

QUESTIONS ABOUT THE VOLCANO

How can I check on the status of the Mount Spurr volcano?

Visit the Spurr Activity page on the Alaska Volcano Observatory website at avo.alaska.edu/volcano/spurr/activity. There you can find past activity, monitoring data, photos, ashfall forecast models (where and how much ash) and preparedness information.

You can sign up for volcano notifications here: <https://volcanoes.usgs.gov/vns/>

Where can I find a map of eruption hazards from Spurr volcano that I can use as a planning tool to evaluate risk?

You can find a detailed hazard assessment for Mt. Spurr here:

<https://avo.alaska.edu/explore/reference/2936>

AVO produces ashfall models twice a day for Spurr using eruption conditions similar to the 1992 eruption and it can be used for situational awareness and planning. The model is shown on bottom of the [Mount Spurr activity page](#) and shows where and how much ashfall would occur. AVO shares this model with the National Weather Service Anchorage Forecast Office who issues the [official warnings](#) and advisories of ashfall on communities & mariners.

What could Southcentral Alaska expect from another volcanic eruption?

An eruption would be explosive and make an airborne ash cloud that could be seen across Cook Inlet. Up to ¼ inch of ash fell on southcentral communities during the last 2 eruptions of Spurr so depending on wind direction this could happen. The timing of ashfall will depend on wind speed and direction. The [NWS Anchorage Forecast Office](#) would issue information about where, when and how much ashfall to expect. If an eruption occurred during daylight hours, the ash cloud would block out the sun while the ash could be drifting overhead resulting in total darkness for potentially hours. There would certainly be impacts to aviation through flight cancellation and airport closures due to the airborne ash cloud and ashfall at airports. Impacts to people in communities would be from ashfall which could take 1 to a few hours to reach communities and fallout could occur for several hours.

Will I be able to see, hear or feel a Mount Spurr volcanic eruption?

Mount Spurr is about 80 miles to the west of Anchorage and visible across Southcentral Alaska so yes, you would be able to see an eruption during clear weather because it would most likely be explosive and produce columns of ash that could rise as high as ~50,000 ft above sea level. You might even observe volcanic lightning in the ash cloud if an eruption

were to occur in low light conditions. It's possible that a strong eruption would produce audible sounds or low rumbles that could be heard in communities across southcentral Alaska. This depends a lot on atmospheric conditions and wind direction, but it is possible. Some people reported hearing the 1992 eruption on the Alaska Peninsula and north of Mount Spurr but not in Anchorage.

Will an eruption trigger an earthquake?

The movement of magma beneath the volcano causes earthquakes to occur but these are small and not big enough to be felt by humans. An eruption would not trigger damaging earthquakes, like those associated with tectonic plate movement. Likewise, a tectonic earthquake would not trigger an eruption of Mount Spurr.

What is the main hazard to me and my loved ones if there is a volcanic eruption?

The most widespread hazard to people from volcanic eruptions in Alaska is from volcanic ashfall. Volcanic ashfall has a variety of impacts, which depend on how much ash is deposited, and this will vary by location. Volcanic ash can impair visibility while it is falling (and afterwards as it is remobilized by wind or driving), is slippery (especially when wet) and can cause mechanical issues to automobiles and other machinery. It is hard and abrasive, so it can scratch surfaces and irritate eyes. Volcanic ash presents an air quality concern, especially if the particles are very fine-grained. People with existing respiratory or heart conditions should seek medical guidance regarding risk associated with ashfall.

QUESTIONS ABOUT/EXAMPLES FROM PAST ERUPTIONS

Last time Mount Spurr Erupted how much ash was deposited on nearby communities?

During the 1953 and 1992 Mount Spurr eruptions, up to a ¼ inch of ash fell on Southcentral Alaska communities. In 1992, up to 1/8 in (3 mm) of ash fell in Anchorage, closing the International Airport for 20 hours and disrupting commerce and transportation. Air quality alerts were issued in Anchorage during the fallout period and on the following weeks and months, as vehicle traffic and winds remobilized the ash again. More information on past eruptive activity can be found on the Mount Spurr volcano Activity Page:

<https://avo.alaska.edu/volcano/spurr/activity>

QUESTIONS ABOUT ASHFALL ON COMMUNITIES

How much ash should I expect to fall on my community if Mount Spurr erupts?

Ashfall would only occur if the winds were blowing from the volcano toward your community during an eruption so it is possible that your community might not get ashfall.

The amount of ashfall will depend on the **size and duration of the eruption** and the **wind speed and direction** at the time of eruption. Typically, ashfall is thickest in areas nearest to the volcano and thinner on communities' further way. The closest communities to Mount Spurr are Tyonek and Beluga within the Kenai Peninsula Borough. Ashfalls in the Municipality of Anchorage and the Matanuska-Susitna Borough are expected to be like 1953 and 1992 ashfalls up to about ¼ inch of ash. Official warnings of ashfall on communities & mariners will be issued by the [National Weather Service Anchorage Forecast Office](#) including where is it expected to fall, when and how much is expected to fall.

How long will it take for ashfall to start in my community after the eruption starts and how long will it last?

The **timing** of ashfall will depend on windspeed and direction. In the 1953 for example, following the start of the eruption, it took about 6-7 hours before ashfall started in Anchorage due to very slow wind speeds. In 1992 it took less than 2 hours to reach anchorage due to fast winds. The **amount** of ashfall depends on the eruption duration and wind speed. In 1992 for example, ashfall occurred for about 4 hours on Anchorage. Official warnings of ashfall on communities & mariners will be issued by the [National Weather Service Anchorage Forecast Office](#) including where is it expected to fall, when and how much ashfall is expected.

How can I check air quality in my community?

The State of Alaska Department of Environmental Conservation Division of Air Quality will issue air quality advisories, alerts, warnings, and emergencies. For current DEC Air Quality statements, visit [Air Quality Advisories/Episodes](#).

When will it be safe for people or animals to go outside after ashfall?

The impacts of volcanic ashfall will vary depending on the intensity and duration of the eruption, wind direction, and wind speed. It is recommended that exposure to ashfall be minimized as much as possible. While conditions will likely improve in the days following an ashfall event, canceling or postponing outdoor activities and non-essential travel should be considered.

After the initial ashfall, high winds and human activities, such as driving on the ash, can remobilize the ash and cause poor air quality for days or even months after an ashfall event. However, rain may improve air quality. [DEC Air Quality statements](#) and/or visit your local government's emergency services pages for more information.

How long will ash be a factor after an eruption?

Due to remobilization by wind and human activities like driving ash could be an issue for months to years following an ashfall. Dusty conditions may impact air quality and require increased maintenance schedules for all machinery including vehicles and air handling systems.

What should someone do if they need medical attention?

If you need medical attention, call 911. Emergency Medical Services will be available during an ashfall event. Do not call 911 for information; instead, check with your local government's emergency services or local media for up-to-date information.

QUESTIONS ABOUT PREPARING FOR ASHFALL

What is a reunification plan and why should my family create a plan?

A family emergency plan outlines how you and your loved ones will reconnect if separated during an emergency. It details what each family member will do during a disaster, establishes meeting locations and alternate shelter options, and records essential contact information.

A guide to creating an emergency plan can be found at [DHS&EM My Emergency Plan](#)

What can I do to protect my vehicle?

- **Drive cautiously:** If driving is essential, drive slowly, use headlights, and ensure ample windshield fluid. Volcanic ash is hard and abrasive, so rinse off the ash with water before washing the surfaces to prevent possible abrasion damage. Consider sealing sensitive areas of your vehicle, such as sunroofs, with tape to protect rubber seals. Set your vehicle to the recirculate air option to reduce the intake of ash from the road. If your vehicle is equipped with a cabin air filter, inspect, clean, or replace it if it becomes clogged.
- **Park safely:** If possible, park your vehicle indoors or under cover. Alternatively, cover your vehicle with plastic sheeting to prevent ash from settling on the surface and to make cleanup easier.
- **Check and maintain filters:** Frequently inspect air filters, and consider changing the oil and oil filters more often when driving in ash-contaminated environments—every 500 to 1,000 miles in hazy conditions, or as soon as possible if your vehicle was driven during a significant ashfall event (where visibility is greatly reduced).
- **Clean components when needed:** Air filters, brake assemblies, and alternators can be cleaned using compressed air if they're exposed to heavy ashfall or if

performance is degraded. If you don't have access to compressed air, check with a local service garage for assistance.

Visit USGS how to learn more about protecting your vehicle from ash - [Impacts & Mitigation - Vehicles](#)

When should I use a mask?

An N95 mask should be worn if you are outside or exposed to airborne ash. Take steps to avoid breathing in ash. Wear a mask if recommended by a government agency or health organization. Medically sensitive individuals or those with respiratory issues may consider wearing a mask indoors but should consult a healthcare professional if wearing a mask makes breathing difficult. For more information on how to protect yourself from inhaling volcanic ash, visit [Protection from breathing ash | IVHHN](#)

If I don't have a N95 mask will makeshift mask work?

A N95 mask provides a higher level of protection, but any type of mask or face covering can reduce the amount of ash entering a person's lungs. Surgical masks, general-use face masks, cloth masks, and makeshift masks can offer some level of protection. All masks should fit tightly to the face with minimal air gaps. Multiple layers of cloth may improve filtering capabilities, but wetting the material does not enhance the mask's ability to filter ash.

QUESTIONS ABOUT IMPACTS TO TRANSPORTATION

Will all road, air and maritime travel be hazardous if the volcano erupts?

It is highly likely that road, air, and maritime travel in Southcentral Alaska will be significantly disrupted during an eruption of Mount Spurr. Previous eruptions of nearby volcanoes, such as Augustine, Redoubt, and Spurr, as well as more distant volcanoes, have caused commercial flight cancellations to and from airports within Cook Inlet. The impact on travel is largely determined by the direction and extent of airborne ash cloud dispersion, as well as whether ashfall occurs at the airport.

For example, in 1992, Anchorage International Airport was closed for 20 hours, resulting in flight cancellations. Road travel is strongly discouraged during ashfall. Ash can severely damage a vehicle's engine and exterior, and it can create hazardous, slippery conditions that reduce traction.

In the days and weeks following an ashfall event, conditions may improve, but damage to vehicles and challenging driving conditions can persist. This is due to the remobilization of ash by wind and human activities, such as driving. To minimize risk, limiting travel in ashfall areas is highly recommended.

For current driving condition travel alerts go to [Alaska 511](#). For Official forecasts of airborne ash hazards to aircraft refer to the [National Weather Service Aviation Weather Unit](#) and

[Volcanic Ash Advisory Center](#) for aircraft. Official warnings of ashfall on communities & mariners will be issued by the [National Weather Service Anchorage Forecast Office](#) including where it is expected to fall, when and how much.

Will my flight out of Ted Stevens Anchorage International Airport, Merrill Field, Kenai, or other locations be cancelled if Mount Spurr erupts?

If you are flying commercially, check with your air carrier to determine the status of your flight. You can also check flight status at [Ted Steven International](#). For current aviation weather alerts go to [Alaska Aviation Weather Unit](#).

QUESTIONS ABOUT IMPACTS TO UTILITIES

Should I be concerned about water quality?

It is not anticipated the ash produced by Mount Spurr will be toxic.

Ash produced by a volcanic eruption, such as Mount Spurr, can elevate turbidity levels in open water sources like Eklutna Lake. During the winter months, turbidity is typically low due to reduced glacier runoff. Additionally, ice cover on the lake may delay the introduction of ash into the water supply. However, in the spring, turbidity levels naturally rise, which is likely when ash-induced turbidity would affect the Eklutna Lake water source.

The Anchorage Water and Wastewater Utility can adjust production levels and maintain operations during periods of increased turbidity, whether due to seasonal changes and/or ashfall from Mount Spurr.

Following the 1992 Mount Spurr eruption, there was a significant increase in water demand for cleanup purposes, which required a boost in water production.

Will power utilities be affected by a Mt. Spur Volcanic eruption?

During the 1953 and 1992 eruptions of Mount Spurr, only about ¼ inch (or less) of ash was deposited on communities in Southcentral Alaska. This minimal ash accumulation is unlikely to cause significant disruption to above-ground power distribution systems. Similarly, below-ground utilities, including natural gas and water/wastewater systems, would generally remain unaffected.

However, the intensity and duration of an eruption, as well as the direction of the wind, are factors that could potentially impact utility providers. That said, previous eruptions of Mount Spurr did not result in notable disruptions to utility services.