



Australian Government

**Australian Radiation Protection
and Nuclear Safety Agency**



Australian National Radiation Dose Register

Ben Paritsky

What is the ANRDR?

- Ensures longevity of dose records
- Originally established in 2010 for the uranium industry
- Opened to all industries – limited uptake
- Mandatory for all ARPANSA licence holders
- Planned Exposure Code (ARPANSA 2016)



Snapshot



More than

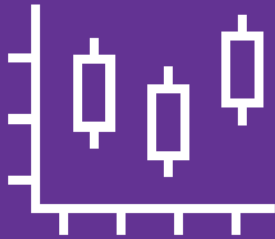
48 000

individual dose
records in the
ANRDR going back
30 years

Estimated to be
more than

80 000

radiation workers
in Australia today –
only a small portion
are being captured
in the ANRDR



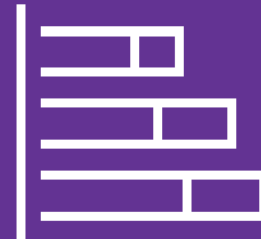
The average dose of
workers last year was

0.77 mSv



72%

of workers had a
dose of **<1mSv**
last year



Highest dose
recorded in 2018 was

6.91 mSv



59

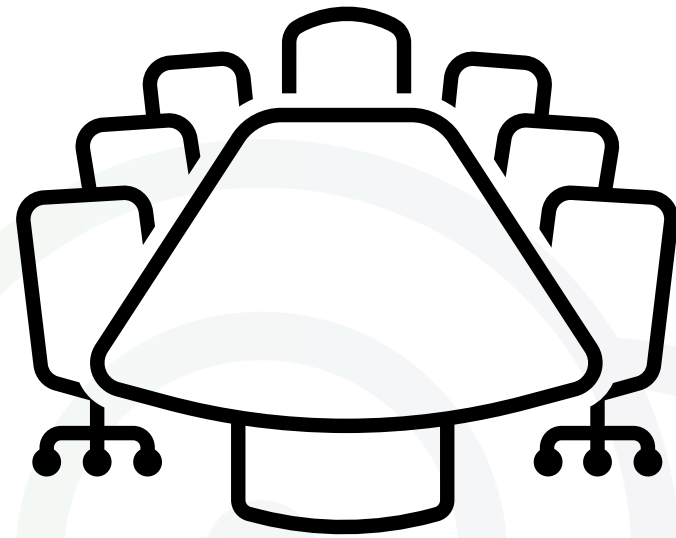
dose history
requests received by
ARPANSA last year

ANRDR vision

To achieve complete
coverage of all
occupationally exposed
workers in Australia

Advisory Board

- Established in 2019 to advise ARPANSA on ANRDR matters
- Fully independent
- Consists of state/territory regulatory representatives
- Driven by ARPANSA
- Ownership of ANRDR strategic direction



New model – DSP submissions

On direction from the Advisory Board, the ANRDR is changing its model from employer submissions to dosimetry service provider (DSP) submissions

- Only way to achieve full coverage – how we measure success
- Reduces the burden on employers (1000s of employers vs 5 DSPs)
- International best practice – Successful models in Canada and Europe
- Part of future DSP Accreditation Scheme

Accreditation scheme for DSPs

- Led by the Victorian Department of Health
- A single point of accreditation recognised by all jurisdictions
- Identified as an area for improvement by the IAEA Integrated Regulatory Review Service mission to Australia in 2017
- Awaiting endorsement in Vic before returning to the RHC for development of the national accreditation standard
- **Requirement on DSPs for data submission to the ANRDR**



Challenges

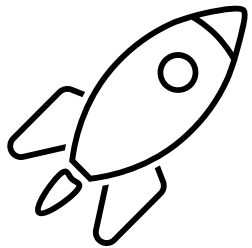


- Privacy as a perceived risk
 - Basic personal information for identification purposes
 - Dose records **not** classified as health or sensitive information
 - Compliant with the Australian Privacy Principles
 - Privacy Statement and Privacy Impact Assessment
 - Benefits greatly outweigh the risks
- Electronic personal dosimeters
- New technologies

Next steps

Pilot program

Work with DSPs to develop the systems necessary to achieve provision of dose records to the ANRDR



All stakeholders were consulted on the development of the data transfer specifications

All providers to participate

How will this affect you?

Provide lifetime* dose histories

- Consolidation of records in one location
- Work planning, new employment

Enhance regulatory control

- Notification of overexposures (multiple jurisdictions), flagging anomalies

Analysis to characterise the occupational exposure situation at the national level

- Maximums/averages across industries, workgroups and jurisdictions

Improve radiation protection in the workplace

- Awareness and dose optimisation

Contribute to health research and scientific knowledge

- Epidemiology, IAEA, UNSCEAR, etc.



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Thank you

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