

## NATIONAL RADIATION PROTECTION OFFICE UPDATE 7<sup>TH</sup> DECEMBER 2023



### RADIATION SAFETY INCIDENTS REPORTED ON THE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) Q3 2023

This report details the radiation safety incidents reported on the NIMS from July to September 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                    | 13         |              |
| Near miss               | 163        | 23           |
| No harm                 | 133        | 35           |
| Total number of reports | <b>308</b> | <b>58</b>    |

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

| Category of person           | Radiology | Radiotherapy |
|------------------------------|-----------|--------------|
| Adult patient / service user | 295       | 58           |
| New Born                     | 1         |              |
| Staff member                 | 12        |              |

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

| Radiology incidents reported on the NIMS in Q3 2023 |                 |       |          |       |            |            |
|---|-----------------|-------|----------|-------|------------|------------|
| Process   | Severity Rating |       |          |       |            | Total      |
|   | Extreme         | Major | Moderate | Minor | Negligible |            |
| Checking patient identification                     |                 |       |          |       | 38         | <b>38</b>  |
| Clinical details on referral                        |                 |       | 1        |       | 120        | <b>121</b> |
| Documentation / records                             |                 |       |          |       | 32         | <b>32</b>  |
| Communication / consent issues                      |                 |       |          |       | 11         | <b>11</b>  |
| Equipment failure                                   |                 |       |          |       | 36         | <b>36</b>  |
| Performing procedure                                |                 |       |          |       | 57         | <b>57</b>  |
| Pregnancy status                                    |                 |       |          |       | 1          | <b>1</b>   |
| Not applicable / unknown                            |                 |       |          |       | 12         | <b>12</b>  |

The 12 reports categorised as *not applicable / unknown* refer mainly to administrative errors and a breakdown in communication within the multidisciplinary team.

| Radiotherapy incidents reported on the NIMS in Q3 2023 |                 |       |          |       |            |       |
|--|-----------------|-------|----------|-------|------------|-------|
| Process  | Severity Rating |       |          |       |            | Total |
|  | Extreme         | Major | Moderate | Minor | Negligible |       |
| Communication / Consent                                |                 |       |          |       | 6          | 6     |
| Documentation / Records                                |                 |       |          |       | 11         | 11    |
| Equipment Failure                                      |                 |       |          |       | 1          | 1     |
| Performing Procedure                                   |                 |       |          |       | 37         | 37    |
| Pregnancy Status                                       |                 |       |          |       | 1          | 1     |
| Unknown  |                 |       |          |       | 2          | 2     |

The 2 reports categorised as '*Unknown*' refer to issues with treatment planning and scheduling.

#### 4. The problems recorded in the incidents.

| Radiology incidents reported on the NIMS in Q3 2023 |                 |       |          |       |            |       |
|---|-----------------|-------|----------|-------|------------|-------|
| Problem   | Severity Rating |       |          |       |            | Total |
|   | Extreme         | Major | Moderate | Minor | Negligible |       |
| Diagnostic exposure greater than intended           |                 |       |          |       | 25         | 25    |
| General exposure related issue                      |                 |       |          |       | 23         | 23    |
| Failure / malfunction of process                    |                 |       |          |       | 66         | 66    |
| Wrong body part / side /site                        |                 |       |          |       | 82         | 82    |
| Wrong patient (>1mSv)                               |                 |       |          |       | 11         | 11    |
| Wrong patient (<1mSv)                               |                 |       | 1        |       | 31         | 32    |
| Wrong process / treatment / procedure               |                 |       |          |       | 33         | 33    |
| Other / unknown                                     |                 |       |          |       | 36         | 36    |

The 36 reports categorised as *other / unknown* refer mainly to staff exposures, inappropriate referrals and communication failures within the multidisciplinary team.

| Radiotherapy incidents reported on the NIMS in Q3 2023 |                 |       |          |       |            |       |
|--|-----------------|-------|----------|-------|------------|-------|
| Problem  | Severity Rating |       |          |       |            | Total |
|  | Extreme         | Major | Moderate | Minor | Negligible |       |
| Wrong treatment / process /procedure                   |                 |       |          |       | 29         | 29    |
| Other  |                 |       |          |       | 29         | 29    |

The 29 reports categorised as *Other* refer to issues with treatment planning and scheduling, the appropriate timing of treatment and failures which occurred during the delivery of treatment.