



## A Change at the Top

At the end of March, Phil Gilvin will step down from his duties as manager of PHE's Personal Dosimetry Service, and Nicky Gibbens will take over. Here Phil looks back over the last thirty years...

It doesn't seem long (well, not that long) since, as a fresh-faced youth (but far from hirsute, even then), I joined the then NRPB's Personal Monitoring Service as deputy to Alan Pook. One of Alan's innovations was the introduction of a customer newsletter – which is why we both appeared in the very first issue of "Monitor", back in 1988. Ah, those were the days: all the work was done with paper forms and printouts; faxes and telexes were still around; and we used to have to change the magnetic tapes on our PDP-11 laboratory computer every day – because 32 kilobytes was a lot of data!



**Phil with Alan Pook, some time in the last century**

Some things have changed since then – film badge dosimeters are now obsolete, and we're using a more sensitive material for our TLDs. We have an HSE-approved service for measuring doses to the lens of the eye. All of the peripheral technology has changed, too, and customers can now look at their results, and administer their orders, using our "Dosimetry On Line" extranet.

But other things haven't changed – as the largest UK-based dosimetry service, we still provide hundreds of thousands of dosimeters each year to thousands of employer sites. We still deliver a high-quality service with excellent customer care, and we still work with colleagues in the UK and Europe to

promote standards and help ensure that workers are properly protected from ionising radiation.



**Nicky and Phil admiring PHE's excellent headband dosimeter...**

As to the future: with Nicky taking over, I am leaving the management of the service in the best possible hands – Nicky has worked in the service for well over twenty years and has all of the necessary skills and qualifications too. (She didn't make it into "Monitor" until 1996, though – what were we playing at?) Meanwhile, I will still be around, carrying on my work with EURADOS as well as being available to support Nicky and her team after the transition. On an official note, under the terms of our dosimetry service approval we have already notified the Health and Safety Executive.

It only remains for me to thank all our customers for letting me have the pleasure of working with you over what seems like a lot less than thirty years. (OK, yes, it's only twenty-nine. 3% measurement uncertainty.)

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## New Ionising Radiations Regulations

Many of our readers will be aware that new Ionising Radiations Regulations are due to come into force in 2018, transposing the 2013 European Basic Safety Standards Directive (BSSD) into UK law. The Health and Safety Executive are carrying out a consultation exercise (closing date 2nd April) on the new regulations, at [www.hse.gov.uk/consult/live.htm](http://www.hse.gov.uk/consult/live.htm). Further consultations on other regulations that transpose the BSSD will follow from the relevant government departments.

## PHE PDS will be exhibiting at these conferences in 2017 Come and see us!

**BINDT Aerospace Event**  
Cambridge, 25th April

**SRP Annual Meeting**  
Aberdeen, 16th - 18th May

**IPEM RPA Update**  
Bristol, 24th May

**IPEM South West Area Scientific Meeting**  
Cheltenham, 9th June

**AURPO Annual Meeting**  
Hull, 5th - 7th September

## Electronic Dose Reports

We are able to supply all of your dose reports, including your Annual Dose Summaries (issued in February), electronically via email. We can also supply this newsletter electronically too. 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 would like to change to reports by email, please contact us at [doserecords@phe.gov.uk](mailto:doserecords@phe.gov.uk).

## Radiation Weighting Factors for Neutrons

On a rather specialised matter, some customers of our neutron dosimetry service have asked about how we take the radiation weighting factors into account. The question arises because changes to the weighting factors, and to the way in which effective dose is calculated, are now being recommended. (Effective dose is the primary quantity that represents health detriment, and is what the “whole body” dose limit in the ionising radiations regulations refers to). The answer is that we do take them into account, but only indirectly.

Following international recommendations, normal practice in the UK is to use the quantity personal dose equivalent,  $H_p(10)$ , as an estimator of effective dose,  $E$ .  $H_p(10)$  is in the main conservative, i.e. it over-estimates  $E$  and is therefore “erring on the safe side”. In some situations, this over-estimation is large, and overly restrictive.

The new values for effective dose will differ from the old ones because more realistic models of the human body have been adopted for their calculation. There will also be changes for neutrons, because of changes to the radiation weighting factor for neutrons, which make it provide better estimates of health detriment. This will mainly affect low energy neutrons, for which the effective dose will approximately halve.

Now, whilst the calculation of  $E$  will change as new dosimetric models are adopted, there will be no immediate update to  $H_p(10)$ . The result is that whilst effective dose will provide better estimates of risk, since  $H_p(10)$  will not change there will be a change to the relationship between personal  $H_p(10)$  and  $E$  – that is, between dosimeter dose estimates and the risk to the dosimeter wearer. The main fields in which there will be a difference are low energy neutron fields, for which underestimates of risk will no longer occur for accurate estimates of  $H_p(10)$ .



# Radiation Safety Training for the Workplace 2017

A key requirement of radiation safety and environmental protection legislation is that employees, including staff who work with sources of ionising radiation, staff appointed to supervise the work, and managers with specific responsibilities to ensure compliance with legislation, are given appropriate training.

## Radiation Protection Supervisor Courses

Our Radiation Protection Supervisor (RPS) courses are designed for staff with responsibility for supervising radiation protection in industry, research and teaching. Our general RPS course is suitable for anyone appointed to this role, however, we also offer courses tailored to staff working in specific fields. For example our X-ray RPS course is suitable for those supervising X-radiation in any workplace, and we have specialist courses for veterinary RPSs and those working in dentistry.

## Radiation Safety Courses

Our radiation safety courses are a good choice for those working with ionising radiation, including operators and classified workers. These courses cover practical radiation protection, monitoring techniques and key legal requirements. We also have a course aimed specifically at those responsible for managing radiation safety, for example health and safety managers or company directors, where the focus is on the employer's legal obligations and the management of the work.

Training is delivered at our venues in Glasgow, Leeds and Chilton by our radiation safety specialists. Courses can also be customised to your specific interests and delivered at your own venue. For more information please visit our website [www.phe-protectionservices.org.uk](http://www.phe-protectionservices.org.uk).

Alternatively, contact us at

Radiation Protection Services,  
Public Health England, Oak Park Lane, Cookridge, Leeds, LS16 6RW

Phone: 0113 267 9041

Fax: 0113 261 3190

email: [PHE.RP-Training@phe.gov.uk](mailto:PHE.RP-Training@phe.gov.uk)

## Radiation Protection Supervisor

		Chilton	Leeds	Glasgow	Fee*
RPS: General	3 days	13 - 15 June 10 - 12 October	11 - 13 July 7 - 9 November	16 - 18 May	£850
RPS: X-ray	2 days	23 - 24 May 14 - 15 November	19 - 20 September		£550
RPS: Refresher	2 days	3 - 4 October	6 - 7 June 12 - 13 September		£550
RPS: Veterinary Practice	1 day	27 June 2 October	17 May		£280
RPS: Dental Practice	1 day	29 June	26 September		£280
RPS: Dental Engineers	2 days	24 - 25 October	25 - 26 April		£280

## Radiation Safety

		Chilton	Leeds	Glasgow	Fee*
Radiation Safety: Sealed Sources and X-Rays	1 day	13 November	21 November	7 November	£280
Radiation Safety: Open Sources	1 day	27 November	10 October	7 December	£280
Radiation Safety for Managers	1 day	11 September	19 July		£280

\*Fees include buffet lunch and all refreshments; there is no charge for parking at our training venues.  
Our course fees are not subject to VAT.

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[www.gov.uk/phe](http://www.gov.uk/phe)

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## Prices from April 2017

Listed below are our prices effective from 1st April 2017. 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.

Dosimeter*	Wear period	£ (each)
TLD	2 and 4 weekly	6.05
TLD	8 weekly	6.80
TLD	13 weekly	7.68
<b>Extremity</b>		
Stall	All	8.00
Ring	All	9.42
<b>Neutron PADC and Radon</b>	All weekly	34.25
* Orders are subject to a minimum order charge of £60.		

	£ (each)
<b>Unreturned TLDs</b>	24.00
<b>Unreturned Extremities</b>	24.00
<b>Dose Record Keeping (using PHE dosimeters)</b>	
Initial registration fee (covering a minimum of 12 months)	30.70
Renewal fee for subsequent years (prices decrease with quantity discounts)	18.25
<b>Dose Record Keeping (not using PHE dosimeters)</b>	
Initial registration fee (covering a minimum of 12 months)	122.60
Renewal fee for subsequent years	97.90
<b>Special Entries to Dose Records</b> (first two entries per year are free)	7.40
<b>Radiation Passbooks</b>	
Next working day despatch	26.55
Standard despatch	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	<b>Laboratories:</b>	
Lyn Pike, Deputy (Commercial)	825343	TLD & Extremity	825353
Sean Baker, Laboratory Manager	825349	Neutron (Leeds)*	0113 267 9041
Dosimeter Logistics Office	825339	<b>Customer Services (CS)</b>	
Dose Records Office	825230	CS Team (calls are rotated)	825240
<b>Fax</b>		<b>Email</b>	
General PDS	825563	General PDS	<a href="mailto:personaldosimetry@phe.gov.uk">personaldosimetry@phe.gov.uk</a>
General CS	825564	Dose Records Office	<a href="mailto:doserecords@phe.gov.uk">doserecords@phe.gov.uk</a>