

NATIONAL RADIATION PROTECTION OFFICE UPDATE 26TH SEPTEMBER 2024



RADIATION SAFETY INCIDENTS REPORTED ON THE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) Q2 2024

This report details the radiation safety incidents reported on the NIMS from April to June 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	17	
Near miss	170	69
No harm	155	17
Total number of reports	342	86

2. Category of person affected by the radiation safety incident

Category of person	Radiology	Radiotherapy
Adult patient / service user	328	86
Staff member	8	
Member of the public	6	

3. Details of the process involved in the incidents.

Radiology incidents reported on the NIMS in Q2 2024						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					48	48
Clinical details on referral			1		86	87
Documentation / records					42	42
Communication / consent issues					17	17
Equipment failure					28	28
Performing procedure			3		72	75
Pregnancy status					3	3
Not applicable / unknown					42	42

If users do not complete all fields in the NIMS when submitting a report, the data extract will often be labelled 'not applicable' or 'unknown'.

In this table, the 42 reports categorised as such refer mainly to poor referral practices, inadvertent staff exposures and administrative failures.

Radiotherapy incidents reported on the NIMS in Q2 2024						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Documentation / Records					9	9
Communication / Consent					3	3
Equipment Failure					2	2
Performing Procedure					72	72

4. The problems recorded in the incidents.

Radiology incidents reported on the NIMS in Q2 2024						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Diagnostic exposure greater than intended			1		32	33
General exposure related issue					34	34
Failure / malfunction					26	26
Wrong body part / side /site					70	70
Wrong patient (>1mSv)					6	6
Wrong patient (<1mSv)					34	34
Wrong process / treatment / procedure					51	51
Inadvertent dose to foetus (>1mSv)					1	1
Other / unknown			3		84	87

The 87 reports categorised as *other / unknown* refer mainly to issues with patient identification and incorrect or incomplete medical referrals.

Radiotherapy incidents reported on the NIMS in Q2 2024						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Dose or volume variation in one fraction >10% wrt fraction dose					1	1
Dose or volume variation in one fraction >20% wrt fraction dose					1	1
Failure / malfunction					1	1
Inadvertent dose to foetus (>1mSv)					1	1
Wrong body part / side / site					1	1
Wrong process / treatment / procedure					20	20
Other					61	61

The 61 reports categorised as *other* refer mainly to treatment planning issues and administrative failures.