



Snowmobile Safety Tips

Snowmobiling is an exciting and wonderful way to enjoy the great outdoors during the winter months. However, snowmobilers should observe the following safety tips and remain alert. Statistics show that 75% of snowmobiling fatalities occur off trails; 74% of snowmobiling injuries involve alcohol; 37% of snowmobiling injuries involve excessive speed, and most snowmobiling injuries and deaths occur among males, aged 20-34.

- **Let someone know where you're going and when you expect to be back. A good description, even a picture of your sled, can be very important, and remember never ride alone.**
- **Watch your fuel supply. Head out only to a point where the fuel gauge reads one-half; then follow your track trailhead.**
- **Be on constant watch for:**
 - **Obstacles hidden in the snow**
 - **Trees and branches on the trail**
 - **Slow grooming equipment**
 - **Oncoming sleds, skiers and walkers**
 - **Wildlife**
 - **Trail wash outs and flooding**
 - **Snow banks and moguls**
 - **Road and railway crossings**
 - **Unexpected corners, intersections and stops**
 - **Bridges, open water and unsafe ice**
 - **Logging operations**

Avalanche Danger

Avalanches are very real, life-threatening winter hazards. Always avoid areas where avalanches are known to occur.

- **Spend as little time as possible on open, steep slopes.**
- **Don't drive across long, open slopes where avalanches have occurred.**
- **Avoid crossing steep-sided hills. If you must cross, stay on the side where the wind blows.**
- **Stay out of narrow, steep canyons – getting out may be difficult.**
- **Snowmobile in timbered areas, along ridges, and on rocky outcrops where snow tends to be anchored.**

If you get caught in an avalanche:

- **Call out to others so they can see your course.**
- **Stay clam.**
- **Move away from your machine and equipment.**
- **"Swim" with the avalanche.**
- **Move toward the side of the avalanche – don't "swim" against it.**
- **Before coming to a stop, place your hands over your face to form an air pocket. If the snow is soft you may be able to dig yourself out. Be sure to dig UP! If you are able to create a pocket use gravity to determine "up and down." Don't waste your strength and oxygen by shouting. Sound is easily transmitted into snow but transmits out poorly.**

If you survive the avalanche don't leave others in your party. You might be their only hope. Search for victims by probing with a pole directly downhill from the point they were last seen.

Dress Right!

With high tech winter wear and proper layering, winter comfort is easy.

- **Start with polypropylene and thermal under layers that release moisture while retaining heat.**
- **Add other heat retentive layers depending on the temperature; remember your forward motion will add to the wind chill factor.**
- **Avoid cottons and sweat shirts, which retain moisture, making you cold and clammy which leads to hypothermia.**
- **Try to find suits that are water and wind proof.**
- **Consider wearing a buoyant snowmobile suit if you plan on traveling across ice a buoyant suit will assist to keep you afloat but most of all help to protect you against hypothermia.**
- **All snowmobile suits should have reflective trim for night visibility.**
- **Carry extra clothing, socks, boot liners and mitts for layering.**

Hypothermia

The greatest danger for winter riders is hypothermia. The body loses heat faster than it produces it. Dressing, in layers, can usually prevent hypothermia.

Factors that contribute to hypothermia include:

- **Cold, but not necessarily severe cold.**
- **Wetness from rain, snow, water immersion, or condensed perspiration.**
- **Wind and the wind chill factor.**
- **Exhaustion.**

Symptoms of hypothermia:

- **Uncontrolled shivering.**
- **Vague or slurred speech.**
- **Fumbling hands or stumbling walk.**
- **Memory lapses.**
- **Drowsiness and apparent exhaustion.**

Treatment for hypothermia:

- **Remove the victim from the wind, rain, snow or cold.**
- **Set up a shelter or move to a timbered area.**
- **Remove the person's wet clothing. Put the victim in dry clothing or a dry sleeping bag. Get in the bag with the victim to provide extra warmth.**
- **Give the person warm drinks if possible. NO alcohol.**
- **If the victim is conscious, give him quick energy food (sugar).**
- **Get medical help as soon as possible.**

Frostbite

Frostbite is caused by prolonged exposure of unprotected flesh to freezing temperature. Fingers, toes, and ears are particularly susceptible to frostbite. Tissue damage occurs as the flow of blood to those areas is reduced.

Symptoms of frostbite include loss of feeling and a dead white appearance of the affected area.

To Treat Frostbite:

- **Restore body temperature as rapidly as possible by providing external heat (campfire, hot water bottle, immersion of affected areas in a water bath of less than 110 degrees).**
- **Cover the affected body areas.**
- **Do no rub, vibrate, or apply pressure to frostbitten area.**
- **Do not apply snow or attempt to thaw frostbitten areas in cold water.**

Don't Drink and Ride

Alcohol is involved in most snowmobiling fatalities.

- **Any amount of alcohol impairs your perception, slows your reaction time and limits your ability to control your snowmobile.**
- **Contrary to popular opinion, alcohol increases your susceptibility to cold and hypothermia. This will decrease your chances of survival if you have to wait long for help to arrive.**

Night Riding

Most snowmobiling accidents, including nine out of ten fatalities, occur after dark. Forward visibility is reduced by darkness and it is much more difficult to spot and identify potential hazards in time. Overriding your headlights can also be a serious problem, so slow down when snowmobiling after dark. Becoming disoriented or lost is much more likely at night. Never ride alone at night, and remember to put reflective strips on your clothing and helmet.

Slow Down

Speed is a contributing factor in nearly all fatal snowmobiling accidents. Drive at a speed that will give you enough time to react should you need to change speed or direction quickly. Conditions will dictate what a reasonable speed is. Weather, visibility, trail conditions, snow coverage, and night or day, must be taken into consideration. Remember, even though you feel you are in total control you have to respect how other snowmobilers feel. When meeting and passing other snowmobiles on the trail, do so at a slow and cautious speed. Enter all corners with caution; be ready to react to any situation you may encounter.

Ice and Snowmobiling

Drowning is one of the leading causes of snowmobile fatalities. Avoid riding on frozen lakes and rivers because ice conditions are never a safe bet. Ice conditions change hour by hour. If you travel over lakes and rivers consider a buoyant snowmobile suit, which will assist you to reach the closest ice surface. Always carry a set of picks, which will help you grip the edge of the ice more easily. If you do break through the ice don't panic. The following are tips to help you if you fall through the ice:

- **Kick vigorously into a horizontal position and swim to the nearest ice edge.**
- **Place hands/arms on unbroken ice while kicking hard to propel your body onto the ice, like a seal.**

- **Once clear, stay flat and roll away to stronger ice.**
- **Stand, keep moving and find shelter fast.**

Winter Survival Kit

You can easily snowmobile beyond immediate help so make sure you have a basic repair kit and a survival kit.

Basic Repair Kit:

- **Spare belt**
- **Spare spark plugs**
- **Manufacturer's tool kit**
- **Wrenches**
- **Nuts and bolts for your sled**
- **Tow rope**
- **Pry bar**
- **Duct tape**
- **Wire**
- **Extra ignition key**
- **Work gloves**

Emergency Kit:

- **First aid kit**
- **Extra medications**
- **Sun block**
- **Sharp knife**
- **Saw**
- **Axe**
- **Map**
- **Compass**
- **Mirror**
- **Waterproof matches or lighter**
- **Flashlight/extra batteries**
- **Non-perishable high energy food**
- **Aluminized blanket for extra warmth**
- **Water (pouches)**
- **Colored flag to attract attention**
- **Extra clothing/socks/mittens**
- **Small battery operated radio**

The purchase of a cell phone, global positioning system (GPS), and Avalanche Beacon should be considered as additional safety equipment.

**Washington Military Department,
Emergency Management Division, 2002**