

# ***Safety*** *goes a long way*



***Your Pocket Guide to  
Snowmobile Safety***



## Emergency Contacts

Name \_\_\_\_\_

Address \_\_\_\_\_

City/Town(ship) \_\_\_\_\_

Home phone \_\_\_\_\_ Bus. \_\_\_\_\_

Cell phone \_\_\_\_\_

Emergency Contact Number \_\_\_\_\_

Police \_\_\_\_\_ Ambulance \_\_\_\_\_

Insurance co. \_\_\_\_\_

Policy number \_\_\_\_\_

Licence plate number \_\_\_\_\_

### Riding Buddies

\_\_\_\_\_  
Name Phone #

\_\_\_\_\_  
Name Phone #

\_\_\_\_\_  
Name Phone #

\_\_\_\_\_  
Name Phone #

\_\_\_\_\_  
Name Phone #

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Name Phone #



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## Take safety along for the ride.

This reference book has been created to give snowmobilers in Alberta the information needed to safely and responsibly enjoy the sport. It has been designed as a handy resource for both on and off the trail, as well as a helpful tool for planning a trip.

There's no doubt about it; snowmobiling is a very popular sport across the province. Every year, more and more people buy machines and hit the trails - including more families than ever before.

While this growth is very exciting, to continue and enjoy public support, safety must be a big part of the sport, the snowmobiling community and the culture of the trail.

There are a number of ways we can achieve these goals. The first, and most important, is for snowmobilers to take responsibility and set a good example. The other is to continue to educate everyone in the sport, from expert to novice, on how to enjoy themselves safely, legally and responsibly.



Throughout the following pages, you'll find information ranging from safety tips, hand signals and checklists to the legal requirements of snowmobiling, trail riding, survival and more.

Read on and **enjoy the ride.**



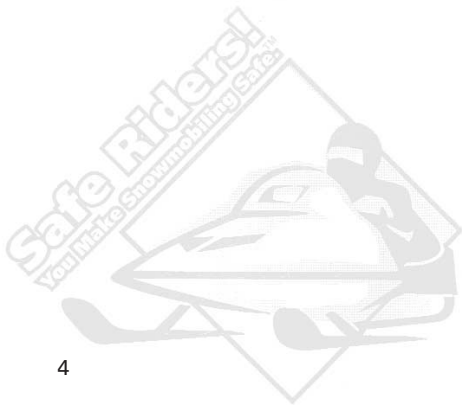
## Facts about snowmobiles and safety.

There are many reasons to use proper safety practices when snowmobiling. While it's a great sport, it has the potential for personal injury and even death. To stay safe, snowmobilers need to understand the risks.

- Drinking and riding is a factor in 80% of snowmobile fatalities in Canada.
- The most dangerous situations happen when a snowmobiler is injured while alone, far from help.
- Snowmobiles can be a hazard even when they're on the trailer. (See page 24.)
- Wearing the wrong clothing can cost you your life. (See page 22.)
- Most collisions happen during reduced winter light or darkness.
- Overall, when involved in a collision, snowmobilers are more likely to receive serious and incapacitating injuries, than people in other vehicles. (See page 11.)
- Riding in the backcountry and in mountainous terrain requires proper equipment and training.



All references contained in this publication to specific provincial laws have been compiled from sources believed to be the most reliable and the best current opinion on the subject. Alberta Transportation, the Alberta Snowmobile Association or the printers of this publication make no warranty, guarantee or representation as to the absolute legal correctness or sufficiency of any representation contained in this publication.



## Some common-sense rules for the ride.

There's an exhilaration that comes with sledding in the great outdoors. All sledders, from the novice to the expert, need to keep safety in mind every time they head out. Ride safe. Ride sober.

### Use these tips to put safety into action - and have a great time.

- Do not use alcohol or drugs – before or during – snowmobiling.
- Operate at safe and reasonable speeds – driving within the limits of the machine and your ability.
- Remember the rules of the road. Always travel on the right-hand side of the trail and adhere to trail signage.
- Stay on trails and in areas where snowmobiling is permitted.
- Use extra caution when riding during the evening or night.
- Become familiar with the snowmobile you ride.
- Keep your snowmobile properly maintained.
- Know the terrain you travel.
- Avoid travel over unfamiliar bodies of water.
- Listen to the weather forecast before you venture out.
- Always wear a safety certified helmet and proper layered clothing.
- Ride with a buddy or with a group.
- Inform someone where you are going and when you plan to return.
- Carry emergency supplies and learn first aid and survival skills.
- Know and use the proper hand signals.

It's up to you to make **snowmobiling safe**.

## Be a good sport.

There's a lot to be said for the unwritten rules of the trail. As part of an interesting, fun-loving community, snowmobilers all play an important part in making sure the sport continues to be a safe and enjoyable one. Setting a positive example, and following these simple, common sense rules, can help the sport grow in the best way possible:

### Leave Tracks, Not Trash

If you had space to bring it in, then respect nature by carrying it out too.

### Maintain Your Sled

A well-tuned snowmobile is more environmentally friendly and reliable.

### Protect Wildlife

Animals are more vulnerable in winter, so keep your distance and leave them alone.

### Leave It Stock

Refrain from using after-market pipes that increase noise and annoy others. Know all laws regulating the operation of snowmobiles.



### Stay on the Trail

Whenever possible, reduce your environmental impact by riding on organized trails. Respect the rights and property of others and snowmobile where permitted.

### Respect Sensitive Areas

There are lots of other places to ride, so avoid areas marked as environmentally sensitive or protected.

### Embrace New Technologies

Mother Nature appreciates snowmobiles that run even more efficiently and effectively.

### Spread the Word

Snowmobiles have improved continually thanks to oil injection, sound reduction measures, variable height exhaust valves, direct injection, on-board computers and now, 4-stroke engines.

### Lend a Hand

Give a helping hand when you see someone in distress and assist in search and rescue parties if needed.

For more info, please visit [www.ccsso-ccom.ca](http://www.ccsso-ccom.ca)

## Know the rules before you make tracks.

Having a good time means staying out of trouble with the law. Law enforcement plays an important role in the safety of all Albertans who enjoy outdoor activities. Here are a few things you should know about the law and snowmobiling.

### Ride with care and caution.

- Riders found guilty of operating a snowmobile without due care and attention or without reasonable consideration for other persons or property (Section 120 (2)(a) of the Traffic Safety Act) can be fined \$402.

### Don't mix alcohol and snowmobiling.

- In Alberta, a snowmobile driver can be charged with the same impaired driving charges as a driver of a motor vehicle for blowing over 0.08mg, and could face license suspension.
- “Zero Tolerance” is the only way to ride safely.
- Snowmobile collisions involving alcohol are often fatal.
- Mixing alcohol and night driving can be a deadly nightcap.
- It's a criminal charge under the Criminal Code of Canada.



### Stay off the road.

- A snowmobiler is prohibited from riding on any portion of a highway (Section 120 (2)(b) of the Traffic Safety Act).

### Exceptions to this law.

- Be careful when crossing roads of any kind. Come to a complete stop and make absolutely sure no traffic is approaching from any direction. Then cross at a right angle to traffic. Cross by the most direct, shortest and safest route available. \*
- Snowmobilers may ride in ditches alongside highways for a specified amount of time during daylight hours only with special permission granted from the provincial government for a special event, or special permission (bylaw) from the municipal government.

### Mufflers are a must.

- No rider can operate a snowmobile without a muffler. It is illegal to ride if your muffler has:
  - been cut off or disconnected.
  - the baffle plate removed.
  - an attachment or device that increases the noise.

(Section 8 of the Off-Highway Vehicle Regulation).

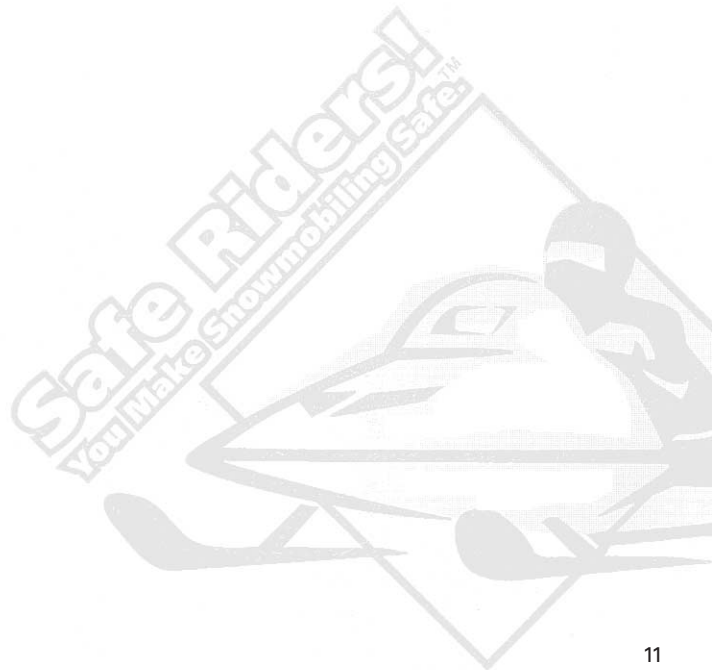
- All “after market mufflers” that increase noise are illegal.

\* Note: Persons under the age of 14 are not permitted to drive on a highway as per Off Highway Vehicle Regulation Prohibition Section 2(1).



### Deal with collisions responsibly.

- Whenever you come across a snowmobile collision, you should give your assistance.
- If you are involved in a collision, you must produce your name, address, registration, insurance and any other information requested by an enforcement officer.
- If there has been an injury, death or property damage of \$1,000 or more, the rider must report to the police station in that area and make a written report just as you would in the event of a motor vehicle collision (Section 126 of the Traffic Safety Act).



## The legal requirements of snowmobiling.

Most snowmobilers aren't aware that the laws governing the operation of a snowmobile differ for private and public property in Alberta. Here's a list of legal requirements you need to know before heading out.

### To sled in a public place:

- The rider must have a properly registered and insured machine.
- The driver must be 14 years of age to operate a machine independently.
- A person younger than 14 years of age must be accompanied by an adult, or supervised closely while receiving instruction.
- An operator of a snowmobile must produce insurance and registration when requested to do so by an enforcement or peace officer.
- A sledder should also check municipal bylaws with local authorities before heading out.

### Insurance is required on public property.

- To be properly insured, you must have a minimum coverage of \$200,000 public liability and property damage.
- A \$1,000,000 public liability and property damage insurance is commonly carried.
- You could be held personally responsible for hundreds of thousands of dollars should you find yourself in a legal injury lawsuit. Protect yourself, your assets and your family.

### Know the registration rules.

- Registration papers may be obtained from any licensing and registry agent.
- The minimum age required to register a snowmobile is 18 years.
- A license plate must be securely attached in a visible location to the front or rear of the snowmobile.

### When snowmobiling on private property:

- You do not need a driver's license, registration or insurance if you are riding on land you own or have acquired the right to access.
- There is no age requirement when riding on private land that you own or have established the right to access.

On organized trails, **insurance** and **registration** are required.





## Hand signals make the trail safer.

Communication is an important part of staying safe, having fun and sharing the trails responsibly. Make sure you know and use these signals every time you go out.



### RIGHT TURN

Left arm raised at shoulder height, elbow bent and forearm vertical with palm of hand flat.



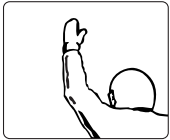
### LEFT TURN

Left arm extended straight out from shoulder and pointing in the direction of the turn.



### SLOWING

Left arm extended out and down from the side of the body with a downward flapping motion of hand to signal warning or caution.



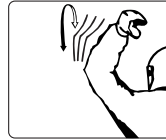
### STOP

Arm raised from the shoulder and extended straight up over the head with palm of hand flat. In some jurisdictions, the STOP signal may be indicated using the right arm, since the left hand is used for braking. Snowmobiles should watch out for and be prepared to stop for either signal.



### ONCOMING SLEDS

Left arm raised at shoulder height, elbow bent and forearm vertical, wrist bent, move arm from left to right over head, pointing to right side of trail.



### SLEDS FOLLOWING

Left arm raised, elbow bent, with thumb pointing backward, in hitchhiking motion, move arm forward to backward over your shoulder.



### LAST SLED IN LINE

Raise forearm from handle bar and show clenched fist at shoulder height.

## Ground-to-air rescue signals can save lives.



Require Assistance



Yes or Affirmative



Require Medical Assistance



Proceeding in this Direction



No or Negative

## Sled out of trouble.

There is an inherent risk involved while snowmobiling that every sledder must recognize. Safety starts with you. There is a great potential for trouble and injury when combining machinery, speed and unpredictable elements. Using common sense and knowing survival and riding techniques are essential. Always be prepared for the worst. Your life may depend on it. (See pages 22 and 23 for handy checklists.)

### Emergency tips

- Inspect your equipment and emergency kit before you leave, every time.
- Ensure a reliable person knows where you're going and when to expect you back. This is extremely important because response time is critical in the event of an injury, especially when hypothermia may be a factor.
- Stay where you are. It is easier for people to find you if you remain in one spot. Know your ground to air signals to aid your rescue. (See page 15.) Carrying a strobe light is also a good idea.
- Think about your situation clearly and use the **STOP** method:
  - Sit down and try to rest and relax. You need your strength.
  - Think of your total situation and evaluate it carefully.
  - Observe your surroundings and take inventory of your equipment.
  - Plan a logical course of action and begin to follow your plan.
- If you need to, use these tips to help you survive a night in the woods:
  - Care for personal injuries immediately. Even “minor” injuries can become critical.

- Find protection from the elements. Use trees, snowbanks, a cave or even your snowmobile for shelter from the weather. If possible, construct a lean-to from branches, a blanket and extra clothing.
- Use something to block the wind, preferably something bright in colour.
- Start a fire for warmth and as a signal to others.
- Find enough water and food to survive the first night. Remember water is a priority over food. Snow may be melted for water.

Make a wise investment and enroll in a winter survival course. It is important that you have the ability to treat frostbite, recognize the warning signals of hypothermia - and save a life if you need to!

## Plan your route.

As a Safe Rider, you should know the terrain and plan your trip. Always file your travel plans with family and friends to let them know where you are going and when you will return.

Get to know your riding area by:

- Obtaining a local map.
- Talking to local snowmobilers in the area.
- Discussing safe routes with other snowmobilers.
- Joining a snowmobile club.

Pack smart and check your snowmobile gear and tools each time before you sled.

## Basic Tips To Avoid And Survive An Avalanche

Sledding in the mountains is a one-of-a-kind experience, however, unstable conditions and weather systems make the possibility of an avalanche a concern for everyone. No matter what the size or power, a snowmobile cannot outrun a large avalanche.

### Here are some tips to keep in mind.

Any snow-covered slope has the ability to slide. The majority of avalanches start on slopes between 30 and 45 degrees, ideal snowmobiling slopes.

### Be prepared:

- Create a trip (difficulty, length, danger exposure) that takes into consideration current conditions, people's interests and skills, terrain and other hazards.
- Ensure group members have proper avalanche safety training.
- Carry survival equipment in a backpack including: transceiver, shovel, probe and spare batteries.
- Call the Public Avalanche Bulletin for latest conditions: 1-800-667-1105 or [www.avalanche.ca](http://www.avalanche.ca).
- Test the transceiver's transmit and receive functions at home.
- Ensure all transceivers are on transmit before leaving the trucks for the ride.

### Route Selection

- Travel low angle slopes, heavily treed areas, ridges and broad valley bottoms to avoid avalanche paths.
- If you choose to ride an avalanche slope, minimize your risk.
- Avoid slopes with excess wind loaded snow.
- Learn the significance of wind, sun, shade and terrain shape on avalanche danger.

- Be aware of escape routes and safe stopping areas.
- Avoid terrain traps or terrain features that can:
  - √ Increase the depth of burial
    - Gullies
    - Steep transition areas (sharp changes in the slope angle)
    - Sharp valleys
    - Creek beds
    - Walls or ridges crossing the natural path
  - √ Decrease the chance for escape
    - Gullies
    - Crevasses
    - Open water
  - √ Increase the chance of injury
    - Cliffs
    - Rocks and trees in avalanche path

### Keep in contact:

- Always ride in a group.
- Maintain constant visual contact at all time.
- Cross suspect slopes one at a time.
- Use a handsignal for "avalanche path...spread out".
- Listen to concerns of all group members.

### Travel Habits

- Park in safe areas, pointed to safer areas (escape route).
- Kill switch up.
- Allow the snow to settle after a storm.
- Test (track up) small slopes with low consequences.

- Test slopes using wide, fast passes before placing yourself in committing terrain.
- Make sure that only one machine is on the slope at any time, even if your buddy is stuck.
- **DO NOT LET YOUR GUARD DOWN**, slopes can avalanche even after multiple passes.

If you're caught in an avalanche, try to:

- Call out, draw attention to yourself.
- React fast, attempt to ride out of the slide.
- If no longer in control, separate yourself from your snowmobile.
- **FIGHT HARD** with swimming motions, trying to stay on top of the snow.
- Grab trees, rocks, etc. to avoid being tumbled down the slope.
- Keep your mouth closed and your teeth clenched.

When the avalanche slows, try to:

- Use your hands to create an airspace in front of your face.
- Wiggle to make an airspace around your body.
- Thrust an arm to the surface.
- Once the avalanche stops the snow sets up like concrete.

When the avalanche stops, try to:

- Remain calm.
- Control your breathing to conserve your oxygen, relax.
- Shout only when rescuers are very near (sound does not travel well within the snowpack).

## Searching For A Victim

The most experienced person should:

- Take a moment to organize the search party.
- Consider the possibility of another avalanche before attempting a rescue. Set an escape route and post a lookout if necessary.
- Mark the last seen point of the victim(s).

Search with beacons:

- Ensure all rescuers' beacons are switched to receive.
- Spread out at 30 metre intervals to cover the debris.
- Look for surface clues: a hand, hat, glove, etc.
- Don't litter the slope with rescuers' belongings.
- Search around and downhill of any clues.
- When a signal is picked up assign one or two to locate it while others continue the search.
- Pinpoint the signal to a small radius, then probe to find the victim.
- Without removing the probe, quickly dig out the victim.
- Turn the victim's beacon to receive if others are still buried.

For your safety and others, enroll in a snowmobile avalanche safety course. (See page 29 for details.)



## Plan for the ride.

You never know what the trail will bring. Whether you're going for the afternoon, the day, or camping overnight, make sure you have everything you need. Here are a few checklists to help you get ready.

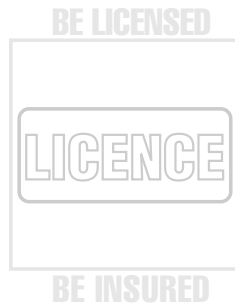
### Snowmobile safety checklist

#### 1. Wear the right layered clothing.

- Snowmobile suit (wind proof)
- Layers of clothing underneath suit
- Thermal weave underwear
- Wool shirt
- Heavy pants
- Safety certified helmet with eye protection (goggles/visor)
- Face shield or pullover face mask (balaclava)
- Mitts or insulated gloves
- Light inner glove
- High bulk socks
- Snowmobile boots
- Extra mitts and socks

#### 2. Pack for survival.

- Extra key
- Knife, axe, saw
- Map and compass
- Waterproof matches
- Flashlight, flares and strobe
- High energy food and bars
- Mirror/reflective material/fluorescent tape
- Shovel, probe, transceiver and extra batteries
- Radio/cell phone (emergency link 1-888-888-4567)
- GPS (Global Positioning System)
- Thermal blanket
- Large metal cup or pot
- Candles



#### 3. A first aid kit is a must.

- Triangular bandages
- Micropore tape
- Gauze pads (small/large)
- Roll gauze (small/large)
- Band aids (small/large)
- Antibiotic ointment
- Wet wipes
- Alcohol wipes
- Pain reliever
- Razor knife
- Scissors and tweezers
- Latex gloves
- Thermal (space) blanket

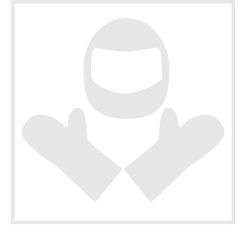
#### 4. Be sure you have the tools to “fix it.”

- Screwdrivers
- Pliers
- Wrenches
- Rags
- Electrical/duct tape
- Starter cord
- Spark plugs
- Spark plug socket
- Spare Drive belt
- Wire
- 20 m nylon tow rope

#### 5. Don't forget the essentials.

- Sled registration, personal ID, driver's license
- Insurance documents
- Food and water
- Toilet paper
- Litter bags
- Sunscreen
- Back pack

WEAR THE GEAR



## Tips on snowmobile trailer safety.

Getting yourself and your machines to the trailhead safely is an important part of the sport, yet something people often overlook. Here's some handy information to help you get there safe and legally.

### Hook it up safely.

- Trailers able to carry two sleds usually weigh less than 907 kg (2,000 lbs.) and require a Class I hitch and a 1-7/8" or 2" ball.
- Trailers capable of carrying four sleds are typically more than 907 kg (2,000 lbs.) and require a Class II or III hitch with a 2" ball.
- Ensure your tire pressure is correct.
- Place your spare tire, tire iron and jack where they are easily accessible.
- Load the sled onto the trailer properly — most sleds loaded across the width of a trailer will exceed your maximum allowable width and will be unsafe for fellow road users.
- Use tie-down straps, rods or clamps to secure the sled.
- Secure your snowmobile to deter theft with padlocks on the hitch and alarms and locks on the sleds. Record the engine serial number of your sled and keep in a safe place.

### Make sure you're secure.

- All trailers must have chains or cables attached to the tow vehicle as a secondary attachment in case the primary ball hitch fails.

### Let them see you.

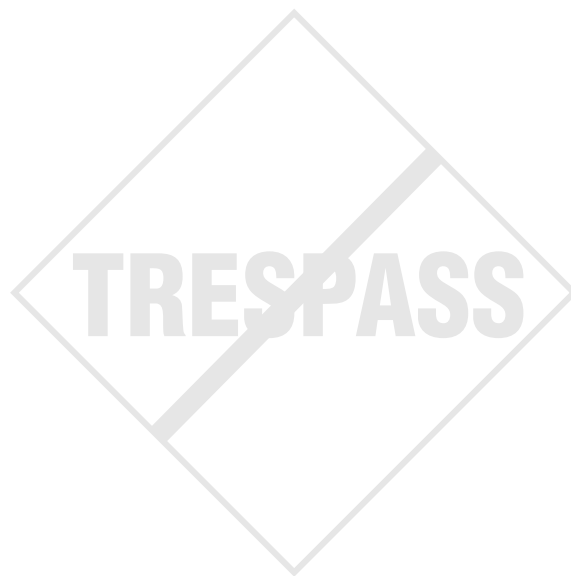
- Every trailer requires tail lights, brake lights, turn signals, side markers (amber in front, red at rear) and license plate light. Identification lights (three red in the centre-rear of the trailer) are required if the trailer width exceeds 2.05 m (6' 9").

### Brake safe.

- Trailers weighing less than 907 kg (2,000 lbs.) or less than half the weight of the tow vehicle do not require brakes.
- Adequate brakes and a breakaway kit are required for trailers weighing more than 907 kg (2,000 lbs.) or exceeding half the weight of the tow vehicle.

### Register for the road.

- Every trailer must be registered and have a license plate attached to the rear.



## Get on course for safety.

The Alberta Snowmobile Association offers a wide range of snowmobile safety and avalanche courses.

### Topics include:

- Snowmobiling: An Overview - History of Snowmobiling, Enjoying Nature and Being a Wise Energy User.
- Your Snowmobile: Maintenance and Repair
- Driving Your Snowmobile: Preparation, On the Snow and Field Practice
- Winter Survival: Basic Needs and Facing the Unexpected
- Snowmobile Regulations: Rules of the Road
- Courtesy and Ethics: Responsibility - Code of ethics, safety code, and alcohol

For trail information, contact your local snowmobile club or the Alberta Snowmobile Association.

For more information on these or other topics, please contact:

### The Alberta Snowmobile Association

Percy Page Centre  
11759 Groat Road  
Edmonton, Alberta  
T5M 3K6  
Phone: (780) 427-2695  
Fax: (780) 415-1779

Check out these web sites for events and other helpful safety information.

[www.altasnowmobile.ab.ca](http://www.altasnowmobile.ab.ca)  
[www.saferoads.com](http://www.saferoads.com)  
[www.avalanche.ca](http://www.avalanche.ca)

