

# Medical and Health Surveillance in Post-Accident Recovery: lessons learned in Fukushima

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**Abstract**—In response to the Fukushima Daiichi Nuclear power plant accident, Fukushima Health Management Survey (FHMS) was implemented. The primary purpose of this survey was to monitor the long-term health of residents, promote their future well-being, and confirm whether long-term low-dose radiation exposure has health effects. The FHMS results indicated that radiation exposure doses of residents were very low and no discernible increased incidence of radiation-related health effects will be expected. However, psychological distress was found to be far greater in Fukushima than in other areas affected by the Tohoku earthquake and subsequent tsunami. Also, lifestyle-related health problems such as overweight, hypertension, diabetes mellitus, dyslipidemia, liver dysfunction increased among evacuees. Thyroid examination of asymptomatic individuals using ultrasound techniques has caused public concern and fear about the health effects of radiation. The Fukushima accident revealed that adverse effects on mental health due to the accident, health problems caused by long-term dislocation, and ethical issues related to mass-screening were much more significant than the direct effects of radiation. It is essential to balance the risks of radiation with other health effects after an accident, and to develop specific measures to mitigate the overall health risks (whole-health management).