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## **Community perceptions of vog exposure, protection and advice on Hawai`i Island: a first assessment**

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Eruptions from Kilauea Volcano, Hawai`i have been nearly continuous since 1983, with 300-30,000 tonnes of SO<sub>2</sub>/day released. Populations downwind are chronically exposed to vog (composed of SO<sub>2</sub> gas and sulfate particles). This study investigates the translation of vog protection advice into practice in Hawai`i homes. Through community focus groups and a survey, we assessed whether, and how, residents access advice, if it is relevant and useful, how they act on it and would like to receive advice/alerts. We also documented self-developed interventions and perceived symptoms attributed to vog exposure. Vog is a major part of people's lives on Hawai`i Island: 96% of the subjects notice the vog, many at least a few times/week. 82% attribute health symptoms to vog exposure and 77% believe vog causes long-term health impacts. A third of the subjects would consider leaving the island. Of the 146 subjects in the survey, 53% do not take action when exposed to vog. This is because: 1) some people are not affected; 2) some people are unaware of appropriate protective actions; and 3) some people find the recommended actions difficult to enact. The focus groups highlighted that many people do not think their indoor environment is protective: 59% of subjects think their home is not well-sealed and 75% did not have an air cleaner, air conditioner or dehumidifier. People also reported using a range of non-official interventions, such as washing their skin, drinking hot drinks and using eye and nasal drops/sprays. Of those that do take official advice, 90% think it is helpful. The subjects wanted to receive advice and alerts mainly by internet, radio, social media, television, bulletin board, pamphlets and text/SMS. The findings of this survey resulted in revision of official advice on vog and multiple outreach products developed through interagency partnerships (see Session S1.17 presentation).