

What is volcanic ash?

Volcanic ash is not "ash" at all. It is pulverized rock. A one-inch layer of dry ash weighs ten pounds per square foot as it lands. It often contains small pieces of light, expanded lava called pumice or cinders.

Fresh volcanic ash may be harsh, acid, gritty, glassy, smelly, and thoroughly unpleasant. Although gases are usually too diluted to constitute danger to a normal person, the combination of acidic gas and ash which may be present within a few miles of the eruption could cause lung damage to small infants, very old and infirm, or those already suffering from severe respiratory illnesses.

- **A heavy ashfall blots out light.** Sudden heavy demand for electric light may cause power supplies to "brown out" or fail.
- **Ash clogs water courses, reservoirs, sewers, sewage plants and machinery of all kinds.**
- **Ash drifts onto roadways, railways, and runways like snow, but resembles soft wet sand.**
- **Fine ash may be slippery.**
- **The weight of ash may cause roofs to collapse.**

What to do if Volcanic Ash is Falling

- Don't panic, stay calm.
- Stay indoors.
- If outside: seek shelter (e.g., car, building); use mask — or a handkerchief/cloth (dampened cloth most effective).
- If at work, go home if possible, before ash begins to fall. If ash is already falling, stay indoors at work if possible, until the heavy ash is settled.
- Go directly home, do not run errands.
- Unless an emergency, do not use the telephone.
- Use your radio for information on the ashfall.



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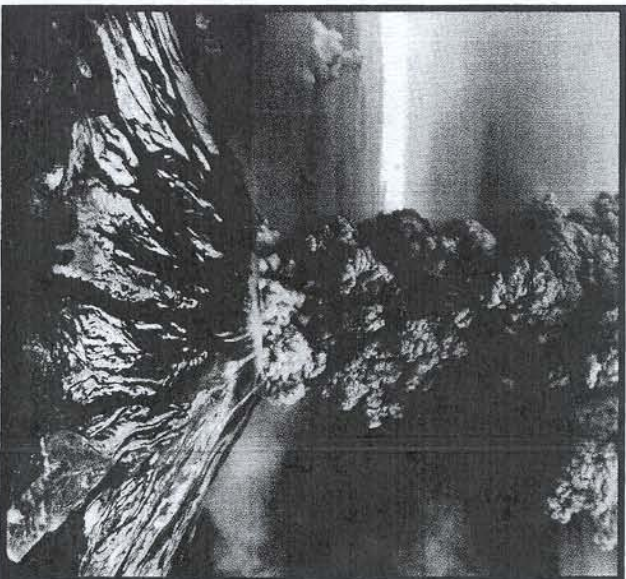
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HOW TO PREPARE FOR AND WHAT TO DO DURING A VOLCANIC ASHFALL



- **What Volcanic Ash is**
- **What to do when Ash is Falling**
- **How To Be Prepared for an Ashfall**
- **Tips for Protection of your Children, your Home, your Pets and Animals, your Automobile.**

How to be Prepared for an Ashfall

Whether in a car, at home, at work, or play you should always be prepared. Based on past Mount St. Helens volcanic activity, intermittent ashfalls may continue over several years.

Your Home

- Extra face masks. Check your local emergency services office for the nearest source.
- Food stored for two weeks.
- Water (one quart per day per person) in clean plastic containers.
- Medicines.
- First aid kit.
- Battery operated radio with extra batteries.**
- Candles, lanterns, or flashlight with extra batteries.**
- Extra wood, if you have a fireplace or wood stove.
- Extra blankets.
- Extra vacuum cleaner filters and cleaning supplies.

**Ash may interrupt telephone, T.V. and electricity.

Your Auto

Any vehicle can be considered a movable, second home. Always carry a few items in case of delays, emergencies, or mechanical failures.

- Face masks (should be coded "TC-21C").
- Blankets.
- Fire extinguisher.
- Extra clothing.
- Emergency food ration.
- First aid kit.
- Flashlight (extra batteries).
- Basic tool kit.
- Portable radio (extra batteries).
- Water.
- Shovel, axe.
- Road map.
- Matches, candle.
- Emergency flares.
- Waterproof tarp.
- Heavy rope or tow cable.
- Survival manual.
- Extra air filter.
- Extra oil filter.
- Extra oil.
- Extra windshield washer water.
- Window wiper blades in good condition.

Your Children

- Have quiet games and activities available.
- Explain what a volcano is and what they should expect.
- Teach children safety procedures if they are caught in an ashfall.
- Consider organizing a community or neighborhood day-care center to relieve economic and other stresses on working parents during ashfall clean-up, and to keep children in a cleaner environment.

Your Pets or Animals

- Extra dry and clean food.

What to do During an Ashfall

Your Home

- Close doors and windows.
- Close dampers
- Place damp towels at door thresholds and other draft sources.
- Do not run exhaust fans or clothes dryers.
- Remove ash from flat or low pitched roofs and from rain gutters to prevent thick accumulation.
- If you are engaged in ash clean-up, logging or farming activities, have your work clothes laundered at work or outside the home.
- If water source is contaminated, use clean stored water in your hot water heater or toilet tank (turn off main water valve). To purify water, use 10 drops of chlorine bleach per gallon of water. Let sit 30 minutes, or purify by boiling for 5 minutes.
- You may eat vegetables from the garden, but wash them off first. The grit is harmless.
- Dust often—using vacuum attachments rather than dust cloths, which may scratch.
- Vacuum furniture, carpets, etc. and try not to wipe as ash will scratch.
- Clothes—brush, shake, and pre-soak. Use detergent, not soap, as soap will gum up.
- Use extra detergent in washer.
- Use full load of water and two rinse cycles. Front loaders are more effective than top loaders.
- Keep refrigerator closed.
- Bagging lawn clippings and mowing lawns when damp will cut down on dust. Blades will dull faster.
- Use battery operated radio to receive information.

Your Auto

- If possible do not drive.
- If you must drive, drive slowly (15 mph). Remember ashfall will decrease visibility. Do not follow the car ahead too closely.
- Use windshield washer and wipers.
- Change air filter.**
- Change oil and oil filter.
- Every 50 to 100 miles in heavy dust. (Less than 50 feet visibility.)
- Every 500 to 1,000 miles in light dust. (Up to 200 feet visibility.)

- Do not drive without air filter.
- If car stalls, push it off the road to avoid collisions, and stay with the auto.

**Do not change air filter until you notice a loss of power in your car's engine. A dirty filter is more effective as long as it allows air to reach engine. If you cannot change air filter, clean by blowing air through from the inside out.

Note: Ash is abrasive rock, therefore it will clog engine, damage motor and scratch finish of auto.

Your Children

- Do not attempt to pick your children up at school. Schools will be notified of emergency procedures to take.
- Keep children indoors.
- Minimize exertion to reduce inhaling ash.
- If possible maintain normal routines for children.
- If prolonged ashfall—take children outside as weather conditions permit. (Use protective masks. Some approved masks which may be adjusted to fit children include: 3-M #8710, #6983 and #8550).

Your Pets or Animals

- Keep pets indoors.
- Get clean water to livestock as soon as possible.
- If pets go out, brush or vacuum them before letting them inside. Don't let them get wet or try to wash them.
- Keep extra dry and clean food available.

This brochure was prepared by the Federal Emergency Management Agency, Region X, Bothell, WA with the assistance of the Washington State Department of Emergency Services, Olympia, WA.