

P.E.E.P.



by LISTOS Sunnyvale, CA



SERV

**SUNNYVALE EMERGENCY
RESPONSE VOLUNTEERS**

SERV

SUNNYVALE EMERGENCY RESPONSE VOLUNTEERS

Disaster Preparedness



Spanish and English



Disaster Response



Housekeeping

- Sign In and Out
- Restroom
- Emergency exit
- Guidelines
 - Q&A
 - Cellphones
- In case of earthquake

Announcements

Please sign out before you leave

We will email the link to the slides and handouts

<https://SunnyvaleSERV.org/Listos-PEP>

2 hr duration

listos@sunnyvaleserv.org

What is LISTOS?

- LISTOS is the Spanish word for READY.
- Here you will learn information that will help you and your family be ready for any type of disaster or emergency.

Scene:

- It is 3:00 am
- You are sleeping
- There is a magnitude 6.7 earthquake
 - You wake up
 - The bed moves side to side
 - You hear glass breaking
 - It's dark
 - The lights won't come on

Would you be

READY...?

You have two options

- Evacuate  3 days
- Stay  14 days

You need to be prepared for both.

Rule of Threes

- 3 minutes without air
- 3 days without water
- 3 weeks without food

Basic necessities, Home preparedness

- Water

- Food
- Medication and hygiene
- Light
- Protection from the elements
- Utilities

Beyond home preparedness

- Fire Safety
- Communication and family meeting plan
- Dependents
- Emergency bags
- Transportation and evacuation

Priority 1: Water

You can improvise shelter



07/16/23

You can't improvise water



How much water do you need?

1 gallon of water

per person

per day

Minimum:

3 days if evacuating

14 days if you shelter at home



Don't forget the pets!

If you buy water

- Buy it before you need it
- Buy what works best for you





This boy is standing next to his 2 weeks of water.

Do it yourself

- Use food grade water containers
- Wash the inside of the container with dishwashing soap and water, then rinse
- Add 1 tsp of bleach to a quart of water, swish around inside the container, discard, and rinse with clean water



Do NOT reuse



- Juice Bottles: It is impossible to remove all the sugar from the plastic.
- Milk Bottles: It is impossible to remove all milk fats from plastic.



Do it yourself

Fill at a water dispenser or tap

Write the date on the container

Add household chlorine bleach

- Without additives:
 - NO scented bleach, NO color-safe bleach, NO splash-proof bleach
- Chlorine bleach expires
 - Use unexpired or bleach bought within 1 year to store water
 - Save the old bleach to wash clothes

Store for 6 months, then refill



Do it yourself with tap water

(If your tap water does not already have chlorine added)

Water	Regular (5% chlorine)	Concentrated (8% chlorine)
1 gallon	2 drops	2 drops
4 gallons	8 drops	6 drops
8 gallons	16 drops	12 drops



Keep out of direct sunlight

Do not store plastic water bottles in car

Keep plastic containers off cement



If your water is shut off

Where can you find more water?

- Melted ice cubes
- Water heater
- Plumbing pipes



If water is still running

Listen to local news reports for emergency information

- 1680 AM for Sunnyvale
- Boil Advisory



Where can you find more water?

Stream



Rainwater collection



You need to purify it

1. Filter out the sediment
 2. Boil for 1 minute OR use bleach
- (boiling is preferred)**

Purifying with bleach

Add * bleach:

- 12 drops per gallon
 - Stir, then wait 30 minutes
 - Check for the smell of chlorine
 - If no chlorine smell, add 12 more drops
 - Stir, then wait 30 minutes
 - Still no chlorine smell, throw it out!
- * Concentrated formula (8%)



Unsafe drinking water

- Swimming pools and hot tubs
- Seawater
 - (above 2 okay for hygiene)
- Treated toilet tank
- Floodwater (contaminated by sewers!)



Basic necessities, Home preparedness

- Water

- Food

- Medication and hygiene
- Light
- Protection from the elements
- Utilities

Food

Store what you eat,
eat what you store.

2 weeks worth is ideal
3 days minimum



Food

Types of food for long-term storage

Canned



Dry



Survival food



Food

- Don't store food that your family won't eat
- Store foods you know how to cook
- Avoid food allergies
- Accumulate over time
- Don't forget comfort food

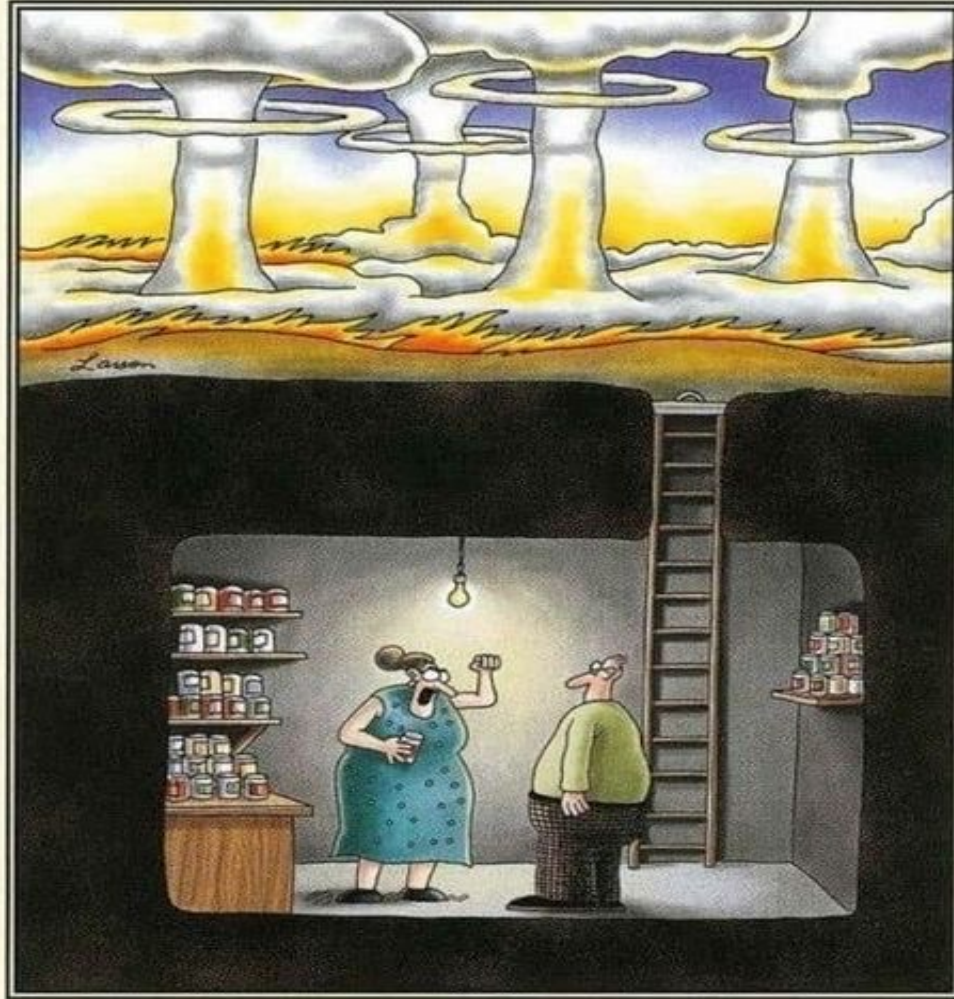


Food

Pets eat too!



12/16/86



“How many times did I say it, Harold? How many times? ‘Make sure that bomb shelter’s got a can opener—ain’t much good without a can opener,’ I said.”

Don't forget the can opener

Otherwise, you will need the first aid kit!



Refrigeration

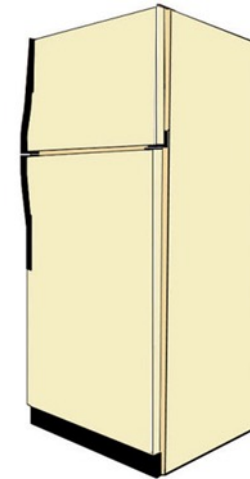
If the power goes out for MORE than 2 hours:

Refrigerator:

- Place perishables in a cooler with ice
- Or cook and eat right away

Freezer:

- Keep the door closed
- Half full: food will be safe for up to 24 hours
- Full: food will be safe for 48 hours



Refrigeration

If you don't know how much time has passed:

- Use a food thermometer
- Throw away any food that has a temperature over 40 degrees Fahrenheit
- Penny and ice test



Scene: Later that day

- The electricity is still off
- The gas is off
- Your family is hungry
- How will you cook?

Can you cook safely indoors or just outside?

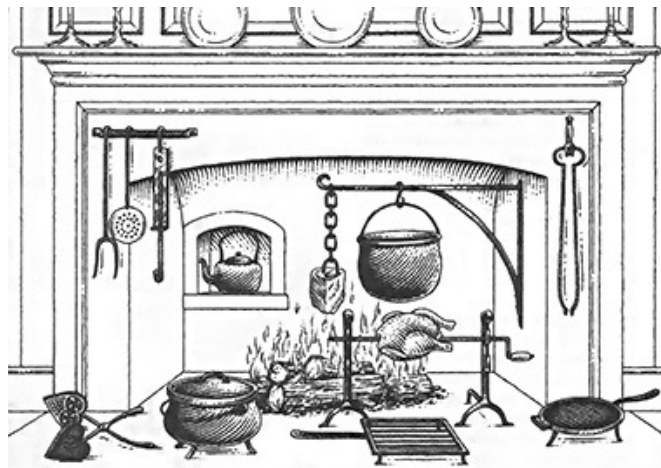
Indoors (make sure the room is ventilated!)



Warms but doesn't cook



Butane



Chimney must be checked by a professional first!

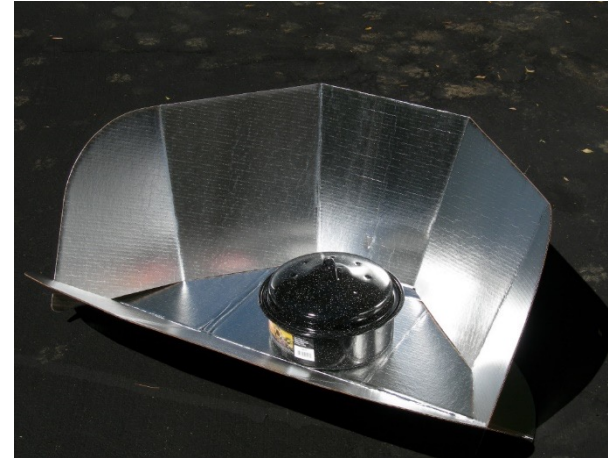
07/16/23



Woodstove only if chimney is not damaged



Outdoor cooking



Never use these indoors!
Carbon monoxide poisoning!

Basic necessities, home preparedness

- Water
- Food
- Medication and hygiene
- Light
- Protection from the elements
- Utilities

Medication

Have a list of what you regularly take

Have extra on hand

- Don't wait until the last minute to refill prescriptions!
- Talk to your doctor about prescription quantity

Storage and transport options

- Special storage (insulin)
- Do you have a way to keep things cold?



Medication

First aid supplies

OTC (over the counter) medications

Pedialyte or electrolyte drink

Oral rehydration solution

Wound care

Gloves (nitrile)

Masks, cloth or surgical



Oral Rehydration solution

Stress and disease can cause dehydration

Oral rehydration solution recipe:

6 tsp (2 TBSP) Sugar

½ tsp Salt

4 cups **water**

Mix the dry ingredients ahead of time

Store in baggie with directions

Keep with your first aid supplies



Hygiene

- Wash your hands
 - 20 seconds with soap and water
- Have a bathing solution
 - Solar shower
 - Baby wipes
 - Bucket
 - Privacy tent



Hygiene: **Water** conservation

- Hand sanitizer
- Baby wipes
- Disposable plates, cups, flatware
- Wash basins and dish soap
- Feminine hygiene



Bathroom considerations

- Use non-potable **water** to flush via gravity
- Don't forget about pets
- Bucket toilet
 - Plastic bag in a bucket and deodorizer



Basic necessities, Home preparedness

- Water
- Food
- Medication and hygiene
- Light
- Protection from the elements
- Utilities

Light

- Avoid hazards in the dark
- Find what you need
- Reduce stress and fear
- Signaling
- Morale
- Entertainment for the kids



Light options

Flashlights, headlamps and batteries

Glowsticks

- No spark, safe if there is a gas leak

Solar garden lights

Lanterns and candles

- Store fuel, matches, and lighters
- **SAFETY: carbon monoxide and fire!**



Basic necessities, Home preparedness

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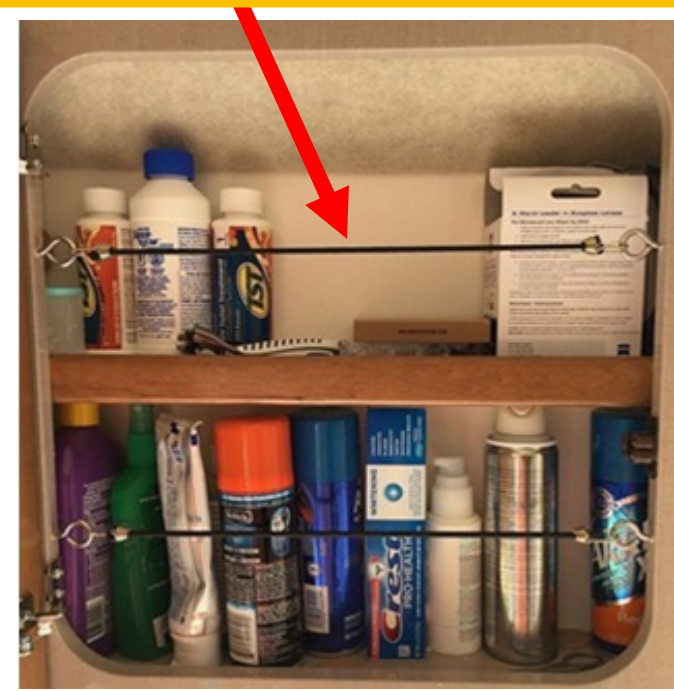
Protection from the elements: Secure your home



Secure Your Home:

Secure furniture:

- Tall furniture, such as bookcases
- Pictures and paintings
- Hot water heater
- Items on shelves
- TVs and monitors



07/16/23

Protection from the elements: During an earthquake



DROP!

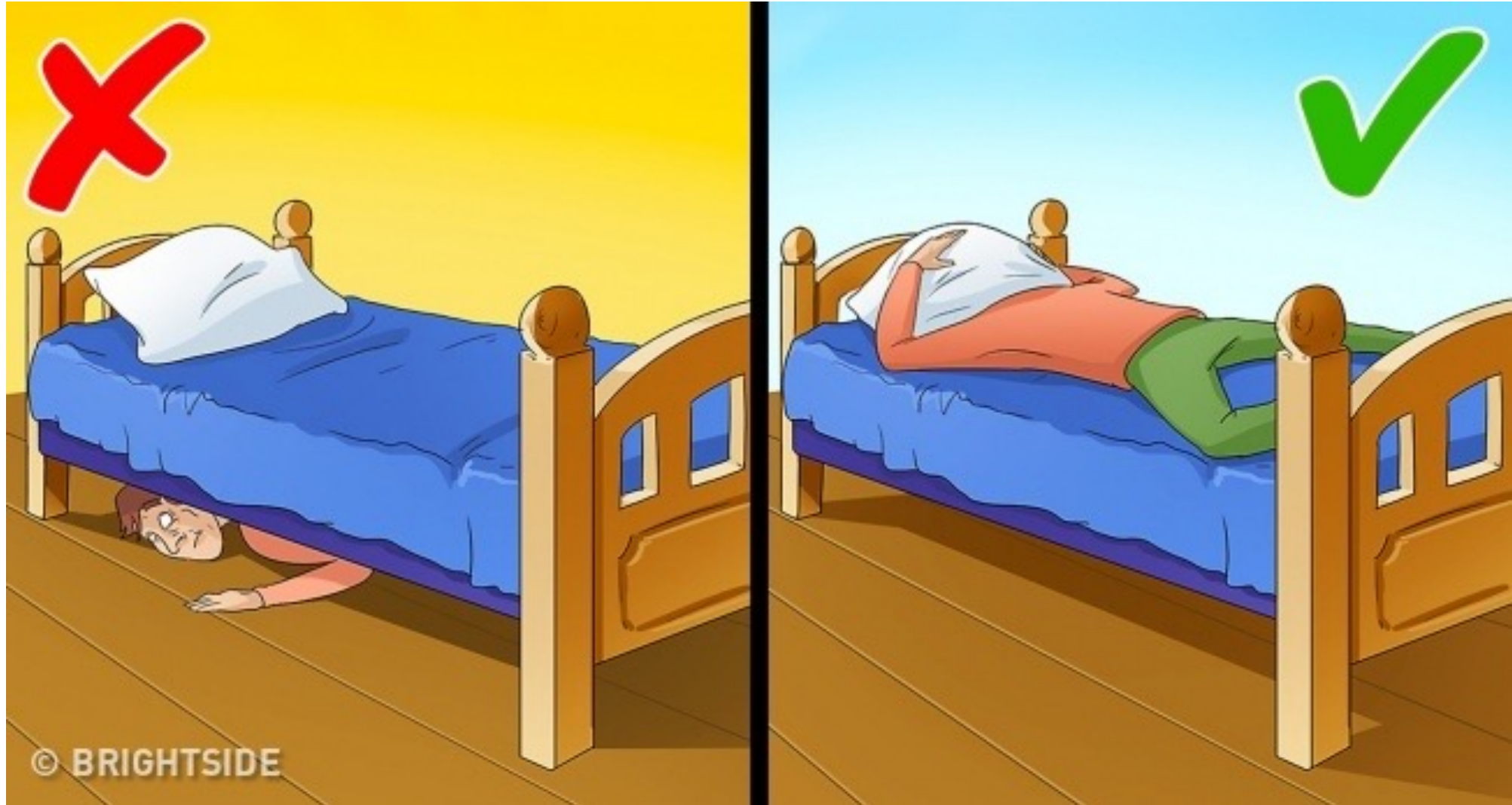


COVER!



HOLD ON!

In bed?



Protection from the elements: During an earthquake



NOAH BERGER/AP

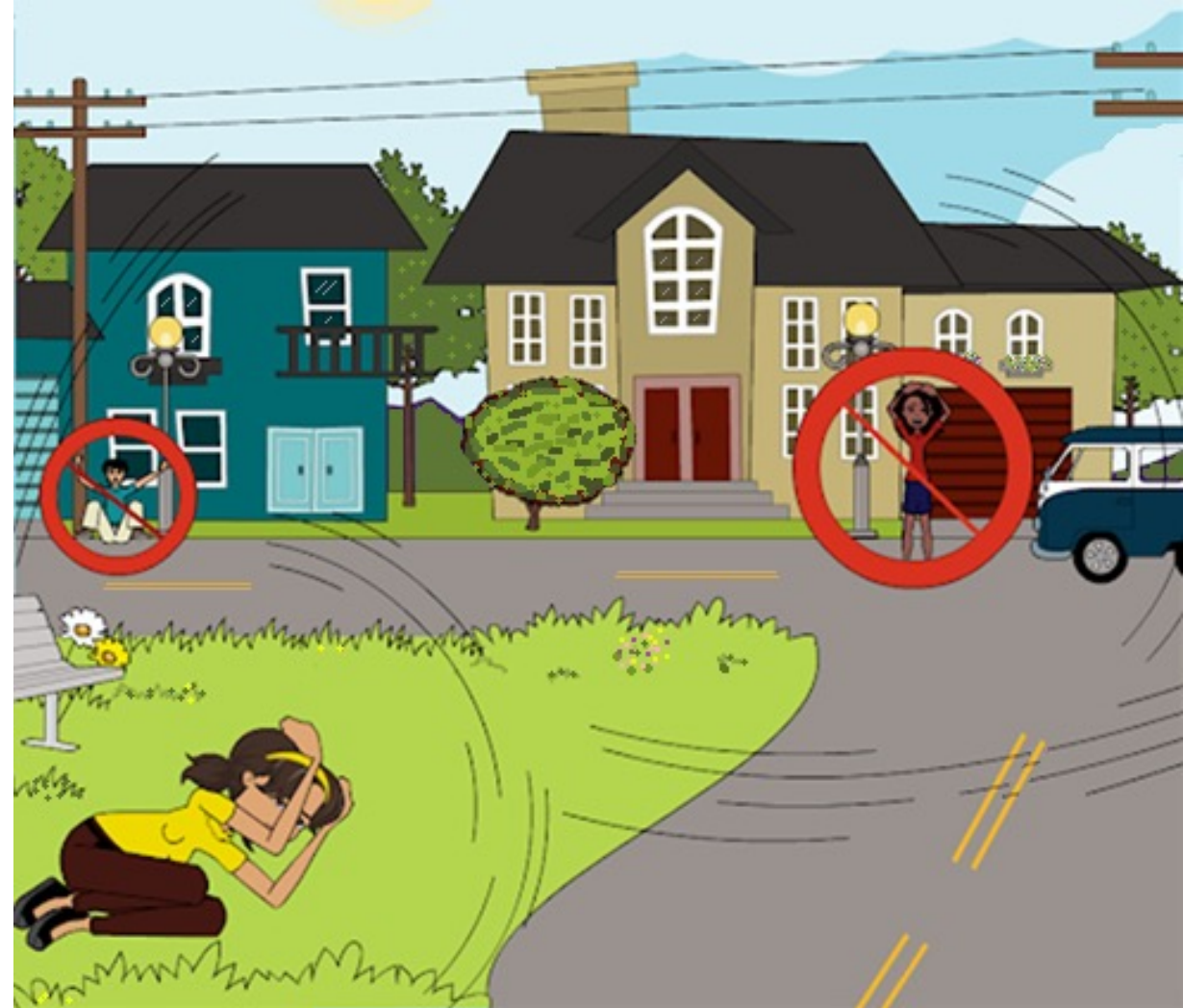
Outside or in a car

In a car

- Pull over and stop away from buildings, walls, power poles, trees, bridges, and power lines

Outside

- Drop to the ground and stay there until the shaking stops (away from everything above)



Protection from the elements:

Bedside bag

Basic

- Sturdy shoes
- Flashlight
- Whistle



Extra

- Hard hat
- Clothes
- Socks
- Work gloves



Protection from the elements: Shelter

- Stay with family or friends
- Money for a hotel
- Tents and sleeping bags
- Rope and a tarp



Basic necessities, Home preparedness

- Water
- Food
- Medication and hygiene
- Pandemics
- Light
- Protection from the elements
- Utilities

Utilities

Know why, when, where, and how to shut off:

- Gas
- Water
- Electricity

Powerlines

Properties of natural gas

- Lighter than air
- Mercaptan is added to natural gas to give it a distinctive odor.
 - It is noticeable at 0.4%
 - Smells like rotten eggs
- Explosive
 - Range is 5-15%
- It Kills
 - Displaces oxygen in a confined area



When to turn off the gas?

- Smell it
 - Rotten eggs, sulfur
- Hear it
 - Whistling or hissing
 - Roaring
- See It
 - Structural damage
 - Gas meter dials spinning faster than normal
 - You see dust blowing in one spot
 - Continuous bubbling in water outdoors
 - Dying plants (after a few days)



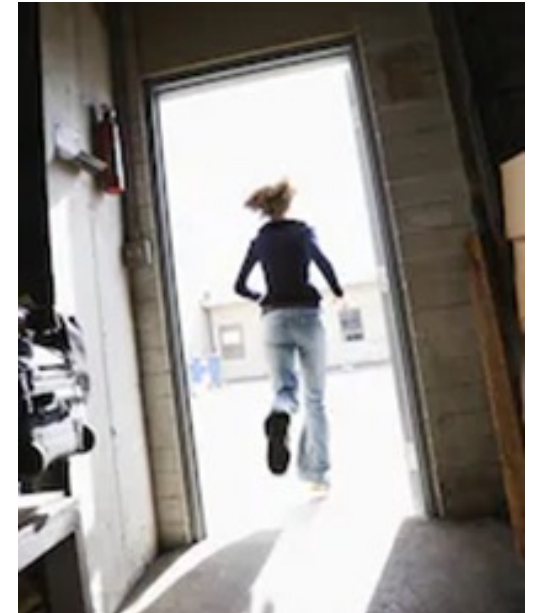
Gas leak inside

Get Out

- Leave the doors open when you leave
- Do not turn electricity on or off—can generate a spark!
- Shut off the gas at the meter

Can't shut off the gas?

- Evacuate immediately
- Call 911 from a safe place where you don't smell gas
- Gas accumulation can lead to a fire or explosion



Where is your gas meter?
Locate and label the shutoff valve.

Side of the house?



In a room?



To shut off the gas:

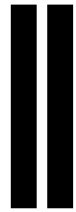
- Use an adjustable wrench – no longer than 12 inches
- Keep it close to the gas meter



It's...

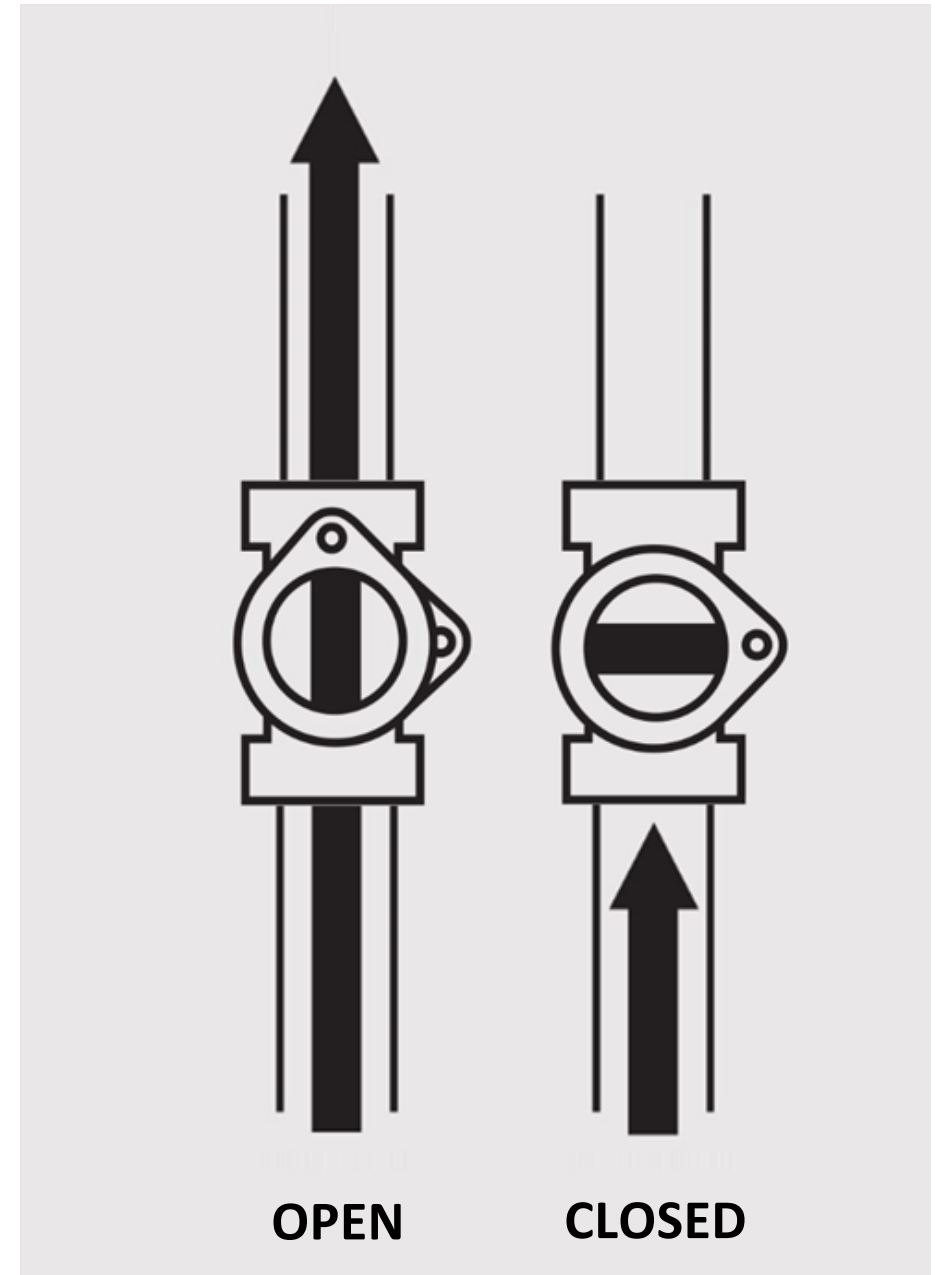
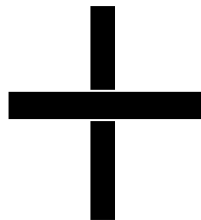
OPEN

When the valve is parallel with the pipe



CLOSED

When the valve is perpendicular to the pipe
(crosses the pipe)



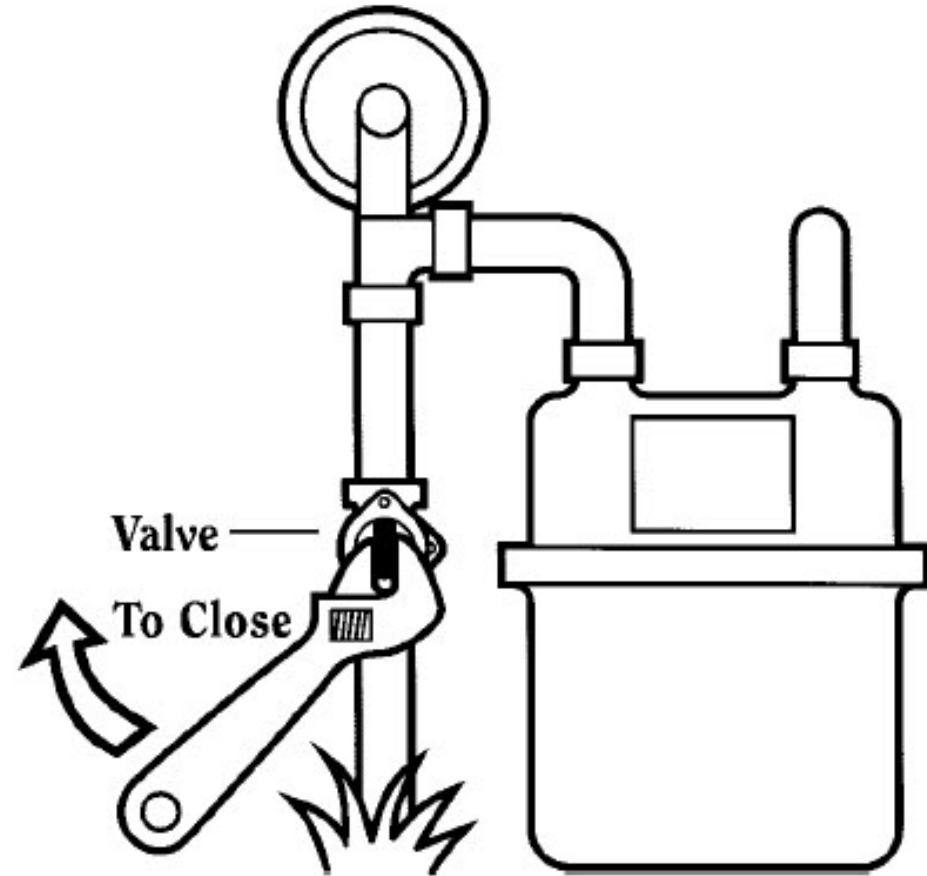
How to shut off the gas

To CLOSE

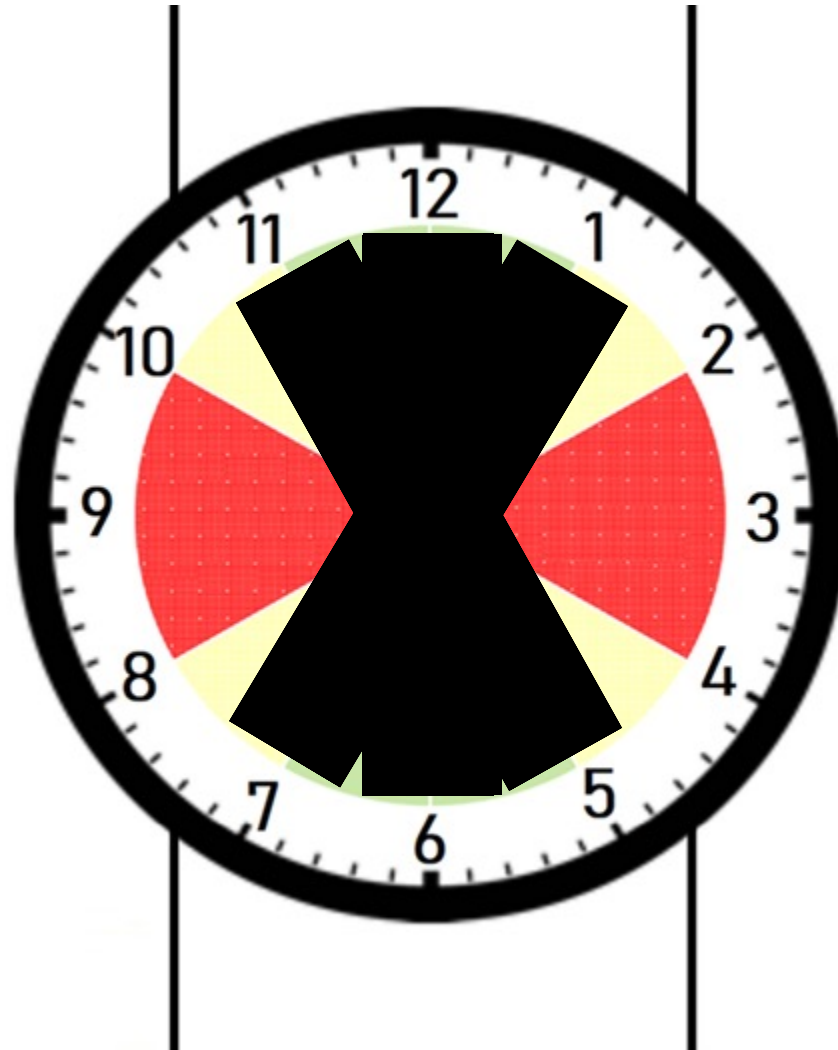
- Turn the valve a quarter (1/4) turn in either direction

To OPEN

- **DO NOT** turn on the gas yourself!
- **Service must be turned on by a qualified utility professional!**



To test the valve:
Move the valve between 11 and 1



When to shut off the water?

- **Significant earthquake**
- Structural damage
- Flood
- Plumbing emergency
 - Water leaks
- Renovations
- Vacation

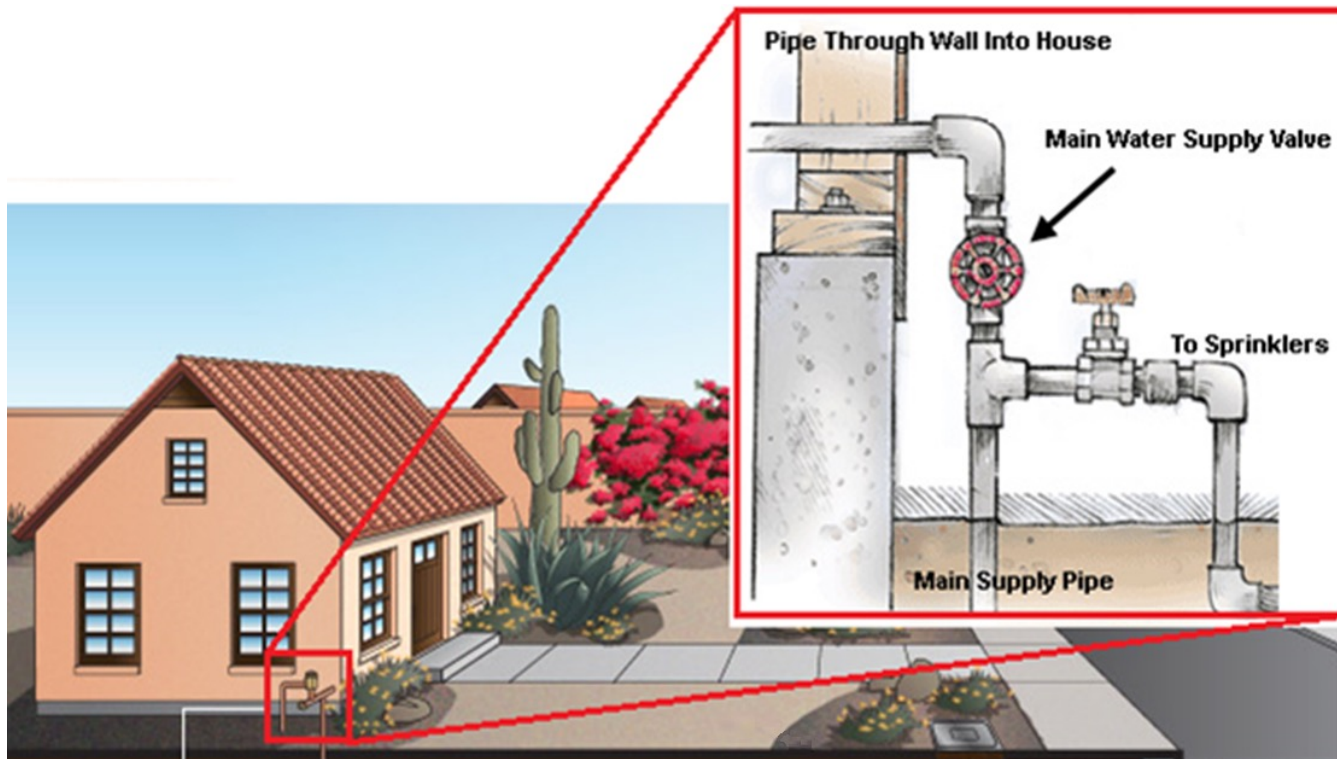


Napa, 6.0 Earthquake

07/16/23



Where to shut off the water? Locate and label shutoff valve.



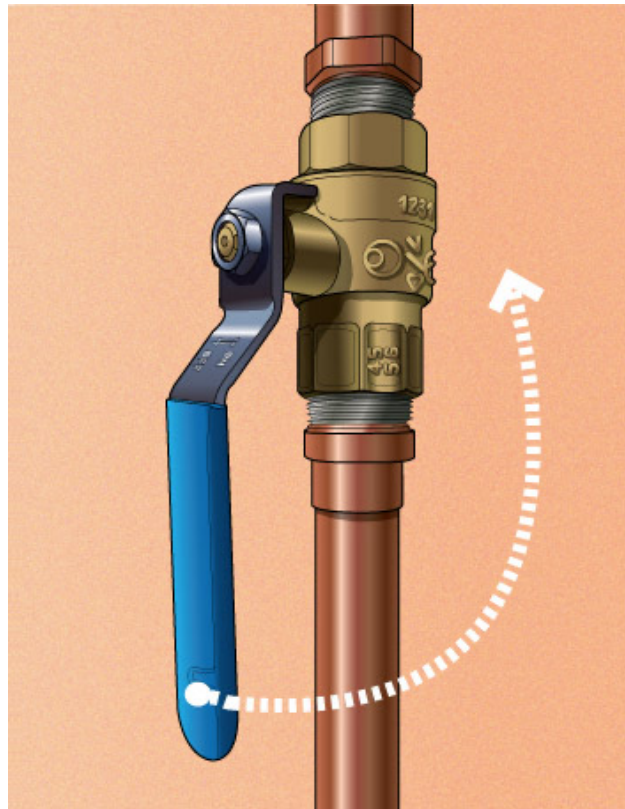
At the house (water main)



Not the street (water meter)

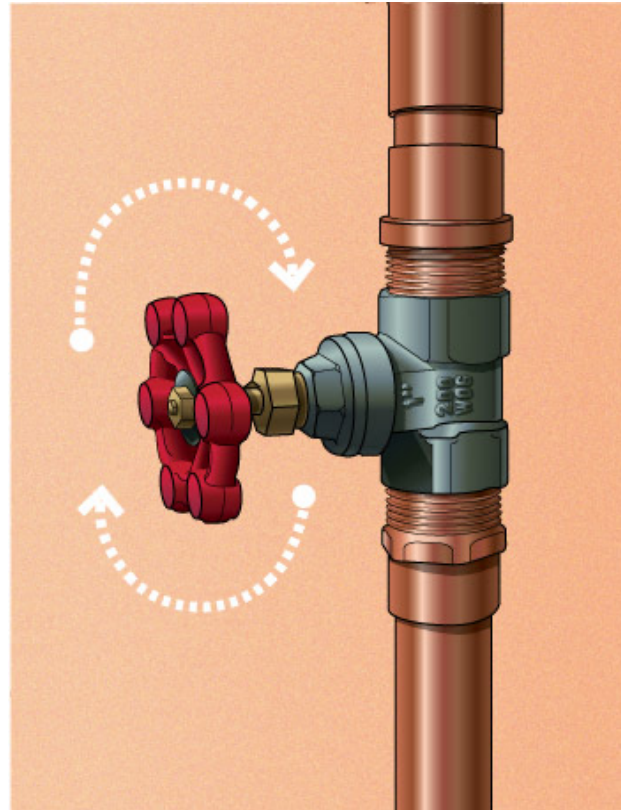
How to shut off the water to the building

Ball valve



1/4 turn to shut off

Gate valve



Clockwise to shut off

Label the water main



Before a blackout: be prepared!

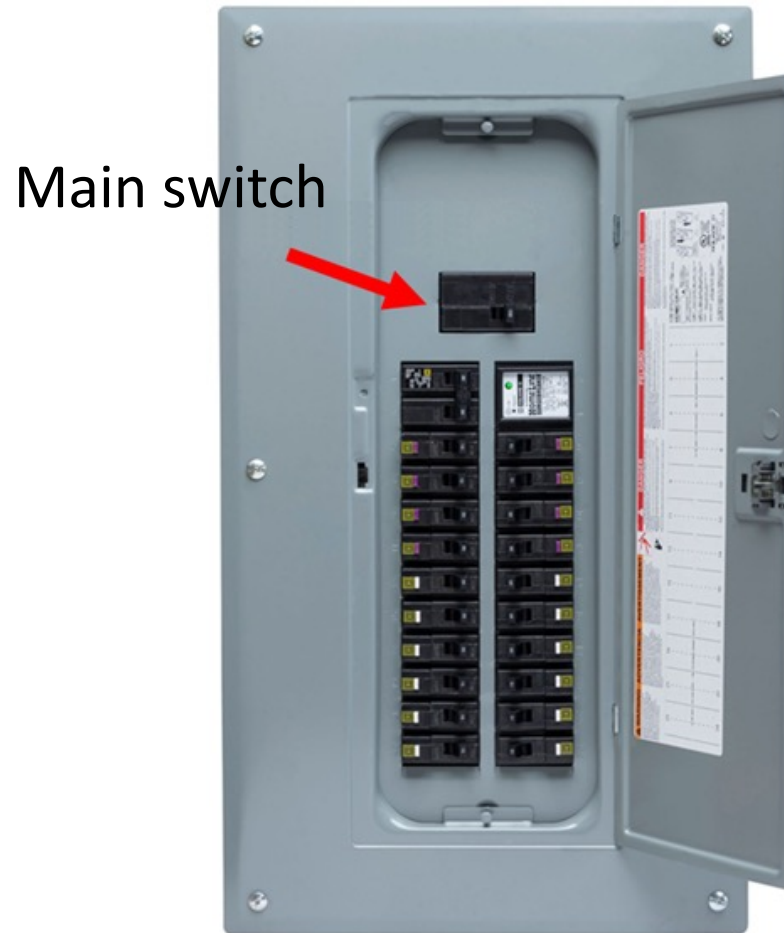
- Make sure you have an emergency supply kit
 - Flashlights and batteries
 - Radio and batteries or crank radio
 - Have charged battery banks, hand crank charger / solar
 - Have a car charger for your cell phone
- If you have a generator, make sure it's ready to operate safely.
- Determine that your landline phone will work during a power outage
- Learn how to manually open your garage or other electronic doors

When to turn off the electricity?

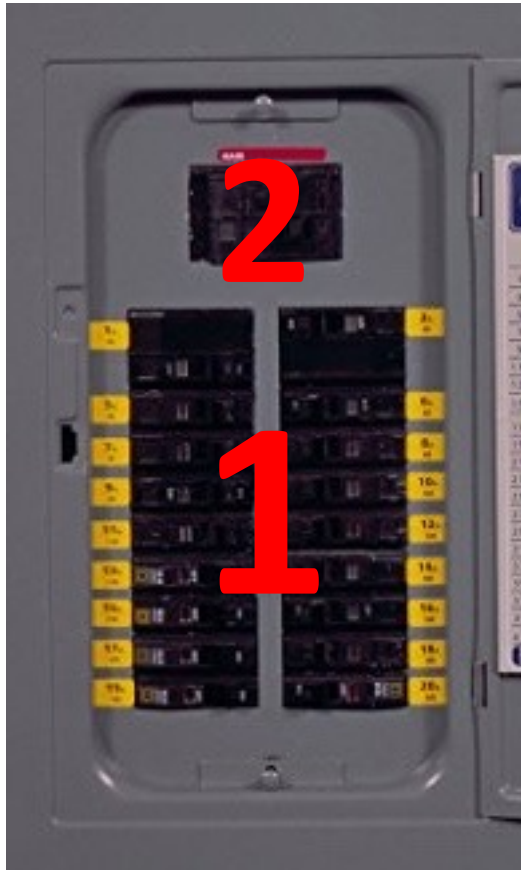
- Structural damage
- Power outage
- Probable gas leaks in the neighborhood



Where is your electrical service panel located?



How to turn electricity On and Off



OFF

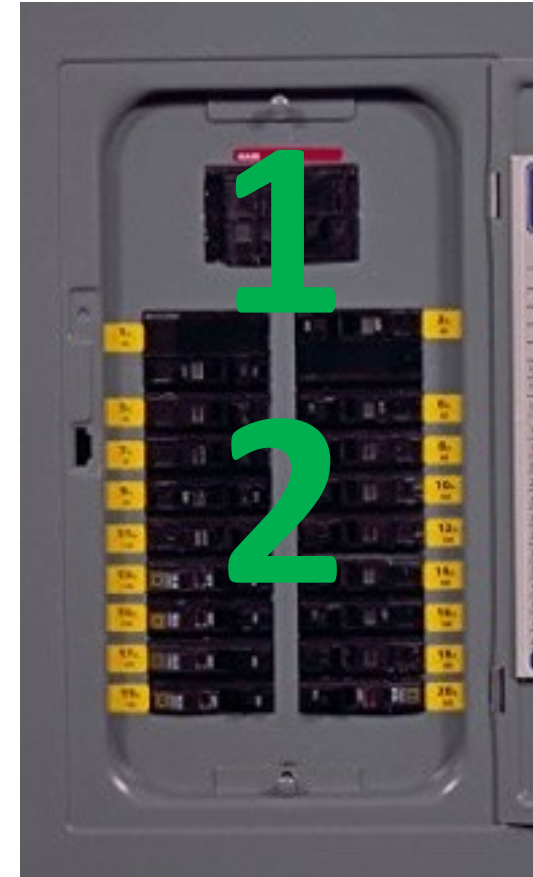
OFF

- 1) Turn off each Individual switch first
- 2) Turn off the Main switch

ON

First, verify that all individual switches are off

- 1) Turn on the main switch first
- 2) Turn on each individual switch



ON

WARNING!

- Never touch the box with wet hands
- Never touch the box while standing on a wet floor
- Never remove the cover
- Do not touch the connections or plugs

Downed Powerlines

- If it's down it's a danger, call 911
- Stay away and do not touch it
- Assume all downed power lines are active!
 - The responsibility of public services is to maintain the flow of energy!
- Keep others away!



Powerlines

- Sunnyvale Distribution Lines are 12,000 volts
- Lines are weather-proofed, not insulated

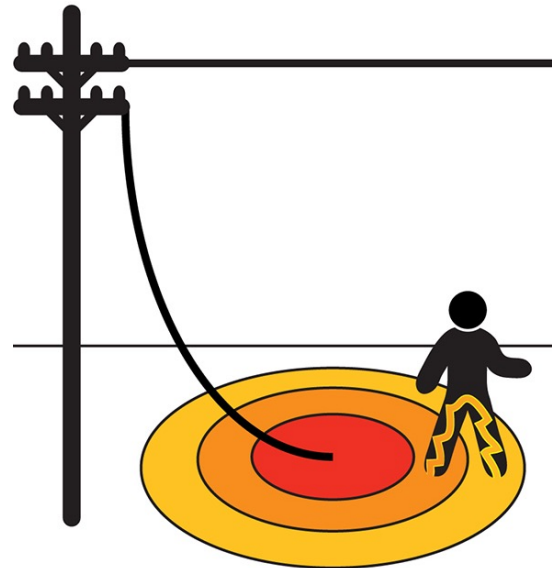
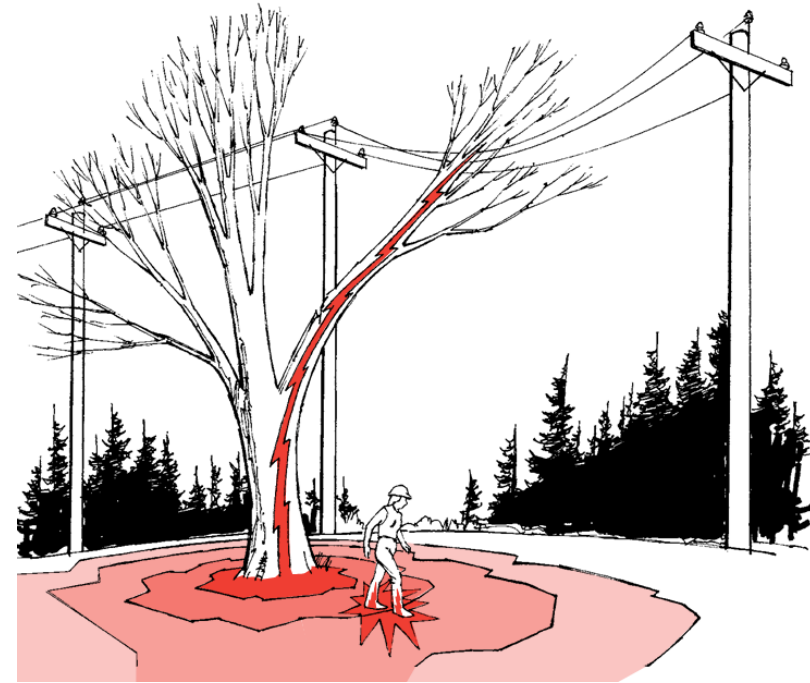
Stay a minimum of 100 feet
from transmission lines

Stay a minimum of 60 feet
from distribution lines



Powerlines

- The power line can be reenergized without notice or warning
- The power line can energize:
 - Trees
 - Fences
 - Cars
 - Smoke
 - Ground-> Step Potential



DO NOT USE:
Broom
Wood 2X4
Tree branches
Rope

All of these can conduct
electricity

Power line over your vehicle

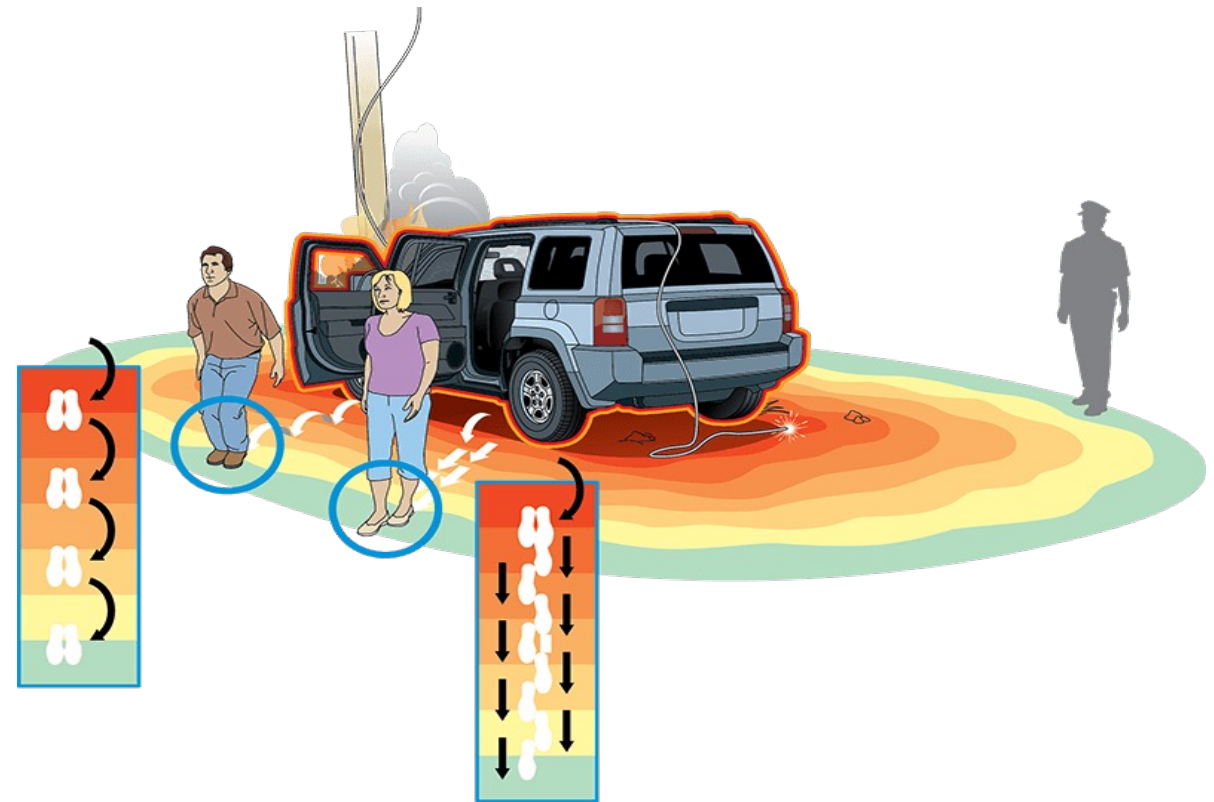
Stay inside your vehicle!

- The car is energized, but the tires act as insulators
- Sit still with your hands inside the car
- Call 911
- Warn people to stay away and don't let anyone touch the car or the line
- Follow first responders' instructions



If your vehicle is in danger of catching fire

- **Do not touch the vehicle and the ground at the same time**
- Open the door
- Stand on the door frame
- Jump and land on your feet with your feet together
- Hop away with your feet together or shuffle without lifting your feet



We've covered:

- Water
- Food
- Medication and hygiene
- Light
- Protection from the elements
- Utilities

**Any
Questions???**

Beyond home preparedness

- Fire Safety

- Communication and family meeting plan
- Dependents
- Emergency bags
- Transportation and evacuation

Fire Safety

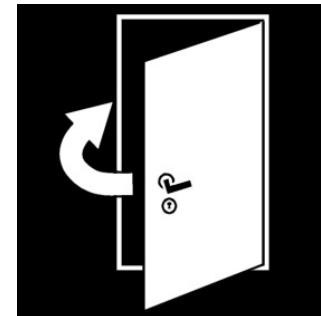
Safety First

- Sound the alarm
- Call 9-1-1



Small Fire – Not Spreading

- Keep a clear exit behind you
- Use the fire extinguisher
- Leave if you
 - Become dizzy
 - Have difficulty breathing
 - Or fire does not go out
- Close the door behind you



Using a Fire Extinguisher

Remember **PASS**

- **P**ull pin
- **A**im
- **S**queeze
- **S**weep





Stove Top Fire

- Slide cover over pan
- Smother with Baking Soda

Use a lid or baking soda to smother a pan fire!



Smoke and Carbon Monoxide Kill

Have working smoke and CO detectors

- They alert you to danger

There are also natural gas/propane leak detectors



Beyond home preparedness

- Fire Safety
- Communication and family meeting plan
- Dependents
- Emergency bags
- Transportation and evacuation

Communication

Whistle

Cell phones

- Text messages
- email

Telephone

- Landlines

Amateur radio

Walkie-talkies

Radio

- Battery/ Hand crank / solar
- Sunnyvale: 1680am
- Regional: 580am, 740am



Online resources

- **AlertSCC** - www.sccgov.org/sites/alertscc

- Sends local alerts via text/ phone/ email

alertthebay.org calalerts.org

- **Nixle** - www.nixle.com

- Text your zip code to 888777 to receive alerts or signup online

- **American Red Cross** - findhelp.org

- Connect with missing family and friends

- **MyShake** - <https://myshake.berkeley.edu/>

- App: Earthquake early warning notifications



Emergency Contact Form

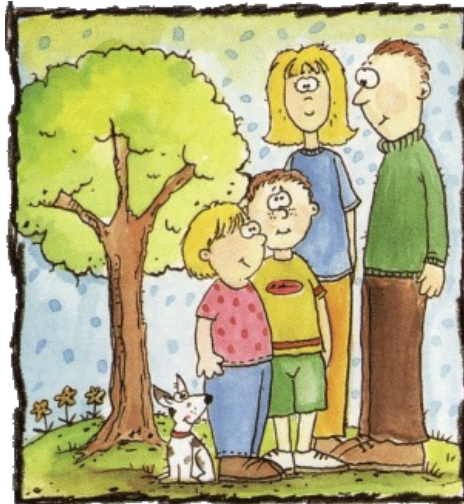
<p style="text-align: center;">Emergency Contact Numbers</p> <p>Local: _____</p> <p>Out of state: _____</p> <p>Other: _____</p> <p style="text-align: center;"><i>Last updated:</i></p>	<p style="text-align: center;">Evacuation Site: Outside</p> <p>Home: _____</p> <p>Block: _____</p> <p>City: _____</p> <p style="text-align: center;"><i>Tune in to Radio 1680am for emergency info</i></p>
<p style="text-align: center;">Emergency Contact Numbers</p> <p>Local: _____</p> <p>Out of state: _____</p> <p>Other: _____</p> <p style="text-align: center;"><i>Last updated:</i></p>	<p style="text-align: center;">Evacuation Site: Outside</p> <p>Home: _____</p> <p>Block: _____</p> <p>City: _____</p> <p style="text-align: center;"><i>Tune in to Radio 1680am for emergency info</i></p>

Family meeting plan

Make a plan

Decide where everyone will meet

- Three levels
 - Outside your home
 - On your block
 - In your city



Beyond home preparedness

- Fire Safety
- Communication and family meeting plan
- Dependents
- Emergency bags
- Transportation and evacuation

Children

- Include your children's irreplaceable items in your list
 - Include a toy for them in the emergency bag
- Have a diaper bag ready for babies
- At school:
 - You will need identification to remove your child from school
 - Only those who are authorized can take them

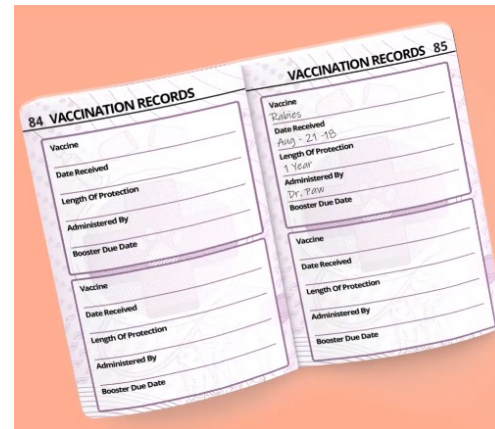
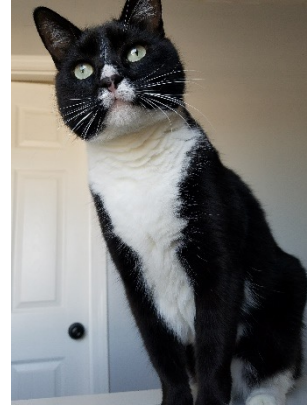


Elderly and other adults

- Have a list of medications available
- Make sure they have a way to ask for help
- Make a plan for any special accommodation they might need
- Include things they need (like adult diapers) in the emergency bag

Pets

- Have food, water, medication
- Have pet immunization record
 - Most shelters do not allow pets
 - Can they stay with friends or family?
- Have a pet carrier and a leash

Two vaccination record forms are shown. The left form is labeled '84 VACCINATION RECORDS' and has two sections, each with fields for 'Vaccine', 'Date Received', 'Length Of Protection', 'Administered By', and 'Booster Due Date'. The right form is labeled 'VACCINATION RECORDS 85' and has a similar layout. The right form has handwritten entries: 'Rabies' for the vaccine, 'Aug - 21 - 18' for the date received, '1 Year' for the length of protection, and 'Dr. Paul' for the person who administered the vaccine.

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Beyond home preparedness

- Fire Safety
- Communication and family meeting plan
- Dependents
- Emergency bags
- Transportation and evacuation

There are many types of bags...

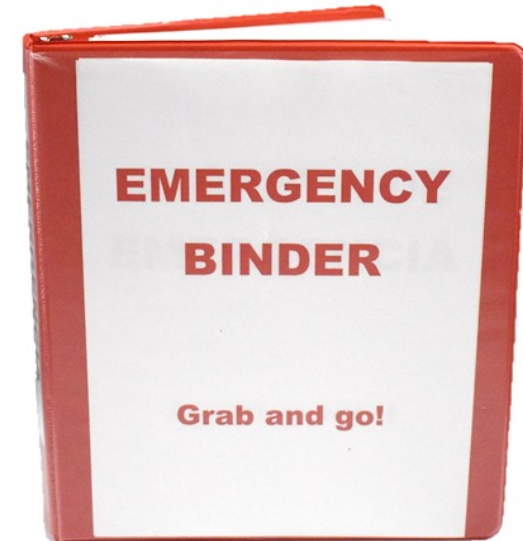
- Emergency binder
- Emergency backpack
- Bedside bag
- First aid kit
- Emergency bag for car
- Emergency bag for work



Emergency Binder

Copies of:

- Birth certificates
- Passports
- Immigration documents
- Driver's license
- Social security cards
- Medical records
- Automobile title
- Car, life, homeowner's or renter's insurance
- Apartment lease
- List of phone numbers



Emergency Backpack

- Emergency Binder (important documents)
- Medications
- Irreplaceable items
 - External hard drives
 - Pictures
- Phone charger
- Eyeglasses
- Money
 - Quarters
 - Small bills of \$1 and \$5
 - Credit Cards



Beyond home preparedness

- Fire Safety
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Evacuation Plan

Have a list ready of what you would take if you have a warning of:

- 1 minute
- 10 minutes
- 1 hour

Put the list next to the door

Evacuate when it's first advised



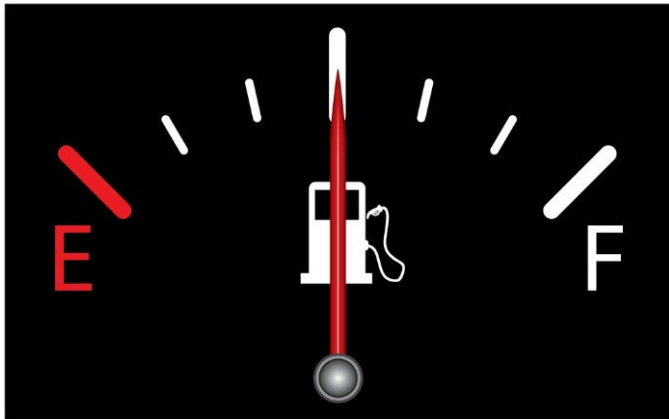
Transportation Plan

Are you running on gas fumes?

- Fill your tank when it is half empty

Don't wait until after an incident

- If there is no electricity, you cannot get gas
- There will be long lines
- It can be dangerous



Transportation Plan

- Are the roads passable? Bridges intact?
- Do you know alternate routes?
 - Download GPS maps ahead of time
 - Paper maps
 - Compass
- Public transportation
 - It won't be available for hours or days after the disaster



Transportation Plan:

What happens if you can't drive or take public transportation?

Walk

- Have comfortable shoes
- Find shortcuts to your destination

Wheelchair

- Have a manual wheelchair

Bikes

- Are a great backup plan
- Keep them in good condition
- Learn how to fix them yourself



Practice with your family

At least once a year including children / grandchildren

- Meeting plan
- Communication plan
- Evacuation plan

Summary

Before

- Secure your home
- Have supplies and kits ready
- Have a family communication and meeting plan

During

- Drop, cover, and hold

After

- Check the gas and electricity
- Shut off the water
- Listen to the radio for information
- Evacuate if necessary

SERV

SUNNYVALE EMERGENCY RESPONSE VOLUNTEERS

Disaster Preparedness



Spanish and English



Disaster Response



Thank you for attending PEP
by

