PrepTalks Discussion Guides are companion documents to PrepTalks videos to help translate the research and expertise showcased by the speakers into action steps that emergency managers can take with community leaders to improve disaster preparedness in their jurisdictions.

**Dr. Sheri Fink: Triage, Ethics, and Operations: Healthcare Emergency Preparedness and Response**

In her PrepTalk, Dr. Fink shares two real-world case studies that demonstrate the value of situational awareness, the complexities of prioritizing limited resources, and the importance of ensuring systems can effectively support operational decisions.

Dr. Fink is the author of *Five Days at Memorial: Life and Death in a Storm-Ravaged Hospital* about a New Orleans hospital after Hurricane Katrina and her latest story, *Lost in the Storm*, tracks the Dailey family's attempts to be rescued during Hurricane Harvey in Texas. Dr. Fink is a former relief worker in disaster and conflict zones, and received her M.D. and Ph.D. from Stanford University.

**Partners for the Discussion**

Prioritization, communications, and decision-making are broad topics that should include emergency managers, elected officials, citizens, and healthcare organizations in your jurisdiction. Dr. Fink emphasizes that citizens are capable of having difficult conversations about the ethics of resource prioritization and bring needed perspectives to the discussion.

**Discussion Prompts**

**Topic 1: Prioritizing Resources For the Greatest Good**

During a disaster, emergency managers, elected and civic leaders, and everyday citizens are required to make decisions with limited information. Deciding what actions to prioritize and how to allocate resources that are often insufficient to meet the identified needs are some of the most challenging responsibilities for emergency managers.

Having the best available situational awareness of the circumstances can assist emergency managers, but, as in the situation at Memorial hospital after Hurricane Katrina, some decisions are simply judgement calls. Discussing potentially life
or death choices in advance can give decision-makers greater clarity in real world events.

**Interdependencies.** The two stories presented by Dr. Fink also emphasize the linkages, or interdependencies, of decisions. Decisions include both the positive action, but also the consequential effect of closing off, or crowding out other opportunities — making the decision to prioritize one group of people means another group will become a lower priority, delaying or excluding them from needed resources. In the case of Memorial hospital, surrounded by floodwaters and about to lose backup power, the helicopters could only evacuate 1-2 patients at a time with 250 patients in the hospital that needed evacuation. As Dr. Fink says “a very important decision was made early on not only about who should be moved first, but also who should be moved last.” Conserving, matching resources to needs and working creatively to expand the resource pool are ways to promote better outcomes.

**Scale.** These stories illustrate that large scale disasters, for example a flooded-ravaged county with a population of more than 4.5 million people, are made up of a series of smaller scale disasters, from infrastructure outages at the county-level to medical emergencies within a household. Having an understanding of systems-thinking and the dynamics of systems within systems can aid emergency managers in decision making. The Incident Command System (ICS) gives emergency managers, and anyone in a leadership role, tools to make decisions at any scale.

**Decision-making.** In the stressful environment of a disaster, past experiences and assumptions can influence decision makers.

Triage is most commonly used in the medical field, but the concept of achieving the best possible outcome with available resources is a useful frame for emergency management. Thinking through possible scenarios, and examining real-world events can help us prepare for the challenges we may one day confront.

**Discussion**

What are the conditions during a disaster that lead to difficulty in making the best possible decisions? What are ways to address these challenges? Consider scenarios where life-saving resources are likely to be overwhelmed (e.g. vaccines in the event of a pandemic, or available rescue equipment relative to population in danger).

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**Triage:**

1) **The sorting of and allocation of treatment to patients and especially battle and disaster victims according to a system of priorities designed to maximize the number of survivors or other outcomes such as years of life or the just distribution of resources.**

2) **The assigning of priority order to projects on the basis of where funds and other resources can be best used, are most needed, or are most likely to achieve success.**

Do potential decision-makers understand the importance of re-assessing decisions over time? Is there a process to reassess, to examine if information has changed, if circumstances have changed, or if resources have changed—both increases and degradation?

How can you guard against groupthink — the tendency to agree with the group— to be sure you are examining all options? Simply asking the question, what are we not thinking of, using a pro/con analysis, or having someone identify and challenge assumptions and challenge the decision with alternatives, can improve your ability to make the best decision in the moment.

How will you maintain situational awareness during the event? Review how ICS has been used in your jurisdiction. Do enough people have training in ICS, and how often is training refreshed for regular staff who will be tasked with important emergency roles in a disaster? How prepared are you to do ‘just in time’ ICS training? Do organizations in your community, such as hospitals, nursing homes, large employers, and faith-based organizations understand the concepts of ICS?

Have discussions with healthcare providers in your jurisdiction. Do they have triage policies? How can emergency managers and healthcare providers learn from each other? Life safety is the number one priority, but how do you determine whose life is at greater risk? Who should receive care first? How can you stretch resources and get more of them to help more people?

The medical profession developed standards of care. How can this concept of standards of care be applied to emergency management?

How can you involve the public in the conversation? Sharing the challenges of decision-making in disasters in advance can help everyone during the event. Actions taken by individuals in your community can have significant consequences for emergency managers and emergency responders.

**Topic 2: Implementing Decisions**

In addition to the challenge of making decisions, Dr. Fink’s PrepTalk illustrates the critical importance of evaluating how these decisions are put into effect — the related protocols, training, and equipment needed to execute the decision.

**The National Response Framework** defines situational awareness as “the ability to identify, process, and comprehend the critical information about an incident.” Effective situational awareness requires ongoing monitoring and re-assessment to support optimal decision-making and allocation of resources.

The broader the conversations, the better. The public can handle it. Be as transparent as possible. You need the public as your partner. They need to understand what the likely scenarios will be. People can wrap their heads around that and they can make some really good, ethically sophisticated choices.

— Dr. Sheri Fink
Communications. The cornerstone of executing a plan of action is communications. That includes communications with the public and among the emergency management community, including the staff at an incident command post, emergency operations center, and responders in the field.

Public Safety Answering Points. Residents reach public safety answering points (PSAPs) by dialing 9-1-1, and this remains the central link between the public and responders during a disaster. Throughout the country, it is often local jurisdictions, cities and counties that operate and fund PSAPs.

PSAPs need to flex during disasters as call volumes swell. Dr. Fink explains that one call center in Harris County, Tx., after Hurricane Harvey in 2017 is “slammed with calls. They’re staffed with usually four call takers, now there are eight call takers ... [with] four or five times their normal call volume.”

PSAPs equipped with next generation technology are capable of transferring calls outside a disaster zone when call takers are overwhelmed or infrastructure is destroyed, helping scale the link between citizens and their government. The Federal Communications Commission’s report from the Task Force on Optimal Public Safety Answering Point Architecture, provides detailed information for jurisdictions to make this important transition.

Equipment and Human Capital. Executing a plan requires equipment and people. Because demand or need typically overwhelms available resources in disasters, it is important to estimate the equipment and people you may need in advance. Building stronger relationships with the community and with volunteer organizations can make acquiring equipment and people during a disaster easier.

Power. Losing electricity has a big impact on disaster response operations. The increasing dependence on electricity and technology means people will not have the same capabilities when power fails. Dr. Fink describes that at Memorial hospital, “there were staff who were hand pumping oxygen into the lungs of patients who relied on mechanical ventilators,” and people had to carry patients up and down the stairs because the elevators were inoperable. That means during a disaster where the power fails, even greater resources will be needed to accomplish routine tasks.

Discussion

PSAPs are an essential link in the emergency management chain. Emergency managers need a clear understanding of how 9-1-1 calls are prioritized and routed. Identify whether your jurisdiction’s 9-1-1 service is the older analog system or upgraded with next generation technology. Research what steps are in place to upgrade the system and ensure adequate staffing in emergencies. Include PSAPs in planning sessions and in exercises.

Throughout the U.S. the legacy forty-year-old 9-1-1 solution cannot support the needs of advanced communication technologies. Public expectations are changing, and new technology will afford public safety the opportunity to provide more effective emergency response.

— Task Force on Optimal Public Safety Answering Point Architecture
The public also needs a clearer understanding of the use of 9-1-1 in widespread disasters and how to clearly describe their emergency so that the 9-1-1 operator can prioritize the response. What changes are needed in your jurisdiction to ensure greater efficiency in 9-1-1 operations?

Social media plays an increasing role in disasters. How is your jurisdiction using social media to improve situational awareness, to address misinformation, and to communicate with the public? Under what conditions would your jurisdiction begin to respond to life-threatening situations reported on social media?

If your jurisdiction is on an analog system, what is the plan if your primary and back-up systems fail during a disaster?

How is your jurisdiction using volunteer resources and equipment (e.g., boats, high water vehicles, amateur radio operators)? Are these resources included in your emergency operations plan (EOP)? Are these resources included in jurisdictional exercises? Does your plan incorporate both affiliated and unaffiliated volunteers?

Losing power exacerbates the impact of the disaster and creates additional challenges for response operations. Many emergency managers have not managed a disaster with widespread and prolonged power outages. Review your jurisdiction’s EOP from the mindset of not having electricity. What assumptions have you made in your EOP that would be different without power? Discuss ways to include scenarios without power in jurisdictional exercises.

Emergency managers serve a coordination role in disasters. This requires that all resources be integrated and work together. Human behavior or institutional practices can thwart otherwise well-planned response operations. Review past performances to determine weak links in executing your EOP. Are emergency support functions adequately integrated? How do your Emergency Operations Center (EOC) communications support or impede this collaboration? What community functions are not sufficiently represented in the planning process, to include PSAPs and volunteer programs?

Additional Resources

- **Five Days at Memorial Life and Death in a Storm-Ravaged Hospital**
  This New York Times best-selling book by Sheri Fink details the events in Memorial hospital after Hurricane Katrina made landfall in 2005. This book is accompanied by a Teacher’s Guide and a Common Reading Guide to discuss important points from the book with a broader audience.
  - **Lost in the Storm**, by Sheri Fink, Aug. 30, 2018 is a magazine story about emergency response and the Dailey family in Harris County after Hurricane Harvey in 2017.
  - **The Deadly Choices at Memorial**, by Sheri Fink, Aug. 1, 2009 is a magazine story about events at Memorial hospital after Hurricane Katrina.

- **Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers**
This site provides resources to help provider and suppliers comply with the Centers for Medicare and Medicaid Emergency Preparedness Rule, including emergency plans, policies and procedures, communication plan, and training and testing.

- **Crisis Standards of Care: A Toolkit for Indicators and Triggers**
  This toolkit, developed by the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine, contains key concepts, guidance, and practical resources to help actors across the emergency response system develop plans for crisis standards of care and response to a catastrophic disaster. Disasters and public health emergencies can stress health care systems to the breaking point and disrupt delivery of vital medical services. During such crises, hospitals and long-term care facilities may be without power; trained staff, ambulances, medical supplies, and beds could be in short supply; and alternate care facilities may need to be used. Planning for these situations is necessary to provide the best possible health care during a crisis.

- **Emergency Communications**
  - **Next Generation 911**
    This site provides information and resources related to upgrading PSAPs to a digital or Internet Protocol (IP)-based 911 system, commonly referred to as Next Generation 911 (NG911).
  - **FIRSTNET**
    The first nationwide public safety broadband network dedicated to public safety.
  - **National Association for Amateur Radio**
    This resource provides information on the Amateur Radio Emergency Service® (ARES).

- **National Health Security Preparedness Index**
  Strengthening national health security and preparedness helps build a culture of health. This Index combines measures from multiple sources and perspectives to offer a broad view of the health protections in place for the nation as a whole and for each U.S. state. The Index identifies strengths as well as gaps in the protections needed to keep people safe and healthy in the face of large-scale public health threats, and it tracks how these protections vary across the United States and change over time.