

## Where and When Does This Happen?

- Most SIS accidents happen where combinations of deep powder, trees, and lots of powder skiers and boarders are common.
- Most SIS accidents occur where skiers and boarders are seeking fresh powder in treed areas or deep snow.
- Lots of deep loose snow makes for the best powder skiing conditions. Unfortunately, these conditions also significantly increase the chance of a SIS accident.
- Most of these accidents have happened during or just after big storms.
- On average 4 SIS fatalities have happened each season.



## You Can Prevent SIS Accidents

- The easiest way to avoid SIS accidents is to remain on groomed runs.
- Ski in control and give tree wells a wide berth. Look at the open spaces between trees not the trees. Don't use ski pole straps.
- Be aware of the recent snowfall and the depth of the loose snow – check local resources for recent snow conditions.
- Carry safety equipment, including cell phone, transceiver/beacon, whistle, shovel, probe, and Avalung.
- Keep your partner in sight at all times! In many SIS accidents, skiers and boarders have part of their body or equipment visible – but a partner wasn't there to see them.
- Take heart. Increased awareness and education reduces SIS risks. There are more reported cases of skiers and boarders being rescued by their partners each season.



RESCUED BY PARTNER



PATROL WITH RECCO DETECTOR

## Keep your partner in sight at all times!

- More than half of all SIS victims were with partners that did not see them go down. Lose sight of your partner and you could lose your friend.
- In dense tree areas or in poor visibility, ski or ride short pitches and stop to regroup often — stay within sight of your partner!
- If you lose contact with your partner, assume they need help. Many SIS victims have died while their partners were waiting at the bottom of a lift.
- Do not leave to get help! Stay with your partner.
- Use a whistle or yell for assistance. If possible, call ski patrol or the resort's emergency phone number.
- Do not try to pull victim out the way they fell in. Instead, determine where the head is and tunnel in from the side.
- Go directly for the airway, and keep it clear. Be careful not to knock more snow into the hole as your partner is extricated.



SUCCESSFUL RECOVERY WHERE PARTNER GOT HELP FROM SKI PATROL

## What If You Go Down?

- Yell or use a whistle to get your partner's attention.
- Try to keep your head above the snow surface, including rolling, grabbing tree branches, or the tree trunk. If possible, keep your feet below the level of your head.
- If you become immersed, make a space around your face and protect your airway – resist the urge to struggle, it could compromise your airspace.
- Stay calm, conserve your air.
- Trust your partner is on their way.
- If possible, use your cell phone to call ski patrol or the resort's emergency number.

# Snow Immersion Suffocation (SIS) Hazards and Safety Information



**Avoid Tree Wells and Keep Your Partner in Sight**

**Tree Wells & Deep Snow Immersion**

**SNOW SUFFOCATION HAZARD**

## What are Snow Immersion Suffocation (SIS) Risks?

- Snow Immersion happens when a skier or boarder falls head-first into a tree well or deep loose snow.
- A tree well is the void around the base of a fir tree containing a mix of low hanging branches, loose snow, and air — treat all tree wells as dangerous.
- In an inverted position you can become trapped under the snow. It is extremely difficult to get out without the help of others.
- Breathing becomes difficult as the loose snow packs in around you. Without immediate help from your partner, you may suffocate.



## Snow Immersion Suffocations Can Be Prevented!

**SNOW SUFFOCATION HAZARD**

**Tree Wells & Deep Snow Immersion**

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## Groomed Runs vs. Ungroomed Terrain

- You can greatly reduce the risk of a SIS accident simply by staying on groomed runs.
- 70 % of all SIS accidents involved tree wells. However, SIS accidents may also occur in areas of deep snow, like steep drops or creek beds.



GROOMED TRAIL



UNGROOMED TERRAIN



TREE WELL

- When you ski or ride off of groomed trails or in the trees it can be thrilling. It is also a choice you are making. You accept the risks of snow immersion suffocation when you do.
- Special thanks to Mt Baker Ski Area and Northwest Avalanche Institute, including Paul Baugher and Chris Morin.
- For more information on Snow Immersion Suffocation, please visit [www.deepsnowsafety.org](http://www.deepsnowsafety.org)