



## DRIVING ON ICE?

Don't drive on the ice if you can possibly avoid it. If you must, follow these safety tips:

- **Stay off the ice at night**, especially during a snowfall or foggy conditions. If that's unavoidable, be extremely cautious and drive slowly since holes can open up quickly.
- **Roll a window down and unlock doors** or keep a door slightly ajar to speed escape.
- Don't wear a life vest while riding inside a vehicle. The extra bulk could hamper your escape through a window.
- **Don't go back into a partially submerged vehicle** to retrieve equipment or other belongings.

## VEHICLE ESCAPE

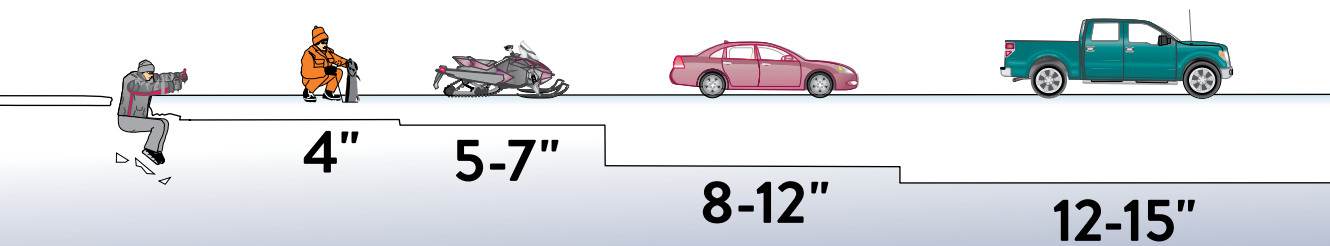
If your car or truck breaks through the ice:

- **Immediately attempt to escape through a door or side window.** The vehicle will stay afloat for a few seconds to a few minutes.
- **If windows and doors won't open, try to kick out a side window.**
- **If the car begins to sink, find the door handle and keep trying to get a door or window open.** As water fills the vehicle it should become somewhat easier to open a door.
- **Push open the door and exit the vehicle.** Your vehicle may have landed on its roof. To get your bearings, let your natural buoyancy guide you as you swim toward the surface.

Think twice before driving on ice.

## ICE IS NEVER 100% SAFE!

Minimum guidelines for new clear ice only



### BOAT AND WATER SAFETY

500 Lafayette Road  
 St. Paul, MN 55155-4040  
 888-MINNDNR or 651-296-6157  
[www.mndnr.gov/boatingsafety](http://www.mndnr.gov/boatingsafety)

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## ICE SAFETY TIPS

Ice is never 100 percent safe. Take these steps to minimize risk when recreating on frozen bodies of water:

- **Check the thermometer, not the calendar.** Air temperature and recent weather patterns can significantly impact ice quality. Just because the ice was safe on a certain date last year doesn't mean it will be safe this year.
- **Check with local experts and sources for current ice reports** and to learn about any known hazardous areas.
- **Let someone know where you are going and when you expect to be back.** Carry a cell phone and/or personal locator beacon with you in case of trouble.
- **Wear a life jacket or float coat when you are on the ice (except when in a vehicle).** If you fall in, a foam-filled vest or coat will keep your head above water and provide some insulation against the effects of cold water.
- **Always bring an ice safety kit with you on the ice: rope, ice picks, ice chisel or drill and tape measure.** Check ice thickness at regular intervals. Know how to use the ice picks to rescue yourself and the rope to rescue others.



## THE COLD FACTS ABOUT ICE

You can't judge ice conditions just by appearance or thickness. Many other factors, including water depth, size of water body, water chemistry, currents, snow cover, age of ice, and local weather combine to determine its strength.

New ice is usually stronger than old ice. Four inches of clear, newly formed ice may support one person on foot, while a foot or more of old, partially thawed ice may not.

Ice seldom freezes uniformly. It may be a foot thick in one location and only an inch or two just a few feet away. Ice near shore can be weaker than ice farther out. Check ice thickness every 150 feet at a minimum.

Ice formed over flowing water and currents is often dangerous. This is especially true near streams, springs, channels between lakes, bridges, culverts and aeration systems. Also, the ice on outside river bends is usually weaker due to the faster current.

The insulating effect of snow slows down the freezing process. The extra weight of snow cover also reduces how much weight the ice sheet can support. Shovel any snow before testing the ice for thickness and color.

Watch for large cracks, depressions or pressure ridges in the ice and avoid those areas.

Moving fish populations can bring warm water up from the bottom of the lake, and waterfowl can warm the surface of the ice causing holes to open up, posing a threat to anyone traveling on the ice.

For more ice safety guidelines and tips, visit [mndnr.gov/icesafety](http://mndnr.gov/icesafety).

## PREACH, REACH, THROW, ROW, DON'T GO

To rescue someone from the ice or water, follow these five steps:

### PREACH

Call 911 if you have a cell phone. Shout to the victim to encourage them to fight to survive and reassure them that help is on the way.

### REACH

If you can safely reach the victim from shore, extend an object such as a rope, ladder or jumper cables to the victim. If the person starts to pull you in, release your grip on the object and start over. Don't run to the edge of the hole, this will likely lead to two victims in the water.

### THROW

From shore, toss one end of a rope or something that will float to the victim. Have them tie the rope around themselves before they are too weakened by the cold to grasp it.

### ROW

Find a lightweight boat to push across the ice ahead of you. Wear your life jacket and bring ice picks and a throwable flotation device. Attach rope to the boat so others can help pull you and the victim to safety. Push the boat to the edge of the hole, get into the boat and pull the victim in over the bow.

### DON'T GO

A nonprofessional should not go out on the ice to perform a rescue without means to self-rescue. This includes bringing ice picks, wearing a life jacket and being securely tied to a rope held by someone who can pull you out.

## BE A SURVIVOR!

You must fight to survive in cold water. Commit this action plan to memory before hitting the ice:

1. **Don't panic!** The shock of cold water can cause you to inhale water and/or hyperventilate. Get your breathing under control.
2. **Don't remove your winter clothing.** Heavy clothes won't drag you down, but instead can trap air to provide warmth and flotation. This is especially true with a snowmobile suit.
3. **Turn toward the direction you came from.** That's probably the strongest ice. Call out for help.
4. **Place your hands and arms on the unbroken surface.** Use your ice picks, a pair of nails or sharpened screwdrivers to get extra traction to pull yourself up onto the ice.
5. **Kick your feet and dig in your ice picks to work your way back onto the solid ice.**
6. **Lie flat on the ice once you're out and roll away from the hole to keep your weight spread out.** This may help prevent you from breaking through again.
7. **Get to a warm, dry, sheltered area and rewarm yourself immediately.** In moderate to severe cases of cold water hypothermia, you must seek medical attention. Review DNR's Cold Water Kills brochure for additional information.

To see these techniques in action, visit [youtube.com/minnesotaDNR/playlists](https://www.youtube.com/minnesotaDNR/playlists) and choose the ice safety video.