

OREGON OFFICE OF EMERGENCY MANAGEMENT

Communications Toolkit: Volcano

Table of Contents

ntroduction3
Alessages to the Public4
Key Messages4
Expanded Messages4
Press Releases
Templates6
Samples7
Social Media Messaging9
Videos and Multimedia9
Twitter Messages9
Facebook Messages

Introduction

The intent of the **Communication Toolkit: Volcano** is to assist messaging during and after a volcanic eruption in Oregon or the surrounding region. This toolkit contains information on communications with the media, partners and the public. During an emergency or disaster, the need for timely and accurate information, regarding what happened and what is being done, skyrockets. This toolkit will help coordinate messages.

This toolkit contains templates and suggestions for communications with the public and media. <mark>Areas highlighted in yellow are meant to be edited to your specific agency.</mark>

Messages to the Public

Key Messages

- Whether a volcano is considered active, dormant or extinct, there is a possibility it could erupt.
- Protect yourself from falling ash.
- Heed the advice of emergency officials regarding evacuations.
- Have an emergency plan and kit.
- Opt into emergency notification systems.
- Donate cash (not supplies) only to official non-profits organizations.

Expanded Messages

Preparing for a volcanic eruption

- Know if you live near a volcano.
 - The effects of an eruption can be experienced miles away.
- A volcano is considered "active" if it has erupted in the past 10,000 years.
- A volcano is considered dormant if it has not erupted in the last 10,000 years; however, this does not mean the volcano will not erupt in the future.
- A volcano is considered extinct if scientist considered it unlikely the volcano will erupt again because it no longer has a magma supply.
- Whether a volcano is considered active, dormant or extinct there is a possibility it could erupt in the future.
- Volcanic unrest is when the volcano is showing unusual activity or is erupting and can last for months or years.
- There are often warning signs prior to an eruption including earthquakes, gas plumes or emissions, ground swelling or a combination.
- A volcanic plume is a vertically ascending eruption of debris and gases that spreads as it reaches higher in the atmosphere.
- A volcanic emission is a release of gases into the atmosphere.
- During times of unusual activity, pay close attention to emergency plans and official recommendations.
- Have an emergency kit with necessary supplies ready in case you must evacuate.
- Have a family plan with meeting places and multiple communication plans.
 - Designate an out-of-state contact. Local phone lines will likely be bogged down but a long distance call may go through.
- Know local evacuation routes and procedures. If you have children in school know the school's plan for evacuation and reunification.

During a volcanic eruption

- If ordered to evacuate, do so immediately.
 - Take your emergency kit with you.
 - Take your animals with you. If it is not safe for you it is not safe for your pet.
- While volcanic eruptions themselves pose significant risk they also can produce a combination of subsequent hazards including floods, landslides or mudflows, tsunamis and wildfires.
- Released heat from lava and steam can melt snow and ice at a volcano's summit causing flooding, mudflows and other hazards.
 - If you see water rising rapidly, move to higher ground.

- Protect yourself from falling ash.
 - Volcanic ash can contain hazardous toxins if breathed in.
 - Limit time outdoors while ash is falling.
 - Ash can travel hundreds of miles away from the eruption depending on wind conditions.
 - Stay informed from official sources of air conditions and warnings.
 - During the Mt. St. Helens eruption in 1980, ash was carried as far as Bend.

After a volcanic eruption

- If possible, stay away from falling ash as it can irritate the respiratory system.
 - Wear a mask or breathe through a cloth.
 - Wear long sleeves and pants.
- Avoid driving as it can stir up ash and clog a vehicle's engine.
- Large amounts of ash can be heavy and should be removed from roofs to avoid collapse. Use caution when removing ash from a roof.

USGS Volcanic Activity Alert Notification System

- The U.S. Geological Survey (USGS) employs a <u>nationwide volcano alert-level system</u> for characterizing conditions at U.S. volcanoes.
- The USGS alert-level system for volcanic activity has two parts:
 - \circ $\ \ \,$ Terms to inform people on the ground about a volcano's status
 - \circ $\,$ Colors to inform the aviation sector about airborne ash hazards
- Alert-Level Terms:
 - <u>Normal</u> Volcano is in typical background, non-eruptive state or, *after a change from a higher level*, volcanic activity has ceased and volcano has returned to non-eruptive background state.
 - <u>Advisory</u> Volcano is exhibiting signs of elevated unrest above known background level or, *after a change from a higher level*, volcanic activity has decreased significantly but continues to be closely monitored for possible renewed increase.
 - <u>Watch</u> Volcano is exhibiting heightened or escalating unrest with increased potential of eruption, timeframe uncertain, **OR** eruption is underway but poses limited hazards.
 - <u>Warning</u> Hazardous eruption is imminent, underway or suspected.
- Aviation Color Codes:
 - <u>Green</u> Volcano is in typical background, non-eruptive state or, *after a change from a higher level*, volcanic activity has ceased and volcano has returned to non-eruptive background state.
 - <u>Yellow</u> Volcano is exhibiting signs of elevated unrest above known background level or, *after a change from a higher level*, volcanic activity has decreased significantly but continues to be closely monitored for possible renewed increase.
 - <u>Orange</u> Volcano is exhibiting heightened or escalating unrest with increased potential of eruption, timeframe uncertain, **OR** eruption is underway with no or minor volcanicash emissions (ash-plume height specified, if possible).
 - <u>Red</u> Eruption is imminent with significant emission of volcanic ash into the atmosphere likely **OR** eruption is underway or suspected with significant emission of volcanic ash into the atmosphere (ash-plume height specified, if possible).

Press Releases

Templates MEDIA RELEASE

Date NR 1

MEDIA CONTACT: Name Phone Number Email

Title

Subtitle (as needed)

Location, **Ore** – Scientists at the U.S. Geologic Survey has elevated the Volcano Alert Level for [Volcano] from [Previous Alert Level] to [New Alert Level]. This change in status indicates that the volcano is [Volcano Alert Definition]. This increase in alert level does not guarantee an eruption could or will happen. Residents are encouraged continue monitoring for official reports on actions to take.

[Agency] would like to remind everyone of the following safety tips in the event of an eruption:

- Pay close attention to emergency plans and official recommendations.
- Have an emergency kit with necessary supplies ready in case you must evacuate.
- Have a family plan with meeting places and multiple communication plans.
- Know local evacuation routes and procedures. If you have children in school know the school's plan for evacuation and reunification.
- Limit time outdoors while ash is falling.

For more information and further updates check Agency's website.

Samples

This press release was sent by the USGS Hawaiian Volcano Observatory on Sept. 17, 2015.

USGS Volcano Alert Level for Mauna Loa Elevated from Normal to Advisory Status

Scientists at the U.S. Geological Survey (USGS)'s Hawaiian Volcano Observatory (HVO) have elevated the Volcano Alert Level for Mauna Loa from NORMAL to ADVISORY. This change in status indicates that the volcano is showing signs of unrest that are above known background levels, but it does not mean that a Mauna Loa eruption is imminent or certain.

HVO's seismic stations have recorded elevated rates of shallow, small-magnitude earthquakes beneath the summit, upper Southwest Rift Zone, and west flank of Mauna Loa for at least the past year. During this same time, HVO monitoring instruments have measured ground deformation (inflation) on Mauna Loa that is consistent with recharge of the volcano's shallow magma storage system. Together, these observations indicate that Mauna Loa is no longer at a background level of activity.

Based on these changes in activity, and in accordance with the USGS Volcanic Activity Alert-Notification System, HVO raised the Volcano Alert Level for Mauna Loa to ADVISORY and the Aviation Color Code to YELLOW. The Volcano Alert Level is a four-tiered system that uses the terms Normal (background levels), Advisory, Watch, and Warning (highest threat) to inform the public about a volcano's status. These alert levels are issued in conjunction with Aviation Color Codes, which provide information about volcanic-ash hazards to the aviation industry. The codes are Green (background), Yellow, Orange, and Red (eruption imminent).

An ADVISORY/YELLOW status is declared when one or more volcano monitoring parameters are above the background range of activity, which is the current situation on Mauna Loa. Progression toward an eruption is by no means certain, but the volcano is closely watched to track how the unrest develops.

"It's possible that the increased level of activity at Mauna Loa could continue for many months, or years, without leading to an eruption," said Tina Neal, HVO's Scientist-in-Charge. "It is also possible that the current unrest could be a precursor to the next eruption of Mauna Loa. But at this early stage, we cannot determine precisely which possibility is more likely."

HVO previously maintained an ADVISORY/YELLOW status for Mauna Loa following increased rates of ground deformation during the rapid inflation of the volcano in 2004–2005. That period of inflation, similar to deformation currently observed, did not result in an eruption. When the inflation slowed to background levels in early 2010, the status of Mauna Loa was returned to NORMAL/GREEN.

The most recent eruption of Mauna Loa, which began on March 25, 1984, and lasted just over three weeks, was preceded by up to three years of increased earthquake activity. But, in contrast to pre -1984 activity, the energy released by recent earthquakes remains comparatively low.

HVO continues to closely monitor Mauna Loa, and will notify Hawai'i County Civil Defense, the National Park Service and other emergency managers, as well as the public, if significant changes are detected.

In response to the status change, HVO is now posting weekly Mauna Loa updates on the HVO website. It is possible to receive these updates via email by signing up for HVO notices through the free USGS Volcano Notification Service.

"The alert level change at Mauna Loa reminds us that it is an active volcano that will erupt again someday, so we should be prepared," said Frank Trusdell, an HVO geologist who has extensively studied and mapped Mauna Loa. To facilitate public awareness and prepared ness, HVO has posted on its website "Frequently Asked Questions about Mauna Loa". Current monitoring data for Mauna Loa is also posted on the HVO website.

For more information about Mauna Loa, other active Hawaiian volcanoes, and recent earthquakes in Hawaii, visit the HVO <u>website</u> or email askHVO@usgs.gov.

Social Media Messaging

The following are suggested social media engagement tools and can be posted directly or edited to suit your agency's needs. When posting on Twitter and Facebook use the event hashtag, other commonly used hashtags or combinations.

Commonly used hashtags:

#OregonEM #Volcano

Videos and Multimedia

It is best to accompany social media posts with photos and videos whenever possible.

Videos: Washington Volcanoes

Graphics: Oregon Volcanoes

Twitter Messages

The following messages can be posted to your agency's local twitter account. We encourage you to retweet messages from <u>@OregonOEM</u> and tag OEM in your tweets.

Twitter accounts to watch and retweet:

<u>@OregonGovBrown</u> – Oregon Governor Kate Brown <u>@OSFM</u> – Oregon State Fire Marshal <u>@ORDeptForestry</u> – Oregon Department of Forestry <u>@RedCrossCasc</u> – American Red Cross Cascades Region <u>@NFPA</u> – National Fire Protection Agency

Scripted Tweets

Oregon has a history of volcanic eruptions. Know your evacuation route and have an emergency kit ready

Volcanoes are a part of agency's emergency plan, are they a part of yours?

Volcanic ash can be toxic and should not be breathed in. Wear a mask or breathe through a cloth.

Facebook Messages

The following messages can be posted to your agency's local Facebook account. We encourage you to share posts from the <u>Oregon Office of Emergency Management</u> and tag OEM in your posts.

Facebook Accounts to watch and share:

Oregon Office of the State Fire Marshal USGS Volcanoes Oregon Department of Forestry National Fire Protection Agency (NFPA) Red Cross Cascades Region

Scripted Posts

- 1. Oregon has a history of volcanic activity. Knowing the terms for volcanic activity and warnings will help prepare you and your family in the event of an eruption.
 - a. <u>Normal</u> Volcano is in typical background, non-eruptive state or, *after a change from a higher level*, volcanic activity has ceased and volcano has returned to non-eruptive background state.
 - b. <u>Advisory</u> Volcano is exhibiting signs of elevated unrest above known background level or, *after a change from a higher level*, volcanic activity has decreased significantly but continues to be closely monitored for possible renewed increase.
 - c. <u>Watch</u> Volcano is exhibiting heightened or escalating unrest with increased potential of eruption, timeframe uncertain, **OR** eruption is underway but poses limited hazards.
 - d. <u>Warning</u> Hazardous eruption is imminent, underway or suspected.
- 2. Oregon has great hiking trails including Mt. Hood and Crater Lake. These areas are also volcanoes. Before planning your next hiking trip learn how to prepare for an eruption. http://volcanoes.usgs.gov/vhp/preparedness.html