EARTHQUAKE PREPAREDNESS EDUCATION
OF LOS ANGELES CITY EMPLOYEES

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SUMMARY

In response to the long-term earthquake prediction for Southern California, the City of Los Angeles has initiated an earthquake preparedness program that includes employee education as one of its major elements. All employees receive a basic course in earthquake preparedness for the workplace and the home environment. Emergency management personnel and selected department representatives participate in regular programs of city, state, and federally-sponsored courses. Employee awareness and responsiveness is stimulated through exercises, drills, conferences, and the annual Earthquake Awareness Week.

INTRODUCTION

The City of Los Angeles is located in Southern California, one of the more seismically active regions of the United States. Within the same region are located more than 42 known active faults capable of generating moderate to great earthquakes, as evidenced by the 1857 Magnitude 8+ Fort Tejon, 1933 Magnitude 6.3 Long Beach, 1971 Magnitude 6.5 San Fernando, and 1987 Magnitude 5.9 Whittier Narrows events. Federal studies by the U.S. Geological Survey predict that there is a high potential (e.g., 60 percent probability in the next 30 years) that a major catastrophic earthquake of Magnitude 7.5 to 8+ may occur along the southern portion of the San Andreas fault which is located 30 miles to the north and east of the city.

In the face of this prediction and past historic experience with earthquakes, the Mayor and City Council Members have made a commitment to:

1. Continually upgrade the ability of the City to respond to various forms of disaster; and

2. Encourage personal earthquake preparedness of the City employees.

EDUCATIONAL PROGRAM

To accomplish the objectives of this commitment, Los Angeles has initiated an earthquake preparedness educational program. This program has multiple levels of training based on employees' emergency preparedness responsibilities. All employees receive a basic course in earthquake preparedness. However, those involved in emergency management functions and selected department represen-
tatives participate in a regular program of city, state, and federally-sponsored courses in disaster preparedness.

**General Employee Earthquake Preparedness Training**  The program of training for all employees in earthquake preparedness includes four basic educational components:

1. Video training session.
2. Earthquake preparedness manual.
3. Earthquake safety information wallet card.
4. Workplace posters.

**Video Training Session**  All employees are provided with a 25 or 40-minute video educational program on earthquake preparedness in the workplace and home. This video presentation was developed for the City of Los Angeles. The first part of the program includes presentations by the Mayor and the Chief Engineer and Manager of the Los Angeles City Fire Department, emphasizing the importance of earthquake preparedness on the part of the City employees and their families.

The second part includes personal interviews with experts in the field of earthquake prediction and effects, Professor Kerry Sieh from CalTech and Building and Safety Officials from the City of Los Angeles. These experts develop an overview of the potential threat from earthquake as well as its effects on office and community activities.

The third part of the video is presented by an expert in earthquake preparedness and covers in detail what may happen in an earthquake at the workplace, in the streets, and at home. Emphasis is placed on preparing for the earthquake, how to respond during the earthquake, and what to do after the earthquake to minimize bodily injury, personal loss, and emotional stress.

At the end of the video presentation, the employees are provided with an earthquake preparedness manual to use in educating their families and developing a personal family earthquake preparedness plan.

**Earthquake Preparedness Manual**  The "Earthquake Preparedness Manual for Office, Home, Family and Community" is a 30-page booklet (Ref. 1) developed primarily for use in family earthquake planning. It covers the following topics: the effects of earthquake, preparedness planning; response during the earthquake; and post-earthquake recovery. The major emphasis is on earthquake preparedness through:

- Planning
- Training
- Drills
- Emergency supplies
- Structural safety inspection and strengthening
- Nonstructural inspection and anchorage or bracing

The booklet contains pages of outlined exercises and plans that may be implemented by the family.

**Earthquake Safety Information**  Each employee has been provided with an earthquake safety information wallet card. Fig. 1 illustrates the basic features of the card. The card provides an immediate reference for all employees to refresh their memories on specific life-saving actions that may be required in the event of a catastrophic earthquake.
When an Earthquake Strikes Los Angeles

Los Angeles City Emergency Operations Organization

Name
Address
Home Phone Work Phone
Medication/Special Condition
Emergency Contacts (Phone Numbers/Addresses) and Reporting Location

DURING AN EARTHQUAKE

INDOORS Stay inside. Take cover under a desk, table or in a doorway. Stay clear of windows and objects that could fall.

OUTDOORS Get into the open away from buildings (avoid falling debris - glass, brick) and power lines.

IN A CAR Pull over and stop away from bridges, overpasses, buildings and overhead power lines. Stay in car.

AFTER AN EARTHQUAKE

Check for injuries. Give first aid.

Remain calm and reassure others.

Avoid broken glass. Check for fire.

Check gas, water and electric lines. If damaged, shut off service. If gas is leaking, don't use matches, appliances or electric switches. Open windows, leave building and report to gas company.

Replace all telephone receivers and do not use except in emergency.

Listen for emergency bulletins on radio or television.

Stay out of damaged buildings.

Be prepared to stay at work or return to work consistent with your department's policy.

FIGURE 1 WALLET CARD

Workplace Posters As a further reminder of the earthquake preparedness training, posters have been developed and distributed throughout the offices in the city. The 60,000 City employees are thus regularly reminded of their earthquake preparedness training and commitment by these posters. Fig. 2 is a sample of this poster format and typical information it conveys.

Specialized Training In addition to the basic training, specialized training is provided for emergency management personnel and selected personnel in the various departments of the City who serve as representatives from each department on the Emergency Management Committee. This training is composed of:

1. A regular monthly training program of one hour is provided for the members of the Emergency Management Committee. Guest speakers are selected from the private and public sectors. Each department is responsible for providing an educational program on its functions and its preparations for an emergency.

2. Specialty courses provided at the state and federal level for selected employees in each department with needs for training related to emergency preparedness. These courses are typically offered by the California Specialized Training Institute at the state level and the Federal Emergency Management Agency at the federal level.

3. Exercises and drills conducted by City personnel in conjunction with the private sector as part of the training program.

VII-609
STAY CALM.

IF YOU ARE NEAR A WINDOW, MOVE QUICKLY AWAY FROM IT TOWARD THE CENTER OF THE BUILDING.

QUICKLY TAKE COVER UNDER A DESK OR TABLE, IN A DOORWAY, OR AGAINST AN INSIDE WALL. TAKE A SEATED POSITION, BRACE YOURSELF, AND PROTECT YOUR HEAD AND NECK WITH YOUR HANDS.

STAY AWAY FROM TALL OBJECTS, SUCH AS SUPPLY CABINETS OR SHELVING.

DO NOT BOARD AN ELEVATOR.

DO NOT TRY TO LEAVE THE FLOOR. FOLLOW THE INSTRUCTIONS OF YOUR FLOOR WARDENS.

It is important that you take these protective measures quickly. The earth shaking during the Long Beach earthquake lasted for only 11 seconds. Therefore, you may have very little time in which to react.

Don’t look to see what others are doing, don’t wait for someone to shout “earthquake,” and don’t wait to see if the tremors will increase or decrease. React immediately and without hesitation.

Plan ahead . . . have bottled water/fruit juice, candy bars, comfortable shoes and a flashlight in your desk.
EARTHQUAKE AWARENESS

In order to stimulate earthquake awareness within the community, the City of Los Angeles in 1980 initiated Earthquake Awareness Week. During this week, both city government and the private sector participate in sponsoring educational programs and exercises in earthquake preparedness. The week has now become a statewide Earthquake Awareness Month (the month of April), in recognition of the great earthquake of 1906 in San Francisco that occurred during this month. This program of earthquake awareness has served to focus public attention on the risks associated with earthquake and the need for earthquake preparedness.

As an extension of earthquake awareness locally, the City of Los Angeles, under the leadership of Councilman Hal Bernson, has sponsored two International Earthquake Conferences to stimulate the exchange of information and experience among metropolitan areas at risk from earthquake. The participants at the conferences have come from more than 30 countries throughout the world and include policymakers and administrators involved in emergency planning and public safety, educators, scientists, engineers, and members of business and industry. City personnel have benefited from the conferences both in terms of technical exchange of information as well as through the contacts and ongoing communication with other countries where similar programs of earthquake preparedness are being developed.

CONCLUSIONS

Employee earthquake preparedness training is considered vital to disaster response activities in the City of Los Angeles. Employees such as those in the Fire and Police departments must be willing to respond to earthquake disaster without fear for the safety of their families. City personnel in non-emergency roles must be available as part of the volunteer force to aid in times of disaster. Thus, employee earthquake training forms a vital part of the City's disaster preparedness program.

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REFERENCES
