

## **Chapter Two**

### **Working in Emergency Management**

#### **2.1 Chapter Objectives**

*As a result of this chapter, students should be able to:*

- Describe the work of an emergency manager in the U.S. and globally.
- Identify and begin to pursue core competencies in emergency management practice.
- Discuss the types of jobs in which emergency managers typically work.
- Observe differences between emergency management in the U.S. and globally.
- Appreciate the value and explain the process of becoming a Certified Emergency Manager.

#### **Chapter Summary**

A central point to make is that people will always live near or with hazards. Too many times, people make choices to do so – or their choices mean that others live in an area of risk to provide services to them. We also live in places over generations, sometimes rarely leaving a region that is culturally and environmentally familiar. Or, historic patterns of segregation place people at risk literally on the floodplain side of the river or a low-lying area subject to repetitive risks.

This chapter starts by looking briefly at the phases of emergency management, here defined as preparedness, response, recovery, and mitigation. You may want to include prevention which is a phase often cited in DHS literature. Some scholars feel that it overlaps with other phases while some content it is terrorism-specific. Be sure also to talk about the different sectors including public, private, nonprofit and international/humanitarian sectors of work. Then, walk through the various kinds of hazards with a focus on what emergency managers actually do during these phases. Ask them what degree of influence they might have over such events – or is there another point of view, such as working with mother nature?

#### **Teaching Suggestions**

Inspire students to discuss how emergency managers can participate in life-saving efforts through education, warning messages, planning and other initiatives. Take some time to have them sort through the phases and identify some of the tasks associated with each. Tell them this is how emergency managers break down the tasks of caring for the community in an organized way. Look also for the kinds of partners likely to be part of work in each phase. Have the students look for jobs that operate through these phases. Have the students identify and discuss the various sectors in which they could do this kind of work and ask: what appeals to you the most and the least? They might want to look for actual job descriptions.

Ask students to research a particular hazard like a tornado or earthquake. Have them focus on its physical characteristics (briefly) and then hone in on the threat it may present. Is it a seasonal event or can it happen anytime? What is the recommended general guidance to prepare for such an event (visit [www.ready.gov](http://www.ready.gov) for checklists specific to hazards). What would an emergency

manager be likely to do in terms of activities for each phase of the life cycle of emergency management for this hazard?

## Resources

- The 2016 *World Disasters Report* is available free at <http://media.ifrc.org/ifrc/publications/world-disasters-report-2016/>. It is produced by the International Red Cross/Red Crescent Federation and is available in multiple languages.
- For a radar animation of the Joplin tornado, visit [http://www.crh.noaa.gov/sgf/?n=event\\_2011may22\\_synopsis](http://www.crh.noaa.gov/sgf/?n=event_2011may22_synopsis), last accessed April 24, 2014.
- Federal Emergency Management Agency offers free online courses in a range of topics. Consider pursuing the certificate they offer for the Professional Development Series. Go to [www.fema.gov](http://www.fema.gov) and search for Independent Study to start your journey.
- A number of websites provide information on space weather. Start your journey at the Space Weather Prediction Center, found at <http://www.swpc.noaa.gov/communities/space-weather-enthusiasts>, last accessed July 31, 2015 or the Office of the Federal Coordinator of Meteorology at [www.ofcm.gov](http://www.ofcm.gov).
- A goldmine of a website is at <http://www.noaa.gov/>. Related websites include <http://www.weather.gov/>, where students can obtain customized weather and sign up for social media weather alerts – this could be an opportunity for them to become more weather aware, to analyze social media use, and to discuss risk communication in future chapters.
- If it is close to Halloween, visit <http://www.cdc.gov/phpr/zombies.htm>. This is a fun site that has actually useful content on preparedness and it just might engage students in your classroom who would otherwise mentally drift through class. The site includes an Educators website with lesson plans, posters, and a novella. Enjoy.
- A number of sites include historic information, which helps students to assess potential risks. One such site is <http://www.tornadoproject.com/>.
- Ask students to google historic events, such as the 1913 flood that affected many states. Here is one such link with historic photos – students could actually go and tour the sites to see what has happened since the event and if the potential for massive flooding still exists: <http://www.chillicotheinfo.net/1913-flood.html>.
- All universities and colleges should have a page on risk management, environmental hazards, emergency information, or something similar. Check out yours or ask students to do the same. Here is one example: <https://www.ohio.edu/riskandsafety/>. Here is a similar link to business continuity planning for a university setting <https://www.ohio.edu/riskandsafety/continuity/index.cfm>.

## Discussion Questions

1. Which of the professional emergency management sectors is of most interest to you and why? What kinds of career opportunities can you find in each of them by searching jobs on the Internet?
  - a. Just googling “emergency management jobs” should produce multiple links. Try this one to start: <http://www.emergencymgmt.com/jobs>. Look for qualifications, requirements, education, experience, salary, location, and even cost of living in

- the potential location.
2. If you were an emergency manager in Florida, New York, California, or Texas, what seasonal challenges might you face? What could be common hazards that you would have to plan for? How about Australia, Pakistan, or Haiti?
    - a. The resources section above should produce some ideas for this. Students may want to look at where they live or where they want to live or work.
  3. How is domestic emergency management different from international locations for emergency managers? Are there other countries or sites that interest you in terms of a professional career? What kinds of hazards may be present in these settings and what kinds of activities would you need to undertake to work in emergency management there?
    - a. This should lead to some interesting discussion, including how international hazards may vary significantly from those in the student's domestic location. This is a good opportunity to contrast developing and developed nations and to sensitize students to the variation in risk across those contexts.
  4. Quarantelli wrote decades ago that new and emerging hazards would continually develop. Today, we are discussing cyberwarfare, pandemics, and space weather which were not on the radar for emergency management several decades ago. Looking into the future, what kinds of hazards do you foresee? What is the lesson to be learned from continually anticipating and adapting to new hazards?
    - a. What they should say is that new hazards emerge all the time and we must be vigilant. Climate change is likely to be one of the topics that they identify for discussion. There are plenty of photos on the Internet of "climate change and flood" if you search – particularly in low-lying and island nations. They will also be likely to talk about the dynamic nature of terrorism. This is also an opportunity for you to emphasize how things were different twenty years ago and how we have all adapted to new threats like Ebola, terrorism, or space weather. They might want to talk about our increasing dependence on digital connections and how space weather might threaten that – and what they could do about this.

### **Test Questions (\*\*= correct answer)**

1. A "watch" means that:
  - a. A disaster is happening, everyone should take protective actions.
  - b. A disaster may happen, everyone should become vigilant and alert.\*\*
  - c. Stormtrackers are out watching for an event to unfold.
  - d. The weather service has determined that danger has passed but everyone should still remain alert.
2. A "warning" means that:
  - a. A disaster is happening, everyone should take protective actions.\*\*
  - b. A disaster may happen, everyone should become vigilant and alert.
  - c. Stormtrackers are out watching for an event to unfold.
  - d. The weather service has determined that danger has passed but everyone should still remain alert.
3. Efforts to educate the public characterize:
  - a. Preparedness \*\*

- b. Response
  - c. Recovery
  - d. Mitigation
  - e. Prevention
4. Evacuations, search and rescue, and road blockades occur during:
- a. Preparedness
  - b. Response\*\*
  - c. Recovery
  - d. Mitigation
  - e. Prevention
5. The time period when many partners assess and determine local needs after a disaster is:
- a. Preparedness
  - b. Response
  - c. Recovery\*\*
  - d. Mitigation
  - e. Prevention
6. Efforts to reduce the physical impacts of disaster occur during:
- a. Preparedness
  - b. Response
  - c. Recovery
  - d. Mitigation\*\*
  - e. Prevention
7. Insurance is an example of:
- a. Preparedness
  - b. Prevention and Response
  - c. Recovery
  - d. Non-structural Mitigation\*\*
  - e. Structural Mitigation
8. In the U.S., the first line of defense is:
- a. An action taken by FEMA and DHS
  - b. One that must be managed locally by individuals and government \*\*
  - c. The responsibility of the state and government
  - d. Shouldered by the National Weather Service
9. When an emergency manager serves as the head of an administrative unit, the organizational structure is called:
- a. Departmental or embedded \*\*
  - b. Tribal or sovereign nation
  - c. Adaptable or flexible
  - d. Standardized and bureaucratic
10. The critical U.S. partnership that provides aid across state borders is the:
- a. Interstate Highway Act
  - b. Emergency Management Association Compact \*\*
  - c. International Emergency Management Association
  - d. Tribal Emergency Management Council
11. In the U.S., citizens should assume they are on their own for at least:
- a. 24 hours

- b. 36 hours
  - c. 72 hours \*\*
  - d. One week
12. The organizing structure for coordinated, national-level U.S. response to an event is called the:
- a. Emergency Management Association Compact
  - b. International Emergency Management Association
  - c. Tribal Emergency Management Council
  - d. National Response Framework \*\*
13. Most businesses prepare well for a disaster:
- a. True
  - b. False \*\*
14. An example of an agency that would provide non-paid service in a disaster would be a:
- a. DMAT
  - b. VMAT
  - c. CERT
  - d. All of the above \*\*
15. Tornadoes are assessed for their impact using the:
- a. Enhanced Fujita Scale \*\*
  - b. Richter Scale
  - c. Mercalli Scale
  - d. Saffir-Simpson Scale
16. The Saffir-Simpson Scale measures wind speed for:
- a. Tornadoes
  - b. Hurricanes \*\*
  - c. Floods
  - d. Thunderstorms
  - e. NASCAR races
17. Fortunately, the most deadly earthquakes in history occurred well in the past over a century ago.
- a. True
  - b. False \*\*
18. The most lethal natural hazard in the U.S. is:
- a. Tornadoes
  - b. Hurricanes
  - c. Terrorism
  - d. Floods \*\*
19. Wildfires have become increasingly worse worldwide.
- a. True \*\*
  - b. False
20. The most common hazard from a volcano is likely to be:
- a. Magma flow
  - b. Earthquakes that cause volcanic eruptions
  - c. Ash that causes social and economic disruption \*\*
  - d. Lava that burns people who try to walk on it
21. In a U.S. community, the organization tasked with addressing chemical hazards is the:

- a. Emergency Management Assistance Compact
  - b. Fire Department
  - c. Local Emergency Planning Committee
  - d. Environmental Protection Agency
22. The Irish potato blight is an example of:
- a. Chemical hazards
  - b. Biological hazards \*\*
  - c. Radiological hazards
  - d. Natural hazards
23. The most recent threat from a radiological hazard occurred after an earthquake and tsunami in:
- a. Japan \*\*
  - b. China
  - c. North Korea
  - d. Chile
24. Probably the most valuable behavior of an emergency manager facing a terrorist threat is being able to discern new ways that attacks may unfold.
- a. True \*\*
  - b. False
25. The example of the Fukushima-Daiichi accident described in Chapter Two is best characterized as a:
- a. Natural hazard
  - b. Radiological hazard
  - c. Na-Tech \*\*
  - d. Cyberattack
26. Cyberattacks and cyberwarfare are on the decrease.
- a. True
  - b. False \*\*
27. The primary or most common threat from space weather is likely to be:
- a. Asteroid strikes on the earth
  - b. Solar flares \*\*
  - c. Remote sensing disruption
  - d. Alien invasion

### **Short Answer/Essay**

1. What kinds of risks do various hazards represent? Select and give examples from natural hazards, hazardous/technological events and terrorism. What is the role of the emergency manager in each?
2. What is the difference between a watch and a warning? How would you try to use both terms to alert the public?
3. What is the value of EMAC?