

Monitor

Protecting and improving the nation's health

Newsletter of the Personal Dosimetry Service Dec 2016 Issue 50

Dosemeter Logistics Team

The Dosemeter Logistics Office is where all the dosemeters are sent from and all TLDs are returned to. We are a small team of four with an additional three members of staff who help out in our really busy periods.

We package and send out over 8,000 dosemeters that are produced each week to over 6,000 customer addresses all over the UK and indeed the world!

We also open and check the returned packages of dosemeters which are then passed through to

our laboratories for assessment. All queries from accompanying letters are dealt with or passed through to the correct section of PDS. Our team is responsible for maintaining the contact details of all of our customers including setting up new addresses and amending email, telephone and delivery information. Please include a letter with your return parcel if you would like us to amend your order, contact details or if you need a holder. Alternatively, you can contact us using personaldosimetry@phe.gov.uk

Our main team is (from left to right):

Julie Walker our newest member of the team who has been working with us for just over a year.

Aimee Gothard is the office Supervisor who has recently taken on this role but has been working at PHE for nearly 3 years.

Luci Darney has been working in this office for 5 years.

Sally Barnes, service Team leader has been with PDS for 16 years

Our extra staff (not pictured) are *Kay Swindells*, *Lynda Smith* and *Phil Darlaston*.



New feature on Dose Reports

We have just introduced a new feature to our Dose Entry and Dose Assessment reports. These are the reports that are issued when you return your dosemeters for assessment at the end of the wear period. They will now also include a list of any dosemeters that were returned as "not worn" so that you can be sure we have received them back (even if you do not need an assessment). The report will show the assessed dosemeters with their doses first and then a list of the "not worn" dosemeters after this with no dose reported.

Also in this issue

New features on Dosimetry On-Line
Lost and Damaged Dosemeters/HSE Information Sheets

Exhibitions in 2017
Getting Connected

New features on Dosimetry On-Line (DOL)

We have added more export buttons to our on-line customer website. You can now download your own data into Excel to help you manage your dosimetry. You can query dosemeter, issue and dose data to get lists of unreturned dosemeters, checked-in dosemeters, individual doses and year/life dose summaries and more!

If you would like access to DOL, please email doserecords@phe.gov.uk for a registration form.

Lost and Damaged Dosemeters

We are often asked about why we make charges for TLD-type dosemeters (body, extremity and eye lens). The main reason is that the dosemeters represent a substantial investment for PHE. They use a highly specialised material (lithium fluoride with specific dopants) that is produced in a sophisticated chemical process. These are expensive, so the purchase cost is significant. Against this, they can be used repeatedly, so that the cost of the initial investment is spread out over many uses. Dosemeters are typically issued three or four times a year, and they can be used for decades (when we closed our previous system in 2006, some of the remaining TLDs were thirty years old; and tests on the current system have shown no deterioration in dosemeter performance over the ten years since it was launched). The metal plates in which the sensitive elements are housed are also very robust. In this way, the cost per measurement is kept as low as possible.





The problem comes when a dosemeter – that can otherwise be used for many years – is lost or damaged. In order to ensure we can meet our issue demand, we have to replace these dosemeters.

It is a condition of supply that the dosemeters remain the property of PHE, so that they must be returned to us after use. It is the service that the employer pays for. In return the employer and the employees get the benefits of personal dosimetry: assurance on safety and quality, inputs into continual improvement and, of course, regulatory compliance. It can be very useful for employers to have records that demonstrate their good safety performance, e.g. to demonstrate that worker doses have always been low; and it can also be very reassuring for staff to know that their safety is taken seriously and that their own doses are low.

The dosemeters are thus part or the employees' personal protective equipment (PPE). Employees therefore have a responsibility to take good care



of their dosemeters, and to return them at the correct time. For classified persons, this is a requirement under the Ionising Radiations Regulations 1999. So the expectation is that all dosemeters are returned after use

But of course, accidents and oversights do occur. The average non-return rate across our service is 2.7% (i.e. the percentage of dosemeters that are not returned). This compares with an average, in a recent survey(¹) across over seventy services in Europe, of 2.4%. (Within PHE's service the return rates vary by sector – customers in the nuclear sector are generally better at returning their dosemeters, for example.)

In a much smaller proportion of cases, dosemeters are damaged so that they cannot be re-used. So although the dosemeter has been returned to us, we still have to make a charge because we still have to buy a replacement.

^{1.} Gilvin P J et al, Quality Assurance in Individual Monitoring for External – Results of EURADOS Survey 2012. 2015-04, EURADOS. (2015), http://www.eurados.org

Monitor: Dec 2016 Issue 50



Bent dosemeters can sometimes be re-flattened – but sometimes not!

The skin element on this dosemeter (bottom right) has been crushed.





The TLD elements are completely missing from this one.

When charging for lost or damaged dosemeters, we do give plenty of time (6-12 months) for the dosemeters to be returned. And if you return a late dosemeter then let us know (by email or write in) so that we can issue you with a credit if possible (usually for up to one year after original charge was made). Please note allowing credit is discretional as we have already purchased new dosemeters to cover the original loss.

In summary: employees can save their employer extra costs by taking care of their dosemeters at all times.

- always treat your dosemeter with care
- make sure you know where it is. Have a designated place where you can keep it when not in use
- always hand your dosemeter in as soon as possible after the date printed on it (the wearing-end date).
 Don't wait for your employer to remind you

Further reading: there is more information for employers and employees on the HSE web site. See: http://www.hse.gov.uk/radiation/ionising/publications.htm. And at PHE we produce our own "Wear and Care" Cards – we supply these for new workers, but we'll be happy to supply a new set upon request.

HSE Information Sheets

Don't forget that HSE's web site (see link in the "Lost and Damaged Dosemeters" article above) also contains other useful documents, including:

- information sheets on a variety of topics
- links to the relevant regulations, approved codes of practice and guidance
- the pamphlet "Working safely with ionising radiation: guidelines for expectant or breastfeeding mothers"
- various other notes



Public Health England Wellington House 133–155 Waterloo Road London SE1 8UG. UK

www.gov.uk/phe Twitter: @PHE_uk

© Crown copyright 2016

PHE publications gateway number: 2016517

PHE Personal Dosimetry Service Centre for Radiation, Chemical and Environmental Hazards Public Health England Chilton, Didcot, Oxfordshire OX11 0RQ, UK

T: +44(0)1235 825240 F: +44(0)1235 825564

E: personaldosimetry@phe.gov.uk www.phe-protectionservices.org.uk/pds

PHE will be exhibiting at the following events in 2017 - Come along and see us!!

SRP Annual Conference

Aberdeen

16th-18th May 2017

AURPO Annual Conference

Hull

September 2017

And see our Dental X-ray Protection Service (DXPS) at:

The Scottish Dental Show

Friday 19th and Saturday 20th May - Stand B1

The BDIA Dental Showcase

19th - 21st October 2017 - Stand G20



Getting Connected to the Personal Dosimetry Service (PDS) Prefix +44(0)1235 (unless*) **Telephone** Dose Records Office 825230 Dr Phil Gilvin, Manager 825333 Lyn Pike, Deputy (Commercial) 825343 Laboratories: Nicky Gibbens, 825334 TLD and Extremity 825353 Deputy (Technical) Neutron (Leeds)* 0113 267 9041 Customer Services (CS) 825240 Sean Baker, 825349 CS Team (calls are rotated) Laboratory Manager **Dosemeter Logistics Office** 825339 Fax **Email** General PDS General PDS 825563 personaldosimetry@phe.gov.uk General CS 825564 Dose Records Office doserecords@phe.gov.uk