



Ice Awareness

For First Responding Apparatus

Ice Thickness

Ice is never 100% safe!

Minimum ice thickness guidelines for new, clear ice only

Rarely achieved in DC area

**STAY
OFF!**



3" OR LESS

4"

Ice fishing and
skating



5-6"

Snowmobiles
and ATVs



8-12"

Cars and small
trucks



12-15"

Medium trucks

ICE SAFETY TIPS:

- Double the thickness guidelines for white or snow-covered ice.
- Carry two large nails to use as ice picks if you fall through.
- Avoid pressure ridges and areas with current.
- Warn children about the dangers of thin ice.
- Do not drive on ice at night.
- Avoid alcoholic beverages when on and near ice.



As thickness increases, rate of growth decreases

- Water is resistant to temperature change
- Snow acts as insulator- imagine putting a top on your yeti cup
- If it snows and then gets cold, ice may not be as thick as this chart estimates

<u>Average Air Temp (°F)</u>	<u>Starting Ice Thickness (in)</u>	Skim	2	4	6	8	10	12	14	16	18	20
30		0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
25		0.8	0.6	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2
20		1.4	1	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3
15		2	1.4	1.1	0.9	0.7	0.6	0.6	0.5	0.5	0.4	0.4
10		2.6	1.8	1.4	1.1	1	0.8	0.7	0.6	0.6	0.5	0.5
5		3.2	2.3	1.7	1.4	1.2	1	0.9	0.8	0.7	0.7	0.6
0		3.8	2.7	2.1	1.7	1.4	1.2	1.1	0.9	0.8	0.8	0.7
-5		4.4	3.1	2.4	1.9	1.6	1.4	1.2	1.1	1	0.9	0.8
-10		5	3.5	2.7	2.2	1.8	1.6	1.4	1.2	1.1	1	0.9
-15		5.6	4	3	2.4	2	1.8	1.6	1.4	1.2	1.1	1
-20		6.2	4.4	3.3	2.7	2.3	2	1.7	1.5	1.4	1.3	1.2

Ice making chart!

Approximate inches of new ice made in a 24 hr period

For reference only! Not to be used to determine if ice is safe for a given load. This chart does not take into account snow cover, currents, springs or fish schools! Not for safety purposes!

If you CAN'T see the victim

- Deny Entry
- Talk to bystander /witness
- Mark last known location. Triangulate.
Use object in background
- Obtain clues (Footprints, Bookbag on ice)
- Don't disturb shoreline. Don't break the ice
- Have police check home address



If you CAN see the victim

- Deny entry
- Establish contact with victim (Yell, Reach, Throw)
- **Yell** (reassure, determine fatigue, establish timeline)
- **Reach**(Inflated hose, ladder, pike pole)
- **Throw** (water rescue throwbag)
- Maintain contact with victim



- Position to leave access for technician level units
DO NOT enter ice without proper PPE
DO NOT enter ice if above your level of training

Tech Level Capabilities

- Tech level personnel are trained and prepared to make entry to the hot zone and perform rescue
- If the victim has submerged, we have the tools to visualize them under the surface and minimize risk



While awaiting extrication

- Warm patient compartment of ambulance (highest thermostat setting)
- Call for additional transport as rehab
- Prepare to assess severity of hypothermia
- Stage EMS equipment depending on patient condition
- Have blankets/towels/mylar blanket/heat packs ready
- Blizzard blanket available on [Swift Water Units](#)
- If possible, gather patient information from bystanders to prevent delay of transport

