Imagine a warm, sunny day along the coastline. Tourists walk the beaches. Employees are hard at work, and children are in school. Life is normal.

Now imagine a large, potentially dangerous storm churning out in the ocean. Day by day, it grows in intensity and draws nearer to your area. Soon, it is considered a strong Category 2, potentially Category 3, storm, and landfall is imminent within the next 72 hours.

With evacuation orders issued, area residents and businesses are urged to prepare for the worst. People scramble to secure their homes, gather their belongings and head to higher ground. Companies hustle to suspend or cease operations. Volunteers prepare shelters throughout the area, and public safety operations work to help those in need.

Anxiously, everyone continues to monitor the situation, listening to television and radio broadcasts, watching national radar and checking websites. Some receive word from local law enforcement, government agencies, or in some instances, their employers, through emergency notification systems. Others look to social media to gather or share information regarding the impending storm.

As extreme as this situation sounds, it is further complicated by what happens next. The hurricane picks up speed and moves even closer in the overnight hours. Panic sets in. People overwhelm the area’s 9-1-1, 5-1-1 and 2-1-1 systems with calls, inadvertently leading to communications gridlock. Officials struggle to keep up with the constant demand for details regarding evacuation routes, shelter locations, medical care accessibility, etc. Businesses find sustaining or suspending operations is more difficult than anticipated, especially with fewer people and a shortened time-frame for response.

Reality hits. Critical gaps exist due to the lack of real-time information available on demand.

How is this possible, especially at a time when communication abounds and most of us seem to live in a world of information overload? The answer is a multifaceted one. Radio and television news is filtered and generalized, often resulting in the delivery of stale or inadequate details. Websites may not be updated or accessible, especially in a contingency of this magnitude. Many people are not involved in social media networks, and some simply pay little or no attention to the world around them. Moreover, not every public safety operation or employer uses emergency notification technology.

Even worse, communication depends on limited infrastructure, often located in the disaster area itself. There is insufficient capacity to meet peak caller demand, and it is nearly impossible to expand this capacity during an actual emergency. And, inbound bulletin boards, typically associated with emergency notification systems, are not designed to handle this type of volume.

Hence, the real and growing need for information—instant information—accessible by telephone from anywhere, at any time and by everyone impacted by a particular event. Hence, the need for answers to fundamental questions like “When can I return home?,” “When and where am I to show up for work?,” “When will my child’s school reopen?,” “What days will debris be removed from my street?,” “Where can my family get fresh water and supplies?” and “Where can we seek medical attention, if necessary?”

The questions do not stop here, and they do not just come in the wake of a Category 3 hurricane. Take the Fourmile Canyon Fire in Colorado or the Iowa flooding in August 2010. In both instances, people not only found themselves displaced by the situation but also confused by the sometimes conflicting details they received after (or so they thought) the danger had passed.

So how could these scenarios play out differently, or more importantly better, for everyone?

Imagine a means for proactive, current and centralized information-sharing exact to a person’s needs or location in the hours and days leading up to, during and following a disaster.

In other words, constant, one-number access to thousands of phone lines outside the impacted area that provide callers menu-driven or quick-key access to details specific to their individual need(s).

Now let us return to our fictitious city of Windy Beach. Here, people learn about the storm’s progression
in the usual ways. Only this time, they are provided a local number to call as often as necessary for additional, continuously updated information.

Designated individuals (e.g., local officials, company management, etc.) continually record or revise storm-related statements, regardless of their physical location, making the latest details immediately available to everyone.

Information is factual, current and applicable, and it does not require new communications infrastructure or additional resources. It feeds into a more orderly evacuation prior to the hurricane’s arrival; a greater sense of safety and security for those who remain behind; a timely, better organized return to the area; and a well-coordinated cleanup effort. It also helps businesses get back to business by providing employees constant access to details critical to their own safety and operational continuity.

As necessary as this type of system sounds, it remains, for the most part, technologically lackluster and unfunded. That is, outside the world of 2-1-1, where in 2009, more than 16.2 million calls were answered in the U.S. alone. Accordingly, the United Way organization is pressing for the passing of the “Calling for 2-1-1 Act” to fund the necessary requirements to better meet everyone’s informational needs.

Why is this important? In a report published on May 27, 2010, United Way Worldwide stated that “many 2-1-1 centers lack the resources needed to build an adequate telecommunications infrastructure, provide appropriate staff levels and training, establish or maintain 24-hour-a-day service, ensure complete and accurate informational databases and reach rural populations.”

A solution of this type and scale should accommodate hundreds, if not hundreds of thousands of phone calls, per hour. It should fill the essential need for critical details, relative to public safety, personal property, business operations and livelihood. It should do so both efficiently and cost-effectively, and it should be fully supported by the organization(s) providing instant information, as well as those who rely on it in contingencies.

Crisis like hurricanes are fluid in nature. So too are the communications surrounding them. For this reason, operations should seek better, more reliable ways to provide people direct and immediate access to event-related information specific to them. And, they should do so with immediacy and imagination. That is, if they are to fill the critical communications gaps that currently exist in both the public and private sectors and throughout the lifecycle of an event like Windy City’s Category 3 storm.

Mark Howard is the software development manager for the Notification Solutions and Services (NSS) division of PlantCML®, an EADS North America company. He is directly responsible for the advancement of the organization’s new Instant Information communications platform. As a 25+ year veteran in technology, Howard has earned several patents for his innovations in medical software. He holds a degree in Accounting from California Polytechnic University-Pomona. He may be contacted at mark.howard@dccusa.com. Reprinted with permission.