



Japan Advisory – Impact on Australia

ARPANSA has assessed that the health impact for people living in Australia from the Fukushima Dai-ichi nuclear power plant (NPP) accident is negligible.

ARPANSA Assessments and Report

During and after the 2011 nuclear accident at the Fukushima Dai-ichi nuclear power plant (NPP) in Japan, ARPANSA undertook a range of measurements and studies to assess the impact of the accident on Australians in Japan and people and the environment in Australia. The report *Assessment of the impact on Australia from the Fukushima Dai-ichi nuclear power plant accident* (www.arpansa.gov.au/Publications/TechnicalReports/index.cfm#tr162) was published in 2012. It provides a record and single point of reference for these assessments.

What was investigated?

- Contamination of the ocean and atmosphere based on the results of international atmospheric and ocean modelling and daily air monitoring at five locations in Australia.
- Potential contamination of imported food, cars, ship surfaces, ship ballast water and military helicopters.
- Doses to Australian citizens living in Japan.
- Impact of the migratory short-tailed shearwater (mutton bird) which nests in Australia.

What were the major results and conclusions of the studies?

- No radioactive caesium or iodine from the Fukushima Dai-ichi NPP accident was detected at Australian air monitoring stations. Very low levels of radioactive xenon (^{133}Xe) were detected in Darwin during April 2011, which were assessed to have no impact on the health of any person living in Australia.



- International ocean modelling predicts that it will take five to fifteen years for any radioactive material from the Fukushima Dai-ichi NPP accident to reach Australian waters. By this time it will have been significantly diluted to levels that will be difficult to detect.
- No contamination was detected on any of the imported new and used vehicles tested by ARPANSA.
- No radioactive contamination was found on any of the mutton birds tested.
- No food samples tested by ARPANSA exceeded internationally accepted limits (set by Australia and many other countries following the accident). Some foods had very low levels of contamination. These were targeted for continued testing to ensure the safety of Australian consumers (testing discontinued in 2014).
- Urine analysis and whole body monitoring of members of a family living 60 km north-west of the Fukushima Dai-ichi NPP during the accident suggested that doses to the family were minimal.

Is any monitoring being done in Australia now?

- ARPANSA has programs to test sea water for radioactive caesium and sample fish caught in Australian waters (in Queensland, the Northern Territory and Western Australia). None of these fish have been found to contain radionuclide contamination from the Fukushima Dai-ichi NPP accident.
- ARPANSA continues to maintain air sampling stations as part of the Comprehensive Nuclear-Test-Ban Treaty network.
- ARPANSA participates in a number of international programs which focus on the effects of the Fukushima Dai-ichi NPP accident.

ARPANSA will continue to monitor the environment in Australia for radioactive materials released during the Fukushima Dai-ichi NPP accident in order to provide accurate and current advice to the Australian Government and the public.

Additional information:

More detailed information including the methods used and full results of all of these studies can be found in the ARPANSA technical report which is available on the ARPANSA website: (www.arpansa.gov.au/Publications/technicalreports/index.cfm#tr162).