National Radiation Protection Office Update 5th December 2024

Radiation safety incidents reported on the National Incident Management System (NIMS) Q3 2024

This report details the radiation safety incidents reported on the NIMS from July to September 2024. The figures listed below do not include incidents related to ultrasound, MRI or issues with extravasation of contrast from a peripheral vascular catheter.

1. Category of radiation safety incident

Category of incident	Radiology	Radiotherapy
Harm	15	1
Near miss	213	47
No harm	131	7
Total number of reports	**359**	**55**

2. Category of person affected by the radiation safety incident

Category of person	Radiology	Radiotherapy
Adult patient / service user	343	55
New Born patient	2	
Staff member	9	
Member of the public	5	

3. Details of the process involved in the incidents.

Radiology incidents reported on the NIMS in Q3 2024						
Process	**Severity Rating**					**Total**
	Extreme	**Major**	**Moderate**	**Minor**	**Negligible**	
Checking patient identification					28	**28**
Clinical details on referral					143	**143**
Documentation / records					54	**54**
Communication / consent issues					12	**12**
Equipment failure					19	**19**
Performing procedure			2	3	56	**61**
Not applicable / unknown					42	**42**

The 42 reports categorised as ‘not applicable’ or ‘unknown’ refer mainly to inadvertent staff exposures; the ordering of procedures that were not required or that had already been performed; and communication failures within the multidisciplinary team.

Radiotherapy incidents reported on the NIMS in Q3 2024						
Process	**Severity Rating**					**Total**
	Extreme	**Major**	**Moderate**	**Minor**	**Negligible**	
Checking patient identification					1	**1**
Documentation / Records					6	**6**
Communication / Consent					3	**3**
Equipment Failure					4	**4**
Performing Procedure			1		39	**40**
Unknown					1	**1**

The report categorised as 'unknown' refers to an issue identified with the patient's anatomy that was missed at an earlier stage and this led to the development of a new plan for the patient.

4. The problems recorded in the incidents.

Radiology incidents reported on the NIMS in Q3 2024						
Problem	**Severity Rating**					**Total**
	Extreme	**Major**	**Moderate**	**Minor**	**Negligible**	
Diagnostic exposure greater than intended				1	24	**25**
General exposure related issue					24	**24**
Failure / malfunction					22	**22**
Wrong body part / side /site					101	**101**
Wrong patient (>1mSv)					11	**11**
Wrong patient (<1mSv)					27	**27**
Wrong process / treatment / procedure			1		35	**36**
Inadvertent dose to foetus (<1mSv)					1	**1**
Wrong dose (NM >20% greater than intended)			1			**1**
Wrong dose (NM 10-20% greater than intended)					1	**1**
Other / Unknown				2	108	**110**

The 110 reports categorised as 'other' or 'unknown' refer mainly to issues with identifying the correct patient or recording accurate patient information on the referral. Also, poor referral practices such as omitting important clinical information, ordering procedures that were incorrect or unnecessary, and failing to check if the patient had previously undergone the same procedure.

Radiotherapy incidents reported on the NIMS in Q3 2024						
Problem	**Severity Rating**					**Total**
	Extreme	**Major**	**Moderate**	**Minor**	**Negligible**	
Dose or volume variation in one fraction >20% wrt fraction dose					1	**1**
Failure / malfunction					4	**4**
Wrong body part / side / site					1	**1**
Wrong process / treatment / procedure					10	**10**
Other			1		38	**39**

The 61 reports categorised as 'other' refer mainly to elements in the treatment plan; omitting information in the medical file; and issues with scheduling treatments and their associated scans.