



COVID-19 – Areas of increased risk in purpose-built healthcare premises

25th November 2020 – Issue 2

Areas of increased risk in purpose-built healthcare premises.

Introduction

This advice note replaces the guidance note '**COVID-19 – Temporary Screening for Infection Control in Hospitals' Issue 1 dated 2nd November 2020**. That guidance is now withdrawn.

The intention of this note is to identify and bring to the reader's attention, any specific areas of risk or consideration in purpose-built healthcare premises, such as hospitals. Fire and Rescue Services (FRSs) may use this information to inform their discussions with NHS Trust and their fire safety personnel so that those people can demonstrate their understanding and so what appropriate measures are being implemented in order to reduce risk to an acceptable level.

This note is only intended to cover specific risks which have come about as a result of the COVID-19 pandemic. It represents non-statutory guidance in order to provide fire and rescue services with general advice to assist with a consistent, standardised approach across all services. The guidance does not constitute legal advice. Fire and rescue services' legal duties will remain those specified by law, in particular article 26 of the Regulatory Reform (Fire Safety) Order 2005 (FSO), during the COVID-19 pandemic, but if any fire and rescue services consider that difficulties arise in relation to compliance with those duties, they should take legal advice.

Increased levels of oxygen within premises

It is expected that hospitals will come under increased pressure from acute respiratory admissions due to both COVID-19 and other winter pressures. These admissions are likely to require an increase in the use of oxygen. The equipment commonly used for respiratory treatment is of a high flow, open circuit design that carries a risk of increasing ambient oxygen concentrations. **NHS Estates and Facilities Alert NHSE/I-2020/003** issued on the 19th November 2020 stated that oxygen concentrations in excess of 23% pose a potential fire risk.

While the presence of oxygen in itself does not create a flammable environment, it may, depending on the levels present, create an atmosphere that allows for rapid fire propagation and development. This had been identified in the previous document '[Design note: COVID-19 ward for intubated patients](#)' which noted that "*Where medical oxygen consumption*

increases, steps must be taken to ensure the oxygen level (oxygen enrichment) is maintained below 23.5%. Failure to do so will increase the flammability of the room.”

The Alert document outlines the importance of NHS Trust Incident Management Teams establishing specific leadership teams including key clinical leaders and fire safety teams to reduce the risk of physical hazards associated with oxygen use. There are 8 key areas identified:

1. Review the fire risk assessment and relevant findings including considering the evacuation. This should include reviewing the [‘Fire Risk Assessment: Guidance on completing specific FRA for temporary wards provided for Covid-19 treatment or care’](#) document where it is appropriate.
2. Arrange drills (including walk through and table-top) to test or improve the speed of response.
3. Risk assess and reduce where oxygen cylinders are used instead of piped delivery.
4. Securing cylinders when used at bedsides, on trolleys or wheelchairs.
5. Review and strengthen existing restrictions on ignition sources such as patient smoking materials.
6. Establish oxygen level monitoring on at least a daily basis and how this might interact with other atmospheres such as operating theatres.
7. Provide guidance for all clinical areas on what to do if oxygen levels exceed 23% including how to seek advice and immediately reduce oxygen levels without compromising infection control.

In order to support NHS Trusts to deal with these issues, FRSs should liaise with the NHS Trust’s fire safety team, normally the Fire Safety Manager or Fire Safety Adviser [Authorised Person (Fire)]. Each premises will offer a different level of risk and type of solution. Particular attention should be given to the risk assessment, the document referred to in point 1 (above) represents a tick box style assessment, and any operational implications such as needing to advise operational crews of the risk of rapid fire development.

The use of temporary screening for infection control in hospitals.

The need to maintain high levels of infection control in hospitals and health care settings during the COVID-19 pandemic is paramount to restricting the potential for the virus to spread while allowing normal healthcare activities to be undertaken.

In some healthcare settings, the use of temporary screens is a method by which physical control measures can be put in place with little impact on the layout or function of the healthcare activities which are undertaken.

The decision to use screens, or any other physical or management-based measures should come about as a result of the operational risk assessment that is carried out by the NHS Trust, or other appropriate responsible person. The decision then to implement these measures should be assessed against the fire risk they present. This should be done in-line with the NHS Trust’s fire safety policy although, more often than not, carried out by the Fire Safety Manager or Fire Safety Adviser [Authorised Person (Fire)].

This should take the form of a review of the existing fire risk assessment for the relevant area. It should include an understanding of the risk posed by the physical properties of the screen, the consequences of them being involved in a fire situation and the measures that can be undertaken to eliminate those risks or reduce them to a tolerable level. Any measures taken and their rationale should be fully documented within the Fire Risk Assessment.

FRSs have been encouraged to work closely with NHS Trusts, especially where special measures related to COVID-19 are required. As a result, they may be asked to make an opinion on the use of screens or other risk mitigation measures. FRS should continue to regulate in a way that is compliant with the Regulator's Code and the FSO.

FRSs will endeavour to undertake their full range of activities but continue to adopt a risk-based approach to ensure the benefits of such activities will be balanced against the risk to staff and the public of transmission of the COVID-19 virus. This approach is outlined further in the Protection Strategic Intention document as well as other COVID-19 related Protection guidance found on the NFCC website here.

When undertaking Protection activities, FRS staff should be conversant with the relevant prevailing standards including the suite of Health Technical Memorandum. In particular, the requirements for fixed or mobile screens can be found in [Health Technical Memorandum 05-03: Operational provisions Part C – Textiles and furnishings](#).

Should you require any further information on the matter, please contact the NFCC Building Safety Programme Team using PPRUAdminTeam@nationalfirechiefs.org.uk.