# Power Outages and Extreme Heat

Ready NW Eugene July 2022

## When the Power Goes Out Unexpectedly

## Prevent carbon monoxide poisoning.

- Use generators, pressure washers, grills, and similar items outdoors only.
- Generators should be used at least 20 feet away from your home.
- Install carbon monoxide detectors with battery backup in central locations on every level of your home.

## Check with local authorities to be sure your water is safe.

#### In hot weather.

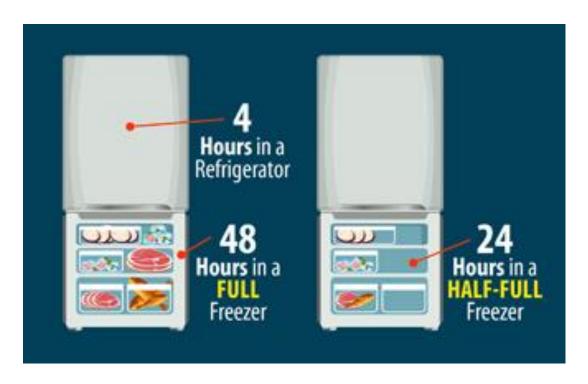
Stay cool and drink plenty of fluids to prevent heat-related illness.

#### Cold weather.

Wear layers of clothing to help keep in body heat.

## Avoid downed power lines.

## Food Safety – During a Disaster



Keep refrigerator and freezer doors closed as much as possible while the power is out!

- A refrigerator will keep food safe for up to 4 hours without power, if you don't open the door.
- A full freezer will keep food safe for 48 hours (24 hours if half-full) without power, if you don't open the door.

**Preparedness Tip** 



Fill gallon water jugs about three-quarters full. Place in the freezer uncapped.

Put the lids on after they are frozen.

When an outage strikes, put several in your refrigerator if there is room, and leave the rest in your freezer. These will help keep the appliances cold if the outage lasts more than four hours.

## Food Safety – After a Disaster

**Identify** and throw away food that may not be safe to eat.



- All perishable food when the power has been off for 4 hours or more (including meat, poultry, fish, eggs, and leftovers).
- All perishable foods in your freezer if they have thawed.
- Food that may have come in contact with floodwater or stormwater.
- Food with an unusual odor, color, or texture.
- Unsafe food can make you sick even if it looks and smells normal.

## When in doubt, throw it out!

Check this <u>FoodSafety.gov</u> chart for a list of what foods you should throw out and foods you can refreeze.



## Safe Drinking Water

When power goes out, water purification systems may not be functioning fully. Your local health department and water provider can make specific recommendations for boiling or treating water in your area.

Do not use water you suspect or have been told is contaminated to drink, wash dishes, brush your teeth, wash and prepare food, wash your hands, make ice, or make baby formula.

 Use bottled, boiled, or treated water for drinking, cooking, and personal hygiene.

Never use water from radiators or boilers that are part of your home heating system.

For more information on treating water, visit <u>Use Safe Water After a Disaster or Emergency</u>.

## DO YOU HAVE ENOUGH WATER PREPARED FOR AN EMERGENCY?

FEMA RECOMMENDS AN EMERGENCY WATER SUPPLY OF AT LEAST + Pets



FOR EACH MEMBER OF YOUR HOUSEHOLD FOR AT LEAST 3 DAYS.

Aim for at least a 3-day supply of water for each person and each pet, but really try to store a 2-week supply if possible.

**Preparedness Tip** 



Store a bottle of unscented liquid household chlorine bleach to disinfect your water and to use for general cleaning and sanitizing.

Try to store bleach in an area where the average temperature stays around 70°F.

Because the amount of active chlorine in bleach decreases over time due to normal decay, consider replacing the bottle each year.

## 1.

## STORING WATER - STOCK UP OR BOTTLE YOUR OWN:



If your water is from an untreated source, add bleach.



Use only UNSCENTED chlorine bleach, with an active ingredient of either 6% or 8.25% Sodium Hypochlorite.

Using a medicine dropper,



Tap water is already treated and can be bottled and stored for up to six months.

Store in cool, dark, secure location that can be easily accessed by you in an emergency.



Cool temperatures inhibit the growth of microbes.

Legionella Bacteria can't grow below 68° F



Replace your bottled-at-home emergency water supply every six months.



Chlorine breaks down after six months and water stored with chlorine disinfectant can no longer be considered safe after this period.



Commercially bottled water, the kind you buy at a supermarket, is considered by the FDA to have an indefinite shelf-life.



If properly stored with the seal unbroken in a cool, dark location, commercially bottled water can be safe to drink in an emergency for many years.



Check the bottles for any signs of wear or decay before drinking. If the plastic has decayed, it could allow the water to become contaminated.

Source: Hydration Anywhere

### 2.

## FILTERING WATER IN AN EMERGENCY:

A simple filter can allow you to drink from almost any source, be it a puddle, lake, stream, or your own contaminated water supply.





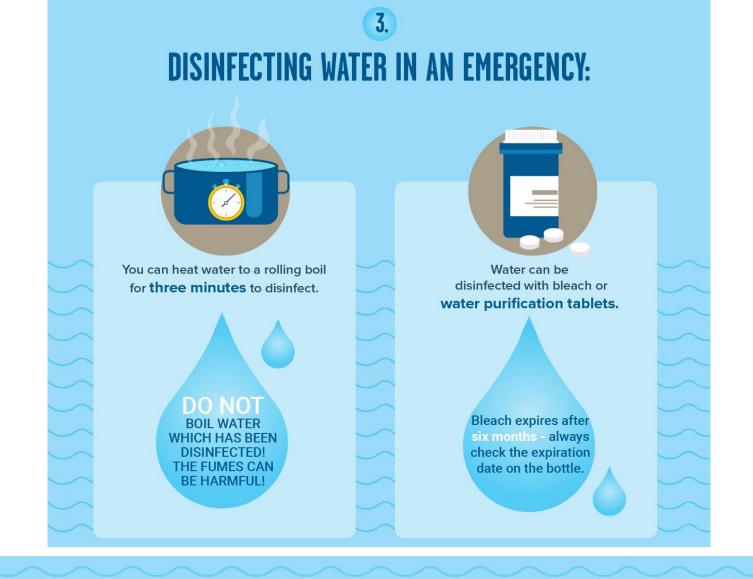
Portable Personal Water Filters capable of removing bacteria and viruses can be purchased for \$20 or less, making almost any water source safe to drink from.



Gravity Water Filter Systems and Manual Hand-Pump Filters can filter water for entire households to treat water from practically any source.

These require no electricity and are ideal for an emergency situation.

Source: Hydration Anywhere



Note that boiling or disinfecting **does not** *filter* the water. It kills microorganisms to disinfect, but it does not remove any particulates or bad taste/odor. Consider adding a water filter to your emergency kit. In a pinch a paper towel, coffee filter, or fine cloth can be used to filter particulates.

## Medications

- Some drugs require refrigeration to keep their strength, including many liquid drugs.
- When the power is out for more than 4 hours, replace all refrigerated drugs as soon as possible.
- Check with your doctor and pharmacist *ahead of time* to ask how long the medications will remain usable when the power goes out.

Resources for people with <u>chronic disease or disability</u>.

## Heat Related Illnesses

## What happens to the body as a result of exposure to extreme heat?

- The body normally cools itself by sweating, but sometimes sweating just isn't enough.
- Several factors affect the body's ability to cool itself during extremely hot weather.
  - When the humidity is high, sweat will not evaporate as quickly, preventing the body from releasing heat quickly.
  - Other conditions that can limit the ability to regulate temperature old age, youth, obesity, fever, dehydration, heart disease, mental illness, poor circulation, sunburn, and prescription drug use and alcohol use.
- People suffer heat-related illness when the body's temperature control system is overloaded and their body temperature rises rapidly.
  - Very high body temperatures may damage the brain or other vital organs.

For more information on heat-related illnesses and treatment, see the CDC <u>Extreme</u> <u>Heat</u> website.

# SPOT \* TREAT STROKE & HEAT EXHAUSTION

In hot temperatures your body may be unable to properly cool itself, leading to serious health problems.







## Know who is at high risk:



Infants



Young children

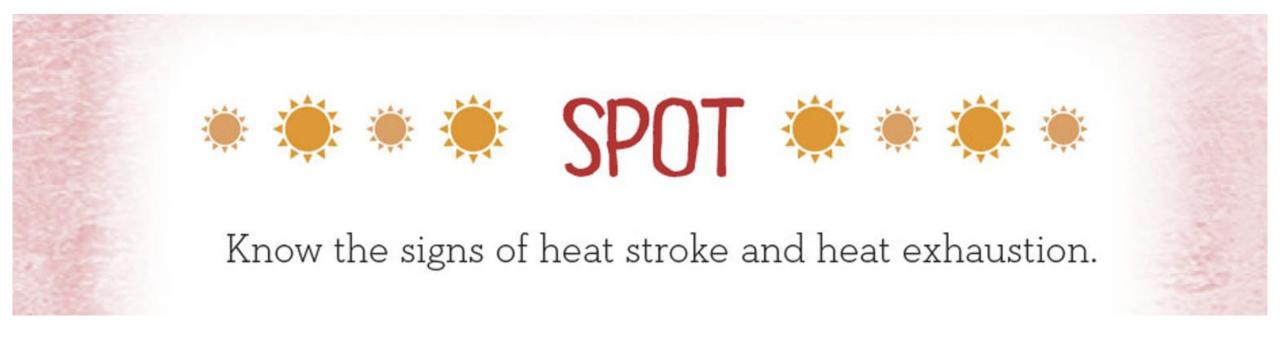


Older adults



People with chronic medical conditions







## **Heat Stroke**

## Heat Exhaustion



If you see any of these signs, get medical help immediately.



## Signs & Symptoms

- Very high body temperature (above 103°F)
- Red, hot, and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Upset stomach
- Confusion
- Passing out

## Signs & Symptoms

- · Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Upset stomach or vomiting
- Fainting





## **Heat Exhaustion**

#### WHAT TO LOOK FOR

- Heavy sweating
- Cold, pale, and clammy skin
- Fast, weak pulse
- Nausea or vomiting
- Muscle cramps
- Tiredness or weakness
- Dizziness
- Headache
- Fainting (passing out)

#### WHAT TO DO

- Move to a cool place
- Loosen your clothes
- Put cool, wet cloths on your body or take a cool bath
- Sip water

#### Get medical help right away if:

- You are throwing up
- Your symptoms get worse
- Your symptoms last longer than 1 hour

## **Heat Stroke**

#### WHAT TO LOOK FOR

- High body temperature (103°F or higher)
- Hot, red, dry, or damp skin
- Fast, strong pulse
- Headache
- Dizziness
- Nausea
- Confusion
- Losing consciousness (passing out)

#### WHAT TO DO

- Call 911 right away, heat stroke is a medical emergency!
- Move the person to a cooler place.
- Help lower the person's temperature with cool cloths or a cool bath.
- Do not give the person anything to drink. Heat Stroke can cause altered consciousness and can cause a choking hazard.



While waiting for medical attention, you can help someone with heat stroke or heat exhaustion.

#### **Heat Stroke**

## Heat Exhaustion



Move the victim to a shady area or indoors. Do not give the person fluids. Cool the body by:

- Placing person in a cool (not cold) bath or shower
- · Spraying with a garden hose
- · Sponging with cool water
- Fanning

Continue efforts to cool the person until help arrives or his or her body temperature falls below 102°F and stays there.

Get medical attention if symptoms get worse or last longer than one hour. Cool the body with:



- Cool, nonalcoholic beverages
- Rest
- A cool (not cold) bath, shower, or sponge bath
- Moving to an airconditioned room
- Wearing lightweight clothing

## **Heat Cramps**

#### WHAT TO LOOK FOR

- Heavy sweating during intense exercise
- Muscle pain or spasms

#### WHAT TO DO

- Stop physical activity and move to a cool place
- Drink water or a sports drink
- Wait for cramps to go away before you do any more physical activity

### Get medical help right away if:

- Cramps last longer than 1 hour
- You're on a low-sodium diet
- You have heart problems

## Sunburn

#### WHAT TO LOOK FOR

- Painful, red, and warm skin
- Blisters on the skin

#### WHAT TO DO

- Stay out of the sun until your sunburn heals
- Put cool cloths on sunburned areas or take a cool bath
- Put moisturizing lotion on sunburned areas
- Do not break blisters

# Tips for Preventing Heat-Related Illness







# Practice HEAT SAFETY Wherever You Are



#### **Job Sites**

Stay hydrated and take breaks in the shade as often as possible.



#### Indoors

Check up on the elderly, sick and those without AC.

Heat related deaths are preventable.

Protect yourself and others from the impacts of heat waves.





#### Vehicles

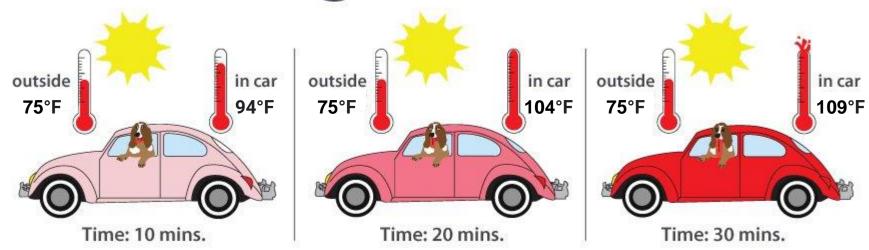
Never leave kids or pets unattended -LOOK before you LOCK



#### Outdoors

Limit strenuous outdoor activities, find shade, and stay hydrated.

## Cars get hot fast!



Call 9-1-1 if you see a Child alone in a car or a pet in distress.

#### **Never Leave Children or Pets in Cars**

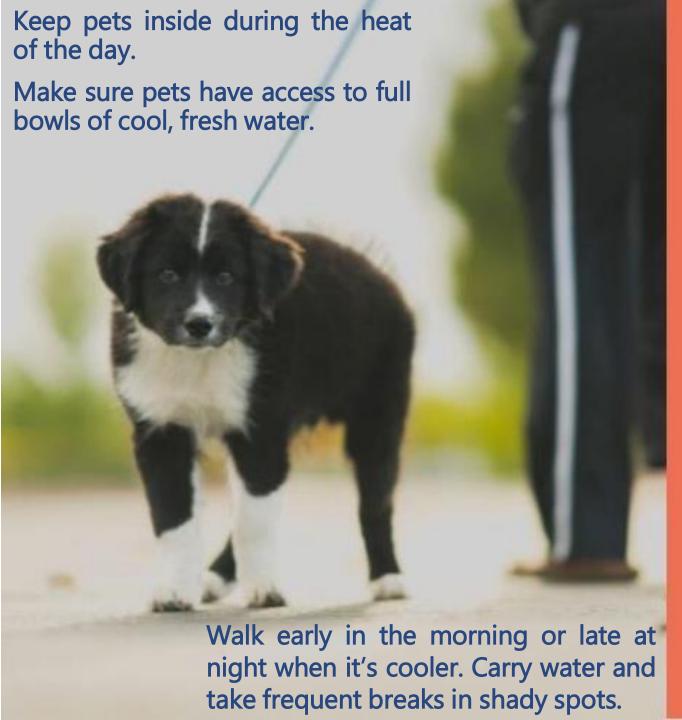
Cars can quickly heat up to dangerous temperatures, even with a window cracked open.

Never leave infants, children or pets in a parked car, even if the windows are cracked open. Even if water is provided, it is not enough.

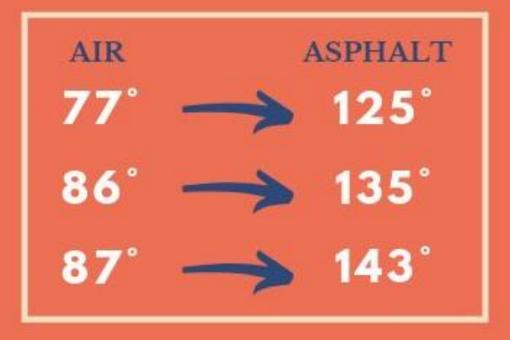
Do not overlook any children who have fallen asleep in the car.

## Oregon Good Samaritan Law

- June 2017, House Bill 2732 to protect children and dogs left in hot cars, signed into law
- Oregon was the 11th state to pass such a Good Samaritan Law, which provides that anyone – not just law enforcement – may enter a vehicle (by force or otherwise) to remove an unattended domestic animal without fear of civil or criminal liability.
- If you notice an animal in distress or unresponsive in a parked car, call 911.
- If an animal is not in distress and it is quicker to locate the owner you may consider that in addition to calling for help.
- If you determine that more immediate life-saving action is necessary, please ensure that you:
  - have a reasonable belief that the animal is in imminent danger of suffering harm;
  - notify law enforcement or emergency services either before or soon after entering the vehicle;
  - use only the minimum force necessary to enter the vehicle; and
  - stay with the animal until law enforcement, emergency services, or the owner or operator of the vehicle arrives.



## WATCH YOUR PAWS!



Test the pavement or sand with your hand for 7 seconds.

Too hot to touch = too hot for paws.

If you suspect your pet's paws have been burned, contact your vet immediately.

## Stay Cool

- Wear Appropriate Clothing.
- Stay Cool Indoors.
- Schedule Outdoor Activities Carefully.
  - Try to limit your outdoor activity to when it's coolest, like morning and evening hours. Rest often in shady areas so that your body has a chance to recover.
- Pace Yourself.
- Wear Sunscreen.
- Avoid Hot and Heavy Meals

## What is the best clothing for hot weather or a heat wave?

- Wear as little clothing as possible when you are at home.
- Choose lightweight, light-colored, loose-fitting clothing.
- In the hot sun, a wide-brimmed hat will provide shade and keep the head cool.
- If you must go outdoors, be sure to apply sunscreen 30 minutes prior to going out and continue to reapply according to the package directions.
  - Sunburn affects your body's ability to cool itself and causes a loss of body fluids.
  - It also causes pain and damages the skin.

## If air conditioning is not available in your home

Contact your local health department or locate an air-conditioned shelter in your area.

- The Register Guard and local public radio stations typically report on available cooling shelters.
- Spend some time at a shopping mall or public library, even a few hours spent in air conditioning can help.
- > Take cool showers or baths.
- ➤ Don't rely solely on fans to keep you cool. Electric fans may provide comfort, but when the temperature is in the high 90s and above, they will not prevent heat-related illness.
- ➤ Use your stove and oven less to maintain a cooler temperature in your home.



## Heat Safety from NWS Seattle

## Keeping Your Residence Cool Without AC



#### #1. Let the cool night air in

Open the windows before you go to bed. Just be sure to close the windows before things heat up in the morning!



#### #3. Use fans

Set your ceiling fans to rotate counter-clockwise. Fill a bowl with ice and position in front of large fan for a cool, misty breeze.



#### #5. Sleep low

Heat rises so sleeping downstairs or in the basement can help. If you don't have multiple levels, move mattress to the ground.



#### #2. Keep your blinds closed

Invest in blackout curtains which can block sunlight and unwanted heat from your windows.



#### **#4.** Cook outdoors

Avoid using your oven or stove if you can - they will make your house hotter. Outdoor grills won't!

## Stay Hydrated

Stay away from sugary or alcoholic drinks, which actually cause you to lose more body fluid.

Avoid very cold drinks that can cause stomach cramps.



### **Replace Salt and Minerals**

Heavy sweating removes salt and minerals from the body that need to be replaced.

A sports drink can replace the salt and minerals you lose in sweat.

\*If you are on a low-salt diet, have diabetes, high blood pressure, or other chronic conditions, talk with your doctor before drinking a sports beverage or taking salt tablets.

### **Keep Your Pets Hydrated**

Provide plenty of fresh water for your pets, and leave the water in a shady area.

## Stay Informed

- Check for Updates: Check your local news for extreme heat alerts and safety tips and to learn about any cooling shelters in your area.
- Know the Signs: Learn the signs and symptoms of heat-related illnesses and how to treat them.
- Use a Buddy System: When working in the heat, monitor the condition of your co-workers and have someone do the same for you. Heat-induced illness can cause a person to become confused or lose consciousness. If you are 65 years of age or older, have a friend or relative call to check on you twice a day during a heat wave. If you know someone in this age group, check on them at least twice a day.
- Monitor Those at High Risk: Although anyone at any time can suffer from heat-related illness, some people are at greater risk than others:
  - Infants and young children
  - People 65 years of age or older
  - People who are overweight
  - People who overexert during work or exercise
  - People who are physically ill, especially with heart disease or high blood pressure, or who take certain medications, such as for depression, insomnia, or poor circulation
- Visit adults at risk at least twice a day and closely watch them for signs of heat exhaustion or heat stroke. Infants and young children, of course, need much more frequent watching.

## Heat Index

- Heat and humidity are measured together to determine what temperature it really feels like.
- For example, if the temperature is 90°F and the humidity is approximately 80%, then the heat index is 113°F meaning that even though it's only 90°F, it actually feels more like 113°F.

You can find the NOAA Heat Index chart here.



HOME

**FORECAST** 

PAST WEATHER

SAFETY

INFORMATION

**EDUCAT** 

#### **Heat Forecast Tools**

Weather.gov > Safety > Heat Forecast Tools

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-	NWS Heat Index Temperature (°F)															
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	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137
2	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137	
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	95	86	93	100	108	117	127									
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Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

## Be Prepared

- Create an emergency plan with your household that includes a disaster supply kit for at least 3 days:
  - one gallon of water per person per day
  - non perishable and dried/canned food
  - flashlights, batteries, and weather radio
    - use battery-powered flashlights and lanterns, rather than candles, gas lanterns, or torches (to minimize the risk of fire).
  - first-aid supplies
  - prescription and over the counter medicines
  - digital thermometer
  - extra clothing
  - board games and cards
- Include backup power for cell phones, communications, medical equipment, and other critical needs.

## Be Prepared

- Do you know how to shut down gas, electric, and water if necessary?
- Are there people in your household or immediate neighbors with disabilities or illness requiring extra assistance?
- Will you have the capacity to help them?
- Do your neighbors have the capacity to help you if you need it?
- Are there groups that you can turn to for assistance?
  - Churches, coworkers, clubs, fraternal organizations, social groups, etc.

## Sources

- https://www.cdc.gov/disasters/poweroutage/needtoknow.html
- https://www.cdc.gov/disasters/extremeheat/index.html
- https://www.cdc.gov/disasters/poweroutage/workersafety.html
- https://www.cdc.gov/disasters/foodwater/facts.html
- https://www.cdc.gov/disasters/extremeheat/warning.html
- https://www.cdc.gov/disasters/foodwater/safe-water.html
- <a href="https://www.foodsafety.gov/food-safety-charts/food-safety-during-power-outage#frozen">https://www.foodsafety.gov/food-safety-charts/food-safety-during-power-outage#frozen</a>
- https://www.cdc.gov/disasters/chronic.html
- https://www.weather.gov/safety/heat-index
- https://www.ready.gov/heat
- https://www.ready.gov/power-outages
- <a href="https://www.co.lincoln.or.us/sheriff/page/hot-car-no-place-your-pet#:~:text=Oregon%20was%20the%2011th%20state,of%20civil%20or%20criminal%20liability">https://www.co.lincoln.or.us/sheriff/page/hot-car-no-place-your-pet#:~:text=Oregon%20was%20the%2011th%20state,of%20civil%20or%20criminal%20liability</a>.
- https://www.offgridweb.com/preparation/infographic-the-basics-of-emergency-water-prep/