The Amsterdam-Amstelland fire department has launched an initiative to change the way emergency agencies look at emergency response.

The fire department is trying to integrate ordinary citizens into emergency response. More than just lip-service, it ran an exercise in which all the responders acted as theatre-goers who, on leaving a performance, discovered an incident outside the theatre doors.

At first glance, including members of the public into an emergency response plan might seem absurd. Police tend to think of emergencies as site-specific events like traffic accidents, train wrecks or a collapsing building where they manage the scene, firefighters deal with fires, spills and heavy rescue, and ambulance personnel deal with the injured. Most emergency plans and emergency exercises assume precisely that kind of scenario.

Sometimes that is what happens and the site of the incident can be well controlled. In December, 1985, for example, when a plane carrying members of the 101st Airborne crashed near Gander Airport in Newfoundland, there was just one access road to the crash site. The RCMP and the municipal police had it closed off within minutes and kept the site controlled with some help from unarmed military personnel from Canadian Forces Base Gander.

But many emergencies aren’t like that. They don’t unfold at a single site and as a result site control isn’t possible. In some situations, it may well be some time before any emergency agency knows the full extent of what’s happened.

EDMONTON’S BLACK FRIDAY

On July 31, 1987, Edmonton and neighbouring Strathcona County were hit by a tornado that stayed on the ground for one hour and five minutes, starting south of the city and ending in the city’s northeast corner.

When word of the tornado first reached police, fire and ambulance responders, most of their available personnel headed to a residential area and an adjacent industrial zone southeast of the city.

But the tornado kept going and as it did, it left debris blocking many roadways. Torrential rain flooded underpasses all across the northeast part of the city. By then, too, there were so many problems, that police and other emergency communications systems were overloaded. Everyone was on the air with an emergency to report.

By the time the tornado hit the Evergreen Mobile Home Park in the northeast corner of the city, most emergency personnel were committed elsewhere. Even if they hadn’t been, due to the damage, they would have had difficulty reaching Evergreen, which was the hardest hit of the communities in the tornado’s path. Of the 27 people killed that day, 15 were from the Evergreen trailer park.

It was 14 minutes before any news of the trailer park reached Edmonton police, fire and ambulance workers, and 21 minutes before the first emergency response personnel — volunteer firefighters from a nearby forensic psychiatric hospital — reached the devastated trailer park.

In those 21 minutes, it was the survivors, some of whom were injured themselves, who assisted the wounded into undamaged and damaged vehicles and took them to medical centres. By the time the first emergency personnel arrived, the walking wounded were gone and so were all those who assisted them. The more seriously injured — including the dying — were still trapped in the wreckage (ordinary people find it difficult to do heavy rescue).

But that wasn’t evident to the arriving emergency personnel.

By the time emergency responders arrived, other residents — mostly those coming home from work — had no idea what had happened or who had been there and left, either as a rescuer or the rescued. They were convinced their loved ones were trapped in the wreckage. Some were, but many had long since left for hospital.

Police and firefighters had no choice but
to start a systematic search for the missing who were presumed trapped.

Is there any way this problem could have been avoided?

The answer is yes, but it requires two things: an understanding of the role ordinary people play in emergency response and cooperation between the medical community and emergency responders such as police and firefighters.

The fact is, during a widespread destructive incident, survivors don’t stand around and wait for someone to help; they look around and do whatever they can. If that involves rescuing the injured and transporting them to hospital, they’ll do just that. In most such incidents, initial search and rescue and transport of the wounded to hospital are done by survivors.

This has several consequences. It means that the least injured will reach hospital first. It means that most of the injured will go to the nearest hospital. And it means that when emergency personnel arrive, they won’t know what has happened. The rescuers and the people they rescued will have left.

Once that’s understood, it’s possible to think of solutions.

First, it’s important that hospitals, on receiving injured, try to identify the names of the victims and all the Good Samaritans who helped them. They can then relay that information to those doing search and rescue. (It’s also important that hospitals move the lightly injured quickly out of emergency and prepare for the more seriously injured who will arrive later.)

Second, it would be helpful if some uninjured survivors remained in major impact areas to keep track of what’s happened so they can inform emergency personnel.

That may sound difficult but that was exactly one of the things suggested when Ottawa seniors and Ottawa police held a workshop on what seniors could do in an emergency.

ADDITIONAL EYES

It was suggested they could do what block parents do: keep informed about what’s going on in their block. When an emergency occurs, they would not only know who was at home and who was away, they could keep track of who was rescued and who rescued them. This information would help responders identify who, in all probability, still needed rescuing. In short, they would become a valuable on-site resource without the need to do anything physical.

Both these approaches make sense but they make sense only when it’s understood what actually happens and when plans are based on reality, what American emergency physician Erik Auf der Heide calls “evidence-based planning.”

The point of the Amsterdam initiative is not to tell others how to plan but to change the mind-set of emergency personnel. To shift the thinking from how do I get these ordinary people out of the way to how do I plan in light of what they’ll do before I arrive, how can I enlist their support and how can I make sure what they do will enhance our response?

The point of the Amsterdam initiative is not to tell others how to plan but to change the mind-set of emergency personnel. To shift the thinking from how do I get these ordinary people out of the way to how do I plan in light of what they’ll do before I arrive, how can I enlist their support and how can I make sure what they do will enhance our response?

The Amsterdam-Amstelland fire department isn’t the only emergency agency in the Netherlands to embrace new approaches in engaging ordinary citizens during a disaster. The Amsterdam Police run a free service called Burgernet (www.burgernet.nl). A citizen who subscribes to this service will be electronically notified if an emergency occurs — anything from a child missing, a police search for a vehicle or an industrial accident. The system is set up so that notices go only to those who voluntarily register themselves on the police department’s website.

In November 2012, the national government launched NL-alert (www.nl-alert.nl), a national warning service quite similar to Burgernet. The NL-alert system can send electronic messages to mobile phones in the affected area. The messages contain information about the emergency and any instructions about what to do.

In addition, every emergency service in Amsterdam has its own social media channel. This initiative took place in 2011 after the public sent more than 200,000 tweets about the way the fire service and the government responded to an industrial fire.

The Twente Fire Department at Enschede, about two hours from Amsterdam, is piloting another project in which some fire officials carry i-Pads. The devices can provide information about the buildings in their response area and allow them to see visuals shot by ordinary people at the scene, who load the images and send them to off-site command posts. The officers can view the images on their i-Pads immediately, and respond accordingly, rather than seeing them for the first time on the six o’clock news or on YouTube.

Joseph Scanlon is Professor Emeritus and Director of the Emergency Communications Research Unit (ECRU) at Carleton University in Ottawa. He has studied emergency response for 42 years and is a regular contributor to the Gazette. Jelle Groenendaal is a doctoral student at Radboud University Nijmegen who works with the Amsterdam Fire Department.