

Northern Ireland Safety Notice

Action

Reference: **NISN-2026-001**

Issued: **3 August 2026**

Electric Instant Hot Water Boilers – Potential for Overheating and Fire (All Makes and Models)

Summary

This notice highlights the potential for overheating and fire risk associated with electric instant hot water boilers installed across the healthcare estate. Over the past 12 months, three confirmed fire incidents have been reported within NHS Wales, with a further similar incident reported via the Hospital Fire Officers' network by an NHS England Trust.

Investigations identified localised overheating around internal electrical components, particularly the power-switch and internal wiring, with moisture or steam ingress from defective seals, missing fixings, or deteriorated gaskets considered likely contributing factors. A small number of older units inspected following these incidents showed heat damage to cable insulation and required remedial replacement.

This notice applies to all electric instant hot water boilers, regardless of manufacturer. It aims to ensure healthcare organisations take action to inspect, maintain, and manage these units, minimising the risk of electrical overheating and fire, safeguarding patients, staff, and visitors

Action

Preventive Action

Estates departments and other suitable personnel should develop a complete and up-to-date asset register for all electric instant hot water boilers, including details of unit location, type, age, and servicing history. Organisations should verify that all units are included within their Planned Preventive Maintenance (PPM) programmes and that no units have fallen out of scheduled inspections. Any gaps in maintenance or inspection should be rectified as a priority.

Inspection and Maintenance

All electric instant hot water boilers should be visually inspected for signs of deterioration, checked to ensure they are securely mounted, and confirmed to be operating normally. Servicing and

inspection should be carried out by appropriately trained personnel in line with current manufacturer recommendations.

Life-Cycle Management and Replacement

Healthcare organisations should review the age and life-cycle status of all units, prioritising legacy boilers beyond their intended service life. Older or damaged units should be inspected and, where necessary, scheduled for replacement in line with manufacturer guidance. Any unit showing signs of overheating, wiring degradation, or moisture damage should be isolated immediately, assessed by competent personnel, and reported to the manufacturer for guidance. Where equipment is being installed or replaced, a risk assessment should be undertaken to determine whether additional protection is required, such as RCD/RCBO and/or AFDD protection.

Record Keeping and Assurance

All inspection findings, maintenance activities, remedial works, and manufacturer communications should be documented and retained. Accurate records support ongoing assurance and help identify recurring issues. Local fire safety reporting and escalation procedures should be reinforced to ensure concerns are communicated promptly to the healthcare organisation's fire safety team.

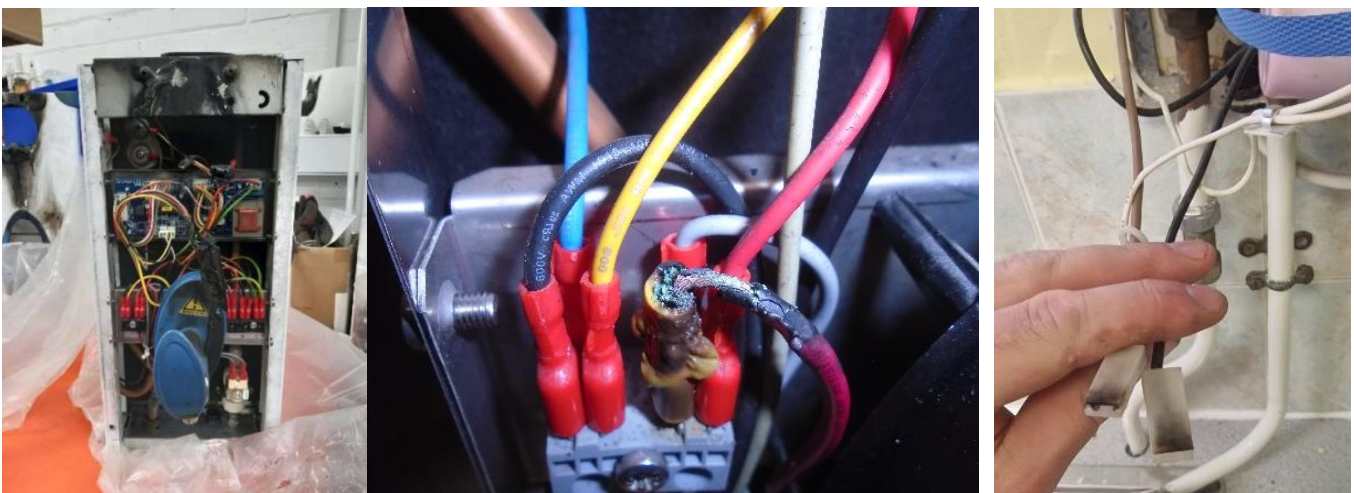
Equipment Details

This notice applies to all electric instant hot water boilers across the healthcare estates, irrespective of manufacturer, model, or installation date. These units are commonly installed in inpatient kitchen areas and as well around the estate to provide on-demand hot water.

The boilers operate with internal electrical heating elements and contain switches, wiring, and control components susceptible to overheating if exposed to moisture ingress, defective seals, or mechanical faults. Both older and newer units are included, as incidents have been reported across a range of designs and installation dates.

Background

The content of this notice has been developed by NHS Wales Shared Services. Three confirmed fire incidents within NHS Wales have highlighted the risks associated with electric instant hot water boilers, primarily localised overheating around the power-switch and internal wiring, often associated with moisture or steam ingress. Some older units inspected following these incidents showed heat damage to cable insulation and required remedial replacement. These events emphasise the importance of immediate, consistent action to manage, maintain, and replace boilers where necessary to mitigate fire risks.



Photographic Evidence - Examples of different incidents across NHS Wales sites and various boiler units. Provided for illustrative purposes only.

Manufacturers' contact details

For further information regarding safe use, maintenance, or replacement, organisations should contact the equipment manufacturer or supplier directly. Manufacturer and supplier contact details can be sourced from product documentation, service agreements, or the organisation's estates department.

Suggested onward Distribution.

Risk Management

Supplies / Procurement

Capital Planning & Design

Operational Estates Fire Safety Advisors PFI / PPP Staff

Enquires

Enquiries and adverse incident reports in Northern Ireland should be addressed to:

Medical Device and Estates Safety
Sustainability, Engineering & Estate Safety
Resources and Corporate Management
Department of Health
Room D1
Castle Buildings
Stormont Estate
Belfast
BT4 3SQ

Tel: 028 9052 3868

Email: mdes@health-ni.gov.uk

<http://www.health-ni.gov.uk/mdes>

Reporting adverse incidents in Northern Ireland

Please report medical device incidents directly to the Medicines and Healthcare products Regulatory Agency via the [Yellow Card website](#) in line with your organisation's procedures..