

IRR17 & HSE LEGISLATION INTERPRETATION

IRR17

Eye dose limit reduced from 150 mSv to 20 mSv per annum

No specific reference to abdomen of women of reproductive capacity

Notification/Registration/Consent

Analysis, recording and future prevention of significant event
– eg radiation accidents. Auditing.

Requirement to estimate radiation dose to members of the public

Authorisation of outside workers

Radiation employer term replaced with employer

RpaVet

- The 3-tier notification/registration/consent system commenced January 1st 2018. This applies to ALL veterinary practices and REGISTRATION applies. Consent must additionally be obtained for any practice using an open source (equine Tc⁹⁹ scintigraphy; feline I¹³¹ therapy) or use of a linear accelerator.

<http://www.hse.gov.uk/radiation/ionising/notification-process.htm>

- The reduction in eye dose will affect in an unshielded position within a controlled area. This will not include rare instances of manual restraint but will apply to use of fluoroscopy & equine radiography/scintigraphy where any person is not in a shielded position.
- It can be argued that events should be documented already – there is just a more formal requirement to fully record any incident and assess remedial action/preventative measures.
- The risk assessment should include estimates of radiation dose to members of the public. In most cases this will be zero. Dose records of owners or representatives assisting in restraint of a horse for radiography should indicate any likely exposure (should approach zero).

HSE interpretation of IRR17

There are some contentious issues here but the following apply:

HSE now require, where practicable, that all warning lights are fail-safe – ie if the bulb fails then the X-ray generator is inoperative. All sites should seek qualified advice as to the practicality of complying. If deemed impractical then defined procedural protocols must be in place to minimize any risk associated with inappropriate entry into a controlled area.

Note that a duplicate light is compliant. An LED light at each entrance may also be sufficient. All warning lights must be red, of sufficient size and intensity and be suitably placed.

Note this also applies to dental X-ray – warning lights are required at any door/open approach.

The radiation employer and RPS should read the HSE RPS statement and RPS notes to make an informed decision as to whether further training is required. HSE now expect any RPS to have received recent, specific radiation protection training. MRCVS or RVN qualification (historic or recent) is not deemed sufficient.

Note the following amendment to the local rules:

It is a requirement of IRR17 that a formal investigation is carried out whenever an employee receives an effective dose of ionising radiation at a specified level below the permitted dose limit. The trigger value is set at 1 mSv in any calendar year and an investigation will take place whenever a cumulative monitor reading reaches this value. The RPA must be informed immediately whenever such a reading occurs. It is advisable to involve the RPA if sequential monitor badge readings suggest the investigation level will be reached so that early intervention can be initiated.

Hand-held dental X-ray generators.

These are causing some concern in HSE circles, principally with respect to potential misuse. Local rules will be restrictive and define precise circumstances where their use is permitted.

All outside workers (eg service engineers) require authorization. A suitable form is available - www.rpavet.co.uk/downloads.