

**Session No. 15**

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**Course Title: Earthquake Hazard and Emergency Management**

**Session Title: Earthquake Issues and Roles – Classroom Skit**

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**Time: 120 minutes**

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**Objectives:**

- 15.1 Appreciate the issues faced by various parties affected by earthquake disasters and describe the roles of relevant agencies and organizations.
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**Scope:**

During this session, the instructor will lead the students in a classroom skit in which the students are to take on the roles of various parties (homeowners, rescue personnel, government officials, etc.) affected by a major earthquake in an urban area. This scenario is intended to be a “capstone” exercise for the students, drawing on the principles learned throughout the entire course. The exercise should be graded as a class participation assignment. The instructor should encourage students to prepare for their roles ahead of time by thinking about their respective roles before the class meeting. The classroom exercise is designed to take two class sessions. The skit should develop naturally, and at each step along the way, questions and discussion should be interjected to prompt discussion and comment. This exercise should be flexible and without firm boundaries in terms of how the conversations and issues develop.

The concepts presented in this session are designed to provide a greater understanding and appreciation of the effects of earthquakes. Of particular relevance is the fact that the students should think in terms of emergency managers and about what actions and issues may or may not be associated with various entities. Also, the information in this session should allow for improved understanding of and communication with various entities during actual earthquake disasters.

**Readings:**

*Required student reading:*

None (although students are encouraged to perform informal research to better understand and communicate their roles).

*Required instructor reading and resources:*

None required, although supplemental background reading material via the Internet may enhance the effectiveness of supervision of the classroom exercise.

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**Handouts:**

Handout 15.1 Classroom Discussion Exercise 15.1

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**General Requirements:**

The skit should be explained to the students, the students should be broken up into groups or individually (depending upon class size), and the instructions for the skit handed out one class period before the skit is to be performed.

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**Objective 15.1 Appreciate the issues faced by various parties affected by earthquake disasters and describe the roles of relevant agencies and organizations.**

**Requirements:**

Present material as classroom discussion.

Handout 15.1 Classroom Discussion Exercise 15.1

**Remarks:**

**I. Role Playing Skit - Instructions for Students [*Handout 15.1*].**

- A.** Natural Disaster Scenario: Major earthquake (Magnitude 7.2) striking urban area in the western U.S. during early morning hours (3:00 AM).
- B.** Review of Major Disaster Phases and Activities:
  - 1. **Mitigation** (before or between events) – Reduce impacts, zoning/building codes, baseline data, modeling, improvements.
  - 2. **Preparedness** – Development of community training and public awareness, logistical support and communications, basic supply needs, early warning, and monitoring.
  - 3. **Response** (time critical) – Damage surveys, equipment, human resources, funds, communication, baseline maps.

4. **Recovery** – Outside data collection, rebuilding, claims, and feedback.

**C.** Some Involved Parties:

1. Scientists/forecasters/researchers (NWS, NOAA, university).
2. Federal Government (FEMA, National Guard, Army COE, USGS).
3. State government (governor, state police).
4. Local/municipal/regional government agencies (water distribution, wastewater treatment, transportation, clearing trees, garbage disposal, emergency planners).
5. Local emergency agencies (police, fire, EMTs, medical personnel, hospital).
6. Aid agencies (Red Cross, church organizations).
7. Insurance companies.
8. Utility companies (electricity, natural gas, telephone).
9. Business owners (hardware/lumber stores, groceries).
10. Insurance and mortgage lending.
11. Homeowners (i.e., engineering expertise from top-flight firms not available for individual homeowners).
12. Building code developers.
13. Mapping agencies and other science groups.
14. Land-use policy developers.
15. Centers for Disease Control and Prevention (CDC).
16. FEMA.
17. Military.
18. Veterans Administration.

19. Intergovernmental and public administration issues/tensions.
20. Engineers/planners (mitigation, damage assessment, recovery).
21. News media.

**D. Instructions:** Your instructor will assign a role for you. Some parties may be teams, while some may be individuals. Given your role assignment, **come to class prepared** to perform the following:

1. Describe your job/role to the rest of the class.
2. With regard to an earthquake disaster in general, explain your primary concerns and issues.
3. In your assigned role, describe as vividly as possible your actions and concerns at the following times relative to an earthquake striking your earthquake-prone community.

| <b>TIMES:</b>  |
|----------------|
| 10 years prior |
| 1 year prior   |
| 2 hours after  |
| 2 days after   |
| 2 weeks after  |
| 1 month after  |
| 6 months after |
| 1 year after   |
| 10 years after |

4. Which phases of disaster management are associated with each time frame present in Question 3?
5. What services are most vital for you during this disaster?
6. How would your role change if this disaster were in the eastern U.S. as opposed to the western U.S.? Repeat/discuss the questions and scenarios above.