

# Simplifying the complex

If you're confused about radiation protection requirements, you're not alone. Here, **Medicert** provides some simple explanations to help clear the issue

Over the years, we have received hundreds of calls at our office about radiation protection requirements. This subject has the capacity to cause a great deal of confusion and a common perception is that it's all just too complicated to follow, sometimes because the associated phrases and abbreviations are not understood. Some callers have found, to their horror, they have paid twice for the same thing from different providers as a result of this. Other callers did not want to ask questions of their RPA, suspecting that the answer would use the same terminology that gave rise to those questions in the first place. We thought it was high time to provide examples of the most frequently asked questions we receive along with explanations of the phrases most commonly used.

## Q: What is an RPA?

A: An RPA is a radiation protection advisor. These are individual people who are formally qualified to provide specific advice about radiation safety in your workplace. Anyone practising as an RPA after 31 December 2004 must hold a valid certificate from an assessing body recognised by the Health and Safety Executive (HSE) – such as RPA 2000 – and must refresh their certification every five years. We have seen one or two examples of people or companies who appear at first glance to be RPAs (perhaps because they provide access to RPA services or contracts) when they are not. If in doubt, check with an assessing body such as RPA 2000.

## Q: Why do some companies call themselves RPAs?

A: Organisations that employ individual RPAs can be awarded the status of 'HSE recognised RPA body'. They still use the phrase 'RPA' for short.



## Q: Are you an RPA?

A: No. We work with an HSE recognised RPA body – IRS Ltd – and our X-ray quality assurance (QA) work is underwritten by them, the appointed RPA and MPE.

## Q: Isn't there only one organisation in the UK who is an HSE recognised RPA body?

A: No. It's a common misunderstanding. The only criterion is to use a suitable RPA. It's no use appointing an RPA that deals with nuclear plant decommissioning for a dental practice. The employer (the practice owner) has

the responsibility for ensuring that the RPA is suitable.

## Q: How do I know if an RPA is suitable?

A: Suitability is defined as competence (confirmed by certification from a recognised body) and the RPA's experience in the relevant sector (i.e. healthcare/medical).

## Q: Why do I need an RPA?

A: The Ionising Radiation Regulations 1999 (IRR99) require the employer to consult with an RPA on several matters including installation plans for

X-ray equipment and implementing controlled areas. The employer should appoint an RPA in writing; this means a letter from the RPA confirming their name and contact details, which can be put into the front of the radiation protection folder or hung on the wall where the contact details are easily accessible. If an X-ray unit is being installed or moved, the installer must consult with an RPA regarding the critical examination of the X-ray equipment (which must be carried out before the x-ray equipment can be used) and the interpretation of those test results.

### **Q: What are the IRR99 regulations?**

A: These are the special regulations made under the Health and Safety at Work Act and published by the HSE. They include the Employer's responsibilities to ensure the radiation exposure of employees and other people is restricted to acceptable levels.

### **Q: What is a radiation folder?**

A: A folder that contains all the documents you amass in relation to radiation safety. Local rules, risk assessments, contingency plans, X-ray critical examination reports, audits, etc.

### **Q: What is an RPS? Is it the same as an RPA?**

A: No. An RPS is a radiation protection supervisor. In each practice, where X-ray equipment is used, a controlled area (or hazard zone) is designated and local rules are drawn up specifying how the radiation work is undertaken. In law, an RPS must be appointed to ensure the local rules are followed and to supervise the work. In order to carry out their duties, an RPS must be trained to be compliant with IRR99. While ultimate responsibility for radiation safety lies with the employer, they and the RPS need not be the same person.

### **Q: What is an MPE then?**

A: A medical physics expert. RPAs and MPEs need not be the same people

but if an RPA is not qualified in Medical physics there's a possibility they are not suitable for a dental practice. Even if they are suitable, an MPE will still be required as well. It's often simpler and more cost effective therefore to have both roles combined in the one person or body.

### **Q: Why do I need an MPE?**

A: The IRMER regulations require the employer to have access to a suitably qualified MPE to provide advice on QA and patient doses.

### **Q: What are the IRMER regulations?**

A: The Ionising Radiation (Medical Exposure) Regulations 2000. IRMER is concerned with protection of the patient. This includes the implementation of specific procedures and clinical protocols for all X-ray exposures. IRMER also identifies specific roles, (the referrer, the operator and the practitioner). Often the dentist will fulfil all of these roles. The regulations require the operator and the practitioner to be adequately trained in these roles. The employer must hold evidence of proof of training.

### **Q: What is a radiation audit?**

A: In essence, a periodic check of procedures in the practice. Some RPAs attend the practice in person but you could opt for a self audit (basically a questionnaire that the employer or RPS completes and sends to the RPA for review). Self audit is an effective means of demonstrating that the employer is consulting an RPA on the specific matters required in the IRR99. It might be more cost effective than an on-site audit and can be done at a date and time that suits the employer or RPS.

### **Q: Is an audit the same as an X-ray examination?**

A: No. X-ray examinations are tests carried out on the X-ray equipment itself. Critical examinations include checks that the X-ray equipment safety features and warning devices operate correctly. The critical examination of

the equipment must be undertaken following a new installation or following a relocation or significant modification/repair of the X-ray equipment. In those circumstances, before the equipment can be used clinically, a QA acceptance test must also be carried out to assess the performance of the equipment. Depending who undertakes this for you, the critical examination and QA test can all be done at the same time. Thereafter the IRR99 requires adequate testing of the X-ray equipment at appropriate intervals. Three yearly checks, QA examinations, are recommended for dental X-ray equipment. Mechanical and electrical safety checks are also required and these, depending on your service provider, can be done at the same time as the QA Examinations. Annual checks are even better. It's better know beforehand if the head is about to fall off as these are very heavy and, of course, the articulated arms then jump up with great force.

### **Q: It sounds very expensive. Can it be easier/cheaper?**

A: Why not consider an RPA body or individual that includes, in their fixed contract fee, all the advice you need and a periodic self-audit. Perhaps get the examinations done by your preferred service provider, using specialist test instruments, as long as your RPA is happy with that.

We hope that the above goes some way to answering some of the simpler and most common questions about radiation protection and the terminology used. If not, or if you need advice, please contact your RPA. If you do not have one, or want a new one, log on to our website for further information.

#### **Medicert**

was founded in Falkirk in 2001 to provide equipment services specifically to practices in Scotland. The company has helped hundreds of practices since then and continues to respond to the needs of its expanding client base every day.