



UNSCEAR

United Nations Scientific Committee
on the Effects of Atomic Radiation

Main findings and highlights of the 2020 report

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Implications of Information Published Since the UNSCEAR 2013 Report
9 March 2021 (Online launch)



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Scope and content

- Summary of current understanding based on information up to end 2019 and implications for the findings of the 2013 report:
 - releases to atmosphere, dispersion and deposition
 - releases to and dispersion in the marine environment
 - transfer through the terrestrial and freshwater environments
 - doses to the public
 - doses to workers
 - health implications
 - doses and effects in non-human biota
- Validate/revise estimates of doses to the public (including variability and uncertainty) and their health implications



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Main findings of 2020 report

- Doses to public more realistic and **robust** with uncertainties quantified
- Updated total doses broadly comparable with those in 2013 report (but large differences in component parts (pathway, location, time))
- No adverse health effects attributable to radiation exposure
- Future cancer rates that could be inferred from radiation exposure are **unlikely to be discernible**
- Increased incidence of thyroid cancer observed in young people judged to be the result of extensive ultra-sensitive screening



Some highlights from other thematic areas

- No change in **total amounts** of radionuclides released to the environment – but significant changes in their **temporal pattern**
- Releases of radiocaesium to the Pacific Ocean continue from site ground water and draining of catchment areas – but now much smaller (less than 0.01% and 0.1% of release in 2011)
- Concentrations of radiocaesium in monitored foodstuffs since 2015 generally below limits established by the Japanese government (ten times lower than guideline levels for international trade)



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Some highlights from other thematic areas

- Decontamination: extensive 5 year programme - reduced annual doses to less than 1 mSv in inhabited areas; and enabled return to many evacuated municipalities
- Broad consensus on levels of exposure of non-human biota
- Regional impacts on wildlife populations unlikely but detrimental effects on individual organisms have been observed and others may have occurred
- Comparison of the accidents at Fukushima Daiichi and Chernobyl NPS



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In conclusion

- The 2020 report is an authoritative, independent and up to date assessment of the levels and effects of radiation exposure due to the accident at FDNPS
- The main findings are robust and unlikely to change significantly in the foreseeable future



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Thank you



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