INTERNATIONAL ASSOCIATION OF EMERGENCY MANAGERS

Bulletin

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IAEM Bulletin Conference Issue, Part 2

IAEM Reimagined Virtual Conference, "Visioning the Future of Emergency Management" – Feature articles on the conference theme begin on page 5.

IAEM Reimagined Virtual Conference Launches on Nov. 16 with Live and On-Demand Content

IAEM knows that the life of an emergency manager can be very spur-of-the-moment. You prepare for a lot of what-ifs, but there are always things that pop up at the last minute. That is why all of the content from IAEM Reimagined, Nov. 16-18, 2020, will be offered live and on-demand.

Earning Contact Hours for Credit Toward IAEM's Certified Emergency Manager Program

With more than 40 breakout sessions and five stellar plenary sessions, educational opportunities are available to meet everyone's needs. IAEM's Virtual Conference provides more than 50 hours of content available whenever you want on-demand. After you watch, you will be able to claim those contact hours for credit towards IAEM's Certified Emergency Manager Program, as well.

Virtual attendees who are unable to attend a plenary or breakout session will have access to the on-demand recording beginning the day after it was presented live. If there are two or more speakers presenting at the same time who really pique your interest, the virtual platform provides a solution – watch one live and the others at a later time that fits your schedule. The only portion not available on demand is the live Q&A. While you can't participate in the live Q&A watching the recording, you can watch any session at least through Dec. 15 to watch whenever you want.

The virtual event again will feature the EMvision Talks. This highly popular plenary session highlights fellow emergency managers sharing a personal story related to the field of emergency management. IAEM Reimagined also will feature EMEX 2020, which brings together the latest technological advances in homeland security and disaster preparedness suppliers.

Networking Events Plus Virtual Meeting Rooms

IAEM Reimagined will hold social networking events before and during the conference to facilitate connections with old friends and encourage attendees to meet and network with new emergency managers from across the globe. The conference platform also provides virtual meeting rooms, or vMeet rooms, to provide the ability for virtual introductions to expand personal emergency management circles, similar to in-person conference networking.

Registration Is Still Available

There is still time to join others at IAEM Reimagined, the event where emergency managers come together to share their stories, network, and expand their careers now to make connections for the future. The virtual conference features all the bells and whistles of our in-person event. Take a sneak peek at the attendee experience in our virtual platform.

Bidding or Donating Will Help the IAEM Scholarship Program in This Difficult Year

There is no denying that donations to the IAEM Scholarship Program are down in 2020. It has been a year of angst and uncertainty for everyone. Nevertheless, the Scholarship Program received a record number of applications and selected three individuals to receive awards. The funds provided through the program can be the difference between a student continuing in the program to graduation or dropping out until additional funds can be secured.

IAEM has more than 5,000 members and could easily raise $50,000 if every member gave as little as $10. Additional funding can be raised through bids on items in the online scholarship auction. While we have online auctions every year, the bulk of the auction funding comes from the fun in-person event held annually at the Annual Conference.

The IAEM Scholarship Program 2020 Annual Conference Auction runs online from **Oct. 20 until 10:00 p.m. EST, Dec. 1, 2020.** Participa-tion in the auction supports the Scholarship Program and helps further the education of students studying the field of emergency management, disaster management or a related program.

Many incredible items and experiences have been added to the auction.

■ Multiple COVID-19 Event Challenge Coins, even the Masked Gumby Coin.

■ Kentucky Bourbon Trail Getaway and Distillery Tours.

■ Several High-end Italian Silver Jewelry Sets.

■ Historic Dude Ranch Vacation.

■ Mystery Box.

■ Escape to the Brandywine Valley.

■ Language Lessons.

■ Sleep in a Caboose in the Smokies and Visit the Buffalo.

■ Guitar Lessons and Active Melody Community Subscription.

■ And more!

Bid in the auction by visiting the Bidding for Good website at www.biddingforgood.com/IAEM

ScholarshipProgram to set up your Bidding For Good account – and then follow the auction using mobile bidding, if you don't want to be outbid.

Giving Tuesday and Cash Donations

Cash donations to the IAEM Scholarship Program are always greatly appreciated. This year the auction will culminate on Giving Tuesday. In this month of Thanksgiv-ing, please take a moment to give back to the profession. You can donate quickly by visiting the online auction. Just choose the donate button on the left menu and donate securely through Bidding for Good. While you are there, you can take a look at the auction items and see the active bidding.

Direct any questions about the IAEM Scholarship Program or its fundraising activities to Scholarship Program Director Dawn Shiley, shiley@iaem.com, 703-538-3542. ▲

IAEM Reimagined Virtual Conference Launches on Nov. 16 with Live and On-Demand Content

There is something for everyone at IAEM Reimagined. Registration fees are lower than ever before at $379 for non-members and $299 for IAEM members. Register today to participate Nov. 16-18, or to access content on-demand afterwards to experience the premier emergency management conference of the year. ▲

Register

Technical Specifications for Participation in the IAEM Virtual Conference

To be sure you have the best experience and are able to fully participate, here are some guidelines.

■ Use the most up-to-date version of **Google Chrome** for your Internet browser when you connect your laptop or desktop to the meeting.

■ **Turn off your VPN**, if you usually use one. The virtual meeting interface will NOT work with the VPN engaged.

■ Be sure to use a computer or laptop with either built in or external web camera and microphone. (This will let you network in V-meet rooms with other attendees, just like you would at an in-person conference.)

■ For the real techies, the best experience uses an Internet speed of at least 10 Mbps download and 5 Mbps upload for good video quality. If you have been participating in virtual meetings using video and have had no issues, do not worry about the suggested speed metrics. You should be fine.

■ Close all unneeded applications to give your computer additional memory for video processing. ▲

From the IAEM-USA President

Thanks for Your Support Throughout My Term as the IAEM-USA President

By Teri Axman, CEM, CPM, IAEM-USA President

Well, we've arrived at my final president's message!

I would like to extend a special note of thanks to outgoing IAEM-USA Board member, Carrie Speranza, CEM, who will complete her term on Nov. 18, 2020. Carrie has served as the secretary of IAEM-USA, ensuring the maintenance of accurate records of the proceedings of all meetings of the membership, the Board of Directors, and the Executive Committee. We thank Carrie for her service and will miss her on the board.

I can truly say that IAEM has given me more than I would ever hope to contribute. A good friend, Lanita Lloyd, CEM, told me at the beginning of my presidency that I would learn invaluable lessons, and she was absolutely correct. I have found that the President is always fully supported, people volunteer for things, and everyone is pulling in the same direction. I have learned many important and invaluable principles. It's been exciting, a lot of fun, rewarding, and a very affirming experience.

Although it has involved a lot of hard work and some disappointments, I have truly enjoyed my time serving as president and feel very fortunate to have had this opportunity.

I want to thank each and every one of you for giving me this opportunity. It has truly been my pleasure to serve as the president of IAEM-USA during this very special year.

Though my term as president has ended, I can step down with confidence and look to our future, as I pass the torch to Judd Freed, CEM. I pledge as your Immediate Past President to continue working with the board of directors, committee chairs, regional presidents, and the members to ensure that we continue to be the premier organization of emergency management professionals.

Thank you for your dedication, hard work, cooperation, honesty and, most of all, your friendship. I wish you all the best! ▲   **Teri**

IAEM Wants to Publicize Your AEM®/CEM® Achievement

The International Association of Emergency Managers cares about your privacy. We recently updated our preferences options for the IAEM online certification listing and membership directory. Please take a moment to doublecheck that our listing reflects your preference: see the current publicly available AEM®/

CEM® News

CEM® list. If your name does not appear, that means that you have chosen to be excluded from the directory listing. Click here to revise that by selecting "Update My Information" and *un-check* the "Exclude from IAEM Directory and other listings…", if desired. Likewise, if your name appears and you prefer *not* to be included in such public lists, click here to check the "Exclude from IAEM Directory and other listings…" to ensure your preference is registered. We are proud of your achievement. Contact info@iaem.com for help. ▲

Take the AEM®/CEM® Prep Course Online

IAEM has partnered with MindEdge Learning to offer the online AEM®/CEM® Prep Course (U.S. version). The course, which can be purchased through the IAEM website, provides candidates with:

■ An overview of the application process;

■ A review of the exam materials; and

■ Access to sample exam questions – including two full-length 100-question practice exams. ▲

Updated Study Guide for the IAEM Certification Exam

The AEM®/CEM® Study Guide has been updated to reflect a change in the core reference list. FEMA has retired IS-547a and replaced it with IS-1300. The updated study guide can be found on the Resource Center page.

Disaster Zone
Using the Emergency Alert System
By Eric E. Holdeman, Senior Fellow, Emergency Management Magazine
blog: www.disaster-zone.com | podcast: Disaster Zone

Hey, everybody! There is a warning system called the Emergency Alert System (EAS) that can be used to issue warnings. Why aren't more emergency managers using it?

Thirty years ago, the Emergency Broadcast System (EBS) was the only technological tool available to emergency managers for an electronic alerting of the population in their jurisdiction. It was replaced in 1997 by the Emergency Alert System (EAS), which still exists as a warning system and is now used extensively by the National Weather Service (NWS) to issue severe weather warnings. The last innovation added to EAS was the addition of Amber Alerts for missing children.

When EAS was fielded, it had the promise of being able to broadcast through televisions and radios, even when they were not turned on, so that people could be alerted. That promise is not one that I'm aware of being fulfilled.

Fast forward to 2007, and a mass shooting incident at Virginia Tech led to an explosion of commercial mass notification systems. At one time, there were more than 100 of these commercial offerings available. Over time, these have consolidated to be many fewer.

It appears to me that this commercial offering of services has become a preferred option for many emergency management organizations. The limitation that I'm aware of is that residents must "opt in" to receive these notifications. Thus, there might be thousands of subscribers to the system, but in reality it equates, in most cases, to *a very small percentage* of actual residents who have taken the step to be notified.

This leads us to the latest innovation in alerting – the national offering of Wireless Emergency Alerts (WEA). The system became operational in 2012. It allows for the issuing agency to specify a geographic area to receive the alert. A significant limitation is that there is a maximum of 90 characters available for formatting a message.

During a review of current situations, especially wildland fires, I've observed that emergency managers have taken heat in California for not using WEA more for alerting purposes. The excuse that I've heard is that the geographic area and character limitations make the system less than helpful in issuing an alert. Therefore, I keep reading about police and fire fighters going door-to-door to alert people to evacuate.

I never hear anything about the EAS system being used to send an alert. Why not? Broadcasters do have to "voluntarily participate" in the system for state and local alerts. Only Presidential Alerts are mandatory for participation. The system has never been used (although I think the terrorist attacks of 9/11 would have been helpful), except for one national test conducted "for the first time" several years ago.

It is possible that there is a "fear factor" associated with sending an alert with EAS because any mistake in language and messaging will be prominent. I also think that there is a lack of training, expertise and confidence on the part of emergency managers that hinders their use of the system. That is my guess, anyway.

Another benefit of the EAS system is that weather radios are linked with EAS messages. The weather radio can sit quietly in a bedroom or office, It will only turn turn on when there is a warning issued, and it can be programmed for specific location warnings. For "less than the cost of a pair of shoes," people who live in high risk areas can get a warning – if one is issued.

It may feel good to hear about first responders going house-to-house, risking their lives to alert people of a hazard, wildfire, dam break, or levee failure. But really, this is the 21st Century – and we should be able to do better than that when we have other tools available, one of them being EAS. ▲

Special Focus Issue Features:
"Visioning the Future of Emergency Management," Part 2

The IAEM Bulletin, which is a benefit of IAEM membership, will soon complete its 37th year of providing information, resources, and ideas for IAEM members.

This issue is Part 2 of our special focus issue on the conference theme of "Envisioning the Future of Emergency Management."

Invite your colleagues to view or download the October *and* November "conference issues" of the IAEM Bulletin.

Make Sure You Receive the Latest Emergency Management News!

Are you receiving the *IAEM Dispatch* weekly e-newsletter every Thursday?

If not, check your spam filter or subscribe at www.iaemdispatch.com.

The *IAEM Dispatch* tackles today's most relevant issues, gathered from sources like Associated Press, The Washington Post, Financial Times, and the leading industry publications. Delivered to the in-boxes of emergency management industry professionals, the *IAEM Dispatch* keeps professionals informed of topics that impact their programs. Subscribers are decision-makers with purchasing power—the top-tier professionals in the industry.

Would you like to find out advertising opportunities in the *IAEM Dispatch*? Check out who subscribes and ask for an *IAEM Dispatch* media kit at www.iaemdispatch.com. ▲

About the IAEM Bulletin

The *IAEM Bulletin*, the official newsletter of the International Association of Emergency Managers, is published monthly by IAEM to keep members abreast of association news, government actions affecting emergency management, research, and information sources.

The publication also is intended to serve as a way for emergency managers to exchange information on programs and ideas. Issues from the past five years through the present are available in the members-only IAEM Bulletin Archives. Older issues can be requested from the editor.

The *Bulletin* is distributed electronically via the members-only archives to emergency management officials each month, representing all levels of government, industrial, commercial, educational, military, private, nonprofit, and volunteer organizations.

Publishing an article in the *IAEM Bulletin* may help you to meet IAEM's certification requirements. If you haven't written an article lately, or at all, for the *IAEM Bulletin*, check out the author's guidelines. ▲

The Future of Whole Community Engagement

**By Jason Ferguson, Senior Analyst, Constant Associates, and
Hieu Vu, Support Specialist, Constant Associates**

An important role in our industry is to directly engage with the communities we serve to best understand their needs and devise effective strategies for helping them prepare for, respond to, recover from, and mitigate against disasters. Typically, this work involves conducting community research, working alongside local partners, and interacting with those who live and work in the community. Practicing whole community engagement brings a wider lens to the issues and challenges that people across diverse populations face during and after an emergency – and can ultimately enhance our ability to promote public health and safety.

This approach is important to the process of bolstering community resilience, as it can help establish rapport and build trust. It also makes way for collaboration around finding and implementing solutions to community health and safety threats. By empowering the community, an authentic dialogue is occurring to bring forth actual solutions that can be effective.

Social Distancing Public Health Mandates and Prohibitions Against Large Gatherings

As the global COVID-19 pandemic response began to formally ramp up, states across the nation began to issue social distancing public health mandates. States that were early hotspots, such as California, New York and Washington, responded by implementing strict "Safer at Home" orders. Effectively, the orders prohibited large gatherings for any reason in an effort to flatten the curve and prevent the spread of coronavirus.

While our traditional forms of community engagement may have been diminished due to the COVID-19 pandemic, the need to stay connected has arguably increased.

Current Barriers

With these measures in place, many of us have experienced disruptions in our work. As a whole, travelling and in-person interactions were immediately halted. Many of us have completely shifted to virtual or web-based interactions as our normal means of engagement. This leads to the current barriers that we might experience in our efforts to properly and effectively engage with the community, which include:

■ The **transition to a virtual environment** could lose the interpersonal aspect that typically helps in building trust with a community, which could diminish relationships and the concepts, habits, and practices we are looking to enhance.

■ Many people across the Nation are experiencing "**zoom fatigue**," which could decrease levels of participation and engagement as a result of the new virtual environment.

■ There is **difficulty in finding convenient non-web based solutions** for populations who do not have access to the internet.

■ Over the past year, there have been **multiple overlapping emergencies** that have taken a certain toll on responders and communities, which could affect their levels of engagement and participation as a result of that burnout.

Sustaining Community Engagement Moving Forward

We have all learned a great deal since the spring of 2020, as we have

been adjusting to our "post-COVID new normal." As a result, these limitations have required innovative and creative solutions for continuing our engagement with disaster-affected populations. Here are different takeaways emergency management can consider in their own efforts:

■ **Invest in improving virtual engagement tools and processes**. It is important to identify the right technology and software to fully support virtual engagement. Assess what functions are most important to your process. This can include webroom capacity, active chat box functions, and call-in numbers. Additionally, ensure that those technologies are fully functional as an organizer and user. Be prepared to inform users on how to use these new functions. For instance, the Los Angeles Department of Health Services' Whole Person Case (WPC-LA) transitioned most of their services to a virtual format, opting to host recorded web-based meetings. As the most immediate solution, transitioning into a virtual environment can be very successful. It has the potential to yield higher attendance and participation from a target audience, as it does not require high levels of commitment like in-person forums. Additionally, it can be more cost effective to host virtual public meetings than it is to plan for and execute the logistics required to support in-person sessions.

■ **Creatively utilize current technology to meet your needs**. Aside from hosting virtual web-based meetings, there are several other ways to virtually engage with the community. Consider utilizing

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your social media accounts to reach populations that would not otherwise be participating in a virtual meeting. The Urban Institute has transitioned their engagement methods to virtual platforms, specifically to Instagram. By creating infographics, they were able to transition their data-sharing presentations (Data Walk) by posting to their feed and promoting engagement with their followers. This form of engagement could help elevate participation in conjunction with other methods.

■ **Actively utilize traditional methods of communication**. While the natural inclination would be to move towards virtual forums, traditional modes of engagement are still beneficial. These can help populations who are hard to reach and/or do not have access to virtual formats. Non-digital formats, like traditional postal mail and phone calls, are still effective in reaching a wide breadth of populations.

In 2018, the Civic Tech and Data Collaborative implemented ecosystem mapping to identify and support social dynamics in the community. Through traditional phone communications and local partnerships, they were able to develop sufficient data about community relations without actively canvassing the community.

■ **Leverage existing local partnerships to engage with the community**. It is important to engage with key community stakeholders who can help identify the best practices for their communities. With their local knowledge, they could help recognize different solutions for issues that several sections of the population may experience. Additionally, they could also identify local partnerships that could serve as a source of information and engagement. For example, non-emergency services like grocery stores, pharmacies, food banks, and schools could act as a conduit of engagement. These partnerships may help cover gaps in the population, who are not aware of or able to access virtual engagements.

■ **Consider underserved populations in your outreach and engagement methodology**. As a result of this new environment, there are many who will not be connected seamlessly to these newly adapted community outreach and engagement processes. Without proper planning, there are those who may not be able to participate or may be hard to reach, including: the elderly population, people with limited or no internet access, individuals who have limited English proficiency, populations with disabilities, and others with access and functional needs. Consider these factors during the outreach planning process to help organizers determine alternative resources, like multiple language translations/interpretations, implementing Wi-Fi access, and traditional telephone options.

Conclusion

Whole community engagement remains a critical function of our role as emergency managers. In order to understand and meet the actual needs of the whole community, it is important for us to adapt our practices over time to meet the evolving needs our communities face. During COVID-19, it may appear that our options are limited. However, it is important to leverage our ability to implement innovative methods for all, including underserved populations. From conducting virtual meetings, utilizing social media, and leveraging traditional forms of communication, it can help push whole community engagement into a new light. More importantly, the effects of our outreach and engagement can still be tangible without sacrificing the elements that made our pre-COVID-19 practices empowering for the community. Moving into the future, emergency managers should continue to encourage and employ innovative and creative practices that include the whole community, as this is an imperative function that ultimately builds resiliency for all. ▲

Changing the Culture: Emergency Preparedness for Individuals and Organzations

**By David R. Baker, MoCEM, MPA (Disaster & Emergency Management),
Emergency Coordinator, ALLETE, Inc., and Ph.D. Student (DEM, Capella University)**

Organizations are often defined by their culture. For example, most organizations have great safety and security cultures that are highly respectable. IAEM's theme this year is "Visioning the Future of Emergency Management," and if we have learned anything this year with COVID-19, it is that being prepared and risk management has certainly taken on new meaning.

People's perceptions never seem to change without incidents affecting them personally. So, how do you change an individual's or an organization's culture towards emergency preparedness? I think it starts with being able to discuss the basics of risk perception, safety, security and emergency preparedness.

Risk Perception

Risk perception is a driving force that keeps individual and corporate emergency preparedness from becoming a culture that competes with safety and security at the highest level. Risk is the likelihood of occurrence of an unwanted event that can cause adverse effects in any given situation. However, there is a risk perception paradox than can hinder this process.

The Risk Perception Paradox – Implications for Governance and Communication of Natural Hazards discusses the paradox of risk perception and its impact on how individuals choose whether to prepare themselves for natural hazards. The risk perception paradox exists when it is assumed that high risk perception will lead to

personal preparedness. However, if an individual still chooses not to prepare, despite the high risk, they are still affected negatively, thus the paradox.

Thus, individuals and organizations tend toward not being as prepared as they should when it comes to disaster or emergency events. This failure as a culture can have devastating effects on an organization.

Difference Between Safety, Security and Preparedness

It also helps to understand the difference between safety, security and preparedness.

■ **Safety** is defined as being safe from undergoing or causing hurt or loss through negligence; protect against failure or accident (unintended, random, or natural).

■ **Security** is the protection or prevention from injury or loss caused by deliberate or intended actions or incidents.

■ Finally, **preparedness** is a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action to ensure effective coordination during incident response for a (man-made, natural, or technological events).

A more simplistic way to look at this is thinking of safety, security and preparedness as being three silos on a farm. All of them have independent value, but collaboratively they are worth more and sustain the farm more effectively and efficiently. In the world of emergency management, especially when we speak about the "whole community," it is

important to understand how the various and numerous aspects of safety, security and preparedness serve a greater purpose collaboratively rather than as individual elements.

Changing the Culture

So, how do we change the culture? First, we must understand what culture is. Culture provides identity to a community based on language, values and norms, as well as the symbols utilized.

Culture is prevalent in our daily lives, affecting the way we operate, how we eat, what we think, and how we interact with others. It is an evolving process that can and will change quickly if given the right set of circumstances, such as a disaster or major event that affects you both personally and/or professionally.

When you speak of culture, you are speaking to understanding diversity as well. Diversity is a recognition and value of differences, which encompass factors such as age, gender, race, ethnicity, ability, religion, sexual orientation and education. In this case, emergency preparedness culture is the variable that needs to change to ensure that an individual and/or organization can better mitigate, prepare, respond, and recover from disasters and emergency events.

Secondly, we must take actional steps to improve one's emergency preparedness culture. The biggest hurdle in culture change and policy development is getting everyone to have productive, meaningful and collaborative communication

Changing the Culture: Emergency Preparedness for Individuals and Organizations

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regarding the need for change. The main focuses should be on:

■ regulating and changing education doctrine (beginning at an early age);

■ providing the necessary funding for the tools for emergency preparedness; and

■ committing to these changes (both at home and within an organization).

There is also a need to increase our public and citizen participation in mitigation, planning, and all other aspects of emergency management.

Finally, it is important to educate the public, policymakers and stakeholders in all areas of emergency management to get the message out regarding the importance of individual and corporate emergency preparedness. It is no

secret that individual participation in our society is necessary for public sector professionals and public officials to take preparedness more seriously. There is a need to provide more education, funding and actionable steps to improve this at the lowest level (individuals).

A recent survey indicated three quarters of respondents cite lack of time for the reason for low citizen involvement. Time management is essential in all of our lives, but most importantly, the need for the "whole community's" involvement – from the individual and household to the neighborhood and community – is critical for cultural change to occur both among individuals and those in our local organizations. ▲

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FEMA Helps to Fund Dam Removal as Part of an Innovative Public-Private Partnership

By Terry Baumann, MA, Account Supervisor, Public Affairs, Ogilvy, Washington, DC

Built in 1904, Rattlesnake Creek Dam played an integral part of the water supply for the City of Missoula, Montana. But at more than a century old, the dam is no longer in use and is a potential hazard to its environment and local community. Without its removal, FEMA estimates Rattlesnake Dam could cause more than $6 million in damages if it failed.

To tackle a project this large, the city formed a partnership with external organizations, such as Trout Unlimited, the Watershed Education Network, and the Montana Department of Fish, Wildlife and Parks. They've worked together over the past several years to prepare the dam for its removal, and the public-private partnership successfully applied for several grants from Patagonia, Northwestern Energy, and the Federal Emergency Management Agency (FEMA).

FEMA's Hazard Mitigation Grant Program is funding more than $700,000 of the project that will go to the removal of the dam and the restoration and restabilization of the site. The program provides funds to states following a major disaster declaration, allowing them to fund projects that will minimize the impact of future disasters.

The FEMA grant provides 75% of the needed funding to remove the dam, and the partnership has secured the remaining allocations. The dam was officially removed during the summer of 2020.

Rattlesnake Creek Dam is just one example out of hundreds of other barriers that pose potential risks to local communities. According to the Association of State Dam Safety Officials, 70% of dams will be past their 50-year life spans by 2025.

"It's important to identify opportunities where partnerships can really strengthen local commu-

Photo courtesy of Trout Unlimited.

nities," said FEMA Region 8 Mitigation Division Director Jeanine Petterson. "We hope others see the potential and the power of public-private relationships, and that we can serve as an example to remove other aged dams and keep communities safe."

Model for Future Restorations in Western United States

With the help of the Unversity of California-Davis Center for Community and Citizen Science, the Rattlesnake Dam partnership will be turned into a model for future restoration efforts throughout the western United States. The center works to build capacity for local groups to monitor watersheds before, during and after dam removal through a grant from the Open Rivers Fund. The Rattlesnake Dam removal will be highlighted as a successful example in their final report to help others with watershed restorations.

Additional information about the project is available at www.rattlesnakedam.org. ▲

Rattlesnake Dam in Missoula, Montana. Photo courtesy of Trout Unlimited.

Maintaining Resilience During Uncertainties

By Sarah B. Smith, MPA, CPP, CBCP, President, and Patrick F. Williams, CBCP,
Chief Operating Officer; Co-Founders: ReadyToGo™, Vi-Ability, LLC

As the complexities of disasters rise, how we respond to a disaster becomes more complex. In today's society, we worry about our individual safety, our family's well-being and our overall survivability from an emotional and financial perspective. Gone are the days when a disaster lasted a couple of days at most. The long-lasting impacts from a disaster may take years to recover from, if ever.

More Complex Disasters

Gone are the days when all communities have to worry about is the one-off tornado or hurricane. Now communities often face complex disasters occurring at the same time. Take 2020 as an example. The nation is responding to a global pandemic, while fires are raging in California, extreme heat impacts the Midwest, and hurricanes are reaching the coast in the southeast.

Families, neighbors and communities face the unprecedented need to plan, prepare, and confront new realities of disruptive harm. However, due to the conflicting priorities, people are not likely to prepare for something that may or may not happen. Enhanced technology will facilitate greater coordination and real-time communication to provide better insight and knowledge. In turn, there is improved resilience for individuals and communities.

Ready2Go™: The Strategic Plan

All families and communities should have resources readily available, not only to sustain a disruption but also to thrive afterwards. By leveraging technology, the authors developed an app that communities and individuals can use simultaneously to be used as a playbook for preparing, responding and recovering from disruptions. Ready2Go™ aims to bridge the gap between the community's emergency plan and an individual emergency plan to ensure that individuals are prepared to respond, recover, and thrive afterwards as valued community members. Resilient people make good friends and neighbors. They form communities that pull together in times of crisis and are able to solve more of their own problems by being less dependent on community resources.

Preparedness: It Takes a Village to Keep Everyone Safe

Preparedness starts at the individual level. However, with everything that is going on in the world and your life, it is unrealistic to assume that individuals will find the time to prepare for a disaster that could happen but is unlikely. Therefore, leveraging the mobile phone to develop and store your plan in a way that is actionable and can be used with little or no warning is the most likely way to ensure an individual's safety. By providing easily digestible information on what to do, coupled by decision-making intelligence "pushed" to you so you do not need to search for it, allows you and your family to execute your emergency plan in an efficient manner.

Response: Knowing Your Role/ Options During an Emergency

When a disruption occurs, there is little to no time to react. Having access to real-time alerts and community instructions will allow individuals to make sound decisions to ensure their safety. Additionally, staying connected with loved ones and having the peace of mind that they are safe alleviates the emotional stress of the disaster. During the response phase of a disaster, effective communication is key. Therefore, providing actionable information assists individuals with being safe and checking in with their family, also providing a checklist for individuals to get the right things done rather than spending time and energy wondering what to do.

Recovery: Having the Necessary Resources at Your Fingertips

Recovering from a disruption can take a few minutes to years. The long-lasting impacts emotionally, financially and physically may never go away. Having resources readily available at your fingertips will provide a roadmap to recovery. Having the awareness of emotional, physical and financial resources available to you will speed up your recovery and allow you to return to the community to get back to doing what you like to do.

Ready2Go™ provides a solution to prepare for a disruption by centralizing information and pushing pertinent information to the end user. Ready2Go™ is a dynamic mobile app that assists you and communities preparing and responding to a disruption. The app gives you what you need when you need it by providing real-time alerts with specific information pushed to you on how to prepare for and respond to a disruption. For more information, contact info@vi-ability.com. ▲

Am I Staying Home or in Lockdown?

The Use of Shelter Terms in COVID-19 Versus in Disaster Response

**By Robert Dale, PEM, Emergency Management Planner/Meteorologist,
Ingham County Office of Homeland Security and Emergency Management, Michigan**

The FEMA document, "Planning Considerations: Evacuation and Shelter-In-Place,"[1] defines the term shelter-in-place as "the use of a structure to temporarily separate individuals from a hazard or threat." It goes on to note that when sheltering-in-place, "individuals should ensure they have enough water, non-perishable food, blankets […] and consumable medical equipment to allow self-sustainment in that location for a minimum of 72 hours and a maximum of 14 days." The International Fire Code defines a lockdown as an emergency "requiring that the occupants be sheltered and secured in place within a building when normal evacuation would put occupants at risk." Both of those terms have an extensive history within the emergency management field, with the former being used for incidents like hazardous materials leaks and the latter (newer) phrase employed for active violence incidents.

Somehow the definition of those terms changed on the fly as we entered the COVID-19 era. It may have been due to early news reports out of Wuhan, where a process that could probably be considered a true "shelter-in-place" was implemented. Residents were ordered to stay in their homes; roads leaving and entering the area were blockaded; businesses were forcibly closed; and police and military patrols ensured that most people never attempted to leave their homes. The China model is not replicable in the United States for obvious reasons, but somehow the shelter-in-place/lockdown terminology crossed the ocean.

Not a True Lockdown or a Shelter-in-Place, Despite Media Reports

Initial orders made by American government entities were requesting people to stay home, but allowing exceptions such as restaurant food pickup, grocery shopping, medical needs, and so on. Per the above definitions, these were neither lockdowns or shelter-in-place orders, yet media did use that terminology when reporting on them. In a true lockdown or shelter-in-place, there are no provisions for leaving the structure for any period of time for any purpose. The goal is to get people into a safe shelter as quickly as possible, where they will remain until the threat has passed. After early news coverage, many of those press releases begin using phrases like "stay at home" orders to clarify.

Why Words Matter

Why do words matter? Many in the public are not familiar with the exact definition of a "shelter-in-place." The Grand Traverse County (MI) Emergency Management office regularly shares an image and text description to explain the definition on their Facebook page. For those who are not part of the emergency response community, "shelter-in-place" is very likely a term they have never heard. "Lockdown" has a little more familiarity with the public at large, due in large part to active violence incident (AVI) response training provided to schools and businesses, but still is not completely understood.

Using the Internet archive, "Wayback Machine," shows that the FEMA Ready.gov website referred to Mass Care Shelters and Guidelines for Staying Put (sheltering-in-place) through March 2020. On Mar. 26, 2020, a new "stay-at-home" section was added to the top to clarify the difference of the COVID-19 requests.

Yes, We Need to Talk About It

Why is the issue worthy of this discussion? A concern is that if your jurisdiction has hazardous materials
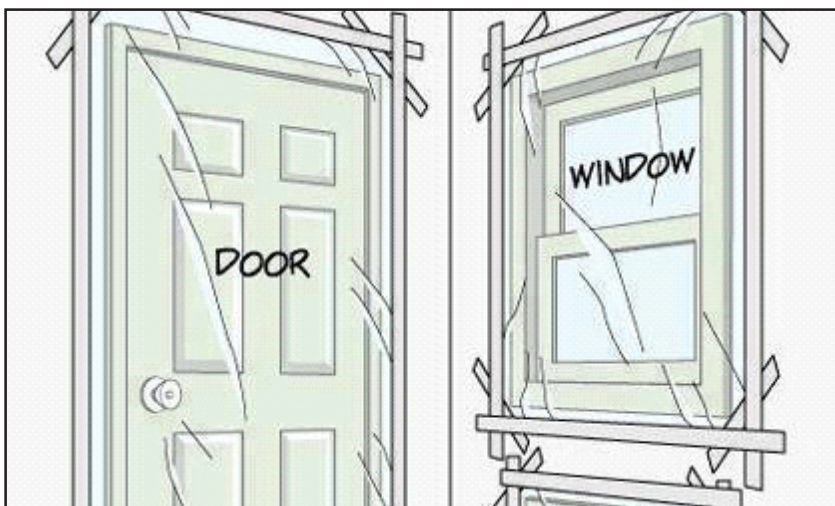
From Facebook.

Am I Staying Home or in Lockdown?
The Use of Shelter Terms in COVID-19
Versus Disaster Response

leaks that require residents to go to the nearest building, seal the entrances and windows, and attempt to keep the chemical outside, telling people to "shelter-in-place" may not be giving them the message we want them to hear. Will they assume it's simply an order to head home? Will they feel free to leave their houses to get a hamburger from the local drive-through restaurant?

Governor Andrew Cuomo summarized this matter quite nicely. "Communicate what you mean without using terms that nobody understands and only incites panic, because that's what we're doing in too many situations." Many in the public don't understand what a "shelter-in-place" means, and the COVID-19 response likely muddied the waters. Once this is behind us, please

> my local news telling us to shelter in place because of a tornado warning as if i'm not already sheltering in place because of a global pandemic
>
> 6:50 PM · 5/15/20 · Twitter for iPhone

From Twitter.

work hard on messaging the "real" definition before you might need to use it.

The example Twitter message (above) released during a tornado warning might be in jest, but it shows that there is some level of confusion among the public at large.

Conclusion

Use educational materials developed from FEMA guidance, from other social media outlets, as well as your emergency operations plan, to inform the public. Just about everyone is now familiar with some form of "stay home," and this is the perfect starting point to provide them with guidance on the difference between that order, a shelter-in-place alert, and a lockdown. ▲

Assigning Blame in a Black Swan Event

**By Timothy J. McDermott, CD, MADEM, CEM, ABCP, CLEP, Emergency Manager,
Halifax Regional Police, Halifax, NS, Canada**

The people of Nova Scotia, and Canadians in general, are all experiencing a wide range of emotions about a mass shooting which occurred Apr. 19-20. The details of the shooting are both horrifying and bizarre. Royal Canadian Mounted Police (RCMP) investigators are piecing together the details and timelines of a shooting rampage that resulted in 22 murders, (including an RCMP Constable) at 16 different crime scenes over an area of hundreds of square kilometers.

For many, the initial shock is beginning to wear off and be replaced by anger. Nova Scotians want to hold someone accountable for their pain and suffering. For some, there is a collective need to assign blame and look for indications and clues that might have prevented or mitigated the tragedy.

Some members of the public, political pundits, commentators, and the media are looking at the fact that the RCMP used Twitter instead of the National Public Alerting System (NPAS), ALERT READY, to provide warning to the public that the suspect was dressed in an RCMP uniform and driving a replica RCMP police cruiser.

I'm not able to comment on why the ALERT READY system wasn't used. Yes, it might have provided a timely warning that might have allowed some of the victims to escape from, or avoid, the suspect. Having said that, it also could have added exponentially to the confusing and contradictory reports that were flowing into Incident Command, creating instances where members of the public failed to follow the lawful commands of actual RCMP

members. At this point, speculation and conjecture on what might have happened aren't helpful to the investigation and provide no comfort or solace to the families of the victims and the people of Nova Scotia. There will be, in due course, a very detailed review of this event, and the actions, decisions and rationale of the RCMP response to the mass shooting.

Right now, blaming the RCMP might seem like the right thing to do for some, and salacious content for the media (who are struggling to provide new content to fill hours of coverage), but if one is honest with one's self, one has to ask if it is fair or reasonable to expect that the RCMP could have possibly envisioned and planned for a scenario like the events of April 2020. Keep in mind that Nova Scotia has never seen a mass shooting before, and the last mass shooting on this scale in Canada took place in 1989 (Ecole Polytechnique, 15 dead). Should the RCMP have been better prepared for such an event?

Low Probability/High Consequence Black Swan Event

I've been planning for emergencies and disasters for more than 20 years. I never, in my wildest dreams, would have imagined that something like this could have happened in Nova Scotia. This shooting is a textbook example of a low probability/high consequence "Black Swan" event.

As every first responder, crisis manager and emergency manager/planner will tell you, Black Swan events are almost impossible to anticipate and properly plan for

response. We all know that existing protocols and plans will most likely be inadequate to address the unique nature or circumstances of a Black Swan event. We all hope that we will be able to develop the situational awareness to allow us to plan and take effective action. We all fear that we will not be able to make sense of the confusing, incomplete or contradictory information. We understand how chaotic, confusing, and contradictory these Black Swan events are. We understand how important pieces of information can get lost, or how decision-makers can develop tunnel vision. We know what it's like to work in a confusing environment, where we are constantly being bombarded with contradictory information. We all know that regardless of how much we train (and training costs a lot of money), we can't possibly envision every possible scenario.

One simply has to look back at events such as 9/11, the Tsunami of 2004, Fort MacMurray or Lac Megantique to see examples of how these types of events are nearly impossible to imagine ahead of time. It is only in hindsight that we have the clarity and certainty we need to make connections and decisions seem obvious.

It is easy to understand how, in hindsight, things in any disaster could be done differently. It is easy to identify what snippets of information contain critical information that should have been acted upon, but it is neither fair nor realistic to suggest that the level of clarity and certainty we have in hindsight should have been obvious if only those in charge were better prepared.

Assigning Blame in a Black Swan Event

Would an ALERT READY Warning Have Been Helpful or Caused Other Problems?

It is easy to suggest that use of ALERT READY could have provided warning to the public, but would that warning have created its own set of problems for the RCMP? Given the dynamic and evolving nature of the Portapique mass shooting, the number of crime scenes, and the path the suspect took from the initial shooting to the point where he was ultimately confronted and killed by an RCMP ERT member, would a READY ALERT message warning people to shelter in place really have been helpful, or would it have added to the chaos and confusion?

It might be helpful to examine an incident a week after the shootings when the RCMP in Nova Scotia initiated an ALERT READY notification for a report of shots being fired in a Halifax suburban area. The ALERT requested people in a specific neighbourhood to shelter in place while police investigated the reports. That ALERT generated several calls to 911, reporting other such incidents in several other areas of the city, which ultimately turned out to be false. Reports from some on Twitter (including an NS reporter who tweeted out he'd heard reports of four to six people being shot) added to the confusion.

RCMP to Adopt National Strategy for Public Alerting

In response to the Portapique Mass shooting and the subsequent ALERT READY notification for unsubstantiated reports of shots being fired, the RCMP have decided to adopt a national strategy for public alerting. Personally, I applaud this approach. I think recognizing the need for an integrated, coordinated and synchronized communication strategy to support operations is a critical lesson learned to be drawn from the national tragedy of Portapique, and I applaud the RCMP for moving on this need so quickly.

Conclusion

When it comes to something like a Black Swan event, even heroes may make mistakes. In fact, I'd suggest that it is inevitable that mistakes will be made. Our heroes did the best they could with the information they had at the time. They put themselves in danger trying to protect us and bring the rampage to an end. Constable Heidi Stevenson gave her life, desperately trying to stop the suspect. The RCMP, like the rest of us, are grieving. If mistakes were made, it was not out of negligence or incompetence and that shouldn't diminish the efforts and sacrifices they make on our behalf. The fact that they weren't perfect doesn't make then incompetent, it just makes them human. ▲

EM Calendar

Visit www.iaem.org/calendar for details on these and other events.

Nov. 12 2:00-3:00 p.m. ET. U.S. Environmental Protection Agency's Center for Environmental Solutions and Emergency Response webinar, "Virtual Reality: A Training Tool for Biological Sampling."

Nov. 13, 16, 18, 20, 24, 30. Select from these remaining dates; all sessions are identical. FEMA's HSEEP Webinar Series: "Integrated Preparedness Plan and Integrated Preparedness Planning Workshop.

Nov.   IAEM Reimagined: Virtual Annual Conference & EMEX. Go to the 16-28 IAEM Annual Conference event site to learn about the speakers, the topics, the program – and why you should register now to attend!

Nov. 19 10:00 a.m.-4:00 p.m. ET, "Disability Summit: Accessibility Throughout Disasters," part 2 of the 3-part series of virtual summits held by FEMA Office of Equal Rights, External Civil Rights Division.

Dec.   National Healthcare Coalition Preparedness Conference, "2020 1-3   Vision: Coalitions Focused on the Future, Empowered by the Past," Las Vegas, NV.

Dec. 2 2:00-3:00 p.m., Briefing for National Weather Service Partners, about the new web page for access to NEXRAD radar date from the NWS, that will improve radar services to partners and the public.

Dec. 3 10:00 a.m.-4:00 p.m. EDT, "Environmental Justice Summit: Implementation Throughout Disasters," part 3 of the 3-part series of virtual summits held by FEMA Office of Equal Rights, External Civil Rights Division.

Dec.   IAEM-USA Region 3 and George Mason University Virtual 7-11   Symposium: "Emergency Management in the New Normal."

2021

Feb.   Natural Disaster Expo, Miami Beach Convention, 10-22   Miami Beach, FL.

May   New Jersey Emergency Preparedness Conference, Atlantic City, NJ. 3-7   Atlantic City, NJ.

Oct.   IAEM 2021 Annual Conference & EMEX: "Looking Back to Look 15-22   Ahead," Grand Rapids, Michigan. Save the date!

Attend the 2020 IAEM Reimagined Virtual Conference, Nov. 16-18! conference site

Save the Date: 2021 IAEM Annual Conference: "Looking Back to Look Ahead," Grand Rapids, Michigan, Oct. 15-22!

Looking Back to Look Ahead

Grand Rapids, Michigan October 15-22, 2021

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