

Radiation Dose Badge Procedure
Radiology Department
The Ionising Radiation Regulations 2017

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Oct 2012	1	Trevor Parker & Craig Moore	First version.
Oct 2014	2	Trevor Parker & Craig Moore	Reference update and change to badge hand in deadlines.
Oct 2016	3	Trevor Parker & Craig Moore	General update. (RMT 24/10/16)
Oct 2018	4	Trevor Parker & Craig Moore	Updated to reflect requirements of IRR17

PROCESS FOR MONITORING COMPLIANCE

Radiology Ops Groups and Radiology RMT Committee. Regular staff dose audit.

REFERENCES

The Ionising Radiation Regulations 2017

1. Introduction

Supply of Personal Protective Equipment (PPE) in the form of body, collar, finger and eye personal dose monitors (currently Luxel badges) is in place to help maintain a safe working environment when working with ionising radiation.

2. Rationale

Although risk assessments performed by the Radiation Protection Adviser (RPA) has shown no member of HEY Trust staff are likely to receive an annual dose of ionising radiation in excess of 3/10ths the annual body or skin/extremity legal limit, or 15 mSv for the eyes assuming appropriate personal protective equipment is worn (designation as a 'classified radiation worker' is therefore not required) it is still a legal requirement under the Ionising Radiation Regulations 2017 (IRR17) that dose monitoring of non-classified radiation workers is carried out (IRR reg 19(4)). Therefore if you are issued with body, collar, finger and eye dose monitors as advised by the Radiation Protection Advisor (RPA) it is MANDATORY to wear them. Depending on radiation doses received, some members of staff may not have to wear collar, finger or eye monitors; if this is the case you will not be issued with one.

All radiology staff working with ionising radiation will be issued with dose monitors (in some cases; body, collar, finger and eye monitors or combinations thereof) on appointment and are required to adhere to this policy. Temporary body, collar, finger and eye monitors may be issued from time to time – IT IS STILL A LEGAL REQUIREMENT TO TREAT THESE TEMPORARY MONITORS AS YOUR OWN.

Please note that collar badges are exactly the same as body badges; when worn on the collar outside the lead apron they help monitor dose to the eyes and thyroid.

3. Role of the Radiation Protection Supervisor (RPS)

A named RPS for each area (appendix 1) is responsible for ensuring that:

- A specific collection point is identified for their staff.
- New badges are placed in collection points before the 1st of each month.
- Used badges (with control) are returned to the supplier no later than the last day of the month following the wear period.
- Late returns are recorded and investigated.
- Dose results are monitored and investigated as required.

4. Responsibility of staff issued with dose badges

The responsibility of employees issued with dosimeter badges is specified in Hull and East Yorkshire Hospitals NHS Trust Corporate Policy 325. The Health & Safety Executive have issued enforcement notices and prosecuted hospitals where:

- dose badges have not been used properly or
- not worn when they should have been, and
- where high dose results have not been checked and appropriate action taken.

If a dose result is higher than the investigation level in the LOCAL RULES for that area then it must be formally investigated.

In line with CP325 it is the personal responsibility of the badge holder to adhere to the following procedure and ensure they have identified their collection/return points (check with relevant RPS, appendix 1) and ensure that badges are:

- Worn correctly
- Exchanged on time
- Loss and damage is reported

5. Procedure

Supply of badges:

- Radiation protection badges are issued at the end of each month and will be placed at collection points as specified by the relevant RPS.
- Badges should be exchanged as near to the beginning of the month as possible and no later than the 21st of the month.
- If badges cannot be exchanged at the beginning of the month for any reason (e.g. annual leave); the badge holder should leave the current month's badge at the collection point and collect the following months badge as soon as possible.

Wearing your badge:

- Badges must be worn when working in any area using ionising radiation. If you are in doubt consult the local rules for the radiation controlled area as well as the RPS.
- For staff not working in a screening environment, dose badges must be worn on the trunk at waist or chest height.
- For staff working in a screening environment, collar badges must be worn on the collar of the lead apron, i.e. it must not be shielded from the radiation.
- Interventional radiologists must wear a body badge under their lead apron and eye monitor outside the lead glasses at the side of the head nearest to the radiation source, as close to the eye as possible.
- Finger monitors must be worn at the ring position on either the ring or little finger of the dominant hand.
- Lost, mislaid, damaged or accidentally exposed badges:
 - Should you lose or mislay your badge please ask an RPS to arrange a replacement one for you for the rest of the month. Hand in your badge, as soon as you can, should you find it.
 - Should you forget your badge one day please ask an RPS to arrange a temporary replacement one for you to wear for that day.
 - Accidentally exposed badges (e.g. badge left in controlled area of fluoro room), and damaged badges (e.g. put through the washing machine/tumble dryer) must not be worn again. Contact your RPS for a replacement.

6. Badge monitoring

Collected badges are sent to the supplier where they are tested and analysed for levels of exposure. Badges showing unusually high levels of exposure will be investigated which is why it is important to keep a record of any instances of accidental damage or lost and found badges.

- Results are displayed in a spread sheet on the radiology Y drive.
- See your RPS if you have any queries regarding your results.

7. Health & Safety Executive (HSE)

If you are issued with a dose badge it is a legal requirement to wear it. The HSE expect badges to be worn by all staff they are issued to:

The Ionising Radiation Regulations 2017 (IRR17) make it a legal requirement for employees to wear and take reasonable care of personal dose badges that have been provided by their employer. This includes wearing them and returning them for processing in accordance with their employer's instructions. An employee may be committing an offence under section 7 of Health and Safety at Work Act if they fail to cooperate with their employer and wear, return and take care of their personal dose badge and own health and safety.'

8. Appendix

SITE	AREA	RPS	STAFF
HRI	General/Screening	Debbie Cook Liz Crook Sandra Pank Beverly Tweed Melanie Atkinson	General Radiographers Radiology Registrars CISWs
HRI	Interventional Radiology Theatres	Hilary Finnis Guy Archer Angie Hunter Sandra Pank	CP Radiographers Radiology Consultants - HRI main base Radiology Nurses
HRI	CT	Rachel Cooper	CT Radiographers CISWs
CHH	General/Screening	Alison Whittle Claire Shepherdson Melanie Atkinson	General Radiographers Radiology Consultants – CHH main base CISWs
CHH	CT	Andrew Stephens	CT Radiographers CISWs