



Australian Government

Australian Radiation Protection and Nuclear Safety Agency

# NDRL Newsletter 2014 No. 3

Dear Service users,

Welcome to the third NDRL Newsletter for 2014. We are now half way through the year and it is time for another update!

As you know, facilities in all Australian states and territories are required to comply with Radiation Protection Series 14, which states that

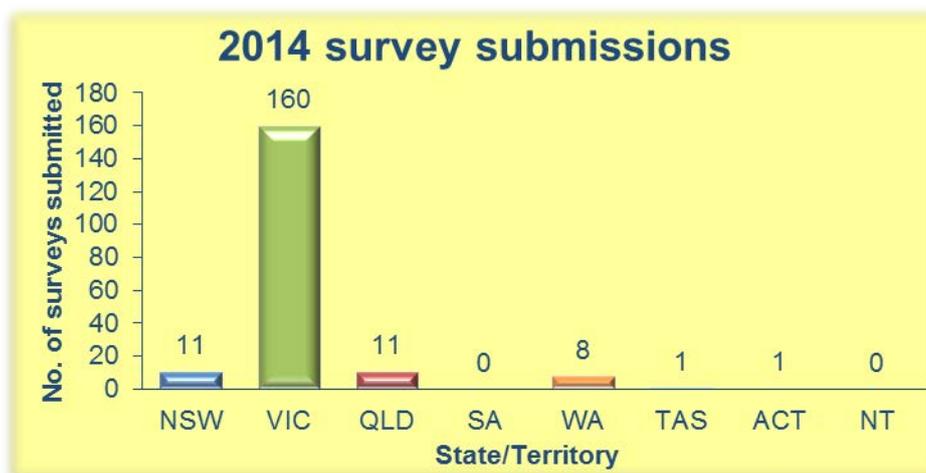
***“The responsible person must establish a program to ensure that radiation doses administered to a patient for diagnostic purposes are:***

***periodically compared with diagnostic reference levels (DRLs) for diagnostic procedures for which DRLs have been established in Australia; and***

***if DRLs are consistently exceeded, reviewed to determine whether radiation protection has been optimised”***

The NDRLS is a **free** service which can be used to compare your doses with the National Diagnostic Reference Levels for CT and as such be used as evidence of compliance. Facilities that do not use this service must establish their own procedures, comparison and reporting techniques.

As of June 27<sup>th</sup> there have been a total of 192 surveys submitted, the following graph shows the distribution by state/territory of these surveys.



Currently one state is the clear leader in survey submissions.....

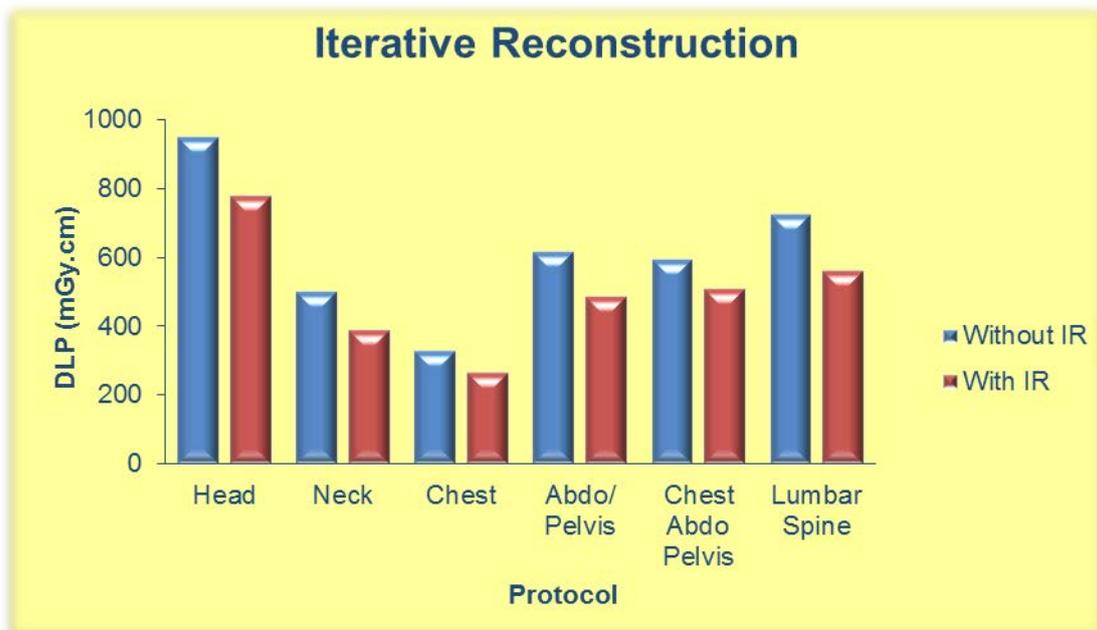
## Iterative Reconstruction

Since April 2013 the use of Iterative Reconstruction (IR), has been included in the parameter settings data collected.

ed with an asterisk \*

	<a href="#">Rotation Time</a> *	<input type="text"/>	<a href="#">Reconstruction</a>
	<a href="#">No of Phases</a> *	Please Select ▾	<a href="#">Reconstruction Kernel</a> *
	<a href="#">Helical or Axial</a> *	<input type="radio"/> Helical <input type="radio"/> Axial	<a href="#">Scan Field of</a>
	<a href="#">Detector Configuration</a> *	<input type="text"/> X <input type="text"/>	<a href="#">Beam Shaping</a>
	<a href="#">Iterative Reconstruction</a> *	<input type="radio"/> Yes <input type="radio"/> No	<a href="#">Noise Index</a>

Some preliminary results indicate that the use of IR does result in lower doses than those protocols that do not use IR. The following graph shows the median of all FRL values calculated for all adult surveys with and without IR submitted during 2013.



The median of the FRLs with IR is consistently lower than the median of the FRLs without IR. The dose reduction ranges from between 14% to 22%.

## ARPANSA RPoP Project

ARPANSA has been tasked by the Commonwealth Department of Health to develop an online Radiation Protection of the Patient Training Module for improving safety awareness in medical imaging that can be used by referrers and other nationally. While similar modules already exist in some jurisdictions, there are none that are accepted and in use all across Australia.

The module is intended to provide assistance to referrers, particularly those that do not always have ready access to radiologists and medical physicists, such as physicians in rural and remote practices, general practitioners and other allied medical practitioners. It may also be included as a module in universities' medical training.

In undertaking this project, ARPANSA will be working with a number of peak bodies including the Royal Australian and New Zealand College of Radiologists (RANZCR), the Royal Australian College of Physicians (RACP), the Australian College of Rural and Remote Medicine (ACRRM), the Royal Australian College of General Practitioners (RAGCGP), the Australian Health Protection Principle Committee (AHPPC), the Australian Commission on Safety and Quality in Health Care (ACSQHC) and others.

If you have any queries, suggestions or know of people with particular interest and expertise that ARPANSA could talk to, please contact Alan Mason on **03 9433 2429** or [alan.mason@arpansa.gov.au](mailto:alan.mason@arpansa.gov.au)

People that ARPANSA would appreciate hearing from include any referring physicians, radiologists or experienced radiographers in your own organization.

Thanks!

***Remember:***

- ***Completing the surveys can be used as an indication of compliance with the mandatory requirement of RPS 14.***
- ***Surveys started this year have until Dec 31<sup>st</sup> 2014 to be completed!***

[Click here to go directly to the Login page](#)

***Regards,***

***The NDRLD Team  
ARPANSA***

# Current Australian National DRLs

## Australian Adult (15+ yrs) MDCT DRLs

Protocol	DLP (mGy.cm)	CTDI <sub>vol</sub> (mGy)
Head	1000	60
Neck	600	30
Chest	450	15
AbdoPelvis	700	15
ChestAbdoPelvis	1200	30
Lumbar Spine	900	40

## Australian Child (5-14 yrs) MDCT DRLs

Protocol	DLP (mGy.cm)	CTDI <sub>vol</sub> (mGy)
Head	600	35
Chest	110	5
AbdoPelvis	390	10

## Australian Baby (0-4 yrs) MDCT DRLs

Protocol	DLP (mGy.cm)	CTDI <sub>vol</sub> (mGy)
Head	470	30
Chest	60	2
AbdoPelvis	170	7

**Contact us:**

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