

Standards help create common ground for volunteer search and rescue community in Canada



A hiker checking out a spectacular mountain vista tumbles over a rocky outcrop. A curious child leaves their family's campsite and gets lost in the woods. A person with Alzheimer's wanders away from their home. When the day began, no one expected they would need rescue.

Some 10,000 ground search and rescue (SAR) operations take place in Canada each year. These searches are the responsibility of provincial and territorial governments and are led by police services.

To cover Canada's expansive geography, SAR programs turn to some 9,000 volunteers who are part of more than 300 trained responder teams. These teams have the specialized training and expertise, equipment, and local knowledge to provide the "boots on the ground" that help find missing people. With their training and expertise, these volunteers go where they're needed and are also called to provide assistance at local or national levels during emergencies like wildfires, floods, and tornadoes.



And yet, despite the necessity of this role and nationwide sharing of resources, there was no national standard for these volunteers until 2015.

Why standards are necessary

“The organizations accountable for search and rescue need to know that our volunteers (unpaid professionals) are as highly trained as their paid SAR workers and singing from the same song sheet,” says Scott Wright, President of the Search and Rescue Volunteer Association of Canada (SARVAC) (2016-2021).

SARVAC and other members of the ground search and rescue community in Canada saw the need for a Canada-wide benchmark that would help ensure a consistent set of skills and level of competence for everyone involved in ground search and rescue (GSAR). That benchmark could then assist in developing training curriculum and program delivery models for SAR operations.

- CSA Z1620-15 (R2020), *Core competency standards for ground search and rescue operations: Searcher, team leader, and SAR manager*
- CSA Z1625-16 (R2021), *Training curriculum standards for ground and rescue operations: Searcher, team leader, and SAR manager*

“You can have all the fancy gear, but you have to be able to trust the people using it and know they aren’t taking unnecessary risks, or making unnecessary mistakes,” Scott says. He chaired the CSA Group Technical Committee responsible for developing the Standards,

which was formed in 2012. The committee represented a diverse group of interests from across Canada and possessed extensive SAR expertise – everything from simple neighbourhood searches to the most technical helicopter and avalanche rescues. They focused on three key roles: searcher, team leader, and SAR manager.

The committee recognized that some areas of the country, such as British Columbia, already had well-developed SAR structure and training, but saw there was value in having national standards that provided the blueprint for a core set of knowledge, skills, and abilities for all those involved in GSAR operations.

With the Standards came interoperability, meaning that teams now had a transferable set of skills when they were deployed across the provinces and territories.

To reach the desired level of performance, the people performing SAR would need an extensive set of skills including: search techniques, first aid and wilderness survival, navigation, equipment safety, and the ability to communicate across a wide variety of terrain, just to name a few.

The best SAR incident is the one that doesn’t happen

Calls for help usually come from recreational activities, and those calls escalated during the pandemic when everyone wanted to get outside. Canadians and visitors to some areas, climates, and terrains in particular may

not know how to navigate around swift-moving water or a sudden snowstorm.

Anyone who finds themselves lost in the wilderness or injured, and has little or no survival training, can end up spending a night or two in the woods without food or water.

"It is often said that the best SAR incident is the one that doesn't happen," says Catherine Dumouchel, trainer and search manager with Sauvetage Bénévole Outaouais-Ottawa Volunteer Search and Rescue (SBO-OVSAR). Catherine sat on the CSA Technical Subcommittee that developed the SAR training curriculum Standard CSA Z1625-16. "Thanks to prevention programs, people can be better prepared for the outdoors and remember to tell someone where they're going," she says. "That's why prevention goes hand in hand with the SAR Standards."

Another contributing factor is an aging population and rising dementia levels. People lose their bearings or forget where they live. More people are in crisis or coping with mental health issues. And climate change is affecting the frequency and reach of natural disasters, where volunteers often help by going door-to-door, checking residents, and evacuating those in danger.

Members of the Standards committees all have personal experience with SAR incidents. While tales of successful searches are the most common, memories of terrifying incidents where life and death were in the balance are there too. Every person can tell a story "that pulls on your soul," says Scott. A little boy lost in the woods for three and a half days; a 5-year-old girl missing and never found.

Those dark and harrowing memories served a purpose. Many of the lessons learned found their way into the Standards.

Changing technology guides what the SAR team needs

Technology like cellphones and GPS is also changing the face of search and rescue.

"The number of searches may be going down, since people have access to technology and may be able to tell where they are," says Paul Olshefsky, Project

Manager with SARVAC. "But rescuing is becoming more common; people need help getting out of trouble."

Paul was part of the CSA Group Technical Committee as a Parks Canada representative, where he spent much of his career. Parks Canada had one of the first formal, organized SAR programs in Canada, a necessity due to the mountain and avalanche rescues that go with many park settings.

Technology is changing for searchers as well. Gone are the days when teams used radios the size of shoeboxes. Now they too have cellphones, GPS, and drones.

Changing technology is one of the reasons the Standards committee looked closely at what the SAR community needs with respect to the required knowledge, skills, and abilities.

Intense discussions at the committee table

As the committee considered all the elements that needed to go into CSA Z1620-15 (R2020), discussions were far-reaching, emotional, and intense. "SAR people are deeply passionate, with strong opinions," says Scott. "But we all understood that we work for the person who's missing or needs rescue, and that fed a deep commitment to move forward. It was a real team effort built on collaboration and cooperation."

He adds, "And we couldn't have done it without the CSA Group facilitator keeping us focused."

A proud moment for CSA Group and Canada when the Standards arrive

CSA Z1620-15 (R2020) attracted international attention with its release in May 2015.

"When we started down this road, I can't tell you how many people said, 'you'll never get it done,'" Scott says. "The U.S., Australia, New Zealand – they'd all been trying to come up with this kind of standard for years."

It gives Scott and the committee immense satisfaction to now see so many countries adapting the concepts included in CSA Z1620-15 (R2020).

The Ontario Search and Rescue Volunteer Association was the first to apply the new Standard. The association had been closely tracking the committee proceedings and worked on building their training standards in tandem.

With the publication of the training curriculum Standard CSA Z1625 in 2016, the association and many others are proud to add a line indicating that the training is “to CSA code,” meaning it complies with national requirements set out in the CSA Z1625 Standard.

Rollout focuses on the Standards as a living document

Tremendous energy went into the creation of the Standards, and CSA Group was determined that the same dedication would go into the rollout. Paul Olshefsky was brought on to help with the rollout. He travelled to every province and territory to talk about the importance of the Standard, how it was developed, and the key components.

Catherine was on the rollout team as well, focusing on what the Standards meant to volunteers and their communities, and how the goal was to help keep the teams safe. Naturally, training was on the agenda – how it should be delivered and recognition that a range of training approaches would be necessary to aid in reaching the recommended standard level of competency.

“CSA Z1625-16 (R2021) helps provide rigour to the training, with clear learning outcomes and key content,” says Catherine. “At SBO-OVSAR, we use it as one of the pillars of our ongoing searcher, team leader, and incident manager training, as well as ‘train the trainer’ programs.”

Trainers and other SAR professionals and volunteers have access to a dedicated, online national GSAR trainers Community. They can ask questions, work in teams, and make suggestions for future updates to the Standards. The Community is hosted by CSA Group and access is managed through the SARVAC.

The committee also welcomes feedback from the SAR community, who point out gaps and share ideas to be considered for updates. That level of ongoing and active



involvement ensures that as the Standards come up for review every five years, they’re living documents that are continuously focused on the future of SAR operations.

Well-trained people with help from the Standards

Paul is proud to say that the Standards are helping fulfill the need first identified by SARVAC all those years ago – they’ve supported the creation of a consistent skillset and recommended level of competence for everyone involved in search and rescue operations.

“It’s not that we’re necessarily doing a better job of rescuing, which is hard to measure,” he says. “But with the standard as a guide, we’re making sure the people who volunteer for SAR operations are well-trained, and well-trained teams will help contribute to more effective rescues.”

Scott agrees, saying “Every team I’ve talked to says, ‘We train in accordance with CSA Standards.’ Having well-trained people often means less uncertainty when teams are setting up. We may get there faster and, hopefully, missing people are brought home quicker.”



CSA Z1620 - A touchstone document for the entire SAR community

The value of CSA Z1620-16 (R2021) is huge, Paul says.

“The Standards help provide the glue for a national program for community-based assistance. They help raise the bar in safety for the volunteer “unpaid professionals” as well as the paid professionals, and the people they rescue.”

There have been unexpected benefits as well. The development of Standards for ground search and rescue competencies has helped to heighten the awareness of SAR practitioners and build trust in

their abilities. In a sense, the Standards have helped ‘professionalize’ a volunteer position and will help have the same effect on the certification and accreditation program now being developed by SARVAC.

It’s been a long time coming, but all search and rescue practitioners have renewed pride in their work.

“The strength of the Standard,” says Catherine, “is that it’s a key resource that can be used to help search and rescue at all levels – from local teams to associations to provincial and territorial agencies. It’s a significant document for the SAR community in Canada.”