

Classified Workers in Nuclear Medicine

In recent years the Health and Safety Executive (HSE) have reaffirmed the requirement that Nuclear Medicine departments assess the need for classification of staff including on the basis of potential radiation exposures for reasonably foreseeable radiation accidents. Classified persons are defined as those exposed workers likely to receive an effective dose of radiation greater than 6 mSv per year or an equivalent dose greater than 15 mSv per year to the lens of the eye or greater than 150 mSv per year to the skin and extremities (see The Ionising Radiations Regulations 2017 (IRR) Regulation 21 [1]).

Nuclear Medicine departments should have systems in place for the assessment and implementation of classification requirements in accordance with IRR [1].

Radiation Risk Assessment

There are radiation risk assessment requirements for work with ionising radiation, as specified in IRR Regulation 8 [1]. The risk assessment may involve the operational manager and Radiation Protection Adviser for the identification of any potential for radiation doses to exceed classified levels, including in accident scenarios, for the range of tasks performed within the Nuclear Medicine department. The potential for accidents involving radioactive contamination to the skin (with and without personal protective equipment) and radioactive needlestick injury should be included in the assessment. Where a potential for radiation doses above classified levels is identified, departments should proceed to classify relevant staff. In most cases it is HSE's opinion that classification will be necessary.

The Classification Process and Appointed Doctors

Classification of employees must take place in accordance with Regulation 21 of IRR [1]. An employer can only designate an employee as *classified* once the individual is certified in their health record as being fit for the work with ionising radiation for the duties that employee is to carry out. The employer must arrange a medical assessment at the outset (before first being designated as a classified worker) and at least once a year thereafter to confirm fitness to work and whether any specific conditions for working with ionising radiation are necessary. This medical examination must be conducted by a doctor appointed by the HSE and holding a certificate to act as an appointed doctor for ionising radiation. Further guidance and the list of current appointed doctors can be found on the HSE website [2].

The chosen appointed doctor should understand the nature of the work being undertaken and the hazards/risks associated with exposure to ionising radiation in the Nuclear Medicine department. Awareness can be gained by liaison with departmental staff and the Radiation Protection Adviser and it may include a visit to the Nuclear Medicine department.

Sharing of Information

Individuals identified for classification should be informed regarding the identified hazards and risks so that they understand the requirement for and process for classification. The employer is responsible for providing key information for each individual to the appointed doctor before each health review. This information may include summaries of radiation dose records, sickness absence records, details regarding other medical concerns brought to their attention by the employee and any changes in the employee's duties since the last review.

First Medical Assessments and Subsequent Periodic Reviews

The first medical assessment and subsequent periodic reviews are conducted between the individual and appointed doctor. Any issues pertaining to fitness to work will be identified and a subsequent notification of fitness to work/fitness with conditions/ no fitness will be provided by the appointed doctor. Any conditions should be observed as part of a support package to facilitate classification. Further information in relation to the format and content of the medical assessment and periodic reviews and details to be recorded in the health record can be found in the HSE guidance [2] and IRR Schedule 6[1].

Recording of Information, Dose Monitoring and Management of the Classified Worker

Subsequent to receipt of the fitness to work notification the approved dosimetry service should be notified of the classification status for the individual. Consideration should be given regarding any special circumstances such as individuals working for multiple employers, individuals on short term contracts and those undergoing changes in employment or duties. In a multiple employer setting the approved dosimetry service should issue a radiation passbook for completion when classified staff are working as outside classified workers. The details to be recorded in the radiation passbook can be found in IRR Schedule 5 [1].

A comprehensive classification recording and management system should be maintained including a list of classified staff and medical surveillance dates to assist with ensuring that subsequent health reviews are arranged and conducted at appropriate intervals.

Further guidance on all these topics can be found on the HSE website www.hse.gov.uk.

References

1. The Ionising Radiations Regulations 2017 SI 2017/1075 The Stationery Office www.legislation.gov.uk/ukxi/2017/1075/contents/made
2. www.hse.gov.uk Guidance for appointed doctors on the Ionising Radiations Regulations 2017 <https://www.hse.gov.uk/doctors/current-appointed-doctors.xlsx>