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Introduction

Most of us have experienced a disaster of some variety. From natural disasters like severe weather and wildfires to man-made calamities like riots and infrastructure failures, disasters can cause loss of life, hardship and disruptions to business that lead to ultimate collapse.

Hurricanes, tornadoes, earthquakes, mudslides and wildfires are all examples of natural occurrences that can quickly escalate into disasters. Even with the most calculated planning, these events can cripple organizations – creating uncertainty in the organization's longevity, introducing massive rebuilding costs and leaving some without jobs.

Identifying an organization's potential exposures and taking steps to address deficiencies are essential practices in any business environment. Such efforts also apply to higher learning institutions, health care facilities and government establishments.

Because natural and man-made disasters are largely unexpected events, stakeholders may not consider them an important part of their routine business planning. However, because such events are capable of rising to catastrophic levels – threatening lives, assets and property – they must be taken into account in every organization's preparedness and response planning.

Such planning should include close attention to the safety of team members on- and off-site. Additionally, organizational assets and property are also at direct risk when emergencies occur and should be given due consideration.

While past events are troubling, we can learn from them. Diligence in planning and response can reduce loss of life or injury, lessen the economic blow and protect organizations against collapse. The incorporation of a far-reaching communication policy will aid an organization at every step in the preparedness and recovery process. Therefore, it's important to identify opportunities for improving communication before disaster strikes.



How Disasters Leave Their Mark

According to a recent report from Forbes, 2021 was one of the costliest – and deadliest – years for natural disasters on record. They state that about \$145 billion in losses were experienced, contrasted against NOAA's annual average of \$51.4 billion in losses, annually, since 1980². Worldwide, similar catastrophes are estimated to have cost over \$280 billion in economic losses.

This, of course, does not take into account the loss of life or serious injury to individuals. An estimated 688 Americans lost their lives in 2021 during these critical events, demonstrating the very real and tragic implications that arise from disasters of every kind.

Natural and man-made disasters can also bring tremendous damage to businesses, educational institutions, health care facilities and government.

TIME PERIOD	BILLION-DOLLAR DISASTERS	EVENTS/YEAR	COST	% OF TOTAL COST	COST/YEAR	DEATHS	DEATHS/YEAR
Last 3 Years (2019 - 2021)	56	18.7	315.2B	13.8%	\$105.1B	1030	343

Facilities Damage

Depending on the nature and severity of the disaster, a business or organizational facility can experience damage or complete destruction. Fires, floods and high winds associated with tropical weather can all leave facilities unsafe to occupy or damaged beyond reasonable repair.

Insurance can oftentimes soften the financial blow of property damage following a disaster. However, time to rebuild and reorganization expenses can prove to be too burdensome for many businesses and organizations. Additionally, the disruption of operations – more often than not – can render even the most robust business a complete financial loss.



Loss of Assets

Even if a facility is spared during the course of a disaster, organizations can incur devastating financial losses due to damage to assets. A large manufacturing business losing expensive processing equipment may experience such economic loss that starting over may never be a reality. Likewise, computer and telecommunications equipment to enterprise business can be difficult to replace quickly or affordably.

In most scenarios, adequate insurance will cover the financial loss of assets. However, this is subject to adjustments for depreciation and other factors. This often results in long wait periods and lesser reimbursement than originally anticipated – leaving many organizations short-handed to cover the cost of rehabilitating their asset pool.



Supply Chain Disruptions

A number of disasters can create interruptions in the supply chain. Severe weather can damage roads and bridges, cyberattacks can impact the grid and company data management and fires can make entire areas impassible.

When this happens, a dangerous domino effect goes into play. Manufacturing companies find themselves without raw materials and are unable to fulfill orders, distributors are unable to keep scheduled deliveries and retailers are unable to satisfy client demands. The end result can often be a loss of clientele, leading to additional financial burdens on an already struggling company.

Why Organizations Fail to Plan for Disaster



Cost



Lack of Knowledge



Time Constraints



Lack of Guidance

Disaster Impact by the Numbers

Since 1980, the United States has endured 332 weather-related disasters where damages exceeded \$1 billion. Summed together, these events exceeded \$2.275 trillion in losses.

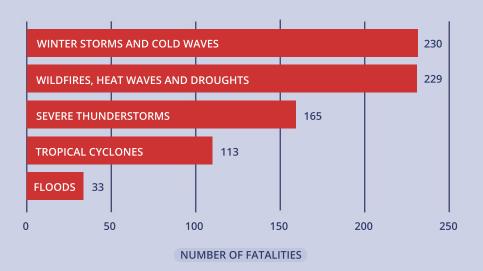
From January to July, 2022 alone, the United States experienced 9 weather disasters with losses exceeding \$1 billion each¹. These events, overall, resulted in the deaths of 8 people and had significant economic effects on each impacted area, according to the National Oceanic and Atmospheric Administration (NOAA).

In August 2021, Hurricane Ida descended on Louisiana, taking 107 human lives and costing over \$75 billion in damages. This made the storm the fifth most costly in United States history.

That same year, a flurry of wildfires in California and nearby states cost an estimated \$10 billion in damages and extreme cold weather in Texas created over \$24 billion in damages.

Along with the cost of assets and property, these almost historical events cost hundreds of fatalities, making them as tragic as they are costly⁴.





Severe weather – such as hurricanes, tornadoes and extreme cold – account for the greatest share of disasters in the United States. However, man-made disasters like cyberattacks and riots also spell danger to lives and property.

At least 25 people were killed during protests and political unrest in 2020⁴. And, the riots that followed the death of George Floyd in police custody cost insurers up to \$2 billion⁵.

For businesses, health care facilities, learning institutions and government, it is essential to prepare, plan and understand how disasters can threaten human life and impact operations. By understanding the potential for destruction, we can better discern our responsibilities and how to promote better outcomes.

Tips for Reducing the Impact of a Disaster

Because a disaster – natural or man-made – can create such long-lasting and profound obstacles for organizations, it's imperative to have an emergency plan in place. Even for smaller emergencies, the art of planning and responding to business interruptions can be both learned and a life-saver for an organization.

There are many facets to consider, and they differ depending on the type and size of the organization. However, for most organizations, having a plan in place will help reduce costs, mitigate known and unknown risks, serve to protect property and assets and – most importantly – protect the lives of team members both on- and off-site.

Identify Stakeholders

Whether by department or role, stakeholders should be identified in your disaster preparedness and response planning. These are the people responsible for securing facilities, communicating evacuation and shelter-in-place instructions, collaborating with authorities, preparing or moving equipment and a host of other efforts that can help minimize the impact of a disaster.

Each stakeholder should clearly understand his or her defined role and be capable and prepared to fit that role should the need arise. If or when someone is no longer able to fulfill these duties, another stakeholder should be named.

Ultimately, those responsible should have adequate training and the support of management in their efforts. This means open dialogue and continual review of plans throughout the organization.

Have a Technology Defense

For most organizations, technology is the lifeblood of operations. From your computer network to your telecommunications, technology is what keeps most businesses and organizations running. Therefore, it only makes sense to muster every tool at your disposal to protect your organization's technology in case of a disaster.

Most IT departments have plans in place to mitigate the risks associated with cyberattacks. However, it's also necessary to have a strategy for emergencies associated with natural disasters. This may include contingency planning should physical technology resources become damaged or destroyed.

Planning means backing up data on a regular basis and performing emergency backups when appropriate. It may mean offsiting certain types of equipment if some servers are housed locally. It can also require regularly conducting inventory counts of computer and telecom equipment in order to keep insurance policies up to date.

Finally, if your organization has not already done so, it may be time to consider cloud computing or SaaS (Software as a Service) solutions. Not only has this industry expanded to provide an abundance of business solutions, it effectively off-sites your data and applications, providing an extra layer of protection in the event of an emergency and allowing you to get back to work sooner.

Prepare for Helping Others

Every organization with a physical location should have adequate first aid on premises and a well-trained staff to administer it when the need arises. When disaster strikes, outcomes are almost always unpredictable. However, often they can mean injuries and other medical emergencies that require immediate attention while waiting for professionals to respond.

Additionally, special considerations should be made for people with disabilities. This includes accessible safe rooms or building exits and team members who are capable of lending assistance when needed.

Finally, some planning is warranted for the comfort of your team members if you're directed to shelter in place. Adequate drinking water, sugary drinks or snacks for those with blood sugar issues and hygiene products are all items that should be on hand if your team is asked to stay put.

Communicate Early and Often

Emergencies of all magnitudes can create chaos. Whether your team is on site or works remotely, it is of the utmost importance that you have a well-structured communication plan before a crisis strikes. Along with your on-site team members, remote and traveling workers need to be kept informed as events unfold.

For that reason, your approach to communicating must evolve beyond simple phone trees or email alone. A proper, proactive communication plan incorporates multiple channels for getting alerts to people and mechanisms for two-way communication.

During emergencies, people need updates on conditions, where to go, when to shelter in place and all-clear notifications.

Employing an overarching suite of tools for communicating crisis situations is essential to protecting lives, property and assets.

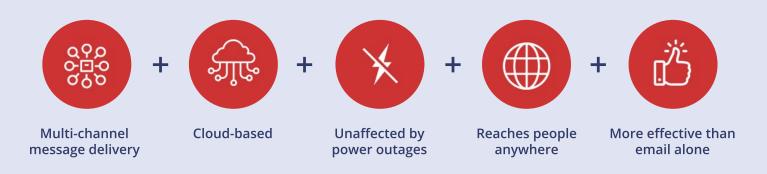


How Mass Notification Improves Survivability

Because a disaster – natural or man-made – can create intense crisis and chaos, it is essential to keep lines of communication open before, during and after the emergency. Most traditional forms of communication are susceptible to failure during natural emergencies like severe weather, earthquakes and wildfires. Therefore, smart alternatives warrant consideration.

Mass Notification – a technology utilized by many organizations for routine business – has its genesis in emergency alerting. Getting early warning to large groups of people when a crisis happens is the core competency of any mass notification platform. Since no organization is completely immune from critical events, it's important that a reliable tool for alerting others be part of an overall communication plan.

What Makes Mass Notification Different



Essential Mass Notification Features

Not all mass notification platforms are alike. For a system to provide the best tools for emergency alerting needs, one must consider the platform's features and capabilities. Before committing to any mass notification provider, make certain it provides the following:

Easy-to-Use Communication Interface

During times of emergency, sending and receiving important notifications must be simple and quick.

Cloud-Based Fail-Safe Features

Your platform should operate reliably even during power outages or cellular tower disruptions.

Automated Alerts

Mass notification systems that integrate with the National Weather Service, NOAA and IPAWS can alert automatically during severe weather events.

Two-Way Communications

The right solution allows two-way communications for advising others and getting updates from affected areas.

Notification Templates

Predefined templates can help save time during emergencies and serve to ensure messages are accurate.

Mobile Apps

The right solution should include a companion mobile app that allows people to receive alerts wherever they are located.

Desktop Notifications

Desktop notifications can be pushed out, instantly, to team members who are on-site or working remotely.

Geo-Targeting Functionality

A mass notification system that allows geo-specific alerts can help you target only those in an affected area.

Streamline Your Emergency Communications

Advanced preparations and planning for emergencies can greatly improve outcomes for people, property and assets. Using mass notification as part of your overall communications plan, you can create a more streamlined approach to critical alerts for your entire network.

Organizations that conduct periodic emergency drills can also benefit from the tools provided by a robust mass notification system. Regular drill participation and practice has been shown to improve the flow of information and reduce response times.

Checklist for Effective Emergency Drills

- Conduct an orientation meeting
- Assign roles and responsibilities
- Require participation from the entire team
- Coordinate with local safety officials
- Conduct scheduled and unscheduled drills
- Simulate unusual situations that can occur during a disaster
- Test employee accountability procedures
- Test all warning and notification procedures
- Conduct post-drill follow ups with team members

Deploying Alerts During a Disaster

When a disaster situation becomes inevitable, time is certainly of the essence. Getting information to your team members is crucial so that they are equipped to take the necessary steps to protect themselves. Timely alerts are also important for those responsible for facilities management or asset protection.

With mass notification, your odds of a positive increase dramatically due to its inherent superiority over more traditional methods of communication – like phone calls or emails.

Mass notification can deliver – almost instantly – to a number of channels, giving you far greater coverage and efficiency during a critical event.

Mass Notification Delivery Channels



Email



Text/SMS



Push Notifications



Desktop Notifications



Mobile App Alerts



Voice/Audio Calls



Digital Alert Systems/ Signage



Public Address Systems



Corporate Intranets



Social Media

ADA Compliance

Many traditional emergency notification methods are not accessible to or usable by people with disabilities. Those who are deaf or hearing impaired may not hear radio, television, sirens or other audible alerts. Those who are blind or vision impaired may not be aware of visual cues such as flashing lights.

Your warning methods should ensure that everyone will have the information necessary to make sound decisions and take appropriate, responsible action. As a best practice, use a combination of visual and audible alerting methods rather than relying on one method alone. Mass notification can deliver more effective results thanks to its multi-channel delivery.



When a natural or man-made disaster threatens an organization and its people, mass notification is the most reliable way to warn others quickly. It can help speed response and save lives when emergency situations arise.



Conclusion

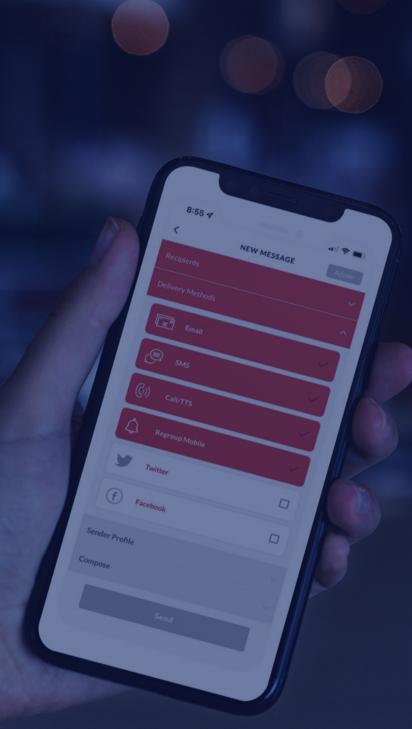
Disasters can strike without warning and in ways that give us little time to prepare or respond. They can cost organizations staggering losses in people, income, property and clientele. Without a plan to face unknown threats, most organizations simply will not weather the outcome of a natural or man-made disaster.

Critical to overcoming such adversity is a deep understanding of potential damages and this history of disasters and their impact on businesses, health care, education and government.

Building an effective disaster preparedness plan demands critical attention to potential flaws in safety protocols and facilities management. It also requires a comprehensive communication plan that helps keep individuals safe.

Using a mass notification system to complement an emergency communication plan offers a variety of benefits. Mass notification helps close communication gaps by delivering to multiple channels even when power is out or cellular services are hobbled. And, with integrations to emergency alerting agencies, mass notification does far more to protect lives than traditional communication methods.





About Regroup Mass Notification

Since 2006, Regroup Mass Notification has provided a cloud-based, multi-channel mass notification platform for emergency and routine applications.

Serving manufacturing, logistics, the educational community, enterprise, finance and government, Regroup's continual pursuit of excellence has made it the most trusted name in mass notification and a leading-edge provider of smart communications for clients throughout North America.

We provide customized solutions for every organization we serve and offer many options including desktop notifications, open API, threat intelligence and more.

Learn More Schedule A Demo regroup.com 855-REGROUP inquiries@regroup.com

Demo **regroup.com/demo**

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