

Northern Saskatchewan Health Indicators

Health Status: Hospitalizations

2019

Population Health Unit

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KEY MESSAGES

Hospitalization Patterns

- Hospital utilization data are commonly used as proxy measures for health conditions. Caution is advised in the interpretation of hospital utilization rates because whether or not someone is hospitalized is complex and influenced by many factors in addition to their health conditions, including availability of and access to services or alternative care, physician practice patterns, family and community supports, and distance from the hospital [1, 2]. Hospitalization data for residents of northern Saskatchewan include hospitalizations in all locations, in northern Saskatchewan, as well as other Saskatchewan and Canadian hospitals.

Total hospitalizations

- Yearly total age-standardized hospitalization rates, for all causes, in northern Saskatchewan have been decreasing slightly over the past ten years, from 241 hospitalizations per 1,000 population in 2006/07 to 202 hospitalizations in 2015/16.
- Hospitalization rates from all causes show similar trends between northern Saskatchewan males and females in most age categories. Both have high rates in the < 1 year category, as hospital births will show up as a discharge. Rates decrease between < 1 year category and those aged 5-9 years before increasing in the 10-14 category. In males this steady increase continues for the remainder of the age groups. Rates among females on the other hand, show a steep increase between the 10-19 year olds until the 20-24 year olds before a decline in rates until the 45-49 year old category. Both the increase and decrease in female rates remain elevated in comparison to the male rates of the same age. The female rates then mirror a similar steady increase in rates from the 45-49 year olds to the 80+ age categories as is seen in the male rates. The separation between the male and female rates between the 10-14 and 40-44 year olds is most likely due to the number of newborn deliveries occurring in the females categories.

Major causes of hospitalizations

- The two leading causes of hospitalization in northern Saskatchewan include Supplementary factors and Childbirth and Complications of Pregnancy. Following these categories the leading causes of hospitalizations include Respiratory System, Injury and Poisoning, Digestive System, and Mental and Behavioural conditions.
- Supplementary Factors is a category that is used for occasions when circumstances other than a disease, injury or external cause is recorded as the diagnoses. One of the leading causes of hospitalization from the Supplementary Factors category is live born infants(s) and is the main reason Supplementary factors is one of the leading categories of hospitalization. Similarly, Childbirth and Complications of Pregnancy is one of the leading categories of hospitalizations as it captures the maternal component of births occurring in hospitals. Some of the leading specific causes of

hospitalizations related to the other ICD chapters include influenza and pneumonia, chronic obstructive pulmonary disease, ischemic heart disease, and diabetes mellitus.

Respiratory Hospitalizations

- The rate of hospitalizations from respiratory conditions was somewhat elevated in 2006/07 and 2007/08 with rates of 364.8 and 383.5 per 1,000 population. Between 2008/09 and 2015/16 rates were slightly lower, ranging from 243.5 and 322.2 per 1,000 population.
- Between 2006/07 and 2015/16, the highest rates of hospitalization for respiratory conditions for both males and females occurred in the 0 to 4 years of age categories. Rates then declined until the middle age categories, after which they slowly increased until the older adult age categories.
- Between 2006/07 and 2015/16 the categories of influenza and pneumonia and other respiratory conditions were the leading causes of respiratory hospitalizations in all age groups, except the 60 years and over category. In the 60 years and over category, Chronic Obstructive Pulmonary Disease (COPD) was the leading cause. Overall Influenza and Pneumonia accounted for 41% of the respiratory hospitalizations, while other respiratory conditions accounted for 41%, COPD accounted for 15% and asthma accounted for 3%. Other respiratory conditions includes all other diagnoses in the respiratory chapter excluding COPD, Influenza and Pneumonia, Asthma, and Bronchiectasis.

Injury Hospitalizations

- The overall rate of injury hospitalization in northern Saskatchewan has remained relatively stable between 2006/07 to 2015/16. In 2015/16 the rate was 296.5 hospitalizations per 10,000 population.
- The greatest numbers of injury hospitalizations occur in both males and females between the 15-19 and 50-54 year old age groups. Males tend to have higher numbers of hospitalizations in almost all age groups except the 80+ categories. The 1-4 to 10-14 year old age groups have the lowest rates of injury hospitalizations, while the 60+ categories have the highest.
- The major causes of injury hospitalization in northern Saskatchewan include unintentional falls, assault, motor vehicle collisions, self-harm and unintentional poisonings. Amongst females the leading causes are unintentional falls, followed by self-harm and motor vehicle collisions. Amongst males, the leading causes are assault, unintentional falls and motor vehicle collisions.

Hospitalizations entirely caused by Alcohol

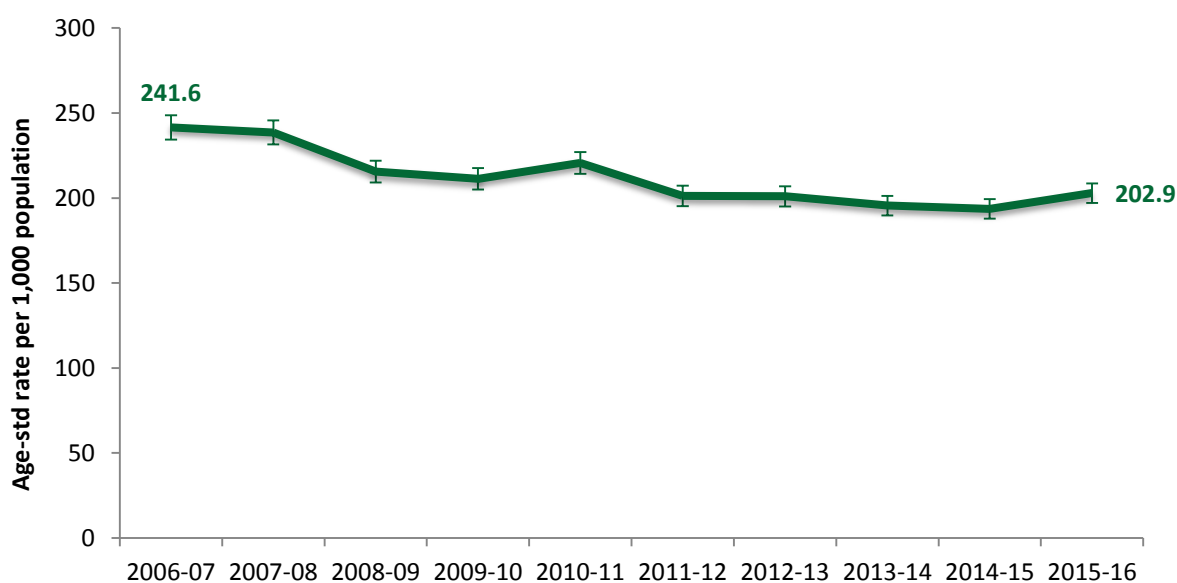
- The Canadian Institutes of Health Information (CIHI) indicate that “hospital discharges can be used as a proxy for alcohol harm in the community and the burden it imposes on health systems”[3]. CIHI define hospitalizations entirely caused by alcohol as hospital stays for those aged 10 years and older for the treatment of conditions considered to be wholly (100%) caused by the harmful consumption of alcohol [4](see Appendix E). It is important to note that conditions considered to be wholly (100%) caused by

the harmful consumption of alcohol make up approximately 30% of all hospitalizations associated with alcohol consumption[3].

- Between 2006/07 and 2015/16 there were 2,990 hospitalizations entirely caused by alcohol in those aged 10 years and older. Comparatively, this is similar to the total number of hospitalizations for Chronic Obstructive Pulmonary Disease, ischemic heart disease, and diabetes mellitus combined (3,484).
- The age standardized rate of hospitalizations entirely caused by alcohol in northern Saskatchewan has remained relatively stable between 2008/09 and 2015/16, although the rate in 2015/16 is now significantly higher than the rates in 2006/07 and 2007/08.
- Rates of hospitalizations entirely caused by alcohol follow similar patterns in both males and females. In females, the rate increases from the 10-14 year old category until the 40-44 category, before decreasing to the 85+ category. In males, the rate also climbs from the 10-14 year old category until the 45-49 category, before falling until the 85+ category. However, the male rates tend to be higher than the female rates between the 45-49 year old category and the 85+ category.
- The major causes of hospitalizations entirely caused by alcohol include mental and behavioural disorders due to use of alcohol (75%), alcoholic gastritis (9%) and alcoholic liver disease (8%). The major diagnoses associated with hospitalizations for mental and behavioural disorders due to use of alcohol include, alcohol use dependence syndrome, harmful alcohol use, alcohol use withdrawal state, and alcohol use acute intoxication.

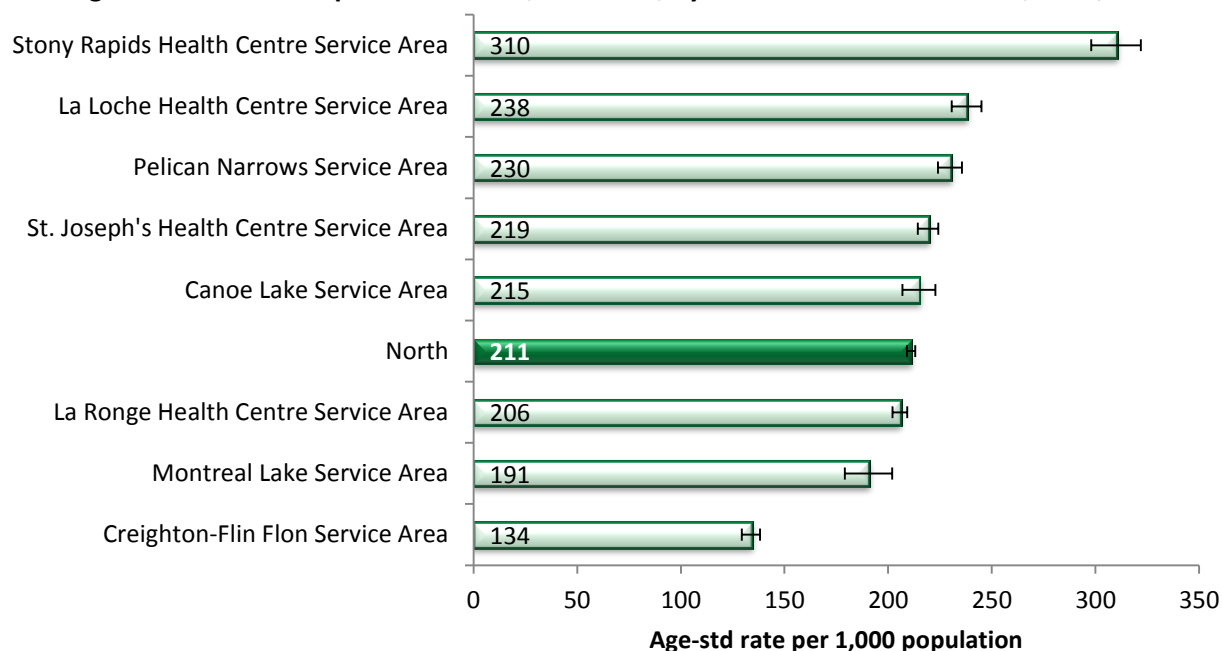
Total hospitalizations

Figure 1: Age-standardized hospitalization rate, all causes, northern Saskatchewan, 2006/07 to 2015/16



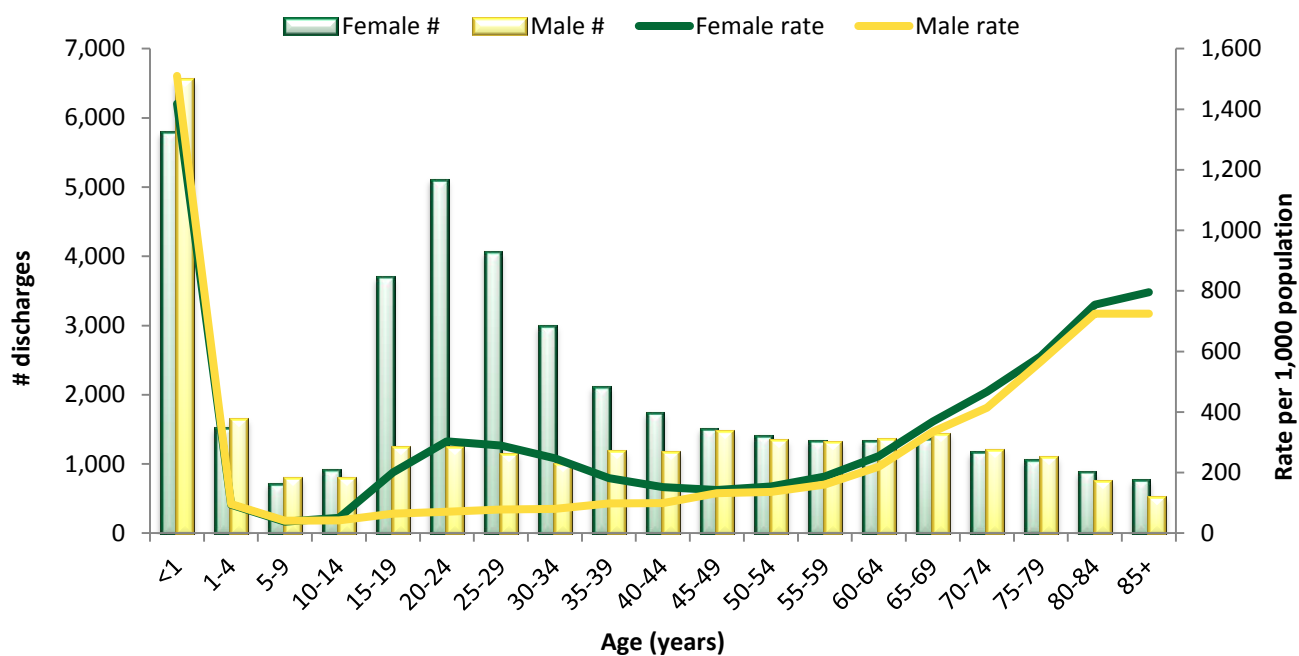
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 2: Age-standardized hospitalization rate, all causes, by health centre service area, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

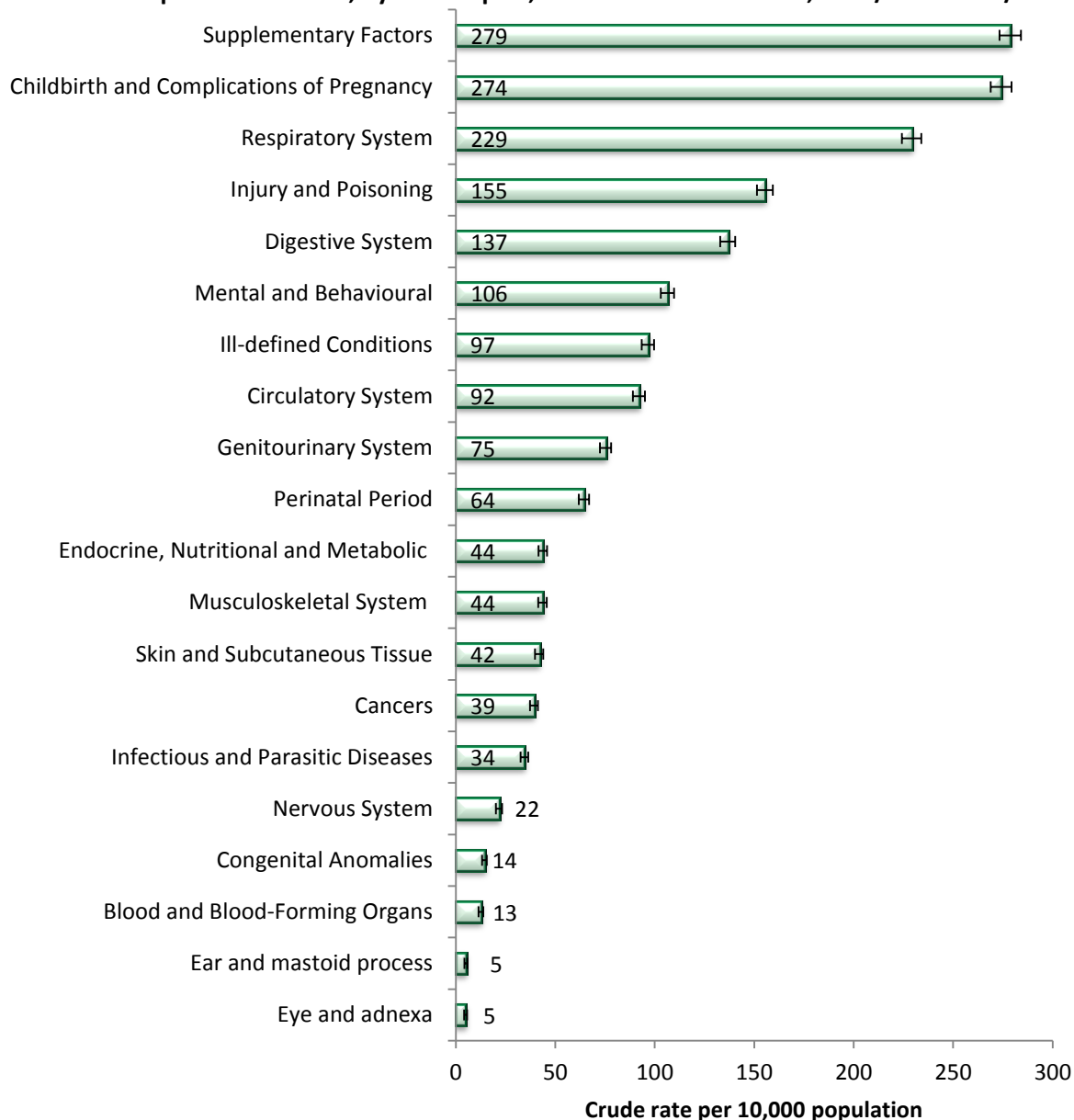
Figure 3: Number and rates of hospitalizations for all causes, by age group and sex, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Major causes of hospitalizations

Figure 4: Crude hospitalization rates, by ICD Chapter, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 5: Ranking of ICD chapters in females by age group, northern Saskatchewan, 2006/07 to 2015/16

Age group	First	Second	Third
< 1	Supplementary Factors	Perinatal Period	Respiratory System
1 to 9	Respiratory System	Injury and Poisoning	Ill-defined Conditions
10 to 19	Pregnancy and Childbirth	Mental and Behavioural	Injury and Poisoning
20 to 29	Pregnancy and Childbirth	Supplementary Factors	Injury and Poisoning
30 to 39	Pregnancy and Childbirth	Supplementary Factors	Digestive System
40 to 49	Genitourinary System	Digestive System	Mental and Behavioural
50 to 59	Digestive System	Respiratory System	Ill-defined Conditions
60 & above	Respiratory System	Circulatory System	Digestive System
Overall	Pregnancy and Childbirth	Supplementary Factors	Respiratory System

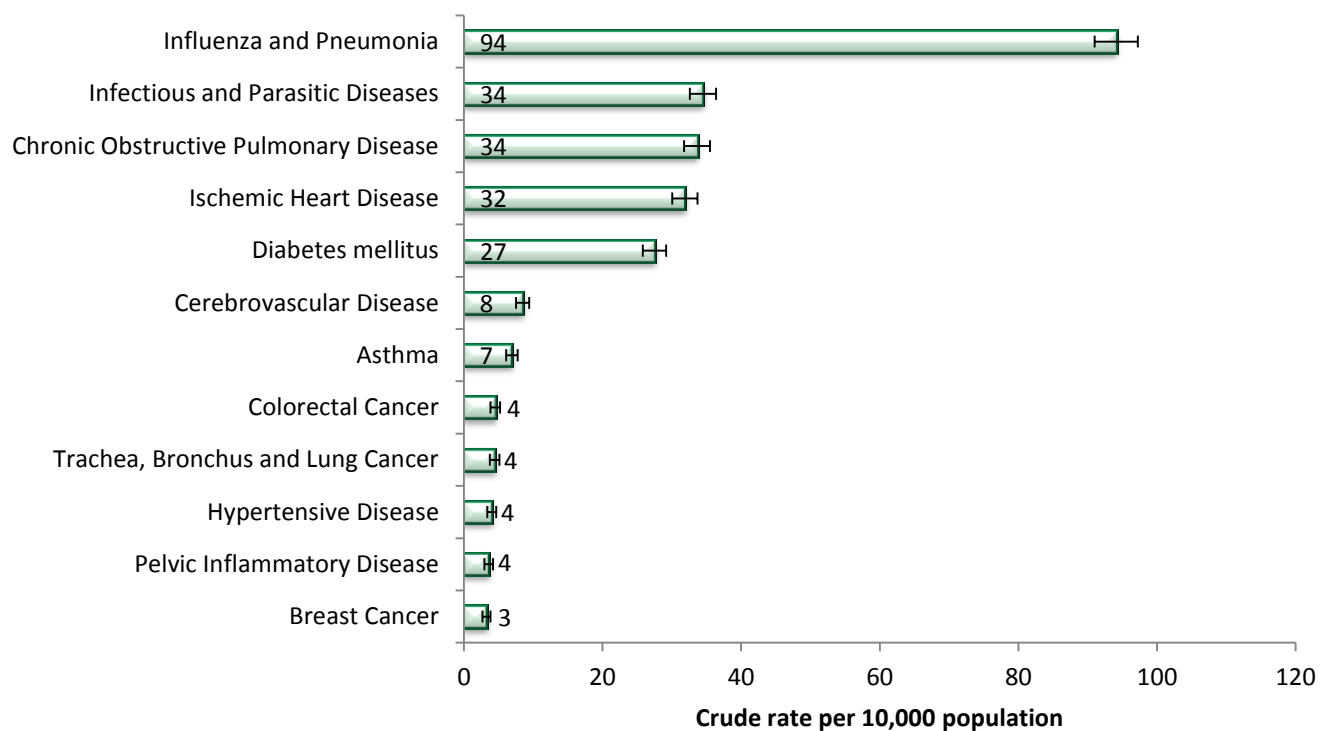
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 6: Ranking of ICD chapters in males by age group, northern Saskatchewan, 2006/07 to 2015/16

Age group	First	Second	Third
< 1	Supplementary Factors	Perinatal Period	Respiratory System
1 to 9	Respiratory System	Injury and Poisoning	Digestive System
10 to 19	Injury and Poisoning	Mental and Behavioural	Respiratory System
20 to 29	Injury and Poisoning	Mental and Behavioural	Digestive System
30 to 39	Injury and Poisoning	Mental and Behavioural	Digestive System
40 to 49	Injury and Poisoning	Digestive System	Mental and Behavioural
50 to 59	Circulatory System	Digestive System	Respiratory System
60 & above	Circulatory System	Respiratory System	Digestive System
Overall	Supplementary Factors	Respiratory System	Injury and Poisoning

Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 7: Selected causes of hospitalizations, crude rates, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

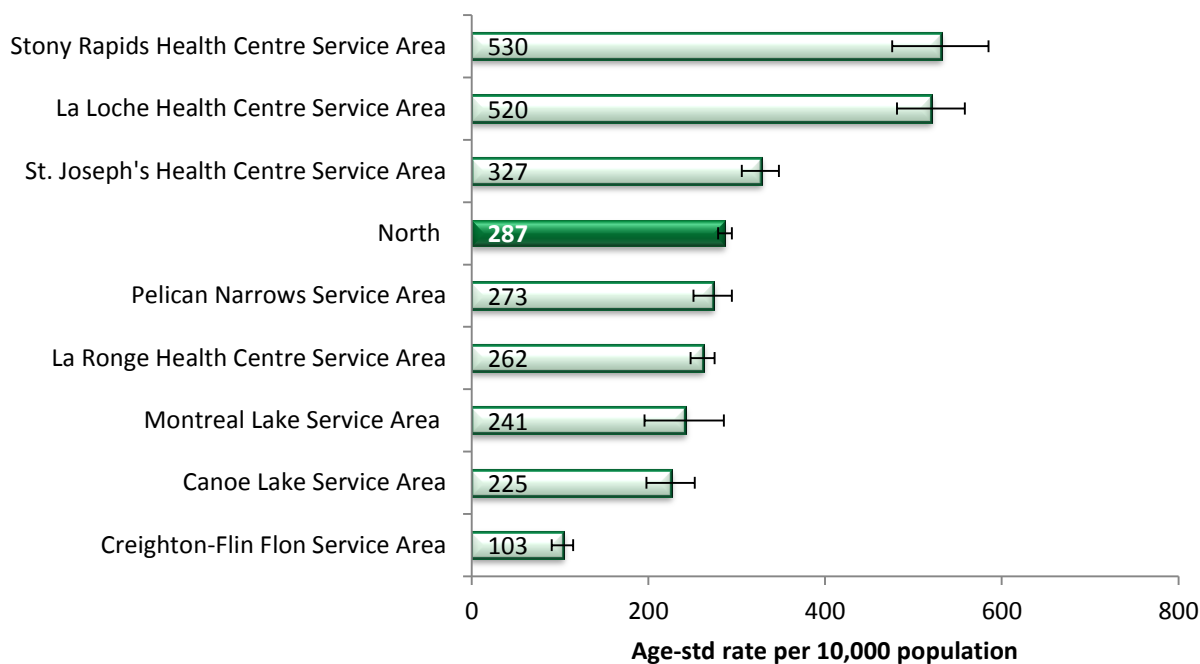
Respiratory Hospitalizations

Figure 8: Age-standardized hospitalization rate for respiratory conditions, northern Saskatchewan, 2006/07 to 2015/16



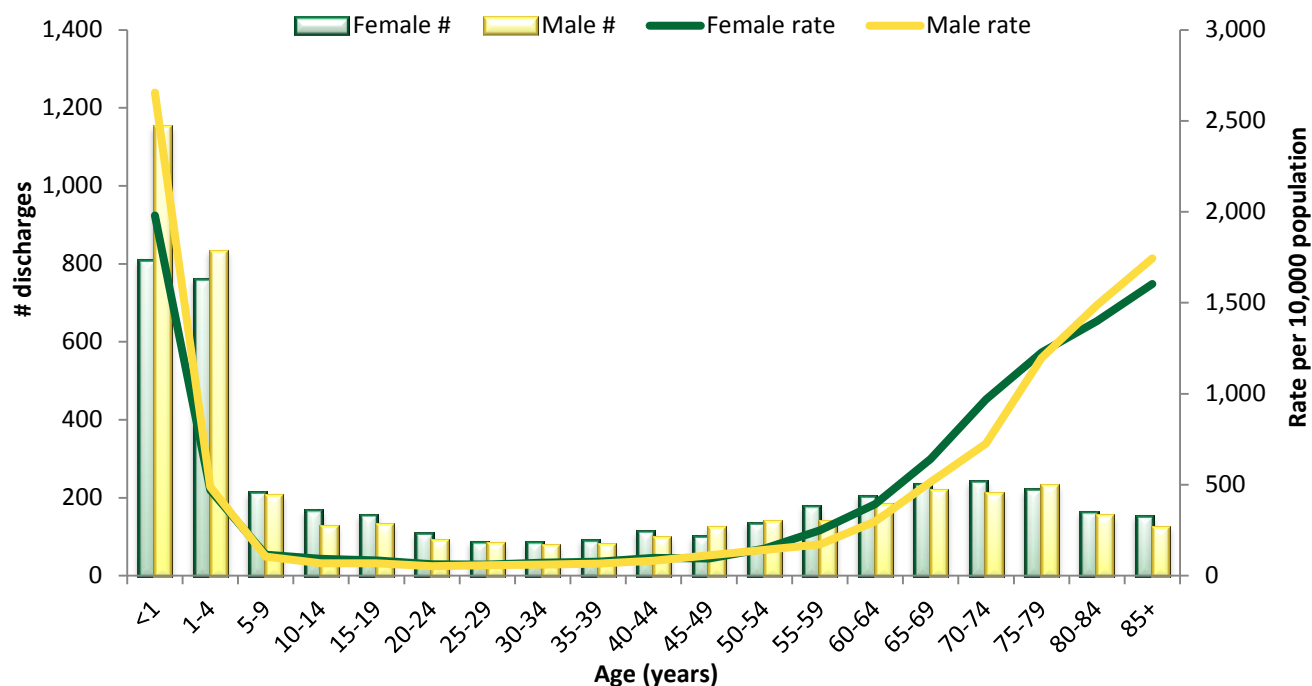
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 9: Age-standardized hospitalization rate for respiratory conditions by health center service area, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 10: Number and rates of respiratory hospitalizations, by age group and sex, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

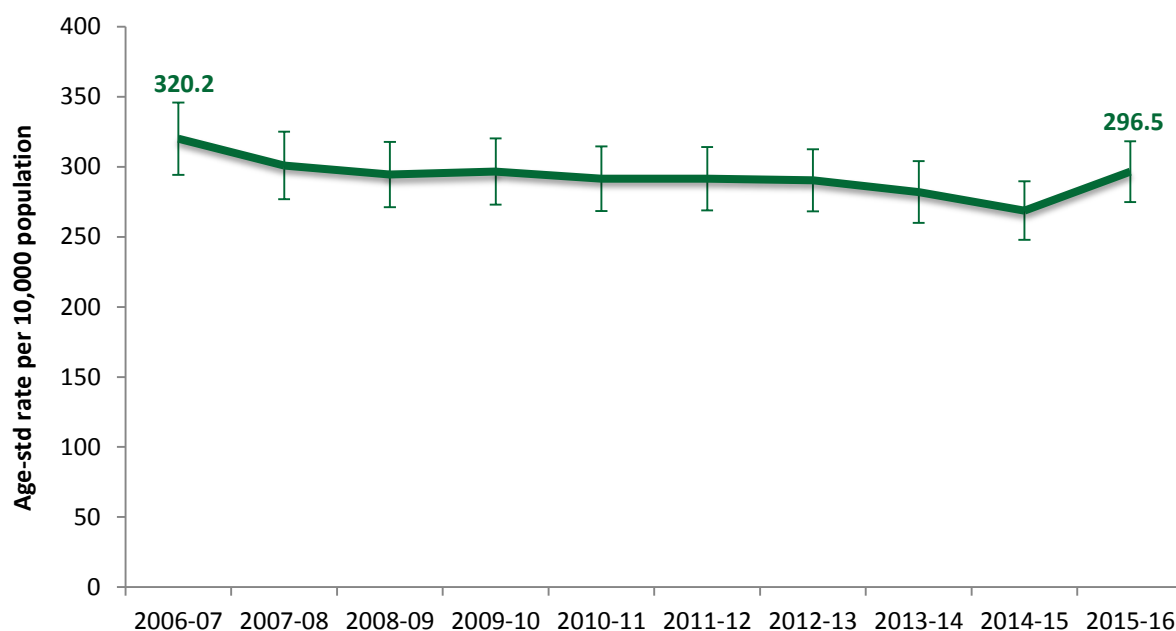
Figure 11: Ranking of major causes of respiratory hospitalizations by age group, northern Saskatchewan, 2006/07 to 2015/16

Age group	First	Second	Third
< 1	Other Respiratory	Influenza and Pneumonia	Asthma
1 to 9	Influenza and Pneumonia	Other Respiratory	Asthma
10 to 19	Other Respiratory	Influenza and Pneumonia	Asthma
20 to 29	Other Respiratory	Influenza and Pneumonia	Asthma
30 to 39	Other Respiratory	Influenza and Pneumonia	Asthma
40 to 49	Influenza and Pneumonia	Other Respiratory	COPD
50 to 59	Influenza and Pneumonia	Other Respiratory	COPD
60 & above	COPD	Influenza and Pneumonia	Other Respiratory
Overall	Influenza and Pneumonia	Other Respiratory	COPD

Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

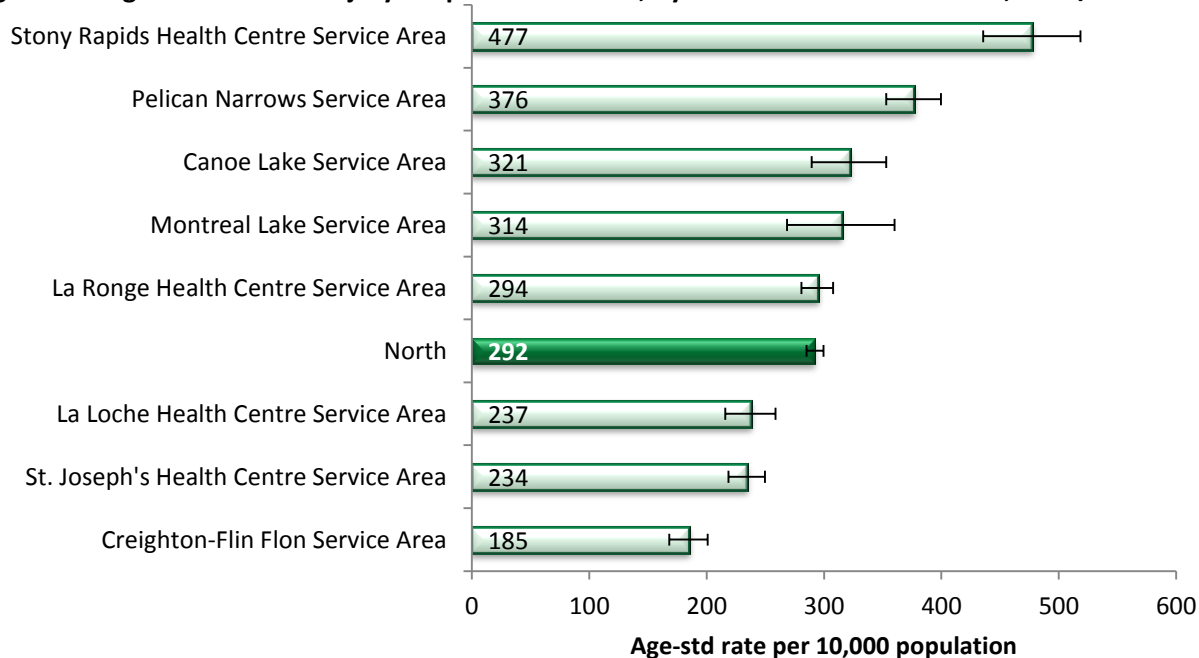
Injury Hospitalizations

Figure 12: Age-standardized injury hospitalization rate, northern Saskatchewan, 2006/07 to 2015/16



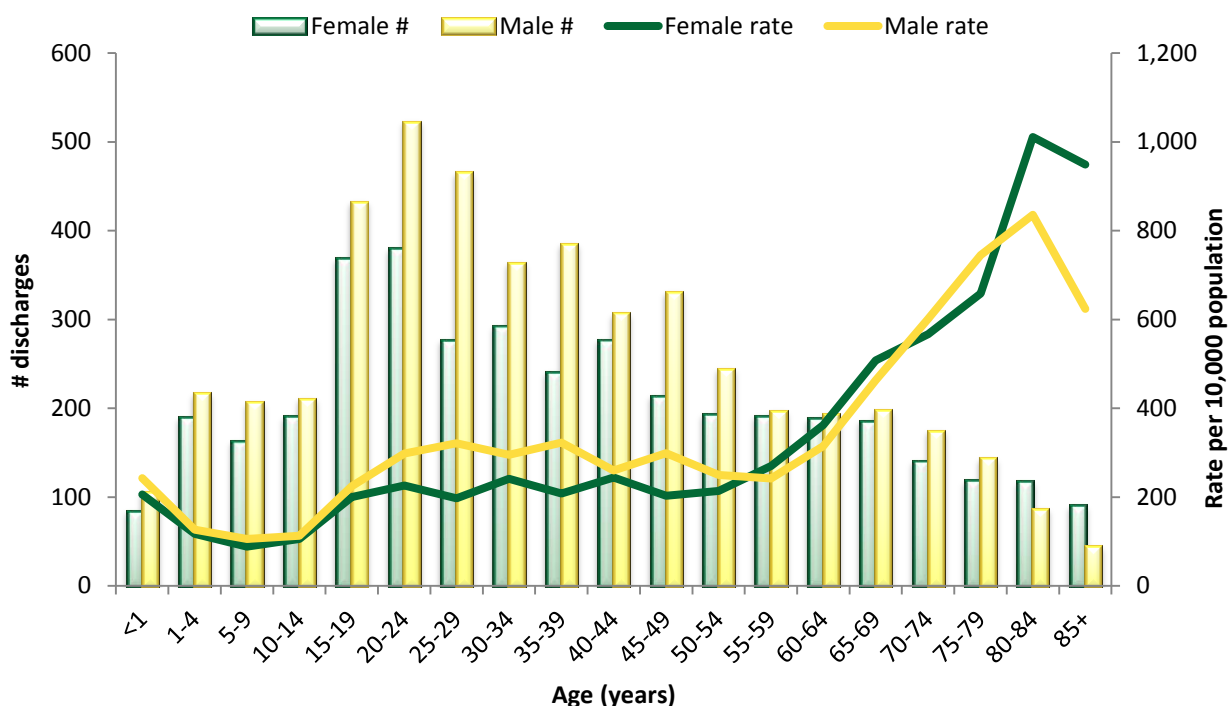
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 13: Age-standardized injury hospitalization rate, by health centre service area, 2006/07 to 2015/16



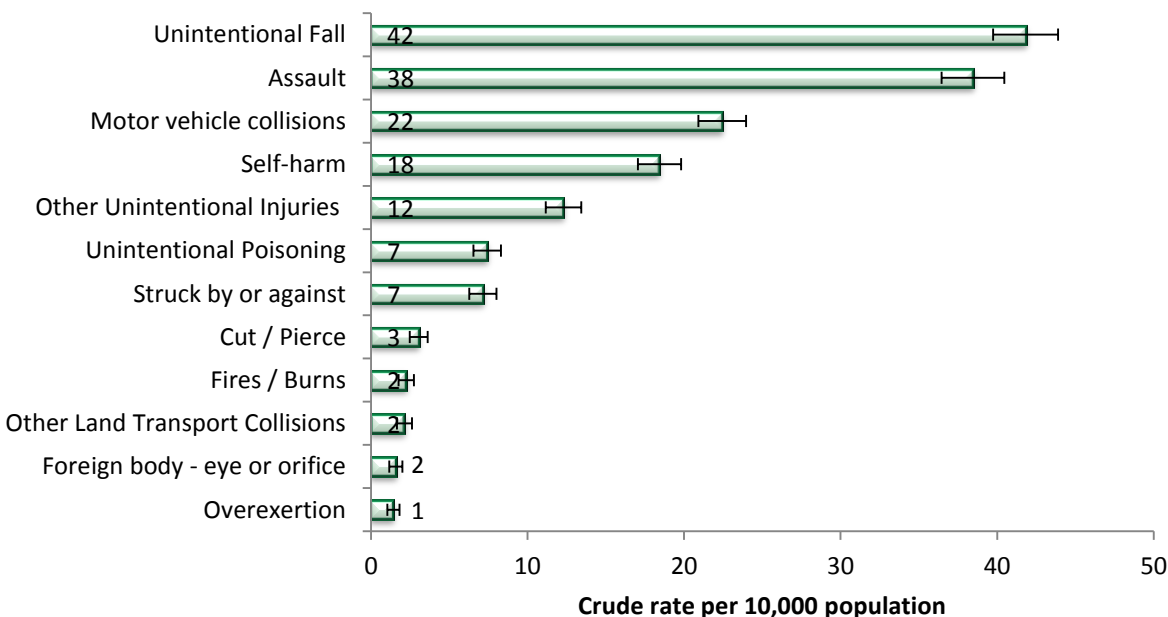
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 14: Number and rates of injury hospitalizations, by age group and sex, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 15: Major causes of injury hospitalizations, crude rates, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 16: Ranking of major causes of injury hospitalizations in females by age group, northern Saskatchewan, 2006/07 to 2015/16

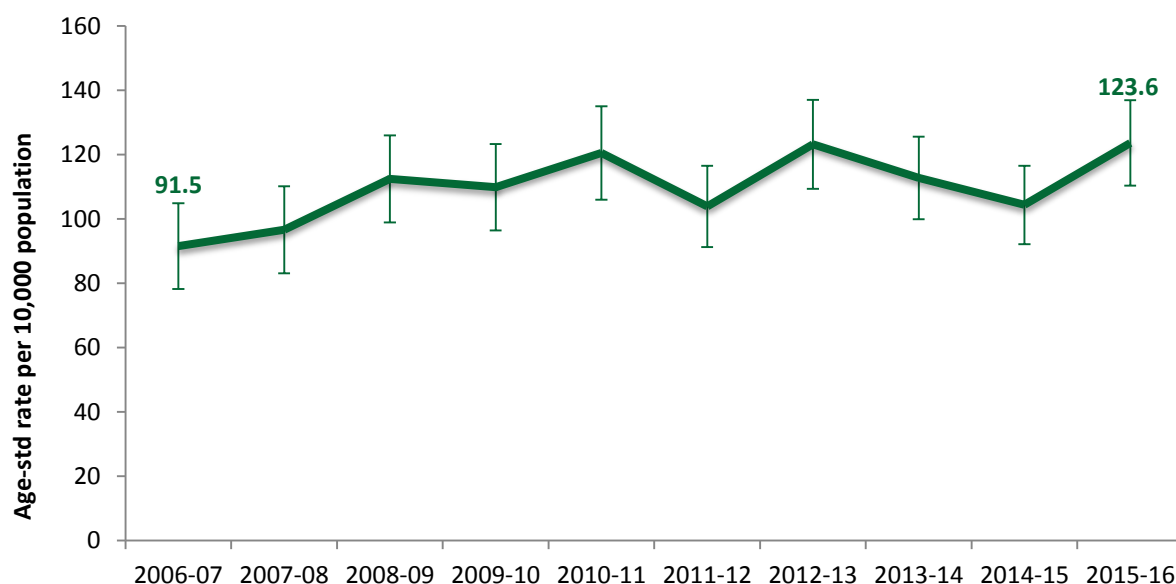
Age group	First	Second	Third
< 1	Assault	Unintentional Fall	Suffocation
1 to 9	Unintentional Fall	Unintentional Poisoning	Motor vehicle collisions
10 to 19	Self-harm	Motor vehicle collisions	Unintentional Fall
20 to 29	Self-harm	Assault	Motor vehicle collisions
30 to 39	Self-harm	Assault	Unintentional Fall
40 to 49	Unintentional Fall	Self-harm	Assault
50 to 59	Unintentional Fall	Self-harm	Motor vehicle collisions
60 & above	Unintentional Fall	Other Unintentional Injuries	Motor vehicle collisions
Overall	Unintentional Fall	Self-harm	Motor vehicle collisions
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018			

Figure 17: Ranking of major causes of injury hospitalizations in males by age group, northern Saskatchewan, 2006/07 to 2015/16

Age group	First	Second	Third
< 1	Unintentional Fall	Assault	Other Unintentional Injuries
1 to 9	Unintentional Fall	Unintentional Poisoning	Motor vehicle collisions
10 to 19	Assault	Motor vehicle collisions	Unintentional Fall
20 to 29	Assault	Motor vehicle collisions	Unintentional Fall
30 to 39	Assault	Motor vehicle collisions	Unintentional Fall
40 to 49	Assault	Unintentional Fall	Motor vehicle collisions
50 to 59	Unintentional Fall	Assault	Motor vehicle collisions
60 & above	Unintentional Fall	Other Unintentional Injuries	Motor vehicle collisions
Overall	Assault	Unintentional Fall	Motor vehicle collisions
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018			

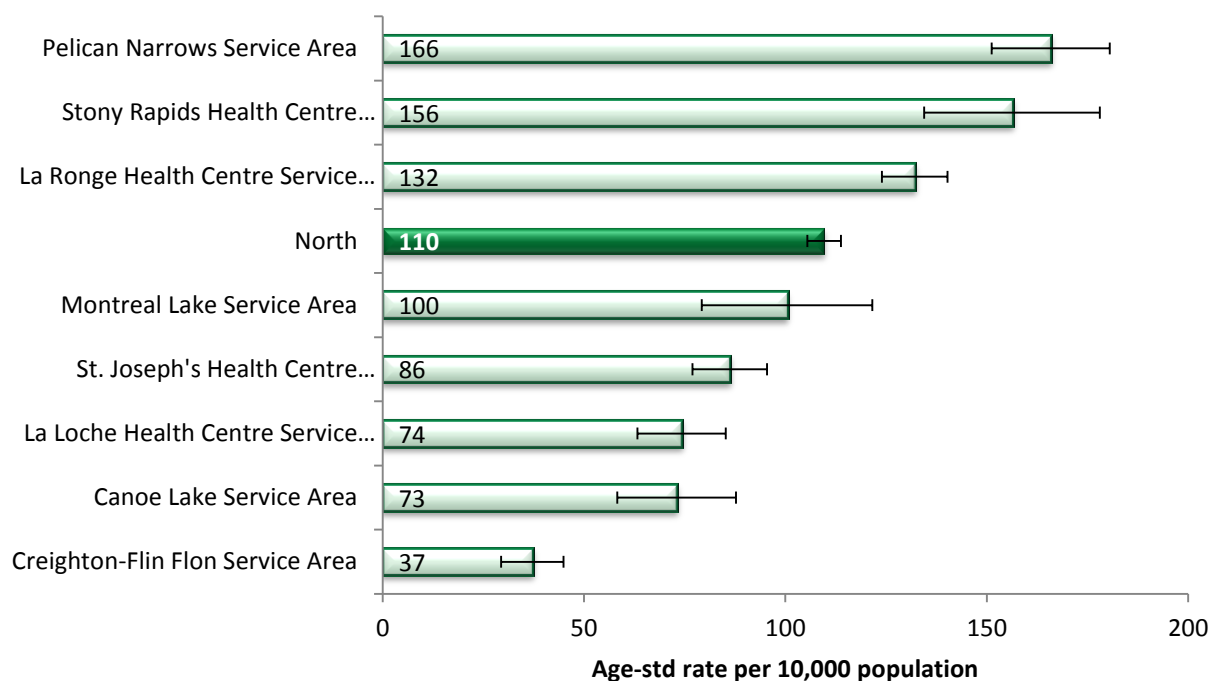
Hospitalizations entirely caused by alcohol

Figure 18: Age-standardized rate of hospitalizations entirely caused by alcohol, northern Saskatchewan, 2006/07 to 2015/16



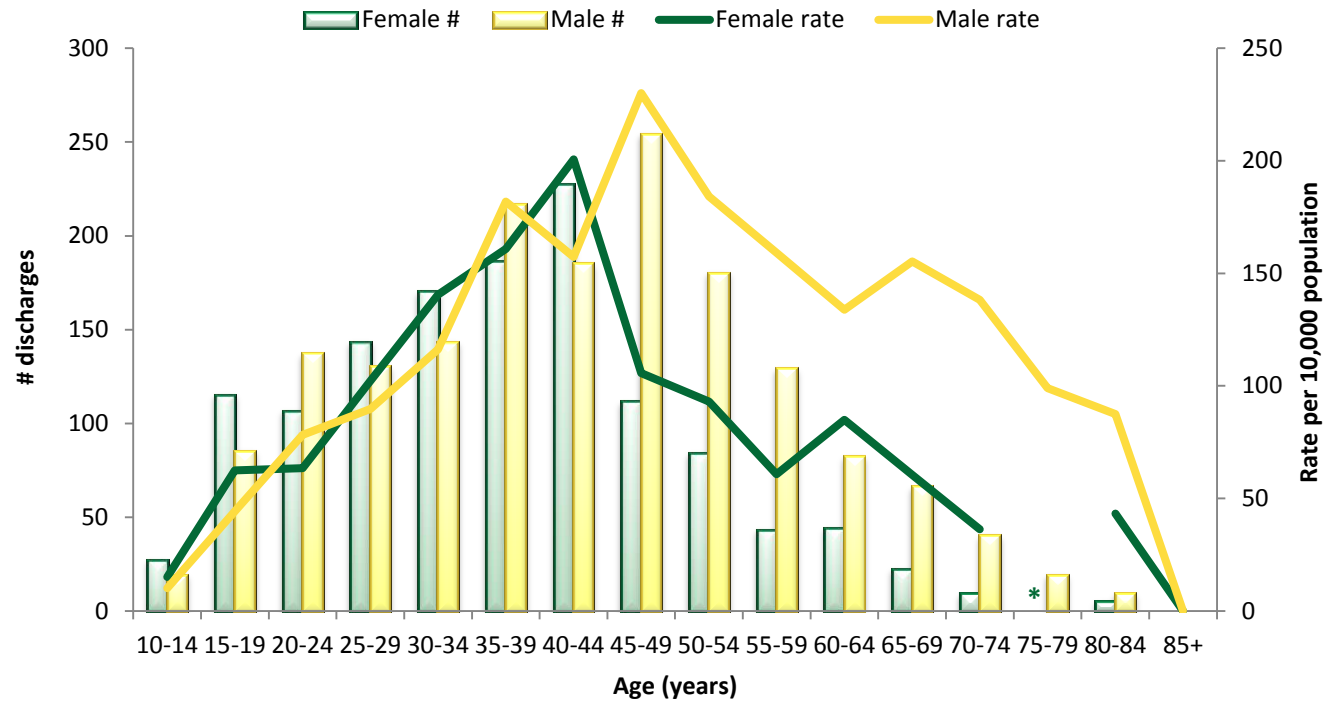
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 19: Age-standardized rate of hospitalizations entirely caused by alcohol, by health centre service area, 2006/07 to 2015/16



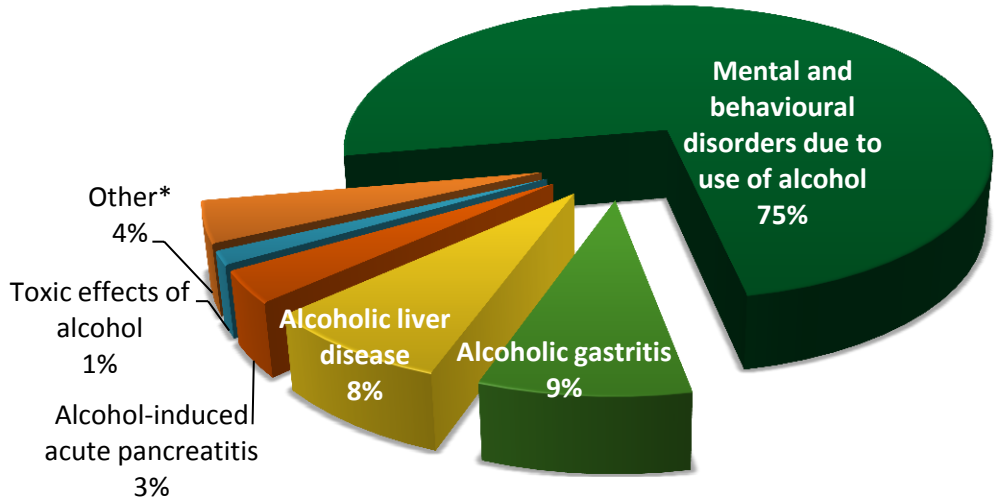
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018

Figure 20: Number and rates of hospitalizations entirely caused by alcohol, by age group and sex, 2006/07 to 2015/16



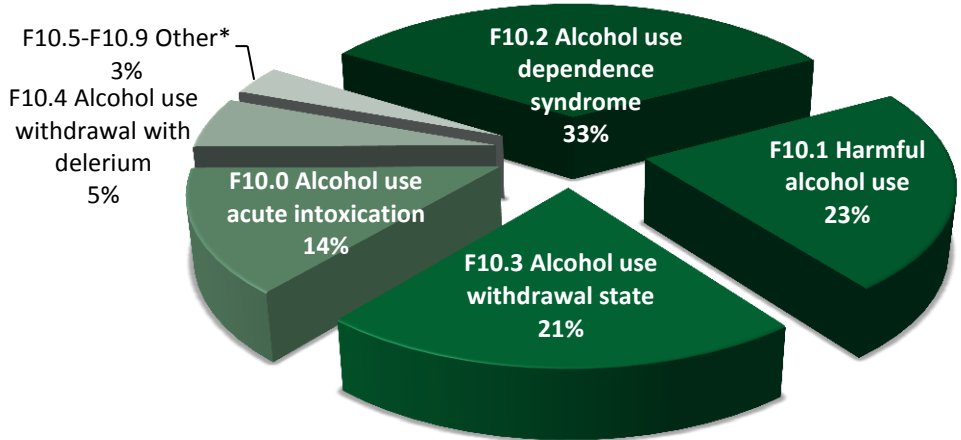
Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018, * suppressed < 5

Figure 21: Major causes of hospitalizations entirely caused by alcohol, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015). Prepared by PHU Mar 2018. * includes all

Figure 22: Hospitalizations from mental and behavioural disorders due to the use of alcohol by diagnosis code, northern Saskatchewan, 2006/07 to 2015/16



Source: DAD (Saskatchewan yearend files 2015), Prepared by PHU Mar 2018, * includes all other causes

Appendix A – Data Notes

Data Sources

Saskatchewan Year-end Hospitalization File (DAD) – The PHU receives an annual update of the data containing all hospitalizations for individuals who list a residence address within the three northern health authorities. Causes of hospitalization were created using ICD Chapters (see Appendix B) and were based on the most responsible diagnosis field for in-patient discharges. Specific causes of hospitalization were also based on the most responsible diagnosis (see Appendix C) and in-patient discharges. Some of the specific causes of hospitalization categories were not listed in the charts within the document as they tend to have very high numbers of hospitalizations but are not very informative. These included categories such as “all other cancers”, “other circulatory diseases”, “other respiratory diseases”, etc. Injury hospitalizations, both total and specific causes, were based on the external cause diagnosis field (see Appendix D) for in-patient discharges. Hospitalizations entirely caused by alcohol were based on the CIHI methodology (see Appendix E) and included both inpatient and day surgery discharges. The alcohol related indicators in this report will have slightly different results than the CIHI indicator as a result of using somewhat different geographies (residence codes vs. postal codes), population sources (Saskatchewan covered population vs. Statistics Canada estimates), as well as an abbreviated DAD file (PHU file contains three diagnosis fields and one external cause field compared to 25 possible diagnosis fields within the CIHI file).

Saskatchewan Covered Population 2016 – Covered Population is based on eligibility for health insurance benefits in Saskatchewan. All residents of Saskatchewan are included except: (a) members of the Canadian Forces and inmates of federal prisons and (b) people not yet meeting the residency requirement. The covered population estimates are derived from the person health registry system which collects information on multiple addresses, when available, in an attempt to distinguish between correspondence (i.e. mailing address) and residence addresses. In northern Saskatchewan, many communities share postal codes, and thus it is difficult to determine exactly which community the person lives in. For example, La Ronge, Air Ronge, and several Lac La Ronge communities share two postal codes. First Nations are assigned residence based on band affiliation. In southern Saskatchewan, some reassignment of residence codes occurs based on additional residence information; however this does not occur in northern Saskatchewan due to the difficulty in distinguishing between residence on reserves and northern towns and villages. As a result, individuals may be assigned to a band but not an actual community. For example, many individuals are assigned to the Peter Ballantyne Cree Nation as opposed to the communities of Pelican Narrows, Sandy Bay, Deschambault Lake, Southend, or Sturgeon Landing. As a result of these limitations, the covered population is thought to be a good estimation of the populations for community areas, health centre service areas, and health authorities but not individual northern communities. For further details on the covered population methodology, please refer to the 2015 covered population website (<https://www.ehealthsask.ca/health-data/covered-population>).

Data Notes

Presentation of Data (e.g. numbers of death, crude rates, age-standardized rates) – For a full description of crude rates, age-adjusted rates, and raw numbers, please refer to “A Guide to the Reports – Understanding the Presentation of Data” report on the Population Health Unit website:

(http://www.populationhealthunit.ca/mrws/filedriver/Health_Indicator_reports/A_Guide_to_the_Reports_Understanding_the_Presentation_of_Data.pdf)

Age-adjusted rates in this report were calculated using the 2011 Canadian population as the standard. Confidence intervals for crude rates were calculated using the Gamma distribution[5] while confidence intervals for age-adjusted rates were calculated using the Poisson approximation method[6].

Appendix B – International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD10) Chapters and corresponding codes

No.	Chapter Name	ICD 10 Codes	ICD 9 codes
I	Infectious and Parasitic Diseases	A00-B99	0 -139, 279.5, 279.6 (except: 099.3, 099.4, 135, 136.1, 034.0)
II	Neoplasms	C00-D48	140-239
III	Diseases of Blood and Blood-Forming Organs	D50-D89	135, 279.0-279.3, 279.8-279.9, 280- 289
IV	Endocrine, Nutritional and Metabolic Diseases	E00-E90	240-278
V	Mental and Behavioural Disorders	F00-F99	290-319
VI	Diseases of the Nervous System	G00-G99	320-359, 435
VII	Diseases of the eye and adnexa	H00-H59	360-379
VIII	Diseases of the ear and mastoid process	H60-H95	380-389
IX	Diseases of the Circulatory System	I00-I99	390-459 (except 435, 446)
X	Diseases of the Respiratory System	J00-J99	034.0, 460-519
XI	Diseases of the Digestive System	K00-K93	520-579
XII	Diseases of the Skin and Subcutaneous Tissue	L00-L99	680-709
XIII	Diseases of the Musculoskeletal System and Connective Tissue	M00-M99	099.3, 136.1, 279.4, 446, 710-739
XIV	Diseases of the Genitourinary System	N00-N99	099.4, 580-629, 788.0 (except 599.7)
XV	Complications of Pregnancy and Childbirth, and the Puerperium	O00-O99	630-676
XVI	Conditions Originating in the Perinatal Period	P00-P96	760-779
XVII	Congenital Anomalies	Q00-Q99	740-759
XVIII	Symptoms, Signs and Ill-defined Conditions	R00-R99	599.7, 780-799 (except 788.0)
XIX	Injury and Poisoning	S00-T98	800-999
XX	External causes of morbidity and mortality	V01-Y98	E800-E999
XXI	Factors Influencing Health Status and Contact with Health Services	Z00-Z99	V01-V82

Appendix C – List of specific causes of hospitalization by International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD10) corresponding codes

Chapters	Specific Cause	ICD10 Code	ICD9 Code
Infectious and Parasitic Diseases	Infectious and Parasitic Diseases	A00-B99	0-139, 279.5, 279.6 (except: 099.3, 099.4, 135, 136.1, and 034.0)
Neoplasms	Lip Cancer	C00	140
	Oral Cavity Cancer	C01 – C06	141, 143, 144, 145
	Head and Neck Cancer	C07 – C14	142, 146, 147, 148, 149
	Esophagus Cancer	C15	150
	Stomach Cancer	C16	151
	Colorectal Cancer	C18 – C21	153, 154
	Liver and intrahepatic Bile Ducts Cancer	C22	155
	Gallbladder and Biliary Tract Cancer	C23 – C24	156
	Pancreas Cancer	C25	157
	Digestive Tract and Small Intestine Cancer	C17, C26	152, 159
	Larynx Cancer	C32	161
	Trachea, Bronchus and Lung Cancer	C33 – C34	162
	Respiratory System Cancer	C30 - C31, C37 - C39	160, 164, 165
	Bone and Connective Tissue Cancer	C40 - C41, C49	170, 171
	Malignant Melanoma of Skin	C43	172
	Other Malignant Cancer of Skin	C44	173
	Breast Cancer	C50	174, 175
	Cervix Cancer	C53	179
	Cancer of the Body of Uterus	C54 - C55	180, 182
	Ovarian Cancer	C56	183
	Cancer of Female Genital Organs (Vulva and vagina, other and unspecified female genital organs, placenta)	C51 - C52, C57 - C58	184, 183.2-183.9, 181

Chapters	Specific Cause	ICD10 Code	ICD9 Code
	Prostate Cancer	C61	185
	Cancer of the Male Genital Organs (testes, penis and other unspecified male genital organs)	C60, C62 - C63	186, 187
	Cancer of the Kidney	C64	189
	Bladder Cancer	C67	188
	Other Urinary tract Cancer	C65 - C66, C68	189.1-189.9
	Brain and Central Nervous System Cancer	C70 - C72	191-192
	Thyroid Cancer	C73	193
	Other Endocrine Glands Cancer	C74 - C75	194
	Hodgkin's Lymphoma	C81	201
	Non-Hodgkin's Lymphoma	C82 - C85	202.0-202.2, 202.7-8
	Multiple Myeloma	C90	203
	Leukemia	C91 - C95	204- 208
	Primary Unknown Cancer	C78 - C80, C97	197-199
	Other Primaries	C42, C47 - C48, C69, C76 - C77	158,190,195-196
	In Situ Neoplasm, Benign Neoplasms and Neoplasms of Uncertain or Unknown Behavior	D00 - D48	210-239
	All other Cancers	C00-D48 (Not mentioned above)	140-239 not mentioned above
Endocrine, nutritional and metabolic diseases	Diabetes mellitus	E10-E14	250
Diseases of the Circulatory System	Hypertensive disease	I10-I15	401-405
	Cerebrovascular disease	I60-I69	430-434,436-438
	Ischemic heart disease	I20-I25	410-414
	Other diseases of circulatory system (except, Hypertensive, Cerebrovascular and Ischemic Heart diseases)	I00-I99 (not mentioned above)	390-459 (not mentioned above)
Respiratory disease	Influenza and Pneumonia	J09-J18	480-487
	Asthma	J45	493

Chapters	Specific Cause	ICD10 Code	ICD9 Code
	COPD	J40-J44	490-492,496
	Bronchiectasis	J47	494
	Other diseases of the Respiratory System (except Asthma, COPD, Bronchiectasis, Influenza and Pneumonia)	J00-J99	460-519
Disease of the Genitourinary System	Pelvic Inflammatory Disease	N70-N74	614-616.0
Unknown	Unknown	Blank	Blank

Appendix D – List of specific causes of injury hospitalization by International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD10) corresponding codes

Specific Injury	ICD10 CA codes	ICD9 e-codes
Near- drowning/submersion	W65-W74, V90, V92	E830, E832, E910
Unintentional Fall	W00-W19	E880-E888
Motor vehicle collisions	V02-V04, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V09.0, V09.2, V80.9, V82.8, V89.0, V89.2	E810-E825
Other Land Transport Collisions	Any codes from V01-V89 not included in the motor vehicle collisions category above	E800-E807, E826-E829, E846-E848
Unintentional Poisoning	X40-X49	E850-E869
Suffocation	W75-W84	E911-E913
Fires/Burns	X00-X19	E890-E899, E924
Overexertion	X50	E927
Cut/Pierce	W25-W29, W45-W46	E920
Struck by or against	W20-W22, W50-W52	E916-E917
Caught or crushed between objects	W23	E918
Bitten by dog or other mammal	W54, W55	E906.0
Foreign body – eye or orifice	W44	E914, E915
Nonvenomous insect bites	W57	E906.4
Other unintentional Injuries	V91, V93-V99, W24, W30-W43, W47-W49, W53, W56, W58-W64, W85-W99, X20-X39, X51-X59, Y85-Y86	E831, E833-E839, E840-E845, E900-E909, E919, E921- E923, E925-E926, E928, E929
Self-harm	X60-X84, Y87.0	E950-E959
Assault	X85-X99, Y00-Y09, Y87.1	E960-E969
Other injuries	External cause and e-codes not listed above	

Appendix E – List of specific causes of hospitalization entirely caused by alcohol by International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD10) corresponding codes

Conditions 100% attributable to alcohol consumption	ICD-10-CA-codes
Accidental poisoning by exposure to alcohol	X45
Alcohol-induced acute pancreatitis	K85.2
Alcohol-induced chronic pancreatitis	K86.0
Alcohol-induced pseudo-Cushing's syndrome	E24.4
Alcoholic cardiomyopathy	I42.6
Alcoholic gastritis	K29.2
Alcoholic liver disease	K70
Alcoholic polyneuropathy	G62.1
Alcoholic myopathy	G72.1
Degeneration of nervous system due to alcohol	G31.2
Fetal alcohol syndrome (dysmorphic)	Q86.0
Finding of alcohol in blood	R78.0
Intentional self-poisoning by and exposure to alcohol	X65
Maternal care for (suspected) damage to fetus from alcohol	O35.4
Mental and behavioural disorders due to use of alcohol	F10
Mental disorders and diseases of the nervous system complicating pregnancy, childbirth and the puerperium	O99.3 (only if F10 is coded in the same abstract as type (3))

a) In-patient records: ICD-10-CA codes 100% attributable to alcohol consumption coded as diagnosis type (M), (1), (W), (X), (Y) or (9) in the Discharge Abstract Database (DAD); or

b) Day-surgery records: ICD-10-CA codes 100% attributable to alcohol consumption coded as type (M), (1) or (9) in the DAD;

Appendix F – Rescodes by health centre service area and health authority, Northern Saskatchewan, 2015

HA	Health Centre Service Area	Rescodes
AHA	Stony Rapids Health Centre Service Area	74982 Black Lake First Nation
		75082 Fond du Lac Denesuline First Nation
		80110 THEORETIC 801
		80170 Camsell Portage
		80172 Fond Du Lac
		80173 Stony Rapids
		80175 Uranium City
KYHR	Canoe Lake Service Area	74680 Canoe Lake First Nation
		80310 THEORETIC 803
		80371 Canoe Narrows
		80372 Dore Lake
		80373 Green Lake
	La Loche Health Centre Service Area	74580 Birch Narrows First Nation
		74880 Clearwater River Dene Nation
		80272 La Loche
		80273 Turnor Lake
	St. Joseph's Health Centre Service Area	74780 Buffalo River Dene Nation
		75180 English River First Nation
		80210 THEORETIC 802
		80270 Buffalo Narrows
		80271 Dillon
		80370 Beauval
		80374 Ile a la Crosse
		80375 Patuanak
MCRHR	La Ronge Health Centre Service Area	72482 Lac La Ronge Indian Band
		72882 Hatchet Lake Nation
		80174 Wollaston Lake
		80410 THEORETIC 804
		80430 La Ronge
		80470 Air Ronge
		80472 Pinehouse
		80474 Stanley Mission
		72082 Peter Ballantyne Cree Nation
	Pelican Narrows Service Area	80473 Southend

HA	Health Centre Service Area	Rescodes
		80510 THEORETIC 805
		80572 Pelican Narrows
		80573 Sandy Bay
		80574 Sturgeon Landing
	Creighton-Flin Flon Service Area	80530 Creighton
		80571 Denare Beach
		80575 Flin Flon Creighton Unorg
	Montreal Lake Service Area	72682 Montreal Lake Cree Nation
		80471 Weyakwin
		80475 Timber Bay

*THEORETIC 80110-80510 are theoretical rescodes created to approximate the concept of a rural municipality (RM) in northern Saskatchewan, where RM's do not exist. Individuals who provide a geographical location within northern Saskatchewan (e.g. land location) for their residence, but in which that location cannot be mapped to a specific northern community, are placed in one of the five theoretical rescodes. These rescodes can then be grouped into one of the Health Centre Service Areas.

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