EXECUTIVE SUMMARY
Key Findings
• 40,000 fatal cancers are predicted in Europe over the next 50 years
• 6,000 thyroid cancer cases to date, 16,000 more expected
• 5 million people in Belarus, Ukraine and Russia still live in highly contaminated areas (>40 kBq/m²)
• 400 million in less contaminated areas (>4 kBq/m²)
• 37% of Chernobyl's fallout was deposited on western Europe
• 42% of western Europe's land area was contaminated
• increased radiogenic thyroid cancers expected in West European countries
• increased radiogenic leukemias, cardiovascular diseases, breast cancers confirmed
• new evidence of radiogenic birth defects, mental health effects and diabetes
• new evidence that children living in contaminated areas suffer radiogenic illnesses

Belarus, Ukraine and Russia were the most highly contaminated countries. About 5 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). 42% of Europe’s land area was contaminated.

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.

New evidence, including quantitative risk estimates, buttress previous indicative studies of increased 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 the ingestion of contaminated food. Visits abroad are of considerable benefit to Chernobyl-affected children.