

Monitor

March 2013 Issue 43



Public Health England

As mentioned in *Monitor* No. 42, the Health Protection Agency will, from 1st April 2013, become part of Public Health England (PHE). The new organisation's functions are to protect and improve health and wellbeing and reduce differences in the quality of health of the population.

Public Health England is an executive agency of the Department of Health (see <http://healthandcare.dh.gov.uk/category/public-health/phe/>) and will provide services to the devolved administrations under similar arrangements to the HPA. PHE will assume all of the functions currently fulfilled by the HPA. In particular, the role of the Centre for Radiation, Chemical and Environmental Hazards (CRCE) – including the provision of a Personal Dosimetry Service – will remain unchanged.

The dosimetry contracts that you currently have with us will automatically transfer to PHE, with the Secretary of State for Health, acting through PHE as the contracting party, replacing the HPA. Due to this automatic transfer, the contracts do not need to be novated by other means. Our new VAT registration number with effect from 1 April 2013 will be GB155 579 377. Our new bank details will be printed on all new invoices.

In this issue, we give our new contact details (see *the back page*). You will see that our telephone numbers have already changed (except the main switchboard and emergency contact numbers, which remain the same), and that we have new email addresses from 1st April. The new email addresses can be formed from the old ones simply, by replacing '@hpa.org.uk' with '@phe.gov.uk'. The old HPA email addresses will continue to work for at least six months. Please note that the address of our Accounting Services has not changed.

We will be working on rebranding our 'Dosimetry Online' (DOL) service, but for the time being DOL will continue to operate at the existing address, <https://dol.hpa.org.uk/>. We expect to be able to give plenty of notice of any changes, but users should keep an eye on the 'message of the day' when logging in. Don't forget you can use DOL to:

- make changes to your order
- check on dose results and cumulative doses
- view previous reports
- check on un-returned dosimeters
- get advice.

REMINDER

Security X-Rays on Other Sites

Do you send your workers' dosimeters on to other sites, eg nuclear sites?

If so, don't forget **there is a risk the dosimeters may get X-rayed**. Many sites have substantial security arrangements, including X-ray scanning of all incoming post.

Things you can do:

- send the dosimeters to a different address, so the staff can carry them when entering the site
- liaise with the site to agree upon the best arrangements
- if necessary, ask us to provide extra control dosimeters
- remind all your workers to be aware of this.

Also in this issue:

- TLDs – Immune to Environmental Effects
- Classified Workers
- EURADOS: Improving Dosimetry Standards Across Europe
- *Happy Retirement Jenny!*
- Prices from April 2013
- Getting Connected

TLDs – Immune to Environmental Effects

We sometimes get enquiries from customers who are worried about a whole-body TLD because, for example:

- it has been left on a radiator
- it has been left in sunlight
- the white wrapper has been punctured.

In these circumstances, what should you do?



What if I get a puncture?

When we changed to the present design of TLD in 2006, we carried out a number of tests on its environmental robustness. These included:

- exposure to elevated temperature
- exposure to high humidity
- exposure to light.

The tests included those prescribed in the relevant international standard¹. Dosimeters were tested up to 40°C and 90% relative humidity. They were also exposed to simulated strong sunlight, and to common indoor lighting. No effects were found². One of the reasons for this is robustness that the new TLDs are ten times more sensitive than the old ones.

The wrapper is provided to protect the dosimeter from contaminants such as dust, grease and chemicals. Therefore:

If there is only a small hole in the wrapper, don't worry.

But if there is a larger tear that might let contaminants in, get our advice.

If a dosimeter has been left in sunlight or on a radiator for some hours, don't worry.

But if it has been subjected to temperatures much above 40°C, get our advice.

References

- 1 International Electrotechnical Commission (2003). *Thermoluminescence Dosimetry Systems for Personal and Environmental Monitoring*. IEC 61066.
- 2 Gilvin PJ, Baker ST, Daniels TJ, Eakins JD, McClure DR, Bartlett DT and Boucher C (2008). Type testing of a new TLD for the UK Health Protection Agency. *Radiat Prot Dosim*, **128**, 36–42.

Classified Workers

Radiation employers need to make sure they have correctly identified their classified workers, and that they are providing proper levels of protection. The Health and Safety Executive is aware that not all employers are following best practice. Are you?

Which workers are classified?

Regulation 20 of the **Ionising Radiations Regulations 1999** (IRR99) requires employers to designate as 'Classified Persons' any employees 'who are likely to receive an effective dose in excess of 6 mSv per year or an equivalent dose which exceeds three-tenths of any relevant dose limit'. The interpretation of this is that if you can foresee any circumstances in which the worker's dose might exceed those levels, then they should be classified. This includes accident situations, eg where an interlock fails – it is not enough to rely upon past evidence of routine doses being low. If you are in any doubt, consult your Radiation Protection Adviser.

Registering for dose record keeping

Regulation 21 of the IRR99 sets out obligations on employers regarding the monitoring and recording of doses for classified workers. They are required to have both routine, continuous dose measurement (assessment) and properly maintained dose records.

If your workers are classified, you need to tell us this when registering them for dose record keeping. To make sure you are doing this properly, it should be your Radiation Protection Supervisor (ie your own employee with responsibilities for radiation safety) who authorises the registrations. Don't leave it to someone who 'just does the paperwork'.

Dosimeter change intervals

Following our item on dosimeter change intervals in the last issue of *Monitor*, the Health and Safety Executive has asked us to emphasise the requirement for employers to change their classified workers' dosimeters at least every month.

In the earlier article, we mentioned that some employers have used longer change intervals, if additional electronic dosimeters were used. However, in practice it is sometimes found that workers fail to use their electronic dosimetry correctly. Therefore, to ensure the best protection for these most-at-risk workers, ***employers should ensure that their classified workers always have dosimeter change intervals of one month or less.***

EURADOS: Improving Dosimetry Standards Across Europe

The HPA contributes to the European Radiation Dosimetry Group, EURADOS. This is a network of more than 50 European institutions and 250 scientists, aiming to promote technical quality and harmonisation of dosimetry standards across Europe. The institutions include individual monitoring services such as our own, together with universities and other research organisations. EURADOS is financially sponsored by a number of bodies, and also pursues work that is self-funding.

The work of EURADOS includes the organisation of scientific meetings, training activities, and intercomparisons and benchmark studies. In all areas, EURADOS seeks to publish its work, in order to disseminate knowledge and best practice.

EURADOS uses small working groups to pursue its aims. Its current areas of work include:

- harmonisation of individual monitoring*
- environmental dosimetry
- computational dosimetry*
- internal dosimetry*
- radiation protection dosimetry in medicine
- retrospective dosimetry*
- high energy radiation fields*
- European Medical ALARA Network.

These are areas where knowledge is limited or further development of standards is required, and HPA scientists are involved in several of them (marked with an asterisk, *).

Within these areas, activities include the following.

Harmonisation of individual monitoring

- assessing the level of quality assurance by means of a Europe-wide survey
- carrying out intercomparisons
- delivering training courses.

Computational dosimetry

- optimising and harmonising computational methods and models
- applying these to current topics in dosimetry.



Internal dosimetry

- improving knowledge and methods for assessing doses from intakes of radionuclides, eg by ingestion and inhalation.

Retrospective dosimetry

- developing techniques to assess exposures that have already occurred, using materials found in common items.

High energy radiation fields

- estimating, and developing methods to assess, doses from cosmic radiation and other high energy sources (exposed workers here include aircrew and astronauts).

Happy Retirement Jenny!

After 14 years of working in Customer Services, Jenny Bushnell has retired.

We will miss her as will the many customers she helped every day, but we suppose she deserves a break!

Good luck Jenny and thanks for everything!

HPA Personal Dosimetry Service
 CRCE, Chilton, Didcot, Oxon OX11 0RQ, UK
 Tel: +44(0)1235 825240
 Fax: +44(0)1235 825564
 Email: personaldosimetry@phe.gov.uk
 Web: www.hpa.org.uk/radiation (and click on Personal Dosimetry Service)

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Prices from April 2013

Listed below are our prices effective from 1st April 2013. The prices listed do not include 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.

Dosimeter*	Wear period	£ (each)	Customer-specific investigation level at £12.60 per notification
TLD	2 and 4 weekly	5.70	
TLD	8 weekly	6.35	
TLD	13 weekly	7.20	
Extremity			
Stall	All	7.50	
Ring	All	8.75	
Neutron PADC and Radon	All weekly	32.10	

* Orders are subject to a minimum order charge of £60.

	£ (each)
Unreturned TLDs	24.00
Unreturned Extremities	24.00
Dose Record Keeping (using HPA dosimeters)	
Initial registration fee (covering a minimum of 12 months)	29.40
Renewal fee for subsequent years (prices decrease with quantity discounts)	17.45
Dose Record Keeping (not using HPA dosimeters)	
Initial registration fee (covering a minimum of 12 months)	117.25
Renewal fee for subsequent years	93.65
Special Entries to Dose Records (first 2 entries per year are free)	7.05
Radiation Passbooks	
Next working day despatch	25.15
Standard despatch	15.75

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

All supplies are subject to HPA terms and conditions.

Getting Connected to the Personal Dosimetry Service (PDS)

Telephone	Prefix +44(0)1235 (unless*)
Dr Phil Gilvin, Manager	825333
Lyn Pike, Deputy (Commercial)	825343
Nicky Gibbens, Deputy (Technical)	825334
Sean Baker, Laboratory Manager	825349
Dosimeter Logistics Office	825339
Dose Records Office	825230
Laboratories	
TLD and Extremity	825353
Neutron (Leeds)*	+44(0)113 267 9041
Customer Services Team (calls are rotated)	825240

Fax numbers	
General PDS	825563
General Customer Services	825564

Email	
General PDS	personaldosimetry@phe.gov.uk
Dose Records Office	doserecords@phe.gov.uk

Visit our website
www.hpa.org.uk/radiation
 (and click on Personal Dosimetry Service)