

WILDLAND FIRE

Before the Fire

Red Flag weather conditions mean that humidity is very low (usually below 15%) and winds exceed 25 mph. When a Red Flag Warning or Alert has been issued there is a greater possibility for brushfires to spread rapidly. If you live in an urban-interface area subject to Red Flag Alerts here are a few tips:

- Park your car heading out and keep your car keys handy
- Disconnect automatic garage door openers in case of power failure
- Place your important records and documents inside your car
- Keep pet carriers handy
- When you leave your home:
 - Keep drapes and window coverings open
 - Close all interior doors in your home
 - Close all windows
 - Keep interior lights on
 - Move combustible furniture away from windows and towards the center of the room



FIRE HAZARD REDUCTION CHECKLIST

- Remove needles, leaves, or other vegetative material from the roof of any structure.
- Remove or trim all vegetation a minimum of ten feet from chimneys or stovepipes.
- Keep landscape clean, remove litter under trees and shrubs, prune out all dead wood.
- Remove dead and dried portions of ground covers and succulents.
- Leave space between shrubs and trees to prevent fire spread. Avoid continuous tree or brush canopies.
- Separate native shrubs by removing adjacent plants.
- Limit the number of specimen trees and shrubs within 30 feet of any structure.
- Tree crowns should not overhang the roof and should be pruned high enough to avoid ignition by a ground fire.
- Within 200 feet of structures, consider removing common garden plants that have proven particularly flammable due to high brush buildup and foliage oils such as Cypress, Fountain Grass, large Juniper, Eucalyptus, Pines, and other Conifers.
- Give special consideration to problem trees such as Eucalyptus, Palms and Pines. Remove dead limbs, litter, dead fronds and loose bark from the ground as well as from the trunk of these trees.

For more information, visit the Santa Cruz County Planning Department website:
http://www.sccoplanning.com/html/env/tree_removal.htm#firesafe



During the Fire

- Follow your evacuation plan instructions and the directions from Sheriff and Fire Department personnel.
- Gather your family, pets and disaster supply kit and immediately leave your home or business.
- Drive carefully at a normal speed with your headlights on.
- Never park your vehicle in a traffic lane or safety area.
- Keep pets in carriers or on leashes.

In case of a house fire, don't stop for anything—just get out. Call the Fire Department from a neighbor's telephone after you are out of the house.

TIP

Pre-wetting your home and surrounding areas will not improve the safety of your home—and it wastes valuable time and water resources.

WILDLAND FIRE

After the Fire

- Don't return to your home before the area is declared to be safe by local officials. Returning home can be both physically and mentally challenging.
- Assess damage; check that your home is safe to occupy
- Before returning home, be sure that utilities are operational
- Remember, burned hillsides may have trouble absorbing water after a fire. Monitor burn areas and be prepared to evacuate if necessary.



IF YOU LIVE NEAR A RECENTLY BURNED AREA...

Flash floods and debris flows may now be a danger. Once the smoke clears from a wildfire, the danger is not over! Other hazards, such as flash floods and debris flows, now become the focus. Steep mountainsides and hillsides recently burned by wildfires are particularly susceptible to flash floods and debris flows during rainstorms. Just a short period of moderate rainfall on a burn scar can lead to flash floods and debris flows. Rainfall that is normally absorbed by vegetation can run off almost instantly. This causes creeks and drainage areas to flood much sooner during a storm, and with more water than normal.

Additionally, the soils in a burn scar are highly erodible so flood waters can contain significant amounts of mud, boulders, and vegetation. The powerful force of rushing water, soil, and rock, both within the burned area and downstream, can destroy culverts, bridges, roadways, and structures, and can cause injury or death if care is not taken.



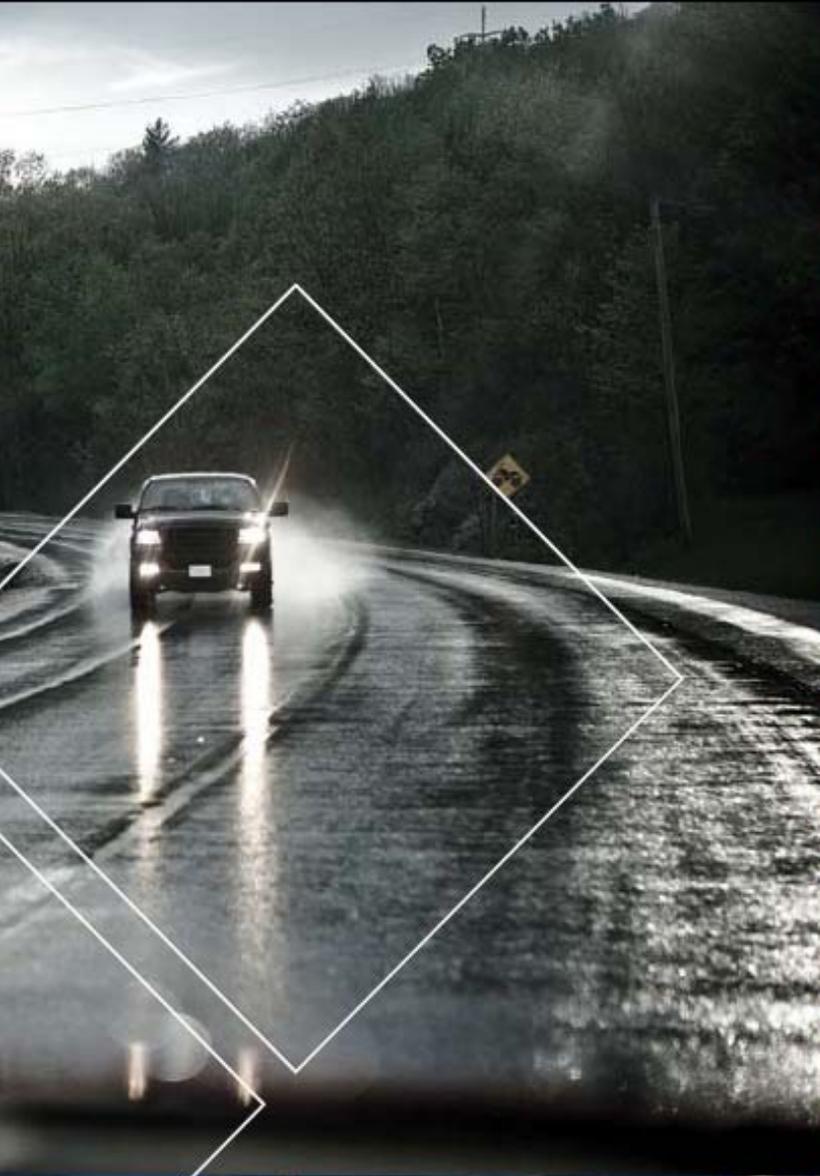
STORMS, FLOODS & MUDSLIDES

When heavy rains come, there is a significant potential for floods and mudslides.

Before the Flood:

1. Assess the safety of your house and belongings in case of a flood or mudslide:
 - Are you near a creek?
 - Do you live above or below a steep hillside?
 - Do you have to drive over a creek or bridge to get to a main road?
2. Clean drains and gutters around the house in the fall before the winter rains come. Check drains on nearby streets.
3. If diversion of water or mud is necessary, plan to fill sandbags well before the rain starts. Sandbags are available at local fire stations. Take time now to find out what fire station serves your area and learn proper placement of sandbags.
4. If you live in a hilly area, maintain all slopes in a safe manner. Use appropriate plantings, slope coverage, and drainage channels.





TIPS

Have a plan in place before an evacuation is ordered.

The safest plan is to stay with friends or family during all rainstorms in which a flash flood watch or warning has been declared for your area.

Teach your children to stay away from all rivers, creeks, arroyos, drainage control channels and washes. Teach all family members about the watch and warning system.

Determine in advance how you will stay informed about the latest flood and flash flood watches, warnings, and weather advisories. Stay Informed for information on the Emergency Alert System and other ways to get updated storm information.

Attend community meetings.

Talk to your neighbors about their plans, and encourage them to plan to get out early.

STORMS, FLOODS & MUDSLIDES

During the Flood

- Do not cross rapidly flowing streams. Stay on one side until the water recedes. Most streams will go down in a couple of hours, once it stops raining.
- During a storm, check drainage systems at your home and driveways to maintain a safe situation and limit damage.
- Watch for mudslides and adjust drainage to reduce mudslides.

If you notice a major mud slippage either above or below your house, move your family to a safe location and notify your neighbors.

WHEN IT'S RAINING...

Plan to arrive at your location in a safe neighborhood before it starts raining and remain there until well after the storm. Burned logs, boulders, mud and other debris can create temporary dams which burst days after the rain has stopped. This could be hours or sometimes even days after the rain has stopped. Be particularly alert when driving. Watch the road for collapsed pavement, mud, fallen rocks, and other hazards. Bridges may be washed out, and culverts overtopped. When you see water across a roadway, there is no way to see whether the road under the water has been washed away. The water may be much more deep and powerful than you expect.



STORMS, FLOODS & MUDSLIDES

After the Flood

- Don't return to your flood-damaged home before the area is declared to be safe by law enforcement and health officials.
- Assess damage; check hillsides, houses, etc. for slope movement, settling, and water damage.



- Remember, many mudslides occur as the soil dries after an extended wet period, so a mudslide may take place several days after the rain stops.
- Winter is often the best time to plant slopes, so make plans and fix any problems areas before the rainy season begins.

Sandbags and other barriers can help divert small mudflows. Remember, however, that these small measures may be meaningless to a huge debris flow. The hillsides will gradually stabilize during the next three to seven years.





DROP!



COVER!



HOLD ON!

EARTHQUAKES

The time to prepare for an earthquake is **NOW**...not next week or after the shock. Protect your family by taking the actions on the **BEFORE Checklist** as soon as you can. It's a good idea to make copies of the **DURING Checklist** and post them by your house and garage exits and in all your family cars.

Before the Earthquake

- Identify safe spots in each room of your home. Note sturdy tables, desks, and interior walls. Know your danger spots: windows, mirrors, hanging objects, fireplaces, and tall, unsecured furniture.
- Conduct practice drills with your family and know the safest locations in your home.
- Decide how and where your family will reunite, if separated during an earthquake.
- Choose an out-of-state friend or relative to contact so family and friends know your status.
- Learn First Aid and CPR and put together a First Aid Kit.
- Learn how to shut off gas, water and electricity; it may be necessary during an earthquake.
- Check chimneys, roofs, walls, and foundations for stability – make sure your house is bolted to its foundation.
- Secure your water heater and major appliances as well as tall, heavy furniture, hanging plants, mirrors, and picture frames. Visit www.daretoprepare.org online for ways to secure your home.
- Keep breakables, heavy objects, and flammable or hazardous liquids such as paints, pest sprays, and cleaning products in secured cabinets or on lower shelves.
- Participate in organizing your neighborhood to be self-sufficient after an earthquake.

EARTHQUAKES

During the Earthquake

- If indoors, stay there. Get under a desk or table or stand in a corner. Stay away from windows, bookcases, file cabinets, heavy mirrors, hanging plants and other heavy objects that could fall. Watch out for falling plaster and ceiling tiles. Stay under cover until the shaking stops. Hold on to your cover – if it moves, move with it.
- If outdoors, get into an open area away from trees, buildings, walls, and power lines.
- If driving, pull over to the side of the road and stop. Avoid areas around power lines. Stay in your car until the shaking is over.
- If in a crowded public place, do not rush for the doors. Crouch and cover your head and neck with your hands and arms.

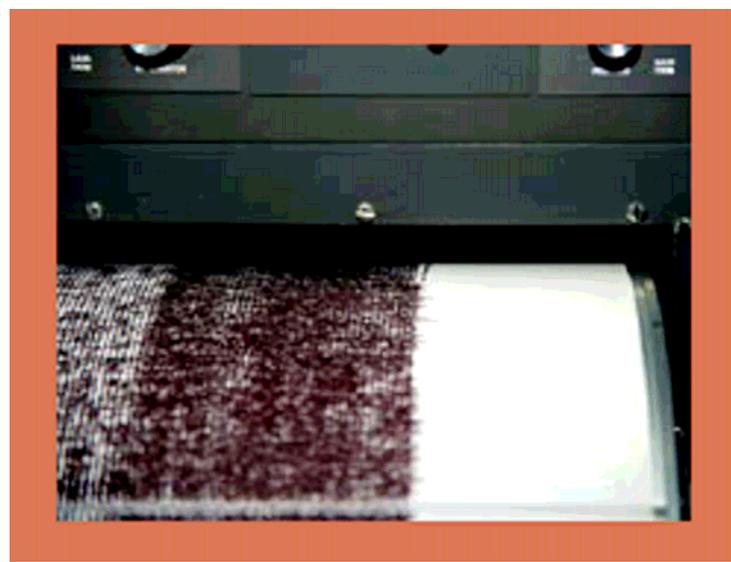
At 5:04 p.m. on October 17, 1989, a magnitude 6.9 earthquake, known thereafter as the Loma Prieta earthquake, rattled Santa Cruz County and the surrounding Bay Area. The earthquake, caused by a slip along the San Andreas Fault, left 63 dead, over 3,700 injured, and up to 12,000 homeless. One of the most expensive natural disasters at that time, the Loma Prieta earthquake caused \$6 billion in property damage and was the largest earthquake to occur on the San Andreas Fault since 1906.



EARTHQUAKES

After the Earthquake

- Do not attempt to use the telephone unless there is an immediate, life-threatening emergency.
- If it is safe, check for gas and water leaks, and broken electrical wiring or sewage lines. If there is damage, turn the utility off at the source and immediately report gas leaks to your utility company.
- Stay away from downed power lines and warn others to stay away.
- Do not attempt to re-light the gas pilot unless your gas line has been thoroughly inspected. Call the Gas Company for assistance.
- If you are able to safely do so, check your building for cracks and damages, including the roof, chimney, and foundation.
- Turn on your portable radio for instructions and news reports.
- Cooperate fully with public safety officials and follow instructions; they are trained to ensure safety.
- Do not use your vehicle unless there is an emergency.
- Be prepared for aftershocks – Stay calm and help others.
- If you evacuate, leave a message at your home telling family members and others where you can be found.



TSUNAMIS

A tsunami (seismic sea wave) is a series of extremely long ocean waves generated by earthquakes, volcanic eruptions, or massive undersea landslide that displaces a large mass of water. From the area of the disturbance, the waves travel outward in all directions, much like the ripples caused by throwing a rock into a pond.

As the waves approach shallow coastal waters, they appear normal and the speed decreases. Then as the tsunami nears the coastline, it may grow to great height and smash into the shore, causing great destruction and loss of life.

The time between wave crests may be from 5 to 90 minutes, and the wave speed in the open ocean may be more than 450 miles per hour. Tsunamis have reached heights of more than 100 feet.

People who are near the seashore during a strong earthquake should listen to a radio for a tsunami warning and be ready to evacuate at once to higher ground. Tsunamis arrive as a series of successive “crests” (high water levels) and “troughs” (low water levels).

Rapid changes in the water level may be an indication of an approaching tsunami.

Tsunamis from both local and distant earthquakes threaten California’s coastal communities. Although our oceans are monitored for developing tsunamis, when a large earthquake occurs nearby, the first tsunami wave may reach coastal communities within a few minutes.

Stay away from coastal or low-lying areas. Waves might continue for several hours and travel several times faster than you can walk, run or drive.

TSUNAMIS

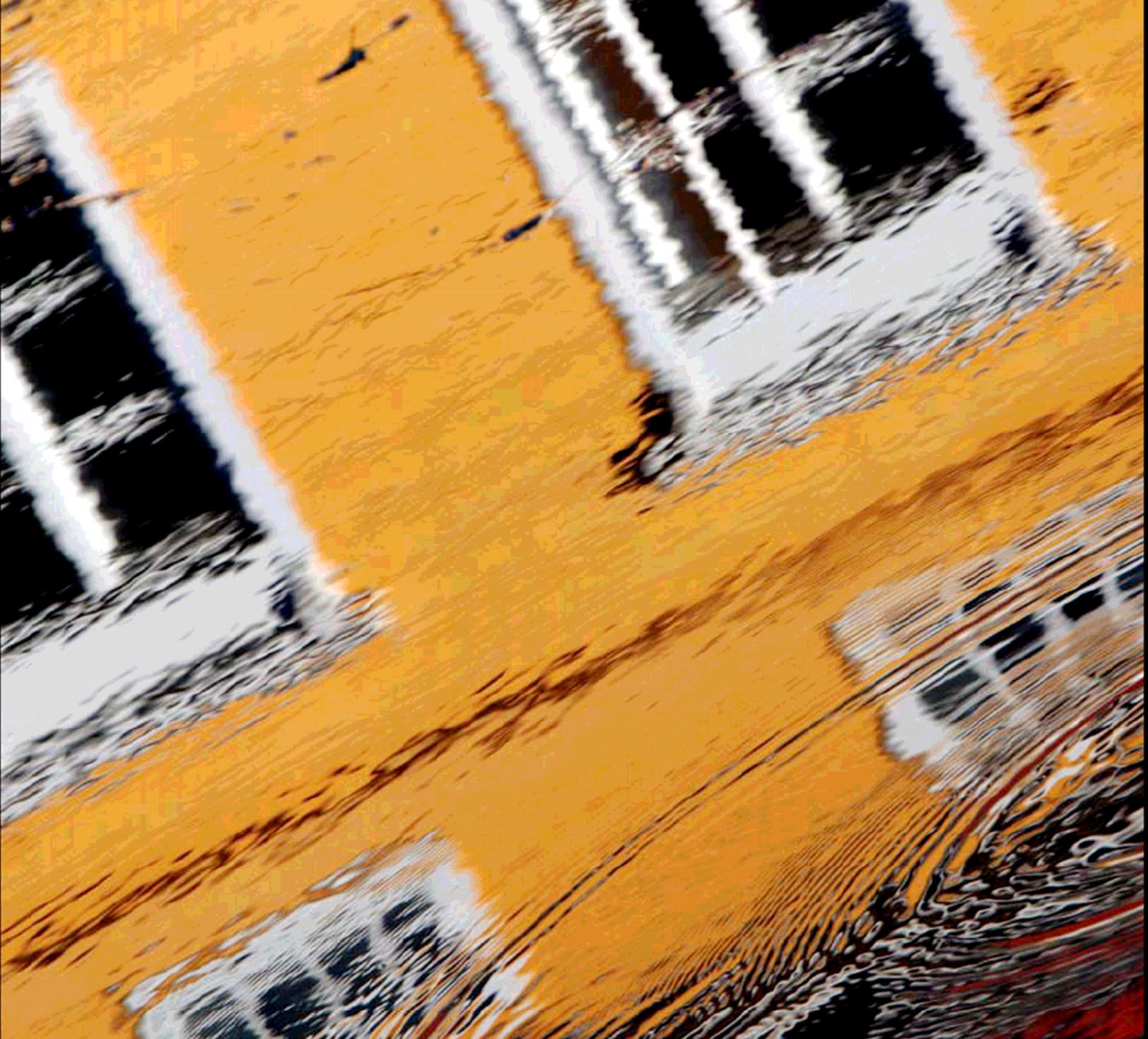
Local populations at risk must be able to recognize the signs of impending tsunami hazards and seek higher ground immediately. While distant-source tsunamis give residents more time to evacuate threatened coastal areas, they increase the need for timely and accurate assessment of the tsunami hazard to avoid costly false alarms.

Communities need to be aware of what areas are likely to be flooded. Residents need to understand the multi-hazard ramifications of very large local and distant earthquakes and their disruption to the community.

- If you are near the coastline, an earthquake may be your only warning of an approaching tsunami, so it is very important to act quickly.
- If you are at the beach and you notice the water has pulled back or run out, creating a vast expanse of exposed beach, this is a warning that a tsunami may be imminent.
- Never go to the beach to watch for or to surf a tsunami wave!

Residents need to be aware of what areas are likely to be flooded. Visit http://www.quake.ca.gov/gmaps/tsunami/tsunami_maps.htm to see if you are located within a tsunami inundation zone.





TSUNAMI WATCH

This means that a significant, distant earthquake has occurred. Tsunami approach is possible but not confirmed. Stay tuned to local radio and TV stations for information. Prepare for a possible Tsunami Warning.

TSUNAMI WARNING

This means that a tsunami approach has been confirmed. Stay tuned to local radio and TV stations for information and be prepared to evacuate, if advised to do so by local authorities.

TSUNAMI EVACUATION

Those within the evacuation advisory area should immediately make their way to higher ground. Tsunami Safe Areas may be indicated by signs placed along roads at elevations of 90 feet or more above sea level. Stay tuned to local radio and TV stations for information about local evacuation centers.

Check <http://wcatwc.arh.noaa.gov/> for current tsunami advisories

TSUNAMIS

Evacuation should **not** be automatic. Before evacuating you should determine if you are in a hazard zone and consider possible hazards that may exist along your evacuation route.

- Know if you live, work or play in a tsunami hazard zone. Visit http://www.quake.ca.gov/gmaps/tsunami/tsunami_maps.htm to see if you are located within a tsunami inundation zone.
- COUNT how long the earthquake lasts. If you feel more than 20 seconds of very strong ground shaking and are in a tsunami hazard zone, evacuate as soon as it is safe to do so.
- If you are on the beach or in a harbor and feel an earthquake—no matter how small—immediately move inland or to high ground
- GO ON FOOT. Roads and bridges may be damaged.
- Avoid downed power lines
- If evacuation is impossible, go to the third or higher floor of a sturdy building or climb a tree. This should only be used as a last resort.
- If you hear that a tsunami warning has been issued but did not feel an earthquake, get more information. Listen to the radio, television or other information sources and follow the instructions of emergency personnel.

If you are outside of a tsunami hazard zone, take no action. You are safer staying where you are.

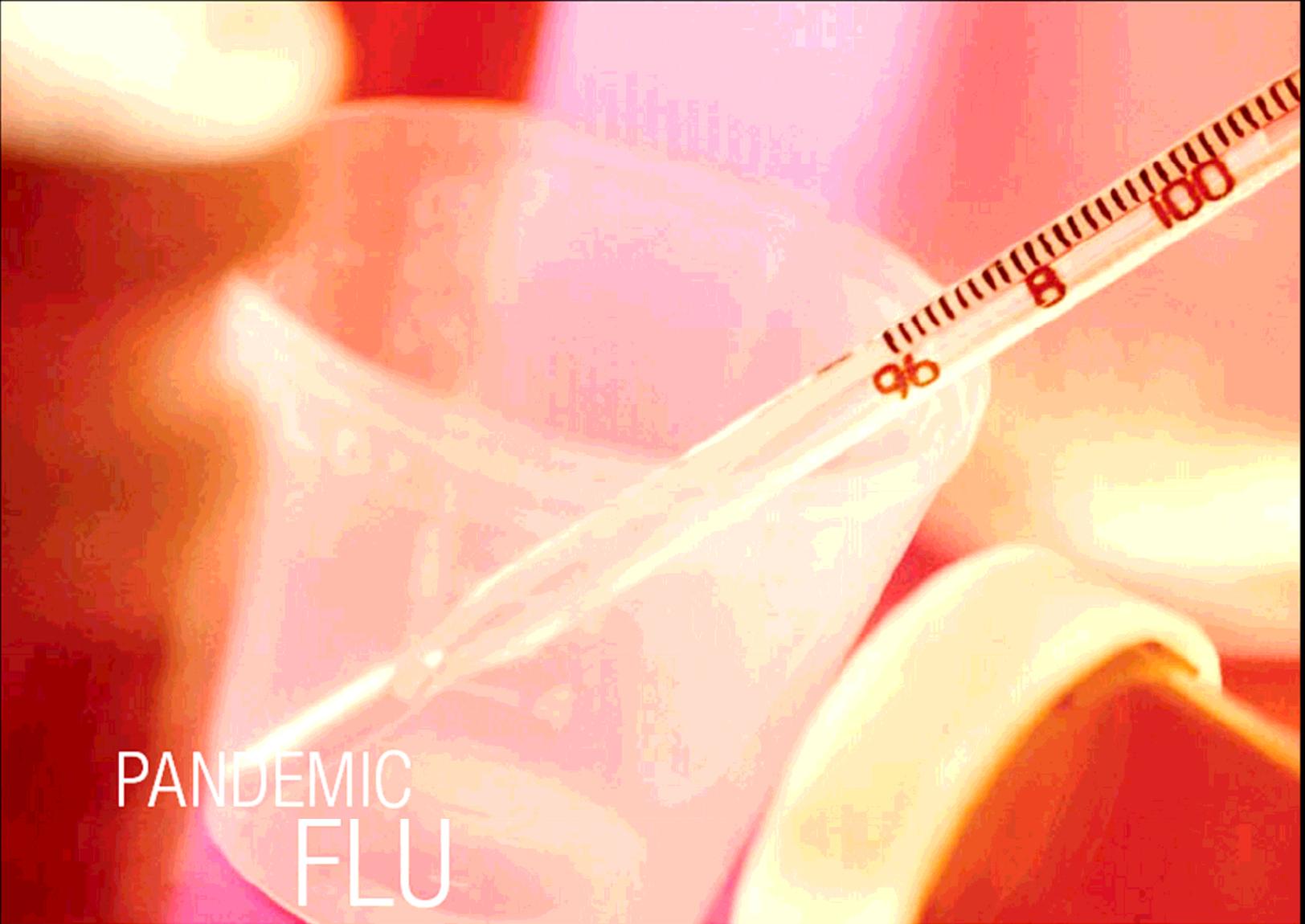
TSUNAMIS

Be Prepared

How you prepare will affect how you recover. And being prepared for earthquakes and tsunamis prepares you for all kinds of disasters.

- Learn what the recommended tsunami evacuation routes are in your city, county, and region. Identify safety zone(s) near you, and decide on your primary and secondary evacuation routes.
- If you live or work in a tsunami hazard zone, get a NOAA weather radio with the public alert feature for your home and office. It will alert you even if turned off.
- Assemble a small evacuation kit with essential documents, medications, a flashlight, a portable NOAA weather radio and batteries, water, snacks, and warm clothes. Include a silver “space blanket” in your kit – it can be used to signal your location to air search teams. Keep your evacuation kit by the door so you can “grab & go.”
- Walk your route – consider what you would do at night or in stormy weather
- Make a reunification plan with your loved ones. Decide when and where you will meet if you are separated, and what out of state relative or friend you will call if it is not possible to meet at your pre-designated reunification spot.
- Discuss plans with family, coworkers, and neighbors
- Make plans for how to address any functional needs or disabilities you might have. If you need help evacuating, prearrange assistance from neighbors, including transport of mobility devices and durable medical equipment. If you are mobility impaired, account for the extra time that you may need.
- Decide on the best strategy for protecting your pets
- Prepare to be on your own for several days or longer

Consider joining your local Community Emergency Response Team (CERT). Visit www.santacruzcountycert.org for more information.



PANDEMIC FLU

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in very short time.

It is difficult to predict when the next influenza pandemic will occur or how severe it will be. Wherever and whenever a pandemic starts, everyone is at risk. Countries might, through measures such as border closures and travel restrictions, delay arrival of the virus, but cannot stop it.

A pandemic may come and go in waves, each of which can last for six to eight weeks.

An especially severe influenza pandemic could lead to high levels of illness, death, social disruption, and economic loss. Everyday life would be disrupted as so many people in many places become seriously ill at the same time. Impacts can range from school and business closings to the interruption of basic services such as public transportation and food delivery.

The effects of a pandemic can be lessened if preparations are made ahead of time. Planning and preparation information and checklists are available at www.pandemicflu.gov/plan.

PANDEMIC FLU

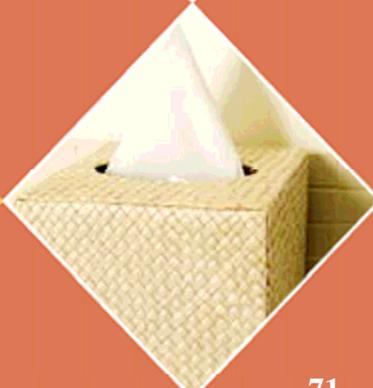
1. You can prepare for an influenza pandemic now

- Store a two week supply of water and food. During a pandemic, if you cannot get to a store, or if stores are out of supplies, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies such as power outages.
- Periodically check your regular prescription drugs to ensure a continuous supply in your home.
- Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.
- Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.
- Volunteer with local groups to prepare and assist with emergency response.
- Get involved in your community as it works to prepare for an influenza pandemic.



2. To limit the spread of germs and prevent infection

- Teach your children to wash hands frequently with soap and water.
- Teach your children to cover coughs and sneezes with tissues.
- Teach your children to stay away from others as much as possible, if they are sick.
- Stay home from work and school if you are sick.



PANDEMIC FLU

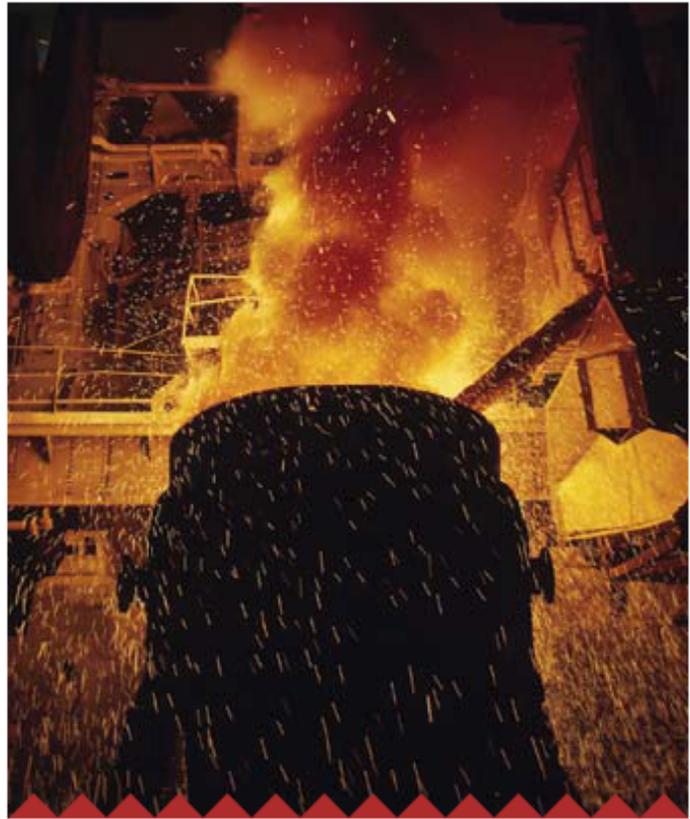
EXAMPLES OF FOOD AND NON-PERISHABLES	EXAMPLES OF MEDICAL, HEALTH, AND EMERGENCY SUPPLIES
<p>Ready-to-eat canned meats, fish, fruits, vegetables, beans, and soups</p> <p>Protein or fruit bars</p> <p>Dry cereal or granola</p> <p>Peanut butter or nuts</p> <p>Dried fruit</p> <p>Crackers</p> <p>Canned juices</p> <p>Bottled water</p> <p>Canned or jarred baby food and formula</p> <p>Pet food</p> <p>Other non-perishable items</p>	<p>Prescribed medical supplies such as glucose and blood-pressure monitoring equipment</p> <p>Soap and water, or alcohol-based (60-95%) hand wash</p> <p>Medicines for fever, such as acetaminophen or ibuprofen</p> <p>Thermometer</p> <p>Anti-diarrhea medication</p> <p>Vitamins</p> <p>Fluids with electrolytes</p> <p>Cleansing agent/soap</p> <p>Flashlight</p> <p>Batteries</p> <p>Portable radio</p> <p>Manual can opener</p> <p>Garbage bags</p> <p>Tissues, toilet paper, disposable diapers</p>



HAZARDOUS & CHEMICAL MATERIALS

Chemicals are found everywhere. They purify drinking water, increase crop production, and simplify household chores. But chemicals also can be hazardous to humans or the environment, if used or released improperly. Hazards can occur during production, storage, transportation, use, or disposal. You and your community are at risk if a chemical is used unsafely or released in harmful amounts into the environment where you live, work, or play.

Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. These substances are most often released as a result of transportation accidents or because of chemical accidents in plants.



IF YOU ARE:	THEN:
<p>Asked to evacuate</p>	<ul style="list-style-type: none"> • Do so immediately. • Stay tuned to a radio or television for information on evacuation routes, temporary shelters, and procedures. • Follow the routes recommended by the authorities—shortcuts may not be safe. • Leave at once. • If you have time, minimize contamination in the house by closing all windows, shutting all vents, and turning off attic fans. • Take pre-assembled disaster supplies. • Remember to help your neighbors who may require special assistance—infants, elderly people and people with disabilities.
<p>Caught Outside</p>	<ul style="list-style-type: none"> • Stay upstream, uphill, and upwind! In general, try to go at least one-half mile (usually 8-10 city blocks) from the danger area. • Move away from the accident scene and help keep others away. • Do not walk into or touch any spilled liquids, airborne mists, or condensed solid chemical deposits. Try not to inhale gases, fumes and smoke. If possible, cover mouth with a cloth while leaving the area. • Stay away from accident victims until the hazardous material has been identified.



IF YOU ARE:	THEN:
<p>In a motor vehicle</p>	<ul style="list-style-type: none"> • Stop and seek shelter in a permanent building. If you must remain in your car, keep car windows and vents closed and shut off the air conditioner and heater.
<p>Requested to stay indoors</p>	<ul style="list-style-type: none"> • Bring pets inside. • Close and lock all exterior doors and windows. Close vents, fireplace dampers, and as many interior doors as possible. • Turn off air conditioners and ventilation systems. In large buildings, set ventilation systems to 100 percent recirculation so that no outside air is drawn into the building. If this is not possible, ventilation systems should be turned off. • Go into the pre-selected shelter room. This room should be above ground and have the fewest openings to the outside. • Seal gaps under doorways and windows with wet towels or plastic sheeting and duct tape. • Seal gaps around window and air conditioning units, bathroom and kitchen exhaust fans, and stove and dryer vents with duct tape and plastic sheeting, wax paper or aluminum wrap. • Use material to fill cracks and holes in the room, such as those around pipes. • If gas or vapors may have entered the building, take shallow breaths through a cloth or a towel. Avoid eating or drinking any food or water that may be contaminated.

HAZARDOUS MATERIALS

If you suspect a problem with hazardous materials follow these important steps and remember **RAIN**:

Recognize the danger.

Avoid the area.

Isolate the area and keep others away.

Notify authorities...Call 911.

Remember to stay **uphill**, **upwind**, and **upstream** from suspected hazardous materials.

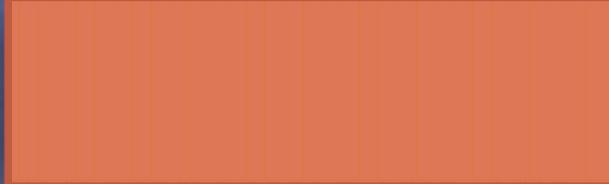
What is a safe distance?

There is no one answer to this question. Follow the "rule of thumb": look toward the incident, hold your thumb out in front of you at arm's length. If you can still see the incident (such as an overturned tanker truck) on either side of your thumb, then you are too close. Back away from the incident until your thumb covers the entire scene.

Smoke from fires includes small particles and gases that can have adverse health effects, particularly for sensitive individuals. Exercise caution and avoid unnecessary outdoor activities, prolonged exertion in smoke impacted areas.

The elderly are more susceptible to the effects of smoke and dust. Individuals with asthma should keep their "as needed" inhalers with them at all times.

Staying indoors can somewhat reduce exposure to smoke and dust, keep doors and windows closed and run the air conditioner. Indoor air filtration devices with HEPA filters can reduce the level of particles that circulate indoors.



TERRORISM

Devastating acts of terrorism have left many concerned about the possibility of future incidents in the United States and their potential impact. They have raised uncertainty about what might happen next, increasing stress levels. There are things you can do to prepare for the unexpected and reduce the stress should another emergency arise. Taking preparatory action can reassure you and your children that you can exert a measure of control even in the face of such events.

What You Can Do

Preparedness includes many of the same steps you will take to prepare for earthquakes, flooding, fires and other disasters.



CREATE

an emergency communications plan.



ESTABLISH

a meeting place.



ASSEMBLE

a disaster supplies kit.



What Could Happen

There can be significant numbers of casualties and/or damage to buildings and infrastructures.

Heavy law enforcement involvement at local, state and federal levels follows a terrorist attack due to the event's criminal nature.

Health and mental health resources in the affected communities may be strained to their limits, even overwhelmed.

Extensive media coverage, strong public fear and international implications and consequences can continue for a prolonged period.

Workplaces and schools may be closed, and there may be restrictions on domestic and international travel.

You and your family or household may have to evacuate an area, avoiding roads blocked for your safety.

Clean-up may take many months.

Additional Positive Steps You Can Take

Remember that young children watching televised reports do not realize that it is repeated video footage, and think the event is happening again and again. Adults may also need to give themselves a break from watching disturbing footage. You may want to make some arrangements to take turns listening to the news with other adult members of your household.

People who may have come into contact with a biological or chemical agent may need to go through a decontamination procedure and receive medical attention. Listen to the advice of local officials on the radio or television to determine what steps you will need to take to protect yourself and your family. As emergency services will likely be overwhelmed, only call 9-1-1 about life-threatening emergencies.

Listen to local authorities

If local authorities ask you to leave your home, they have a good reason to make this request, and you should heed the advice immediately. Listen to your radio or television and follow the instructions of local emergency officials and keep these simple tips in mind.

- Your local authorities will provide you with the most accurate information specific to an event in your area. Staying tuned to local radio and television, and following their instructions is your safest choice.
- If you are advised by local officials to "shelter in place"
- Remain inside your home or office and protect yourself there.
- Close and lock all windows and exterior doors.
- Turn off all fans, heating and air conditioning systems.
- Close the fireplace damper. Get your disaster supplies kit, and make sure the radio is working.
- Go to an interior room without windows that's above ground level.
- In the case of a chemical threat, an above-ground location is preferable because some chemicals are heavier than air, and may seep into basements even if the windows are closed.
- Using duct tape, seal all cracks around the door and any vents into the room.
- Keep listening to your radio or television until you are told all is safe or you are told to evacuate.
- Local officials may call for evacuation in specific areas at greatest risk in your community.