

## Integrating Earthquakes into School Emergency Operations Plans (EOPS)

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### Federal and National Earthquake Programs

#### **Earthquake Hazards Program, United States Geological Survey (USGS)**

The USGS is responsible for providing the nation with earthquake monitoring and notification services, delivering regional and national seismic hazard assessments, conducting targeted geoscience research, and coordinating post-earthquake investigations. A variety of resources on earthquakes are provided on this Web page, including information about real-time earthquakes, seismic hazards in various areas, and the science of earthquakes.

<http://earthquake.usgs.gov/>

#### **Earthquake Resources Web Page, Federal Emergency Management Agency (FEMA)**

This Web page links to FEMA's earthquake-related publications, training, grants, events, best practices, fact sheets, reports, and information. It is organized by target audience (individuals and families, teachers and kids, public policy makers and planners, building designers, managers and regulators, businesses and other organizations, communities and program managers). <https://www.fema.gov/earthquake>

#### **FEMA-supported Regional Earthquake Consortia**

FEMA supports four regional nonprofit consortia focused on raising awareness and reducing losses from earthquakes through sustained outreach, partnership-building efforts, and the mobilization of public support for loss reduction. The links provided offer resources and publications to support earthquake preparedness planning in member regions:

- Cascadia Region Earthquake Workgroup (CREW)—Cascadia communities in British Columbia, California, Oregon, and Washington  
<http://www.crew.org/>
- Central United States Earthquake Consortium (CUSEC)—Member states of Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee and associate state participants in Georgia, Iowa, Louisiana, Nebraska, North Carolina, Ohio, Oklahoma, South Carolina, and Virginia  
<http://www.cusec.org/>

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## WEBINAR RESOURCE LIST

- Northeast States Emergency Consortium (NESEC)—Member states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont  
<http://nsec.org/>
- Western States Seismic Policy Council (WSSPC)—Member states of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; U.S. territories of American Samoa, Guam, and Northern Mariana Islands; and Canadian Yukon Territory and province of British Columbia  
<http://www.wsspc.org/>

### Great ShakeOut Earthquake Drills

The Great ShakeOut Earthquake Drills are worldwide coordinated earthquake drills, which, in the United States, are typically held annually on the third Thursday of October. The Great ShakeOut Earthquake Drills Website provides earthquake preparedness resources for schools, institutions of higher education (IHEs), individuals, families, businesses, government agencies and organizations, as well as registration information on how individuals and groups can participate in the Great ShakeOut Earthquake Drills. <http://www.shakeout.org/>

### National Earthquake Hazards Reduction Program (NEHRP)

The NEHRP is a partnership of four Federal agencies (FEMA, National Institute of Standards and Technology, National Science Foundation, and the USGS) working in close collaboration to improve understanding of earthquake hazards and to mitigate their effects. This program is responsible for developing, disseminating, and promoting knowledge, tools and practices for earthquake risk reduction through the coordinated efforts of its agencies and their stakeholders. On the program's Library Web page (<http://www.nehrp.gov/library/index.htm>), users can find information on topics such as Design and Construction and Public Safety Guidelines. <http://www.nehrp.gov/>

### School Earthquake Preparedness

#### Design Guide for Improving School Safety in Earthquakes, Floods and High Winds (FEMA 424)

This publication is intended to provide design guidance for the protection of school buildings and their occupants against natural hazards, especially earthquakes, floods, and high winds. The guide focuses on the design of elementary and secondary schools (K-12), as well as repair, renovation, and additions to existing schools.

[http://rem.s.ed.gov/docs/FEMA\\_ImprovingSchoolSafety\\_EarthquakesFloodsWinds.pdf](http://rem.s.ed.gov/docs/FEMA_ImprovingSchoolSafety_EarthquakesFloodsWinds.pdf)

# Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center

## WEBINAR RESOURCE LIST

### **Earthquake Exercises for Schools Podcast, REMS TA Center**

In this podcast, information is presented that schools and districts may want to consider when developing or implementing earthquake-related exercises, including how they can work with their local community to be better prepared for an earthquake. Also discussed is America's PrepareAthon! and Great ShakeOut Earthquake Drills, and where schools and districts can get more information on earthquake exercises. <https://rem.ed.gov/Shakeout.aspx>

### **Earthquake Publications: Teachers & Kids Web Page, FEMA**

On this page are numerous links to FEMA publications that may be of interest to school teachers and their students. Resources include a poster, safety activities and training packages for various grade levels. <https://www.fema.gov/earthquake-publications-teachers-kids>

### **Earthquake Safety at School Web Page, FEMA**

This resource page provides information on preventing and minimizing injury, property damage, and disruption of school functions during an earthquake; links to resources for developing earthquake-resistant school facilities; and suggestions for working with the community to build disaster resilience and to prepare school buildings to serve as emergency shelters. <https://www.fema.gov/earthquake-safety-school>

### **Great ShakeOut Earthquake Drills Web Page, REMS TA Center**

Individuals will find information on this Web page about the Great ShakeOut Earthquake Drills and how they can participate, including through the TA Center. Various resources are provided, such links to the TA Center's Great ShakeOut Earthquake Drills Forum on the Community of Practice (<https://rem.ed.gov/COP/REMSCOPforum/topics.aspx?ForumID=105>), where school, school district, and IHE personnel can discuss earthquake drills with their colleagues. <http://rem.ed.gov/Shakeout.aspx>

### **Incremental Seismic Rehabilitation of School Buildings (K-12): Providing Protection to People and Buildings Manual (FEMA 395)**

This resource provides school administrators with the information necessary to assess the seismic vulnerability of their buildings, and to implement a program of incremental seismic rehabilitation for those buildings. <https://www.fema.gov/media-library/assets/documents/5154>

### **K-12 Schools and Districts Web Page, Great ShakeOut Earthquake Drills**

This Great ShakeOut Earthquake Drills Web page provides information for schools and districts on how to plan an earthquake drill, get prepared, and share information on the Great ShakeOut

# Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center

## WEBINAR RESOURCE LIST

Earthquake Drills. Links are provided to additional resources, including School Preparedness Information and Drill Planning. <http://www.shakeout.org/schools/>

### **Reducing the Risks of Nonstructural Earthquake Damage Guide (FEMA E-74)**

This guide explains the sources of nonstructural earthquake damage and provides methods for reducing potential risks. Information includes how to survey and assess existing buildings and nonstructural risk reduction for new and existing buildings.

<https://www.fema.gov/media-library-data/1398197749343-db3ae43ef771e639c16636a48209926e/FEMA%20E-74%20Reducing%20the%20Risks%20of%20Nonstructural%20Earthquake%20Damage.pdf>

### **Teen Community Emergency Response Training (CERT) Program, FEMA**

Teen CERT empowers students to safely respond to an emergency and to assist victims, and boosts the capacity of schools to better prepare for emergencies. The training covers nine topics over a total of approximately 20 hours, including details on how to conduct light search and rescue; assist emergency responders and those who are injured; and set up medical treatment areas. <https://www.fema.gov/media-library/assets/documents/28048>

### **Teen CERT: Enhancing School Emergency Management through Youth Engagement and Preparedness Webinar, REMS TA Center**

This archived Webinar provided an overview of FEMA's Teen CERT program as well as information about how schools and school districts are using Teen CERT to support their overall school safety, security, emergency management and preparedness.

<http://rem.ed.gov/TeenCertEnhancingSchoolEmergMgrment.aspx>

## Individual Preparedness

### **Great ShakeOut Earthquake Drills Educational Resources Web Page**

This Web page provides educators with activities and games to be used in educational settings to increase student knowledge about earthquake science and preparedness. Each 30-minute activity includes an activity guide and worksheets.

<http://www.shakeout.org/california/schools/resources/index.html>

### **Know the Facts: Earthquakes Web Page, Ready.gov/kids**

This section of the Ready.gov/kids site offers downloadable resources, lesson plans, and activities to teach youth about emergencies and how to prepare for them. The Know the Facts: Earthquakes page provides earthquake-specific information and terminology, as well as tips for

# Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center

## WEBINAR RESOURCE LIST

what to do before, during, and after an earthquake in simple, easy-to-understand language.

<https://www.ready.gov/kids/know-the-facts/earthquakes>

### **Seven Steps to Earthquake Preparedness, Earthquake Country Alliance (ECA)**

ECA is a partnership of people, organizations and regional alliances that provides information and resources for individuals in earthquake-prone areas. This page presents detailed suggestions related to preparation and planning for an earthquake (e.g., securing space to minimize damage/danger, developing an emergency plan and organizing supplies), as well as actions to take during (Drop, Cover, and Hold On) and after an earthquake.

<http://www.earthquakecountry.org/sevensteps>

### **Earthquake Preparedness Guide for People with Disabilities and Other Access or Functional Needs, ECA**

This guide follows the Seven Steps to Earthquake Safety with content that has been specifically adapted for people with disabilities and others with access and functional needs, as well as for their caregivers.

[http://www.earthquakecountry.org/downloads/ShakeOut\\_Earthquake\\_Guide\\_Disabilities\\_AFN.pdf](http://www.earthquakecountry.org/downloads/ShakeOut_Earthquake_Guide_Disabilities_AFN.pdf)

### **What to Do during an Earthquake Web Page, Ready.gov**

This site provides an overview of actions to take before, during and after an earthquake, as well as links to Federal earthquake preparedness partners. <https://www.ready.gov/earthquakes>

## Funding for Community Hazard Mitigation

### **Community Development Block Grants (CDBG)**

CDBG is a flexible program that provides communities with resources to address a wide range of unique community development needs.

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/communitydevelopment/programs](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs)

### **FEMA Pre-Disaster Mitigation (PDM) Grant Program**

The PDM Program is designed to assist states, territories, federally recognized tribes, and local communities in implementing a sustained pre-disaster natural hazard mitigation program. The goal is to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding in future disasters. This program awards planning and project grants, and provides opportunities for raising public awareness about reducing future losses before disaster strikes. <https://www.fema.gov/pre-disaster-mitigation-grant-program>

# Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center

## WEBINAR RESOURCE LIST

### **FEMA Hazard Mitigation Grant Program (HMGP)**

The purpose of the HMGP program is to help communities implement hazard mitigation measures following a Federal disaster declaration.

<http://www.fema.gov/hazard-mitigation-grant-program>

### **FEMA Public Assistance (PA) Program**

FEMA provides supplemental Federal disaster grant assistance for debris removal; emergency protective measures; and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private non-profit organizations. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process.

<https://www.fema.gov/public-assistance-local-state-tribal-and-non-profit>

## Planning Resources

### **EOP ASSIST 2.0 and EOP ASSIST Interactive Workbook, REMS TA Center**

EOP ASSIST and its offline version (EOP ASSIST Interactive Workbook) is available for state agencies, school districts, and schools as either a Web-accessible software application or offline tool. The resource directs planning team members through a process that will result in the output of an emergency operations plan (EOP) according to Federal guidelines.

<http://rem.s.ed.gov/EOPinteractivetools.aspx>

### **Guide for Developing High-Quality School Emergency Operations Plans, Federal Government**

This guide is aimed at the K-12 community and was created by the U.S. Departments of Education (ED); Justice (DOJ), led by the Federal Bureau of Investigations (FBI); Homeland Security (DHS), led by FEMA; and Health and Human Services (HHS). The resource describes principles of emergency management planning, and a process for developing, implementing, and continually refining an EOP. <http://rem.s.ed.gov/K12GuideForDevelHQSchool.aspx>