

Increase in respiratory symptoms following volcanic eruption

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Exposure to volcanic ash can increase respiratory symptoms such as an extreme cough, or phlegm, according to a new study.

The research, which will be presented today at the European Respiratory Society's Annual Congress in Vienna, investigated the effects of living close to the Icelandic Volcano, Eyjafjallajökull.

Eyjafjallajökull erupted in April 2010 and created a huge [ash cloud](#) which spread across Europe, causing widespread disruption to air travel on the continent.

Researchers from the University of Iceland have now examined the effect of this ash cloud on the respiratory health of those living close to the volcano. They compared 1,148 people living in South Iceland, who were close to the volcano, with 510 people from North Iceland, which was relatively unaffected by the ash cloud.

All participants were asked to complete a [respiratory health](#) questionnaire, giving details of their well-being for the previous year. The questionnaire was distributed 6 months after the eruption.

The results showed that people living close to the volcano had worse symptoms than those in the control population. Also, within the group living close to the volcano, those who lived very close experienced more symptoms than those who were a bit further away.

When giving information on their symptoms during the previous month, the exposed group reported more phlegm (odds ratio 2.1), [eye irritation](#) (odds ratio 2.9) and a runny or irritated nose (odds ratio 2.0). They also reported a higher level of cough than the [control group](#) (odds ratio 2.6).

The researchers also found that the symptoms co-existed, as people reporting one symptom were likely to have others too.

Lead researcher, Hanne Krage Carlsen, said: "The eruption of Eyjafjallajökull in Iceland provided the opportunity for us to study the [health effects](#) of people living close to the volcano. Our results suggest that living close to a volcano after a substantial eruption can seriously increase the risk of [respiratory symptoms](#). Although the long-term consequences are still unknown, this has important clinical relevance as healthcare professionals treating people in this situation need to be aware of the potential rise in respiratory symptoms."

Provided by European Lung Foundation

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