



Module 4: Emergencies: Prevention, Preparedness, Response and Recovery

Part 4: Recovery

Tamar: The objective for this module is to assess the emergency recovery process and the challenges therein for different types of emergencies.

First, we're going to discuss recovery challenges. Listed here are a variety of recovery challenges, including housing, insurance, ethical issues, mental health, vulnerable populations, and rebuilding. Let's talk about each of these.

From a housing perspective, there's often a question about whether or not a community should rebuild. Additionally, there may be an influx of emergency contractors from outside of the community, so-called storm chasers, who go from community to community to demolish and/or rebuild houses. Often, these contractors can have questionable ethics and may take advantage of some who are affected by an emergency.

There may also be various displaced populations who are in need of housing in their communities.

Additionally, there are emotional ties to a place or community. Many people, even if their community may be at risk of future damage, don't want to leave the community that their family lives in or in which they grew up. Some examples of this include Hurricane Katrina and Hurricane Sandy, after which there have been discussions about whether or not those communities that were affected by those hurricanes should rebuild or not.

From an insurance perspective, there are a variety of challenges. The National Flood Insurance Program is a federal program for those who live in flood plains, which is an area of land adjacent to a stream or river that stretches from the banks of its channel to the base of the enclosing valley and experiences flooding during periods of high discharge. Living in a flood plain can affect one's ability to obtain flood insurance, which is only available by the federal government.

Additionally, many homeowners insurance policies will not cover certain damages from various disasters. There is the same with business property insurance. Some businesses that are affected by emergencies have challenges getting insurance payouts.

Additionally, claims processes may be very onerous and difficult to deal with. Documentation can often be a problem if people's homes and belongings were damaged in the emergency in question.

There are a variety of ethical issues that have to be considered in recovering from a disaster. Research ethics is one of these concerns. Oftentimes after an emergency, researchers are interested in learning about individual or community experiences, but making sure that there



are protections in place for research participants is incredibly important to make sure that they're not taken advantage of or that they experience emotional distress during the research process.

Additionally, there are potentially altered standards of care during a response to and after an emergency. For example, there may be decisions made about who should have access to ventilators and other life-saving interventions, or triage in the field may require altered standards of care that look more like military standards of care, which the general public is very uncomfortable with.

Additionally, access to resources; who should have access to various resources, housing, financial, et cetera? Should it be those who are most affected? Should it be those who are most in need? All of these kinds of issues raise various ethical concerns that need to be considered and dealt with.

From a mental health perspective, it's important to remember that community services may be suspended, and those services may be necessary for some members of the community. Additionally, the Red Cross, their mental health services may not have the capacity to meet the needs of the local community.

There are also social stigma issues when it comes to mental health. People are uncomfortable asking for mental health services because they fear that they'll be stigmatized by their local community or friends or family.

Also, physical displacement is often prioritized above mental health, so those who have been physically displaced from their homes or communities may receive services first as opposed to those who may have adverse mental health effects from a disaster. So these are all mental health challenges that need to be considered.

Vulnerable populations also need to be considered. Vulnerable populations may have particular housing needs that can no longer be met after an emergency event.

Also, communication services, ensuring that people who may not speak English or the other local language can receive information in a way that they can understand, and those who have hearing impairments or visual impairments may need special services or special communication tools to ensure that they're receiving information similarly to the rest of the community.

Social services may also be limited after an emergency, and many services that serve vulnerable populations may no longer exist or may be suspended, which can negatively impact those communities that depend on services.

Additionally, vulnerable populations may be displaced. This often happens in large-scale emergencies, particularly in the international community after or during wars or other kinds of



violent emergencies where there are large populations who are displaced and have nowhere to go.

Vulnerable populations may be at increased risk for mental health adverse effects of an emergency, so making sure that mental health services are available for those in need, again, is a key challenge.

Let's talk a little bit about learning lessons from emergency responses.

First, we'll talk about learning lessons from the governmental response to emergencies. Here is a list of examples for methodologies for learning from emergency responses. Some of these may include:

Hot washes, which usually occur quickly after an emergency occurs. All the responders who were part of the response will discuss their experience and things that they learned, things that went well, or things that didn't go so well that can be learned from.

Additionally, the Homeland Security Exercise and Evaluation Plan and After Action Reports are both required from the federal government, particularly if local health agencies request funding reimbursement for their response to an emergency, they're required to complete an HSEEP and AAR.

Often, volunteer surveys are conducted, especially from organizations like the Red Cross or Medical Reserve Corps, to try to understand what worked well and didn't work well from a volunteer perspective.

Root cause analysis can be used to learn from challenges or things that didn't go as well to find out what was the root cause for failure.

Facilitated lookbacks are a methodology that can be used also to learn from what happened. They're usually conducted after the fact and allow for responders to discuss particular issues that came up and how they could be dealt with in the future.

Realistic evaluation uses a context plus mechanism equals outcome perspective, where you look at a local context, a local community, and what some of their resources were, and then look at some of the processes they used and how that impacted the outcome or their response.

Also, critical event registries could potentially be used. These are similar to airline event registries where when there is an airline crash or a potential airline problem, those experiences are catalogued into a database to reduce the likelihood of them happening in the future. There has been some discussion about using similar kinds of registries in emergency response to collect data about what happens during emergency responses and being able to learn from them.



If you look at a specific example, during H1N1, we learned a whole variety of things from local public health vaccination clinics. We found that successful clinics defined priority groups for vaccination clearly, they communicated well with the public, they maintained adequate staffing of the local health department, they established community partnerships with other agencies, and they maintained flexibility so they were able to change their processes at the drop of a hat depending on what was going on.

So that's one example of what we learned from an actual emergency response, and many of those lessons learned have been used to assist local health departments in creating plans for future public health emergencies.

Let's now talk about learning lessons from an individual and community perspective after emergencies.

One of the biggest concerns of emergencies are the psychological consequences of a disaster. Any scale of disaster results in damage, both physical and psychological.

The psychological impacts of disaster, however, are far more reaching than physical consequences. Even people who are not directly involved with an emergency may be impacted emotionally. If you think back to the September 11, 2001 attacks, people continue to be impacted psychologically and emotionally, even many years later.

Some of the reactions at the impact phase of an emergency – this would be at the moment the emergency is happening – stressors during that phase may have psychological consequences because there's a threat to life or an encounter with death, there may be feelings of helplessness and powerlessness, feelings of loss or dislocation, a feeling of responsibility, inescapable horror, and human malevolence, particularly in man-made disasters when it's been a person who has perpetrated the emergency or disaster on other people.

Immediately post-disaster, some of the reactions include numbness, denial or shock, flashbacks and nightmares, grief, anger, sadness or hopelessness.

In the recovery phase, there may be significant longer-term emotional needs that become apparent. Continued media exposure to trauma may bring back feelings from the initial exposure. This can often happen when there is an anniversary and pictures are shown of the emergency that happened the year before or years before. It can bring back many of the same feelings that occurred during the initial exposure.

There may also be hesitation to express feelings of distress, concern, or dissatisfaction. We spoke about this previously in some of the other modules where there may be a social stigma attached to asking for mental health services.



There may also be physical health symptoms of emotional distress. For example, depression often brings with it sleeplessness and general malaise or feeling other physical symptoms that may appear.

Normal psychological reactions exist. Here's a list of some of the psychological reactions that may occur: upsetting memories, anxiety and fear, depression, self-blame, and guilt. It's important to remember that these exist in the population anyway, but more people may have them after an emergency.

Reactions to disaster are, for the most part, normal people having normal reactions to an abnormal situation. A lot of these experiences don't necessarily mean that people are having an adverse or abnormal reaction, but they're having a normal reaction to an abnormal event.

This slide shows you examples of distress versus dysfunction, and although the majority of people do not have dysfunctional reactions to disasters, there will be some that do. This chart gives some good examples of the symptoms of one versus the other.

For example, emotional distress might include anxiety or depression, whereas emotional dysfunction may include panic attacks or PTSD. You can see the same for behavioral and physical distress versus dysfunction.

Some signs of the need for additional intervention may include:

Disorientation, which would be someone who is dazed, experiencing memory loss, has an inability to give the date or time or state where he or she is. Someone who's disoriented may be unable to recall the events of the past 24 hours or understand what is happening.

Someone who has an inability to care for themselves may also need additional intervention. That might include not eating, bathing, or changing clothes, or an inability to manage the activities of daily living.

When these reactions appear, individuals should be referred for more extensive professional mental health care, because they may be hurting themselves or others, which can lead to adverse effects.

From a community perspective, there are four initial intervention goals during a disaster. First is to identify those in need of immediate attention; provide supportive assistance and protection; facilitate connecting survivors with family and friends; and provide information about the status of the disaster site and immediate law enforcement efforts.

Once physical safety is established, the following interventions should be targeted: alleviating distress; facilitating problem solving; recognizing and addressing pre-existing psychiatric or other health conditions; and providing psycho-educational information regarding post-trauma reactions and coping strategies.



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In summary, when recovering from a disaster, the process may take some time, and there are a variety of challenges, both physical and psychosocial, but it's important to remember that many of the psychosocial reactions may be much longer lasting than the physical reactions.

There are numerous evidence-based strategies that can be implemented to learn from the response as well as increase community and governmental resilience. We talked about a whole variety of methodologies that can be used to learn from emergency responses, and we also know a variety of interventions that can be conducted at the individual and community level to help community and individual resilience.

At the end this module, if you've listened to all four modules, you should be a veritable expert on emergency prevention, preparedness, response and recovery.