

Disaster Preparedness: The Basics

Presented by the Seattle Office of
Emergency Management



Seattle is vulnerable to many disasters...



Seattle's top hazards...

1. Earthquakes
2. Snow and Iced
3. Windstorms
4. Power Outages
5. Cyber Attacks
6. Landslides
7. Disease Outbreaks
8. Flooding
9. Excessive Heat
10. Tsunamis/Seiches
11. Infrastructure and Structural Failures
12. Fires
13. Transportation Incidents
14. Water Shortages
15. Social Unrest
16. Attacks
17. Hazmat Incidents
18. Volcanic Hazards



"Terrifying", "Horrifying", "Don't read if you want to go to Sleep" and "The *New Yorker* scares the bejesus out of the PNW"...

These are all quotes from people who read the New Yorker Article: 'How to Stay Safe When the Big One Comes" By Kathryn Schulz.

"Fear is not an end in itself, at best, it is a means to an end, a way to channel emotion into action. To achieve that, however, you need to navigate between the twin obstacles of panic (which makes you do all the wrong things) and fatalism (which makes you do nothing)"Kathryn Schulz.

By gaining knowledge, you can become familiar with the problem and with practice and familiarity, fear will turn to action and purpose in an emergency.

The Ring of Fire

- The Ring of Fire is a 25,000-mile-long horseshoe shaped ring
- This horseshoe shape ring houses most of the earth's volcanoes
- Most familiar active volcanoes in our state are Mount St. Helens and Mount Rainier.



Photo accredited to Public Domain USGS
Communications and Publishing 1980

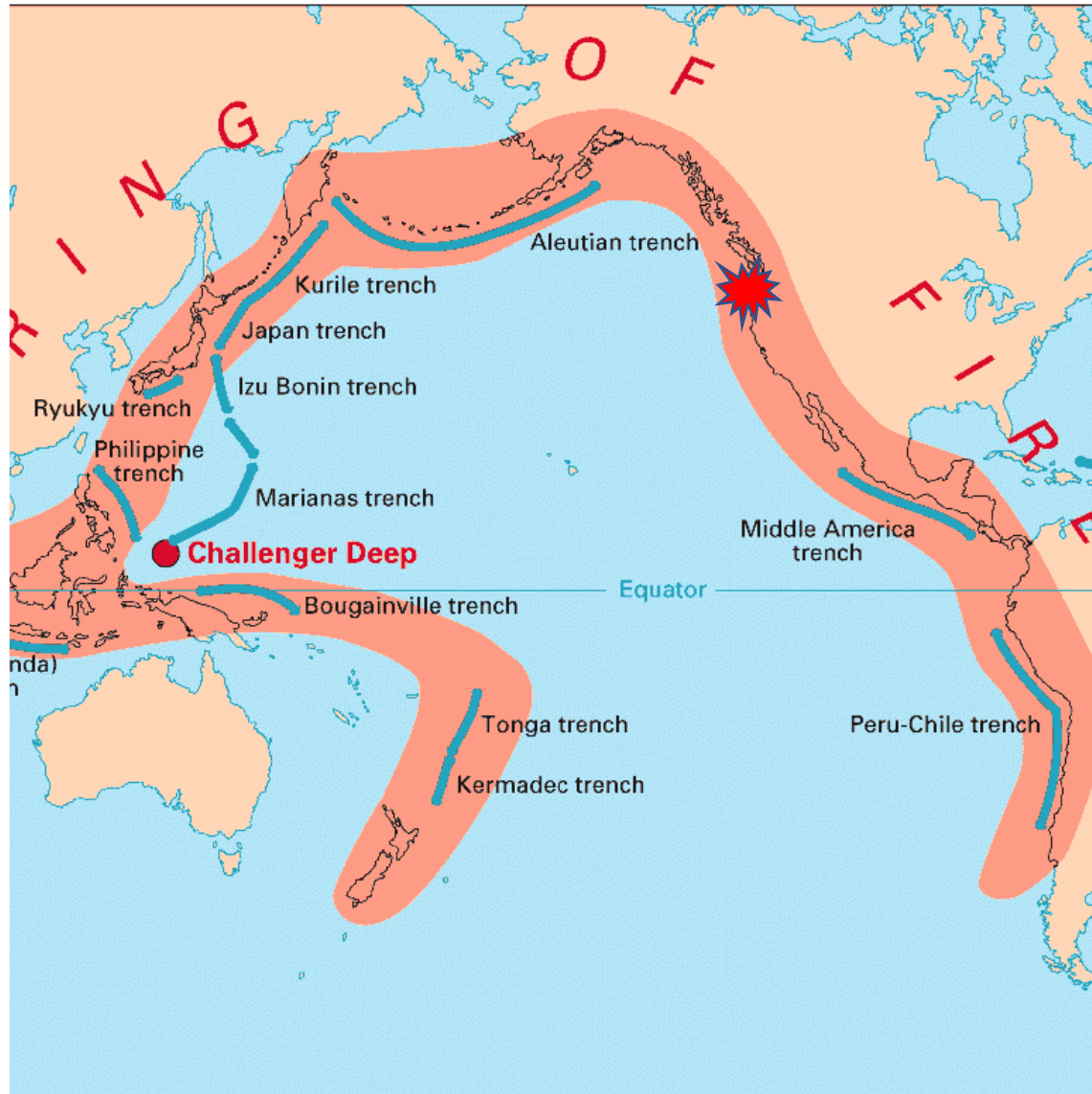


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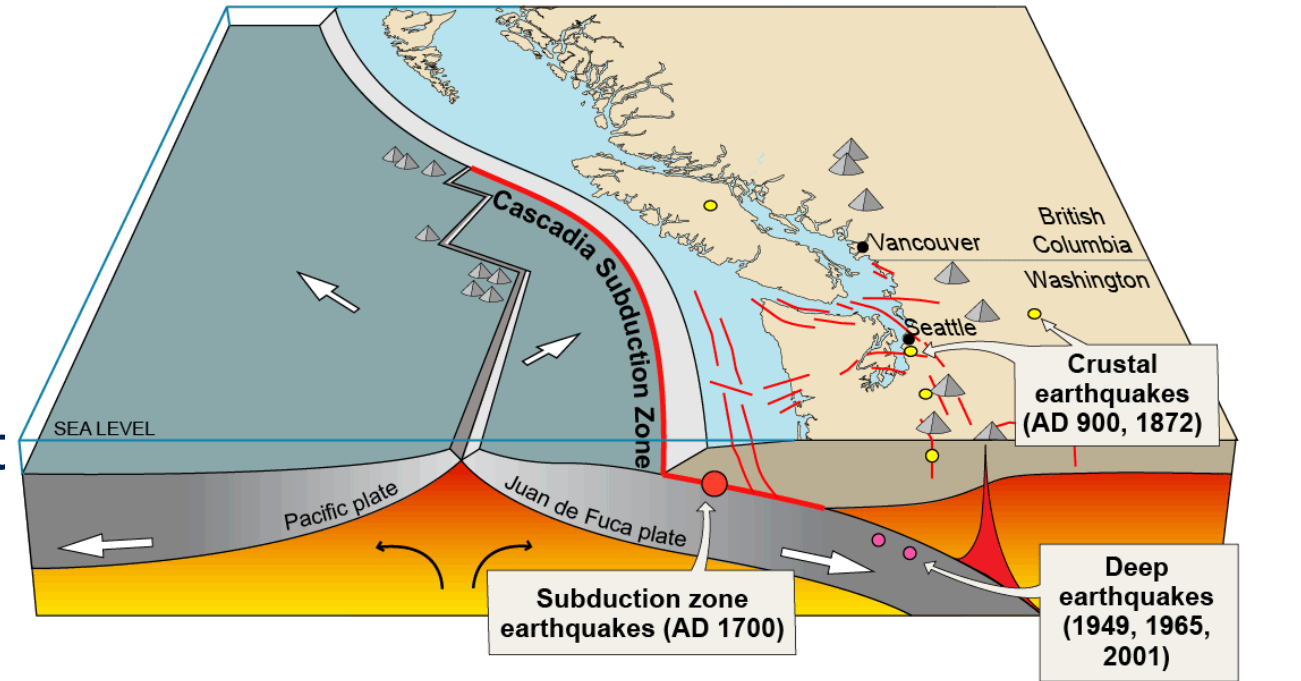
Earthquakes in Seattle

The Seattle area experiences three earthquake types with very different consequences.

☐ Crustal or Shallow Quakes

☐ Deep Quakes

☐ Subduction Zone or Megathrust Quakes



Source	Max. Size	Recurrence
● Subduction zone	M 9+	200–600 years
● Deep Juan de Fuca plate	M 7+	30–50 years
● Crustal faults	M 7+	Hundreds of years?

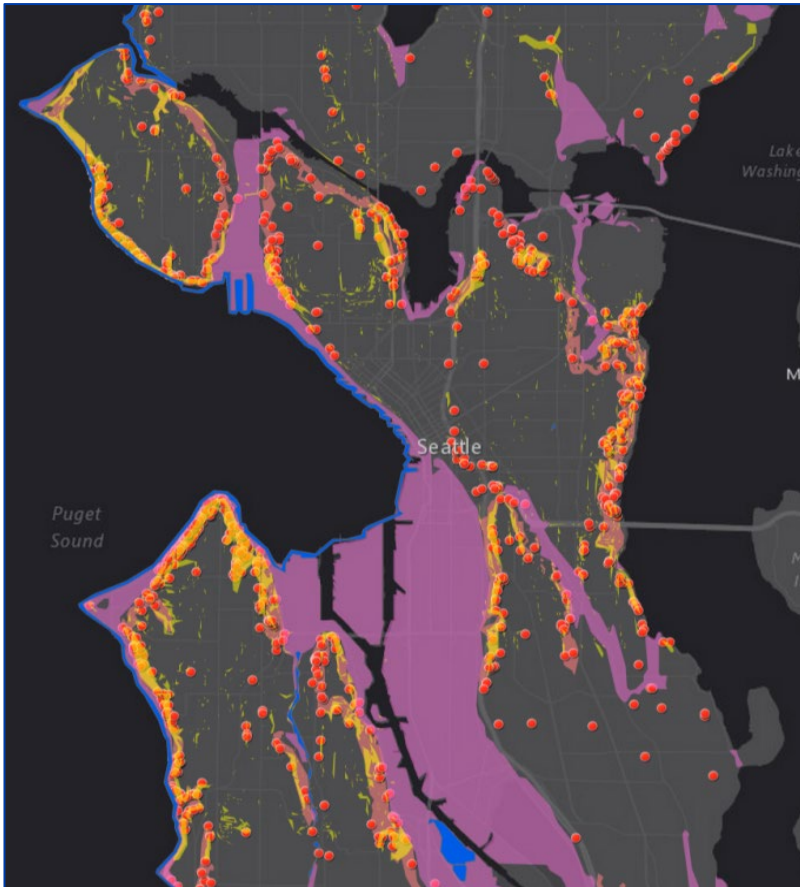
- Volcano
- Active crustal fault
- Active plate boundary fault

*figure modified from USGS Cascadia earthquake graphics at <http://geomaps.wr.usgs.gov/pacnw/pacnweq/index.html>

Seattle Hazard Explorer & King County Ready Tool

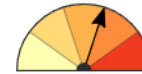
www.seattle.gov/hazardexplorer

www.hazardready.org/seattle



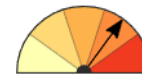
WHAT TO EXPECT AT THIS LOCATION

In Your Lifetime



There is a **HIGH CHANCE** (84%) of a magnitude 6.5+ deep earthquake hitting in the next 50 years. It will feel similar to the M6.8 Nisqually Earthquake in 2001. **Strong shaking will make it hard to walk here. Books, glassware, and items will fall from shelves. Cabinet doors and drawers will open.** Some chimneys and poorly built buildings will be damaged. ([map](#))

Cascadia Quake



There is a **MODERATE CHANCE** (10-30%) of a magnitude 8+ Cascadia earthquake hitting the Northwest in the next 50 years. **When it does, you will feel very strong shaking that persists for minutes here. Standing will be difficult and many will be injured. Bricks and shattered glass will litter the streets.** Power and water will be off for days to weeks. ([map](#))

What's The Worst?



A **LOW CHANCE** (5%) exists of a magnitude 7+ earthquake on the Seattle Fault in the next 50 years, but if it does it will be damaging. **Severe shaking will make it hard to stand or drive. Heavy furniture will be overturned. Parts of URM buildings will collapse and wood frame houses will shift on foundations.** ([map](#))



Know the reality

The services you rely on will be significantly disrupted.



People may not be able to get places easily (roads, bridges damaged, transit will stop)



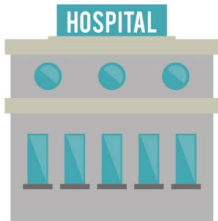
Stores may quickly run out of supplies or normal places of business may close



Utilities may be damaged (electricity, water, sewer)



Gas stations and ATM machines may not work



Hospitals may be overwhelmed



Phones, cable TV, and internet may not work, or you may need to rely on new methods of communication to stay connected with friends and family

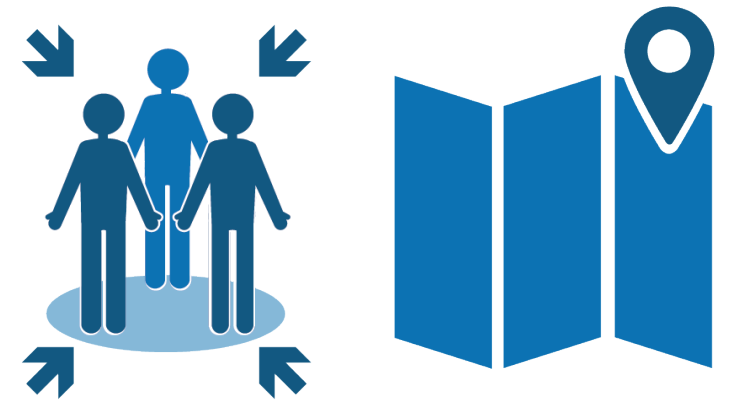


First responders may not be able to help you for some time

Develop a plan

Consider the following:

- How will you reunite with family?
- Know alternate routes home and to work
- Know plans for work and children's schools or day care
- What if you have no electricity?
- What if you have no water service?



Build a Kit

- Be prepared to be on your own for 14 days.
- Think about what you use on a daily basis, and include those items in your kit
- Have a kit in your car and at work



Medicine and Medical Equipment

- Keep at least 30 days of medical supplies
- Extra assistive items (walkers, canes, eyeglasses)
- Food Specific, dietary needs
- Power supply for medical equipment (battery power or electricity)

Create a checklist:

- ✓ Food for 14 days per person
- ✓ Water for 14 days per person
- ✓ Food for pets
- ✓ Water for pets
- ✓ Medicine
- ✓ Flashlight
- ✓ Batteries
- ✓ Blankets and extra clothing
- ✓ Sleeping bags/tent
- ✓ Battery operated radio
- ✓ Family Plan of Action
- ✓ Important Documents (Insurance/medical)
- ✓ **Something you enjoy!**



[This Photo](#)

[CC BY-NC](#)



Communications Plan

Include the following in your communications plan:

- Texting is your best option
- Establish text message groups
- Social media
- Don't make calls unless absolutely necessary



Insurance and Government Assistance

- Do not rely on FEMA or other government assistance as your insurance plan
 - Usually no more than \$37,900 for a total loss
 - Small Business Administration (SBA) Loans vs. Individual Assistance Program (IAP)
- Homeowner's Insurance vs. Renter's Insurance
- Know what your insurance covers and what it does not
 - Earthquake – can be added on or purchased separately
 - Flood – must be purchased separately through the NFIP
 - Rising water vs. Falling water



Emergency Sanitation

- Following a major disaster, water and sewer lines may be disrupted. Do you know how to improvise an emergency toilet?

Supplies:

- 2 Plastic buckets with lids
- Heavy duty garbage bags and ties
- Absorbent material like cat litter or shredded newspaper
- Household bleach
- Soap
- Rubber gloves
- Toilet paper
- Antiseptic towelettes
- Hand sanitizer



What to do during an earthquake



- Don't run during the shaking
- Drop, Cover, and Hold under a desk or table
- If there's no table, find the nearest safe place beside an inside wall.
- If outside in an open area, sit down and cover your head with your arms
- If in the 'danger zone' next to a building, try to get back into the building and find shelter.

What to do after an earthquake

1. Check on yourself and your family for injuries
2. Check on your home
3. Check on others
4. Find out more information



Know how and when to control utilities

Shut off natural gas **ONLY** if necessary

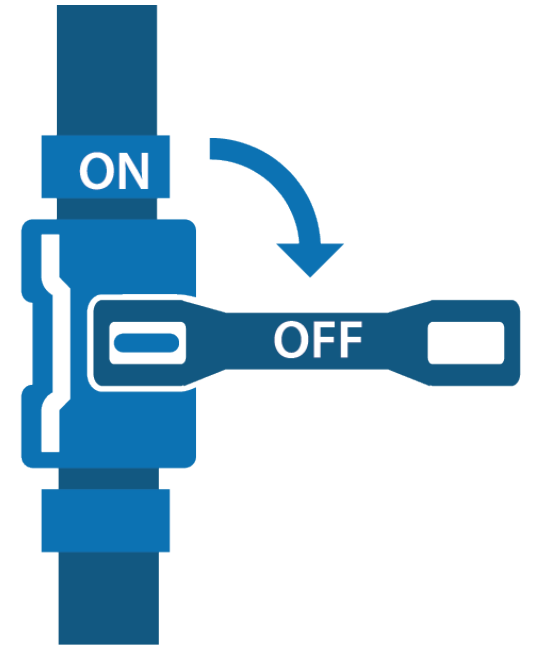
- Only shut it off if you smell natural gas, hear a hissing sound, or the dial is spinning rapidly

Shut off water at the main house valve

- Typically located right outside your house or inside
- This saves the water in your hot water heater and toilet from possible contamination
- Turn off power to the water heater- attach a hose

Check to see if your home sustained structural damage

- Rope off damaged areas so others know how



Know where to find water and how much

Sources of water

- Hot water heater
- Back of toilet tank
- Filling tub with water in advance of a storm
- Locate nearest water source and purify



**How much water do
you need?**

1 gallon / person / day

Home Hazard Mitigation and Retrofitting

Secure the following:

1. Large furniture
2. Wall hangings
3. Kitchen cabinets & contents
4. Water heater
5. Washer/Dryer
6. Stoves
7. Hazardous Materials

Go on a 30-minute home hazard hunt.

Attend a free home retrofit class.

Visit seattle.gov/emergency to register on our events calendar.

Retrofit your home

See a list of contractors on OEM's website.



Know your neighborhood's plan

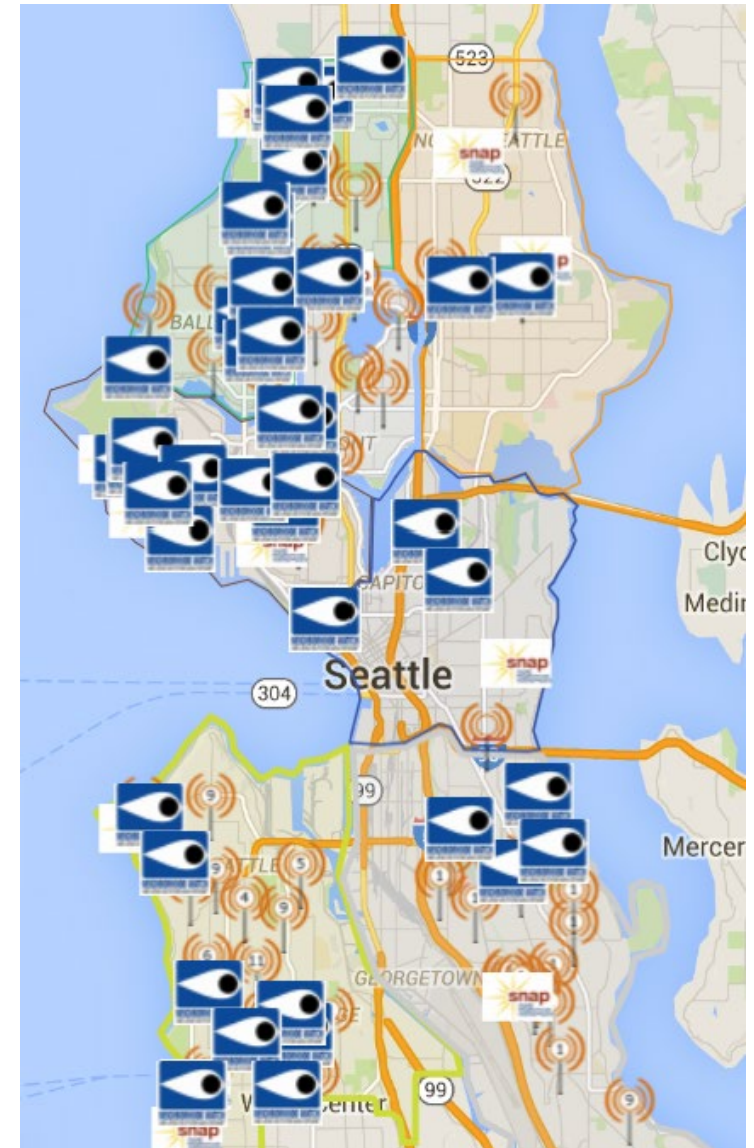
Help each other

Community Emergency Hubs

seattleemergencyhubs.org

<http://seattleemergencyhubs.org/>

Seattle Neighborhoods Actively Prepare



Sign up for emergency alerts



EMERGENCY ALERTS AND NOTIFICATIONS

When emergencies happen, be the first to know. Stay informed with **AlertSeattle** to receive real-time, official notifications from the City of Seattle. This is a free service.

alert.seattle.gov

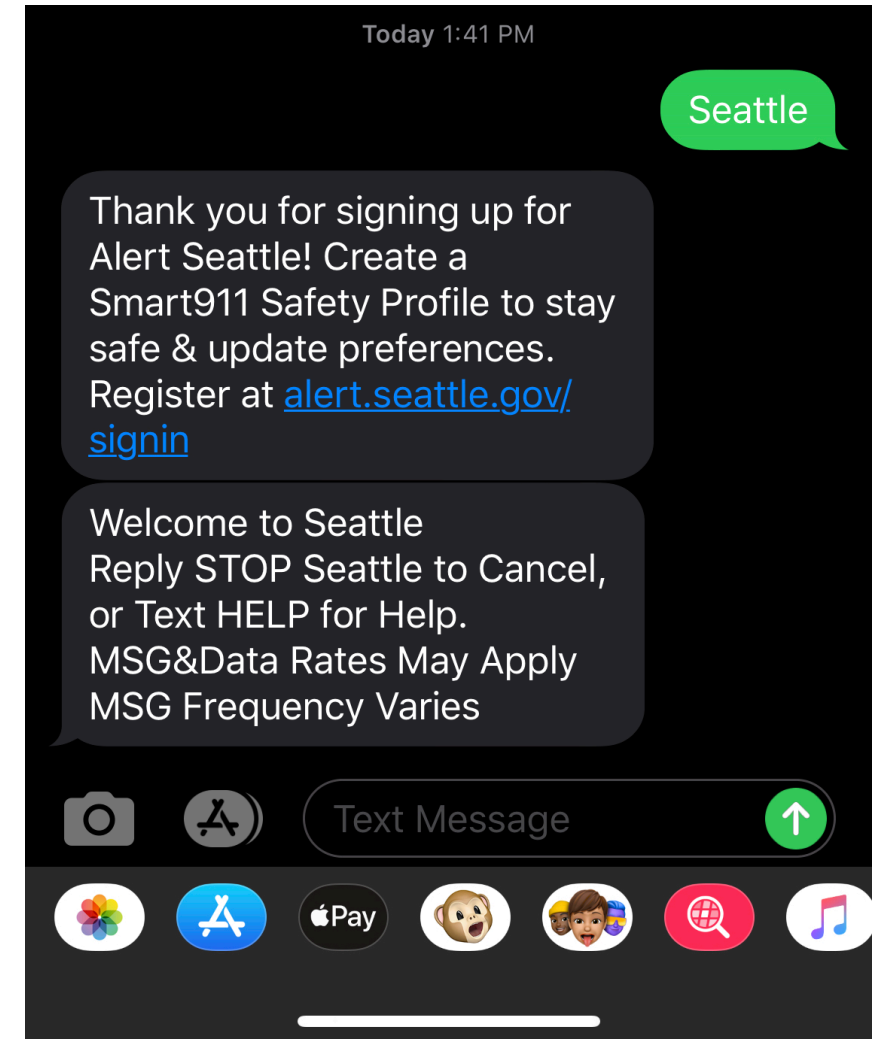
*You can choose to receive **Emergency Alerts or Community Notifications**, such as:*

- Severe weather
- Safety
- Health
- Special events
- Utility disruptions
- Major traffic disruptions
- Emergency preparedness
- Test messages



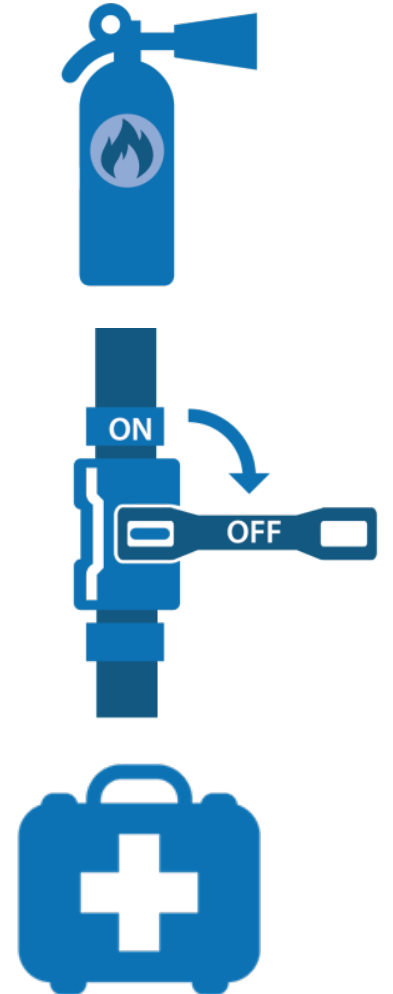
Text "SEATTLE" to 67283

- Automatically opts you in to receive **Emergency** and **Public Safety** alerts
- Cannot receive geo-targeted alerts because there is no location (address) information
- Cannot customize alert preferences
- To add address or customize alert preferences, will need to set up a profile at **alert.seattle.gov**



Disaster skills training

- Learn how to use a fire extinguisher
- Check on and control utilities
 - Shut off water at the main house valve
 - Shut off natural gas ONLY if necessary
- Construct an emergency toilet
- Stop the Bleed
- Sign up for classes at www.seattle.gov/emergency



Find out more information

- **Get AlertSeattle and Alert King County messages**
Sign up online at alert.seattle.gov
- **Tune into local emergency radio stations**
AM 710, AM 1000, FM 97.3, FM 97.7, and FM 94.4
- **Tune into local television**
- **Follow city departments on social media**
@CityofSeattle, @oemseattle, @SeattlePD,
@SeattleFire, @AlertSeattle, @SeattleDOT,
@SeattleSPU, @SEAcitylight
- **Go to your nearest Community Emergency Hub**



Questions?

Thank you for attending- you'll be happy you prepared ahead of time when the next disaster strikes!



Seattle
Office of Emergency
Management



Please tell us how we did!
Thank you!

<https://forms.office.com/g/9XALDPkKtj>

