Snowmobile Safety

Thousands of snowmobiling accidents occur in the United States every year resulting in hundreds of injuries and deaths. According to the Morbidity and Mortality Weekly Report issued by the Center for Disease Control (CDC) in 2002-2003, the main causes of deaths resulting from snowmobile accidents was; excessive speed, inattentiveness or careless operation, and inexperience. In states where snowmobiling is a popular form of winter recreation there are many laws and regulations governing the use of these off-road vehicles. All states set a minimum age at which you can operate a snowmobile (with and without supervision), most states require registration of snowmobiles, and many states require or recommend a potential snowmobile operator to take a safety course first.

Table 1 compares snowmobile regulations in eight states: Indiana, Maine, Michigan, Minnesota, Nebraska, Utah, Vermont, and Wisconsin. The availability of information on these states determined their inclusion. In all of the states, registration is required. Other regulations examined were the minimum age to operate; whether safety education is required; what other requirements exist, such as a trail maintenance pass; what, if any, safety equipment is required; and the maximum noise levels allowed.

Vermont Snowmobile Regulations

In Vermont, registration of snowmobiles is required if they will be operated on the public trail system; out-of-state registration is also honored. Registration stickers are issued by the Department of Motor Vehicles (VT DMV), and must be displayed properly on the vehicle. No one under the age of twelve may operate a snowmobile on non-family owned lands without direct supervision of an adult at least 18 years of age. Children under the age of 16 must take a Snowmobile Safety Course to operate a snowmobile without supervision. A Trail Maintenance Assessment/Trail Pass (TMA) must be purchased from a snowmobile club chairperson or a local business contracted to sell TMAs for the club. The revenues are used to maintain trails. It is required for the operator and any passengers of the snowmobile to wear a helmet and protective eye gear, such as a face shield, goggles or glasses. The maximum allowable noise level is 73 decibels on the A scale at 50 feet.

2004 Vermont Snowmobile Law Changes (H.397)

A snowmobile operator does not need a TMA decal to drive on frozen bodies of water unless those water bodies are part of the statewide snowmobile trails system. If an operator is caught driving the machine in an unreasonable way, then they are subject to a $300.00 fine. Operation of a snowmobile without the minimal liability insurance coverage will result in a $500.00 fine.
A snowmobile operator will also be charged a $500.00 fine if they drive the snowmobile during closed season or when authorities have closed the trails during open season. This new law also gives law enforcement the right to perform safety inspections on the machine even if they stop the operator for other violations. Safety inspections may also be conducted in a designated area of the trail by law enforcement officials (VT Dept. of Public Safety, 2007). Snowmobiling while intoxicated (SWI) is illegal, with the same legal blood alcohol limit as DWI, which is 0.08. Penalties may include fines, loss of snowmobiling privileges and imprisonment (VT DMV, 1998). While this statement is still valid, H.397 gives authorities the right to punish the operator under the current DUI laws of the state of Vermont. This could potentially have an effect on the status of operator’s driver’s license in addition to the punishments mentioned above.

Table 1: State Snowmobiling Laws

<table>
<thead>
<tr>
<th>STATE</th>
<th>REGISTRATION REQUIRED</th>
<th>MINIMUM AGE TO OPERATE¹</th>
<th>SAFETY EDUCATION REQUIRED</th>
<th>OTHER REQUIREMENTS</th>
<th>SAFETY EQUIPMENT REQUIRED</th>
<th>NOISE LAWS (MAXIMUM DECIBELS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>Yes</td>
<td>14</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Muffler Required</td>
</tr>
<tr>
<td>Maine</td>
<td>Yes</td>
<td>14</td>
<td>None</td>
<td>Fish and Wildlife Sticker</td>
<td>Helmet when under 18</td>
<td>82 decibels</td>
</tr>
<tr>
<td>Michigan</td>
<td>Yes</td>
<td>12</td>
<td>12 - 17</td>
<td>NA</td>
<td>Helmet for all operators</td>
<td>78 decibels</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Yes</td>
<td>12</td>
<td>12 - 17 ³</td>
<td>Non-Resident State Trail Sticker</td>
<td>Helmet when under 18</td>
<td>78 decibels</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Yes</td>
<td>12</td>
<td>None ⁴</td>
<td>NA</td>
<td>NA</td>
<td>Muffler Required</td>
</tr>
<tr>
<td>Utah</td>
<td>Yes</td>
<td>8</td>
<td>8 – 15 ⁵</td>
<td>NA</td>
<td>Helmet when under 18</td>
<td>Noise Control Device Required</td>
</tr>
<tr>
<td>Vermont</td>
<td>Yes</td>
<td>16 ²</td>
<td>12 - 16</td>
<td>Trail Use Sticker</td>
<td>Approved Helmet &amp; Protective Eye wear</td>
<td>73 decibels</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Yes</td>
<td>12</td>
<td>12 - 15</td>
<td>Non-Resident Trail Use Sticker</td>
<td>Helmets recommended</td>
<td>78 decibels</td>
</tr>
</tbody>
</table>

1. Without supervision
2. Must be 12 to operate snowmobiles at all
3. Effective October 1, 1998, everyone born after December 31, 1979 must have a safety certificate, as well as speeding repeat offenders or those convicted of careless or reckless operation
4. Operators 12 – 15 must have a safety certificate, which requires passing an exam given by the DMV
5. Older operators must have a valid Drivers license or safety certification
Other States

Maine Snowmobile Regulations

Registration of the snowmobile is required for residents and non-residents of the state if they are riding on the state trail system. A resident pays $33 dollars annually for the registration of their machine. Non-residents have three options when purchasing registration from the state. “A 3 consecutive day registration is $43; a 10 consecutive days is $58 and a full season is $68. (Plus an agent's processing fee of $1-$2)” (Maine Snowmobile Association, 2008). Maine allows children 10 years of age or older to operate a snowmobile on state land if they are accompanied by an adult. However, a child must be 14 years of age or older before they are allowed to cross a public way on a snowmobile. All snowmobile operators under the age of 18 must wear a helmet when riding on a trail funded under the Snowmobile Trail Grant program (MSA, 2008). Currently, there are no speed limits on the state’s trail system. Operators are urged to use “reasonable and prudent speed for the existing conditions” (MSA, 2008). Maine has an Operating under the Influence (OUI) law that is identical to Vermont’s SWI law.

The Maine Department of Inland Fisheries and Wildlife offer safety tips on their website under “Snowmobile Laws and Rules” in order to give snowmobile operators the knowledge they need in emergency situations.

New Hampshire Regulations

Registration of snowmobiles is required in the state if operated off the owner’s land because the machine falls under the category of OHRV (Off Highway Recreational Vehicles); however, registration is not required for youth model snowmobiles which qualify as such if the machines are less than 125cc. (NH Fish & Game Dept.). Trail permits are not required when operating a snowmobile in the state. Helmets are required only for operators and passengers who are 17 years old or younger. “There is a 10mph speed limit at trail junctions, parking lots or when passing trail grooming equipment. Speed limit is 45mph unless otherwise posted. The speed limit is 10mph when within 150 feet of any fisherman, their shanty or fishing hole. Also, “speed should be reasonable and prudent for conditions then existing at the time of operation” (NH Fish & Game Dept.).

Michigan Regulations

Both residents and non-residents of the state must have a valid registration for their snowmobile prior to operation. Registration within the state is obtained through the Secretary of the State and is valid for three years at a time. Non-residents need to have either a valid registration from their home state or may purchase one through the Secretary of State. If an individual chooses to operate their snowmobile within the state on state trails they must also obtain a trail permit sticker, which is valid for a full year. It is illegal for anyone to operate a snowmobile under the influence of drugs or alcohol. There are no set speed limits on the trails and it is at the discretion of the authorities to decide whether an operator is speeding, which is qualified as a speed that exceeds the amount appropriate for the existing conditions of the trail.

There are also age restrictions regarding the operation of a snowmobile in the state. Persons under the age of 12 are not allowed to operate a snowmobile, unless under the direct supervision
of an adult. In addition, persons who are 12 years or older but not 17 can not operate a snowmobile unless they are accompanied by a person 21 years or older; however, if those persons between the ages of 12 and 17 have a snowmobile safety certificate then they can operate the snowmobile without the supervision of an adult. A Department of Transportation approved helmet is a mandatory requirement for all operators and passengers of snowmobiles.

The Exploring the North is a traveler’s guide to the state of Michigan, which provides recommended safety gear tips to individuals who choose to operate a snowmobile within the state. Those items are:

**RECOMMENDED EQUIPMENT FOR OPERATORS AND PASSENGERS**

1. An insulated snowmobile suit.
2. Sturdy gloves that provide both hand and finger protection and a secure grip on the controls.
3. Insulated boots for ankle and foot protection.

**RECOMMENDED EMERGENCY EQUIPMENT**

1. Tool kit (knife, pliers, adjustable wrench, electrical tape, plug wrench, and screwdriver).
2. Flashlight (extra batteries and bulb).
3. Matches (candles).
4. Disposable blanket (heat reflecting "space" type).
5. First aid kit.
6. Snowshoes
7. Package of fire starters

(Exploring the North, 1998)

**Indiana Regulations**

Residents and non-residents of the state are required to hold valid registration when operating a snowmobile on state trails. The registration fee is $30.00 and must be renewed every three years. Non-residents with registration from their home state or country are allowed to operate their machine on state trails but for no longer than 20 days per year. Any individual younger than 14 years of age cannot operate on state trails without supervision by someone 18 years or older; the only exception to this rule is family-owned land. There is no set speed limit in the state, however those that are operating at speeds greater than what is considered proper for trail conditions is in violation of the law. Operating under the influence of drugs and/or alcohol are also a violation of state law and is punished as a Class B misdemeanor, which means the operator is subject to imprisonment for no more than 180 days and not fined more than $1,000 (Indiana Department of Natural Resources).

**Minnesota Regulations**

The state requires trail permits for all snowmobiles owned by residents and non-residents of the state, which are purchased for $16 per season. Registration is also required for each snowmobile and may be purchased for $48.50 every three years. Non-residents who have a valid registration
from their home state or country are legal in this state. All resident snowmobile operators born after 12/31/76 are required to have a Snowmobile Safety Certificate. Helmets are required for all riders who are 18 years of age or younger. The speed limit of the nearest road sets the speed limit for the particular trail in question. The maximum speed allowed within the state is 50mph (American Council of Snowmobile Associations).

Nebraska Regulations

All snowmobiles operated within the state require some sort of registration. Registrations from other states or countries are valid in the state. Registration from the state is available at $17.50 and must be renewed every two years. There are no trail permit requirements for the state trails. Helmets are a mandatory requirement for all riders. No individual under 12 years of age is allowed to operate a snowmobile unless under supervision of an adult 18 years of age or older. Individuals between the ages of 12 and 15 may operate a snowmobile only if they have a valid Snowmobile Safety Certificate and must be in the company of an individual 14 years or older who holds a valid safety certificate as well. Violation of the state snowmobile laws is a class 3 misdemeanor, which means that if convicted the maximum penalty could be 3 months imprisonment, a $500.00 fine or both (Nebraska Game and Parks Commission).

Fatal Accident Information

Despite these rules and regulations, accidents do happen and death or serious injuries often result. In Alaska, for 1993-1994, there were higher injury death and hospitalization rates reported for snowmobiles (off-road vehicles) than for on-road motor vehicles. Over half of these snowmobile injury-induced deaths involved natural objects such as boulders, rivers, and ravines. Of the people who died as a result of a snowmobile accident and for whom blood alcohol levels were available, 65% had BAC levels of 0.10 or higher (Landen, et al., 1999).

In Maine, snowmobiling accidents became more prevalent in the 1995-1996 winter season; however, snowmobile registration rates also rose to record levels. Of the 1,355 snowmobile accidents, which occurred between the years of 1991 and 1996, 80% were due to excessive speed or careless operation; thirteen per cent were due to alcohol intoxication (CDC, 1997).

New Hampshire reported 165 non-fatal injuries and 12 deaths resulting from snowmobile accidents in a fourteen-month period (January 1989 to February 1992). These accidents disproportionately involve males between the ages of 20 and 29. According to the Center for Disease Control (CDC), “67% of all fatal accidents were alcohol-related and 67% were associated with excessive speed” (CDC 1995).

In Wisconsin, the historic leading causes of snowmobile accidents were excessive speed and alcohol intoxication. The 1997-98 Snowmobile Fatal Accident Report showed that there were 21 fatal snowmobile accidents. For those years the two main causes of accidents were collision with fixed objects and falling through ice. Also interesting to note is that “80% of operators involved in fatal accidents had not received Snowmobile Safety Training” (Wisconsin Department of Natural Resources).
Figure 3: Snowmobile fatalities between 1990 and 2003 for Maine, New Hampshire and Vermont.


The number of fatalities from snowmobiling in Maine, New Hampshire, and Vermont peaked with a total of 28 deaths in the 2002-2003 winter season. The Maine Department of Inland Fisheries and Wildlife has reported seven fatalities for the 2005-2006 season and six for the 2006-2007 season.

Insurance

Vermont requires liability coverage of $25,000 for one person and $50,000 for two or more persons injured or killed, and $10,000 for property damaged in one accident (Vermont Department of Motor Vehicles). Maine, New Hampshire and Michigan have no snowmobile insurance requirements (Maine Snowmobile Association, New Hampshire Fish and Game Department, and Michigan Department of Natural Resources). Michigan and Indiana, however, do require dealers that rent or lease snowmobiles to carry liability insurance of $20,000.00 because of bodily injury to or death of 1 person in any 1 accident and subject to that limit for 1 person, $40,000.00 because of bodily injury to or death of 2 or more persons in any 1 accident, and $10,000.00 because of injury to or destruction of property of others in any 1 accident.
Dealers may alternatively require anyone renting or leasing a snowmobile to carry insurance at or above these levels.

References:


Minnesota Department of Natural Resource, “Snowmobile Operators,” and other sites
Available: http://www.dnr.state.mn.us/trails_and_waterways/regulations/snowmobile/

http://ngp.ngpc.state.ne.us/parks/snowmobile.html

New Hampshire Fish and Game Department. “New Hampshire Off Highway Recreational
www.wildlife.state.nh.us/OHRV/2008_Laws_Digest.pdf

Vermont Association of Snow Travelers, “What you need to snowmobile in Vermont,” and other

www.dps.state.vt.us/vtsp/snow/

State of Vermont Department of Motor Vehicles, “Vermont Snowmobile Operator’s Manual,”
retrieved April 28, 2008, from
http://www.aot.state.vt.us/DMV/documents/Manuals/Snowmobile/TAVN035Snowmobile
Manual2006.pdf


Vermont Department of Public Safety, “Vermont Snowmobile Safety.” Retrieved April 28, 2008 from
http://www.dps.state.vt.us/vsp/register.htm

Wisconsin Department of Natural Resources, Enforcement Division, “Snowmobile Safety
Education Course Information” Available:
http://www.dnr.state.wi.us/org/caer/cs/registrations/snow.htm

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