

Estates and Facilities Alert



Action

Ref: EFA/2010/008 Issued: 28 July 2010
Gateway Reference: 14629

Device

Unsecured medical gas cylinders, including cylinders on trolleys

Problem

Medical gas cylinders which are not secured properly can topple causing injury or death. This includes cylinders which may be free standing and those held in cylinder trolleys.

Action

Gas cylinders and their trolleys should be secured to a wall bracket or other static/stable structure to prevent them from toppling.

Action by

Managers and staff involved in the provision and use of medical gas supplies.

Contact

Specific suppliers of medical gas cylinders and/or manufacturers of cylinder trolleys.

Background

1. There have been incidents of medical gas cylinders and their trolleys falling over, one such incident leading to the death of a patient. The frail, elderly patient was mobile despite being on 24-hour oxygen supplied from a large (G-size) cylinder, which was held in a trolley. The patient was found dead on the floor by his bed, underneath the cylinder and trolley.
2. The patient may have tried to use the cylinder or trolley as a support and, although the exact circumstances of the accident remain unknown, he appears to have knocked or pulled them down on top of himself. The post mortem report indicated cause of death as "blunt force trauma".
3. The Health and Safety Executive carried out an investigation and recommended to the NHS Board that cylinders and their trolleys be secured to a wall bracket or other static/stable structure to prevent further incidents.

Problem

4. Medical gas cylinders are used in areas where there is no piped gas supply, where demand is low, or as a back up to a fixed pipeline supply.
5. Existing advice on use of medical gas cylinders states only that cylinders should be secured while in use, sometimes adding that they should be secured to a "wall or trolley".
6. However, trolleys are designed to enable easier movement of gas cylinders and will not prevent a large cylinder from toppling, should sufficient force be applied. Tests carried out by the HSE following the fatal accident above showed that a G-size cylinder on a trolley can be toppled by a relatively small force. This could also apply to J-size cylinders and trolleys.

Action

7. Gas cylinders and their trolleys should be secured to a wall bracket, or other static/stable structure, while in use to prevent them from toppling.
8. Where patients are mobile and need a regular medical gas supply from a cylinder on a trolley, consideration should be given to providing them with a smaller cylinder, e.g. F-size.
9. Staff should be trained / reminded how to safely transport and secure medical gas cylinders and their trolleys.

Suggested Onward Distribution

- Accident & Emergency
- Ambulance Services
- Anaesthetics
- Care for the Elderly
- Chest Clinics
- Community Care Dental
- Dental Hospitals
- Device Managers
- District Nursing
- Estates/Facilities
- Fire Safety Advisors
- General Dental Practitioners
- General Medical Practitioners
- Hospices
- Intensive Therapy Units
- Maternity
- Medical
- Medical Physics
- Nursing
- Operating Departments
- Pharmacy
- Portering Services
- Registered Nursing Homes
- Respiratory Medicine
- Resuscitation Teams
- Risk Management
- Safety Officers
- Stores
- Transport Managers
- Wards

Additional information for England

The above sections of this Alert were compiled by Health Facilities Scotland and distributed nationally without modification.

Action required by this alert should be **underway by: 27th August 2010**

Action required by this alert should be **completed by: 29th October 2010**

Enquires should quote reference number EFA/2010/008 and be addressed to:

Defects & Failures

Department of Health
Estates & Facilities Division 3N12
Quarry House,
Quarry Hill,
Leeds LS2 7UE
Mb-defects&failures@dh.gsi.gov.uk

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 is an on-line reporting facility, available on the NHS Information Centre website at www.ic.nhs.uk

This Alert can be found on the following websites
<http://www.dh.gov.uk> and <https://www.cas.dh.gov.uk>

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