

Mr Paul D Smith
HM Senior Coroner
Lincolnshire Coroner's Service
The Myle Cross Centre
92 Macaulay Drive
Lincoln
LN2 4EL

National Medical Director
NHS England
Wellington House
133-155 Waterloo Road
London
SE1 8UG

13 October 2025

Dear Coroner,

Re: Regulation 28 Report to Prevent Future Deaths – Jean Dye who died on 7th September 2020.

Thank you for your Report to Prevent Future Deaths (hereafter "Report") dated 21st July 2025 concerning the death of Jean Dye on 7th September 2020. In advance of responding to the specific concerns raised in your Report, I would like to express my deep condolences to Jean's family and loved ones. NHS England is keen to assure the family and yourself that the concerns raised about Jean's care have been listened to and reflected upon.

I am grateful for the further time granted to respond to your Report, and I apologise for any anguish this delay may have caused Jean's family or friends. I realise that responses to Coroners' Reports can form part of the important process of family and friends coming to terms with what has happened to their loved ones, and I appreciate this will have been an incredibly difficult time for them.

Your Report raised concerns that there is no current guidance for the siting of Emergency Power Off (EPO) controls, particularly where there are remote from the affected room. In this case, the EPO was not sited within the lab nor was there a restart button in the lab to allow the EPO to be reset - this was in another room located elsewhere within the hospital. You invited a review of the guidance and of the need for any consequential training.

Review of the guidance

There are currently two guidance documents that reference EPO controls. They are the [Health Technical Memorandum \(HTM\) 06-01 Electrical services supply and distribution](#) and the [Health Building Note \(HBN\) 01-01: Cardiac facilities](#).

HTM 06-01 Electrical services supply and distribution (published in 2007 and updated in January 2024) refers to EPOs:

"Emergency power off switches

15.59 Some permanently installed (fixed) ME [medical electrical] equipment, according to the manufacturer's instructions, require emergency power off (EPO) mushroom buttons to be provided. These switches are intended to remove all power in the event of a serious incident such as fire, flood or electric shock, which is very rare. It is important to protect these switches from accidental operation, such as an operator leaning on the button or a trolley pushed against it.

15.60 Protection against accidental operation of the EPO can be achieved by careful positioning of the button and using one fitted with a shroud (often a semi-circular protrusion over the top). Care should be taken to avoid making the button too difficult to operate; therefore, covers that need to be lifted should be avoided.

15.61 The EPO button(s) may require a double-pole contact to enable two circuits to be formed. One will remove the power to the equipment supply contactor and the other circuit may be needed to shut down any UPS [uninterruptible power supply] the system is using in order to fully isolate the source of power.

15.62 EPO buttons should also be clearly marked (labelled) to indicate their function and the related equipment. For example, "X-ray system Emergency Power Off".

This guidance is focused on stopping accidental activation of the EPO, but does not currently state what to do if the EPO is activated in error. The NHS England Estate's team advise that they will address this when the HTM 06-01 guidance document is next updated.

NHS England's Head of Hard Facilities Management has been contacted by an independent advisor to the Medicines and Healthcare products Regulatory Agency (MHRA) on electrical safety, who was involved in the inquest hearing. The MHRA advisor raised that:

- The EPO control itself does not need to be in the same room as the equipment/users, just a means to reset it;
- A risk assessment on power failure needs to be conducted as part of the room design;
- He has suggested the following wording be used in the HTM 06-01 guidance when it is rewritten:

"All EPOs and associated contacts in the EPO circuit should as a minimum, be replaced when an interventional x-ray room is replaced and would suggest this is common practice with all medical radiological equipment.

All interventional x-ray rooms shall be inspected and if the contactor is in another location, (operator cannot see the on/off buttons from the x-ray room), a remote on/off is fitted. The remote on/off buttons shall have integral lamps."

Guidance on cardiac catheter labs, the setting for this incident, are covered in HBN 01-01 "Cardiac facilities". The current version of HBN 01-01 was published in 2013 (updated in January 2024) and includes the following references to power:

"Catheter laboratories

5.9 Key engineering considerations include:

... It is recommended that removal of a catheter under X-ray control is possible in the event of mains power failure; this requirement should be discussed with the hospital's and system manufacturer's engineers."

Earlier guidance, published in 2001 by the former NHS Estates (an Executive Agency of DHSC abolished in 2005) called [HBN 06-01 "Facilities for diagnostic imaging and interventional radiology"](#) is in the process of being updated, but excludes cardiac facilities covered separately in HBN 01-01. The draft updated HBN 06-01 currently includes the following text on EPO buttons:

6.62 As set out in HTM 06-01, emergency stop buttons should be provided within imaging examination rooms. There are three main types of emergency button (see AXREM emergency stop button label recommendations):

- emergency power-off – cuts mains power and mains power UPS to the whole room*
- imaging system emergency power-off (also medical equipment emergency power-off) – cuts power on a local control circuit specific to particular item(s) of medical equipment. For example, the X-ray system emergency power-off button would cut power to the X-ray machine and its local equipment UPS to ensure X-rays cannot be generated in an emergency situation. The mains power to the room would remain on so that items on separate circuits such as lights and IT would stay on*
- emergency motion stop – stops movement on the imaging equipment in the event of an emergency, to prevent harm to patients.*

6.63 Emergency-stop switches should be clearly labelled, easily accessible by staff and mounted at a height which reduces the risk of accidental use. They should be installed in both the examination and control area, with advice sought from the RPA [radiation protection advisor] or MRSE [magnetic resonance safety expert] (as appropriate) on button locations.

As a result of the discussions between the Head of Hard Facilities Management and the MHRA advisor, amendments are to be made to this text. The amendments will also address the location of reset buttons in the update.

An update to HTM 06-01 is planned and the content relating to EPOs will be reviewed in light of this incident and the final published content for HBN 06-01, to ensure alignment of guidance. The update is due to be completed in the financial year 2026-27.

Training

Competency and training for engineers will be included in the HTM update described above.

I would also like to provide further assurances on the national NHS England work taking place around the Reports to Prevent Future Deaths. All reports received are discussed by the Regulation 28 Working Group, comprising Regional Medical Directors, and other clinical and quality colleagues from across the regions. This ensures that key learnings and insights around events, such as the sad death of Jean, are shared across the NHS at both a national and regional level and helps us to pay close attention to any emerging trends that may require further review and action.

Thank you for bringing these important patient safety issues to my attention and please do not hesitate to contact me should you need any further information.

Yours sincerely,

A large black rectangular box redacting the signature of the National Medical Director.A black rectangular box redacting the name of the National Medical Director.

National Medical Director
NHS England