

NATIONAL RADIATION PROTECTION OFFICE UPDATE 23 MARCH 2023



RADIATION SAFETY INCIDENTS REPORTED ON THE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) Q4 2022

This report details all radiation safety incidents reported on the NIMS from October to December 2022. 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	8	1
Near miss	104	38
No harm	95	28
Total number of reports	207	67

2. Category of person affected by the radiation safety incident

Category of person	Radiology	Radiotherapy
Adult patient / service user	197	66
Staff member	9	1
Member of the public	1	

3. Details of the process involved in the incidents.

Radiology incidents reported on the NIMS in Q4 2022						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					17	17
Clinical details on referral					83	83
Documentation / records					23	23
Communication / consent issues					3	3
Equipment failure					24	24
Performing procedure			2		52	54
Pregnancy status					2	2
Not applicable / unknown					1	1

The report categorised as *not applicable / unknown* refers to a staff member exposed to radiation whilst caring for a patient who had undergone a nuclear medicine scan. The staff member had not been informed of the scan.

Radiotherapy incidents reported on the NIMS in Q4 2022						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Clinical details on referral					1	1
Communication / consent					1	1
Documentation / records					38	38
Equipment failure					8	8
Performing procedure				1	17	18
Not applicable					1	1

The report categorised as *not applicable* refers to the inadvertent exposure of a staff member to radiation when a procedure had commenced when they were in the room.

4. The problems recorded in the incidents.

Radiology incidents reported on the NIMS in Q4 2022						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Diagnostic exposure greater than intended					18	18
General exposure related issue					19	19
Failure / malfunction of process					33	33
Wrong body part / side /site					77	77
Inadvertent dose to foetus (<1mSv)						
Inadvertent dose to foetus (>1mSv)					2	2
Wrong patient (>1mSv)					8	8
Wrong patient (<1mSv)					8	8
Wrong process / treatment / procedure			2		20	22
Other / unknown					20	20

The 20 reports categorised as *other / unknown* refer mainly to issues with incorrect or incomplete clinical referrals, failures in communication between the multidisciplinary team and patient identification errors.

Radiotherapy incidents reported on the NIMS in Q4 2022						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Exposure related issue					2	2
Failure / malfunction in equipment					5	5
Wrong treatment / process /procedure					56	56
Wrong body part/site/site					1	1
Other					3	3

The three reports categorised as *other* refer to patient related issues.