Monitor

Newsletter of the Personal Dosimetry Service

Autumn 2024 Issue 66



Welcome to *Monitor* Issue 66

Nicky Gibbens, Manager – Personal Dosimetry Service (PDS) UK Health Security Agency (UKHSA)

Hello again, and welcome to Issue 66 of *Monitor*, the six-monthly newsletter of the UKHSA's Personal Dosimetry Service (PDS) – although more of that later.

Since last time, PDS has ...

- Started the roll-out of our new internal business management system TARDIS, which should improve our processing of customer orders.
- Formally launched the new customer online portal CLARA.
- Continued to take on and train new staff, again positioning ourselves well for the future.
- Bid farewell and a "Happy Retirement" to Ros McIntyre, Supervisor of our Extremity Dosemeter Lab.

We like to think that in this issue of *Monitor* we have, as usual, provided something of interest to all our readers out there, including: -

- Dr. Stephen Barnard, Cytogenetics Group Leader for UKHSA here in Chilton, discusses the role of Chromosomal Dosimetry, a scientifically rigorous mechanism for producing accurate dose estimates.
- Kinga Zmijewska, PDS Technical Development Manager, announces the launch of the new PDS online portal, CLARA, and discusses how you can help to make it even better.

- There is an update on the first of our volunteering days here at Harwell, which not only forms part of our community social responsibility, but also is good for the environment (of course) and good for PDS staff mental health.
- We hosted our second PDS Open Day in late October and we'll have a report on that in the next edition of Monitor. In the meantime, please save the date for our next Open Day, which is set for Wednesday 15th October 2025.
- Several PDS staff members took part in a study into the human body's circadian rhythms. This involved donating blood samples regularly, the study's aim being to understand better how compromised circadian rhythms can affect our health.

... and finally, we have an exciting development (well we think it's exciting!) to do with the *Monitor* newsletter itself. **Read on** ...

An Announcement About Our Monitor Newsletter

As many of you will know, we publish this *Monitor* newsletter every six months or so, typically in the spring (March or April) and the autumn (October or November). It is sent to our more than 6,500 PDS customers both in the UK and overseas, the vast majority being despatched as a PDF attachment in an e-mail. (The good news is that less than 100 of our customers still wish to receive a printed version – so we're definitely all saving a few trees here. Thank you! – Ed.)

We have decided to intersperse the spring and autumn issues with a summer and a winter issue, as there is always news

to impart as we grow, as we roll out new systems, and as developments in dosimetry and the science that underpins it develops. However, please bear in mind that these two new issues **will be e-mailed only**; there will be no printed versions of these, so our quest to save the rainforest continues.

We like to think that our newsletter has something of interest for all our stakeholders, but if there are any items or topics you would like to see covered in future issues of *Monitor*, either as a one-off or as a regular item, please drop an e-mail to the Editor at https://hugh.schoenemann@ukhsa.gov.uk



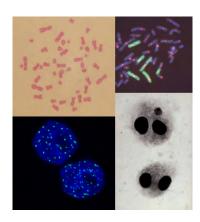


UKHSA Chromosomal Dosimetry Service

Dr Stephen Barnard MRSB CSci Cytogenetics Group Leader, UKHSA

UKHSA's Chromosomal Dosimetry Service provides individual dose estimates based on standardised, validated methods. This is in addition to a range of additional consultancy, research & development, training, and software products. All of these are provided to industry, government, and academic partners. UKHSA's specialist staff have a wealth of experience and are an authoritative source of advice to regulators, the public and others.

So, what is Chromosomal Dosimetry? Well, ionising radiation can cause direct or indirect damage to DNA, which leads to a complex chain of responses, including activation of DNA damage signalling and repair proteins. Depending on the amount and complexity of damage, chromosome breaks can be repaired or mis-repaired. Mis-repair can lead to chromosome aberrations such as dicentrics (a chromosome with two centromeres) or translocations (the transfer of DNA material from one chromosome to another).



What can we do for you then? Well, we can: -



- Demonstrate false alarms when, for example, the dose recorded on a dosemeter was not, on investigation, actually received by the wearer.
- Confirm genuine overexposures and provide an alternate estimate of dose based on blood sampling, independent of any physics methods.
- Give an indication of the whole- or partial-body nature of the exposure and the proportion of the body exposed.
- Often be the only available method to confirm or refute suspected overexposure to people in a radiation incident who were *not* wearing dosemeters.

For further information, please contact me at the UKHSA's Cytogenetics Group at stephen.barnard@ukhsa.gov.uk or visit our website at: www.ukhsa-protectionservices.org.uk/cds/



CLARA Support & Survey

Kinga Zmijewska
PDS Technical Development Manager, UKHSA

CLARA Support

We are excited to announce that the customer online portal, CLARA has now launched! Our Operations Team have been working hard to ensure that all PDS customers have access, and we would like to thank you for your patience whilst we process your requests. If you have any questions or would like to request a demo, please email our CLARA inbox: clarasupport@ukhsa.gov.uk. If you have any suggestions for improvements, please see the survey link below but note that it might take some time for improvements to be made, as priority is being given to the improvements which have been suggested the most.

New Customer Survey

Please tell us what you think! We have recently designed and launched a new customer survey form to gather feedback and suggestions from our customers to help us improve our service. The survey can be accessed here:

Click here for the Feedback Survey

The feedback we receive will be saved and reviewed monthly and discussed during Management Review Meetings.



PDS Goes on its First Litter-Pick

Hugh Schoenemann PDS Customer Services Manager, UKHSA

Continuing with the UKHSA / PDS "Green Agenda" and as part of UKHSA's volunteering scheme, several PDS staff took part in a litter-picking afternoon on Wednesday 12th June here at Harwell, an event that had been long in the preparation before the pandemic hit and the associated lockdowns took hold.

The whole event was the idea of Wendy Kerswill, one of the PDS Customer Service Team, who herself is a dedicated "litter picker" around her hometown of Wantage. Wendy arranged *everything*, from the venue (the whole Harwell Research Park where PDS is based), the litter-pickers ("claws") that we all used, and the rubbish bags we filled – so well done Wendy!

In the short time we spent spreading out as small teams across the site, we collected over six bags of assorted rubbish from sweet wrappers and crisp bags to vandalised road signs and bits of old clay pipe.





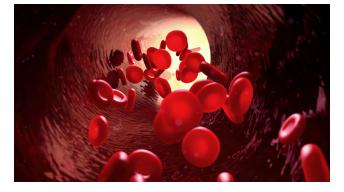
A whole bunch of PDS staff and all the rubbish they collected.

(The PDS staff are on the left – Ed.).

PDS Staff Help with Biomarkers Research

The Cancer Mechanisms & Biomarkers Group is part of the Radiation Effects Department and, like PDS, is part of UKHSA's Radiation, Chemical & Environmental Hazards Directorate (RCE) based at the Harwell Research Park in Chilton. This group has recently embarked on a study into disruption of the human body's circadian system and how it can affect transcription of clock genes and DNA repair which, in turn, could affect the risk of cancer development.

The complete study will comprise two groups of participants, one of day-shift workers and one of night-shift workers, the current stage of the project concerning day-shift workers only. For this stage, UKHSA/RCE staff were invited to take part in the study as blood-sample donors and, unsurprisingly, three members of PDS staff volunteered as participants. This required donating blood twice a day at 7.30am and 7.30pm on three different days – a total of six blood donation sessions of 25ml each – which will be used to complement those samples collected from night-shift workers.



A UKHSA phlebotomist evaluated the feasibility of blood collection based on a simple vein assessment of each participant prior to the start of sampling, with a recommendation that donors should a) be well hydrated, and b) warm their hands before donation (?!)

We all look forward to the publication of the Cancer Mechanisms & Biomarkers Group's findings in due course.

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Please say "Hello" to our new PDS staff ...

PDS continues to grow as a department in line with our ever-increasing workload. To accommodate this, we have recruited new people to the various teams that PDS comprises. Please welcome the following newcomers to our ranks, all of whom have joined us since the spring of 2024.



Fiona Perkins has joined us as our Laboratory Supervisor of the main PDS Lab, as she brings supervisory expertise within the environmental regulatory sector. On a personal note, Fiona loves to read and travels the world whenever she can.



Lola Gibbens took her GCSEs this year and started working with us in the summer. She has now started college where she is studying for a T-Level in Healthcare. In her leisure time, she enjoys playing football, dancing, and she is a qualified football referee.



Maddy Gibbs has joined us as our PDS Technical Manager, having graduated this year from Leeds University with a degree in Physics. Maddy has moved to Oxford from Kent and is really excited to be joining the PDS team.

Stay Connected with PDS

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