

# National Closed Loop Audit on Foundation Doctors' Knowledge of Radiation Legislation



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## 01 Background

Medical and non-medical practitioners are classed as Duty Holders under Ionising Radiation Medical Exposure regulations (IR(ME)R) (1). They must be aware of their responsibilities under IR(ME)R before referring patients for examinations involving exposure to ionising radiation (1).

## 02 Aim

To evaluate foundation doctors' knowledge of radiation legislation across UK foundation schools.

## 03 Methodology

An adapted version of RCR's radiation legislation awareness questionnaire was distributed to foundation doctors across UK deaneries online in June 2022. A re-audit was conducted following distribution of an IR(ME)R teaching resource in August 2022.

**Figure 1:**  
"Foundation Doctors-Radiation Legislation Awareness Questionnaire" adapted from RCR (2).

1. Are you aware of any governmental regulations on radiation exposure?\*

Yes

No

2. Are you aware of any legal obligation to provide accurate information when requesting imaging?\*

Yes

No

3. Are you aware that the department of radiology has the right to withdraw radiology 'requesting' rights?\*

Yes

No

4. Are you aware of the book 'iRefer: Making the best use of clinical radiology'?\*

Yes

No

5. Have you ever been asked by your senior colleague to request an imaging investigation and were unsure of the indication for this test?\*

Yes

No

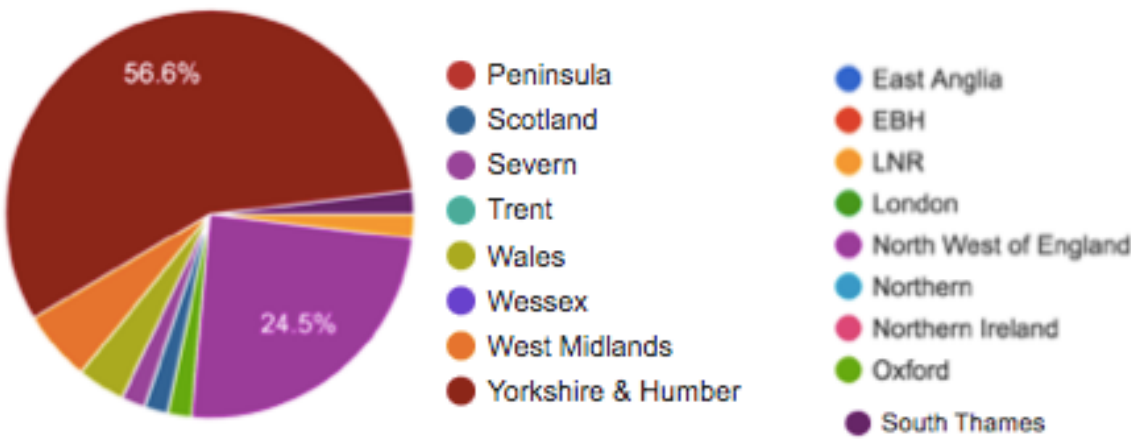
6. Do you feel you have had adequate teaching regarding appropriate radiology referrals?\*

Yes

No

## 04 Results

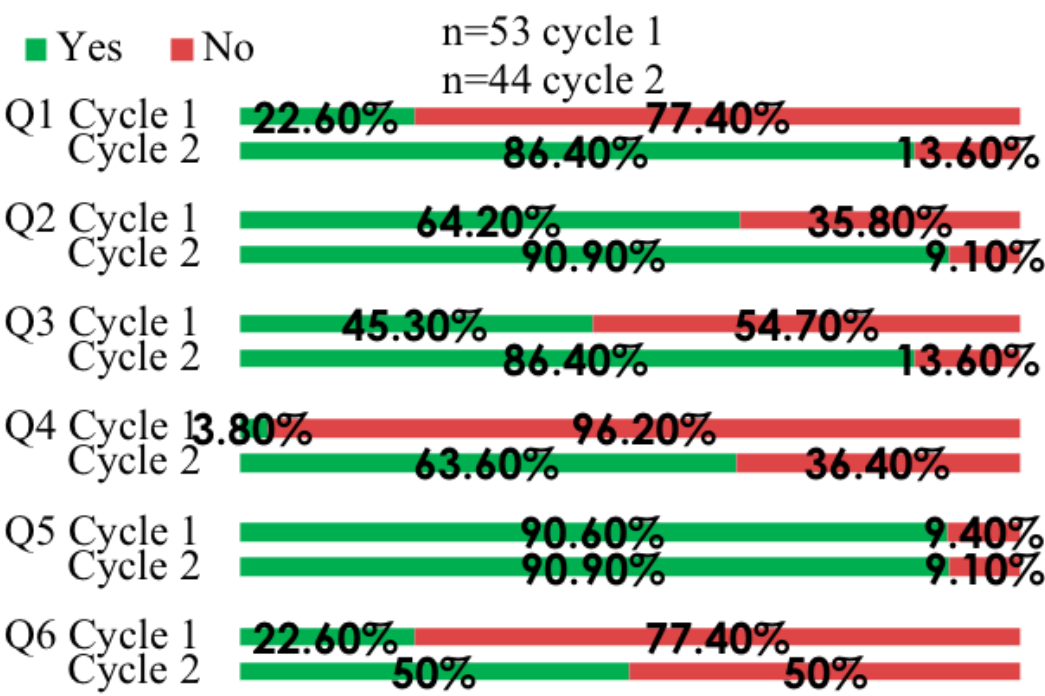
**Figure 2:**  
Proportion of Foundation Doctors from UK deaneries (taken from audit cycle one).



53 foundation doctors took part in cycle one, and 44 in cycle two. Following the re-audit:

- The % of doctors aware of radiation governmental regulations increased by 63.8% from 22.6%.
- There was a 26.7% increase in awareness of the legal obligation to provide accurate information when requesting imaging.
- 41.1% more doctors became aware that the department of radiology has the right to withdraw radiology 'requesting' rights.
- Awareness of i-refer increased by 59.8% from 3.8%. The % of doctors unsure about indications for certain tests remained the same.
- The proportion that felt they had adequate teaching on radiology referrals increased by 27.4%.

**Figure 3:**  
RCR's Adapted Foundation Doctors-Radiation Legislation Awareness Questionnaire results compared across cycle one and two.



## 05 Conclusion

There is a deficiency in awareness of IR(ME)R amongst UK foundation doctors. Teaching resource distribution followed by re-audit demonstrated a significant improvement in awareness across all knowledge areas. Integrating IR(ME)R based teaching into the foundation teaching curriculum, thus bridges knowledge gaps in radiation legislation and brings foundation trainees closer to the expected standard as duty holders under IR(ME)R.

### References

- 1). RMER. (2017). The Ionising Radiation (Medical Exposure) Regulations 2017. Retrieved from <https://www.legislation.gov.uk/uksi/2017/1322/regulation/10/made>
- 2). RCR. (2022) Radiation Legislation Awareness 2) Questionnaire. Retrieved from [https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.rcr.ac.uk%2Fsites%2Fdefault%2Ffiles%2Fauditliveocr%2F187\\_Foundation%2520Doctor%2520new.doc](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.rcr.ac.uk%2Fsites%2Fdefault%2Ffiles%2Fauditliveocr%2F187_Foundation%2520Doctor%2520new.doc)