



Monitoring Non-Classified Workers

*I have staff who are not classified workers under the Ionising Radiations Regulations.
Do I have to supply them with radiation dosimeters?*

The short answer to this question is, it depends!

Under Regulation 21 of the Ionising Radiations Regulations 2017 (IRR17 – see <http://www.legislation.gov.uk/uksi/2017/1075/contents/made>), a worker must be designated as classified if they might foreseeably receive a dose above certain levels¹. In assessing whether such doses are likely, the employer needs to carry out a **risk assessment**, normally with the assistance of a Radiation Protection Adviser. As well as routine exposures, foreseeable accidents need to be considered. If a worker is classified, then Regulation 22 of IRR17 requires that all doses are systematically assessed – normally by means of personal dosimeters. But what happens if the risk assessment shows that the workers do not need to be classified?

There is no requirement under IRR17 to make systematic assessments of doses, so it could be argued that dosimeters are not necessary. However, in practice there are good reasons why an employer might wish to continue monitoring non-classified workers. Indeed, the majority of people covered by PHE Personal Dosimetry Service fall into this category.

In the first place, individual monitoring by means of personal dosimeters is an easy way to **keep doses under review**. In other words, it is a way of making sure the risk assessment is still valid. Any changes in practice or behaviour that might lead to higher doses will readily become apparent.

Secondly, individual monitoring provides **reassurance for the employer** that safety systems are working correctly. In organisations with a strong safety culture, it is not enough to assert that doses are low because the risk assessment says so. Evidence is essential, and individual monitoring is an inexpensive way of providing it. Individual monitoring results can also feed into **epidemiological studies**.

Another important factor is **reassurance for employees**. Employees – who are often non-specialists and may have a limited understanding of the context of radiation protection – may feel that their safety is being taken seriously if the employer is taking the trouble to check their doses.

Finally, employers can also feel that having records to show that doses are low provides some **protection in case of future legal actions**, where claims may be made linking ill-health with radiation exposure.

So, there are often very good reasons for providing dosimeters for non-classified workers. Many employers take this approach, some opting for longer change intervals such as three months, rather than dispensing with monitoring altogether.

¹ "...those of its employees who are likely to receive an effective dose greater than 6 mSv per year or an equivalent dose greater than 15 mSv per year for the lens of the eye or greater than 150 mSv per year for the skin or the extremities..."

The above considerations follow the discussion that can be found in Chapter 2 of the European Commission's "Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation" (RP160 – see <https://ec.europa.eu/energy/sites/ener/files/documents/160.pdf>).

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Non-magnetic clips

A new Thermoluminescent Dosimeter (TLD) clip has been designed and produced to allow TLDs to be worn around Magnetic Resonance Imaging (MRI) scanners. This required a clip containing no magnetic material which could cause the clip to be drawn towards the MRI scanner. The clips currently supplied in the service contain steel in their construction and are therefore not suitable for this environment.

Following many enquiries a suitable commercially available clip could not be found. The Technology Development Team within PHE worked with us to design and develop a suitable clip. The new clip is 3D printed in plastic and as such is not magnetic. These are available to our customers who require these for their work with MRI. Please contact our Customer Services.



Re-approval in Ireland and more!

During 2017 PHE's Personal Dosimetry Service (PDS) successfully gained re-approval for its services in Ireland and extended the scope for the UK. PDS supplies various Irish based clients with dosimetry for which it has gained a further 5 years approval from the Environmental Protection Agency of Ireland.

PDS also applied for new approvals to the British Health & Safety Executive for Co-ordination and Record Keeping to be added to our approval under REPPiR – Radiation (Emergency Preparedness and Public Information) Regulations 2001. We have added the assessment of eye dose to our neutron dosimeter approval under the Ionising Radiations Regulations 1999 (now IRR17). If you would like information on either of these services please contact us.

Exhibitions in 2018

PHE PDS will be exhibiting at these conferences in 2018. Come and see us!

SRP Annual Meeting

1st – 3rd May, Southport

IPEM RPA Update meeting

23rd May, Manchester

IPEM South West Regional Annual Meeting

15th June, Bath

AURPO Annual Meeting

4th - 6th September, Leicester

MPEC18 Medical Physics Engineering Conference

18th – 20th September, York

Goodbye and best wishes

Mel Dent has left PHE after 17 years of working in the Dose Records office. Mel has relocated to Cornwall for a relaxing semi-retirement. Many of you will have dealt with Mel Dent over the years when contacting the office.



Matthew Patton who worked in our Lab also left in December after a couple of years with us to return to his previous employment as an upholsterer and with a view to a move to France. We thank them for their hard work with us and wish them all the best for the future.

Electronic Dose Reports

Please remember that we are able to supply all of your dose reports, including your Annual Dose Summaries (issued in February), electronically via email. This will mean you receive your reports more quickly – no need to wait for the postman. And, we all help to save the environment! If you aren't already and would like to receive reports by email, please contact us at doserecords@phe.gov.uk

European Radiation Dosimetry Group (EURADOS) Annual Meeting 2018

PHE's involvement in EURADOS helps us to stay abreast of latest developments in dosimetry and to influence standards.

In February EURADOS held its annual meeting at Instituto Superior Técnico, Lisbon. EURADOS is a network of more than 70 European institutions and nearly 600 scientists. It aims to promote and implement technical developments in radiation dosimetry, and to contribute to raising and maintaining quality and compatibility between systems and practices. Over 300 scientists and students attended the annual meeting and its associated Winter School, which this year covered “the application of physical and computational phantoms in dose assessment”.

EURADOS represents a highly appropriate association for PHE – not only are our European colleagues physically close, but our radiation protection systems are very similar, deriving as they do from same European Basic Safety Standards Directive. (The new Ionising Radiations Regulations 2017 derive from 2013 Directive, and irrespective of Brexit will remain in force for many years to come.)

Areas of work include individual monitoring for external and internal exposure, retrospective dosimetry, environmental radiation monitoring and diagnostic and interventional radiology (see www.eurados.org for full details). PHE's Centre for Radiation, Chemical and Environmental Hazards is represented in many of these.

From the Personal Dosimetry Service, Nicky Gibbens and Phil Gilvin attended Working Group 2 (WG02), which aims to promote harmonisation and raise standards in individual monitoring. WG02 members come from other Individual Monitoring Services (some from the UK) and from metrology and standards institutes. Engagement in WG02 helps us to stay abreast of developments, to maintain contacts, and to influence guidance and recommendations. At the annual meeting WG02 planned and carried out work on:

- intercomparisons for dosimetry services
- training courses for staff of services
- guidance on interpreting quality standards.

WG02 is also promoting new ways of networking between dosimetry services. As well as a “learning network” discussion group for important topics in dosimetry, work is also being done on an online forum which will help services to discuss and resolve problems, and to share best practice.

Information about all the working groups can be found on the EURADOS website. Following the annual meeting, this information will be updated shortly.

Attendees of AM18 in Lisbon



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Prices from April 2018

Listed below are our prices effective from 1st April 2018. The prices listed are not inclusive of any discount at this stage. Prices decrease as quantities increase and many of our existing customers pay **less** than these prices.

For example if you are receiving 4 TLDs every 4 weeks then your annual quantity is 52 which takes you into the first discount band. Discounts are calculated automatically by our system which means there is no need to 'claim' them.

Dosemeter*	Wear Period	£ (ea)
TLD:	2 & 4 weekly/monthly	6.20
TLD:	8 weekly/bi-monthly	6.95
TLD:	13 weekly/quarterly	7.85
Extremity: Stall	All	8.20
Extremity: Ring	All	9.65
Neutron PADC & Radon	All	35.10

*orders are subject to a minimum order charge of £60

Dosemeter*	£ (ea)
Unreturned TLDs	24.00
Unreturned Extremities	24.00

Dose Record Keeping (Using PHE Dosimeters)

Initial registration fee (covering a minimum of 12 months)	30.70
Renewal fee for subsequent years (prices decrease with quantity discounts)	18.25

Dose Record Keeping (Not using PHE Dosimeters)

Initial registration fee (covering a minimum of 12 months)	122.60
Renewal fee for subsequent years	97.90

Special Entries to Dose Records (first 2 entries per year are free)	7.60
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Radiation Passbooks

Next working day despatch	26.55
Standard	16.60

All prices are applicable to European delivery addresses and exclude VAT which will be added to charges where applicable.

All supplies are subject to PHE terms and conditions.

Getting Connected to the Personal Dosimetry Service (PDS)

Telephone	Prefix 01235 (unless*)		
Nicky Gibbens, Manager	825334	Laboratories:	
Lyn Pike, Deputy (Commercial)	825343	TLD & Extremity	825353
Sean Baker, Laboratory Manager	825349	Neutron (Leeds)*	0113 267 9041
Dosemeter Logistics Office	825339	Customer Services (CS)	
Dose Records Office	825230	CS Team (calls are rotated)	825240
Fax		Email	
General PDS	825563	General PDS	personaldosimetry@phe.gov.uk
General CS	825564	Dose Records Office	doserecords@phe.gov.uk