CERT
Community Emergency Response Team
University of Southern California
MISSION:
To ensure the safety of members of the USC community and the continuity of the university’s mission by establishing emergency preparedness and fire safety programs.

Bill Regensburger, Angela DiBenedetto, Rob Forsberg, Jill Frater, Steve Goldfarb, Jeff Pendley,
http://capsnet.usc.edu/firesafety
The Bad News: Disasters are Inevitable

MOST PEOPLE ARE UNPREPARED!
Chemical/Biological Attack

Drought

Power Outage

Train Derailment

Cyber - Terrorism

Mudslide
Community Emergency Response Team

Volunteer team:

- Provide emergency assistance to the Trojan community on campus
- Respond to emergencies and disasters. Assist with special events.
- Help Fire Safety & Emergency Planning Office educate and prepare USC and the community
- SAVE LIVES, HELP PEOPLE
#1 Job of CERT

1. Take care of yourself first
2. Then help others on campus

- YOU ARE #1!
  - YOUR safety is always the first priority!
NORMAL Emergency Svcs

EMERGENCY

LA Emergency Services Arrive Quickly

County, State, Federal Resources Available
The Good News: It’s easy to be prepared

We will learn all the skills to be so well prepared that we will be able to help our USC Community.

SELF-HELP
Quick Response by Volunteers Saves Lives

GOLDEN HOUR
Percent of Lives Saved in a Disaster

Lapsed Time (in Hours)
What You Have Signed Up For
Session #1

- Introduction
- Earthquake Threat in southern California
- Personal and family preparedness
- Nonstructural hazard mitigation
- How to respond to an earthquake
- The USC Emergency Response Plan Overview & Incident Command System
Session #1

- Fire safety & Prevention
- Fire/Life/Safety Systems
- Evacuations
- Fire Suppression including fire extinguishers and fire hose use
- Hazardous Materials Awareness
Disaster First Aid

- Identifying the “killers”
- The most common types of injuries you will see in a disaster
- Hands-on practice treating injuries
- How to ensure survival of most casualties
- Assessing the condition of an injured person
• TRIAGE - Identifying and sorting the most seriously injured in order to save their lives
• Caring for a large number of victims
• Organizing a disaster treatment area
• RPM – the critical test
Light Search & Rescue

- The most effective methods to search a disaster area for trapped victims
- Effective rescue methods
- Assessing damage and hazards
- Ensuring rescuer safety
Psychological first aid
Review
Disaster Drill
Earthquake

There are hundreds of EQ faults in Southern California, and most of the region will experience strong shaking at some point.
Northridge Earthquake

• Jan. 17, 1994

• Magnitude 6.7

• Strong shaking near epicenter

• 7 Seconds

• Over 40,000 Injured

• 57 deaths
PUENTE HILLS FAULT

Potential 6.8 Mg Quake

Similar Mag. To 1994 Northridge EQ Directly Beneath Central LA
7.8 Mg. San Andreas EQ

- Strong ground shaking
- Geographically widespread
- Duration 1 - 2 minutes
- OVERDUE
7.8 San Andreas EQ

300,000 Damaged Buildings
1,800 Fatalities
53,000 Injured
255,000 Homeless
1,600 FIRES
$200-300 Billion Damage
Dangerous earthquake fault network

Research suggests the Ventura fault is connected to others that could cause a 7.7 to 8.1 magnitude earthquake from the Santa Barbara area to San Bernardino County.

Source: Bulletin of the Seismological Society of America

Lou Spirito / @latimesgraphics
OVERALL EQ. RISK

90% probability of a major earthquake in Southern California next 20 years

Almost every area of the region will experience strong ground shaking at some point
Earthquake Shaking Potential for the Los Angeles Metropolitan Region

Counties
Summer, 2003

This map shows the relative intensity of ground shaking and damage in the Los Angeles area. The map is based on the earthquake hazard of the region and includes the area surrounding Los Angeles, California.

Level of Earthquake Hazard

- Important measures about earthquakes for the Los Angeles metropolitan area:
  - Earthquakes have produced over $50 billion in losses in California since 1971. The next major earthquake may produce even greater losses, especially if it strikes a major urban area. If the earthquake occurs in a major urban area, it would likely cause widespread damage.
  - Emergency planning is critical to minimize the impact of future earthquakes. This map is intended to help residents and businesses understand the potential impact of earthquakes in their area and prepare accordingly.
  - A large earthquake in or near the Los Angeles metropolitan area will not only affect the economy of the entire state but also the nation. Effective disaster planning by state and local agencies, and by private businesses, can dramatically reduce losses and speed recovery. (For information go to www.oes.ca.gov or www.fema.ca.gov)
  - Current building codes will reduce damage but their objective is life safety, not continued operation of the facility.
  - After a large earthquake, residents and businesses may be isolated from law enforcement, fire, and emergency support for a period ranging from several hours to a few days. Citizens must be prepared to survive safely on their own, and to aid others, until help arrives. (For information go to www.oes.ca.gov)
  - Maps of the shaking intensity of the most major earthquakes will be available within minutes on the Internet. The maps are available at http://www.usgs.gov, a cooperative effort of OES, OES, and USGS. Caltech and UCI tracking, will help identify the area most seriously affected and guide emergency crews to the most damaged regions.
HUNTINGTON BEACH AREA

Westminster

Huntington Beach
Earthquake Response

- Kobe Japan 1995
- 7.1
During the Earthquake

What do you do when the ground starts shaking?
The main hazard is **FALLING OBJECTS**
During the Earthquake:

DROP, COVER, AND HOLD ON!
WHAT IF?

- You are in bed?
- You are in a car?
- You are in a theatre?
- You are in a supermarket?
Earthquake Preparedness
WE MUST ACT NOW!

You can’t control how an earthquake will *shake* you.

But you can control how an earthquake will *harm* you.
Prepare

Water:
- Minimum 2-weeks Supply
- 2 gallon/person/day
- Rotate every 6 months
- Be ready to purify
Supplies

Food

- More of the foods you normally eat
- Canned food = no cooking (can opener?)
- Low sodium
- Comfort food
Supplies

Essential Medicines
- Minimum 2-weeks supply
- Never take “last one”
- Prescription glasses
Prepare

Other Supplies
- Flashlight
- Transistor radio
- Work gloves
- First Aid Supplies
- Gas shut-off wrench
- Plastic & duct tape

Evacuation Bag
- Change of clothes
- Personal hygiene supplies
- Contact lists
- Critical papers (insurance, medical history, deed, etc.)
- Cash
Prepare

Family Emergency Plan

- Evacuation Plan
- Duck, Cover and Hold Drill
- Family Reunion Plan
- Out-of-State Contacts
Secure Your...
Top Heavy Furniture

Flexible Nylon Straps
Secure Your…

Bookshelf and Shelving Contents

Books, videocassettes, binders, miscellaneous items on shelves can be secured by using a series of restraints appropriate to the shelf.

Shelves should be secured within cases with proper supports.
Secure Your… TVs and electronics

Peel and press nylon straps and buckles
Secure Your…
Wall Hangings

Step one
Prepare back of frame

Step two
Use closed hooks

Change glass to Plexi-Glass
Secure Your...
Decorative Items and Breakables

- Earthquake Putty
- Museum Wax
Unsecured cabinet doors fly open during earthquakes, allowing glassware and dishes to crash to the floor.

Many types of latches are available to prevent this: child-proof latches, hook and eye latches, or positive catch latches designed for boats.
Secure Your... Gas Appliances

Replace rigid gas connections to water heaters and other gas appliances, with flexible stainless-steel gas connectors.

Secure the appliance to wall studs.

Backup Plan: Keep extra flexible connectors in case of breakage and plumbers being unavailable.
The bedroom should be the safest room in your home.
Structural Hazard Mitigation

- Bolt older houses to the foundations (pre-1950)
- Automatic shutoffs for utilities.
- Strap mobile homes to their slabs.
- Have engineer check foundation, roof connectors, chimney, building structural support.
- Buy earthquake insurance
Utility Shutoff

- Gas
- Electricity
- Water
Utility Shutoffs - Gas

Gas Meter And Shut-Off Valve

Have wrench stored in a specific location where it will be immediately available.
Shutting Off Natural Gas

Which Natural Gas Valve is in the Closed position?

Bar in a vertical position. **INCORRECT**

Bar in a horizontal position. **CORRECT!**
Utility Shutoffs - Electrical

Modern circuit breakers
Older fuse box
Utility Shutoffs - Water

Water Shut-Off

this is the on position
After the Earthquake

- Don’t rush outside, unless there is danger from fire or structural damage
After the Earthquake

- Check for injured, missing or trapped persons.
- Check for hazards (utilities, chemical spills, broken glass, etc.)
- Prepare for aftershocks.
- Refrain from using the telephone (except to report life-threatening emergencies).
Walk the perimeter of your home or office building to look for hazards.

If you smell gas, see fire, smoke or other hazards, evacuate.
Impact on USC

- Hundreds of injuries, possibly some fatalities
- Damage to many buildings; people possibly trapped
- Power outage, Gas and water leaks,
- Communication systems disrupted
- Fires, chemical spills in labs
- Emergency services unavailable – on our own for several days
USC Emergency Plans & Resources
PRIORITIES

1. Ensure safety and well-being of students, staff, faculty
2. Protect university property and assets
3. Re-establish university mission, teaching, and research
4. Assist neighborhood & community
Department Operations Centers
Emergency Medical Plan

-Goal: 0 fatalities
DISASTER MEDICAL RESPONSE TEAM

Student Health Center, School of Dentistry, Athletics Department, Public Safety, School of Pharmacy, USC Care, School of Medicine
CERT
Campus Emergency Response Team
Damage Assessment & Repair

Team leader: Facilities Management
Support: Housing

Perform rapid inspection of all buildings to ensure safety
- Complete emergency repairs or shutoffs
- Post buildings “OPEN” or “CLOSED”
Systematic team approach.
Teams dispatched to all buildings.
ASSESSMENT PRIORITIES:

1. RESIDENTIAL & MEDICAL BUILDINGS
2. LABORATORY RESEARCH BUILDINGS
3. ALL OTHER BUILDINGS
Each building will be posted

**CLOSED**

This facility is temporarily closed. Do not enter or occupy.

For information, call Facilities Operation and Maintenance. 740-6833 (UPC) or 224-7001 (HSC)

DATE: ________  TIME: ________

DO NOT REMOVE THIS PLACARD

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**OPEN**

This facility has been inspected for damage and safety hazards, and may be occupied.

For information, call Facilities Operation and Maintenance. 740-6833 (UPC) or 224-7001 (HSC)

DATE: ________  TIME: ________

DO NOT REMOVE THIS PLACARD
Facility Recovery Arrangements:

Belfor Company on retainer

Also pre-disaster agreement with earthquake engineers
Hazardous Chemical Spill Response Team (Lab Bldgs.)

Environmental Health & Safety
Fire/Emergency Medical Response Vehicle
Emergency Food Service

Leader: Hospitality Svcs.
Emergency drinking water
Emergency Shelter & Housing

Housing Services & Residential Education
Emergency Transportation

Transportation Services
Backup Radio Communications System
Amateur Radio Communications

- Staff and Faculty Team Members at UPC and HSC
Emergency Equipment Containers

Numerous items including:
- Lighting
- Tools
- Generators
- Spill Supplies
- Crowd Control Equipment
- Command Post Equipment
USC Emergency Communications

213-740-9233
http://emergency.usc.edu

TrojansAlert
emergency notification system
Trojansalert.usc.edu
Emergency Teams in All Buildings
(Evacuation Coordinator & Floor Wardens)
Each Building Emergency Team Has:

- Emergency Supply Kit
- Disaster First Aid Kit
DRILLS

Drop, Cover & Hold Drill

EOC Drill

Department Operations Center Drill
BUSINESS RECOVERY PLANNING

- Business Recovery Plans
  - Schools
  - Departments

- Contracts with critical vendors

- Belfor Disaster Recovery (Next Slide)

- ITS Recovery Plan
INCIDENT COMMAND SYSTEM (ICS)

- Maintain safety of disaster workers.
- Provide clear leadership and organizational structure.
- Improve effectiveness of rescue efforts.
Basic ICS Structure

- Incident Commander
  - Operations Section Chief
  - Logistics Section Chief
  - Planning Section Chief
  - Administration Section Chief
CERT Command Structure

Operations
Section Chief

Fire Suppression
Group Leader
- Fire Suppression Team A
- Fire Suppression Team B
- Fire Suppression Team C
- Staging Area

Search and Rescue
Group Leader
- S & R Team A
- S & R Team B
- S & R Team C

Medical
Group Leader
- Triage Team
- Treatment Team
- Morgue Team
ICS Objectives

- Identify the scope of the incident
- Determine an overall strategy
- Deploy resources
- Document actions and results
CERT Activation

Automatic:

- Following a large-scale incident:
  - check your immediate work area
  - address life-safety issues
  - report to the CERT Staging Area
    - UPC: Parking Lot 2 (Bookstore Parking Lot)
    - HSC: CHP Parking Lot (facing Eastlake)
  - Check-in and report any life-safety issues
Call-Outs:

- Trojans Alert will be the primary communication method to request all CERT members to report to the staging area or alternate location.
- Always wear your CERT Identification and personal protective equipment.
- Drills are conducted a few times per year at UPC and HSC.
More Info Sources

❖ Visit [www.lafd.org/blog](http://www.lafd.org/blog)

❖ Visit [www.readyla.org](http://www.readyla.org)

❖ Visit [www.alert.lacounty.gov](http://www.alert.lacounty.gov)

❖ Visit [www.ready.gov](http://www.ready.gov)
Stay Connected

- American Red Cross Safe and Well
- Wearesafeandsound.com
- Facebook
- Alert.lacounty.gov
- Twitter
Are you ready?