

Australian Government

Australian Radiation Protection and Nuclear Safety Agency



We are the Australian Government's primary authority on radiation protection and nuclear safety



Independent regulator





ARPANSA is an independent regulator

We are the independent regulator of Commonwealth entities that use or produce radiation. Using a risk-informed regulatory approach, we ensure that licensees take responsibility for protection of people and the environment from the harmful effects of radiation.



Regulatory services

Our role is to independently regulate the use of radiation by Commonwealth entities, such as CSIRO, Department of Defence and ANSTO. Regulatory activities include licensing, compliance, inspection and enforcement.

The Australian Radiation Incident Register

The ARIR is Australia's national database of incidents and events, where radiation or radioactivity was implicated. The purpose of the ARIR is to raise awareness on where, how and why incidents and events occur, and how they can be best prevented.

Licensing

We administer licences for nuclear installations, radiation facilities, sources, and equipment used and operated by Commonwealth entities.

Transport of radioactive material

We are the Commonwealth competent authority and provide information to assist companies or organisations seeking approval to transport radioactive material within Australia. We establish the national standard.

Import and export permits

The import of radioactive substances into Australia and export of sources of high-activity radiation from Australia both require a permit issued by ARPANSA.

National uniformity

We promote uniformity of radiation protection and nuclear safety policy and practices across all jurisdictions.

Security of radioactive material

We work to achieve national uniformity for the security of radioactive materials during their production, transportation, storage, use and eventual disposal.

ARPANSA is a health advisor

We build and maintain expertise in measurement of radiation and assessment of health impacts, including the assessment of risks and responses to radiation incidents. We provide high quality advice to the government and the community.



Ultraviolet radiation monitoring network

We maintain a network of solar ultraviolet radiation detectors in major Australian cities and in the Australian Antarctic territories. This network provides data to Australians allowing them to make informed decisions about their daily exposure to the sun and therefore reduce their risk of skin cancer.

Talk to a Scientist

We provide a unique opportunity for the public and community to talk directly with our scientists on issues about radiation exposure and protection in Australia.

This service offers people the opportunity to find answers to science related questions that they have been unable to find using other resources.

Our scientists are available Tuesdays and Thursday between 11 am and 12.30 pm (Melbourne time).

Australian Primary Standard for absorbed dose

As one of only 15 laboratories in the world, we maintain a Primary Standard for absorbed dose - the quantity of energy imparted by ionising radiation. By calibrating hospitals' radiation monitors against the primary standard, we provide certainty a patient's dose is accurate.

Electromagnetic energy (EME) research

We promote, coordinate, fund and lead EME research outcomes through direct commissioning of research to focus on key research needs that underpin safety standards. This allows gold-standard research in Australia to ensure safety standards remain evidence based and risk informed.

Radiation health advice

We publish a comprehensive range of fact sheets on our website relating to radiation and health issues.

Emergency preparedness and response

Our Radiation Emergency Coordination Centre in Melbourne provides 24-hour access to expert radiation protection advice in the event of a radiation or nuclear incident or emergency.

We maintain specialised radiation monitoring and modelling capability to support the determination of radiation levels and the extent of radioactive contamination in the event of a radioactive release.

Comprehensive **Nuclear-Test-Ban Treaty**

We maintain seven stations around Australia and its territories, including Antarctica, which sample the air for materials that have been produced by a nuclear explosion.

ARPANSA is a service provider

We offer high quality services for the purpose of protection against the harmful effects of radiation.

Radioanalytical services

We measure radioactivity in food samples, water and other materials.

We provide radioanalytical method development and evaluation.

We also provide field-based measurement of radiation to identify and quantify radionuclides.

Radon chamber

We maintain one of only two radon chambers in Australia. Our radon chamber is used for radon measurement and comparison of radon monitoring equipment.

Ultraviolet radiation services

Our NATA accredited laboratory tests clothing, fabric, shadecloth, sunglasses and glass films for ultraviolet radiation transmittance. We also calibrate ultraviolet radiation measurement instruments.

Australian National Radiation Dose Register

The ANRDR is a database of radiation doses to Australian workers. This centralised database allows workers to keep track of their doses as they move from workplace to workplace, and ensures that recommended dose limits are not exceeded.

Radiofrequency **Calibration Service**

We maintain diverse laboratory facilities for measurements relating to hazard analysis and calibration of radiofrequency radiation measuring instruments. Specific calibration services include calibration of radiofrequency hazard meters, gauss meters, and personal radiofrequency hazard meters.

National Diagnostic Reference Level Service

The NDRLS provides individual facilities with a tool for comparing the diagnostic radiation doses they provide to patients with national data.

Personal Radiation Monitoring Service

The PRMS provides monitors that measure Australian workers' occupational exposure to radiation to ensure that the recommended dose limit is not exceeded.

Australian Clinical Dosimetry Service

The ACDS audits linear accelerators used by radiotherapy providers in Australia, verifying that the radiation exposure of the 60 000+ patients each year that undergo treatment is correct.

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ARPANSA acknowledges the Traditional Owners of the land and waters throughout Australia and pays respect to them, their culture and their Elders past, present and future.

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