

Speaker notes for ATV Safety Presentation

2021

This presentation was developed for community-based programs, public health professionals, educators, and others working in the area of injury prevention. This presentation shares information on ATV-related injuries, laws, safety tips, and issues related to ATV safety for all ages.

The statements in bold are the key messages for the slide and are found in the notes section of the PowerPoint slides. Select references are provided at the end of this document.

Slide 1 ATV Safety in Saskatchewan

ATVs are an important part of outdoor life for many Saskatchewan residents. They are fun to ride, have practical uses, and can get you places that you otherwise might not be able to access. ATVs are used throughout Saskatchewan for transportation, recreation, and occupation-related activities.

ATVs are powerful machines that deserve an operator's complete attention. When you are driving an ATV, you are driving a motor vehicle that you need to operate safely. For ATV-related injuries in Canada, residential areas and private homes are most often indicated as the location at the time of injury, followed by roads and highways, and recreational areas. An ATV-related injury can occur in any one of these settings and appropriate safety behaviours must always be followed.

This presentation shares information on ATV-related injuries, laws, safety tips, and issues related to ATV safety for all ages.

Slide 2

This presentation was developed by the Child Injury Prevention Program at the Saskatchewan Prevention Institute in collaboration with the Acquired Brain Injury Partnership Project (ABI), a partnership between the Ministry of Health and Saskatchewan Government Insurance (SGI).

The Saskatchewan Prevention Institute is a provincial non-profit organization that strives to reduce the occurrence of disabling conditions in children. The Saskatchewan Prevention Institute provides information, training, and resources based on current best evidence. The slogan, "Our goal is healthy children", guides the Prevention Institute's work. The Prevention Institute believes that children of all abilities have the right to the best physical, social, and emotional health possible.

Slide 3 All-Terrain Vehicles (ATVs)

All-terrain vehicles are motorized off-highway vehicles designed for use on unprepared surfaces such as dirt, grass, or gravel. An ATV has a seat designed to be straddled by the operator and handlebars for steering control. **ATVs are most often intended by the manufacturer for use by**

a single operator and no passenger. Some ATVs are equipped with a designated seating position behind the operator and others with the passenger position beside the operator (i.e., side-by-sides).

The term ATV includes quads, side-by-sides, dirt bikes, off-road utility vehicles, and utility terrain vehicles (UTVs). Golf carts and snowmobiles are not considered ATVs in Saskatchewan and have different rules and regulations.

Slide 4 ATV Injuries

Injuries remain a leading cause of death, disability, and years of life lost in Canada. **ATV use has resulted in devastating injuries and death to Saskatchewan residents. These injuries span across all geographic locations and age groups, including seniors and toddlers.**

In Saskatchewan in 2015, there were 9 ATV-related deaths. There were 5 ATV-related deaths in 2016, 5 in 2017, and 2 in 2018.

The number of injury-related hospitalizations is much larger. For example, Athabasca Health Authority reported 41 injuries related to ATVs and snowmobiles between January 2019 and September 2020. This gives you a picture of the extent of serious ATV-related injuries from one area of the province. This number does not include emergency room visits, those that were treated at home, and fatal injuries.

For Saskatchewan children and youth, ATV-related injuries were the 9th leading cause of injury resulting in hospitalization between 2004 and 2013, with an average of 48 hospitalizations per year.

A person who is involved in an ATV crash can suffer life-long disabling or fatal injuries. It is vital to prevent ATV-related injuries.

Slide 5 What are the injuries?

People hospitalized with ATV-related injuries often suffer from multiple injuries. Fractures are the most common ATV-related injury and most often occur to the upper and lower extremities. Other ATV-related injuries include head and neck injuries, and injuries to the internal organs. Between 2004 and 2013, 20% of ATV-related hospitalizations for Saskatchewan children and youth were head and neck injuries.

ATV-related injuries can result in extended recovery times and hospital stays, increased rehabilitation requirements and at-home services, life-long disability, and death.

Slide 6 How are the injuries occurring?

ATVs are heavy vehicles that are capable of great speeds. There are limited safety measures on an ATV to prevent injury and death. Therefore, drivers of an ATV must have the necessary skills and take precautions to ensure they avoid hazards while riding an ATV.

Contributing factors to injuries include:

- **vehicle factors (mechanical failure, seat belts)**
- **environmental factors (terrain, livestock unpredictability, and obstacles)**
- **driver factors (speed, multi-tasking, reacting automatically to situations, helmet use)**

ATVs are intended to travel over uneven and rough terrain; however, doing so at excessive speeds can cause an ATV to roll or tip. Many ATV-related injuries occur when a rider loses control of the vehicle, resulting in falls off the ATV, the ATV rolling, and the ATV colliding with an object. Injuries can also occur when the rider contacts the ground, a tree, or another person after falling off the ATV, or when the ATV lands on the rider. Crush protection devices and restrictions on where to ride an ATV are two additional measures that could reduce the likelihood of injury.

Slide 7 ATVs and Children

Because of their design, size, and speed, ATVs require considerable strength, balance, coordination, and cognitive ability to safely drive. ATVs are not toys. **Children do not possess the physical development to safely drive an ATV or the cognitive ability to react to potentially dangerous situations.** Considering the high risk of injuries to children and youth when operating ATVs, the Canadian Paediatric Society recommends that children and youth younger than 16 years of age should not operate an ATV.

The Canadian ATV industry recommends that ATVs designed for children and youth come with factory-set maximum speeds and carry warning labels explicitly indicating the age limit for use, the need for mandatory adult supervision, and a warning that operation of ATVs by children under the designated age limit increases their risk of severe injury or death. There is a lack of evidence in the research that youth sized ATVs reduce the risk of injury.

Slide 8 ATVs and Youth

Youth-sized ATVs are smaller in size and reach slower speeds than a regular ATV, but this does not mean that they are without risk. 'Age-appropriate' ATVs may weigh up to 90 kg (200 lb) and reach speeds of 50 km/hr (30 mph). **'Age-appropriate' ATVs still reach speeds that a youth cannot be expected to understand or react to and weigh more than a youth can physically control, particularly at these speeds. Youth do not possess the abilities to safely control an ATV of any size. This is why the Canadian Paediatric Society recommends no ATV use for children and youth under the age of 16.**

Slide 9 Preventing ATV Injuries

Whether using an ATV for work or recreational purposes, the first thing that needs to be top of mind is safety.

What can be done differently to prevent ATV-related injuries?

Allow participants to brainstorm factors that can be changed to reduce injuries, using the factors listed in previous slides (i.e., vehicle factors, environmental factors, driver factors).

- Rider training
- Keeping ATVs in good working order
- Following the rules of the road
- Wearing protective gear
- Knowing and making the proper preparations
- Operating the ATV safely (e.g., not attempting tricky manoeuvres; following the speed limit; and avoiding roads and streets when driving, except to cross the road or go around obstacles)
- Not riding with a passenger, unless your ATV is designed for more than one rider
- Not using alcohol or drugs before or while riding
- Remaining in control always, and paying attention to the elements, fellow drivers, and pedestrians

We will explore all of these in more detail in the coming slides.

Slide 10 Operating an ATV SAFELY

When operating ATVs:

- **drive with due care and attention**
- **travel in the same direction as traffic**
- **keep to the right when approaching other vehicles**
- **pass other vehicles on the left**
- **maintain a safe following distance**
- **yield to vehicles on your right and to pedestrians**
- **signal turns when required**
- **stop for police**
- **maintain at least a 2-metre distance from the edge of the road**
- **obey trail rules**
- **when crossing a road, bring the ATV to a complete stop**
- **when crossing a road, all passengers must dismount the ATV**
- **cross the road by the most direct route**

When operating an ATV do not:

- drive at an unsafe speed or over the speed limit (maximum 80 km/h)
- drive in highway medians that are less than 50 metres in width
- drive at night if the headlights or rear lights are not working
- disturb, injure, or kill wildlife
- drive animals or birds towards hunters

Slide 11 ATV Riding Safety Gear

Safety gear includes an approved helmet, eye protection, and protective clothing. A full-faced DOT approved off-road helmet is preferred. If the helmet is not full-faced, then use off-road goggles in addition to your helmet. Clothing includes riding gloves, long-sleeved shirt, long pants, and over-the-ankle riding boots. Protective clothing is necessary to protect your skin from cuts, scrapes, and punctures. For recreational riders, off-road pants with knee-pads and chest and shoulder protectors are recommended.

Slide 12 Approved ATV Helmets

Always wear a helmet that is approved for use when riding an ATV in Canada. Approved ATV helmets are certified by DOT or Snell. Did you know? The DOT symbol needs to appear on the outer surface of the helmet, in a colour that contrasts with the background colour of the helmet.

Even a quick trip to check the field or to visit the neighbours can result in a disabling or fatal injury if safety behaviours are not followed. A brain injury can result in life-long disabilities and affect physical functions such as speech, fine and gross motor control, as well as alter an individual's personality, memory, and emotions. A helmet reduces the risk of a brain injury in the event of a crash.

There are different types of helmets available for use. Helmets that provide eye and face protection should be considered for use when riding an ATV. A full-face helmet provides additional protection to the face, eyes, mouth, and chin. An open-face helmet provides no additional protection to the face or eyes. If an open-face helmet is worn when riding an ATV, additional eye protection must be worn.

An off-road or motocross helmet provides the greatest amount of protection to the face, with increased protection for the mouth and chin.

Remember, a helmet and eye protection are required by Saskatchewan law when riding an ATV on public land and are always recommended.

Slide 13 Videos

How Helmet Protects (3:49)

<https://youtu.be/VKHnjxFdqv0>

Off-Road Ed: How To Choose an ATV Helmet (2:10)

<https://youtu.be/k73LleNLR2c>

Helmets On, Part 1: Lessons from New Stuyahok (6:31)

<https://youtu.be/KUlgSrStSvM>

Helmets On, Part 2: ATV Safety Course and Injury Prevention in New Stuyahok Follow Near-Fatal Crash (5:42)

<https://youtu.be/W6M1UTDrYH4>

Slide 14 Helmet Fit and Maintenance

The off-road vehicle safety helmet should fit snugly but not hurt or pinch (your cheeks may be slightly squeezed). If the pressure is right, you shouldn't be able to chew gum when the helmet is on and all the straps are done up correctly (check your specific instruction booklet for more information). Make sure all straps are done up correctly on every ride.

All helmets must be replaced after five years. The material that a helmet is made from degrades over time. Although a helmet may look the same as when you bought it, it will not necessarily protect the head and brain in the same way in the event of a crash. **ATV helmets are meant to protect for only one impact.** Replace helmets after a collision or if you find any dents or cracks on the helmet.

Slide 15 Passenger Safety

ATV seats are very large and wide; however, just because two people can fit on an ATV seat does not mean that the ATV is meant to carry a passenger. **Know if your ATV is meant to carry a passenger.** Never carry a passenger on an ATV that was designed for one person. Carrying passengers on an ATV that is not intended to carry a passenger affects the balance and control of the vehicle, increasing the risk of a rollover or fall from an ATV.

The driver of an ATV needs to be able to make whole body movements in order to control the vehicle. The large ATV seat is designed to accommodate this side-to-side and forward-to-backward movement. **A passenger can restrict a driver's movement and change the dynamics of how an ATV handles.**

Slide 16 Take an Approved Training Course

An ATV training course is recommended for operators of all ages. A safety course will help refresh skills for experienced ATV riders as well as teach new skills for new riders. There are instructors throughout Saskatchewan who offer approved ATV training courses.

Delivered by Canada Safety Council-certified instructors, the ATV/UTV curriculum is based on field-tested techniques and meets Occupational Health & Safety Regulations. The ATV/UTV rider course is a hands-on learning experience with emphasis on the safety implications of each area of riding. Students learn how to ride while being aware of their surroundings to avoid an incident. Other topics include:

- Legislation and regulations (The Saskatchewan Employment Act and the OH&S Regulations (Saskatchewan))
- All-terrain Vehicles Act & Regulations (Saskatchewan)
- Proper riding gear
- Inspecting your ATV

- Starting procedures
- Proper riding techniques and operation
- Navigating different terrain types (obstacles, slopes/hills)
- Laws and regulations
- Preparing for emergencies

For more information, contact:

David Burnett, Chief Instructor

306-384-8079 in Saskatoon

burnett3@sasktel.net

Saskatchewan All Terrain Vehicle Association

1-855-297-2882

<http://www.satva.ca/atv-safety>

Saskatchewan Safety Council

306-757-3197 in Regina

<https://www.sasksafety.org/>

Ultimate ATV and Off-road Training

306-533-9966

kenmatechuk@hotmail.com

<http://kenmatechuk.com/training/>

Ride Rite Safety Training & Certification

306-441-3046

riderite@sasktel.net

<http://www.riderite.ca/>

Slide 17 Look First

It is important that your ATV is in safe operating condition. **Always take a look at your ATV before riding to ensure everything is working properly.** Check out the tires and brakes.

Look at the weather forecast and trail conditions before you leave.

Pay attention to hazards, people walking, animals, and other vehicles.

Slide 18 Ride Responsibly

Always ride at a safe speed that allows you to stay in control of the ATV and is safe for the conditions.

Riding responsibly includes not riding after consuming alcohol or drugs. This contributes to your ability to pay attention to the hazards and operate your ATV in a safe manner. Report others who ride under the influence of substances. Operating an ATV while impaired is very dangerous to your safety as well as the safety of others around you. **Operating an ATV while impaired is illegal.** Operating an ATV in a way that's dangerous to the public and failing to remain at a collision (hit and run) is also illegal.

Slide 19 Have a Plan and Be Prepared

Tell someone when and where you are going and when you are expected to return. Know your route. Carry your cell phone or a GPS with you. It is also important to carry a first aid or emergency kit and tow rope.

What else would you carry in your emergency kit? *Allow participants to brainstorm items they could pack in the emergency kit (e.g., bandages, ice pack, splint).*

The goal is to have fun and reduce injuries and fatalities.

Slide 20 Saskatchewan Laws

Saskatchewan laws regulate who ATVs can be operated by and where ATVs can be operated. *The All Terrain Vehicles Act* does not regulate the use of ATVs on private land that is owned or occupied by the operator or a member of the operator's immediate family.

The ATV Act states that **no person under the age of 16 years shall operate an all-terrain vehicle.** This means you must be 16 years of age and hold a valid driver's licence to operate an ATV on public land in Saskatchewan. However, youth between the ages of 12 and 15 can operate an ATV on public and private land if all three of the following conditions are in place.

1. They are accompanied by a supervising rider. The supervising rider can be on the same ATV (if it is designed for the transportation of a passenger) or riding a different ATV.
2. They are supervised by someone who has held a driver's licence continuously for the last 365 days.
3. They have passed an approved ATV training course.

Remember, it is not recommended that children under 16 years of age operate an ATV.

No person shall operate an ATV on the travelled portion of a highway unless the specific municipality indicates a specific part of a highway, street, road, or crossing. It is illegal to operate an ATV while impaired by drugs or alcohol, even when doing so on private land. It is also illegal to ride in a manner that is dangerous to the public. These are criminal offences that can result in criminal charges, seizure of the ATV, and the loss of a driver's license. If you are found operating an ATV on public land by police, you must provide proof of insurance. **By law, every rider must wear an approved helmet and appropriate protective riding gear.**

Every person must comply with the ATV Act. Any person who authorizes or permits another person to operate an ATV is guilty of an offence against this Act if that person violates the regulations. This means that if a parent allows a child to ride an ATV and the child has not passed an approved training course, the parent can receive a fine. **The ATV Act can be found at <http://www.publications.gov.sk.ca/details.cfm?p=369&cl=5>.** Although the ATV Act does not apply while on private land (either occupied by the ATV operator or a member of their immediate family), it is recommended that riders apply ATV Act laws to their private land.

Some of the fines pertaining to the ATV Act include the following:

- Failing to wear helmet and eye protection \$60
- Operating an all-terrain vehicle without a driver's licence \$100
- Operating an all-terrain vehicle without landowner's permission \$40
- Operating an all-terrain vehicle at night without using lights \$40
- Exceeding a reasonable and safe speed \$100
- Failing to yield right-of-way \$100
- Failing to maintain a safe following distance \$50

Slide 21 ATV Safety Resources

There are numerous resources available related to ATV safety.

- **Acquired Brain Injury (ABI) Partnership Project**
The Education and Prevention Coordinators work to establish, enhance, and/or deliver programs that address issues related to traffic safety and injury prevention. Some specific work around ATVs includes funding to support helmet use.
<https://www.abipartnership.sk.ca/>
Facebook @SaskSmart
- **Education & Health Professionals**
Learning about ATV safety in schools is important. Your local health centre and healthcare professional may have information and resources to share with you.
- **Government of Saskatchewan**
Responsible for legislation and education related to traffic safety.
All-Terrain Vehicles (ATV) Act
<http://www.publications.gov.sk.ca/details.cfm?p=369&cl=5>
- **Saskatchewan All-Terrain Vehicle Association Inc. (SATVA)**
The poster on this slide is from their awareness campaign. They promote the safe and responsible use of ATVs in Saskatchewan.
<http://www.satva.ca/>
Facebook @saskatv
- **Saskatchewan Government Insurance (SGI)**

Responsible for legislation and education related to traffic safety.

ATV and Snowmobile Riders

<https://www.sgi.sk.ca/atv-and-snowmobile>

Facebook @SGIcommunity

- Saskatchewan Prevention Institute
Share evidence-based information through print and web-based resources. Provide education on child and youth injury prevention.
All-Terrain Vehicle (ATV) and Off-Highway Vehicle (OHV) Safety
<https://skprevention.ca/all-terrain-vehicle-atv-and-off-highway-vehicle-ohv-safety/>
Facebook @SaskatchewanPreventionInstitute
- Saskatchewan Royal Canadian Mounted Police (RCMP)
Provide education and enforcement.
<https://www.rcmp-grc.gc.ca/en/sk/home>
Facebook @SaskatchewanRCMP
- Saskatchewan Safety Council
Non-profit organization dedicated to the prevention of injury in Saskatchewan.
<https://www.sasksafety.org/>
Facebook @sasksafetycouncil
- You and Your Community
You are the most important when it comes to riding safely. It is your responsibility to take injury prevention seriously. The majority of ATV-related injuries are predictable and preventable. Gather friends, neighbours, family, and community members together to educate and make change at the local level.

ATV Safety in Saskatchewan (PowerPoint Presentation)

Additional ATV Safety Resources

Videos

Rexburg Motorsports (2010)
How to Fit A Helmet – GearHead.com (0:49)
<https://youtu.be/pAsXThDlows>

Saskatchewan Safety Council (2019)
ATV UTV Safety Equipment (0:34)
<https://youtu.be/LCaZ4LhvMCI>

Saskatchewan Safety Council (2020)
ATV Unload (0:42)
<https://youtu.be/wdIRD9bvnQM>

Saskatchewan Safety Council (2020)
Helmet Fitting for ATV, Motorcycle, Side-by-Side, Snowmobile, or UTV (4:04)
<https://youtu.be/K7uPP4XVUj8>

SaskSmart (2020)
What Does Your Brain Feel Like? (0:35)
<https://www.facebook.com/1822360627999430/videos/621134758504597>

Booklets

Saskatchewan Prevention Institute (2018)
Gotta Brain Getta Helmet booklet (4-220)
<https://skprevention.ca/resource-catalogue/safety/gotta-brain-getta-helmet/>

University of Iowa Stead Family Children's Hospital (n.d.)
Safety Tips for ATV Riders
<https://uichildrens.org/sites/default/files/atv-safety-booklet.pdf>

ATV Safety in Saskatchewan (PowerPoint Presentation)

Select References

Government of Saskatchewan. (2019). *All Terrain Vehicles Act, A-18.02*. Retrieved from <https://publications.saskatchewan.ca/#/products/369>

Melnychuk, M. (2019, June 4). ATV fatalities dropping, but advocates still want mandatory training. *Regina Leader-Post*. <https://leaderpost.com/news/local-news/atv-fatalities-dropping-but-advocates-still-want-mandatory-training>

Saskatchewan Prevention Institute. (2017). *Child and youth injury in Saskatchewan 2004-2013*. Retrieved from <https://skprevention.ca/resource-catalogue/safety/child-and-youth-injury-in-saskatchewan-2004-2013/>

Yanchar, N. L., & Canadian Paediatric Society. (2012; re-affirmed 2020). Preventing injuries from all-terrain vehicles [Position statement]. *Paediatrics & Child Health*, 17(9), 513-514. <https://doi.org/10.1093/pch/17.9.513>