Radiological Dispersal Device (RDD)—Version A

The Los Angeles County Department of Mental Health (DMH) has called you to respond to a large-scale disaster. You receive an incident briefing from your county DMH unit leader. In that briefing, you learn that the Los Angeles County Sheriff's Department is working in conjunction with the Los Angeles County Department of Public Health (DPH), because they have learned that a terrorist organization purchased cesium to make an RDD or "dirty bomb" and it has detonated the device this morning in downtown Los Angeles. Wind is carrying radioactivity from this aerosolized dispersion to an area covering 36 blocks of the explosion. Hundreds of businesses, apartment buildings, and government offices are potentially contaminated. The blast caused 180 fatalities; about 270 injured require medical care.

The entire scene is contaminated with cesium. First responders were not initially aware of the presence of cesium when they arrived on scene, and many of them are now concerned that they may have been exposed. In addition, up to 20,000 individuals in the primary survivor triage area potentially have detectable superficial radioactive contamination. The media are reporting that minor contamination may be an issue further downwind and are airing many interviews with frightened citizens.

Local hospitals in the area, already at maximum capacity with injuries from the blasts, are inundated with approximately 50,000 people who think that they have been contaminated. Hospital emergency department (ED) staff who are working with survivors from the explosion site have been exposed to gruesome images of burn/blast survivors as they enter the ED. Survivors from the explosion and their family members have also witnessed gruesome sites, sounds, and smells. Hospitals are reporting difficulties calming family members and patients who were already in the ED for nonexplosion-related emergency care because they fear they have been contaminated by blast survivors arriving at the ED.

During the initial phase of the disaster response, hospital staff were also not initially aware of the presence of cesium. Staff are now concerned that they were potentially contaminated because they were not wearing the proper personal protective equipment. Hospital staff also do not understand the short-term and long-term risks of cesium exposure. This uncertainty is creating anxiety and rumors and making staff hesitate to report to work or to remain at their assigned work location.

DPH officials and hospital infectious disease staff are working hard to distribute information about cesium. The following is the information they provide:

- In the long term, no one will suffer acute radiation syndrome, but approximately 20,000 individuals near the blast scene are likely to become externally contaminated.
- Low-level contamination may enter food and water supplies.
- The sum of the cumulative exposure is expected to result in an increased lifetime cancer risk proportionate to the dose.
- Injured people will require some decontamination in the course of medical treatment and before hospital admission.
- Thousands more will probably need superficial decontamination and both short-term and long-term medical follow-up.

Despite these public information efforts, hospitals are reporting that dozens of hospital clinical, administrative, and support/ancillary services staff are not showing up to work because they fear contamination, because they want to be close to their families, or because transportation into the area has been interrupted.

You have now reported to a local hospital (or clinic) to assist with the mental health (MH) response. You have met with the county DMH unit leader on scene, who is working with the hospital MH unit leader to deploy staff to the appropriate areas in the hospital. You have been **assigned to the ED (or clinic triage area)**. You have been asked to help address the MH concerns of victims, the injured, and survivors after they have received medical evaluation and treatment. You have

also been asked to "keep an eye out" for any staff who might be experiencing stress reactions.

You notice that the survivors include children and non-English speaking individuals, as well as some first responders (fire and police). During the course of your work, you discover that there are many family members in the ED waiting area who are concerned about contamination. You also notice a large group of children in the waiting area sitting with frightened and concerned family members. You learn that some staff have expressed fears about being exposed. Shortly after reporting for duty, you are confronted by an angry patient who is disrupting staff working in the ED. ED staff, overwhelmed with the urgent medical needs of so many patients, want security to remove the patient from the facility.

Draw on what you have learned in this course to address the following questions:

- What triggers of psychological response are you likely to encounter in this setting?
- What are your first priorities when you arrive in the ED to provide assistance?
- What is your overall mission in this location?
- If other MH staff are assigned with you, what suggestions might you make about how to divide tasks?
- How might you work with other hospital or clinic staff also assigned to "mental health," such as nurses, chaplains, child life specialists, etc.?
- How would you decide which patients need immediate assistance?
- How do you plan to work with those who arrive at the ED but are not assessed by the medical staff as being exposed or having "real" medical concerns?
- What will your strategy be if some of those who arrive at the ED with contamination concerns are first responders (fire and police)?
- What short-term interventions might you use in this situation?
- What would you do to meet the needs of specific groups, such as children and non-English speakers?
- How might you begin to connect people with resources for longer-term MH interventions?
- What other resources might you need (e.g., MH brochures, information about cesium exposure, the "Zebra book"), and how might you get them?
- What do you think should be done about the potential MH needs you are noticing in other areas (for example, the waiting area) where you are not assigned?
- What might you do to address the concerns of staff?
- What self-care strategies might you use to address your own stress concerns on scene and after the end of your shift?
- What tasks do you need to complete at the end of your shift to ensure continuity of care from the new shift coming in after you?
- Are there other considerations, unique to this situation, that you would like to address?