

## HIVE Train-the-trainer initiative

**Yogyakarta, January 2019**

**Background:** The HIVE project conducted research into the effectiveness of different forms of respiratory protection used by communities to protect themselves from inhaling volcanic ash. The published study results (1, 2) have been translated into recommendations and public informational products (both printable and audio-visual) which are available on the website of the International Volcanic Health Hazard Network ([www.ivhhn.org](http://www.ivhhn.org)). This includes information (a leaflet and a video) on how to fit a facemask. The leaflet was designed to be handed out with a facemask, during a volcanic crisis. These were produced after the HIVE pilot study (3) showed that many people in Yogyakarta, Indonesia were being given masks with no information on how to fit them and, consequently, were not wearing them correctly.

**Aim:** We would like to conduct a train-the-trainer initiative to educate communities, in Yogyakarta, in how to accurately fit a facemask. This part of Indonesia has many natural hazards, including active volcanoes, so the civil protection, disaster management and health governmental and non-governmental agencies have a large, active volunteer network, which disseminates information and best practice actions within the communities. We want to harness this network in order to roll out knowledge across a wide population.

**Method:** We aim to recruit around 100 volunteers, who are belong to networks such as PMI (Red Cross) and DREAM (led by a local university). We will train them in how to fit a facemask, through in-person demonstrations and by learning from the leaflet and video products. We will then teach the volunteers how to train other people, through role-play exercises. We will set up agreements with the GO/NGOs that their volunteers will each agree to train a further people from both volunteers and community groups.

**Timeframe:** The trip is planned for 17-24 January 2019.

### References

1. Mueller W, Horwell CJ, Apsley A, Steinle S, McPherson S, Cherrie JW, et al. The effectiveness of respiratory protection worn by communities to protect from volcanic ash inhalation; Part I: Filtration efficiency tests. International Journal of Hygiene and Environmental Health 2018;221(6):967-976.
2. Steinle S, Sleeuwenhoek A, Mueller W, Horwell CJ, Apsley A, Davies A, et al. The effectiveness of respiratory protection worn by communities to protect from volcanic ash inhalation; Part II: Total inward leakage tests. International Journal of Hygiene and Environmental Health 2018;221(6):977-984.
3. Horwell CJ, Ferdiwijaya D, Wahyudi T, Dominelli L. Use of respiratory protection in Yogyakarta during the 2014 eruption of Kelud, Indonesia: Community and agency perspectives. Journal of Volcanology and Geothermal Research 2017.