

Ice Safety Tips

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www.mndnr.gov/safety/ice (for statistics, videos and safety tips)

Here are a few ice safety tips that winter sports enthusiasts should keep in mind before venturing out on a frozen lake or pond. Remember the thicknesses below are merely guidelines for new clear solid ice and that many factors other than thickness can cause ice to be unsafe. It's important to note that ice that is white or milky is only about one-half as strong as new clear ice.

4" of new clear ice is the minimum thickness for travel on foot.

5" is minimum for snowmobiles and ATVs.

8"- 12" for cars or small trucks.

Even if the ice seems to be thick enough, there are other factors such as currents, wind, water chemistry and wildlife that can affect the relative safeness of ice.

Check for known thin ice areas with a local resort or bait shop. Test the thickness yourself using an ice chisel, ice auger or even a cordless 3/8 inch drill with a long bit.

Refrain from driving on ice whenever possible. If you must drive a vehicle, be prepared to leave it in a hurry - keep windows down, unbuckle your seat belt and have a simple emergency plan of action you have discussed with your passengers.

Stay away from alcoholic beverages. Even "just a couple of beers" are enough to cause a careless error in judgment that could cost you your life. And contrary to common belief, alcohol actually makes you colder rather than warming you up.

Don't "overdrive" your snowmobile's headlight. At even 30 miles per hour, it can take a much longer distance to stop on ice than your headlight shines. Many fatal snowmobile through-the-ice accidents occur because the machine was traveling too fast for the operator to stop when the headlamp illuminated the hole in the ice.

Wear a life vest under your winter gear or one of the new flotation snowmobile suits. And it's a good idea to carry a pair of ice picks that may be home made or purchased from most well stocked sporting goods stores that cater to winter anglers. It's amazing how difficult it can be to pull yourself back onto the surface

of unbroken but wet and slippery ice while wearing a snowmobile suit weighted down with 60 lbs of water. The ice picks really help pulling yourself back onto solid ice. **CAUTION:** Do **NOT** wear a flotation device when traveling across the ice in an enclosed vehicle!

What should you do if a companion falls through thin ice?

- 1) Keep calm and think out a solution.
- 2) Don't run up to the hole. You'll probably break through and then there will be two victims.
- 3) Use some item on shore to throw or extend to the victim to pull them out of the water such as jumper cables or skis, or push a boat ahead of you.
- 4) If you can't rescue the victim immediately, call 911. It's amazing how many people carry cell phones.
- 5) Get medical assistance for the victim and handle them gently. People who are subjected to cold water immersion but seem fine after being rescued can suffer a potentially fatal condition called "after drop" that may occur when cold blood that is pooled in the body's extremities starts to circulate again as the victim starts to re-warm.

What if YOU fall in?

Try not to panic. Instead, remain calm and turn toward the direction you came from. Place your hands and arms on the unbroken surface of the ice (here's where the ice picks come in handy.) Work forward on the ice by kicking your feet. If the ice breaks, maintain your position and slide forward again. Once you are lying on the ice, don't stand. Instead, roll away from the hole. That spreads out your weight until you are on solid ice. This sounds much easier than it really is to do.

The best advice is don't put yourself into needless danger by venturing out too soon or too late in the season. No angler, no matter how much of a fishing enthusiast, would want to die for a crappie.

For more information on ice safety contact the MN DNR and ask for our free ice safety publications which include the brochures, "Danger, Thin Ice" and "Hypothermia the Cold Facts" and the wallet-sized reference card and 11X14 posters titled, "Minimum Recommended Ice Thicknesses". TC Metro 651-296-6157 or toll free outside the metro area 1-888-646-6367 or email info@dnr.state.mn.us .

Go to the DNR's web site: www.mndnr.gov/safety/ice to download ice safety tips and to see a nine minute DNR video on ice safety.

**Minnesota Ice-Related Fatalities
1976-2009**

MN DNR-Boat and Water Safety Section
500 Lafayette Rd., St. Paul, MN 55155-4046

<u>No.</u>	<u>Date</u>	<u>County</u>	<u>Water Body</u>	<u>Age</u>	<u>Accident Type</u>
1976					
1.	1/22	St. Louis	Miller Creek	(6)	toboggan thru ice
2.	1/22	St. Louis	Miller Creek	(5)	toboggan thru ice
3.	3/17	Murray	Lime Creek	(6)	broke thru ice
4.	4/3	Aitkin	Big Sandy Lake	(37)	snowmobile thru ice
5.	4/3	Aitkin	Big Sandy Lake	(7)	snowmobile thru ice
6.	4/3	Cook	McFarland Lake	(39)	snowmobile thru ice
7.	11/21	Stearns	Lake Crystal	(??)	broke thru ice
8.	11/21	Wilkin	Otter Tail River	(??)	broke thru ice
1977					
1.	2/10	Nobles	Lake Okabena	(15)	broke thru ice---fishing
2.	2/10	Nobles	Lake Okabena	(67)	broke thru ice---fishing
3.	2/20	Itasca	Mississippi River	(6)	broke thru ice
4.	4/03	Koochiching	Gravel Pit	(??)	broke thru ice
1978					
1.	1/07	Wright	Clearwater Lake	(60)	snowmobile thru ice
2.	11/30	Cass	Big Thunder Lake	(25)	snowmobile thru ice
3.	11/30	Cass	Big Thunder Lake	(19)	snowmobile thru ice
1979					
1.	2/14	Hennepin	Powderhorn Lake	(9)	fell from ice to open water
2.	11/15	Murray	Hole/trash burned	(2)	fell in hole/ice covered
3.	11/18	Traverse	Traverse Lake	(41)	fell into ice fishing hole
4.	12/1	Itasca	Reiley Lake	(20)	snowmobile thru ice
5.	12/1	Otter Tail	Lake Lizzie	(69)	snowmobile thru ice
6.	12/3	Itasca	Big Splithand	(8)	truck thru ice
7.	12/16	Hennepin	Lake Minnetonka	(11)	broke thru ice---skating
8.	12/18	Scott	Prior Lake	(19)	truck thru ice
9.	12/23	Todd	Guernsey Lake	(31)	car thru ice
10.	12/23	Wright	Dog Lake	(21)	driving on ice
11.	12/25	Pope	Lake Ben	(50)	walking across lake
12.	12/27	Washington	Big Carnelian	(18)	car thru ice
1980					
1.	1/1	Meeker	Collinwood Lake	(??)	car thru ice
2.	1/7	Anoka	Coon Lake	(17)	snowmobile thru ice
3.	2/6	Murray	Lake Shetek	(24)	snowmobile thru ice
4.	2/16	Crow Wing	Cross Lake	(53)	snowmobile thru ice
5.	3/28	Hennepin	Lake Minnetonka	(71)	broke thru ice/heart attack
6.	11/12	Itasca	Prairie Lake	(6)	broke thru ice
7.	11/29	Hennepin	Powderhorn Lake	(5)	broke thru ice
8.	12/7	Aitkin	Lake Minnewawa	(??)	snowmobile thru ice
9.	12/6	Douglas	Lake Brophy	(22)	snowmobile thru ice
10.	12/7	Crow Wing	Whitefish Lake	(70)	broke thru ice
11.	12/21	Benton	Little Rock Lake	(59)	car thru ice
12.	12/26	Grant	Pomme De Terre Lake	(19)	car thru ice

<u>No.</u>	<u>Date</u>	<u>County</u>	<u>Water Body</u>	<u>Age</u>	<u>Accident Type</u>
1981					
1.	1/13	Goodhue	Lake Pepin	(78)	car thru ice
2.	1/24	Stearns	Lake Francis	(36)	truck thru ice
3.	1/30	Meeker	Lake Washington	(64)	van thru ice
4.	2/2	Winona	Mississippi River	(37)	car thru ice
5.	2/2	Martin	Lake George	(14)	snowmobile thru ice
6.	2/17	LeSueur	Gorman Lake	(14)	truck thru ice
7.	2/16	LeSueur	Gorman Lake	(38)	truck thru ice
8.	3/28	Cass	Lake Inguadona	(48)	snowmobile thru ice
9.	3/28	Cass	Lake Inguadona	(15)	snowmobile thru ice
10.	12/5	Crow Wing	Platte Lake	(37)	snowmobile thru ice
11.	12/20	Aitkin	Mille Lacs Lake	(68)	snowmobile thru ice
12.	12/20	Aitkin	Mille Lacs Lake	(66)	snowmobile thru ice
13.	12/18	St. Louis	Lake Namakan	(58)	snowmobile thru ice
14.	12/18	St. Louis	Lake Namakan	(58)	snowmobile thru ice
15.	12/23	Aitkin	Mille Lacs Lake	(21)	jeep thru ice
1982					
1.	11/5	Mahnomen	Drainage Pond	(7)	broke thru ice
2.	11/13	Hennepin	Minnehaha Creek	(3)	broke thru ice
3.	11/30	Itasca	Swan Lake	(26)	broke thru ice
4.	11/30	Itasca	Swan Lake	(31)	broke thru ice
5.	12/12	Winona	Mississippi River	(6)	broke thru ice
6.	12/15	St. Louis	Shagawa Lake	(33)	car thru ice
7.	12/20	Yellow Medicine	Tyson Lake	(11)	broke thru ice
8.	12/22	Wright	Dean Lake	(25)	broke thru ice
9.	12/27	Becker	Cotton Lake	(27)	broke thru ice
1983					
1.	1/5	Beltrami	Lake Irvine	(55)	car thru ice
2.	1/8	Pennington	Red Lake River	(76)	broke thru ice
3.	1/14	Waseca	Lake Elysian	(30)	snowmobile thru ice
4.	1/15	Olmsted	Lake Zumbro	(28)	snowmobile thru ice
5.	1/28	Morrison	Sullivan Lake	(29)	snowmobile thru ice
6.	2/28	Stearns	Sauk River	(4)	broke thru ice
7.	3/10	Meeker	Big Swan Lake	(74)	snowmobile thru ice
8.	3/10	Meeker	Big Swan Lake	(71)	snowmobile thru ice
9.	3/11	Hennepin	Shingle Creek	(10)	broke thru ice
10.	3/12	Anoka	Pond	(2.5)	broke thru ice
11.	3/19	St. Louis	Lake Vermilion	(32)	snowmobile thru ice
12.	3/19	St. Louis	Lake Vermilion	(5)	snowmobile thru ice
13.	3/19	St. Louis	Lake Vermilion	(3)	snowmobile thru ice
1984					
1.	2/18	Wright	Mississippi River	(64)	fell in ice fishing hole
2.	3/31	Kittson	Gravel Pit	(20)	crossing ice w/loader
3.	11/14	Big Stone	Minnesota River	(21)	broke thru ice
4.	11/18	St. Louis	Bailey Lake	(48)	car thru ice
5.	12/8	Crow Wing	Upper Hay Lake	(37)	snowmobile thru ice
6.	12/13	Pine	Pokegama Lake	(51)	snowmobile thru ice
7.	12/14	Hennepin	Lake Calhoun	(??)	broke thru ice
1985					
1.	1/6	Stearns	Mississippi River	(4)	broke thru ice
2.	11/22	St. Louis	Pelican Lake	(65)	broke thru ice

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1986					
1.	1/19	Renville	Hawk Creek	(2)	broke thru ice
2.	3/16	Lake	Lake Superior	(23)	snowmobile thru ice
3.	4/6	Hennepin	Mississippi River	(3)	broke thru ice
4.	12/25	Rice	Circle Lake	(11)	car thru ice
5.	12/25	Rice	Circle Lake	(16)	car thru ice
6.	12/26	McLeod	Lake Marion	(29)	car thru ice
1987					
1.	1/4	Pope	Lake Minnewaska	(30)	car thru ice
2.	1/5	Kandiyohi	Diamond Lake	(66)	car thru ice
3.	1/10	Hubbard	Second Crow Wing Lk.	(41)	snowmobile thru ice
4.	1/13	Washington	St. Croix River	(30)	3-wheeler thru ice
5.	1/29	Goodhue	Pond	(22)	snowmobile thru ice
6.	2/5	Goodhue	Cannon River	(4)	broke thru ice
7.	3/2	Mille Lacs	Mille Lacs Lake	(14)	broke thru ice
8.	3/15	Scott	Dog Patch Lake	(14)	broke thru ice
9.	3/21	Stearns	Horseshoe Lake	(71)	broke thru ice
10.	12/1	Blue Earth	Outdoor Pool	(5)	broke thru ice
11.	12/3	Becker	Big Toad Lake	(59)	x-co. skier/broke thru ice
12.	12/6	Washington	Sunfish Lake	(47)	x-co. skier/broke thru ice
13.	12/27	Lake of the Woods	Lake of the Woods	(59)	tracked vehicle thru ice
14.	12/31	Cass	Gull Lake	(21)	snowmobile thru ice
1988					
1.	2/20	Lake	Fall Lake (Dam)	(54)	snowmobile thru ice
2.	2/20	Lake	Fall Lake (Dam)	(55)	snowmobile thru ice
1989					
1.	3/24	Isanti	Rum River	(21)	snowmobile into open water
2.	4/7	Pine	Snake River	(2)	broke thru ice
3.	4/9	St. Louis	Midway River	(4)	broke thru ice
4.	12/6	Lake	Fall Lake (Dam)	(18)	snowmobile thru ice
5.	12/15	Ramsey	White Bear Lake	(25)	truck thru ice
6.	12/16	Ramsey	White Bear Lake	(29)	car thru ice
7.	12/31	Wright	Clearwater Lake	(36)	van thru ice
1990					
1.	1/13	Crow Wing	Upper Whitefish Lk.	(27)	truck thru ice
2.	1/13	LeSueur	Lake Washington	(30)	snowmobile thru ice
3.	1/20	St. Louis	Wynne Lake	(27)	snowmobile thru ice
4.	1/27	Crow Wing	Pequot Lakes	(34)	snowmobile thru ice
5.	12/3	Blue Earth	Loon Lake	(??)	fishing/broke thru ice
6.	12/12	Ramsey	Holding Pond	(7)	broke thru ice
7.	12/15	Aitkin	Sandy River	(50)	snowmobile thru ice
1991					
1.	11/8	Brown	Minnesota River	(64)	hunting/broke thru ice
2.	12/1	Pope	Lake Minnewaska	(24)	snowmobiling/drove into open water
3.	12/22	Blue Earth	Maple River	(2)	broke thru ice
1992					
1.	1/4	Pope	Lake Amelia	(74)	driving tractor on ice
2.	11/9	Sherburne	Rice Lake	(18)	broke thru ice deer hunting
3.	12/5	Anoka	Coon Lake	(16)	snowmobile thru ice
4.	12/17	Isanti	Isanti Brook	(60)	broke thru ice

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5.	12/19	Dakota	Crystal Lake	(27)	snowmobile thru ice
6.	12/23	Chisago	Green Lake	(11)	SUV broke thru ice (passenger)
1993					
1.	1/22	Chisago	Goose Lake	(42)	snowmobile thru ice
2.	3/14	Benton	Little Rock Lake	(22)	snowmobile thru ice in channel
3.	11/28	Chisago	Rush Lake	(30)	snowmobile thru ice
1994					
1.	1/3	Mille Lacs	Mille Lacs Lake	(30)	truck thru ice
2.	2/6	Todd	Gurney Lake	(65)	truck thru ice
3.	3/9	Lake of the Woods	Lake of the Woods	(59)	broke thru ice
4.	3/14	Redwood	Cottonwood River	(2)	broke thru ice
5.	12/11	Hennepin	Lake Minnetonka	(32)	snowmobile thru ice
1995					
1.	1/19	St. Louis	Cloquet River	(30)	snowmobile into open water
2.	2/12	Hennepin	Mississippi River	(26)	ice jumping – fell into water
3.	3/8	Waseca	Lake Elysian	(50+?)	snowmobile thru ice
4.	11/27	Meeker	Youngstrom Lake	(27)	snowmobile thru ice
5.	12/11	Dakota	Lake Marion	(17)	snowmobile thru ice
6.	12/14	Goodhue	Spring Creek	(5)	broke thru ice
7.	12/22	Otter Tail	Battle Lake	(44)	snowmobile thru ice
8.	12/26	Jackson	Round Lake	(38)	truck thru ice
9.	12/28	Kanabec	Farm pond	(33)	bobcat thru ice---clearing skating rink for kids on pond
1996					
1.	1/15	Carver	Lake Waconia	(41)	fell into ice fishing hole (spearing)
2.	4/5	Kandiyohi	Golden Pond	(68)	broke thru ice
3.	4/13	St. Louis	Lake Vermilion	(46)	snowmobile into open water
4.	12/22	St. Louis	Ash River	(63)	snowmobile groomer thru ice
5.	12/30	Lake of the Woods	Lake of the Woods	(63)	modified (ice fishing) van thru ice
6.	12/30	Lake of the Woods	Lake of the Woods	(68)	modified (ice fishing) van thru ice
7.	12/30	Lake of the Woods	Lake of the Woods	(71)	modified (ice fishing) van thru ice
8.	12/30	Lake of the Woods	Lake of the Woods	(65)	modified (ice fishing) van thru ice
1997					
1.	4/5	Crow Wing	Big Mahnomen Lake	(17)	broke thru ice
2.	4/12	Koochiching	Rainy Lake	(81)	ATV thru ice
3.	4/14	Murray	Lake Shetek	(57)	attempted dog rescue (both drown)
4.	11/14	Rice	Holding Pond	(31)	snowmobile thru ice
5.	11/18	Lake	Wood Lake	(63)	broke thru ice
6.	12/13	Cass	Leech Lake	(48)	snowmobile thru ice
7.	12/28	Hennepin	Lake Minnetonka	(18)	snowmobile thru ice
8.	12/28	Hennepin	Lake Minnetonka	(19)	snowmobile thru ice
1998					
1.	1/30	St. Louis	Colby Lake	(23)	snowmobile thru ice
2.	3/25	Hennepin	Powderhorn Lake	(8)	broke thru ice
3.	11/18	Clearwater	Lake Six	(4)	broke thru ice
4.	11/18	Clearwater	Lake Six	(2)	broke thru ice
5.	12/31	Itasca	Lake Winnibigoshish	(34)	motor vehicle thru ice
6.	12/31	Itasca	Lake Winnibigoshish	(36)	motor vehicle thru ice

<u>No.</u>	<u>Date</u>	<u>County</u>	<u>Water Body</u>	<u>Age</u>	<u>Accident Type</u>
1999					
1.	1/15	Polk	Red River	(21)	snowmobile over dam into water
2.	2/5	Hubbard	3 rd Crow Wing Lake	(33)	snowmobile into open water
3.	2/7	St. Louis	Cloquet River	(39)	snowmobile into open water
4.	2/27	Cass	Lake Winnibigoshish	(30)	motor vehicle thru ice
5.	2/27	Cass	Lake Winnibigoshish	(5)	motor vehicle thru ice
6.	3/9	Waseca	Lake Elysian	(45)	snowmobile into open water
7.	12/17	Hubbard	Fish Hook River	(39)	broke thru ice
8.	12/31	St. Louis	Wild Rice Lake	(51)	motor vehicle thru ice
2000					
1.	1/2	Big Stone	Big Stone Lake	(64)	snowmobile thru ice
2.	2/26	Koochiching	Rainy Lake	(7mos)	truck thru ice
3.	11/26	Anoka	Coon Creek	(5)	broke thru ice
2001					
1.	3/24	Aitkin	Mississippi River	(35)	snowmobile thru ice
2.	4/5	Renville	Ditch	(5)	broke thru ice
3.	4/5	Renville	Ditch	(8)	broke thru ice
4.	12/15	Sherburne	Fremont Lake	(18)	snowmobile thru ice
2002					
1.	1/1	Mille Lacs	Mille Lacs Lake	(80)	snowmobile thru ice
2.	3/2	Crow Wing	N. Long Lake	(47)	ATV thru ice
3.	4/6	Cass	Leech Lake	(45)	truck thru ice
4.	4/6	Cass	Leech Lake	(49)	truck thru ice
5.	11/19	Anoka	Pond	(5)	broke thru ice
6.	11/19	Anoka	Pond	(6)	broke thru ice
7.	11/19	Anoka	Pond	(2)	broke thru ice
8.	12/20	Aitkin	Farm Island Lake	(49)	SUV thru ice
9.	12/20	Aitkin	Farm Island Lake	(37)	SUV thru ice
10.	12/25	Jackson	Round Lake	(63)	ATV thru ice
11.	12/27	Waseca	Clear Lake	(85)	broke thru ice
12.	12/29	Anoka	Coon Lake	(21)	ATV thru ice
2003					
1.	1/23	Hennepin	Lake Minnetonka	(17)	car thru ice*
2.	1/23	Hennepin	Lake Minnetonka	(16)	car thru ice
3.	11/18	Becker	Wettles Lake	(19)	attempted dog rescue
* death likely due to hypothermia					
2004					
1.	3/2	Ramsey	Long Lake	(46)	snowmobile thru ice
2.	3/23	Cook	Lake Saganaga	(38)	snowmobile thru ice
3.	12/18	St. Louis	Lake Vermilion	(65)	tracked vehicle thru ice
4.	12/30	Grant	Pelican Lake	(25)	truck thru ice
2005 - No ice-related drownings or deaths occurred in this year					
2006					
1.	1/19	Kandiyohi	Green Lake	(20)	snowmobile into open water
2.	1/30	Otter Tail	Pelican Lake	(25)	snowmobile thru ice
3.	11/22	Beltrami	First Thunder's Lake	(2)	broke thru ice
4.	11/22	Beltrami	First Thunder's Lake	(4)	broke thru ice
5.	12/6	St. Louis	Burntside Lake	(66)	snowmobile thru ice
6.	12/10	Crow Wing	Round Lake	(21)	ATV thru ice
7.	12/17	Ramsey	Goose Lake	(21)	broke thru ice

<u>No.</u>	<u>Date</u>	<u>County</u>	<u>Water Body</u>	<u>Age</u>	<u>Accident Type</u>
2007					
1.	1/14	LeSueur	Lake Tetonka	(18)	snowmobile into open water
2.	1/15	Hennepin	Lake Minnetonka	(56)	snowmobile thru ice
3.	1/21-22	Mille Lacs	Lake Mille Lacs	(28)	truck through ice*
* death due to hypothermia					
2008					
1.	1/11	Hennepin	Mississippi River	(29)	fell into open water *
2.	1/13	Cass	Leech Lake	(36)	truck thru ice into shallow water*
3.	2/3	Itasca	Mississippi River	(24)	fell into open water *
4.	12/7	Hennepin	Medicine Lake	(56)	broke thru ice while skating (P)
5.	12/9	Hennepin	Mississippi River	(39)	broke thru ice
* death due to hypothermia					

2009 - No ice-related drownings or deaths occurred as of this summary

Minnesota Ice Fatality Summary Information (thru winter of 08-09)

Fatalities by Winter Season (November through April)

76-77	6	83-84	2	90-91	3	97-98	7	04-05	2
77-78	1	84-85	6	91-92	4	98-99	10	05-06	2
78-79	3	85-86	4	92-93	7	99-00	4	06-07	8
79-80	16	86-87	12	93-94	5	00-01	4	07-08	3
80-81	16	87-88	7	94-95	4	01-02	5	08-09	2
81-82	6	88-89	3	95-96	9	02-03	10		
82-83	22	89-90	8	96-97	8	03-04	3		

Average Number of Deaths By Season

Average 76-77 thru 08-09 (212 deaths / 33 seasons) = 6.4 deaths per winter season
 Average 99-00 thru 08-09 (43 deaths / 10 seasons) = 4.3 deaths per winter season
 Average 04-05 thru 08-09 (17 deaths / 5 seasons) = 3.4 deaths per winter season

Mode of Travel – 04-05 thru 08-09 seasons (17 deaths in 5 seasons)

Snowmobile or ATV.....	7 (41%)
Other Motor Vehicle	4 (24%)
On Foot	6 (35%)
	<u>17 (100%)</u>

Deaths by County – 04-05 thru 08-09 seasons (17 deaths in 5 seasons)

Hennepin.....	4
Beltrami & St. Louis.....	2 ea
Cass, Crow Wing, Grant, Itasca, Kandiyohi, LeSueur, Mille Lacs, Otter Tail & Ramsey	1 ea

Victim's Age - 04-05 thru 08-09 seasons (17 deaths in 5 seasons)

Less than 13.....	2
13-17.....	0
18-29.....	9
30-39.....	2
40-49.....	0
50-59.....	2
60 and older.....	<u>2</u>
	17