

Reviews & general articles

Review articles

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Buist, A. S., Bernstein, R. S., Johnson, L. R. & Vollmer, W. M. (1986) '[Evaluation of physical health effects due to volcanic hazards: human studies](#)', *Am J Public Health*, 76, 66-75.

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Hansell, A. & Oppenheimer, C. (2004) '[Health hazards from volcanic gases: a systematic literature review](#)', *Archives of Environmental Health*, 59(12): 628-639.

Horwell, C.J. & Baxter, P.J. (2006) '[The respiratory health hazards of volcanic ash: a review for volcanic risk mitigation](#)', *Bulletin of Volcanology*, 69: 1-24.

Newhall, C. G., & Fruchter, J. S. (1986) '[Volcanic activity: a review for health professionals](#)', *American Journal of Public Health*, 76(Suppl), 10-24.

Stewart, C., Johnston, D.M., Leonard, G.S., Horwell, C.J., Thordarson, T., & Cronin, S.J. (2006) '[Contamination of water supplies by volcanic ashfall: A literature review and simple impact modelling](#)', *Journal of Volcanology and Geothermal Research*, 158: 296-306.

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Witham, C.S., Oppenheimer, C. and Horwell, C.J. (2005) '[Volcanic ash leachates: a review and recommendations for sampling methods](#)', *Journal of Volcanology and Geothermal Research*, 141: 299-326.

Witham, C.S. (2005) '[Volcanic disasters and incidents: A new database](#)', *Journal of Volcanology and Geothermal Research*, 148(3-4): 191-233.

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General/uncategorised articles

Baxter, P. J., Ing, R., Falk, H., French, J., Stein, G. F., Bernstein, R. S., Merchant, J. A. & Allard, J. (1981) '[Mount St Helens eruptions, May 18 to June 12, 1980. An overview of the acute health impact](#)', *JAMA*, 246, 2585-9.

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Ash impacts

IVHHN leachates protocol

Stewart, C., Horwell C.J., Plumlee, G., Cronin, S., Delmelle, P., Baxter, P., Calkins, J., Damby, D.E., Morman, S. & Oppenheimer, C. (2013) 'Protocol for analysis of volcanic ash samples for assessment of hazards from leachable elements'. Available at: www.ivhhn.org/

IVHHN ash analysis protocol

Methodology papers for bulk ash analysis

Horwell, C.J. (2007) '[Grain size analysis of volcanic ash for the rapid assessment of respiratory health hazard](#)', *Journal of Environmental Monitoring*, 9(10), 1107 - 1115.

Horwell, C.J., Fenoglio, I. & Fubini, B. (2007) '[Iron-induced hydroxyl radical generation from basaltic volcanic ash](#)', *Earth and Planetary Science Letters*, 261(3-4): 662-669.

Le Blond, J.S., Cressey, G., Horwell, C.J. & Williamson, B.J. (2009) '[A rapid method for quantifying single mineral phases in heterogeneous natural dust using X-ray diffraction](#)', *Powder Diffraction*, 24: 17-23.

Reich, M. (2009) '[Formation of cristobalite nanofibers during explosive volcanic eruptions](#)', *Geology*, 37(5): 435-438.

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Recent research papers applying methodologies for bulk ash analysis

Cronin, S.J., Stewart, C., Zernack, A., Brenna, M., Procter, J.N., Pardo, N.m Christenson, B., Wilson, T.M., Stewart, R.B. and Irwin, M. (2014) 'Volcanic ash leachate compositions and assessment of health and agricultural hazards from 2012 hydrothermal eruptions, Tongariro, New Zealand', *Journal of Volcanology and Geothermal Research* (accepted, in press).

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Horwell, C.J., Sparks, R.S.J., Brewer, T.S., Llewellyn, E.W. and Williamson, B.J. (2003) '[The characterisation of respirable volcanic ash from the Soufriere Hills Volcano, Montserrat, with implications for health hazard](#)', *Bulletin of Volcanology*, 65: 346-362.

Le Blond, J.S., Horwell, C.J., Baxter, P.J., Michowicz, S.A.K., Tomatis, M., Fubini, B., Dilmelle, P., Dunster, C., & Patia, H. (2010) '[Mineralogical analyses and in vitro screening tests for the rapid evaluation of the health hazard of volcanic ash at Rabaul volcano, Papua New Guinea](#)', *Bulletin of Volcanology*, 72: 1077-1092.

Reich, M. (2009) '[Formation of cristobalite nanofibers during explosive volcanic eruptions](#)', *Geology*, 37(5): 435-438.

General/Multi-Volcano Studies

Bonner, J. C., Rice, A. B., Lindroos, P. M., O'Brian, P. O., Dreher, K. L., Rosas, I., Alfaro-Moreno, E. and Osornio-Vargas, A. R. (1998) '[Induction of the lung myofibroblast PDGF receptor system by urban ambient particles in Mexico city](#)', *American Journal of Respiratory Cell Molecular Biology*, 19, 672-680.

Cervini-Silva, J., Gomez-Vidales, V., Ramirez-Apan, M. T., Palacios, E., Montoya, A., Kaufhold, S., Abidin, Z., & Theng, B. K. (2014) '[Lipid peroxidation and cytotoxicity induced by respirable volcanic ash](#)', *Journal of Hazardous Materials*, 274, 237-246.

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Wendlandt, R. F., Harrison, W. J. and Vaughan, D. J. (2007) '[Surface coatings on quartz grains in bentonites and their relevance to human health](#)', *Applied Geochemistry*, 22(11), 2290-2306.

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Non-peer reviewed

Baxter, P. J., Woo, G. and Pomonis, A. (1998) '[Preliminary assessment of volcanic risk on Montserrat](#)'. Montserrat: Montserrat Volcano Observatory.

Damby, D. (2012) '[From Dome to Disease: The Respiratory Toxicity of Volcanic Cristobalite](#)', Doctoral dissertation, Durham University, UK.

*Mascarenhas, S., & Mattoso, L.H. (2010) '[Volcanic ash should not be presumed harmless in long term](#)', *Nature*, 465(7295), 157.

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Africa

Cameroon

Atanga, M.B.S., Van der Meerve, A.S., Shemamg, E.M., Suh, C.E., Kruger, W., Njome, M.S., & Asobo, N.E. (2013) '[Volcanic Ash from the 1999 Eruption of Mount Cameroon Volcano: Characterization and Implications to Health Hazards](#)', *African Journals Online*, 8(2-3), 63-70.

Americas

Argentina

General

Ruggieri, F., Saavedra, J., Fernandez-Turiel, J. L., Gimeno, D. and Garcia-Valles, M. (2010) '[Environmental geochemistry of ancient volcanic ashes](#)', *Journal of Hazardous Materials*, 183(1-3), 353-365.

Copahue Volcano

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Chile

Daga, R., Guevara, S.R., Poire, D.G., & Arribére. (2014) '[Characterisation of tephra dispersed by the recent eruptions of volcanoes Calbuco \(1061\), Chaitén \(2008\) and Cordón Caulle Complex \(1960 and 2011\), in Northern Patagonia](#)', *Journal of South American Earth Sciences*, 49, 1-14.

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Reich, M., Zuniga, A., Amigo, A., Vargas, G., Morata, D., Palacios, C., Parada, M. A. & Garreaud, R. D. (2009) '[Formation of cristobalite nanofibers during explosive volcanic eruptions](#)', *Geology*, 37(5), 435-438.

Ecuador

Guaga Pichincha Volcano

Naumova, E. N., Yepes, H., Griffiths, J. K., Sempertegui, F., Khurana, G., Jagai, J. S., Jativa, E. and Estrella, B. (2007) '[Emergency room visits for respiratory conditions in children increased after Guagua](#)

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Mount Tungurahua

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Costa Rica

Horton, R. J. M. & McCaldin, R. O. (1964) '[Observations on air pollution aspects of Irazu volcano, Costa Rica](#)', *Public Health Reports*, 79, 925-929.

Nicaragua

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