

## NATIONAL RADIATION PROTECTION OFFICE UPDATE 12<sup>TH</sup> MARCH 2022



### RADIATION SAFETY INCIDENTS REPORTED ON THE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) Q4 2021

This report details all radiation safety incidents reported on the NIMS from October to December 2021. 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
Actual incidents	15	
Near miss events	268	120
Total number of reports	<b>283</b>	<b>120</b>

#### 2. Category of person affected by the radiation safety incident

Category of person	Radiology	Radiotherapy
Adult patient / service user	250	120
Paediatric services	15	
Neonate services	1	
Staff member	17	

#### 3. Details of the process involved in the incidents.

Radiology incidents reported on the NIMS in Q4 2021						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					23	<b>23</b>
Clinical details on referral					103	<b>103</b>
Documentation / records				1	31	<b>32</b>
Communication / consent issues					10	<b>10</b>
Equipment failure				1	25	<b>26</b>
Performing procedure			1	4	39	<b>44</b>
Pregnancy status					1	<b>1</b>
Not applicable / unknown					44	<b>44</b>

The 44 reports categorised as *not applicable* and *unknown* refer to administrative errors when ordering a procedure; failure to follow notify ward staff when a patient is radioactive; and staff exposures for example, high personal dosimetry readings, staff refusing to wear personal protective equipment and staff entering a room during a procedure.

Radiotherapy incidents reported on the NIMS in Q4 2021						
Process	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Checking patient identification					1	1
Communication / consent issues					4	4
Documentation of referral					62	62
Equipment failure					27	27
Performing procedure					26	26

#### 4. The problems recorded in the radiation safety incidents reported in Q4 2021

Radiology incidents reported on the NIMS in Q4 2021						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Diagnostic exposure greater than intended					26	26
General exposure related issue					32	32
Failure / malfunction of process				1	40	41
Wrong body part / side /site					78	78
Wrong dose – Nuclear Medicine 20% greater than intended					1	1
Inadvertent dose to foetus (<1mSv)					2	2
Inadvertent dose to foetus (>1mSv)					1	1
Wrong patient (>1mSv)					9	9
Wrong patient (<1mSv)					17	17
Wrong process / treatment / procedure					20	20
Other / unknown			1	5	50	56

The 50 reports categorised as *other / unknown* refer mainly to incidents which involved incorrect, incomplete or inappropriate referrals, patient identification issues and delays in performing a procedure due to staffing issues.

Radiotherapy incidents reported on the NIMS in Q4 2021						
Problem	Severity Rating					Total
	Extreme	Major	Moderate	Minor	Negligible	
Failure / malfunction in equipment					3	3
Wrong treatment / process /procedure					112	112
Dose or volume variation in one fraction >10-20% wrt fraction dose					1	1
Other					4	4

The 4 report categorised as *Other* refer to two patient related issues, one issue with recording consent and one issue related to performing a procedure.