

DISASTER PLANNING

EMERGENCY PREPAREDNESS—MORE CRITICAL NOW THAN EVER

Statistics show that weather-related and other disasters are increasingly common, along with business vulnerabilities

By Lucien Canton

One of the questions that I'm frequently asked as an emergency manager is whether disasters are becoming more frequent, or if it just seems that way because of media attention. After all, disasters have occurred throughout history and occur every day. Doesn't it make sense that our modern communications just make these events more visible and immediate?

The answer isn't a simple one, mainly because the question is framed wrong. Emergency managers focus on risk, which can be simplified as the frequency of an event times its impact. However, impact is a function of the actual magnitude of the event and the vulnerability of the affected population to that event. For example, heavy rains that produce flooding in open fields may have limited impact on your business. But a flood that blocks the transportation arteries that you need to transport goods to your customers or interrupts your supply chain can put you out of business. So, the question really shouldn't hinge on an increase in the frequency of disasters, but rather on whether we're becoming more vulnerable to them. Unfortunately, the answer, particularly to the latter question is, "yes."

INTERCONNECTIVITY RISKS

Before we consider the impact of disasters, we need to understand our operating environment. Over the years we've grown so dependent on technologies and infrastructure that we have become extremely brittle (i.e., subject to failure) through obsolescence and lack of maintenance. The interconnection of these systems means that a failure of one part can have an impact on other parts of a system. A prominent example of this phenomenon is the northeast power failure in 2003 that shut down more a dozen power plants in three minutes. This event left millions of people without power, some for days. The cause? Overgrown trees coming into contact with power lines in Ohio.

By understanding the increased vulnerability caused by our aging infrastructure, one can then begin to understand how emerging risks could impact on your business than was the case a few years ago. This suggests that we could begin seeing an increase in technological disasters. These could range from transportation issues such as the 2023 I-95 bridge collapse in Pennsylvania to toxic releases such as the 2023, a chemical plant spill in Bristol, PA, that spilled 8,100 and 12,000 gallons of butyl acetate, ethyl acetate and methyl methacrylate into a tributary of the Delaware River. Two other big areas of concern are failures of electrical grids as we place more demands on them, and water shortages caused by increasingly widespread droughts. The impact of these types of events on your business relates directly to your vulnerability.

Technological risks aren't limited to infrastructure. We are increasingly dependent on information technology, and that dependency has made us increasingly vulnerable to system failures and cyber attacks. Denial of service attacks and ransomware demands are increasingly common, as are scams and website hijacking. The risk is not only to your intellectual property but to your business reputation if your company identity is used to defraud your customers. There also are numerous stories of how company reputations have cratered due to the malicious use of social media.

CLIMATE RIPPLE EFFECTS

One of the biggest emerging risks is the impact of climate change. Whichever side of the debate on the cause of climate change you fall on, there is no denying that storms, droughts, and sea level rise are becoming more frequent and more intense, leading to more disasters. However, the impacts of disasters are not limited to the area affected by the event. They also have ripple effects that flow through the wider community. This is especially true given the interconnectedness of our systems. For example, a change in precipitation patterns can lead to a drought in one part of the country that in turn may lead to water rationing in another.

Ripple effects can also have an impact on your customer base. Following the 1994 Northridge Earthquake in California, there was a migration of many of the local population (mainly white retired aerospace engineers) to other parts of the country. They were replaced by a wave of young Hispanic immigrants that significantly changed the demands for services in the area. After the 1995 Great Hanshin Earthquake in Japan, several key manufacturers opted

to transfer operations to other countries where labor costs were cheaper rather than rebuild in an earthquake-prone area. The 1920 Mississippi Flood contributed to the Black Diaspora which saw a significant shift of African American families from the South to other parts of the United States. As the effects of climate change become more pronounced, we could well see this type of migration from affected areas to less-disaster prone areas with a subsequent impact on your client base, employee pool and demand for services.

While COVID-19 is fresh in our experience, disease is not really an emerging threat. There have been pandemics and epidemics throughout history, including quite a few in the United States that have been overlooked or forgotten, such as the Yellow Fever Plague of 1793 or the bubonic plague outbreak San Francisco in 1900. What COVID does suggest is that we can expect more outbreaks of disease in the future. Even if they do not have the global impact of the influenza pandemic of 1918 or COVID, disease—even something as simple as a particularly bad variant on the seasonal influenza—can significantly disrupt your business. Disease will impact demand for your services, hamper your ability to recruit staff, and disrupt your supply chain. It's important that we not forget the lessons learned in COVID—particularly as it pertains to protecting your workforce and customers.

Like any disaster, COVID has ripple effects far beyond the immediate need for a medical response. Many major cities are wrestling with a glut of unused office space, as employers recognize the cost savings by switching to a remote workforce. The improvements in online conferencing systems have sparked a reduction in business travel. Streaming services are rapidly replacing movie theaters. Even places of worship are seeing a decline in attendance as more and more people choose to attend remotely.

One area that is emerging is the increase in political violence. Several reputable researchers have made the case that we in the U.S. could be on the brink of a civil war, a war that won't be fought by mass armies but by individual acts of terrorism. Whether or not this is the case, the increased polarization between political parties in the U.S. and Europe, has given rise to numerous confrontations and increase violence. Having your business identified with an unpopular political viewpoint, taking a position on a controversial issue, highly publicized employee issues, having a business in the wrong location—these are the types of things that can make you a target for potential violence. Recognizing the dangers of reputational risk and having a strategy to deal with it is essential today.

The simple fact is that disasters are by their very nature hard to predict. We can recognize emerging risks but there's no guarantee that we will be predict the next crisis. Rather, focus instead on reducing your areas of vulnerability. Consider the following:

- What are your key risks and how could they impact your business? Can you function without electricity or water? How important is the transportation infrastructure to your business? Will a disaster reduce or increase demand for your services? How will it affect your work force?
- Understand what is critical to your business survival. What intellectual property do you need to protect? Who are your key suppliers and what are their vulnerabilities? Who are your key personnel? What critical functions are necessary to keep your business running? What impact will it have on your existing contracts?
- Develop strategies for dealing with crisis. Remember that this means not just physical damage but also intangibles such as reputational risk. It also means thinking beyond immediate response to include how you will restore your business to viability.

There are no guarantees when dealing with disaster. However, doing all you can to reduce your vulnerability to likely risks and having plans for how you will respond and recover can make the difference between business survival or failure.

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