

Acknowledgements

Prairie Mountain Health acknowledges that it provides services in facilities and sites located on the original lands and traditional territories of the Cree, Dakota, Ojibway, Oji-Cree and homelands of the Métis. Prairie Mountain Health respects that the First Nation Treaties were made on these territories and we dedicate ourselves to continued collaboration in partnership with First Nation, Métis and Inuit people in the spirit of reconciliation.

This report was prepared by the Prairie Mountain Health Community Health Assessment (CHA) team: Jody Allan, Angie Allen, Michelle Gaber, Nancy McPherson, Pamela McTavish, Amy Ostash, Nancy Tregunna, and Colin Williams. We could not have completed the CHA without the partners who provided us with the data, in particular Manitoba Health, Seniors and Active Living and Manitoba Centre for Health Policy.

The team would like to express gratitude to those that have participated and contributed to the Community Health Assessment process. The 2019 CHA process has been a true collaboration. We would like to thank all Community Health Assessment Network members from across the province, staff at Manitoba Health, Seniors and Active Living and the Prairie Mountain Health Executive Management Team for their continued support and guidance. We are grateful to have such commitment and dedication in Manitoba. To provide feedback on the report, please email: pmh@pmh-mb.ca.

This report is produced and published by the Prairie Mountain Health CHA team. It is available in PDF format on our website at: <http://prairiemountainhealth.ca/cha-2019>

If you would like more information about the Community Health Assessment, please contact Prairie Mountain Health at:

Prairie Mountain Health Corporate Office
192-1st Avenue West
Box 579
Souris, Manitoba R0K 2C0
Toll-free: 1-888-682-2253
Website: www.prairiemountainhealth.ca

How to cite this report:

McPherson N, Williams C, McTavish P, Allen A, Gaber M, Ostash A, Tregunna N, Allan J. Prairie Mountain Health Community Health Assessment 2019, December 2019

Table of Contents

Executive Summary	i
Introduction	vi
Community Health Assessment in Manitoba	vi
Community Health Assessment Network.....	vii
CHA Purpose and Use	vii
Provincial Template for CHA Reports.....	ix
Population Health and Health Equity	ix
First Nations People’s Health in Manitoba	xii
Data Sources	xiv
Data Limitations.....	xv
Data Presentation and Interpretation	xvii
Chapter 1 Who Lives In Prairie Mountain Health?	1
Key Findings.....	1
Programs and Services.....	3
Population	4
Birth Rate.....	5
Internal Migrant Mobility	7
Population Density	8
Population Change	9
Population Projections	10
Indigenous Population.....	11
Visible Minority Population	13
Knowledge of Official Languages.....	14
Immigrant Status in Private Households	15
Immigration by Place of Birth	16
Chapter 2 What Keeps us Healthy?	17
Key Findings.....	17
What influences how healthy our population is?.....	18
Socioeconomic Factor Index.....	20
Social Deprivation Index.....	22

Material Deprivation Index.....	24
Lone Parent Families.....	26
Dependency Ratio	27
Income, Education and Employment.....	29
Median Household Income – After-Tax	29
Low Income Measure – After-Tax (LIM-AT)	31
Household Food Insecurity.....	33
Housing Affordability.....	35
Educational Attainment.....	37
Labour Force Participation	39
Unemployment Rates.....	41
Industry Sectors.....	43
Work Stress.....	44
Healthy Child Development.....	45
Inadequate Prenatal Care.....	45
Preterm Birth Rate.....	47
Small for Gestational Age	49
Large for Gestational Age	51
Breastfeeding Initiation	54
Proportion of Children in Low Income Families	57
Families First – Risk Factors	59
Readiness for School Learning.....	61
Pediatric Dental Extraction Surgery.....	65
Childhood Immunization	67
Teen Pregnancy Rate	70
Teen Birth Rate	72
Personal Health Determinants.....	76
Self-Rated General Health	76
Self-Rated Mental Health	77
Life Stress.....	78
Sense of Community Belonging.....	79
Changes Made to Improve Health.....	81
Body Mass Index (BMI).....	82

Health Behaviours	84
Substance Use Disorders	84
Drug Methods.....	87
Alcohol Use.....	89
Tobacco Use/Smoking	91
Second-Hand Smoke Exposure	95
Physical Activity – Adults	96
Participation and Activity Limitation	97
Fruit and Vegetable Consumption.....	99
Sleep Time	100
Cell Phone Use While Driving	101
ATV Helmet Use	102
Use of Preventive Services	103
Influenza Immunization	103
Pneumococcal Immunization	104
Colorectal Cancer Screening.....	105
Breast Cancer Screening.....	106
Cervical Cancer Screening	108
Oral Health (Dental Visits/Insurance).....	110
Chapter 3 How Healthy Are We?	113
Key Findings.....	113
Mortality	115
Life Expectancy	115
Female Life Expectancy	115
Male Life Expectancy	117
Total Mortality Rates	119
Premature Mortality Rate.....	122
Infant Mortality	125
Child Mortality.....	126
Potential Years of Life Lost.....	127
Potential Years of Life Lost — Unintentional Injuries	129
Potential Years of Life Lost — Suicide.....	130
Potentially Avoidable Deaths.....	131

Table of Contents

Unintentional Injury Causing Death	133
Cancer	135
Cancer Incidence	135
Cancer Incidence by Site.....	136
Cancer Mortality.....	139
Cancer Mortality by Site	140
Cancer - Late Stage (IV) Diagnosis	142
Cancer Late Stage (IV) Diagnosis by Site.....	143
Cancer Survival	144
Cancer Survival by Site	145
Cardiovascular	147
Hypertension Prevalence.....	147
Ischemic Heart Disease Prevalence	150
Heart Attack Rate.....	152
Congestive Heart Failure Prevalence	155
Stroke Rate	157
Diabetes	160
Diabetes Incidence	160
Diabetes Prevalence	162
Lower Limb Amputations	164
Diabetes Care - Eye Exams.....	166
Injury.....	169
Injury Hospitalization - Intentional	169
Injury Hospitalization - Unintentional	171
Causes of Injury Hospitalization	173
Hip Fracture Hospitalization Rate.....	175
Mental Illness	177
Mood and Anxiety Disorders	177
Dementia Prevalence.....	180
Antidepressant Prescription Follow-Up.....	182
Suicide Rates.....	184
Musculoskeletal	185
Arthritis Prevalence	185

Table of Contents

Osteoporosis Prevalence	187
Renal	190
Chronic Kidney Disease Prevalence	190
End Stage Kidney Disease	191
Observed and Projected End Stage Kidney Disease	193
Respiratory	195
Total Respiratory Morbidity (TRM) Prevalence	195
Asthma Prevalence for Children	197
Asthma Care: Controller Medication Use	200
Sexually Transmitted Infections	202
Chlamydia Rates	202
Gonorrhea Rates.....	204
Human Immunodeficiency Virus (HIV)	206
Syphilis Rates	207
Chapter 4 How Well Does Our Health System Meet the Needs of the Population?	209
Key Findings.....	209
Primary Health Care	210
Use of Physicians and Nurse Practitioners	210
Rate of Ambulatory Visits to Physicians and Nurse Practitioners	213
Location of Visits to Physicians or Nurse Practitioner	215
Ambulatory Consultation Rate	216
Majority of Care—Continuity	218
Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rates.....	221
Benzodiazepine Overprescribing Community-Dwelling	225
Access to a Regular Health Care Provider	228
Type of Place for Minor Health Problem (Primary Care)	230
Reasons for No Regular Health Care Provider	232
Wait Time for Minor Health Problem	233
Coordination Between Health Professionals and Other Providers	235
Acute Care	237
Use of Hospitals.....	237
Inpatient Hospitalization Rate	239
Hospital Location: Where Residents Were Hospitalized	241

Table of Contents

Most Frequent Causes of Hospitalizations	242
Hospital Days for Acute Care	243
Hospital Days for Alternate Level of Care Stays.....	245
Hospital Catchment: Where Patients Using RHA Hospitals Came From	247
Hospital Readmission Rates (Unplanned)	248
Caesarean Section (C-section).....	250
Vaginal Birth After Caesarean Section.....	253
Canadian Patient Experience Survey—Inpatient Care	255
Home Care and Personal Care Homes (PCHs)	258
Home Care Regional Prevalence.....	258
Residents in Personal Care Homes	261
Level of Care on Admission to Personal Care Homes.....	263
Median Wait Times for Personal Care Home Admission from Hospital.....	266
Median Wait Times for Personal Care Home Admission from Community	268
Benzodiazepine Overprescribing—Personal Care Homes	270
Appendices.....	272
References.....	284

List of Figures

Figure 1.1 PMH Population, June 1, 2018	4
Figure 1.2 Birth Rate by RHA, 2011/12 (T1) and 2016/17 (T2)	5
Figure 1.3 5-Year Internal Migration Mobility by RHA, 2016.....	7
Figure 1.4 PMH Population Change (proportion) 2013 (solid) to 2018 (outline)	9
Figure 1.5 PMH Projected Population Change by 5-year age groups, 2017-2030.....	10
Figure 1.6 Indigenous Population by RHA, 2016	11
Figure 1.7 Visible Minority Population by RHA, 2016	13
Figure 2.1 Socioeconomic Status by RHA, 2011 (T1) and 2016 (T2).....	20
Figure 2.2 Socioeconomic Status by PMH District, 2011 (T1) and 2016 (T2)	21
Figure 2.3 Mean Social Deprivation by RHA, 2011 (T1) and 2016 (T2)	22
Figure 2.4 Mean Material Deprivation by RHA, 2011 (T1) and 2016 (T2)	24
Figure 2.5 Percent of Lone Parent Families, Manitoba and RHAs, 2016	26
Figure 2.6 Dependency Ratio, by MB and RHA, 2013 (T1) and 2018 (T2).....	27
Figure 2.7 Median Household Income (after-tax, post transfer) by RHA, 2015	29
Figure 2.8 Prevalence of low income based on the Low-Income Measure, After Tax (LIM-AT) (%) by RHA, 2015	31
Figure 2.9 Reported being 'Moderately/Severely Food Insecure' by RHA, 2015-2016.....	33
Figure 2.10 Housing Affordability, 2016	35
Figure 2.11 Percentage of Population Aged 15+ with no Certificate, Diploma or Degree by RHA, 2016.....	37
Figure 2.12 Unemployment Rates, by RHA, 2016	41
Figure 2.13 Perceived Work Stress by RHA, 2016	44
Figure 2.14 Inadequate Prenatal Care Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	45
Figure 2.15 Preterm Birth Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	47
Figure 2.16 Small for Gestational Age Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	49
Figure 2.17 Large for Gestational Age Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	51
Figure 2.18 Breastfeeding Initiation Rates by RHA, 2011/12(T1) and 2016/17(T2)	54
Figure 2.19 Children Aged 17 Years and Younger Living in Low Income Families Based on LIM-AT, by RHA, 2016.....	57
Figure 2.20 Dental Extraction Surgery Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	65
Figure 2.21 Teen Pregnancy Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	70
Figure 2.22 Teen Birth Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	72
Figure 2.23 Self-Rated General Health by RHA, 2015-2016	76
Figure 2.24 Self-Rated Mental Health by RHA, 2015-2016	77
Figure 2.25 Self-Rated Life Stress by RHA, 2015-2016	78
Figure 2.26 Sense of Community Belonging 2015/2016	79
Figure 2.27 Percent of residents who reported making a positive health change in the last year, 2015-2016 (T1)	81
Figure 2.28 Body Mass Index, by RHA, 2015-2016.....	82
Figure 2.29 Prevalence of Substance Use Disorders among Adults by RHA, 2010/11-2014/15 (T1)	84
Figure 2.30 Method for Illicit Drug Consumption (Lifetime), by RHA, 2015-2016	87
Figure 2.31 Average Number of Drinks On A Weekly Basis Over The Last Year 2015-2016.....	89

Figure 2.32 Tobacco Use by RHA, 2015-2016.....	91
Figure 2.33 Exposed To Second-Hand Smoke in Own Home/Private Vehicle/Public Place, 2015-2016.....	95
Figure 2.34 Physical Activity by RHA, 2015-2016.....	96
Figure 2.35 Participation and Activity Limitations by RHA, 2015-2016.....	97
Figure 2.36 Reported Consuming 5 or More Servings of Fruit or Vegetables per Day, by RHA, 2015-2016.....	99
Figure 2.37 Reported Sleep Time in a 24 hour period by RHA, 2015-2016.....	100
Figure 2.38 Cell Phone Use While Driving by RHA, 2011/12, 2013/14.....	101
Figure 2.39 Wearing a Helmet While Riding an ATV by RHA, 2011/12, 2013/14.....	102
Figure 2.40 Influenza Immunization Rate, by RHA, 2017/2018.....	103
Figure 2.41 Pneumococcal Immunization Rate, by RHA, 2017/2018.....	104
Figure 2.42 All Fecal Tests (ColonCheck FOBT, ColonCheck FIT and Other FOBT) by RHA, 2014/15 (T1) and 2016/17 (T2).....	105
Figure 2.43 Mammogram within the Last Two Years, by RHA 2014-2015 (T1) and 2015-2016 (T2).....	106
Figure 2.44 Cervical Screening Percent of Eligible Population, by RHA, 2012-2014 (T1), 2015-2017 (T2).....	108
Figure 2.45 Reported Having Insurance for Dental Expenses by RHA, 2011/12, 2013/14.....	110
Figure 3.1 Female Life Expectancy by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	115
Figure 3.2 Male Life Expectancy by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	117
Figure 3.3 Average Annual Total Mortality Rate by RHA, 2007-2011 (T1) & 2012-2016 (T2).....	119
Figure 3.4 Premature Mortality Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	122
Figure 3.5 Infant Mortality Rates by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	125
Figure 3.6 Child Mortality Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	126
Figure 3.7 Potential Years of Life Lost by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	127
Figure 3.8 PYLL due to Unintentional Injury by RHA, 2006/07-2010/11 (T1) and 2011/12-2015/16 (T2).....	129
Figure 3.9 PYLL due to Suicide by RHA, 2006/07-2010/11 (T1) and 2011/12-2015/16 (T2).....	130
Figure 3.10 Potentially Avoidable Death Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	131
Figure 3.11 All Invasive Cancers – Incidence Rate by RHA 2011-13 (T1) and 2014-16 (T2).....	135
Figure 3.12 All Invasive Cancers – Mortality rate by RHA 2011-13 (T1) and 2014-16 (T2).....	139
Figure 3.13 Percent of All Invasive Cancers Diagnosed at Late Stage (IV), by RHA, 2011-2013 (T1) and 2014-2016 (T2).....	142
Figure 3.14 Cancer Survival by RHA, observed years 2007-2011, with follow-up to 2011 (T1) and observed years 2012-2016, with follow-up to 2016 (T2).....	144
Figure 3.15 Prevalence of Hypertension by RHA, 2011/12 (T1) and 2016/17 (T2).....	147
Figure 3.16 Prevalence of Ischemic Heart Disease by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	150
Figure 3.17 Heart Attack (AMI) Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	152
Figure 3.18 Congestive Heart Failure Prevalence by RHA, 2011/12 (T1) and 2016/17 (T2).....	155
Figure 3.19 Stroke Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	157
Figure 3.20 Incidence of Diabetes by RHA, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2).....	160
Figure 3.21 Prevalence of Diabetes by RHA, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2).....	162
Figure 3.22 Lower Limb Amputations by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	164
Figure 3.23 Diabetes Care: Eye Examinations by RHA, 2011/12 (T1) and 2016/17 (T2).....	166
Figure 3.24 Intentional Injury Hospitalization Rates by RHA, 2011/12 (T1) and 2016/17 (T2).....	169
Figure 3.25 Unintentional Injury Hospitalization Rates by RHA, 2011/12 (T1) and 2016/17 (T2).....	171

Figure 3.26 Hip Fracture Hospitalization Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	175
Figure 3.27 Prevalence of Mood and Anxiety Disorders by RHA, 2010/11-2014/15 (T1)	177
Figure 3.28 Prevalence of Dementia by RHA, 2010/11-2014/15 (T1)	180
Figure 3.29 Antidepressant Prescription Follow-up by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	182
Figure 3.30 Average Annual Suicide Rates by RHA, 2007-2011 (T1) and 2012-2016 (T2).....	184
Figure 3.31 Prevalence of Arthritis by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	185
Figure 3.32 Prevalence of Osteoporosis by RHA, 2011/12 (T1) and 2016/17 (T2).....	187
Figure 3.33 Prevalence of Chronic Kidney Disease by RHA, March 31, 2012	190
Figure 3.34 End Stage Kidney Disease Prevalence by RHA, 2007 Q2 (T1) and 2012 Q2 (T2)	191
Figure 3.35 Observed and Projected Number of Patients with ESKD by Treatment Type in PMH, 2004-2024.....	194
Figure 3.36 Prevalence of Total Respiratory Morbidity by RHA, 2011/12 (T1) and 2016/17 (T2)	195
Figure 3.37 Asthma Prevalence by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	197
Figure 3.38 Asthma Care by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	200
Figure 3.39 Rate of Reported Chlamydia Infections by RHA, 2013-2015 (T1) and 2016-2018 (T2)	202
Figure 3.40 Rate of Reported Gonorrhoea Infections by RHA, 2013-2015 (T1) and 2016-2018 (T2).....	204
Figure 3.41 Proportion (%) of New HIV Cases in Manitoba by RHA, 2017	206
Figure 3.42 Rate of Reported Syphilis Infections by RHA, 2013-2015 (T1) and 2016-2018 (T2)	207
Figure 4.1 Use of Physicians and Nurse Practitioners by RHA, 2011/12 (T1) and 2016/17 (T2)	210
Figure 4.2 Ambulatory Visit Rate by RHA, 2011/12 (T1) and 2016/17 (T2)	213
Figure 4.3 Ambulatory Consultation Rate by RHA, 2011/12 (T1) and 2016/17 (T2)	216
Figure 4.4 Majority of Care by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2).....	218
Figure 4.5 Hospitalization Rate Ambulatory Care Sensitive Conditions by RHA, 2011/12 (T1) and 2016/17 (T2)	221
Figure 4.6 Benzodiazepine Overprescribing in Community by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2).....	225
Figure 4.7 Access to a Regular Health Care Provider by RHA, 2015-2016.....	228
Figure 4.8 Type of Place for Minor Health Problem by RHA, 2015-2016	231
Figure 4.9 Reasons for No Regular Health Care Provider by RHA, 2015-2016	232
Figure 4.10 Wait Time for Minor Health Problem by RHA, 2015-2016.....	233
Figure 4.11 Coordination Between Health Care Providers Reported as 'Excellent/Very Good', by RHA, 2015-2016	235
Figure 4.12 Use of Hospitals by RHA, 2011/12 (T1) and 2016/17 (T2).....	237
Figure 4.13 Inpatient Hospitalization by RHA, 2011/12 (T1) and 2016/17 (T2)	239
Figure 4.14 Hospital Days for Acute Stays (Excluding Newborns) by RHA, 2011/12 (T1) and 2016/17 (T2)	243
Figure 4.15 Hospital Days for ALC Stays (Excl. Newborns) by RHA, 2011/12 (T1) and 2016/17 (T2)	245
Figure 4.16 Hospital Readmission by RHA, 2011/12 (T1) and 2016/17 (T2)	248
Figure 4.17 Caesarean Section Rate by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	250
Figure 4.18 VBAC by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	253
Figure 4.19 Overall Hospital Experience Rating in PMH and Manitoba, 2017-2018 and 2018-2019.....	255
Figure 4.20 Prevalence of Manitoba and PMH Receiving Home Care Services, 2013/14-2014/15	259
Figure 4.21 Residents in Personal Care Homes by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	261
Figure 4.22 Level of Care on Admission to PCH, PMH and Manitoba, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	263
Figure 4.23 Level of Care on Admission to PCH, PMH Zones, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	264

Figure 4.24 Median Wait Times for PCH Admission from Hospital by RHA, 2010/11-2011/12 (T1) & 2015/16-2016/17 (T2).....	266
Figure 4.25 Median Wait Times for PCH Admission from Community by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	268
Figure 4.26 Benzodiazepine Overprescribing for PCH Residents, by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2).....	270

List of Tables

Table 1.1 Birth Rate by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2).....	6
Table 1.2 Knowledge of official languages, Manitoba and PMH, 2016	14
Table 1.3 Immigration by Place of Birth, PMH and Zones, 2016	16
Table 2.1 Dependency Ratio, by PMH Zone and District, 2013 (T1) and 2018 (T2).....	28
Table 2.2 Median Household Income (after-tax, post transfer) by PMH District, 2015	30
Table 2.3 Prevalence of low income based on the Low-Income Measure, After Tax (LIM-AT) (%) by PMH Districts, 2015	31
Table 2.4 Percentage of Population Aged 15+ with no Certificate, Diploma or Degree, By PMH Zone and District, 2016	38
Table 2.5 Total Labour Force Population aged 15+ by Occupation, PMH and MB, 2016	43
Table 2.6 Inadequate Prenatal Care Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	46
Table 2.7 Preterm Birth Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	48
Table 2.8 Small for Gestational Age Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	50
Table 2.9 Large for Gestational Age Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	52
Table 2.10 Breastfeeding Initiation Rates by PMH Zone and District, 2011/12(T1) and 2016/17(T2)	55
Table 2.11 Children aged 0-17 Years Living in Low Income Families Based on LIM-AT, PMH Zone and District, 2016.....	58
Table 2.12 Percent of Families First Screens Identifying Specific Risk Factors 2008-2012 (T1) and 2013-2017 (T2).....	60
Table 2.13 Children Vulnerable by EDI Domain by RHA, 2019	61
Table 2.14 Children at Risk by EDI Domain by RHA, 2019	62
Table 2.15 Children on Track by EDI Domain by RHA, 2019	62
Table 2.16 Vulnerable Children on the EDI in PMH Zone and District, 2015 (T1) and 2019 (T2)	63
Table 2.17 Dental Extraction Surgery Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	66
Table 2.18 Percentage of Adolescents Considered ‘complete for age’ by RHA by Antigen 2015-2017	67
Table 2.19 Percentage of Adolescents Considered ‘complete for age’ by PMH by Antigen 2015-2017	68
Table 2.20 Percentage of Females Considered ‘complete for age’ by RHA for HPV 2015-2017.....	68
Table 2.21 Percentage of Females Considered ‘complete for age’ by PMH Zone for HPV 2015-2017.....	69
Table 2.22 Teen Pregnancy Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	71
Table 2.23 Teen Birth Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	73
Table 2.24 Prevalence of Substance Use Disorders among Adults by PMH Zone and District, 2010/11 – 2014/15 (T1).....	85
Table 2.25 Reported Visiting the Dentist, 2011/12, 2013/14.....	111
Table 3.1 Female Life Expectancy by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)	116
Table 3.2 Male Life Expectancy by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2).....	118
Table 3.3 Average Annual Total Mortality Rate by PMH Zone and District, 2007-2011 (T1) & 2012-2016 (T2).....	120
Table 3.4 Most Frequent Cause of Death in PMH, 2007-2011(T1) and 2012-2016(T2)	121
Table 3.5 Premature Mortality Rate PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)	123
Table 3.6 Most Frequent Cause of Premature Death in PMH, 2007-2011 and 2012-2016.....	124
Table 3.7 Potential Years of Life Lost by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)	128
Table 3.8 Potentially Avoidable Death Rate by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2).....	132
Table 3.9 Unintentional Injury Causing Death by RHA, 2007-2011(T1) and 2012-2016(T2)	133
Table 3.10 Unintentional Injury Causing Death by PMH Zone and District, 2007-2011(T1) and 2012-2016(T2).....	134

Table 3.11 Cancer Incidence by Site in PMH and Manitoba, 2011-2013 (T1) and 2014-2016 (T2).....	136
Table 3.12 Cancer Incidence by Site by PMH Zone, 2014-2016	137
Table 3.13 Cancer Mortality, Top 4 by PMH and Manitoba, 2011-2013(T1) and 2014-2016(T2).....	140
Table 3.14 Percentage of Cancers Diagnosed at Late Stage (IV) by Site, by PMH and MB, 2011-2013 (T1) and 2014-2016 (T2)	143
Table 3.15 Percentage of Site Specific Invasive Cancers Diagnosed at Late Stage (IV), by Zone, 2014-2016.....	143
Table 3.16 Cancer Survival by Site, PMH and MB, observed years 2007-2011 (T1) and observed years 2012-2016 (T2)	145
Table 3.17 Cancer Survival by Site, PMH Zone, observed years 2007-2011 (T1) and observed years 2012-2016 (T2).....	145
Table 3.18 Prevalence of Hypertension by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	148
Table 3.19 Prevalence of Ischemic Heart Disease by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2) ...	151
Table 3.20 Heart Attack (AMI) Rate by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)	153
Table 3.21 Congestive Heart Failure Prevalence by Zone and District, 2011/12 (T1) and 2016/17 (T2)	156
Table 3.22 Stroke Rate by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)	158
Table 3.23 Incidence of Diabetes by PMH Zone and District, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2)	161
Table 3.24 Prevalence of Diabetes by PMH Zone and District, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2)	163
Table 3.25 Lower Limb Amputations by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2).....	165
Table 3.26 Diabetes Care: Eye Examinations by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2).....	167
Table 3.27 Unintentional Injury Hospitalization Rates by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2).....	172
Table 3.28 Most Frequent Causes of Injury Hospitalization by PMH and MB, 2016-2017.....	173
Table 3.29 Hip Fracture Hospitalization Rate, PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	176
Table 3.30 Prevalence of Mood and Anxiety Disorders by PMH District, 2010/11-2014/15 (T1)	178
Table 3.31 Prevalence of Dementia by PMH District, 2010/11-2014/15 (T1)	181
Table 3.32 Antidepressant Prescription Follow-up, Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	183
Table 3.33 Prevalence of Arthritis by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	186
Table 3.34 Prevalence of Osteoporosis by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	188
Table 3.35 Prevalence of Total Respiratory Morbidity by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	196
Table 3.36 Asthma Prevalence by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	198
Table 3.37 Asthma Care by PMH Zone and District, 2007/09-2011/12 (T1) and 2012/13-2016/17 (T2).....	201
Table 3.38 Annual Count of Reported Chlamydia Infections by PMH 2013-2018	203
Table 3.39 Annual Count of Reported Gonorrhoea Infections by PMH 2013-2018	205
Table 3.40 Annual Count of Reported Syphilis Infections by PMH, 2013-2018.....	208
Table 4.1 Use of Physicians and Nurse Practitioners by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	211
Table 4.2 Ambulatory Visit Rate by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2).....	214
Table 4.3 Location of Visits to Physicians or Nurse Practitioner by RHA, 2011/12 and 2016/17	215
Table 4.4 Ambulatory Consultation Rate by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	217
Table 4.5 Majority of Care by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	219
Table 4.6 Hospitalization Rate ACSC by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2).....	223
Table 4.7 Benzodiazepine Use in Community by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2).....	226
Table 4.8 Use of Hospitals by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2).....	238
Table 4.9 Inpatient Hospitalization by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	240
Table 4.10 Hospital Location: Where Health Region Patients Went for Hospitalizations by RHA, 2011/12 and 2016/17	241

Table 4.11 Most Frequent Causes of Hospitalizations PMH and Manitoba, 2016-17	242
Table 4.12 Hospital Days for Acute Stays (Excl. Newborns) by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	244
Table 4.13 Where Health Region Patients Came from for Hospitalizations by RHA, 2011/12 and 2016/17	247
Table 4.14 Hospital Readmission by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)	249
Table 4.15 Caesarean Section Rate by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)	251
Table 4.16 VBAC by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)	254

Executive Summary

This report provides the results of a comprehensive Community Health Assessment (CHA) for Prairie Mountain Health (PMH). The CHA includes analysis of indicators, trends and other information sources that describe the health and burden of illness experienced by PMH residents, as well as the way health services are used. Population health surveillance is essential to healthcare planning and resource allocation to ensure we develop equitable and sustainable programs and services.

Who Lives in Prairie Mountain Health?

Prairie Mountain Health has a growing population, which is projected to continue increasing, particularly in the senior population. The Indigenous population is growing at a faster rate than that of all other residents of PMH. Another growing population in PMH are newcomers to Canada.



Language barriers and cultural differences impact client experience and affect service provision. PMH's changing population will continue to have a significant impact on health care services in the region. Ongoing planning and enhanced partnerships aimed at addressing the needs of an aging population, newcomers, and Indigenous populations will be vital. Geography and low population densities pose challenges with sustainability of services in parts of the region.

What Keeps Us Healthy?

Many factors have an influence on the health of us as individuals, families, and communities. In addition to our genetics, lifestyle choices, and the quality of and access to our health care system, where we are born, grow, live, learn, work and age also have an important influence on our health.

Amongst the most significant predictors of health are income, employment and education. PMH has the lowest median household income in the province. More than a quarter of children in the North zone live in low income families and children in Brandon Downtown are two and a half times as likely to live in a low income family as children in Turtle Mountain district. More than a quarter of PMH residents do not have a high school diploma. In contrast, Brandon South End residents are more



than two and a half times as likely to have at least a high school diploma as residents of Agassiz Mountain. Unemployment rates vary greatly across the region, with rates in Porcupine Mountain more than double those in the Whitemud district. PMH residents report the highest levels of work stress in the province.

A strong sense of community belonging reflects attachments, social engagement and participation within communities which is associated with positive health outcomes. PMH residents report a slightly stronger 'sense of community belonging' than the province as a whole.

Only half of PMH residents report making positive health changes in the past year; the lowest percentage in the province. A quarter of the region's adults are classified as obese, and eighteen percent of respondents report being current smokers.



The prevalence of substance use disorder (including alcohol and/or drug dependence) is significantly higher in PMH than the provincial average. Substance use is associated with alcohol poisoning, violence, injuries and deaths, and prolonged use may lead to a number of acute and chronic disease conditions.

Immunization rates for PMH seniors are well below national targets at 53% for Influenza and 62% for Pneumococcal. People 65 years and older are at greater risk of serious complications from the flu and pneumonia, often leading to hospitalization and death, because immune defenses become weaker with age.

Only a third of eligible PMH residents have completed their colorectal screening. In Manitoba, it is recommended that most people aged 50 to 74 years participate in colorectal screening every two years. Screening is lowest amongst low income males.

In the North zone, a significantly higher proportion of pregnant women do not receive adequate prenatal care, which can place both the mother and infant at risk. While breastfeeding is a key part of the healthy growth and development of infants, there are significantly lower breastfeeding initiation rates in the northern part of the region. Pregnant teenagers are less likely to receive early prenatal care and more likely to experience negative health outcomes, depressive disorders, and reduced educational opportunities. Encouragingly, in PMH there have been significant decreases in the rates of teenage pregnancy and teenage births in recent years.



How Healthy Are We?



PMH residents are living longer, with male and female life expectancy increasing significantly over time. Premature mortality, or death before the age of 75, is significantly higher than the Manitoba average in the North zone, whilst significantly lower in the South zone. Circulatory diseases and cancer account for more than half of all deaths.

Unintentional injuries, such as motor vehicle accidents, drowning, falls, burns and poisonings, are responsible for almost one hundred deaths every year in PMH. Low income residents are two to three times as likely to die of unintentional injuries as high income residents. Similarly, hospitalizations due to unintentional injury are significantly higher than the provincial average, with falls accounting for more than half of these hospitalizations.

The prevalence of mood and anxiety disorders remains the highest in the province, with more than 34,000 adults in PMH diagnosed with a condition. Only half of those prescribed antidepressants receive the recommended follow-up. Mood and anxiety disorders frequently coexist with other chronic diseases and conditions.



Five-year cancer survival rates in PMH are the best in the province. Breast cancer incidence is significantly lower than the provincial average, whilst the colorectal incidence rate is significantly higher. Although the incidence of prostate cancer is significantly lower, the proportion of prostate cancer diagnosed at a later stage, along with the mortality rate are significantly higher for PMH residents than the province.



Cardiovascular disease is a major cause of death and disability in the region. Almost a quarter of PMH adults live with hypertension or high blood pressure. Hearteningly, the stroke rate is significantly lower than the province and has decreased significantly over time. PMH has the highest rate of ischemic heart disease in the province, however it did decrease significantly over time. Significant disparities exist, with residents of the North zone almost twice as likely to live with cardiovascular disease or experience a heart attack or stroke as others in the region.

More than 17,500 PMH residents live with diabetes. The incidence and prevalence of diabetes is significantly higher than the province and has increased significantly over time. Diabetes prevalence amongst low income residents is twice that of high income residents in Manitoba. Renal disease is a common complication of diabetes. The number of residents in PMH living with end stage kidney disease is projected to increase by two-thirds in the next five years, placing a massive strain on a hemodialysis program that is already at capacity.

Arthritis is a chronic condition that seriously impacts quality of life, functional independence, and physical ability of many residents. Arthritis prevalence in the region is significantly higher than the provincial average, with almost 30,000 residents living with arthritis.

More than 23,000 PMH residents live with a respiratory disease such as asthma, chronic bronchitis, or emphysema. The rate is significantly higher than the provincial average, increased significantly over time and remains the highest in the province. Asthma prevalence in PMH children is significantly higher than the province and increased significantly over time. Almost 40% of those diagnosed with asthma do not fill the prescriptions recommended for long-term control. The rates for the region are driven by residents in the Brandon zone, who have significantly higher and increasing rates of respiratory disease.



How Well Does Our Health System Meet the Needs of the Population?

Visits to primary care providers by PMH residents have been increasing, with residents making on average over 800,000 visits to physicians or nurse practitioners every year. The most frequent causes for these visits are respiratory, circulatory, musculoskeletal and mental illness.



Health professionals will often refer clients to another provider due to the complexity, obscurity, or seriousness of a condition. Referrals to other health care professionals are significantly lower for PMH residents than the provincial average. Specialist care is particularly important in rural areas where clients use specialist services less frequently due to access issues. Less than half of PMH residents report that the level of coordination between their regular health care provider and other health professionals is 'excellent/very good'.

Continuity of care allows for a stronger patient-healthcare provider relationship and correlates with better health outcomes, improved client satisfaction and fewer hospitalizations. The percentage of North zone residents who received at least half of their care from the same physician or nurse practitioner is significantly lower than the provincial average and decreased significantly over time.

A lower rate of ambulatory care sensitive conditions (ACSC) hospitalization is an indication of access to good quality primary health care. Appropriate management and control in the community reduces the need for hospitalization,

improves quality of life, and reduces health spending for chronic conditions. ACSC hospitalizations in PMH remain significantly higher than the provincial average, and in Manitoba, low income residents are four times more likely to be hospitalized for an ACSC than high income residents.

In an average year just over 13,000 PMH residents are hospitalized, accounting for almost 20,000 individual hospital admissions. Although this is a significant decrease, use of hospitals remain significantly higher than the provincial average.

Reducing hospital readmissions is a recognized strategy to improve patient outcomes and reduce healthcare costs. High rates of readmission act as a signal to review practices, including discharge planning and continuity of services after discharge. The rate of unplanned hospital readmissions in PMH remains significantly higher than the provincial average.



PMH remains the only region to have significantly higher Caesarean section (C-section) rates than the Manitoba average and significantly lower rates of women undergoing a vaginal birth after a prior C-section. C-sections are associated with a greater risk of maternal morbidity, negative maternal and infant health outcomes and higher costs to the health care system. C-section rates are used to monitor clinical practices, with lower rates indicating more appropriate and efficient care.

The Canadian Patient Experience Survey supports quality improvement initiatives, informs hospital care and promotes patient-centred care. The majority of clients in PMH (70%) report a very good hospital experience, however a substantial proportion (42%) report that they did not receive enough information from hospital staff about what to do if they were worried about their condition or treatment after they left the hospital.

Benzodiazepine use by seniors is not recommended as it poses serious safety concerns including increased risk for confusion, memory loss, poor coordination and muscle control, potentially leading to falls and fractures. Benzodiazepine use in PMH is pervasive with twenty-percent of community-dwelling older adults and a third of all personal care home (PCH) residents under the influence of psychoactive drugs at any one time. Rates remain the highest in the province and are significantly higher than the provincial average.



An estimated 5,400 PMH residents received one or more home care services over a two-year period. The majority of people waited 30 days or less to the first visit from a Home Care provider. An aging population, and an increase in those living with chronic conditions, will result in the need for additional home care support services along with an increased number of admissions to a PCH. The proportion of PMH residents aged 75 years and older living in PCHs is the highest in the province. The median wait time for admission to a PCH from hospital or community is significantly higher than the province.

Mind the Gap

Inequity in health status is evident across PMH, with some segments of the population experiencing a higher burden of illness. The health status of residents is largely driven by the social determinants of health, particularly income, with individuals living in lower income areas having higher rates of physical and mental illnesses. There are notable disparities between PMH's healthiest districts and the least healthy.

Premature mortality rate is considered the single best indicator of the overall health status of a region's population and need for healthcare. North zone residents are over 1.2 times more likely to die before the age of 75 than residents of the South zone; this disparity gap has persisted over time. Brandon Downtown residents are more than twice as likely to die prematurely as residents of Brandon West End; this gap has widened at the district level. In urban settings (Brandon and Winnipeg), low income residents are almost three times as likely to die prematurely as high income residents. In rural settings, low income residents are over twice as likely to die prematurely as high income residents. The inequities between low and high income Manitobans has not improved over time.



The majority of indicators presented within this CHA report demonstrate that the health gap has persisted for both low income residents and geographically between zones and districts. These CHA findings provide the basis for discussion and future planning with our communities, partner organizations, Manitoba Health, Seniors and Active Living, Shared Health, and regional programs and services. An equity perspective is crucial to reducing the health disparities across our region and province.

Introduction

Community Health Assessment in Manitoba

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.¹

Understanding the health needs and assets of the people that live in Prairie Mountain Health (PMH) is critical to effectively planning programs and services. Access to local health data supports planning for policies and programs that are responsive to communities' unique needs and will most benefit their residents.

In Manitoba, this understanding is gained through legislated CHAs. This is the 5th cycle of CHA in Manitoba. The dates of the previous CHA cycles are 1st cycle - 1997/98, 2nd cycle – 2004, 3rd cycle – 2009 and 4th cycle – 2015.

Using a population health approach, CHAs provide baseline information about the health status, determinants of health, and health system utilization of community residents. The process also tracks health outcomes over time, identifies opportunities for health promotion and disease prevention, and describes the conditions that contribute to health disparities.

The CHA allows us to begin to understand ourselves: who we are, our strengths, our challenges, and how our health system responds to our needs. One of the strengths of the process is that it presents data from several time periods to reflect health trends over time to help identify areas needing priority action.

In other jurisdictions, CHA work is captured under the term “Population and Public Health Surveillance” which is defined as “the collection, analysis, interpretation, and dissemination of data about demography, socio-economic status, health status, chronic diseases as well as their protective and risk factors”.²

“Community” can refer to all persons living in a certain region, or it might refer to groups of people with common characteristics or interests, for example: women, youth, seniors, cultural groups or those living

Community Health Assessment Network

Community Health Assessment Network (CHAN) enables a coordinated approach to province-wide comparability on health issues within health regions, while recognizing and respecting the diversity among them. CHAN is a provincially coordinated, collaborative group comprised of representatives from:

- Manitoba Health, Seniors and Active Living
- Department of Education (Healthy Child MB)
- Manitoba Centre for Health Policy (MCHP)
- George & Fay Yee Centre for Healthcare Innovation
- Service Delivery Organizations:
 - Shared Health/Soins communs
 - CancerCare Manitoba (CCMB)
 - Addictions Foundation of Manitoba (AFM)
 - Interlake-Eastern Regional Health Authority
 - Northern Health Region
 - Prairie Mountain Health
 - Southern Health-Santé Sud



CHAN workshop in Winnipeg, autumn 2018

CHA Purpose and Use

CHAs present local data and local interpretation of that data, foster community engagement and highlight community strengths and areas for improvement. This information enables the community-wide establishment of health priorities, and facilitates collaborative action planning directed at improving community health status and quality of life.

Community Health Assessments and the Manitoba Quality and Learning Framework

Manitoba is taking bold steps to improve access to care, quality of services and patient outcomes. Clinical leaders and health system experts from across the province are working on a provincial approach to the planning and delivery of better health care for Manitobans. This work is supported by clinical data and evidence, including the information presented in Manitoba's Community Health Assessments (CHA).

As the Provincial Clinical and Preventive Services Plan guides and supports decisions about human resources, investment and clinical services, the valuable information we gather in the CHAs will help ensure clinical experts have a real understanding of our population.

Ensuring positive patient outcomes experiences is a focus and responsibility of every member of our health system. Efforts to improve quality and safety are ongoing, and will be guided going forward by a new Manitoba Quality and Learning Framework that presents a common vision and approach to quality, patient safety and accreditation.

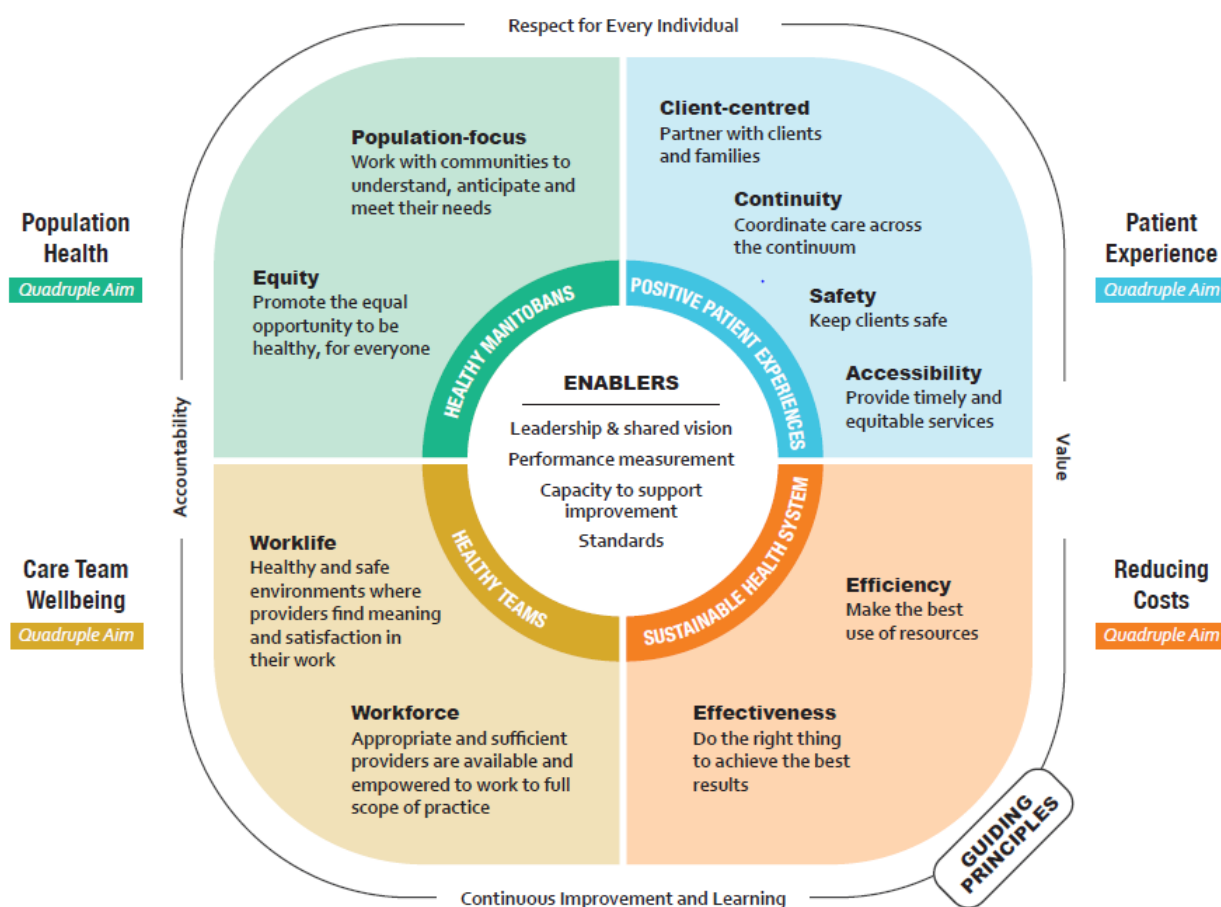
The Framework describes the Principles and Enablers of quality health care and defines the overarching goals of our system in alignment with the Institute for Healthcare Improvement’s Quadruple Aim. These four areas - Healthy Manitobans, Positive Patient Experience, Sustainable Health System and Healthy Teams – allow service delivery organizations, patients and providers to share a common understanding of our goals.

These common goals also ensure that we are able to closely monitor progress and success, by aligning the indicators included in Community Health Assessments (population health, equity, continuity of care, accessibility) with the overarching goals of the health system. Health authorities will be able to use CHA data and the Framework together to set priorities and monitor quality performance all within a culture of continuous improvement and learning.

The Framework is intended for use across the health system, by funders, policy makers, leaders, direct service providers and patients. It applies across the continuum of care, focused on improved provincial outcomes but adaptable to local needs and experiences.

For more information on the Manitoba Quality and Learning Framework, please visit <https://sharedhealthmb.ca/>.

The Manitoba Quality and Learning Framework



Provincial Template for CHA Reports

There are five Regional Health Authorities (RHAs) in Manitoba, and all RHAs have collaborated to produce CHA reports using a common template to allow for easier comparison of population health indicators across the province. While regional CHA reports will have a similar look, the content reflects findings unique to each health region. New to CHA reports are story boxes called “A Closer Look” which provide additional regional context.

CLOSER LOOK...

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus odio eros, feugiat ut congue nec, mattis sed augue. Sed metus nunc, commodo id volutpat vel, bibendum nec mauris. Sed ut dui sit amet nunc viverra eleifend nec eu ligula. Ut aculis faucibus eros, sed sollicitudin felis commodo quis. Donec id posuere velit. Duis vehicula odio quis lorem rhoncus finibus. Duis sed blandit leo. In rhoncus, augue at facilisis tempor, libero dolor suscipit dui, sit amet pretium tellus lacus non lectus. Curabitur facilisis velit eu eleifend suscipit. Nulla vitae arcu nibh.

Pellentesque cursus ultrices dui, vitae luctus ipsum iaculis eu. Praesent accumsan, mi vitae molestie aliquam, metus ligula varius felis, quo bibendum erat velit vitae mi. Phasellus eleifend urna tortor, vitae ornare quam mollis a. Proin ut metus pulvinar, tempor tortor ac, tincidunt nunc. Curabitur mattis risus vel magna dapibus semper. In hac habitasse platea dictumst. In fermentum volutpat ipsum eu feugiat. Nullam aliquam lacrima nisi, quis efficitur magna. Proin vel luctus lorem. Nunc id facilisis neque. Integer fringilla semper velit, et aliquet ipsum mattis nec.

Population Health and Health Equity

To tell the story of the health and well-being of any community or population, we do so by making comparisons. We ask ourselves how that population has stayed the same over time and how it is changing. We compare the population in our health region to that of other health regions in the province; in one district (or community area) to the neighbouring one. We ask ourselves why one population is healthier than another.

Many terms are used to describe differences in health among population groups including “disparities”, “inequalities”, and “inequities”. Even when intending to describe ideas that mean something quite different, these terms are sometimes used interchangeably. It is important to be clear what we mean when we use these terms.

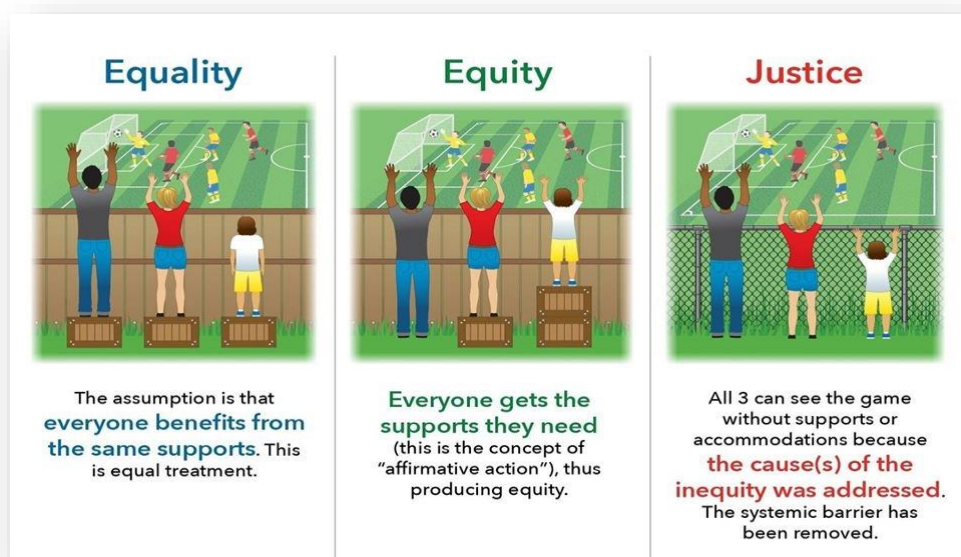
“Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.”

(Braveman, P. et al 2017)

What does it mean?

While **health disparities** and **health inequalities** can both be used to describe measurable differences in health status among population groups, the term health inequities should be interpreted differently.

Health inequities are *unfair* and *modifiable* because the underlying causes are largely social and economic in nature. The interventions needed go beyond health care services and supporting healthy behaviours, to the types of public policies, programs and services a society chooses. For example, decades ago, the poverty rates amongst seniors in Canada was substantially reduced by introducing a universal public pension program. Language surrounding health inequities will hopefully lead us to talk about why these differences exist and what kind of changes are likely to get at the root causes to make the biggest difference in narrowing persisting gaps among population groups.³ Conceptual differences are illustrated below.⁴



Measuring and reporting on health inequalities has grown with each cycle of CHA. We have expanded the measurement of health inequalities when available and appropriate. In doing so, we will advance discussions and action around health equity — a growing priority for health systems and governments at all levels in Canada and internationally. This aligns with Manitoba’s *Chief Provincial Public Health Officer Position Statement on Health Equity*,⁵ which discusses the importance of working to improve health equity as a key way to improve overall population health and as a health goal in and of itself.

“Social determinants of health are unequally distributed among population groups in our society” and these are influenced by “unequal and unfair social relations such as colonialism, discrimination, racism and gender inequity” as well as “structural drivers such as social policies and programs, economic arrangements and politics.” The Chief’s position statement also recognizes that the health care system and its services influence only about 25 percent of overall health outcomes, while up to 60 percent of a population’s health status is influenced by the social determinants of health and the structural drivers.

To provide a comprehensive picture of the health of the people living in our communities, information regarding the social determinants of health, health status measures by health region and health status changes over time is presented throughout this report.

How are health inequalities measured?

To strengthen the measurement of health inequalities between subpopulations, Manitoba participated in a collaborative pan-Canadian expert working group to inform work by Statistics Canada and the Canadian Institute for Health Information (CIHI). The goal was to develop common equity characteristics for disaggregating health indicators. This collaborative national work resulted in recommended definitions for six equity characteristics for measuring health inequalities: age, sex, gender, income, education, and geographic location.⁶

This CHA report supports measuring health inequalities by:

- Stratifying data by geographic location
- Stratification of select indicators by age groupings and sex
- Geographic disparity ratios
- Income disparity ratios
- Presenting data graphs and tables in a new way to help identify disparities or health gaps

System Responsibility

CHAs provide a better understanding of what contributes to health inequities and what we need to address in order to advance health equity for our population.

As identified for the third round of CHA, in 2015, the evidence informs an approach to interventions to achieve more equitable population health outcomes, which address equitable access in three main areas. These include **equity of access** to:

Health Care Services

This is the responsibility of health and social service agencies, their boards and the various levels of government, which provide funding, oversight, planning and policy support. One example is providing services universally to the whole population and supplementing them with “targeted” services for population groups experiencing persistently poorer health and social outcomes.

Social Determinants of Health

This is the responsibility of all levels of government and the organizations to which they further delegate responsibilities, commission work and distribute funds which affects all sectors of society. Examples include approaches such as healthy community planning, inter-sectoral action on health, healthy public policy, health in all policies; health as a human right; and health among sustainable development goals.

Community Participation

An important consideration includes collaboration with populations in vulnerable situations and more likely to experience health inequities to inform priorities, directions and decisions. This includes making space at the tables where decisions are made, for community voices.

The notion of equitable access is based on the pioneering work done by Whitehead and Dahlgren and international works related to the right to health to which Canada has made commitments to via international covenants, treaties and declarations.

Health regions and the province overall strive to maintain and improve the health of the entire population. To this end, we are involved in population health planning which must address what contributes to those socially and economically influenced health differences among population groups. Future planning efforts must take these health equity gaps into consideration to improve overall population health outcomes; and would benefit from applying an equity analysis to all phases of planning and implementation.

Actions to mitigate health inequities among population groups is an important component of improving the overall health of all Manitobans. Health inequities are evident among several population groups including newcomers and refugees, visible minorities, persons with disabilities and people living in poverty or other types of economic or social marginalization. There is strong evidence that Indigenous peoples of Manitoba experience persistent health disparities resulting from historic and current traumatic experiences related to colonization and racism. One of the population groups most impacted by health inequities is the Indigenous peoples of Manitoba. A recent report, *The Health Status of and Access to Healthcare by Registered First Nations Peoples in Manitoba*, was released in autumn 2019 and key highlights from the report are noted below.

First Nations People’s Health in Manitoba

The Manitoba Centre for Health Policy (MCHP) and the First Nations Health and Social Secretariat of Manitoba (FNHSSM) partnered to develop a comprehensive report, entitled *The Health Status of and Access to Healthcare by Registered First Nations Peoples in Manitoba*, looking at health and healthcare use patterns of First Nations people living in Manitoba. Comparisons were made between First Nations and all other Manitobans, between on and off reserve First Nations, and regional comparisons by health regions and by Tribal Council Areas. This report will “contribute to building a dialogue that supports strategies for increased access to equitable healthcare, improving programs that support First Nations health and wellness, and supporting policy change and development”.⁷ It is an update to the MCHP report referred to as the 2002 First Nations Atlas.

There is a widening and unequal gap between First Nations people’s health and other Manitobans.

“To understand why First Nations’ health is worse than other Manitobans, we need to first acknowledge the history of colonization and the horrendous effects it had (and continues to have) on the First Nations (peoples and their) ways of life. As part of an effort to ‘civilize’ First Nation people, many children were forcibly removed from their families and communities and placed in residential schools. In being made to adopt the European way of life, they lost much of their language, their culture, and their connection to the families and communities. The trauma from this experience is still being felt today as the pain of this loss is passed down through generations.”

The Truth and Reconciliation Commission of Canada's Calls to Action, especially number 19, was the impetus for this study: "to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and to publish annual progress reports and assess long-term trends. Such efforts would focus on indicators such as: infant mortality, maternal health, suicide, mental health, addictions, life expectancy, birth rates, infant and child issues, chronic diseases, illness and injury incidence, and the availability of appropriate health services."⁸

While the majority of the data available was based on illness and not wellness, the report did highlight community strengths and resilience in results from the Manitoba First Nations Regional Health Survey (RHS). Compared to all other Manitobans, some of the key findings included:

- Mortality indicators are significantly worse among First Nations peoples
- Cancer screening rates are significantly lower among First Nations peoples
- Incidence of cervical and colorectal cancer are significantly higher among First Nations peoples
- Poorer mental health is seen among First Nations peoples
- First Nations peoples have substance use disorder rates three times higher
- Rates of suicide and suicide attempts are five to six times higher among First Nations peoples
- Poor health and lower physician service use indicate barriers to First Nations peoples accessing care
- Use of hospital services is higher by First Nations peoples
- There is a dramatically higher rate of opioid dispensations for First Nations peoples
- First Nations communities highlight the importance of traditional healers
- Forty five percent of RHS respondents reported they have safe drinking water on reserve
- Fifty nine percent of RHS respondents reported their houses on reserves require repair
- One in four families living on reserve include a survivor of residential schools

The health status gap between First Nations and all other Manitobans has widened since 2002. Researchers have urged five actions to create change and improve health of the individuals, families, and communities:⁹

1. Annual reporting on progress in addressing gaps in health and access to healthcare;
2. Development of strategic initiatives for equitable access to intervention and prevention measures (including addressing racism in the health system through mandatory cultural safety training for all staff, hiring of First Nations providers, new human resource policies for safe reporting of racist incidents);
3. Development of short- and long-term plans for the training and hiring of First Nations healthcare professionals;
4. Further development of research partnerships among MCHP, MHSAL, First Nations Health and Social Secretariat of Manitoba (FNHSSM) and Manitoba First Nations;
5. Setting First Nations on the path to borderless healthcare delivery by improving access to primary care healthcare that is designated and delivered through First Nations-led partnerships.

Although the health profile of First Nations peoples is not summarized in the CHA report, we invite you to read full report here: [The Health Status of and Access to Healthcare by Registered First Nations Peoples in Manitoba](#).

Data Sources

The information for this report includes multiple sources of data to provide an in-depth look into the health of our population. These are referenced throughout the document in the figures and tables and include:

Administrative Health and Surveillance Data

These data measure health status and health services utilization in the province and health regions. The majority of the administrative health and surveillance data are provided by the Manitoba Centre for Health Policy (MCHP) or Manitoba Health, Seniors and Active Living, Information Management and Analytics Branch (MHSAL IMA).

MCHP data are obtained from the Population Research Data Repository, a comprehensive collection of administrative, registry, survey, and other data about residents of Manitoba. The data come from a variety of government department administrative datasets. For more detailed information about the repository, visit the [MCHP website](#). Data presented in this report are primarily from published reports, including: [The 2019 RHA Indicators Atlas](#) and [Mental Illness Among Adult Manitobans](#). However, home care data from the MCHP are unpublished work commissioned by MHSAL.

Canadian Community Health Survey (CCHS)

CCHS is a national cross-sectional self-reported survey on residents' health status, health determinants, and health care utilization. CCHS is designed to collect health data at the provincial and health region levels. Respondents who participated in the CCHS were selected to be representative of the provincial population and to provide reliable estimates at the health region level. It is typically collected by Statistics Canada every other year. The Manitoba sample size is 5,183 respondents. The data are weighted for representativeness and standardized to take into account certain demographic differences across health regions (e.g., age and sex), which can allow for more accurate comparisons between health regions in the province.

2016 Census

The 2016 Census data are used to describe population and community characteristics. The Census data provide high-quality information for communities across the province and are used to support planning for employment, education and health care services. It is typically collected by Statistics Canada every five years.

To ensure confidentiality, Statistics Canada randomly rounds up the values, including totals, either up or down to a multiple of '5' or '10.' As a result, when these data are summed or grouped, the total value may not match the individual values since totals and sub-totals are independently rounded. Similarly, percentages, which are calculated on rounded data, may not necessarily add up to 100 percent.

Healthy Child Manitoba

Data on the Early Development Instrument (EDI) and Family First risk factors are provided by the Healthy Child Manitoba Office. For more details about the EDI program in Manitoba and other provincial reports on child health, please visit [Healthy Child Manitoba EDI](#).

CancerCare Manitoba

Cancer screening, incidence and mortality data are provided by CancerCare Manitoba from the Manitoba Cancer Registry, Screening Programs and Radiation Oncology Program. Please visit [CancerCare Manitoba Publications](#).

Canadian Patient Experiences Survey – Inpatient Care (CPES-IC)

The 2017/18 Canadian Patient Experiences Survey is a standardized survey patients use to provide feedback about the quality of care they received during their most recent stay in a Canadian acute care hospital. It was created by the Canadian Institute for Health Information (CIHI) and has been endorsed by Accreditation Canada to meet the accreditation requirements for patient experience surveying. The results of the survey were analyzed by the Information Management and Analytics Branch of MHSAL. The CPES-IC has been collected across all regional health authorities in Manitoba since 2017.

Data Limitations

We acknowledge that there are limitations that should be taken into consideration when interpreting the data presented in this report. A challenge of drafting large population surveillance reports using multiple data sources is the availability of the most up-to-date data. The most current data available have been used for this report; however, for some indicators (e.g., dementia prevalence, mood and anxiety disorders) the most recent data can be several years old.

Although many of the indicators are representative of the population, the information in this report may not reflect the health status and needs of Indigenous peoples living in Manitoba due to data limitations. For more information on the Health Status of First Nations people in Manitoba, please see the previous section (First Nations People's Health in Manitoba).

Some indicators (e.g., cancer-related) are not available at the zone or district level. For some indicators, statistical testing was not available to test the differences compared to the Manitoba average (e.g., Census) or the changes over time (e.g., Canadian Community Health Survey). Although differences may be noted, the statistical significance of these differences should not be inferred. Similarly, statistically significant differences were not tested across RHAs, zones, and districts.

Administrative Health and Surveillance Data

The majority of the administrative health and surveillance data (e.g., provided by the Manitoba Centre for Health Policy or MHSAL IMA) rely on medical claims data. Some health providers (e.g., physicians, nurse practitioners) working in rural areas are covered under alternate payment methods (e.g., salaried), and they submit claims (shadow billings) for administrative purposes only. This may result in under-reported health services in those areas. This is particularly true for many Northern districts because much of the primary care for residents in some communities is provided by nurses and not coded into medical claims data.

In addition, some useful demographic factors such as race and ethnicity are not captured in the administrative health data repository; we also cannot assess the differences of health status and health care utilizations across these groups.

Canadian Community Health Survey (CCHS)

Due to the self-reported nature of the CCHS, recall and self-serving biases may have particular impact on certain survey questions. For example, respondents were asked about events (e.g., physical activity, fruit and vegetable consumption) occurring during the last month, and their ability to remember accurately may affect the data. In addition, respondents may choose to alter their responses in a more positive light to questions that may be perceived as more sensitive (e.g., alcohol consumption).

Respondents who participated in the CCHS were selected to be representative of the provincial population and to provide reliable estimates at the health region level. However, due to the small number of respondents, caution is needed when interpreting some response categories and smaller geographic areas.

Since 2015, considerable changes were made to the CCHS (e.g., sample selection procedures, content, etc.). Therefore, the 2015-2016 data cannot be combined with previous cycles to examine data at smaller area levels (i.e., community areas, zones, and districts). For certain indicators deemed important to report, data used in previous cycles of the CCHS was not available this cycle.

Although the CCHS survey is representative of 98 percent of the total population, it is missing information from the other two percent of the population is (e.g., the homeless, persons living on-reserve and other Indigenous settlements, full-time members of the Canadian Armed Forces, the institutionalized population and children aged 12 to 17 years old living in foster care). These groups may differ in risk for a wide range of health issues and may have different health service needs.

Census Data

In 2011, Statistics Canada's mandatory long-form census was abolished and replaced with a voluntary National Household Survey (NHS). The response rate to the NHS was much lower than the mandatory long-form census. Therefore, comparisons between the 2016 census data, presented in this report, and the previous 2011 NHS cannot be made, as well as, trends since 2011 cannot be noted.

Data Presentation and Interpretation

Most indicators in this report are presented using a population-based approach. This means that the rates or prevalence shown are based upon virtually every person living in Manitoba and excludes only those in federal penitentiaries, members of the Canadian Armed Forces, and the RCMP.

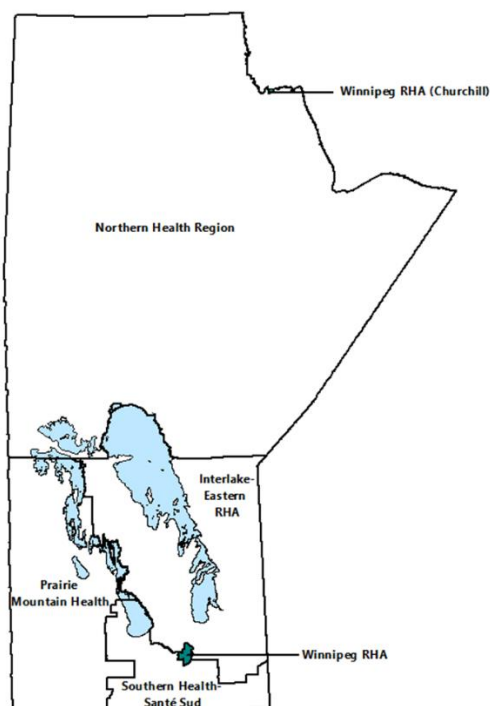
The indicators in this report are based upon where people live, not where they received services, with a few exceptions. For example, a person living in Prairie Mountain Health may be hospitalized in Winnipeg, but the hospitalization is attributed back to the rate for Prairie Mountain Health. Thus, the results show the health and healthcare use patterns of the population living in Prairie Mountain Health, no matter where they receive their care.

In all cases, the latest available information is presented. Visual representations of data have been labelled and ordered in a consistent fashion throughout the report with sources clearly defined.

In this report where the term 'Indigenous' is used, it is referring to only those residents who have self-identified as being either First Nations, Métis or Inuit. When Prairie Mountain Health is used alone it refers to all residents of the health region, including those identifying as First Nations or Métis.

Geographic Boundaries

In the majority of cases, the quantitative data are presented for the five regional health authorities of Manitoba.



The PMH zones are reported as North, South and Brandon. When reading this report, unless explicitly specified otherwise, you should assume that 'the region' is the area covered by the PMH region and that 'residents' are the people living within the boundaries of the PMH region.

Rates and Prevalence

In the majority of visual representations, data are presented as a rate or prevalence. Prevalence refers to the proportion of the population that has a certain condition, either at a given point in time (point prevalence) or over a period of time (period prevalence). It is an indication of how common the condition is, and therefore, has implications for the provision of services. Most indicators in this report use the concept of period prevalence over a one, three, or five year period.

In contrast, a rate refers to a change in state over time and is used to express the frequency of events during a given period. Many health-related events can happen to a given person more than once. For example, the physician visit rate shows how often residents visit physicians each year. Where an indicator covers a period longer than one year, the rate is annualized— that is, given as an annual average.

Adjusted Rates and Crude Values

The indicator tables and figures in this report are labelled as ‘age and sex adjusted’ rates when results have been statistically adjusted to account for the different age and sex composition of the populations living in different areas. This adjustment allows for fair comparisons among areas with different population characteristics. Adjusted rates show what an area’s rate would have been if the area’s population had the same age and sex composition as the Manitoba population.

In some cases ‘crude values’ are presented in order to indicate the actual number of events that occurred (e.g., residents living with a particular condition) within the health region and to represent the possible burden of illness to PMH in particular.

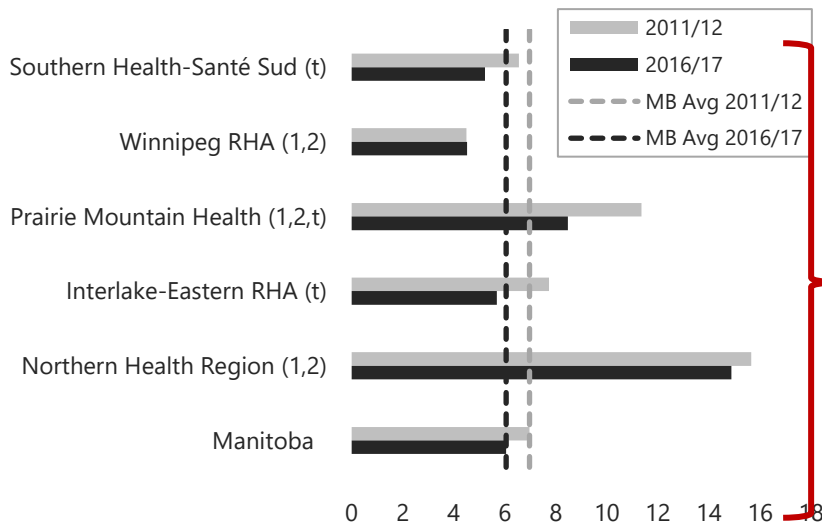
When reading this report, if the narrative referring to an indicator suggests that a difference is ‘significant’ then you know the difference is considered statistically significant and not likely to be an annual or period fluctuation or due to chance. When a difference is not described as ‘significant’, the rate should be considered similar to the time period it is compared with and/or the provincial average. Statistical significance was only tested for the difference compared to the provincial average and/or changes over time; there were no statistical tests completed for differences between regions, zones, and districts.

Visualization of Data

The 2019 CHA introduces a new method of visualizing data to describe regional differences and changes over time. It captures all the components of the previously used MCHP multiple year bar charts (below) but in a more condensed format.

The ORIGINAL bar graph from MCHP:

Hospitalization Rate Ambulatory Care Sensitive Conditions by RHA, 2016/17 (T2) and 2011/12 (T1)
Age and sex adjusted per 1,000 residents aged 0-74



In the CHA reports the bar charts here are collapsed and visualized below.

For each time period, the range in values (lowest to highest) are shown on either end

The regions are ordered from lowest to highest (based on T2)

**T2 = recent time period
T1 = earlier time period**

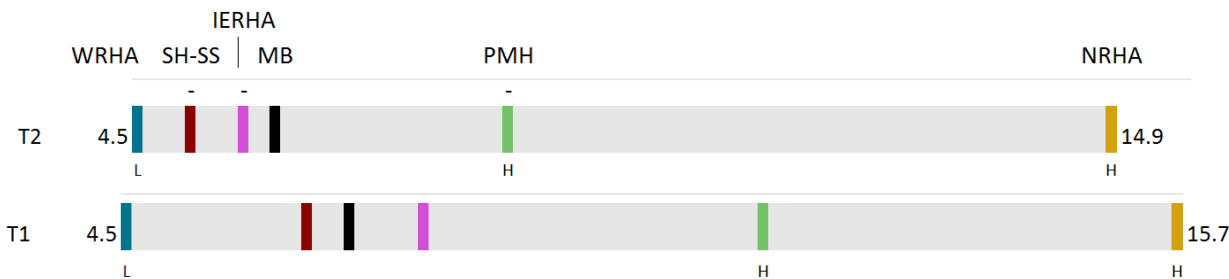
Data tables with actual values and crude counts

- 1 indicates area's rate was statistically different from Manitoba average in first time period
- 2 indicates area's rate was statistically different from Manitoba average in second time period
- t indicates change over time was statistically significant for that area
- s indicates data suppressed due to small numbers

MCHP RHA Indicators Atlas 2019

The NEW look in CHA reports:

Hospitalization Rate Ambulatory Care Sensitive Conditions by RHA, 2016/17 (T2) and 2011/12 (T1)
Age and sex adjusted per 1,000 residents aged 0-74



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA		SH-SS		IERHA		MB		PMH		NRHA	
T2 COUNT	3,467		1,010		861		8,023		1,522		995	
T2 RATE	4.5	L	5.2	-	5.7	-	6.1		8.5	H-	14.9	H
T1 RATE	4.5	L	6.6		7.7		7.0		11.4	H	15.7	H

MCHP RHA Indicators Atlas 2019

Graphing the two time periods

- The line bars are stacked one on top of the other with the most recent time period on top and the earlier time period below.
- The earlier or first time period is labeled “T1” and the second or more recent time period is labeled “T2”. These labels are positioned at the extreme left end of the line bars.

Understanding the sliding scale

Identifying regional data

- Bars on the sliding scale correspond to the regional values in the MCHP bar chart. To easily identify regional position, each RHA and Manitoba has been assigned a specific colour.

The range of values

- The T2 bar reflects only the range in values from the lowest regional value (WRHA 4.5) to the highest (14.9 NRHA). The horizontal bar does not show the entire scale from 0.
- The T1 bar reflects the data in the earlier time period (or in some cases, the only time period available). In the example above, the lowest value is the same for both time periods (WRHA 4.5) but the highest value extends the scale to the right (NRHA 15.7). The scale has been extended to reflect the full range of values for both time periods.
- The bookends (lowest and highest values) easily identify whether values have increased, decreased, or remained similar across the province. This is a quick way to see whether the regional disparity has widened or narrowed.

Statistical significance (statistical significance of $p < .05$)

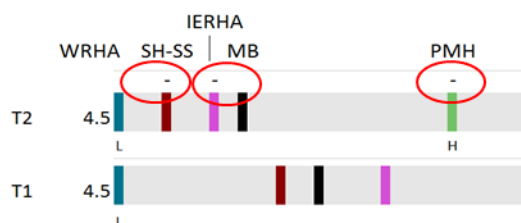
- Significant differences from the Manitoba average are shown below the RHA marker as either H (higher) or L (lower). This replaces MCHP’s symbols ‘1’ or ‘2’ for indicating statistical differences from the Manitoba average by time period.
- Significant changes over time are shown above the RHA marker as + (increasing) or - (decreasing). This replaces MCHP’s symbols “t” for indicating if the change over time was statistically significant for that area.

Data table below sliding scales

- A data table follows each set of line bars showing the actual values for every health region
- T2 COUNT reflects the crude count for only the recent time period (e.g., residents, hospitalizations, visits, etc.)
- T2 RATE presents the regional data reflected in T2 sliding scale
- T1 RATE presents the regional data reflected in T1 sliding scale
- Statistically significant notations as described above
- Values are ordered from left to right, lowest to highest according to the T2 rate

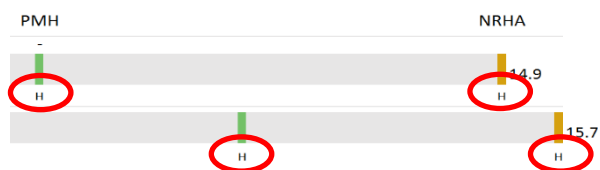
Interpreting the data

Significant increases or decreases (statistical significance of $p < .05$) in a health region's value over time (from T1 to T2) are notated by either a + (increase) or - (decrease) above the RHA marker on the T2 bar and repeated in the accompanying table.



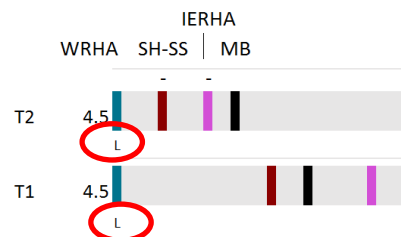
Southern Health Santé Sud, Interlake Eastern RHA and Prairie Mountain Health have all shown a significant decrease in hospitalizations for Ambulatory Care Sensitive (ACS) conditions between T1 and T2.

Values that are significantly different from the Manitoba average for that time period are notated by either an H (higher) or L (lower) underneath the RHA marker on both the T1 and T2 bars and repeated in the accompanying table.



Prairie Mountain Health and Northern RHA have significantly higher rates of hospitalization for ACS conditions than the province as a whole in both time periods.

Winnipeg RHA has significantly lower rates of hospitalization for ACS conditions than the province as a whole in both time periods.



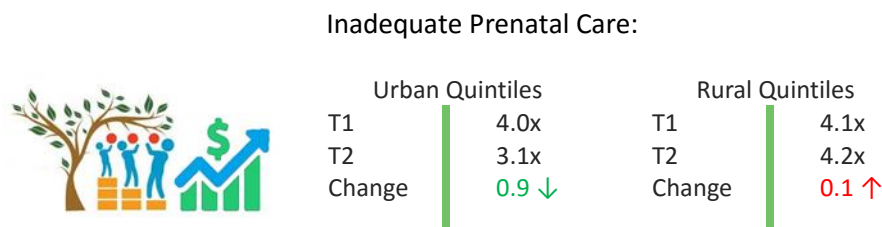
PMH	
1,522	
8.5	H-
11.4	H

Prairie Mountain Health had an ACS conditions rate of 11.4/1,000 in the first time period (2011/12) which was significantly higher than the provincial average of 7.0/1,000. This value has decreased significantly to 8.5/1,000 in the second time period (2016/17) but remains significantly higher than the T2 provincial average of 6.1/1,000.

Disparity Measures

There are two disparity measures shown in the report; income disparity and geographic disparity.

Income disparity is provided at a provincial level and is represented by the following visual for



Manitobans are split into urban and rural with urban being the cities of Brandon and Winnipeg, and rural being all other areas of the province.

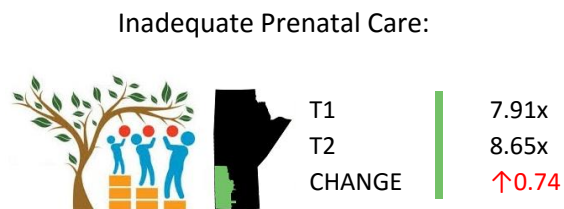
Within each group the population is divided into five groups of approximately equal population, according to the average household income (as determined by the Census small dissemination area) called income quintiles.

- The disparity measure is reported only where there is a statistically significant linear trend between income and the indicator results.
- The disparity is the relative difference between those in the highest income quintile and those in the lowest income quintile.

Understanding the income disparity information:

- The example above indicates that in urban settings, in the second time period (T2), the lowest income residents are 3.1 times as likely to receive inadequate prenatal care as those in the highest income quintile. The gap between the income levels has shrunk markedly over time.
- In a rural setting, the lowest income residents are 4.2 times as likely to receive inadequate prenatal care as those in the highest income quintile. The gap between the income levels has increased slightly over time.
- The direction of change is indicated by the arrows and the colour indicates whether the gap is narrowing (green) or widening (red).

Geographic disparity is shown at a regional level and is represented in the district table by the following visual for



The disparity is measured between the district with the best value for the indicator and the district with the worst value.

Understanding the geographic disparity information:

- In the example above, the disparity measure in T1 indicates that for the first time period, the district with the highest value in Prairie Mountain Health is 7.91 times more likely to receive inadequate prenatal care than the district with the lowest value in Prairie Mountain Health. The disparity measure in T2 indicates that for the second time period, the district with the highest value in Prairie Mountain Health is 8.65 times more likely to receive inadequate prenatal care than the district with the lowest value in Prairie Mountain Health.
- Note that the districts with the highest and lowest values may vary from T1 to T2.
- The red/green value indicates the change between the two time periods. The arrow pointing up/down and the red/green font colour indicate that the disparity or gap has widened/narrowed over time. In this case the disparity has widened between the two time periods.

Chapter 1 Who Lives In Prairie Mountain Health?

Key Findings

Population

- The population of Prairie Mountain Health in 2018 was 170,899, accounting for 12.6% of the Manitoba population.
- The largest proportion of the PMH population resides in the South Zone (44.5%).
- The gender split of PMH's population was fairly even at 49.6% male and 50.4% female.
- By 2030, PMH's population is expected to increase in almost all age groups and the most significant increase will be in the population aged 75-84.
- The population projection for First Nation peoples in Manitoba is significantly higher than the rest of the population. Currently the Indigenous population of PMH is estimated at 17.5%.
- Newcomers to Canada often experience challenges with navigating the health care system. Language barriers and cultural differences impact their experience and affect service provision within PMH. The 2016 Census indicated that 2.4% of residents of the Brandon zone had no knowledge of either official language.
- Almost one in five families in the North zone are single-parent families.
- PMH's changing population will continue to have a significant impact on health care services in the region. Ongoing planning and enhanced partnerships aimed at addressing the needs of an aging population, newcomers, and Indigenous populations will be vital. Geography and low population densities pose challenges when delivering services, especially in the North zone of PMH.

Why is this chapter important?

This chapter outlines the geography of the region as well as demographic features of our population. The unique characteristics of our region influence the factors that determine how healthy we are and have a significant impact on the need for appropriate services and programs.

The information in this chapter is foundational to forecast future issues that will require dedicated strategies in both the short and long-term.

Population health surveillance is essential to healthcare planning and resource allocation to ensure we develop equitable and sustainable programs and services.

Geographic Boundaries

Prairie Mountain Health spans an area from the 53rd parallel in the north to the United States border in the south and from the Saskatchewan border across to Lake Manitoba to the east. It covers an area of 64,800 square kilometres.

This land is defined as the traditional territories of the Cree, Dakota, Ojibway, Oji-Cree and homelands of the Métis. Acknowledging traditional territories and treaties confirms recognition and respect for the Indigenous populations, past and present.

There are 14 First Nation communities situated in the geographical area of PMH. The First Nation communities of Ebb & Flow, Keeseekoowenin, O-Chi-Chak-Ko-Sipi and Skownan are signatory to Treaty # 2 that was signed in 1871. Gambler First Nation, Pine Creek, Rolling River, Sapotaweyak Cree Nation, Tootinaowaziibeeng, Waywayseecappo and Wuskwi Sipiik are signatory to Treaty # 4 that was signed in 1874.

The Dakota First Nation communities of Birdtail Sioux, Sioux Valley and Canupawakpa were not a part of the numbered treaties. However, they are recognized as having occupation of territories within Manitoba and have secured alliances and arrangements with the Crown.

The Manitoba Métis Federation (MMF) is represented by seven regions with a provincial Métis population of well over 120,000. The MMF-Southwest and MMF-Northwest regions are within the boundaries of PMH with a small pocket of several northern Métis Locals/communities affiliated to MMF's The Pas Region.

PMH is home to 34 Hutterite communities, all of which are located south of Riding Mountain National Park.

There are two designated Francophone communities; St. Lazare in the district of Asessippi and Ste. Rose in the district of Agassiz Mountain. There is also a significant French speaking community on and around the Canadian Forces Base Shilo.

Programs and Services

In collaboration with the community, partners, and Shared Health/Soins communs, Prairie Mountain Health endeavours to provide access to care in appropriate settings. We strive to deliver a seamless continuum of care that supports our clients at every stage of their lives.

ACUTE AND TRANSITIONAL CARE

- Critical Care
- Emergency Care
- Medical Care
- Obstetrical Care
- Pediatric Care
- Rehabilitation Services
- Respiratory Therapy
- Surgery/Surgical Care
- Wound Care And Enterostomal Therapy

PRIMARY HEALTH/PRIMARY HEALTH CARE

- Chronic Disease Education
- Family Doctor Finder
- Health Promotion
- Medical Clinics
- Midwifery
- Mobile Clinic
- My Health Teams
- Nurse Practitioners
- Primary Care Outpatient Clinics (PCOC)
- Primary Health Care Centres
- Teen Health Clinics

AMBULATORY CARE

- Heart Program
- Hemodialysis
- Lung Clinic
- Pain Clinic
- Prehabilitation Clinic
- Stroke Clinic

PUBLIC HEALTH

- Communicable Disease Prevention & Control
- Early Childhood Development & Parenting
- Families First, Healthy Baby
- Healthy Sexuality & Harm Reduction Program
- Immunizations/Child Health Clinic
- Prenatal And Postpartum Support
- Transgender Health Clinic
- Travel Health Clinic

HOME CARE

- Adult Day Programs
- In-Home Personal Care And Nursing Services
- Meals On Wheels / Congregate Meals
- Respite Care
- Services To Seniors

UNIFIED REFERRAL INTAKE SERVICE (URIS)

SPIRITUAL HEALTH CARE

CANCER CARE/CANCER NAVIGATION SERVICES

MENTAL HEALTH

- Community Counselling Services
- Crisis Response Services
- Inpatient Psychiatric Treatment
- Mental Health Promotion, Housing And Supports
- Psychiatric Consultation
- Psychosocial Rehabilitation
- Rapid Access Addictions Medicine (RAAM) Clinic

THERAPY SERVICES

- Audiology
- Occupational Therapy
- Physiotherapy
- Speech Language Therapy

PALLIATIVE CARE

SHARED HEALTH/SOINS COMMUNS

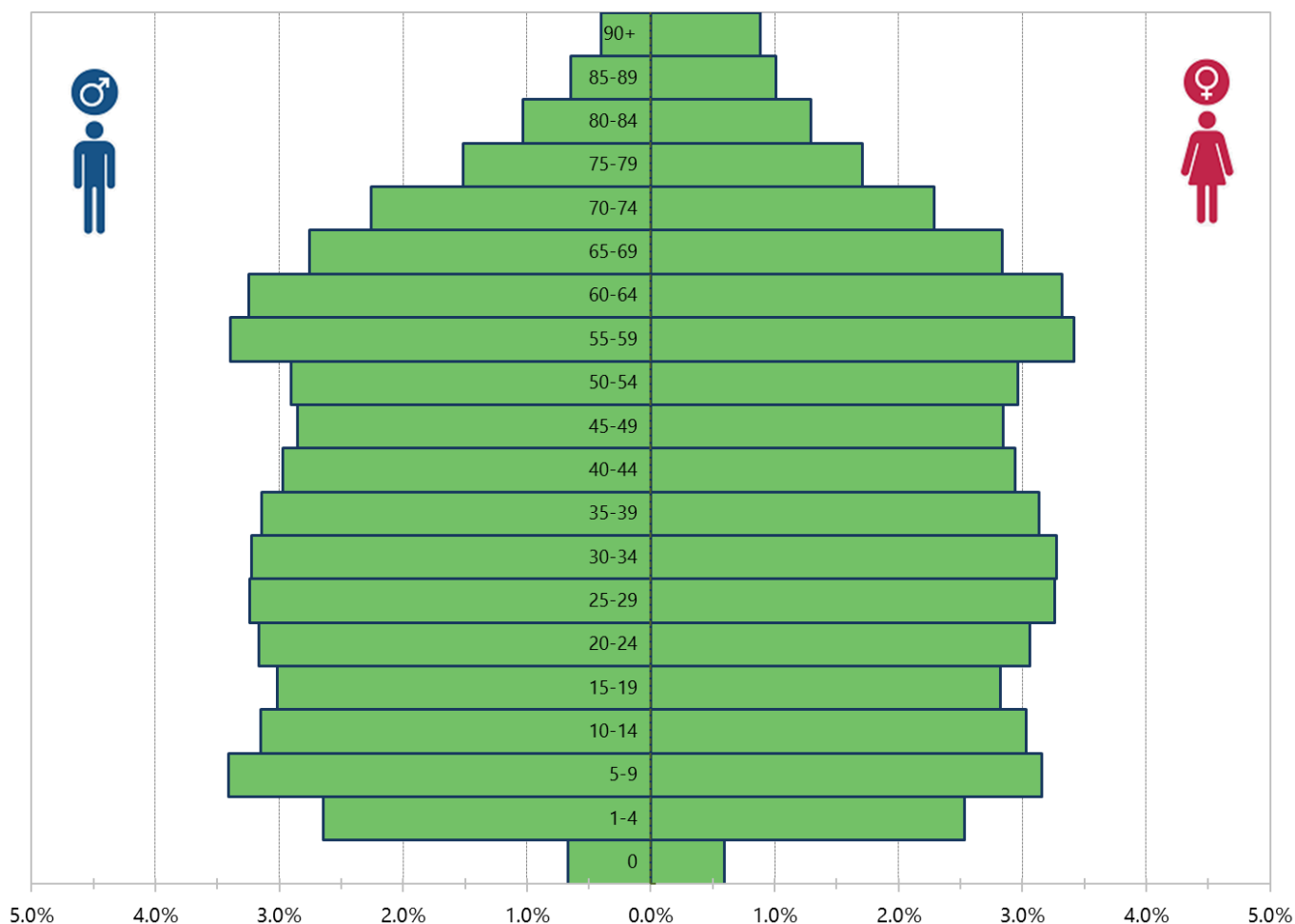
- Emergency Medical Services (Ambulance)
- Lab & Diagnostic Imaging

Population

The population is defined as the total number of residents living within a geographic area based on a resident's address on their Manitoba Health Card on June 1st of each year.

The population of PMH at June 1, 2018 was 170,899, composed of an almost exact 50:50 split between males and females. The following is a population pyramid or breakdown of the population by five-year age groups and split into male (left) and female (right). It details the percentage of the PMH populations that falls within each category.

Figure 1.1 PMH Population, June 1, 2018



MHSAL IMA 2019

In 2018, the PMH population was comprised of 40,651 or 23.8% in the North zone, 76,052 or 44.5% in the South zone and 54,196 or 31.7% in the Brandon zone.

Birth Rate

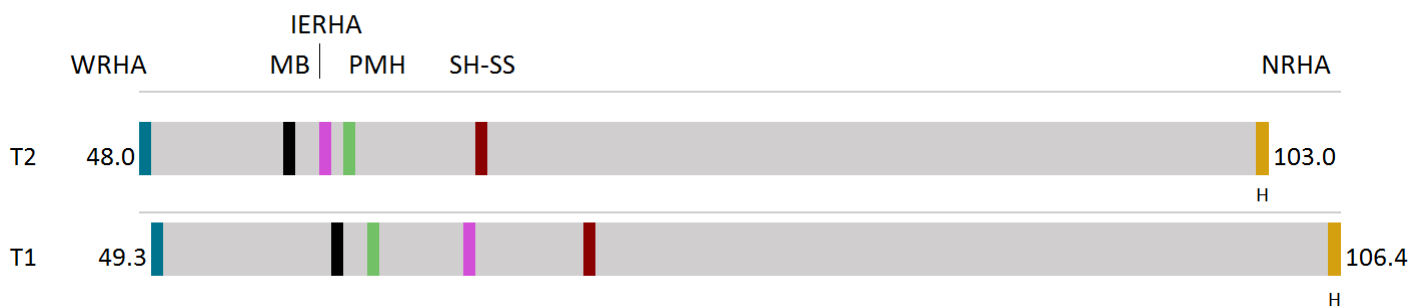
Definition

The rate of live births per 1,000 females aged 15 to 45 years, for a one-year time period.

Provincial Key Findings

- The annual birth rate in Manitoba decreased slightly, but not significantly, over time.
- Northern RHA has a birth rate significantly higher than the Manitoba average.

Figure 1.2 Birth Rate by RHA, 2011/12 (T1) and 2016/17 (T2)
Age adjusted rate of live births per 1,000 females aged 15-45 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	IERHA	PMH	SH-SS	NRHA
T2 COUNT	8,021	16,027	1,360	2,080	2,882	1,669
T2 RATE	48.0	55.5	57.4	58.8	65.1	103.0 H
T1 RATE	49.3	58.1	64.3	59.6	70.2	106.4 H

MCHP RHA Indicators Atlas 2019

Who Lives in Prairie Mountain Health?

Regional Key Findings

- The birth rate in PMH is similar to the province and has not changed significantly over time.
- Birth rates at a zone level are similar to the provincial average with a slightly higher rate in the South zone.
- Swan River has a significantly lower birth rate than the provincial average and is the only PMH district with a birth rate significantly different from the Manitoba average.
- Porcupine Mountain women have a birth rate three times higher than those in Swan River.

Table 1.1 Birth Rate by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age adjusted rate of live births per 1,000 females aged 15-45 years

	T2		T1	
	Count	Rate	Rate	
Manitoba	16,027	55.5	58.1	
PMH	2,080	58.8	59.6	
Brandon	736	57.4	59.5	
East End	115	69.3	68.3	
South End	170	66.9	59.0	
North Hill	94	60.1	61.1	
Downtown	184	58.3	63.7	
West End	173	46.0	56.9	
North	393	56.6	59.8	
Porcupine Mountain	106	74.5	69.1	
Agassiz Mountain	83	69.9	87.2	
Dauphin	103	60.9	57.1	
Riding Mountain	44	54.2	47.3	
Duck Mountain	34	37.4	39.6	
Swan River	23	23.2	L	35.5
South	951	62.9	64.4	
Whitemud	172	74.1	73.2	
Spruce Woods	205	65.4	73.7	
Turtle Mountain	122	64.1	71.1	
Little Saskatchewan	138	62.3	55.6	
Assessippi	132	61.3	56.8	
Souris River	182	59.6	63.1	

PMH District Disparity Ratio

T1: 2.46x
T2: 3.21x
CHANGE: ↑0.75

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Internal Migrant Mobility

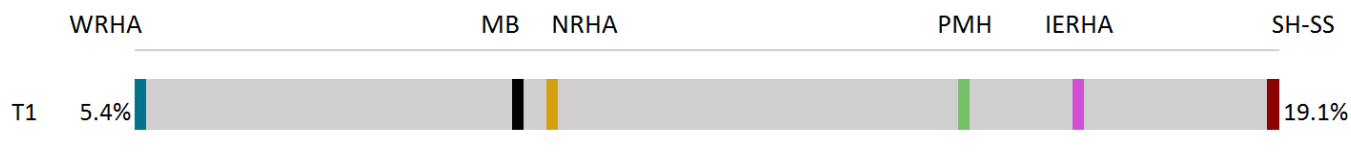
Definition

The percentage of the population that is currently living in a different city, town, township, village or First Nation Reserve within Canada compared to five years earlier.

Provincial Key Findings

- The provincial 5-year internal migrant mobility rate has decreased slightly from the 2011 Census value of 10.5%.
- The rate of 5-year mobility is highest in Southern Health-Santé Sud at close to a fifth of all residents having moved in a five year time period.
- Winnipeg RHA has the lowest mobility at around half that of any other region.

Figure 1.3 5-Year Internal Migration Mobility by RHA, 2016



	WRHA	MB	NRHA	PMH	IERHA	SH-SS
T1 RATE	5.4%	10.1%	10.4%	15.4%	16.8%	19.1%

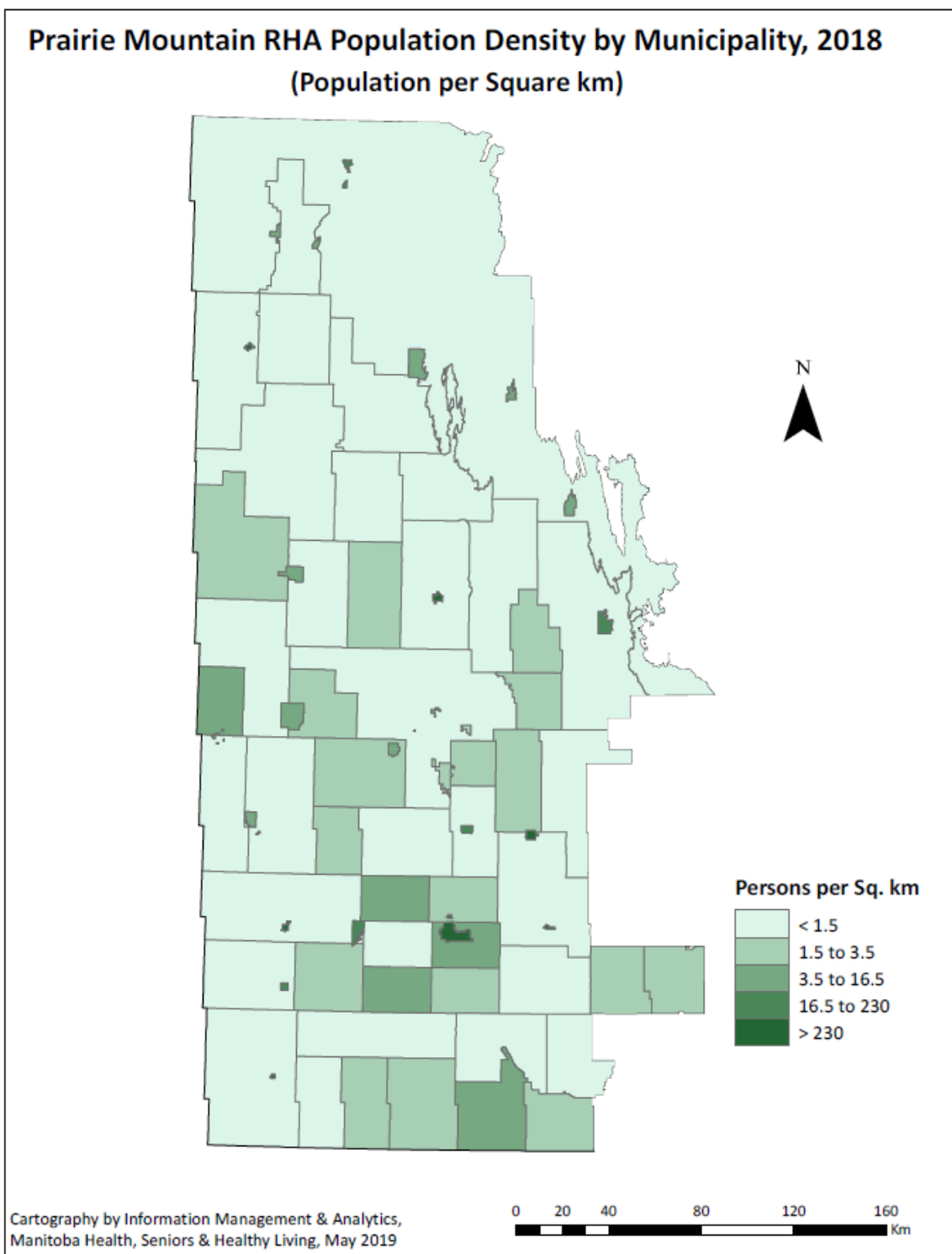
Statistics Canada Census 2016

Regional Key Findings

- The rate of 5-year mobility in PMH is more than 5% higher than the province and has changed very little from the 2011 Census value of 15.5%.
- Mobility does not differ much between zones, with a slightly higher rate in the South zone (16.3%) compared to that of the North (14.4%) and Brandon (14.7%) zones.

Population Density

The number of people per-square kilometre based on the population divided by the total land area for a one-year time period. Refer to the Appendices for zone and district level population densities.

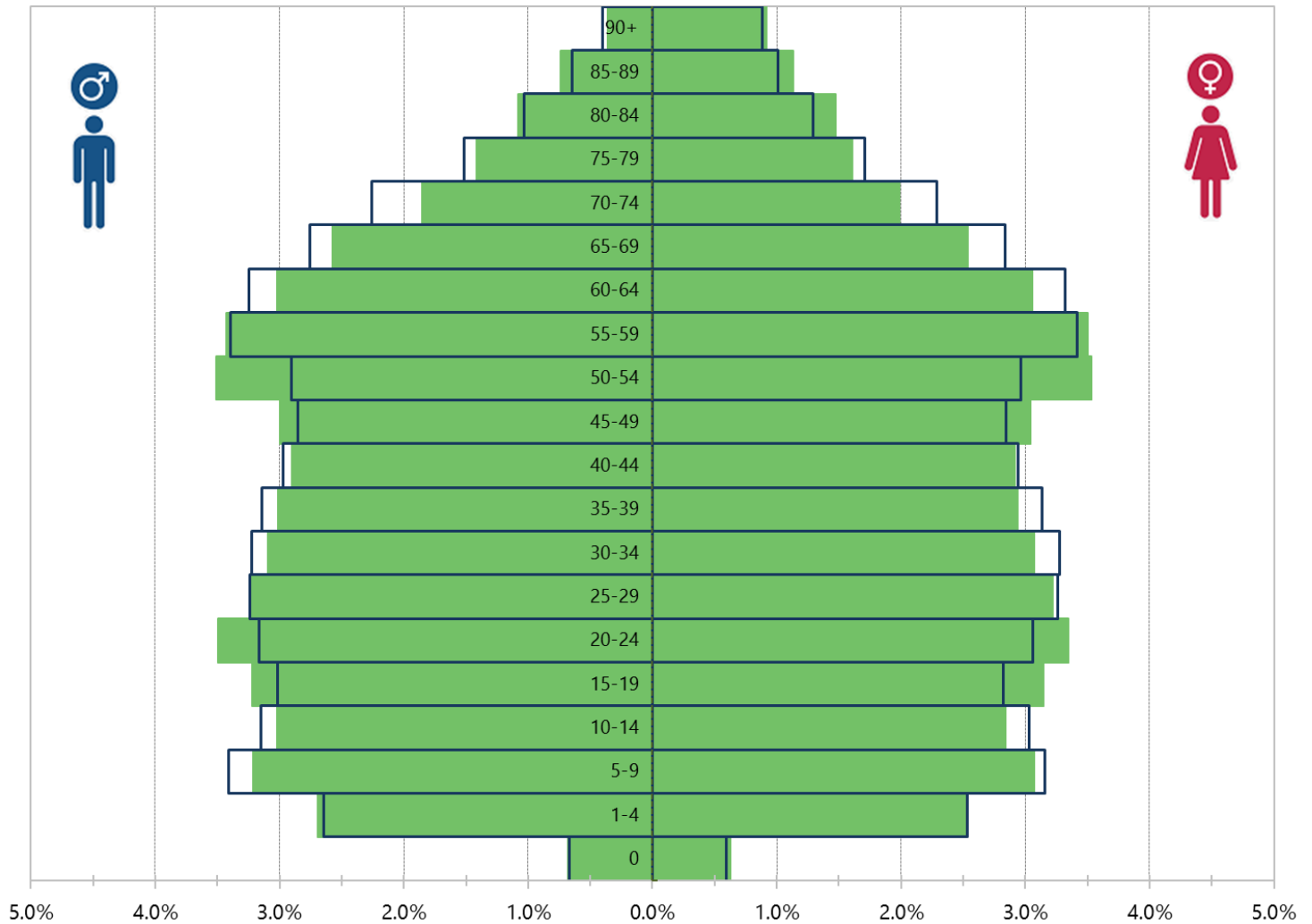


Population Change

The change in the number of people who live in a defined area over a five-year time period.

The population of PMH at June 1st, 2018 was 170,899 which represents an increase of 3,778 since 2013. The last five years in PMH has seen declines in the proportion of the population aged 15-24 and 50-54 with increases in the age groups 60-75 and 5-14 for both sexes.

Figure 1.4 PMH Population Change (proportion) 2013 (solid) to 2018 (outline)

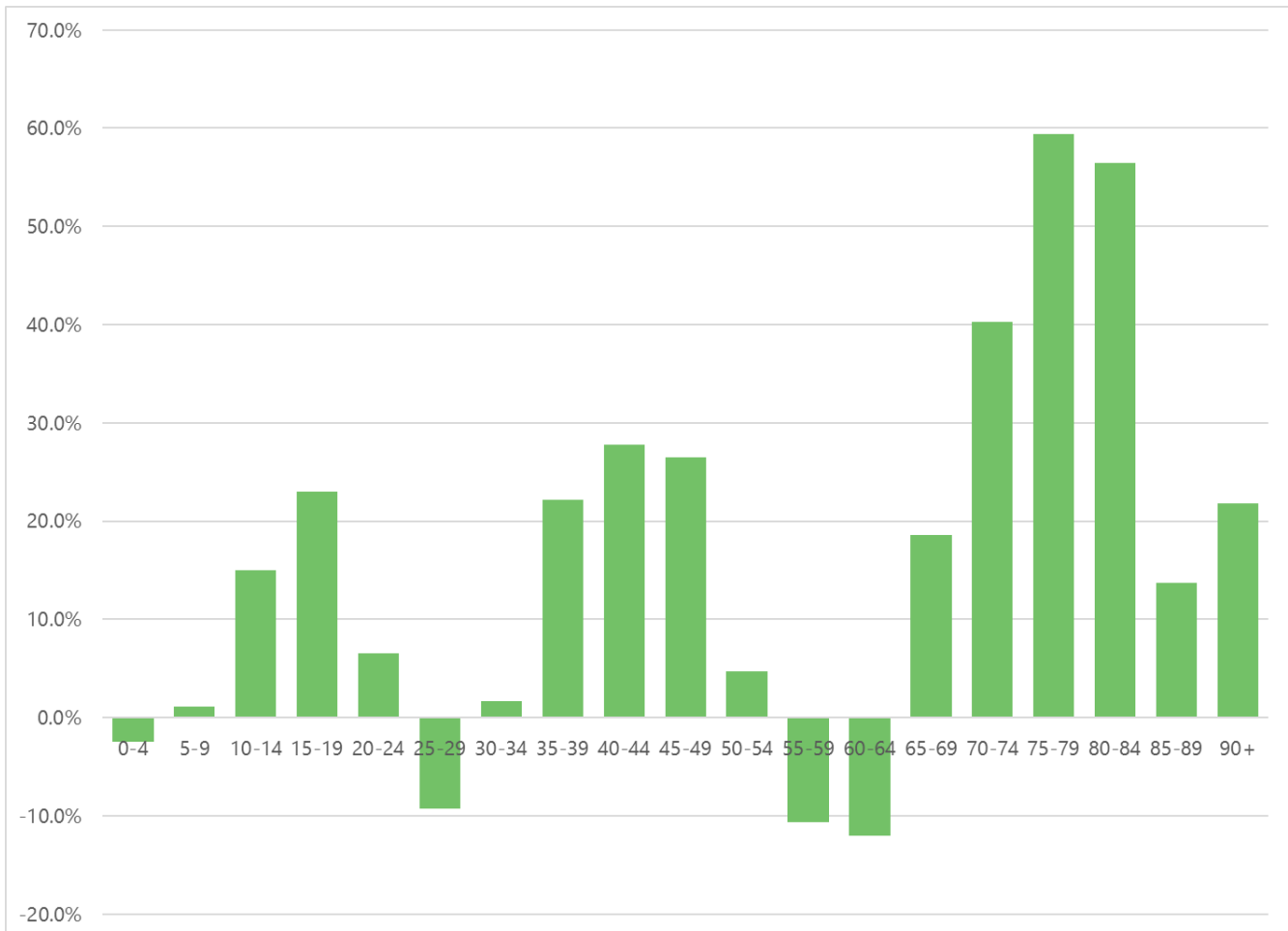


IMA MHSAL Population Reports 2013 and 2018

Population Projections

The following chart shows an estimate of population change projected by 2030, based on medium forecasts of birth, death and migration rates. Projected population change is depicted in five-year age groups from 2017-2030 for PMH. The largest proportional projected population increases will be in the 70 to 84 age group.

Figure 1.5 PMH Projected Population Change by 5-year age groups, 2017-2030
Medium Birth, Death and Migration Rate Forecast



IMA MHSAL 2019

Indigenous Population

Definition

An estimate of the Indigenous population based on self-reported 'Aboriginal identity' which includes persons who are First Nations (North American Indian), Métis or Inuk (Inuit) and/or those who are Registered or Treaty Indians (that is, registered under the Indian Act of Canada), and/or those who have membership in a First Nation or Indian band.

Provincial Key Findings

- The provincial Indigenous population has increased since the 2011 Census where it was estimated at 16.7%.
- There are considerably higher proportions of residents self-reporting as individuals of 'Aboriginal identity' in Interlake Eastern RHA and Northern RHA.

Figure 1.6 Indigenous Population by RHA, 2016



	WRHA	SH-SS	PMH	MB	IERHA	NRHA
T1 RATE	12.2%	13.4%	17.5%	18.0%	27.3%	72.6%

Statistics Canada Census 2016

Regional Key Findings

- The Indigenous population of PMH has increased since the 2011 Census where it was estimated at 15.9%.
- There are considerably higher proportions of residents self-reporting 'Aboriginal identity' in the North (33.6%) zone of PMH compared to the Brandon (13.7%) and South (11.6%) zones.

A CLOSER LOOK... INDIGENOUS CULTURAL SAFETY

In response to the Truth and Reconciliation Commission of Canada Calls to Action, PMH Indigenous Health program staff provide education for healthcare providers using a learning module called, Indigenous Cultural Awareness – Creating the Foundation for Cultural Safety. The module was adapted from the National Collaborative Centre for Aboriginal Health (NCCA) and offers a step-by-step approach to help build a foundation of cultural safety for First Nation and Métis people.

There are four key components:

- Cultural Awareness – knowing who we are, where we come from, our history, our language, and our land base
- Cultural Sensitivity – respecting the differences between cultural groups and to dispel the belief that all Indigenous people are the same and to be able to acknowledge our own attitudes
- Cultural Competency – creating a health care environment that is free of racism and stereotyping
- Cultural Safety - the outcome as defined and experienced by those who receive services. The focus is feeling safe based on respectful engagement that can help find paths to well-being and safety from discrimination based on cultural affiliation or background.

Visible Minority Population

Definition

An estimate of the visible minority population, defined as persons, other than Indigenous people, who are non-Caucasian in race or non-white in colour.

Provincial Key Findings

- The provincial visible minority population is predominantly based in the Winnipeg RHA.

Figure 1.7 Visible Minority Population by RHA, 2016



	IERHA	NRHA	SH-SS	PMH	MB	WRHA
T1 RATE	1.8%	3.2%	3.6%	7.4%	17.5%	27.5%

Statistics Canada Census 2016

Regional Key Findings

- The PMH visible minority population is relatively small and primarily based in the Brandon zone.

Knowledge of Official Languages

Definition

Knowledge of official languages refers to whether the person can conduct a conversation in English only, French only, in both or in neither language. For a child who has not yet learned to speak, this includes languages that the child is learning to speak at home.

The majority of PMH residents speak only English. It is noteworthy that 2.4% of Brandon zone residents speak neither English nor French.

Table 1.2 Knowledge of official languages, Manitoba and PMH, 2016

	English Only	French Only or English and French	Neither English nor French
Manitoba	90.0%	8.7%	1.3%
PMH	94.4%	4.8%	0.8%
South	95.4%	4.4%	0.2%
Brandon	92.3%	5.3%	2.4%
North	95.1%	4.8%	0.1%

Statistics Canada Census 2016

A CLOSER LOOK... LANGUAGE SUPPORT

The Westman Immigrant Services (WIS) Language Centre offers professional interpretation in 17 languages. More than 60 interpreters participate in rigorous and ongoing training with many having completed specialized medical training. Trained interpreters offer impartial, professional language interpretation to support effective communication between limited English speakers and service providers. The importance of professional interpretation for newcomers is paramount to the settlement experience, as there are notable drawbacks associated with using family members or other facility staff for language support.

Immigrant Status in Private Households

Immigrant status refers to whether the person is a non-immigrant, an immigrant, or a non-permanent resident and applies to each member of a household.

Prairie Mountain Health had an immigrant population of 8.9% at the last Census (2016) evenly split between males (8.8%) and females (9.0%). This differs from the provincial value of 19.2%.

The proportion of immigrants in the population is highest in the Brandon zone at 15.9%, less than half that in the South zone (7.2%) and very modest in the North zone (3.4%).

A CLOSER LOOK...LOCAL IMMIGRATION PARTNERSHIP

Commencing April of 2020, the Brandon Neighbourhood Renewal Corporation (BNRC) and Immigrant, Refugee, Citizenship Canada will team up to establish the sixth Local Immigration Partnership (LIP) in Manitoba. Working together, the LIP will identify challenges faced by newcomers when settling in Brandon, and look for innovative ways to attract and retain new immigrants, while ensuring the economic benefits of immigration occur within the local economy. Similar to other LIPs, Brandon's partnership council will be made up of community change makers including Prairie Mountain Health, Brandon School Division, Chamber of Commerce, Westman Immigrant Services, Brandon University, Assiniboine Community College, Brandon Urban Aboriginal Peoples' Council, Brandon Police Services, Municipal and Provincial governments, and industry leaders such as Maple Leaf.

Through guidance of the partnership council, a coordinator will educate and prepare local employers, education systems, political systems and residents to openly welcome and retain newcomers. The LIP will work synergistically with various BRNC projects, such as the homelessness coordinated access system and affordable housing networks, as well as the Community Development network, which works to ensure all Brandon residents have a good quality of life.

Immigration by Place of Birth

This indicator measures any person who has ever been a landed immigrant or permanent resident, by place of birth. The largest proportion of landed immigrants in PMH were born in the Philippines followed by the United Kingdom and China. This distribution varies across the zones with the highest proportion of landed immigrants being from the Philippines in the South zone, from China in the Brandon zone and from the United Kingdom in the North zone.

Table 1.3 Immigration by Place of Birth, PMH and Zones, 2016

Place of Birth	PMH	South	Brandon	North
Philippines	16.7%	33.0%	6.1%	11.9%
United Kingdom	13.0%	24.0%	5.0%	14.6%
China	10.5%	2.9%	17.1%	2.8%
India	7.0%	0.5%	11.4%	7.5%
El Salvador	6.6%	0.2%	12.0%	0.8%
United States	5.5%	7.3%	3.0%	14.2%
Germany	5.4%	7.8%	2.6%	12.6%
Ukraine	3.2%	1.0%	4.6%	2.8%
Colombia	3.1%	0.7%	5.3%	0.0%
Elsewhere	29.0%	22.7%	32.9%	32.8%

Statistics Canada Census 2016

A CLOSER LOOK... RESETTLEMENT ASSISTANCE PROGRAM

Westman Immigrant Services (WIS) has participated in the Resettlement Assistance Program since 2016. This program is funded by Immigration Refugees and Citizenship Canada. From 2016 to 2018, 50-65 refugees arrived each year to settle in Brandon through this program. In April 2019, WIS was notified that the number of refugee arrivals will increase to 75 for 2019-2020. It is important to note that this is not the only way that refugees arrive in Brandon. There are several ways in which refugees arrive in Brandon including sponsorship groups, family sponsors and blended visa-office referred refugees.

The inaugural years of the program saw individuals come to Canada as part of the Syrian response. While Syrian arrivals experienced significant trauma as a result of war in their country, they had been living relatively well-established lives before the conflict. Many had specialized skills and experienced relatively stable education and healthcare (although gender differences existed with regards to access) in advance of their refugee experience.

In the last 18 months, the origins of refugees has changed with many arrivals from Ethiopia, Eritrea, Somalia and the Congo. More recent refugee arrivals have experienced many years in refugee camps before coming to Canada, with some of the younger arrivals having spent their entire lives in a refugee camp. Access to education was inconsistent between camps and some individuals have very limited education, resulting in profound literacy needs. Access to healthcare has been equally as sporadic resulting in chronic issues. WIS receives limited notification of known medical requirements such as monitoring for tuberculosis, mobility issues, and specialized care required upon arrival, however, not all medical conditions are identified and reported with client arrival. In addition to medical needs, mental health supports for adults and children are of utmost importance, as many refugees have specific needs related to trauma.

Chapter 2 What Keeps us Healthy?

Key Findings

Income, Education and Employment

- The median household income for residents in PMH was the lowest in the province, a full \$5,000 less than the provincial average.
- Although the proportion of PMH residents spending more than 30% of their income on shelter related expenses is lower than the provincial average, there are communities with safe and affordable housing challenges.
- More than a quarter of PMH residents do not have a high school diploma. Lower levels of education pose many challenges for residents in making healthy life choices and accessing health care as well as for service providers in delivering care.
- Almost 21% of PMH residents work in sales and service occupations.

Healthy Child Development

- A significantly higher proportion of women in the North zone do not receive adequate prenatal care and have significantly lower breastfeeding initiation rate.
- More than a quarter of North zone children and almost a quarter of Brandon zone children live in low income families.
- PMH has seen a significant decrease in the rates of teenage pregnancy and teenage birth.

Personal Health Determinants

- A quarter of PMH residents were classified as obese and almost a third as overweight. Almost 50% of PMH residents reported 'increased exercise' as the single most important health change they had made in the last year.
- Residents reported a stronger 'sense of community belonging' than the province as a whole.

Health Behaviours

- The prevalence of PMH adults living with a substance use disorder is significantly higher than the provincial average, with almost half of the districts significantly higher than Manitoba overall.
- 18% of PMH respondents reported being current smokers.
- More than half of PMH respondents reported being physically active in the last three months, whilst 21% of residents reported being physically inactive.
- Almost a quarter of PMH respondents reported requiring assistance with activities of daily living.
- More than a quarter of PMH respondents reported consuming five or more servings of fruit or vegetables per day, the highest in the province.
- Over a quarter of PMH respondents reported using a cell phone whilst driving.
- PMH has the highest proportion (49%) of respondents reporting 'rarely or never' wearing a helmet whilst riding or driving an ATV.

Use of Preventive Services

- Immunization rates for seniors range between 49%-60% across the zones for Influenza, and 60%-66% for Pneumococcal, both much lower than the national target of 80%.
- PMH Colorectal screening rates remain significantly lower than the province as a whole at 34%. Rates are lowest among low income males.
- Breast Cancer screening rates in PMH are the highest in the province at 58%
- PMH respondents reported significantly lower dental coverage and significantly higher proportion who visit the dentist less than once a year or for an emergency visit only.

What influences how healthy our population is?

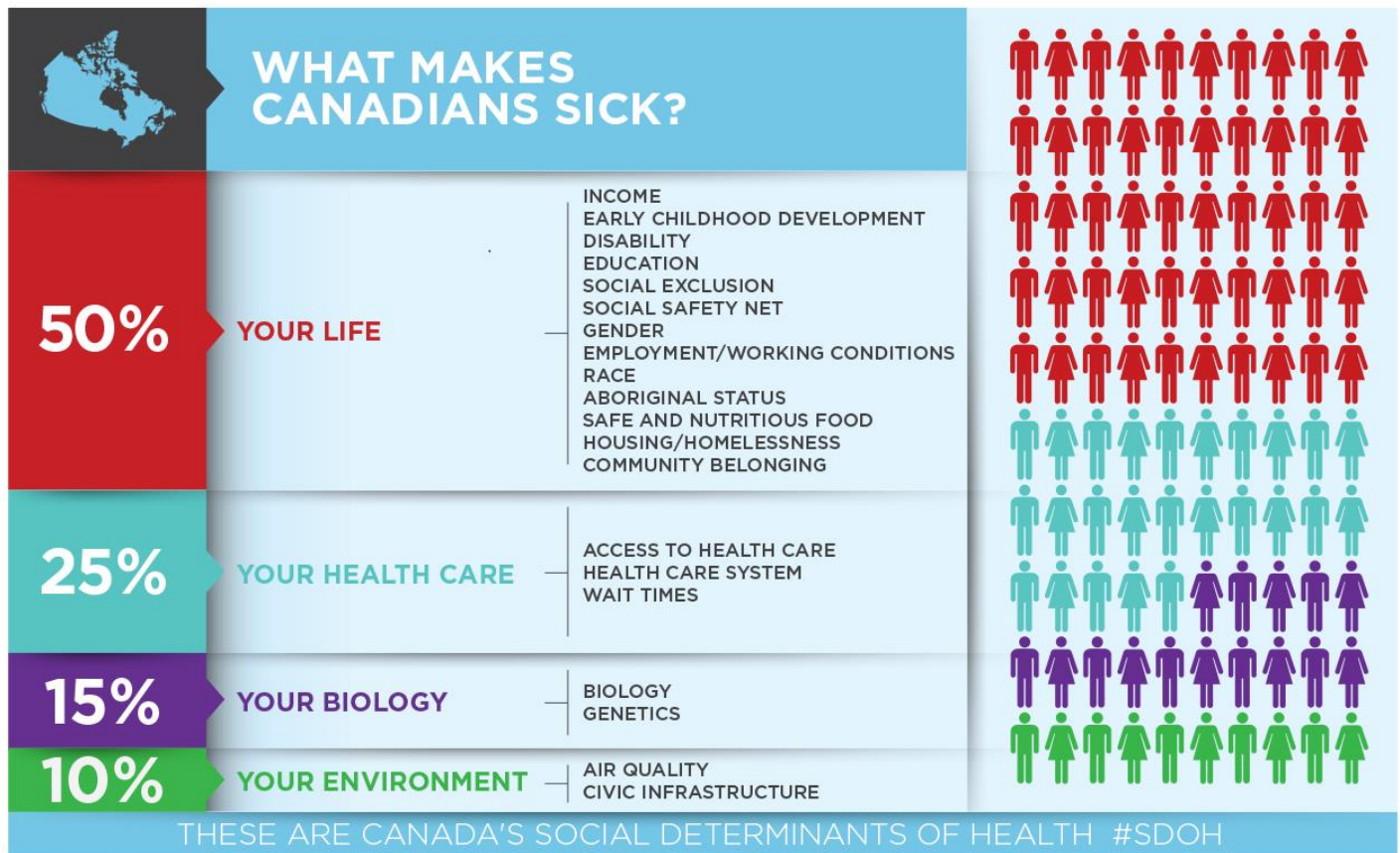
This chapter presents information regarding the social determinants of health and health status measures by geographic area in order to provide a comprehensive picture of the health of residents of Prairie Mountain Health.

Interactions between the determinants of health result in differences in health status between individuals living in different geographic areas of the region and the province. Wherever possible, the report presents the health status of the population overall, and identifies population groups that experience poorer health outcomes. These comparisons are essential to assess whether gaps are widening or narrowing among population groups (based on income and geographic location). Future planning efforts must take these health gaps into consideration to improve overall population health outcomes.

According to the Canadian Medical Association (CMA), social determinants of health “are systematic social and economic conditions that influence a person’s health. They include income, housing, education, gender and race, and have a greater impact on individual and population health than biological and environmental conditions. Their impact can be even greater than that of the health care system itself.” In 2013, the CMA published the results of the National Dialogue on Health Care Transformation. Participants identified four social determinants of health (income, housing, nutrition and food security, and early childhood development) as having equal, if not more impact on health than the healthcare system.

According to the CMA, about 50 percent of an individual’s health is determined by their life experiences (e.g., income, early childhood development, disability). Only 25 percent of an individual’s health is determined by the health care they receive (e.g., access to health care, the healthcare system, wait times) and 15 percent is determined by an individual’s biology (e.g., genetics). Finally, the environment determines about ten percent of an individual’s health (e.g., air quality, civic infrastructure).

Determinants of Health



Canadian Medical Association 2013

In an attempt to answer the question of what keeps PMH residents healthy, this chapter will look at indicators related to:

- Income;
- Housing;
- Food Security;
- Education;
- Employment/Working Conditions;
- Healthy Child Development;
- Personal Health Determinants;
- Health Behaviours; and
- Use of Preventive Services.

The indicators reported in this chapter relate to the social determinants of health. However, while all determinants of health are important, data are not currently available for all social determinants at the provincial and regional levels. Further, not all determinants of health are easily modifiable or can be reasonably addressed by the region solely.

Socioeconomic Factor Index

Definition

The Socioeconomic Factor Index (SEFI) reflects the social determinants of health using four variables: average household income, proportion of single parent households, unemployment rate for residents aged 15 years and older, and proportion of population aged 15 years and older without high school graduation. Lower scores indicate better socioeconomic status while scores greater than zero indicate worse status.

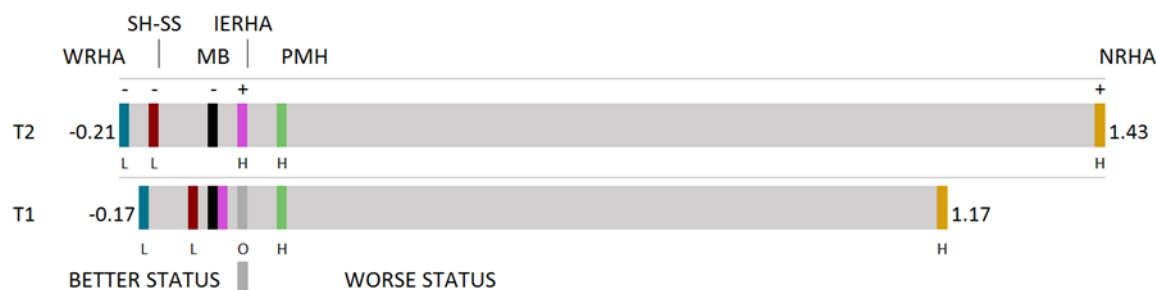
Why is this indicator important?

All four variables that comprise this composite indicator are social determinants of health and have been demonstrated to heavily influence a person’s health and well being.

Provincial Key Findings

- Winnipeg RHA and Southern Health-Santé Sud have better socioeconomic status than the province as a whole.
- Interlake-Eastern RHA, Prairie Mountain Health and Northern RHA have worse socioeconomic status than the province as a whole.
- The SEFI score for Manitoba got slightly better over time, however this should be interpreted with caution, as the change was driven by population distribution (more Manitobans lived in areas that had higher average scores in the second time period).

Figure 2.1 Socioeconomic Status by RHA, 2011 (T1) and 2016 (T2)
Score on MCHP’s Socioeconomic Factor Index (SEFI). Lower values indicate better status



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

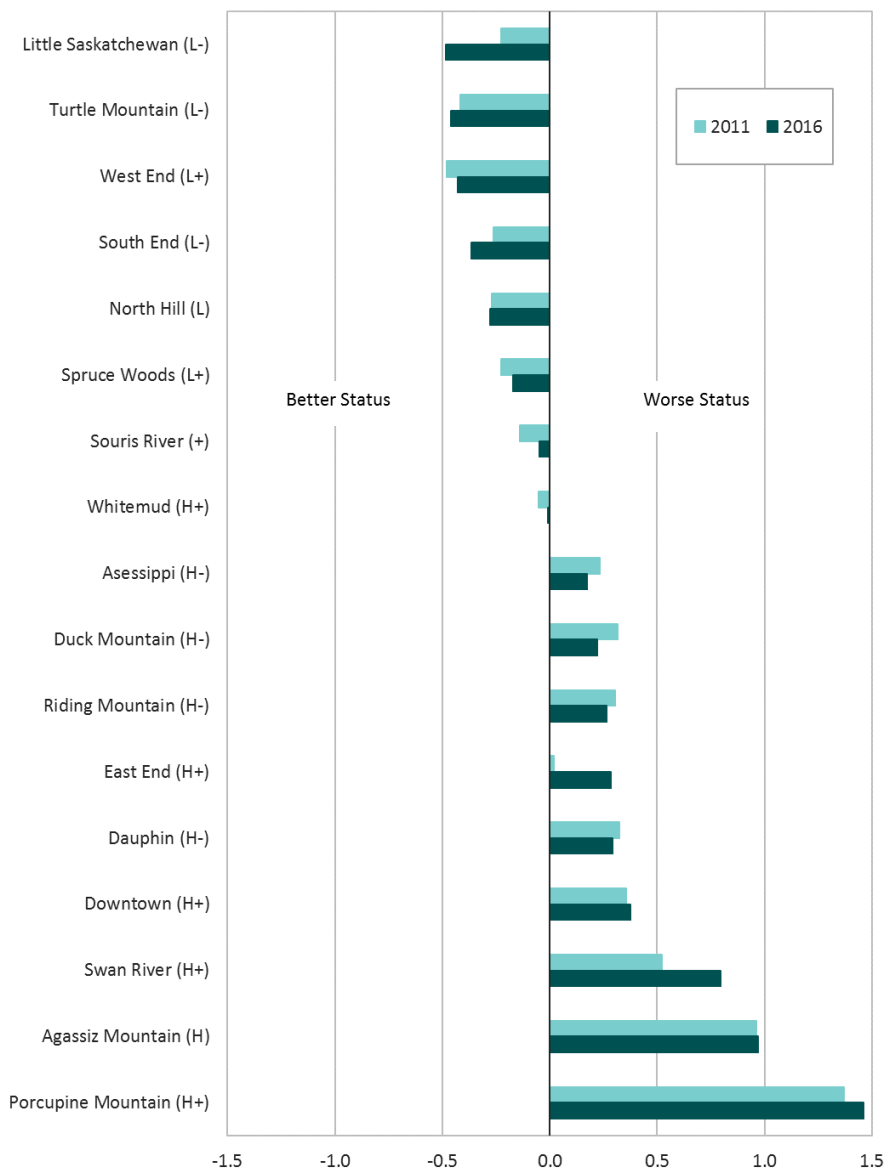
	WRHA		SH-SS		MB		IERHA		PMH		NRHA	
T2 COUNT	770,185		198,809		1,351,359		128,240		170,521		77,068	
T2 RATE	-0.21	L-	-0.14	L-	-0.05	-	0.00	H+	0.06	H	1.43	H+
T1 RATE	-0.17	L	-0.08	L	-0.03		-0.03		0.07	H	1.17	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The SEFI for PMH is significantly higher than the province and has remained relatively unchanged over time.
- The South zone (-0.16) is the least 'socioeconomically deprived', followed by the Brandon zone (-0.11) and the North zone (0.71).
- Six districts have a significantly higher SEFI than the Manitoba average and ten districts have a significantly lower SEFI.
- The lowest SEFI score (best status) can be found in Little Saskatchewan (-0.48), whilst the worst socioeconomic status can be found in Porcupine Mountain (1.46)

Figure 2.2 Socioeconomic Status by PMH District, 2011 (T1) and 2016 (T2)
Score on MCHP's Socioeconomic Factor Index (SEFI). Lower values indicate better status



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Social Deprivation Index

Definition

A composite score which includes the proportion of the population, aged 15 years and older, who are separated, divorced, or widowed, the proportion of the population that lives alone, and the proportion of the population that has moved at least once in the past five years.

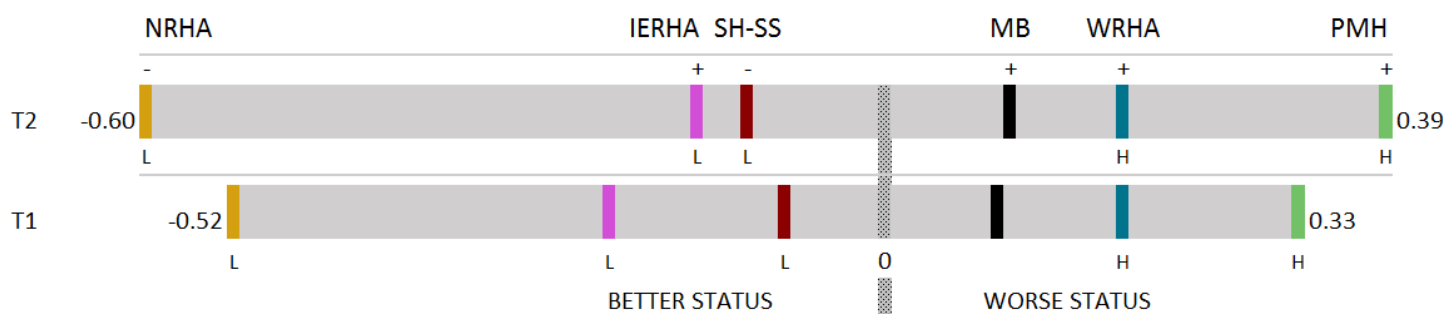
Why is this indicator important?

It reflects the status of relationships among individuals in the family, workplace, and the community. Scores on these indices range from -5 to +5; lower scores indicate better status or less deprivation, while higher scores indicate worse status or more deprivation.

Provincial Key Findings

- Winnipeg RHA and Prairie Mountain Health have a significantly worse status than the province.
- Northern RHA, Interlake-Eastern RHA and Southern Health-Santé Sud have a significantly better status than the province.
- Social deprivation in Manitoba slightly worsened over time. The values for Southern Health-Santé Sud and Northern RHA improved, whereas Prairie Mountain Health, Winnipeg RHA and Interlake-Eastern RHA worsened.

Figure 2.3 Mean Social Deprivation by RHA, 2011 (T1) and 2016 (T2)
Score on MCHP's Social Deprivation Index. Lower values indicate better status



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		IERHA		SH-SS		MB		WRHA		PMH	
T2 COUNT	77,068		128,240		198,809		1,351,359		770,185		170,521	
T2 RATE	-0.60	L-	-0.15	L+	-0.11	L-	0.09	+	0.19	H+	0.39	H+
T1 RATE	-0.52	L	-0.22	L	-0.08	L	0.08		0.18	H	0.33	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The Social Deprivation Index for PMH is significantly higher (worse) than the province and has worsened over time.
- The South zone (0.22) is the least 'socially deprived', followed by the Brandon zone (0.41) and the North zone (0.68).
- The South zone showed a significant improvement over time, whilst the Brandon and North zones showed a significant worsening in social deprivation.
- Only Agassiz Mountain and Turtle Mountain demonstrate a significantly better social deprivation status than the province.
- Agassiz Mountain (-0.37) has the strongest community connections and support in PMH (best status on the social deprivation index), whereas Swan River (2.79) has the weakest (worst status) in PMH and the entire province.

Material Deprivation Index

Definition

A composite score which includes average household income, unemployment rate for ages 15 years and older, and proportion of the population aged 15 years and older without high school graduation.

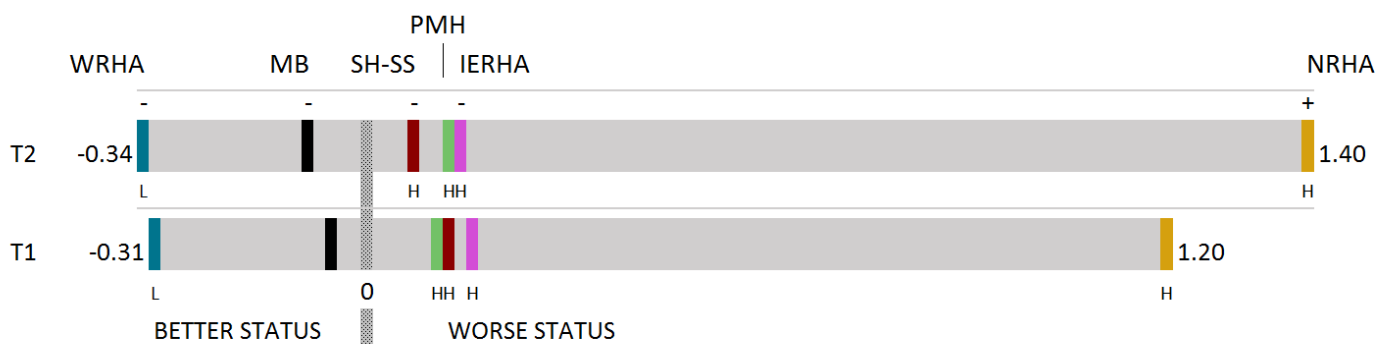
Why is this indicator important?

It reflects the status of wealth, goods and conveniences. Scores on these indices range from -5 to +5; lower scores indicate better status or less deprivation, while higher scores indicate worse status or more deprivation.

Provincial Key Findings

- Winnipeg RHA drives the material deprivation index for the province and is the only region that has a value better than the province. All other RHAs have a significantly worse status.
- Material deprivation in Manitoba got better over time. The values for Southern Health-Santé Sud, Winnipeg RHA and Interlake-Eastern RHA improved, whereas Northern RHA worsened.

Figure 2.4 Mean Material Deprivation by RHA, 2011 (T1) and 2016 (T2)
Score on MCHP's Material Deprivation Index. Lower values indicate better status



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	SH-SS	PMH	IERHA	NRHA						
T2 POP	770,185	1,351,359	198,809	170,521	128,240	77,068						
T2 RATE	-0.34	L-	-0.07	-	0.08	H-	0.14	H	0.14	H-	1.40	H+
T1 RATE	-0.31	L	-0.05		0.14	H	0.13	H	0.17	H	1.20	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The Material Deprivation Index for PMH is significantly higher (worse) than the province and has worsened slightly over time.
- The Brandon zone (-0.19) is the least 'materially deprived', followed by the South zone (0.05) and the North zone (0.72).
- The South zone showed a significant improvement over time, whilst the Brandon and North zones showed a significant worsening in material deprivation.
- Only five districts demonstrate a significantly better material deprivation status than the province.
- The lowest material deprivation index (best status) can be found in West End (-0.43), whilst the most material deprivation can be found in Porcupine Mountain (1.65)

Lone Parent Families

Definition

The percentage of census families composed of only one parent of any marital status (e.g., divorced, separated, widowed or never-married) living with at least one child in the same dwelling.

Children growing up in single-parent families typically do not have the same resources available as those growing up in two-parent families. Compared with children in married-couple families, children raised in single-parent households are more likely to drop out of school, to have or cause a teen pregnancy and to experience a divorce in adulthood.

Provincial Key Findings

- Lone parent families range from less than 11% in Southern Health-Santé Sud to almost a third of all families in Northern RHA.

Figure 2.5 Percent of Lone Parent Families, Manitoba and RHAs, 2016



	SH-SS	IERHA	PMH	MB	WRHA	NRHA
T1 RATE	10.9%	14.3%	14.8%	17.0%	18.3%	31.8%

Statistics Canada Census 2016

Regional Key Findings

- Nearly 15% of all families in PMH are single parent families. More than three in four (78%) of lone parent households are headed by females.
- The North zone has 19.8% lone parent families, followed by the Brandon zone at 17.8%, whilst the South zone has just 10.4%.
- The proportion of lone parent families ranges from 8.1% in Spruce Woods to over a quarter (25.3%) in Downtown. Families in Downtown are more than three times as likely to be a lone parent family as those in Spruce Woods.

Dependency Ratio

Definition

The total dependency ratio is the ratio of the combined youth population (0 to 19 years) and senior population (65 or older) to the working-age population (20 to 64 years). It is expressed as the number of dependents for every 100 workers.

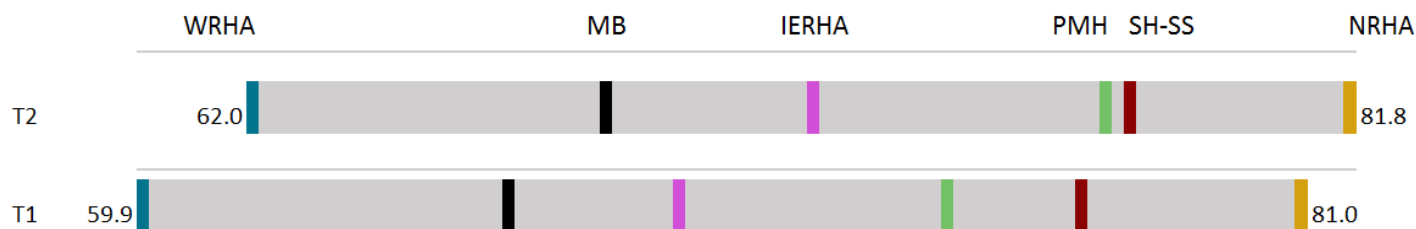
The dependency ratio is based on age rather than employment status. It does not account for young people or seniors who are working, nor for working-age people who are unemployed or not in the labour force. It merely reflects population age structure and is not meant to diminish the contributions made by people classified as dependents.

A sizeable share of seniors aged 65 or older and children and youth younger than age 20 are likely to be socially and/or economically dependent on working-age Manitobans, and they may put additional demands on health services. The dependency ratio measures the size of the dependent population in relation to the working age population who theoretically provide social and economic support.

Provincial Key Findings

- The dependency ratio for Manitoba has increased slightly over time.
- The ratio ranges from 62 dependents per 100 working age in Winnipeg RHA to almost 82 in Northern RHA.

Figure 2.6 Dependency Ratio, by MB and RHA, 2013 (T1) and 2018 (T2)



	WRHA	MB	IERHA	PMH	SH-SS	NRHA
T2 RATE	62.0	68.5	72.1	77.5	77.8	81.8
T1 RATE	59.9	66.6	69.8	74.5	77.1	81.0

IMA MHSAL 2019

Regional Key Findings

- The dependency ratio for PMH has increased slightly over time and is nearly 78 dependents for every 100 residents of working age.
- The ratios for the rural areas of PMH (North and South zones) are considerably higher than the Brandon zone.
- The dependency ratio ranges from 60.8 in Downtown to 93.6 in Duck Mountain.

Table 2.1 Dependency Ratio, by PMH Zone and District, 2013 (T1) and 2018 (T2)

	T2		T1
	Count	Rate	Rate

Manitoba		68.5	66.6
-----------------	--	------	------

Brandon			
Brandon	21,770	67.2	64.5
Downtown	4,544	60.8	59.1
South End	4,267	66.1	63.7
North Hill	3,088	69.5	66.6
West End	6,894	69.9	65.2
East End	2,977	71.6	71.5

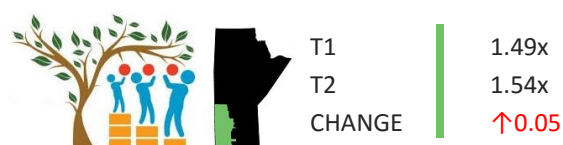
South			
South	34,034	81.0	76.9
Little Saskatchewan	5,609	77.1	70.9
Souris River	6,201	78.9	77.1
Asessippi	4,993	79.7	79.7
Whitemud	5,465	80.2	72.0
Turtle Mountain	4,605	83.7	80.7
Spruce Woods	7,161	86.3	81.4

	T2		T1
	Count	Rate	Rate

PMH	74,595	77.5	74.5
------------	--------	------	------

North			
North	18,791	86.0	83.5
Riding Mountain	2,224	77.4	73.6
Porcupine Mountain	3,837	82.9	81.0
Swan River	2,427	83.8	85.4
Dauphin	4,268	87.2	85.2
Agassiz Mountain	3,376	90.6	87.2
Duck Mountain	2,659	93.6	88.3

PMH District Disparity Ratio



IMA MHSAL 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Income, Education and Employment

Median Household Income – After-Tax

Definition

The median combined total income (after-tax, post transfer) of all members of household, aged 15 years and older, who reported income. Median household income is the amount which divides income size distribution, ranked by size of income, into two halves. That is, the incomes of the first half of the households are below the median, while those of the second half are above the median.

Why is this indicator important?

Median household income is an important measure of income inequality that exists between communities. It is an effective measure because those with lower median household income generally experience poorer health status.

Provincial Key Findings

- Median household income is similar across the province, with the exception of Prairie Mountain Health, which is \$5,000 less than the provincial average.

Figure 2.7 Median Household Income (after-tax, post transfer) by RHA, 2015



	PMH	MB	WRHA	NRHA	SH-SS	IERHA
T1 INCOME	\$54,014	\$59,093	\$59,510	\$60,308	\$60,802	\$61,155

Statistics Canada Census 2016

Regional Key Findings

- PMH median household income is the lowest in the province.
- Whilst zone level data are not available, it is apparent that the lowest median income districts are primarily in the North zone.
- The lowest median household income can be found in Downtown at almost \$26,000 less than households in the West End.

Table 2.2 Median Household Income (after-tax, post transfer) by PMH District, 2015

Manitoba		PMH	
	\$ 59,093		\$ 54,014
Brandon		North	
Downtown	\$ 40,930	Agassiz Mountain	\$ 43,105
East End	\$ 53,243	Duck Mountain	\$ 43,615
North Hill	\$ 57,706	Porcupine Mountain	\$ 44,792
South End	\$ 64,487	Swan River	\$ 45,198
West End	\$ 66,424	Dauphin	\$ 45,808
		Riding Mountain	\$ 49,597
South		<p>PMH District Disparity Ratio</p> <p>1.6x</p>	
Asessippi	\$ 51,314		
Little Saskatchewan	\$ 52,531		
Souris River	\$ 56,672		
Whitemud	\$ 57,905		
Turtle Mountain	\$ 59,314		
Spruce Woods	\$ 59,754		

Statistics Canada Census 2016

Low Income Measure – After-Tax (LIM-AT)

Definition

In Canada, it is set at 50% of the median income after tax, adjusted for family size and composition. It is used internationally as a relative measure of poverty.

Provincial Key Findings

- Prairie Mountain Health and Northern RHA have the highest prevalence of low income households.

Figure 2.8 Prevalence of low income based on the Low-Income Measure, After Tax (LIM-AT) (%) by RHA, 2015

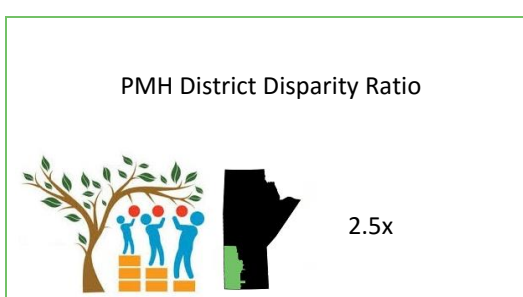
	IERHA	SH-SS	MB	WRHA	NRHA	PMH
LIM-AT	12%	15%	15%	16%	17%	17%

Statistics Canada Census 2016

Regional Key Findings

- Whilst data are not available at zone level, it is apparent that the highest prevalence of low income households is in the North zone.
- Porcupine Mountain, at 28%, has the highest prevalence of low income households, more than 2.5 times that of West End at just 11%.

Table 2.3 Prevalence of low income based on the Low-Income Measure, After Tax (LIM-AT) (%) by PMH Districts, 2015

Manitoba	15%	PMH	17%
Brandon		North	
West End	11%	Riding Mountain	19%
South End	12%	Dauphin	21%
North Hill	17%	Swan River	23%
East End	17%	Duck Mountain	24%
Downtown	26%	Agassiz Mountain	25%
		Porcupine Mountain	28%
South		 <p>PMH District Disparity Ratio</p> <p>2.5x</p>	
Turtle Mountain	13%		
Spruce Woods	13%		
Souris River	14%		
Whitemud	14%		
Assessippi	16%		
Little Saskatchewan	16%		

Statistics Canada Census 2016

A CLOSER LOOK...COMMUNITY VOLUNTEER INCOME TAX PROGRAM

The Community Volunteer Income Tax Program (CVITP) is a Population Health initiative that offers free support to help low-income individuals file their income tax and benefit returns. In 2004, the former Brandon Regional Health Authority led the development of the Community Volunteer Income Tax Program (CVITP) in partnership with Canada Revenue Agency (CRA). The program was initially delivered in a store-front space in the Town Centre before moving to 7th Street Health Access Centre. Over the past 15 years, the program has spread to more than 20 communities throughout the health region.

Residents who meet the income threshold for this program may drop off their tax information at a site offering the service. Tax returns are then completed by a community volunteer and filed electronically with CRA. In Brandon, walk-in service is also available between February and April.

There is compelling evidence supporting the need for CVITP. Many individuals do not realize they are eligible for a financial return based on income earned, others have had challenging experiences with systems in the past including health, education, social services and justice and do not seek out further interaction with these systems, while others are not aware that filing an income tax return is the gateway to many federal, provincial and local benefits and programs. A Notice of Assessment is required to access GST refunds, Canada Child Tax Benefit, Manitoba Rent Assist, Disability Tax credits, Pharmacare deductibles and more.

In 2018, in Prairie Mountain Health region, the total dollar value in tax refunds and benefits for residents who used CVITP to complete their tax returns was over 7 million dollars. The average return for an individual CVITP client was \$3,441. There is simply no other program that directly impacts the health determinant, Income and Social Status for low-income individuals and families.

Household Food Insecurity

Definition

The proportion of the population who reported being unable to acquire sufficient quantity and/or quality of food in a socially acceptable way, or the uncertainty that one will be able to do so.

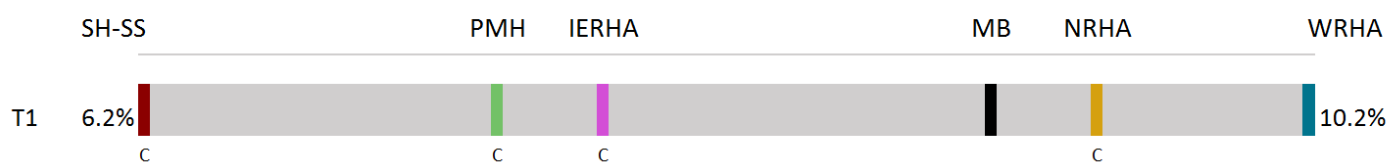
Why is this indicator important?

Food insecurity is an important indicator of health equity because it is often associated with a household's financial ability to access food.

Provincial Key Findings

- Winnipeg RHA and Northern RHA residents report being the most 'food insecure', whilst residents of Southern Health-Santé Sud, Prairie Mountain Health and Interlake-Eastern RHA are less likely than the Manitoba average to report being 'food insecure'.

Figure 2.9 Reported being 'Moderately/Severely Food Insecure' by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample



H/L Significantly higher or lower than the MB average for that time period; c - estimate displayed with caution

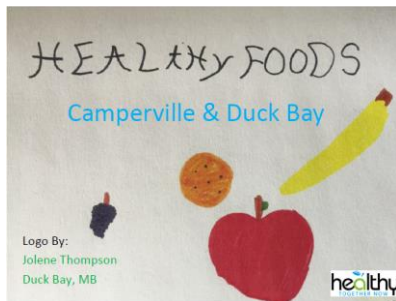
	SH-SS		PMH		IERHA		MB		NRHA		WRHA	
T1 RATE	6.2%	c	7.4%	c	7.8%	c	9.1%		9.4%	c	10.2%	

Statistics Canada CCHS 2015-2016

Regional Key Findings

- PMH residents are slightly, but not significantly, less likely to report being 'food insecure' than the province as a whole.

A CLOSER LOOK...BETTER ACCESS TO GROCERIES PROGRAM



In the summer of 2016, Health Promotion and Community Development staff implemented a food security project with residents in Camperville and Duck Bay to address challenges with access to fresh vegetables and fruit. Individuals were invited to place orders for their families which were purchased in bulk in Swan River and brought to the community for distribution. The program was supported by many community volunteers and local Emergency Medical Services (EMS) staff when available.

A program evaluation was initiated six months after the program was launched. Participants rated the quality and value of product as 'excellent' and 89% of participants reported eating more vegetables and fruit as a result of the program. As one participant stated, "It is an excellent program. I wish this was available when we were young parents, maybe my older children would love vegetables today."

The project ran successfully in Camperville until January 2018 when it closed for the best possible reason. A couple relocated to the community and opened a grocery store offering fresh vegetables and fruit. As a result of enhanced community capacity, the program was no longer needed.

The B.A.G. program was launched in Sapotaweyak Cree Nation in June 2019. The community developed their own logo and there is strong community support to continue the program.



Housing Affordability

Definition

The percentage of people in households that spend 30 percent or more of total household income on shelter expenses (e.g., electricity, water, municipal services, rent, mortgage payments, property taxes, condominium fees).

Why is this indicator important?

According to government standards, 30% of total household income is the threshold for affordable housing, as spending a higher amount will put a strain on the overall household budget.

Provincial Key Findings

- Just over one in ten homeowners in Manitoba spend 30% or more of their income on shelter costs and almost four in ten tenant households.
- Northern RHA has the least homeowners and tenants spending 30% or more on shelter expenses whilst Winnipeg RHA has the most.

Figure 2.10 Housing Affordability, 2016
Percent of households spending 30% or more on shelter costs

	PMH	MB	WRHA	NRHA	SH-SS	IERHA
Tenant	30%	37%	40%	22%	34%	32%
Owner	10%	11%	12%	6%	11%	11%

Statistics Canada Census 2016

Regional Key Findings

- The proportion of PMH residents spending 30% or more on shelter costs is similar to the province for homeowners and lower for tenant households.
- The highest proportions for both homeowners and tenants can be found in Brandon Downtown (Homeowner: 13%, Tenant household: 39%).
- The lowest proportion for homeowners can be found in Dauphin at just 7% whilst the lowest for tenant households is in Spruce Woods at 15%.

A CLOSER LOOK...HABITAT FOR HUMANITY

By mobilizing volunteers, tradespersons and community partners, Habitat for Humanity Manitoba works with both individuals and groups to build safe, decent, affordable housing for purchase by low-income working families. Habitat for Humanity partners with families who are ready for the responsibility and challenges of home ownership, but are unable to qualify for a traditional mortgage. The selection of families is based on three principles: need for housing, financial situation, and ability to participate. Within the PMH region, there are Habitat for Humanity Chapters in Brandon, Dauphin, Killarney, and Virden with 10 homes built or under construction since 2015.

Educational Attainment

Definition

The proportion of the population, aged 15 years and older, with no certificate, diploma or degree.

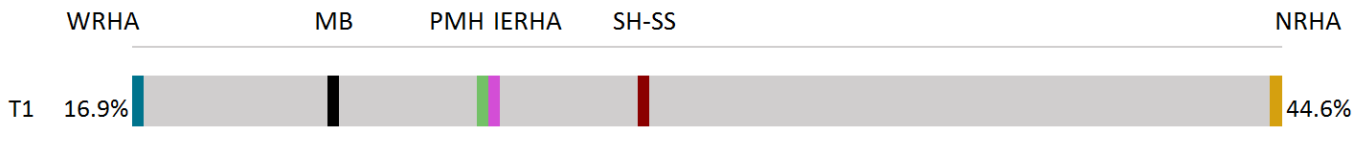
Why is this indicator important?

Educational attainment is widely acknowledged as a key component of socioeconomic status and is positively associated with health. Higher levels of education improve ability to access and understand information to stay healthy. Understanding levels of education is important for health planning.

Provincial Key Findings

- Manitoba's educational attainment is driven by the relatively low percentage of residents in Winnipeg RHA who have no certificate, diploma or degree.
- A quarter to almost one half of residents of all other RHAs have no certificate, diploma or degree.

Figure 2.11 Percentage of Population Aged 15+ with no Certificate, Diploma or Degree by RHA, 2016



	WRHA	MB	PMH	IERHA	SH-SS	NRHA
T1 RATE	16.9%	22.0%	25.7%	25.7%	29.4%	44.6%

Statistics Canada Census 2016

Regional Key Findings

- PMH has a slightly higher percentage of residents with no certificate, diploma or degree than the province.
- The North zone has the highest percentage of residents with no certificate, diploma or degree.
- Agassiz Mountain at 42.0% has the highest percentage of residents with no certificate, diploma or degree, almost 2.7 times that of South End at just 15.8%.

Table 2.4 Percentage of Population Aged 15+ with no Certificate, Diploma or Degree, By PMH Zone and District, 2016

Manitoba	22.0%	PMH	25.7%
Brandon	19.7%	North	34.6%
South End	15.8%	Dauphin	26.9%
West End	17.0%	Riding Mountain	28.5%
North Hill	18.3%	Swan River	29.3%
East End	23.1%	Duck Mountain	38.4%
Downtown	26.7%	Porcupine Mountain	40.3%
		Agassiz Mountain	42.0%
South	25.0%		
Turtle Mountain	22.1%		
Spruce Woods	23.2%		
Little Saskatchewan	23.5%		
Whitemud	24.1%		
Souris River	28.5%		
Assessippi	28.5%		

PMH District Disparity Ratio

2.7x

Statistics Canada Census 2016

A CLOSER LOOK...RURAL PRACTICAL NURSING DIPLOMA PROGRAM

Assiniboine Community College (ACC) delivers a Practical Nursing diploma program through permanent campuses in Brandon, Dauphin and Winnipeg. In an effort to bring training closer to home, the College also offers one of two rotating nursing programs in rural communities with 25 students in each class. Community proposals to host the program are assessed based on labour market demand, health care partnerships, availability of facilities and capital equipment, student demand and student experience. Since 1999, ACC has delivered the rural rotating site option in several communities including Boissevain, Deloraine, Killarney, Melita, Neepawa and Russell. Many graduates of the program are employed throughout Prairie Mountain Health.

Labour Force Participation

Definition

The percentage of the population, aged 15 years and older, who reported being in the labour force.

Why is this indicator important?

Those that are employed generally have higher levels of social inclusion, feeling they are contributing to the overall well-being of the community around them.

Provincial Key Findings

- Two thirds of Manitobans (66%) reported being in the labour force in the first week of May 2016. This value was similar in all RHAs except Northern RHA which was much lower at 57%.

Regional Key Findings

- PMH's labour force participation rate is identical to the province at 66%.
- Brandon zone has the highest labour force participation rate at 70%, compared to the South zone (68%) and the North zone (58%).
- The highest participation can be found in South End at 72%, whilst the lowest can be found amongst Agassiz Mountain residents at 54%.

A CLOSER LOOK...BEEP AND NEIGHBOURHOOD BUILDERS

In 2007, the Brandon Neighbourhood Renewal Corporation (BNRC) partnered with Manitoba Housing and Renewal Corporation, Competiveness, Training & Trade, Science, Technology, Energy & Mines, Agriculture Food & Rural Initiatives and Westbran Training Centre to launch the Brandon Energy Efficiency Program (BEEP), a construction training program to help unskilled labourers, people who are unemployed and/or on employment income assistance and, in some cases, those who have been in trouble with the law. The goal is to reduce barriers to employment so individuals can gain knowledge and skills to move on to the private sector. BEEP employees also report learning other important skills such as how to get along with others, punctuality, time management and meeting deadlines. The program supports trainees with securing essentials such as a bank account, identification, social insurance card and a driver's license. Assistance is available to help trainees complete their high school equivalency and workplace training is provided including CPR, Workplace Hazardous Materials Information System and fall protection.

BEEP has served approximately 200 individuals with the majority moving into full time employment, further education, and in some cases achieving their Red Seal Certificate in Carpentry. Most BEEP employees move on to construction jobs in the private sector with some going into a specific trade such as concrete, roofing or stucco. The program has expanded from basic energy efficiency upgrades such as installing low flow toilets and attic insulation, to complete builds of energy efficient low-income homes as a successful social enterprise. As the program grew, a more sophisticated social enterprise called Neighbourhood Builders was added which acts as a second phase of training for individuals looking to advance in the construction and carpentry industry. Neighbourhood Builders delivers complex renovation jobs and new builds of houses and multi-unit buildings. Trainees in the BEEP program work alongside the employees in Neighbourhood Builders gaining valuable experience while being mentored by peers who have overcome the same barriers. Moving from BEEP to Neighbourhood Builders, a trainee can achieve up to Level 3 Apprentice while working for BNRC.

As a past participant stated:

"BEEP knew I had trouble with the law, but hired me anyway to keep me out of trouble earning a wage, learning lots about a trade I enjoy. BEEP helped me find an affordable place to live, and I like how my future looks."

The BEEP program is a unique employment initiative that addresses many social determinants of health for individuals who are challenged by life circumstances and have difficulty securing education and employment opportunities. This program has a significant impact on health inequities by tackling challenges associated with income, education, housing, addictions and personal coping skills.

Unemployment Rates

Definition

The percentage of the population, aged 15 years and older, who reported being unemployed but available to work.

Why is this indicator important?

Unemployment is a significant risk factor for poor physical and mental health and therefore a major determinant of health inequality. It may be associated with increasingly difficult living conditions, low socioeconomic status and health and social problems.

Provincial Key Findings

- Of the two thirds of Manitobans who reported being in the labour force in the first week of May 2016, 6.8% were unemployed.
- Northern RHA and Interlake-Eastern RHA reported higher unemployment rates than the provincial average.

Figure 2.12 Unemployment Rates, by RHA, 2016

Percentage of the labour force aged 15+ identified as unemployed in the first week of May 2016



	SH-SS	WRHA	PMH	MB	IERHA	NRHA
T1 RATE	5.3%	6.5%	6.6%	6.8%	7.5%	14.2%

Statistics Canada Census 2016

Regional Key Findings

- PMH's unemployment rate is similar to the province.
- South zone has the lowest unemployment rate at 5.4%, compared to the Brandon zone (7.3%) and the North zone (8.0%).
- The lowest level of unemployment can be found in Whitemud at 4.2%, whilst the highest can be found amongst Porcupine Mountain residents at 9.8%.

A CLOSER LOOK... EMPLOYMENT SUPPORT POST-INCARCERATION

In the fall of 2017, Brandon University nursing students completed a Community Health practicum¹⁰ at the John Howard Society. The focus of their project was to determine the supports necessary for men to successfully reintegrate into the community following incarceration. Using a Population Health framework, the students completed a comprehensive literature review and conducted 65 qualitative surveys and key informant interviews. A final report with recommendations for action was developed.

Following up on recommendations from the students' needs assessment, Prairie Mountain Health formed a partnership with the Brandon Neighbourhood Renewal Corporation, Brandon Police Service, John Howard Society and Brandon Correctional Centre to implement a Population Health initiative targeting individuals post-incarceration. The intent of this initiative is to reduce recidivism by securing meaningful employment opportunities for individuals who are reintegrating into the Brandon community. With support from Manitoba Justice Criminal Property Forfeiture Division, a Coordinator is currently working with individuals at Brandon Correctional Centre to identify areas of employment interest, determine aptitude and remove barriers to employment by securing necessary photo identification, Social Insurance Number, bank account as well as enrollment in GED courses if appropriate. The Coordinator is also working with local employers to explore potential positions and offer ongoing support to the employer. This partnership will not only assist in reducing the stigma of hiring an individual with a criminal record, but also provide employers with the necessary resources to successfully hire and maintain these employment relationships.

Meaningful employment is an important social determinant of health because it provides individuals with a path to a different life. Work provides an income necessary to secure stable housing and nutrition, as well as a feeling of purpose which is linked to greater success in remaining sober, lower incidents of mental health crisis, and reduced criminal behaviour. Although this project aims to secure employment for individuals post-incarceration, preliminary findings identify the need for safe, secure housing as a critical foundation to secure and maintain employment. Efforts to explore creative, short-term housing options to complement employment opportunities are underway. Provincial support has been secured to continue the initiative and coordinator position for another year.

Industry Sectors

Definition

The percentage of the population, aged 15 years and older, by their kind of work and the description of the main activities in their job.

Why is this indicator important?

The type of employment, irrespective of income level, may carry with it greater health risks due to exposure to harmful substances or potential risk of injuries.

Regional Key Findings

- More than half of PMH residents in the labour force, as of the first week of May 2016, were employed in 'sales and service', 'trades, transport and equipment operators' or 'management' occupations.

Table 2.5 Total Labour Force Population aged 15+ by Occupation, PMH and MB, 2016
National Occupational Classification (NOC) - 25% sample data

Occupation Category	PMH	Manitoba
Sales and service occupations	20.7%	22.2%
Trades, transport and equipment operators and related occupations	15.9%	15.8%
Management occupations	14.8%	11.0%
Occupations in education, law and social, community and government services	12.5%	13.2%
Business, finance and administration occupations	11.8%	14.8%
Health occupations	8.4%	8.0%
Natural resources, agriculture and related production occupations	6.3%	2.8%
Occupations in manufacturing and utilities	5.1%	4.6%
Natural and applied sciences and related occupations	3.1%	5.3%
Occupations in art, culture, recreation and sport	1.3%	2.2%

Statistics Canada Census 2016

A CLOSER LOOK... NEW DAUPHIN INDUSTRY

Industry supports the social and economic growth in a community. The residents of Dauphin are celebrating the impending development of a 30 acre state-of-the art glass greenhouse by Vermillion Growers. With the majority of tomatoes in Canada being imported, access to local, vine-ripened tomatoes will be a welcome addition to grocery stores across the province. Tomatoes will be grown initially, and plans are underway to grow a range of produce for Manitoba and central Canada year round. The company is committed to growing food, growing people and growing community. This initiative will bring not only fresh produce, but much-needed jobs to the Parkland area.

Work Stress

Definition

The proportion of residents, aged 15 to 75 years, who reported on their level of stress most days at their main job or business.

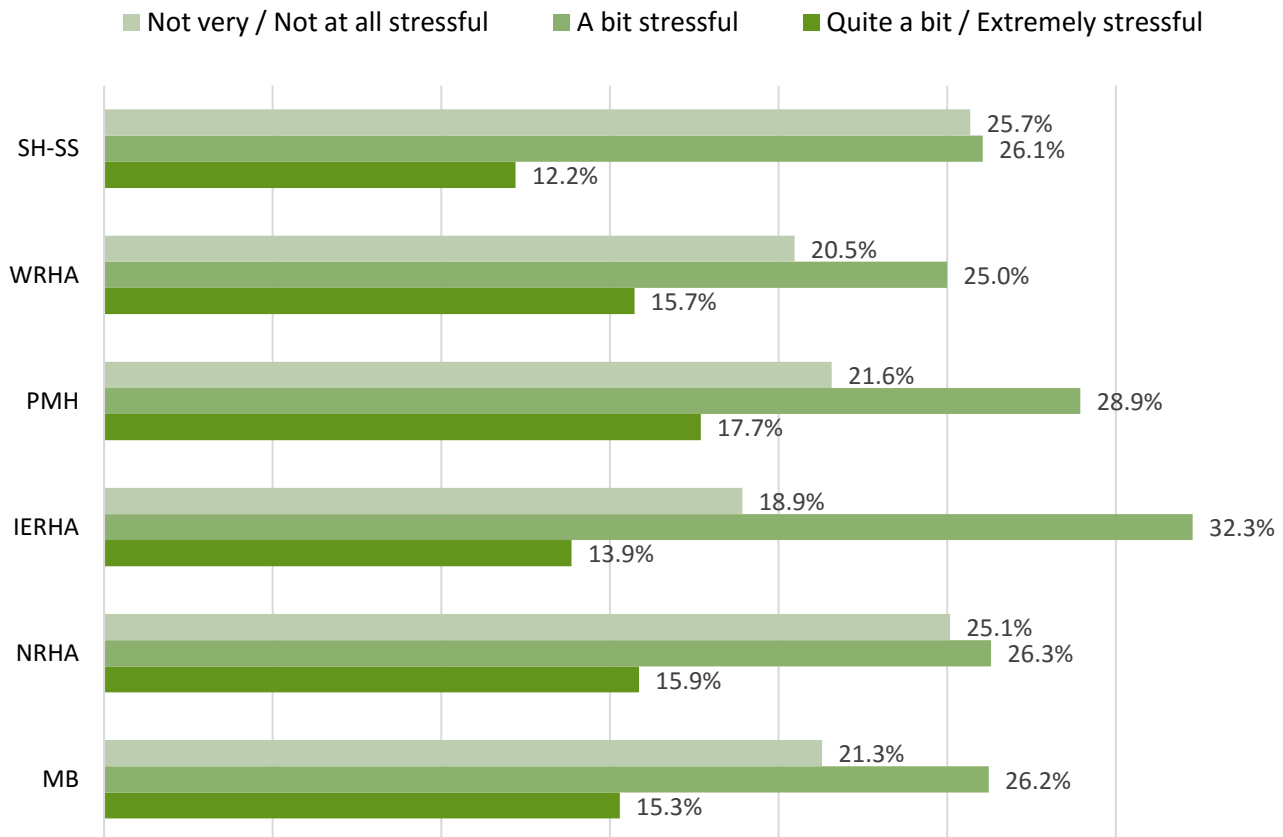
Why is this indicator important?

Work stress is one of the most common forms of stress, which can lead to poor health and injuries.

Provincial Key Findings

- More than 15% of Manitobans reported their main job or business as being 'quite a bit / extremely' stressful on most days.
- Southern Health-Santé Sud reported the lowest level of work stress whilst PMH reported the highest level.

Figure 2.13 Perceived Work Stress by RHA, 2016
Age and sex adjusted proportion (%) of weighted sample, Aged 15-75 years



CCHS 2015 - 2016

Healthy Child Development

Inadequate Prenatal Care

Definition

The proportion of women with a single, live, in-hospital birth receiving no or inadequate prenatal care, over a five-year time period.

Why is this indicator important?

Women who access prenatal care and receive regular prenatal visits are more likely to experience better health outcomes including a lower risk for low birth weight infant compared to women who receive no prenatal care. Inadequate prenatal care is more likely to be found in women who had less than a Grade 12 education or were younger (less than 25), living in lower income areas, on income assistance, a lone parent, socially isolated, or multiple pregnancies¹¹.

Provincial Key Findings

- More than ten percent of Manitoban women receive inadequate prenatal care during their pregnancy, a value which has not changed significantly over time.
- A significantly higher proportion of Northern RHA women receive inadequate prenatal care.
- A significantly lower proportion of Winnipeg RHA women receive inadequate prenatal care.

Figure 2.14 Inadequate Prenatal Care Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	SH-SS	MB	IERHA	PMH	NRHA
T2 COUNT	2,117	1,139	7,300	665	971	2,391
T2 RATE	6.6% L	9.4%	10.3%	10.6%	10.9%	27.8% H
T1 RATE	7.0% L	8.6% L	10.8%	11.8%	9.7%	31.1% H

MCHP RHA Indicators Atlas 2019

- Inadequate prenatal care amongst lowest income Manitobans is 4.2 times higher than the highest income residents in rural areas and 3.1 times higher in urban areas.



Urban Quintiles
 T1 4.0x
 T2 3.1x
 Change 0.9 ↓

Rural Quintiles
 T1 4.1x
 T2 4.2x
 CHANGE 0.1 ↑

Regional Key Findings

- The rate of inadequate prenatal care in PMH is similar to that of the province.
- A significantly higher proportion of North zone women receive inadequate prenatal care, whilst a significantly lower proportion of Brandon zone women receive inadequate prenatal care.
- The rate of inadequate prenatal care in the South zone has increased significantly over time.
- Four districts have rates of inadequate prenatal care significantly higher than the Manitoba average and three districts in Brandon have a significantly lower rate.
- Women in the South End are over 8.6 times as likely to receive adequate prenatal care as women in Porcupine Mountain. The district disparity gap has widened by over nine percent between T1 and T2.

Table 2.6 Inadequate Prenatal Care Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
 Maternal age adjusted average annual percent of singleton live in-hospital births

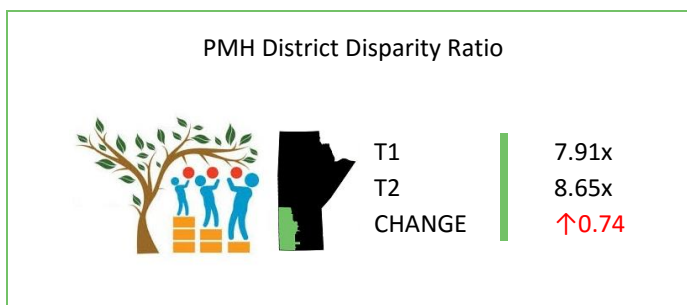
	T2		T1	
	Count	Rate	Rate	
Manitoba	7,300	10.3	10.8	

Brandon	171	5.5	L	4.3	L
South End	23	3.7	L	4.2	L
West End	35	4.7	L	4.2	L
North Hill	21	5.1	L	3.4	L
East End	29	6.1		3.8	L
Downtown	63	7.3		5.4	L

South	402	10.3	+	8.0	L
Turtle Mountain	31	6.1		4.6	L
Whitemud	41	6.9		4.5	L
Spruce Woods	63	7.0		5.2	L
Souris River	73	9.1		7.9	
Little Saskatchewan	57	9.5		6.5	
Asessippi	137	22.8	H	19.8	H

	T2		T1	
	Count	Rate	Rate	
PMH	971	10.9	9.7	

North	398	19.5	H	18.4	H
Riding Mountain	14	6.8		8.6	
Dauphin	46	10.1		11.7	
Swan River	23	18.4		10.0	
Duck Mountain	30	18.7	H	17.9	
Agassiz Mountain	104	22.2	H	23.4	H
Porcupine Mountain	181	32.0	H	26.9	H



Preterm Birth Rate

Definition

The proportion of live births with a gestational age of less than 37 weeks, based on a five-year time period.

Why is this indicator important?

Preterm births are the leading cause of infant mortality. Preterm infants can have both short and long term health issues, including developmental disabilities, mental illnesses and respiratory conditions¹².

Provincial Key Findings

- Manitoba has a preterm birth rate of 7.6%, a value that has not changed significantly over time.
- Southern Health-Santé Sud has a significantly lower pre-term birth rate than the province whilst Northern RHA has a significantly higher rate.
- The preterm birth rate amongst the lowest income Manitobans is 1.5 times higher than the highest income residents in rural areas and 1.4 times higher in urban areas.

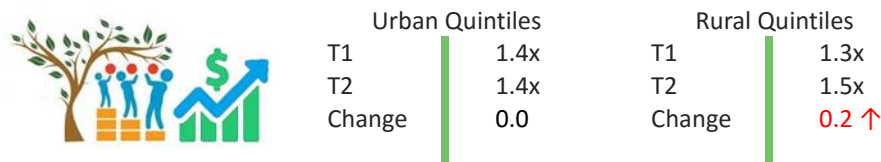
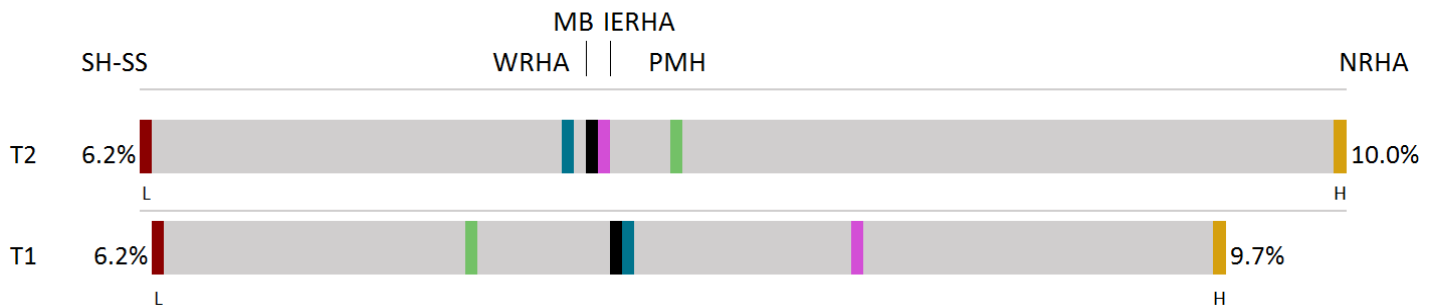


Figure 2.15 Preterm Birth Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS		WRHA		MB		IERHA		PMH		NRHA	
T2 COUNT	877		3,105		6,089		528		781		782	
T2 RATE	6.2%	L	7.6%		7.6%		7.7%		7.9%		10.0%	H
T1 RATE	6.2%	L	7.7%		7.7%		8.5%		7.2%		9.7%	H

Regional Key Findings

- PMH's preterm birth rate is similar to that of the province.
- Whilst all zones have preterm birth rates similar to that of the province, slightly higher rates are apparent in the North and Brandon.
- Agassiz Mountain has a preterm birth rate significantly higher than that of the province. Downtown has seen a significant increase in preterm births over time.
- Women in Agassiz Mountain are almost twice as likely to experience a preterm birth as women in Little Saskatchewan. The district disparity gap has widened by ten percent between T1 and T2.

Table 2.7 Preterm Birth Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births

	T2		T1
	Count	Rate	Rate

Manitoba	6,089	7.6	7.7
-----------------	-------	-----	-----

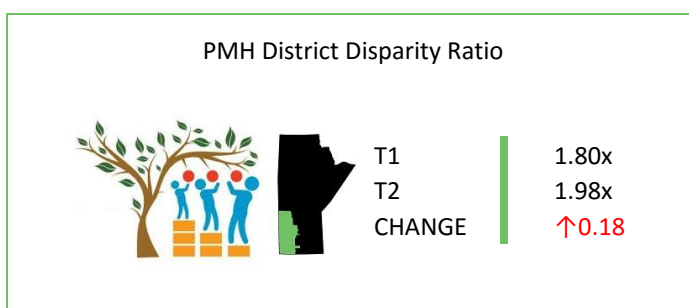
Brandon	Count	Rate		Rate
South End	52	7.0		7.7
West End	62	7.2		8.0
East End	41	7.9		6.4
North Hill	42	9.1		9.1
Downtown	90	9.7	+	5.8

South	Count	Rate		Rate	
Little Saskatchewan	41	6.3		5.6	
Spruce Woods	66	6.4		5.5	
Souris River	64	7.4		7.8	
Whitemud	55	7.7		5.9	
Turtle Mountain	49	8.4		7.0	
Assessippi	53	8.9		6.2	

	T2		T1
	Count	Rate	Rate

PMH	781	7.9	7.2
------------	-----	-----	-----

North	Count	Rate		Rate
Duck Mountain	10	6.4		6.2
Riding Mountain	15	6.8		6.5
Dauphin	33	6.8		9.5
Swan River	9	7.3		9.9
Porcupine Mountain	44	8.7		8.6
Agassiz Mountain	55	12.5	H	9.8



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Small for Gestational Age

Definition

The percentage of live hospital births in which birth weight falls below the 10th percentile of sex-specified birth weight for a given gestational age, based on a five-year time period.

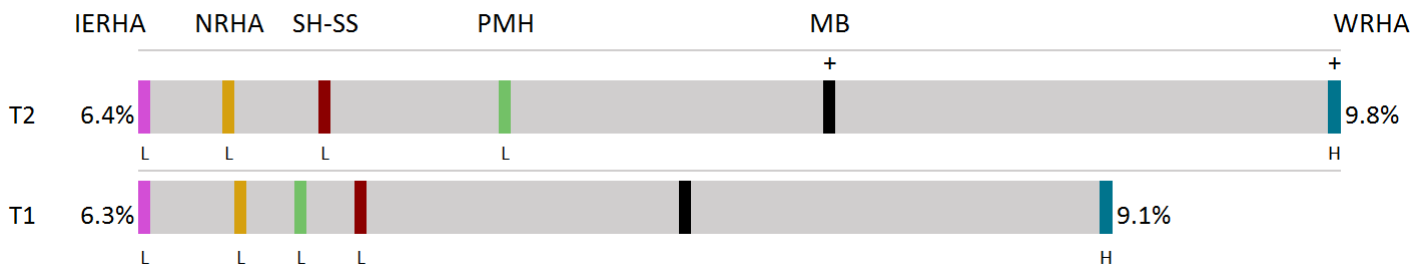
Why is this indicator important?

Small for Gestational Age (SGA) infants are more likely to face both short-term and long-term health issues including diabetes, hypertension, and cardiovascular disease. SGA is often related to maternal smoking, substance use, poor nutrition during pregnancy, placental insufficiency and other conditions.

Provincial Key Findings

- Manitoba’s rate for SGA is driven by the high rates in Winnipeg RHA and is increasing significantly over time.
- Winnipeg RHA has the highest rate of SGA in the province, a rate that is significantly increasing over time.
- All other regions have SGA rates that are significantly lower than the provincial average and are not changing significantly over time.
- Small for gestational births amongst the lowest income Manitobans is 1.2 times higher than the highest income residents in urban areas.

Figure 2.16 Small for Gestational Age Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	IERHA		NRHA		SH-SS		PMH		MB		WRHA	
T2 COUNT	440		535		985		734		6,576		3,873	
T2 RATE	6.4%	L	6.6%	L	6.9%	L	7.4%	L	8.3%	+	9.8%	H+
T1 RATE	6.3%	L	6.6%	L	7.0%	L	6.8%	L	7.9%		9.1%	H

Regional Key Findings

- PMH has a SGA rate significantly lower than the provincial average.
- The South zone has a rate significantly lower than the provincial average whilst both the North and Brandon zones are not significantly different.
- Turtle Mountain infants are more than 1.7 times less likely to be SGA as infants born in East End. The district disparity gap has remained relatively unchanged between T1 and T2.

Table 2.8 Small for Gestational Age Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births

	T2		T1		
	Count	Rate	Rate	Rate	
Manitoba	6,576	8.3	+	7.9	
PMH	734	7.4	L	6.8	L
Brandon	282	8.1		7.3	
Downtown	67	7.2		8.8	
North Hill	34	7.4		5.5	
West End	67	7.9		7.5	
South End	61	8.4		5.7	
East End	53	10.1		8.8	
North	155	7.8		6.8	
Dauphin	36	7.3		7.5	
Duck Mountain	13	8.1		6.6	
Agassiz Mountain	37	8.1		7.2	
Porcupine Mountain	44	8.2		6.4	
Riding Mountain	22	9.8		6.4	
Swan River	s	s		5.1	
South	297	6.7	L	6.5	L
Turtle Mountain	33	5.7		5.5	
Souris River	52	6.0		6.1	
Little Saskatchewan	40	6.2		8.3	
Assessippi	41	6.7		5.4	
Spruce Woods	71	7.0		7.1	
Whitemud	60	8.6		5.9	

PMH District Disparity Ratio

T1: 1.73x
T2: 1.77x
CHANGE: **↑0.05**

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period (s)-suppressed due to small numbers

Large for Gestational Age

Definition

The percentage of live hospital births in which birth weight falls above the Canadian 90th percentile of sex-specified birth weight for a given gestational age, based on a five-year time period.

Why is this indicator important?

Large for Gestational Age (LGA) infants may have a higher risk for injury and complications during birth, fetal and neonatal illnesses and death, impaired cognitive development, childhood and adult obesity and chronic conditions such as diabetes and heart disease later in life. LGA infants can be associated with prolonged pregnancies and gestational diabetes.

Provincial Key Findings

- The provincial rate for LGA is driven by the low rates in Winnipeg RHA and is decreasing significantly over time.
- Winnipeg RHA has the lowest rate of LGA in the province, a rate that is significantly decreasing over time.
- Prairie Mountain Health, Interlake-Eastern RHA and Northern RHA all have LGA rates that are significantly higher than the provincial average. In the case of Northern and Interlake-Eastern RHAs these rates are declining significantly over time.
- LGA birth rate amongst the lowest income Manitobans is 1.4 times higher than the highest income residents in rural areas and 1.2 times higher in urban areas.

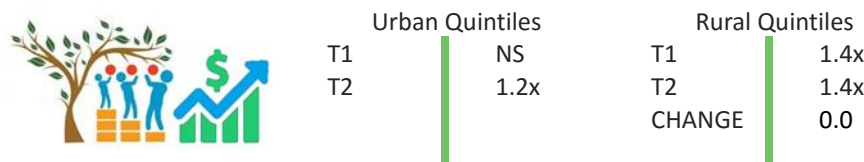
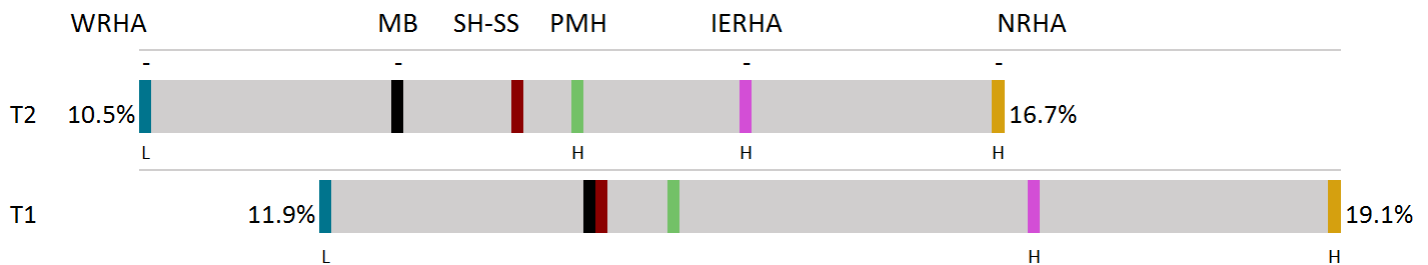


Figure 2.17 Large for Gestational Age Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	SH-SS	PMH	IERHA	NRHA	
T2 COUNT	4,213	9,830	1,887	1,356	1,026	1,337	
T2 RATE	10.5% (L)	12.4%	-	13.2%	13.7% (H)	14.9% (H-)	16.7% (H-)
T1 RATE	11.9% (L)	13.8%	-	13.8%	14.4%	17.0% (H)	19.1% (H)

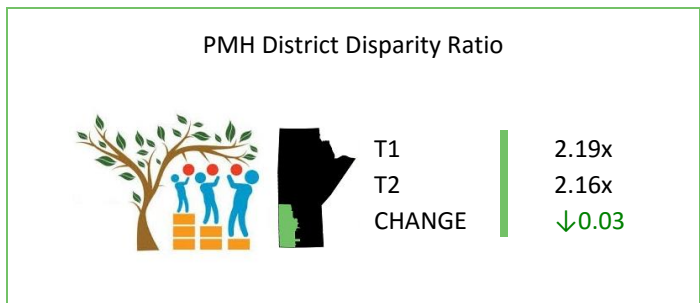
MCHP RHA Indicators Atlas 2019

Regional Key Findings

- PMH has a LGA rate significantly higher than the provincial average.
- The Brandon zone has a rate significantly lower than the provincial average which has decreased significantly over time. Both the North and South zones have LGA rates significantly higher than the provincial average.
- Three districts have LGA rates significantly higher than the provincial average.
- Infants born to residents of Dauphin are more than twice as likely to be LGA as infants born to residents of South End. The district disparity gap has remained relatively unchanged between T1 and T2.

Table 2.9 Large for Gestational Age Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted average annual percent of singleton live in-hospital births

	T2		T1		
	Count	Rate		Rate	
Manitoba	9,830	12.4	-	13.8	
Brandon	374	10.7	L-	12.3	
South End	70	9.5	-	13.2	
North Hill	46	10.0		12.3	
Downtown	99	10.7		12.4	
East End	56	10.7		11.0	
West End	103	12.0		12.3	
PMH	1,356	13.7	H	14.4	
North	356	18.1	H	18.6	H
Duck Mountain	22	13.9		14.8	
Swan River	18	14.4		24.1	H
Porcupine Mountain	88	16.7		18.6	H
Riding Mountain	40	17.8		16.5	
Agassiz Mountain	88	19.6	H	20.6	H
Dauphin	100	20.5	H	15.9	
South	626	14.1	H	13.8	
Spruce Woods	125	12.2		11.4	
Whitemud	87	12.3		12.4	
Turtle Mountain	76	13.1		13.5	
Souris River	129	14.8		15.9	
Little Saskatchewan	101	15.5		12.3	
Assessippi	108	17.8	H	18.0	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... IN HOSPITAL POSTPARTUM CARE

In the fall of 2017, nursing students from Brandon University completed a Community Health practicum¹³ on the Single Room Maternity Care (SMRC) unit at the Brandon Regional Health Centre. The focus of the project was to develop educational resources for staff about the benefits of skin-to-skin contact during the immediate postpartum period. The students conducted a comprehensive literature review, interviews with pre and postnatal women to understand the client experience and identify gaps in practice, designed an informational brochure for the region on the benefits of skin-to-skin contact and delivered an education session for staff on SRMC.

Breastfeeding Initiation

Definition

The percentage of women who deliver in hospital and initiate breastfeeding while in hospital, based on a one-year time period.

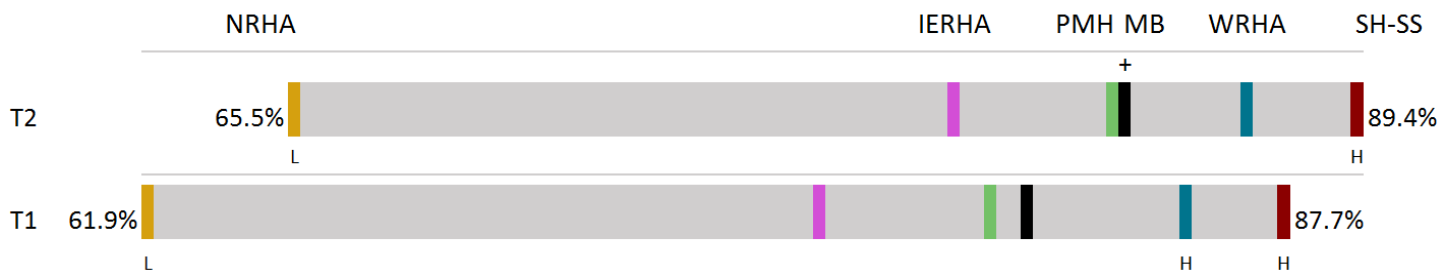
Why is this indicator important?

Breastfeeding is a key part of the healthy development and growth of infants. It is associated with lower rates of obesity and chronic diseases such as diabetes and asthma, and better early childhood development. Breastfeeding also has health benefits for mothers including lower risk for breast cancer, ovarian cancer and osteoporosis. Some of the most significant predictors of lower breastfeeding initiation are lower income, less than Grade 12 education and inadequate prenatal care.

Provincial Key Findings

- More than eight out of ten Manitoban mothers initiated breastfeeding in-hospital, a value that is increasing significantly over time.
- Southern Health-Santé Sud has the only in-hospital breastfeeding initiation rate significantly higher than the province at almost nine out of ten births.
- Northern RHA has the only in-hospital breastfeeding initiation rate significantly lower than the province at just over six out of ten births.

Figure 2.18 Breastfeeding Initiation Rates by RHA, 2011/12(T1) and 2016/17(T2)
Maternal age adjusted percent of singleton live in-hospital births

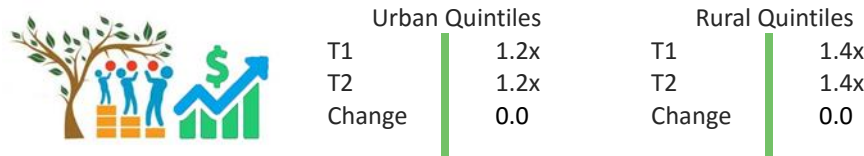


H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA	IERHA	PMH	MB	WRHA	SH-SS
T2 COUNT	1,032	1,075	1,693	13,215	6,893	2,515
T2 RATE	65.5% L	80.2%	83.9%	84.2% +	86.8%	89.4% H
T1 RATE	61.9% L	77.3%	81.2%	82.1%	85.4% H	87.7% H

MCHP RHA Indicators Atlas 2019

- The breastfeeding initiation rate amongst lowest income Manitobans is 1.4 times lower than the highest income residents in rural areas and 1.2 times lower in urban areas.



Regional Key Findings

- PMH has a breastfeeding initiation rate that is similar to the province and has increased slightly over time.
- The North zone has a rate significantly lower than the provincial average, whilst both the Brandon and South zones are not significantly different.
- Porcupine Mountain is the only district to have a breastfeeding initiation rate significantly lower than the provincial average.
- Porcupine Mountain mothers are more than 1.6 times less likely to initiate breastfeeding in-hospital as are residents of Whitemud. The district disparity gap has widened by five percent between T1 and T2.

Table 2.10 Breastfeeding Initiation Rates by PMH Zone and District, 2011/12(T1) and 2016/17(T2)
Maternal age adjusted percent of singleton live in-hospital births

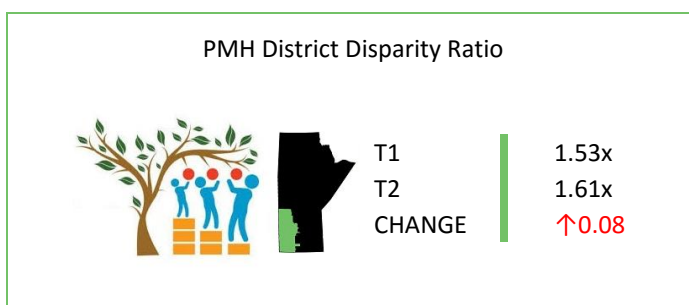
	T2			T1
	Count	Rate		Rate
Manitoba	13,215	84.2%	+	82.1%

Brandon	625	85.9%		85.9%
Downtown	159	87.3%		89.3%
North Hill	78	87.1%		77.8%
South End	148	85.8%		87.0%
West End	145	85.1%		87.8%
East End	95	84.4%		82.1%

South	809	87.8%		83.8%
Whitemud	152	89.7%		88.0%
Spruce Woods	179	89.6%		90.0%
Souris River	156	89.4%		78.9%
Little Saskatchewan	118	88.7%		79.5%
Turtle Mountain	104	85.9%		89.3%
Assessippi	100	81.0%		71.4%

	T2			T1
	Count	Rate		Rate
PMH	1,693	83.9%		81.2%

North	259	70.0%	L	67.4%	L
Duck Mountain	28	87.2%		85.7%	
Riding Mountain	33	80.4%		84.7%	
Dauphin	73	74.9%		67.0%	
Agassiz Mountain	52	70.5%		60.1%	
Swan River	15	68.6%		78.7%	
Porcupine Mountain	58	55.9%	L	58.6%	



A CLOSER LOOK... BABY FRIENDLY INITIATIVE

Breastfeeding is recognized as optimal nutrition for infants, with health benefits for women, families and communities. Breastfeeding optimizes child health and has been associated with reduced obesity, reduced chronic diseases including type 2 diabetes, improved oral health, and improved early childhood development. Breast milk provides all the nutrition an infant needs. It has hundreds of antibodies, enzymes, and other factors that will protect infants from infections and disease.

Prairie Mountain Health promotes and supports efforts towards making breastfeeding a priority and the normal nutritional choice for babies. PMH is actively working toward a Baby Friendly Initiative (BFI) designation, with a target date for Baby Friendly Accreditation of 2022. BFI is a coordinated program that enables facility and community to protect, promote and support breastfeeding. A Baby Friendly facility strengthens and demonstrates commitment to family-centred care and increases family and staff satisfaction of care.

Proportion of Children in Low Income Families

Definition

The proportion of children, age 17 years and younger, living in low income families according to low income measure – after tax (LIM-AT).

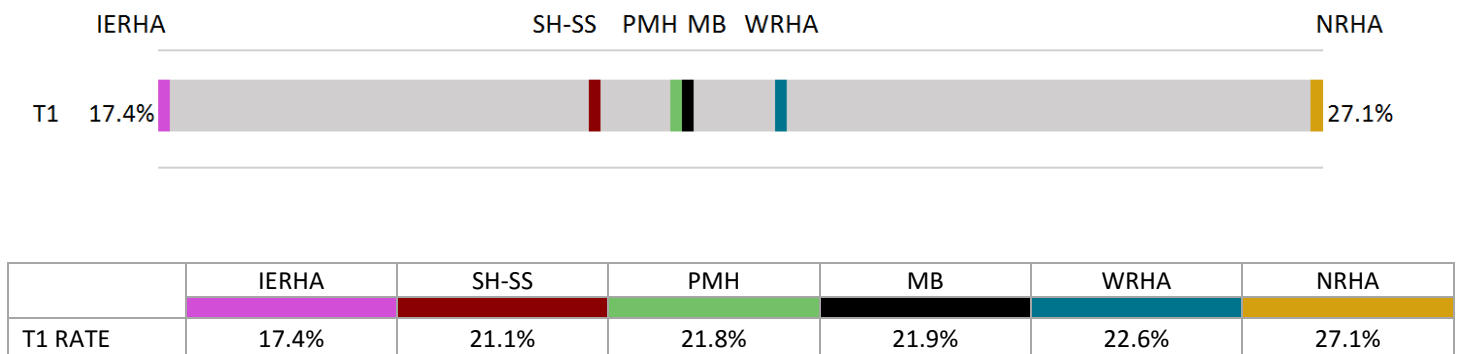
Why is this indicator important?

Family income affects children’s access to basic necessities such as adequate housing, nutritious food and clothing. Living in low income poses many challenges for child growth and development including early learning and care programs, and access to recreation and art programs.

Provincial Key Findings

- More than a fifth of children in the province live in low income families.
- The highest proportion of children living in low income families can be found in Northern RHA whereas the lowest proportion is found in Interlake-Eastern RHA.

Figure 2.19 Children Aged 17 Years and Younger Living in Low Income Families Based on LIM-AT, by RHA, 2016

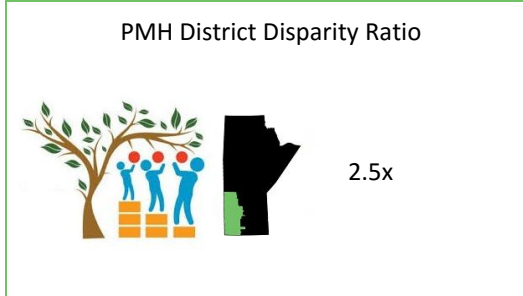


Statistics Canada Census 2016

Regional Key Findings

- The proportion of PMH children living in low income families is similar to the provincial average.
- More than a quarter of North zone children and almost a quarter of Brandon zone children live in low income families. This value is considerably less in the South zone.
- Downtown children are more than 2.5 times as likely to live in a low income family as children living in Turtle Mountain.

Table 2.11 Children aged 0-17 Years Living in Low Income Families Based on LIM-AT, PMH Zone and District, 2016

Manitoba	21.9%	PMH	21.8%
Brandon	24.0%	North	27.7%
West End	16.6%	Riding Mountain	21.2%
South End	18.5%	Duck Mountain	21.8%
East End	26.2%	Dauphin	25.9%
North Hill	33.2%	Swan River	27.2%
Downtown	35.8%	Porcupine Mountain	34.3%
		Agassiz Mountain	34.3%
South	17.3%	<p>PMH District Disparity Ratio</p> 	
Turtle Mountain	14.3%		
Spruce Woods	15.3%		
Asessippi	15.8%		
Souris River	18.0%		
Little Saskatchewan	20.4%		
Whitemud	20.6%		

Statistics Canada Census 2016

Families First – Risk Factors

Definition

The proportion of families with three or more risk factors identified as leading to poor childhood outcomes, based on the regional post-partum population screened for enrollment in the Families First Program.

Why is this indicator important?

The early years comprise a significant period of brain development and set the foundation for health and success in all aspects of life. It is used to identify families who may need further support and assistance to ensure children are raised in a healthy environment.

Regional Key Findings

- Almost a third of Families First screens in PMH identified families with three or more risk factors. The number of screens with three or more risk factors decreased slightly over time across PMH and all zones but Brandon. More than one third of all families in the North and Brandon zones ‘screen in’ compared to just over a quarter in the South zone.
- Fourteen percent of screens identified mothers who consumed alcohol while pregnant, this decreased slightly over time across PMH and all zones. The South zone had the highest percentage of mothers consuming alcohol while pregnant.
- Fifteen percent of screens identified mothers who smoked while pregnant, this decreased slightly over time across PMH and all zones. The North zone had the highest percentage of mothers smoking while pregnant.
- Sixteen percent of screens identified mothers as not graduating from high school (or equivalent), this decreased slightly over time across PMH and all zones. The North zone had, by far, the highest percentage of mothers without a high school diploma.
- Fourteen percent of screens identified parent(s) on income support or reporting financial difficulties, this decreased slightly over time across PMH and all zones. The North zone had the highest percentage of parent(s) experiencing financial challenges.
- More than twenty percent of screens identified mothers diagnosed with depression and/or anxiety, this increased over time across PMH and Brandon and North zones. The highest values and largest increase of mothers diagnosed with depression and/or anxiety can be found in the Brandon zone.

Table 2.12 Percent of Families First Screens Identifying Specific Risk Factors 2008-2012 (T1) and 2013-2017 (T2)

Area	Period	Three or More Risk Factors	Alcohol Use	Smoking	High School Graduation	Financial Challenges	Depression / Anxiety
PMH	T2	31.9%	14.4%	14.8%	16.0%	14.2%	21.5%
	T1	34.0%	19.2%	20.6%	20.1%	17.7%	20.7%
Brandon	T2	37.2%	14.2%	16.2%	13.8%	19.7%	25.2%
	T1	37.2%	18.5%	20.7%	17.7%	22.4%	21.9%
North	T2	36.4%	11.3%	23.5%	25.9%	23.0%	20.1%
	T1	38.3%	14.8%	30.8%	27.4%	25.3%	19.0%
South	T2	26.0%	15.7%	10.3%	13.8%	6.6%	19.0%
	T1	29.5%	21.5%	15.9%	18.6%	10.7%	20.3%

Healthy Child Manitoba 2019

Readiness for School Learning

Definition

The proportion of kindergarten children 'vulnerable', 'at risk', and 'on track' for age-appropriate developmental expectations on the Early Development Instrument (EDI), for a one-year time period. It measures five areas of development: physical health and well-being, social competence, emotional maturity, language and thinking skills, and communication skills and general knowledge.

Why is this indicator important?

EDI is an important measure of the well-being and health of children. It has been shown to be strongly linked to parental involvement in a child's early learning, household income levels, as well as educational outcomes later in childhood. EDI results assist communities in planning for the services and programs children need in order to learn and enjoy their school experience.

Provincial Key Findings

- Southern Health-Santé Sud and Interlake-Eastern RHA have the best EDI results (i.e., lower vulnerable, lower at risk, higher on track), whilst Northern RHA has the poorest results (higher vulnerable, higher at risk, lower on track).
- The highest percentages of vulnerable children fall within the domain of communication skills and general knowledge.
- Over the last five years, percentages of vulnerable, at risk, and on track children remained relatively stable across health regions and across domains.

Table 2.13 Children Vulnerable by EDI Domain by RHA, 2019

Percentage of kindergarten children who score below the 10th percentile based on Canadian baseline sample

Area of Development (Domain)	SH-SS	WRHA	PMH	IERHA	NRHA	MB
Physical Health & Well-Being	10.5	15.1	17.3	14.2	25.1	12.8
Social Competence	9.0	12.6	12.9	9.4	18.7	9.5
Emotional Maturity	10.7	14.9	14.8	11.5	22.8	11.9
Language and Thinking Skills	10.5	14.4	15.2	10.9	29.2	12.2
Communication Skills and General Knowledge	14.3	17.6	18.4	13.6	23.8	14.4

Healthy Child Manitoba Office 2019

Table 2.14 Children at Risk by EDI Domain by RHA, 2019

Percentage of kindergarten children who score between the 10th and 25th percentile based on Canadian baseline sample

Area of Development (Domain)	SH-SS	WRHA	PMH	IERHA	NRHA	MB
Physical Health & Well-Being	9.1	10.2	10.7	9.5	8.6	9.8
Social Competence	14.0	15.0	15.0	12.2	15.9	14.5
Emotional Maturity	17.1	14.8	16.0	13.8	20.2	15.5
Language and Thinking Skills	14.2	14.8	14.4	12.8	16.9	14.6
Communication Skills and General Knowledge	17.5	16.4	15.7	14.6	14.8	16.6

Healthy Child Manitoba Office 2019

Table 2.15 Children on Track by EDI Domain by RHA, 2019

Percentage of kindergarten children who score above the 25th percentile based on Canadian baseline sample

Area of Development	SH-SS	WRHA	PMH	IERHA	NRHA	MB
Physical Health & Well-Being	80.4	74.7	72.0	76.2	66.4	77.4
Social Competence	77.0	72.4	72.1	78.3	65.3	76.0
Emotional Maturity	72.1	70.4	69.2	74.6	57.0	72.7
Language and Thinking Skills	75.2	70.8	70.4	76.3	53.8	73.2
Communication Skills and General Knowledge	68.2	66.0	66.0	71.8	61.4	69.0

Healthy Child Manitoba Office 2019

Regional Key Findings

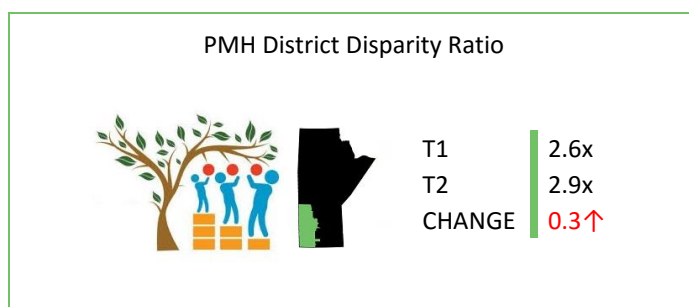
- The percentage of children considered vulnerable in PMH has increased from 30.4% in 2015 to 34.5% in 2019.
- In 2019, the areas of development with the greatest proportion of children considered vulnerable in PMH are physical health and well-being (17.3%) and communication skills and general knowledge (18.4%).
- The North and Brandon zones have similar proportions of children vulnerable in one or more domains whilst the South zone has a lower proportion.
- Porcupine Mountain children are almost three times as likely to be vulnerable in one or more domains as are children living in Turtle Mountain. The district disparity gap has remained increases by almost 10% between T1 and T2.

Table 2.16 Vulnerable Children on the EDI in PMH Zone and District, 2015 (T1) and 2019 (T2)
Percentage of kindergarten children vulnerable in at least one domain (area of development)

	T2	T1
Brandon	36.6	35.3
West End	35.1	24.0
South End	29.2	30.0
North Hill	33.8	48.1
East End	43.9	46.2
Downtown	44.2	43.3

South	T2	T1
Whitemud	26.9	25.0
Spruce Woods	29.9	26.8
Little Saskatchewan	45.6	22.8
Asessippi	30.4	38.5
Souris River	28.0	22.2
Turtle Mountain	24.7	18.8

	T2	T1
North	38.6	30.3
Duck Mountain	18.0	24.6
Riding Mountain	23.1	22.0
Dauphin	39.4	23.1
Agassiz Mountain	41.9	36.2
Swan River	48.6	39.7
Porcupine Mountain	51.6	41.1



Healthy Child Manitoba Office 2019

A CLOSER LOOK... ABORIGINAL HEAD START

In the fall of 2017, nursing students from Brandon University completed a Community Health practicum¹⁴ at the Brandon Friendship Centre. The focus of their project was to revise the Little Teaching Lodge's resource manual based on the six components of the Aboriginal Head Start program.

The revised manual includes new and relevant peer-reviewed information in the areas of growth and development of pre-school aged children, safety, health, nutrition requirements of young children, Indigenous culture, education needs and a compendium of local resources for parents such as vision and dental services that accept treaty status and therefore bill directly for services rendered. The manual is a valuable tool for the community and for parents and children involved with the Little Teaching Lodge as they navigate through a critical period of child development.

Pediatric Dental Extraction Surgery

Definition

The average annual rate of hospital-based dental surgeries involving extractions for children under the age of 6 years, per 1,000 population, over a five-year time period.

Why is this indicator important?

Early childhood caries (i.e., dental decay in the primary teeth in children under the age of 6 years) reflects the impact of many social inequalities including income, nutrition and personal health practices. Monitoring pediatric dental surgery involving extraction of primary teeth gauges ongoing access to care and preventive dental services for children.

Provincial Key Findings

- The rate of hospital-based dental surgeries under general anesthesia involving extraction of primary teeth for children significantly decreased over time in Manitoba and in all regions. Over the past ten years, nearly all (99.4%) of dental extraction surgeries in hospital had direct admission and were coded as elective procedures (e.g., scheduled day procedures, not unplanned urgent/emergent procedures).¹⁵
- However, the rates of severe childhood tooth decay may be underestimated as data for dental extraction surgeries performed outside of hospitals (e.g., dentists' offices) are not available. Additionally, not all surgeries to treat early childhood caries involve extraction of primary teeth as many are restored with fillings and stainless steel crowns.
- Winnipeg RHA, Prairie Mountain Health and Southern Health-Santé Sud have extraction rates significantly lower than the province whilst Northern RHA has a significantly higher rate.

Figure 2.20 Dental Extraction Surgery Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Crude average annual rate per 1,000 residents under age 6 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA		SH-SS		PMH		MB		IERHA		NRHA	
T2 COUNT	1,060		450		448		5,786		530		3,279	
T2 RATE	4.2	L-	4.9	L-	6.8	L-	11.5	-	12.1	-	66.1	H-
T1 RATE	6.4	L	8.0	L	9.0	L	15.0		17.1	H	72.8	H

MCHP RHA Indicators Atlas 2019

- Pediatric dental extraction surgeries amongst lowest income Manitobans are 6.5 times higher than the highest income residents in rural areas and 12.9 times higher in urban areas.



Urban Quintiles
 T1 9.8x
 T2 12.9x
 CHANGE 3.1↑

Rural Quintiles
 T1 6.8x
 T2 6.5x
 CHANGE 0.3↓

Regional Key Findings

- PMH's dental extraction surgery rate is decreasing significantly over time and is significantly lower than the provincial average.
- Brandon and South zones have dental extraction surgery rates significantly lower than the provincial average which are decreasing significantly over time.
- Only Porcupine Mountain has extraction rates significantly higher than the provincial average whilst ten districts have rates significantly lower.
- Porcupine Mountain children are almost ten times as likely to undergo dental extraction surgery as children living in West End. The district disparity gap has remained relatively unchanged between T1 and T2.

Table 2.17 Dental Extraction Surgery Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
 Crude average annual rate 1,000 residents under age 6 years

	T2		T1	
	Count	Rate	Rate	

Manitoba	5,786	11.5	-	15.0	
-----------------	-------	------	---	------	--

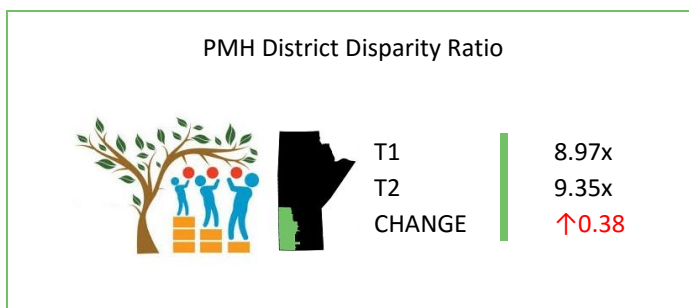
Brandon	Count	Rate		Rate	
West End	13	2.3	L	3.0	L
North Hill	8	2.9	L	5.0	L
South End	17	3.9	L	6.7	L
Downtown	25	5.0	L-	8.9	L
East End	16	5.2	L	8.3	L

South	Count	Rate		Rate	
Whitemud	14	3.2	L	5.3	L
Turtle Mountain	13	3.4	L	5.7	L
Spruce Woods	23	3.5	L	4.6	L
Souris River	39	6.8	L	6.8	L
Little Saskatchewan	30	7.4		10.1	
Aseissippi	62	13.2		15.3	

	T2		T1	
	Count	Rate	Rate	

PMH	448	6.8	L-	9.0	L
------------	-----	-----	----	-----	---

North	Count	Rate		Rate	
Dauphin	14	4.6	L	5.4	L
Riding Mountain	7	4.7		5.8	
Duck Mountain	27	13.8		7.2	
Agassiz Mountain	50	16.4		17.5	
Porcupine Mountain	86	21.5	H	26.9	H
Swan River	s	s		7.5	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period (s)-suppressed due to small numbers

Childhood Immunization

Definition

Antigen-specific immunization coverage rates are provided, as measured by the percentage of children who received all recommended vaccine doses for diphtheria, tetanus, pertussis, measles, mumps and human papilloma virus (HPV) by the age of 17 years. Note: HPV immunization is only reported for females.

Why is this indicator important?

Vaccines are one of the most important parts of child health programs because they can prevent death, disability, and control the spread of infectious diseases. Immunization is the single most important public health achievement in the past century, as infectious diseases have dropped from the leading cause of death to less than five percent of all deaths in Canada. For additional information, see the Routine Immunization Schedules in Manitoba.

Provincial Key Findings

- Provincial coverage rates for all vaccines have remained relatively stable over the last three years.
- Winnipeg RHA has the lowest coverage rates in the province with around two thirds of all adolescents immunized. Conversely, Prairie Mountain Health has much better rates with four out of every five adolescents immunized.

Table 2.18 Percentage of Adolescents Considered ‘complete for age’ by RHA for Diphtheria, Pertussis and Tetanus, Measles, Mumps and Rubella 2015-2017

ANTIGEN	YEAR	PMH	MB	WRHA	NRHA	SH-SS	IERHA
Diphtheria / Tetanus	2015	82.7%	72.3%	69.4%	69.5%	71.5%	79.2%
	2016	82.1%	72.0%	69.9%	69.9%	69.4%	77.9%
	2017	82.1%	71.9%	70.1%	71.0%	66.8%	79.4%
Pertussis	2015	81.0%	70.6%	67.9%	68.6%	68.9%	77.2%
	2016	80.4%	70.5%	68.6%	68.6%	67.1%	76.2%
	2017	80.6%	70.5%	68.9%	70.2%	64.5%	78.2%
Measles	2015	86.0%	72.5%	61.9%	81.4%	86.0%	84.3%
	2016	86.0%	74.3%	64.2%	87.2%	86.2%	85.8%
	2017	87.3%	74.3%	63.8%	88.6%	86.5%	86.9%
Mumps	2015	85.0%	72.0%	61.7%	80.5%	85.0%	83.8%
	2016	85.0%	73.8%	64.0%	86.4%	85.5%	85.6%
	2017	86.7%	74.0%	63.5%	88.2%	85.9%	86.9%
Rubella	2015	91.5%	83.6%	76.1%	95.8%	90.6%	93.6%
	2016	90.3%	83.8%	76.7%	97.2%	90.6%	93.3%
	2017	91.0%	83.0%	75.2%	96.6%	90.8%	93.8%

Regional Key Findings

- PMH has the highest coverage rates in the Province.
- The South zone has high coverage rates for all vaccines. The North zone has the lowest coverage rates in PMH with around three out of every four adolescents considered ‘complete for age’ for Diphtheria, Tetanus and Pertussis. Conversely higher rates can be found for Measles, Mumps and Rubella vaccines.
- The Brandon zone has the lowest coverage rates in PMH for Measles, Mumps and Rubella but higher rates can be found for Diphtheria, Tetanus and Pertussis vaccines.

Table 2.19 Percentage of Adolescents Considered ‘complete for age’ by PMH Zone for Diphtheria, Pertussis, Tetanus, Measles, Mumps and Rubella 2015-2017

ANTIGEN	YEAR	PMH	NORTH	BRANDON	SOUTH
Diphtheria / Tetanus	2015	82.7%	77.9%	84.0%	84.5%
	2016	82.1%	79.6%	79.7%	85.2%
	2017	82.1%	76.3%	81.5%	86.0%
Pertussis	2015	81.0%	77.9%	84.0%	84.5%
	2016	80.4%	79.6%	79.7%	85.2%
	2017	80.6%	76.3%	81.5%	86.0%
Measles	2015	86.0%	91.6%	78.2%	88.5%
	2016	86.0%	91.4%	77.0%	89.1%
	2017	87.3%	90.6%	78.3%	91.8%
Mumps	2015	85.0%	91.2%	76.6%	87.4%
	2016	85.0%	90.6%	75.3%	88.6%
	2017	86.7%	90.6%	76.9%	91.6%
Rubella	2015	91.5%	95.1%	85.8%	93.4%
	2016	90.3%	95.0%	82.8%	92.8%
	2017	91.0%	93.9%	84.3%	94.3%

MHSAL Communicable Disease Control Unit 2019

HPV Provincial Key Findings

- Less than two thirds of females received all recommended vaccine doses for the human papilloma virus (HPV).
- Southern Health-Santé Sud has the lowest coverage rates in the province whereas PMH has the highest.

Table 2.20 Percentage of Females Considered ‘complete for age’ by RHA for HPV 2015-2017

ANTIGEN	YEAR	PMH	MB	WRHA	NRHA	SH-SS	IERHA
HPV	2015	67.3%	57.0%	56.2%	65.0%	44.4%	64.0%
	2016	70.6%	62.0%	61.9%	66.8%	51.2%	66.1%
	2017	73.7%	62.7%	62.4%	66.9%	51.2%	68.6%

MHSAL Communicable Disease Control Unit 2019

Regional Key Findings

- The North zone has the highest coverage rates with almost four out of every five adolescents receiving the recommended vaccinations.

Table 2.21 Percentage of Females Considered ‘complete for age’ by PMH Zone for HPV 2015-2017

ANTIGEN	YEAR	PMH	NORTH	BRANDON	SOUTH
HPV	2015	67.3%	70.2%	69.4%	64.2%
	2016	70.6%	75.2%	66.8%	70.9%
	2017	73.7%	78.7%	70.6%	72.9%

MHSAL Communicable Disease Control Unit 2019

A CLOSER LOOK... ENHANCING VACCINE UPTAKE

Concerns have been identified in uptake of childhood immunizations, including outbreaks of vaccine-preventable illness such as measles. The Manitoba Childhood Immunization Coverage Mapping Project involves identification of under-immunized districts in Manitoba through mapping of vaccine uptake, and development of local intervention strategies to increase vaccine uptake in children living in these districts. In April of 2017, PMH in collaboration with MHSAL, mapped the vaccination rates for four vaccines (human papillomavirus (HPV), measles, pertussis and rotavirus) across the region.

Public Health subsequently identified the potential causes of low vaccine uptake amongst children in the districts with the lowest uptake. Local intervention strategies were developed and implemented in an attempt to address the specific causes of the low vaccine uptake. The strategies included:

- Walk-in alternative clinics: Non-appointment immunization clinics are offered during evening hours in both Dauphin and Brandon in an attempt to make hours and location more convenient for working parents.
- Improved communication: Specifically targeted at the HPV vaccine, Public Health developed an education package to be included in school newsletters that was delivered to schools across PMH. Additionally information related to immunizations in general was delivered as part of a comprehensive social media strategy.
- Reminders: In a particularly low vaccine uptake area (Swan River), a system of telephone and then letter reminders were sent to the parents whose children were identified as being ‘overdue’ for specific immunizations.

The project is due to report back in March of 2020 on the success of any or all of these interventions.

Teen Pregnancy Rate

Definition

The annual rate of pregnancies including live births, stillbirths, abortions and ectopic pregnancies per 1,000 female residents, ages 15 to 19 years, over a five-year time period.

Why is this indicator important?

Pregnant teenagers are less likely to receive early prenatal care and more likely to experience anemia, eclampsia and depressive disorders. Teenage pregnancy is often associated with high risk activities such as substance use, smoking during pregnancy, and physical or sexual abuse. Teenage mothers tend to have lower socioeconomic status, as well as reduced educational opportunities¹⁶.

Provincial Key Findings

- The rate of teenage pregnancy in the province and all RHAs has decreased significantly over time.
- Teenage pregnancy rates are significantly lower than the province in Southern Health-Santé Sud and Winnipeg RHA whereas those in Northern RHA are significantly higher.
- The teen pregnancy rate amongst lowest income Manitobans is 4.5 times higher than the highest income residents in rural areas and 8.4 times higher in urban areas.

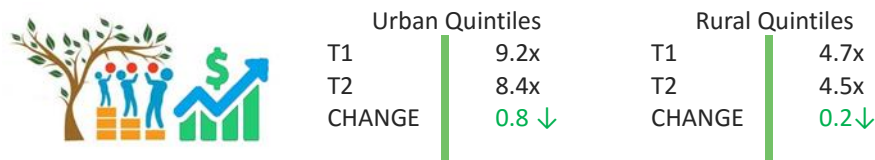


Figure 2.21 Teen Pregnancy Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age adjusted annual average rate per 1,000 females aged 15-19 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS		WRHA		PMH		MB		IERHA		NRHA	
T2 COUNT	817		2,765		807		6,679		658		1,533	
T2 RATE	21.9	L-	23.3	L-	29.3	-	30.0	-	30.8	-	100.5	H-
T1 RATE	28.7	L	36.8	L	40.8		44.5		46.1		127.8	H

Regional Key Findings

- PMH has a teenage pregnancy rate similar to the provincial average and is decreasing significantly over time.
- The North zone has a significantly higher rate of teenage pregnancy whilst the South zone has a rate significantly lower than the provincial average. All zones in PMH have rates that are decreasing significantly over time.
- Porcupine Mountain females aged 15-19 years old are almost five times as likely to become pregnant as those living in Whitemud. The district disparity gap has narrowed by eight percent between T1 and T2.

Table 2.22 Teen Pregnancy Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age adjusted annual average rate per 1,000 females aged 15-19 years

	T2		T1		
	Count	Rate		Rate	
Manitoba	6,679	30.0	-	44.5	
PMH	807	29.3	-	40.8	
Brandon	238	28.9	-	41.6	
West End	46	18.2	L-	31.2	L
South End	32	21.5	-	35.6	
North Hill	26	22.8	-	46.1	
Downtown	79	46.2	H-	62.7	H
East End	55	61.4	H	52.7	
North	302	44.2	H-	59.6	H
Swan River	13	16.4	-	33.6	
Riding Mountain	19	23.5		28.3	
Duck Mountain	19	24.0		35.1	
Dauphin	57	46.7	H	55.4	
Agassiz Mountain	78	63.6	H-	87.7	H
Porcupine Mountain	116	67.9	H	77.6	H
South	267	21.6	L-	29.2	L
Whitemud	23	13.6	L	16.1	L
Spruce Woods	37	16.3	L	20.3	L
Little Saskatchewan	42	23.9		32.0	
Turtle Mountain	36	24.4		23.2	L
Souris River	55	24.9	-	40.9	
Asessippi	74	37.6		43.1	

PMH District Disparity Ratio

T1: 5.45x
T2: 4.99x
CHANGE: ↓0.45

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Teen Birth Rate

Definition

The annual rate of live births per 1,000 female residents, ages 15 to 19 years, over a five-year time period.

Why is this indicator important?

Very similar to teen pregnancy rate, teen birth rates are of concern because babies born to teen mothers are at higher risk of adverse health outcomes such as low birth rate, death during infancy, and preterm birth. There are also strong economic consequences, since teenage mothers are more likely to drop out of school and have fewer economic opportunities.

Provincial Key Findings

- The teenage birth rate in the province and all RHAs has decreased significantly over time.
- The teenage birth rates are significantly lower than the province in Winnipeg RHA, whereas those in Northern RHA are significantly higher.
- The teen birth rate amongst lowest income Manitobans is 6.1 times higher than the highest income residents in rural areas and 15.6 times higher in urban areas.

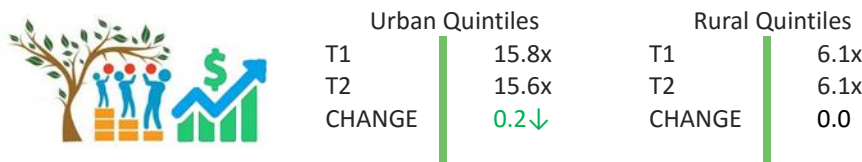
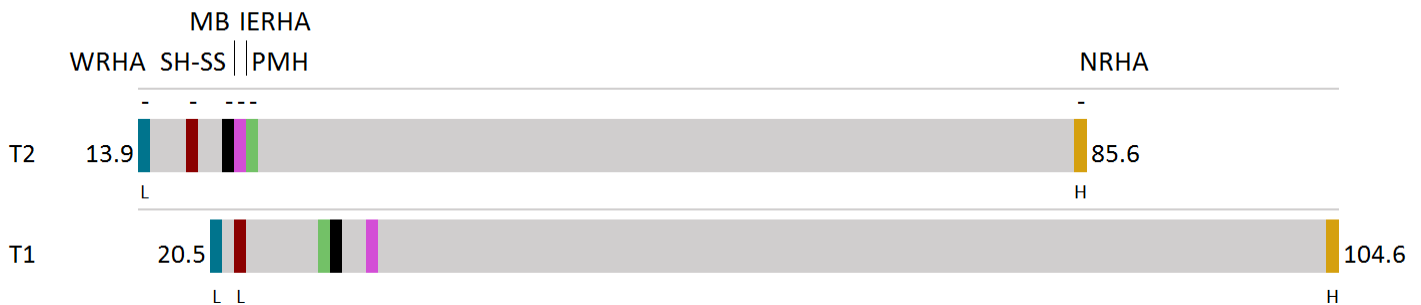


Figure 2.22 Teen Birth Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age adjusted average annual rate per 1,000 females aged 15-19 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA		SH-SS		MB		IERHA		PMH		NRHA	
T2 COUNT	1,644		691		4,786		476		619		1,290	
T2 RATE	13.9	L-	18.3	-	21.5	-	22.3	-	22.5	-	85.6	H-
T1 RATE	20.5	L	21.9	L	29.7		31.6		28.4		104.6	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- PMH has a teenage birth rate similar to the provincial average and is decreasing significantly over time.
- The North zone has a significantly higher rate of teenage births, whilst the South zone has a rate significantly lower than the provincial average.
- Porcupine Mountain females aged 15-19 years are almost eight times as likely to give birth as those living in Whitemud. The district disparity gap has widened by 19 percent between T1 and T2.

Table 2.23 Teen Birth Rate by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age adjusted average annual rate per 1,000 females aged 15-19 years

	T2		T1		
	Count	Rate		Rate	
Manitoba	4,786	21.5	-	29.7	
PMH	619	22.5	-	28.4	
Brandon	174	20.8		25.4	
West End	35	13.8	L	16.7	L
North Hill	18	15.8	-	30.4	
South End	25	16.8		25.5	
Downtown	54	31.5		37.8	
East End	42	46.8	H	35.4	
North	248	36.3	H	45.1	H
Swan River	11	13.8		22.0	
Riding Mountain	13	16.1		13.5	
Duck Mountain	16	20.2		26.1	
Dauphin	45	36.9	H	38.5	
Agassiz Mountain	61	49.8	H-	72.5	H
Porcupine Mountain	102	59.7	H	61.9	H
South	197	15.9	L	20.3	L
Whitemud	13	7.7	L	11.1	L
Spruce Woods	27	11.9	L	13.4	L
Turtle Mountain	22	14.9		14.9	L
Souris River	39	17.7	-	27.0	
Little Saskatchewan	32	18.2		21.8	
Asessippi	64	32.4	H	35.6	

PMH District Disparity Ratio

T1: 6.53x
T2: 7.75x
CHANGE: ↑1.22

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... TEEN CLINIC

Teen Clinics are conveniently located in schools to provide a safe, confidential, non-judgmental place for youth to deal with all their health care needs with no appointments necessary. An interdisciplinary team (e.g. Public Health Nurses, Nurse Practitioners, Community Mental Health Workers, Addictions Foundation Workers, Physicians) provides:

- mental health screening and resource connection
- sexually transmitted infection (STI) testing and treatment
- birth control counselling
- prescription for birth control and free condoms
- education and advocacy for healthy lifestyle choices
- addiction assessment and resource connection
- nutritional counseling
- immunizations
- assessment and treatment of other health concerns

Teen clinics are currently offered in high schools in Birtle, Brandon, Dauphin, Forrest, Erickson, Grandview, Hamiota, Minnedosa, Rivers, Roblin, Rossburn, Russell, Strathclair and Swan River.

In a survey conducted with teens who had attended a clinic during the 2018-2019 school year:

- Ninety-four percent were satisfied with the services provided and would recommend a teen clinic to their friends
- Top three reasons for attending a teen clinic were birth control/condoms, skin/acne conditions and general unwellness (e.g. aches, pains, colds)

In the fall of 2018, Brandon University nursing students implemented a community health project¹⁷ to assess awareness of the Teen Clinic by school staff and identify opportunities for improvement. Data were gathered through a survey, one-on-one interviews, and discussions at school staff meetings and with Teen Clinic staff at three rural schools (Erickson, Strathclair and Minnedosa). Findings include:

- Additional staff education required about Teen Clinic, including Mature Minor Assessment Tool (which allows minors with the capacity to understand and make decisions the right to provide consent)
- The need to enhance the Teen Clinic social media platform to address relevant health issues and needs of students
- Additional resources required for school staff when Teen Clinic is not operating
- The need to reduce the stigma associated with accessing Teen Clinic services

A CLOSER LOOK... ABORTION SERVICES

On September 1, 2019, new universal coverage for Mifegymiso (pronounced Miff-e-gee-my-so) took effect in the province in an effort to make abortion more accessible for all. Mifegymiso, also known as RU-486, is a two-pill treatment used to provide a non-surgical option for early abortion. The medication is approved by Health Canada for use in the first nine weeks of a pregnancy.

Mifegymiso is available at no cost for women who have a provincial health card and a prescription from a physician or nurse practitioner. Previously the medication had been covered under Pharmacare, however that left some patients who didn't have private health insurance or who weren't covered under social assistance facing a bill of \$300 or more. Universal coverage is being made retroactive to June 2, 2019 and any patient who paid for Mifegymiso between June 2 and September 1, 2019 can apply for reimbursement by contacting Pharmacare.

Personal Health Determinants

Self-Rated General Health

Definition

The percentage of residents, aged 12 years and older, who rated their overall health as ‘poor/fair’, ‘good’, ‘very good’ or ‘excellent’. Overall health was not only based on the absence of disease or injury, but overall physical, mental and social-well-being.

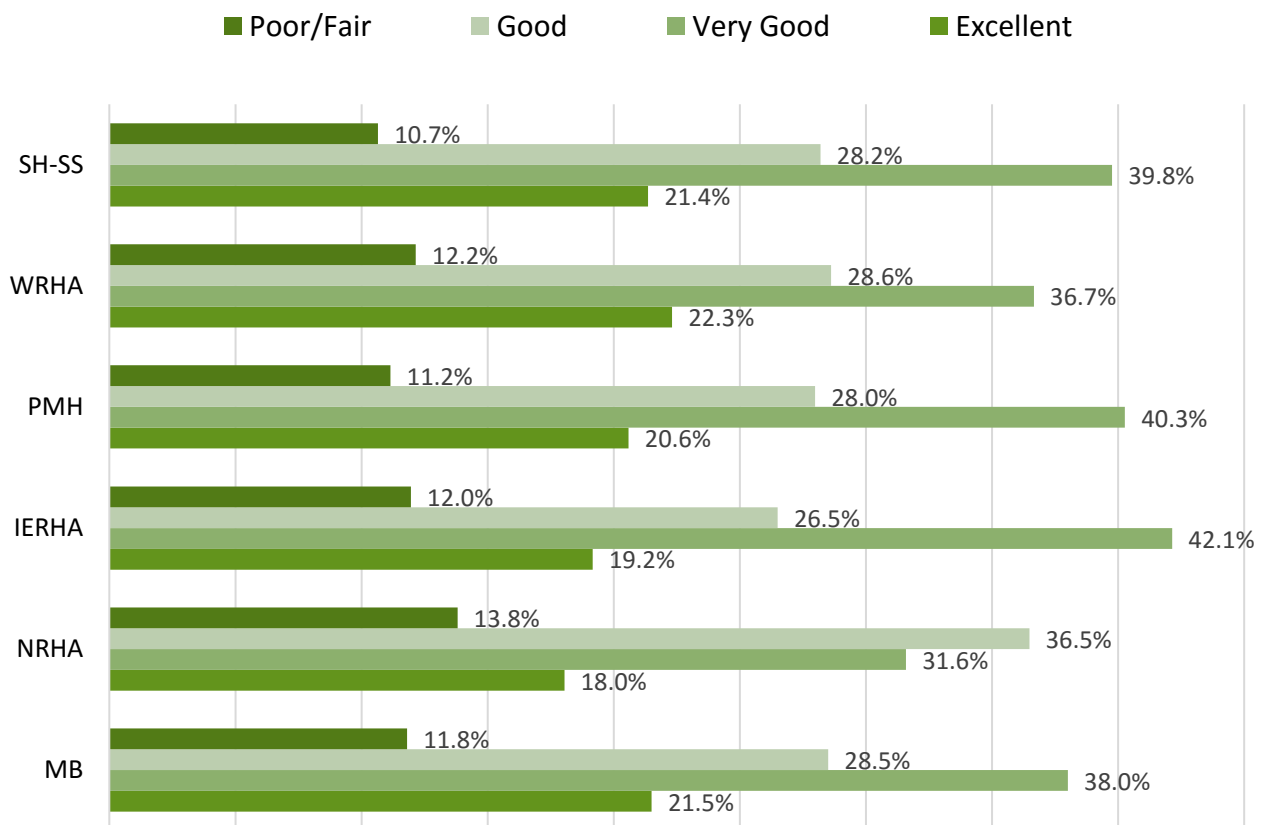
Why is this indicator important?

Good-to-excellent self-reported health status is associated with lower risk of mortality and use of health services. Poor self-reported health status is a good predictor of future illness and premature death.

Provincial Key Findings

- Approximately one in 10 Manitoba residents rate their overall health as ‘poor/fair’.
- Southern Health-Santé Sud reported the lowest level of ‘poor/fair’ overall health, whilst Northern RHA reported the highest level.

Figure 2.23 Self-Rated General Health by RHA, 2015-2016
Age and sex adjusted percent of weighted sample aged 12+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Self-Rated Mental Health

Definition

The percentage of residents, aged 12 years and older, who rated their mental health as 'poor/fair', 'good', 'very good' or 'excellent'.

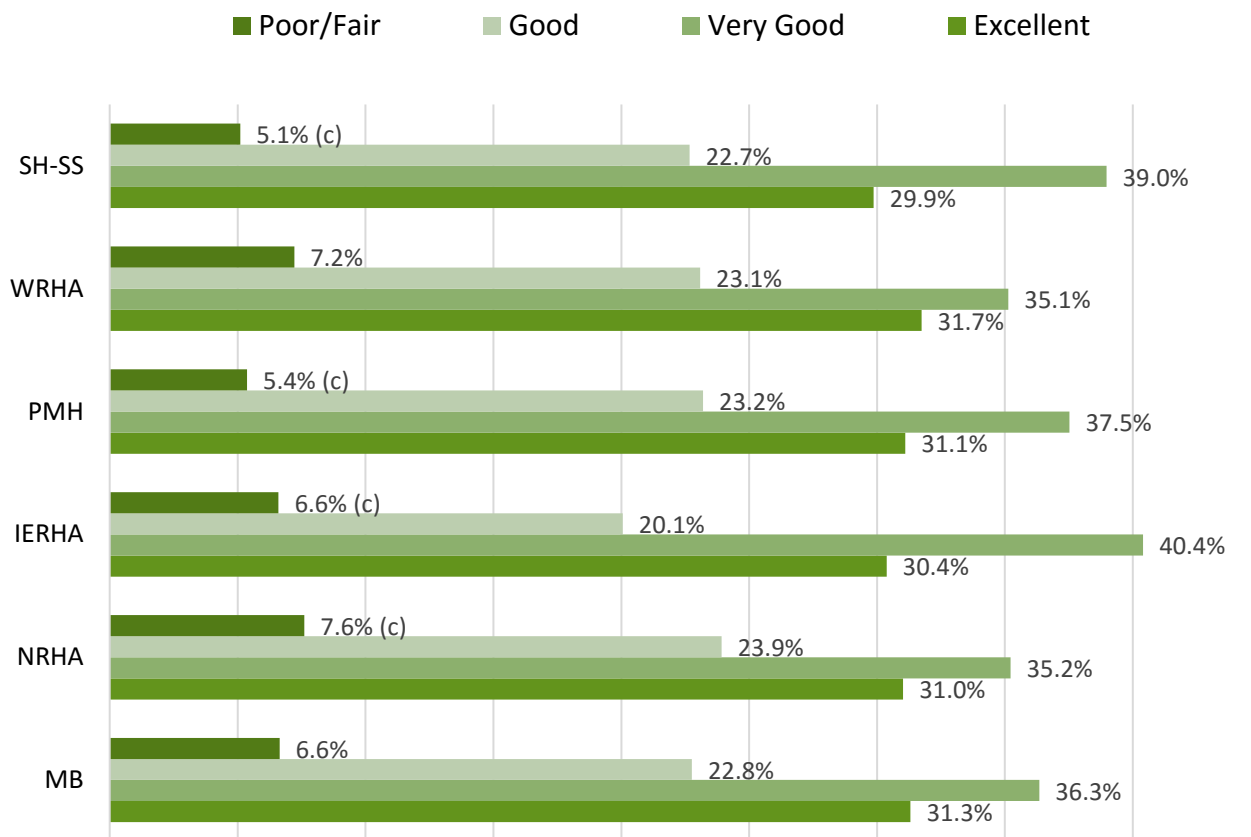
Why is this indicator important?

Mental health issues, including emotional health problems, can manifest at any time across the lifespan and are often related to challenges associated with changing roles and responsibilities. While perceived mental health is a subjective measure and does not directly correspond with diagnosed mental illnesses, it may still affect health service use and quality of life.

Provincial Key Findings

- Approximately 90 percent of Manitoba residents rate their mental health as 'good', 'very good' or 'excellent'.

Figure 2.24 Self-Rated Mental Health by RHA, 2015-2016
Age and sex adjusted percent of weighted sample aged 12+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Life Stress

Definition

The percentage of residents, aged 15 years or older, who reported most days to be ‘quite a bit stressful’, ‘extremely stressful’, or ‘not at all stressful’.

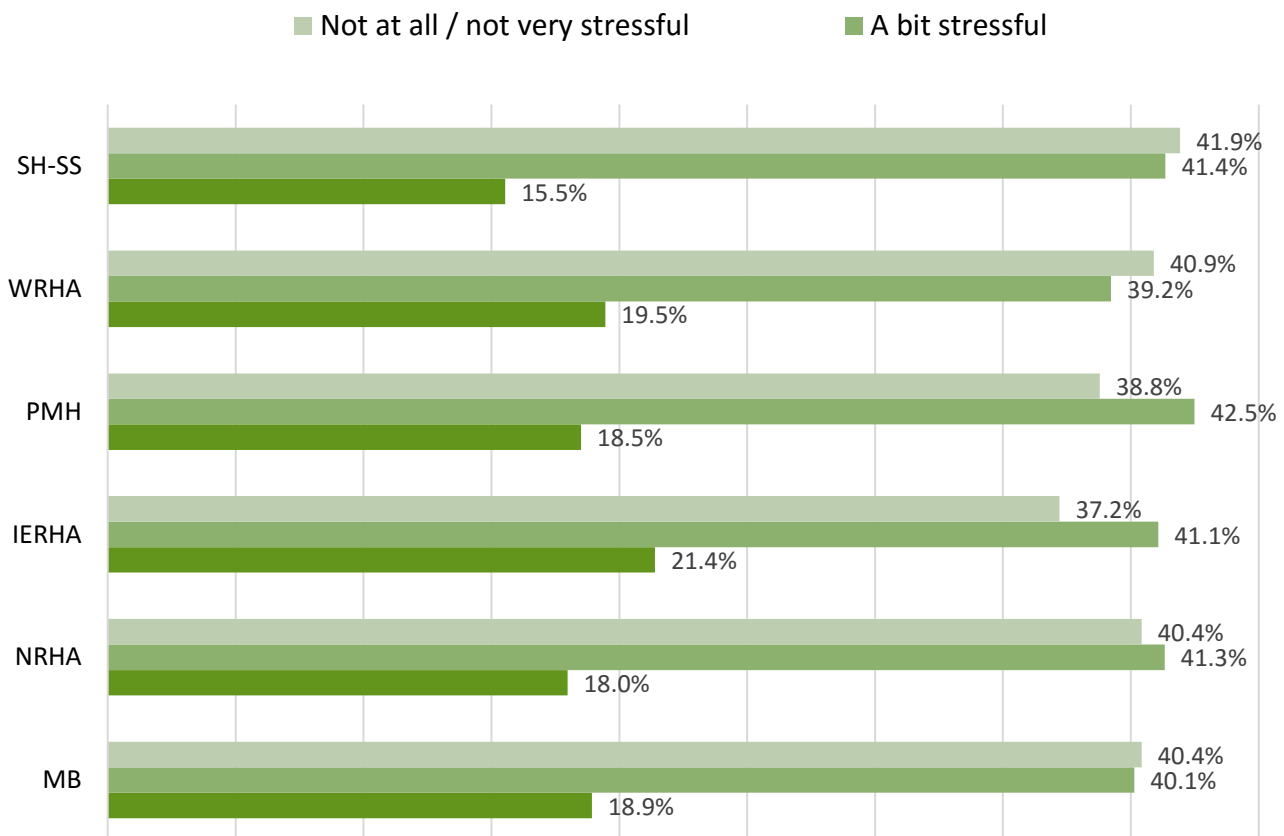
Why is this indicator important?

Prolonged exposure to high levels of stress can have negative consequences for health including increased risk of illness and chronic disease. Stress is often an underlying cause of high risk behaviours as coping mechanisms, such as substance use.

Provincial Key Findings

- Almost 19% of Manitobans reported their levels of life stress as being ‘quite a bit / extremely stressful’.
- Lower levels of life stress were reported in Southern Health-Santé Sud, whilst the highest levels of life stress were reported in Interlake-Eastern RHA.

Figure 2.25 Self-Rated Life Stress by RHA, 2015-2016
Age and sex adjusted percent of weighted sample aged 15+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Sense of Community Belonging

Definition

The percentage of population, aged 12 years and older, who described their sense of belonging to their local community as 'somewhat/very weak,' 'somewhat strong' or 'very strong'.

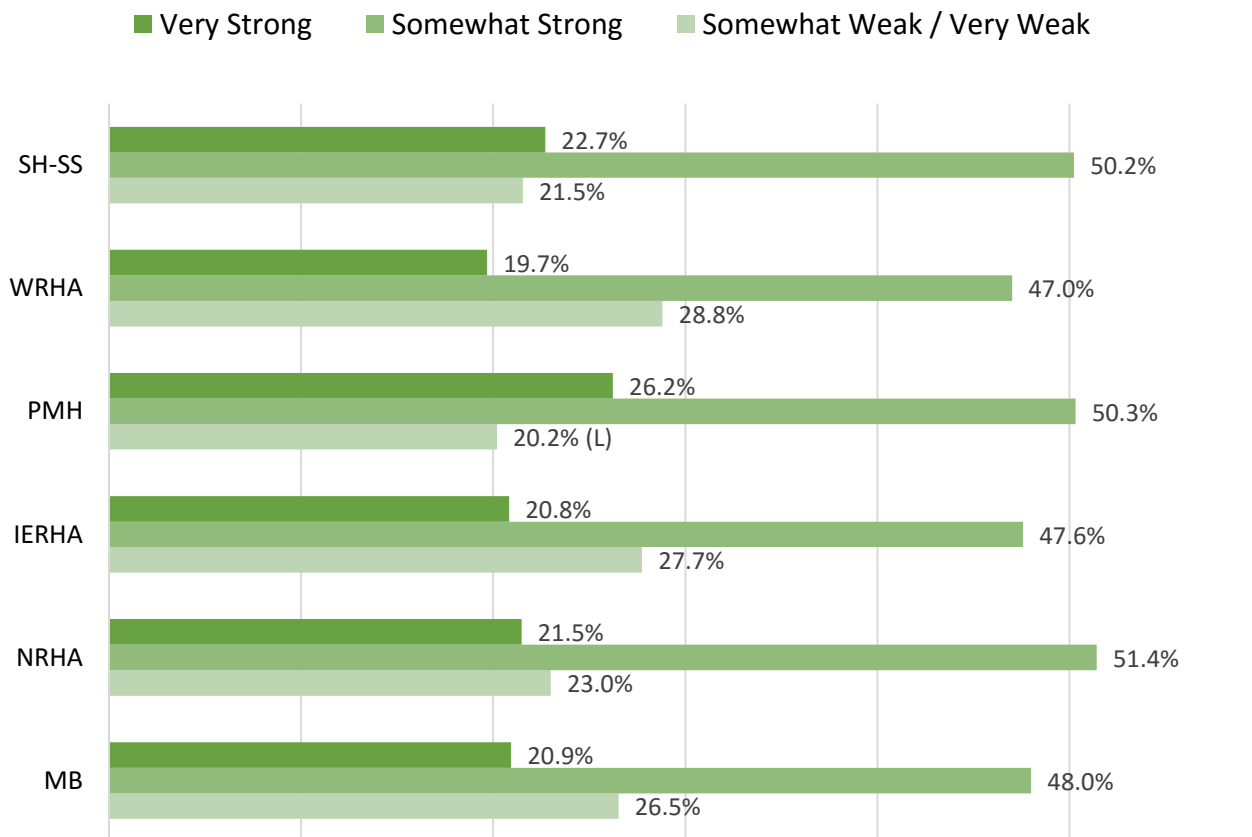
Why is this indicator important?

A strong sense of community belonging reflects attachments, social engagement and participation within communities which is associated with positive health outcomes. Individuals who do not have a strong sense of community belonging may experience social isolation which can be detrimental to their health. Understanding community connectedness supports an upstream approach to health promotion and illness prevention.

Provincial Key Findings

- Just under three quarters of Manitobans reported their 'sense of belonging to the local community' as 'somewhat strong' or 'very strong'.

Figure 2.26 Sense of Community Belonging 2015/2016
Age and sex adjusted proportion (%) of weighted sample



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Regional Key Findings

- PMH residents reported a slightly stronger 'sense of community belonging' than the province as a whole with a significantly lower proportion reporting a 'somewhat weak' or 'very weak' sense of belonging.

A CLOSER LOOK... HEALTHY TOGETHER NOW

Healthy Together Now (HTN) is a regionally coordinated and government supported partnership that aims to improve the health of populations through community-led programming. HTN program staff collaborate with local residents and organizations to implement health promoting activities using a community development approach. Activities focus on four key pillars to reduce risk for chronic disease: healthy eating, physical activity, tobacco reduction and mental well-being. Communities may apply for grants up to a maximum of \$5,000. In 2018-2019, over 60 grants were awarded to communities across the region.

Changes Made to Improve Health

Definition

The percentage of residents who reported making positive health changes in the last 12 months.

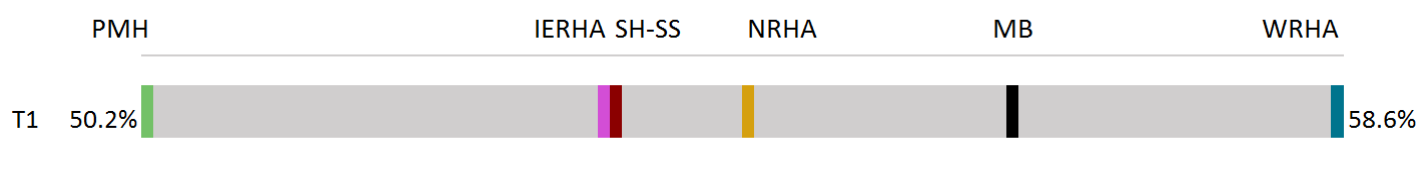
Why is this indicator important?

This measure provides insight into people’s willingness to make changes to improve their health.

Provincial Key Findings

- More than half of Manitobans reported making a positive health change in the last year.
- Winnipeg RHA reported the highest levels of positive health changes, whilst Prairie Mountain Health reported the lowest.
- Across all RHAs the most important change that has been made is ‘increased exercise’, which accounts for over 40% of responses in each RHA.
- Across all RHAs the greatest barrier from making the intended positive health change is ‘lack of willpower’, which had a response rate of over 29% in each RHA.

Figure 2.27 Percent of residents who reported making a positive health change in the last year, 2015-2016 (T1)
Age and sex Adjusted proportion of weighted sample (%)



H/L Significantly higher or lower than the MB average for that time period.

	PMH	IERHA	SH-SS	NRHA	MB	WRHA
T1 RATE	50.2%	53.5%	53.6%	54.5%	56.3%	58.6%

CCHS 2015-2016

Regional Key Findings

- The single most important health changes made in the past year by PMH residents were ‘increased exercise’ (47.7%), followed by ‘improved eating habits’ (21.4%) and ‘reduced weight, smoking, alcohol or stress’ (11.9%).
- PMH had the highest proportion of residents in the province reporting ‘improved eating habits’ (21.4%) in the past year.
- PMH had the highest proportion of residents in the province reporting ‘lack of willpower’ as the main barrier for not changing to improve health at 34.3%.

Body Mass Index (BMI)

Definition

The percentage of residents, aged 18 years and older, who are underweight/normal, overweight or obese, based upon self-reported height and weight.

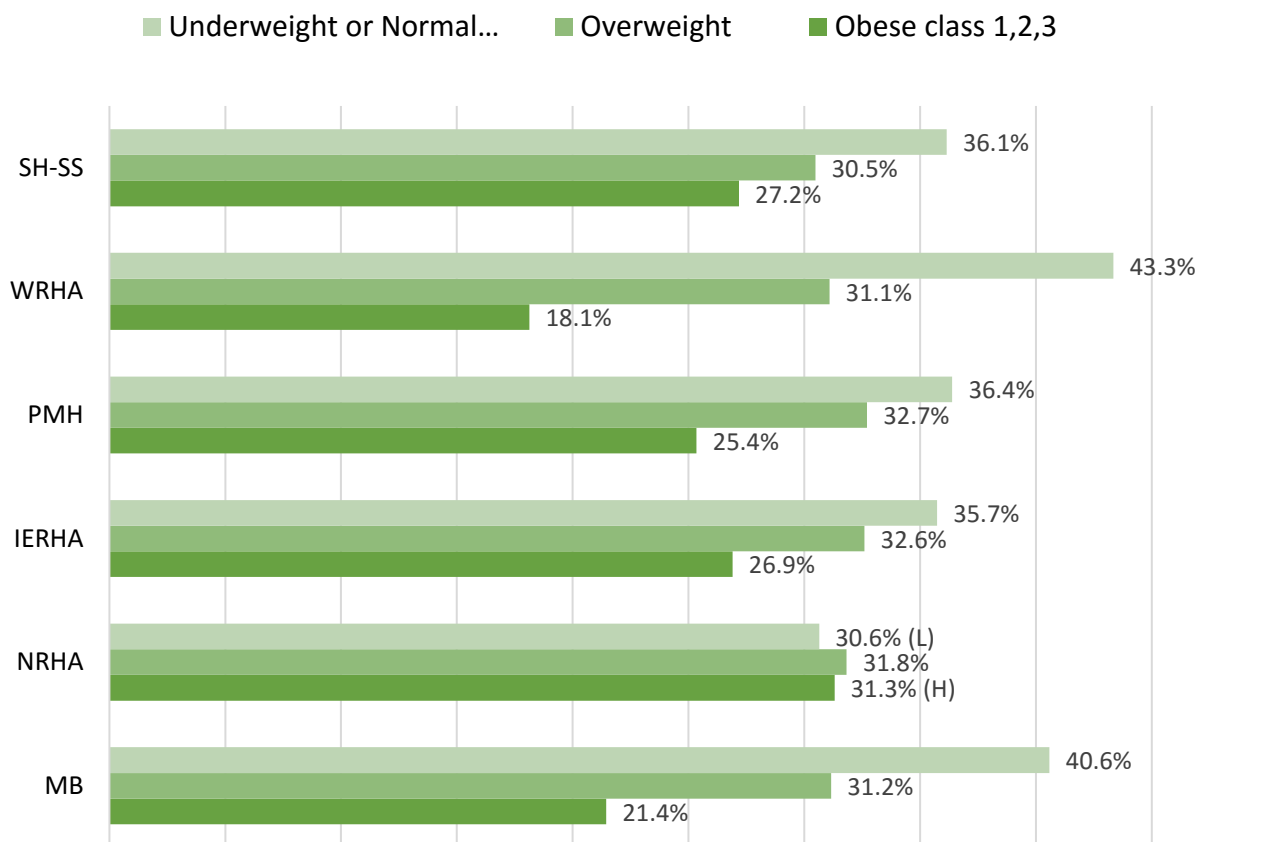
Why is this indicator important?

BMI is a widely used diagnostic tool used to monitor weight patterns in the population. Obesity impacts quality of life, life expectancy, is a major risk factor for a number of chronic diseases and affects the use of health services.

Provincial Key Findings

- More than half of all Manitobans reported heights and weights that gave them a BMI classification of either overweight or obese.
- Almost a third of all respondents in Northern RHA were classified as obese compared to just 18% in Winnipeg RHA.

Figure 2.28 Body Mass Index, by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample, aged 18+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Regional Key Findings

- PMH is similar to the province in that a quarter of all respondents were classified as obese and almost a third as overweight.

A CLOSER LOOK... BARIATRIC CARE

PMH now has a Certified Bariatric Educator; this five year certification is recognized across Canada from Obesity Canada. The program's mission "The Certified Bariatric Educator program offered by Obesity Canada will serve the public and the field of obesity medicine by maintaining standards for assessment and credentialing allied healthcare professionals in Canada. The Certified Bariatric Educator will signify specialized knowledge in the principles of obesity management and will distinguish an allied healthcare professional as having achieved competency in obesity management and bariatric care." There are designated rooms in several facilities to better support bariatric care, and specialized equipment is available to facilitate safe care across the region.

Health Behaviours

Substance Use Disorders

Definition

The percentage of residents, aged 18 years and older, diagnosed with a substance use disorder (including alcohol and/or drug dependence), over a five-year time period.

Why is this indicator important?

Substance use may be associated with injuries and deaths, vandalism, alcohol poisoning and violence. Harmful use patterns that started at a young age and carried into adulthood exacerbate these problems, and prolonged substance use may lead to a number of acute and chronic disease conditions.

Provincial Key Findings

- Almost six percent of Manitoba residents live with a substance use disorder.
- The rate in Prairie Mountain Health and Northern RHA are significantly higher than the provincial average, whilst the rates in Winnipeg RHA and Southern Health-Santé Sud are significantly lower.
- Substance use disorders are most prevalent in males and in the age group of 25-44.
- The prevalence of substance use disorders amongst low income Manitobans is 3.3 times higher than the highest income residents in urban areas and 1.7 times higher in rural areas.



Figure 2.29 Prevalence of Substance Use Disorders among Adults by RHA, 2010/11-2014/15 (T1)
Age and sex adjusted percent of adults aged 18+ diagnosed with disorder in five-year time period



H/L Significantly higher or lower than the MB average for that time period.

	SH-SS	WRHA	IERHA	MB	PMH	NRHA
T1 COUNT	5,956	32,208	5,627	58,178	8,354	5,593
T1 RATE	4.4%	5.6%	5.9%	5.9%	6.7%	10.8%
	L	L			H	H

MCHP Mental Illness Among Adult Manitobans 2018


Regional Key Findings

- The prevalence of adults living with a substance use disorder in Prairie Mountain Health is significantly higher than the provincial average.
- Eight districts are significantly higher than the provincial average and two districts in the South zone are significantly lower.
- Porcupine Mountain adults are more than twice as likely to be living with a substance use disorder as adults in Whitemud.

Table 2.24 Prevalence of Substance Use Disorders among Adults by PMH Zone and District, 2010/11 – 2014/15 (T1)
Age and sex adjusted percent of adults aged 18+ diagnosed with disorder in five-year time period

	T1		
	Count	Rate	
Manitoba	58,178	5.9	
PMH	8,354	6.7	H
Brandon			
West End	643	5.5	
South End	452	6.0	
North Hill	419	7.5	H
East End	439	8.5	H
Downtown	881	9.9	H
North			
Duck Mountain	207	5.1	
Riding Mountain	219	5.4	
Dauphin	435	6.9	H
Agassiz Mountain	412	8.0	H
Swan River	323	8.4	H
Porcupine Mountain	676	10.1	H
South			
Whitemud	404	4.6	L
Spruce Woods	575	5.2	L
Little Saskatchewan	519	6.0	
Asessippi	553	6.0	
Souris River	674	6.4	
Turtle Mountain	523	7.0	H

PMH District Disparity Ratio



2.19 x

MCHP Mental Illness Among Adult Manitobans 2018

H/L Significantly higher or lower than the MB average for that time period.

A CLOSER LOOK... RAPID ACCESS TO ADDICTIONS MEDICINE (RAAM) CLINIC

In October 2018, a Rapid Access to Addictions Medicine (RAAM) Clinic opened in Brandon offering front-line help for PMH residents, age 18 and older, who are seeking help with high-risk substance use and addiction including but not limited to opioids, methamphetamine and alcohol. This includes people who want to try medical assistance to reduce or stop their substance use. The clinic also provides support for people who may have substance-related health issues such as hepatitis, pancreatitis and infections. The Brandon RAAM team consists of an Addiction Medicine Specialist, Community Psychiatric Nurse, Addictions Foundation Rehabilitation Counselor and administrative assistants.

Housed at the 7th Street Health Access Centre, RAAM is a low-threshold, walk-in service with initial assessments conducted during clinic hours. Low-threshold programs are harm reduction-based and make minimal demands on the patient, offering services without attempting to control their intake of drugs, and providing counselling only if requested. The clinic is designed to provide assessment, counselling, prescribing of appropriate medications and connections to other community supports for ongoing care.

Brandon RAAM Clinic Facts: October 2018 to March 2019

- Approximately 100 unique clients supported from across the region; over half were between 25 to 44 years of age, and male
- Majority of clients self-refer or are directed by family or friends as opposed to being referred by a professional agency
- Majority of clients identify a history of trauma and co-occurring mental health issues
- Clients report RAAM culture is welcoming and non-judgmental
- Opiates and stimulants are the primary identified substances; the majority of clients live with poly-substance use disorders, as they identify second and third substances of abuse such as alcohol, opiates, stimulants, and benzodiazepines.

Drug Methods

Definition

The methods individuals reported using for illicit drug consumption over the course of their lifetime.

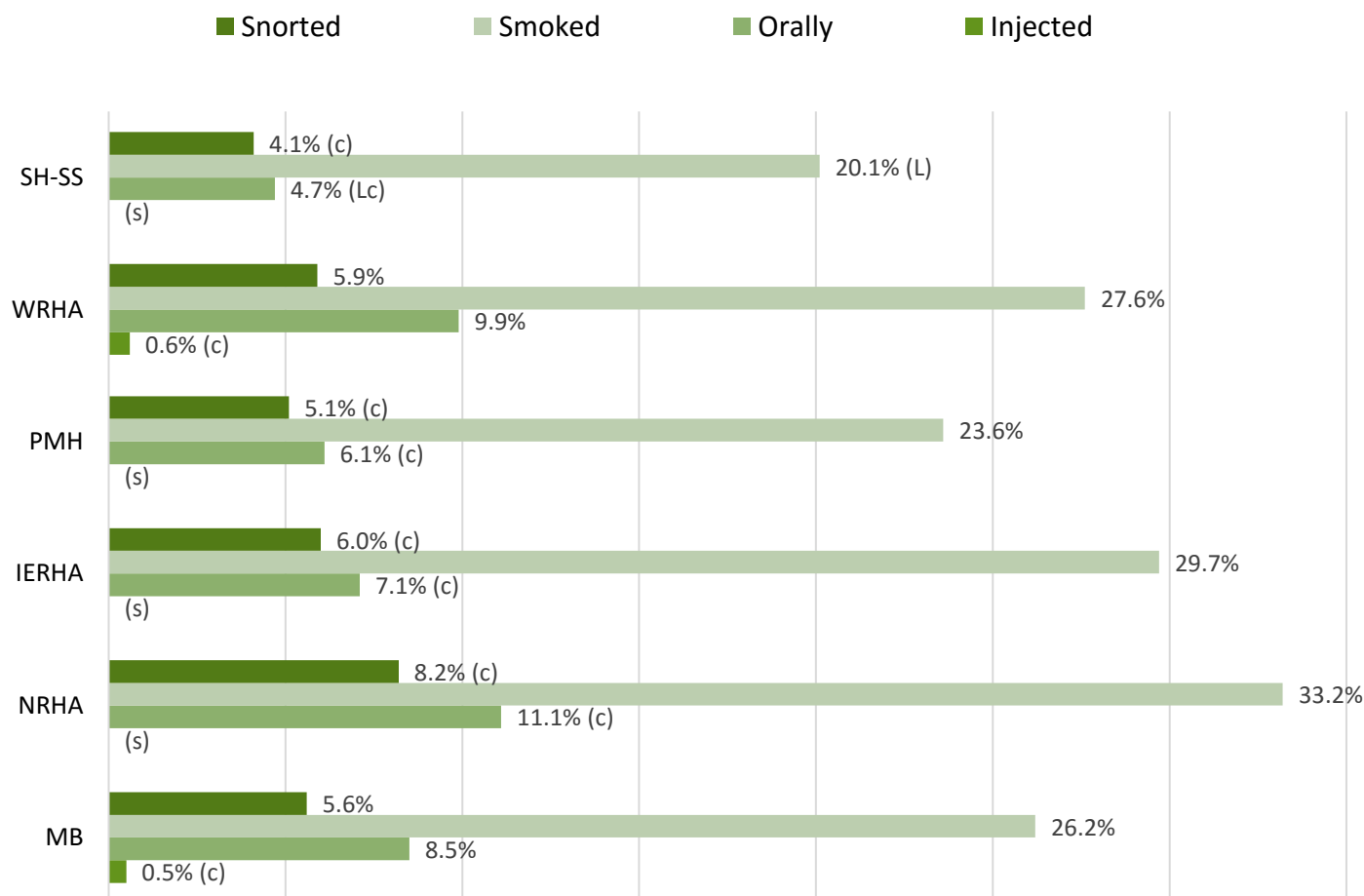
Why is this indicator important?

Understanding methods of drug consumption help inform harm reduction interventions including public awareness, sexually transmitted blood-borne infection (STBBI) prevention and public policy.

Provincial Key Findings

- Smoking is the most frequently reported method of illicit drug consumption in Manitoba.

Figure 2.30 Method for Illicit Drug Consumption (Lifetime), by RHA, 2015-2016
Age and sex adjusted percent of weighted sample



(H/L) Significantly higher or lower than the MB average (c) Use with caution (s) Suppressed

CCHS 2015 - 2016

A CLOSER LOOK... WITHDRAWAL TREATMENT BEDS

In the fall of 2019, six withdrawal support services beds opened in Brandon specifically for individuals living with methamphetamine or opioid addiction. The beds are flexible-length, allowing clients the necessary time they need to withdraw from drugs. This treatment option is part of a broader residential withdrawal support program through a partnership between Manitoba Health, Seniors and Active Living, Prairie Mountain Health, and Community Health and Housing Association Westman. These beds are housed in a temporary location until construction of the Joshua Jacks Centre, the permanent withdrawal management facility, is complete.

Alcohol Use

Definition

The percentage of the population, aged 12 years and older, who reported alcohol consumption (average weekly volume) over the past year.

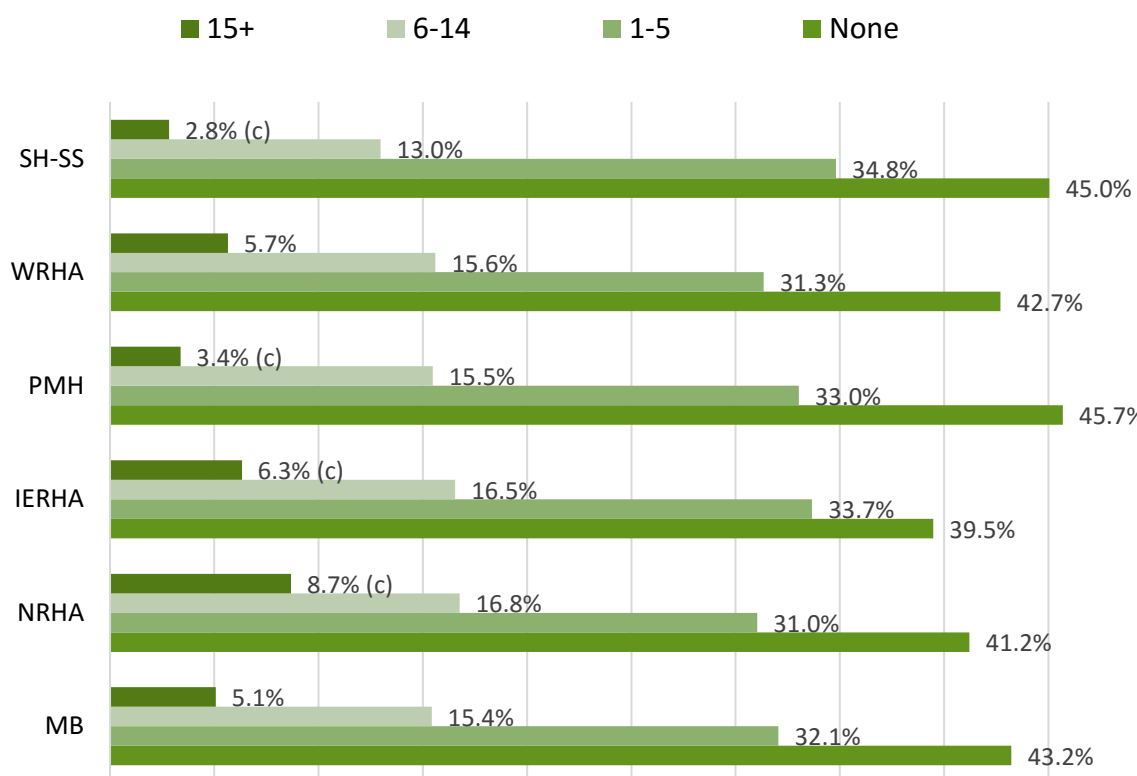
Why is this indicator important?

Alcohol consumption is linked to over 200 different diseases, conditions and types of injuries. Drinking patterns matter – how much and how often a person drinks alcohol are key factors that increase or decrease overall health and well-being¹⁸.

Provincial Key Findings

- More than 40% of Manitobans reported not consuming alcohol on a weekly basis over the last year.
- More than five percent of Manitobans reported consuming on average 15 drinks or more on a weekly basis over the last year.
- All regions are similar to the provincial average.

Figure 2.31 Average Number of Drinks On A Weekly Basis Over The Last Year 2015-2016
Age and sex adjusted percent of weighted sample, aged 12+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

A CLOSER LOOK... OUTPATIENT MEDICAL ALCOHOL DETOXIFICATION

In February 2018, under the leadership of Dr. R. Tatineni, PMH implemented a new Outpatient Medical Alcohol Detoxification program to assist with mild to moderate alcohol detoxification. This is a one day program based on a model from the United Kingdom that has shown success with alcohol dependency. It is a voluntary program for individuals aged 18 to 60 years who meet specific criteria including a referral by a physician or nurse practitioner.

Tobacco Use/Smoking

Definition

The percentage of the population, aged 12 years and older, who reported being either a 'current smoker', a 'former smoker' or a 'non-smoker'.

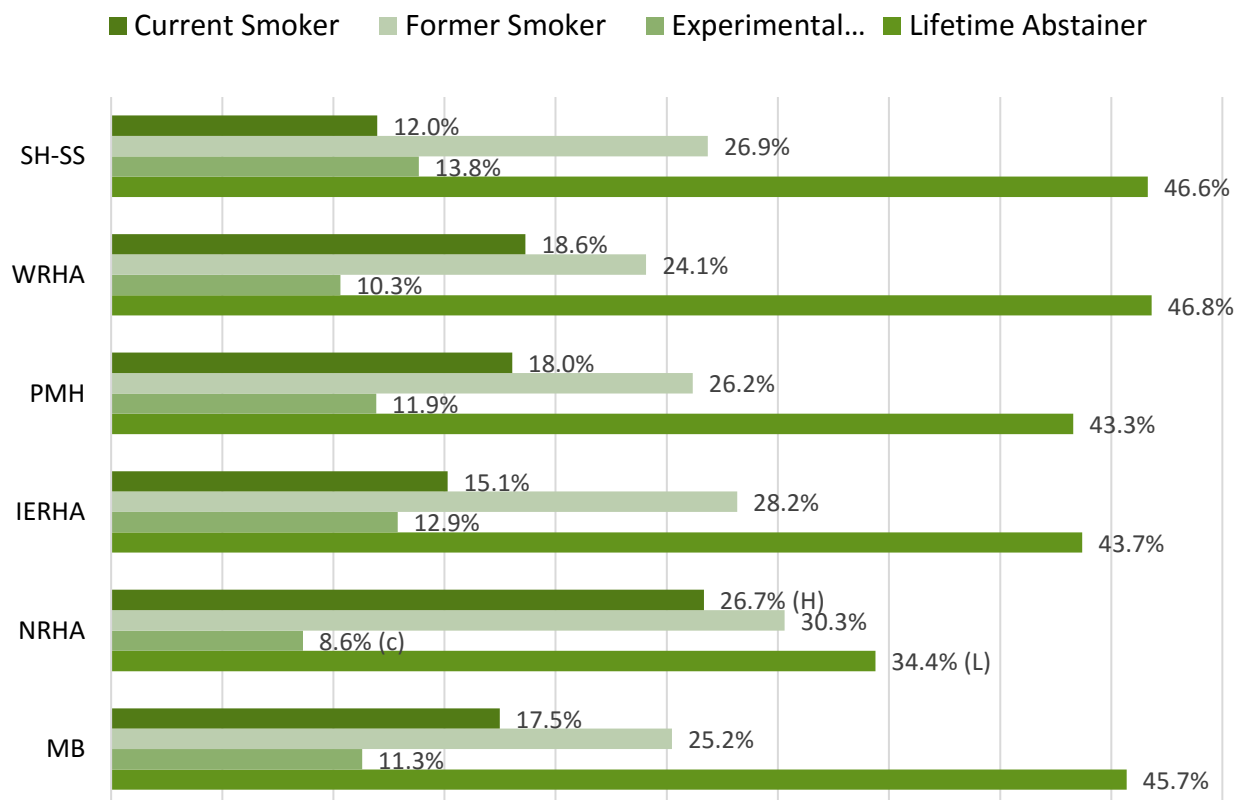
Why is this indicator important?

Tobacco continues to be the leading cause of preventable death in Canada. Smoking and exposure to second-hand smoke are significant risk factors for lung cancer, respiratory diseases and other health problems.

Provincial Key Findings

- More than 45% of Manitobans reported that they had never smoked tobacco.
- More than 17% of Manitobans reported currently smoking tobacco and a quarter of Manitobans reported being 'former smokers'.
- Northern RHA has significantly higher percentage of current smokers and significantly lower rates of lifetime abstainers.

Figure 2.32 Tobacco Use by RHA, 2015-2016
Age and sex adjusted percent of weighted sample, aged 12+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 – 2016

A CLOSER LOOK...VAPING

Vaping involves inhaling a vapour created by an electronic cigarette known as e-cigarette or other vaping device. E-cigarettes are battery-powered devices with cartridges filled with a liquid that usually contain nicotine, flavourings and chemicals. The liquid is heated into a vapour which is inhaled. Vapour products are widely available and accessible in every price range.

There is no long-term research on the health effects of vaping and all the associated risks are not known. The number of breathing illnesses reported among people who vape is increasing in Canada and the United States (US). Illnesses present as an inhalation injury with the lungs apparently reacting to a caustic substance. In November 2019, the U.S. Centers for Disease Control and Prevention reported over 2,200 cases of severe respiratory illness associated with vaping and almost 50 deaths in the US related to vaping.

U.S. Centers for Disease Control and Prevention are conducting ongoing investigations examining Vitamin E acetate which is found in THC cannabis products. Vitamin E acetate, an oily chemical added to some THC vaping liquids to thicken or dilute them, has emerged as an area of concern.

There have been some reported cases of E-cigarette or Vaping Associated Lung Injury (EVALI) tied to vaping products in Canada and health officials are monitoring the situation. Health Canada has responded with continued social media messaging targeting youth because there has been a surge in e-cigarette use among Canadian youth. At the same time, the number of Canadian teens who reported smoking rose in 2018, marking the first increase in smoking rates in this age group in almost 50 years.

A CLOSER LOOK... REGIONAL TOBACCO PROGRAM

The closure of the Tobacco Dependence Program at the BRHC has provided an opportunity for PMH to develop a Regional Tobacco Program. In response to Health Canada's target of less than 5% smoking prevalence by 2035, the program will include the four core components of the Federal Tobacco Control Strategy: prevention, cessation, protection and denormalization.

Prevention

Health Promotion and Community Development staff deliver many public education activities across the region. Activities include:

- Poster boards to raise public awareness
- Tobacco prevention efforts embedded in Teen Health Clinics
- Presentations to early years schools and other youth groups

Cessation

There is compelling evidence that brief intervention from health professionals has a significant effect on smoking cessation rates. Brief intervention for smoking cessation involves the incorporation of the 5A's into clinical practice:

- ASK about tobacco use
- ADVISE client to quit
- ASSESS readiness to quit
- ASSIST with supportive counselling and/or pharmacotherapy
- ARRANGE for follow-up

It is expected that every health care provider will take the opportunity to address the client's smoking behaviour through the 5A's. To support intervention of the 5A's, over 80 health care professionals across the region have been trained to provide counselling and Nicotine Replacement Therapy (NRT). Several PMH staff have become licensed as Certified Tobacco Educators and are key in developing and delivering training for licensed health care providers, influencing and developing policy, and developing a community of practice that is critical to address smoking cessation in PMH.

Group counselling sessions have been piloted in the North zone by nurse practitioners and may become a model for practice in other areas of the region. These group sessions provide a peer support approach that several clients identified as an outstanding need.

In the acute care setting, ASK and ADVISE is built into admission forms to remind the health care provider to initiate the conversation with clients. In addition tobacco withdrawal therapy, NRT is now a standing medication order set.

Protection

PMH is committed to providing a safe and healthy environment for patients, residents, the public and PMH staff, volunteers and physicians. Evidence proves that the use of tobacco products and exposure to second hand smoke from tobacco product is a major cause of preventable deaths. To protect the health of staff, Home Care clients are advised to not smoke in the home within two hours of the arrival of staff.

The PMH Board of Directors created a Smoke Free Grounds regional policy to address smoking on PMH property. Public feedback was actively sought to inform the policy and ultimately support it. Clear communication is a key aspect of this policy, including the use of signage to denote no-smoking as well as designated smoking areas.

Denormalization

Opportunities to advocate for public policy, making tobacco use less desirable, less acceptable, and less accessible, will be explored.

Second-Hand Smoke Exposure

Definition

The percentage of the non-smoking population, aged 12 years and older, who reported second-hand smoke exposure over a period of one year.

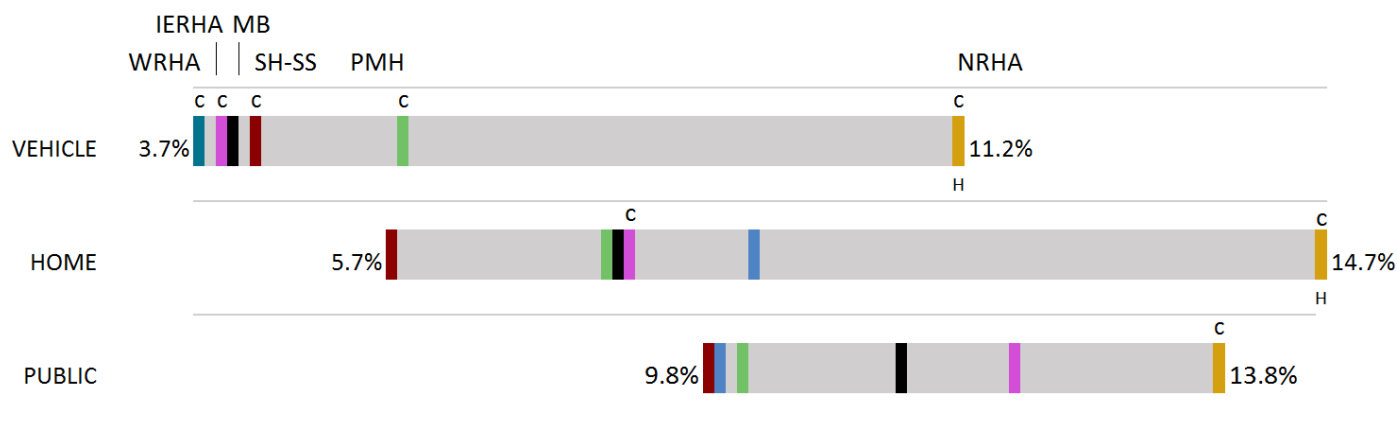
Why is this indicator important?

Second-hand smoke causes numerous health problems in infants and children including more frequent and severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS). For adults, health conditions caused by second-hand smoke include coronary heart disease, stroke, and lung cancer.

Provincial Key Findings

- Provincially, respondents reported exposure to second-hand smoke predominantly in a public setting and less so when in a private vehicle or at home, a pattern that is repeated across all the RHAs except Northern RHA where exposure at home is more common.
- Manitoba was the first province to ban smoking at public beaches and playgrounds in all provincial parks.
- In Northern RHA, respondents were more likely to be exposed to second-hand smoke in general.

Figure 2.33 Exposed To Second-Hand Smoke in Own Home/Private Vehicle/Public Place, 2015-2016
Age and sex adjusted proportion (%) of weighted sample, aged 12 years and older



H/L Significantly higher or lower than the MB average. c – Use with caution.

	WRHA	IERHA	MB	SH-SS	PMH	NRHA
VEHICLE	3.7%	4.0%	4.1%	4.4%	5.8%	11.2%
HOME	8.0%	9.2%	7.9%	5.7%	7.9%	14.7%
PUBLIC	12.4%	9.9%	11.5%	9.8%	10.2%	13.8%

CCHS 2015 - 2016

Physical Activity – Adults

Definition

The percentage of the population, aged 12 years and older, who reported average daily physical activity in the last three months, over a one-year time period.

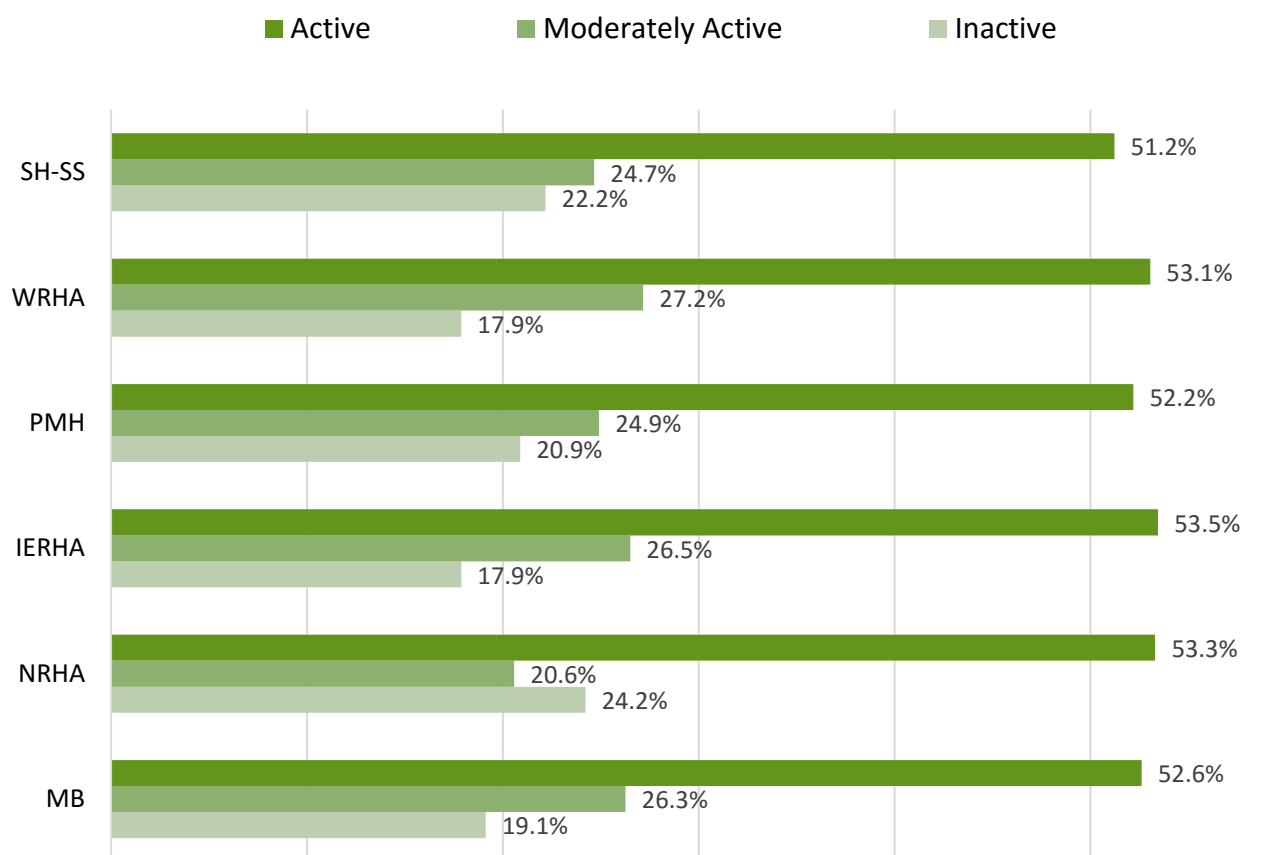
Why is this indicator important?

Appropriate levels of physical activity have been demonstrated to promote normal growth and bone development, foster psychological well-being, help maintain a healthy body weight and reduce the risk of several chronic diseases.

Provincial Key Findings

- More than half of Manitobans reported being physically active in the last three months.
- In the last three months, almost a fifth of Manitobans reported being physically inactive.
- All regions were similar to the provincial average.

Figure 2.34 Physical Activity by RHA, 2015-2016
Age and sex adjusted percent of weighted sample aged 12+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Participation and Activity Limitation

Definition

The percentage of respondents, aged 12 years and older, who reported they require help for activities of daily living because of a physical or mental condition or health issue.

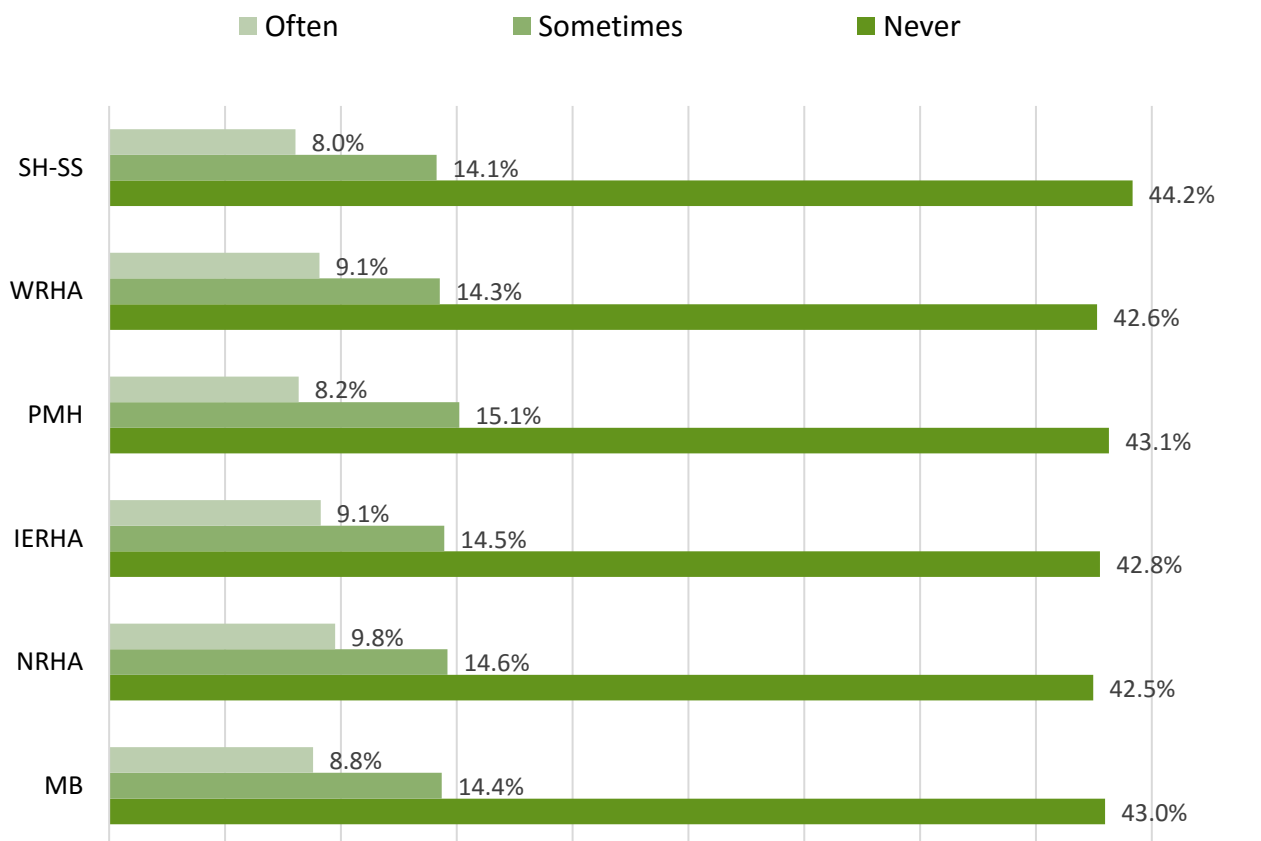
Why is this indicator important?

While it is imperative to measure the prevalence of specific health conditions, it is also important to understand the burden these conditions place on the daily lives of residents. The participation and activity limitation indicator helps to monitor this burden in the population.

Provincial Key Findings

- Almost a quarter of all Manitobans aged twelve and over reported requiring assistance with the activities of daily living at some time in the last year.

Figure 2.35 Participation and Activity Limitations by RHA, 2015-2016
Age and sex adjusted percent of weighted sample aged 12+



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Regional Key Findings

- The North zone (24.5%) has the highest percentage of respondents in PMH who reported requiring assistance with the activities of daily living at some time in the last year followed by the Brandon (23.8%) and South (22.3%) zones.

A CLOSER LOOK... STEPPIN' UP WITH CONFIDENCE PLUS

Manitoba Health Seniors and Active Living provided funding to each health region to implement a community falls prevention exercise program for seniors. Falls may lead to loss of independence, decreased function and mobility, and increased fractures and hospitalizations. According to the Canadian Institute for Health Information, 4 out of 5 injury hospitalizations involving seniors were because of a fall.

The Steppin' Up with Confidence Plus program is a 16 week pilot project delivered between April-August 2019 through Primary Health Care. The objective of the program is to promote participant strength and balance to reduce their risk for falls. It is a volunteer, peer-led exercise program that is delivered at no cost. Classes include cardiovascular, lower and upper body and core muscle strength, endurance, flexibility and balance exercises. Classes are available for 60 minutes, twice per week with home exercise programs as well. The program also offers education regarding falls prevention topics such as Home Safety Checklists, medication deprescribing, safety equipment and foot and eye care.

Eight community leaders were trained and 45 residents participated at the three pilot sites which included Killarney, Roblin and Parkview Seniors Co-op in Brandon. Program evaluation results will be analysed to determine the impact of the program to inform future falls prevention exercise programs in the community setting.

Fruit and Vegetable Consumption

Definition

The percentage of the population, aged 12 years and older, who reported consuming 5 or more servings, on average, of fruit and vegetables daily.

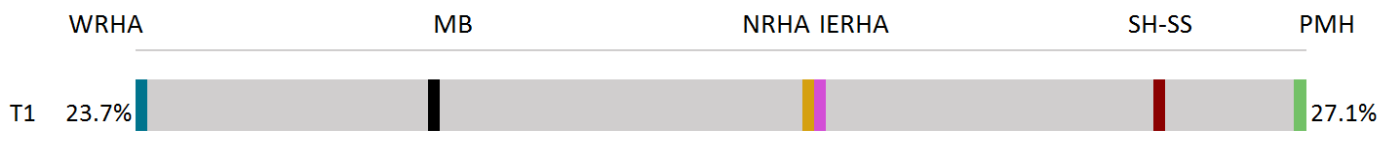
Why is this indicator important?

Low fruit and vegetable consumption is one of the leading factors contributing to chronic disease.

Provincial Key Findings

- Almost a quarter of respondents reported consuming five or more servings of fruit or vegetables per day.
- The lowest percentage of respondents reporting consuming five or more servings of fruit or vegetables per day are from the Winnipeg RHA whilst the highest percentage are from Prairie Mountain Health.

Figure 2.36 Reported Consuming 5 or More Servings of Fruit or Vegetables per Day, by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample, aged 12 years and older



H/L Significantly higher or lower than the MB average.

	WRHA	MB	NRHA	IERHA	SH-SS	PMH
T1 RATE	23.7%	24.6%	25.7%	25.7%	26.7%	27.1%

CCHS 2015-2016

Sleep Time

Definition

The average number of hours individuals reported they spent sleeping in a 24 hour period.

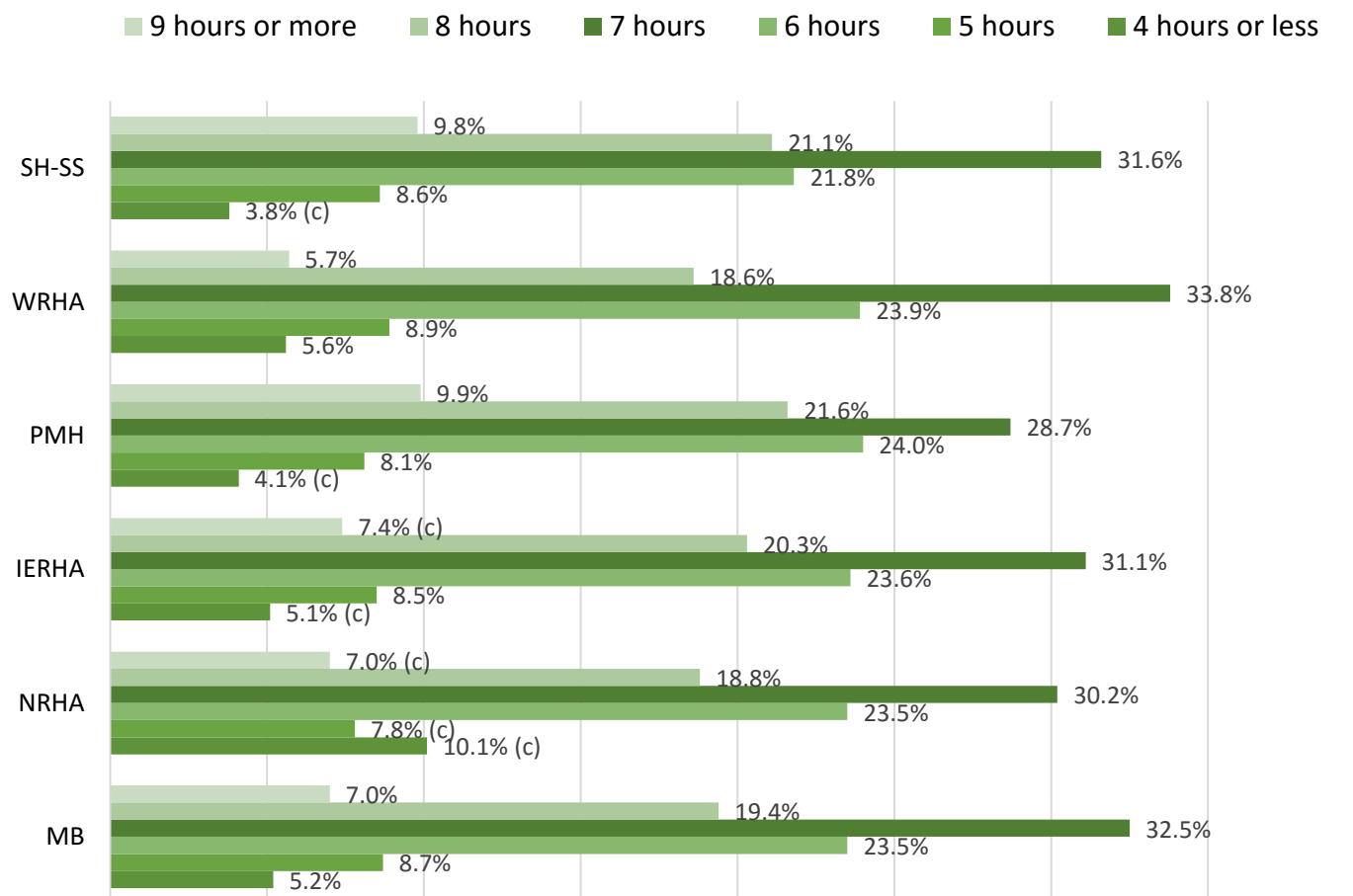
Why is this indicator important?

Sleep is a vital component of good health and well-being throughout an individual's life. An adequate amount of quality sleep every day can help promote good mental and physical health, quality of life and safety.

Provincial Key Findings

- Almost 60% of all Manitobans reported getting seven hours of sleep or more on average.

Figure 2.37 Reported Sleep Time in a 24 hour period by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2015 - 2016

Cell Phone Use While Driving

Definition

The percentage of the population who reported using a cell phone while driving a motor vehicle, over a one-year time period.

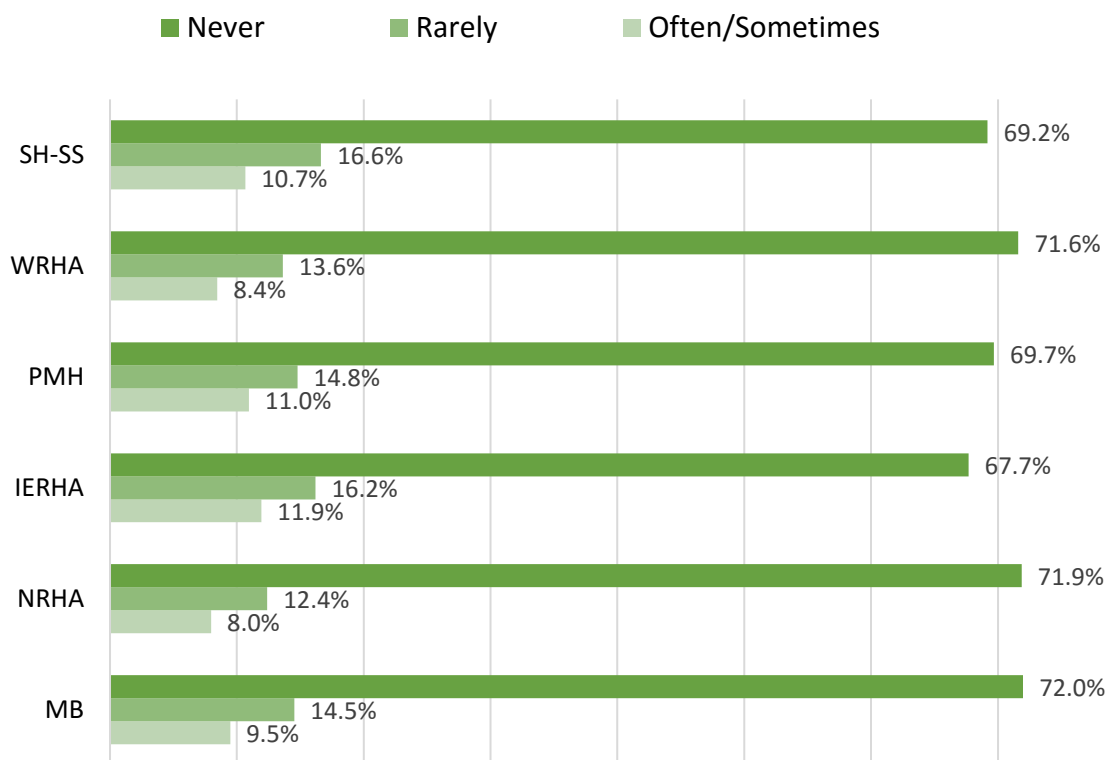
Why is this indicator important?

Cell phone use while driving decreases driver awareness and increases the risk for collisions, leading to higher levels of unnecessary injuries and fatalities. Monitoring this behaviour helps to inform on the effectiveness of public education activities.

Provincial Key Findings

- Almost a quarter (24%) of all Manitobans reported using a cell phone whilst driving.

Figure 2.38 Cell Phone Use While Driving by RHA, 2011/12, 2013/14
Age and sex adjusted proportion (%) of weighted sample



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2011/12-2013/14

Regional Key Findings

- Just over a quarter of respondents from PMH reported using a cell phone whilst driving.
- A considerably higher percentage of respondents in the South zone (36.2%) reported using a cell phone whilst driving compared to the North (26.6%) and Brandon (21.3%) zones.

ATV Helmet Use

Definition

The percentage of the population who reported using a helmet while riding an all-terrain vehicles (ATVs), over a one-year time period.

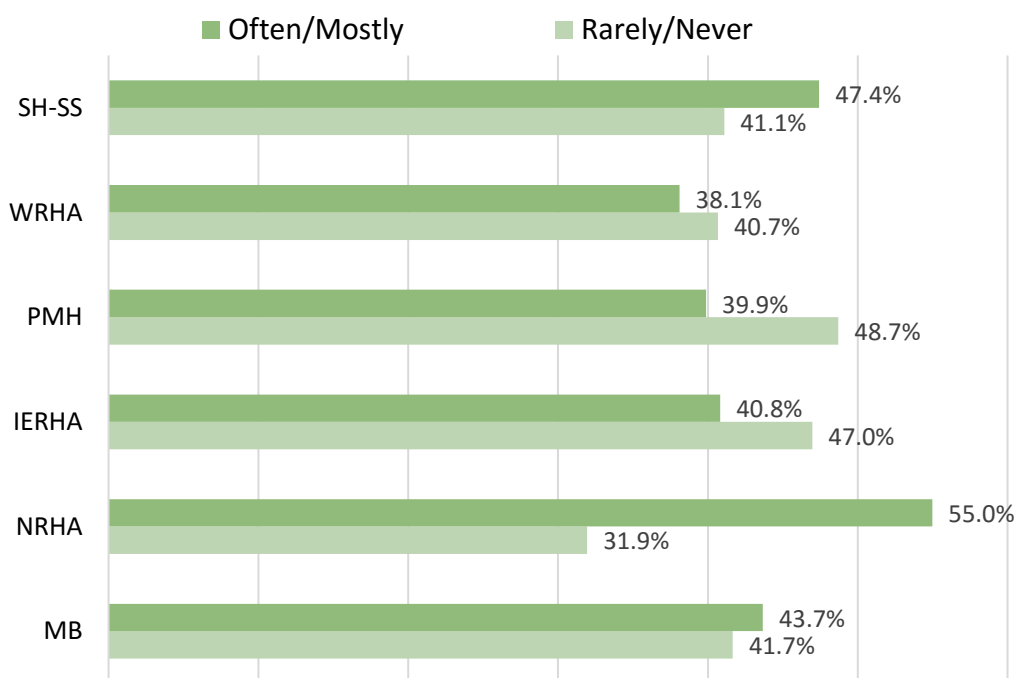
Why is this indicator important?

Wearing an approved proper fitting helmet is one of the ways to reduce the risk of acquiring a head or spinal cord injury during an ATV accident. Monitoring this behaviour helps to inform public education activities.

Provincial Key Findings

- Just over 40 percent of Manitobans report ‘rarely or never’ wearing a helmet while on an ATV.
- Prairie Mountain Health has the highest proportion of respondents reporting ‘rarely or never’ wearing a helmet whilst Northern RHA has the lowest.

Figure 2.39 Wearing a Helmet While Riding an ATV by RHA, 2011/12, 2013/14
Age and sex adjusted proportion (%) of weighted sample



(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2011/12-2013/14

Regional Key Findings

- Prairie Mountain Health has the highest proportion of respondents reporting ‘rarely or never’ wearing a helmet whilst riding or driving an ATV.
- The highest percentage of respondents who report rarely or never wearing a helmet is found in the North zone (51.0%) followed by the South (50.3%) and Brandon (47.6%) zones.

Use of Preventive Services

Influenza Immunization

Definition

The percentage of the population, aged 65 years and older, who were immunized for influenza (received the flu shot), over a one-year time period.

Why is this indicator important?

People 65 years and older are at greater risk of serious complications from the flu, often leading to hospitalization and death, because immune defenses become weaker with age. Monitoring the uptake of influenza vaccination helps to inform health promotion and public health interventions including public awareness messages in an effort to reach the national target of 80 percent coverage.

Provincial Key Findings

- Influenza Immunization rates in the province are currently around 55%, well short of the national target.
- The highest immunization rates can be found in Winnipeg RHA whilst the lowest are in Northern RHA.

Figure 2.40 Influenza Immunization Rate, by RHA, 2017/2018
Percent of population aged 65+



	NRHA	SH-SS	PMH	IERHA	MB	WRHA
T1 COUNT	2,405	12,909	16,716	12,698	115,433	70,705
T1 RATE	43.2%	47.5%	53.2%	54.3%	55.2%	58.2%

MHSAL Communicable Disease Control Unit 2019

Regional Key Findings

- PMH Influenza immunization rates are similar to the provincial average.
- The lowest rates in PMH can be found in the North zone (48.8%) followed by the South (51.8%) and the Brandon (60.3%) zones.

Pneumococcal Immunization

Definition

The percentage of the population, aged 65 years and older, who were immunized for pneumonia (pneumococcal conjugate vaccine). Unlike influenza, this immunization is usually only given once in a lifetime, therefore the rate is cumulative.

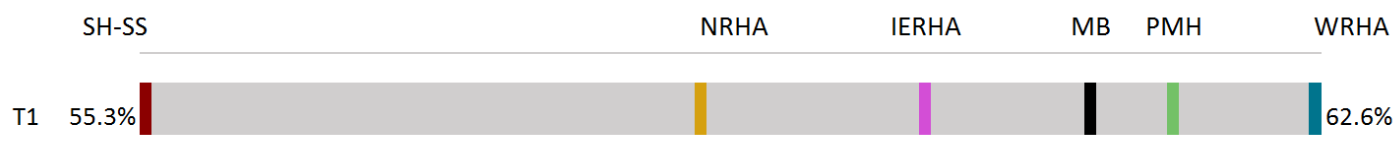
Why is this indicator important?

Pneumococcal disease can cause severe infections of the lungs, bloodstream, lining of the brain and spinal cord that may sometimes be fatal. A weakened immune system puts older adults at a greater risk of developing life threatening pneumococcal infections and, for those who survive to suffer permanent damage to health, especially if living with other comorbid conditions. Monitoring the uptake of pneumococcal vaccination helps to inform on health promotion and primary health care interventions.

Provincial Key Findings

- Pneumococcal immunization rates in the province are currently around 61%, well short of the national target.
- The highest immunization rates can be found in Winnipeg RHA whilst the lowest are in Southern Health-Santé Sud.

Figure 2.41 Pneumococcal Immunization Rate, by RHA, 2017/2018
Percent of population aged 65+



	SH-SS	NRHA	IERHA	MB	PMH	WRHA
T1 COUNT	14,992	3,255	14,024	127,881	19,445	76,165
T1 RATE	55.3%	58.8%	60.2%	61.2%	61.7%	62.6%

MHSAL Communicable Disease Control Unit 2019

Regional Key Findings

- PMH Pneumococcal Immunization rates are similar to the provincial average.
- The lowest rates in PMH can be found in the South zone (59.7%) followed by the North (61.2%) and the Brandon (65.8%) zones.

Colorectal Cancer Screening

Definition

The percentage of the population, aged 50 to 74 years, who participated in screening for colorectal cancer (including Fecal Occult Blood Test (FOBT), Fecal Immunochemical Test (FiT), Colonoscopy, and Flexible Sigmoidoscopy).

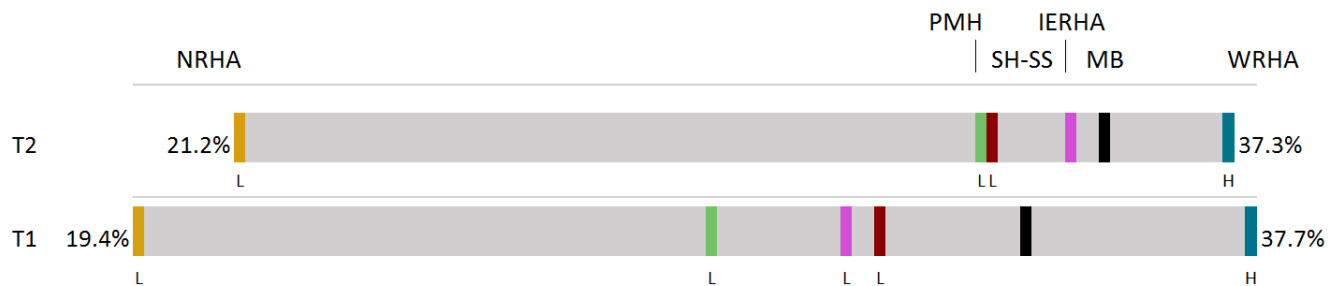
Why is this indicator important?

In Manitoba, it is recommended that most people aged 50 to 74 years do a fecal occult blood test (FOBT) every two years. Screening done through a regular FOBT or a colonoscopy or sigmoidoscopy has been shown to greatly reduce the chance of dying from colorectal cancer because early detection of pre-cancerous polyps often leads to more effective treatment.

Provincial Key Findings

- Around 35% of Manitobans aged 50-74 years participated in colorectal screening.
- Participation rates are significantly lower than the Manitoba average in Southern Health-Santé Sud, Prairie Mountain Health and Northern RHA. Screening rates in Winnipeg RHA are significantly higher than the Manitoba average.
- Screening rates are higher in females, in the age group 65-74 years, in urban settings and amongst residents in the higher income quintiles.

Figure 2.42 All Fecal Tests (ColonCheck FOBT, ColonCheck FiT and Other FOBT) by RHA, 2014/15 (T1) and 2016/17 (T2)
Percent of residents screened, ages 50-74 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA	PMH	SH-SS	IERHA	MB	WRHA
T2 COUNT	3,444	16,830	16,852	15,729	131,612	78,757
T2 RATE	21.2% L	33.5% L	33.5% L	34.9% L	35.3%	37.3% H
T1 RATE	19.4% L	28.9% L	31.6% L	31.1% L	34.1%	37.7% H

CancerCare Manitoba 2019

Regional Key Findings

- PMH Colorectal screening rates remain significantly lower than the province as a whole.
- Screening rates are similar to the provincial rate in Brandon (35.6%) zone, whilst significantly lower in the North (32.8%) and South (32.7%) zones.

Breast Cancer Screening

Definition

The percentage of females, aged 50 to 74 years, who received at least one mammogram in a two-year time period.

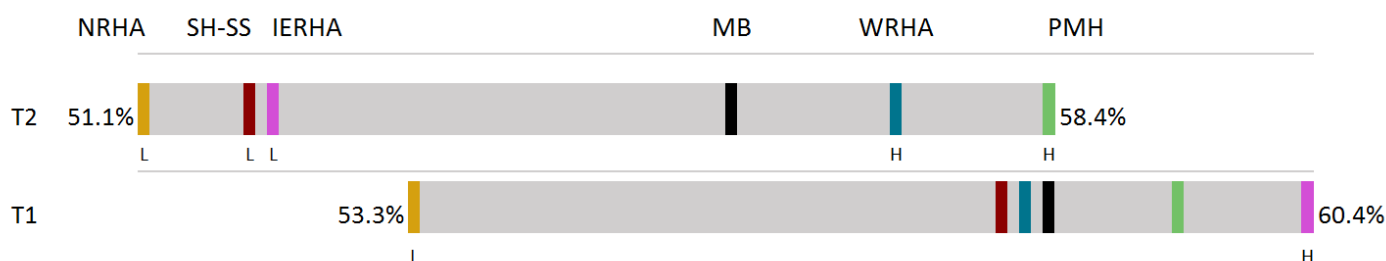
Why is this indicator important?

In Manitoba, it is recommended that screening mammography be offered every two years to all women 50 to 74 years of age. Although breast cancer can occur at any age, more than 80 percent of new cases occur among women 50 years of age and older. Early detection, combined with effective treatment, remains the best option available to reduce deaths due to breast cancer.

Provincial Key Findings

- Just over half of all qualifying females in Manitoba received a mammogram, a screening rate that has dropped slightly over time.
- Northern RHA, Southern Health-Santé Sud and Interlake-Eastern RHA all have screening rates significantly lower than the provincial average whilst both Winnipeg RHA and Prairie Mountain have significantly higher rates.
- Higher screening rates can be found in women aged 60-69, those living in urban settings and amongst residents in the higher income quintiles.

Figure 2.43 Mammogram within the Last Two Years, by RHA 2014-2015 (T1) and 2015-2016 (T2)
Percent of woman screened, ages 50-74 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		SH-SS		IERHA		MB		WRHA		PMH	
T2 COUNT	3,695		13,087		11,429		106,075		63,072		14,792	
T2 RATE	51.1%	L	52.0%	L	52.2%	L	55.8%		57.1%	H	58.4%	H
T1 RATE	53.3%	L	58.0%		60.4%	H	58.4%		58.2%		59.4%	

CancerCare Manitoba 2019

Regional Key Findings

- PMH has the highest breast screening rate in the province which is significantly higher than the Manitoba average.
- The highest screening rates are found in the Brandon (62.6%) zone followed by the South (56.8%) and North (56.7%) zone.

A CLOSER LOOK... MOBILE BREAST CHECK

How does a woman access a mammogram when she lives in a rural community and does not have the resources to travel far? CancerCare MB has solved this through the availability of two mobile clinics that travel to nearly 90 rural and northern communities on a two year cycle. Those who are eligible and due for their screening are forwarded a letter informing them of the availability and location of the mobile clinic in their geographical area. Enhanced access to mammography testing for rural PMH residents reduces inequity in the health services provided.

Cervical Cancer Screening

Definition

The percentage of females, aged 21 to 69 years, who were screened for cervical cancer over a two-year time period.

Why is this indicator important?

Regular pap smears every three years can prevent or detect early cell changes that can be the precursor to cervical cancer. Risk factors associated with cervical cancer include early age of sexual intercourse, sexually transmitted infection, low socioeconomic status and smoking.

Provincial Key Findings

- Almost two thirds of eligible females in Manitoba undergo cervical screening.
- Significantly higher rates of screening can be found in Interlake-Eastern RHA and Winnipeg RHA whilst significantly lower rates can be found in Southern Health-Santé Sud and Northern RHA.
- Higher rates of screening can be found in females aged 25-40 years, and in the highest rural and urban income quintiles.

Figure 2.44 Cervical Screening Percent of Eligible Population, by RHA, 2012-2014 (T1), 2015-2017 (T2)
Percent of woman screened, Ages 21-69 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA	SH-SS	PMH	MB	IERHA	WRHA
T2 COUNT	12,178	34,383	30,414	251,718	26,268	148,475
T2 RATE	55.1% L	63.4% L	64.6%	64.8%	65.8% H	65.9% H
T1 RATE	57.6% L	66.6%	65.1% L	66.6%	68.1% H	67.5% H

CancerCare Manitoba 2019

Regional Key Findings

- PMH's rate of cervical screening is similar to the provincial average.
- Screening rates are significantly higher than the provincial rate in Brandon (71.3%) zone, whilst significantly lower in the South (62.8%) and North (59.2%) zones.

A CLOSER LOOK... CERVICAL SCREENING CLINIC

The PMH cervical screening clinic is a nurse run clinic that travels out to medical clinics or health centres across the region (Benito, Birdtail Sioux, Birtle, Brandon, Deloraine, Ebb and Flow, Erickson, Melita, Oh-Chi-Chak-Ko-Sippi, Sioux Valley, Souris, Reston, Russell, Waywayseecappo). Whilst cervical screening is the main focus, the clinic offers clinical breast examinations and information regarding other recommended screenings such as colorectal and mammography. Since 2014/15, there have been over 1,600 encounters at these clinics.

Oral Health (Dental Visits/Insurance)

Definition

The percentage of respondents who reported on the annual frequency of dental visits and dental insurance coverage.

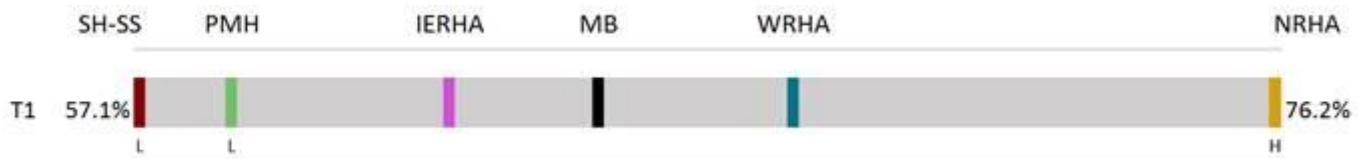
Why is this indicator important?

The promotion of good oral health habits such as healthy food choices, brushing teeth twice a day with fluoridated toothpaste, regular flossing and visits to a dentist can all help to prevent decay and maintain a healthy mouth for a lifetime. There is a strong association between early periodontal disease and cardiac disease in later life.

Provincial Key Findings

- Almost two-thirds of Manitobans reported having insurance for dental expenses.
- Southern Health-Santé Sud and Prairie Mountain Health have significantly lower dental coverage and significantly higher proportions of respondents who report visiting the dentist less than once a year or for an emergency visit only.
- Northern RHA reported significantly higher coverage, however still maintains a significantly higher proportion of respondents who report visiting the dentist less than once a year or for an emergency visit only.
- Winnipeg RHA has amongst the highest proportion of respondents reported having dental coverage and is the only RHA where there is a significantly higher proportion of residents who report visiting the dentist more than once a year for checkups.

Figure 2.45 Reported Having Insurance for Dental Expenses by RHA, 2011/12, 2013/14
Age and sex adjusted proportion (%) of weighted sample



H/L Significantly higher or lower than the MB average.

	SH-SS		PMH		IERHA		MB		WRHA		NRHA	
T1 RATE	57.1%	L	58.9%	L	62.5%		65.0%		68.2%		76.2%	H

CCHS 2011/12, 2013/14

Regional Key Findings

- Prairie Mountain Health has a significantly lower proportion of respondents with dental coverage than the provincial average.
- Dental coverage for respondents in all zones are similar to Prairie Mountain Health.
- Dental coverage ranges from less than half of respondents in Downtown to over 70% in Turtle Mountain.
- PMH has a significantly higher proportion of residents who reported visiting the dentist less than once a year or for emergency purposes only. This is most noticeable in the South zone.
- Residents of all three zones in PMH report significantly lower proportions of residents visiting a dentist more than once a year for checkups.

Table 2.25 Reported Visiting the Dentist, 2011/12, 2013/14
Age and sex adjusted proportion (%) of weighted sample

Area	Less than once a year Emergency visit only	About once a year	More than once a year for checkups
Manitoba	29.4%	33.5%	33.7%
PMH	22.4% (H)	37.5%	22.4% (L)
Brandon	34.6%	41.2%	21.3% (L)
North	35.8%	34.2%	25.2% (L)
South	37.9% (H)	37.4%	21.6% (L)

(H/L) Significantly higher or lower than the MB average (c) Use with caution

CCHS 2011/12-2013/14

A CLOSER LOOK... PARKLAND CROSSING

Dauphin's Parkland Crossing is a unique facility committed to redressing health inequities experienced by many community residents. The building is a former Residential School now transformed into a community hub. Founded on strong partnerships between several community organizations, including Prairie Mountain Health, it addresses social determinants of health through a population health approach to service delivery. Examples of programs and support by health determinant include:

Income and Social Status	Get Your Benefits program
Education	Test centre for certifications
Healthy Child Development	Indoor playground and family centre
Personal Health Practices & Coping	Exercise classes, gymnastics and a boxing club Cooking classes and nutrition education Food bank, indoor greenhouse and outdoor garden spaces Spiritual support and counselling services
Physical Environment	20 apartments and 34 dormitory style housing options
Social Support Networks	Local Men's Shed, Keystone Chorus Barbershop and Unity Women's Maker Collective
Health Services	Community Connections Clinic through Public Health Services Prenatal and Families First support Access to harm reduction supplies

Chapter 3 How Healthy Are We?

Key Findings

Mortality

- Male and female life expectancy in PMH increased significantly over time.
- The total mortality rate for PMH is similar to the province, with the top two causes, circulatory and cancer, accounting for more than half of all deaths.

Cancer

- Incidence rates for both prostate and breast cancer are significantly lower than the provincial average, whilst the colorectal incidence rate is significantly higher.
- The mortality rate for prostate cancer is significantly higher than the provincial average.
- The rate of prostate cancer diagnosed at a later stage (IV) is significantly higher than the province for PMH residents. This is driven by a significantly higher rate in the South zone.
- The rate of cancer survival in PMH is significantly higher than the Manitoba average, driven by high survival rates in the Brandon zone.

Cardiovascular

- Almost a quarter of PMH adults are living with hypertension or high blood pressure.
- The stroke rate in PMH is significantly lower than the province and decreased significantly over time.

Diabetes

- The incidence and prevalence of diabetes in PMH is significantly higher than the province and has increased significantly over time. More than 17,500 PMH residents live with diabetes.
- The rate of lower limb amputations amongst diabetic PMH residents is significantly higher than the province.
- The percentage of PMH diabetic adults who had an eye exam is significantly higher than the province and increased significantly over time but remains at less than 45%.

Injury

- The rate of hospitalizations due to unintentional injury in PMH is significantly higher than the provincial average but has decreased significantly over time.
- Falls were the most frequent cause of unintentional injury hospitalization in PMH, accounting for more than half of all unintentional injury hospitalizations.

Mental Illness

- The prevalence of mood and anxiety disorders amongst PMH adults is the highest in the province. More than 34,000 adults in PMH live with a mood and anxiety disorder.
- The prevalence of dementia in PMH is significantly lower than the provincial average.

Key Findings continued

Musculoskeletal

- The prevalence of arthritis in PMH is significantly higher than the provincial average. Almost 30,000 residents live with arthritis.

Renal

- The number of residents in PMH living with End Stage Kidney Disease is projected to increase by 64% by 2024.
- Kidney transplants are expected to increase by 66% by 2024.
- Home based dialysis is expected to increase by 71% by 2024.
- PMH has proportionately lower use of home-based dialysis compared to other regions.

Sexually Transmitted Infections

- Chlamydia, Gonorrhea, and Syphilis rates have steadily increased over the last few years.

Respiratory

- The prevalence of Total Respiratory Morbidity in PMH is significantly higher than the provincial average, increased significantly over time and remains the highest in the province. More than 23,000 residents live with a respiratory issue.
- The prevalence of asthma in PMH children is significantly higher than the province and increased significantly over time.
- Almost 40% of PMH residents with asthma do not receive the medications recommended for long-term control.

Mortality

Life Expectancy

Definition

The expected length of life from birth, based on patterns of mortality in the population for the preceding five years.

Why is this indicator important?

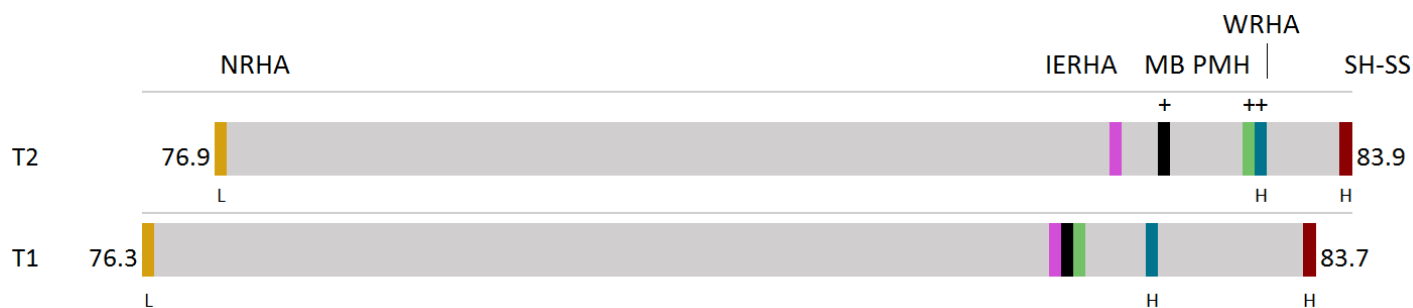
Life expectancy is one of the most widely used indicators to measure the health of a population, and the overall effectiveness of a health care system in maintaining the health status of its population.

Female Life Expectancy

Provincial Key Findings

- Female life expectancy in Manitoba increased significantly over time.
- Life expectancy for females increased for all RHAs, though only the changes in Winnipeg RHA and Prairie Mountain Health demonstrated statistical significance.
- Female life expectancy in Northern RHA is significantly lower than the Manitoba average, and significantly higher in both Winnipeg RHA and Southern Health-Santé Sud.
- Female life expectancy is shorter for residents of lower income areas in both rural and urban settings.

Figure 3.1 Female Life Expectancy by RHA, 2007-2011 (T1) and 2012-2016 (T2)
Life expectancy at birth in years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		IERHA		MB		PMH		WRHA		SH-SS	
T2 COUNT	1,177		2,786		25,781		4,144		13,605		3,294	
T2 RATE	76.9	L	82.5		82.8	+	83.3	+	83.4	H+	83.9	H
T1 RATE	76.3	L	82.1		82.2		82.2		82.7	H	83.7	H



MCHP RHA Indicators Atlas 2019

Regional Key Findings

- Female life expectancy in PMH is similar to the province and increased significantly.
- The South zone has a significantly increasing and higher rate than the Manitoba average.
- Five districts have significantly higher life expectancy than the Manitoba average, two districts increased significantly over time and the Downtown district has a significantly lower life expectancy.
- Life expectancy for Downtown females is almost 11 years shorter than for females of South End. The district disparity gap narrowed slightly between T1 and T2.

Table 3.1 Female Life Expectancy by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)
Life expectancy at birth in years

	T2		T1		
	Count	Rate		Rate	
Manitoba	25,881	82.8	+	82.2	
PMH	4,059	83.3	+	82.2	
Brandon	1,087	83.4		82.3	
South End	128	90.5	H	90.5	H
North Hill	101	87.2	H	87.1	H
West End	307	84.9	H+	83.0	
East End	178	83.7		83.4	
Downtown	373	79.6	L	78.6	L
North	1,119	82.0		81.3	
Dauphin	295	83.7		81.6	
Duck Mountain	183	83.1		83.4	
Riding Mountain	125	83.0		82.3	
Porcupine Mountain	148	81.9		80.6	
Swan River	188	80.9		81.2	
Agassiz Mountain	180	79.7		81.4	
South	1,853	83.9	H+	82.6	
Whitemud	260	85.4	H	83.2	
Spruce Woods	327	84.8	H	84.0	
Souris River	333	84.6	+	82.4	
Little Saskatchewan	280	84.0		82.7	
Turtle Mountain	295	82.7		83.4	
Asessippi	358	82.2		81.6	

PMH District Disparity Ratio					
	T1	1.15x			
	T2	1.14x			
	CHANGE	↓0.01			

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Male Life Expectancy

Provincial Key Findings

- Life expectancy for males in Manitoba increased significantly over time.
- Male life expectancy increased for all RHAs, though the change in Southern Health-Santé Sud did not demonstrate statistical significance.
- Male life expectancy in Northern RHA is significantly lower than the provincial average, and significantly higher in both Winnipeg RHA and Southern Health-Santé Sud.
- Male life expectancy is shorter for residents of lower income areas in both rural and urban settings.

Figure 3.2 Male Life Expectancy by RHA, 2007-2011 (T1) and 2012-2016 (T2)

Life expectancy at birth in years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		IERHA		PMH		MB		SH-SS		WRHA	
T2 COUNT	1,177		2,786		4,144		25,781		3,294		13,605	
T2 RATE	72.7	L+	78.2	+	78.3	+	78.5	+	79.4	H	79.4	H+
T1 RATE	71.3	L	76.7		77.3		77.5		79.1	H	78.3	H



MCHP RHA Indicators Atlas 2019

Regional Key Findings

- Male life expectancy in PMH is similar to the province and increased significantly over time.
- All zones have a similar life expectancy to the Manitoba average and the North zone increased significantly.
- Four districts have significantly higher life expectancy than the Manitoba average, three districts increased significantly over time and the Downtown and East End districts have a significantly lower life expectancy.
- Life expectancy for Downtown males is more than 10 years shorter than for males of North Hill. The district disparity gap widened slightly between T1 and T2.

Table 3.2 Male Life Expectancy by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)
Life expectancy at birth in years

	T2			T1	
	Count	Rate		Rate	Rate
Manitoba	25,781	78.5	+	77.5	
PMH	4,144	78.3	+	77.3	
Brandon	1,000	78.5		78.2	
North Hill	119	84.0	H+	78.6	
South End	137	82.9	H	81.7	H
West End	272	81.4	H	79.6	H
East End	205	74.8	L	77.0	
Downtown	267	73.7	L	74.3	L
North	1,185	77.2	+	74.5	
Riding Mountain	135	82.2	H+	76.6	
Duck Mountain	156	80.9	+	77.2	
Swan River	173	77.6		74.6	
Dauphin	307	76.2		74.6	
Porcupine Mountain	209	75.6		73.1	L
Agassiz Mountain	205	75.4		73.2	L
South	1,959	78.6		78.2	
Whitemud	257	80.1		78.0	
Spruce Woods	379	80.0		79.6	
Turtle Mountain	280	79.9		80.3	H
Little Saskatchewan	309	79.0		77.9	
Souris River	374	77.2		78.4	
Asessippi	360	76.0		76.2	

PMH District Disparity Ratio					
	T1		1.12x		
	T2		1.14x		
	CHANGE				↑0.02

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Total Mortality Rates

Definition

The total average annual number of deaths, per 1,000 population, for a five-year time period.

Why is this indicator important?

Mortality statistics provide a valuable measure for assessing community health status and are useful when formulating health plans and policies to prevent or reduce premature mortality and improve overall quality of life.

Provincial Key Findings

- The total mortality rate for Manitoba and all RHAs decreased over time, although it did not demonstrate statistical significance.
- Total mortality rate in the Northern RHA is significantly higher than the provincial average.
- The most frequent causes of death in Manitoba are circulatory diseases, cancer and respiratory diseases.
- The two top causes (circulatory and cancer) account for almost 60% of all deaths in the province.
- 'Injury and poisoning' is a much more common cause of death in Northern RHA than in other regions.
- The income disparity in urban settings has remained relatively stable between the two time periods. In urban settings, low income residents' mortality rate was more than twice that of the highest income residents. In rural settings, low income residents' mortality rate was almost twice that of the highest income residents.

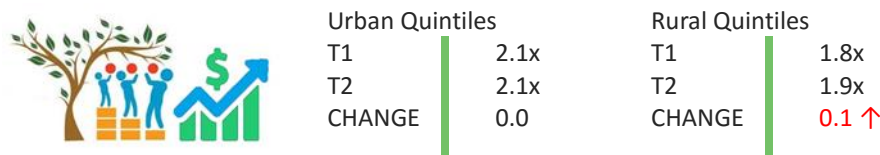
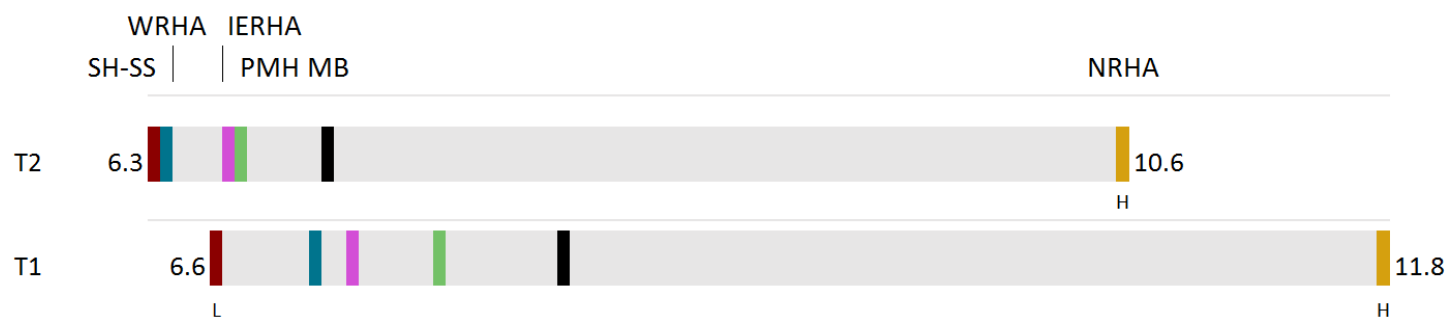


Figure 3.3 Average Annual Total Mortality Rate by RHA, 2007-2011 (T1) & 2012-2016 (T2)
Age and sex adjusted rate per 1,000 (all ages)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

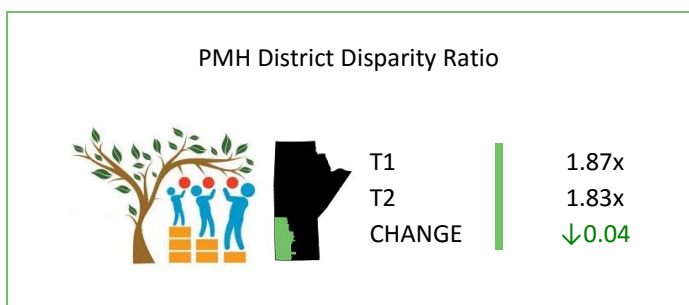
	SH-SS	WRHA	IERHA	PMH	MB	NRHA
T2 COUNT	6,266	28,477	5,225	8,218	51,723	2,103
T2 RATE	6.3	6.3	6.7	6.7	7.1	10.6 (H)
T1 RATE	6.6 (L)	7.0	7.2	7.6	8.2	11.8 (H)

Regional Key Findings

- The total mortality rate for PMH is similar to the province, with the top two causes, circulatory and cancer, accounting for 55% of all deaths.
- The rates for all zones are similar to the province and the North zone significantly decreased over time.
- Mortality in South End district is significantly lower than the provincial average, whilst the rate for Downtown is significantly higher.
- Downtown residents are 1.8 times more likely to die in a given year than residents of South End. The district disparity gap narrowed by two percent between T1 and T2.

Table 3.3 Average Annual Total Mortality Rate by PMH Zone and District, 2007-2011 (T1) & 2012-2016 (T2)
Age and sex adjusted rate per 1,000

	T2		T1	
	Count	Rate	Rate	
Manitoba	51,723	7.1	8.2	
PMH	8,218	6.7	7.6	
Brandon	2,090	7.4	7.8	
South End	265	5.6	5.7	L
North Hill	220	6.2	6.9	
West End	581	6.4	7.5	
East End	384	8.3	8.0	
Downtown	640	10.3	10.7	H
North	2,308	8.4	9.4	-
Duck Mountain	341	6.7	7.8	
Riding Mountain	261	7.0	7.9	
Swan River	361	8.2	9.3	
Dauphin	602	8.3	8.9	
Porcupine Mountain	357	8.8	9.9	
Agassiz Mountain	386	9.1	9.4	
South	3,820	7.4	7.8	
Whitemud	517	6.5	7.5	
Spruce Woods	707	6.9	7.2	
Turtle Mountain	575	7.9	7.3	
Souris River	707	7.6	7.7	
Little Saskatchewan	593	7.2	7.8	
Assessippi	721	8.5	8.4	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Table 3.4 Most Frequent Cause of Death in PMH, 2007-2011(T1) and 2012-2016(T2)
Average annual crude percent of deaths

Cause of Death	2012-2016		2007-2011
	Percent	Count	Percent
Circulatory	27.8	2,279	30.8
Cancer	26.9	2,202	26.0
Respiratory	8.9	731	9.3
Mental Illness	7.7	630	5.8
Injury and Poisoning	7.5	617	7.3
Endocrine and Metabolic	5.5	449	5.1
Digestive	3.6	298	3.4
Ill-Defined Conditions	3.3	273	2.8
Nervous System	3.1	258	3.6
Genitourinary and Breast	1.9	152	2.5
All Others	3.7	305	3.4

MCHP RHA Indicators Atlas 2019

A CLOSER LOOK... DEATH CAFÉS

In 2018, Virden began hosting Death Cafés which are open forum discussions to help people become comfortable talking about death and mortality. Individuals gather in a safe environment to eat cake, drink tea and raise questions, share thoughts and express feelings about death and dying. A Death Café is a facilitated discussion group, not grief support or counselling session. The primary objective of a Death Café is to help people become more familiar with the end of life and address taboos associated with a significant life event. Brandon Public Library began hosting monthly Death Cafés in 2019.

Premature Mortality Rate

Definition

The average annual number of deaths before the age of 75 years, per 1,000 population, for a five-year time period.

Why is this indicator important?

Premature Mortality Rate (PMR) is an important overall indicator of population health status with high rates indicating poor health. These rates are often correlated with morbidity and self-rated health as well as socioeconomic indicators such as food security, housing and education level.

Provincial Key Findings

- PMR in Manitoba and all RHAs decreased over time, though the decrease did not demonstrate statistical significance.
- PMR in the Northern RHA is significantly higher than the provincial rate.
- The most frequent causes of premature death in Manitoba are cancer, circulatory diseases and ‘injury and poisoning’.
- The two top causes (cancer and circulatory diseases) account for almost 60% of all premature deaths.
- In contrast to all other RHAs, the most frequent cause of premature death in Northern RHA is ‘injury and poisoning’.
- In urban settings, low income residents are almost three times as likely to die prematurely as the highest income residents. In rural settings, low income residents are over twice as likely to die prematurely as the highest income residents.

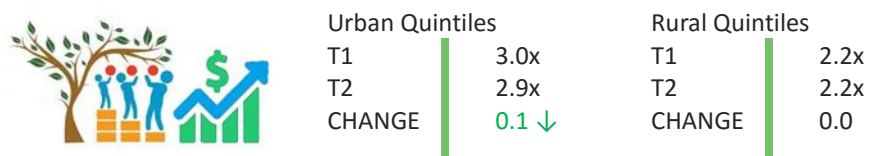


Figure 3.4 Premature Mortality Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of death before age 75 per 1,000 residents (age 0-74)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	PMH	IERHA	MB	NRHA
T2 COUNT	2,334	10,563	2,702	2,253	19,915	1,456
T2 RATE	2.46	2.64	2.79	2.90	2.98	5.44 H
T1 RATE	2.52 L	2.87	3.25	3.26	3.29	5.83 H

Regional Key Findings

- Premature mortality in PMH is similar to the province.
- The North zone has a significantly higher rate than the Manitoba average (despite significant decrease over time), whilst the South zone is significantly lower.
- Three districts have significantly higher rates of premature mortality than the Manitoba average and two districts have significantly lower rates.
- Downtown residents are more than twice as likely to die before the age of 75 as residents of West End. The district disparity gap widened by nearly five percent between T1 and T2.

Table 3.5 Premature Mortality Rate PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of death before age 75 per 1,000 residents

	T2		T1	
	Count	Rate	Rate	
Manitoba	19,915	2.98	3.29	
PMH	2,702	2.79	3.25	
North	803	3.41	3.81	H
Riding Mountain	84	2.40	3.16	
Duck Mountain	87	2.49	3.26	
Dauphin	172	3.58	3.95	
Porcupine Mountain	184	3.87	4.56	H
Swan River	111	3.94	3.49	
Agassiz Mountain	165	3.99	3.99	
South	1,198	2.80	3.00	L
Whitemud	153	2.45	2.78	
Spruce Woods	217	2.47	2.68	L
Turtle Mountain	145	2.49	2.61	
Souris River	232	2.98	2.97	
Little Saskatchewan	226	2.99	3.40	
Asessippi	225	3.43	3.57	

	T2		T1	
	Count	Rate	Rate	
Brandon	701	2.96	3.16	
West End	159	2.17	2.65	L
South End	118	2.43	2.35	L
North Hill	120	2.91	2.96	
East End	99	3.57	3.82	
Downtown	205	4.49	4.65	H

PMH District Disparity Ratio

T1 1.98x
T2 2.07x
CHANGE ↑0.09

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

- The top two causes of premature death in PMH are cancer and circulatory diseases, accounting for 57%.

Table 3.6 Most Frequent Cause of Premature Death in PMH, 2007-2011 and 2012-2016
Average annual crude percent of deaths amongst residents age 0-74 years

Cause of Premature Death	Crude Percent	
	2007-2011	2012-2016
Cancer	36.2%	36.0%
Circulatory Diseases	23.5%	20.7%
Injury and Poisoning	14.4%	14.2%
Endocrine and Metabolic	5.4%	6.2%
Respiratory	5.8%	5.2%

MCHP RHA Indicators Atlas 2019

Infant Mortality

Definition

The average annual number of deaths prior to one year of age, per 1,000 live births, over a five-year time period.

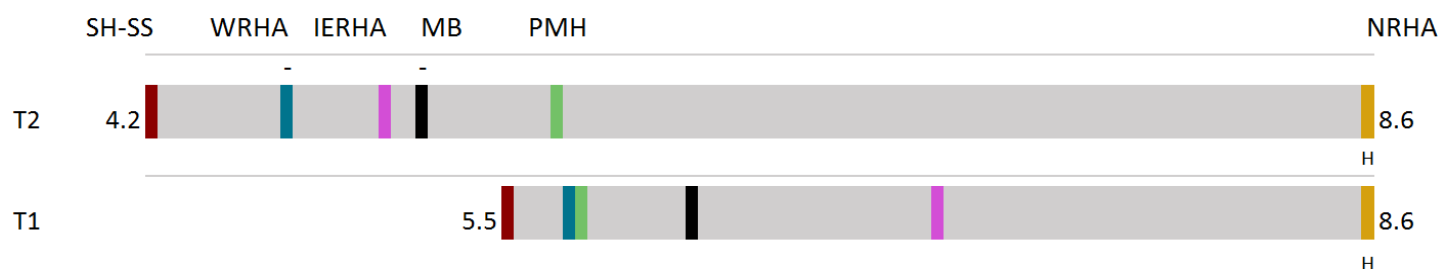
Why is this indicator important?

Infant mortality is considered to be one of the most important indicators of child and overall population health, and the well-being of a society over time. This is a health equity indicator as it is largely driven by social determinants of health and helps to inform planning of appropriate upstream interventions.

Provincial Key Findings

- Infant mortality decreased significantly over time in the province and in Winnipeg RHA.
- Infant mortality in the Northern RHA is significantly higher than the provincial average.
- Higher mortality rates can be found in lower income areas in both rural and urban settings.
- The main causes of infant mortality are congenital anomalies, Sudden Infant Death Syndrome and injury.

Figure 3.5 Infant Mortality Rates by RHA, 2007-2011 (T1) and 2012-2016 (T2)
Maternal age adjusted average annual rate of death in the first 364 days, per 1,000 live births



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	IERHA	MB	PMH	NRHA
T2 COUNT	59	182	35	407	57	73
T2 RATE	4.2	4.7	5.1	5.2	5.7	8.6
T1 RATE	5.5	5.8	7.1	6.2	5.8	8.6

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The infant mortality rate for PMH is similar to the province.
- All zone rates are similar to the provincial average. The highest zonal rate is observed in the North at 7.0, whilst the lowest can be found in the South at 5.2.

Child Mortality

Definition

The average annual number of deaths amongst children, aged 1 to 19 years, per 1,000 population, for a five-year time period.

Why is this indicator important?

Similar to infant mortality, child mortality is an important indicator of overall population health and the well-being of a society over time. This is a health equity indicator as it is largely driven by social determinants of health and helps to inform planning of appropriate upstream interventions.

Provincial Key Findings

- In Manitoba, child mortality decreased slightly, although the decrease does not demonstrate statistical significance.
- Child mortality rates in Northern RHA are significantly higher than the provincial average.
- The most frequent causes of child mortality in Manitoba are ‘injury and poisoning’, cancer, nervous system disorders, respiratory disorders and congenital anomalies.
- ‘Injury and poisoning’ is the most common cause of mortality in children for Manitoba and all RHAs.
- Higher mortality rates can be found in lower income areas in both rural and urban settings.

Figure 3.6 Child Mortality Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of deaths per 1,000 residents per year, age 1-19



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	PMH	SH-SS	MB	IERHA	NRHA
T2 COUNT	174	50	79	472	51	94
T2 RATE	0.22	0.26	0.30	0.31	0.35	0.76 H
T1 RATE	0.21 L	0.39	0.26	0.32	0.33	0.89 H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- Child mortality regional and zone PMH rates are similar to the province.
- All zone rates are similar to the provincial average. The highest zonal rate is observed in the North at 0.32, whilst the lowest can be found in Brandon at 0.23.

Potential Years of Life Lost

Definition

The life lost when a person dies between the age of 1 to 74 years. For each death, the Potential Years of Life Lost (PYLL) value is calculated as the difference (in years) between age at death and 75 years of age. Average annual rates are calculated per 1,000 population, for a five-year time period.

Why is this indicator important?

PYLL is more sensitive to deaths at younger ages than other mortality indicators.

Provincial Key Findings

- Manitoba experienced a reduction of PYLL, although this decrease is not statistically significant.
- PYLL in Northern RHA is significantly higher than the provincial average.
- The highest rate of PYLL can be found for deaths attributed to injury, cancer, circulatory, digestive and respiratory diseases.
- In urban settings, low income residents overall potential years of life lost is three times that of the highest income residents. In rural settings, low income residents overall potential years of life lost is 2.3 times that of the highest income residents.
- The income disparity has decreased slightly over time in both urban and rural settings.

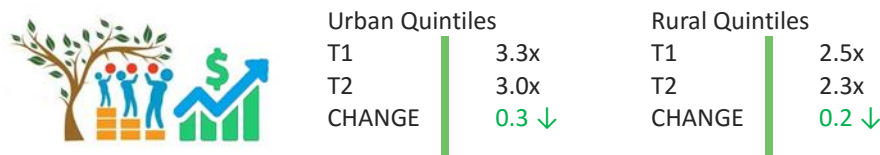


Figure 3.7 Potential Years of Life Lost by RHA, 2007-2011 (T1) and 2012-2016 (T2)

Age and sex adjusted average annual rate of PYLL per 1,000 residents (aged 1-74)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period



	SH-SS	WRHA	PMH	MB	IERHA	NRHA
T2 COUNT	37,007	163,408	40,289	315,700	33,708	32,157
T2 RATE	44.8	45.2	49.5	52.3	55.7	110.8 H
T1 RATE	41.8	47.2	57.8	54.1	57.2	108.1 H

Regional Key Findings

- PYLL in PMH at a regional, zone and district level is similar to the province, with no significant increase or decrease over time.
- The top five causes for PYLL in PMH are injury (16.9), cancer (12.8), circulatory (7.6), digestive (2.4) and respiratory (1.8). Injury can be further defined as unintentional injuries (10.3) and intentional injuries (suicide and assault) (5.8).
- The highest PYLL is observed in Porcupine Mountain at 83.5 in comparison to the lowest in West End at 31.2. The district disparity gap narrowed by 34 percent between T1 and T2.

Table 3.7 Potential Years of Life Lost by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of PYLL per 1,000 residents (aged 1-74 years)

	T2		T1	
	Count	Rate	Rate	
Manitoba	315,700	52.3	54.1	
Brandon	10,871	43.3	44.9	
West End	2,269	31.2	26.6	
South End	1,853	36.6	41.3	
East End	1,409	44.5	60.9	
North Hill	1,685	47.2	54.7	
Downtown	3,655	63.1	62.2	
PMH	40,289	49.5	57.8	
North	12,242	64.2	84.7	
Riding Mountain	1,057	36.6	76.3	
Dauphin	2,372	54.6	73.8	
Duck Mountain	1,301	55.2	57.4	
Swan River	1,520	55.2	84.6	
Agassiz Mountain	2,551	82.2	82.2	
Porcupine Mountain	3,441	83.5	108.3	
South	17,176	46.8	53.7	
Turtle Mountain	1,832	36.4	43.5	
Spruce Woods	2,937	38.6	39.7	
Little Saskatchewan	2,880	38.8	52.3	
Whitemud	2,212	41.3	39.4	
Souris River	3,767	58.2	55.0	
Assessippi	3,548	64.7	88.9	

		T1	4.07x
		T2	2.67x
		CHANGE	↓1.40

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Potential Years of Life Lost — Unintentional Injuries

Definition

The PYLL for all unintentional injuries, for example falls, motor vehicle accidents or drowning, per 1,000 population aged 1 to 74 years, for a five-year time period.

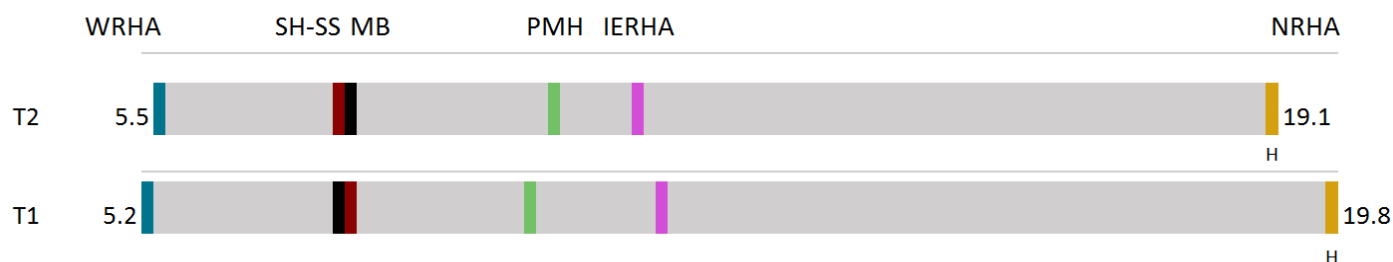
Why is this indicator important?

Unintentional injuries contribute significantly to PYLL and can be used to help identify the need for injury prevention strategies.

Provincial Key Findings

- Unintentional injuries PYLL remains stable over time for Manitoba and all regions.
- PYLL due to unintentional injuries in Northern RHA is significantly higher than the provincial average.

Figure 3.8 PYLL due to Unintentional Injury by RHA, 2006/07-2010/11 (T1) and 2011/12-2015/16 (T2)
Age and sex adjusted PYLL Rates, per 1,000 (1 to 74 years)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	SH-SS	MB	PMH	IERHA	NRHA
T2 COUNT	17,962	6,449	44,662	7,566	5,975	6,710
T2 RATE	5.5	7.6	7.8	10.3	11.3	19.1 H
T1 RATE	5.2	7.9	7.8	10.0	11.7	19.8 H

MHSAL IMA 2018

Regional Key Findings

- PYLL due to unintentional injuries in PMH is similar to the province.

Potential Years of Life Lost — Suicide

Definition

The PYLL for all suicides per 1,000 population aged 1 to 74 years, for a five-year time period.

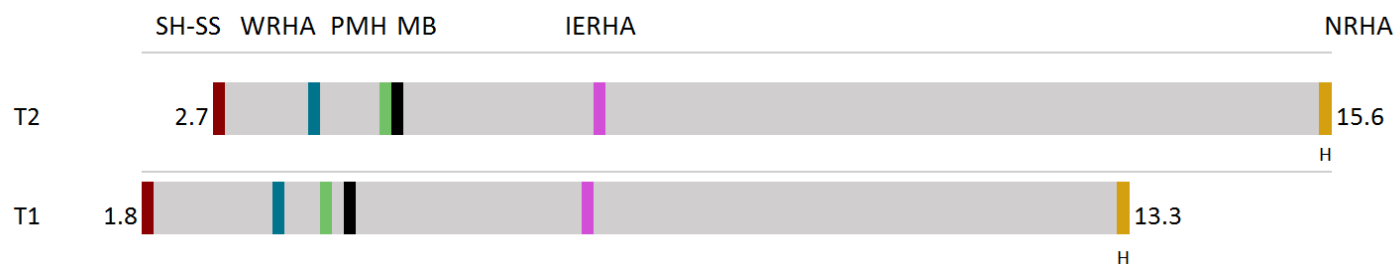
Why is this indicator important?

Suicide is one of the main causes of premature death. There is potential to positively impact society overall through strengthening mental health awareness, early identification of suicidal thoughts and timely referral to appropriate supports.

Provincial Key Findings

- PYLL caused by suicide increased slightly in Manitoba.
- PYLL due to suicide in Northern RHA is significantly higher than the provincial average.

Figure 3.9 PYLL due to Suicide by RHA, 2006/07-2010/11 (T1) and 2011/12-2015/16 (T2)
Age and sex adjusted PYLL Rates, per 1,000 (1 to 74 years)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	PMH	MB	IERHA	NRHA
T2 COUNT	2,465	12,451	3,564	27,455	3,548	5,427
T2 RATE	2.7	3.9	4.7	4.9	7.2	15.6 H
T1 RATE	1.8	3.5	4.0	4.3	7.0	13.3 H

MHSAL IMA 2019

Regional Key Findings

- PYLL due to suicide in PMH is similar to the province.

Potentially Avoidable Deaths

Definition

The average annual rate of avoidable deaths before age 75 years, per 1,000 population, for a five-year time period. Avoidable deaths includes those that could be avoided through primary prevention efforts, such as lifestyle modifications, immunizations and health promotion initiatives.

Why is this indicator important?

Potentially avoidable deaths provides insight on the effectiveness of disease prevention policies, health promotion and health care in preventing premature deaths.

Provincial Key Findings

- The number of potentially avoidable deaths in Manitoba decreased significantly over time.
- All regions except Southern Health-Santé Sud decreased significantly over time.
- Southern Health-Santé Sud and Winnipeg RHA have significantly lower rates, whilst Northern RHA has rates significantly higher than the provincial average.
- In urban settings, low income residents’ rate of potentially avoidable deaths is 3.7 times higher than the highest income residents. In rural settings, the low income residents’ rate of potentially avoidable deaths is 2.2 times higher than the highest income residents.



Urban Quintiles	
T1	3.7x
T2	3.7x
CHANGE	0.0

Rural Quintiles	
T1	2.1x
T2	2.2x
CHANGE	0.1 ↑

Figure 3.10 Potentially Avoidable Death Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of avoidable death before age 75, per 1,000 residents aged 0-74 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period



	SH-SS		WRHA		PMH		MB		IERHA		NRHA	
T2 COUNT	1,539		7,272		1,856		13,699		1,587		1,074	
T2 RATE	1.74	L	1.98	L-	2.08	-	2.11	-	2.15	-	3.83	H-
T1 RATE	1.84	L	2.16	L	2.34		2.33		2.48		4.22	H

Regional Key Findings

- The rate of potentially avoidable death in PMH is similar to the province and decreased significantly.
- The North zone has a significantly higher rate than the Manitoba average, whilst the South zone has a significantly decreasing, lower rate.
- Three districts have a significantly higher rate and two districts have a significantly lower rate. Two districts have decreased significantly over time.
- Downtown residents are over twice as likely to die due to a potentially preventable cause as those in the West End. The district disparity gap narrowed by 13 percent between T1 and T2.

Table 3.8 Potentially Avoidable Death Rate by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of avoidable death before age 75 years, per 1,000 residents aged 0-74 years

	T2		T1		
	Count	Rate		Rate	
Manitoba	13,699	2.11	-	2.33	
PMH	1,856	2.08	-	2.34	
Brandon	471	1.99		2.20	
West End	104	1.42	L	1.82	
South End	79	1.63		1.50	L
North Hill	82	2.01		1.87	
East End	65	2.34		2.71	
Downtown	141	3.06	H	3.55	H
North	574	2.47	H	2.77	H
Duck Mountain	55	1.60		2.11	
Riding Mountain	61	1.77		2.31	
Dauphin	122	2.58		2.69	
Swan River	73	2.62		2.36	
Porcupine Mountain	139	2.94	H-	3.70	H
Agassiz Mountain	124	3.04	H	2.93	
South	811	1.91	L-	2.17	
Whitemud	97	1.57	L-	2.16	
Spruce Woods	153	1.76		1.84	L
Turtle Mountain	93	1.62		1.98	
Souris River	159	2.06		2.13	
Little Saskatchewan	157	2.10		2.40	
Assessippi	152	2.34		2.60	

		T1	2.46x
		T2	2.15x
		CHANGE	↓0.31

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Unintentional Injury Causing Death

Definition

The number of deaths due to unintentional injury, per 1,000 population, for a five-year time period.

Why is this indicator important?

This indicator focuses on the accidental causes of death such as motor vehicle accidents, drowning, falls, burns and poisonings. Unintentional injuries are one of the leading causes of death in Canada and worldwide.

Provincial Key Findings

- In Manitoba, the rate of deaths due to unintentional injury slightly decreased over time.
- Northern RHA has significantly higher rates than the provincial average.
- In urban settings, low income residents' are three times as likely to die of unintentional injuries as the highest income residents. In rural settings, low income residents' are 2.2 times as likely to die of unintentional injuries as the highest income residents.



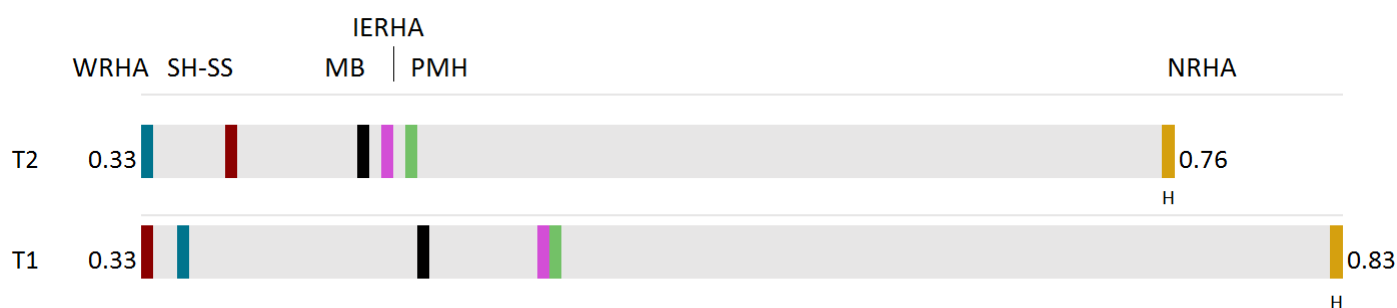
Urban Quintiles

T1	3.1x
T2	3.0x
CHANGE	0.1 ↓

Rural Quintiles

T1	2.3x
T2	2.2x
CHANGE	0.1 ↓

Table 3.9 Unintentional Injury Causing Death by RHA, 2007-2011(T1) and 2012-2016(T2)
Age and sex adjusted average annual rate per 1,000



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	SH-SS	MB	IERHA	PMH	NRHA
T2 COUNT	1,356	338	2,774	295	471	240
T2 RATE	0.33	0.37	0.42	0.43	0.44	0.76 H
T1 RATE	0.35	0.33	0.45	0.50	0.50	0.83 H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The rate of unintentional injury causing death at a regional, zone and district level in PMH is similar to the province, with exception of Asessippi and Porcupine Mountain districts, where it is significantly higher.
- Porcupine Mountain residents are three times more likely to die due to unintentional injury than residents of South End. The district disparity gap narrowed by 41 percent between T1 and T2.

Table 3.10 Unintentional Injury Causing Death by PMH Zone and District, 2007-2011(T1) and 2012-2016(T2)
Age and sex adjusted average annual rate per 1,000

	T2		T1	
	Count	Rate	Rate	
Manitoba	2,774	0.42	0.45	
PMH	471	0.44	0.50	
Brandon	105	0.32	0.31	
South End	12	0.25	0.21	
West End	22	0.26	0.30	
North Hill	13	0.37	0.45	
East End	19	0.43	0.50	
Downtown	39	0.60	0.44	
North	130	0.45	0.69	
Swan River	13	0.36	0.64	
Duck Mountain	15	0.37	0.34	
Agassiz Mountain	19	0.48	0.83	H
Riding Mountain	15	0.48	0.59	
Dauphin	37	0.60	0.60	
Porcupine Mountain	31	0.74	H	1.08 H
South	236	0.46	0.44	
Spruce Woods	37	0.42	0.36	
Little Saskatchewan	31	0.43	0.48	
Whitemud	34	0.48	0.50	
Souris River	47	0.56	0.57	
Turtle Mountain	37	0.58	0.47	
Asessippi	50	0.68	H	0.54

PMH District Disparity Ratio

T1 5.1x
T2 3.0x
CHANGE ↓2.1

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Cancer

Cancer Incidence

Definition

The number of diagnosed new cases of all invasive cancers per 100,000 population, for a two-year time period.

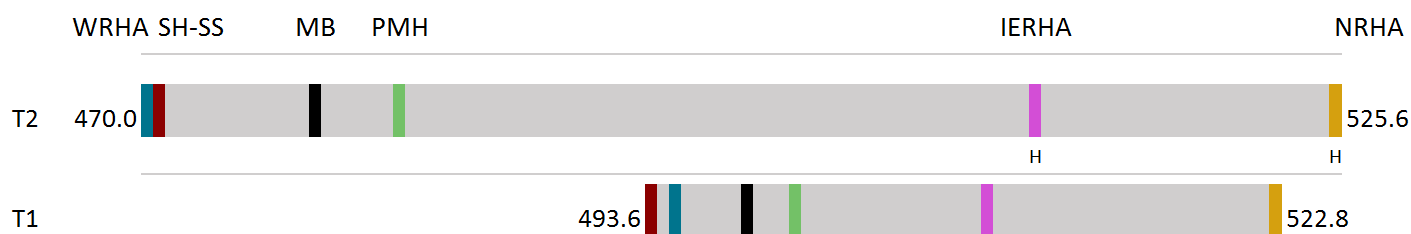
Why is this indicator important?

Annual statistics on cancer incidence are an important part of predicting future utilization of cancer care services and can provide insight into the effectiveness of, and access to, screening programs.

Provincial Key Findings

- In Manitoba, the rate decreased slightly over time.
- Interlake-Eastern RHA and Northern RHA rates are significantly higher than the provincial average.
- The incidence rates are higher amongst male residents and residents aged 75 and older.

Figure 3.11 All Invasive Cancers – Incidence Rate by RHA 2011-13 (T1) and 2014-16 (T2)
Age standardized incidence rates per 100,000 residents



H/L Significantly higher or lower than the MB average for that time period.

	WRHA	SH-SS	MB	PMH	IERHA	NRHA
T2 COUNT	11,073	2,517	19,422	2,860	2,272	720
T2 RATE	470.0	470.9	478.4	482.3	511.8 H	525.6 H
T1 RATE	494.9	493.6	498.2	500.8	509.2	522.8

CancerCare Manitoba 2019

Regional Key Findings

- The rate of invasive cancers in PMH is similar to the province.
- All zone rates are similar to the provincial average. The highest zonal rate is observed in Brandon at 511.1, whilst the lowest can be found in the South at 463.8.

Cancer Incidence by Site

Definition

The number of diagnosed new cases of breast, prostate, lung and colorectal cancer per 100,000 population, for a two-year time period.

Why is this indicator important?

Identifying the cancer site allows for more effective preventive interventions, targeted treatment services and future resource allocation.

Provincial Key Findings

- The top four invasive cancer incidence rates by site in Manitoba are 'lung and bronchus', breast, colorectal and prostate.
- Cancer incidence rates are higher amongst residents aged 75 and older for all top four diagnoses. Incidence rates are higher in males for colorectal and 'lung and bronchus' cancers.

Table 3.11 Cancer Incidence by Site in PMH and Manitoba, 2011-2013 (T1) and 2014-2016 (T2)
Age standardized incidence rates per 100,000 residents

Cancer Site	2014-2016				2011-2013	
	PMH		MB		PMH	MB
	Rate	Count	Rate	Count	Rate	Rate
Colorectal	72.1	H 429	61.9	2,504	72.1	66.8
Lung and Bronchus	69.4	432	67.7	2,778	72.9	69.4
Breast	51.2	L 296	62.7	2,530	61.7	L 69.9
Prostate	46.0	L 283	51.8	2,145	47.0	51.2

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

Regional Key Findings

- PMH incidence rates for both prostate and breast cancer are significantly lower than the provincial average whilst the colorectal incidence rate is significantly higher. The high rate of colorectal cancer incidence in PMH is driven by males accounting for 58% of new cases.
- The colorectal incidence rate is significantly higher in the Brandon zone whilst breast cancer rates are significantly lower than the provincial average in both the North and South zones. Prostate cancer incidence rates are low across PMH, significantly so in the South zone.

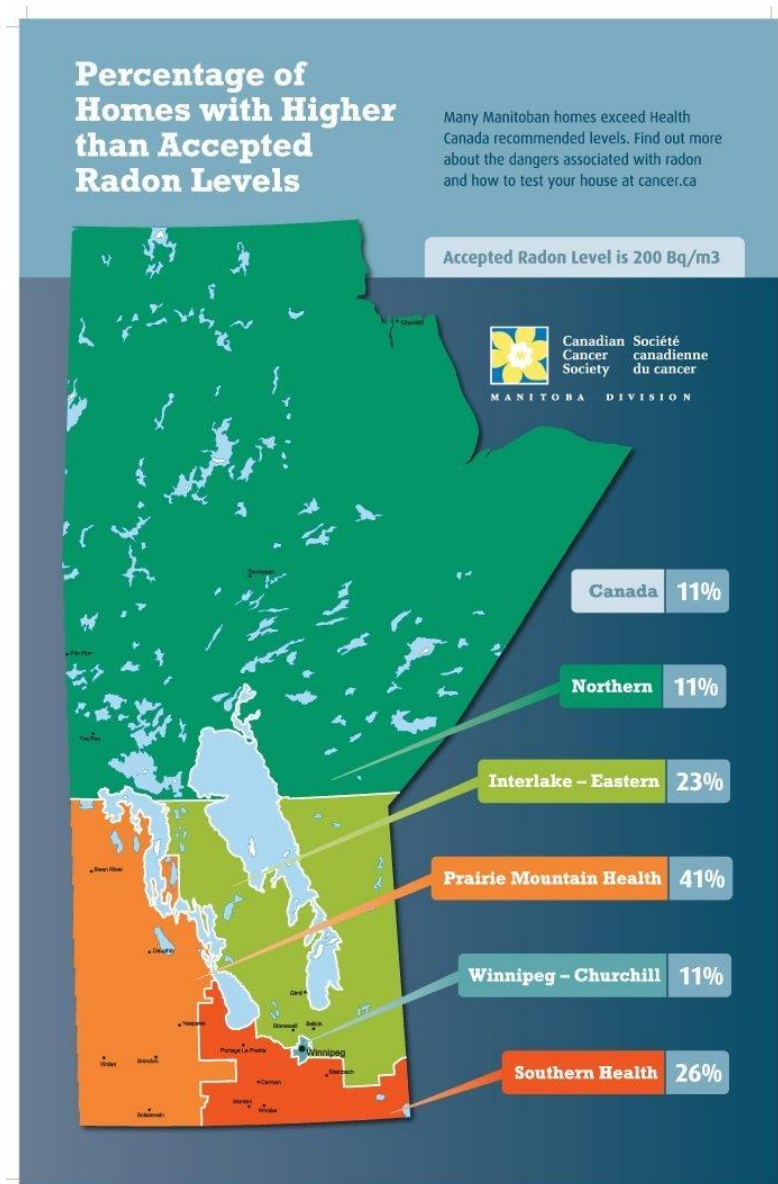
Table 3.12 Cancer Incidence by Site by PMH Zone, 2014-2016
Age standardized incidence rates per 100,000 residents

Cancer Site	North		Brandon		South			
	Rate	Count	Rate	Count	Rate	Count		
Colorectal	74.3	118	81.0	H	126	65.7	185	
Lung and Bronchus	69.0	115	76.1		120	66.8	197	
Breast	47.5	L	71		98	46.4	L	127
Prostate	46.0		77		74	44.3	L	132

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

A CLOSER LOOK... HEALTH IMPACTS OF RADON



Radon is the leading environmental cause of lung cancer, the leading cause of lung cancer in non-smokers and the second leading cause of lung cancer in smokers.¹⁹ The number of homes exposed to increased levels of radon in PMH is well above the national average. Radon is a colourless, odourless radioactive gas found naturally in the environment.

It comes from uranium as it breaks down in soil and rocks. When radon is released from the ground, the gas is diluted in outside air. However, the gas can accumulate in homes and become a health risk. Radon enters a building through any opening such as cracks and gaps in the foundation and walls. Generally, radon levels are highest in the basement.

When radon gas is breathed in, the lungs are exposed to small amounts of radiation which may damage or kill the cells in the lungs. The risk from radon exposure is associated with the level of radon, how long a person is exposed and their smoking habits.

According to Health Canada, exposure to high levels of radon, a known carcinogen, can increase risk for lung cancer, especially in people who smoke. Radon concentration levels will vary from one house to another even if they are similar in design and next door to each other. The only way to be sure of the radon level in a home is to test for it. A radiation specialist can provide recommendations on the best ways to reduce high levels of radon.

Cancer Mortality

Definition

The rate of death for all cancers per 100,000 population, for a two-year time period.

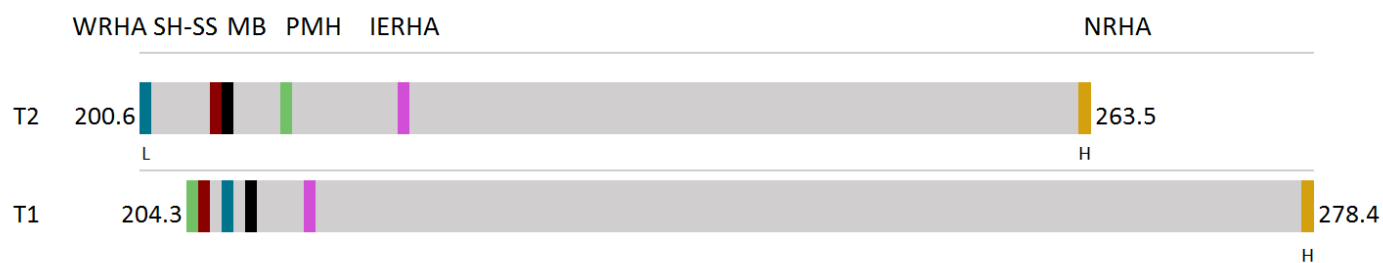
Why is this indicator important?

Cancer mortality statistics provide insight into the treatment success for cancer.

Provincial Key Findings

- The mortality rate for all invasive cancers is fairly stable in Manitoba.
- Mortality rate is significantly higher than the provincial average in Northern RHA whilst it is significantly lower in Winnipeg RHA.
- Mortality rates are higher in males and residents aged 75 and older.

Figure 3.12 All Invasive Cancers – Mortality rate by RHA 2011-13 (T1) and 2014-16 (T2)
Age standardized mortality rates per 100,000 residents



H/L Significantly higher or lower than the MB average for that time period

	WRHA	SH-SS	MB	PMH	IERHA	NRHA
T2 COUNT	4,727	1,072	8,348	1,311	942	296
T2 RATE	200.6 L	205.9	206.5	211.0	218.4	263.5 H
T1 RATE	206.6	205.4	208.2	204.3	212.6	278.4 H

CancerCare Manitoba 2019

Regional Key Findings

- The PMH mortality rate due to all invasive cancers is not significantly different to the provincial average.
- The mortality rate for females (185.6) is lower than that for males (246.3).

Cancer Mortality by Site

Definition

The rate of death for breast, prostate, 'lung and bronchus', and colorectal cancers, per 100,000 population, for a two-year time period.

Why is this indicator important?

Site specific cancer mortality statistics provide insight into the treatment success for cancer at a site specific level.

Provincial Key Findings

- The top four invasive cancer mortality rates by site in Manitoba are 'lung and bronchus', colorectal, breast and prostate.
- Cancer mortality rates are higher amongst residents aged 75 and older for all top four diagnoses by site. Mortality rates are higher in males for colorectal and 'lung and bronchus' cancers.

Table 3.13 Cancer Mortality, Top 4 by PMH and Manitoba, 2011-2013(T1) and 2014-2016(T2)
Age standardized mortality rates per 100,000 residents

Cancer Site	2014-2016				2011-2013	
	PMH		MB		PMH	MB
	Rate	Count	Rate	Count	Rate	Rate
Lung and Bronchus	51.3	324	50.0	2,039	52.9	49.6
Colorectal	29.1	181	25.0	1,005	25.1	25.4
Prostate	17.1	H 111	13.6	542	14.1	12.3
Breast	13.7	83	14.7	591	11.3	L 14.4

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

Regional Key Findings

- The PMH mortality rate for prostate cancer is significantly higher than the provincial average and the crude number of deaths increased by almost a quarter from 2011-2013.

A CLOSER LOOK...PROSTATE CANCER STUDY

The Western Manitoba Cancer Centre (WMCC) located in Brandon is not only a treatment centre but is also involved in a number of research studies including two focused on patients living with prostate cancer.

The Radiotherapy and Androgen Deprivation in Combination After Local Surgery (RADICALS) study involves patients with early stage prostate cancer who had a radical prostatectomy. In prostate cancer, surgery alone is a standard treatment. The aim of this study is to determine how best to use radiotherapy and hormone treatment after surgery.

The Prevention of Metabolic Syndrome and Increased Weight Using Metformin Concurrent to Androgen Deprivation Therapy and Radiotherapy for Locally Advanced Adenocarcinoma of the prostate (PREMIUM) study is focused on the prevention of weight gain as a complication from androgen deprivation therapy for a 12-month period. A portion of the study group participants have been given Metformin (a drug often used in diabetes symptom management) to assess if it decreases weight gain, improves prostate cancer specific outcomes and reduces comorbidities.

Cancer - Late Stage (IV) Diagnosis

Definition

The percent of all cancer patients diagnosed at a later stage (IV), for a two-year time period.

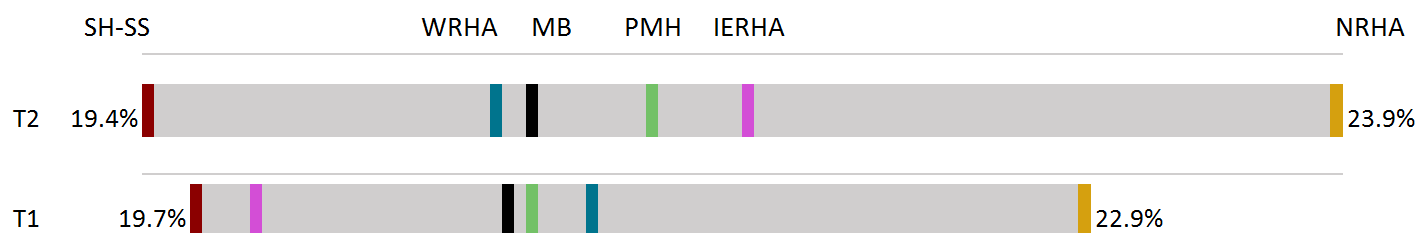
Why is this indicator important?

In late-stage diagnoses, cancer has already spread to other parts of the body and has a significantly worse outcome than cancer diagnosed during earlier stages. Data on late-stage cancer diagnosis helps to identify where to focus cancer awareness campaigns, screening programs and how to improve access to diagnostic tests.

Provincial Key Findings

- The proportion of cancer patients diagnosed at a late stage (IV) of their illness remains relatively stable throughout the province.
- The proportion diagnosed at a late stage is higher in males and patients aged 75 and older.

Figure 3.13 Percent of All Invasive Cancers Diagnosed at Late Stage (IV), by RHA, 2011-2013 (T1) and 2014-2016 (T2)



H/L Significantly higher or lower than the MB average for that time period.

	SH-SS	WRHA	MB	PMH	IERHA	NRHA
T2 COUNT	489	2,300	4,064	610	493	172
T2 RATE	19.4%	20.8%	20.9%	21.3%	21.7%	23.9%
T1 RATE	19.7%	21.1%	20.8%	20.9%	19.9%	22.9%

CancerCare Manitoba 2019

Regional Key Findings

- The percent of all invasive cancers diagnosed at stage IV is similar to the province for residents in PMH and amongst all zones.
- The percent of all invasive cancers diagnosed at late stage is higher for PMH males (23.2%) than it is for females (19.4%).

Cancer Late Stage (IV) Diagnosis by Site

Definition

The percent of all cancer patients diagnosed at a later stage (IV) for 'lung and bronchus', prostate, colorectal and breast cancers.

Why is this indicator important?

Site specific data on late-stage cancer diagnosis helps to identify where to focus cancer awareness campaigns, screening programs and diagnostic tests.

Provincial Key Findings

- The proportion of cancer patients diagnosed at a late stage (IV) of their cancer for the top four diagnoses remains relatively stable throughout the province.

Table 3.14 Percentage of Invasive Cancers Diagnosed at Late Stage (IV) by Site, by PMH and MB, 2011-2013 (T1) and 2014-2016 (T2)

Cancer Site	2014-2016				2011-2013	
	PMH		MB		PMH	MB
	Rate	Count	Rate	Count	Rate	Rate
Lung and Bronchus	45.1%	195	47.7%	1,324	46.5%	48.8%
Colorectal	19.1%	82	20.2%	505	19.0%	19.4%
Prostate	25.1%	H 71	17.2%	369	20.1%	16.4%
Breast	7.4%	22	6.6%	167	5.8%	6.6%

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

Regional Key Findings

- The rate of prostate cancer diagnosed at a later stage (IV) is significantly higher than the province for PMH residents. This is driven by a significantly higher rate in the South zone.
- PMH residents are more than six times as likely to be diagnosed at stage IV for lung and bronchus compared to breast cancer.

Table 3.15 Percentage of Site Specific Invasive Cancers Diagnosed at Late Stage (IV), by Zone, 2014-2016

Cancer Site	North	Brandon	South
Lung and Bronchus	44.4%	46.7%	44.7%
Prostate	26.0%	16.2%	29.6%
Colorectal	23.7%	19.1%	16.2%
Breast	5.6%	5.1%	10.2%

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

Cancer Survival

Definition

The percent of residents still alive five years after a cancer diagnosis, for a five-year time period.

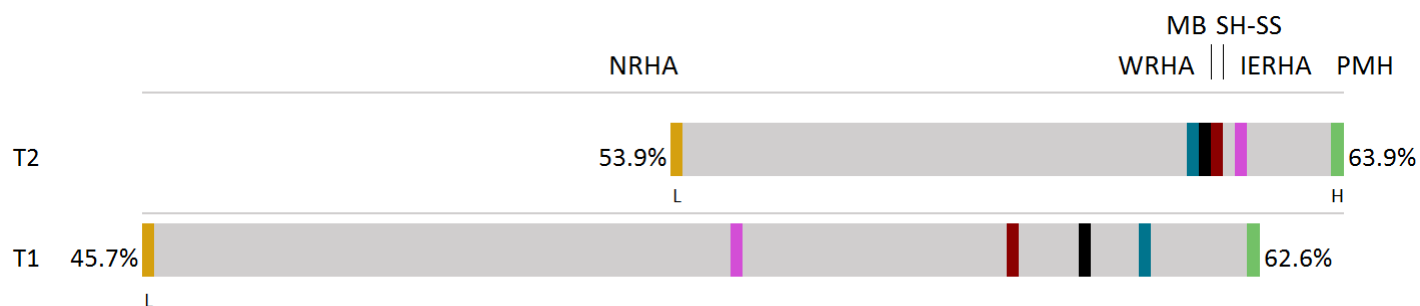
Why is this indicator important?

Data on cancer survival can be used to assess the effectiveness of prevention strategies and cancer treatment.

Provincial Key Findings

- Cancer survival rates increased slightly in the province.
- Cancer survival rates are significantly higher than the province in Prairie Mountain Health, whilst they are significantly lower in Northern RHA.
- Cancer survival rate is highest amongst females and those in the age group of 15-44.

Figure 3.14 Cancer Survival by RHA, observed years 2007-2011, with follow-up to 2011 (T1) and observed years 2012-2016, with follow-up to 2016 (T2)
Age standardized period relative survival



H/L Significantly higher or lower than the MB average for that time period.

	NRHA		WRHA		MB		SH-SS		IERHA		PMH	
T2 RATE	53.9%	L	61.8%		62.0%		62.0%		62.3%		63.9%	H
T1 RATE	45.7%	L	61.0%		60.0%		58.9%		54.7%		62.6%	

CancerCare Manitoba 2019

Regional Key Findings

- The rate of cancer survival in PMH is significantly higher than the Manitoba average.
- Survival rates in the Brandon zone (66.6%) are significantly higher than the provincial average, whilst rates in the North (62.7%) and South (62.3%) zones are not significantly different.

Cancer Survival by Site

Definition

The percent of residents still alive five years after a cancer diagnosis for breast, prostate, 'lung and bronchus', or colorectal cancer, for a five-year time period.

Why is this indicator important?

Site specific data on cancer survival can be used to assess the effectiveness of cancer prevention strategies and treatment.

Provincial Key Findings

- Amongst the top four diagnosed cancers, survival rates are lowest for 'lung and bronchus' cancers and highest for prostate cancer.
- Cancer survival rate is highest amongst female cancer patients and patients aged 15-54 for colorectal, and 'lung and bronchus' cancers. Cancer survival rates are also highest amongst females aged 65-74 for breast cancer and males aged 55-64 for prostate cancer.

Table 3.16 Cancer Survival by Site, PMH and MB, observed years 2007-2011 with follow-up to 2011 (T1) and observed years 2012-2016, with follow-up to 2016 (T2)
Age standardized period relative survival

Cancer Site	2012-2016		2007-2011	
	PMH Rate	MB Rate	PMH Rate	MB Rate
Prostate	90.0%	91.1%	N/A	86.3%
Breast	92.0%	88.0%	91.0%	87.5%
Colorectal	67.0%	65.0%	76.6%	H 64.5%
Lung and bronchus	24.0%	23.1%	N/A	20.3%

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

Regional Key Findings

- Cancer survival for top four diagnoses in PMH is similar to the province.
- Survival rates for colorectal cancer is significantly higher in the Brandon zone than the provincial average.

Table 3.17 Cancer Survival by Site, PMH Zone, observed years 2007-2011 with follow-up to 2011 (T1) and observed years 2012-2016, with follow-up to 2016 (T2)
Age standardized period relative survival

Cancer Site	North	Brandon	South
Lung and Bronchus	27.2	17.3	26.0
Prostate	N/A	94.4	88.4
Colorectal	60.0	77.0	H 66.5
Breast	91.1	95.3	90.0

H/L Significantly higher or lower than the MB average for that time period.

CancerCare Manitoba 2019

A CLOSER LOOK... COMMUNITY ENGAGEMENT LIAISON

The Community Engagement Liaison for Cancer Navigation Services position, was created in 2015. It is a collaboration position brought forward by CancerCare Manitoba's Under Served Population Program, formally known as "First Nation, Métis, and Inuit Cancer Control". The position fills gaps in underserved population areas, such as First Nation communities, rural communities, frail elderly and newcomer communities. Working closely with the Cancer Navigation team, resources and information are provided to communities and individuals promoting cancer navigation, screening and risk reduction. Information is communicated by way of presentations, workshops and community events, such as health fairs, youth gatherings and wellness days. Services are provided to the entire region including all 14 First Nation communities.

The Liaison coordinates with other PMH programs such as the Mobile Clinic, Health Promotion and Community Development, Healthy Together Now and the Certified Tobacco Educator community of practice. Collaboration is integral to this role through robust partnerships with programs and organizations such as Get Checked Manitoba, Canadian Partnership against Cancer, Southern Manitoba First Nation Commercial Tobacco Reduction Strategy, other regional health authorities, Underserved Populations Program, Manitoba Lung Association, Canadian Cancer Society, CancerCare Manitoba Smoking Cessation Program and Westman Immigration Services.

Cardiovascular

Hypertension Prevalence

Definition

The percent of residents, aged 19 and older, diagnosed with hypertension (high blood pressure), for a one-year time period.

Why is this indicator important?

Hypertension is a risk factor for a number of cardiovascular conditions. Accurate assessment of the hypertension burden helps to guide prevention efforts and treatment choices, which may lead to reductions in heart-related morbidity and mortality.

Provincial Key Findings

- In Manitoba, hypertension prevalence remains unchanged over time and there are no significant changes in any of the regions.
- Hypertension prevalence in Northern RHA and Interlake-Eastern RHA is significantly higher than the provincial average.
- In urban settings, hypertension prevalence among low income residents is 1.3 times that of the highest income residents. In rural settings, hypertension prevalence among low income residents is 1.2 times that of the highest income residents.

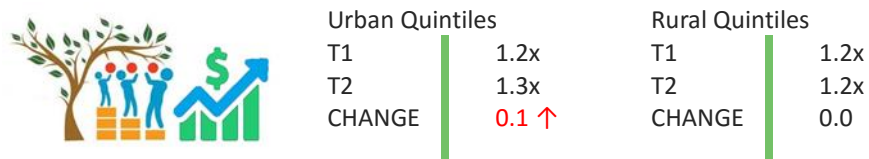
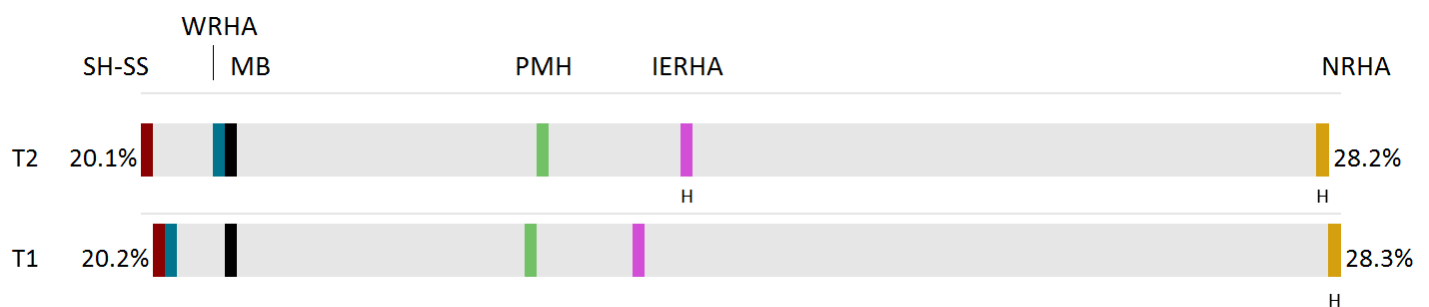


Figure 3.15 Prevalence of Hypertension by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents aged 19 years and older diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	MB	PMH	IERHA	NRHA
T2 COUNT	26,699	125,460	219,507	31,977	25,134	9,392
T2 RATE	20.1%	20.7%	20.7%	22.8%	23.8% (H)	28.2% (H)
T1 RATE	20.2%	20.2%	20.7%	22.8%	23.5%	28.3% (H)

Regional Key Findings

- The prevalence of hypertension in PMH is similar to the province, with almost a quarter of PMH adults living with hypertension.
- The Brandon and North zones have significantly higher rates than the Manitoba average, whilst the South zone is significantly lower and has decreased significantly over time.
- Four districts have significantly higher prevalence of hypertension. Asessippi and Whitemud districts have significantly lower prevalence. Asessippi and Little Saskatchewan districts decreased significantly over time.
- Porcupine Mountain residents are 1.3 times more likely to live with hypertension than residents of Asessippi. The district disparity gap narrowed slightly between T1 and T2.

Table 3.18 Prevalence of Hypertension by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents aged 19+ diagnosed with disorder

	T2		T1	
	Count	Rate	Rate	
Manitoba	219,507	20.7	20.7	
PMH	31,977	22.8	22.8	
Brandon	9,148	23.0	H 22.4	H
West End	2,596	21.8	21.3	
South End	1,774	23.2	23.0	H
North Hill	1,477	23.3	22.8	H
Downtown	1,990	24.6	H 23.3	H
East End	1,311	24.8	H 24.1	H
North	8,876	22.8	H 23.3	H
Swan River	1,112	21.6	21.7	
Riding Mountain	1,174	22.2	23.0	H
Duck Mountain	1,343	22.6	23.5	H
Agassiz Mountain	1,483	23.4	23.7	H
Dauphin	2,107	23.5	H 23.2	H
Porcupine Mountain	1,657	24.8	H 25.7	H
South	13,953	20.1	L- 20.7	
Asessippi	2,088	19.5	L- 21.0	
Whitemud	2,026	19.7	L 19.6	
Spruce Woods	2,775	20.2	20.3	
Souris River	2,557	20.4	20.9	
Little Saskatchewan	2,420	20.6	- 22.1	
Turtle Mountain	2,087	21.9	21.5	

PMH District Disparity Ratio

T1 1.31x
T2 1.27x
CHANGE ↓0.04

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... REACTIVE HYPERTENSION

'White coat hypertension' occurs when people react to having their blood pressure checked and it almost always makes their blood pressure higher. It can be difficult to know whether the blood pressure is truly elevated or whether it is reactive hypertension, a dramatic, temporary spike in blood pressure.

There are underlying factors such as genetic disposition that influence both physical stress reactions and blood pressure changes over time. Challenges in everyday life may result in psychological stress, which can trigger reactive hypertension. This condition requires treatment, regardless of an individual's age, because there is a cumulative negative effect from reoccurring elevation in blood pressure. Over time, frequent temporary spikes in blood pressure can cause damage to blood vessels, heart and kidneys similar to chronic hypertension.

Ischemic Heart Disease Prevalence

Definition

The percent of residents, aged 19 and older, diagnosed with Ischemic Heart Disease (IHD), for a five-year time period.

Why is this indicator important?

IHD (also known as coronary artery disease) is a major cause of death and disability in Canada. IHD prevalence helps to gain insight into the success of prevention, program planning and IHD management efforts.

Provincial Key Findings

- Prevalence of IHD in Manitoba increased significantly over time.
- In Winnipeg RHA, the rate of IHD increased significantly over time, whilst it decreased significantly in Prairie Mountain Health and Northern RHA.
- Prevalence is significantly lower than the provincial average in Southern Health–Santé Sud.
- In urban settings, the prevalence of IHD amongst low income residents is 1.4 times that of the highest income residents. In rural settings, the prevalence of IHD amongst low income residents is 1.5 times that of the highest income residents.

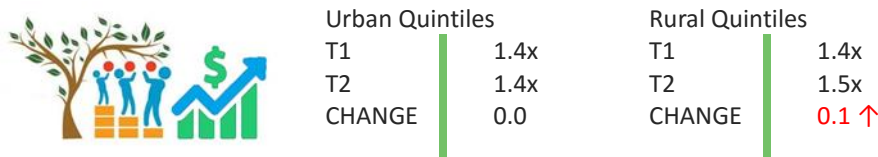
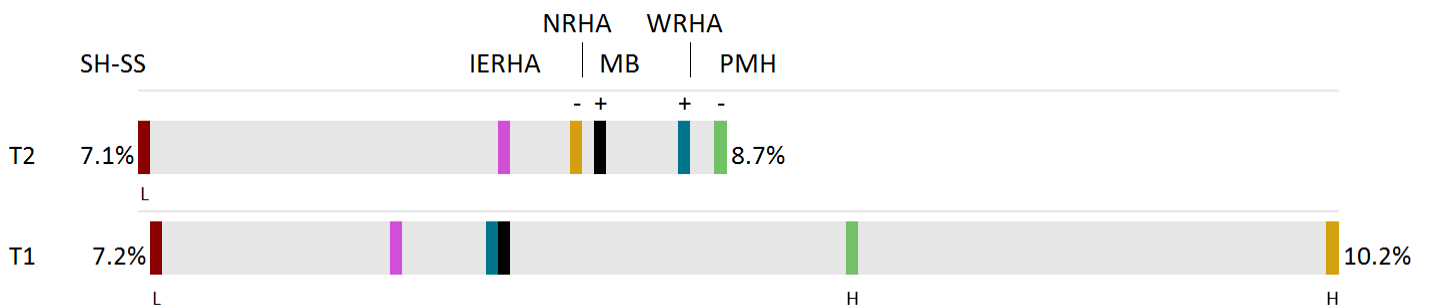


Figure 3.16 Prevalence of Ischemic Heart Disease by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age and sex adjusted percent of residents aged 19 years and older diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	IERHA	NRHA	MB	WRHA	PMH
T2 COUNT	9,458	8,908	2,539	82,339	47,935	13,094
T2 RATE	7.1% L	8.1%	8.3% -	8.3% +	8.6% +	8.7% -
T1 RATE	7.2% L	7.8%	10.2% H	8.1%	8.1%	9.0% H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- Prevalence of IHD in PMH is similar to the province and decreased significantly over time.
- The North zone has a significantly higher rate than the Manitoba average and is driving the rates for PMH. The South zone has a significantly lower rate than the Manitoba average.
- Eleven districts have significantly higher prevalence, including all districts in the North zone. Asessippi district has a significantly lower rate than the Manitoba average and is one of two districts that decreased significantly over time.
- Dauphin residents are more than two and a half times as likely to live with IHD as residents of Asessippi. The district disparity gap widened by 14 percent between T1 and T2.

Table 3.19 Prevalence of Ischemic Heart Disease by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age and sex adjusted percent of residents aged 19 years and older diagnosed with disorder

	T2		T1		
	Count	Rate		Rate	
Manitoba	82,339	8.3	+	8.1	
PMH	13,094	8.7	-	9.0	H
North	4,765	11.8	H-	12.7	H
Swan River	484	10.2	H	9.9	H
Duck Mountain	660	12.0	H-	14.4	H
Porcupine Mountain	736	13.8	H	15.2	H
Riding Mountain	692	15.4	H	16.4	H
Agassiz Mountain	825	15.9	H	17.7	H
Dauphin	1,368	17.1	H	17.4	H
South	5,237	7.2	L	7.5	L
Asessippi	666	6.7	L-	8.0	
Whitemud	749	8.5		8.9	
Little Saskatchewan	899	8.9		9.1	
Spruce Woods	1,095	9.2		8.7	
Turtle Mountain	788	9.6	H	10.3	H
Souris River	1,040	9.6	H	9.8	H

PMH District Disparity Ratio

T1 2.22x
T2 2.53x
CHANGE ↑0.31

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Heart Attack Rate

Definition

The annual rate of death or hospitalization due to acute myocardial infarction (AMI) (or heart attack) per 1,000 population, aged 40 and older, for a five-year time period.

Why is this indicator important?

Heart attacks are one of the leading causes of death in Manitoba. Understanding AMI rates, in combination with other cardiovascular indicators, is important in the planning of public awareness campaigns and health promotion interventions, as well as the allocation of resources in response to the demands on acute care services.

Provincial Key Findings

- The rate of death or hospitalization due to heart attack in Manitoba and amongst all regions decreased significantly over time, with the exception of Northern RHA.
- The rates in Southern Health–Santé Sud, Interlake-Eastern RHA and Northern RHA are significantly higher than the provincial average, whilst the rate in Winnipeg RHA is significantly lower.
- The rate of heart attacks amongst low income residents is 1.7 times higher than that of the highest income residents in both urban and rural settings.

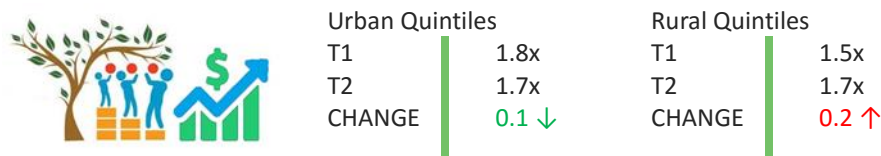
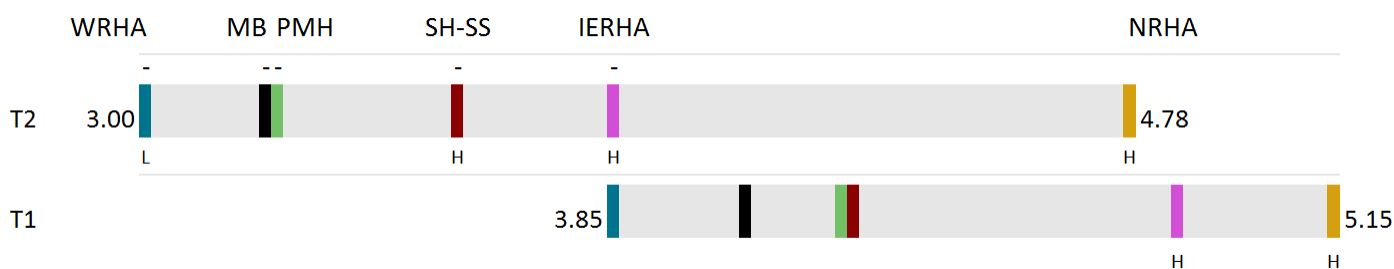


Figure 3.17 Heart Attack (AMI) Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2)

Age and sex adjusted average annual rate of death or hospitalization for AMI per 1,000 residents aged 40 years and older



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	PMH	SH-SS	IERHA	NRHA
T2 COUNT	5,366	10,235	1,577	1,470	1,304	438
T2 RATE	3.00 L-	3.24 -	3.24 -	3.58 H-	3.86 H-	4.78 H
T1 RATE	3.85	4.08	4.28	4.28	4.87 H	5.15 H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The heart attack rate in PMH is similar to the province and decreased significantly over time.
- The North zone has significantly higher rates than the Manitoba average, whilst the Brandon zone has significantly lower rates. All PMH zones decreased significantly over time.
- Three districts in the North zone have significantly higher rates than the Manitoba average and eight districts have decreased significantly over time.
- Agassiz Mountain residents are 2.8 times more likely to have a heart attack than residents of West End. The district disparity gap widened by 16 percent between T1 and T2.

Table 3.20 Heart Attack (AMI) Rate by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted average annual rate of death or hospitalization for AMI per 1,000 residents aged 40 years and older

	T2		T1		
	Count	Rate		Rate	
Manitoba	10,235	3.24	-	4.08	
PMH	1,577	3.24	-	4.28	
Brandon	315	2.59	L-	3.69	
West End	87	2.33	-	3.45	
South End	55	2.54	-	3.95	
East End	47	2.65		3.48	
Downtown	70	2.90	-	4.38	
North Hill	56	3.18		3.75	
North	569	4.35	H-	5.52	H
Duck Mountain	55	2.63		3.09	
Swan River	63	3.53		4.36	
Riding Mountain	68	3.90		5.35	
Porcupine Mountain	104	4.88	H-	6.93	H
Dauphin	151	4.98	H-	7.37	H
Agassiz Mountain	128	6.44	H	5.75	H
South	693	3.01	-	3.92	
Little Saskatchewan	103	2.69	-	3.60	
Whitemud	94	2.85		3.64	
Souris River	124	3.04	-	4.59	
Spruce Woods	139	3.10		3.96	
Turtle Mountain	104	3.35		3.55	
Asessippi	129	3.52	-	4.65	

PMH District Disparity Ratio

T1 2.39x
T2 2.76x
CHANGE ↑0.38

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK...RURAL CLIENT EXPERIENCE FOLLOWING A HEART ATTACK

In the summer of 2019, the Heart Program at the Brandon Regional Health Centre (BRHC) participated in a pilot project led by Dr. Andrew Morris, Cardiologist at St. Boniface Hospital and Professor in the Department of Cardiology at the University of Manitoba. The intent of the project was to explore the experience of clients living in a rural setting following a heart attack. The Heart Nurses actively recruited rural clients who were willing to share their stories. Clients discussed the challenges and successes of accessing health services:

- at the onset of their heart attack,
- during transfer to and from Winnipeg,
- at the catheterization lab in St. Boniface Hospital,
- during the discharge process,
- cardiac rehabilitation through the PMH Heart Program.

These interviews were showcased at a provincial conference hosted by the Winnipeg Regional Health Authority in October 2019 as a valuable education tool for staff working in cardiology in Winnipeg and rural Manitoba.

Congestive Heart Failure Prevalence

Definition

The percent of residents, aged 40 and older, diagnosed with Congestive Heart Failure (CHF), for a three-year time period.

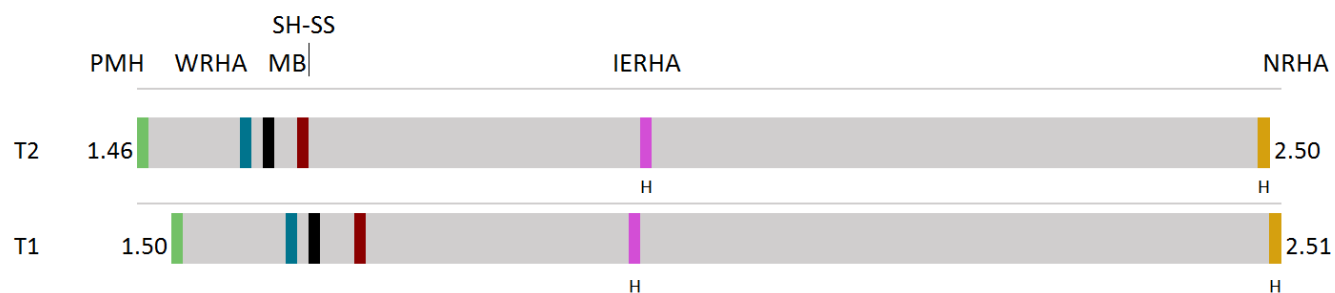
Why is this indicator important?

Cardiovascular disease, including CHF, is the leading cause of death in Manitoba. Understanding CHF prevalence is important in the planning of public education and health promotion initiatives, as well as allocation of resources in response to symptom severity, reserved prognosis and high costs of treatment.

Provincial Key Findings

- Prevalence of CHF in Manitoba, as well as amongst all regions, did not change significantly over time.
- In Interlake-Eastern RHA and Northern RHA, the prevalence of CHF is significantly higher than the provincial average.

Figure 3.18 Congestive Heart Failure Prevalence by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted average annual percent of residents aged 40 years and older diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	PMH	WRHA	MB	SH-SS	IERHA	NRHA
T2 COUNT	1,478	5,959	10,461	1,325	1,247	386
T2 RATE	1.46	1.57	1.59	1.62	1.93 H	2.50 H
T1 RATE	1.50	1.61	1.63	1.67	1.93 H	2.51 H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

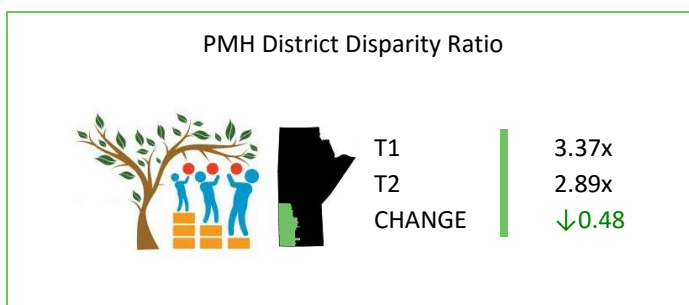
- Prevalence of CHF in PMH is similar to the provincial average.
- The South zone has a significantly lower rate than the Manitoba average.
- Two districts have significantly higher prevalence, whilst two districts have significantly lower prevalence. The prevalence increased over time in South End.
- Dauphin residents are 2.9 times more likely to live with CHF than residents of Asessippi. The district disparity gap narrowed by fourteen percent between T1 and T2.

Table 3.21 Congestive Heart Failure Prevalence by Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted average annual percent of residents, aged 40 years and older diagnosed with disorder

	T2		T1		
	Count	Rate		Rate	
Manitoba	10,461	1.59		1.63	
Brandon	429	1.61	+	1.39	L
North Hill	46	1.39		1.20	
South End	60	1.46	+	0.81	L
West End	125	1.65		1.36	
East End	78	1.90		1.89	
Downtown	120	2.14		2.11	

South	583	1.20	L	1.16	L
Asessippi	60	0.82	L	1.02	L
Whitemud	86	1.24		1.38	
Souris River	102	1.25		1.13	L
Spruce Woods	111	1.25		1.28	
Little Saskatchewan	117	1.62		1.30	
Turtle Mountain	107	1.71		1.51	

	T2		T1		
	Count	Rate		Rate	
PMH	1,478	1.46		1.50	
North	466	1.66	-	2.07	H
Swan River	34	0.88	L	1.28	
Porcupine Mountain	54	1.47		1.89	
Agassiz Mountain	63	1.61		2.12	
Duck Mountain	84	1.85		2.47	H
Riding Mountain	76	2.35	H	2.70	H
Dauphin	155	2.37	H	2.73	H



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Stroke Rate

Definition

The number of hospitalizations or deaths due to stroke, per 1,000 residents, aged 40 and older, for a five-year time period.

Why is this indicator important?

Stroke is one of the leading causes of adult disability and death. Stroke rates, along with other cardiovascular indicators, describe levels of cardiovascular health in the population.

Provincial Key Findings

- The stroke rate in Manitoba decreased significantly over time.
- The stroke rate in Prairie Mountain Health, Winnipeg RHA and Interlake-Eastern RHA decreased significantly over time.
- Death or hospitalization due to a stroke is significantly higher than the provincial average in Northern RHA, whilst it is significantly lower in Prairie Mountain Health.
- The rate of strokes amongst low income residents in urban settings is 1.7 times higher than that of the highest income residents. The rate of strokes amongst low income residents in rural settings is 1.4 times higher than that of the highest income residents.

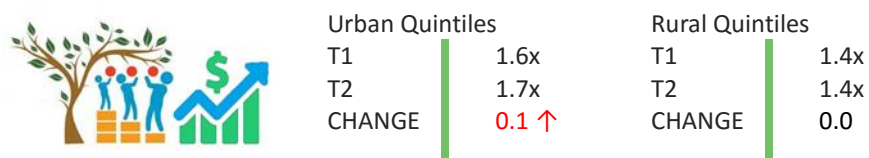


Figure 3.19 Stroke Rate by RHA, 2007-2011 (T1) and 2012-2016 (T2)

Age and sex adjusted average annual rate of death or hospitalization for stroke per 1,000 residents aged 40 years and older



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	PMH	SH-SS	WRHA	MB	IERHA	NRHA
T2 COUNT	1,076	921	4,494	7,857	816	357
T2 RATE	2.13 (L)	2.31	2.43 (-)	2.48 (-)	2.56 (-)	4.68 (H)
T1 RATE	2.52	2.45	2.65	2.69	2.84	4.56 (H)

Regional Key Findings

- The stroke rate in PMH is significantly lower than the province and decreased significantly over time.
- The Brandon and South zone rates are significantly lower than the Manitoba average. The North and South zones decreased significantly over time.
- The West End district has a significantly lower stroke rate than the provincial average and three districts decreased significantly over time.
- Agassiz Mountain residents are more than twice as likely to be hospitalized or die from a stroke as residents of West End, despite the district disparity gap narrowing by 19 percent between T1 and T2.

Table 3.22 Stroke Rate by PMH Zone and District, 2007-2011 (T1) and 2012-2016 (T2)

Age and sex adjusted average annual rate of death or hospitalization for stroke per 1,000 residents aged 40 years and older

	T2		T1	
	Count	Rate	Rate	

Manitoba	7,857	2.48	-	2.69	
-----------------	-------	------	---	------	--

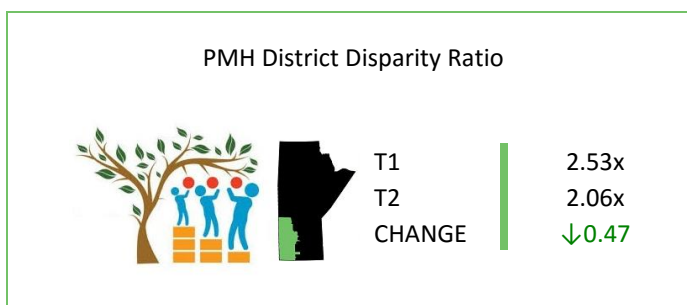
Brandon	219	1.71	L	1.77	L
West End	57	1.46	L	1.75	L
East End	36	1.74		1.59	
Downtown	49	1.79		2.08	
South End	40	1.88		1.76	
North Hill	37	2.22		1.77	

South	502	2.09	L-	2.45	
Whitemud	65	1.84		2.07	
Souris River	83	1.87		2.30	
Spruce Woods	98	2.13		2.51	
Turtle Mountain	74	2.23		1.88	
Little Saskatchewan	88	2.30	-	3.26	
Asessippi	94	2.35		2.82	

	T2		T1	
	Count	Rate	Rate	

PMH	1,076	2.13	L-	2.52	
------------	-------	------	----	------	--

North	355	2.59	-	3.28	H
Duck Mountain	54	2.34	-	3.52	
Swan River	47	2.35	-	4.03	H
Porcupine Mountain	52	2.62		2.84	
Dauphin	93	2.69		3.26	
Riding Mountain	48	2.81		2.57	
Agassiz Mountain	61	3.01		3.73	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... STROKE PREVENTION CLINIC

Since 2008, the Stroke Prevention Clinic, located at the Brandon Regional Health Centre, has provided services for individuals who are at high risk for stroke with rapid assessment and accelerated care through a series of diagnostic tests and immediate prevention medication if necessary. While genetics play a role in risk for stroke, the primary contributing factors are related to lifestyle including tobacco use, physical inactivity, poor nutrition and living with chronic stressors.

The majority of individuals utilizing the stroke prevention clinic tend to be older adults, often in their 70's and 80's. Over the past five years, more than 20% of clients receiving services are in their 40's and 50's.

Diabetes

Diabetes Incidence

Definition

The average number of residents newly diagnosed with diabetes (Type 1 and 2) per 100 person years, for a three-year time period.

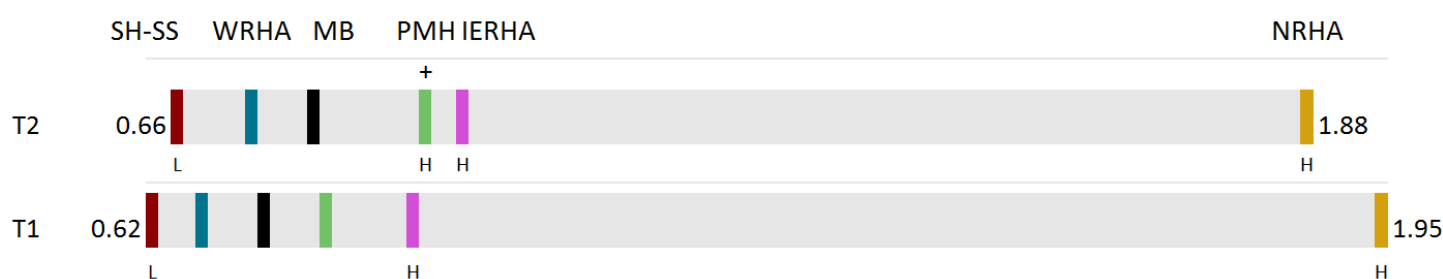
Why is this indicator important?

Diabetes is a significant public health issue. Diabetes incidence provides perspective on the number of new cases of diabetes and can help focus prevention and management efforts going forward.

Provincial Key Findings

- Diabetes incidence in Manitoba did not change significantly over time.
- Incidence increased significantly in Prairie Mountain Health.
- The diabetes incidence rates in Prairie Mountain Health, Interlake-Eastern RHA and Northern RHA are significantly higher than the province, whilst the rate in Southern Health-Santé Sud is significantly lower.

Figure 3.20 Incidence of Diabetes by RHA, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2)
Age and sex adjusted incidence rate per 100 person-years for residents (all ages)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS		WRHA		MB		PMH		IERHA		NRHA	
T2 COUNT	2,847		13,901		25,603		3,599		3,044		2,052	
T2 RATE	0.66	L	0.74		0.80		0.92	H+	0.97	H	1.88	H
T1 RATE	0.62	L	0.69		0.74		0.81		0.91	H	1.95	H

MCHP RHA Indicators Atlas 2019

- In urban settings, diabetes incidence amongst low income residents is twice that of the highest income residents. In rural settings, the diabetes incidence amongst low income residents is 2.2 times that of the highest income residents.



Urban Quintiles

T1 1.9x
T2 2.0x
CHANGE 0.1 ↑

Rural Quintiles

T1 2.3x
T2 2.2x
CHANGE 0.1 ↓

Regional Key Findings

- Diabetes incidence in PMH is significantly higher than the province and has increased significantly over time. There are nearly 3,600 new cases of diabetes.
- The North zone has a significantly higher incidence than the Manitoba average, whilst the South zone is significantly lower. The Brandon zone increased significantly over time.
- Three districts have significantly higher incidence of diabetes than the Manitoba average and Spruce Woods district is significantly lower. Two districts increased significantly over time.
- Porcupine Mountain residents are over twice as likely to be newly diagnosed with diabetes as residents of Spruce Woods. The district disparity gap widened by 30 percent between T1 and T2.

Table 3.23 Incidence of Diabetes by PMH Zone and District, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2)
Age and sex adjusted incidence rate per 100 person-years for residents (all ages)

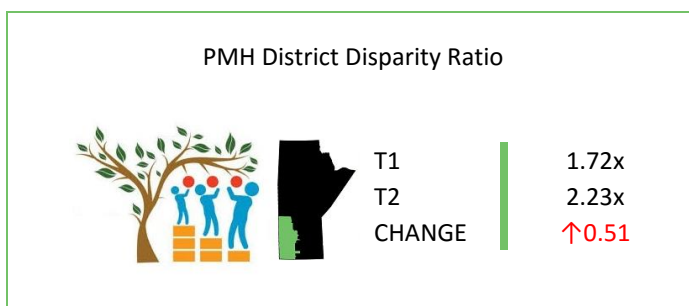
	T2		T1	
	Count	Rate	Rate	
Manitoba	25,603	0.80	0.74	

Brandon	1,019	0.86	+	0.76	
West End	299	0.78	+	0.61	
South End	185	0.79		0.74	
North Hill	158	0.83		0.70	
East End	137	0.89		0.71	
Downtown	240	1.03	H	1.05	H

South	1,528	0.74	L	0.72	
Spruce Woods	261	0.60	L	0.65	
Turtle Mountain	189	0.67		0.69	
Asessippi	239	0.73		0.73	
Whitemud	232	0.75		0.70	
Souris River	297	0.77		0.77	
Little Saskatchewan	310	0.85		0.71	

	T2		T1		
	Count	Rate	Rate		
PMH	3,599	0.92	H+	0.81	

North	1,052	0.96	H	0.88	H
Riding Mountain	122	0.74		0.74	
Duck Mountain	124	0.74		0.80	
Dauphin	194	0.79		0.83	
Swan River	134	0.93		0.79	
Agassiz Mountain	193	1.05	H	0.95	H
Porcupine Mountain	285	1.34	H+	1.04	H



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Diabetes Prevalence

Definition

The percent of residents diagnosed with and treated for diabetes (Type 1 and 2), for a three-year time period.

Why is this indicator important?

Diabetes can lead to serious complications (such as cardiovascular disease, vision loss, kidney failure, nerve damage or amputation) and premature death. As the Canadian population continues to grow and age, the number of Canadians living with diabetes is also expected to continue to increase²⁰.

Provincial Key Findings

- Diabetes prevalence increased significantly over time in the province and in all five regions.
- The prevalence in Northern RHA, Interlake-Eastern RHA and Prairie Mountain Health is significantly higher than the provincial average, whilst the rate in Southern Health-Santé Sud is significantly lower.
- In urban settings, diabetes prevalence amongst low income residents is 1.8 times that of the highest income residents. In rural settings, diabetes prevalence amongst low income residents is 2.2 times that of the highest income residents.

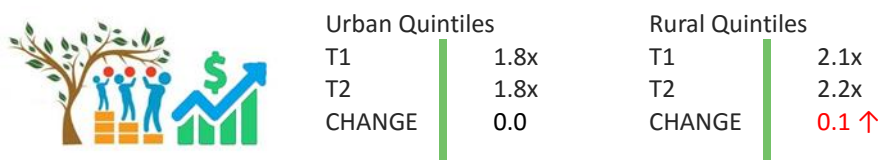
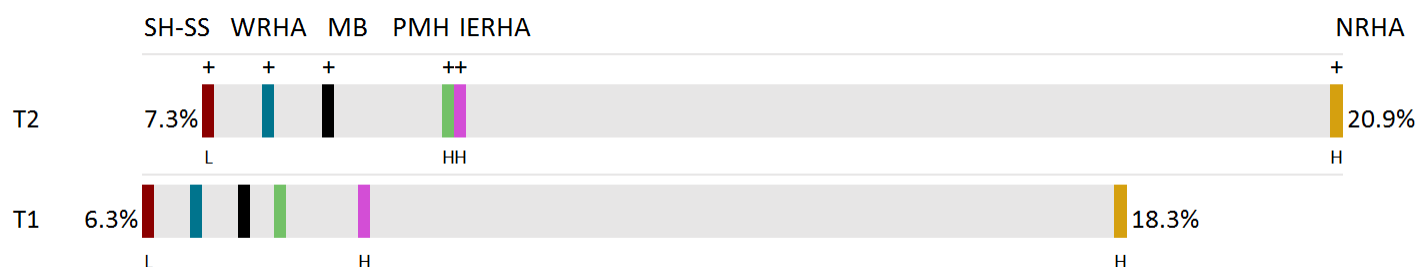


Figure 3.21 Prevalence of Diabetes by RHA, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2)
Age and sex adjusted percent of residents (all ages) diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	MB	PMH	IERHA	NRHA
T2 COUNT	13,103	65,004	120,201	17,593	14,040	9,733
T2 RATE	7.3% L+	7.9% +	8.6% +	10.1% H+	10.3% H+	20.9% H+
T1 RATE	6.3% L	7.0%	7.6%	8.1%	9.1% H	18.3% H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The prevalence of diabetes in PMH is significantly higher than the province and increased significantly over time. More than 17,500 residents live with diabetes.
- The Brandon and North zones have significantly higher prevalence than the Manitoba average and all zones increased significantly over time.
- Four districts have significantly higher prevalence of diabetes than the Manitoba average and all but two districts increased significantly over time. Spruce Woods and Whitemud districts have significantly lower prevalence of diabetes.
- Porcupine Mountain residents are 1.8 times more likely to live with diabetes than residents of Spruce Woods. The district disparity gap widened by four percent between T1 and T2.

Table 3.24 Prevalence of Diabetes by PMH Zone and District, 2009/10-2011/12 (T1) and 2014/15-2016/17 (T2)
Age and sex adjusted percent of residents (all ages) diagnosed with disorder

	T2		T1		
	Count	Rate		Rate	
Manitoba	120,201	8.6	+	7.6	
PMH	17,593	10.1	H+	8.1	
Brandon	4,997	9.8	H+	7.6	
West End	1,366	8.6	+	6.4	L
North Hill	753	9.2	+	6.8	
South End	971	9.6	+	7.8	
East End	704	10.4	H+	7.9	
Downtown	1,203	11.4	H+	9.2	H
North	5,118	10.6	H+	8.6	H
Riding Mountain	597	8.5		7.4	
Duck Mountain	680	9.2	+	7.6	
Dauphin	1,062	9.6	+	7.7	
Swan River	641	9.8	+	7.9	
Agassiz Mountain	972	12.5	H+	9.7	H
Porcupine Mountain	1,166	13.0	H+	10.5	H
South	7,478	8.5	+	7.1	L
Spruce Woods	1,313	7.3	L+	6.1	L
Whitemud	1,016	7.5	L+	6.2	L
Little Saskatchewan	1,299	8.4	+	6.6	
Asessippi	1,232	8.9	+	7.4	
Turtle Mountain	1,104	9.1		8.1	
Souris River	1,514	9.4	+	7.7	

PMH District Disparity Ratio

T1	1.71x
T2	1.78x
CHANGE	↑0.06

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Lower Limb Amputations

Definition

The percent of residents with diabetes, aged 19 and older, who had a lower limb amputation either below or including the knee, for a five-year time period.

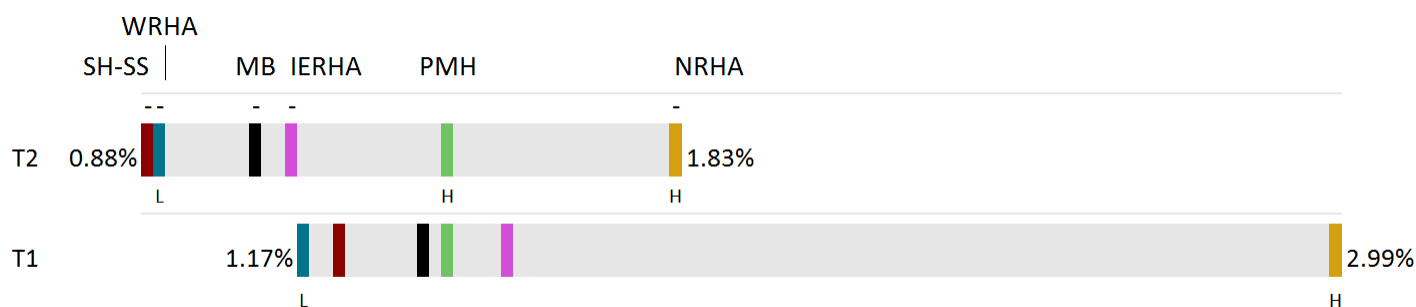
Why is this indicator important?

Individuals with diabetes are more likely to be hospitalized with a non-traumatic lower limb amputation than the non-diabetic population²¹. Lower limb amputations amongst diabetics are an indication of poor disease management and can lead to increased morbidity and mortality. There is a strong relationship between lower limb amputation due to diabetes and overall health status of vulnerable populations. This indicator helps to plan focused upstream education and equitable access to disease prevention efforts.

Provincial Key Findings

- The percent of diabetes-associated lower limb amputations in the province decreased significantly over time.
- The rate decreased significantly over time in all regions except for Prairie Mountain Health.
- Northern RHA and Prairie Mountain Health rates are significantly higher than the provincial average, whilst the rate in Winnipeg RHA is significantly lower.

Figure 3.22 Lower Limb Amputations by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age and sex adjusted percent of residents with diabetes aged 19 years and older who had an amputation



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	MB	IERHA	PMH	NRHA
T2 COUNT	107	538	1,197	157	235	142
T2 RATE	0.88%	0.91%	1.09%	1.16%	1.42%	1.83%
T1 RATE	1.23%	1.17%	1.39%	1.54%	1.42%	2.99%

MCHP RHA Indicators Atlas 2019

- The income disparity in both urban and rural settings has increased markedly over time. In urban settings, the percentage of lower limb amputations amongst low income residents is 3.5 times higher than the highest income residents. In rural settings, the percentage of lower limb amputations amongst low income residents is 3.8 times higher than the highest income residents.



Urban Quintiles
 T1 3.1x
 T2 3.5x
 CHANGE 0.4 ↑

Rural Quintiles
 T1 3.2x
 T2 3.8x
 CHANGE 0.6 ↑

Regional Key Findings

- The rate of lower limb amputations amongst diabetic PMH residents is significantly higher than the province.
- The North zone and districts of Asessippi, Porcupine Mountain and Agassiz Mountain have significantly higher rates than the Manitoba average.
- Diabetic residents of Agassiz Mountain are nearly five times as likely to have a lower limb amputation as those of Whitemud. The district disparity gap widened by eight percent between T1 and T2.

Table 3.25 Lower Limb Amputations by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
 Age and sex adjusted percent of residents with diabetes aged 19 years and older who had an amputation

	T2		T1
	Count	Rate	Rate

Manitoba	1,197	1.09	-	1.39
-----------------	-------	------	---	------

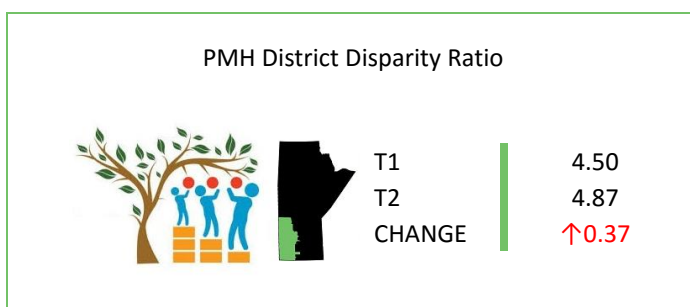
Brandon	56	1.24		0.94
West End	13	1.03		0.81
North Hill	8	1.17		s
Downtown	13	1.28		1.12
East End	9	1.37		s
South End	13	1.46		s

South	88	1.21		1.08
Whitemud	6	0.61		1.04
Spruce Woods	8	0.62		0.78
Turtle Mountain	10	0.91		0.72
Souris River	15	1.04		1.37
Little Saskatchewan	23	1.91		1.30
Asessippi	26	2.18	H	1.31

	T2		T1
	Count	Rate	Rate

PMH	235	1.42	H	1.42
------------	-----	------	---	------

North	91	1.82	H	2.30	H
Duck Mountain	10	1.44		2.08	
Riding Mountain	9	1.46		2.46	
Dauphin	16	1.51		1.63	
Porcupine Mountain	25	2.31	H	2.47	
Agassiz Mountain	27	2.97	H	3.23	H
Swan River	s			1.89	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period (s) suppressed due to small numbers

Diabetes Care - Eye Exams

Definition

The percent of residents with diabetes, aged 19 and older, who had an eye exam in a given year, as defined by a visit to an ophthalmologist or an optometrist.

Note: Eye exam rates may be underestimated in Manitoba. Services provided by general practitioners and family physicians may not be included, as there is no specific tariff for this service. Furthermore, although all residents with diabetes qualify for annual eye exams without having to pay for the service, some may not indicate their diabetic status to the provider, in which case the provider may bill the patient directly. If that occurs, there would be no record of the visit in medical claims data.

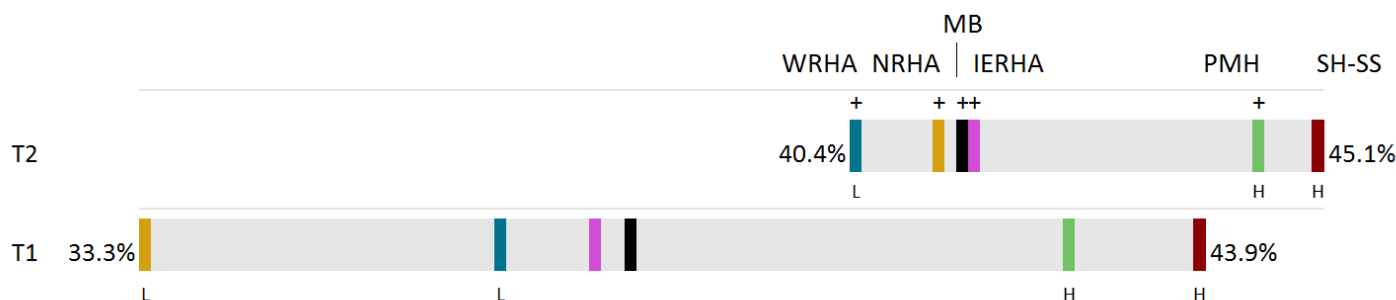
Why is this indicator important?

Diabetic eye problems (such as diabetic retinopathy, cataract and glaucoma) are common complications of diabetes and may lead to visual loss or even blindness. The Canadian Association of Optometrists recommends that individuals with diabetes should see their optometrists for an eye examination when they are first diagnosed and at minimum, once a year after. More frequent eye exams may be recommended²².

Provincial Key Findings

- The proportion of diabetic adults in Manitoba who had an eye examination increased significantly over time.
- The rate increased significantly in all regions except for Southern Health-Santé Sud.
- The rate is significantly higher in Southern Health-Santé Sud and Prairie Mountain Health, while it is significantly lower in Winnipeg RHA.
- Rates for residents of the Northern RHA may be under-estimated because the Manitoba Retinal Screening Vision Program affects these rates; services from nurse screeners are not documented into the medical claims system.

Figure 3.23 Diabetes Care: Eye Examinations by RHA, 2011/12 (T1) and 2016/17 (T2)
Crude percent of residents aged 19 years and older with diabetes who had an eye exam



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	NRHA	MB	IERHA	PMH	SH-SS
T2 COUNT	26,292	4,026	50,112	5,857	7,831	5,909
T2 RATE	40.4% L+	41.4% +	41.7% +	41.7% +	44.5% H+	45.1% H
T1 RATE	37.0% L	33.3% L	38.3%	37.9%	42.6% H	43.9% H

MCHP RHA Indicators Atlas 2019


Regional Key Findings

- The percentage of PMH diabetic residents who had an eye exam is significantly higher than the province and increased significantly over time.
- The South and North zones have significantly higher percentages than the Manitoba average and the North zone increased significantly over time.
- Three districts in the South zone have significantly higher percentages than the Manitoba average and Duck Mountain district increased significantly over time.
- Spruce Woods diabetic residents are 1.4 times more likely to have an eye exam than those from Downtown. The district disparity gap narrowed by seven percent between T1 and T2.

Table 3.26 Diabetes Care: Eye Examinations by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Crude percent of residents aged 19 years and older with diabetes who had an eye exam

	T2		T1		
	Count	Rate	Rate	Rate	
Manitoba	50,112	41.7	+	38.3	
PMH	7,831	44.5	H+	42.6	H
Brandon	2,107	42.2		41.3	H
South End	452	46.5		48.8	H
West End	605	44.3		43.2	
North Hill	320	42.5		42.8	
East End	287	40.8		40.8	
Downtown	443	36.8		32.6	
North	2,263	44.2	H+	40.6	
Swan River	293	45.7		39.7	
Duck Mountain	310	45.6	+	37.4	
Riding Mountain	270	45.2		40.3	
Dauphin	477	44.9		44.7	H
Agassiz Mountain	416	42.8		42.6	
Porcupine Mountain	497	42.6		38.0	
South	3,461	46.3	H	44.7	H
Spruce Woods	674	51.3	H	49.1	H
Turtle Mountain	536	48.6	H	46.6	H
Souris River	734	48.5	H	47.6	H
Whitemud	464	45.7		44.4	
Little Saskatchewan	575	44.3		42.8	
Assiniboia	478	38.8		37.0	

PMH District Disparity Ratio



T1 1.51x

T2 1.39x

CHANGE ↓0.11

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... GET BETTER TOGETHER

Get Better Together (GBT) is a free six-week workshop designed to help people develop a plan to deal with the daily challenges of living with an ongoing health concern or disability. GBT is offered in communities throughout PMH.

GBT is led by others living with chronic conditions. Topics discussed include healthy eating, physical activity, communicating with others and the healthcare team, dealing with fatigue, frustration and pain management, goal setting, problem solving and much more. This program is ideal for people dealing with any health condition such as arthritis, asthma, chronic obstructive pulmonary disease, diabetes, cancer, hepatitis, heart disease, high blood pressure, anxiety, depression, chronic back pain, stroke and fibromyalgia.

GBT program participants said:

“Get Better Together was an excellent program! I would recommend this program to anyone who is dealing with chronic health issues in any way. This program has helped me feel less defeated and has given me a resource to help me overcome some hurdles in my self-management.”

“It was also nice to have feedback and input by other people who were having similar issues as myself.”

“This program is great to connect with people all trying to improve their lives. We worked together as a team as well as individually, learning great coping skills and approaches to many problems that affect all our lives. You learn to troubleshoot and get positive input and new ideas and a new outlook.”

Based upon program evaluations, 95% of GBT participants report increased confidence in managing their chronic condition(s) after completing the course.

Injury

Injury Hospitalization - Intentional

Definition

The number of residents who stayed in hospital at least one day with a primary diagnosis of intentional injury (e.g. self-inflicted, assault) per 1,000 population, for a one-year time period.

Why is this indicator important?

This indicator helps us to understand the effectiveness of public awareness efforts and informs program planning and resource allocation.

Provincial Key Findings

- The provincial rate of hospitalization due to intentional injury decreased significantly over time.
- Southern Health-Santé Sud, Winnipeg RHA and Prairie Mountain Health rates decreased significantly over time.
- The Northern RHA rate is significantly higher than the provincial average, whilst Southern Health-Santé Sud is significantly lower.
- The income disparity is large in both urban and rural settings. In urban settings, the hospitalization rate due to intentional injuries amongst low income residents is more than six times higher than for the highest income residents. In rural settings, the hospitalization rate due to intentional injuries amongst low income residents is almost nine times that of the highest income residents.

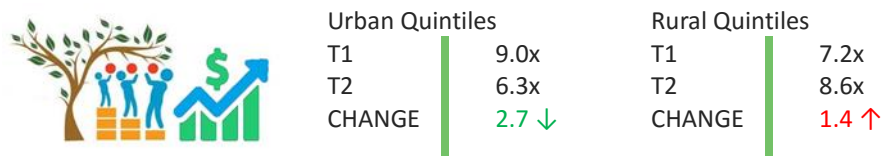
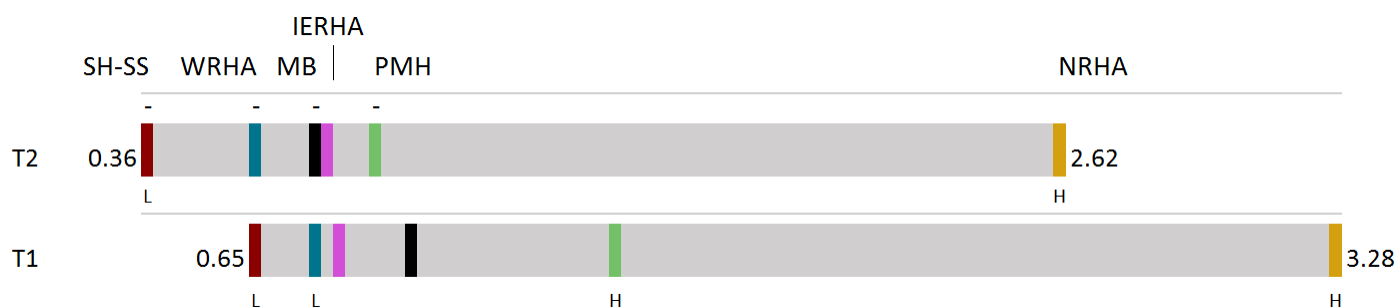


Figure 3.24 Intentional Injury Hospitalization Rates by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate per 1,000 residents



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	MB	IERHA	PMH	NRHA
T2 COUNT	66	480	1,015	94	146	200
T2 RATE	0.36 L-	0.65 -	0.80 -	0.82	0.94 -	2.62 H
T1 RATE	0.65 L	0.81 L	1.04	0.87	1.54 H	3.28 H

Regional Key Findings

- The rate of hospitalizations due to intentional injury in PMH is similar to the provincial average and decreased significantly over time.
- The rate of intentional injury hospitalization is significantly higher than the province in the North zone (1.67) and decreased significantly over time. The rates for both the Brandon zone (0.95) and South zone (0.73) are similar to the province.

Injury Hospitalization - Unintentional

Definition

The number of residents who stayed in hospital at least one day with a primary diagnosis of unintentional injury (e.g. falls, motor vehicle accidents, drowning) per 1,000 population, for a one-year time period.

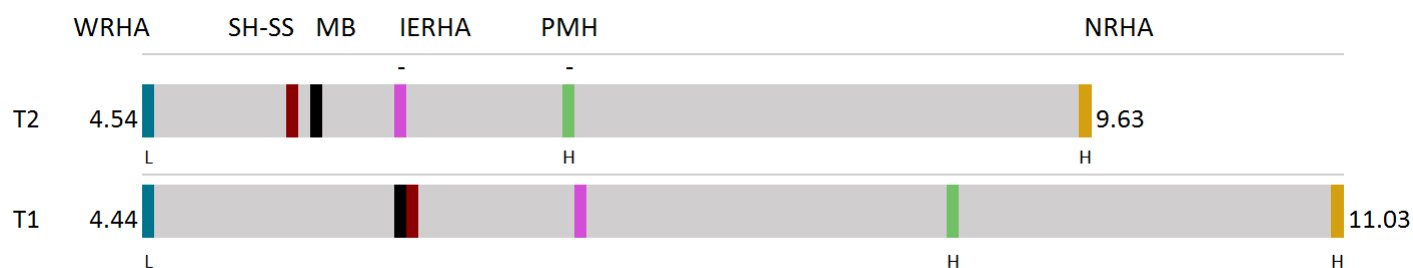
Why is this indicator important?

Measuring unintentional injury hospitalization rates helps to understand the adequacy and effectiveness of prevention efforts.

Provincial Key Findings

- The rate of hospitalizations due to unintentional injury in Manitoba decreased slightly.
- Prairie Mountain Health and Interlake-Eastern RHA rates decreased significantly over time.
- Rates in Prairie Mountain Health and Northern RHA are significantly higher than the province, whilst Winnipeg RHA is significantly lower.

Figure 3.25 Unintentional Injury Hospitalization Rates by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate per 1,000 residents



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	SH-SS	MB	IERHA	PMH	NRHA			
T2 COUNT	3,738	971	7,449	763	1,298	512			
T2 RATE	4.54	L	5.32	5.89	-	6.78	H-	9.63	H
T1 RATE	4.44	L	5.97	5.90	6.90	8.91	H	11.03	H

MHSAL IMA 2019


Regional Key Findings

- The rate of hospitalizations due to unintentional injury in PMH is significantly higher than the provincial average and decreased significantly over time.
- The rate of hospitalizations due to unintentional injury in the North zone is significantly higher than the provincial average and decreased significantly over time.
- Four districts within PMH have significantly higher rates of injury hospitalization than Manitoba although a number of districts have shown significant decreases over time.
- Residents of Porcupine Mountain are almost twice as likely to be hospitalized for an unintentional injury as residents of South End. The district disparity gap has narrowed by almost half from T1 to T2.

Table 3.27 Unintentional Injury Hospitalization Rates by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate per 1,000 residents

	T2		T1	
	Count	Rate	Rate	
Manitoba	7,449	5.42	5.90	
PMH	1,298	6.78	8.91	H
Brandon	349	6.16	7.20	
South End	49	4.97	4.55	
North Hill	38	5.03	5.74	
West End	101	5.79	6.52	
East End	60	7.15	8.70	
Downtown	101	8.13	10.53	H
North	380	8.09	12.83	H
Riding Mountain	38	6.01	9.83	H
Dauphin	76	6.34	9.11	H
Swan River	53	7.84	14.03	H
Duck Mountain	66	8.11	11.02	H
Agassiz Mountain	66	8.19	10.43	H
Porcupine Mountain	81	9.74	17.49	H
South	567	6.24	7.78	H
Spruce Woods	101	5.41	6.55	
Little Saskatchewan	87	5.65	6.68	
Whitemud	88	6.16	7.31	
Turtle Mountain	80	6.33	8.66	H
Souris River	115	6.94	8.35	H
Assessippi	96	7.28	8.99	H

PMH District Disparity Ratio



T1 3.84x

T2 1.96x

CHANGE ↓1.88

MHSAL IMA 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Causes of Injury Hospitalization

Definition

The most frequent causes of hospitalization due to injury.

Why is this indicator important?

This indicator contributes to an understanding of the adequacy and effectiveness of injury prevention efforts.

Provincial Key Findings

- The most frequent causes of injury hospitalizations in Manitoba were falls, suffocation, poisoning, struck by or against an object, and Motor Vehicle Accident (MVA) occupant.
- Falls were the most frequent cause of injury hospitalization in all RHAs.

Regional Key Findings

- The top five causes of injury hospitalizations in PMH and at the zone level are similar to the province.

Table 3.28 Most Frequent Causes of Injury Hospitalization by PMH and MB, 2016-2017
Percentage of total injury hospitalizations

Injury Causes	PMH		MB	
	Rate	Count	Rate	Count
Falls	52.2%	784	49.6%	4,406
Poisoning	11.3%	170	9.1%	812
Suffocation	7.7%	116	9.7%	859
Struck by or against an object	5.4%	81	5.6%	501
MVA (Occupant)	4.3%	65	4.4%	387

MHSAL IMA 2018

A CLOSER LOOK... FALLS – UNIVERSAL RISK FACTORS

Historically, Prairie Mountain Health had approached falls prevention strategies through a risk assessment model where a client's risk for falling was assessed using a validated tool. High risk clients were identified by a symbol sticker to alert health care providers of the potential risk for falling. Despite these efforts, falls remained the leading cause of injury across the region.

In 2016, the Falls Steering team was reconfigured to include members from a number of health disciplines and represent the continuum of care including community, acute care and long term care. The team explored a new approach to falls prevention that would consider all clients at risk for a fall and focus on tailoring interventions to the individual client. The intent of a universal falls approach is to implement a minimum standard for all clients, similar to the universal infection control routine practices model. Time that would have been spent on screening for risk is redirected to implementing prevention interventions with the aim to reduce falls.

Universal risk factors are not restricted to environmental factors but include:

Impaired vision and hearing	Medication/alcohol/drug misuse
Impaired cognition	Inadequate nutrition and hydration
Medication effects	Inappropriate footwear/clothing
Vitamin D deficiency	Lack of exercise
Gait and Balance deficits	Social isolation
Incontinence	Poor building design or maintenance
Foot conditions	

Evidence informed prevention interventions were developed for community and institutional settings. The SAFE slogan addresses Safe environment, Assist with mobility, Fall risk reduction and Engage patient/resident and family and is recommended for all inpatients and residents. Community universal falls interventions include MOVE your body, IMPROVE your health and REMOVE hazards and obstacles and is recommended for those in the community.

Hip Fracture Hospitalization Rate

Definition

The rate of individuals admitted to an acute care hospital with a hip fracture, per 100,000 population, aged 65 and older, for a five-year time period.

Why is this indicator important?

Hip fractures are associated with high morbidity and mortality rates in older adults. Individuals with hip fractures are at significantly increased risk for further fractures.

Provincial Key Findings

- Hospitalization due to hip fracture in Manitoba decreased significantly over time.
- The rates decreased significantly in Winnipeg RHA and Interlake-Eastern RHA.
- Northern RHA rate is significantly higher than the provincial average.

Figure 3.26 Hip Fracture Hospitalization Rate by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age and sex adjusted rate per 100,000 residents, aged 65 years and older



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	IERHA		SH-SS		PMH		WRHA		MB		NRHA	
T2 COUNT	478		643		927		3,295		5,637		159	
T2 RATE	578.5	-	584.0		612.3		621.6	-	627.9	-	1002.2	H
T1 RATE	673.0		618.5		664.1		667.9		674.0		971.6	H

MHSAL IMA 2018


Regional Key Findings

- The regional, zone and district rates of hospitalizations due to hip fracture in PMH is similar to the provincial average.
- The Turtle Mountain district rate decreased significantly over time.
- Downtown residents are twice as likely to be hospitalized as a result of a hip fracture as residents of South End. The district disparity gap widened by 14 percent between T1 and T2.

Table 3.29 Hip Fracture Hospitalization Rate, PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Age and sex adjusted rate per 100,000 residents, age 65 years and older

	T2		T1	
	Count	Rate	Rate	
Manitoba	5,637	627.9	- 674.0	
Brandon	238	613.0	686.3	
South End	22	369.6	456.5	
North Hill	20	471.0	526.4	
West End	72	617.3	735.3	
East End	52	702.7	743.1	
Downtown	72	754.1	787.5	
PMH	927	612.3	664.1	
North	248	600.7	588.1	
Riding Mountain	21	448.9	471.5	
Swan River	37	552.1	549.7	
Dauphin	66	568.0	588.8	
Agassiz Mountain	33	579.1	679.8	
Porcupine Mountain	37	719.6	772.7	
Duck Mountain	54	725.8	504.6	
South	441	618.8	696.7	
Little Saskatchewan	65	529.8	520.5	
Turtle Mountain	58	564.6	- 808.6	
Assessippi	66	608.8	757.4	
Souris River	83	618.2	687.5	
Spruce Woods	92	668.8	621.2	
Whitemud	77	720.1	818.6	

PMH District Disparity Ratio



T1 1.79x

T2 2.04x

CHANGE ↑0.25

MHSAL IMA 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Mental Illness

Mood and Anxiety Disorders

Definition

The percent of residents (aged 18 and older) diagnosed with mood and anxiety disorders, for a five-year time period.

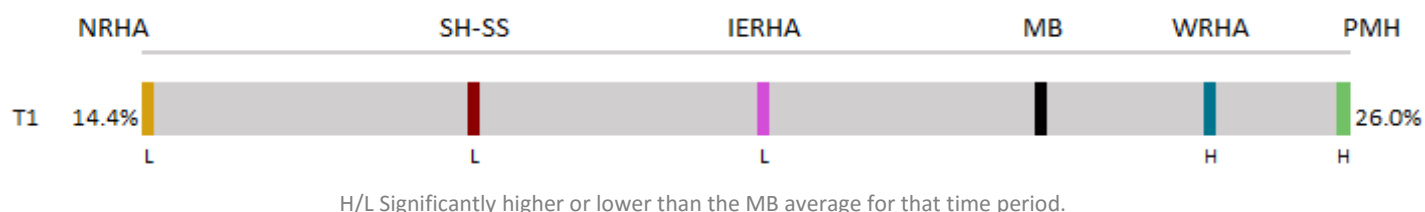
Why is this indicator important?

Mood and anxiety disorders frequently coexist with other chronic diseases and/or conditions. For example, the early onset of depressive and anxiety disorders are associated with an increased risk of developing heart disease, asthma, arthritis, chronic back pain and chronic headaches in adults²³.

Provincial Key Findings

- More than 23% of Manitoba adults live with a mood and anxiety disorder.
- The rates in Prairie Mountain Health and Winnipeg RHA are significantly higher than the provincial average, whilst the rates in Southern Health-Santé Sud, Interlake-Eastern RHA and Northern RHA are significantly lower.
- A higher prevalence of mood and anxiety disorders was found in urban areas compared to rural areas.

Figure 3.27 Prevalence of Mood and Anxiety Disorders by RHA, 2010/11-2014/15 (T1)
Age and sex adjusted percent, aged 18 and older, diagnosed with disorder in five-year time period



	NRHA		SH-SS		IERHA		MB		WRHA		PMH	
T1 COUNT	7,148		23,814		20,287		228,982		142,171		34,287	
T1 RATE	14.4%	L	17.7%	L	20.4%	L	23.2%		24.7%	H	26.0%	H

MCHP Mental Illness Among Adult Manitobans 2018

Regional Key Findings

- The prevalence of mood and anxiety disorders amongst PMH adults is significantly higher than the provincial average and the highest in the province. More than 34,000 residents live with a mood and anxiety disorder.
- All five districts in the Brandon zone and three districts in the North zone have significantly higher prevalence than the provincial average, whilst six districts have significantly lower prevalence.
- Downtown residents are two and a half times more likely to live with a mood and anxiety disorder than residents of Asessippi.

Table 3.30 Prevalence of Mood and Anxiety Disorders by PMH District, 2010/11-2014/15 (T1)
Age and sex adjusted percent, aged 18 and older, diagnosed with disorder in five-year time period

	T1		
	Count	Rate	
Manitoba	228,982	23.2	
PMH	34,287	26.0	H
Brandon			
West End	3,761	30.4	H
South End	2,562	32.4	H
East End	1,859	33.7	H
North Hill	2,070	34.9	H
Downtown	3,600	39.7	H
North			
Duck Mountain	873	19.3	L
Agassiz Mountain	1,149	21.1	L
Riding Mountain	1,078	25.1	
Porcupine Mountain	1,910	27.5	H
Swan River	1,291	30.4	H
Dauphin	2,473	34.7	H
South			
Asessippi	1,563	15.7	L
Whitemud	1,637	18.1	L
Spruce Woods	2,305	18.9	L
Souris River	2,190	19.3	L
Turtle Mountain	1,830	22.6	
Little Saskatchewan	2,136	23.1	

PMH District Disparity Ratio

T1 2.54 x

H/L Significantly higher or lower than the MB average for that time period. MCHP Mental Illness Among Adult Manitobans 2018

A CLOSER LOOK...RURAL MENTAL HEALTH

In August 2019, Brandon University established a new Centre for Critical Studies of Rural Mental Health housed in the Faculty of Health Studies. The goals of the Centre are to:

- accelerate the already growing number of studies on rural and remote mental health and wellness,
- link research results to people who can use them, and
- support education and community engagement in relation to mental health.

The Centre will serve as a point of contact and network for academics, researchers, students, community members, professionals, educators and the broad range of people who live with and support people living with mental health issues.

Brandon University is already a leader in promoting mental health through the Bachelor of Science in Psychiatric Nursing and the Master of Psychiatric Nursing programs, which is the only graduate Psychiatric Nursing program in Canada. The new Centre will build on those strengths and support cross-disciplinary research that explores rural mental health from a multitude of angles.

Dementia Prevalence

Definition

The percent of residents, aged 55 years and older, diagnosed with dementia for a five-year time period.

Why is this indicator important?

Dementia refers to symptoms and signs associated with a progressive deterioration of cognitive functions that affects many Canadians' daily activities²⁴. Prevalence estimates are useful to better understand the burden of this disease in the community.

Provincial Key Findings

- More than ten percent of residents aged 55 and older live with dementia in Manitoba.
- The rates of dementia in Prairie Mountain Health and Interlake-Eastern RHA are significantly lower than the provincial average.

Figure 3.28 Prevalence of Dementia by RHA, 2010/11–2014/15 (T1)

Age and sex adjusted percent, aged 55 and older, diagnosed with disorder in five-year time period



H/L Significantly higher or lower than the MB average for that time period.

	PMH	IERHA	NRHA	SH-SS	MB	WRHA
T1 COUNT	5,073	2,785	565	4,191	34,912	20,952
T1 RATE	8.8% L	8.9% L	8.9%	10.0%	10.3%	10.7%

MCHP Mental Illness Among Adult Manitobans 2018


Regional Key Findings

- The prevalence of dementia in PMH is significantly lower than the provincial average.
- Eight districts have significantly lower prevalence than the Manitoba average, whilst Swan River district has a significantly higher prevalence.
- Swan River residents are 2.6 times more likely to live with dementia than residents of Riding Mountain.

Table 3.31 Prevalence of Dementia by PMH District, 2010/11-2014/15 (T1)
Age and sex adjusted percent, aged 55 and older, diagnosed with disorder in five-year time period

	T1		
	Count	Rate	
Manitoba	34,912	10.3	
PMH	5,073	8.8	L
Brandon			
North Hill	104	6.2	L
South End	151	6.6	L
West End	438	9.9	
East End	260	10.2	
Downtown	379	11.8	
North			
Riding Mountain	112	5.7	L
Dauphin	265	6.5	L
Duck Mountain	243	8.7	
Agassiz Mountain	245	11.1	
Porcupine Mountain	237	11.7	
Swan River	337	14.8	H
South			
Little Saskatchewan	226	5.9	L
Asessippi	367	7.2	L
Souris River	421	8.1	L
Spruce Woods	444	8.5	L
Whitemud	374	9.5	
Turtle Mountain	470	12.1	

PMH District Disparity Ratio



T1 2.58 x

H/L Significantly higher or lower than the MB average for that time period. MCHP Mental Illness Among Adult Manitobans 2018

Antidepressant Prescription Follow-Up

Definition

The percent of residents with a physician diagnosis of depression, plus a new prescription for antidepressants filled within two weeks, and who had at least the recommended follow-up of three subsequent physician visits within four months, for a five-year time period.

Why is this indicator important?

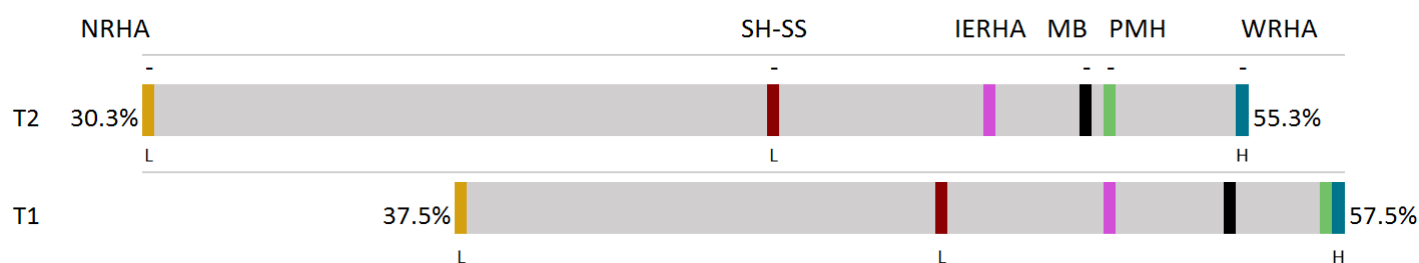
Regular follow-up after initial diagnosis of depression is essential to track patient response to antidepressant medication and modify treatment if necessary. Antidepressants may not have a clinical effect for some time after initiation of therapy and patients with major depression are at risk for suicide. Antidepressant prescription follow-up is a quality of care indicator and important part of a treatment regime.

Provincial Key Findings

- The rate of antidepressant prescription follow-up in Manitoba decreased significantly over time.
- The rates in Winnipeg RHA, Prairie Mountain Health, Northern RHA and Southern Health-Santé Sud decreased significantly over time.
- Winnipeg RHA rate is significantly higher than the provincial average, whilst the rates in Southern Health-Santé Sud and Northern RHA are significantly lower.

Note: The Northern RHA rate should be interpreted with caution as many residents receive primary care from nurses in local nursing stations. This care is not captured in the medical claims data system and is not included in this indicator.

Figure 3.29 Antidepressant Prescription Follow-up by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Crude percent of new depression patients who received at least three physician visits in four months



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA	SH-SS	IERHA	MB	PMH	WRHA
T2 COUNT	350	1,676	1,413	13,717	2,140	8,092
T2 RATE	30.3% L-	44.7% L-	49.7%	51.7% -	52.4% -	55.3% H-
T1 RATE	37.5% L	48.5% L	52.3%	54.9%	57.2%	57.5% H



MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The crude percent of new depression patients in PMH who receive three or more physician visits in four months is similar to the provincial average and decreased significantly over time.
- The Brandon zone has significantly higher rates than the Manitoba average and the South zone decreased significantly over time.
- East End new depression patients are 1.6 times more likely to receive three or more physician visits within four months than new depression patients in Agassiz Mountain. The district disparity gap widened by almost nine percent between T1 and T2.

Table 3.32 Antidepressant Prescription Follow-up, Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Crude percent of new depression patients who received at least three physician visits in four months

	T2		T1	
	Count	Rate	Rate	
Manitoba	13,717	51.7	-	54.9
Brandon	900	59.8	H	64.4
East End	141	61.8		63.3
South End	169	61.5		64.6
Downtown	236	60.7		64.6
West End	241	59.2		63.3
North Hill	113	54.6		66.9
PMH	2,140	52.4	-	57.2
North	375	46.2		52.4
Dauphin	139	51.1		53.5
Duck Mountain	58	50.4		59.5
Swan River	32	47.1		45.8
Porcupine Mountain	55	44.0		55.7
Riding Mountain	48	40.7		50.0
Agassiz Mountain	43	38.1		44.6
South	865	49.0	-	53.8
Turtle Mountain	154	55.6		54.3
Souris River	183	51.8		53.1
Little Saskatchewan	132	49.1		59.5
Spruce Woods	203	49.0		53.2
Whitemud	121	44.2		50.8
Asessippi	72	40.4		51.2

		T1	1.50x
		T2	1.63x
		CHANGE	↑0.13

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Suicide Rates

Definition

The average annual rate for which suicide was listed as the cause of death, per 1,000 population, aged 10 years and older, for a five-year time period.

Why is this indicator important?

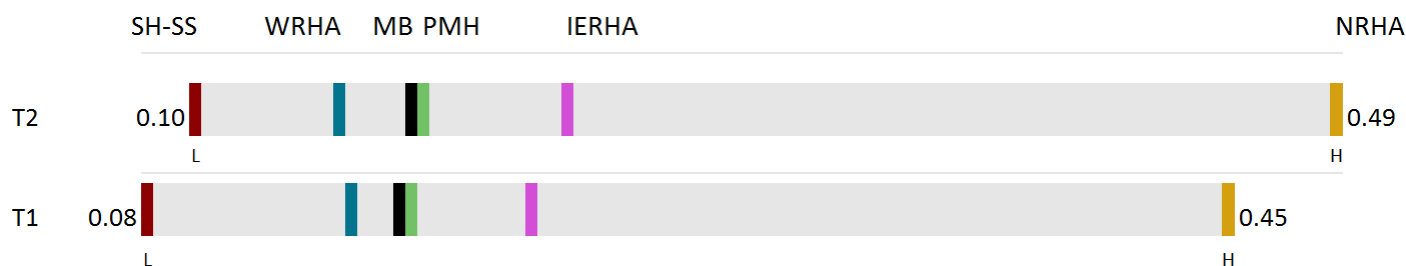
High rates of suicide are an important indication of the mental health of communities and underlying trauma. Suicide rates are one indication of the effectiveness of mental health prevention and promotion initiatives.

Provincial Key Findings

- On average nearly 1,000 suicides occur in Manitoba every year.
- The suicide rates for all regions have not significantly changed over time.
- The Northern RHA rate of suicide is significantly higher than the provincial average, whilst the Southern Health-Santé Sud rate is significantly lower.
- In urban settings, the suicide rate amongst low income residents is 3.8 times higher than that of the highest income residents. In rural settings, the suicide rate amongst low income residents is 2.7 times higher than the highest income residents.



Figure 3.30 Average Annual Suicide Rates by RHA, 2007-2011 (T1) and 2012-2016 (T2)
Age and sex adjusted rate per 1,000, aged 10 years and older



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS	WRHA	MB	PMH	IERHA	NRHA
T2 COUNT	83	503	993	136	118	139
T2 RATE	0.10 L	0.15	0.17	0.18	0.23	0.49 H
T1 RATE	0.08 L	0.15	0.17	0.17	0.21	0.45 H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The average annual suicide rate for PMH is similar to the provincial average.

Musculoskeletal

Arthritis Prevalence

Definition

The percent of residents, aged 19 years and older, diagnosed with arthritis (rheumatoid or osteoarthritis), for a two-year time period.

Why is this indicator important?

Arthritis is a chronic condition that seriously impacts quality of life, functional independence, and physical ability of many Manitobans.

Provincial Key Findings

- The prevalence of arthritis in Manitoba did not significantly change over time.
- Prevalence in Interlake-Eastern RHA decreased significantly over time.
- Arthritis prevalence in Northern RHA and Prairie Mountain Health is significantly higher than the provincial average, whilst the rate in Southern Health-Santé Sud is significantly lower.
- In urban settings, arthritis prevalence amongst low income residents is 1.2 times higher than that of the highest income residents. In rural settings, arthritis prevalence amongst low income residents is 1.1 times higher than the highest income residents.

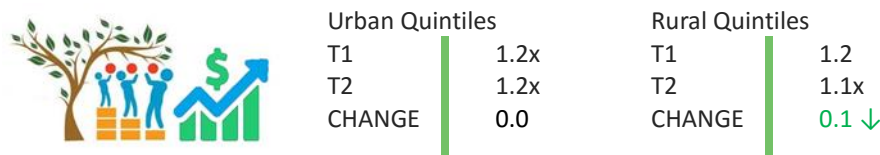
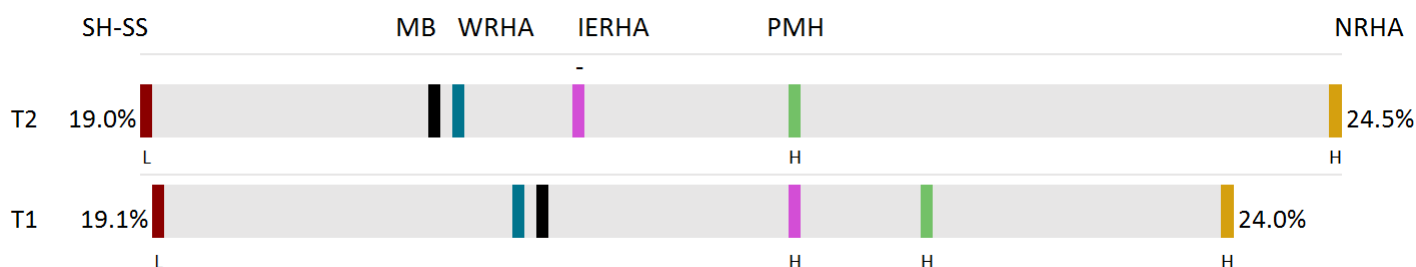


Figure 3.31 Prevalence of Arthritis by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age and sex adjusted percent of residents aged 19 years and older diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS		MB		WRHA		IERHA		PMH		NRHA	
T2 COUNT	26,121		213,054		124,475		21,994		29,921		10,304	
T2 RATE	19.0%	L	20.4%		20.4%		21.0%	-	22.0%	H	24.5%	H
T1 RATE	19.1%	L	20.9%		20.8%		22.0%	H	22.6%	H	24.0%	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The prevalence of arthritis in PMH is significantly higher than the provincial average. Almost 30,000 residents live with arthritis.
- The Brandon and North zones have significantly higher prevalence than the Manitoba average, whilst the South zone has significantly lower prevalence. The prevalence of arthritis decreased significantly over time in both the North and South zones.
- All five districts in the Brandon zone, and all but one district in the North zone, have significantly higher prevalence of arthritis. Two districts in the South zone have significantly lower prevalence. Three districts decreased significantly over time.
- Downtown residents are 1.6 times more likely to live with arthritis than residents of Whitemud. The district disparity gap narrowed by five percent between T1 and T2.

Table 3.33 Prevalence of Arthritis by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age and sex adjusted percent of residents aged 19 years and older diagnosed with disorder

	T2		T1	
	Count	Rate	Rate	
Manitoba	213,054	20.4	20.9	
PMH	29,921	22.0	22.6	H
Brandon	9,527	24.1	23.5	H
West End	2,656	22.7	21.7	
South End	1,786	23.3	22.6	
North Hill	1,389	23.4	24.3	H
East End	1,300	24.4	23.4	H
Downtown	2,396	27.8	27.2	H
North	8,510	25.2	26.8	H-
Swan River	1,011	22.1	26.0	-
Duck Mountain	1,167	23.5	24.0	H
Riding Mountain	1,105	24.7	25.6	H
Agassiz Mountain	1,407	25.3	25.0	H
Porcupine Mountain	1,685	27.2	31.7	H-
Dauphin	2,135	27.3	26.9	H
South	11,884	19.2	20.1	L-
Whitemud	1,677	17.6	20.7	L-
Souris River	2,131	18.8	19.0	L
Little Saskatchewan	1,976	19.2	19.9	
Spruce Woods	2,344	19.2	19.0	L
Turtle Mountain	1,704	20.4	21.1	
Asessippi	2,052	21.5	21.8	

PMH District Disparity Ratio

T1	1.67x
T2	1.58x
CHANGE	↓0.09

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Osteoporosis Prevalence

Definition

The percent of residents, aged 50 years and older, diagnosed with osteoporosis, for a one-year time period.

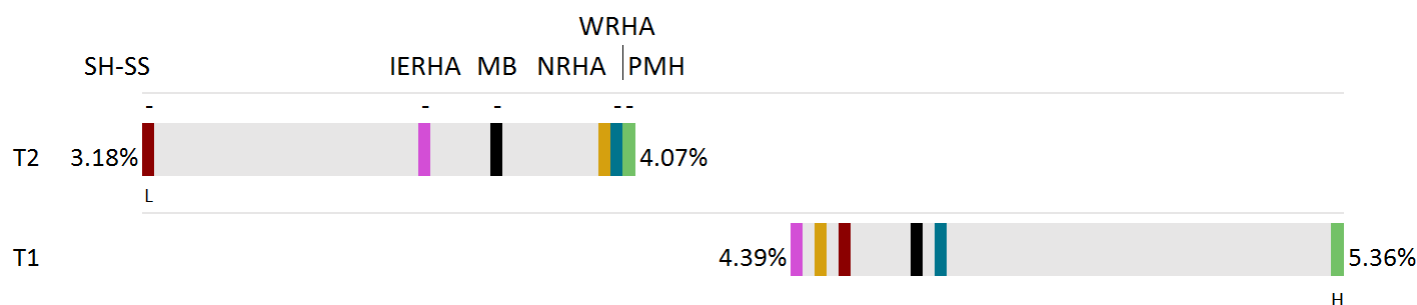
Why is this indicator important?

Osteoporosis is a disease that leads to a reduction in bone density and causes bones to become weak and more likely to fracture. The most common injuries associated with osteoporosis are fractures of the wrist, spine and hip. Osteoporosis prevalence provides valuable insight for planning patient education regarding preventive measures and treatment options to reduce fractures and hospitalizations, and improve quality of life.

Provincial Key Findings

- The percent of Manitoba residents living with osteoporosis decreased significantly over time.
- Prevalence decreased significantly in all regions except for Northern RHA.
- Osteoporosis prevalence in Southern Health-Santé Sud is significantly lower than the provincial average.

Figure 3.32 Prevalence of Osteoporosis by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents aged 50 years and older diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	SH-SS		IERHA		MB		NRHA		WRHA		PMH	
T2 COUNT	1,635		1,626		17,104		450		10,721		2,600	
T2 RATE	3.18%	L-	3.70%	-	3.83%	-	4.03%		4.05%	-	4.07%	-
T1 RATE	4.48%		4.39%		4.60%		4.42%		4.65%		5.36%	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- Prevalence of osteoporosis in PMH is similar to the provincial average and decreased significantly over time.
- The Brandon zone has significantly higher prevalence than the Manitoba average. The South and Brandon zones decreased significantly over time.
- Only the North Hill district has significantly higher prevalence than the Manitoba average. Seven districts decreased significantly over time.
- North Hill residents are twice as likely to live with osteoporosis as residents of Whitemud. The district disparity gap narrowed by 18 percent between T1 and T2.

Table 3.34 Prevalence of Osteoporosis by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents aged 50 years and older diagnosed with disorder

	T2		T1		
	Count	Rate	Rate	Rate	
Manitoba	17,104	3.83	-	4.60	
PMH	2,600	4.07	-	5.36	H
Brandon	874	5.10	H-	7.17	H
East End	115	4.31	-	7.69	H
West End	255	4.90	-	7.01	H
Downtown	190	5.52	-	7.61	H
South End	166	5.76		7.15	H
North Hill	148	6.06	H	7.62	H
North	651	3.86		4.23	
Agassiz Mountain	88	3.42		3.93	
Dauphin	154	3.53		3.21	
Riding Mountain	78	3.91		4.38	
Porcupine Mountain	95	3.99		3.90	
Swan River	104	4.32		4.17	
Duck Mountain	132	4.81	-	6.95	H
South	1,075	3.71	-	5.25	
Whitemud	138	3.09	-	5.45	
Turtle Mountain	139	3.52	-	5.79	
Asessippi	173	3.74		4.54	
Spruce Woods	207	3.76	-	5.64	
Souris River	219	4.07		5.38	
Little Saskatchewan	199	4.30		5.40	

PMH District Disparity Ratio

T1	2.40x
T2	1.96x
CHANGE	↓0.43

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... MOBILIZATION OF VULNERABLE ELDERLY (MOVE)

The Mobilization of Vulnerable Elders (MOVE) initiative is underway on the Medicine floor of the Dauphin Regional Health Centre. It is an evidence-based initiative rolled out in other jurisdictions across Canada that promotes early mobilization for seniors admitted to hospital, especially those who are frail. Vulnerable patients who are mobilized within 24 hours of admission tend to have decreased length of stay, less delirium, maintain/gain more independence, and experience less depression.

There are three key components of the MOVE initiative:

- assess mobility within the first 24 hours upon admission;
- mobilize patients at least 3 times a day; and
- a progressive, scaled mobilization approach (to increase movement a bit each day).

Staff, patients and families are encouraged to work together to achieve positive health outcomes which are being monitored throughout the initiative. The MOVE initiative will be spread to other facilities.

Renal

Chronic Kidney Disease Prevalence

Definition

The percent of residents, aged 18 years and older, diagnosed with chronic kidney disease (CKD).

Why is this indicator important?

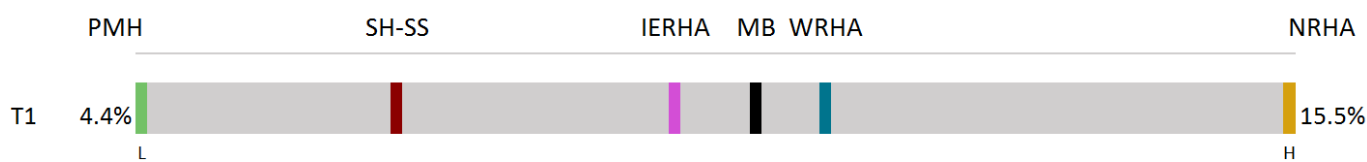
Chronic kidney disease often starts slowly and develops without symptoms over a number of years, sometimes leading to serious damage before diagnosis. Understanding how many residents live with chronic kidney disease and where they live helps with program planning and resource allocation. Appropriate care can slow the progression of the disease, reduce complications and enhance quality of life.

Provincial Key Findings

- The prevalence of adult CKD in Manitoba using laboratory data was 10.4%.
- Prevalence amongst residents aged sixty five years and older was more than seven times higher than residents aged 18-44. The prevalence was 1.5 times higher in females than in males.
- There are regional differences in the prevalence of CKD, which follow the general pattern of health status by region.
- The prevalence of CKD in the Northern RHA was significantly higher than the provincial average. This could be attributed both to the lower health status of these populations and to the smaller number of people living in these areas.
- In urban settings, CKD amongst low income residents is 1.6 times higher than that of the highest income residents.

Figure 3.33 Prevalence of Chronic Kidney Disease by RHA, March 31, 2012

Age and sex adjusted percent of residents, aged 18 years and older, lab data only



H/L Significantly higher or lower than the MB average for that time period.

	PMH	SH-SS	IERHA	MB	WRHA	NRHA
T1 COUNT	730	1,964	3,262	37,534	30,084	1,491
T1 RATE	4.4% L	6.9%	9.6%	10.4%	11.0%	15.5% H

MCHP Care of Manitobans Living with Chronic Kidney Disease 2015

Regional Key Findings

- Early stages of CKD can only be diagnosed with lab tests. Data from Westman Laboratories were not included in the report which significantly underestimates the prevalence in PMH.

End Stage Kidney Disease

Definition

The number of residents with End Stage Kidney Disease (ESKD) per 1,000 population. ESKD is based on a patient's use of renal replacement therapies (dialysis or kidney transplant).

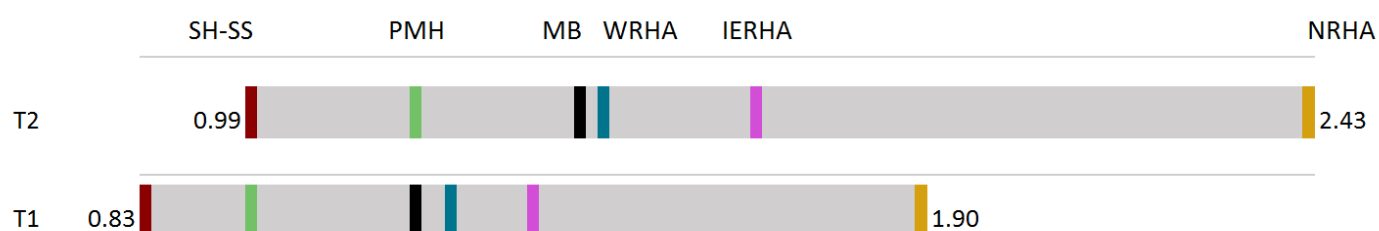
Why is this indicator important?

ESKD is increasing in Canada, and Manitoba has the highest rate of kidney disease in the country. ESKD is a serious chronic condition because of associated high mortality, negative impact on quality of life and high cost of kidney transplants. Diabetes is the most common cause of ESKD, so it is important to address comorbidities in prevention education, treatment options and resource allocation.

Provincial Key Findings

- There were over 1,800 residents living with ESKD in Manitoba in 2012.
- ESKD prevalence has increased significantly in all regions over time from 2004 to 2012.
- In Manitoba, in 2012, 1,853 adults living with ESKD had renal replacement therapy (1.91 per 1,000 residents). These therapies included: 1,245 had dialysis (1.28 per 1,000 residents), 608 adults had kidney transplant (0.63 per 1,000 residents).
- The crude rates of renal replacement therapy for adults living with ESKD are higher for residents aged 65 years and older and for males.
- In urban settings, ESKD amongst low income residents is 2.6 times higher than that of the highest income residents. In rural settings, ESKD amongst low income residents is 2.8 times higher than the highest income residents.

Figure 3.34 End Stage Kidney Disease Prevalence by RHA, 2007 Q2 (T1) and 2012 Q2 (T2)
Rate per 1,000 residents



	SH-SS	PMH	MB	WRHA	IERHA	NRHA
T2 COUNT	180	200	1,833	1,066	206	181
T2 RATE	0.99	1.21	1.45	1.47	1.68	2.43
T1 RATE	0.83	1.00	1.22	1.26	1.37	1.90

MCHP Care of Manitobans Living with Chronic Kidney Disease 2015

Regional Key Findings

- ESKD prevalence has increased significantly in PMH over time from 2004 to 2012. ESKD prevalence was significantly lower than the provincial rate on March 31st, 2012.
- In PMH, in 2012, 193 adults living with ESKD had renal replacement therapy (1.43 per 1,000 residents which is significantly lower than the Manitoba average). These therapies included: 128 had dialysis (0.92 per 1,000 residents which is significantly lower than the Manitoba average), 65 adults had kidney transplant (0.51 per 1,000 residents).

A CLOSER LOOK... MANITOBA RENAL PROGRAM

The Manitoba Renal Program is a complex service delivery model with four Kidney Health Clinics and 16 Local Renal Health Centres throughout the province. The provincial program has three goals:

- To deliver high quality health care services to Manitobans
- To improve early diagnosis and treatment of chronic kidney disease
- To promote prevention of chronic kidney disease through education

In Prairie Mountain Health, a Kidney Health Clinic is located at the Brandon Regional Health Centre and staff oversee the hemodialysis, peritoneal dialysis and home hemodialysis programs.

Dialysis services are also delivered by PMH in three Local Renal Health Centres (dialysis units) located in Dauphin, Swan River and Russell which are all part of the Manitoba Renal Program. Health Sciences Centre in Winnipeg provides oversight of clients utilizing the Local Renal Health Centres.



Observed and Projected End Stage Kidney Disease

Definition

Observed (2004-2012 (Q2)) and projected (2012 (Q3)-2024) number of residents living with ESKD, by treatment type.

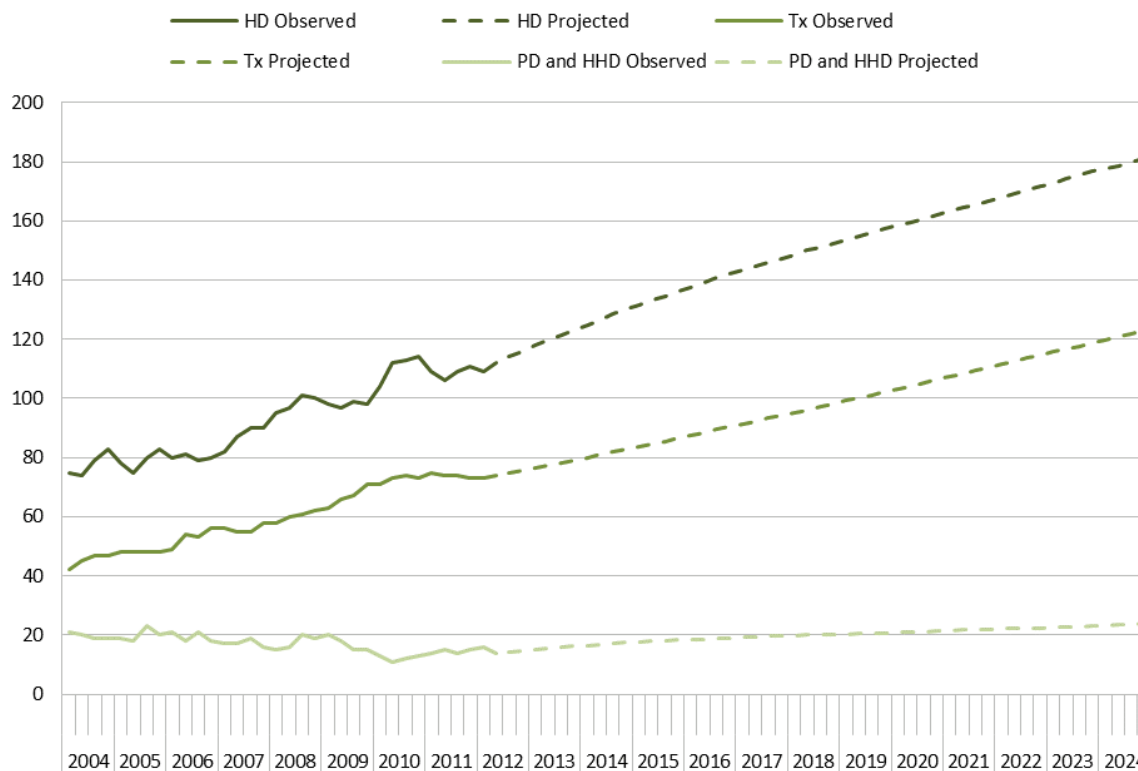
Why is this indicator important?

Manitoba has the highest prevalence of ESKD in Canada and current projections predict a significant increase by 2024. ESKD projections help to plan prevention initiatives, deliver coordinated health care services and allocate appropriate resources to meet the service demand.

Provincial Key Findings

- The number of Manitobans living with ESKD is projected to increase by 68% by 2024 and almost 3,100 residents will require renal replacement therapy (RRT).
- For the province overall, a 4.3% annual increase is predicted in the number of residents receiving centre-based hemodialysis, a 3.2% annual increase in home-based dialysis (peritoneal and home hemodialysis), and a 4.5% annual increase in kidney transplants.
- The most significant increases are projected in Southern Health-Santé Sud and Northern RHA. The Northern RHA will continue to have the highest number of people needing RRT per capita in Manitoba.
- Approximately half of all ESKD patients in Manitoba are also living with diabetes, and by 2024 the number of residents who are on hemodialysis and live with diabetes is projected to increase by 89%. The requirement for hemodialysis amongst residents without diabetes will see a more modest increase of 35%.
- The number of residents living with ESKD aged 65 years and older on hemodialysis is projected to increase by 89% by 2024 with more modest increases in the younger population.

Figure 3.35 Observed and Projected Number of Patients with ESKD by Treatment Type in PMH, 2004-2024



MCHP Care of Manitobans Living with Chronic Kidney Disease 2015

Regional Key Findings

- The number of residents in PMH living with ESKD is projected to increase by 64% by 2024 and approximately 328 residents will require renal replacement therapy (RRT).
- Kidney transplants are expected to increase by 66% from 74 in 2012 to 123 by 2024.
- Home based dialysis (peritoneal and home dialysis) are expected to increase by 71% from 14 residents in 2012 to 24 residents in 2024. PMH has proportionately lower use of home-based dialysis compared to other regions (7% of all RRT patients in 2012 compared to 14% in Manitoba).

A CLOSER LOOK... BRANDON HEMODIALYSIS UNIT

The Brandon Regional Health Centre Hemodialysis Unit recently expanded capacity to meet the growing needs of patients who require hemodialysis. The hemodialysis unit optimized available resources by offering treatment on Sundays, when the unit was not in use. The initiative allowed the existing dialysis unit to add an additional 18 patients into care. The unit has since reached this capacity marker and are now looking to find additional space as the unit has maximized existing infrastructure. Renal disease is an increasing concern in the province and the cost associated with building new treatment space can be lessened by using the Sunday model.

Respiratory

Total Respiratory Morbidity (TRM) Prevalence

Definition

The percent of residents diagnosed with a respiratory disease (asthma, chronic or acute bronchitis, emphysema, or chronic airway obstruction).

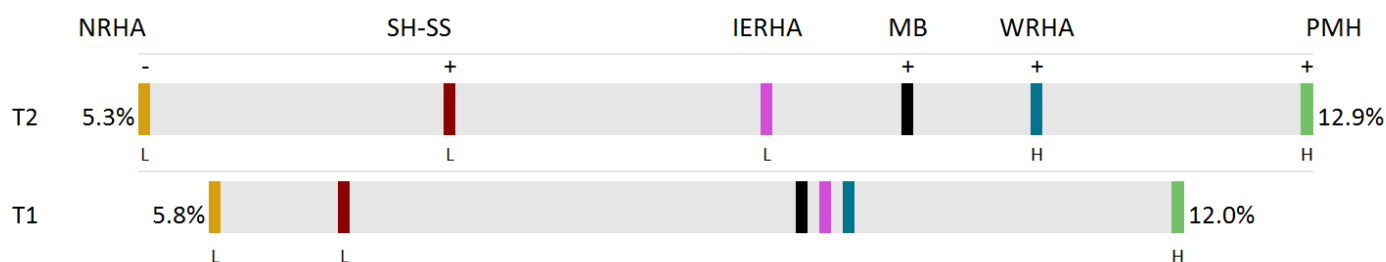
Why is this indicator important?

TRM is a good overall measure of the proportion of the population that experiences breathing issues. Understanding prevalence helps to plan prevention efforts, coordinate services between community and acute care, and provide effective supports to enhance quality of life.

Provincial Key Findings

- TRM prevalence increased significantly in Manitoba.
- Prevalence in Southern Health-Santé Sud, Winnipeg RHA, and Prairie Mountain Health increased significantly, whilst Northern RHA decreased significantly.
- The rates in Winnipeg RHA and Prairie Mountain Health are significantly higher than the province; the rates in Northern RHA, Southern Health-Santé Sud and Interlake-Eastern RHA are significantly lower.
- In urban settings, TRM amongst low income residents is 1.4 times higher than that of the highest income residents.

Figure 3.36 Prevalence of Total Respiratory Morbidity by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents diagnosed with disorder



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		SH-SS		IERHA		MB		WRHA		PMH	
T2 COUNT	3,829		14,679		12,632		143,607		88,789		23,371	
T2 RATE	5.3%	L-	7.3%	L+	9.4%	L	10.3%	+	11.1%	H+	12.9%	H+
T1 RATE	5.8%	L	6.6%	L	9.8%		9.6%		9.9%		12.0%	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The prevalence of TRM in PMH is significantly higher than the provincial average, increased significantly over time and remains the highest in the province. More than 23,000 residents live with respiratory disease.
- The Brandon zone has a significantly higher rate than the Manitoba average and is driving the rates for PMH, whilst the North zone has a significantly lower and decreasing rate. The rates in both Brandon and South zones increased significantly over time.
- Seven districts (including all districts of the Brandon zone), have significantly higher prevalence of TRM, whilst four districts have significantly lower prevalence. The rates increased significantly over time in eight districts and decreased significantly in five districts.
- Downtown residents are over two and a half times more likely to be diagnosed with a respiratory condition than residents of Agassiz Mountain. The district disparity gap widened by 10 percent between T1 and T2.

Table 3.35 Prevalence of Total Respiratory Morbidity by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents diagnosed with disorder

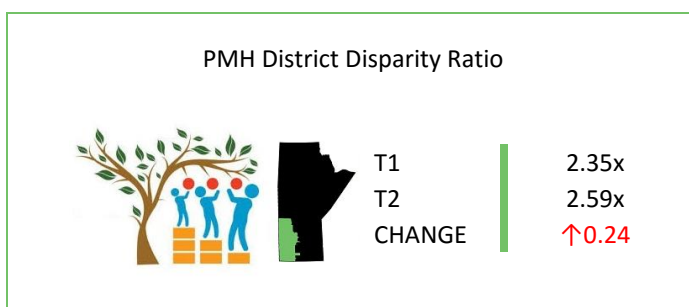
	T2		T1	
	Count	Rate	Rate	
Manitoba	143,607	10.3	9.6	

Brandon	Count	Rate		Rate	
West End	2,903	17.3	H+	14.3	H
South End	2,099	18.4	H+	14.8	H
East End	1,455	18.8	H+	16.6	H
North Hill	1,574	19.1	H+	16.7	H
Downtown	2,660	20.6	H+	18.2	H

South	Count	Rate		Rate	
Whitemud	1,059	8.0	L	7.8	L
Asessippi	1,087	8.5	L	8.4	L
Little Saskatchewan	1,454	10.9		10.1	
Spruce Woods	1,848	11.1	+	8.6	L
Turtle Mountain	1,296	11.8	H+	10.4	
Souris River	1,824	11.9	H+	9.6	

	T2		T1	
	Count	Rate	Rate	
PMH	23,371	12.9	12.0	H

North	Count	Rate		Rate	
Agassiz Mountain	614	8.0	L-	10.9	H
Swan River	522	8.9	L-	12.4	H
Riding Mountain	527	9.2	-	10.6	
Dauphin	948	9.5	-	11.1	H
Porcupine Mountain	876	9.5	-	14.1	H
Duck Mountain	625	10.2		10.8	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Asthma Prevalence for Children

Definition

The percent of residents, aged 5 to 19 years, diagnosed with asthma, over a two-year time period.

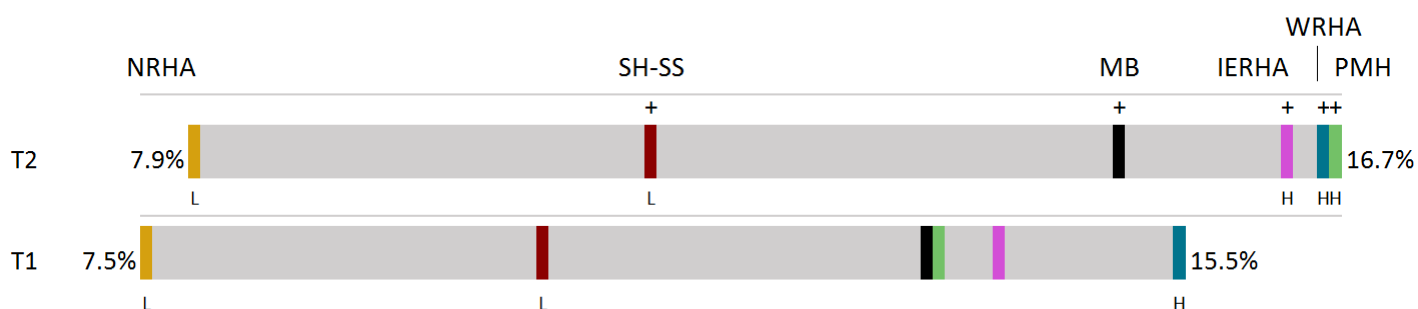
Why is this indicator important?

Asthma is the most common chronic disease in children²⁵. Timely and appropriate education and treatment help children and their families living with asthma learn how to manage the condition effectively.

Provincial Key Findings

- The prevalence of asthma for children in Manitoba increased significantly over time.
- Rates increased in all regions, although the increase in Northern RHA is not statistically significant.
- Prevalence in Winnipeg RHA, Prairie Mountain Health and Interlake–Eastern RHA are significantly higher than the provincial average, whilst the rates in Northern RHA and Southern Health-Santé Sud are significantly lower.
- Asthma prevalence rates appear to be higher for children in urban settings compared to those in rural areas.
- Unlike other indicators, rural children from high income areas have higher rates of childhood asthma than low income children (1.4 times).

Figure 3.37 Asthma Prevalence by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age and sex adjusted average annual percent of residents aged 5-19 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		SH-SS		MB		IERHA		WRHA		PMH	
T2 COUNT	1,680		5,085		38,424		3,738		22,037		5,325	
T2 RATE	7.9%	L	11.4%	L+	15.1%	+	16.4%	H+	16.7%	H+	16.7%	H+
T1 RATE	7.5%	L	10.6%	L	13.6%		14.1%		15.5%	H	13.7%	

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The prevalence of asthma in PMH children is significantly higher than the province and increased significantly over time.
- The Brandon zone has significantly higher rates than the Manitoba average and both the Brandon and South zones increased significantly over time.
- All districts in the Brandon zone and two districts in the South zone have significantly higher and increasing prevalence of asthma in children. Two districts in the South zone have significantly lower rates. The prevalence in 10 districts increased over time.
- Children from the North Hill district are over twice as likely to live with asthma as children of Whitemud. The district disparity gap widened by 37 percent between T1 and T2.

Table 3.36 Asthma Prevalence by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age and sex adjusted average annual percent of residents aged 5-19 years

	T2		T1		
	Count	Rate		Rate	
Manitoba	38,424	15.1	+	13.6	
PMH	5,325	16.7	H+	13.7	
Brandon	2,044	20.5	H+	15.0	
Downtown	432	19.8	H+	14.0	
West End	612	20.1	H+	16.2	H
South End	407	20.2	H+	14.1	
East End	293	21.6	H+	14.3	
North Hill	300	22.7	H+	15.9	
South	2,149	15.1	+	12.9	
Whitemud	268	10.8	L	11.6	
Spruce Woods	378	12.7	L+	10.7	L
Turtle Mountain	289	15.4		16.4	H
Little Saskatchewan	323	15.8	+	13.0	
Asessippi	403	17.8	H+	12.5	
Souris River	488	18.5	H+	13.9	
North	1,132	14.7		13.7	
Swan River	113	12.0		13.2	
Dauphin	209	13.2		15.4	
Porcupine Mountain	256	13.3		11.5	
Riding Mountain	129	15.7	+	11.3	
Agassiz Mountain	251	16.8		15.3	
Duck Mountain	174	18.6		15.6	

PMH District Disparity Ratio

T1: 1.53x
T2: 2.10x
CHANGE: **↑0.57**

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK...UNIFIED REFERRAL INTAKE SYSTEM (URIS)

URIS is a provincial program designed to support children who have designated health care needs when attending community programs including schools, licensed child care centres, respite services and accredited recreational programs within PMH. The URIS nurse completes an Individual Health Care Plan for each child outlining the child's health history and the necessary interventions that are required to support the child's health care needs while attending the community-based program. As of August 31, 2019 there were 2,339 children in PMH receiving URIS services. As some children have more than one health condition they require more than one health plan. The majority of health plans are developed for school-age children. The top five health conditions requiring a plan are:

- Asthma (1,463)
- Anaphylaxis (525)
- Seizure disorder (200)
- Diabetes (91)
- Cardiac condition (90)

URIS also includes health care plans for children requiring ostomy care, gastrostomy care, clean intermittent catheterization, pre-set oxygen, suctioning, bleeding disorder, endocrine condition and musculoskeletal disorders.

Asthma Care: Controller Medication Use

Definition

The percent of residents (all ages) diagnosed with asthma receiving medication recommended for long-term control of their disease.

Why is this indicator important?

Asthma controller medications control the inflammation in the airways and prevent asthma symptoms²⁶.

Provincial Key Findings

- The percent of residents with asthma receiving the medication for long-term control in Manitoba, and amongst all regions, did not significantly change over time.

Figure 3.38 Asthma Care by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Crude percent of residents with asthma who filled at least one prescription for inhaled steroids



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	PMH	SH-SS	IERHA	MB	NRHA	WRHA
T2 COUNT	3,218	2,716	2,652	25,107	1,503	14,813
T2 RATE	61.7%	62.3%	63.5%	64.3%	65.2%	65.3%
T1 RATE	62.5%	65.2%	63.3%	64.1%	66.9%	64.1%

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- At regional, zone and district levels, the percent of residents with asthma receiving the medication for long-term control is similar to the provincial average, with the exception of the Asessippi district, which is significantly lower.
- Residents with asthma from the Whitemud district are one and a half times more likely to receive at least one prescription for inhaled steroids than residents of Asessippi. The district disparity gap narrowed by seven percent between T1 and T2.

Table 3.37 Asthma Care by PMH Zone and District, 2007/09-2011/12 (T1) and 2012/13-2016/17 (T2)
Crude percent of residents with asthma who filled at least one prescription for inhaled steroids

	T2		T1	
	Count	Rate	Rate	
Manitoba	25,107	64.3	64.14	
Brandon	1,089	62.6	61.7	
North Hill	142	55.5	63.3	
Downtown	260	56.6	58.9	
East End	164	64.6	60.9	
West End	314	67.7	64.7	
South End	209	67.9	61.1	
PMH	3,218	61.7	62.5	
North	765	59.1	60.5	
Porcupine Mountain	168	55.1	61.3	
Agassiz Mountain	143	55.6	55.8	
Swan River	74	56.5	44.0	
Duck Mountain	100	61.4	69.3	
Riding Mountain	99	63.9	58.9	
Dauphin	181	64.0	65.6	
South	1,364	62.5	64.4	
Asessippi	220	47.4	L 52.8	
Little Saskatchewan	214	60.6	65.7	
Turtle Mountain	205	64.1	64.3	
Souris River	280	65.0	68.7	
Spruce Woods	244	71.8	72.5	
Whitemud	201	72.8	61.5	

PMH District Disparity Ratio

T1	1.65x
T2	1.54x
CHANGE	↓0.11

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Sexually Transmitted Infections

Chlamydia Rates

Definition

The number of reported cases of chlamydia per 100,000 population.

Why is this indicator important?

Chlamydia is the most common bacterial sexually transmitted infection (STI). Symptoms usually begin two to six weeks after infection but are often overlooked. Left untreated, chlamydia can lead to painful health problems and infertility. It can also be transmitted from mother to child during childbirth. Timely access to health information, and early diagnosis and treatment, will help prevent many complications associated with this infection.

Provincial Key Findings

- Chlamydia infection rates have increased in Manitoba with 2017 showing the highest infection counts for six years.
- Rates vary considerably across the province with Southern Health-Santé Sud having rates half that of the province and Northern RHA having rates more than four times that of the province.
- Chlamydia infections are most common in females (64%) and in the 20-39 age group (68%).

Figure 3.39 Rate of Reported Chlamydia Infections by RHA, 2013-2015 (T1) and 2016-2018 (T2)
Crude average annual rate per 100,000 residents



	SH-SS	PMH	WRHA	IERHA	MB	NRHA
T2 COUNT	521	682	3,822	671	7,559	1,821
T1 COUNT	480	652	3,104	552	6,438	1,647
T2 RATE	255	399	491	515	556	2,370
T1 RATE	256	390	423	439	499	2,204

MHSAL EpiVIEW June 2019

Regional Key Findings

- PMH Chlamydia infection counts have varied over the last six years with 2017 and 2018 showing counts in excess of 700.
- Gender and age profiles are similar to the province with females accounting for 61% of infections and 70% in the 20-39 age grouping.

Table 3.38 Annual Count of Reported Chlamydia Infections by PMH 2013-2018

	2013	2014	2015	2016	2017	2018
Male	287	250	246	237	281	277
Female	419	353	400	347	444	461
Total	706	603	646	584	725	738

MHSAL EpiVIEW June 2019

Gonorrhea Rates

Definition

The number of reported cases of gonorrhea per 100,000 population.

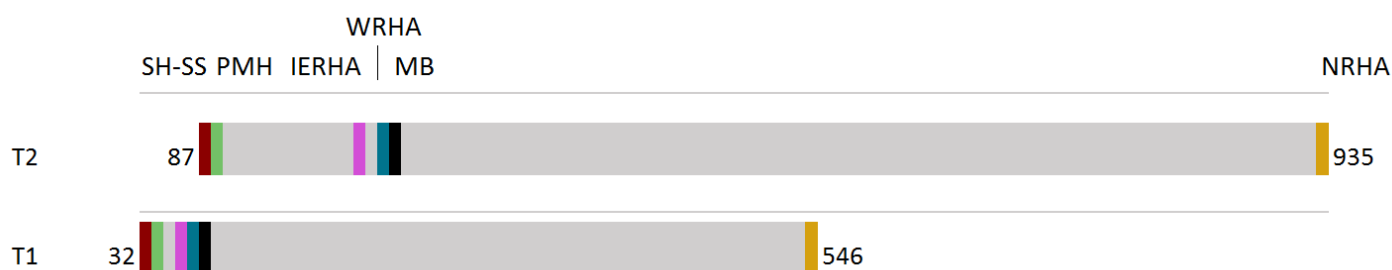
Why is this indicator important?

Gonorrhea, commonly referred to as the ‘Clap’, is on the rise in Canada and can cause very serious complications when left untreated. Gonorrhea can be cured with the right medication; however it is becoming increasingly resistant to antibiotics. Gonorrhea can lead to pelvic inflammatory disease in women and infertility in both women and men. Understanding gonorrhea incidence helps to plan public awareness campaigns to promote safer sex and regular screening. Timely access to early diagnoses and treatment will prevent many complications associated with this infection.

Provincial Key Findings

- Gonorrhea infection rates have increased dramatically in Manitoba and in all RHAs with 2017 and 2018 showing the highest infection counts in the last six years.
- Rates vary considerably across the province with Southern Health-Santé Sud having rates less than half that of the province and Northern RHA having rates more than four times that of the province.
- Gonorrhea infections are evenly distributed between males and females and are most common and in the 20-39 age group (71%).

Figure 3.40 Rate of Reported Gonorrhea Infections by RHA, 2013-2015 (T1) and 2016-2018 (T2)
Crude average annual rate per 100,000 residents



	SH-SS	PMH	IERHA	WRHA	MB	NRHA
T2 COUNT	177	159	269	1,731	3,078	719
T1 COUNT	61	57	90	534	1,150	408
T2 RATE	87	93	206	222	226	935
T1 RATE	32	34	71	73	89	546

MHSAL EpiVIEW June 2019

Regional Key Findings

- PMH Gonorrhea infection counts have steadily increased over the last few years with 2017 and 2018 showing counts more than three times those previously experienced.
- Gender and age profiles are similar to the province with almost three quarters (73%) of reported infections in the 20-39 age grouping.

Table 3.39 Annual Count of Reported Gonorrhea Infections by PMH 2013-2018

	2013	2014	2015	2016	2017	2018
Male	32	35	22	44	100	90
Female	23	35	25	31	101	110
Total	55	70	47	75	201	200

MHSAL EpiVIEW June 2019

A CLOSER LOOK... MOBILE HARM REDUCTION INITIATIVE

PMH continues to augment regional harm reduction services to address a significant increase in Sexually Transmitted and Blood-Borne Infections (STBBIs). A new strategy will be a Mobile Harm Reduction Unit, using a decommissioned ambulance, to enhance community care for underserved populations through outreach support. Nursing students from Brandon University²⁷, in collaboration with Public Health Services, conducted a comprehensive assessment of best practice, existing service models, client needs and required resources to inform an implementation plan for PMH.

The students reviewed the literature, conducted over 50 key informant interviews and focused group discussions with over 60 individuals from across Canada and within Manitoba. Further interviews were conducted with local health providers, other service organizations and potential users of the program. Brandon was chosen as a pilot site with the intent to spread to other parts of the region in the future.

Key recommendations include:

- Start slowly, build rapport and create a safe space for clients including warm drinks and snacks
- Prioritize partnerships and collaboration, and ensure service providers are passionate about the work
- Consider other program schedules such as the Bear Clan and deliver the mobile harm reduction services when other services are not available
- Develop peer groups with potential users of the service to help build the program, spread the word and educate service providers
- Offer specialized nursing services such as STBBI testing and treatment, HIV/Hepatitis C rapid access, birth control and wound treatment

Human Immunodeficiency Virus (HIV)

Definition

This indicator measures the proportion of new HIV reported cases, per 100,000 population, all ages, for a one-year time period. A new case of HIV is counted when an individual has a positive HIV antibody, or viral DNA sequence test, that is reported to the Public Health Surveillance System, Epidemiology and Surveillance, MHSAL for the first time. Only individuals who reside in Manitoba at the time of his/her diagnosis are included.

Why is this indicator important?

Human immunodeficiency virus (HIV) has no cure or vaccine to prevent infection. Without treatment, the HIV infection may progress to AIDS, the most advanced stage of HIV infection. HIV infection is largely preventable through safer sex methods and abstaining from intravenous drug use (as the sharing of needles and drug equipment can expose users to HIV as well as other viruses and infections).

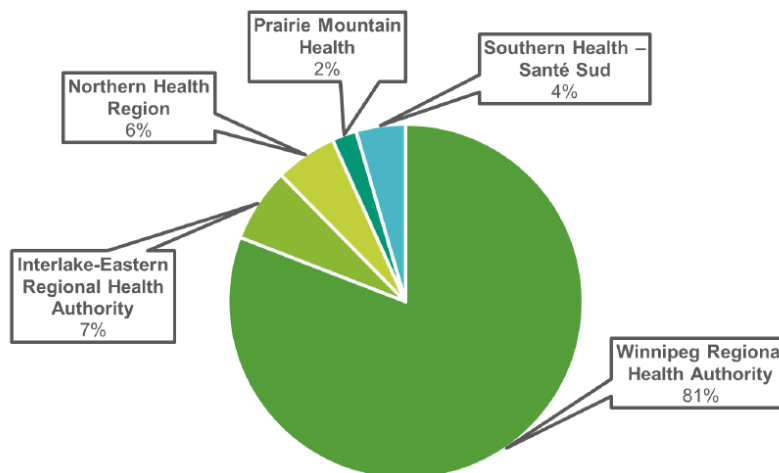
Provincial Key Findings

- There were 89 new positive HIV cases reported in 2017. This is a decrease of 20 cases compared to the 109 new HIV cases in 2016.
- The majority of new HIV cases reported residence in the Winnipeg Regional Health Authority, with six or fewer infections arising in each of the other Regional Health Authorities.

Regional Key Findings

- PMH had the lowest number of new HIV infections in the province at just two percent of all cases.

Figure 3.41 Proportion (%) of New HIV Cases in Manitoba by RHA, 2017



Manitoba Health, 2017 Annual Statistical Update: HIV in Manitoba

To learn more about HIV in Manitoba visit: [HIV Surveillance](#)

Syphilis Rates

Definition

The number of reported cases of syphilis per 100,000 population.

Why is this indicator important?

Syphilis is a bacterial infection, usually spread by sexual contact. It can have very serious complications if left untreated, but it is simple to cure with the right treatment. Manitoba has seen clustered outbreaks of this infection in recent years. Timely access to health information, and early diagnoses and treatment, will help prevent many complications associated with this infection. There is also a concern that congenital Syphilis cases are occurring for the first time in decades.

Provincial Key Findings

- Syphilis infection rates have increased dramatically in Manitoba and in all RHAs with 2018 showing the highest infection counts over the last six years.
- Rates vary considerably across the province with Prairie Mountain Health having rates a third of those found in the province as a whole and Northern RHA having rates more than five times that of the province.
- Syphilis infections are most common in males (64%) and in the 20-39 age group (68%).

Figure 3.42 Rate of Reported Syphilis Infections by RHA, 2013-2015 (T1) and 2016-2018 (T2)
Crude average annual rate per 100,000 residents



	PMH	SH-SS	IERHA	WRHA	MB	NRHA
T2 COUNT	17	21	23	226	424	127
T1 COUNT	9	6	6	83	129	24
T2 RATE	10.1	10.4	17.9	29.0	31.2	164.8
T1 RATE	5.6	3.4	4.8	11.3	10.0	32.6

MHSAL EpiVIEW June 2019

Regional Key Findings

- PMH Syphilis infection counts have fluctuated over the last few years but remain relatively rare in comparison to other sexually transmitted infections like Chlamydia and Gonorrhoea.
- Gender and age profiles are similar to the province with Syphilis infections most common in males (74%) and in the 20-39 age group (68%).

Table 3.40 Annual Count of Reported Syphilis Infections by PMH, 2013-2018

	2013	2014	2015	2016	2017	2018
Male	2	3	19	8	10	17
Female	0	0	4	1	3	13
Total	2	3	23	9	13	30

MHSAL EpiVIEW June 2019

A CLOSER LOOK... SEXUALLY TRANSMITTED BLOOD BORNE INFECTIONS

During the last year, the Population Health division of Manitoba Health, Seniors and Active Living reported an outbreak of syphilis throughout the province and clusters of infections were reported in PMH. The number of cases diagnosed in pregnant women continues to rise.

The infection may be passed to an unborn baby during pregnancy or childbirth resulting in a condition called congenital syphilis. There are tests to determine if a person, including pregnant women or newborn, has syphilis and the infection can be treated with antibiotics. Early detection is important to reduce the negative impact of this infection. PMH has further developed the STBBI program to enhance public awareness and access to STBBI testing. Public/Community Health nurses, with additional training, may order tests for chlamydia, gonorrhoea, hepatitis B and C, Hepatitis A Ig, HIV and syphilis, and provide counseling and follow-up.

PMH Public Health and Medical Officers of Health are currently coordinating associated strategies to reduce the alarming increases—including the infections of gonorrhoea, chlamydia, and syphilis, Hepatitis B, Hepatitis C and HIV.

Chapter 4 How Well Does Our Health System Meet the Needs of the Population?

Key Findings

Primary Health Care

- PMH residents made over 800,000 individual visits to their physician or nurse practitioner in 2016/17.
- The most frequent causes for physician and nurse practitioner visits are respiratory, circulatory, musculoskeletal and mental illness.
- The ambulatory consultation rate in PMH is significantly lower than the provincial average.
- The rate of hospitalization for Ambulatory Care Sensitive Conditions in PMH is significantly higher than the provincial average.
- Benzodiazepine use in PMH is significantly higher than the provincial average with over 20% of community-dwelling older adults with a potentially inappropriate benzodiazepine prescription.

Home Care / Personal Care Homes

- The overall prevalence of home care use in PMH was 3.3%; an estimated 5,400 residents received one or more services during a two-year time period.
- The proportion of PMH residents aged 75 years and older living in PCHs is the highest in the province.
- The proportion of newly admitted PCH residents requiring higher levels of care increased at a similar rate to the province.
- The median wait time for admission to a PCH from hospital or community is significantly higher than the province.
- PMH has the highest proportion of PCH residents prescribed benzodiazepines in the province with almost a third of all residents under the influence of psychoactive drugs at any one time.

Acute Care

- PMH has the second highest rate of hospital days for Alternate Level of Care stays in the province and is increasing over time.
- More than 90% of all hospitalizations in PMH facilities were for residents of PMH.
- The rate of unplanned hospital readmissions in PMH is significantly higher than the provincial average.
- PMH remains the only region in the province to have significantly higher C-section rates, a pattern repeated in all three zones.
- PMH remains the only region in the province to have significantly lower Vaginal Birth after C-section (VBAC) rates, a pattern repeated in all three zones.
- A substantial proportion (42%) of patients reported that they did not receive enough information from hospital staff about what to do if they were worried about their condition or treatment after they left the hospital.
- Hospital use in PMH has decreased significantly over time, but remains significantly higher than the provincial average.
- The most frequent causes of hospitalizations in PMH are digestive, 'health status and contact' and cancer.

Primary Health Care

Use of Physicians and Nurse Practitioners

Definition

The percentage of residents who received at least one ambulatory visit in a fiscal year. Ambulatory visits include all contact with physicians and nurse practitioners, except during inpatient hospitalization and emergency department visits.

Why is this indicator important?

Regular examinations and consultations are important to help identify risk factors and problems before they become serious. When conditions are identified early, treatments are usually much more effective. Understanding how many people see a physician or nurse practitioner may help to identify access barriers to services and reflects the effectiveness of the primary care system.

Provincial Key Findings

- The percent of residents in Manitoba and amongst all regions, who saw a physician or nurse practitioner at least once, decreased slightly over time.
- The use of physicians or nurse practitioners in Northern RHA is significantly lower than the provincial average.
- In rural areas, the percent of residents who did not visit a physician or nurse practitioner is higher for residents of lower income areas.

Figure 4.1 Use of Physicians and Nurse Practitioners by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents with at least one ambulatory visit per year



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA	SH-SS	IERHA	PMH	MB	WRHA
T2 COUNT	47,460	149,798	101,307	135,770	1,072,087	636,040
T2 RATE	65.9% L	77.2%	78.1%	78.6%	78.7%	81.4%
T1 RATE	68.8% L	77.6%	80.2%	80.3%	79.9%	81.7%

Regional Key Findings

- The percent of PMH residents who saw a physician or nurse practitioner is similar to the province and did not change significantly over time.
- The percent of residents in the Brandon zone who saw a physician or nurse practitioner is significantly higher than the provincial average.
- Downtown district is significantly higher than the Manitoba average and three districts in the South zone were significantly lower. Whitemud district decreased significantly over time.
- Downtown residents are 1.2 times more likely to visit a physician or nurse practitioner at least once in a year than residents in Asessippi. The district disparity gap widened by seven percent between T1 and T2.

Table 4.1 Use of Physicians and Nurse Practitioners by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents with at least one ambulatory visit per year

	T2		T1	
	Count	Rate	Rate	
Manitoba	1,072,087	78.7	79.9	
Brandon	46,397	85.6	H 85.0	
Downtown	10,697	85.9	H 83.9	
West End	13,640	85.3	85.0	
South End	9,311	84.8	84.0	
North Hill	6,761	84.8	84.6	
East End	5,988	80.8	83.9	
PMH	135,770	78.6	80.3	
North	32,051	77.1	78.1	
Dauphin	7,484	79.7	79.4	
Riding Mountain	4,079	75.8	76.3	
Duck Mountain	4,338	75.3	77.9	
Agassiz Mountain	5,511	74.8	77.3	
Porcupine Mountain	6,563	74.2	75.4	
Swan River	4,076	73.2	73.7	
South	57,322	73.8	77.5	
Turtle Mountain	8,296	79.5	80.0	
Little Saskatchewan	9,439	74.1	75.9	
Spruce Woods	11,753	73.8	77.8	
Whitemud	9,016	71.5	L- 77.0	
Souris River	10,448	71.4	L 75.5	
Asessippi	8,370	69.2	L 73.0	L

PMH District Disparity Ratio

T1 1.16x
T2 1.24x
CHANGE **↑0.08**

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... POST SECONDARY HEALTH INITIATIVE

In response to a significant increase in Sexually Transmitted Blood Borne Infections (STBBI) in Manitoba and recent findings from a research study conducted by faculty at Brandon University (BU) and Université de Saint-Boniface, Prairie Mountain Health partnered with Brandon University to deliver on-site primary care to post-secondary students²⁸. The intent of this initiative is to improve access to primary care and provide education for at-risk individuals using a harm reduction approach.

BU nursing students, as part of a community health practicum, collaborated with 7th Street Health Access Centre to develop and implement a walk-in clinic, staffed by a Nurse Practitioner, which opened in November 2019. Services are available on a weekly basis and include access to birth control, pap tests, prenatal care, testing and treatment for chlamydia and gonorrhea, medical prescriptions, and 2SLGBTQ+ health support. Health promotion displays and interactive activities on topics pertinent to the target population such as use of stimulants, vaping and addictions are also offered. Following the pilot phase at BU, the initiative will expand to include the Assiniboine Community College campuses in Brandon and Dauphin.

Rate of Ambulatory Visits to Physicians and Nurse Practitioners

Definition

The average number of visits to physicians and nurse practitioners per resident in a given year. Ambulatory visits include all contact with physicians and nurse practitioners: office visits, walk-in clinics, home visits, personal care home visits, visits to outpatient departments and prenatal visits. Exclusions include inpatient hospitalization and emergency department visits.

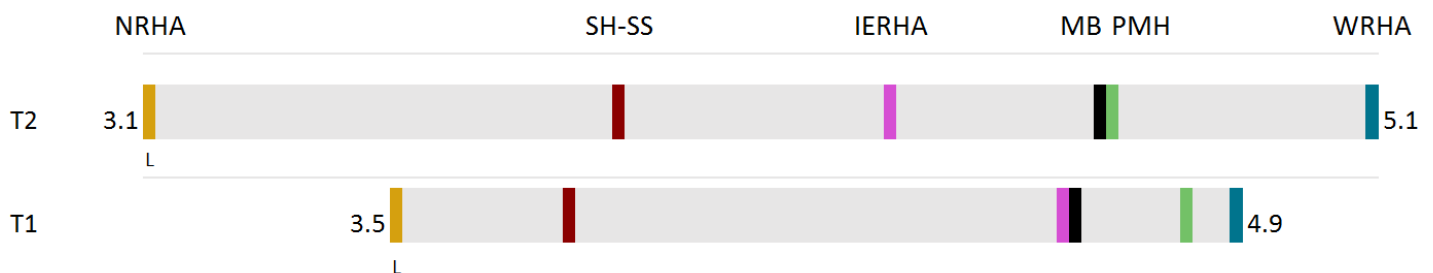
Why is this indicator important?

Ambulatory visit rates may reveal issues related to access to primary care, and how well the healthcare system manages ongoing care for patients outside the hospital setting, especially for individuals living with a chronic condition(s). This measure provides insight into whether a region is moving towards a primary care centered model that focuses on appropriate resources and supports in the community setting and reduces unnecessary hospitalizations.

Provincial Key Findings

- The average number of visits per resident in Manitoba and in all RHAs did not change significantly over time.
- The rate of ambulatory visits in Northern RHA is significantly lower than the provincial average.
- The most frequent causes for physician and nurse practitioner visits in Manitoba in 2016/17 were: circulatory (10.1%), health status and contact (9.5%), respiratory (9.4%), mental illness (9.4%), and musculoskeletal (8.7%).

Figure 4.2 Ambulatory Visit Rate by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate of ambulatory visits per resident



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA	SH-SS	IERHA	MB	PMH	WRHA
T2 COUNT	208,501	747,581	573,982	6,299,699	821,641	3,936,761
T2 RATE	3.1 L	3.9	4.3	4.6	4.6	5.1
T1 RATE	3.5 L	3.8	4.6	4.6	4.8	4.9

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The rate of ambulatory visits in PMH is similar to the province and did not change significantly over time.
- The rate of ambulatory visits in the Brandon Zone is significantly higher than the provincial average.
- All five districts in the Brandon zone are significantly higher than the provincial average, whilst Swan River and Whitemud are significantly lower. Whitemud district decreased significantly over time.
- Downtown residents are 1.8 times more likely to visit a physician or nurse practitioner than residents in Whitemud. The district disparity gap widened by 12 percent between T1 and T2.
- The most frequent causes for physician and nurse practitioner visits in PMH in 2016/17 were: respiratory (11.3%), circulatory (10.8%), musculoskeletal (9.2%), mental illness (8.3%), ill-defined conditions (8.0%).

Table 4.2 Ambulatory Visit Rate by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate of ambulatory visits to all physicians per resident

	T2		T1	
	Count	Rate	Rate	

Manitoba	6,299,699	4.6		4.6	
-----------------	-----------	-----	--	-----	--

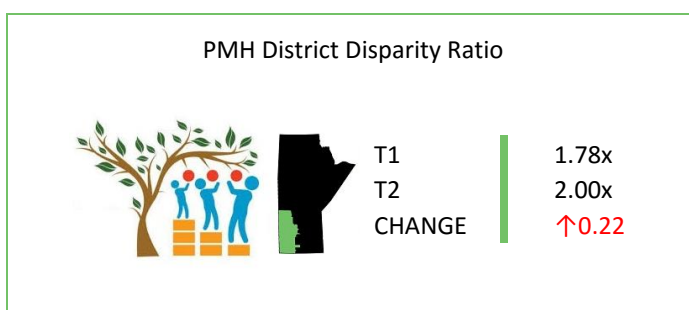
Brandon	329,418	6.1	H	6.0	H
Downtown	80,027	6.6	H	6.6	H
North Hill	48,586	6.1	H	6.0	H
South End	64,460	6.0	H	5.8	
West End	93,218	5.9	H	5.6	
East End	43,127	5.9	H	6.0	H

South	310,070	3.9		4.2	
Turtle Mountain	50,089	4.8		5.0	
Souris River	58,783	3.9		4.3	
Spruce Woods	62,188	3.8		4.2	
Little Saskatchewan	50,249	3.8		4.1	
Asessippi	45,459	3.8		4.0	
Whitemud	43,302	3.3	L-	4.0	

	T2		T1	
	Count	Rate	Rate	

PMH	821,641	4.6		4.8	
------------	---------	-----	--	-----	--

North	182,153	4.2		4.3	
Dauphin	45,858	4.7		4.6	
Duck Mountain	28,148	4.6		4.9	
Riding Mountain	23,137	4.1		4.2	
Agassiz Mountain	29,242	4.0		3.8	
Porcupine Mountain	34,723	3.8		4.2	
Swan River	21,045	3.5	L	3.7	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Location of Visits to Physicians or Nurse Practitioner

Definition

The percentage of visits by residents of each RHA to general or family physicians or nurse practitioners: within the patient's RHA district; elsewhere in their RHA; in another RHA or in Winnipeg.

Why is this indicator important?

Where residents access primary care provides valuable insight regarding challenges related to availability and accessibility of services, which helps to plan and allocate resources appropriately.

Provincial Key Findings

- The location of visits to a physician or nurse practitioner in Manitoba has not changed over time. More than 80% of all visits occurred in the district where the resident lived.
- The location of visits to physicians varied across RHAs. Residents in Winnipeg RHA received over 98% of visits within their home district whilst residents in Southern Health-Santé Sud and Interlake-Eastern RHA were more likely to travel to visit a physician with a large portion of visits occurring in Winnipeg.

Table 4.3 Location of Visits to Physicians or Nurse Practitioner by RHA, 2011/12 and 2016/17
Percent of Total Visits

	Fiscal Year	Total Visits	In District	Elsewhere in RHA	In Other RHA	In Winnipeg
SH-SS	2011/12	521,355	46.4%	30.3%	3.1%	20.3%
	2016/17	578,314	42.5%	32.7%	2.6%	22.2%
WRHA	2011/12	2,377,306	97.7%	0.0%	2.3%	N/A
	2016/17	2,755,850	98.3%	0.0%	1.6%	N/A
PMH	2011/12	701,692	73.1%	23.6%	1.5%	1.8%
	2016/17	680,839	71.7%	24.9%	1.4%	2.1%
IERHA	2011/12	431,337	50.0%	20.5%	2.5%	27.0%
	2016/17	418,277	39.8%	20.4%	2.8%	37.1%
NRHA	2011/12	173,636	76.6%	11.9%	4.0%	7.4%
	2016/17	144,601	72.4%	13.6%	3.3%	10.6%
MB	2011/12	4,205,326	81.5%	10.3%	2.4%	5.9%
	2016/17	4,577,881	81.2%	10.1%	1.9%	6.8%

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- PMH residents made over 700,000 individual visits to their physician or nurse practitioner in 2016/17, an increase of 3.1% from 2011/12. Almost three quarters of these visits were in the resident's home district and the majority of the remainder in another district within PMH. Very few took place outside PMH.

Ambulatory Consultation Rate

Definition

The percentage of ambulatory consultations per resident, in a given year. These consults occur when a physician, nurse, or other allied health professional refer a patient to another physician (usually a specialist or surgeon) or nurse practitioner.

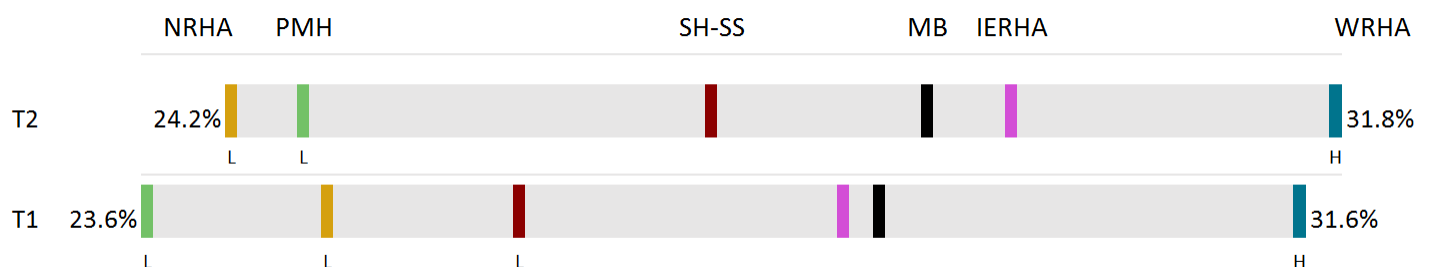
Why is this indicator important?

Health professionals will often refer patients to another provider due to the complexity, obscurity, or seriousness of a condition. Patients may also request a second opinion. This indicator yields important information about initial access to specialist care, which is particularly important in rural areas where patients use specialist services less frequently due to access issues.

Provincial Key Findings

- Ambulatory consultation rates in Manitoba and amongst all regions did not significantly change over time.
- Consultation rates in Winnipeg RHA are significantly higher than the provincial average, whilst rates in Northern RHA and Prairie Mountain Health are significantly lower.
- Ambulatory consultation rates are significantly related to income in both urban and rural areas. Residents of lower income areas have fewer consultations than those in higher income areas which is opposite of what might be expected given that residents of lower income areas have poorer health status and higher levels of chronic disease.

Figure 4.3 Ambulatory Consultation Rate by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of consults (first referral) per resident



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		PMH		SH-SS		MB		IERHA		WRHA	
T2 COUNT	15,537		44,304		52,645		402,497		40,948		248,592	
T2 RATE	24.2%	L	24.8%	L	27.5%		29.0%		29.6%		31.8%	H
T1 RATE	24.9%	L	23.6%	L	26.2%	L	28.7%		28.4%		31.6%	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The ambulatory consultation rate in PMH is significantly lower than the provincial average and did not significantly change over time.
- The ambulatory consultation rate in the North and South zones are significantly lower than the provincial average.
- Six districts are significantly lower than the provincial average.
- West End residents are 1.7 times more likely to be referred to a physician than residents in Asessippi. The district disparity gap narrowed by five percent between T1 and T2.

Table 4.4 Ambulatory Consultation Rate by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of consults (first referral) per resident

	T2		T1	
	Count	Rate	Rate	

Manitoba	402,497	29.0		28.7	
-----------------	---------	------	--	------	--

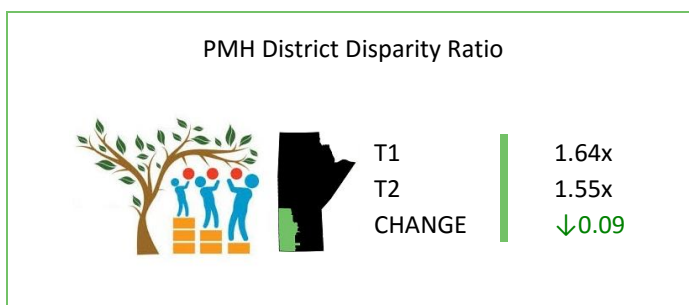
Brandon	14,931	29.2		28.1	
West End	4,574	29.4		27.7	
North Hill	2,349	29.4		28.7	
South End	3,062	28.9		29.3	
East End	1,921	27.8		27.1	
Downtown	3,025	26.6		25.5	

South	18,211	22.8	L	21.9	L
Spruce Woods	3,951	24.2		23.5	
Turtle Mountain	2,623	23.9		24.2	
Souris River	3,456	22.8		20.2	L
Little Saskatchewan	3,160	22.6	L	22.6	
Whitemud	2,605	20.7	L	20.1	L
Asessippi	2,416	19.0	L	18.1	L

	T2			T1	
	Count	Rate		Rate	

PMH	44,304	24.8	L	23.6	L
------------	--------	------	---	------	---

North	11,162	25.1	L	23.8	L
Dauphin	2,852	28.2		26.5	
Riding Mountain	1,714	27.5		26.5	
Agassiz Mountain	2,106	27.3		27.2	
Duck Mountain	1,434	21.8	L	23.0	
Swan River	1,235	20.8	L	18.1	L
Porcupine Mountain	1,821	20.3	L	17.9	L



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Majority of Care—Continuity

Definition

The percentage of residents who received at least 50% of their ambulatory visits from the same physician (general practitioner, family practitioner, pediatrician or internal medicine specialist) or nurse practitioner over a two-year time period among those with three or more visits.

Why is this indicator important?

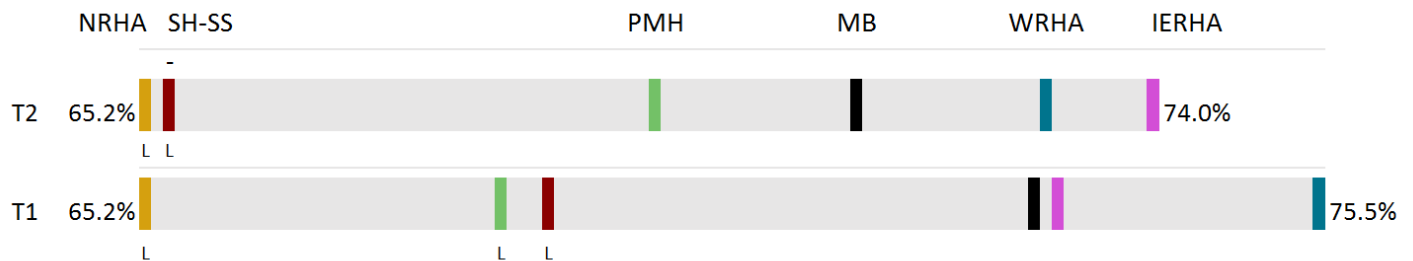
Continuity of care allows for a stronger patient-healthcare provider relationship and correlates with better health outcomes, improved patient satisfaction and fewer hospitalizations.

Provincial Key Findings

- The proportion of Manitoban residents receiving more than 50% of their visits from the same primary physician or nurse practitioner decreased slightly over time.
- The proportion decreased significantly over time in Southern Health-Santé Sud.
- Northern RHA and Southern Health-Santé Sud are significantly lower than the provincial average.

Figure 4.4 Majority of Care by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)

Age and sex adjusted percent of residents with more than 50% of their visits from the same physician (among those with 3+ visits)



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		SH-SS		PMH		MB		WRHA		IERHA	
T2 COUNT	23,297		81,909		86,156		668,305		409,578		66,321	
T2 RATE	65.2%	L	65.5%	L-	69.7%		71.5%		73.1%		74.0%	
T1 RATE	65.2%	L	68.8%	L	68.4%	L	73.0%		75.5%		73.2%	

MCHP RHA Indicators Atlas 2019


Regional Key Findings

- Continuity of care in PMH is similar to the provincial average and did not change significantly over time.
- Continuity of care in the North zone is significantly lower than the provincial average and decreased significantly over time. The Brandon zone increased significantly over time.
- Five districts have significantly lower rates than the provincial average, whilst Whitemud district has a significantly higher rate. Four districts within the North zone decreased significantly over time. Eight districts, including all districts in the Brandon zone, increased significantly over time.
- Whitemud residents are 1.6 times more likely to experience continuity of care than residents in Dauphin. The district disparity gap narrowed by six percent between T1 and T2.

Table 4.5 Majority of Care by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age and sex adjusted percent of residents with more than 50% of their visits from the same physician (among those with 3+ visits)

	T2		T1		
	Count	Rate		Rate	
Manitoba	668,305	71.5		73.0	
PMH	86,156	69.7		68.4	L
Brandon	30,885	73.2	+	66.5	L
South End	6,268	73.7	+	65.3	L
Downtown	7,183	73.1	+	65.5	L
North Hill	4,573	72.4	+	67.0	L
East End	4,004	72.1	+	64.6	L
West End	8,857	70.1	+	64.5	L
North	17,877	61.1	L-	68.0	L
Swan River	2,763	75.2	-	89.2	H
Duck Mountain	2,768	67.3	+	52.2	L
Porcupine Mountain	3,859	65.9	L-	81.0	H
Agassiz Mountain	2,809	55.9	L	56.6	L
Riding Mountain	2,101	54.8	L-	65.7	L
Dauphin	3,577	50.8	L-	60.7	L
South	37,394	73.1		71.5	
Whitemud	6,284	81.8	H	81.4	H
Turtle Mountain	5,800	75.9	+	70.9	
Asessippi	5,516	73.2		75.4	
Souris River	6,745	71.6	+	65.1	L
Little Saskatchewan	5,892	68.8		68.8	
Spruce Woods	7,157	67.3	L	67.7	L

PMH District Disparity Ratio



T1 1.71x

T2 1.61x

CHANGE ↓0.10

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... PRIMARY CARE OUTREACH CLINICS

Using a harm reduction approach, Primary Care Outreach Clinics in Swan River and Dauphin focus on providing primary care to a priority population of clients, including prenatal, living with HIV, Hepatitis C, addictions and vulnerable populations not connected to primary care. Examples of vulnerable situations for clients include housing insecurity, street involvement, sex trade work, injecting drugs and socioeconomic disadvantage.

Primary care is supported by a community health nurse, physicians with training in addictions medicine, infectious disease specialists in Winnipeg, addictions counselor, public health nurse and mental health worker. Screening for sexually transmitted and blood-borne infections is available and there is an outreach component of the program that addresses wound care, infections and birth control in the community setting.

Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rates

Definition

The annual hospitalization rate per 1,000 population, aged 0 to 74 years, for ambulatory care sensitive conditions (ACSC) which include a group of 25 diseases and diagnoses (e.g., diabetes, Chronic Obstructive Pulmonary Disease (COPD), asthma, angina, gastroenteritis, congestive heart failure) for which primary health care may be more appropriate than hospital care.

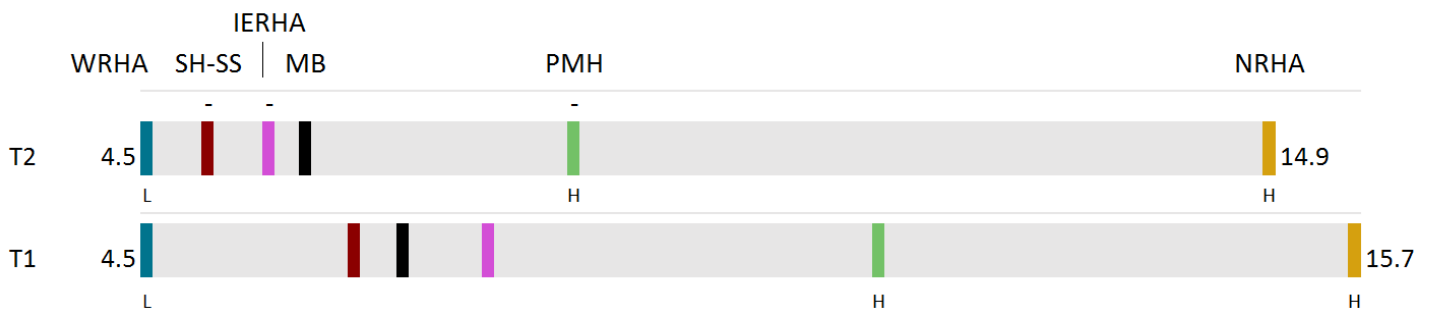
Why is this indicator important?

Lower rates reflect better access to good quality primary health care. Appropriate management and control of ACSC in the community could potentially reduce the need for hospitalization and improve quality of life, improve efficiency in resource utilization and reduce health spending for chronic conditions.

Provincial Key Findings

- The rate of hospitalization for ACSC in Manitoba slightly decreased over time.
- Southern Health-Santé Sud, Interlake-Eastern RHA and Prairie Mountain Health decreased significantly over time.
- ACSC hospitalization rate for Winnipeg RHA is significantly lower than the provincial average, whilst the rate is significantly higher for both Prairie Mountain Health and Northern RHA.

Figure 4.5 Hospitalization Rate Ambulatory Care Sensitive Conditions by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted per 1,000 residents aged 0-74 years



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA		SH-SS		IERHA		MB		PMH		NRHA	
T2 COUNT	3,467		1,010		861		8,023		1,522		995	
T2 RATE	4.5	L	5.2	-	5.7	-	6.1		8.5	H-	14.9	H
T1 RATE	4.5	L	6.6		7.7		7.0		11.4	H	15.7	H

MCHP RHA Indicators Atlas 2019

- ACSC hospitalization rates are very strongly related to income in both urban and rural areas. In urban settings, rates amongst low income residents are 4.2 times that of the highest income residents. In rural settings, rates amongst low income residents are 3.7 times that of the highest income residents. Income disparity rates have increased in both rural and urban settings.



Urban Quintiles

T1	3.8x
T2	4.2x
CHANGE	0.4 ↑

Rural Quintiles



T1	3.3
T2	3.7
CHANGE	0.4 ↑

Regional Key Findings

- The rate of hospitalization for ACSC in PMH is significantly higher than the provincial average but decreased significantly over time.
- The rate of hospitalization for ACSC in the North zone is significantly higher than the provincial average and decreased significantly over time in the North and South zones.
- Six districts are significantly higher than the provincial average and six districts decreased significantly over time.
- Agassiz Mountain residents are 3.7 times more likely to be hospitalized for ACSC than residents in West End. The district disparity gap narrowed by 23 percent between T1 and T2.

Table 4.6 Hospitalization Rate ACSC by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted per 1,000 residents aged 0-74 years

	T2		T1	
	Count	Rate	Rate	
Manitoba	8,023	6.1	7.0	
Brandon	381	7.1	7.5	
West End	76	4.8	6.0	
North Hill	48	5.5	6.0	
South End	66	6.0	5.5	
Downtown	121	10.8	H	11.3
East End	70	11.3	H	11.8
South	626	7.4	-	10.1
Whitemud	73	5.5		6.6
Spruce Woods	95	5.7	-	9.4
Little Saskatchewan	100	6.6	-	10.4
Turtle Mountain	84	7.2		7.0
Souris River	132	8.2	-	12.2
Assiniboia	142	11.5	H	14.4
PMH	1,522	8.5	H-	11.4
North	515	11.3	H-	16.8
Swan River	46	7.7		10.6
Dauphin	76	8.1		10.7
Riding Mountain	52	8.5	-	14.8
Porcupine Mountain	107	11.1	H-	24.6
Duck Mountain	112	16.0	H	14.9
Agassiz Mountain	122	17.7	H-	26.3

	T1	4.78x
	T2	3.69x
	CHANGE	↓1.09

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... COPD SYSTEM OF CARE

PMH, along with Winnipeg and Interlake-Eastern RHA, is one of six sites across Canada to participate in the Canadian Foundation for Health Improvement's (CFHI) INSPIRED™ scale collaborative to improve the care for people living with Chronic Obstructive Pulmonary Disease (COPD). The original Halifax-based INSPIRED™ is recognized as a leading practice for COPD care in Canada. The initiative was renamed COPD System of Care by provincial partners. COPD is one of the top reasons for medical admission to hospital in PMH and Manitoba overall. The goal is to improve the experience of those living with COPD through patient engagement, self-management, skill development, and enhanced integration and transitions between hospital and home while reducing in-hospital lengths of stay, emergency department visits and re-admission rates.

An inter-professional team approach has been integral to the success of COPD System of Care. The initiative draws expertise from multiple programs throughout PMH including the Lung Health Clinic, Chronic Disease Education Program, Pharmacy, Respiratory Therapy, Occupational Therapy, Physiotherapy, Physicians, Nursing, Mental Health, Palliative Care, and Spiritual Care. To support the initiative, a number of team members have completed the Certified Respiratory Educator (CRE) credential which recognizes health-care professionals who provide respiratory education to their clients.

The COPD initiative is working to embed the Canadian Thoracic Society COPD Action Plans into Manitoba COPD System of Care. The COPD Action Plan helps patients and their caregivers recognize flare-ups and how to respond appropriately. This care plan is developed between clinicians, patients and their families while recovering in hospital and handed-off to clients' primary care home clinic upon discharge. The COPD Action Plan strengthens the coordination and management of care, and enhances patient and family involvement in determining care needs.

The patient voice was integral to all aspects of COPD System of Care including reviewing patient resources, action plans, and care needs when home. Patients and caregivers were actively engaged through surveys and focus groups which ultimately led to the formation of a provincial COPD patient and caregiver advisory group. Issues identified by patients and caregivers were consistent with issues and gaps identified by the COPD clinical partners, albeit from the patient perspective. As a result, issues with coping, anxiety, depression, and caregiver burden led to enhancing community visits and psychosocial supports.

COPD system of care is currently underway in Brandon and Swan River with the intent to spread to other sites across PMH.

What clients have said about their experience with COPD System of Care:

"Since I've been part of COPD System of Care I have not been back to the hospital at all!"

"My COPD action plan allows me to self-manage at home."

"My caregivers were also included in my self-management education and appreciated having their questions answered as well."

"Everything provided in the hospital and during home visits was very helpful!"

Benzodiazepine Overprescribing Community-Dwelling

Definition

The percentage of residents, aged 75 years and older, living in the community who had at least two prescriptions for benzodiazepines, or at least one prescription for benzodiazepine dispensed with more than a 30-day supply.

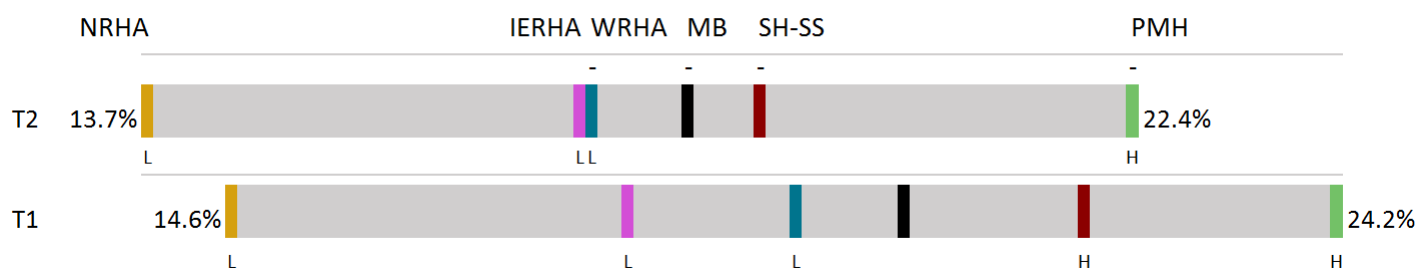
Why is this indicator important?

Benzodiazepines are medications widely used to treat seizures, anxiety and insomnia, however use by seniors is not recommended as it poses serious safety concerns including increased risk for confusion, memory loss, poor coordination and muscle control potentially leading to falls and fractures.

Provincial Key Findings

- More than 30,000 community-dwelling older adults in Manitoba use benzodiazepines.
- The proportion of community-dwelling older adults using benzodiazepines has decreased significantly over time.
- Benzodiazepine use in Prairie Mountain Health is significantly higher than the provincial average.
- Benzodiazepine use in Northern RHA, Interlake-Eastern RHA and Winnipeg RHA is significantly lower than the provincial average.
- There were significant inverse relationships between benzodiazepine use and income in both urban and rural areas with a higher percentage of older adults receiving the drugs in lower income areas.

Figure 4.6 Benzodiazepine Overprescribing in Community by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Crude percent of adults aged 75 years and older with 2 prescriptions or more than a 30-day supply



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		IERHA		WRHA		MB		SH-SS		PMH	
T2 COUNT	467		2,933		17,052		30,430		4,034		5,895	
T2 RATE	13.7%	L	17.6%	L	17.6%	L-	18.5%	-	19.2%	-	22.4%	H-
T1 RATE	14.6%	L	18.0%	L	19.5%	L	20.4%		22.0%	H	24.2%	H

Regional Key Findings

- Benzodiazepine use in PMH is significantly higher than the provincial average although has decreased significantly over time.
- Benzodiazepine use in all three zones is significantly higher than the provincial average despite decreasing significantly over time.
- Only six districts in PMH have benzodiazepine use rates similar to the provincial average. All other districts have significantly higher rates.
- Dauphin community-dwelling older adults are 1.6 times more likely to be prescribed benzodiazepines than those in Little Saskatchewan. The district disparity gap remained stable between T1 and T2.

Table 4.7 Benzodiazepine Overprescribing in Community by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Crude percent of Adults aged 75 and older with 2 prescriptions or more than a 30-day supply

	T2		T1		
	Count	Rate		Rate	
Manitoba	30,430	18.5	-	20.4	
PMH	5,895	22.4	H-	24.2	H
Brandon	1,544	22.9	H-	25.0	H
West End	415	20.7		23.3	
South End	272	22.7	H	26.4	H
Downtown	298	22.8	H	21.6	
North Hill	245	23.8	H	22.9	
East End	314	26.3	H-	31.0	H
North	1,684	23.0	H-	25.4	H
Porcupine Mountain	197	18.9		19.1	
Riding Mountain	176	19.8		21.8	
Swan River	231	21.0		23.1	
Agassiz Mountain	243	22.5	H	26.3	H
Duck Mountain	292	24.2	H-	29.2	H
Dauphin	545	27.4	H	28.8	H
South	2,667	21.8	H-	23.0	H
Little Saskatchewan	321	16.7		19.0	
Spruce Woods	475	19.7		19.7	
Whitemud	453	23.3	H	26.3	H
Souris River	521	23.4	H	23.1	H
Turtle Mountain	403	23.4	H	26.2	H
Assessippi	494	24.5	H	25.1	H

PMH District Disparity Ratio

T1	1.63x
T2	1.64x
CHANGE	↑0.01

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... SEDATIVE DEPRESCRIBING FOR COMMUNITY SENIORS

In December 2018, PMH was awarded a Dr. John Wade Patient Safety Initiatives grant by the Manitoba Institute for Patient Safety (MIPS) for a project titled, Sedative-Hypnotic Deprescribing in Prairie Mountain Health. The initiative targets benzodiazepine prescribing among community-dwelling seniors, clients for whom a sedative is initiated while in hospital and residents in personal care homes. The intent is to build the capacity of health care providers and engage patients in shared decision making about specific medication use after being provided information about the risks of sedative medications. This initiative is based on the Choosing Wisely model and the Canadian Deprescribing Network Drowsy Without Feeling Lousy toolkit.

A working group was established to determine the scope of the community component of the pilot project, identify key sites for implementation within the region and determine opportunities to engage health care practitioners. The project initially focused on inter-disciplinary teams including the MyHealth Teams (Brandon and Swan River), nurse practitioners and acute care pharmacy.

Highlights include:

- Many primary health care providers have embraced the Sedative Deprescribing Initiative including physicians, nurse practitioners (NPs), and pharmacists.
- Reconfiguration of an existing electronic health record (Accuro) to support documentation, alert flags, pre-formatted tapering prescriptions and the fax function to community pharmacists. Key resources have been uploaded into Accuro for easy access by practitioners by typing 'sedative' in the document search function.
- The PMH Health Promotion and Community Development program is a valuable partner with public education activities such as community presentations and display boards.

In acute care settings, Pharmacy Services has developed a process to identify clients for whom a sedative was initiated in hospital. Where appropriate, sedative use is discontinued at the time of discharge and information provided regarding non-pharmaceutical alternatives. It is anticipated that this will reduce the number of community dwelling seniors with inappropriate benzodiazepine use.

Access to a Regular Health Care Provider

Definition

The percentage of Manitobans, aged 12 years and older, participating in the Canadian Community Health Survey over a two-year time period, who reported that they have access to a regular health care provider.

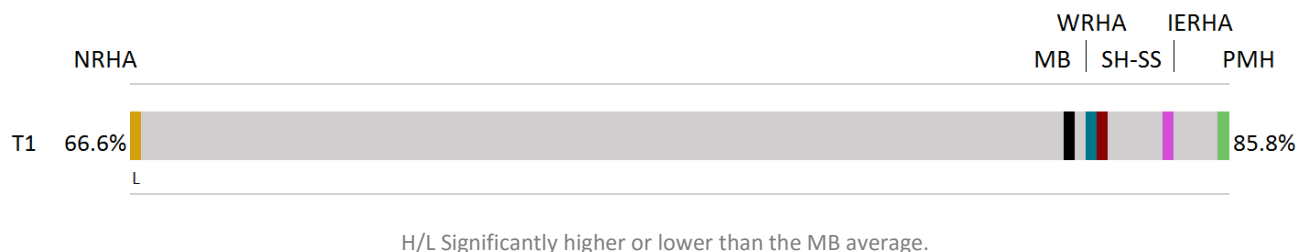
Why is this indicator important?

A regular health care provider can offer preventive care, healthy lifestyle choices, treatment for common medical conditions and referrals to specialists when needed. Having a regular primary care provider can help improve lives and save money on hospital admissions, emergency room visits and surgeries.²⁹

Provincial Key Findings

- More than four out of five Manitoba residents reported having a regular health care provider in 2015/16. This is similar in all regions except the Northern RHA which reports significantly lower access.

Figure 4.7 Access to a Regular Health Care Provider by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample aged 12 years and older



	NRHA		MB		WRHA		SH-SS		IERHA		PMH	
T1 RATE	66.6%	L	83.2%		83.4%		83.6%		84.8%		85.8%	

CCHS 2015 - 2016

Regional Key Findings

- PMH residents report a level of access to a regular health care provider similar to that reported in the province as a whole.

A CLOSER LOOK... NURSE PRACTITIONERS

Nurse Practitioners (NPs) are registered nurses with a Master's level education and clinical experience that qualifies them to diagnose illnesses, treat certain conditions, prescribe medications and order diagnostic tests. They form an integral part of the regional Primary Care Connector Program which matches individuals to a primary care provider.

PMH continues to improve access to Primary Care services and have expanded the number of NPs in the region to 25. The NPs work collaboratively with all other service providers to enhance the health of PMH residents. NPs support communities across the region, including First Nations and the Mobile Clinic, where there is an identified need for improved access to primary care.

The NPs at Swan Valley Primary Care Centre in Swan River responded in an innovative way to the demand for smoking cessation counselling and support. They deliver group 'quit smoking' sessions that are organized into three ninety minute classes. The group setting encourages participants to learn from and support one another. This model allows participants to have the 'best of both worlds' by connecting them with others who are trying to quit smoking and allows for participants to have one-on-one counselling with the health care provider as needed.

Type of Place for Minor Health Problem (Primary Care)

Definition

The percentage of Manitobans aged 12 years and older, participating in the Canadian Community Health Survey over a two-year time period, who reported the type of place they usually went for a minor health problem, such as doctor's office, walk-in clinic or emergency department.

Why is this indicator important?

Many minor health problems can be treated through self-care or over the counter medicines from a pharmacist. Accurate understanding of where residents seek medical care for minor health problems better informs the region of the accessibility of primary care services and education required to ensure optimal use of healthcare resources.

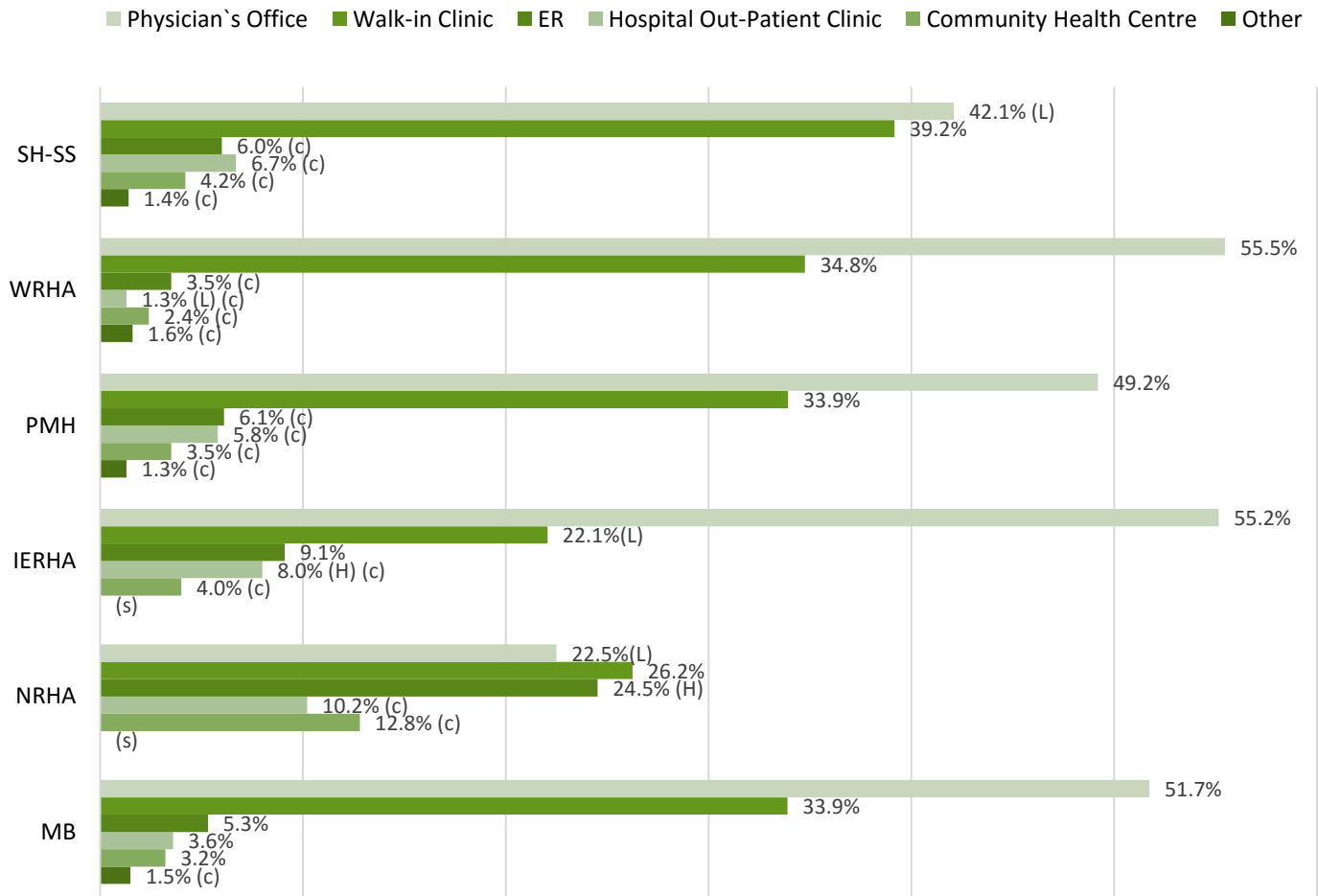
Provincial Key Findings

- In 2015-2016 the most commonly reported place Manitoba residents went for a minor health care problem were the physician's office followed by walk-in clinic.
- Northern RHA has a significantly higher percentage of residents who report visiting the Emergency Department for minor health care problems compared to other RHAs.

Regional Key Findings

- PMH reports a similar pattern to that of the province when selecting a location for the treatment of minor health problems. Not all options are available in all communities at all times which will influence where people seek care.

Figure 4.8 Type of Place for Minor Health Problem by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample aged 12 years and older



(H/L) Significantly higher or lower than the MB average (c) Use with caution (s) Estimate suppressed

CCHS 2015 - 2016

Reasons for No Regular Health Care Provider

Definition

The most frequent reasons given for not having a regular health care provider, by Manitobans aged 12 years and older, participating in the Canadian Community Health Survey, over a two-year time period.

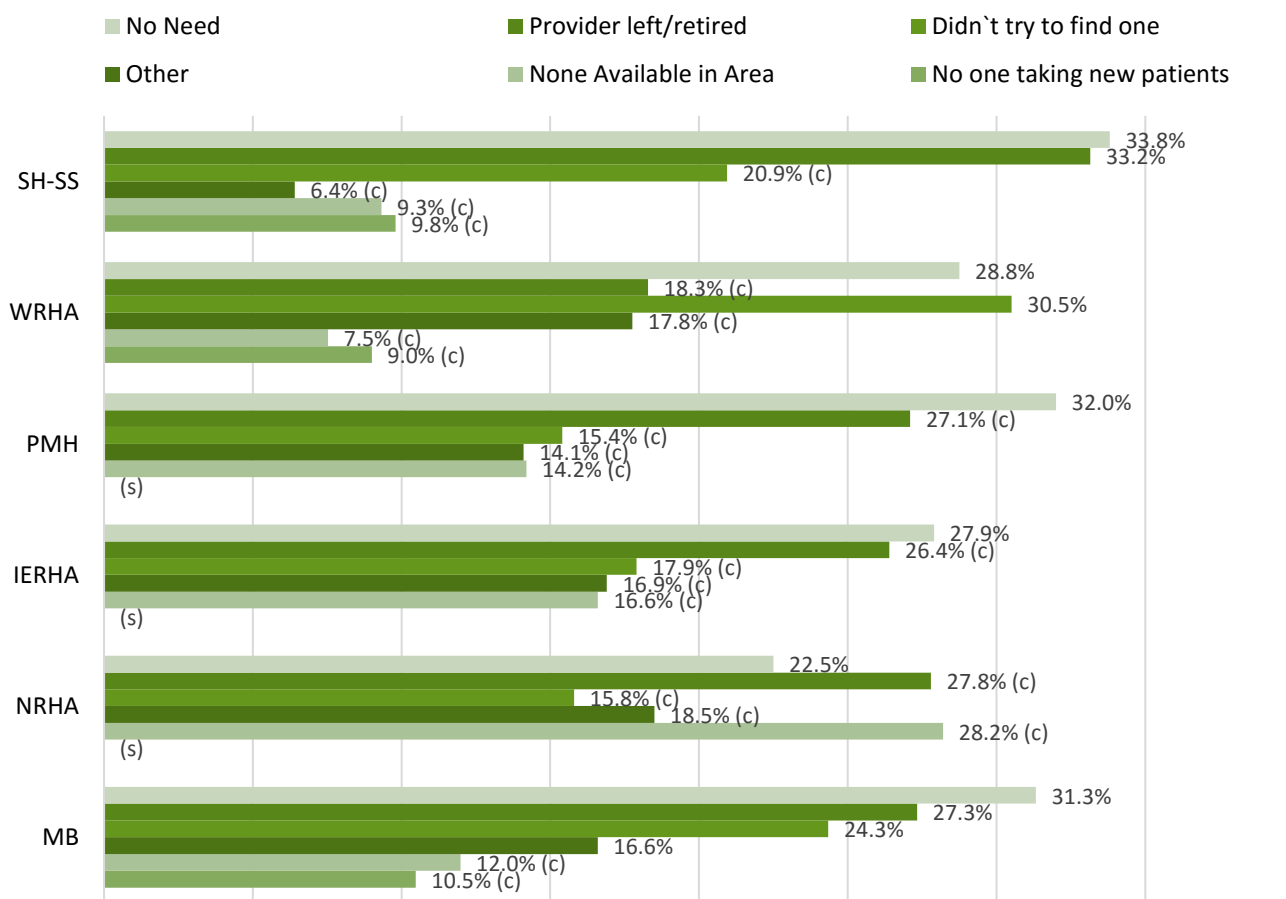
Why is this indicator important?

Understanding potential gaps in delivery of primary care services is important in policy planning and resource allocation to create conditions that reduce health inequities and improve patient outcomes.

Provincial Key Findings

- Approximately one third of Manitobans report that they do not have a need for a regular health care provider.
- Almost one quarter of Manitoba residents indicate that they didn't try to find one, whilst just over one quarter say that their regular health care provider had left or retired.

Figure 4.9 Reasons for No Regular Health Care Provider by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample aged 12 years and older



(H/L) Significantly higher or lower than the MB average (c) Use with caution (s) Estimate suppressed

Wait Time for Minor Health Problem

Definition

The wait time for a medical appointment with their regular health care provider for a minor health problem, by Manitobans aged 12 years and older, participating in the Canadian Community Health Survey, over a two-year time period.

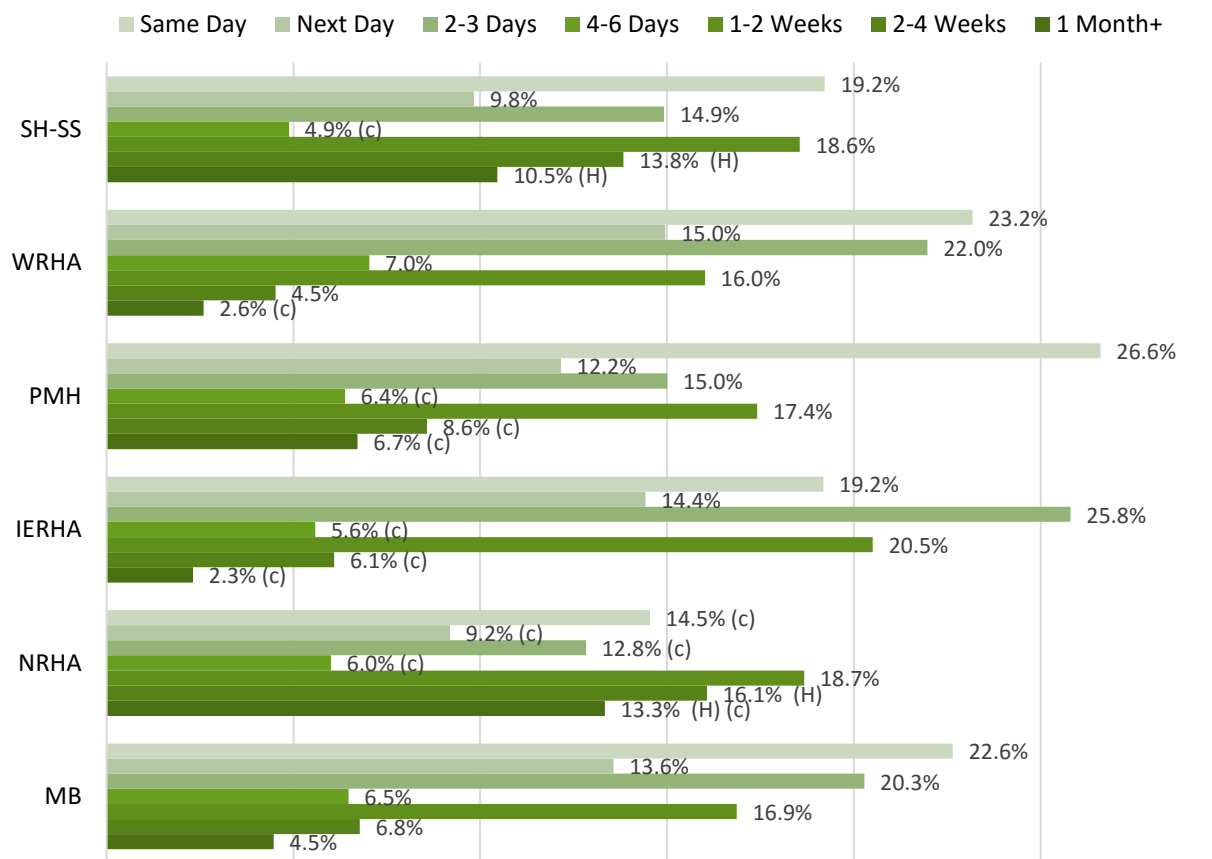
Why is this indicator important?

Whilst not all waits are avoidable, repetitive long waits could be a sign of inadequate resources or scheduling issues.

Provincial Key Findings

- Approximately a third of Manitobans report that they were able to obtain a same-day or next-day appointment to see their primary health care provider for a minor health problem.
- Southern Health-Santé Sud and Northern RHA have the largest percentage of residents who report waiting over two weeks for an appointment for a minor health care problem.

Figure 4.10 Wait Time for Minor Health Problem by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample 12 years and older



(H/L) Significantly higher or lower than the MB average (c) Use with caution (s) Estimate suppressed

Regional Key Findings

- Just over a third of PMH residents report that they were able to obtain a same-day or next-day appointment to see their primary health care provider for a minor health problem.
- Just under a third of PMH residents reported waiting a week or more to obtain an appointment to see their primary health care provider for a minor health problem.

A CLOSER LOOK... MYHEALTH TEAMS

MyHealth Teams are partnerships that bring different care providers together to strengthen the overall support network for patient care. The team includes a doctor or nurse practitioner and other health care professionals such as a community health nurse, mental health shared care counselor, social worker, dietitian, licensed clinical assistant and pharmacist. Each team is developed around the needs of the community and clients. Patients are treated as partners in planning and managing their care, and are provided with more tools and access to resources to do so. In Prairie Mountain Health, there are two MyHealth Teams: Brandon and Swan River.

Service priorities include:

- Enrolling patients to primary care providers
- Timely access to care
- Addressing the needs of patients with complex conditions
- Service coordination
- Outreach to vulnerable populations

The first MyHealth Team in PMH was established in Brandon in late 2014. It involves a network of primary care providers from the Western Medical Clinic, Prairie Mountain Health (7th Street Health Access Centre and Mental Health programs) and the Western Manitoba Cancer Centre. In January 2018, MyHealth Team Brandon partnered with Meredith Medical Clinic and is currently expanding to the Brandon Clinic.

Swan Valley and Area MyHealth Team is a partnership between the physician group based at the Swan Valley Primary Care Centre, Prairie Mountain Health and the Saptaweyak Cree Nation Health Authority. As part of the initiative, a physician or other health care providers visit the Saptaweyak Health Office on a weekly basis. Through this collaborative approach, healthcare professionals provide coordinated care in a timelier manner for patients in the northern part of the region.

Coordination Between Health Professionals and Other Providers

Definition

The level of coordination between their regular health care provider and other health professionals using a five scale rating, by Manitobans aged 12 years and older participating in the Canadian Community Health Survey, over a two-year time period.

Why is this indicator important?

Monitoring coordination of care between providers is one way to assess fragmentation of health services. Patients perceive interruptions in care as unreasonable as they navigate the healthcare system.³⁰ Patient input is necessary to achieve safer, more effective and efficient care, and bridge the gaps that remain along healthcare pathways.

Provincial Key Findings

- Almost half of Manitoba residents report that the coordination between health care providers is 'Excellent/Very Good'.
- Responses were mostly consistent for all RHAs.

Figure 4.11 Coordination Between Health Care Providers Reported as 'Excellent/Very Good', by RHA, 2015-2016
Age and sex adjusted proportion (%) of weighted sample aged 12 years and older



H/L Significantly higher or lower than the MB average.

	PMH	SH-SS	NRHA	WRHA	MB	IERHA
T1 RATE	44.6%	45.0%	45.6%	45.9%	46.3%	50.5%

CCHS 2015 - 2016

Regional Key Findings

- Less than half of PMH residents report that the coordination between health care providers is 'Excellent/Very Good'.

A CLOSER LOOK...BRANDON TRANS HEALTH CLINIC

In April 2015, the Brandon Trans Health Clinic opened in response to the challenges that many residents face with accessing the services in Winnipeg. The goal of the clinic is to provide an individualized approach to care by acknowledging that each person has their own spectrum of gender identity and the variation in expression of this identity. Therefore every individual will have their own pathway to actualize the expression of their authentic self.

The Clinic was developed through a partnership with Klinik (Winnipeg), Sexuality Education Resource Centre (SERC), Public Health Services and a local physician who completed the Canadian Professional Association for Transgender Health (CPATH) course. A second family physician and a Nurse Practitioner will be completing the CPATH course in November 2019. The Brandon Trans Health Clinic is the only clinic specializing in transgender health outside of Winnipeg.

The Clinic operates one evening per month in Public Health Services at the Town Centre. A physician referral is not required, and there are currently 95 clients from across PMH accessing clinic services. Clients under 18 years are referred to Health Sciences Centre in Winnipeg. The Clinic connects clients with support services in the area including primary health care providers, offers hormone therapy and/or referrals for surgery, assists with completing documents required for legal identification change, injection technique training and safe needle disposal.

Clients are initially seen by a sexual health nurse and connected to resources including a 2SLGBTQ+ Counsellor with SERC. Hormone therapy is initiated and continued for one year before the client is referred to a Psychologist at Klinik. After a client has lived in a gender role that is congruent with their gender identity for 12 months, they may be referred for necessary surgery. Some surgeries may be performed in Brandon and Winnipeg while others are performed at Centre Metropolitain de Chirurgie in Montreal, Quebec and voice therapy is available at Deer Lodge Centre in Winnipeg.

Acute Care

Use of Hospitals

Definition

The percentage of residents who were admitted to an acute care hospital at least once in a fiscal year.

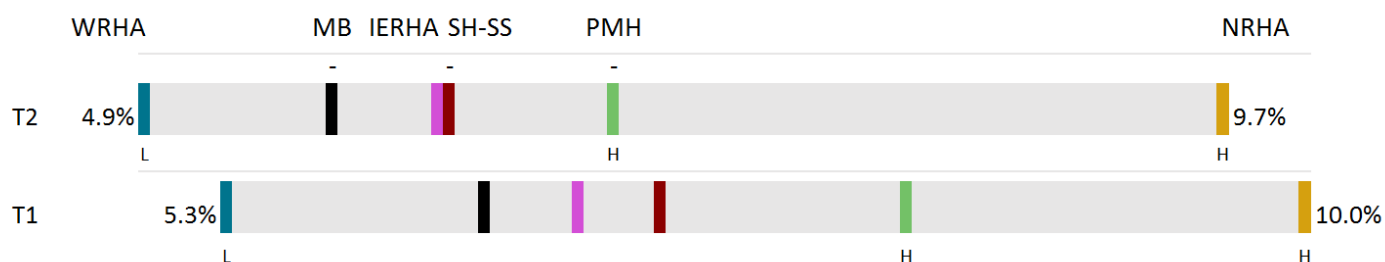
Why is this indicator important?

Hospitalizations can indicate the level of illness in the population, capacity of community-based supports and accessibility of hospital care for local residents.

Provincial Key Findings

- Hospital use in Manitoba decreased significantly over time.
- Hospital use in Prairie Mountain Health and Northern RHA is significantly higher than Manitoba, whilst significantly lower in Winnipeg RHA.
- Hospital use decreased significantly over time in Prairie Mountain Health and Southern Health-Santé Sud.
- Significant variation in hospital use is observed across the RHAs with Northern RHA having a rate almost double that of Winnipeg RHA.

Figure 4.12 Use of Hospitals by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of residents with at least one inpatient hospital stay per year



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	IERHA	SH-SS	PMH	NRHA
T2 COUNT	39,999	80,193	8,232	11,736	13,107	6,317
T2 RATE	4.9% L	5.8%	6.2% H	6.2% -	7.0% H-	9.7% H
T1 RATE	5.3% L	6.5%	6.9%	7.2%	8.3% H	10.0% H

MCHP RHA Indicators Atlas 2019

- Hospital use is strongly related to income in both urban and rural areas. In urban settings, hospital use amongst low income residents is 1.5 times that of the highest income residents. In rural settings, hospital use amongst low income residents is 1.7 times that of the highest income residents.



Urban Quintiles
 T1 1.5x
 T2 1.5x
 CHANGE 0.0

Rural Quintiles
 T1 1.7x
 T2 1.7x
 CHANGE 0.0

Regional Key Findings

- Hospital use in PMH has decreased significantly over time, but remains significantly higher than the provincial average.
- Hospital use in the Brandon and North zones is significantly higher than the provincial average. Hospital use has decreased significantly in both the South and North zones.
- Six districts demonstrate significantly higher hospital use than the province as a whole.
- Residents of Agassiz Mountain are 1.6 times as likely to use a hospital as residents of Whitemud. The district disparity gap narrowed by 17 percent between T1 and T2.

Table 4.8 Use of Hospitals by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
 Age and sex adjusted percent of residents with at least one inpatient hospital stay per fiscal year

	T2		T1	
	Count	Rate	Rate	

Manitoba	80,193	5.8	-	6.5	
-----------------	--------	-----	---	-----	--

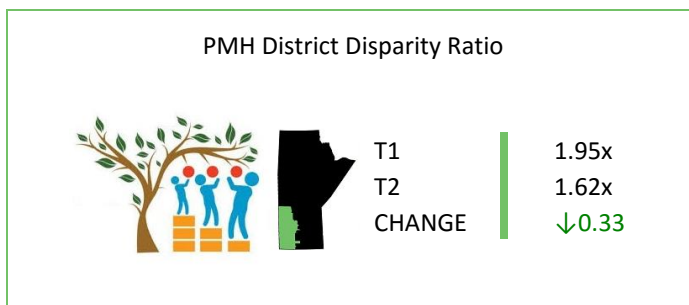
Brandon	3,784	6.8	H	7.1	
West End	997	5.9		6.2	
North Hill	504	6.0		6.5	
South End	706	6.2		6.3	
East End	589	7.5	H	7.8	
Downtown	988	7.6	H	8.1	H

South	5,707	6.7	-	7.9	H
Whitemud	788	5.8	-	7.5	
Spruce Woods	1,132	6.5		7.2	
Souris River	1,061	6.5	-	7.6	
Turtle Mountain	810	6.8		7.3	
Little Saskatchewan	945	6.8		7.8	H
Assessippi	971	7.2	H	8.1	H

	T2		T1	
	Count	Rate	Rate	

PMH	13,107	7.0	H-	8.3	H
------------	--------	-----	----	-----	---

North	3,616	7.9	H-	10.3	H
Swan River	446	6.7	-	8.8	H
Dauphin	742	6.7	-	8.4	H
Riding Mountain	426	6.8		8.1	H
Duck Mountain	540	7.6	H-	10.0	H
Porcupine Mountain	730	8.1	H-	11.3	H
Agassiz Mountain	732	9.4	H-	12.1	H



Inpatient Hospitalization Rate

Definition

The total annual number of inpatient hospitalizations per 1,000 population. Multiple admissions of the same person are counted as separate events.

Why is this indicator important?

Hospital admissions per resident can provide insight into the chronic nature of many health conditions, patient capacity to self-manage, capacity of community based supports and utilization of inpatient hospital services over time.

Provincial Key Findings

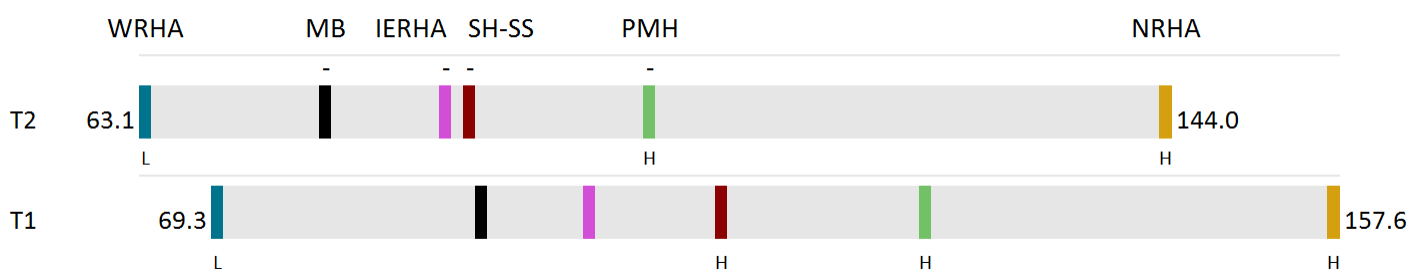
- The inpatient hospitalization rate has decreased significantly over time in Manitoba.
- Rates for Northern RHA and Prairie Mountain Health are significantly higher than the Manitoba average, whilst the rate for the Winnipeg RHA is significantly lower.
- Rates in all RHAs other than Winnipeg and Northern decreased significantly over time.
- Inpatient hospitalization rates are very strongly related to income in both urban and rural areas. In urban settings, rates amongst low income residents are 1.6 times that of the highest income residents. In rural settings, rates amongst low income residents are 1.9 times that of the highest income residents.



Urban Quintiles	
T1	1.6x
T2	1.6x
CHANGE	0.0

Rural Quintiles	
T1	1.8x
T2	1.9x
CHANGE	0.1 ↑

Figure 4.13 Inpatient Hospitalization by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate of hospitalizations per 1,000 residents



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	IERHA	SH-SS	PMH	NRHA
T2 COUNT	51,182	109,146	11,493	16,573	19,717	9,016
T2 RATE	63.1 L	78.4 -	87.5 -	89.7 -	103.7 H-	144.0 H
T1 RATE	69.3 L	90.6	98.9	109.2 H	125.3 H	157.6 H


Regional Key Findings

- Despite decreasing significantly over time, inpatient hospitalizations in PMH remain significantly higher than the province.
- The North zone has a significantly higher rate of inpatient hospitalizations although has shown a significant decrease over time.
- Three districts, all in the North zone, have inpatient hospitalization rates significantly higher than the provincial average.
- Residents of Agassiz Mountain are more than twice as likely to be hospitalized as residents of West End. The district disparity gap narrowed by 26 percent between T1 and T2.

Table 4.9 Inpatient Hospitalization by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted rate of hospitalizations per 1,000 residents

	T2		T1		
	Count	Rate	Rate	Rate	
Manitoba	109,146	78.4	-	90.6	
PMH	19,717	103.7	H-	125.3	H
Brandon	5,114	91.8		94.4	
West End	1,282	77.9		82.9	
South End	946	86.6		82.0	
North Hill	712	89.7		94.8	
East End	808	105.0		108.5	
Downtown	1,366	109.1		114.0	
North	5,816	123.2	H-	166.1	H
Dauphin	1,117	101.7		126.8	
Riding Mountain	662	102.4		132.5	
Swan River	737	110.7		145.3	H
Porcupine Mountain	1,125	127.8	H-	192.8	H
Duck Mountain	979	129.2	H	173.3	H
Agassiz Mountain	1,196	159.5	H-	226.0	H
South	8,787	102.3		119.7	
Whitemud	1,241	92.9		120.5	
Spruce Woods	1,678	93.8		108.7	
Souris River	1,615	98.4		116.2	
Turtle Mountain	1,221	99.8		118.5	
Little Saskatchewan	1,425	101.9		123.3	
Assessippi	1,607	116.9		129.0	

PMH District Disparity Ratio



T1 2.76x

T2 2.05x

CHANGE ↓0.71

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Hospital Location: Where Residents Were Hospitalized

Definition

The percentage of all hospitalizations of residents by location: within their home RHA, in another RHA, in Winnipeg or out-of-province, for a one-year time period. If a patient transfers to another hospital, each stay is counted as a separate event and attributed to the appropriate location.

Why is this indicator important?

Understanding where residents were hospitalized and the proportion of residents who travel to receive appropriate healthcare services is important for healthcare resource planning to meet resident needs and address barriers to care.

Provincial Key Findings

- More than three quarters of all hospitalizations in Manitoba occur in the residents 'home RHA hospital' with most of the remainder in a Winnipeg RHA hospital.
- The proportion of a RHAs hospitalizations that occur in Winnipeg varies from 60% in Interlake Eastern RHA to 14% in Prairie Mountain Health.

Table 4.10 Hospital Location: Where Health Region Patients Went for Hospitalizations by RHA, 2011/12 and 2016/17
Percent of Total Hospitalizations

	Fiscal Year	Total Hospitalizations	Home RHA Hospital	Other RHA Hospital	Winnipeg Hospital	Out of Province Hospital
SH-SS	2011/12	31,883	56.3%	3.2%	39.5%	1.1%
	2016/17	31,553	54.3%	3.1%	41.7%	0.9%
WRHA	2011/12	100,655	96.9%	1.6%	0.2%	1.3%
	2016/17	104,651	96.9%	1.8%	0.1%	1.1%
PMH	2011/12	40,126	80.8%	3.2%	13.6%	2.3%
	2016/17	37,928	81.9%	2.5%	13.9%	1.7%
IERHA	2011/12	22,469	37.5%	2.8%	58.7%	1.0%
	2016/17	23,361	36.7%	2.9%	59.6%	0.8%
NRHA	2011/12	14,420	54.5%	1.7%	42.6%	1.3%
	2016/17	15,229	48.4%	1.9%	48.7%	1.0%
MB	2011/12	209,553	78.4%	2.3%	17.9%	1.4%
	2016/17	212,722	77.8%	2.3%	18.8%	1.1%

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- PMH residents were hospitalized almost 38,000 times in 2016/17, a decrease of 5.5% from 2011/12. More than 80% of these were to a hospital in PMH and the majority of the remainder to a Winnipeg RHA based facility.

Most Frequent Causes of Hospitalizations

Definition

The most frequent causes for hospitalizations, for a one-year time period. This indicator is based on the most significant condition (responsible diagnosis) of a patient which contributed to his or her hospital stay.

Why is this indicator important?

Causes of hospitalization inform regions on the utilization of hospitals and can help focus resource allocation and education priorities.

Regional Key Findings

- The most frequent causes of hospitalizations in Manitoba are digestive, ‘health status and contact’ (issues not necessarily connected to a specific diagnosis or disease such as colonoscopies, convalescence, palliative care, etc.) and pregnancy and childbirth.
- The most frequent causes of hospitalizations in PMH are digestive, ‘health status and contact’ and cancer.

Table 4.11 Most Frequent Causes of Hospitalizations PMH and Manitoba, 2016-17
Crude Percent of Hospitalizations

PMH Cause	Percent of Hospitalizations	MB Cause	Percent of Hospitalizations
Digestive	19.0%	Digestive	17.5%
Health Status and Contact	13.7%	Health Status and Contact	11.4%
Cancer	8.0%	Pregnancy and Birth	10.6%
Pregnancy and Birth	7.2%	Cancer	8.3%
Circulatory	7.0%	Circulatory	7.5%
Musculoskeletal	6.2%	Genitourinary and Breast	6.1%
Injury and Poisoning	5.8%	Injury and Poisoning	6.0%
Eye Disorders	5.8%	Eye Disorders	6.0%
Respiratory	5.5%	Ill-Defined Conditions	5.5%
Ill-Defined Conditions	5.1%	Respiratory	5.2%

MCHP RHA Indicators Atlas 2019

Hospital Days for Acute Care

Definition

The number of days of hospital care provided to patients who are acutely ill and require medical care or surgery for treatment of disease or severe illness (excluding newborns), per 1,000 population, for a one-year time period.

Why is this indicator important?

Providing targeted care and timely discharge from hospital results in better patient outcomes and reduced financial cost to the healthcare system.

Provincial Key Findings

- The rate of hospital days for acute care in the province has decreased slightly over time.
- Northern RHA has a rate of hospital days for acute care significantly higher than the province.
- There are considerable variations in the rate of hospital days for acute care across all RHAs ranging from just over 500 in Winnipeg RHA to almost 1,200 in Northern RHA.
- Use of acute care days is very strongly related to income in both urban and rural areas. In urban settings, rates amongst low income residents are almost twice that of the highest income residents. In rural settings, rates amongst low income residents are more than twice that of the highest income residents.



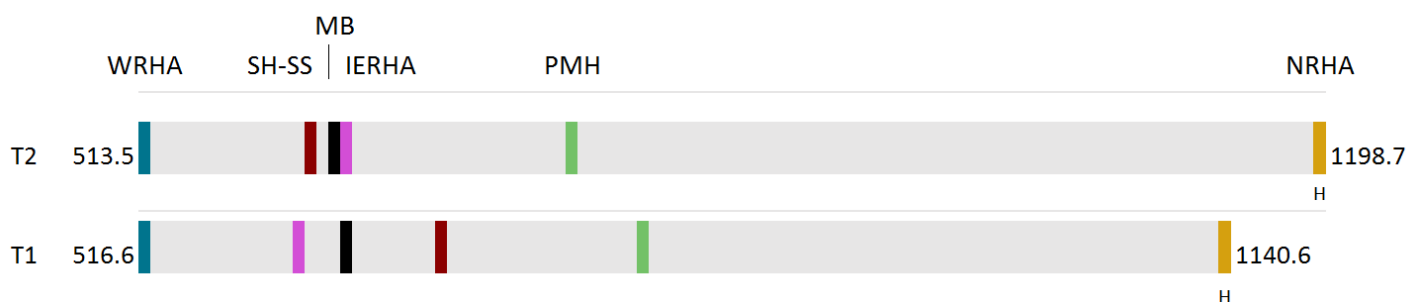
Urban Quintiles

T1 2.0x
T2 1.9x
CHANGE 0.1 ↓

Rural Quintiles

T1 1.9x
T2 2.1x
CHANGE 0.2 ↑

Figure 4.14 Hospital Days for Acute Stays (Excluding Newborns) by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted per 1,000 residents



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	SH-SS	MB	IERHA	PMH	NRHA
T2 COUNT	412,097	109,142	844,018	87,076	159,209	52,871
T2 RATE	513.5	618.4	628.4	634.4	766.0	1198.7 H
T1 RATE	516.6	690.3	636.2	611.1	806.2	1140.6 H

Regional Key Findings

- The rate of hospital days used in PMH and each of the three zones has not changed significantly over time and remains similar to the provincial average.
- Only Downtown exhibits a significantly higher rate of hospital days used than the province as a whole.
- Residents of downtown are almost twice as likely to use hospital days as residents of Spruce Woods. The district disparity gap narrowed by 6 percent between T1 and T2.

Table 4.12 Hospital Days for Acute Stays (Excl. Newborns) by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted per 1,000 residents

	T2		T1
	Count	Rate	Rate

Manitoba	844,018	628.4	636.2
-----------------	---------	-------	-------

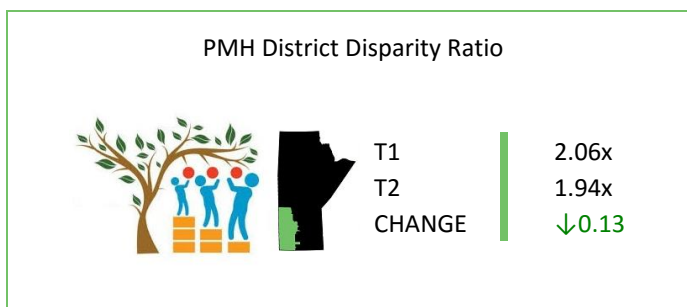
Brandon	47,775	794.3	788.4
South End	6,656	642.1	579.7
West End	12,952	699.8	653.1
North Hill	6,041	751.6	709.5
East End	8,103	926.3	916.9
Downtown	14,023	1093.7	1173.1

South	67,403	707.7	712.4
Spruce Woods	11,991	564.6	663.5
Whitemud	9,989	673.8	728.4
Souris River	12,515	698.9	713.4
Turtle Mountain	9,985	713.5	692.6
Little Saskatchewan	11,599	726.6	810.4
Assessippi	11,324	802.0	702.1

	T2		T1
	Count	Rate	Rate

PMH	159,209	766.0	806.2
------------	---------	-------	-------

North	44,031	863.7	1015.2	H
Swan River	5,671	686.6	841.0	
Riding Mountain	5,468	735.9	850.0	
Dauphin	11,212	804.9	983.1	
Duck Mountain	7,105	806.7	809.6	
Agassiz Mountain	6,284	869.1	1196.4	H
Porcupine Mountain	8,291	986.8	1155.7	H



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Hospital Days for Alternate Level of Care Stays

Definition

The number days of hospital care provided to patients (excluding newborns) who were designated as Alternate Level of Care (ALC), per 1,000 population, for a one-year time period. A patient may be designated as ALC if they occupy an acute care hospital bed but is no longer acutely ill and does not require the intensity of resources and services provided in an acute care setting.

Why is this indicator important?

Reducing the number of ALC hospital days helps to ensure patients are cared for in the most appropriate setting and that hospital resources are used more efficiently, resulting in substantial cost savings for the healthcare system.

Provincial Key Findings

- The provincial and regional rates of hospital days for ALC Stays (excluding newborns) has increased over time.
- Use of ALC days is very strongly related to income in both urban and rural areas. In urban settings, rates amongst low income residents are 3.1 times that of the highest income residents. In rural settings, rates amongst low income residents are 2.5 times that of the highest income residents. The income disparity has increased markedly in both rural and urban settings from T1 to T2.

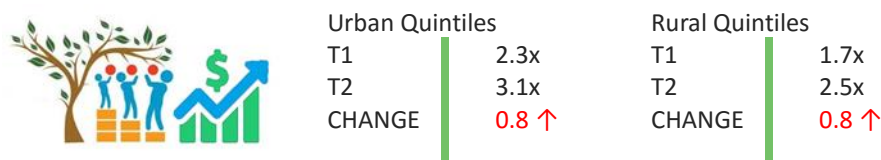
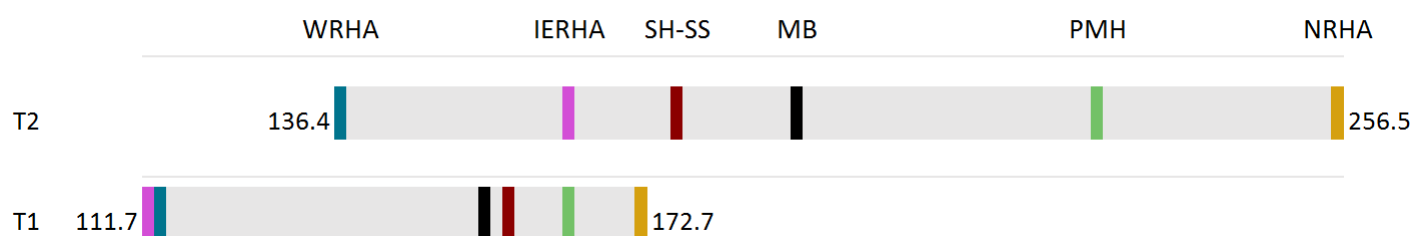


Figure 4.15 Hospital Days for ALC Stays (Excl. Newborns) by RHA, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted per 1,000 residents



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	IERHA	SH-SS	MB	PMH	NRHA
T2 COUNT	73,640	31,748	45,593	243,007	56,826	6,878
T2 RATE	136.4	164.6	176.3	191.7	227.5	256.5
T1 RATE	113.4	111.7	157.3	153.4	164.6	172.7

Regional Key Findings

- PMH has the second highest hospital days for ALC Stays in the province and is increasing over time.
- ALC rates are similar in the Brandon (263) and South (300) zones but are lower in the North (93) zone.

A CLOSER LOOK... THE FRAILTY JOURNEY

Reducing the length of a hospital stay remains a provincial priority. External factors unrelated to the initial cause of the admission often influences the length of stay. Hospital stays are frequently extended because of a client's inability to manage the activities of daily living: bathing, dressing, feeding themselves, organizing their day, referred to as 'failure to cope'.

A Frailty Assessment is completed for those experiencing 'failure to cope'. The results assist clinicians in determining the appropriate care and discharge plan, with additional caregiver support, community support services and the possibility of PCH placement discussed.

Frailty is related to a number of factors, including:

- co-morbidities such as diabetes, hypertension, heart disease, respiratory disease,
- cognitive impairment,
- inadequate nutrition,
- loss of bowel and bladder control,
- balance problems and falling,
- vision and/or hearing impairment,
- health issues requiring home care nursing support, and
- unstable health conditions requiring frequent visits to the family doctor or emergency room.

Individuals and their families can find themselves faced with difficult decisions. PMH offers a valuable resource entitled, "The Frailty Journey" that provides information to clients and families in this situation.

Hospital Catchment: Where Patients Using RHA Hospitals Came From

Definition

The percentage of all hospitalizations provided by all hospitals in each RHA that were provided to residents of the (home) RHA, other RHA, Winnipeg, or out-of-province, for a one-year time period.

Why is this indicator important?

Where residents are hospitalized provides valuable insight into the availability and accessibility of acute care services, which helps to plan and allocate resources appropriately.

Provincial Key Findings

- In every RHA, the majority of hospital patients are residents of that region.

Table 4.13 Where Health Region Patients Came from for Hospitalizations by RHA, 2011/12 and 2016/17
Percent of Total Hospitalizations

	Fiscal Year	Total Hospitalizations	RHA Residents	Other RHA Residents	Winnipeg Residents	Non-Manitobans
SH-SS	2011/12	20,534	87.4%	7.8%	3.4%	1.4%
	2016/17	19,554	87.6%	6.3%	4.8%	1.3%
WRHA	2011/12	142,877	68.4%	26.1%	N/A	5.5%
	2016/17	148,546	68.4%	26.8%	N/A	4.9%
PMH	2011/12	35,267	92.0%	3.9%	0.5%	3.7%
	2016/17	33,690	92.2%	4.0%	0.5%	3.2%
IERHA	2011/12	9,404	89.7%	1.6%	7.7%	1.0%
	2016/17	9,610	89.3%	1.8%	8.1%	0.8%
NRHA	2011/12	8,817	89.1%	1.0%	0.4%	9.6%
	2016/17	8,217	89.9%	1.4%	0.6%	8.1%
MB	2011/12	216,899	75.8%	18.7%	0.7%	4.8%
	2016/17	219,617	75.5%	19.4%	0.9%	4.2%

MCHP RHA Indicators Atlas 2019

Hospital Readmission Rates (Unplanned)

Definition

Unplanned, inpatient readmissions to an acute care facility (the same or different hospital) within 30 days, following discharge, for a one-year time period.

Why is this indicator important?

Hospital readmission is a nationally used indicator of overall health system performance. Although readmission may involve factors outside the direct control of the hospital, high rates of readmission act as a signal to review practices, including discharge planning and continuity of services after discharge. Reducing hospital readmissions is a recognized strategy to improve patient outcomes and reduce healthcare costs.

Provincial Key Findings

- Unplanned readmissions have slightly decreased in Manitoba.
- The readmission rate decreased significantly in Southern Health-Santé Sud.
- Winnipeg RHA residents have significantly lower rates; whilst Prairie Mountain Health and Northern RHA residents have significantly higher rates than the provincial average.
- Readmission rates are strongly related to income in both urban and rural areas. In urban settings, rates amongst low income residents are 1.3 times that of the highest income residents. In rural settings, rates amongst low income residents are 1.4 times that of the highest income residents.

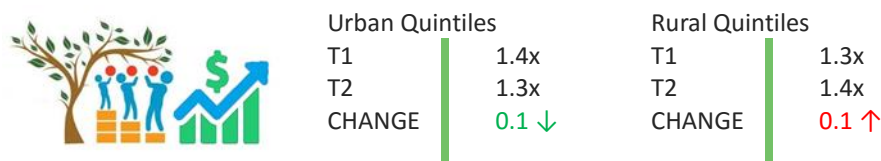
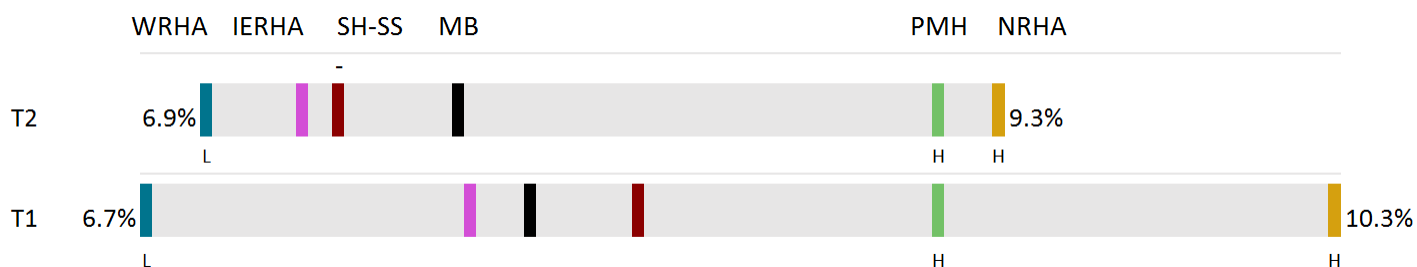


Figure 4.16 Hospital Readmission by RHA, 2011/12 (T1) and 2016/17 (T2)

Age and sex adjusted percent of hospital episodes with a readmission within 30 days of discharge



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	IERHA	SH-SS	MB	PMH	NRHA			
T2 COUNT	3,865	861	1,225	8,642	1,877	806			
T2 RATE	6.9%	L	7.2%	7.3%	7.7%	9.1%	H	9.3%	H
T1 RATE	6.7%	L	7.7%	8.2%	7.9%	9.1%	H	10.3%	H



MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The rate of unplanned hospital readmissions in PMH is significantly higher than the provincial average.
- Hospital readmissions in the North and South zones are significantly higher than the provincial average.
- Hospital readmissions decreased significantly over time in the North zone whilst increasing significantly in the Brandon zone.
- Asessippi and Duck Mountain are significantly higher than the provincial average.
- Duck Mountain residents are more than twice as likely to be readmitted to hospital as residents of Riding Mountain. The district disparity gap narrowed by 19 percent between T1 and T2.

Table 4.14 Hospital Readmission by PMH Zone and District, 2011/12 (T1) and 2016/17 (T2)
Age and sex adjusted percent of hospital episodes with a readmission within 30 days of discharge

	T2		T1		
	Count	Rate	Rate	Rate	
Manitoba	8,642	7.7		7.9	
Brandon	454	8.2	+	6.4	L
West End	104	7.4		6.0	
South End	82	7.7	+	4.9	L
Downtown	124	8.0		7.0	
East End	77	8.5		6.3	
North Hill	67	8.9		7.5	
PMH	1,877	9.1	H	9.1	H
North	564	9.1	H-	10.6	H
Riding Mountain	40	5.9	-	10.8	
Dauphin	85	7.4		7.9	
Porcupine Mountain	99	8.3		10.9	H
Swan River	80	9.0		9.1	
Agassiz Mountain	116	9.5	-	12.5	H
Duck Mountain	144	12.2	H	10.9	H
South	859	9.2	H	9.0	H
Spruce Woods	135	7.3		6.9	
Whitemud	96	7.6		8.1	
Souris River	134	8.5		8.7	
Little Saskatchewan	139	8.7		8.9	
Turtle Mountain	151	9.9		10.6	H
Asessippi	204	12.0	H	9.9	

PMH District Disparity Ratio					
	T1	2.55x			
	T2	2.07x			
	CHANGE	↓0.48			

MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

Caesarean Section (C-section)

Definition

The percentage of caesarean section procedures for in-hospital births among female residents, for a two-year time period.

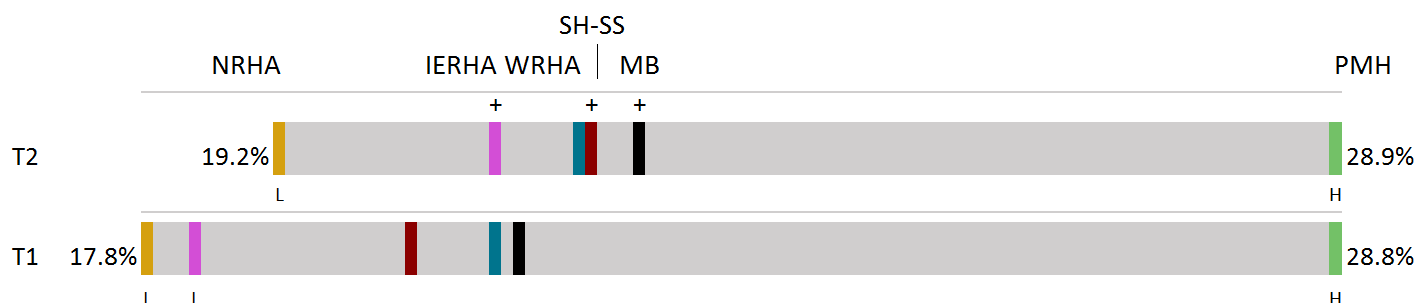
Why is this indicator important?

C-sections are associated with a greater risk of maternal morbidity, negative maternal and infant health outcomes and higher costs to the health care system. C-section rates are often used to monitor clinical practices, with an implicit assumption that lower rates indicate more appropriate and efficient care.

Provincial Key Findings

- The percentage of C-sections significantly increased over time in the province.
- Prairie Mountain Health has a significantly higher rate than the province whilst Northern RHA has a significantly lower rate.
- Similar to the province, Southern Health-Santé Sud and Interlake-Eastern RHAs have increased significantly over time.
- The proportion of C-sections for women 40 years of age and older is generally higher than all other age groups.

Figure 4.17 Caesarean Section Rate by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Maternal age adjusted average annual percent of singleton in-hospital births



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	NRHA		IERHA		WRHA		SH-SS		MB		PMH	
T2 COUNT	584		586		3,813		1,276		7,446		1,183	
T2 RATE	19.2%	L	21.2%	+	21.9%		22.1%	+	22.5%	+	28.9%	H
T1 RATE	17.8%	L	18.4%	L	21.1%		20.4%		21.4%		28.8%	H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The rate of C-sections in PMH remains significantly higher than the provincial average.
- C-sections in all three zones remain significantly higher than the provincial average.
- East End and West End are significantly higher than the provincial average.
- Swan River residents are 1.4 times as likely to undergo a C-section as residents of Porcupine Mountain. The district disparity gap narrowed by 25 percent between T1 and T2.

Table 4.15 Caesarean Section Rate by PMH Zone and District, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Maternal age adjusted average annual percent of singleton in-hospital births

	T2			T1	
	Count	Rate		Rate	

Manitoba	7,446	22.5	+	21.4	
-----------------	-------	------	---	------	--

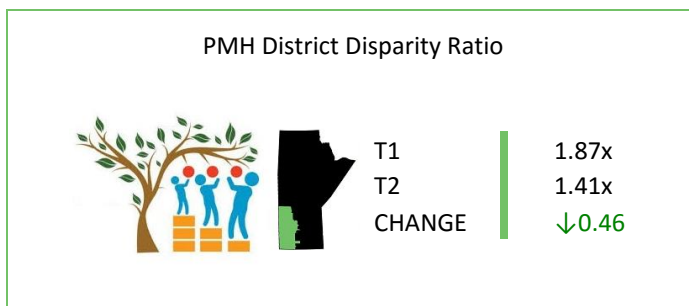
Brandon	444	31.2	H	31.1	H
South End	92	29.0		32.5	H
Downtown	100	29.3		31.3	H
North Hill	58	30.2		33.5	H
East End	70	33.1	H	33.1	H
West End	124	35.0	H	27.5	

South	507	26.8	H	27.0	H
Spruce Woods	108	25.5		24.6	
Little Saskatchewan	73	26.3		28.2	
Whitemud	93	26.9		24.0	
Turtle Mountain	66	27.1		25.6	
Souris River	102	27.6		29.7	H
Assessippi	65	28.7		29.9	

	T2			T1	
	Count	Rate		Rate	

PMH	1,183	28.9	H	28.8	H
------------	-------	------	---	------	---

North	232	30.0	H	28.5	H
Porcupine Mountain	48	24.9		27.4	
Duck Mountain	20	29.2		17.9	
Agassiz Mountain	56	30.2		29.4	
Dauphin	63	31.4		31.8	H
Riding Mountain	28	32.9		32.0	
Swan River	17	35.2		21.7	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

A CLOSER LOOK... CAESAREAN SECTIONS

Caesarean sections (C-sections) are the most common surgical procedure performed on women of child-bearing age. There are several factors that impact the C-section rates including induction practices, demographics of child-bearing women, multiple pregnancies, previous C-section, infections such as HIV or genital herpes and general obstetric complications. While C-sections may be the best approach to ensure good outcomes for both mother and baby in high-risk pregnancies or complicated deliveries, rates are increasing among women in all categories including low-risk pregnancies, where vaginal birth would be expected.

Given the complexity of factors driving C-section rates, it may be worthwhile to categorize C-section rates by the characteristics of a pregnancy, using validated criteria, to identify the greatest contributors to surgical intervention. It may also be useful to examine how labour is managed and the time of day that C-sections tend to occur if timely access to surgical intervention is not readily available.

Vaginal Birth After Caesarean Section

Definition

The percentage of female residents giving birth vaginally, who had previously had at least one delivery by caesarean section, in a five-year period.

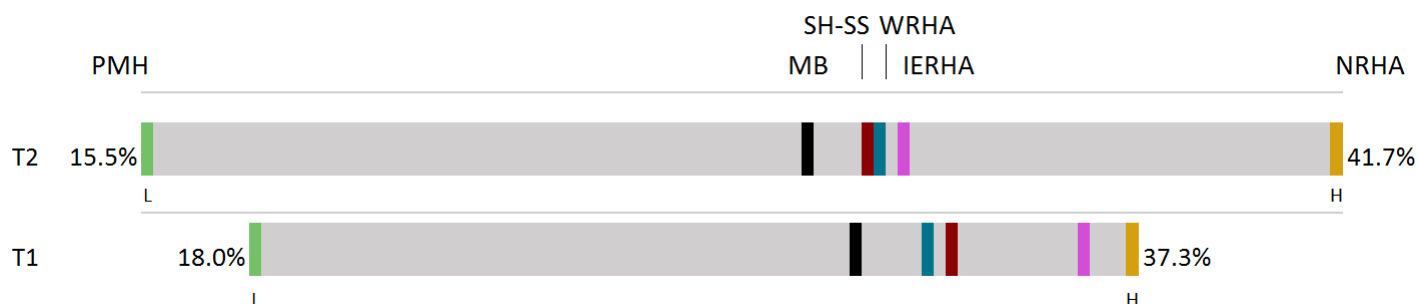
Why is this indicator important?

Vaginal birth is a safe option for many women who previously had a C-section and is preferred because there is less risk to the mother and a shorter recovery time. Clinical practice guidelines recommend women who had a previous C-section be offered the opportunity to deliver vaginally following discussion about maternal and perinatal risks and benefits with their healthcare provider.

Provincial Key Findings

- The percentage of Vaginal Birth After C-section (VBAC) decreased slightly over time in the province.
- Prairie Mountain Health has a significantly lower rate than the province whilst Northern RHA has a significantly higher rate.
- The majority of women who had a VBAC were between the ages 25 to 34 years.

Figure 4.18 VBAC by RHA, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted percent of births among females with previous Caesarean section



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	PMH	MB	SH-SS	WRHA	IERHA	NRHA
T2 COUNT	230	2,847	549	1,450	232	384
T2 RATE	15.5% L	30.2%	31.5%	31.7%	32.4%	41.7% H
T1 RATE	18.0% L	31.2%	33.2%	32.7%	36.3%	37.3% H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The rate of VBACs in PMH remains significantly lower than the provincial average.
- VBACs in all three zones remain significantly lower than the provincial average and decreased significantly over time in the Brandon zone.
- Five districts are significantly lower than the provincial average.
- Downtown residents are more than three times as likely to not have a subsequent vaginal birth once they have undergone a C-Section as residents of Duck Mountain. The district disparity gap widened by 78 percent between T1 and T2.

Table 4.16 VBAC by PMH Zone and District, 2007/08-2011/12 (T1) and 2012/13-2016/17 (T2)
Maternal age adjusted percent of births among females with previous Caesarean section

	T2		T1	
	Count	Rate	Rate	

Manitoba	2,847	30.2		31.2	
-----------------	-------	------	--	------	--

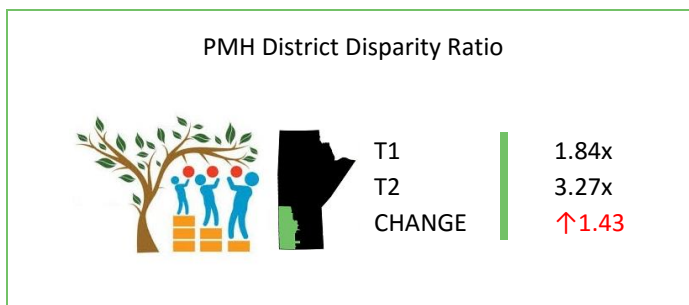
Brandon	50	9.4	L-	14.7	L
North Hill	s			15.0	
West End	16	11.9	L	15.4	L
South End	12	10.7	L	15.5	
East End	7	9.0	L	14.0	
Downtown	11	8.5	L	13.4	L

South	118	18.2	L	19.2	L
Spruce Woods	35	25.1		24.6	
Whitemud	20	19.4		19.1	
Asessippi	20	18.6		16.8	
Little Saskatchewan	14	17.3		21.0	
Turtle Mountain	12	14.9		16.3	
Souris River	17	12.4	L	14.5	L

	T2		T1	
	Count	Rate	Rate	

PMH	230	15.5	L	18.0	L
------------	-----	------	---	------	---

North	62	20.9	L	20.8	L
Riding Mountain	s			15.9	
Swan River	s			s	
Duck Mountain	7	27.8		s	
Agassiz Mountain	18	25.7		21.7	
Porcupine Mountain	18	23.1		22.9	
Dauphin	11	14.2		22.6	



MCHP RHA Indicators Atlas 2019

H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period. (s) suppressed due to small numbers.

Canadian Patient Experience Survey—Inpatient Care

Definition

The percentage of adult patients participating in the Canadian Patient Experience Survey – Inpatient Care (CPES-IC), over a one-year time period, who reported positively about the quality of care they received during a recent hospital stay. It excludes patients admitted for primary mental health diagnosis or from a mental health facility, admitted from correctional facilities, discharged to personal care homes, or selected for the survey in the last 12 months within the same hospital. Unless otherwise labelled the data are from inpatients completing the CPES-IC survey in PMH facilities in the fiscal year 2018/2019.

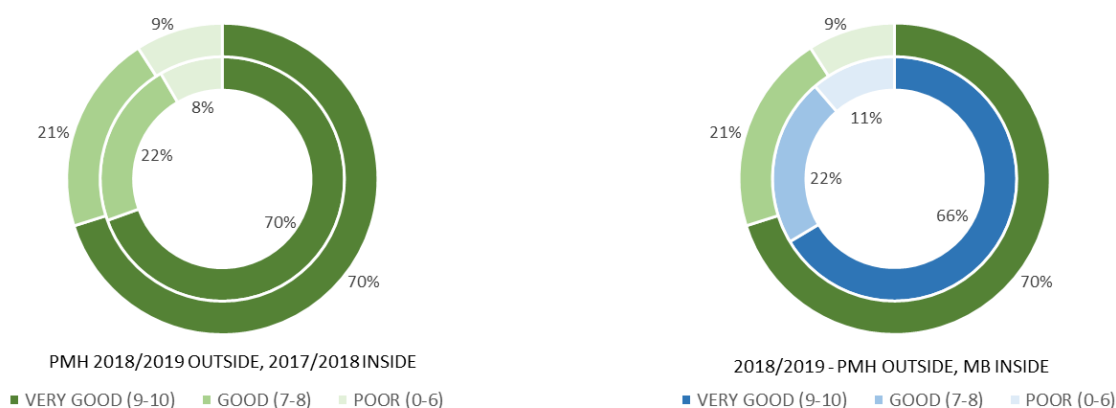
Why is this indicator important?

This survey is a partnership between all regional health authorities and the Manitoba government, as part of a larger initiative across Canada that supports comparison of patients’ experiences across the country. It supports quality improvement initiatives at all service delivery sites, informs hospital care and supports accreditation processes.

Overall Experience

- In PMH for the 2018/2019 fiscal year 2,247 inpatients completed the CPES-IC survey for a response rate of 43%. This compares favourably to a provincial response rate of 37% and is the same as the 2017/2018 response rate for PMH.
- The majority of clients in PMH (70%) reported a very good (scored their hospital experience as 9 or 10 out of 10) hospital experience in 2018/2019, the same as 2017/2018 and slightly higher than the provincial average of 66% in the same time period.

Figure 4.19 Overall Hospital Experience Rating in PMH and Manitoba, 2017-2018 and 2018-2019



Canadian Patient Experience Survey

Communication and Explanation of Care

Good communication with doctors and nurses is important for ensuring that patients clearly understand their treatment plan and can take an active role in their care. Medication is an important component of hospital care. Effective explanation about medication helps patients understand how to take what has been prescribed, as well as possible side effects, and may prevent medication errors.

- The majority of respondents felt that they were ‘always’ treated with courtesy and respect by both nurses (81%) and doctors (84%). A smaller proportion reported that nurses (64%) and doctors (68%) always explained things in a way they could understand.
- Although more than two-thirds (71%) of respondents reported that they were ‘always’ told what a new medicine was for before being given it, less than half (46%) reported that hospital staff ‘always’ described the possible side effects in a way they could understand.

Coordination of Care

Coordination of care involves effective communication amongst health care providers. Lack of communication may lead to frustration and confusion amongst patients, system inefficiencies and unintended patient harm.

- Most respondents (60%) felt that there was ‘always’ good communication about their care between doctors, nurses and other hospital staff and that the staff ‘always’ seemed informed and up to date regarding their care.
- Less than half of patients that were admitted through the Emergency Department reported that they got enough information about their condition or treatment (43%) or what was going to happen during their hospital stay (44%). However, 91% of respondents felt that they didn’t have to wait too long once they knew they needed to be admitted to a hospital bed.
- More than two-thirds (70%) of patients reported that tests and procedures were done when they were told they would be done.

Support Leaving Hospital

Discharge planning involves ensuring that patients will have the help they need at home and that they are ready with information about their health problems and symptoms, including written instructions, before they leave the hospital.

- On discharge from the facility, four out of every five patients (80%) reported that they had a clear understanding about all of their prescribed medications, including those they were taking before their hospital stay.
- Only half (53%) of patients reported having a better understanding of their condition than when they entered the hospital.
- A substantial proportion (42%) of patients reported that they did not receive enough information from hospital staff about what to do if they were worried about their condition or treatment after they left the hospital.

A CLOSER LOOK... RESPONDING TO CLIENT CONCERNS

Emergency Department (ED) staff at the Brandon Regional Health Centre noticed an increase in concerns related to patients' confusion about where to go/where to sit or stand upon entering the ED. Patients were reporting being upset after observing other patients being seen before them and signage was reported to be unclear. The manager of this department also had a conversation with one of the complainants who mentioned they felt things could be improved by having a particular area of the waiting room for people who were awaiting triage.

As a result, this department decided to try something new in an attempt to clear up some of the confusion and frustration for both patients and staff. They had five red chair covers made for the waiting room. These chairs were designated for those patients who had already been checked in by patient registration but were now waiting to be seen/assessed by the triage nurse.

With this system and some accompanying signage in place, staff and patients could easily and quickly see who was in the red chairs and still awaiting triage. The system provided reassurance to those awaiting triage that they were visible to the triage nurse and were still in line for their initial assessment. In general this change helped to reduce some of the confusion that can occur in a busy ED waiting room.

This new process was shared with other PMH Emergency Departments for their consideration.

Home Care and Personal Care Homes (PCHs)

Home Care Regional Prevalence

Definition

The prevalence of home care use for all ages, for a two-year time period. Prevalence was calculated for overall rates (i.e. the number of active clients receiving one or more services) and for each type of service separately, which includes: health care aids/home support worker and nursing services.

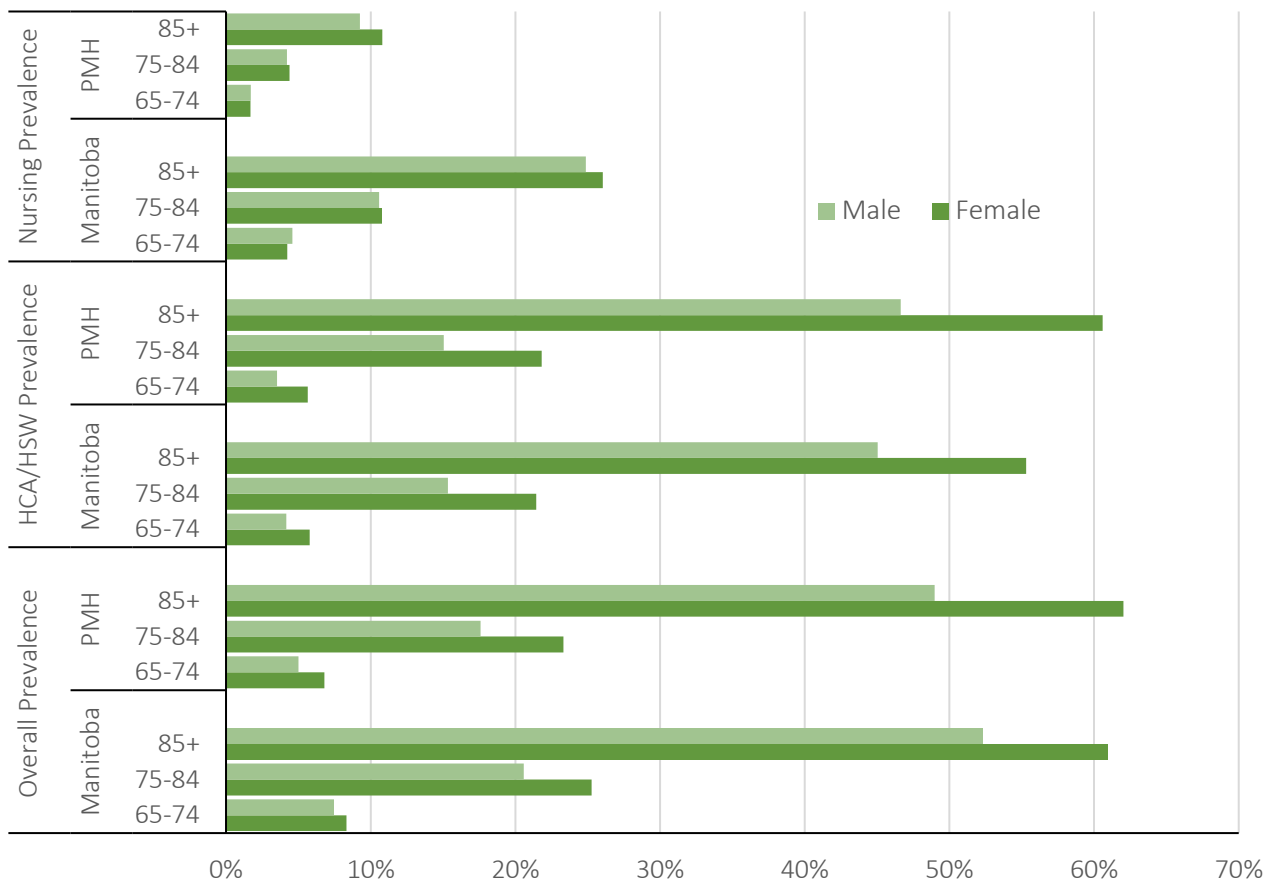
Why is this indicator important?

Home care use provides insight into services and supports provided (such as personal care, nursing care and home support) to help individuals remain at home and live independently in their community. An aging population, and an increase in those living with chronic conditions, will result in the need for additional home care support services.

Provincial Key Findings

- The overall prevalence of home care use in Manitoba was 3.3%; an estimated 43,000 residents received one or more services during a two-year time period. This was highest amongst residents who were females and aged 85 years and older.
- An estimated 29,000 residents received Health Care Aide (HCA) and Home Support Worker (HSW) services, representing a prevalence of 2.2%. This was highest amongst residents who were females and aged 85 years and older.
- An estimated 23,000 residents received home care for nursing services, representing a prevalence of 1.8%. This was highest amongst residents who were aged 85 years and older.
- On average people in Manitoba receive HCA/HSW services for 2.1 years. Female home care clients received care on average longer than that of males (2.2 versus 1.7 years).

Figure 4.20 Prevalence of Manitoba and PMH Receiving Home Care Services, 2013/14-2014/15
Residents aged 65 and older by age, sex, and service type



MCHP Home Care Indicators - Preliminary data tables from work being commissioned by the Provincial Health Department

Regional Key Findings

- The overall prevalence of home care use in PMH was 3.3%; an estimated 5,400 residents received one or more services during a two-year time period.
- An estimated 4,500 PMH residents received Health Care Aide (HCA) and Home Support Worker (HSW) services, representing a prevalence of 2.8%. This was highest amongst residents who were females and aged 85 years and older.
- An estimated 1,400 PMH residents received home care for nursing services, representing a prevalence of 0.9%. This was highest amongst residents who were aged 85 years and older. This prevalence is considerably less than that of the province.
- Home care prevalence is highest in the North zone of PMH (4.6%), almost twice that of Brandon (2.3%) and higher than the South zone (3.3%) which is comparable to the provincial average.
- Dauphin residents are more than three times as likely to have received Home Care services over a two year period as residents of West End.
- On average people in PMH received HCA/HSW services for 2.6 years.
- In PMH, 85% of people waited 30 days or less from intake to the first visit from a Home Care provider.

A CLOSER LOOK... PERSONAL CARE HOME CLIENT EXPERIENCE

In May 2016, residents/clients in PCH and transitional care settings in PMH were provided with the opportunity to complete the Long Term Care Resident Experience Questionnaire. Family members and volunteers were requested to assist those who were unable to complete the questionnaire independently.

Collecting and responding to feedback regarding the care and service received is part of the organization's commitment to quality improvement.

Several themes became evident through the site level feedback:

- There is room for improvement with communication between staff and residents or their families in most PCHs. This includes staff wearing name tags, introducing themselves, and discussing medications or care decisions and explaining why decisions were made.
- Lack of awareness of Resident Family Council activity; respondents noted not seeing meeting minutes, and not being aware of discussion items. Also, if residents were aware of Resident Family Council, they were unsure of how to bring concerns forward to that group.
- Lack of awareness and understanding of The Resident Bill of Rights; many respondents noted this was 'not applicable' even though The Resident Bill of Rights is applicable to all residents.

All responses are confidential and are expected to be used to improve the quality of care and experience of the residents/clients.

Residents in Personal Care Homes

Definition

The percentage of residents 75 years and older who live in a personal care home, for a one-year time period.

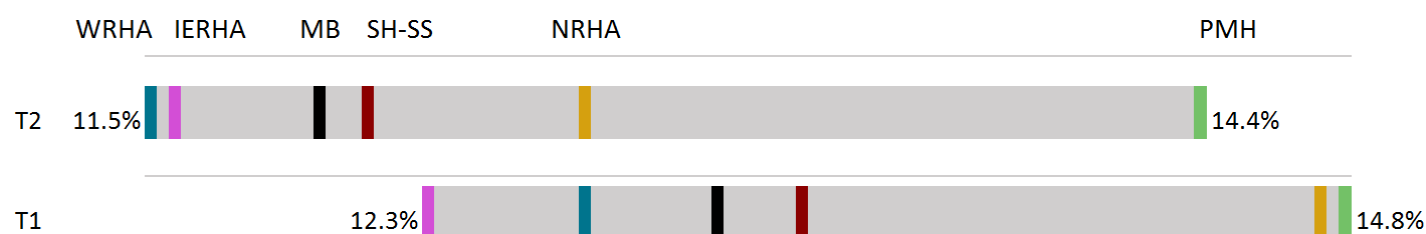
Why is this indicator important?

As the population continues to age, it is important to monitor the proportion of residents living in PCHs to anticipate increasing healthcare resource requirements.

Provincial Key Findings

- In Manitoba and amongst all regions the proportion of residents aged 75 years and older living in PCHs decreased slightly over time.

Figure 4.21 Residents in Personal Care Homes by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age and sex adjusted average annual percent of residents 75 years and older living in a PCH



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	IERHA	MB	SH-SS	NRHA	PMH
T2 COUNT	12,663	1,705	21,719	2,584	310	4,457
T2 RATE	11.5%	11.6%	12.0%	12.1%	12.7%	14.4%
T1 RATE	12.7%	12.3%	13.1%	13.3%	14.7%	14.8%

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- The proportion of PMH residents aged 75 years and older living in PCHs is the highest in the province.
- The proportion of PMH residents aged 75 years and older living in PCHs is significantly higher than the province in all zones; Brandon (15.2%), South (14.3%) and North (14.7%).

A CLOSER LOOK... MAKING PERSONAL CARE HOMES MORE LIKE HOME

A common theme in Personal Care Homes across PMH is the philosophy of putting the resident and their well-being first. Inspired by The Butterfly Household Model of Care, Brandon University nursing students conducted site research and developed recommendations for action in PMH personal care homes³¹. The model focused on enhanced emotional care for residents living with dementia, requiring a shift in care services. The shift from being task-oriented to achieving a real emotional connection is at the heart of a more person-centred approach. The holistic approach offers many benefits with a more home-like environment and closer emotional connection with the residents including increased resident well-being, decreased resident falls, and reduced staff turnover and absenteeism. A variety of concepts were recommended, including a “reality orientation board” that includes the date, weather, season, holiday information and the name of the PCH. Increased lighting, wall murals, tablets with headsets to play music on, colourful art work, large print communications, stimulating games, and resident pets were some of the described options.



Souris PCH embraced the recommendations and implemented large murals and tactile wall art that create a colourful and engaging environment that sparks memories or feelings of joy. The response from the residents and the community has been very positive, and the concept is expanding to other PCH's across the region.

The Riverdale PCH received a facelift with the installation of a photo covering the entirety of the front entrance. The photographer was Caley Brown of Brandon.



A resident said: *“This reminds me of Heaven, it is so peaceful!”*



Rosburn PCH partnered with local students to brighten the hallways and encourage interaction between the students and residents. The students had to interview a resident and then design a mural depicting their life. The murals have been painted on room doors. For example, there is a resident in the Baseball Hall of Fame and his door was painted with a ball player. The residents loved having the students around.

Fairview PCH has been working hard to put into action a vision that has been in the hearts of staff and residents for years. They are so excited to display the work of a local artist, Irene Fidler. Irene worked for countless hours to brighten the main floor, as well as the hearts of Fairview residents with a “bookshelf” door mural.



Level of Care on Admission to Personal Care Homes

Definition

The percentage of residents aged 75 years and older admitted to a PCH at each level of care, for a two-year time period. Each level measures the amount of care a resident requires, with level 4 residents requiring the most care.

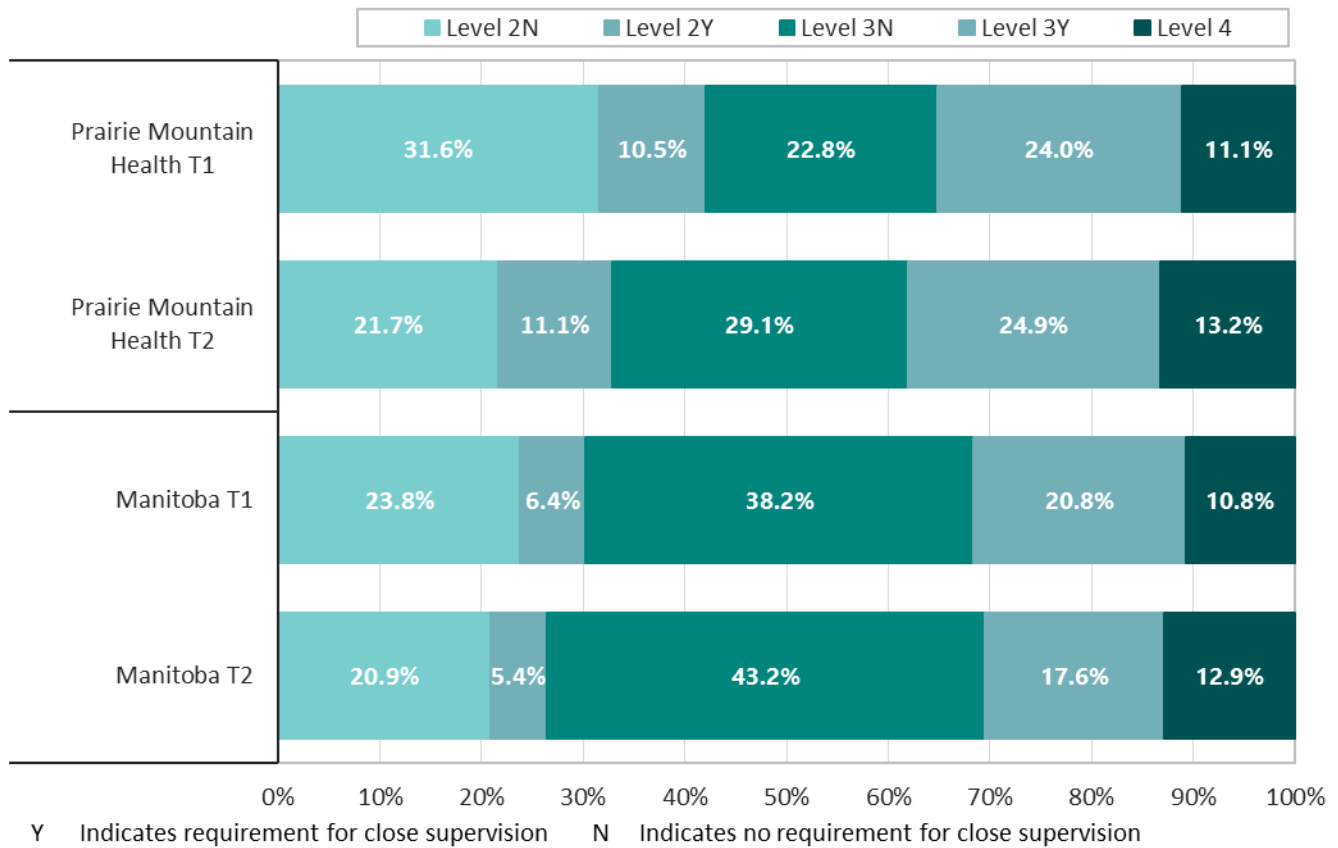
Why is this indicator important?

Understanding levels of care upon admission provides an indication of accessibility and affordability of alternate housing options and community based support for seniors requiring minimal care, and the resources required to meet more intensive care needs, across the continuum of care.

Provincial Key Findings

- Overall, the proportion of newly admitted PCH residents requiring high levels of care increased. Correspondingly there was a reduction in level 2 admissions.

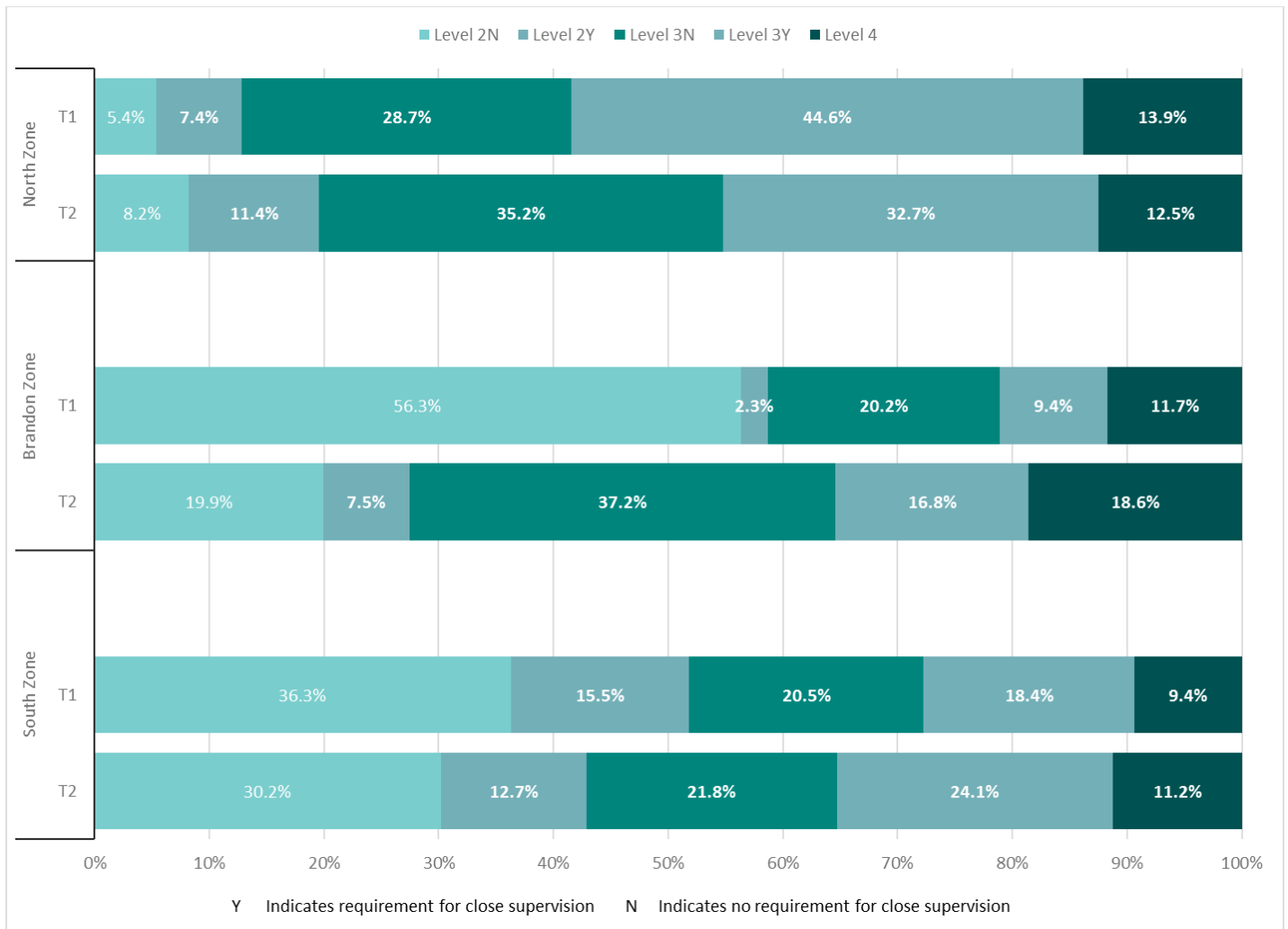
Figure 4.22 Level of Care on Admission to PCH, PMH and Manitoba, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age 75 years and older



Regional Key Findings

- In PMH, the proportion of newly admitted PCH residents requiring higher levels of care increased similar to the province as a whole. Correspondingly there was a reduction in level 2 admissions.
- These changes were reflected in the South and Brandon zones but in the North there was a small increase in level 2 admissions.
- New admissions in the North zone demonstrate a considerably higher level of care than the other two zones.
- New Level 2N admissions in the Brandon zone have decreased dramatically from more than half of all admissions to less than a fifth.

Figure 4.23 Level of Care on Admission to PCH, PMH Zones, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)
Age 75 years and older



A CLOSER LOOK... LEVEL OF CARE ON ADMISSION TO PCH

Many community-dwelling seniors are now able to remain in their homes longer due to additional in-home supports provided by Home Care Services. As a result, fewer seniors are admitted to personal care homes (PCHs) requiring minimal care without supervision, while a higher proportion of residents are admitted with co-morbidities requiring a higher degree of care and supervision.

Residents who are eligible for admission to PCHs are assessed to determine their care requirements and need for supervision prior to admission. Level of acuity ranges from level two, the lightest care and supervision needs, to level four, being the most dependent and requiring closer supervision.

Between 2010 and 2017, there has been a shift in the proportion of residents requiring a higher degree of care and close supervision upon admission to PCH, most notably in Brandon. This may be partially due to more family support available for older individuals in Brandon in comparison to rural settings where many adult children have left the community. The greater level of care needs has resulted in many challenges for staff to deliver care safely. On occasion, admission of eligible residents is deferred until a facility is able to manage the care needs of those waiting admission.

Median Wait Times for Personal Care Home Admission from Hospital

Definition

The median length of time (in weeks) from PCH assessment to admission from hospital to PCH amongst residents aged 75 years and older, for a two-year time period.

Why is this indicator important?

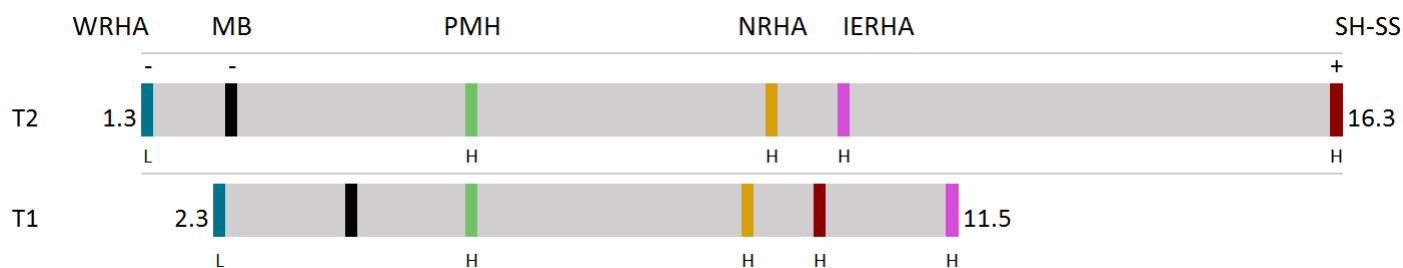
Admission to PCH is largely driven by the demand for PCH beds, personal preference of facility and the ability of the healthcare system to prepare rooms in a timely fashion. Peneled individuals often wait in a hospital or require extensive home care services and other supports in the community. Reducing the median wait for admission to PCH helps to ensure residents are cared for in the most appropriate setting and that resources are used more efficiently.

Provincial Key Findings

- The median wait time for Manitoba residents for PCH admission is 2.5 weeks.
- There was a significant decrease in median wait times for PCH admission from hospital in Manitoba.
- Provincial wait times are driven by Winnipeg RHA which has a significantly lower median wait time whilst all other RHAs showed significantly higher rates.
- Southern Health-Santé Sud wait times increased significantly whilst Winnipeg RHA had a significant decrease.

Figure 4.24 Median Wait Times for PCH Admission from Hospital by RHA, 2010/11-2011/12 (T1) & 2015/16-2016/17 (T2)

Age and sex adjusted median weeks from assessment to admission by residence prior to admission per 1,000 residents aged 75+



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	PMH	NRHA	IERHA	SH-SS
T2 COUNT	1,510	2,717	609	45	216	327
T2 RATE	1.3	2.5	5.5	9.3	10.1	16.3
T1 RATE	2.3	4.0	5.5	8.9	11.5	9.9

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- In PMH, the median wait time for admission to a PCH from hospital is more than twice that of the province and has not changed over time.
- Median wait times are significantly higher in the South (8.2) and Brandon (6.3) zones but similar to the province in the North zone (2.1).

Median Wait Times for Personal Care Home Admission from Community

Definition

The median length of time (in weeks) from PCH assessment to admission from community to PCH amongst residents aged 75 years and older, for a two-year time period.

Why is this indicator important?

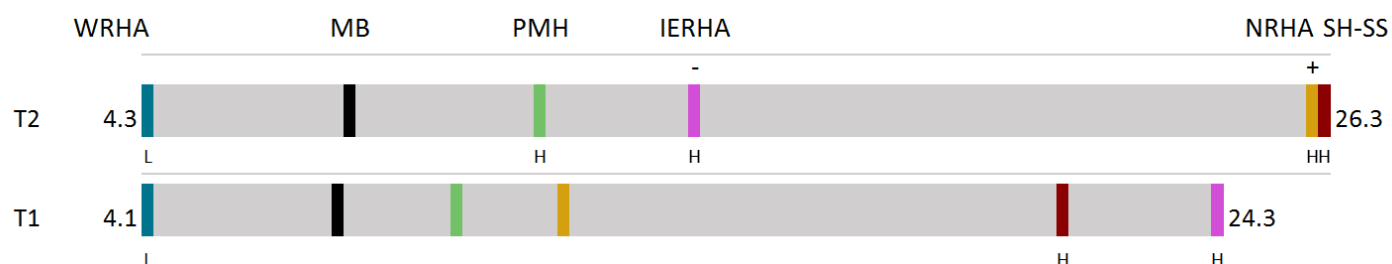
Admission to PCH is largely driven by the demand for PCH beds, personal preference of facility and the ability of the healthcare system to prepare rooms in a timely fashion. Peneled individuals often wait in a hospital or require extensive home care services and other supports in the community. Reducing the median wait for admission to PCH helps to ensure residents are cared for in the most appropriate setting and that resources are used more efficiently.

Provincial Key Findings

- The median wait time for Manitoba residents for PCH admission from the community is 8.1 weeks which has not changed significantly over time.
- Median wait times decreased significantly in Interlake Eastern RHA and increased significantly in Northern RHA.
- Provincial wait times are driven by Winnipeg RHA which has a significantly lower median wait time whilst all other RHAs showed significantly higher rates.

Figure 4.25 Median Wait Times for PCH Admission from Community by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)

Age and sex adjusted median weeks from assessment to admission by residence prior to admission per 1,000 residents aged 75+



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	PMH	IERHA	NRHA	SH-SS
T2 COUNT	1,423	2,403	388	226	53	301
T2 RATE	4.3 L	8.1	11.5 H	14.5 H-	26.0 H+	26.3 H
T1 RATE	4.1 L	7.8	10.0	24.3 H	12.1	21.4 H

Regional Key Findings

- In PMH, the median wait time for admission to a PCH from community is significantly higher than the province and has increased slightly over time.
- Median wait times are similar to the province in the South (14.7), Brandon (13.7) and North (4.7) zones.

Benzodiazepine Overprescribing—Personal Care Homes

Definition

The percent of residents aged 75 years and older living in a PCH who had at least two prescriptions for benzodiazepines or at least one prescription for benzodiazepines with a greater than 30 day supply per year, in a two-year time period.

Why is this indicator important?

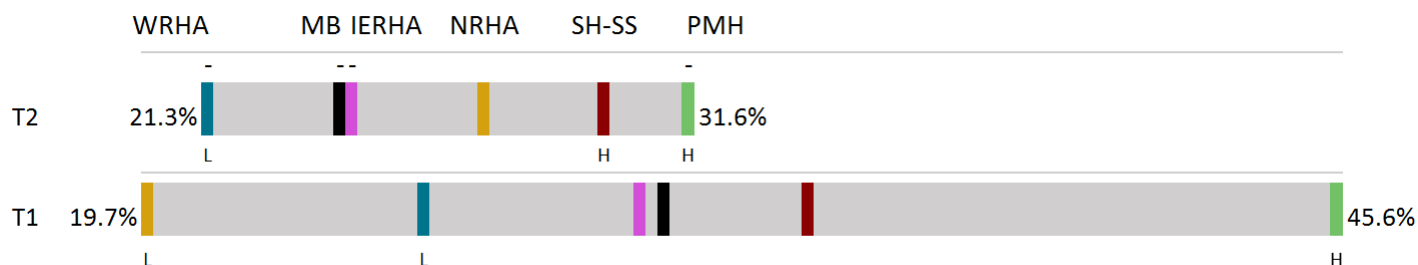
Benzodiazepines are medications widely used to treat seizures, anxiety and insomnia, however use by seniors is not recommended as it poses serious safety concerns including increased risk for confusion, memory loss, poor coordination and muscle control potentially leading to falls and fractures.

Provincial Key Findings

- Almost a quarter of all PCH residents aged 75+ in Manitoba are inappropriately prescribed benzodiazepines.
- Provincially, residents receiving benzodiazepines decreased significantly over time.
- Decreases are seen in all RHAs except Northern RHA; all decreases are significant with the exception of Southern Health-Santé Sud.

Figure 4.26 Benzodiazepine Overprescribing for PCH Residents, by RHA, 2010/11-2011/12 (T1) and 2015/16-2016/17 (T2)

Crude percent of PCH seniors age 75 and older with 2+ prescriptions or more than a 30 day supply



H/L Significantly higher or lower than the MB average for that time period. +/- A significant increase (+) or decrease (-) since the first time period

	WRHA	MB	IERHA	NRHA	SH-SS	PMH
T2 COUNT	2,322	4,298	417	65	269	1,225
T2 RATE	21.3% L-	24.4% -	24.4% -	27.2%	29.7% H	31.6% H-
T1 RATE	19.7% L	31.0%	30.6%	19.7% L	34.1%	45.6% H

MCHP RHA Indicators Atlas 2019

Regional Key Findings

- PMH has the highest proportion of PCH residents prescribed benzodiazepines in the province with almost a third of all residents under the influence of psychoactive drugs at any one time.
- The South (28.3%) and Brandon (39.1%) zones have prescribing rates significantly higher than the province whilst the North (27.9%) zone is similar to the provincial average.
- Similar to the province, all three zones have shown significant decreases over time.

A CLOSER LOOK... SEDATIVE DEPRESCRIBING INITIATIVE IN PCH

In December 2018, PMH was awarded a Dr. John Wade Patient Safety Initiatives grant by the Manitoba Institute for Patient Safety (MIPS) for a project titled, Sedative-Hypnotic Deprescribing in Prairie Mountain Health. The initiative targets benzodiazepine prescribing among community-dwelling seniors, clients for whom a sedative is initiated while in hospital and residents in personal care homes. The intent is to build the capacity of health care providers and engage patients in shared decision making about specific medication use after being provided information about the risks of sedative medications. This initiative is based on the Choosing Wisely model and the Canadian Deprescribing Network Drowsy Without Feeling Lousy toolkit.

Consideration for pilot site selection included geography, urban/rural setting, strong nursing leadership and facility/staff readiness. The committee identified the importance of initiating the deprescribing with a single resident at a time and involve additional residents over time rather than attempting to initiate tapers with a high volume of eligible candidates at the outset. Building on lessons learned with the pilot sites, this initiative will be rolled out to other long term care sites across the region.

Highlights include:

- A toolkit assists staff in supporting residents who participate in the deprescribing process, including resources to enhance resident sleep hygiene
- Process established to access data about clients eligible for and/or enrolled in the deprescribing process from PMH Pharmacy services and MediSystem
- Interdisciplinary education support by participating sites for residents and families using the EMPOWER brochure and other resources such as non-pharmacologic strategies contained in the staff toolkit.

Appendices

Appendix 1 – PMH Zones

A brief description and location map of the three Prairie Mountain Health planning zones.

Appendix 2 – PMH Districts

A brief description and location map for each of the seventeen districts that make up the Prairie Mountain Health region.

Appendix 3 –PMH Municipalities by Planning Zone (2019 Boundaries)

A list of municipalities by planning zone using 2019 boundaries.

Appendix 1: PMH Zones



The **North Zone** is situated in the northern section of the PMH region. The North Zone contains the following districts: Agassiz Mountain, City of Dauphin, Duck Mountain, Porcupine Mountain, Riding Mountain, and the Town of Swan River.

The population of the North Zone was 40,651 at June 1, 2018. This represents a decrease of 693 from the 2013 figure of 41,344. The North Zone covers an area of 18,891 km² (excluding the unorganized territories) giving it a population density of 2.15 persons/km².



The **South Zone** is situated in the southern section of the PMH region, and surrounds the Brandon Zone. The South Zone comprises the following districts: Asessippi, Little Saskatchewan, Whitemud, Souris River, Turtle Mountain, and Spruce Woods.

The population of the South Zone was 76,052 at June 1, 2018. This represents an increase of 919 from the 2013 figure of 75,133. The South Zone covers an area of 32,324 km² giving it a population density of 2.35 persons/km².



Brandon City is situated in the centre of the south part of Prairie Mountain Health. Brandon City is split into five areas: Brandon Downtown, Brandon East End, Brandon North Hill, Brandon South End, and Brandon West End.

The population of the Brandon City was 54,196 at June 1, 2018. This represents an increase of 3,542 from the 2013 figure of 50,654. Brandon City covers an area of 77 km² giving it a population density of 703.8 persons/km².

Appendix 2: PMH Districts



The **Porcupine Mountain** district is in the northern part of the PMH region. It is bordered by Lake Winnipegosis to the east, and the Saskatchewan border to the west. Duck Mountain Provincial Park is in the south part of the district. The community of Benito is in the southwest part of the district.

The primary transportation route is Highway 10. The main areas of population are Benito, Pine Creek First Nation, Sapotaweyak Cree (Shoal River) Nation, and Wuskwi Sipiik (Indian Birch) First Nation.

The population of the Porcupine Mountain district was 8,464 at June 1, 2018. This represents a decrease of 653 people from the 2013 figure of 9,117. Porcupine Mountain district covers an area of 5,640 km² giving it a population density of 1.5 persons/km².

Included in the Porcupine Mountain district is the Benito PCH, Mafeking Ambulance Station, Camperville Primary Health Care Centre, and Duck Bay Community Health Services Office.



The **Town of Swan River** is situated in the northern part of the PMH region surrounded by the Porcupine Mountain district; the primary transportation routes are Highways 10 and 83.

The population of the Town of Swan River was 5,324 at June 1, 2018. This is virtually unchanged from the 2013 figure of 5,321. The Town of Swan River covers an area of 6.89 km² giving it a population density of 772.7 persons/km².

Facilities in the Town of Swan River are the Swan River Valley Health Centre, and Swan Valley Lodge PCH.

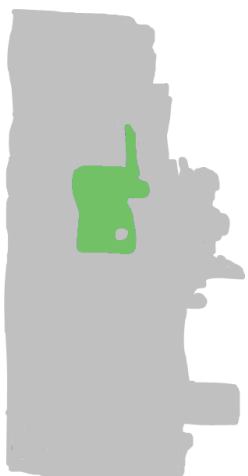


The **Agassiz Mountain** district is situated in the north eastern part of the PMH region. It is bordered by Lake Manitoba to the east and Dauphin Lake on the west. Riding Mountain National Park is situated in the south west corner of Agassiz Mountain District. McCreary is in the south part of the district, and Chitek Lake Park Reserve is in the northern part of the district.

The primary transportation routes are Highway 68 and Highway 5. The main areas of population are Ste. Rose du Lac, McCreary, Ebb and Flow First Nation, Skownan (Waterhen) First Nation and the O-Chi-Chak-O-Sipi (Crane River) First Nation.

The population of the Agassiz Mountain district was 7,102 at June 1, 2018. This represents a decrease of 140 people from the 2013 figure of 7,242. Agassiz Mountain covers an area of 5,510 km² giving it a population density of 1.29 persons/km².

Included in the Agassiz Mountain District is the Ste. Rose Du Lac Health Centre, Dr. Gendreau PCH in Ste. Rose Du Lac, McCreary/Alonsa Health Centre (Transitional Care) and PCH, Waterhen Ambulance Station and Primary Health Centre, Crane River and Alonsa Community Health Services office.

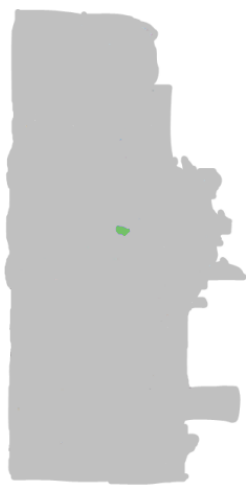


The **Riding Mountain** district is in the north central part of the PMH region. It is bordered in the south by Riding Mountain National Park, and Duck Mountain Provincial Park in the North West.

The primary transportation routes are Highway 10 and Highway 20. The main areas of population are Gilbert Plains and Winnipegosis.

The population of the Riding Mountain district was 5,099 at June 1, 2018. This represents a decrease of 129 from the 2013 figure of 5,228. Riding Mountain district covers an area of 4,830.43 km² giving it a population density of 1.06 persons/km².

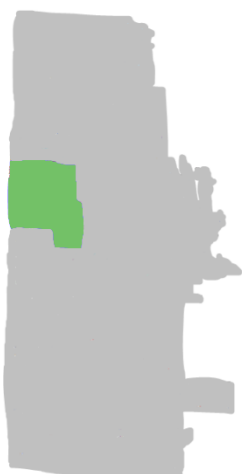
Included in the Riding Mountain district is Winnipegosis Health Centre and Gilbert Plains PCH.



The **City of Dauphin** is in the north central part of the PMH region. Dauphin City is surrounded by the Riding Mountain district. The primary transportation routes are Highway 10 and Highway 20.

The population of the Dauphin City was 9,161 at June 1, 2018. This represents an increase of 329 people from the 2013 figure of 8,832. Dauphin City covers an area of 12.6 km² giving it a population density of 727 persons/km².

Included in the city of Dauphin is Dauphin Regional Health Centre, Dauphin PCH, and St. Paul's PCH.



The **Duck Mountain** district is situated in the central northwest section of the PMH region. It is bordered by the Asessippi Provincial Park in the south and the Duck Mountain Provincial Park in the north. It extends from the Town of Grandview in the east to the Saskatchewan border in the west. The primary transportation routes are Highway 83 and Highway 5. The main areas of population are Roblin, Grandview and the Tootinaowaziibeeng (Valley River) First Nation.

The population of the Duck Mountain district was 5,501 at June 1, 2018. This represents an increase of 93 people from the 2013 figure of 5,594. Duck Mountain covers an area of 2,892 km² giving it a population density of 1.9 persons/km².

Included in the Duck Mountain district is the Roblin District Health Centre and PCH, and the Grandview District Health Centre and Grandview PCH.



The **Asessippi** district is situated in the central western section of the PMH region. It is bordered by the Asessippi Provincial Park in the north and Riding Mountain National Park in the northeastern corner of the district. It extends from the Town of Hamiota in the southeast corner to the Saskatchewan border in the west. The primary transportation routes are Highways 16 and 45 (east-west) and Highways 21 and 83 (north-south). The main areas of population are Russell, Hamiota, Waywayseecappo First Nation, and Birdtail Sioux First Nation.

The population of the Asessippi district was 11,257 at June 1, 2018. This represents a decrease of 51 from the 2013 figure of 11,308. Asessippi covers an area of 6,431 km² giving it a population density of 1.75 persons/km².

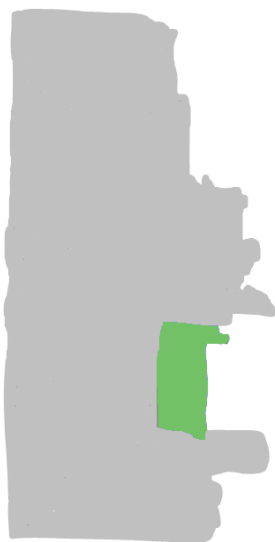
Included in the Asessippi district is the Russell District Health Centre and Russell PCH, Hamiota District Health Centre, Birtle Health Centre (Transitional Care) and Rossburn Health Centre.



The **Little Saskatchewan** district is situated in the central section of the PMH region. It is bordered by the Riding Mountain National Park in the north. The primary transportation routes are Highways 10, 16 and 45. The main areas of population are Minnedosa, Erickson, Rolling River First Nation, Shoal Lake and the Keeseekoowenin First Nation.

The population of the Little Saskatchewan district was 12,887 at June 1, 2018. This represents an increase of 239 people from the 2013 figure of 12,648. Little Saskatchewan covers an area of 4,996 km² giving it a population density of 2.58 persons/km².

Included in the Little Saskatchewan district is the Minnedosa Health Centre and Minnedosa PCH, Erickson Health Centre (Transitional Care), Shoal Lake-Strathclair Health Centre and Sandy Lake PCH.



The **Whitemud** district is situated on east side of the PMH region. The Whitemud district contains the south corner of Riding Mountain National Park. The primary transportation routes are Highways 16 (east-west) and 5 (north-south). The main areas of population are Neepawa and Carberry.

The population of the Whitemud district was 12,279 at June 1, 2018. This represents an increase of 789 people from the 2013 figure of 11,490. Whitemud covers an area of 3,913 km² giving it a population density of 3.14 persons/km².

Included in the Whitemud district is Neepawa Health Centre, Neepawa PCH (Country Meadows), and Carberry Health Centre and PCH.



The **Spruce Woods** district is situated in the southeast section of the PMH region with the American border in the south. In the east is the community of Treherne. Spruce Woods encompasses Spruce Woods Provincial Park. The primary transportation routes are Highways 2 and 5. The main areas of population are Killarney, Wawanesa, and Treherne.

The population of the Spruce Woods district was 15,458 at June 1, 2018. This represents an increase of 98 people from the 2013 figure of 15,361. Spruce Woods district covers an area of 7,084 km² giving it a population density of 2.19 persons/km².

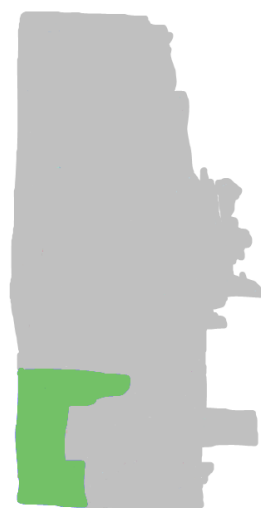
Included in the Spruce Woods district is Killarney (Tri-Lake) Health Centre and Bayside PCH, Treherne (Tiger Hills) Health Centre and PCH, Glenboro Health Centre and PCH, Baldur Health Centre (Transitional Care) and PCH, Wawanesa and District Memorial Health Centre (Transitional Care) and PCH, and Cartwright (Davidson Memorial) PCH.



The **Turtle Mountain** district is situated in the centre of the south section of the PMH region. It is bordered by the American border to the south. Turtle Mountain Provincial Park is located in the south part of the district. The primary transportation routes are Highways 2, 3, 10 and 21. The main areas of population are Souris, Boissevain, and Deloraine.

The population of the Turtle Mountain district was 10,107 at June 1, 2018. This represents an increase of 29 people from the 2013 figure of 10,078. Turtle Mountain covers an area of 5,081 km² giving it a population density of 1.99 persons/km².

Included in the Turtle Mountain district is Souris Health Centre and PCH, Boissevain Health Centre and PCH, Westview Lodge PCH, Deloraine Health Centre and PCH, Bren-Del Win Lodge PCH, and Hartney PCH.



The **Souris River** district is situated in the southwest section of the PMH region. It is bordered by the American border in the south and the Saskatchewan border to the west. The primary transportation routes are Highway 1 (east-west) and Highway 83 (north-south). The main areas of population are Virden, Rivers, Sioux Valley Dakota First Nation, and Canupawakpa Dakota (Oak Lake) First Nation.

The population of the Souris River district was 14,064 at June 1, 2018. This represents a decrease of 184 from the 2013 figure of 14,248. Souris River covers an area of 6,818 km² giving it a population density of 2.06 persons/km².

Included in the Souris River district is Virden Health Centre, Westman PCH and Sherwood PCH both in Virden, Melita Health Centre and PCH, Riverdale Health Centre and PCH, Reston Health Centre (Transitional Care) and PCH, and Elkhorn PCH.

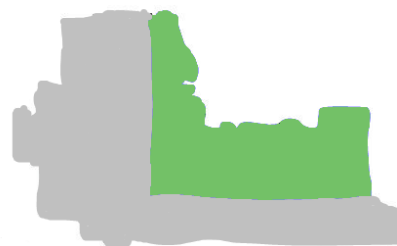


The **Brandon Downtown** district is situated in the centre of the city. Its boundaries are Pacific Avenue in the north, 1st Street to the east, Richmond Avenue to the south, and 18th street to the west.

The population of the Brandon Downtown district was 12,027 at June 1, 2018. This represents an increase of 675 from the 2013 figure of 11,352.

The **Brandon East End** district consists of the northeast part of Brandon. Veterans Way is the northern boundary, 65th Street East is the eastern boundary, Richmond Avenue is the southern boundary, and 1st Street is the western boundary.

The population of the Brandon East End district was 7,163 at June 1, 2018. This represents an increase of 374 from the 2013 figure of 6,789.



The **Brandon North Hill** district is situated in the northern part of Brandon. Highway #1 is in the northern boundary, 1st Street is the eastern boundary, Pacific Avenue is the southern boundary, and 34th street is the western boundary.

The population of the North Hill district was 7,529 at June 1, 2018. This represents an increase of 240 from the 2013 figure of 7,289.



The **Brandon South End** district consists of the entire south end of Brandon. Richmond Avenue is the northern boundary, 65th Street East is the eastern boundary, Patricia Avenue is the southern boundary, and 47th Street is the western boundary.

The population of the Brandon South End district was 10,721 at June 1st, 2018. This represents an increase of 781 from the 2013 figure of 9,940.

The **Brandon West End** district consists of the central west part of Brandon. Pacific Avenue is the northern boundary, 18th Street is the eastern boundary, Richmond Avenue is the southern boundary, and 50th Street is the western boundary.

The population of the Brandon West End district was 16,756 at June 1, 2018. This represents an increase of 1,472 from the 2013 figure of 15,284.



Appendix 3 –PMH Municipalities

MUNICIPALITIES OF THE NORTH ZONE

Agassiz Mountain

O-Chi-Chak-Ko-Sipi First Nation (Crane River FN)
 Ebb & Flow FN
 RM of Alonsa - Parkland
 RM of Lakeshore
 RM of McCreary
 RM of Ste. Rose
 Skownan First Nation (Waterhen FN)

Duck Mountain

RM of Grandview
 RM of Hillsburg-Roblin-Shell River
 Tootinaowaziibeeng Treaty Reserve (Valley River FN)

Dauphin

City of Dauphin

Swan River

Town of Swan River

Riding Mountain

RM of Dauphin
 RM of Ethelbert
 RM of Gilbert Plains
 RM of Mossey River

Porcupine Mountain

Wuskwi Sipiik First Nation (Indian Birch FN)
 Pine Creek FN
 RM of Minitonas-Bowsman
 RM of Mountain - North
 RM of Mountain - South
 RM of Swan Valley West
 Sapotaweyak Cree Nation (Shoal River FN)
 Unorganised Territories - Parkland

MUNICIPALITIES OF THE SOUTH ZONE

Whitemud

RM of Glenella-Lansdowne
 RM of North Cypress-Langford
 RM of Rosedale
 Town of Carberry
 Town of Neepawa

Spruce Woods

RM of Argyle
 RM of Cornwallis*
 RM of Killarney-Turtle Mountain
 RM of Oakland-Wawanesa
 RM of Cartwright-Roblin
 RM of Glenboro-South Cypress
 RM of Norfolk-Treherne
 RM of Prairie Lakes
 RM of Victoria

*Includes CFB Shilo

MUNICIPALITIES OF THE SOUTH ZONE (CONT.)

Assessippi

Birdtail Sioux FN
 Gambler FN
 RM of Ellice-Archie
 RM of Hamiota
 RM of Prairie View
 RM of Riding Mountain West
 RM of Rosburn
 RM of Russell-Binscarth
 Waywayseecappo First Nation

Turtle Mountain

RM of Boissevain-Morton
 RM of Deloraine-Winchester
 RM of Grassland
 RM of Sifton
 RM of Souris-Glenwood
 RM of Whitehead

Little Saskatchewan

Keeseekoowenin First Nation
 RM of Oakview
 RM of Clanwilliam-Erickson
 RM of Elton
 RM of Harrison-Park
 RM of Minto-Odanah
 RM of Yellowhead
 Rolling River First Nation
 Town of Minnedosa

Souris River

Canupawakpa Dakota First Nation
 RM of Brenda-Waskada
 RM of Pipestone
 RM of Riverdale
 RM of Two Borders
 RM of Wallace-Woodworth
 Sioux Valley Dakota First Nation
 Town of Melita
 Town of Virden

AREAS OF THE BRANDON ZONE

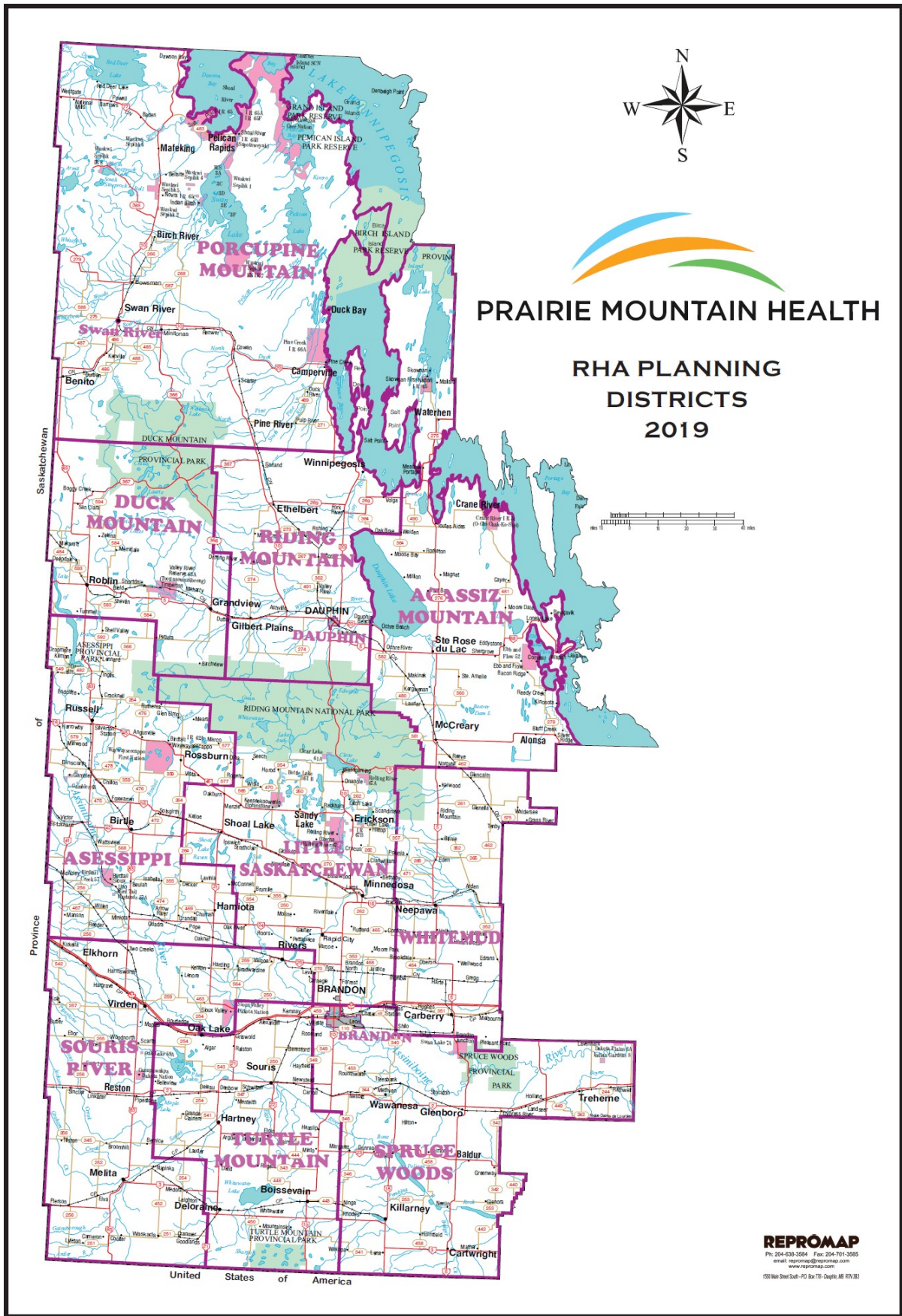
Brandon City

Brandon Downtown
 Brandon East End
 Brandon North Hill
 Brandon South End
 Brandon West End

References

- ¹ World Health Organization. (1948). Mental health: A state of well-being, https://www.who.int/features/factfiles/mental_health/en/
- ² BC Centre for Disease Control. (n.d.). Population & Public Health Surveillance. <http://www.bccdc.ca/our-services/programs/population-public-health-surveillance>
- ³ The Robert Wood Johnson Foundation (RWJF). What is Health Equity? ,2017 <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html>
- ⁴ <http://agentsofgood.org/wp-content/uploads/2017/04/Equality-vs-Equity-Illustration3.jpg>
- ⁵ Manitoba Health, Seniors and Active Living. (2018). Chief Provincial Public Health Officer Position Statement on Health Equity, https://www.gov.mb.ca/health/cppho/docs/ps/health_equity.pdf
- ⁶ Canadian Institute for Health Information. Pan-Canadian Dialogue to Advance the Measurement of Equity in Health Care: Proceedings Report. Ottawa, ON: CIHI; 2016. https://secure.cihi.ca/free_products/Measurement_of_Equity_in_Health_Care_Proceedings_Report_EN.pdf
- ⁷ Katz, A., Kinew, K.A., Star, L., Taylor, C., Koseva, I., Lavoie, J., et al. (2019). The Health Status of and Access to Healthcare by Registered First Nations Peoples in Manitoba. http://mchp-appserv.cpe.umanitoba.ca/reference//FN_Report_web.pdf. Accessed October 15, 2019
- ⁸ Truth and Reconciliation Commission of Canada. (2015). Truth and Reconciliation Commission of Canada: Calls to Action. http://nctr.ca/assets/reports/Calls_to_Action_English2.pdf. Accessed October 15, 2019
- ⁹ Katz, A., Kinew, K.A., Star, L., Taylor, C., Koseva, I., Lavoie, J., et al. (2019). The Health Status of and Access to Healthcare by Registered First Nations Peoples in Manitoba. http://mchp-appserv.cpe.umanitoba.ca/reference//FN_Report_web.pdf. Accessed October 15, 2019
- ¹⁰ Kaluzniak K, Kizuik J, Malishevskaya A. (2017). Reintegration to Community Needs Assessment. Brandon, MB. Brandon University/John Howard Society of Brandon Inc.
- ¹¹ Heaman M, Kingston D, Helewa ME, Brownell M, Derksen S, Bogdanovic B, McGowan KL, Bailly A. Perinatal Services and Outcomes in Manitoba. Winnipeg, MB. Manitoba Centre for Health Policy, November 2012.
- ¹² Public Health Agency of Canada. Canadian Perinatal Health Report, 2008 Edition. PHAC. 2008. Accessed August 29, 2019 from: <http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/pdf/cphr-rspc08-eng.pdf>.
- ¹³ Dubnick A, Leece A (2017). Maternal Health Education. Brandon University/Prairie Mountain Health.
- ¹⁴ Goldforb B, Jonk V. (2017). Resource Manual for Service Providers and Parents of Young Children. Brandon University/Brandon Friendship Centre.
- ¹⁵ Manitoba Centre for Health Policy. Personal Communication. October 28, 2019.

- ¹⁶ Brownell M, Chartier M, Santos R, Ekuma O, Au W, Sarkar J, MacWilliam L, Burland E, Koseva I, Guenette W. How Are Manitoba's Children Doing? Winnipeg, MB. Manitoba Centre for Health Policy, October 2012.
- ¹⁷ Drain C, O'Hanlon C. (2018). Teen Clinic: Staff Knowledge Summary. Brandon University/Prairie Mountain Health.
- ¹⁸ Public Health Agency of Canada. The Chief Public Health Officer's Report on the State of Public Health in Canada, 2015: Alcohol Consumption in Canada. PHAC. 2016. Accessed August 29, 2019 from: <https://www.canada.ca/en/public-health/services/publications/chief-public-health-officer-reports-state-public-health-canada/2015-alcohol-consumption-canada.html/>.
- ¹⁹ Health Canada. "Radon: Is it in your home?" Canada.ca, Government of Canada, 7 Nov. 2017 www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/radiation/radon-your-home-health-canada-2009.html
- ²⁰ Public Health Agency of Canada (2017). Diabetes in Canada. Highlights from the Canadian Chronic Disease Surveillance System. Retrieved February 22, 2019 from <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/diabetes-canada-highlights-chronic-disease-surveillance-system/diabetes-in-canada-eng.pdf>.
- ²¹ Public Health Agency of Canada. Report from the National Diabetes Surveillance System: Diabetes in Canada, 2009.
- ²² Canadian Association of Optometrists. <https://opto.ca/health-library/diabetes>.
- ²³ Public Health Agency of Canada. 2016. Report from the Canadian Chronic Disease Surveillance System: Mood and Anxiety Disorders in Canada, 2016.
- ²⁴ Canadian Institute for Health Information. How dementia impacts Canadians. <https://www.cihi.ca/en/dementia-in-canada/how-dementia-impacts-canadians>
- ²⁵ U.S National Library of Medicine. 2012. Asthma-children. <https://www.nlm.nih.gov/medlineplus/ency/article/000990.htm>
- ²⁶ Lung Association of Ontario. Asthma: Treatment and Medication. 2019. <https://lungontario.ca/disease/asthma/treatment-and-medication>
- ²⁷ Hernandez N, Wiebe D (2019). Mobile Harm Reduction Initiative – Data Summary. Brandon, MB. Brandon University/Prairie Mountain Health.
- ²⁸ Jenkyns T, Surovy K (2019). Post-secondary Health Initiative. Brandon, MB. Brandon University/Prairie Mountain Health.
- ²⁹ Macinko J, Starfield B, Shi L, Quantifying the health benefits of primary care physician supply in the United States. Int J Health Serv. 2007; 37(1):111-26. Review.PMID:17436988; <https://www.ncbi.nlm.nih.gov/pubmed/17436988>
- ³⁰ "Care Coordination Measures Atlas Update," Agency for Healthcare Research and Quality. Accessed May 27, 2019. <https://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/atlas2014/chapter2.html>
- ³¹ Shemeliuk G, Smith C (2018). Making Personal Care Homes More Like Home. Brandon, MB. Brandon University/Prairie Mountain Health.





PRAIRIE MOUNTAIN HEALTH
SANTÉ PRAIRIE MOUNTAIN

192-1st Avenue West
Box 579
Souris MB R0K 2C0
Toll-free: 1-888-682-2253

prairiemountainhealth.ca

