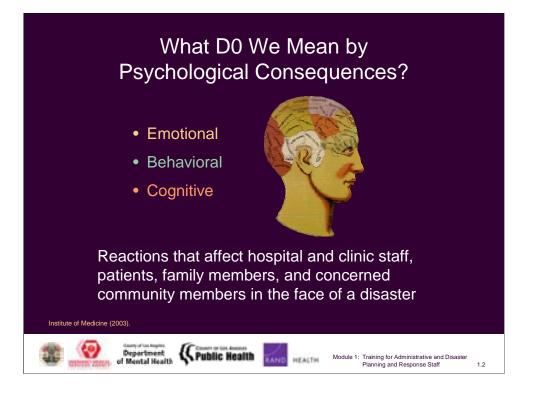


Terrorist attacks or public health emergencies such as severe acute respiratory syndrome (SARS) or pandemic flu can stress the capacity of hospitals and clinics to deal with the psychological consequences for survivors, families, and staff members. Existing disaster plans generally deal with the medical consequences; few offer guidance to hospitals and clinics about responding to the psychological consequences of such large-scale disasters.

We have adapted a health services framework to develop a comprehensive, facility-level approach for preparing hospitals and clinics to respond to the surge of acute mental health consequences that may result from a terrorist incident or other public health emergency.

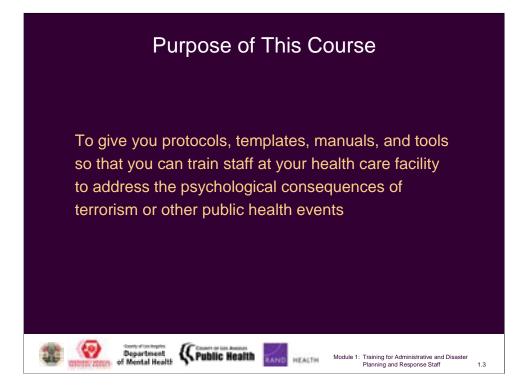
Our adapted framework emphasizes the importance of putting structural elements in place before an event and implementing evidence-informed processes during and after an event. This approach will ensure that the needs of survivors, patients, their families, and hospital and clinic staff are met.



By "psychological consequences" we mean the emotional, behavioral, and cognitive effects of a terrorist or other public health emergency. People will also experience somatic effects. We will be discussing these effects in more detail during the next hour.

In addition to the reactions of those who might be directly exposed to an event (survivors), their families, and health care workers, we must also attend to those who may not be directly affected, but who are concerned about their health. These individuals are often referred to as the "worried well." We prefer to avoid use of that term and instead refer to this group as "people who believe they have been affected."

We will be using a number of technical terms in our discussion. Definitions of key terms can be found in your binder in the "Tools" tab.



The purpose of this course is to provide you with guidance and tools you can use to train your staff about addressing the psychological aspects of an emergency. The knowledge and skills you will gain can help protect patients receiving care at your facility, their family members, as well as clinic and hospital staff, volunteers, and community members who might be affected.

In our discussion, we will cover all phases of response, from appropriate planning to actions during and after an emergency.



The course has four objectives.

First, help you recognize the five triggers that often lead to psychological distress.

Second, raise awareness of the specific types of psychological effects to expect.

Third, provide you with principles and tools to bring back to your own facility to augment the facility's response plan and strengthen its resources where possible.

Fourth, help you train staff at your facility, increasing their knowledge and their ability to think strategically about planning for and responding to large-scale public health emergencies.



The course is the result of a collaboration between Los Angeles County and the RAND Corporation.

The effort was funded by a Hospital Preparedness Program grant. This grant is part of a multiyear, nationwide effort to enhance the ability of hospitals and clinics to prepare for and respond to bioterrorism and other public health emergencies.

The County of Los Angeles/Department of Health Services Emergency Medical Services (EMS) Agency is the project lead in coordination with the County Departments of Public and Mental Health (DMH).

Los Angeles County contracted with RAND to perform this work.



The course has three modules, which are designed for different audiences.

The present core hour-long module provides basic information for administrative and disaster planning and response staff. Your facility may decide to provide this module to everyone including administrators, clinicians, and even volunteers because everyone needs to understand what to expect and what to do in an emergency.

The second module was designed specifically for clinical staff and for nonclinical staff who would be tasked with giving psychological support and intervention during a disaster. The module provides specific evidence-informed strategies for providing psychological support and intervention and describes some cultural issues related to integrating mental health staff into the disaster response. Your facility may choose to train all staff regardless of whether they would be in the role of providing psychological support.

Finally, an additional two-hour module was developed for the Los Angeles County Department of Mental Health disaster mental health (MH) workers, who would coordinate with affected health care facilities during a disaster (e.g., to help triage and treat psychological reactions). This module provides more detailed training about how to intervene with those suffering from psychological consequences in the field or community, including how to coordinate with hospitals and clinics.

Participant manuals (and self-study guides for staff who cannot participate in a training course) for all components are available on the Los Angeles County Department of Health Services web site:

http://www.ladhs.org/ems/disaster/trainingIndex.htm

Type of Facility	Components to Emphasize
Hospital with no on-site MH staff	Module 1: Staff assignments
Hospital with on-site MH staff	Module 2: All sections
Children's hospital	Module 2: Special populations
Community clinic	All sections of modules 1 and 2 are relevant

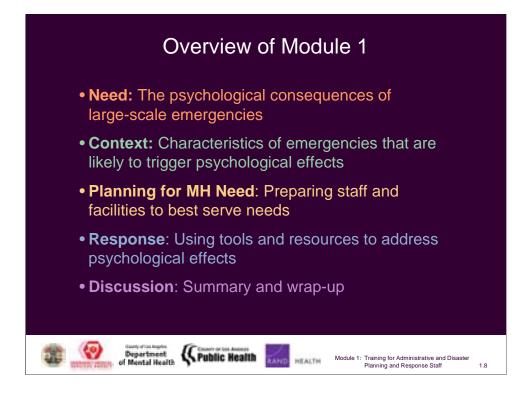
All of the material we have prepared is relevant to all types of health care facilities. However, some sections are particularly relevant for some facilities. We have suggested some specific areas you may want to emphasize depending on the type of healthcare facility you work in. It will be up to you to decide what specific content to provide at your local clinic or hospital.

When you complete the course, we expect you to take your knowledge back to your local hospital or clinic and tailor the materials to suit your particular needs in training all of your staff.

We have intentionally designed the course in a modular fashion and put it in a three-ring binder so that you can take sections out, add new sections, and move them as you see fit.

For example, children's hospitals and clinics that serve families and children will want to emphasize the section on populations of specific interest, which is part of module 2. If you work in a children's hospital, you may want to reorganize the training slides for module 1 so that everyone sees that section of module 2, not just mental health staff.

You may also want to supplement training with other materials as needed.



The material we will cover in the next hour has five basic parts. We will begin by describing some real public health emergencies to demonstrate the dramatic psychological effects they can have, including effects on health care workers (HCWs).

Next we will highlight dimensions of these emergencies that may trigger a psychological reaction.

We will discuss the areas within and around health care facilities where you can expect to find the most psychological effects. We will also discuss where to place staff effectively.

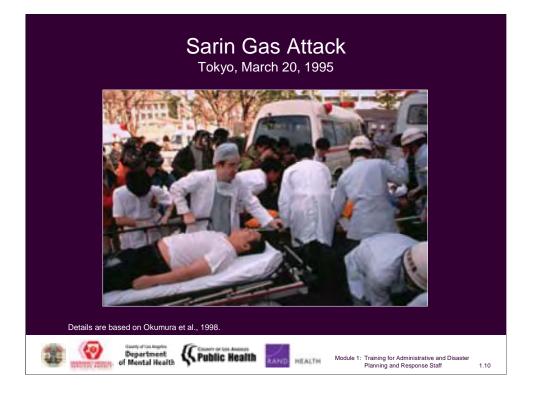
We will then turn our attention to how the tools and resources we have provided can be used in responding to a public health emergency.

We have already asked you to complete a two-page organizational assessment tool so that you have an idea about how prepared you are currently at your facility. We will refer to this organizational assessment later in the discussion. *Self-study participants:* Please complete this form (the 5th item in the Tools section) now to be covered later.

We will conclude with a brief summary and wrap up the course.



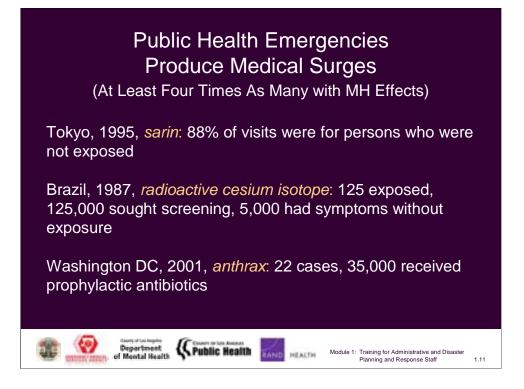
The purpose of this first section is to set the stage for why it is important for you to understand the psychological consequences of large-scale disasters. We'll discuss some real examples, beginning by recalling the details of two recent public health emergencies—the sarin gas attack in 1995 and the SARS outbreak in 2002.



On the morning of March 20, 1995, five members of a Japanese cult boarded subway trains at five stations around Tokyo. Each carried two sealed plastic pouches of diluted sarin and a sharpened umbrella to puncture the pouches. As the trains converged near the center of Tokyo, the five men placed the bags on the floors of their train cars, punctured them, and fled.

As the vapor leaked out and began to evaporate, commuters on the crowded trains started to sweat. Their noses ran, they coughed, they had difficulty breathing, and they felt weak and giddy. Some vomited, had seizures, or developed fluid in their lungs, a condition called pulmonary edema.

In all, 12 people died. About 1,000 individuals experienced some symptoms from exposure; yet, more than 4,500 sought medical attention, presenting with physical symptoms such as difficulty breathing and nausea but no signs of exposure. This surge of patients who had not been exposed but sought care for event-triggered symptoms is a major component of the psychological consequences you may have to deal with (details are based on Okumura et al., 1998).

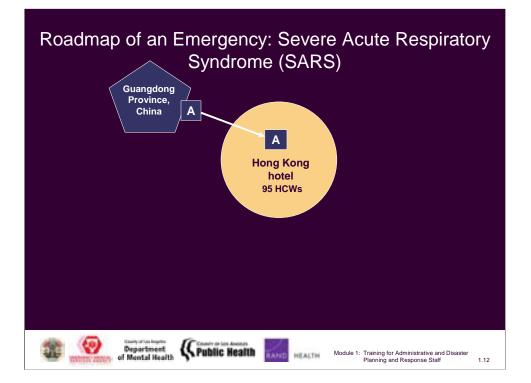


Public health emergencies often generate unanticipated surges in demand for medical care. In previous public health disasters, there have been, on average, *at least four times the number of people with mental health effects than with medical effects resulting from exposure.*

In the sarin attack just described, 88 percent of the emergency room visits were for persons who were not exposed to the chemical but had symptoms that they feared were from exposure to sarin.

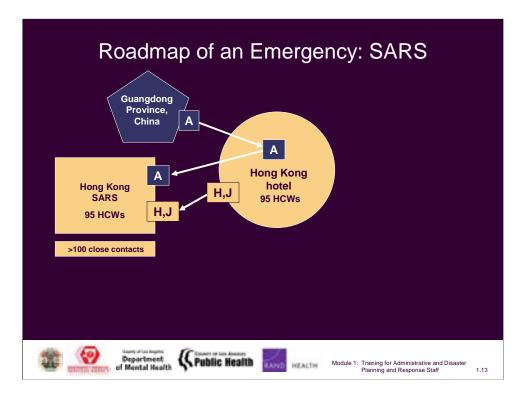
In Brazil, 1987, about 125 people were accidentally exposed to radiation, but more than 100,000 sought screening, and 5,000 reported symptoms even though they were not exposed.

During the anthrax attacks of 2001, there were 22 cases with five deaths; yet, 60,000 prescriptions more than usual for ciprofloxacin were written in the month after the attacks. Less than one-half of one percent of that antibiotic was actually prescribed because of likely exposure to anthrax. The rest was probably prescribed by well-meaning doctors to reduce patient anxiety.



The outbreak of SARS in China in 2002 illustrates how an event can have multiple waves of patients, generating a prolonged "surge" that will require a prolonged mental health response—possibly over months. Initial symptoms of SARS are flu-like, and there are nonspecific symptoms. Symptoms usually appear two to ten days following exposure. Early physical signs of infection are inconclusive and may be absent. About 10–20 percent of cases require mechanical ventilation. Antibiotics are ineffective. Treatment of SARS so far has been largely best supportive care. Suspected cases of SARS must be isolated, preferably in negative pressure rooms, with full barrier precautions taken for any contact.

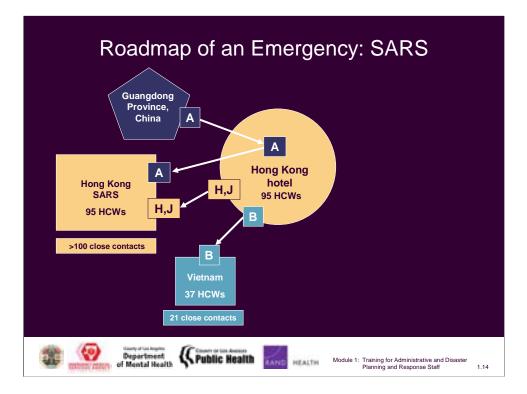
This diagram shows a roadmap of how the SARS emergency evolved. Initially, patient A from China who was infected stayed at a hotel in Hong Kong and exposed 95 health care workers to the disease.



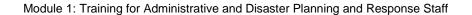
Module 1: Training for Administrative and Disaster Planning and Response Staff

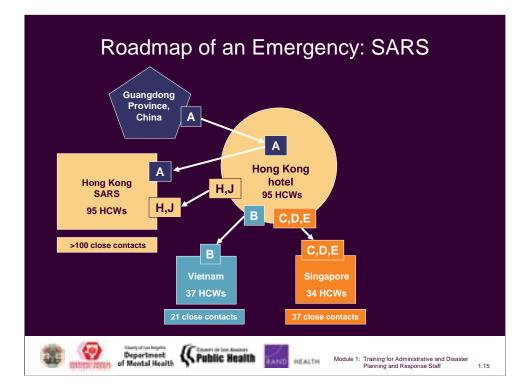
Patient A infected patients H and J. Those three patients infected 95 HCWs in Hong Kong.





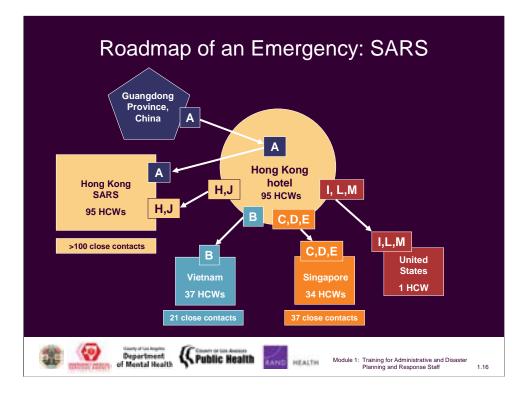
Patient B went home to Vietnam and infected 37 HCWs there.





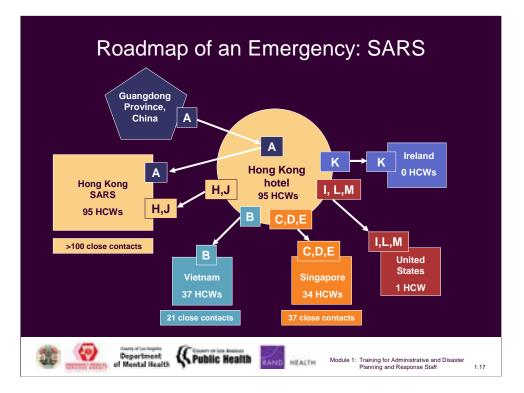
It spread to Singapore.





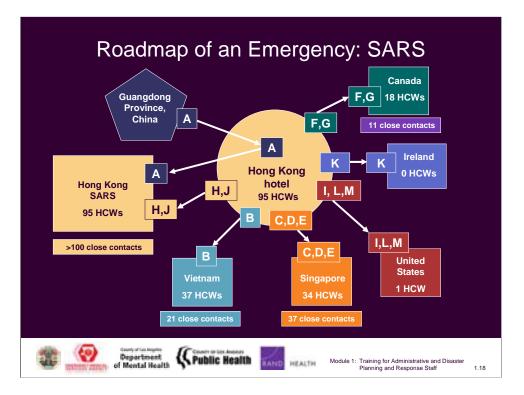
Eventually, it reached the United States.



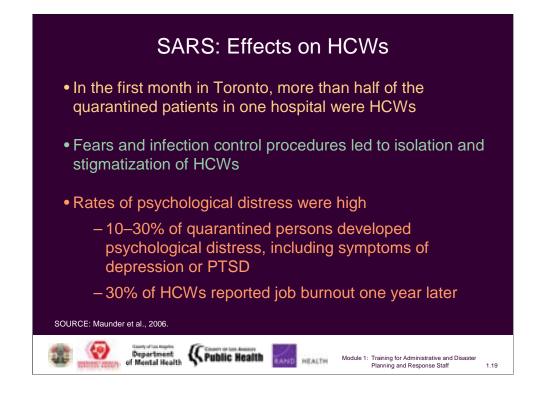


Between November 2002 and July 2003, there were about 8,100 known cases of the disease worldwide and about 775 deaths (a mortality rate of about 10 percent). Here we see potential for spread in Ireland.





Fear of infection was widespread. The SARS public health information hotline in Toronto received 316,615 calls, including 41,789 in a single day. The number of calls handled by a staff person in one day ranged from 214 to 1,471. This slide shows the number of health care workers and their close contacts who got sick.



Public health emergencies directly affect HCWs. They were among the thousands who were quarantined in Toronto. In the first month, *more than half of those quarantined in one Toronto hospital were HCWs*, a major loss of staff just when they were most needed. And quarantine is distressing. Health staff under home quarantine reported feeling loneliness, fear, and guilt that their family and friends may have been exposed; feelings of stigmatization; and anxiety whenever their temperatures spiked.

Those still working did so in a greatly changed hospital environment where fear, anxiety, isolation, and stigmatization challenged staff and management alike. Imagine the following. Infection control procedures changed daily—sometimes hourly—so HCWs were working under conditions of danger and uncertainty. To prevent spreading the virus among HCWs and then to the general public, HCWs were discouraged from socializing with each other outside or inside the hospital. Eating and drinking, which required removing face masks, were done alone or outside the hospital. At one point, cafeterias were closed to prevent contagion; when they reopened, HCWs were encouraged to sit several feet apart. Inpatients were not allowed visitors. Medical students and volunteers were not allowed in the hospital.

Outside the hospital, media attention on the role of HCWs in spreading SARS caused many people to avoid them. HCWs reported that they and their families felt isolated and stigmatized. Hospital staff experienced conflict between their roles as health care providers and parents. HCWs reported limiting time with patients because they feared for their safety. In a recent survey, many U.S. health professionals said they might not come to work during an epidemic such as SARS because they feared for their own and their families' safety.

No wonder so many HCWs were psychologically distressed and so many reported post-traumatic symptoms, burnout at work, increased use of substances, and missed work days. More than a year later, 30 percent of HCWs in one Toronto survey reported high levels of burnout, and 45 percent reported high levels of psychological distress (Maunder et al., 2006).



Failure to manage the surge in mental health demands and needs could have a cascading effect on the delivery of health care and even on the mental health of patients, families, and staff themselves.

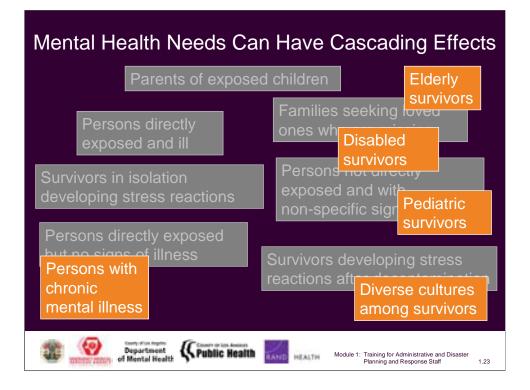
First to arrive by ambulance, taxi, car, or on foot will be people who have clearly been exposed to the event and are symptomatic. Others will have been exposed but appear without symptoms. Along with them will be people unsure if they were exposed, some of whom have symptoms consistent with exposure and some of whom do not. Staff will triage and manage persons who have been exposed whether they have symptoms or not as well as persons who were not exposed but have event-triggered symptoms or concerns.



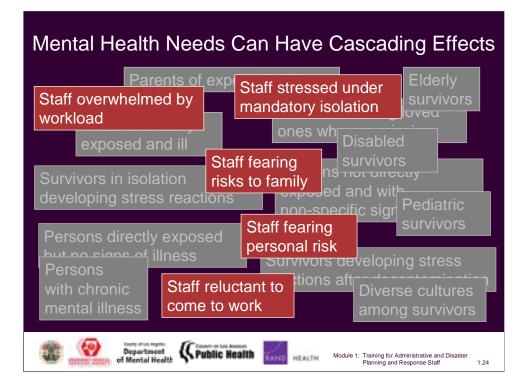
Over time survivors will arrive who have their own psychological difficulties from the event even though they were not directly exposed.



Soon families will be arriving. These include the parents of exposed children and families seeking missing loved ones. This influx could create unnecessary exposure among the unexposed waiting for services, "fan" mass psychosocial reactions, aggravate survivors' stress reactions, and further threaten access to quality care for vulnerable populations.



There will be groups with special needs, such as persons with chronic mental illness, elderly survivors, persons with disabilities, children, and members of the diverse cultures living in Los Angeles who need translators.

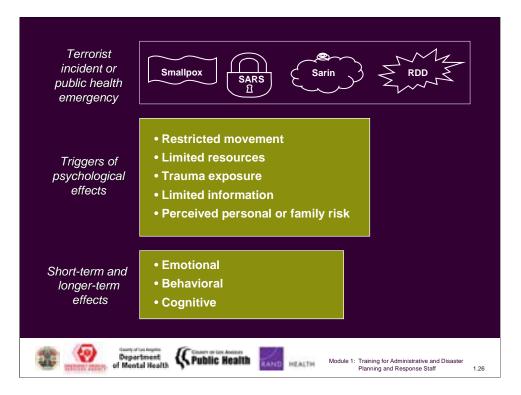


Finally, there will be the health care staff, potentially overworked, afraid for themselves and family, having difficulties coming to work, who will feel the stress of the situation.

Many mental health interventions are simple activities that can reduce distress and allow the natural resilience of patients, families, and staff to take over. For patients, this means providing access to basic needs of food, shelter, safety, and communication with their loved ones. For families, this means helping them find and care for their loved ones. For the specific populations at higher risk of injury or less able to advocate for themselves, it means knowing who these groups are in your service area and being prepared to accommodate them. Finally, for staff, it means focusing on preventing burnout and managing stress.



We have been discussing how significant the psychological effects of public health emergencies can be. What are the characteristics of emergencies that are likely to trigger such effects?

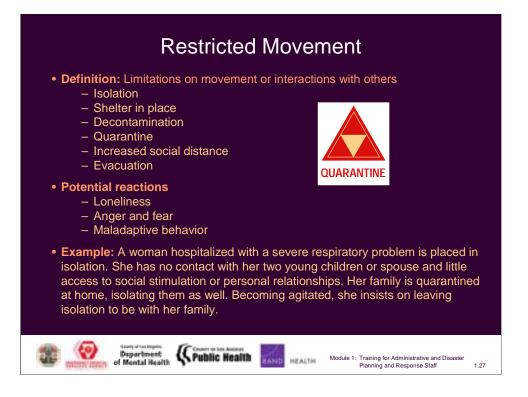


When we think about preparing for terrorist incidents and other public health emergencies, we often focus on specific types of events or agents—for example, smallpox, SARS, a sarin gas attack, or a radiological dispersal device (RDD). The idiosyncrasies of and differences in these events are important for understanding appropriate responses.

We have identified five key dimensions of emergencies likely to trigger psychological reactions to these types of large-scale events: restricted movement (limitations on movement or interactions), limited resources, trauma exposure, limited information, and perceived personal or family risk. Each trigger can affect the reaction of an individual or a group across emotional, behavioral, and cognitive domains. Next, we define these triggers and provide examples of the psychological effects they can engender.

All types of emergencies will trigger:

- Emotional distress such as fear, anxiety, sadness, anger, numbness, and hopelessness.
- Behaviors such as care-seeking, avoidance, self-medicating, non-compliance with instruction, and anti-social behavior.
- Cognitive changes such as experiencing difficulty thinking. These cognitive changes combined with emotional distress can also lead to somatic symptoms—including nausea, heart palpitations, etc.
- Depending on their severity and clinical impairment, some of these reactions may meet the criteria for a psychiatric illness, including acute stress disorder, depression, or post-traumatic stress disorder (PTSD).



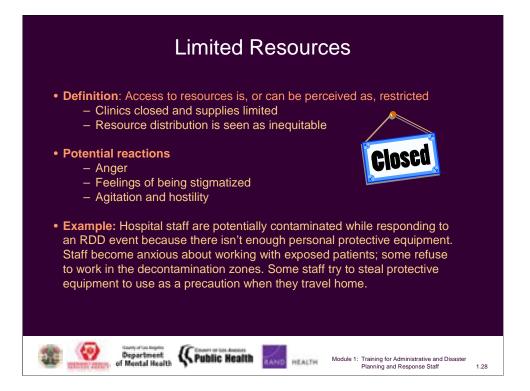
Restricted movement can result from policies or directives that affect how people interact physically or verbally with others—including isolation, quarantine, and separation of loved ones.

- Isolation refers to separating individuals who have a specific infectious disease from those who are healthy and restricting their movement to stop the disease from spreading.
- Quarantine refers to separating and restricting movement of persons who, although not yet ill, have been exposed to an infectious agent and therefore may become infectious.

Social interaction provides support for coping with difficulties. When individuals are cut off or have limited access to social interaction, they may feel isolated, alone, sad, afraid, or angry.

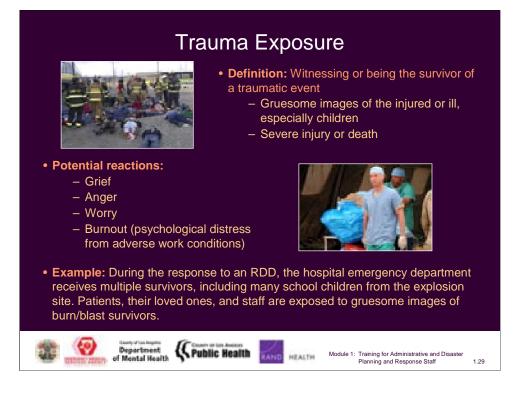
Loss of connectedness can lead to further emotional distress and limit psychological recovery. It can also lead to maladaptive behavioral responses such as acting out; noncompliance with public health recommendations; and negative coping such as smoking, drinking, or other risk-taking behaviors.

These types of reactions should be anticipated if the above restrictions are implemented, and appropriate precautions and support should be put in place.



During a response to a terrorist incident or public health emergency, individuals may also react to how resources or services are delivered or issued. Such situations include places where access to care, resources, or support is denied, limited (for example, if medical countermeasures are delivered to only part of the population exposed or at risk), or temporarily suspended (for example, if routine medical care is denied during an emergency).

In such circumstances, individuals may ignore official advice. In extreme cases, they could become angry, anxious, or feel stigmatized. They may also become agitated and aggressive and act in maladaptive ways, including looting, rioting, and other similar behaviors.



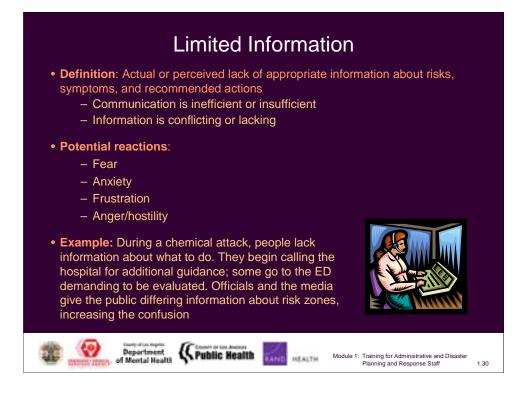
Trauma exposure is an important trigger to monitor in patients, their families and in facility staff. It is the number one predictor of long-term psychological consequences. Those with particularly intense or prolonged exposure to traumatic sights, sounds, smells, etc., from a disaster have a greater likelihood of experiencing some either short term or longer term psychological consequences than those who were less exposed.

Many individuals presenting in the emergency department (ED) or clinic may be the direct or indirect survivor of a terrorist incident or other public health emergency. They come seeking medical care or attention, or they come because their loved ones are in need of care. In addition to the trauma of being part of the actual incident or emergency, individuals may witness the incident or encounter grotesque images after the event or of survivors who are injured/ill.

In response to these images or experiences, individuals may experience a range of emotions including shock, numbness, sadness, grief, and anger. Staff may also feel burned out and experience personal grief over these images.

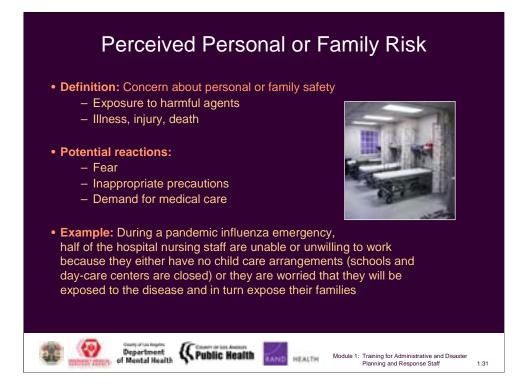
These additional trauma experiences can exacerbate existing psychological symptoms or psychiatric illness.

These reactions may also lead to maladaptive behavior, including inappropriate coping (smoking, drinking, risk taking) or absenteeism.



The trigger we have called "limited information" refers to any actual or perceived lack of appropriate information about any of the following: risks, potential consequences (symptoms), and appropriate response actions (what to do, where to go for help, etc). This trigger can occur when there is no information disseminated or when communication is inefficient or insufficient. This trigger may also be activated when information from different sources is conflicting.

Without information, individuals may become extremely anxious and even angry. They will seek other sources of information—even if from nonauthoritative sources. Without information or communication, individuals may also have maladaptive behavioral responses—for example, they may do the wrong thing or become withdrawn. One potential outcome of limited information is non-compliance with public orders based on limited or conflicting information. Another consequence of not having sufficient and accurate information is that rumors can start spreading the wrong information.



Another trigger is what we have called perceived personal or family risk. This trigger includes fear or concern about one's own safety and well-being and the safety and well-being of family and loved ones. Individuals who perceive a personal or family risk—for example, being exposed to harmful agents or becoming ill—may become:

- Fearful and anxious
- Angry or hostile, particularly if they believe the risk is being imposed intentionally on them or their families.

Some individuals may respond appropriately to this risk, for example, taking precautionary measures to avoid being exposed or becoming ill. However, others may not interpret or perceive the risk correctly and could respond in maladaptive ways, including not following instructions about precautions or not adhering to appropriate treatment. To overcome the impact of perceived personal risk with your hospital and clinic staff, the facility should issue frequent communications about the disaster with information about what your facility is doing to protect the health and well-being of staff and their families. Including information on the positive things that staff is accomplishing during the disaster also helps staff realize that their presence is "making a difference" in the recovery of their community. Also keep in mind that regular disaster exercise along with reviewing available disaster supplies and procedures can help staff feel more comfortable reporting to work following a disaster.



Understanding what might trigger psychological reactions will help you determine the areas of greatest MH needs and where to provide MH care, identify the sensitivities associated with finding places to put everyone, and assign MH staff to address those needs.



The disaster or emergency site is an obvious location to stimulate psychological reactions. But there are areas in your hospital or clinic that may also trigger psychological reactions resulting from the different psychological triggers we just reviewed (restricted movement, limited resources, trauma exposure, limited information, and perceived personal or family risk.)

The first type of area likely to trigger psychological reactions is where people enter and exit the facility. For example, the lobby and front desk are locations where people may be denied access to the building or asked to leave.

The second trigger area is where people are being treated (particularly critical care units) where staff and the public may be exposed to trauma.

The third area is where people congregate—for example:

- Waiting rooms because people may to have to wait for care or be told to stay in place; they might perceive an inequity in treatment resources.
- Decontamination areas because people may have psychological reactions if they are asked to remove clothing in public, feel at risk of getting sick, or are separated from friends and family.
- Isolation or quarantine areas if people are separated from loved ones or are concerned about their own safety.
- Anywhere there is a television if they are watching news related to the event.

In all of these areas, staff may also need psychological support if they think they or their families might be at risk.

For each location, you will need to decide if it must be staffed by individuals with MH training or if it can be staffed by others, with or without guidance from the MH department. Your MH staff will be overwhelmed, so it is important to consider who else can be trained to help you.



As part of your disaster preparedness process, you will want to work with the Hospital Incident Command System (HICS) MH and Employee Health and Well-Being Unit Leaders to identify several types of locations. See these two Job Action Sheets in your binder. In particular,

- Decide where to provide psychological support for people who are not admitted or diagnosed with a medical problem.
 - You will need three areas for providing psychological support : (1) for the first responders and their families, (2) for staff, and (3) for the public.
 - If there is no space to provide psychological support care in the main facility, consider using the parking lot or ancillary hospital/clinic buildings.
- Separate those waiting for news of their friends and family from those who are getting medical treatment and, perhaps, dying.
 - Waiting families may become even more anxious if they overhear or witness families whose loved ones have died while getting medical treatment. You should also separate the families of those who were already in the ICU before the disaster from disaster survivors' families.
- Decide where to locate disruptive persons and think about how to get assistance if people become violent.
 - Undoubtedly, there will be a few people unfairly demanding attention or causing other disturbances. They should be removed from the general waiting or treatment areas.



Keep in mind that the site for MH care should not be in the waiting areas of clinics or in hospitals in the ED or intensive care unit (ICU) halls. There will not be sufficient room, and people could get in the way of medical staff trying to do their jobs.

In selecting sites, choose

- Spaces with easy access to bathrooms.
- Spaces that are viable in bad weather.



Who will be available to provide care?

Your facility should pre-identify staff for your disaster MH team and be sure that they receive training in psychological first aid (PFA). PFA is described in Module 2. This technique has not been evaluated but is informed by strategies based on science. Currently, it is the best we have to offer. Consider hospital social workers, psychologists, other licensed MH staff (LMFT), chaplains, psychiatric nurses, "Child Life" professionals or child care specialists, hospital volunteers, etc. Also identify who will be assigned to HICS MH Unit Leader and/or Employee Health and Well-Being Unit Leader roles. Prior to a disaster, be sure to include staff from your MH team in your facility's disaster planning committee(s) and regular disaster exercise program.

The first thing you need to know is that you will most likely be on your own for an extended period of time following a large-scale disaster. In fact, your facility should have enough resources to operate on its own for at least three days. Therefore, you will need to make do with the staff you have on hand (i.e., the staff present in the facility at the time of the emergency).

- If you have a facility in which MH specialists are available, you will want to place them in the trigger areas, such as the entrance, waiting rooms, triage areas, and the ED.
- If you do not have MH specialists at your facility, then you will want to train other health staff to carry out triage to identify psychological problems that need urgent attention.
- Another alternative is to train administrative staff or other workers who may be available to help. This alternative may make more sense than using medical clinicians if there are medical injuries that need to be the priority for the ED/ER. This is where providing PFA can be particularly useful, because it is designed to be used by lay people to deliver triage MH care.
- Developing phone scripts in advance for staff to use in a disaster will also help to address needs.



Your facility should consider making pre-disaster agreements that will allow for additional MH staff (mutual aid). Consider working with your Disaster Resource Hospital (DRC) group, health and MH clinics in your area, faith-based organizations and chaplains, or other appropriate volunteer groups. During disasters, if you need additional staff, your hospital or clinic command center can contact the DHS to request more MH staff. DHS will request staff from County DHS. DHS may also deploy pre-screened MH volunteers from the County Emergency System for Advance Registration of Volunteer Health Professionals (ESAR VHP). For more information on ESAR VHP see the EMS website: www.ladhs.org/ems

Where can you get help outside your facility? Begin by contacting the County Department of Health Services (DHS). DHS staff will help you get the MH resources you need.

In an emergency, you will be inundated with organizations wanting to help. Such organizations could include various forms of paraprofessionals. Your hospital or clinic probably already has a plan for dealing with spontaneous volunteers, because it is required to do so by the Joint Commission (formerly the JCAHO), but you should familiarize yourself with the plan. You will also want to limit the organizations you allow access to your hospital or clinic by putting together an approved list. They will need to report to the HICS MH Unit Leader or volunteer staging center at the hospital or clinic before entering. The list of organizations with access should be available to those at the front desk or security staff.



To reduce chaos and avoid problems, you should plan for how to process the arrival of staff from other mutual aid organizations when they report to your clinic or hospital.

You should also know in advance who they will report to. This will be either the *HICS MH Unit Leader*, *HICS Well-Being Unit Leader*, or other designated HICS staff.

In addition, you should know how to identify outside staff working in your facility by using a badge that is different from the usual visitor badge.



Now let's turn our attention to how you can use the tools and resources provided in this course to address the psychological effects of a public health emergency. To illustrate use of the tools, we will use a scenario involving a radiological dispersal device RDD and another involving pandemic influenza (pan-flu).



To set the context: Preparedness and response activities have three time frames—before the incident, during the incident, and after the incident (adopted from the Institute of Medicine, 2003).

- The time frame *before the incident* includes planning and training activities designed to prepare your hospital or clinic to respond appropriately to the incident.
- The time period *during the incident* entails activating your facility's resources and linking with outside resources for an appropriate acute or short-term response. Many of these activities will include treating psychological consequences of serious public health events and performing activities aimed at preventing adverse psychological responses that may manifest themselves after an incident.
- The period *after the incident* entails longer-term monitoring and response activities as well as a debriefing and evaluation of the response activities before and during the incident.

Corresponding structures and processes must be in place for each of these time frames and activated when there is a disaster or emergency. These structures and processes are outlined next.

Tool Name	Purpose	When to Use	
Definitions	To explain selected medical concepts and countermeasures	Before and during	
HICS MH Job Action Sheets	To improve the disaster response by including MH content and integrating MH functions	Before and during	
Recommended Actions	To guide hospital/clinic staff in specific responses needed	Before and during	
An Algorithm for Triaging MH Needs	To help staff decide who may need urgent psychological assessment from those who need nonurgent assessment	Before and during	
REPEAT	To help hospitals/clinics assess their levels of preparedness	Before and after	
Providing PFA: Tips for Talking with Adults and Children, Reference card and NCPTSD Handouts	To outline the 8 principles of early intervention in a disaster	Before and during	
Tips for Workers and Survivors	To help prevent or mitigate burnout	Before, during, and after	
Facility Poster	To promote preparedness among hospital/clinic staff	Before, during, and after	
Image: Construction of Mental Health Construction Module 1: Training for Administrative and Disaster Planning and Response Staff 1.41			

Our team developed a number of tools to provide guidance to hospital and clinic staff before, during, and immediately after a terrorist incident or other public health emergency. These tools are provided in your binder.

In addition to a list of definitions that may be informative, we have included copies of the HICS MH Unit Leader and Employee Health and Well-Being Unit Leader Job Action Sheets in the Resources tab.

The Recommended Actions booklet for Preparing Facilities to Address the Psychological Aspects of Large-Scale Emergencies is designed to provide guidance on the responses for different trigger situations including the actions that you can take before and during disasters later on.

An Algorithm for Triaging Mental Health Needs can be used to triage those who may be suffering from psychological reactions to an event.

The Readiness for Events with Psychological Emergencies Assessment Tool (REPEAT) (which each of you filled out at the beginning of this course) is designed to assess your facility's level of preparedness before and following a disaster. The tool can also be used on an ongoing basis for general quality improvement.

The Providing PFA Handouts are reproduced in your binder and are available from the National Center for PTSD (NCPTSD). We also adapted the basics into Tip Cards that provide simple scripts to guide how you talk with adults and children, and developed a wallet-sized PFA reference card.

There are also tip sheets for workers and survivors.

Finally, there is a poster than you can display at your facility.

These tools are all designed to be flexible so that they can be tailored to your facility. Let's discuss in more detail how to use some of these tools, using the RDD and pan-flu scenarios.



Los Angeles County resources for you to know about include how to contact the Department of Mental Health (DMH), the lead agency for addressing psychological effects that may arise in a large-scale disaster.

It will be the responsibility of your hospital incident commander (or, for clinics, another person designated as the facility disaster coordinator) to request additional support through the county EMS agency. The coordinator can call the Medical Alert Center (MAC), can use the Hospital Emergency Administrative Radio (HEAR) system (if available—95 percent of hospitals have this radio system but clinics do not), or can use the ReddiNet, which is a hospital messaging system. All of these communications systems are backed-up. MAC is linked to medical transports so it is critical. If phone lines are down in a disaster, MAC would be available since it is a radio system.

The other critical piece of information to have at your fingertips is the Los Angeles County Department of Mental Health hotline number. You can call to request that DMH deploy staff to your facility to help provide MH triage and intervention.



Now let's consider a potential scenario—radiological dispersal device or RDD. First here is a description of the actual event. Then in the following slides we will break down these by considering the psychological triggers, and how to respond.

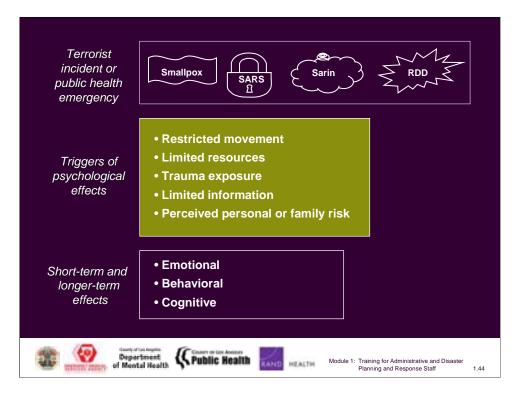
A terrorist organization purchases stolen cesium to make an RDD or "dirty bomb" that is detonated in downtown Los Angeles. Variable winds carry the radioactively contaminated aerosol over approximately 36 blocks including the business district, apartment buildings, and city government offices. The blast kills 180 people; about 270 injured require medical care. The entire scene is contaminated with harmful radiation, though not at levels causing immediate concern to first responders. In addition, up to 20,000 individuals in the primary detonation zone have detectable radioactive contamination.

Local hospitals and clinics, already at maximum capacity with injuries from the blasts, are inundated with up to 50,000 people who believe they may be affected. Patients, their loved ones, and staff are exposed to gruesome images of burn/blast survivors as they enter the ER. Family members of patients who were already being seen in the ER (for nonexplosion related emergency care) become anxious and afraid of getting sick/contaminated while waiting. Hospital staff are potentially contaminated because of insufficient stock of protective gear. Staff are also not aware of the risks of exposure to cesium, making them anxious and hesitant in their tasks.

Dozens of hospital clinical, administrative, and support/ancillary services staff do not show up for work because they fear becoming contaminated, because they want to stay close to their families, or because transportation into the area is difficult.

Injured people will require some decontamination in the course of medical treatment and, if possible, prior to hospital admission. Thousands more will likely need superficial decontamination, and both short-term and long-term medical monitoring.

Module 1: Training for Administrative and Disaster Planning and Response Staff

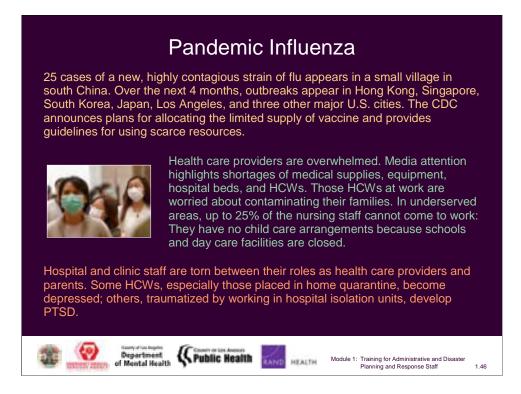


Here are the triggers again.

Radiological Dispersal		
"Hospital staff may be contaminated because they lack protective gear."	Limited resources	
"Patients, their loved ones, and staff are exposed to gruesome images of burn/blast survivors as they enter the ER."	Traumatic exposure	
"Staff don't understand risks of cesium exposure, making them anxious and hesitant in their work."	Limited information	
"The injured will require some decontamination while being treated and, if possible, before hospital admission."	Restricted movement	
"In the hours and days following the attack, dozens of staff don't come to work."	Perceived personal or family risk	
	dministrative and Disaster Response Staff	1.45

Let's think about how this scenario might trigger psychological reactions among the survivors, the public, and the staff. We will show you some excerpts from each of the scenarios and ask you to identify the psychological triggers that correspond with the example.

Now that you've identified the potential triggers of psychological reactions, where would you place staff and how would you use them?



This slide shows a shortened version of the scenario.

At least 25 cases of a new and highly contagious strain of flu virus occur in a small village in south China. Because of genetic change in the virus, people have no immunity to it. Over the next two months, outbreaks occur in Hong Kong, Singapore, South Korea, and Japan.

Two months later, the virus appears in Los Angeles and three other major U.S. cities. Because of the virus's rapid spread and the time required to develop, test, produce, and distribute an effective vaccine, the disease arrives in the United States before a "significant" number of people can be vaccinated. While vaccine begins to arrive in hospitals, the Centers for Disease Control and Prevention (CDC) announces its plans for allocating the limited supply of vaccine among the population and guidelines on priorities for using scarce resources, such as antiviral drugs, hospital beds, and ventilators. Meanwhile, hospitals, clinics, private doctors' offices, nursing homes, and home care agencies are overwhelmed by hospitalizations, outpatient visits, and isolation care. Media attention highlights shortages of medical supplies, equipment, hospital beds, and HCWs. During the height of the response, routine health care services in the hospital/clinic are limited, leaving many individuals with chronic health care problems untreated.

Knowing that they are at higher risk of exposure than the general population, five percent of HCWs choose to stay home; most of those who do work are severely stressed about infecting family members. At some smaller community hospitals and clinics in underserved areas, up to 25 percent of the nursing staff cannot come to work because they have no child care arrangements. (To contain the spread of the disease, L.A. County has closed all schools and day care facilities.) Hospital and clinic staff are torn between their roles as health care providers and their responsibilities as parents. Some HCWs, especially those placed in home isolation, develop depression; others, traumatized by working in hospital isolation units, develop PTSD.

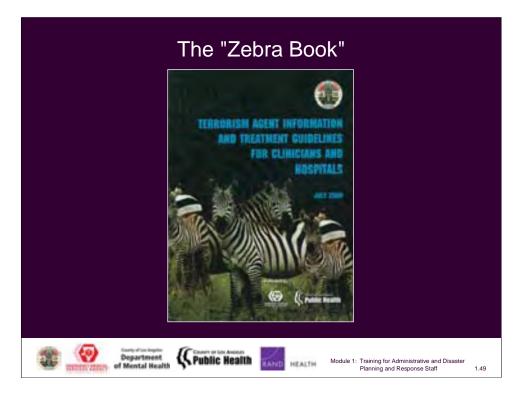
Pandemic Influenza		
"The CDC announces plans for allocating the limited supply of vaccine and provides guidelines for using scarce resources."	Limited resources	
"In underserved areas, up to 25% of the nursing staff cannot come to work: They have no child care arrangements because schools and day care facilities are closed."	Limited resources	
"Some HCWs, especially those placed in home quarantine, become depressed; others, traumatized by working in hospital isolation units, develop PTSD."	Traumatic exposure and restricted movement	
"HCWs are worried about contaminating their families."	Perceived personal or family risk	
	r Administrative and Disaster nd Response Staff 1.47	

Let's now think about how this scenario might trigger psychological reactions among the survivors, the public, and the staff. We will show you some excerpts from the pan-flu scenario and ask you to identify the psychological triggers corresponding with the example.



Here is how you can use the different tools to respond to an RDD or other situation:

- Contact the *HICS MH and Employee Health and Well-Being Unit Leaders* to request additional MH resources such as staff to help identify and intervene with those suffering from psychological distress.
- Consult the "Zebra book" for Terrorism Agent Information and Treatment Guidelines for Clinicians and Hospitals (July, 2006). It can be downloaded at http://labt.org
- Consult the Recommended Actions tool to locate countermeasures.
- Consult the *Algorithm* to triage those requiring psychological assessment and to determine where to station MH staff to help provide early intervention.
- After the immediate stage of the RDD event, fill out the *assessment tool* (REPEAT) to see where you have improved and identify areas that need further work.
- Distribute the *worker and survivor tips* to help patients, families of survivors, and hospital/clinic staff deal with their distress, including helping their children cope with the situation.
- Use the PFA tip sheets to help staff provide support to those with traumatic exposure.
- Post and distribute a *poster* and *reference card* to educate staff about what to do during a disaster.
- If your facility is a hospital, use the *HICS Mental Health Job Action Sheet* to review the steps necessary to address psychological responses to the emergency.



This is the cover of the county resources for terrorism agent information to help hospital and clinic staff identify a disease and learn how to treat it. You can locate the "Zebra book" on the Public Health Bioterrorism Website: http://labt.org

•	he Recommended Actions Tool to Address RDD Contents			
Contents				
Psychological Trigger	Agent	Page Numbe		
Restricted Movement		5		
 Isolation 	Biological, Chemical			
 Shelter in place 	Contagious, Chemical, RDD)		
 Decontamination 	Chemical, RDD			
Quarantine	Contagious			
Limited Resources		8		
 Staffing shortages under surge 	Any			
 Space limitations for providing 				

Any

Biological, Chemical, RDD

HEALTH

Module 1: Training for Administrative and Disaster Planning and Response Staff

1.50

psychological care

equipment (PPE)

• Availability of personal protective

Department of Mental Health

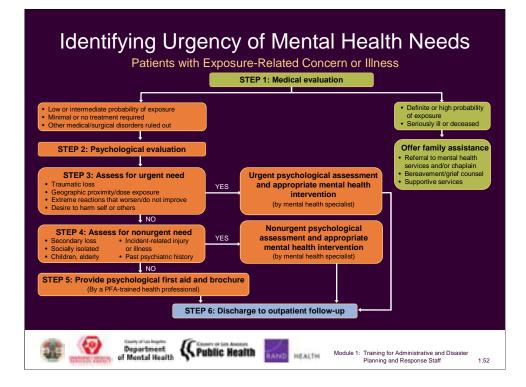
You can use the Recommended Actions tool to address the psychological consequences of an RDD disaster for example. Here we show an excerpt of the table of contents.

CPublic Health

You can glance down to find an issue relevant to RDDs, such as decontamination, as highlighted in yellow. Next, we turn to the first page of the Recommended Actions tool.



The decontamination section lists several actions you can take to prepare for an RDD and steps you can take during the RDD process. As we said earlier, this tool is not intended to be a comprehensive list of all the actions you can take. Instead, it is intended to provide examples of the range of steps that can be taken.

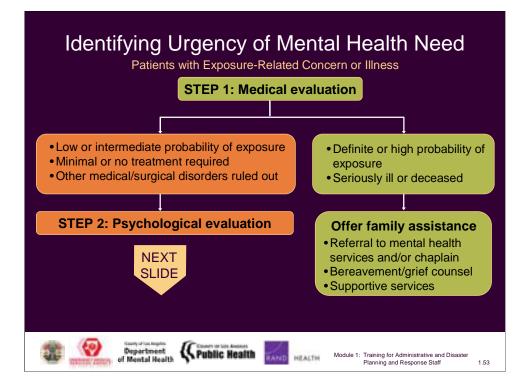


This is the entire algorithm which is provided in larger format under the tools section. We will explain each step in the next three slides.

ED or clinic staff face the challenge of determining the level of psychological distress that patients are experiencing and deciding how to allocate their limited mental health personnel in the most efficient and effective way. The strategy or triage tool is intended to help distinguish between those who may need *urgent psychological assessment* and possible intervention from those who need only *nonurgent psychological assessment* and possible intervention. The tool is also intended to help determine which health care staff should be involved and at what point in the triage process.

The distinguishing features used to differentiate urgent from nonurgent need are based on studies of prior large-scale traumas, such as natural disasters (earthquakes, the Asian tsunami) and human caused disasters (9/11, the Oklahoma City bombing). But there is no "one-size-fits-all" strategy, because conditions will differ between incidents and even among health care facilities. This strategy is generic and is meant to be highly flexible so that you can adapt it for different events or as knowledge changes.

The triage tool is meant to be used in "clean" (nondecontamination) zones, where it is assumed that health care workers will have more time to deal with mental health issues than they will in decontamination zones, where medical issues will be paramount and overwhelming.

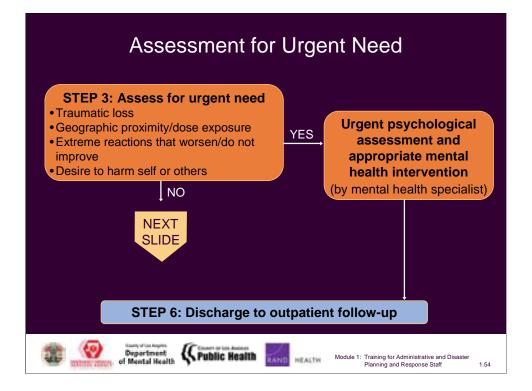


We begin with a patient in a clean, nonisolation area of the ED or clinic, who has had his or her medical needs assessed and dealt with.

Most generic triage methods will divide persons between those who are so ill that they need emergency and/or inpatient medical treatment versus those who are mildly or not at all ill and need little or no treatment, except perhaps follow-up or observation as an outpatient. The symptoms and signs that will distinguish exposure and illness from a particular agent differ between agents. For more on this topic, please refer to the "Zebra book" mentioned earlier.

Those in the first group, who need emergency or inpatient care, are probably too ill for mental health care to be a priority, although the family will certainly be potential recipients for mental health or spiritual care.

The persons we address in this triage algorithm are those who have come for an event-related concern, especially those who are found to have never been exposed and are not ill from the event, but have event-triggered symptoms or stress reactions.

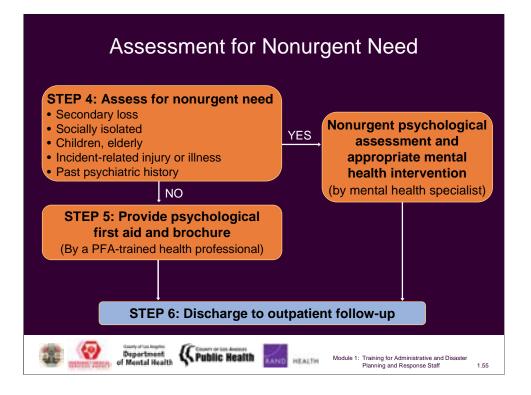


To assess for urgent need, a HCW (could be MD, RN, or triage staff) inquires about four factors. First, the patient's experience of traumatic loss of a loved one. Second, their proximity to the incident (e.g., they were very near the outside of the radius of exposure caused by an RDD) or level of exposure to the incident (e.g., they had a known contact with someone with smallpox but themselves did not get smallpox). What is that proximity or level of threshold? It will depend on the incident itself and will have to be determined based on the nature and severity of the event as well as how much of a surge you are experiencing. For instance, based on the known properties of the RDD, you will have to decide what the "X" is in the question, "Were you within X miles of ground zero?" These first two features are objective measures of risk for traumatic mental health problems such as PTSD.

Anyone who presents with extreme psychological reactions to the event and is not improving with medical attention would also be considered to need urgent assessment and treatment. Finally, as always, intent to harm oneself or others requires urgent attention. Individuals who have one of these characteristics should be sent for further psychological assessment and possible treatment to be provided as rapidly and early as possible by a mental health specialist.

Here is another way in which the triage tool is flexible. The threshold for referral to urgent care can shift based on the level of surge; so when lots of people are crowding the ED, staff can ratchet up the threshold.

If there were many people in the urgent-assessment category, it may indicate that the hospital should seek outside help to obtain additional mental health specialists. Assessments will clearly be influenced by the number of people requiring assessment and by the nature and severity of an individual's symptoms, plus any other risk factors the person may have for psychological problems, such as a history of chronic mental illness. Most persons will probably be discharged to outpatient mental health follow-up. Others will be retained or referred for follow-up mental health care.



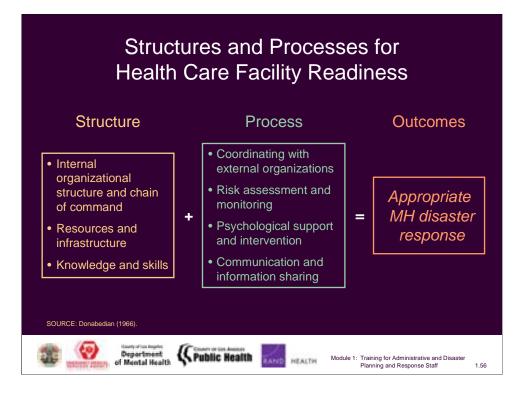
To assess for nonurgent need, individuals who did not meet the criteria for urgent assessment would continue to be assessed for criteria suggesting need for nonurgent assessment by a mental health specialist. These characteristics could include suffering a secondary loss (e.g., loss of job, home, forced relocation/evacuation, or, for children, even the loss of a favorite toy).

Children, the socially isolated (persons without social support), and individuals who have previously suffered from an injury or illness because of the incident—for example, they were quarantined for possible infection but have now been cleared; history of external injury diagnosis (cause of injury is trauma, poisoning, etc.)—would be sent for a nonurgent clinical assessment.

Patients who had none of these features would receive PFA and disaster mental health brochures from a PFA-trained health professional.

As was the case for urgent care, the threshold for referral to nonurgent care could be adjusted depending on the number of people who need assessment.

Most persons will probably be discharged to outpatient mental health follow-up.



An appropriate MH disaster response results from organizations having the necessary structures in place before an event and the ability to engage the appropriate response processes during an event. Structures required for an appropriate MH response include:

- A clear chain of command for managing the psychological aspects of incidents—for example, your facility should have established a command structure and identified multidisciplinary teams to handle the MH response and integrate MH into the overall hospital and clinic disaster response.
- The needed resources and staffing available to address MH needs, such as arranging for space to sort and support survivors with psychological needs, mechanisms to facilitate workforce participation (e.g., phone trees).
- Staff who are trained and knowledgeable about addressing psychological needs during a disaster, including understanding MH roles and teaching stress management techniques to these (MH providers, chaplains, etc.).

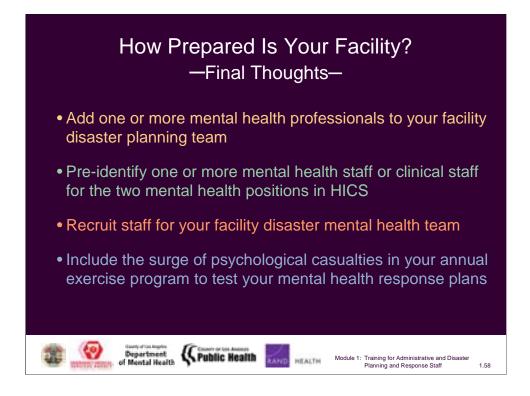
Processes that need to be in place include:

- Being able to coordinate with external organizations, including having a plan for coordinating with other entities for disaster-related psychological services and resources.
- The ability to assess risk from psychological triggers and to monitor psychological reactions to them.
- Having MH staff available to provide psychological support and intervention, such as evidence-informed PFA.
- Communicating and sharing MH expertise within your facility and with community partners.



We developed a "hands-on" tool for hospital and clinic staff to use in assessing their facilities' readiness before and following a disaster. (You all filled out this tool for your facility at the beginning of the meeting.) The tool can also be used on an ongoing basis as a general quality improvement tool to gauge progress in areas that are identified as weak. Hence, the acronym REPEAT.

The idea is to assess how prepared your facility is with respect to the key components of structure and process that we described in our training framework. Once you know your baseline score, then you can see where work is needed to become better prepared.



As a result of this training today at *minimum* your facility should take the following actions:

- Add one or more mental health professionals to your facility disaster planning team.
- Pre-identify one or more mental health staff or clinical staff to the two mental health positions in HICS.
- Recruit staff for your facility disaster mental health team.
- Include the surge of psychological casualties in your annual exercise program to test your mental health response plans.

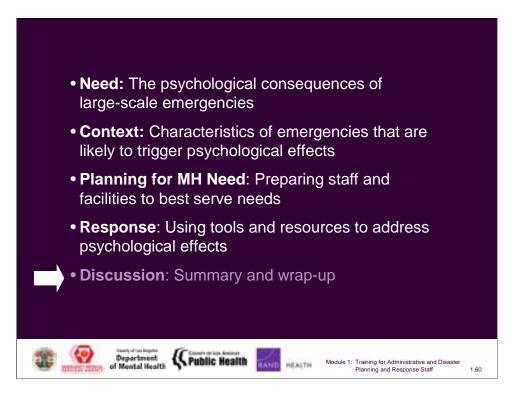
Disaster Preparedness Self-Assessment Tool						
Psychological Element*	Full Implementation (Score = 2)	Some Implementation (Score = 1)	No Implementation (Score = 0)	Your Score and Areas to Improve		
	Structure					
Internal Organizational Structure and Chain of Command	 Leadership recognizes the need to address psychological consequences Disaster plan includes MH in the incident command structure/ job action sheets Clear roles are identified for direct MH service to survivors and family; and staff 	Some of these structures are in place to address psychological consequences	There is no infrastructure to address psychological consequences	2 1 0		
Resources and Infrastructure	 Plan has been reviewed to ensure adequate resources and supplies will be available Resource list is available with information on who to contact (county DMH) Have capacity to handle a MH surge up to 50 times the number of physical casualties 	Some but not all resources that would be needed are available	Resources available are inadequate should a disaster occur	2 1 0		
Knowledge and skills	 MH staff are trained for roles in command structure and familiar with job action sheets MH staff are trained in MH assessment and early psychological intervention Staff receive hands-on training through exercises and drills to test plans 	Some staff have received some training activities on MH reactions and response	received	2 1 0		
	Subtotal Disaster Preparedness Self-Assessment Score	(Structure: possil	ole range = 0–6)			

Here is an excerpt from REPEAT.

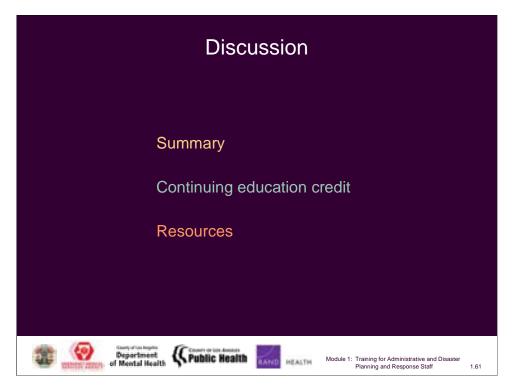
To use the tool, key members of your facility (e.g., disaster response coordinators, ED directors, MH directors) review each row of preparedness and response activities to determine which have been implemented or are in place. A facility receives 2 points if all of the components are in place, 1 if some of the components are in place, and 0 if none of them is in place.

REPEAT is organized in two parts, one for structure and another for process. Here, we provide an example from the structure section, under the Knowledge and Skills row. A facility would score a 2 if it had MH staff who were trained for roles in the command structure and familiar with job action sheets, had educated staff about risks and consequences of exposure, had trained MH staff to assess and provide early psychological intervention, had given volunteers basic disaster training, and had provided staff with opportunities for hands-on exercises and drills to test disaster plans. If none of these components was in place, the facility would receive a score of 0. If the facility had MH staff in the command structure and conducted drills, it would get a score of 1.

At the end of the assessment, those completing the tool would enter the total score for overall level of preparedness, then review the assessment, noting areas that need attention (a score of 0) or strengthening/improvement (a score of 1).



Now, we will take a few minutes to summarize what we hope you will take away from this training course.



We began with an overview of the different psychological consequences that your facility might face should we experience a large-scale emergency. We have also reviewed the main triggers of these different psychological responses and how you can plan for and respond with staffing and resources. Finally, we have provided you with several tools that can help you integrate these lessons and functions into your response plan.

Remember that we have arranged for you to receive continuing education credits for participating in this course. Please complete your paperwork and hand it to us before you leave today or complete it online.

For those of you who will be going back to your facility and training staff locally, we have prepared "student" handouts that participants can use when taking the course. This manual can be used for training staff and as a self-study guide for those who want to take the course on their own time. All of the tools, guidelines, and resources we covered during the course are part of your package. These materials are available on the Los Angeles County Web site:

http://www.ladhs.org/ems/disaster/trainingIndex.htm