

Estates & Facilities Alert



Ref. DH 2008/08
Gateway Ref. 10618

	IMMEDIATE ACTION	
For:	ACTION	✓
	INFORMATION	
	UPDATE	

Issued: 30/09/2008

Action underway by: 6/10/2008

Action completed by: 31/10/2008

	Section
Equipment: Haemodialysis equipment	
Problem: Silver-stabilised hydrogen peroxide chemicals (for the use of microbiological removal) within water services, producing a risk of exposure likely to cause severe injury to patients.	▶ ①
Action: As a matter of urgency, review water disinfection procedures involving Hydrogen Peroxide based chemicals on sites where haemodialysis treatment (renal dialysis) is performed, and to ensure that these and other potentially dangerous chemicals cannot be passed on to patients.	▶ ②
Action by: Chief Executive/Board Member with special responsibility for health and safety, in accordance with local procedures, should ensure that this alert is brought to the attention of appropriate staff which may include: <ul style="list-style-type: none">• Liaison Officers• Risk Managers• Health & Safety Officers/Advisors• Clinical Governance Leads• Estates & Facilities Managers• Nurse Directors• Medical / Clinical Directors• Renal Service Managers and Technicians	
CONTACTS: Enquires should quote reference number DH 2008/08 and be addressed to: Defects & Failures Department of Health Estates & Facilities Division 3N12 Quarry House Quarry Hill Leeds LS2 7UE Email: mb-defects&failures@dh.qsi.gov.uk	

This Alert is on our web site: <http://www.dh.gov.uk>

1. PROBLEM:

Silver-stabilised hydrogen peroxide chemicals (for the use of microbiological removal) within water services, producing a risk of exposure likely to cause severe injury to patients.

Silver-stabilised hydrogen peroxide has been used in dosing a water supply, with the intention to reduce any incidence of microbiological growth, on a site where haemodialysis, is provided to renal patients.

As part of an investigation resulting from a number of patients being re-admitted to hospital after dialysis treatment, it was identified that the renal water treatment plant (including the carbon filters and reverse osmosis (RO) plant) does not filter out the hydrogen peroxide.

Based on initial investigations, the likely result was that chemicals passed straight through the carbon filters and RO plant, thereby exposing patients using the renal unit for haemodialysis to potentially high levels of hydrogen peroxide.

2. ACTION:

As a matter of urgency, review with immediate effect water disinfection procedures involving Hydrogen Peroxide based chemicals on sites where haemodialysis treatment (renal dialysis) is performed, and ensure that these or other potentially dangerous chemicals cannot be passed on to patients. When disinfection of this nature is necessary, procedures must be in place to liaise with units where haemodialysis takes place, including intensive care units or similar locations where sporadic haemodialysis may be performed. Water should be tested for chemical residues before patient treatments recommence.

Additional information

- 1) Trusts are reminded of their responsibilities under the "Control of Substances Hazardous to Health Regulations 2002" (COSHH), which require employers to control exposure to hazardous substances to prevent ill health.
- 2) COSHH regulations requires employers to; amongst other duties:-
 - Assess the risks to health from chemicals and prevent or adequately control exposure.
 - Use those controls and make sure employees use them.
 - Make sure the controls are maintained and working effectively.
 - Inform employees about the risks to their health.
 - Maintain a comprehensive register of all chemicals stored, or to be used on site(s).
 - Train employees.
- 3) Ensure chemicals are only used in accordance with manufacturer's recommendations.
- 4) Ensure hazardous substances are stored and used in accordance with manufacturer's instruction and the containers are in a serviceable condition.
- 5) General good practice for managing water systems and services within healthcare premises is also obtainable within HTM 04-01-The control of *Legionella* hygiene, "safe" hot water, cold water and drinking water systems the interests of patient safety, when planning dosing of water systems:-

- 6) In the interests of patient safety ensure that when planning dosing of water systems:-
 - Close liaison is undertaken with clinicians and departmental heads
 - A risk assessment is undertaken to identify at-risk areas and consider their isolation
 - That the process is not likely to have an adverse effect on other parts of the system or equipment
- 7) Following dosing with silver hydrogen peroxide or other chemicals ensure adequate flushing of the system(s).
- 8) Reference should also be made to the National Patient safety(NPSA) Rapid Response Report number RRR/2008/007

HOW TO REPORT DEFECTS & FAILURES

Defects and failures relating to non-medical equipment, plant and buildings should be reported to the Department as soon as possible. Advice on how to report can be found in DH (2008) 01. Defect and failure reporting forms and an on-line reporting facility are available on the NHS Information Centre website at www.efm.ic.nhs.uk