

Independent Report on Health Effects 30 Years After Chernobyl: TORCH Updated

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Abstract

An update of the 2006 TORCH (The Other Report on Chernobyl) was commissioned by the NGO Global 2000/Friends of the Earth Austria and funded by the Wiener Umweltanwaltschaft (Vienna Ombuds Office for Environmental Protection) Austria. The findings of the report follow.

Belarus, Ukraine and Russia were the most highly contaminated countries. About 6 million people still live in areas with very high levels of radioactive contamination (Cs-137 >40 kBq/m²) in Belarus (18,000 km²), Ukraine (12,000 km²) and Russia (16,000 km²). 400 million people live in areas contaminated with lower levels of radioactivity (4–40 kBq/m²). Over 500,000 clean-up workers were also highly exposed. 42% of Europe's land area was contaminated (>4 kBq/m²).

Western Europe (defined as all European countries excluding Belarus, Ukraine and Russia) received 37% of Chernobyl's fallout accounting for about 40% of Chernobyl's collective dose to the northern hemisphere. It is estimated that 40,000 fatal cancers will arise over the next 50 years. 6,000 thyroid cancer cases have arisen so far with 16,000 cases estimated to arise over the next 50 years.

New evidence indicates increased thyroid cancer cases in Austria, similar to previous indicative studies in other European countries. Increased surveillance, diagnoses and medical exposures to radio-iodine are partial causes but the report estimates 8% to 40% of increased TC cases after 1990 may be radiogenic, particularly in the Vienna region. Maps of iodine fallout on Europe are publicised for the first time. Care needed in estimating the radiogenic fraction of TC cases after Chernobyl/ Fukushima. In Western European countries and Japan, these are likely to be small but still significant. Average thyroid exposures in the most contaminated areas of Belarus and Ukraine were ~50 to ~60 times greater than those at Fukushima prefecture.

New evidence, including quantitative risk estimates, buttress previous indicative studies of increased thyroid cancers, leukemias, solid cancers, cardiovascular effects, mental health effects, birth defects and other radiogenic effects in the most affected countries.

Persuasive evidence demonstrates continuing ill health among children in highly contaminated areas due to continued ingestion of contaminated food. It is likely that visits abroad are of benefit to Chernobyl-affected children.

Recommendations are made for the European Commission and national Governments to fund proposed research programmes to assess Chernobyl's long term effects, including the establishment of new registries to monitor the incidences of cancer and other health effects in Europe.

Recommendations are made for the European Commission and national Governments to adopt humanitarian policies to alleviate the continuing plight of children affected by Chernobyl. They should also support existing non-government organisations and medical charities which help these children with visits abroad. 30 years after the accident, humanitarian help is still needed for the children of Chernobyl.

The report was published on March 7, 2016 and the web address for the electronic version is <http://www.ianfairlie.org/wp-content/uploads/2016/03/chernobyl-report-version-1.1.pdf>