

## What the volcano taught me

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People have a difficult time dealing with uncertainty, especially for events that are perceived as highly unlikely to occur. We often fall back on two simple strategies: (1) Until a disaster strikes *it will not happen to me*. (2) Immediately after a disaster focus attention on the consequences.

That's exactly how I found myself behaving after arriving in London shortly after the Eyjafjallajökull volcano in Iceland began spewing ash on April 14. At a meeting the following morning, someone asked: "Are the airlines insured against volcanic ash?" Everyone in the room started laughing.

It was only then that I learned my flight from Philadelphia was one of the last ones to arrive in the UK. My initial thought was "How lucky to be able to get into London just in the nick of time." Everyone at our meeting was convinced that my flight on Sunday would take off as scheduled.

Over the next couple of days, I treated the problem as below my level of concern, assuming I would leave London as planned. By Saturday, however, the situation was sufficiently serious that I found myself focusing on the consequences of the event---my missing classes during the final week of the semester---but felt totally stymied by having no course of action except to wait and see what transpired. Leaving the UK for the continent was extremely difficult, and my travel agent said he couldn't book me a flight to the U.S. from any other European city until the following Thursday.

Fortunately, I was on one of the first planes out of Heathrow on Wednesday April 28th, which mysteriously was half empty, even though the crew told us it had been fully booked. We arrived in Philadelphia 45 minutes early because there were so few other planes flying out of London and all the other international flights to the city of Brotherly Love had been canceled.

The flight disruptions due to the Iceland volcano eruption might have been avoided if the airlines had taken a lesson from Alaska Airlines who had to cope with volcanic ash from Mount St. Helens 30 years ago. After its planes were grounded for days by the eruption in Washington state, the airline developed an effective way to navigate safely around volcanic ash by using computer models to predict the path of ash clouds. It will be interesting to see if the airlines are now more effective in routing flights from Europe in the coming days given a **new plume of low-altitude ash** that has floated eastward over Spain and southeastern France during this past weekend.

The current oil spill in the Gulf of Mexico has also brought back memories of a severe oil spill off Santa Barbara, CA in 1969 that shut down offshore oil drilling along the Atlantic and Pacific Coasts. Twenty years later, Congress was on the verge of allowing drilling in Alaska's Arctic National Wildlife Refuge when the Exxon Valdez hit the rocks. An open question today is whether plans for offshore drilling will be shelved, and if so for how long?

These two examples illustrate that crises provide opportunities for undertaking steps to avoid another disaster. The challenge is to overcome our natural tendency to assume that the disaster will not happen again. How can our leaders avoid a **NIMTOF (Not in My Term of Office) philosophy** when deciding whether to undertake protective measures?

A starting point is to stretch the time horizon when thinking about the likelihood of a catastrophic event. For example, a one-in-100 chance of a serious flood occurring next year means that the likelihood of experiencing *at least one such flood* over the next 25 years is greater than one-in-five.

But presenting information alone will not do the trick. Data on the likelihood and consequences of low-probability, high-consequence events requires public sector action. Long-term contracts such as multi-year insurance policies with premium reductions for those who invest in protection, coupled with multi-year loans to spread the costs of these measures over five, 10 or 20 years, can encourage property owners to take action now. The insurance premium reductions are likely to be greater than the annual loan payments, making the measure financially attractive.

Strategies need to be designed so that legislators, potential victims and other key stakeholders pay attention to future disasters that are below their threshold level of concern. Then they need to focus on what steps should be taken today rather than hoping the catastrophe will not occur.