The accident raised concerns about the safety of the Soviet nuclear power industry. It slowed its expansion (getting bigger) for some time. It also forced the Soviet government to become less secretive. Since then, Russia, Ukraine and Belarus have become separate countries. Those countries have been burdened with continuing costs for decontamination (removing the radiation) and health care because of the accident. Exposure to radiation leads to a higher risk of getting cancer. It is difficult to accurately tell the number of deaths caused by the events at Chernobyl. The Chernobyl accident happened when some workers were testing the safety of the reactor. Some of the devices that stopped the reactor from blowing up were switched off. Then, there was a power surge; they lost control and the reactor blew up.

Most of the people affected have not died yet. When and if the people involved die of cancer, or related diseases, it will be hard to tell if this was because of the accident. A 2005 IAEA report tells of 56 direct deaths; of those, 47 were accident workers and 9 were children who died of thyroid cancer. The report estimates that up to 4,000 people may die from long term diseases related to the accident. Greenpeace, along with others, thinks that the study's conclusions may be false.