Abstract

Twenty years after the Chernobyl accident the WHO and the International Atomic Energy Authority issued a reassuring statement about the consequences. Our objectives in this study were to evaluate the health impact of the Chernobyl accident, assess the international response to the accident, and consider how to improve responses to future accidents. So far, radiation to the thyroid from radioisotopes of iodine has caused several thousand cases of thyroid cancer but very few deaths; exposed children were most susceptible. The focus on thyroid cancer has diverted attention from possible nonthyroid effects. The international response to the accident was inadequate and uncoordinated, and has been unjustifiably reassuring. Accurate assessment in future health effects is not currently possible in the light of dose uncertainties, current debates over radiation actions, and the lessons from the late consequences of atomic bomb exposure. Because of the uncertainties from and the consequences of the accident, it is essential that investigations of its effects should be broadened and supported for the long term. The United Nations should initiate an independent review of the actions and assignments of the agencies concerned, with recommendations for dealing with future international-scale accidents. These should involve independent scientists and ensure cooperation rather than rivalry.

Keywords
Chernobyl, Disaster response, Nuclear accidents, Radiation, Thyroid cancer