



Hawaii County Evacuation Guidance on Hazardous Gas Exposure



Code	Color	SO ₂ Level (parts per million) – 30 min average	H ₂ S Level (parts per million) – 30 min average	Health Effect	Public Response
Blue	Blue	0.0 to 0.2	0.0 to < 0.6	<ul style="list-style-type: none"> Individuals with pre-existing medical or respiratory conditions may be affected at these levels. Little or no risk to healthy individuals. 	<ul style="list-style-type: none"> People with breathing difficulties should take action to avoid exposure. Everyone should be alert for changing conditions.
Orange	Orange	> 0.2 to 1.0	0.6 to < 7.0	<ul style="list-style-type: none"> Individuals with pre-existing medical or respiratory conditions may experience health effects, like wheezing or chest tightness, and should leave the area. The general public is not expected to be affected in this range. 	<ul style="list-style-type: none"> Individuals with pre-existing medical or respiratory conditions should avoid outdoor activities that cause heavy breathing or breathing through the mouth. Minimize physical activities. Take actions to limit exposure by going indoors or leaving the area. Everyone should be alert for changing conditions.
Red	Red	Above 1.0	7.0 or above	<ul style="list-style-type: none"> The general public may experience minor respiratory issues and should be on alert while minimizing exposure. As concentrations increase, everyone may experience more serious health effects. Severe effects may include choking or difficulty breathing. May affect entire exposed population. 	<ul style="list-style-type: none"> Prepare and be alert for Civil Defense warnings regarding possible evacuation. Take actions necessary to limit further exposure (remain indoors or leave area). Monitor emergency broadcasts and follow instructions. Call 9-1-1, Hawaii Poison Center (1-800-222-1222) or seek medical attention if severely affected.

NOTES:

- Asthmatics & persons with chronic respiratory disease: Always have your medications available.
- Reducing your exertion level so that you can breathe through your nose will reduce the amount of hazardous gas that reaches your lungs.
- People experiencing health effects: Contact your doctor as soon as possible if any problems develop, as respiratory conditions might worsen rapidly in heavy sulfur dioxide (SO₂), hydrogen sulfide (H₂S) or vog conditions.
- People have different sensitivities to hazardous gas. Use this table to learn how sensitive you are, so that you can develop appropriate measures to protect your health and avoid serious responses.
- Readings are based on 30-minute average. Part per million equals part per billion divided by 1000.
- Susceptible individuals may develop symptoms at or below the warning limits.
- Individuals with pre-existing respiratory conditions such as asthma, bronchitis, emphysema, lung or heart disease may be more severely impacted by poor air quality conditions. Note: Some people with mild asthma may not be aware of it. If you have breathing difficulties at low levels of SO₂ or H₂S, check with your healthcare provider.
- People react differently to hazardous gas exposure - some are more sensitive. For many people simply reducing activity levels enough so that they can breathe through the nose will permit them to be outdoors without symptoms.
- Current levels can be monitored at <http://www.epa.gov/kilaueaairdata>

This is a joint venture and product of the Hawaii County Civil Defense Agency, Hawaii State Department of Health, and the U.S. Environmental Protection Agency in response to the Kilauea volcanic eruptions. Last updated: June 5, 2018.