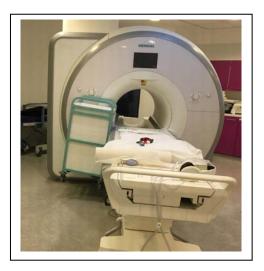
MR Safety case study



AN INCIDENT WITH MR UNSAFE EQUIPMENT

An MR Unsafe trolley was brought into the MR environment by a highly experienced MRI radiographer. This happened in the period between examinations when the room was otherwise empty. The error was noticed immediately, as the trolley was pulled towards the 3T magnet. The radiographer tried to hold back the trolley and got his hand trapped momentarily between couch and trolley, resulting in very minor injury

The MRI manufacturer was contacted to ramp down the field and remove the trolley – this happened the next day. All appointments for that day were cancelled.



The MR Safety Expert and the MR Responsible Person identified a number of factors that may have contributed to this error and considered many lines of action.

What was changed?

Reduction of stress levels: The radiographer involved was under considerable pressure. A busy extended day was progressing with a challenging skills mix. MRI examinations were running late and junior staff members required help. The previous patient required an interpreter to be organised. The way the translating services are managed within the MR controlled access area were changed.

Labelling: The MR Unsafe trolley was appropriately labelled. However, the label could be hidden by items on top of the trolley. When in use, the attention is drawn to items on the trolley, and the trolley in itself is not the focus. **The labelling was changed and is now much larger, on all sides of the trolley.**

Trolley location: The MR Conditional trolley had been moved outside the MR environment and was not in its usual place - this may have contributed to this accident. **The probability of having accidents is smaller if the MR conditional trolley is always the first one to be found and always in the same place.** Aren't we all "creatures of habit" to some extent?

What was not changed?

More MR safety training: The MRI Radiographer in question is very knowledgeable – he has trained many others over years. This accident was not attributed to lack of knowledge or experience.

Replacing the trolley: The MR Conditional trolley and the MR Unsafe trolley are completely different in both design and colour. They would not usually be confused. The MR Unsafe trolley has necessary drawers. The MR Conditional trolley does not. If it had, additional precautions would be needed to avoid storing unsafe items.

Tethering of MR Unsafe trolley: The MR Unsafe trolley is used by the incident/outreach team and MRI Radiographers outside of the magnet room and it needs to move freely.