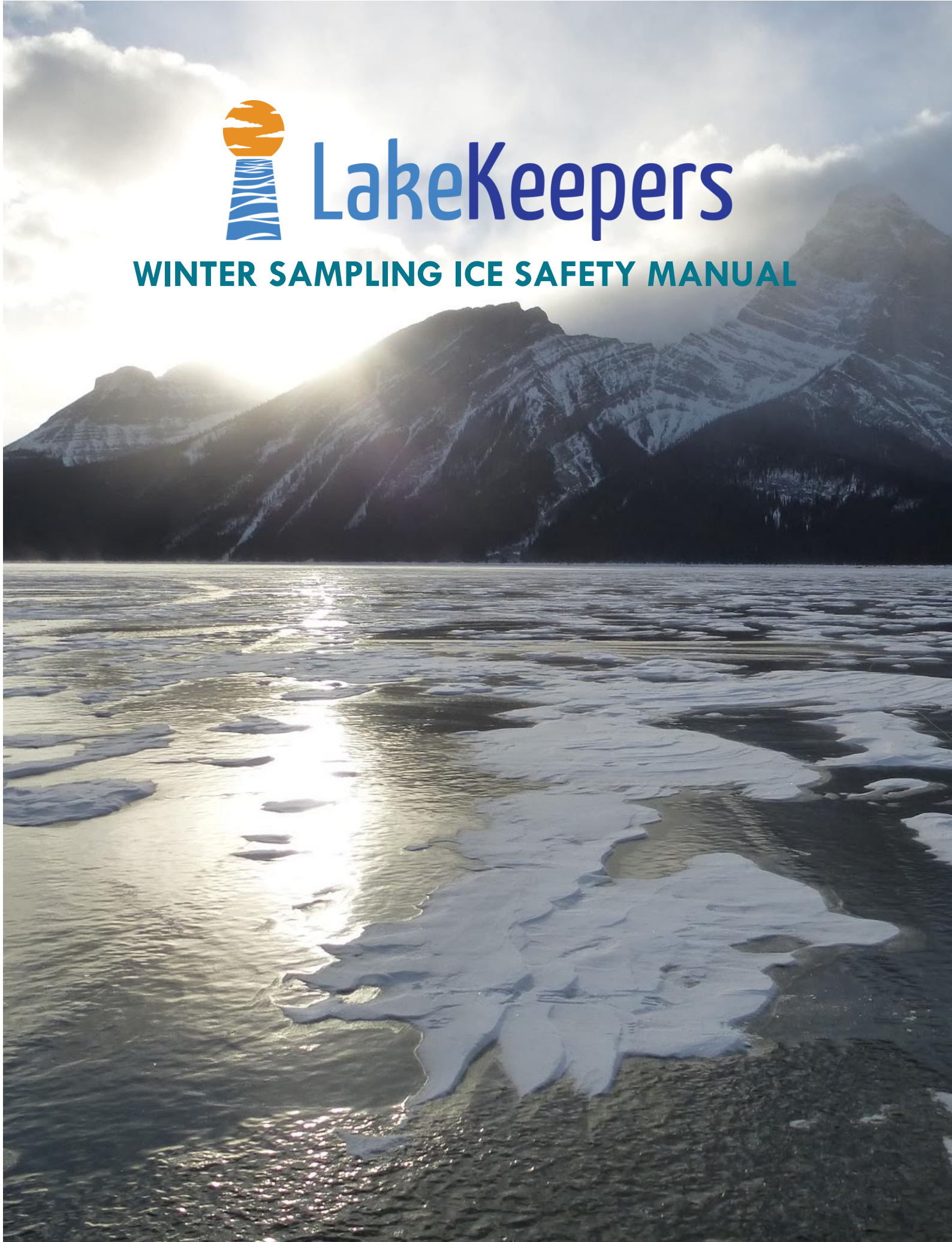




LakeKeepers

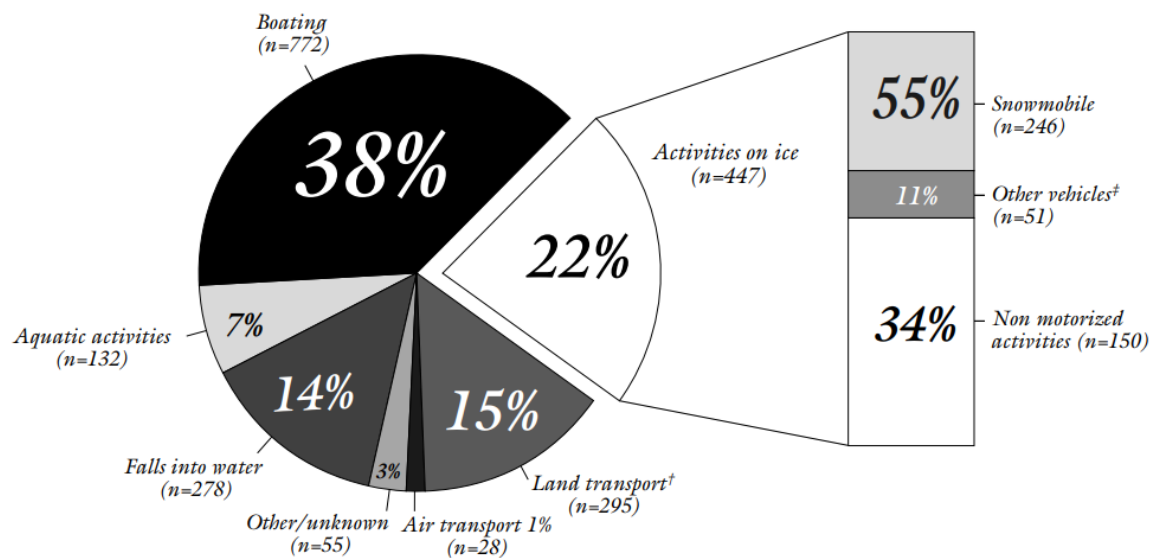
WINTER SAMPLING ICE SAFETY MANUAL



Heading onto the ice

Your safety is the most important consideration when recreating on Alberta lakes. There are always risks when traveling and recreating on frozen water bodies, including regular winter risks such as hypothermia and frostbite, as well as the additional risk of falling through ice. Although thousands of Canadians recreate safely on ice every year, an average of 45 Canadians per year died after falling through ice from 1991 to 2000 (Figure 1). Please keep risks in mind when sampling with LakeKeepers, and during all your winter outdoor pursuits.

Figure 1 COLD WATER IMMERSION DEATHS* BY ACTIVITY, CANADA 1991-2000 (n=2,007)



* Includes victims for whom one or more of these factors were reported: hypothermia with or without drowning, the presence of ice or extremely cold water (<10° C), cold weather month (November through April), or snowmobiling
† Excludes snowmobiles and other vehicles on ice ‡ 51 is an estimate based on 41 cases for 1993-2000; 10 cases for 1991-1992 were included here and deducted from "Land transport", so the total of 293 for that category is also an estimate

Source: The Canadian Red Cross Society & the Canadian Surveillance System for Water-Related Fatalities, 2005

For your reference, ALMS has compiled some resources for safe planning and assessment of ice conditions, and for the worst-case scenario, self rescue in the event of a fall through the ice. To participate in the program, we require volunteers to verify their knowledge of ice safety through a short quiz. For those experienced in ice fishing and ice travel, and who have reviewed the following material, this quiz will be simple and straightforward.



Ice safety overview

This guide from the Minnesota Department of Natural resources provides a detailed and concise summary of ice safety knowledge for travel and recreation on frozen lakes. The guide includes:

- Tips for driving on ice and escaping a vehicle if it falls through lake ice
- Guidelines for how thick the ice must be for different activities to be considered safe
- Recommended contents for an ice assessment and rescue kit
- Tips for assessing whether ice is safe for travel
- What to do if you or a friend falls through the ice

How thick is the ice?

Unless you can see through the ice well enough to visually assess its thickness, the only reliable way of assessing ice thickness is to measure it directly by drilling or chipping a small hole close to shore where you enter the ice, and then at least 150 feet as you travel.

Detailed instructions for how to measure the thickness of lake ice can be found here:

<https://www.dnr.state.mn.us/safety/ice/thickness.html>

Worst-case scenario:

If all precautions are taken to avoid travel on unsafe ice, falling through is very unlikely. However, if you or someone you're with falls through knowing the best techniques for rescue and recovery can save a life. In this video, you will see what to do if you fall through the ice.

<https://www.youtube.com/watch?v=VLQB0WpTvJk>

Quiz:

When you have reviewed all of these materials, please take our LakeKeepers Ice Safety quiz. We request that all volunteers score 100% on the quiz. However, you can refer to the materials as you take the test, and retake it if necessary. Sampling materials will not be provided to volunteers who have not completed the safety quiz and informed consent form.

<https://forms.gle/x4FKHEmoRktwtCB99>

Lake Keepers Safety Checklist:

(for safety only. Please also see sampling kit-list)

To bring:

- ☐ Ice chisel or drill for testing ice depth
- ☐ Buoyant rope
- ☐ Ice picks
- ☐ Tape measure
- ☐ Warm Clothing
- ☐ Blankets
- ☐ Winter vehicle survival kit
- ☐ Cell phone in a waterproof bag or container, or SPOT device

To do:

- ☐ Give your itinerary to someone who is not coming with you
- ☐ Check the weather and ensure you are prepared for extreme cold and warming events
- ☐ Review guidelines for ice thickness and self rescue
- ☐ Consult local knowledge about ice conditions where available (ask locals you know, guides, or ice fishing forums such as www.iceshanty.com)
- ☐ Leave no trash on the lake when you go and remove any semi-permanent shelters before ice melt!

ICE IS NEVER 100% SAFE!

Minimum guidelines for new clear ice only

