Our Vision of Better Health for All

We envision a community in which everyone has a chance to live a healthy life and has the same opportunities to reach their full health potential. The Better Health for All Series highlights a number of key findings about the status of our health. Our series highlights what actions are being taken to make this vision a reality and what more we can do to create better opportunities for all to achieve better health.

Better Health for All Series 7: Unintentional Injury

Unintentional injuries are injuries that are not caused on purpose or with an intention to harm. They include harms related to transportation such as motor vehicles, pedestrian, cycling and off-road injuries. They also include events such as falls, drowning, burns and poisonings. Unintentional injuries are often thought of as random events or “accidents” that could not have been prevented. In reality, many injuries are preventable and occur as a result of actions and circumstances largely determined by the physical, social and policy structures in place where we live, work and play. When we think about a person’s risk of being injured, we must consider the wider environment.

In addition to this report answering the question, “What types of injuries are occurring in our community?” we answer “What puts members of our community at risk for these injuries and how can we better prevent them?”

Why Should We Care About injuries?

Preventable injuries are the leading cause of death for Canadians under age 45. The total economic burden of injuries is estimated at $27 billion per year in Canada and $1.1 billion per year in Saskatchewan1. Our province has been particularly hurt by injuries, having the second highest per capita cost due to injuries compared to any other province.1 Further, over the past decade Saskatchewan has had the highest injury hospitalization rates in the country.2,3 While Saskatoon Health Region has fared better than the provincial average, we are consistently higher than national injury hospitalization rates.2

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1 Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.
2 Canadian Institute for Health Information. Health Indicators Interactive Tool [Internet]. 2013; [cited 2016 Apr 10]; Available from: http://yourhealthsystem.cihi.ca/epub/search.jspa.
3 Past decade is from 2004 to 2013.
Many of our injuries occur in workplaces. Saskatchewan has the second highest time loss injury rate in Canada.⁴

**Who is Affected by Unintentional Injuries?**

Different types of unintentional injuries exhibit unique patterns in specific groups. For example, deaths and injuries associated with motor vehicle collisions are more common among teens and young adults⁵, while falls are more likely to have severe outcomes in older adults⁶. Further, lower socio-economic groups not only have a higher risk of experiencing several types of injuries, the outcomes tend to be more severe. This is why health equity should be considered when implementing policy to prevent unintentional injuries⁷.

In addition to reporting on the injuries that occur in the population, we examine the data in more depth to show how injury and risk differ according to gender, age, areas of more or less advantage, and geography within the Region.⁸

**What Did We Find?⁹**

Unintentional injury hospitalizations in the Region have decreased 21% between the fiscal years 2003/04 and 2012/13. While this is good news, it still means that over 1,300 hospitalizations are seen each year for residents of our Region. In addition, in the Region over 100 people die every year and over 15,700 people go to the Emergency Department from unintentional injuries.

Injuries-related to falls make up the majority of unintentional injury hospitalizations. About 60% of all unintentional injuries are due to falls. Falls hospitalization rates have decreased over time by about 17%. Falls are more common among those 65 years and older than any other age group. In 2014, residents of our Region had over 6,400 falls-related Emergency Department visits.¹⁰

Transportation injuries (motor vehicles, pedestrian, bicyclists, off-road) is the second largest category of unintentional injury and makes up about 20% of all unintentional injury hospitalizations. Injuries involving motor vehicle collisions make up the majority of transportation injuries. We found that rural residents had the highest motor vehicle injury rates. In 2014, the Region’s residents made almost 800 motor vehicle-related Emergency Department visits.

Pedestrian injury hospitalizations have been relatively stable, with 15 to 24 year olds and those 65 years and older having the highest rates. Each year residents of our Region make about 140 pedestrian-related Emergency Department visits.

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⁸ To show how we compare over time we use data from hospital discharges provided by Saskatchewan Ministry of Health along with urban Emergency Department visits. Data from other sources such as physician billing, self-reported injuries and “near misses” that could have caused injury are not included in this report.
⁹ See CommunityView Collaboration http://www.communityview.ca/pdfs/2016_shr_series7_aboutthedata.pdf for detailed definitions of these indicators.
¹⁰ Note that this total only includes emergency department visits seen in Saskatoon’s three urban hospitals. Rural emergency department coding was not available at the time of this release.
Bicycling injury hospitalizations have decreased over time by about 35%, which is good news. However, about two bicyclists are hospitalized per month due to a collision. In addition, almost one bicyclist per day goes to the Emergency Department because of an injury.

Off-road injury hospitalizations have been on the increase in the Region – by over 80% from 2003/04 to 2012/13. Off-road vehicles include snowmobiles and ATV’s. Injury rates are twice as high in rural areas of the Region compared to Saskatoon.

Unintentional poisonings is the third largest category of unintentional hospitalization injuries and includes poisonings by pharmaceutical and illegal drugs, as well as chemicals like gases and pesticides. People living in the least advantaged areas of Saskatoon had poisoning rates that were up to six times higher than for those living in the most advantaged areas.

Sports-related injuries make up about 5% of all unintentional injury hospitalizations and have decreased by over half since 2003/04. Most injury hospitalizations occur among 15 to 19 year olds. Sports-related injuries represent a large burden on Emergency Departments as over 2,400 visits in 2014 were caused by this category of injury.

Fire and burn injury hospitalizations have decreased over time by almost 60%. Children under five years old are the ones most affected in this category and most hospitalizations are as a result of hot liquid burns. People living in the least advantaged areas of Saskatoon had fire and burn rates that were five times higher than for those living in the most advantaged areas.

Finally, while only one or two drowning injury hospitalizations occur each year for Regional residents, these occur most prominently in children under five years old. Swimming pools were the locations most commonly related to a drowning hospitalization.

Looking at unintentional injuries through the life course, for those individuals under 65 years old, falls, motor vehicle collisions and poisonings show up most frequently. For those under five years old, fire and burns and poisonings are prominent injury types. For 5 to 14 year olds, sports-related injury is an important injury type. For those older than 65 years, falls-related injury is by far the most common type of unintentional injury (Figures 1 and 2).

Figure 1: Leading Causes of Unintentional Injuries Ages 0 to 64 years, Saskatoon Health Region, 2003/04 to 2012/13 Combined
Impacts of Injury Showcased

With this release we asked injury survivors to tell us about their experience of injury through photos. We wanted to know what happened, what their life after the injury has been like, and what they think could help prevent injuries in the future. The injury survivors spoke of the difficulties that their injury had on them, from diminishing their everyday abilities, to increased costs due to time lost from work. The importance of the built environment was also noted. Survivor stories are found at www.communityview.ca/photovoice.

Health Inequalities and Inequities Persist

Previous reports in the Better Health for All Series highlight very large gaps in health between people living in the most and least advantaged areas of Saskatoon. In this report, we found that people living in the least advantaged areas\textsuperscript{11} had statistically significantly higher falls, motor vehicle, pedestrian, poisonings, and fire and burn injury hospitalization rates. Our analyses by sub-group showed that people living in rural areas had statistically significantly higher off-road and motor vehicle injury hospitalization rates.

What’s Being Done to Create Better Conditions and Better Outcomes?

Within Saskatoon Health Region, much is being done to prevent unintentional injuries (click here for one page fact sheets and here for injury activity summary sheet). Most of these efforts focus on creating awareness about causes of injury and providing injury prevention education and supports to specific groups. Examples include the work of the Saskatchewan Central Acquired Brain Injury Outreach team with initiatives that aim to educate children and adolescents on how to prevent brain injuries (e.g.

\textsuperscript{11} Deprivation in Saskatoon was identified using an index of six socioeconomic variables (income, education, employment, marital status, single-parent families, and living alone). The index divides Saskatoon into five categories ranging from highest to lowest deprivation and each area contains approximately one fifth of the population. See http://www.communityview.ca/pdfs/2014_shr_phase3_deprivationindexsummary.pdf for more information.
P.A.R.T.Y program, Brain Walk etc.). The Regional Fall Prevention strategy was implemented in 2011. The Fall Reduction and Injury Prevention department provides staff and public education on falls and injury prevention, supports exercise programs for older adults in the community, such as Forever in Motion, and ensures falls prevention policies are established and sustained in the thirty long-term care homes in the Region. From an environmental perspective, Population and Public Health has been working with municipal partners to create healthy built environments. This work ensures that all road users can benefit from improvements planned for transportation infrastructure.

Municipally, the City of Saskatoon has created a Traffic Safety Action Plan, is planning to expand their pedestrian and cycling networks and is piloting new types of infrastructure such as protected bicycle lanes to increase bicycle safety. Safe Communities Humboldt and Area is one of only three accredited safe communities in the province and offers a range of injury prevention programming.

Provincially, in June 2014 legislative changes were made to traffic laws to help improve safety. The changes to the traffic laws included tougher consequences for impaired and distracted driving, increased fines for speeding, enhanced booster seat laws, and enhanced traffic safety awareness campaigns. The provincial government is a major funder of agencies like the Saskatchewan Prevention Institute, Safe Saskatchewan, and WorkSafe Saskatchewan, among others.

Nationally, the Canadian Institute for Health Information recently released a report highlighting income-related health inequalities. This report profiled falls among older adults, motor vehicle injuries, and initiatives and programs across Canada. For example, the Canadian Mortgage and Housing Corporation grants forgivable loans to low income older adults to implement renovations in their home such as handrails, grab bars and lever handles on doors. These initiatives can help reduce falls in this group. Lowering speed is a key factor in reducing transportation-related injury frequency and severity. In an effort to improve safety for all road users, Edmonton, Alberta, Westmount, Quebec and Duncan, British Columbia have reduced speed limits in residential neighbourhoods.

Reducing Unintentional Injuries – A Call to Action for Saskatoon Health Region and its Partners

We envision a community where:

- injuries are viewed as preventable;
- citizens feel empowered to demand legislative change;
- safe physical environments are provided;
- citizens educate one other about injury prevention;
- programs are implemented that result in meaningful reductions in injuries; and
- we achieve better outcomes for those who do get hurt.

Essentially, we imagine a society where fewer people are injured and those who are injured can recover and achieve a good quality of life in the long term.

Unintentional injury prevention can be achieved through addressing underlying causes and risk factors. Effective prevention saves lives, reduces disabilities and other health consequences and is increasingly being shown to be cost effective.

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With this in mind, Saskatoon Health Region should continue to work with its partners to:

1. **Address the Root Causes of Unintentional Injuries**

   Injury rates and health equity can only be improved with an array of injury prevention strategies.

   **Rationale:** The social determinants of health, including income, education, and employment, are linked to injuries. People living in areas of least advantage tend to have significantly higher unintentional injury rates than those living in areas of most advantage. This pattern holds true in our Region, especially for poisonings, fire/burns and pedestrian injuries. Initiatives outlined by the provincial Advisory Group on Poverty Reduction, such as a basic income, Housing First, and an early years action plan, among others, would help to reduce poverty in Saskatchewan and would likely help to alleviate the injury disparity seen in our Region.

   In addition to the broad based initiatives outlined above, targeted strategies are needed for the most vulnerable in society. Housing conditions, home safety equipment and parental education can improve poison prevention practices and fire safety. This is especially crucial as children are susceptible to pharmaceutical poisonings. New dangers of poisoning from liquid nicotine have also been noted.

2. **Continue to Build on the Successes Around Falls Reduction**

   **A)** Expand policies to provide older adults with support to implement safety equipment in their home. Access to falls prevention programs and home assessments are also needed.

   **Rationale:** The majority of falls that happen to older adults occur in the home. Low income older adults are particularly at risk. Modifying the home environment is one of the six falls prevention best practices identified for those living in the community. The Saskatchewan Aids to Independent Living program could be expanded to help alleviate older adult falls. In addition, when patients are discharged from hospital following an injury that occurred in the home, a home assessment would be an important consideration to ensure re-injury does not occur and to avoid hospital readmission.

   **B)** Address community environments to decrease risk of injuries due to falls.

   **Rationale:** A large proportion of injuries due to falls are known to occur in community settings, including sidewalks and roads. Attention to features of the built environment in city planning and design can help to decrease these risks to pedestrians, especially for older adults. For example, sidewalk construction and clearing of snow and ice have a role in injury prevention, particularly in areas with high pedestrian volumes. Municipalities need to pay particular attention to pedestrian

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C) Balance the need for safety in playgrounds and indoor play parks with recognition that kids need to be active.

Rationale: Playgrounds are the most common site for falls leading to hospitalization among 1 to 9 year olds. Standards exist for playground structures that help reduce the incidence of injuries by taking into account the height of the structures, as well as playground surfaces. Attention to these standards in construction and maintenance helps reduce playground injuries.

We also recognize that allowing children to play in more natural outdoor environments helps increase physical activity. Playing in these settings allows children to learn about personal risk assessment and management, which is beneficial for healthy child development. When planning environments and programming for children’s play, communities should balance the benefits of challenging activities with known measures to prevent injury.

3. Strengthen Road and Pedestrian Safety through Comprehensive Interventions

A) Municipalities, including the City of Saskatoon, should adopt a “Vision Zero” goal for deaths and serious injuries among drivers, cyclists and pedestrians.

Rationale: Road injuries are preventable, and as a society we can choose to take action to reduce the burden of illness and costs related to serious injuries and deaths caused by motor vehicle collisions. Numerous cities in North America and worldwide, including Edmonton as the first in Canada, have adopted a “Vision Zero” approach to these injuries, endorsing in policy and action that there is no acceptable level of death and injury on their roads. In our region, the involvement of partners such as SGI, Saskatoon Health Region and others would support the success of such a strategy.

B) Encourage safer driver behaviour through a variety of measures addressing speed, impaired driving and distracted driving.

Rationale: Speed is a major cause of injury and death on our roads. With more speed comes more harm. Most studies point to a relationship of every 1% increase in speed being associated with a 4% increase in risk of death. Pedestrians struck by a car at 30 km/h have a 90% chance of survival compared to less than a 50% chance of survival if struck at 45 km/h. Excessive speeding contributes to 30% of all fatality risk. Ways to reduce vehicular speed include speed limit

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21 Parachute Canada. Vision zero [Internet]. Available from: http://parachutecanada.org/visionzero
22 City of Edmonton, Vision zero [Internet]; Available from: http://www.edmonton.ca/transportation/traffic_safety/traffic-safety/landingpage.aspx
reductions in both residential and school zone areas and traffic calming measures such as roundabouts, speed bumps and bicycle lanes. *The City of Saskatoon Growth Plan to Half a Million* (2016), *Active Transportation Plan* (2016), and *Traffic Safety Action Plan* (2014), all highlight the need to ensure safety of the most vulnerable road users.

Impaired driving is a factor in about 20% of all road fatalities (i.e. drivers had excess alcohol in their blood, above the legal limit). Saskatchewan has the highest rate of impairment-related traffic fatalities in Canada. Legislative changes to lower the blood alcohol limit for federal Criminal Code impaired driving offenses from .08 to .05 mg/ml would act as an enhanced deterrent and ensure consistency between criminal and administrative penalties. Furthermore, allowing police to conduct random breath tests would enable enforcement officers to screen drivers in areas where impaired driving may be more common. Random breath testing has been shown to reduce fatal and serious crashes by up to 48%. Finally, in the context of changes to regulations on use of marijuana, as well as the ubiquity of handheld devices and related risk of collisions, policies and enforcement procedures must adapt to the risk of impairment due to other substances (such as marijuana) and distracted driving.

Alcohol retail policies also play an important role in preventing impaired driving. Price policies are effective for reducing heavy consumption of alcohol at the population level, and minimum prices should be maintained and adjusted for inflation through taxation or other mechanisms. Raising the price of alcohol through taxation significantly reduces heavy alcohol use among people at all income levels and decreases motor vehicle collision rates. (In Saskatchewan, minimum pricing standards are in place at provincially owned and operated SLGA retail establishments. Off-sale and private liquor retailers use an open pricing system and can currently adjust their prices as they choose.) As well, regulation of the number of alcohol retail outlets in a given area, and the hours of availability can support low-risk drinking.

C) Encourage the use of bicycle helmets within Saskatoon Health Region.

**Rationale:** Bicycle helmets are designed to protect the brain in collisions. Studies have shown that bicycle helmets reduce head injuries and should therefore be worn by riders of all ages. To help offset the cost of bicycle helmets, programs for low income families should be considered. While helmet use can reduce the severity of bicycling-related injuries due to a collision or fall, changes in the built environment infrastructure for safe cycling are needed (as described in other recommendations in this report) to reduce the rate of bicycle-related collisions.

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28 Macpherson A, Spinks A. Bicycle helmet legislation for the uptake of helmet use and prevention of head injuries [Internet]. Cochrane Database of Systematic Reviews. 2008; Issue 3.

D) Support people who are unable to drive by providing transportation options.

**Rationale:** Adults, especially those 80 years and older, have higher motor vehicle injury rates. Without accessible and effective transportation options, older adults and others with reduced mobility can suffer from social isolation and less ability to meet their day-to-day needs. Use of safe, active transportation, public transit services and private carriers (e.g. Saskatoon Co-op, Bus Buddy, for hire drivers) should be facilitated in order to decrease reliance on personal vehicular transportation for at-risk drivers. Elements of the City of Saskatoon Growth Plan to Half a Million and Active Transportation Plan that promote safe transportation for older adults should be supported with appropriate funding.

E) Enact minimum age restrictions governing ATV usage.

**Rationale:** Injury hospitalizations related to ATV usage are on the rise in Saskatoon Health Region and is especially common among those ages 10 to 19. There is currently no provincial legislation that restricts ATV usage for those under 16 years old. This recommendation is supported by the Canadian Pediatric Association.  

4. Continue to Strengthen Safety in Sports

**Rationale:** Sports-related injuries are most prominent in the early adolescence (ages 15 to 19) and are a burden on the health care system. Each year in the Region, over 2,400 emergency department visits result from sport and recreation activities. Head and neck injuries make up almost one quarter of all hospitalizations and major head injuries are a growing concern. Clear concussion protocols are needed for those sports that do not currently have them in place.

5. Improve Fire and Burn Safety within the Region

**Rationale:** Most fire and burn injuries happen to members of vulnerable populations in our Region (those less than five years old and those living in the least advantaged areas). Smoke alarms have been shown to be effective in reducing fire injury rates. It is incumbent upon all homeowners and landlords of rental properties to ensure their properties have smoke alarms in working order and placed according to local and national fire codes. In addition, keeping a hot water heater temperature of 49 Celsius (120 Fahrenheit) can reduce burn injuries.
6. **Enhance Awareness Around Drowning Incidents**

   Increased knowledge of water safety measures can make a difference.

   **Rationale:** The most common location for drownings in those under five years old is a swimming pool. For people with private swimming pools, adherence to local safety bylaws and parental supervision are crucial.\(^{34,35}\) For safety aboard boats and other small vessels, life jackets and personal flotation devices need to be worn in order to prevent drownings. Alcohol consumption while boating plays a major role in injuries; alcohol has been found as a factor in 40% of recreational boating fatalities.\(^{36}\) Transport Canada has reported that a majority of Canadian boaters have consumed alcohol while boating. Avoidance of alcohol consumption while boating is an important factor in preventing drownings and other injuries.

7. **Work with Health Care Practitioners to Help Reduce Unintentional Poisonings**

   Health care providers should follow evidence-informed guidelines around opioid painkiller prescribing.

   **Rationale:** Recommendations around the prescribing of opioid painkillers for chronic pain exist.\(^{37,38}\) Overdoses of opioid painkillers have been on the increase in recent years and health care providers need to ensure they are following appropriate prescribing guidelines.

8. **Need for an Overarching Injury Agency for the Province with Supports at the Regional Level**

   A provincial injury prevention plan is needed.

   **Rationale:** While there are provincial agencies that have an injury mandate (e.g. Safe Saskatchewan, Saskatchewan Prevention Institute, and Saskatchewan Safety Council,) none has the resources to perform both a coordination role and provide needed injury surveillance information. With no provincial agency in place it is difficult to enact a provincial injury plan. A coordinated plan would lay out the interventions, at policy, organizational and individual levels, that would be needed to make meaningful reductions in injury rates. The Health Region should strengthen its commitment to injury prevention. The Region should be commended for its participation in Mission Zero\(^{39}\) and being a signatory to the provincial Health and Safety Leadership Charter.\(^{40}\) However, as is shown in this report, more work is needed to reduce injuries in the

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\(^{35}\) Parachute. Backyard pool safety [Internet]. Available from: http://www.parachutecanada.org/injury-topics/item/backyard-pool


\(^{37}\) Centers for Disease Control. CDC guideline for prescribing opioids for chronic pain [Internet]. 2016 [cited 2016 Apr 6]; Available from: http://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm


community. At the Regional level, aside from falls prevention, few dedicated resources are assigned to injury prevention. This needs to change given the burden of injury.

9. **Improve the Collection and Use of Injury Data, Especially for Children**

With the creation of the new Children's Hospital of Saskatchewan, the opportunity to be a part of the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) has never been better.

**Rationale:** CHIRPP collects data on children’s injuries from 17 hospitals across Canada. To date, no hospitals in Saskatchewan participate in CHIRPP. CHIRPP data has been used by injury prevention workers, as well as in numerous reports and over 100 peer reviewed publications. Given some of the data gaps in causes of injury and location of the actual incident, Saskatoon Health Region should develop routine surveillance for local injury rates and determinants of injuries using CHIRPP.

**Learn More about the Better Health for All Series**

We invite you to consider the information that we have presented in this message and through **CommunityView**. It is our hope that you will use the Better Health for All series to inform the decisions you make towards advancing the vision of a community in which everyone has the opportunity to live healthy lives. Available reports include:

- **Series 1, March 26, 2014**
  - Our Population – A high level look at who lives in our Region.

- **Series 2, May 21, 2014**
  - Immunization – Examines a selected set of immunization indicators to report on progress and gaps in coverage rates. Proposes further action to ensure equal opportunities for access to immunization.

- **Series 3, June 23, 2014**
  - Advancing Health Equity in Health Care – Examines a range of health inequalities and proposes health care system action to create equal opportunities for all to achieve better health.

- **Series 4, July 28, 2014**
  - Bloodborne and Sexually Transmitted Infections – Focuses on communicable disease such as human immunodeficiency virus (HIV), and sexually transmitted infections (STIs).

- **Series 5, Sept 19, 2014**
  - HIV – Focuses on HIV in particular and the role of the health sector in reducing its occurrence.

- **Series 6, March 25, 2015**
  - Health Behaviours and Risk Conditions – Focuses on the foods we eat, physical activity levels, tobacco and alcohol use, stress and mental health and the role of the health sector in creating environments that aim to support everyone in achieving their full health potential.

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City of Saskatoon Traffic Safety Committee
City of Saskatoon Transportation Division
Emergency Department physician
Safe Saskatchewan
Safe Communities Humboldt & Area
Sask Sport
Saskatchewan Prevention Institute
Saskatoon Police Service
SGI
Sport Medicine and Science Council of Saskatchewan

Evidence based review options and analysis:
Lanre Medu, Jana Suresh, Nina Thompson

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Unintentional Injuries

Why Is This Important?
Unintentional injuries are those that occur without the intent of harm, either from the victim or someone else. Common unintentional injury causes are: falls, transportation-related, sports injuries, drownings, fire/burns, and poisonings.

In Canada, injuries are the leading killer of people under 45 years old. Unintentional injuries account for over 200,000 hospitalizations and over three million emergency department visits every year in Canada. Workplace injuries are also common. In 2013, Saskatchewan had the second highest lost time injury rate in the country.

Inequities in injury rates persist within the Saskatoon Health Region. It was reported that from 2004 to 2010, rates of injury hospitalizations were disproportionality higher in individuals living in the least advantaged areas of Saskatoon (See Advancing health equity in health care).

What Is Being Done?
Safe Saskatchewan
See other fact sheets in this series of injury releases.

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Unintentional injury hospitalization rates have been decreasing over time.

- In 2012/13, the number of unintentional injury hospitalizations was over 1,300, a rate of 386 per 100,000 (Figure 1). Unintentional injury hospitalizations decreased 21% between 2003/04 and 2012/13.
- Unintentional injury hospitalization rates for residents living in rural areas of the Region were significantly higher every year compared to those living in Saskatoon (Figure 1).
- Unintentional injury hospitalization rates varied by age and sex. Males had higher injury rates in every age group up to 65 years old. For those 65 years and older, females had higher injury rates. (Figure 2).
- Unintentional injury hospitalization rates vary by sub-group. Click here to see rates by geographic area, socio-economic status and workplace.

Figure 1: Age Sex Standardized Unintentional Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

![Figure 1: Age Sex Standardized Unintentional Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13](image)

Source: Saskatchewan Ministry of Health

Figure 2: Unintentional Injury Hospitalization Rates, Age Group and Sex, Saskatoon Health Region, 2012/13

![Figure 2: Unintentional Injury Hospitalization Rates, Age Group and Sex, Saskatoon Health Region, 2012/13](image)

Source: Saskatchewan Ministry of Health

* Not reportable due to small cell size.
Unintentional Injuries by Sub-Group

Highlights

- In Saskatoon, unintentional injury rates in areas of least advantage (Q5) were higher than for all other areas (Figure 1).
- Unintentional injury hospitalizations rates for Watrous and area tend to be higher than other rural areas of Saskatoon Health Region (Figure 2).
- Workplace injuries in Saskatchewan have decreased by 33% from 2005 to 2014 (Figure 3). This downward trend is similar to the decreasing trend in unintentional injury hospitalizations seen in the Region.
- In 2014, there were over 15,700 unintentional injury visits for Saskatoon Health Region residents to the three urban Saskatoon Emergency departments. Rates for 1 to 4 year olds, 15 to 19 year olds, and those 85 years and over were the highest among age groups (Figure 4).

Figure 1: Age Sex Standardized Unintentional Injury Rates, Areas of Advantage, Saskatoon, 2003/04 to 2012/13

![Figure 1: Age Sex Standardized Unintentional Injury Rates, Areas of Advantage, Saskatoon, 2003/04 to 2012/13](image)

Note: Q1 represents the most advantaged areas whereas Q5 represents the least advantaged areas.
Source: Saskatchewan Ministry of Health

Figure 2: Age Sex Standardized Unintentional Injury Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13

![Figure 2: Age Sex Standardized Unintentional Injury Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13](image)

Source: Saskatchewan Ministry of Health
Figure 3: Time Loss Claims from Work, Saskatchewan, 2005 to 2014

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Source: Association of Workers Compensation Boards of Canada, National Work Injury/Disease Statistics Program (NWISP)

Figure 4: Unintentional Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2014

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals.
Source: Strategic Health Information and Planning Services, Saskatoon Health Region.
Why Is This Important?
A fall can be defined as an unexpected event that results in a person coming to rest on the ground or floor or lower level with or without an injury. They are the leading cause of unintentional injuries in the Region (over 60%) and are the leading cause of injuries among Canadian seniors. Up to one-third of seniors fall each year. Falls cause up to 90% of hip fractures in seniors, causing significant disability and morbidity. Falls are a significant issue in acute and long term care institutions, making up about 17% of the total falls-related hospitalizations in Canada. The number of seniors is expected to double by 2036, signaling a perfect time for addressing the issue of falls.

Falls are disproportionately felt amongst those living in the most vulnerable circumstances. Click here for information on health equity.

What Is Being Done?
Falls prevention in Saskatoon Health Region
Public Health Agency of Canada Falls Prevention

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Hospitalization rates due to falls have been decreasing steadily over time.

- The total number of hospitalizations due to falls was 880, a rate of 211 per 100,000 in 2012/13 (Figure 1). Falls decreased by 17% between 2003/04 and 2012/13.
- Falls-related hospitalization rates for residents living in rural areas were higher than for urban Saskatoon residents between 2003/04 and 2012/13 (Figure 1).
- There is a clear age relationship in falls-related hospitalizations, with a marked increase in falls for those older than 65 years. Older females experience higher falls-related hospitalizations than older males (Figure 2).
- Falls hospitalization rates vary by sub-group. Click here for rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Falls-Related Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

<table>
<thead>
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<th>Age Group</th>
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<td>300.5 282.3 243.0 276.1 255.9 237.2 220.3 212.5 218.8 225.3</td>
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</tbody>
</table>

Source: Saskatchewan Ministry of Health

Figure 2: Falls-Related Hospitalization Rates, Age Group and Sex, Saskatoon Health Region, 2008/09 to 2012/13 Combined

Source: Saskatchewan Ministry of Health
Falls-Related Injury by Sub-Group

**Highlights**

- Those in the most advantaged areas had the lowest falls hospitalization injury rates. Rates increased in areas of decreasing advantage (Figure 1).
- Falls injury hospitalization rates among people living in many of the rural areas tended to be higher than for those living in Saskatoon area (Figure 2).
- Falls injury hospitalization rates decreased between 2008/09 to 2012/13 (Figure 3).
- In 2014, over 6,400 falls related visits by Saskatoon Health Region residents were reported in the three urban Saskatoon Emergency departments. Rates increased sharply for those 75 years and older, especially among females (Figure 4).

**Figure 1: Age Sex Standardized Falls Injury Hospitalization Rates, Quintiles of Deprivation, Saskatoon, 2003/04 to 2007/08 and 2008/09 to 2012/13**

Note: Quintile 1 represents the most advantaged areas whereas quintile 5 represents the least advantaged areas.

Source: Saskatchewan Ministry of Health

**Figure 2: Age Sex Standardized Falls Injury Hospitalization Rates, Rural Areas, Saskatoon Health Region, 2003/04 to 2012/13**

Source: Saskatchewan Ministry of Health
Figure 3: Change in Age Sex Standardized Falls Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2007/8 and 2008/09 to 2012/13

<table>
<thead>
<tr>
<th></th>
<th>SHR</th>
<th>Saskatoon</th>
<th>Rural SHR</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Saskatoon area</th>
<th>Humboldt and area</th>
<th>Rosthern and area</th>
<th>Watrous and area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falls</td>
<td>-15.1%</td>
<td>-13.5%</td>
<td>-18.0%</td>
<td>-10.2%</td>
<td>-17.1%</td>
<td>-13.4%</td>
<td>-6.2%</td>
<td>-15.3%</td>
<td>-21.2%</td>
<td>-10.0%</td>
<td>-30.9%</td>
<td>-28.3%</td>
</tr>
</tbody>
</table>

Note: Q1 represents the least advantaged areas whereas Q5 represents the most advantaged areas. Source: Saskatchewan Ministry of Health.

Figure 4: Falls Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2014

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals. Source: Strategic Health Information and Planning Services, Saskatoon Health Region.
Why Is This Important?
Motor vehicle traffic collisions are the leading cause of injury-related death for Canadians under the age of 25 years. In 2010, Saskatchewan had the highest age standardized mortality rates from motor vehicle collisions in Canada, double the national average.

Motor vehicle collisions along with off-road, pedestrian and bicycling injuries are defined as transport injuries. About half of all transport-related deaths, hospital discharges and emergency department visits are due to motor vehicle collisions.

Equity is a major concern in motor vehicle injuries. In 2012, the difference in rates of motor vehicle injury hospitalizations between those living in the lowest and highest income levels was greatest in Saskatchewan compared to any other province in Canada.

What Is Being Done?
- Graduated driving licensing programs to ensure driving safety for new drivers
- Saskatoon Strategic Traffic Safety Action Plan and Active Transportation Plan

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Motor vehicle injury hospitalization rates are highest in rural areas of the Region.

- The total number of motor vehicle injury hospitalizations was 133 for a rate of almost 40 per 100,000 in 2012/13 (Figure 1).
- In most years, motor vehicle injury hospitalization rates for residents living in rural areas of the Region were significantly higher than for those who lived in Saskatoon (Figure 1).
- Rates vary by age group and sex. Males had higher motor vehicle injury hospitalization rates than females in almost every age category (Figure 2).
- Motor vehicle injury hospitalization rates vary by sub-group. Click here to see rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Motor Vehicle Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

Figure 2: Motor Vehicle Injury Hospitalization Rates, Age Group and Sex, Saskatoon Health Region, 2008/09 to 2012/13 Combined

* Not reportable due to small cell size.

Source: Saskatchewan Ministry of Health

For more information: www.communityview.ca
Highlights

- Motor vehicle injury hospitalization rates among persons living in the least advantaged areas of Saskatoon (Q5) were higher than for those living in the most advantaged areas of Saskatoon (Q1); however, in most years these differences were not statistically significant (Figure 1).
- Motor vehicle injury hospitalization rates among people living in many of rural areas tended to be higher than for those living in Saskatoon area (Figure 2).
- Motor vehicle injury hospitalizations are highest in the July to September months, when more people are travelling. January to April show the lowest numbers (Figure 3).
- In 2014, 774 motor vehicle-related visits for Saskatoon Health Region residents were seen in the three urban Saskatoon Emergency Departments. Rates for 15 to 19 year old females are the highest of any age group. Elevated rates were also seen among males and females 20 to 24 years old (Figure 4).

Figure 1: Age Sex Standardized Motor Vehicle Injury Hospitalization Rates, Areas of Advantage, Saskatoon, 2003/04 to 2012/13

![Figure 1](image1)

Source: Saskatchewan Ministry of Health

Note: Quintile 1 represents the most advantaged areas whereas quintile 5 represents the least advantaged areas.

Figure 2: Age Sex Standardized Motor Vehicle Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13

![Figure 2](image2)

Source: Saskatchewan Ministry of Health
Figure 3: Average Number of Motor Vehicle Injury Hospitalizations per Month, Saskatoon Health Region, 2003/04 to 2012/13 combined

![Graph showing the average number of motor vehicle injury hospitalizations per month, with peaks in August and September.]

Source: Saskatchewan Ministry of Health

Figure 4: Motor Vehicle Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2014

![Graph showing the rate of motor vehicle injury emergency department visits by age group and sex.]

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals.
Source: Strategic Health Information and Planning Services, Saskatoon Health Region
Why Is This Important?
Pedestrians are any person not riding in or on a motor vehicle, train, bicycle, animal-drawn or other vehicle at the time of injury. Pedestrians are vulnerable given their lack of protection if struck by a vehicle. After motor vehicle collisions, bicycling, and off-road vehicles, pedestrian injuries account for the fourth highest transport related costs in Canada.

Low socio-economic status is associated with child pedestrian injury rates. Increased speeds of traffic, more streets to cross on the way to school and walking unaccompanied to school have been cited as contributing factors to higher injury rates among children living in lower socio-economic areas. Click here for information on health equity.

What Is Being Done?
Silhouettes for Safety program in school zones
Pedestrian Safety information from the Saskatchewan Prevention Institute
Saskatoon Active Transportation Plan

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Pedestrian injury hospitalization rates have been relatively stable over time.

- The total number of hospitalizations due to injuries sustained by pedestrians was 32 for a rate of 9.6 per 100,000 in 2012/13 (Figure 1).
- Pedestrian injury hospitalization rates vary by age group. Between 2008 and 2013, 15 to 24 year old males and females 65 years and older had the highest hospitalization rates for pedestrian injuries (Figure 2).
- Pedestrian injury hospitalization rates vary by sub-group. Click here to see rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Pedestrian Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

![Pedestrian Injury Hospitalization Rates Graph](source)

Source: Saskatchewan Ministry of Health

Figure 2: Pedestrian Injury Hospitalization Rates, Sex and Age Group, Saskatoon Health Region, 2008/09 to 2012/13 Combined

![Pedestrian Injury Rates by Age and Sex Graph](source)

Source: Saskatchewan Ministry of Health
Pedestrian Injuries by Sub-Group

Highlights

- Rates of hospitalizations due to injuries sustained by pedestrians were highest in the least advantaged areas of Saskatoon (Q5) at 26.4 per 100,000 in the 2008/09 to 2012/13 time period. This was almost six times higher than the rate for those living in the most advantaged areas of Saskatoon (Q1) at 4.5 per 100,000 (Figure 1).

- Watrous and area had the highest pedestrian injury hospitalization rates between 2003/04 and 2012/13 (11.4 per 100,000). These rates were nearly twice as high as rates in other rural areas (Figure 2).

- Pedestrian injury hospitalizations were highest in the summer months of July and August, and the winter months of November and December (Figure 3).

- Between 2012 and 2014, an average of 143 pedestrian-related injuries for Saskatoon Health Region residents was seen annually in the three urban Saskatoon Emergency departments. Rates for 25 to 29 year old males were the highest of any age group (Figure 4).

Figure 1: Age Sex Standardized Pedestrian Injury Hospitalization Rates, Areas of Advantage, Saskatoon, 2003/04 to 2012/13

![Figure 1: Age Sex Standardized Pedestrian Injury Hospitalization Rates, Areas of Advantage, Saskatoon, 2003/04 to 2012/13](image)

Note: Quintile 1 represents the most advantaged areas whereas quintile 5 represents the least advantaged areas. Source: Saskatchewan Ministry of Health

Figure 2: Age Sex Standardized Pedestrian Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13

![Figure 2: Age Sex Standardized Pedestrian Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13](image)

Source: Saskatchewan Ministry of Health
**Figure 3:** Average Number of Pedestrian Injury Hospitalizations per Month, Saskatoon Health Region, 2003/04 to 2012/13 combined

![Bar chart showing the average number of pedestrian injury hospitalizations per month.](chart1.png)

*Source: Saskatchewan Ministry of Health*

**Figure 4:** Pedestrian Injury Emergency Department Rates, Age and Sex, Saskatoon Health Region, 2012 to 2014

![Bar chart showing pedestrian injury emergency department rates by age and sex.](chart2.png)

*Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals. Source: Strategic Health Information and Planning Services, Saskatoon Health Region.*
Why Is This Important?
Bicyclists are at increased risk for injury or death due to minimal protection and the weight difference between themselves and motor vehicles. After motor vehicle collisions, bicycling injuries accounted for the second highest transport related costs in Canada in 2010. Bicycling is also the leading cause of sport and recreational injury in children and adolescents in Canada.

Boys are at increased risk for bicycling related injuries compared to girls. Newcomers have also been found to be at increased risk for bicycling related injuries.

What Is Being Done?
- **Bicycle Safety Week** from the Saskatchewan Prevention Institute
- Brain Walk, PARTY Program and No Regrets from Acquired Brain Injury
- SGI Safety Squad works throughout summer delivering safety programs

To Learn More:
Chief Medical Health Officer’s [Call to Action](#)

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**Highlights**

Bicycle injury hospitalization rates have decreased over time.

- In 2012/13 the total number of bicycle injury hospitalizations was 26 at a rate of 8.5 per 100,000 (Figure 1).
- Bicycle injury hospitalization rates have decreased 35% over time from 13.1 per 100,000 in 2003/04 to 8.5 in 2012/13 (Figure 1).
- Bicycle injury hospitalization rates vary by age group. The 15 to 19 year olds had higher rates compared to other age groups (Figure 2).
- Bicycle injury hospitalization rates vary by sub-group. Click [here](#) to see rates by geographic area and socio-economic status.

---

**Figure 1:** Age Sex Standardized Bicycle Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

![Graph showing bicycle injury hospitalization rates by year and sex.](#)

**Figure 2:** Bicycle Injury Hospitalization Rates, Age Group, Saskatoon Health Region, 2003/04 to 2012/13 Combined

![Bar graph showing bicycle injury hospitalization rates by age group.](#)

*Not reportable due to small cell size.*

Source: Saskatchewan Ministry of Health
Bicycle Injuries by Sub-Group

Highlights

- Bicycle injury hospitalization rates have decreased over time, especially among persons living in the two least advantaged areas of Saskatoon (quintiles 4 and 5). The bicycle injury hospitalization rate for residents living in quintile 5 in 2003/04 to 2007/08 was 17.6 per 100,000. This rate dropped by half to 8.6 per 100,000 in the 2008/9 to 2012/13 time period (Figure 1).

- Watrous rural area had the highest bicycle injury hospitalization rates between 2003/04 and 2012/13 combined at 8.2 per 100,000, though this was not significantly different from other rural areas (Figure 2).

- Head and neck injuries made up almost one quarter of all bicycling related hospitalizations (Figure 3).

- Between 2012 and 2014 an annual average of 354 bicycle related visits for Saskatoon Health Region residents were reported in the three urban Saskatoon Emergency departments. Rates for 10 to 14 year old boys were the highest out of any age group (Figure 4).

Figure 1: Age Sex Standardized Bicycle Injury Hospitalization Rates, Socio-Economic Status, Saskatoon, 2003/04 to 2012/13

![Figure 1](image1.jpg)

Note: Q1 represents the most advantaged areas whereas Q5 represents the least advantaged areas.

Source: Saskatchewan Ministry of Health.

Figure 2: Age Sex Standardized Bicycle Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13 Combined

![Figure 2](image2.jpg)

Source: Saskatchewan Ministry of Health
Figure 3: Body Part Injured in Bicycle Hospitalization, Saskatoon Health Region, 2003/04 to 2012/13 combined

Source: Saskatchewan Ministry of Health

Figure 4: Bicycle Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2012 to 2014 Combined

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals.
Source: Strategic Health Information and Planning Services, Saskatoon Health Region.
* Not reportable due to small cell size.
Off-Road Injuries

Why Is This Important?

Off-road vehicles include all-terrain vehicles (ATV’s) and snowmobiles. Injuries and fatalities due to off-road vehicles are on the increase in Canada. In 2010, injuries involving off-road vehicles were the third highest cost out of all transport-related injuries. Rural areas tend to have significantly higher rates of off-road associated injuries, with an increased burden among young persons. Males have the highest off-road injury rates.

What Is Being Done?

Saskatchewan Prevention Institute information on ATV safety
Saskatchewan All Terrain Vehicle Association
Saskatchewan Snowmobile Association
Canadian Pediatric Society recommended Age Restrictions for operating ATV’s and snowmobiles

To Learn More:

Chief Medical Health Officer’s Call to Action

Highlights

Off-road injury hospitalization rates are highest in rural areas of the Region.

- The total number of off-road injury hospitalizations was 26 for a rate of 8.4 per 100,000 in 2012/13 (Figure 1).
- Off-road injury hospitalization rates for residents living in rural areas of the Region were consistently higher than Saskatoon residents. Rates for off-road hospitalizations have increased over 80% between 2003/04 and 2012/13 (Figure 1).
- Off-road injuries occur primarily between those 15 to 19 years old with a second peak among those 35 and 39 years old. Male injury rates were consistently higher than female injury rates (Figure 2).
- Off-road injury hospitalization rates vary by sub-group. Click here to see rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Off-Road Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

<table>
<thead>
<tr>
<th>Year/Group</th>
<th>SHR</th>
<th>Saskatoon</th>
<th>Rural SHR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003/4</td>
<td>4.6</td>
<td>3.8</td>
<td>7.1</td>
</tr>
<tr>
<td>2004/5</td>
<td>5.5</td>
<td>3.7</td>
<td>10.2</td>
</tr>
<tr>
<td>2005/6</td>
<td>5.3</td>
<td>3.5</td>
<td>10.1</td>
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<tr>
<td>2006/7</td>
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<td>15.0</td>
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<td>2007/8</td>
<td>5.5</td>
<td>3.7</td>
<td>10.4</td>
</tr>
<tr>
<td>2008/9</td>
<td>10.0</td>
<td>6.1</td>
<td>21.0</td>
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<td>2009/10</td>
<td>10.4</td>
<td>8.0</td>
<td>17.8</td>
</tr>
<tr>
<td>2010/11</td>
<td>4.9</td>
<td>2.3</td>
<td>15.7</td>
</tr>
<tr>
<td>2011/12</td>
<td>10.4</td>
<td>4.1</td>
<td>26.8</td>
</tr>
<tr>
<td>2012/13</td>
<td>8.4</td>
<td>5.7</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Source: Saskatchewan Ministry of Health

Figure 2: Off-Road Injury Hospitalization Rates, Age Group, Saskatoon Health Region, 2003/04 to 2012/13 Combined

* Not reportable due to small cell size.

Source: Saskatchewan Ministry of Health

For more information: www.communityview.ca
### Highlights

- Off-road injury hospitalizations were highest in the warmer months of May to September, suggesting more ATV than snowmobile injuries (Figure 1).
- Off-road injury hospitalization rates were highest in rural areas of the Region. Rates increased in all rural areas between 2003/04 and 2012/13 (Figure 2).
- Off-road injury rates increased in most sub-groups of the Region with an overall increase of 40% (Figure 3).
- Between 2012 and 2014, an average of 85 annual off-road related visits by Saskatoon Health Region residents were reported in three urban Saskatoon Emergency departments. The highest rates were seen in 15 to 19 year olds (Figure 4). Males had higher rates than females (data not shown).

### Figure 1: Average Number of Off-Road Injury Hospitalizations per Month, 2003/04 to 2012/13 Combined

![Figure 1: Average Number of Off-Road Injury Hospitalizations per Month, 2003/04 to 2012/13 Combined](source:image)

Source: Saskatchewan Ministry of Health

### Figure 2: Age Sex Standardized Off-Road Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2007/08 and 2008/09 to 2012/13

![Figure 2: Age Sex Standardized Off-Road Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2007/08 and 2008/09 to 2012/13](source:image)

*Not reportable due to small cell size.*

Source: Saskatchewan Ministry of Health
Figure 3: Change in Age Sex Standardized Off-Road Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2007/08 and 2008/09 to 2012/13

Note: Q1 represents the most advantaged areas whereas Q5 represents the least advantaged areas.
Source: Ministry of Health.

<table>
<thead>
<tr>
<th>Area</th>
<th>SHR</th>
<th>Saskatoon</th>
<th>Rural SHR</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Saskatoon area</th>
<th>Humboldt and area</th>
<th>Rosthern and area</th>
<th>Watrous and area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-road</td>
<td>49.6%</td>
<td>25.9%</td>
<td>86.4%</td>
<td>84.8%</td>
<td>-53.8%</td>
<td>-0.2%</td>
<td>1.1%</td>
<td>62.0%</td>
<td>15.5%</td>
<td>203.5%</td>
<td>162.2%</td>
<td>80.2%</td>
</tr>
</tbody>
</table>

Figure 4: Off-Road Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2012 to 2014 Combined

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals.
Source: Strategic Health Information and Planning Services, Saskatoon Health Region.

*Values too small to report
Unintentional Poisoning

Why Is This Important?
Poisoning among Canadians is a serious preventable public health concern. Unintentional poisonings include a wide variety of drugs and substances including analgesics, sedatives, narcotics, alcohol, solvents, gases and vapours, pesticides and other chemicals. Poisonings exclude those taken with intent to self-harm.

Poisonings are especially lethal for children, as it is the second leading cause of hospitalizations for children under 5 years old in Canada. People living in low socio-economic status are more likely to be affected by poisonings than other groups. Click here for more information on health equity.

What Is Being Done?
Poisoning prevention information from Parachute
Toll free help-line for Saskatchewan residents for poisonings

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Poisoning rates are much higher among those living in the least advantaged areas of the Region.

- There were 78 poisoning-related hospitalizations for a rate of 24.3 per 100,000 in 2012/13. Poisoning hospitalization rates were higher for Saskatoon city residents compared to residents living in rural areas of the Region (Figure 1).
- Individuals living in the least advantaged areas of Saskatoon had higher poisoning hospitalization rates (up to six times higher) compared to those living in the most advantaged areas (Figure 2).
- Unintentional poisoning hospitalization rates vary by sub-group. Click here to see rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Unintentional Poisoning Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

Figure 2: Age Standardized Unintentional Poisoning Hospitalization Rates, Areas of Advantage, Saskatoon, 2003/04 to 2012/13
Unintentional Poisoning by Sub-Group

Highlights

- Hospitalization rates for unintentional poisonings were stable through all age groups. High rates were noted for children under 5 years old and those 85 to 89 years old (Figure 1).
- Pharmaceuticals include many types of drugs. Drugs that can depress the central nervous system, as well as narcotics and hallucinogens, were the two most common drug types resulting in unintentional poisoning hospitalizations for Saskatoon Health Region residents (32% and 24% respectively; Figure 2).
- In most subgroups, unintentional poisoning injury hospitalizations decreased over time. The exception to this was the rate in the second least advantaged area of Saskatoon, which increased (Figure 3).
- In 2014, there were 459 poisoning-related visits for Saskatoon Health Region residents in the three urban Saskatoon Emergency departments. Rates in children under 5 years old were the highest among all age groups (Figure 4).

Figure 1: Age Sex Standardized Unintentional Poisoning Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

*Not reportable due to small cell size.

Source: Saskatchewan Ministry of Health

Figure 2: Types of Unintentional Poisonings, Saskatoon Health Region, 2003/04 to 2012/13

Source: Saskatchewan Ministry of Health
Figure 3: Change in Age Sex Standardized Unintentional Poisoning Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2007/08 and 2008/09 to 2012/13

<table>
<thead>
<tr>
<th>Area</th>
<th>Change in percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHR Saskatoon</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Saskatoon Rural</td>
<td>6.5%</td>
</tr>
<tr>
<td>Q1</td>
<td>-32.2%</td>
</tr>
<tr>
<td>Q2</td>
<td>-4.9%</td>
</tr>
<tr>
<td>Q3</td>
<td>-17.4%</td>
</tr>
<tr>
<td>Q4</td>
<td>8.3%</td>
</tr>
<tr>
<td>Q5</td>
<td>110.9%</td>
</tr>
<tr>
<td>Saskatoon Q1 area</td>
<td>0.7%</td>
</tr>
<tr>
<td>Humboldt Q1 area</td>
<td>1.3%</td>
</tr>
<tr>
<td>Rosthern Q1 area</td>
<td>-25.9%</td>
</tr>
<tr>
<td>Watrous Q1 area</td>
<td>-46.0%</td>
</tr>
<tr>
<td>Saskatoon Q2 area</td>
<td>-15.1%</td>
</tr>
<tr>
<td>Saskatoon Q3 area</td>
<td>-21.6%</td>
</tr>
</tbody>
</table>

Note: Q1 represents the most advantaged areas whereas Q5 represents the least advantaged areas.
Source: Saskatchewan Ministry of Health

Figure 4: Unintentional Poisoning Injury Emergency Department Rates, Age Group, Saskatoon Health Region, 2014

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals.
Source: Strategic Health Information and Planning Services, Saskatoon Health Region.
Why Is This Important?
Sports-related injuries are those that happen from falling, being struck by sports equipment, striking against or bumping into another person while playing sports. The sports included are skiing/snowboarding, skating, tobogganing, baseball, hockey, soccer, and football/rugby.

In Saskatchewan, the annual cost of sports-related injuries is estimated at $7 million.

Sports-related injuries commonly occur in children and adolescents. Up to two-thirds of injuries to youth 12 to 19 years old were sports-related. The most common sports injuries requiring hospitalization in the Region are those related to hockey and skiing/snowboarding (Saskatoon Health Region analysis).

What Is Being Done?
Parachute Canada has information sheets on winter helmet safety
Sport Medicine and Science Council
Saskatoon Minor Hockey Safety page

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Sports-related hospitalization rates have been decreasing over time.

- In 2012/13, the number of hospitalizations due to sports-related injuries was 53, a rate of 15.8 per 100,000 (Figure 1). The rate decreased by over half between 2003/4 and 2012/13.
- The highest rate of hospitalizations due to sports-related injuries was seen among 15 to 19 year olds, followed by 10 to 14 year olds (Figure 2).
- Approximately 24% of all hospitalizations due to sports-related injuries were to the head and neck (data not shown).
- Sports-related injury hospitalization rates vary by sub-group. Click here to see rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Sports-Related Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

Source: Saskatchewan Ministry of Health

Figure 2: Sports-Related Injury Hospitalization Rates, Age Group, Saskatoon Health Region, 2008/09 to 2012/13 Combined

Source: Saskatchewan Ministry of Health

* Not reportable due to small cell size.
Sports-Related Injury Hospitalizations by Sub-Group

Highlights

- Sports-related injury hospitalization rates were much higher for males compared to females. The gap has decreased over time as rates for males have decreased by approximately half since 2003/04 (Figure 1).
- Hockey and skiing/snowboarding were the two most common sports resulting in a hospitalization for residents of the Region with over 120 events listed between 2003/04 and 2012/13 (Figure 2).
- Sports-related hospitalization injury rates dropped over time in all rural areas between 2003/04 to 2007/8 and 2008/09 to 2012/13 (Figure 3).
- In 2014, sports-related injuries accounted for over 2,400 visits by Saskatoon Health Region residents to the three urban Saskatoon Emergency departments. Rates for 10 to 19 year old boys were the highest among all age groups (Figure 4).

Figure 1: Age Sex Standardized Sports Related Injury Hospitalization Rates, by Sex, Saskatoon Health Region, 2003/04 to 2012/13

<table>
<thead>
<tr>
<th>Year</th>
<th>Male Rate</th>
<th>Female Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003/4</td>
<td>56.7</td>
<td>15.1</td>
</tr>
<tr>
<td>2004/5</td>
<td>52.9</td>
<td>10.1</td>
</tr>
<tr>
<td>2005/6</td>
<td>42.6</td>
<td>14.5</td>
</tr>
<tr>
<td>2006/7</td>
<td>41.2</td>
<td>11.2</td>
</tr>
<tr>
<td>2007/8</td>
<td>40.5</td>
<td>12.5</td>
</tr>
<tr>
<td>2008/9</td>
<td>34.2</td>
<td>12.8</td>
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<td>2009/10</td>
<td>27.5</td>
<td>6.5</td>
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<td>2010/11</td>
<td>30.0</td>
<td>15.4</td>
</tr>
<tr>
<td>2011/12</td>
<td>26.6</td>
<td>15.8</td>
</tr>
<tr>
<td>2012/13</td>
<td>25.6</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: Saskatchewan Ministry of Health

Figure 2: Most Common Sports Involved in an Injury Hospitalization, Saskatoon Health Region, 2003/04 to 2012/13

Source: Saskatchewan Ministry of Health
Figure 3: Age Sex Standardized Sports-Related Injury Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals. Source: Strategic Health Information and Planning Services, Saskatoon Health Region.

Figure 4: Sports-Related Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2014

Source: Saskatchewan Ministry of Health
Why Is This Important?
Fire and burn injuries are the third leading cause of injury hospitalizations among children under 5 years old. They account for over 1,300 emergency department visits and over 100 hospitalizations each year in Saskatchewan. Fire and burn injuries account for $17 million each year in total costs in Saskatchewan.

Fire and burn injuries include exposure to fire, smoke, hot liquids and surfaces. The most common type of fire and burn injury in the Saskatoon Health Region is contact with hot tap water and other hot liquids (based on Region analysis).

Research has shown that poverty is linked to burns in young children. The risk of being burned is higher among poorer children. See here for information on health equity.

What Is Being Done?
Information from Parachute Canada on preventing burns

To Learn More:
Chief Medical Health Officer’s Call to Action

Highlights
Fire and burn injury hospitalization rates are highest among those under 5 years old.

- There were 13 hospitalizations for fire and burns in 2012/13 in Saskatoon Health Region for a rate of 3.7 per 100,000. Injury hospitalization rates due to fire and burns have come down nearly 60% since 2003/04 (Figure 1).
- The highest rates of fire and burn hospitalizations were seen in children under 5 years old. Eighty percent of fire and burn hospitalizations for this age group were caused by hot liquids, tap water and other fluids (Figure 2).
- Fire and burn injury hospitalization rates vary by sub-group. Click here to see rates by geographic area and socio-economic status.

Figure 1: Age Sex Standardized Fire- and Burn-Related Injury Hospitalization Rates, Saskatoon Health Region, 2003/04 to 2012/13

Figure 2: Fire- and Burn-Related Injury Hospitalization Rates, Age Group, Saskatoon Health Region, 2003/04 to 2012/13 Combined
Fire and Burn Injury by Sub-Group

Highlights

- Residents living in the least advantaged areas of Saskatoon experienced fire and burn hospitalization rates almost five times higher than those living in the most advantaged areas (9.3 per 100,000 and 2.0 per 100,000 respectively; Figure 1).
- Rosthern and Watrous rural areas experienced the highest fire and burn hospitalization rates of all rural areas of the Region (Figure 2).
- The overall Saskatoon Health Region rates of fire and burn hospitalizations decreased from 2003/04 to 2012/13.
- The area with the largest increase in fire- and burn-related hospitalizations was Humboldt and area, which increased by over 700% (Figure 3).
- Between 2012 and 2014, an annual average of 237 fire- and burn-related visits for Saskatoon Health Region residents were seen in the three urban Saskatoon Emergency departments. Rates for children under 5 years old were the highest among all age groups (Figure 4).

Figure 1: Age Sex Standardized Fire and Burn Hospitalization Rates, Areas of Advantage, 2003/04 to 2012/13

Note: Quintile 1 represents the most advantaged areas whereas quintile 5 represents the least advantaged areas.

Source: Saskatchewan Ministry of Health

Figure 2: Changes in Age Sex Standardized Fire and Burn Hospitalization Rates, Rural Area, Saskatoon Health Region, 2003/04 to 2012/13 Combined

Source: Saskatchewan Ministry of Health
Figure 3: Change in Fire and Burn Injury Hospitalizations, Saskatoon Health Region, 2003/4-2007/8 to 2008/9-2012/13

Note: Q1 represents the most advantaged areas whereas Q5 represents the least advantaged areas. Source: Saskatchewan Ministry of Health

Figure 4: Fire and Burn Injury Emergency Department Rates, Age Group and Sex, Saskatoon Health Region, 2012 to 2014 Combined

Note: Emergency department visits are only for those seen in the three Saskatoon city hospitals. Source: Strategic Health Information and Planning Services, Saskatoon Health Region.
Why Is This Important?
Drownings may lead not only to deaths, but also disability and long-term impairment. Drownings can occur in bathtubs, swimming pools, lakes and rivers. Drownings include those related to boating collisions.

Drownings are a leading cause of death for children nine and under in Saskatchewan. Almost a third of deaths in children under 10 years old are attributed to drowning. Drownings cost $11 million in Saskatchewan annually.

Although most drownings occur in lakes and rivers, for young children the most common place for drownings to occur is in private swimming pools.

What Is Being Done?
Lifesaving Society of Canada has water safety tips for parents of children under 5 and up to 12 years old.

Canadian Red Cross has water safety tips.

To Learn More:
Chief Medical Health Officer’s Call to Action

Figure 1: Drowning Related Hospitalization Crude Rates, Saskatoon Health Region, 2003/04 to 2012/13 Combined

Figure 2: Location of Drowning Related Hospitalizations, Saskatoon Health Region, 2003/04 to 2012/13 Combined
Table of Contents

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Description of Data

Data Sources
The main data source for this report was the Discharge Abstract Database (DAD), which tracks inpatient hospital discharges. The Saskatchewan Ministry of Health provides year end hospital files for all residents living within Saskatoon Health Region boundaries. Hospital discharges include all acute care inpatient and psychiatric inpatient discharges for Region residents. The data is based on total number of hospital discharges; irrespective of how many times the same individual is discharged. For example, one person could present to hospital five times in a fiscal year for an injury, and it would be counted as five discharges. A patient may be admitted to one hospital and be transferred to another hospital, which would count as two discharges, even though the individual was hospitalized for the same event.

All acute care inpatient and psychiatric inpatient hospital discharges are included for Region residents no matter where the hospital discharge took place (i.e. all provincial hospitals and out of province hospitals are included). Hospital discharges are reported by fiscal year, which runs from April 1 through to March 31.

The second data source used in the report is Emergency Department discharge data. This data is specific to the three urban hospitals in Saskatoon (St. Paul’s, City, and Royal University Hospital). It therefore excludes any emergency discharges for injuries that occurred in any of the rural Region hospitals. Emergency codes were not utilized in the period April 1, 2010 to March 31, 2011. For this reason, the calendar years 2010 and 2011 are not reported in the statistics.

Main Stratifiers Used in the Analysis

Time
For much of the analysis, two distinct five year time periods were used. The first was from fiscal year 2003/04 to 2007/08. The second five year time period was from 2008/09 to 2012/13. A grouping of five years was needed for most injury categories given the relatively small numbers of hospitalizations that occur in any one year. Comparing the 2003/04 to 2007/08 time period with the 2008/09 to 2012/13 time period gives some indication of trend over time.

Sex
Male or female are the only two choices allowed in hospital discharge data.

Age Group
For most of the indicators, 5 year age groupings were used.
**Deprivation Index**
This index is based on six questions from the 2006 census. Click [here](#) for more information on how the deprivation index was derived for Saskatoon. Patient’s postal code was converted to Dissemination Area and then to a deprivation index area in order to complete the socio-economic analysis.

**Rural/Urban**
Patients are considered urban if they lived within the boundary of the city of Saskatoon. Anyone living outside this boundary but within the Saskatoon Health Region boundary was considered a rural SHR resident.

**Rural Planning Zones**
Saskatoon Health Region is divided into four rural planning zones, each with a population of approximately 15,000 (Figure 1).

**Type of Analysis**
Most analysis in this release utilizes age-sex standardization. Age-sex standardization helps to control for the influence of age and sex on the condition of interest, making comparisons between sub-groups more accurate. The direct method of age sex standardization is utilized with the 1991 Canadian Census as the reference population. Where graphs or tables do not state age-sex standardization, crude rates are presented. Most rates are presented per 100,000 population for ease of readability.

In some cases small numbers (less than six in a cell) are present. An asterisk (*) is presented to depict that numbers are too small to report in order to protect privacy.
Unintentional Injuries

Definition
Any person discharged from hospital with an unintentional injury.

Calculation
Unintentional injury rate is the number of inpatient hospital discharges due to unintentional injuries in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Unintentional injuries are listed in the International Classification of Disease 10th version as V01-X59, Y85, Y86.

Source
Saskatchewan Ministry of Health.
References


Falls

definition
Any person discharged from hospital with an injury caused from a fall.

calculation
Fall injury rate is the number of inpatient hospital discharges due to a fall in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Fall injuries are coded as W00-W01, and W03-W19 in the International Classification of Diseases 10th edition (ICD-10). Note that W02 are coded in the sports related section.

source
Saskatchewan Ministry of Health.

References


Motor Vehicle

Definition
Any person discharged from hospital with an injury caused by being in a motor vehicle collision in traffic.

Calculation
Motor vehicle injury rate is the number of inpatient hospital discharges due to motor vehicle collision in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Motor vehicle injuries are coded as V20-V28(.3-.9), V29-V79(.4-.9), V80(.3-.5), V81.1, V82.1, V83-V86(.0-.3), V87(.0-.8), V89.2 in the International Classification of Diseases 10th edition (ICD-10).

Source
Saskatchewan Ministry of Health.

References

Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.

Bicycle

Definition
Any person discharged from hospital with an injury caused by being in bicycle collision.

Calculation
Bicycle injury rate is the number of inpatient hospital discharges due to bicycle collision in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Bicycle injuries are coded as V10, V11, V12-V14, V15-V19 in the International Classification of Diseases 10th edition (ICD-10).

Source
Saskatchewan Ministry of Health

References


Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.


Off-Road

Definition
Any person discharged from hospital with an injury caused from off-road related collisions. All terrain vehicles and snowmobiles are the most common off road vehicle.

Calculation
Off-road injury rate is the number of inpatient hospital discharges due to off-road collisions in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Off-road injuries are coded as V86.08, V86.18, V86.2, V86.38, V86.4, V86.58, V86.68, V86.7, V86.98

Source
Saskatchewan Ministry of Health

References
Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.


Pedestrian

Definition
Any person discharged from hospital with an injury caused from pedestrian related collision.

Calculation
Pedestrian injury rate is the number of inpatient hospital discharges due to pedestrian collisions in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Pedestrian injuries are coded as V01, V02, V03, V04, V05, V06, and V09 in the International Classification of Diseases 10th edition (ICD-10).

Source
Saskatchewan Ministry of Health.

References


Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.
Unintentional Poisonings

Definition
Any person discharged from hospital with an injury caused by unintentional poisoning.

Calculation
Unintentional poisoning hospitalization injury rate is the number of inpatient hospital discharges due to unintentional poisoning in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Unintentional poisoning injuries are coded as X40-X49 in the International Classification of Diseases 10th edition (ICD-10). For illustrative purposes, X40, X41, X43 and X44 = “pharmaceuticals”, X42 = “narcotics and hallucinogens”, X45 = “alcohol”, X49 = “Other and unspecified chemicals and noxious substances, and X46, X47, X48 = “All others”.

Source
Saskatchewan Ministry of Health.

References


Sports-related

Definition
Any person discharged from hospital with an injury caused by a fall, being struck by sports equipment or striking against or bumping into another person while playing sports.
**Calculation**

Sports related hospitalization injury rate is the number of inpatient hospital discharges due to sports in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Struck by injuries are coded as W02, W21-22 and W51 in the International Classification of Diseases 10th edition (ICD-10).

**Source**

Saskatchewan Ministry of Health.

**References**


Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.

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**Fire/Burns**

**Definition**

Any person discharged from hospital with an injury caused from exposure to fire, smoke or heat and hot substances.

**Calculation**

Fire/burn injury rate is the number of inpatient hospital discharges due to exposure to fire, smoke or heat and hot substances in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Fire/burn injuries are coded as X00-X19 in the International Classification of Diseases 10th edition (ICD-10).

**Source**

Saskatchewan Ministry of Health.

**References**

Parachute. The cost of injury in Canada. Toronto (ON); Parachute; 2015.


Drownings

Definition
Any person discharged from hospital with an injury caused by drowning or submersion including bath tubs, swimming pools and natural waters like lakes, rivers or oceans.

Calculation
Drowning hospitalization injury rate is the number of inpatient hospital discharges due to a drowning in a specific year in a particular 5 year age/sex group divided by the population in that age/sex group * 100,000. Covered Population is used as the denominator. Drowning injuries are coded as W65-W74, V90 and V92 in the International Classification of Diseases 10th edition (ICD-10).

Source
Saskatchewan Ministry of Health.

References

What’s Being Done in Saskatoon Health Region to Reduce Unintentional Injuries?

In addition to the initiatives highlighted in the one page fact sheets included in the Series 7 release (see http://www.communityview.ca/infographic_SHR_injury.html), the following are programs and policies that are helping to improve the unintentional injury situation in our Region.

**Falls Prevention**
- Staying on Your Feet program: https://www.saskatoonhealthregion.ca/locations_services/Services/Falls-Prevention/Documents/Brochures/SOYF%20Brochure%20(July%202013).pdf
- Community falls prevention clinics in the Region: https://www.saskatoonhealthregion.ca/locations_services/Services/Falls-Prevention/Documents/Brochures/2016/Falls%20Prevention%20Clinic%20Brochure%20Final%20June%202016.pdf

**Motor Vehicle Safety**
- The City of Saskatoon undertakes Neighbourhood Traffic Management Reviews, Corridor Study Projects, and Intersection Improvement Projects to help improve safety for all road users.
- Saskatchewan General Insurance has started a photo speed enforcement initiative: https://www.sgi.sk.ca/individuals/penalties/photospeedenforcement.html
- Canadian Automobile Association funds a School Safety Patrol program: https://caask.ca/about-caa/caa-social-responsibility/school-safety-patrol-program#.VtSJffkrK70

**Bicycling Safety**
- The City of Saskatoon has embarked on protected bicycle lanes as a demonstration of how infrastructure can help promote safe cycling: https://www.saskatoon.ca/moving-around/cycling/cycling-plans-projects
- The City of Saskatoon is engaged in a Learn to Ride Safe program targeted at Grade 3’s: https://www.saskatoon.ca/moving-around/cycling/cycling-plans-projects
- Humboldt hosts Bike Rodeo and Safety Day every year: http://humboldt.safecommunities.parachutecanada.org/bicycle-safety/2016-bike-rodeo-safety-day/
Pedestrian Safety

- Neighborhood Speed Enforcement was initiated by the City of Saskatoon Transportation Engineers in response to concerns raised at neighborhood traffic meetings. 10 locations were identified as potential problem areas and police enforcement in these areas has helped reduce crashes in the city.
- Enhanced pedestrian crossing facilities are being installed by the City of Saskatoon Transportation division.
- City of Saskatoon is developing an Active Transportation Plan to increase safety of walking and cycling: [http://www.growingfwd.ca/activetransportation/](http://www.growingfwd.ca/activetransportation/)
- Safe Communities Humboldt & Area operates a Positive Ticketing campaign which gives tickets to residents who display safe behaviours (e.g. safe crossing by pedestrians etc.): [http://humboldt.safe-communities.parachute-canada.org/positive-ticketing/](http://humboldt.safe-communities.parachute-canada.org/positive-ticketing/)
- The Saskatoon Council on Aging's Age Friendly Initiative addresses pedestrian safety through outdoor spaces and transportation priorities: [http://www.scoa.ca/age_friendly.html](http://www.scoa.ca/age_friendly.html)

Sports Safety

- All registered minor hockey teams in Saskatoon and Saskatchewan must have at least one registered team official complete the Hockey Canada Safety program via the Saskatchewan Hockey Association’s - Hockey University: [https://sha.sk.ca/coaches/certification/hockey-university](https://sha.sk.ca/coaches/certification/hockey-university)

Rural Safety

- Progressive Agriculture Safety Days are run throughout the province. Humboldt hosts in October: [http://www.progressiveag.org/#](http://www.progressiveag.org/#)
- The Canadian Centre for Health and Safety in Agriculture has information on rural safety: [http://www.cchsa-ccssma.usask.ca/](http://www.cchsa-ccssma.usask.ca/)