

Estates and Facilities Alert

Reference: EFA/2018/007 Issued: 05 December 2018 Review Date: 06 December 2021

Fire risk from personal rechargeable electronic devices



Summary

Personal rechargeable electronic devices present a fire risk during use and when being charged

This alert supersedes and replaces EFA/2014/002 E-cigarettes, batteries and chargers.

Action

- Review guidance provided in appendix and update fire policies, risk assessments procedures and training programmes as required to reflect new guidance
- Indicate that all staff, patients, visitors etc. must be made aware of the risks. e.g. for staff this could be safety briefing or e-learning, for patients and visitors, this could be posters/signs near accessible socket outlets.

Action by

- Chief Executives
- Directors of Human Resources
- Directors of Estates and Facilities
- Directors of Nursing
- Medical Directors
- Risk Managers
- Health & Safety Managers
- Fire Safety Officers

Deadlines for action

Actions underway: 09 January 2019

Actions complete: 05 June 2019

Device details

All personal electronic devices that require recharging such as e-cigarettes, mobile phones, laptops, tablets, cameras, e-bike batteries, etc

Problem / background

Estates and Facilities Alert, EFA/2014/002, E-cigarettes, batteries and chargers, was issued in 2014 in response to a number of reported incidents where e-cigarettes exploded or ignited causing fire while recharging or in use in an oxygen rich environment (i.e. when patients are prescribed medical oxygen). This gave rise to concerns that products did not have adequate over-charge safeguards. However there is now a licensing regime in place with specified safety standards for e-cigarettes.

Reports from Public Health England and the Houses of Parliament, Parliamentary Office of Science and Technology considered various aspects on the use of e-cigarettes including the risk of fire. The report states, *“it seems likely that the risk of fire and electrical fault is similar to other domestic electrical products, indicating that EC [e-cigarettes] should be subject to the same guidelines and safety mechanisms”*. The full report with the data source and rationale can be accessed in the References section (references 1 and 2).

There remains a risk of fire from all faulty rechargeable electrical devices in general and in particular from those using lithium ion batteries (see References Section, reference 3, paragraph titled Battery care and charging). Consequently, there is a need for updated guidance on their safe use and charging in the healthcare environment.

This alert supersedes and replaces EFA/2014/002 E-cigarettes, batteries and chargers.

This alert is to raise awareness and mitigate fire risks where local policies permit their use and is not an endorsement or otherwise on the use of e-cigarettes in healthcare premises.

Distribution

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

References

1. E-cigarettes: an evidence update, a report commissioned by Public Health England, Aug 2015
<https://www.gov.uk/government/uploads/system/uploads/attachment>
2. Houses of Parliament Parliamentary Office of Science & Technology Postnote 533, Electronic Cigarettes, Aug 2016
<https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source>
3. National Fire Chiefs Council Guidance Note, E-cigarette use in smokefree NHS settings, June 2018
[https://www.nationalfirechiefs.org.uk/write/MediaUploads/NFCC%20Guidance%20publications/Health/E-cigs%20in%20NHS/Guidance note - E-cigarettes use in smokefree NHS settings.pdf](https://www.nationalfirechiefs.org.uk/write/MediaUploads/NFCC%20Guidance%20publications/Health/E-cigs%20in%20NHS/Guidance%20note%20-%20E-cigarettes%20use%20in%20smokefree%20NHS%20settings.pdf)
4. EIGA Safety Information - Use of electronic cigarettes with Homecare Oxygen
<https://www.eiga.eu/index.php?eID=dumpFile&t=f&f=180&token=66e3fb58fde56d8d07df35b1d5667551a9b4ee41>

Enquiries

This alert has been compiled under a partnership arrangement by the organisations below and it has been distributed across the UK. Enquiries should be directed to the appropriate Regional Office quoting the alert reference number.

England

Enquires should quote reference number EFA/2018/007 and be addressed to:-
nhsi.mb-defectsandfailures@nhs.net

Reporting adverse incidents in England

Defects or failures should be reported on this system: <http://efm.hscic.gov.uk/>

The web-based D&F reporting system is managed by the NHS and Social Care Information Centre on behalf of the Department of Health. For further information on this system, including obtaining login details, please contact the efm-information Helpdesk. Tel 0300 303 5678.

Northern Ireland

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

Northern Ireland Adverse Incident Centre, CMO Group,
Department of Health
Tel: 028 9052 3868 Email: niaic@health-ni.gov.uk
<http://www.health-ni.gov.uk/niaic>

Reporting adverse incidents in Northern Ireland

Please report directly to NIAIC using the [forms on our website](#).

Scotland

Enquiries and adverse incident reports in Scotland should be addressed to:

Incident Reporting and Investigation Centre (IRIC)
Health Facilities Scotland, NHS National Services Scotland
Tel: 0131 275 7575 E-mail: nss.irc@nhs.net

Reporting adverse incidents in Scotland

Use our [online report form](#) or download the [PDF form](#)

Independent facilities which only provide private care should report to the [Care Inspectorate](#).

Wales

Enquiries and adverse incident reports in Wales should be addressed to:

Simon Russell, Principal Engineer, NHS Wales Shared Services Partnership – Specialist Estates Services, 4th Floor, Companies House, Crown Way, Cardiff CF14 3UB

Tel: 029 2090 4100
E-mail: Simon.Russell@Wales.nhs.uk

Appendix

Where personal electrical equipment is permitted in a healthcare environment, it is essential it is used and charged in a safe manner. Staff should be aware of the risk of fire as a result of faulty rechargeable devices, particularly those with lithium batteries, and faulty chargers

Personal rechargeable electronic equipment belonging to staff, patients or others should not be used in healthcare premises unless:

- the local fire policy permits the use of personal electronic devices and their charging on the healthcare premises
- it displays the CE mark of conformity,
- the charger was supplied with the device (no mixing of chargers/devices) and
- it has been visually inspected prior to use and found to be free from defects, cracks, damaged cables, burn marks etc.

Charging of electrical equipment must take place in a safe, controlled environment and consideration should be given to the provision of designated charging locations. Where a designated charging location is not provided, alternative charging locations need to be fully risk assessed complete with documentation and their use only authorised if risks are deemed acceptable.

Staff Awareness

All staff are responsible for ensuring their own safety and that of others in the workplace. This involves identifying and taking the appropriate action to remove or minimise fire hazards. The following list outlines common causes of electrical fires which staff should be aware of and, if encountered, they should take action themselves wherever possible or report the matter to the responsible person:

- charger or battery/device overheating
- Damage to the lead including fraying, cuts or heavy scuffing, e.g. from floor box covers;
- Damage to the plug, e.g. to the cover or bent pins;
- Signs of overheating, such as burn marks or staining on the plug, lead or the electrical equipment;
- Tape applied to join leads together;
- Coloured wires visible where the leads joins the plug (the cable is not being gripped where it enters the plug);
- Damage to the outer cover of the equipment itself, including loose parts or screws;

If any of the above are discovered whilst an appliance is in use, it should immediately be switched off at the mains and its use discontinued.

Hazard reduction

- Personal electrical devices should not be charged where water or other liquid spills are likely;
- Chargers should be unplugged when the battery is fully charged

Reference:
EFA/2018/007

Issued
05 December 2018

Review Date
06 December 2021

- Personal rechargeable electronic equipment should be visually inspected prior to use and found to be free from defects, cracks, damaged cables, burn marks
- Cables should not be trapped under furniture or in floor boxes
- Devices must not be charged in an oxygen rich environment;
- E-cigarettes should not be used in an oxygen rich environment
- Safety advice should be given to patients receiving oxygen therapies at home. This should be consistent with advice from the European Industrial Gases Association (see Reference Section reference 4)