

Health effects of volcanic activities of Mt. Sakurajima

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Mt. Sakurajima in Kagoshima, Japan is located close to metropolitan areas, and is one of the most active volcano in the world. At the time of a large eruption in 1914, lava discharged by the volcano connected the Island of Mt. Sakurajima to the Ohsumi Peninsula. Since then, it has become active every 10-30 years. Relatively active periods were around 1935, 1946, 1956-67, and the period between 1972 and 2001 with its peak in 1985. In recent years, it has become active again and, in 2011, it erupted more than 1000 times a year. In 2012, the number of eruptions decreased but still it erupted nearly 1000 times a year. Mt. Sakurajima disgorges various dusts and gases, including sulfur dioxide, silica and radon gases. This paper, which is to be presented at the session on various volcanic activities and their health consequences of major volcanoes in Japan, will review studies of the chronic health effects of the volcanic activities of Mt. Sakurajima, including our recent study, which showed an increase of lung cancer in the vicinity of this volcano.