

NATIONAL RADIATION PROTECTION OFFICE UPDATE 15TH JUNE 2023



RADIATION SAFETY INCIDENTS REPORTED ON THE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) Q1 2023

This report details the radiation safety incidents reported on the NIMS from January to March 2023. 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	
Near miss	123	16
No harm	107	19
Total number of reports	245	35

2. Category of person affected by the radiation safety incident

Category of person	Radiology	Radiotherapy
Adult patient / service user	233	35
New born	1	
Staff member	11	

3. Details of the process involved in the incidents.

Radiology incidents reported on the NIMS in Q1 2023						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					26	26
Clinical details on referral					89	89
Documentation / records					46	46
Communication / consent issues					4	4
Equipment failure				1	15	16
Performing procedure			1		41	42
Pregnancy status						
Not applicable / unknown				2	20	22

The 22 reports categorised as *not applicable / unknown* refer mainly to inadvertent staff exposures, administrative errors, issues when performing the procedure and failures in communication between the multidisciplinary team.

Radiotherapy incidents reported on the NIMS in Q1 2023						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Communication / consent					2	2
Documentation / records					16	16
Equipment failure					3	3
Performing procedure					14	14

4. The problems recorded in the incidents.

Radiology incidents reported on the NIMS in Q1 2023						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Diagnostic exposure greater than intended			1		28	29
General exposure related issue				2	16	18
Failure / malfunction of process				1	37	38
Wrong body part / side /site					76	76
Wrong patient (>1mSv)					11	11
Wrong patient (<1mSv)					20	20
Wrong process / treatment / procedure					17	17
Other / unknown					36	36

The 36 reports categorised as *other / unknown* refer mainly to incidents which involved incomplete medical referrals, communication failures and incidents which, from the description of the event, did not fall into only one category on the NIMS menu.

Radiotherapy incidents reported on the NIMS in Q1 2023						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Dose or volume variation in one fraction > 20% wrt fraction dose					1	1
Dose or volume variation >5-10% prescribed					5	5
Failure / malfunction in equipment					3	3
Wrong treatment / process /procedure					22	22
Other					4	4

The four reports categorised as *other* refer to issues with consent, treatment planning and clinical information on the medical records.