

Moran, S.C., 2023, December. The USGS Volcano Science Center's (VSC) 2023 Newberry Volcano Tabletop Exercise: Testing the VSC's Response Plan for Significant Volcanic Events. In AGU Fall Meeting Abstracts (Vol. 2023, No. 215, pp. V33F-0215).

ABSTRACT

In April 2023 the USGS Volcano Science Center (VSC) held a two-day internal tabletop exercise based on a scenario involving a volcanic event at Newberry Volcano (Oregon). The two primary purposes of the exercise were to: 1) better prepare VSC staff for an eruption at a Cascade Range volcano; and 2) test parts of the VSC's "Response Plan for Significant Volcanic Events," a plan that has been in development since the 2018 eruption of Kīlauea Volcano (Hawai`i). A key feature of the plan is an Incident Command System (ICS)-like organizational framework called the "Observatory Volcanic Event Response Team," or OVERT, that includes up to 40 positions, each with defined roles and responsibilities, embedded in a hierarchical chain-of-command structure that follows the ICS' span-of-control principle. Primary design goals of the OVERT framework include: 1) providing observatory Scientists-in-Charge with a checklist to ensure that all key functions, including scientific activities, are covered during the crisis; 2) clarifying roles and responsibilities for those working in the response; 3) streamlining communications and decision-making; and 4) ensuring that no individual is doing too much.

To prepare staff for the tabletop exercise, we held a two-hour seminar one week beforehand featuring talks about Newberry Volcano, prior VSC eruption responses, and the VSC response plan. The exercise was run virtually so that staff from all USGS observatories could participate and was limited to only VSC personnel to keep the scope of the exercise manageable. Even with that limit, over 100 people participated in each of the two days of the exercise, representing > 50% of all VSC staff. Each day consisted of a mixture of structured discussion via all-hands meetings and unstructured time when smaller teams could meet as needed. Activities were motivated by the scenario plus over 140 "injects" designed to either motivate specific actions or test various aspects of the OVERT. In follow-on surveys given to participants after each of the two days, there was notable improvement in respondents' familiarity both with the OVERT concept and how to communicate internally during a crisis, and a self-reported predominantly high level of engagement in the exercise (8-9 out of 10).

Link: <https://ui.adsabs.harvard.edu/abs/2023AGUFM.V33F0215M/abstract>