What is the ANRDR?

Recording and maintaining workers’ doses is an essential part of any radiation protection program. The ANRDR supports workplaces by securely storing and maintaining dose records in a central location. This program provides a range of benefits to workers, employers and regulators.

Estimated to be more than
80,000 radiation workers in Australia today – only a small portion are being captured in the ANRDR.

The average dose of workers last year was 0.77 mSv.

72% of workers had a dose of <1 mSv last year.

Highest dose recorded in 2018 was 6.91 mSv.

27 dose history requests received by ARPANSA last year.

More than 44,000 individual dose records in the ANRDR going back 30 years.

What do we do?

• Securely store and maintain workers’ dose records for the long term
• Provide dose histories to workers to assist with work planning or for new employment
• Assist in regulatory control by monitoring doses and notifying regulators of overexposures
• Analyse and publish dose trends to support dose optimisation efforts
• Improve radiation protection awareness for workers through direct engagement and issuing dose histories
• Make sure employers are in compliance with long-term record-keeping requirements

What are our goals?

• Make sure all radiation workers in Australia are covered by the ANRDR
• Enhance radiation protection practice and regulation
• Meet international best practice guidelines set out by the IAEA for the management of dose records in a national register

How do we do this?

• Engage with industry to encourage employers to sign up to the ANRDR
• Encouraging workers to periodically check their dose histories
• Work with regulators to make sure the appropriate frameworks are in place to support industry participation in the ANRDR
• Collaborate with dosimetry service providers on a project for provision of customers’ monitoring results to the ANRDR

Where to from here?

The current ANRDR approach which relies on employers to sign up voluntarily has significant drawbacks and has seen a limited uptake of the program.

To address this challenge, ARPANSA is working with dosimetry service providers and regulators to establish a framework and mechanism to obtain monitoring results directly from providers.

Australian National Radiation Dose Register
The future of dose record management

Ben Paritsky and Cameron Lawrence