



***Explore how school and community partners can work together to customize plans and implement training that prepare our schools for an earthquake.***



- Develop Procedures
- Store & Maintain Disaster Supplies
- Conduct Training & Drills
- Great Oregon Shake-Out
- Teen CERT



# PREPAREDNESS

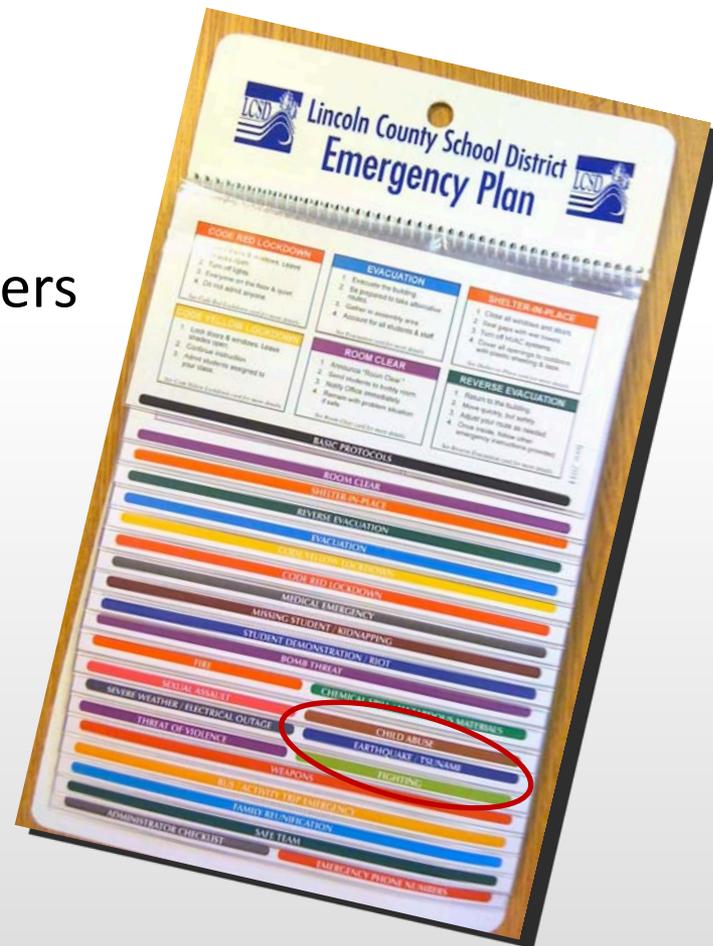
## Customize Emergency Plans



Your current emergency plan may only need a few adjustments to address earthquakes.

- All hazards emergency plan
- Created in collaboration with local emergency service partners
- Customized to your specific needs, laws, facilities, and population

<http://rems.ed.gov>





# Earthquake Procedures & Teams

**Drop, Cover & Hold On**

**Evacuation**

**Assembly Areas**

**Student Accountability**

**Supervision & Security**

**Search & Rescue**

**Disaster Medical**

**Sheltering**

**Basic Needs**

**Family Reunification**

## Drop, Cover & Hold On!



- **Drop** to the floor
  - Before the earthquake drops you!
- **Take Cover**
  - Under a sturdy desk or table
  - Or get down next to a wall and cover your head with your arms
- **Hold On** to it firmly
  - Be ready to move with it until the shaking stops



# Drop, Cover & Hold On!

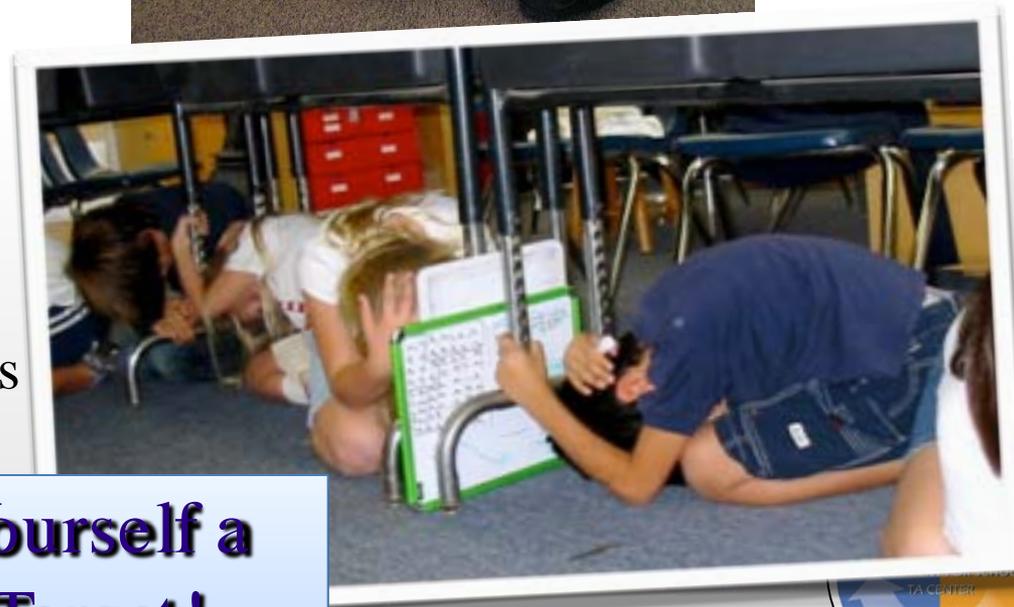
- Body Position

- On knees
- One hand protecting neck/head
- One hand holding onto furniture
- Curl into a ball



- Face Position

- Turn away from windows
- Close eyes



**Make Yourself a Small Target!**





# During the Shaking

- If Inside, Stay Inside
  - Classroom
  - Gymnasium
  - Band Room
- If Outside, Stay Outside

Get away from buildings, trees, light poles, power lines, utilities



## On the Bus

- Pull over to a safe location
- Stop & stay there
- Keep seat belt on
- After shaking stops, assess your situation



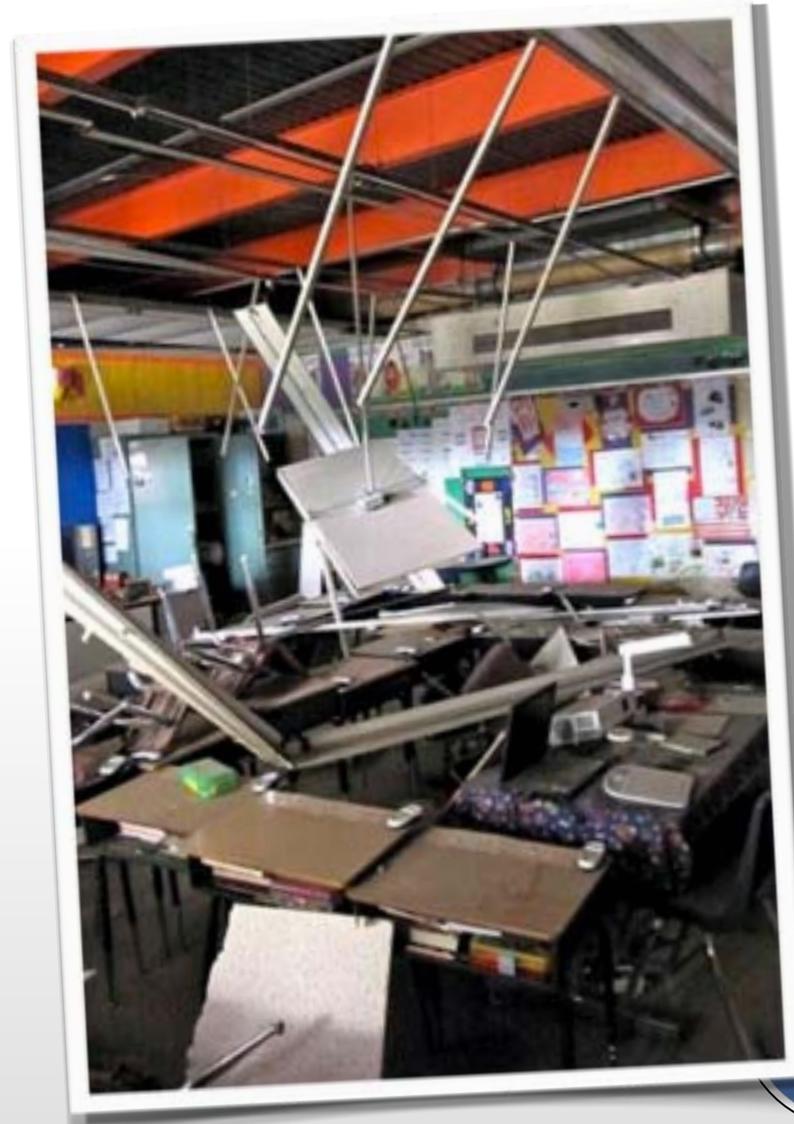
**Do you have written emergency procedures for school bus emergencies?**





## Common Hazards

- Broken windows – glass
- Ceiling tiles
- Light fixtures
- Unsecured bookcases
- Dust
- Fires
- Darkness: power outage





## Wheel Chair Bound

Roll into area with structural protection

Apply brakes

Cover head and eyes to best of ability

**Be Advised:** rescuers need to drop, cover, and hold on, too!



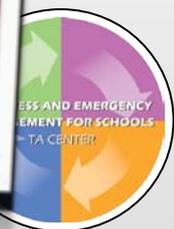
# Drop, Cover & Hold On!

## What about your staff?

Staff should also Drop, Cover & Hold On during drills

Supplies under staff desk

Encourage staff to have a family emergency plan



# Three Common Mistakes



## 1. **DO NOT** run out of the building!

Most people are injured in earthquakes by things falling on them.

## 2. **DO NOT** get in a doorway!

It does not protect you from falling items, and in strong shaking you are unable to stand.

## 3. **DO NOT** believe the “triangle of life!”

You are safer under, not next to a table.





The “Triangle of Life” is based on several wrong assumptions:

**Myth:** Buildings always collapse in earthquakes.

**Truth:** *Most buildings do not collapse at all, and few completely collapse.*

Excerpt taken from:  
<http://earthquakecountry.info/dropcoverholdon/>





The “Triangle of Life” is based on several wrong assumptions:

**Myth:** During strong shaking people can move to a desired location.

**Truth:** *Strong shaking can make moving very difficult and dangerous.*

Excerpt taken from:

<http://earthquakecountry.info/dropcoverholdon/>





The “Triangle of Life” is based on several wrong assumptions:

**Myth:** People can always anticipate how their building might collapse and find the survivable void spaces.

**Truth:** *The direction of shaking and unique structural aspects of the building make this impossible.*

Excerpt taken from:

<http://earthquakecountry.info/dropcoverholdon/>





The “Triangle of Life” is based on several wrong assumptions:

**Myth:** When buildings collapse they always crush all furniture inside.

**Truth:** *People DO survive under furniture or other shelters.*

Excerpt taken from:

<http://earthquakecountry.info/dropcoverholdon/>



# Drop, Cover & Hold On!



- **Protect Yourself Before:**
  - Strong shaking knocks you down
  - Strong shaking drops something on you
- **Be a Survivor!**
  - Be part of the solution, not part of the problem



Notice anything?



# Drop, Cover & Hold On!

## LCSD Earthquake/Tsunami Video



[http://lincoln.k12.or.us/dept\\_programs/safety\\_videos.php](http://lincoln.k12.or.us/dept_programs/safety_videos.php)



# Evacuation Considerations



- Evacuate after the shaking stops
  - If you hear the fire alarm
  - If you do not hear the fire alarm
  - Intercom system probably won't work
- Quickly take safety precautions first

**Empower your staff to  
take independent action.**



# Evacuation Considerations



## Assess your situation

- Hazards in your classroom
- Identify Injured students
- Check for safe passage

Enlist students to help!



# PREPAREDNESS

## Evacuation Considerations



### Take Action!

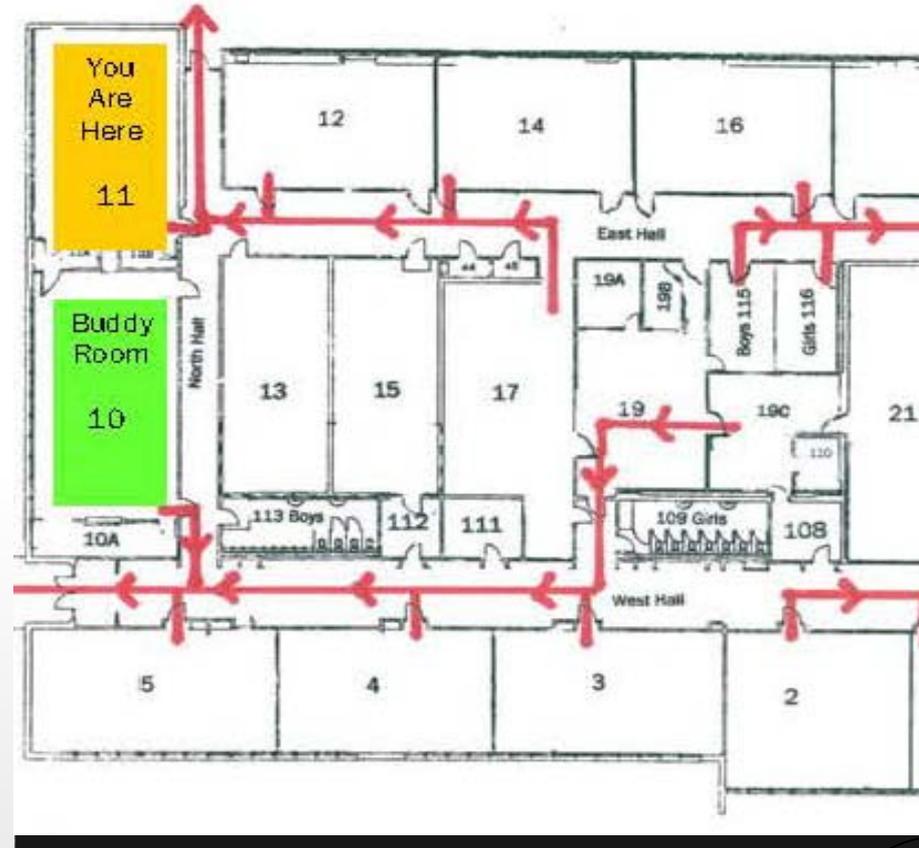
- Quickly treat those with life-threatening injuries
  - Airway
  - Bleeding
- Clear exit routes
- Put out small fires





## Buddy Room

- Assist each other
- Injured students
- Communications
- Accountability



# Evacuation Considerations

If safe, evacuate with:

- Go-Kit
- Fire extinguisher
- Student backpacks





## SPECIAL EVACUATION PLANS VIDEO

View this video at:

<http://www.safehavensinternational.org/LCSD-Samples/>

User Name: guest

Password: lcsd-samples



## Assembly Areas

- On campus assembly areas
  - Primary
  - Secondary
- Off campus assembly areas
  - Within walking distance
  - With transport assistance
- Make accommodations for persons with special needs



**Think Hazards, Aftershocks, Security**



# PREPAREDNESS Communications

- External
  - Ham radio
  - Satellite phones
- Internal
  - Megaphone
  - Two-way radio



# Sheltering & Basic Needs



- Weather Considerations
  - Rain ponchos
  - Tents
  - School buses
- Multiple nights
- Staffing



# Sheltering & Basic Needs



- Basic Needs
  - Water
  - Food
  - Sanitation



# Store & Maintain Disaster Supplies



Emergency water is the most important item to consider when preparing for an emergency.

Special 55-gallon water barrels are an ideal storage solution.



# Store & Maintain Disaster Supplies



Schools can use this formula to calculate the amount of water needed for a 3-day emergency:



$$\begin{array}{ccccccc}
 \text{\# of} & & & & & & \\
 \text{students} & \times & \frac{1}{2} \text{ gallon} & \times & \text{3 days} & = & \text{Total water} \\
 \text{and staff} & & \text{each} & & & & \text{needed in} \\
 & & & & & & \text{gallons}
 \end{array}
 \quad
 \frac{\text{\# gallons}}{55 \text{ gallons/drum}} = \text{\# drums}$$

*(At home, keep 1 gallon per day per person for 5 to 7 days. Don't forget to include your pets!)*



## Store & Maintain Disaster Supplies



In an emergency, you will need an area for a latrine. Simple “bucket” toilets can be stored with your supplies.

1. Line bucket with 2 plastic garbage bags
2. Add absorbent to bottom of bags
3. Place toilet seat on top of bucket
4. Your toilet is ready for use.



The ideal ratio is 1 bucket for every 30 people.





- **Develop Search & Rescue Protocols**
  - Collaborate with community partners
  - Consider CERT search & rescue procedures
- **Training**
  - Staff
  - Students (Teen CERT)
- **Supplies**



# Store & Maintain Disaster Supplies



## Protective Equipment, Tools, & Supplies

Personal protective equipment  
- helmets, gloves, masks,  
goggles and non-latex exam  
gloves



Basic hand tools – for light  
search and rescue



**Do not become a victim; if it is not safe to enter a building and do a search, stop, get help, or approach the task from another direction.**





- Develop Medical Protocols

- Collaborate with community partners
- Consider CERT disaster medical protocols

- Training

- Staff
- Older students

- Supplies

- Storage & accessibility



# PREPAREDNESS Disaster Medical Care



Large commercial first aid kits should be stored in an accessible location.



**Such kits are typically sufficient for up to 400 students.**





## Make sure your first aid kits are maintained:

- Kits should be labeled
- Stored in a clean, safe location – at the front of the emergency bin/container
- Replace expired items immediately or preferably before they expire! Include timelines in your emergency plans





**In addition to the standard first aid kit, you may want to supplement with additional supplies.**

- Bottled water to flush wounds
- Mylar or regular blankets to keep people warm and dry
- Box of non-latex exam gloves to protect against infections and disease
- Fresh bleach can be mixed with water (10:1) and used as a universal disinfectant



# PREPAREDNESS Storage Options



Your storage should depend on your needs and facilities.

- Access for school personnel
- Access for community partners
- *Written agreements for use of supplies during non-school hours*



LAUSD: A cargo container of emergency supplies is on every school campus.





- **Training**

- Staff first
- Students

- **Conduct a drill**

- **Debrief & make corrections**

- Staff level
- Student level

- **Practice**

- The right way
- To be ready to respond
- To reduce injuries

Practice doesn't  
necessarily  
make perfect!



# Oregon Law & School Earthquake Drills



## 2003 OREGON REVISED STATUTES 336.071

- **Earthquakes**

- Drill at least 2 times per year
- Instruction & drill at least 30 minutes each time
- Drills & instructions on “duck, cover and hold” methods



- **Tsunami Zone Schools**

- Drill at least 3 times per year
- Instruction & drill at least 30 minutes each time
- Immediate evacuation after earthquake or tsunami warning

Purpose:

*“...so that the students may respond to an emergency without confusion or panic.”*





## Earthquake Drills

- Define procedures, responsibilities & frequency
- Teach, practice & correct
- After-action reporting
- “Curve ball” contingencies





## ***Tabletop Exercises Goals***

- Practice emergency plan elements
- Clarify roles of involved parties during an emergency
- Identify resources needed in an emergency
- Build relationships with community partners
- Identify and address gaps that may exist in current plan





## ***Full-Scale Exercises***

- Requires extensive planning – and a planning team
- Should include community partners
- Should be focused on specific elements of an emergency scenario
- Identify and address gaps that may exist in current plan



# ShakeOut. Don't FreakOut.

October 18, 2012 Register Now at [shakeout.org/oregon](http://shakeout.org/oregon)



<http://www.shakeout.org/oregon/>

The Great ShakeOut earthquake drills are a new opportunity to have your drill along with your broader school community, when on the same day:

Millions of people practice...



10:18 AM on October 18<sup>th</sup>



# ShakeOut. Don't FreakOut.

October 18, 2012 Register Now at [shakeout.org/oregon](http://shakeout.org/oregon)



The Great  
Southern California  
Shake  
Out





# Community Emergency Response Team



Lincoln County School District (LCSD)

September 2012





- Disaster – when professional emergency response is delayed or unavailable
- Empowers teens with lifelong emergency preparedness and response skills





- Help Yourself
- Help Your Family
- Help Your Neighbor
  
- Help Your School



- Safety
- Buddy system
- Greatest good for the greatest number of people





## Disaster Preparedness



- Identify & reduce hazards at home & school
- Utility shut-off's
- Home disaster kit & plan



# Fire Safety

- Fire Chemistry
- Extinguish Small Fires
- Hazardous Materials





## Disaster Medical

- Identify & treat the “3 killers”
  - Airway
  - Bleeding
  - Circulation (Shock)





# Disaster Medical

- Triage = Sort

Immediate

Delayed

Minor

Dead





# Disaster Medical

- Proper Hygiene
- Treat Minor Injuries
  - Splinting
  - Wound Care
  - Fractures, Sprains
  - Burns
  - Hypothermia





## Light Search & Rescue



- Size Up
  - Hazards
  - Damage Assessment
- Search Methods



## Light Search & Rescue

- Leveraging
- Cribbing
- Safely lifting objects out of the way





## Light Search & Rescue



- Removing victims
- Lifts, drags, carry's
- Using available resources



## Cert Organization

- Leadership & Management Structure
- Incident Command System
- Documentation





# Disaster Psychology



- Reduce your stress & the survivors' stress
- Listening & empathizing
- Psychological & physiological symptoms



# Terrorism



- Terrorist weapons
- Environmental & physical indicators
- Home preparedness





## Final Exercise/ Drill



- Realistic scenario
- Practice skills in a controlled environment



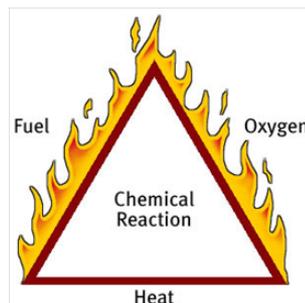
# Graduation





# Q/A: How does CERT relate to our existing curriculum?

- Chemistry (fire & hazmat)
- Health Sciences (medical)
- Physics (cribbing, leveraging, building assessments)



- Earth Sciences (natural disasters)
- Psychology
- Organizational Skills & Teamwork (search methods, documenting, ICS, triage, buddy system)



## Q/ A: How long is Teen CERT?

- 25-30 hours or more
- Flexible Schedule
  - 1 time per week (2-3 hrs)
  - 2 times per week (1+ hrs)
  - **Daily, ideal**
- More hours for extended training





## Q/ A: Is there advanced training?

- CPR/AED
- Shelter Operations
- Advanced ICS & NIMS
- Community Involvement



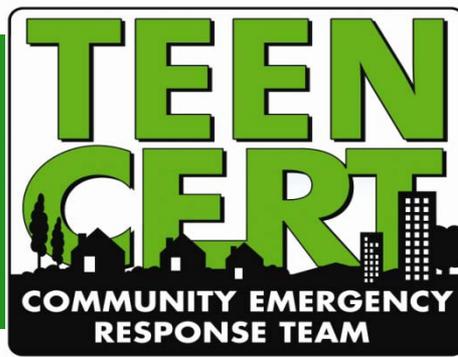


## Q/A: Where does it fit?

- Stand alone class
- Health class
- Voc Ed class
- Science class
- Summer class
- Leadership
- Club
- Senior Project



Think Sustainability



## Q/A: Who can participate?

### THINK SAFETY

- Class size
- Cross section of student body
- Application process?
- GPA/Behavior?
- High School only





## Q/A: What about special populations?

- Empowers students with life-long learning skills
- Self awareness
- Self protection in emergency/disaster situation





## Q/A: Who will deliver the curriculum?

- School Coordinator/Instructor
  - Health, PE, Science Teacher
  - School Nurse
  - School Resource Officer
- Community Partners
  - Emergency Management professionals
  - Fire, Police, EMS
  - Red Cross, or other disaster relief personnel





## Q/A: What about risk?

- This program is about learning to respond SAFELY!
- Reduce risk & liability
- Trained student responders who know how to react in the face of danger or disaster
- Parent permission slip?





## Q/A: How much does it cost?

- Start Up Costs
  - Classroom training aids
  - Protective gear
  - Student manuals
  - Set of CERT kits
- Instructor Training
- Ongoing Costs:
  - Refill fire extinguishers
  - Instructor





## Q/ A: Does CERT influence careers?

- Medical
- Police
- Fire
- Health & Human Services
- EMS
- Engineering
- Public Works

**YES!**





## Q/A: What's in it for my students?

- Accountability
- Responsibility
- Organization
- Leadership
- Team Work



- Personal Protection
- Emergency Prep at Home
- Life Saving Skills
- Community Service Hours
- Improved Self-Image

Satisfaction from helping others "I can make a difference"



## Q/A: What's in it for our school?

- Improved school safety and security
- Reduction in school violence
- Peer role models
- Awareness of additional resources in case of an emergency
- Trained team of first responders for major disaster



**TEEN CERTS are NOT replacements for professional responders.**

# PREPAREDNESS

## *Self Assessment*



- Develop written earthquake procedures
- Store & maintain disaster supplies
- Conduct training & drills
- Participate in the Great Oregon Shake-Out
- Teen CERT or other training for students

