

Emergency Preparedness



LAA
Cluster

How to be sure you and your Host Kids are safe when the unexpected happens

(Welcome)

Earthquake!

- “An **earthquake** is what happens when two blocks of the earth suddenly slip past one another. The surface where they slip is called the **fault**”^{*1}. The location on the earth’s surface above where the earthquake starts is called the **epicenter**.
- **Foreshocks** and **aftershocks** are smaller quakes that happen before or after the mainshock in the exact same location as the main earthquake.
- Small earthquakes happen all the time (approximately 10,000 of them per year) and most of them we don’t even feel or notice.
- In an average year, there will likely be one earthquake of 8+ magnitude somewhere in the world, and one earthquake of 5.5+ magnitude somewhere in California.^{*2}

^{*1} <https://www.usgs.gov/>

^{*2} <https://www.conservation.ca.gov/>

Who has experienced an Earthquake?

(Discussion)

In this part of California, we are on a major fault, called the San Andreas, so we experience Earthquakes.

Most Angelinos are so used to them, we don’t give it a second thought.

But if it’s new to you, you should be aware of what you need to do and to know when (if) you should be concerned.

What to expect in an earthquake



Magnitude	Class	Earthquake Effects
2.5 -	Minor	Usually not felt, but can be recorded by seismograph.
2.5 to 3.9	Light	sometimes felt, but only causes minor damage, if any.
4.0 to 5.4	Light to Moderate	Often felt, but only causes minor damage.
5.5 to 6.0	Moderate	Slight damage to buildings and other structures.
6.1 to 6.9	Strong	May cause a lot of damage in very populated areas.
7.0 to 7.9	Major	Major earthquake. Serious damage.
8.0 +	Great	Great earthquake. Can destroy communities near the epicenter.

Graph 1

rolling, shaking, tremor, seism

“some items fell from shelves...”

“sudden large jolt then more strong shaking...”

“a gentle bump and then a rolling sensation...”

“wondered if it was a small earthquake or vertigo...”

Graph 1: <http://www.geo.mtu.edu/>

For those of you who've experienced an Earthquake (or many of them) what did it (or do they) feel like to you?

(Discussion)

What to do in an earthquake



- Drop, Cover and Hold On!
- If you are indoors, stay there; most buildings in California are built to withstand even a major earthquake
- Step away from glass, such as windows, glass doors, large mirrors or light fixtures
- If you are outside, move away from structures, electrical wires and anything that could fall.
- Stay where you are until the shaking has stopped
- If you are driving, pull over and stop, avoid overpasses, stay in the car
- If you are right next to your children, bring them with you under a sturdy object, such as a table
- If your children are across the room or in another room, wait until the shaking has fully stopped before going to check on them
- Text your host family that you are OK; do not make unnecessary phone calls; do not call 911 unless you truly need emergency service professionals to come to your aid

<https://www.earthquakeauthority.com/>

<https://www.ready.gov/>

On the third Thursday of October every year, Californians participate in The Great California Shakeout. This year it is on October 21. At about 10am, schools and businesses will blow a horn or set off a siren and pretend there is an earthquake happening. It gives us all the opportunity to practice what we would do if it were a real earthquake. In professional settings, this is often followed by a critique and learning opportunity. If you host children are not in school, it can be a wonderful opportunity to use pretend play to remove the fear of earthquakes and reinforce for them how they can keep themselves safe. This slide reviews what you should do in an actual earthquake. If it happens for real, you should “Drop, Cover, and Hold on!”

Wild Fire!

- Wildfires can be caused by a lightning, a downed power line, a stray cigarette, careless campers, and sometimes even arson
- Any area of dry brush or forest is at risk for wildfire; in California our hot, dry summers and autumns bring great opportunity for fire to spread
- If a wildfire approaches a residential area, the local news will begin reporting on television and radio



Here in California, June through September is known as Wildfire Season, because the vegetation is naturally dry and flammable. Wildfires can catch even after official Wildfire season ends, however, and it's not unusual for them to occur in October or November. Wildfires occur when a spark or flame catches fire on dry plants and the fire spreads. This can happen from lightning, a carelessly tossed cigarette, a spark from electrical equipment such as a lawnmower, or countless other reasons.

What to do if a wildfire is near

- If the news reports a wildfire in your area, stay tuned for details
- Dress yourself and the children in comfortable, practical clothing and have face masks handy in case the air becomes smokey
- If local authorities call for evacuation, they will do so in stages: neighborhood by neighborhood, first voluntary evacuations, then mandatory evacuations
- Ask your host parents where the family should go in case of wildfire evacuation (often the home of a family member in another city)
- Have needed papers and medications at the ready (your passport, license and irreplaceable documents, any medications you or the children take regularly or that might be needed in a smokey or stressful situation)
- Tell the children you may need to go somewhere else if the fire comes to close or if the neighborhood gets too smokey, but let them know they will be safe and you will all be together.



***Foschek** is a brightly colored fire-retardant that the fire service sprays from planes to prevent the fire from spreading*

Usually, the way you learn about a Wildfire is by hearing about it on the news or receiving a warning through your phone. Sometimes you might notice the air is smoky and you turn on the TV to see news reports. I have always felt I've had significant warning.

You can sign up for local Nixl Notifications by texting your zip code to 888777. By opting in, you will receive notification about severe weather, severe traffic, criminal activities, missing persons and other important information specific to your area.

The local news will have lots of information on what areas should evacuate and where to go. If a Wildfire is in your area, you should coordinate with your Host Parents.

Landslide & Mudslides!

- **Landslides** occur when masses of rock, earth, or debris move down a slope. They are caused by disturbances in the natural stability of a hillside, often in heavy rains after a period of drought or an earthquake.
- **Mudslides** are much more dangerous. Also referred to as Debris Flows, they can easily exceed speeds of 15 kph and often flow at rates of more than 30 mph. Usually occurring on steep slopes, Mudslides develop when water rapidly saturates the hillside carrying Water-saturated rock, clay, earth, and debris downward.
- Because mudslides travel much faster than landslides, they can cause deaths, injuries and significant property damage.
- Both Landslides and Mudslides can be activated after other natural disasters. Slopes where wildfires or construction have destroyed vegetation are especially vulnerable.



<https://www.cdc.gov/disasters/>

<https://www.usgs.gov/natural-hazards>

Areas that have endured wildfires are often in threat of landslides and mudslides the following season. When the wildfires clear out all of the brush and natural vegetation, the land no longer has strong roots to hold the soil in place. When the rain comes in the winter or springtime, the ground becomes waterlogged or saturated with water and can be easily washed away.

In a landslide, soil that would have normally held strong is washed away. This can happen from rains after wildfires, droughts, earthquakes, volcanic activity, or natural soil erosion. Mudslides are faster and more serious landslides.

What to do in a landslide or mudslide

- Look for tilted trees, telephone poles, fences, or walls, and for new holes or bare spots on hillsides. Listen for rumbling sounds that might indicate an approaching landslide or mudflow.
- Be alert for any sudden increase or decrease in water flow and for a change from clear to muddy water.
- If you are in areas susceptible to landslides and debris flows, consider leaving if it is safe to do so; move to a second story if possible.
- Be especially alert when driving in intense rain. Embankments along roadsides are particularly susceptible to landslides. Watch the road for collapsed pavement, mud, fallen rocks, and other indications of possible debris flows.
- If intense rain is predicted, such as often occurs at least once in a California winter, ask your Host Parents if there have been any drought or wildfire issues in the past year that could lead to landslides.
- In a landslide, move out of the path the water is flowing!

If you find the ground beneath your feet is sliding away, look to trees, poles, fences and other normally upright structures to see if they are leaning or tilted.

If you are caught in a landslide, move across its path, not with it or against it, to get out of the way.

(Analogy to Riptides)

Flash Flood!

- A **Flash Flood** is “A flood caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. Flash floods are usually characterized by raging torrents...they can occur within minutes or a few hours of excessive rainfall.”
- Flash floods occur when heavy rainfall exceeds the ability of the ground to absorb it, or when enough water accumulates for streams to overtop their banks, causing rapid rises of water in a short amount of time.
- Densely populated areas are at a high risk for flash floods. The construction of buildings, highways, driveways, and parking lots increases runoff by reducing the amount of rain absorbed by the ground. This runoff increases the flash flood potential.
- A Flash Flood **Watch** means the conditions indicate a flash flood is possible in the designated area
- A Flash Flood **Warning** means a flash flood is happening or is likely to occur very soon.

<https://www.weather.gov/>

<https://www.nssl.noaa.gov/education>

Another danger of strong rains is Flash Floods. In the steep slopes of the San Gabriel Mountains, soil erosion can lead to landslides or flash floods. You may see town officials or neighbors piling up sandbags to create a wall of protection. The danger in a flash flood is how dramatically fast the water can rise. Here in Southern California, we have significant periods of intense rain at least one or twice per year, often in the winter.

What to do in a flash flood warning

- Get to high ground.
- Do not walk, swim or drive through flood waters; fast-moving waters can easily knock you down.
- **“Turn Around, Don’t Drown!”** According to the CDC, over half of all flood-related drownings occur when a vehicle is driven into hazardous flood water.
- Stay off of bridges, which can be washed away without warning
- If you are driving, stop. Stay in the car as long as possible, only climbing to the roof if the car fills with water.
- If you are trapped in a building, go to the highest floor, but stay inside. Only go to the roof if the top floor is no longer habitable or if you need to signal for help.
- Once the rain has stopped be wary of the deep waters. Dangers include electricity, unseen physical items, wildlife, and germs or contamination

<https://www.ready.gov/floods>

If you see water collecting and rising, always stay out of it. If you are at home or indoors, seek higher ground, such as an upstairs bedroom or perhaps the attic.

If you are driving, turn around and seek an alternate route. “turn around, don’t drown” Stay off of bridges and away from streams or rivers.

Be careful to avoid flooded areas after the rain. Puddles are fun to jump in, but be wary that they are small, individual puddles far away from electricity or contamination.

Extreme Heat!

- Extreme heat is defined as a long period of high heat combined with humidity and temperatures above 90° F (32° C). In extreme heat, evaporation is slowed and the human body must work extra hard to maintain a normal temperature. Children are at much greater risk than adults.
- Several different heat-related illnesses can occur when exposed to high temperatures over a period of time. Temperatures exceeding 90° or 100° f (32° to 38° celsius) can heat illness to arise, sometimes without warning.
 - Heat Stroke – Headache, dizziness, nausea, confusion, temperature
 - Heat Exhaustion – sweating, clammy skin, nausea, cramps, exhaustion, headache, weakness
 - Heat Cramps – heavy sweating & muscle spasms (especially during exercise)
 - Sunburn – painful red or pink warm skin
 - Heat Rash – clusters or red blisters or dots, especially near neck, chest, groin and elbow

<https://www.cdc.gov/>

The effects of extreme heat on the human body can be severe if not monitored.

if left unchecked, and can be life-threatening in some cases.

It can get extremely hot in Southern California, and summer-like weather is known to persist into the fall. It's not unusual to have dangerously high temperatures into October. When the weather exceeds

How to protect yourself & the children

- Watch the weather forecasts especially in the summer months
- Avoid the sun between 10am and 3pm, dress children appropriately
- Drink more water than you think you need to and provide water and juice to the children throughout hot days
- Replace salts and minerals that are excreted when sweating (juice, sports drinks, popsicles, potato chips, salty snacks)
- Keep the children indoors in the air conditioning during the midday heat
- If you lose electricity, find a place that is cool!
- Seek medical attention if you suspect Heat Exhaustion or Heat Stroke or if blisters develop on the skin

It's a good idea to download a weather app to your phone or use a weather applet in your daily calendar.

On warm days, avoid bringing the children out in the sun during the middle of the day, and always have water or drinks on hand.

Dress yourself and the children in light, loose clothing. This protects you better than short, tight clothing does.

When exercising or playing sports outdoors, you should always wear a hat or visor to protect your face from the sun, and have electrolytes (such as sports drinks or salty snacks) available.

Watch others for signs of heat-related illnesses: Hot, red or cold, pale skin. Dizziness, headache, nausea, blisters or speckled rash on the skin.

Being in cool air will resolve these issues better and anything else. Seek medical attention if problems persist beyond a few minutes.

Wildlife Threats!

- **Black Bears**

- About a meter or taller at the shoulder
- can be black, brown or reddish
- Usually interested in trash cans or the smell of food

- **Coyotes**

- Related to dogs
- About 10 to 16 kg, scruffy fur, long tail
- Eat berries, nuts, and small wild rodents like rabbits and gophers

- **Mountain Lions (aka Cougar, Puma)**

- Rarely seen, occasionally heard, they avoid people
- Related to cats but much larger, can be 30 to 100 kg
- Tend to be found in the same places as deer (their main prey)
- Adults have a uniform tan color with a long (cat-like) tail

- **Bobcats (aka lynx)**

- Often mistaken for mountain lions
- Mottled grey-ish fur, very short / bobbed tail, dark-tipped ears
- Half to 2/3 the size of a mountain lion

- **Rattlesnakes**

- Black and brown diamond pattern
- Triangular shaped head (pouches containing venom on either side of their face)
- Usually a rattle on their tail. Just because you don't hear the rattle or even if it is broken off, it still could be a rattlesnake
- Rattlesnakes can leap forward almost as far as they are long.



<https://wildlife.ca.gov/>

If we haven't scared you enough yet with all the frightening things that can happen in Southern California, now here comes the wildlife!

In the mountains, we have Bears, Mountain Lions, and Bobcats. At the beaches we have Sharks and Jellyfish. And we have Coyotes, Ticks and Rattlesnakes everywhere else!

Who has seen some of these creatures? (*Discussion*)

Coyotes are the most often seen; they look like mangy, scruffy dogs. They are not much of a threat to adults, but can see small pets or babies as prey.

Rattlesnakes are probably the scariest. You can tell they are poisonous by the triangular-shaped head because they store venom in pouches alongside their jaws. Notice the brown and black diamond-shaped pattern on their back.

What to do if you encounter dangerous wildlife

- Pick up small children immediately
- Be loud. Make noise so that you do not startle the animal
- Respect the animal's space – never, ever get between a Mama and her cub
- Make yourself look large – stand on something, raise your arms, stand with your legs wide, hold open your jacket if wearing one
- Do not run away or turn your back; you might cause the animal to instinctually chase you
- Back away slowly and deliberately; behave as calmly as possible
- Fight back (only) if attacked
- Stay at least 10 feet away from rattlesnakes; back off and go the other direction
- If you are bitten call 911 immediately



The one thread that goes through the What To Dos for all of these animals is to stand still, hold your ground, look large, and back away. All of these animals can become threatened if you make sudden moves, and many of them will chase you if you run away. Pull children (and small pets) close, and back away.

Ticks

- There are three types of ticks that can be found on the California coast: the American Dog Tick, the Brown Dog Tick, and the Western Black-legged Tick
- Tickborne illnesses can be a serious threat to an individual's health, and include Lyme disease, Tickborne Relapsing Fever, Tularemia, Babesiosis, Colorado Tick Fever or Spotted Fever Rickettsiosis.
- The CDC recommends using insect repellent whenever in or near bushy or wooded areas, tall grasses or shrubs.
- Embedded ticks should be removed from the skin using tweezers and pulling carefully to remove the whole tick rather than allowing the head to break off and remain in the skin.



<https://www.cdc.gov/ticks/tickbornediseases/tick-bites-prevention.html>

Ticks are small insects that live on the blood of other creatures, including humans. In this slide, you can see a regular tick on the top, and on the bottom is another tick engorged with blood.

Ticks typically live in low brush, bushes and tall grass. You are most likely to encounter them when hiking or exploring nature.

The CDC recommends using insect repellent to keep ticks away. It's a good idea to wear long pants and / or tall socks when walking in areas where ticks might be found.

Ticks love to attach themselves to adults, children and animals such as the family dog! They burrow their head into your skin and drink blood, usually without you noticing.

When removing ticks, you should use tweezers to pull them firmly and carefully, then wipe the area with alcohol. Be very careful not to break the tick, leaving its head embedded in the skin.

Know your resources!

- City of Los Angeles Emergency Management Department
- Los Angeles County Department of Public Health
- County of Los Angeles Fire Department
- Community Emergency Response Team
- California Department of Public Health
- California Department of Fish & Wildlife
- 211 Los Angeles County (guide to services)
- Ready.gov
- USA.gov/Emergency and Disaster Preparedness
- National Park Service
- National Oceanic Atmospheric Administration
- United States Geological Survey
- US Environmental Protection Agency
- Centers for Disease Control
- American Red Cross

There are so many resources available to learn more about these threats.

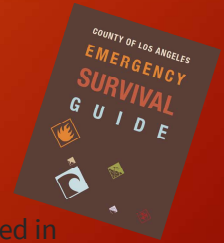
All of the logos represented here are sources used for the information in the presentation. The CDC (or Centers for Disease Control) is the foremost authority on medical issues that affect us here in the US.

The State of California has info available on:

- *Wildfires (<https://www.fire.ca.gov/>),
- *Earthquakes (<https://earthquake.ca.gov/>),
- *Landslides & Mudslides (<https://www.cde.ca.gov/ls/ep/landslidemude.asp>)
- *Floods (<https://water.ca.gov/Programs/Flood-Management/Community-Resources/Flood-Risk>)
- *Heat Illness (<https://www.dir.ca.gov/dosh/heatillnessinfo.html>)
- *Wild animals (<https://wildlife.ca.gov/>)

Be prepared!

- Talk to your Host Family about emergency plans
- Practice those plans with the children
- Search your city's website for local emergency preparedness info
- Sign up for text alerts through NIXLE / everbridge
- Download the free PulsePoint App & open your city and surrounding cities
- Have numbers for poison control, your local police and fire departments saved in your phone



If your host family has not put together Family Emergency Plan, create one together.
Start here: <https://lacounty.gov/emergency/emergency-survival-guide/>

September is National Emergency Preparedness Month. It's an excellent time to discuss a safety plan with your host family.

Children should be taught what to do if there is an emergency at home, the same way they are taught in school.

Every family should have a family emergency plan and a emergency supplies kit. The kit is a collection of materials you might need in a disaster (such as flashlights and bandages).

If your Host Family does not already have a family emergency plan and a emergency supplies kit, you can help them get started by ordering the LA County Emergency Survival Guide at <https://lacounty.gov/emergency>.

You can also find a great deal of information at Ready.gov. Ready.gov has lots of info on teaching emergency preparedness to children!