

NATIONAL RADIATION PROTECTION OFFICE UPDATE 20TH MAY 2021



RADIATION SAFETY INCIDENTS REPORTED ON THE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) Q1 2021

This report details all radiation safety incidents reported by hospitals on the NIMS from January to March 2021. The figures listed below do not include incidents related to ultrasound, MRI or issues with peripheral vascular catheters.

1. Category of radiation safety incident

Category of incident	Radiology	Radiotherapy
Actual incidents	87	3
Near miss events	74	68
Total number of reports	161	71

2. Category of person affected by the radiation safety incident

Category of person	Radiology	Radiotherapy
Adult patient / service user	154	71
New born patient	2	0
Staff member	5	0

3. Details of the process involved in the incidents.

Radiology incidents reported on the NIMS in Q1 2021						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					14	14
Clinical details on referral					69	69
Documentation / records					15	15
Communication / consent issues					7	7
Equipment failure					17	17
Performing procedure			1	1	23	25
Pregnancy status					1	1
Not applicable / unknown			1		12	13

The 13 reports categorised as *not applicable / unknown* refer mainly to failures in the RIS/PACS system and inadvertent staff exposures.

Radiotherapy incidents reported on the NIMS in Q1 2021						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					1	1
Communication / consent issue					1	1
Equipment failure					18	18
Documentation / records					40	40
Performing procedure					11	11

4. The problems recorded in the radiation safety incidents reported in Q1 2021

Radiology incidents reported on the NIMS in Q1 2021						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Diagnostic exposure greater than intended					16	16
General exposure related issue					5	5
Failure / malfunction of process					21	21
Wrong body part / side /site					37	37
Wrong dose – Nuclear Medicine - 20% greater than intended					1	1
Wrong patient (>1mSv)					9	8
Wrong patient (<1mSv)					4	4
Wrong treatment / process / procedure					10	10
Other / unknown			2	1	55	58

The 58 reports categorised as *not applicable / unknown* refer to incidents which mainly involved checking the patient's identification, incomplete documentation or inappropriate clinical details recorded on the referral.

Radiotherapy incidents reported on the NIMS in Q1 2021						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Dose or volume variation in one fraction greater than 20% wrt fraction dose					2	2
Failure / malfunction					3	3
Wrong body part / site / side					2	2
Wrong treatment / process /procedure					64	64