

HEALTH ISSUES RELATED TO VOLCANIC ACTIVITY

Summary

Health problems related to volcanic eruptions are caused mainly by ashfall. Ash inhalation, especially during long-term exposure, can result in respiratory disease, including attacks of bronchitis and asthma. Long-term exposure to fine, silica-rich ash can potentially cause chronic fibrotic diseases such as silicosis. Ash may also contain carcinogenic asbestiform minerals. Ashfall has the potential to contaminate water supplies, of particular concern being high fluorine concentrations, which may lead

to dental fluorosis or possibly even skeletal fluorosis. Sulphur dioxide emitted in volcanic gases can trigger asthma attacks, even at low concentrations. Carbon dioxide emissions are also known to have caused an asphyxia hazard. Ocular problems from ashfall include irritative conjunctivitis. Psychological effects of eruptions may last for many years, symptoms including anxiety, tension, insomnia, anegia and social dysfunction.