# Hawai'i Volcanoes National Park (HVNP) visitors

#### **RECOMMENDATIONS**

- Follow the advice of Park rangers and posted signs
- Check air quality in the park before visiting (see links on back cover)

#### DANGER

VOLCANIC FUMES ARE HAZARDOUS TO YOUR HEALTH AND MAY BE LIFE THREATENING

DO NOT ENTER THIS AREA IF YOU ARE A PERSON AT RISK

- RESPIRATORY PROBLEMS
- HEART PROBLEMS
- PREGNANT
- INFANTS & YOUNG CHILDREN



#### **RESPIRATOR OR FACE MASK USE:**

The Hawaii Department of Health (HDOH) does not recommend the public use of respirators to protect against volcanic gases. However, N95-type particle-filtering respirators/masks can help to protect against volcanic ash. Children should not use N95 masks because they are sized for adults.

# For your information...

- Interagency Vog FAQ booklet (expands on the protective actions presented here): www.ivhhn.org/vog/FAQ.pdf
- ➤ **Vog dashboard** (comprehensive information including links below): www.ivhhn.org/vog
- ► UH Mānoa VMAP Vog Forecast Model (SO<sub>2</sub> and sulfate particle forecasts based on wind model): http://weather.hawaii.edu/vmap/
- ► HDOH Hawai'i short-term SO<sub>2</sub> monitoring and advisory (SO<sub>2</sub> gas data from island-wide monitoring stations): www.hiso2index.info/
- U.S. EPA AirNow current PM<sub>2.5</sub> conditions: www.airnow.gov (select Hawaii State at top of page)
- ► NPS HVNP air quality monitoring and advisory (SO<sub>2</sub> and PM<sub>2.5</sub> data from within the National Park): www.hawaiiso2network.com











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Graphic Design by Klineworks

# What can I do to protect myself from vog?

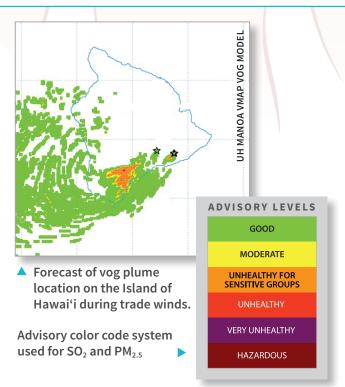
Vog is a hazy mixture of sulfur dioxide gas (SO<sub>2</sub>) and particles (PM<sub>2.5</sub>) originating from Kīlauea Volcano. Sensitivity to vog varies, so individuals need to protect themselves as necessary. People with pre-existing medical conditions are expected to be at highest risk for health effects, depending on the amount of emissions, distance away from the vent, and wind direction from day to day.

### What can I do?

#### **Prepare**

- Understand the hazard: Get familiar with key air monitoring websites and the SO<sub>2</sub> and PM<sub>2.5</sub> advisory codes/levels.
- Learn about wind conditions: Be aware of winds that could carry vog to your area.
   This will help you to better predict when you might be affected.
- Keep medications handy: If you have asthma or other respiratory conditions, keep your medication available and use as prescribed. If you don't have medications, but feel you might need them, call your doctor.

See links on back cover for wind and air monitoring websites



## Take protective actions to reduce exposure



#### **SEEK MEDICAL ASSISTANCE**

- If you are having asthma symptoms seek medical assistance as necessary.
- Assume that asthma could get worse during periods of high vog.



#### TAKE CARE OF YOURSELF

- Do not smoke: Also, avoid secondhand smoke.
- Stay hydrated: Drink plenty of liquids to help loosen congestion.
   Warm or hot liquids may help some people.
- Manage congestion or irritation:
   Over-the-counter nasal sprays or eye drops can help to reduce symptoms.





# 5 THINGS TO DO IF YOU ARE BOTHERED BY VOG:



**Limit strenuous activities:** Outdoor exercise or exertion increases your chances of being affected by SO<sub>2</sub> gas and/or PM<sub>2.5</sub>.



**Stay indoors:** If possible, go indoors and close all outside doors and windows, but beware of becoming overheated. If your house is not well-sealed, it may still offer some protection.

- Eliminate sources of indoor pollutants (e.g., smoking, candles or incense).
- Consider visiting commercial indoor areas that are better-sealed or have air conditioning.



**Use an air cleaner:** If a room in your house can be closed up, an appropriate air-cleaning device can help reduce the levels of vog.



Leave the area if appropriate: Consider temporarily relocating to a less impacted part of the island.



Close up your vehicle: If driving through the dense volcanic plume near Hawai'i Volcanoes National Park, to minimize air infiltration, temporarily close your windows and vents, and turn your fan and air conditioner off.