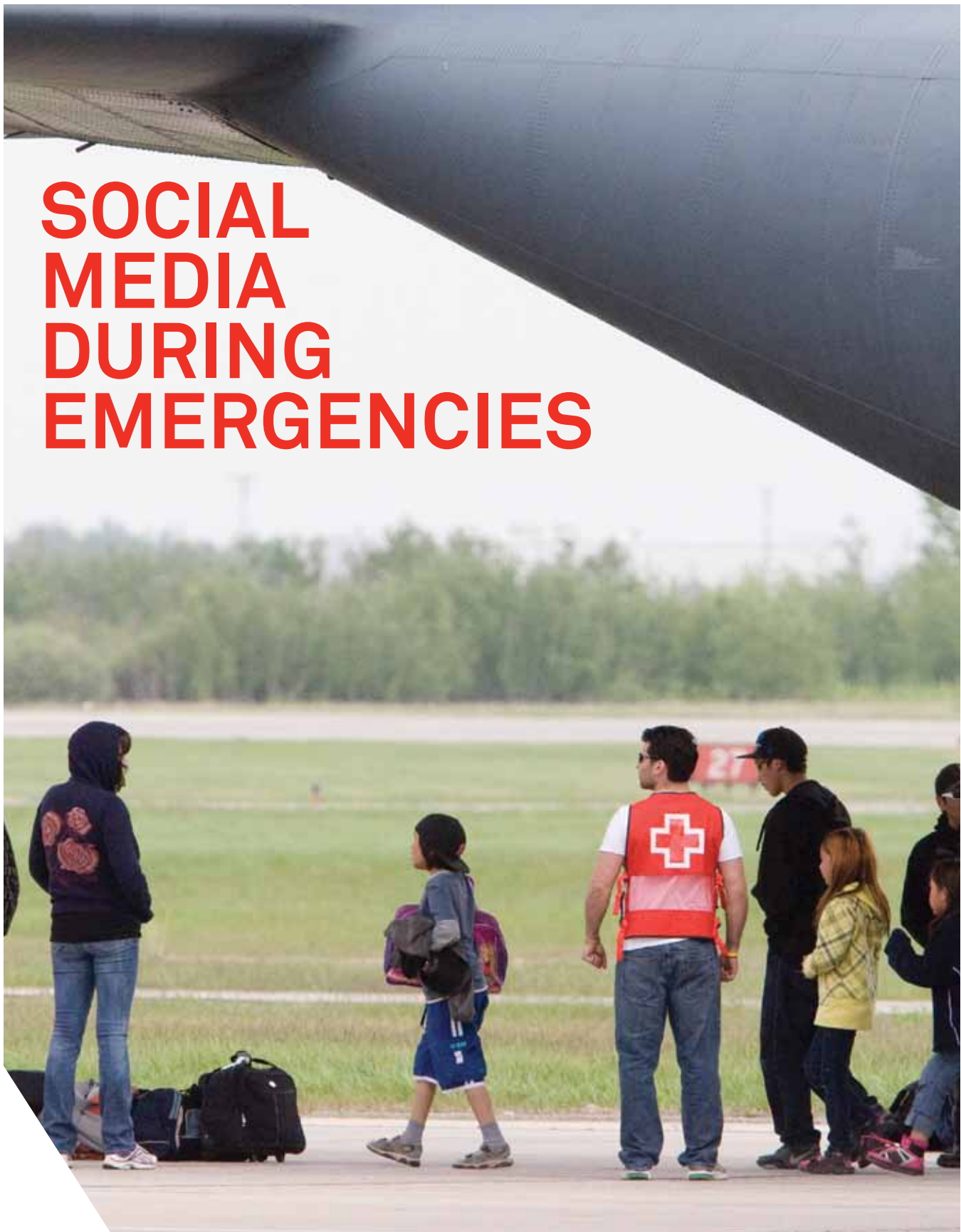
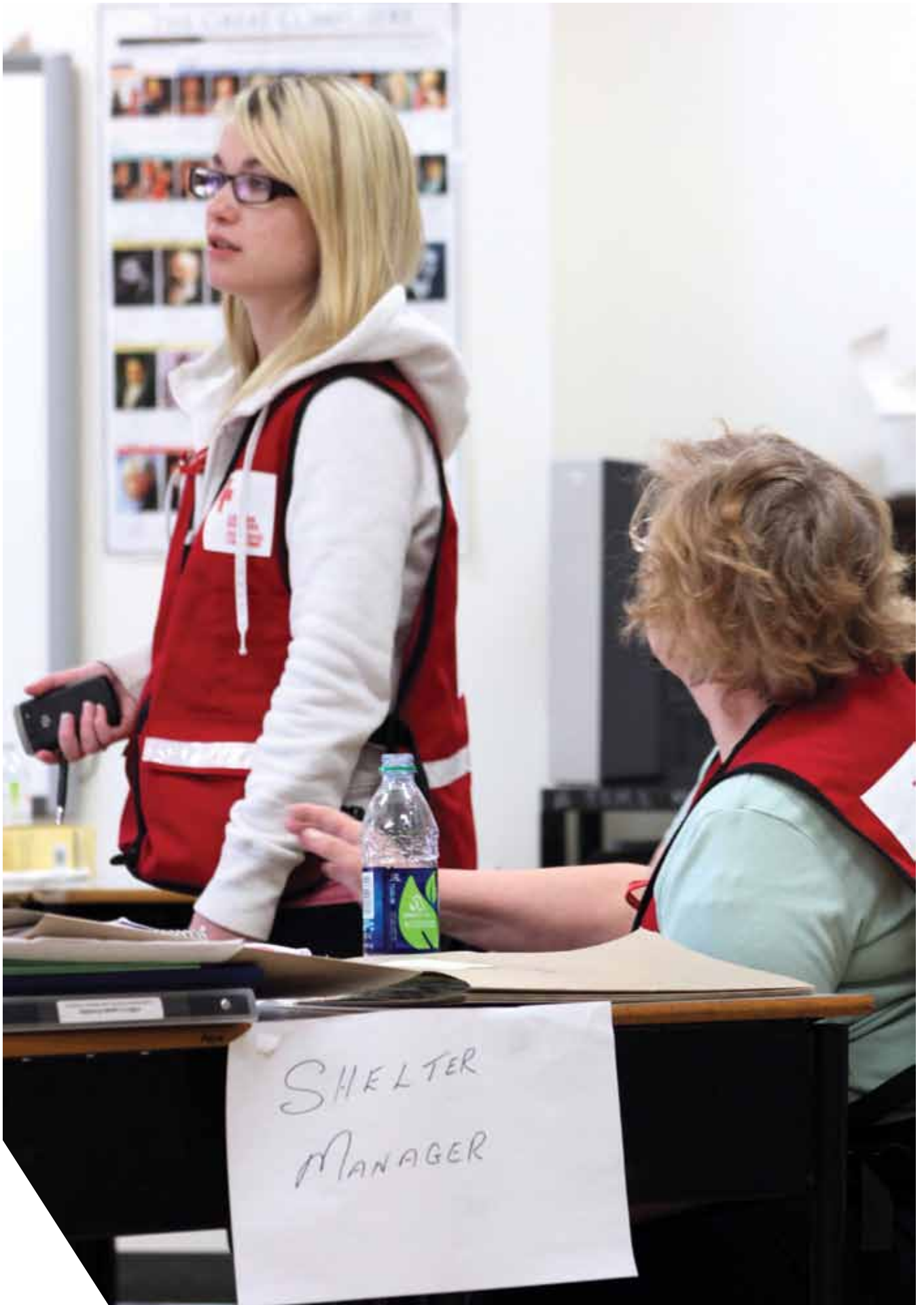


# SOCIAL MEDIA DURING EMERGENCIES



**CANADIAN  
RED CROSS**



# INTRODUCTION

Red Cross Societies around the world, including the Canadian Red Cross, are exploring ways in which social media can affect the efficiency of a disaster response.

To improve its understanding of social media, the Canadian Red Cross commissioned Ipsos Reid, a leading polling agency, to conduct a survey to explore how Canadians use social media and mobile technology during emergencies—and their expectations around the use of social media by emergency responders.

The survey — the first of its kind in Canada — reached 1,000 people from across the country online and by phone between June 19 and July 4, 2012.

This report provides an overview of key survey findings, including:

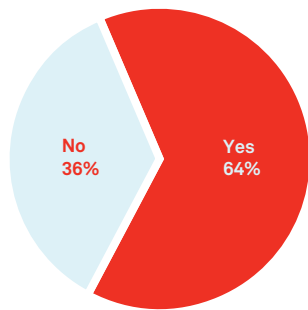
- More than 60 per cent of respondents use social media networks on a regular basis
- Sixty-six per cent of Canadians haven't taken steps to prepare for disasters
- About one in three respondents thinks that posting a call for help on social media would result in assistance from emergency services

This report also includes case studies to illustrate some innovative ways in which social media has been used as a tool to both communicate and gather information during emergencies in Canada and around the world.

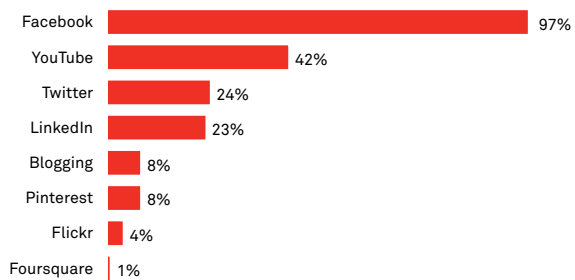
# OVERVIEW OF SOCIAL MEDIA USE IN CANADA

## CANADIAN PARTICIPATION IN ONLINE COMMUNITIES OR SOCIAL MEDIA NETWORKS

Do you participate in online communities?



Participation of respondents in online communities or networks



**84 per cent of users participate in social media at least a few times a week.**



# CASE STUDY

## IQUALUIT MAYOR INFORMS RESIDENTS AND DISPELS RUMOURS THROUGH SOCIAL MEDIA

For Iqaluit's mayor, Madeleine Redfern, Facebook is often the best way to reach members of her community, especially in emergencies. Many Iqaluit residents use Facebook, which can provide timely updates and allow for two-way communication more effectively than mainstream media.

Although less popular than Facebook, Mayor Redfern also uses Twitter to share information with her community and the local and national media. "It depends on the information, but if it's timely and we can't wait for a press release, then I can put a message on Twitter for the media and community," she said.

By sharing timely information with her community through social media, Mayor Redfern can help dispel rumours before they spread. "If misinformation is not corrected and it spreads like wildfire, then suddenly people are angry and scared and act in ways not in their best interest," she added. "It's the difference between an informed public and a panicked one."

Mayor Redfern has witnessed many emergencies over the past year, including house fires and other personal disasters, an armed standoff, and a water crisis when a main water pipe broke. This incident led to the loss of several million litres of water, requiring families to significantly reduce water consumption and follow a boil water advisory. In instances like these, Mayor Redfern uses social media to help ensure her community receives the information they need. The community often then shares her updates with their own networks, helping the message reach a wide audience quickly.



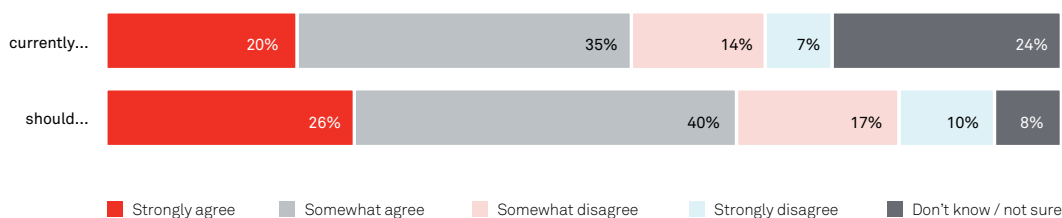
*Madeleine Redfern, mayor of Iqaluit*

**“It’s the difference between an informed public and a panicked one.”**

# EXPECTATIONS AROUND SOCIAL MEDIA USE DURING EMERGENCIES

A majority of Canadians who participated in the survey think emergency responders such as police and firefighters should monitor social media for emergency calls and be prepared to respond. One-third of respondents believe emergency responders would respond to an emergency call posted on social media sites, with 74 per cent of those expecting help would arrive within an hour.

## EMERGENCY RESPONDERS LIKE FIREFIGHTERS AND THE POLICE CURRENTLY/SHOULD MONITOR SOCIAL MEDIA WEBSITES



**63 per cent of Canadians say emergency responders should be prepared to respond to calls for help posted on social media. One-third of respondents think emergency services would respond to a request for help posted on social media.**

## CASE STUDY

### THE VIRTUAL SCENE: TORONTO POLICE SERVICE

The Toronto Police Service (TPS) has taken an aggressive approach to social media — by mid-2012, it had trained 300 staff to use networking tools such as Twitter, Facebook and blogs. For the majority of those staff, social media is an added function to their duties.

When police are responding to a large public incident, community members often turn to social media to discuss what is happening. Toronto police monitor this virtual scene not only to advance their understanding of the situation but also to provide assurance to the community.

One example of this strategy emerged when police were conducting a manhunt in a residential community. The suspect was regarded as armed and dangerous; as a precaution, some schools were locked down and homes secured.

“What people started doing was turning to Twitter,” said Sgt. Tim Burrows. “Parents talked about the schools in the area, and rumours and false information were making its way on Twitter. It was creating panic so we had to get into that space because that’s where the

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**Toronto police monitor this virtual scene not only to advance their understanding of the situation but also to provide assurance to the community.**

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people are and they need to have accurate and reliable information as it becomes available.”

By following keywords and hashtags (a symbol used to mark keywords or topics), the TPS were able to monitor what the community was saying about the incident. In doing so, they were able to correct misinformation, dispel rumours and provide assurance that police were on the scene.

Having a strong social media presence has led to the public reporting non-emergency information to Toronto police. While the TPS has created a program that allows for great access to our members, it has been designed to be a communications tool, not a reporting tool. When reports do come in, members act on them accordingly, but the public is urged to report crime information via traditional methods.

To help the public understand the limitations of reporting emergencies in social media and minimize expectations of how reports are responded to, all Toronto Police Service social media accounts carry a disclaimer that they are not monitored 24/7.

# CASE STUDY

## CALGARY EXPLORING ONLINE MAPPING DURING EMERGENCIES

One area of technology many emergency responders are trying to further understand is online mapping. The City of Calgary, working with the software company Esri, has developed a mapping tool called the Common Operating Picture (COP).

To provide an overview of what is happening on the ground, the COP can pull relevant data — reports of flooding or fire, for example — from social media networks such as Twitter, YouTube and Flickr. This is done through content tags as well as other types of information from sources such as traffic cameras, census data and road conditions.

The COP maps can view and post information on the Canadian Multi-Agency Situational Awareness System (MASAS). Municipalities, provinces and federal agencies like Environment Canada are using this national project to share critical information during emergencies. The City of Calgary has also explored Ushahidi — an open source project that allows users to crowdsource crisis information over their mobile devices — as a mapping tool to share information with the public. It has also created test maps for different types of emergency events.



## The Common Operating Picture can pull relevant data — reports of flooding or fire, for example — from social media networks such as Twitter, YouTube and Flickr.

Already, the Calgary Emergency Operations Centre (EOC) dedicates a screen to social media monitoring using HootSuite, a social media dashboard. Mapping is taking this type of monitoring a step further. “One of the challenges is making sure the information is valid,” said Jason Cameron of the Calgary Emergency Management Agency. This agency has been developing a community of validated reporters (city staff and agency partners) to send geotagged photos and videos from smartphones into the EOC for automatic mapping. Thanks to these efforts, as many as 14,000 employees will be able to provide situational awareness and validated information to city residents during an emergency.

Cameron sees no reason why he can’t train additional staff beyond responders to use the mapping software to alert emergency officials to emerging issues in real time. He provides an example in which agency and utility partners, in the course of their work, would be able to send validated data about flooding or other emergencies from their specific location, potentially speeding up responses to better protect residents and property.

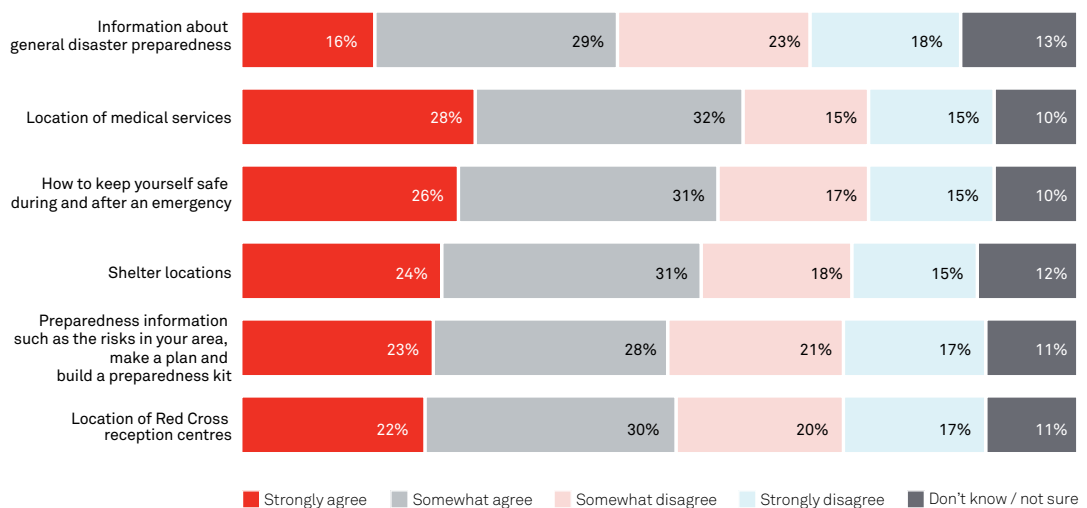


# SOCIAL MEDIA AS AN ALERTING TOOL DURING EMERGENCIES

While television and radio are the preferred media for broadcasting information about emergencies, one-third of respondents would opt to receive such information through electronic means.

About half of respondents indicated they would definitely or probably sign up for alerts via email, text message or a smartphone application to receive information about disaster preparedness when there are official warnings in their area. The survey also found that email was the preferred means to receive these notifications.

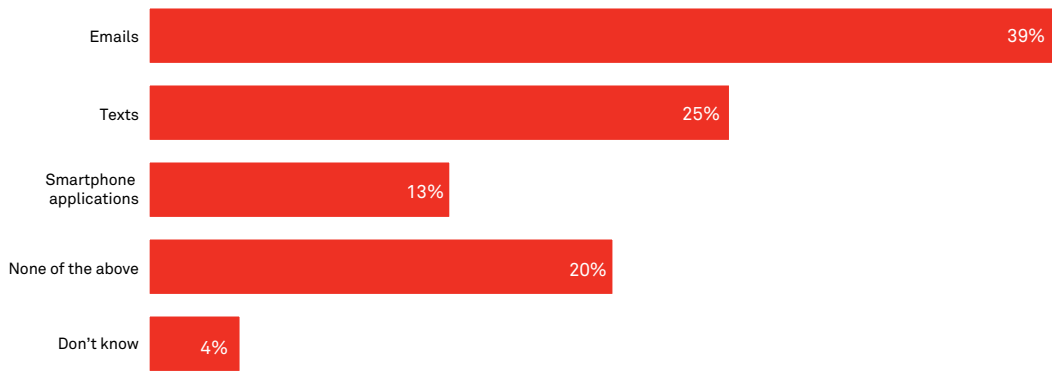
## LIKELIHOOD OF SIGNING UP FOR ALERTS ABOUT GENERAL DISASTER PREPAREDNESS OR SPECIFIC TYPES OF INFORMATION



**49 per cent of respondents say they are likely to sign up for electronic alerts when there are official warnings.**

**Respondents 35–44 years old, those with children in the house and women tend to be most likely to sign up for text or email alerts.**

PREFERRED METHOD OF RECEIVING INFORMATION ABOUT EMERGENCIES



# CASE STUDY

## SMS USED IN HAITI AS AN IMPORTANT TOOL FOR SHARING INFORMATION

When Haiti was struck by a devastating earthquake in 2010, people immediately turned to short message service (SMS), also known as texting, for help. In some cases, Haitians were sending texts while trapped under collapsed buildings. Using GPS technology to identify the location of people seeking help, search and rescue teams and aid agencies, including the Red Cross, were able to reach some of those affected by the disaster.

The Red Cross also used SMS as an effective tool to reach a large number of Haitians with important messages about emergency preparedness during hurricane season, as well as information on treating and preventing cholera.

At the height of the cholera epidemic that followed the earthquake, the Red Cross sent out 10.5 million text messages to cellphone users in Haiti. The International Federation of Red Cross and Red Crescent Societies (IFRC) worked with a local mobile partner to create an SMS communications system to send these targeted messages.

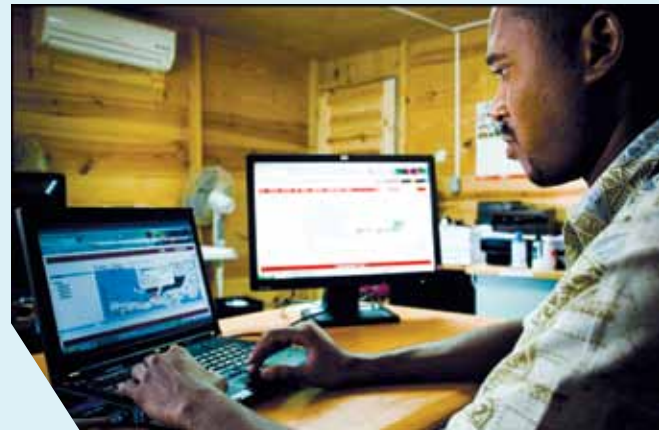
While the majority of Canadians (81 per cent) use the Internet, this isn't the case in Haiti. According to data from the World Bank, only eight per cent of Haitians are online. Mobile use far outstrips Internet use in the small Caribbean country, which explains why SMS campaigns are the method of choice to reach large numbers of people. A recent study by the Canadian Wireless Telecommunications Association found that smartphones represent 48 per cent of the mobile market in Canada. These devices allow people to communicate with each other in a multitude of ways, including email, social media applications and SMS.

Accessibility is one factor that determines the best way to reach users, as is the case for mobile phones and SMS in Haiti. This should not be the only consideration in Canada, where both mobile phones and the Internet are widely used.

While Canadians sent more than 70 billion text messages from mobile phones in 2011, smartphones users can also choose to send short messages through native instant messaging applications such as iMessage, WhatsApp and BlackBerry Messenger, further fragmenting the ways in which people communicate with one another.

	Canada	Haiti
Internet users	81%	8%
Mobile subscriptions	24 million	4 million
Telephone lines	17 million	50,000
Population	34 million	10 million

Source: World Bank, 2010.



### REFERENCES

International Federation of Red Cross and Red Crescent Societies.

2012 Cell Phone Consumer Attitudes Study, prepared by the Corus Consulting Group for the Canadian Wireless Telecommunications Association (<http://cwta.ca/wordpress/wp-content/uploads/2011/08/CWTA-2012ConsumerAttitudes1.pdf>).

World Bank Public Data.

Statistics compiled by the Canadian Wireless Telecommunications Association ([http://www.txt.ca/english/business/pdf/yr\\_graph\\_02-11.pdf](http://www.txt.ca/english/business/pdf/yr_graph_02-11.pdf)).

# HOW PREPARED ARE CANADIANS FOR DISASTERS?

While flooding and fires often make headlines in Canada, the most common types of disasters respondents said they have experienced are loss of electricity for more than 72 hours (41 per cent) and severe weather events (38 per cent).

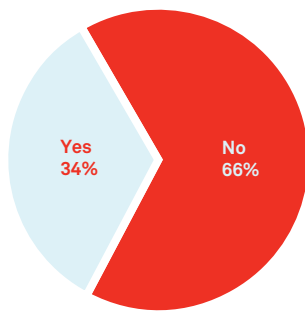
## PERSONAL EXPERIENCE WITH DISASTERS (% Yes)

	Canada	British Columbia	Alberta	Prairies	Ontario	Atlantic	Quebec
Loss of electricity for more than 72 hours	41%	27%	14%	16%	52%	38%	52%
Hurricanes, tornadoes or severe storms	38%	31%	42%	47%	43%	48%	25%
Flooding	16%	18%	13%	34%	14%	10%	15%
Fire	12%	18%	15%	9%	12%	14%	9%
An evacuation order as a result of disaster	9%	12%	8%	6%	9%	3%	9%

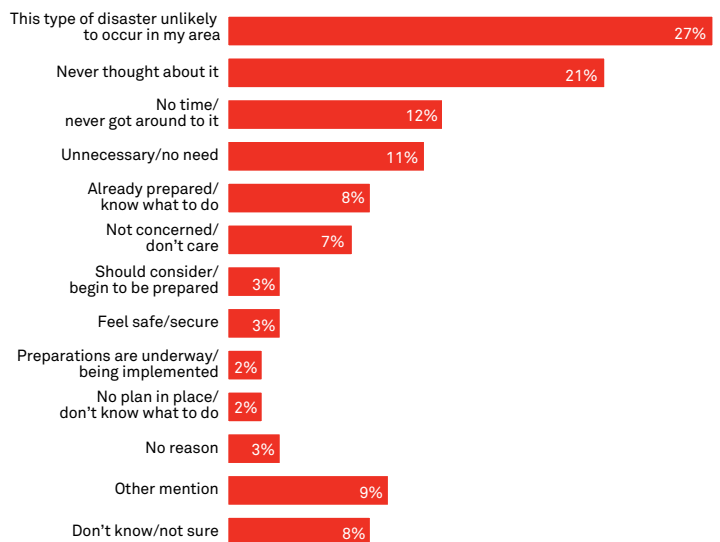


# More than half of respondents would use social media to alert loved ones that they are safe in the event of an emergency affecting their area.

## HAVE YOU TAKEN STEPS TO PREPARE IN THE EVENT OF A DISASTER?



## REASONS FOR NOT TAKING STEPS TO PREPARE FOR A DISASTER





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#### Canadian Red Cross on social media

Twitter: @redcrosscanada

@croixrouge\_qc

Facebook: /canadianredcross

/croixrougequebec

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[www.redcross.ca](http://www.redcross.ca)

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