

Estates and Facilities Alert



Department
of Health



Health Facilities Scotland



Department of
Health, Social Services
and Public Safety

www.dhsspsni.gov.uk



Partneriaeth
Cydwasaethau
Shared Services
Partnership

Action

Ref: EFA/2014/002

Issued: 16 JUNE 2014

Device

E-cigarettes, batteries and chargers

Includes reusable and disposable electronic cigarettes (e-cigarettes), cigars, pipes and similar battery powered tobacco replacement products which use a heating element (atomiser) to produce a vapour which resembles smoke.

Problem

Potential fire or explosion during:

- recharging the battery
- use in an oxygen rich environment

Disposable e-cigarettes are not affected by the charging problem.

Action

- All staff should be made aware of the fire hazard associated with the use and recharging of e-cigarettes.
- E-cigarette batteries should not be recharged in premises or vehicles.
- E-cigarettes should not be used in an oxygen rich environment
- Safety advice should be given to patients receiving therapies at home (see Annex)

Action by

Directors of Estates & Facilities
Directors of Nursing
Medical Directors
Risk Managers
Health & Safety Managers
Fire Safety Officers

Contact

Enquiries about specific E-cigarettes should be directed to the relevant manufacturer or supplier.

Problem

A number of incidents have been reported across the UK involving e-cigarettes that have exploded or ignited to cause a fire while recharging or in use in an oxygen rich environment. A number of different brands of e-cigarette have been implicated within these incidents.

Incidents have occurred in premises and vehicles. Recharging modes included connection to a computer USB port, car cigarette lighter/accessory socket, and connection to a mains recharger.

It is possible the devices do not have adequate over-charge safeguards. Some e-cigarettes may incorporate a high level of over-charge protection using fuses or intrinsically safe batteries for example. However, it is difficult to readily identify or distinguish these products from those with less protection or possibly no over-charge protection.

There are existing controls around the use of electronic devices in health, social care and local authority premises and vehicles. However, the level of incidents now being reported indicates these controls are not adequate and tighter controls may need to be introduced.

There has also been a report of an incident in which an e-cigarette exploded while a patient was receiving oxygen therapy in a hospital

Action

1. All staff should be made aware of the fire hazard associated with the use and recharging of e-cigarettes.
2. Reusable e-cigarettes should not be recharged in NHS and local authority premises or vehicles including those of contractors, e.g. care home with local authority funded residents.
3. Reusable and disposable e-cigarettes should not be used in an oxygen rich environment.
4. Safety advice should be given to patients receiving therapies at home, e.g. home oxygen therapy. This should be consistent with advice from the European Industrial Gases Association ([see Annex](#)) which recommends:
 - a. electronic cigarettes should not be used whilst a patient is undergoing oxygen therapy,
 - b. batteries of electronic cigarettes should not be charged in the vicinity of a patient undergoing oxygen therapy or the oxygen source itself.

Suggested Onward Distribution

Directors of Estates & Facilities
Directors of Nursing
Medical Directors
Risk Managers
Health & Safety Managers
Fire Safety Officers

Contacts

Enquiries about specific E-cigarettes should be directed to the relevant manufacturer or supplier.

References

Safety Info 32/13, European Industrial Gases Association, *Use of Electronic Cigarettes with Homecare Oxygen*, published 2013 ([see Annex](#)).

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: 23rd June 2014**

Action required by this alert should be **completed by: 8th September 2014**

All requests regarding return, replacement or modification of the equipment mentioned in this alert should be directed to the relevant supplier or manufacturer.

Other enquiries in England should be addressed to: 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 what needs to be report can be found in DH/2014/001. Defect and failure reporting is an on-line only reporting facility, available on the NHS and Social Care Information Centre website at www.efm.ic.nhs.uk

This Alert can be found on <https://www.cas.dh.gov.uk>

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Addressees may take copies for distribution within their own organisations



Safety Information

Prepared by WG-10

Safety Info 32/13

Use of Electronic Cigarettes with Homecare Oxygen

Within several EIGA Documents, including EIGA Doc 89 *Medical Oxygen Systems for Homecare Supply* and EIGA Doc 158 *Good Homecare Practice*, it is stated that patients shall never smoke when using oxygen.

The reason for this is that whilst oxygen is not a flammable gas, oxygen will support combustion. There have been a number of incidents involving patients smoking whilst being administered oxygen in the homecare environment and this has resulted in a number of fires leading to serious injuries and in some cases death.

Many patients are undergoing oxygen treatment due to smoking related diseases and some of them continue to smoke whilst undergoing such oxygen treatment. EIGA members are continuously reinforcing the message that smoking or being close to an energy source such as an open flame is incompatible with the use of oxygen.

Recent innovations in smoking cessation programmes have led to the introduction of so called "electronic cigarettes". These work on the principle of a heating element that vaporizes a liquid solution which delivers nicotine.

Electronic cigarettes include a power source, and this may be charged from a USB power port or by using a separate battery charger. These items when saturated with oxygen may ignite.

Recent reports in the media are indicating that there could be a risk of an ignition of an electronic cigarette whilst a patient is undergoing oxygen therapy.

As a result of this, EIGA's position is that electronic cigarettes should not be used whilst a patient is undergoing oxygen therapy. Additionally, batteries of electronic cigarettes should not be charged in the vicinity of a patient undergoing oxygen therapy or the oxygen source itself.

EIGA shall be amending documents relating to Homecare oxygen to reflect the above advice.

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