

Introduction of International Volcanic Health Hazard Network

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Volcanic eruptions are often accompanied by the discharge of volcanic gases and fine pyroclastic particles, which may cause health problems. At Miyakejima Island, for example, the continuous emission of sulphur dioxide, which started in 2000, has prevented residents from returning to the island for over four years. This clearly shows that the evaluation of the impact of volcanic emissions on people's health plays a key role in assessing the social repercussions of volcanic eruptions.

The International Volcanic Health Hazard Network (IVHHN) was launched in February 2003 with the aim of trying to determine the health effects of volcanic emissions. IVHHN currently involves 31 expert members from 25 international institutions and over 120 corresponding members. Members of IVHHN work in diverse scientific disciplines such as volcanology, epidemiology, toxicology, public health, and physical chemistry. IVHHN was awarded Commission status by the International Association of Volcanology and Chemistry of Earth's Interior (IAVCEI) in 2003.

The main goals of IVHHN are: (1) to promote the expansion of the newly emerging field of volcanic health hazard research, (2) to continue existing collaborations and develop new collaborative links between the multidisciplinary international partner organizations, (3) to produce and widely disseminate protocols and volcanic health hazard information to volcano observatories, scientists, governments, emergency managers, health practitioners, and the general public, (4) to encourage the collection of geological and medical data to evaluate health hazards, and (5) to compile databases of well-characterized ash and gas samples, as well as volcanic literature from around the world, for use by the Network and other workers.

IVHHN is now preparing several guidelines related to the health hazards of volcanic emissions. I will translate some of the guidelines into Japanese, to provide information for the public in Japan, via the World Wide Web. This task is involved in the project entitled, 'The study on volcanic eruption predictions' by the National Research Institute for Earth Science and Disaster Prevention, Japan. One of the main objectives of the project is to use the effectiveness of the computer to improve the procedures of providing information for disaster mitigation, with the ultimate goal of developing a 'next generation' hazard map.

I will talk about IVHHN and the contents of the guidelines on volcanic gas exposure, some of which are now available to the public via Internet.