



Australian Government
Australian Radiation Protection
and Nuclear Safety Agency



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



ARPANSA is an *independent regulator*

We're the **independent regulator of Commonwealth** entities that use or produce radiation. Our risk-informed regulatory approach ensures 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.

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.

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.

Licensing

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

Radioactive waste management

We regulate the storage and disposal of radioactive waste by Commonwealth entities. This includes licensing facilities, compliance monitoring and enforcement to protect people and the environment for current and future generations. We also prepare codes, standards and guidance on radioactive waste management based on international best practice.

National uniformity

We promote uniformity of radiation protection and nuclear safety policy and practices across all jurisdictions. This supports consistent radiation protection for all Australians.

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.



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 to make informed decisions about their daily exposure to the sun and reduce their risk of skin cancer.

Comprehensive Nuclear-Test-Ban Treaty

We operate and maintain 7 stations around Australia and its territories, including Antarctica, which sample the air for materials produced by a nuclear explosion. We also maintain stations in Fiji and Kiribati.

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.

Radiation health advice

Our health advice is based on extensive assessment of radiation research and is used to inform government, industry and communities.

Australian Primary Standard for absorbed dose

Under the Metre Convention, we maintain Australia's primary standard for absorbed dose – the amount of energy deposited per unit mass by ionising radiation. By calibrating hospitals' radiation monitors against the primary standard, we underpin the accuracy of radiation doses delivered to patients during radiotherapy.

Electromagnetic energy (EME) research

We promote and undertake EME research to focus on key needs underpinning safety standards. This allows research in Australia to ensure safety standards remain evidence based and risk informed.

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.



ARPANSA is a *service provider*

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

Environmental services

We deliver high-quality radioanalytical measurements across a wide range of sample types, including food, water, soil, air filters and other materials. Our teams conduct field-based radiation measurements, develop, validate, and apply advanced radiochemical methods, and undertake modelling and assessment activities to support national monitoring programs, emergency preparedness, and research collaborations.

Radon chamber

We maintain the largest radon chamber in Australia, used to measure radon and compare radon monitoring equipment.

Ultraviolet radiation services

Our NATA accredited laboratory tests a wide range of material including fabrics, clothing, umbrellas and shade cloth for their effectiveness in protection from ultraviolet (UV) radiation from the sun. We also test sunglasses, window films, building and transparent materials for their UV radiation transmission.

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 including a state-of-the-art anechoic chamber for measurements relating to hazard analysis and calibration of radiofrequency radiation measuring instruments.

National Diagnostic Reference Level Service

The NDRLS provides facilities with a tool to compare their diagnostic radiation doses with national data. This benchmarking supports continued optimisation of radiation dose in medical imaging.

Personal Radiation Monitoring Service

PRMS has been a trusted provider of personal monitors since 1931. Our NATA accredited service measures occupational exposure to gamma, beta, X-ray, neutron, and radon radiation sources, supporting the safety of workers across Australia and the Pacific.

Australian Clinical Dosimetry Service

The ACDS is a world-class dosimetry auditing program assisting in the safe treatment of cancer via radiation therapy in Australia. The ACDS audits linear accelerators used by radiotherapy providers in Australia and New Zealand, verifying the radiation exposure of patients undergoing treatment is correct.



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From our scientists to the world's first scientists, we respectfully acknowledge Traditional Owners and First Nations communities and their rich cultures. We recognise, respect and continue to learn from Indigenous sciences, and the deep understanding and observations of land, waters and sky carried and shared by First Nations peoples over thousands of years.

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