

KEEPING STUDENTS & TEACHERS SAFE DURING NATURAL DISASTERS



In 2017, the U.S. faced **49 NATURAL DISASTERS**

From hailstorms, tornadoes, hurricanes & thunderstorms, natural disasters cost billions in damages. However, disasters that affect schools strike especially close to the heart because they affect young children.

NATURAL DISASTERS IN THE U.S. IN 2017

The year 2017 has been declared the costliest year for natural disasters in the U.S. The new annual record has reached more than

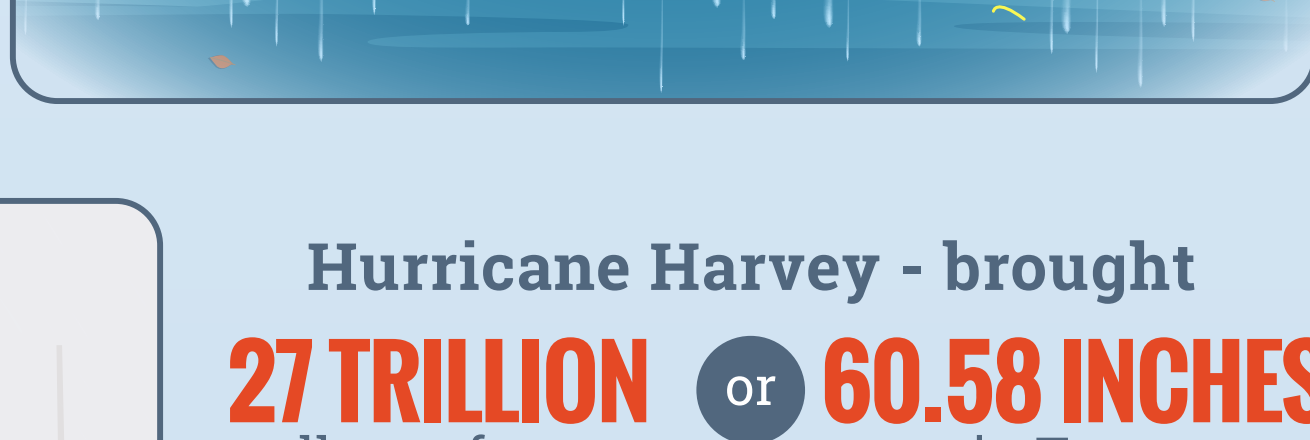
\$306 BILLION



FLOODING

Across Northern California - price tag of **\$1.5 BILLION**

Across Missouri and Arkansas - price tag of **\$1.7 BILLION** and 20 fatalities



HURRICANES



Hurricane Harvey - brought **27 TRILLION** or **60.58 INCHES** gallons of water in Texas

Insured losses of **\$30 BILLION** Overall losses of **\$85 BILLION** **88 FATALITIES**

The costliest natural disaster in the world by **OVERALL LOSSES IN 2017 III**

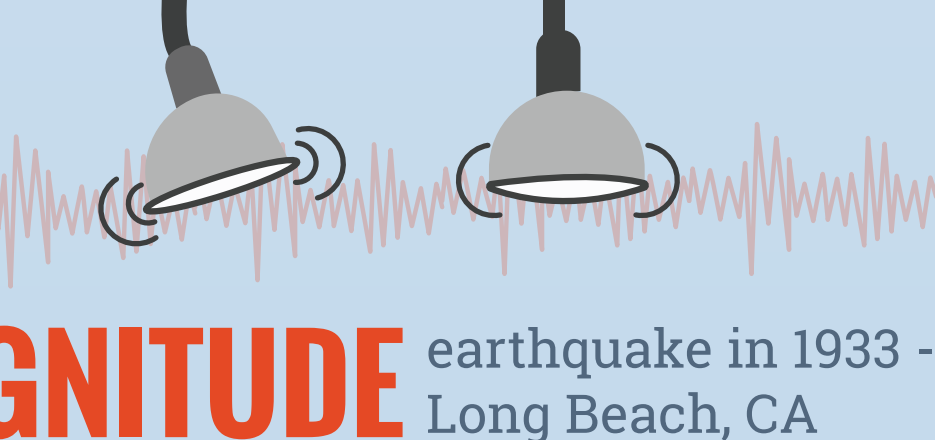


WILDFIRES

Across Western U.S.

Insured losses of **\$8 BILLION** Overall losses of **\$10.5 BILLION** **25 FATALITIES**

Thomas Fire spanned **280,000** acres and was the largest fire in California history



NATURAL DISASTERS THAT WERE A "NEAR MISS" FOR AMERICAN STUDENTS



6.4 MAGNITUDE earthquake in 1933 - Long Beach, CA

Damaged nearly 200 school buildings

Fortunately school was not in session

The Resulting Precaution: The Field Act was passed by the State of California, mandating "earthquake resistant construction requirements and inspection for all future public school buildings," according to a paper published by the Earthquake Engineering Research Institute.

6.7 MAGNITUDE earthquake in 1994 - Northridge, CA

Collapse of suspended ceilings and light fixtures

Fortunately, no school buildings were collapsed

EF3 tornado on April 27, 2014 - Little Rock, Arkansas

The Resulting Precaution: The Federal Emergency Management Agency (FEMA) funded a program to seismically brace all of the suspended light fixtures and ceilings in every Los Angeles County school building.

Leveled a school under construction

NATURAL DISASTERS THAT TOOK A TOLL ON SCHOOLS AND STUDENTS

EF4 tornado struck on March 1, 2007 - Enterprise, Alabama

Destroyed a local high school

Unreinforced concrete masonry wall killed 8 students, injured over 50 others



Hurricane Katrina hit on August 29, 2005 - New Orleans, Louisiana

Damaged or destroyed hundreds of school buildings

Caused over **100,000** students to miss some or all of the 2005-2006 academic year

SAFETY PROCEDURES & PRECAUTIONS



School staff and parents should be equally involved in preparing for emergencies. School staff oversees drills and safety procedures, while parents should make sure their children understand the family emergency plan.

HOW SCHOOLS PREPARE

PRACTICING, MONITORING, & IMPROVING

Schools hold simulation drills, record the results, and make improvements.

Assessment and planning

The school disaster management committee assesses risks, vulnerabilities, and hazards, and makes a contingency plan that is communicated to all concerned groups.

Physical and environmental protection

The contingency plan considers structural safety, non-structural safety, local infrastructure and environmental mitigation.

Response capacity development

School staff develops disaster-response procedures, skills, and organizational structure.

WHAT PARENTS SHOULD KNOW



Evacuations take place in anticipation of, or following a disaster. Students and staff are moved out of the building to a pre-designated safe location and usually return after the cause of evacuation is resolved.

Relocations occur when returning to the school building is not an option. Students may be released from school and activities will be changed or put on hold.

Lockdowns or Lockouts take place when there is a danger inside or outside the building, such as an unauthorized individual loitering on school grounds, or reports of criminal activity in the area

Shelter-in-place is used during severe weather conditions, such as fires, floods, or hurricanes. These shelters should have emergency supply, phone access, and access to a bathroom.

Communication with parents during disasters is a responsibility of school staff. In times of crisis, schools will use their emergency communication system to notify parents via voice, email, or text message.

HOW PARENTS SHOULD PREPARE

Parents should make sure their children understand the family emergency plan. This includes methods of communication and where to reunite after a disaster.

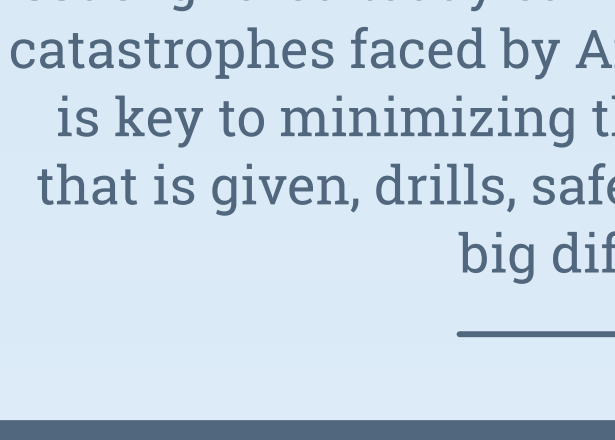
For students who take medication, parents should make sure the school has back up or extra medication in case of emergencies.

Parents should keep emergency contact information updated and inform the school of any changes. Parents should also keep an emergency card in their wallet and in their student's backpack.



Preparing for an emergency requires learning about the school's emergency response. Parents should understand rules for parental access, meet-up locations, and emergency communications between the school and parents.

SUPPORT & RECOVERY



Recovering from disaster can be a long and difficult process. For children, understanding what's going on around them and having their questions answered is critical to their emotional well being. Parents should be aware of children's potential reactions and know how to offer their support.

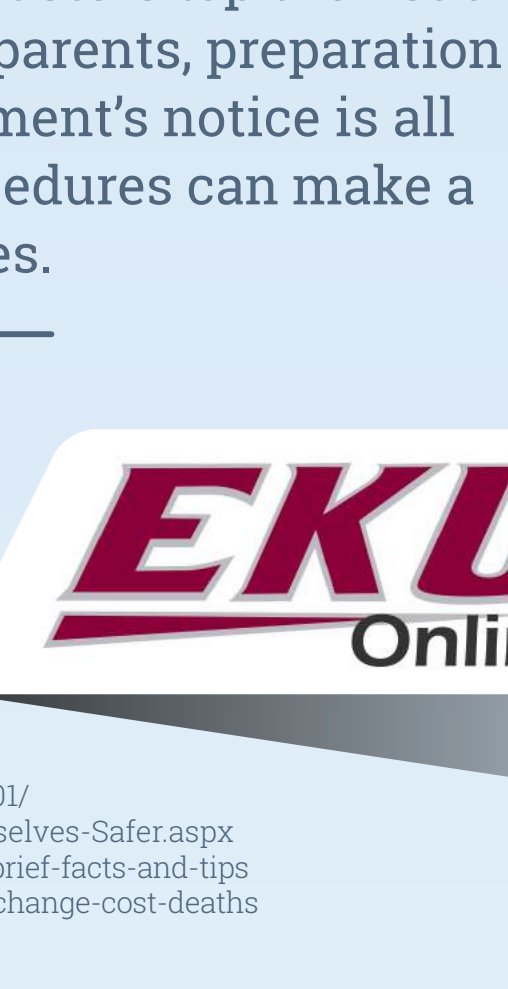
According to the National Association of School Psychologists (NASP), natural disasters can cause the following common reactions among:

- PRESCHOOL STUDENTS:** Regressive behaviors, decreased verbalization, thumb sucking, bedwetting, clinging to parents, sleep disturbances, loss of appetite, fear of the dark, and increased anxiety.
- ELEMENTARY SCHOOL STUDENTS:** Poor attention/concentration, school avoidance, irritability, clinginess, aggression, somatic complaints, nightmares, and social withdrawal.
- MIDDLE AND HIGH SCHOOL STUDENTS:** Sleeping and eating disturbances, agitation, increase in conflicts, physical complaints, delinquent behavior, and poor concentration.

RISK FACTOR

Risk factors that affect the severity of a child's reactions include:

- Loss of a loved one
- Personal injury
- Exposure to the event
- Level of parental support
- Level of physical destruction
- Pre-existing risks
- Dislocation from their home or community



How parents can offer support:

- Acknowledge the loss or destruction, but stay calm and reassuring.
- Encourage children to verbalize their feelings and concerns.
- Listen, empathize, and answer their questions.
- Seek the help of school counselor, psychologist, or social worker.
- Encourage positive coping and applying problem-solving skills to disaster-related stressors.
- Emphasize children's strengths and abilities to cope with past fears.
- Strengthen peer support and children's friendships.
- Take the time to take care of your own needs.

Author Ken Poirot has said, "Be proactive not reactive, for an apparently insignificant issue ignored today can spawn tomorrow's catastrophe." Natural disasters top the list of catastrophes faced by Americans today. For schools, students, and parents, preparation is key to minimizing the impact of a natural disaster. When a moment's notice is all that is given, drills, safety precautions, and disaster-response procedures can make a big difference in reducing damage and saving lives.

<http://safetymanagement.eku.edu/>

