



Food and Water Activity Guide

In a long emergency or major disaster, food and water could become limited. The activities here will help keep your household fed, safe, and comfortable. You'll have water for drinking and hygiene, and meals that are not only life-sustaining but also good tasting. Choose the activities that work for you, your group or your household.

5-Minute Activities

1. Fill Empty Freezer Space With Water Bottles.



Free/
Low-cost



Easy

Every time you open your freezer, cold air in empty spaces rushes out. Bottles of frozen water in your freezer will:

- keep frozen food cold longer in a power outage
- give you extra drinking water in an emergency
- make your freezer more efficient *all the time!*

TO DO NOW:

- Fill up some sturdy water bottles with water (leave space at the top for the water to expand)
- Fill any large open spaces in your freezer
- Don't overfill the freezer – leave enough space for air to circulate



2. Practice Turning Off Your Water Supply.



Free/
Low-cost



Easy

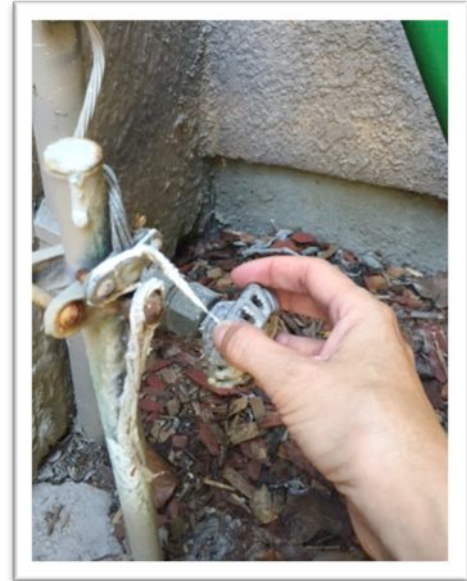
Earthquakes can break water pipes in the streets, which could cause the water coming into your home to be dirty and dangerous. To protect the water within your home from being contaminated, you need to know how to turn off the water coming into your home.

It's also important to know how to turn off your water supply in case an earthquake causes a pipe in your home to break and leak.

TO DO NOW:



- Find the water shut-off for your home. It's often where a water pipe enters the building. It may be close to an outdoor faucet or hose, or at your water meter.
- For help finding your water shut-off, watch this video from EBMUD:
<https://www.youtube.com/watch?v=C3I0amTJ6hs>
- Turn off the water supply by turning the shut-off clockwise until it won't turn anymore. Do not shut off the water if you live in a multi-unit building.



Now you know how to shut off your water! You'll do this in a disaster to separate your home from the water supply if there are any concerns about contamination.

3. How Much Emergency Water Does Your Household Need?



Free/
Low-cost



Easy

Store **one gallon per person per day for a minimum of 3 days, and a recommended 14 days**. That's for both drinking and sanitation. Nursing mothers and people who are elderly and/or ill may need more water.

Number of people in household	Minimum Water To Store (3 days)	Recommended (14 days)
3	9 gallons	42 gallons
4	12 gallons	56 gallons
5, one is nursing or elderly	15 + 3 extra gallons	70 + 14 extra gallons

Dogs & cats need three ounces of water per pound per day. If they eat only dry food they need more.



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Pet	Minimum Water to Store (3 days)	Recommended (14 days)
10 pound cat/dog	3 quarts	3 ½ gallons
20 pound cat/dog	1 ½ gallons	7 gallons
30 pound dog	2 gallons	10 ½ gallons

Add another 2 gallons of water for every 5 pounds your pets weigh over 30 pounds. That will give them enough water for 2 weeks.

TO DO NOW:

- Plan how much water your household needs for an emergency.
- Where will you store it?

Many Berkeley residents purchase 7 gallon, 30 gallon or 55 gallon barrels to store water. You can use clean, sturdy plastic bottles such as soda bottles. Juice and milk bottles are not recommended. For more information, read the Water Storage Guide at <http://cityofberkeley.info/prepare/activity-guides/> or visit <http://www.ready.gov/water>.

4. Add Up Sources of Safe Water in Your Home.



Free/
Low-cost



Easy

You may already have more emergency water than you realize! Check for lesser-known water sources in your home.

TO DO NOW:

- Fill in the amount of drinking water available to you in an emergency from the following sources.

Water Source	Gallons (fill in)
Ice in the freezer (get it before it melts because some iceboxes are not waterproof)	
Water from canned fruit or vegetables	
Rain water collected from downspouts (must be disinfected to drink; see activity #5)	
Water in your hot water heater tank	



Emergency water you have stored	
Water drained from pipes (see activity #8)	
Other sources	
TOTAL EMERGENCY WATER AVAILABLE	

Water from additional sources, such as a hot tub, nearby stream, or your toilet tank (not the bowl!) can be used for washing and cleaning purposes.

- Does the total add up to as much water as you calculated in Activity #3?

30-Minute Activities

5. Practice Disinfecting Water With Bleach.



Kid-Friendly



Free/Low-cost

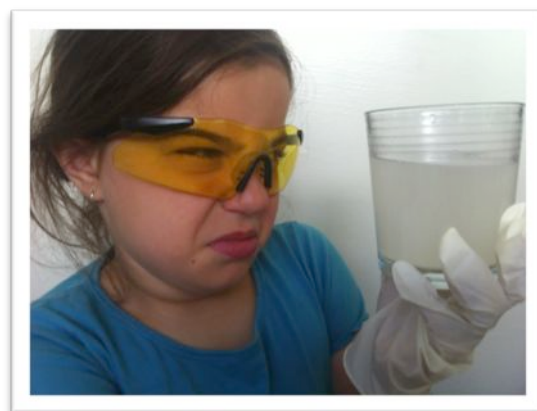


Easy

If you have any doubts about the quality of your emergency water (even if it is coming out of the tap), purify it before drinking.

You can heat water to a rolling boil for 1 minute or use commercial purification tablets (available at camping supply stores) to purify the water. You can also use household liquid chlorine bleach.

By practicing now, you can be confident that you will know how to purify your water in a real emergency.





TO DO NOW:

1. Fill a 1-gallon bottle or jug with water.
2. Choose a bleach to use. Use only **standard, household, unscented liquid chlorine bleach**. Do not use bleach labeled color-safe, scented, or splashless; bleach tablets; pool tablets; or non-chlorine bleach.
3. Look at your bleach container and try to find the percent of Sodium Hypochlorite.
4. Look at the chart to find how many drops of bleach you should add to each gallon of water:



Concentration: Percent of Sodium Hypochlorite	Drops of bleach per gallon (if water is clear)	Drops of bleach per gallon (if water is cloudy)
1%	40 drops	80 drops (1 teaspoon)
4% - 6%	8 drops	16 drops (1/4 teaspoon)
Most common → 7% - 10%	4 drops	8 drops

5. With an eyedropper, add drops of chlorine bleach to the gallon of water.
 - Put the number of drops into the water from the chart above.
 - Mark the eyedropper for bleach only or throw it away after use.
6. Stir or shake the water well.
7. Wait 30 minutes for the bleach to kill any organisms in the water that might make you sick.
8. Pour the water into a glass, canteen, or water bottle and drink! A slight chlorine taste or smell is normal. A pinch of salt may improve the taste.



6. Practice Getting Water from Your Hot Water Heater.



A hot water heater with a tank can provide between 30 and 60 gallons of drinkable water after a disaster. You will need to turn off the incoming water supply to the heater when disaster strikes, so that contaminated water cannot enter it.

TO DO NOW:



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Go through these steps to build “muscle memory” of how to get water from your water heater if you need drinkable water in an emergency:

1. If your water heater is electric, turn off the electricity to the water heater. If you have a gas-powered water heater, **do not turn off the gas** for this exercise, just note where the gas supply it is located and how to turn it off.
2. Preserve the purity of the water in the tank by closing the water supply valve to the tank. This will prevent any contaminated water from entering the tank.
3. Turn on the hot water from any tap in the house. (Be sure to collect and use this water so it is not wasted in the drought!)
4. Find the valve at the bottom of the hot water heater tank for draining. This will look like a faucet and it may have threads on it that can be threaded to a garden hose.
5. Open the drain valve and collect the water in a clean container. You may need a wrench to turn on the drain valve.
6. Filter any sediment that has collected in your water. You can run the water through a fine cloth, clean T-shirt or paper coffee filter.



Here is an illustrated link on how to get emergency drinking water from your hot water heater: <http://www.wikihow.com/Get-Emergency-Drinking-Water-from-a-Water-Heater>.



7. Cook a Disaster Recipe Meal.



Free/
Low-cost



Kid-
Friendly



Easy

Try out some disaster recipes ahead of time to see what will work for you and your family!

TO DO NOW:

Select a recipe from The Emergency Kit Cook-off website at <http://www.emergencykitcookoff.org/>.

In the Emergency Kit Cook-off website, you can find recipes that are easy, affordable, good for you, kid friendly and culturally diverse. They taste good too! If you find your family enjoying some of these meals more than others, you can stock up those ingredients rather than relying on boring alternatives or whatever is left on grocery store shelves.

8. Practice Draining Water from Your Pipes.



Free/
Low-cost

Many Berkeley homes will have 1-2 gallons of water in the pipes that can be used as an emergency supply – more in a large or multi-story home. Try draining your pipes now, to understand how much water this will supply to you in an emergency.

TO DO NOW:

As you practice any of these activities, be sure to save the water you collect so that it is not wasted in the drought. If now is not a good time to use the water you collect, skip this activity until a better time.

1. Turn off the water supply to your home.
2. One by one, turn on the taps in your house and collect whatever water comes out. Start at the highest point in your home, and work your way down. Leave the taps open after they are empty.
3. Open the tap at the lowest point in your house and let it drain completely. Don't forget to use the water you've collected so it is not wasted!

2-Hour Activities

9. Inventory Your Cupboards.



Free/
Low-cost

Following a disaster, there may be power outages that could last for several days. Food trucks may not deliver to stores due to road conditions and stores may run out of stock. All homes should store a supply of non-perishable foods that do not require refrigeration,



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cooking, water or special preparation. Be sure to include a manual can opener, utensils, and paper plates.

The following items are good emergency food choices. You may already have many of these on hand:

- Ready-to-eat canned meats, fruits, vegetables and a can opener
- Protein or fruit bars
- Dry cereal or granola
- Peanut butter
- Dried fruit
- Nuts
- Crackers
- Canned juices
- Non-perishable pasteurized milk
- High energy foods
- Vitamins
- Food for infants
- Comfort foods and drinks

TO DO NOW:

Look through your canned and other nonperishable food items, checking expiration dates as you go. With the above list in mind, ask yourself some questions:

- Do you have meals for your entire household for 72 hours? Begin a needs list that you can bring with you when you go shopping.
- You may find there are some complete meals you could make if you had a missing item. Buy those items first.
- Consider any special dietary needs or preferences you or your family may have. Your family will be happier and more comfortable if the disaster kit contains familiar foods that they like.

Learn more about emergency food at <http://www.ready.gov/food>.

10. Create Your Own Disaster Recipe.



Free/
Low-cost



Kid-
Friendly

Everything from Pho Soup to S'mores can be created from non-perishable food items, and your family will be much happier eating recipes you've tried out and proven to be winners. Take time now to create your own recipe that is tailored to your family's specific dietary needs and preferences.

TO DO NOW:



It's fun to work on recipes with kids!

- Develop a recipe using only non-perishable foods, like canned fruit or instant Ramen noodles.
- Test it out on your household to be sure they'll actually want to eat it. Consider all meals: breakfast, lunch, dinner, and comfort food.
- Once you're happy with the recipe, submit it to: <http://www.emergencykitcookoff.org/>. If your recipe is accepted, you'll receive a free apron (while supplies last).

11. Talk With Your Neighbors About Sharing Food Supplies and Costs.



Neighborhood
Group Activity

Neighborhood groups can improve community preparedness by sharing costs. Here are a few ideas:

- Purchase and set up several 55-gallon food-grade water tanks in different areas of the neighborhood fixed with a pump which will further filter the water. Use rain/cistern water when possible to fill up the tanks.
- Purchase containers in bulk. Big box stores sell plastic storage boxes or large plastic garbage bins at reasonable prices. Get some with some tight-fitting lids to store non-perishables outdoors in a safe, shaded location if possible, as you may not be able to enter your home after an earthquake. Lock your bins shut, or use bungee cords to hold them closed and discourage raccoons from enjoying the fruits of your labor.
- Buy nonperishable foods and other necessary items as a group for bulk discounts and share resources when possible; one neighbor to buy a propane grill; one, a generator to run a community refrigerator; one to stockpile fuel to cook food and boil water...you get the idea!

TO DO NOW:

Meet as a neighborhood to discuss possible ways to pool resources and share costs for emergency food and water supplies.

12. Consider Growing a Backup Food Supply.



Neighborhood
Group Activity

Berkeley is fortunate to enjoy a climate that allows us to grow food year-round. In an emergency, fresh-grown food will be a welcome addition to your disaster food supplies.

TO DO NOW:

Here are a few ways to get started with growing food for your disaster back-up:

- Start a sustainable garden using seeds that you can reseed. This is a great neighborhood



group activity. If any of your neighbors are small urban farmers, trade vegetables and fruits regularly for variety.

- Stock seeds that you can sprout within 3 days on your kitchen countertop for added nutrition. Here's how: www.wikihow.com/Grow-Sprouts.
- Community gardens can be a wonderful source of food in an emergency. Sometimes more than one family can share a plot.

13. Have a Disaster Recipe Neighborhood Potluck



Neighborhood
Group Activity

In a disaster, the better you know your neighbors, the safer & more comfortable you'll be.

Gather together with neighbors to share creative meals made only with non-perishable foods, like canned fruit or instant Ramen noodles.

TO DO NOW:

- Invite your neighbors to join together for a potluck featuring disaster meals.
- Neighbors can refer to <http://www.emergencykitcookoff.org/> to find great recipes!

More Food & Water Preparedness Tips

1. Never ration your drinking water. Drink as much water as you need and seek more water if you are going to run out.
2. If no members of your household are allergic to peanuts, peanut butter is a good disaster kit item. It can be purchased in plastic containers, is non-perishable, has a long shelf life, and is high in protein. It takes no preparation - just eat it off a spoon - and it is a favorite with children!
3. If you have access to a garden, any food you plant there will be a welcome addition to your disaster food supplies. Trade vegetables and fruits with neighbors for variety.
4. Grab a few extra packets of ketchup and mustard when you go to a fast food restaurant. These handy packets should stay good for three months - or longer in the fridge.
5. Rotate your food regularly and buy a few extra canned items on sale each month to add to your stock.
6. Edible weeds can supplement your disaster food supply. Dandelion greens can be eaten raw or steamed. Just be sure you know they haven't been treated with any weed-killing chemicals.



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7. Food in your refrigerator should be safe to eat for roughly 4 hours after a power outage. Keep the refrigerator door closed as much as possible and discard perishable food such as meat, poultry, fish, eggs and leftovers that have been above 40 degrees F for over 2 hours.
8. In your disaster kit, avoid foods that will make you thirsty. Choose salt-free crackers, whole grain cereals, and canned goods with high liquid content.
9. Do not store food or water in glass containers that could break in an earthquake. Cans and plastic containers are safer.

This document was created by Berkeley CERT volunteers. Special thanks to Khin Chin, Shawn Connors, Gradiva Couzin, Pamela Fadem, Sarah Jones, Elaina Lovejoy, Mary McBride, Chadidjah McFall, George Nace, Nicole Rodgers, Roger Sharpe, David Snippen, Susan Snyder, Bill Springer, Kim Tonkyro, and Jenny Wenk.