UNDERSTANDING ICE AT THE SSRA

Q: What affects when a lake starts to freeze? A: Temperature is the main factor. Water has to reach the freezing point before ice forms. Larger lakes take longer to cool down and freeze.

Q: How do the lake's size, shape, and depth impact freezing?

A: These factors determine how much water needs to cool, affecting how quickly the lake can freeze.

Q: How does ice get thicker?

A: Ice thickens from the top down. The first layer that forms is called primary ice, and the next layer is called secondary ice.

Q: Can ice thicken in other ways?

A: Yes. Snow or water on the ice can create slush, which can freeze into an extra layer called superimposed ice.





Q: When does slush form?

A: Slush forms when water rises through cracks in the lake ice. These cracks are caused by pressure from melting snow, rain, or very cold temperatures.

Q: Does snow slow down ice thickening? A: Yes. Snow acts as insulation, trapping heat in the ice. More snow means heat escapes more slowly, which slows down the growth of secondary ice.

Q: Do snow and slush eventually freeze into ice? A: Yes, they do, but the freezing speed depends on the temperature and the amount of snow or slush. When snow and slush freeze on top of primary ice, they create a layer called superimposed ice.

Q: Can you predict how thick the ice will be? A: It's possible, but predictions can be complex and sometimes inaccurate. To ensure safety, the SSRA doesn't predict ice thickness but instead has a maintenance team regularly test the lake ice for thickness and quality.

SSRA ICE SAFETY Q&A

Q: When is lake ice safe?

A: Lake ice is never "100% safe" due to changing conditions that affect its thickness and quality. To reduce risks, the SSRA monitors Lake Summerside's ice regularly. The lake is only opened for use when all areas meet SSRA safety standards.

Q: What are the SSRA's main safety concerns? A: The SSRA focuses on two safety areas:

- 1. Protecting staff by ensuring they have proper training, equipment, and supervision.
- 2. Minimizing risks to residents, especially children, who may not fully understand the dangers of thin ice.





A: No. Staff must work on the ice, so they receive extra training, equipment, and supervision. Residents, however, use the ice at their own risk once the SSRA has confirmed it's safe.

Q: If I see staff on the ice, does that mean it's safe for me?

A: Not necessarily. Always check the flag. Staff may be on the ice for testing or maintenance with special equipment that residents don't have. Even if one area is thick enough, other parts may not be safe, so the ice is only open to the public when the SSRA confirms it's safe across the entire lake.



Q: What do the red and yellow flags mean? A: A yellow flag means the lake ice is open, but you use it at your own risk. A red flag means the ice is closed. If SSRA's testing shows the ice doesn't meet minimum safety standards, a red flag is displayed to close the lake.

Q: What does the SSRA look for to allow a yellow flag on the ice? A: The SSRA checks ice strength and conditions to ensure safety:

- Clear, black ice is the strongest.
- White or slushy ice is only about half as strong as black ice.
- Dry cracks in black ice are usually safe as they often heal. Wet cracks can be safe if filled with ice or snow.
- Surface water: Water or slush on the ice weakens it.
- Small holes can be filled safely, but larger holes (over 8–10 inches wide) indicate weaknesses. These may be safe if accessible for repair and if there isn't excess water around them.
- Temperature changes: Quick temperature shifts can cut ice strength by half.
- Thickness of solid clear blue/black lake ice



Q: When does the SSRA use the Zamboni? A: The SSRA uses the Zamboni when the temperature is between 4°C down to -20°C. When the temperature is too cold, the Zamboni can freeze and become inoperable.

MINIMUM 20+ inches for Zamboni.

Q: Is it okay to throw heavy objects/debris onto the ice to test the thickness myself?

A: No. Please do not throw any rocks or other objects onto the lake ice to "test" ice thickness. These rocks/objects freeze into the ice and present a significant hazard to staff members, equipment, and residents skating on the lake.



Q: Who do I ask if I have more questions?

A: You are always welcome to email our Parks Manager (parks@lakesummerside.ca) or our General Manager (gm@lakesummerside.ca).