Fire Safety Management Protocol
False Alarms & Unwanted Fire Signals

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. **If, for exceptional reasons, you need to print a policy off, <u>it is only valid for 24 hours.</u>**

Executive Sponsor(s):	Kirsty Edmondson-Jones - Director of Innovation & Infrastructure
Author/reviewer: (this version)	Howard Timms - Acting Operational Director of Estates and Facilities
Date written/revised:	14 June 2023
Approved by:	Trust Fire Safety Committee and Trust Health and Safety Committee
Date of approval:	7 September 2023
Date issued:	December 2023
Next review date:	June 2026
Target audience:	Trust-wide

Amendment Form

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed **without change**, this information will still need to be recorded although the version number will remain the same.

Version	Date Issued	Brief Summary of Changes	Author
Version 1	December 2023	• This is a new procedural document, please read in full	Howard Timms

Contents

1   INTRODUCTION

This protocol contributes to the fulfilment of developing fire safety protocols as stated in Health Technical Memorandum 05-01: Managing healthcare fire safety (second edition). This protocol addresses 'False Alarms & Unwanted Fire Signals'.

2   PURPOSE

This protocol will be implemented throughout all premises, or parts of premises, that the Trust owns, occupies, or those for which the Trust is otherwise responsible.

The safety of patients, visitors, staff, and other building users from fire relies upon the fire precautions present within the building and a quick response by staff to the fire incident. This is aided by the automatic fire detection and alarm system providing the earliest possible warning of a fire. When an alarm occurs, staff are required to suspend their usual duties in order to respond to the potentially life-threatening situation. However, when the cause of the alarm activation is not a fire, the disruption to normal activities is unacceptable, as are the detrimental effects upon the future efficacy of alarm response.

The actual cost of a False Alarm is immeasurable since it will include myriad elements that are difficult to quantify including:

- Potential detriment to patient care whilst staff attend the alarm.
- Loss of productive time.
- Potentially cancelled or postponed clinic appointments.
- Potentially cancelled or postponed procedures.
- Negative publicity.

Where the fire service is summoned to a False Alarm (Unwanted Fire Signal) there are additional cost elements including:

- The costs associated with fire service response.
- The loss of fire service productive time.
- The potential diversion of resources from a life-threatening incident.
- The potential risk to the public of emergency response.

3   DUTIES AND RESPONSIBILITIES

The Trust as an employer and as represented by the Trust Board, see article 5(3) FSO, has overall responsibility.

Whilst some key personnel have specific roles, it is incumbent upon all staff to participate in the avoidance and management of false alarms and unwanted fire signals as follows:

3.1   All Staff

- Understand the causes and potential causes of False Alarms.

- Minimise the incidence of False Alarms through exercising appropriate control of the immediate environment, processes, and action to avoid the unnecessary activation of the fire detection and alarm system.
- As appropriate, assist in investigating any activation of the fire detection and alarm system to determine the nature and cause of the activation.
- Minimise the incidence of Unwanted Fire Signals (UwFS) by immediately reporting any activation of the fire detection and alarm system you have certain knowledge of being a False Alarm via the fire phone number [2222].
- Provide any information regarding a False Alarm incident to the Competent Person to assist in the compilation of an incident report.

3.2   Competent Person

- Ensure that all of the information detailed in Section 8.1 of this protocol is recorded in the event of a system activation.
- As described in Section 8.1 of this protocol, access the "Level 2" controls of the relevant fire detection and alarm system control and indicating equipment to silence alarms and perform a system reset.
- Where possible operate the system controls to restore the system to an operational state following any activation.
- Compile a detailed report of any incident resulting in a False Alarm of the fire detection and alarm system, or an incident response by the Fire Response Team to an incident other than a fire or planned fire drill.
- Forward the incident report to the Person with System Responsibility and the Trust's Fire Safety Team Representative.
- As appropriate, assist the Person with System Responsibility and the Trust's Fire Safety Team Representative to develop measures to further mitigate the incidences of False Alarms and Unwanted Fire Signals.

3.3   Fire Detection and Alarm System Designer

- Take account of the recommendations and guidance of BS5839-1, HTM 05-03 Part B and HTM 05-03 Part H when designing the fire detection and alarm system.
- Ensure that the design of the fire detection and alarm system and in particular the selection of detection devices is appropriate for the intended building environment, occupancy, and use.
- Provide sufficient information to the Person with System Responsibility and the Trust's Fire Safety Team Representative to assist in formulating suitable processes and training programmes to avoid False Alarms.

3.4   Fire Detection and Alarm System Installer

- Install the fire detection and alarm system in accordance with the recommendations and guidance of BS5839-1, HTM 05-03 Part B and HTM 05-03 Part H.
- Advise the Fire Detection and Alarm System Designer, the Person with System Responsibility, and the Trust's Fire Safety Team Representative of any instances where conditions in the building may lead to the incidence of False Alarms.

3.5 Fire Detection and Alarm System Maintainer

- On each scheduled service visit, review the records of False Alarms and UwFS.
- Where possible, assist the Person with System Responsibility to determine the likely cause of any incidents of False Alarm for which the reported cause is "Unknown".
- Examine the fire detection and alarm system logs and status codes and advise the Person with System Responsibility of any trends or potential system faults that may result in a False Alarm.
- Advise the Person with System Responsibility of any modifications to the fire detection and alarm system necessary to avoid future False Alarms.

3.6 Fire Safety Team Representative

- Collate False Alarm & Unwanted Fire Signal Reports.
- Investigate False Alarm incidents to determine the cause and nature of events, and where possible apply measures to prevent their recurrence.
- Provide advice on the need for automatic detection, the appropriate type of detection and management of any area so as to avoid False Alarms.
- Assist the Person with System Responsibility to determine the appropriate fire detection and alarm system modifications to reflect material changes.
- Develop suitable programmes of training to inform staff of the issues relating to False Alarms and UwFS, and practical measures to avoid such incidents.

3.7 Person with Control

- Ensure that staff are aware on the need to minimise False Alarms.
- Ensure that staff are aware of the potential causes of False Alarms in respect of the area and processes with which they are involved.
- Ensure that conditions and processes with the potential to cause False Alarms are appropriately controlled and supervised.
- Ensure that staff are aware of the appropriate action to be taken in the event of an activation of the fire alarm.
- Ensure that staff are aware of the need and process to report all instances which they have certain knowledge of being a False Alarm.
- Ensure that any material changes that take place in the area(s) for which they have control are notified to the Fire Safety Manager.

3.8 Person with System Responsibility

- Ensure that sufficient Authorised Persons are appointed and sufficiently trained so as to provide continuous availability.
- Collate records of the fire detection and alarm system activations and ensure such events are documented in the system logbook.
- Ensure that all records of False Alarm and Unwanted Fire Signal incidents are brought to the attention of the Fire Detection and Alarm System Maintainer.
- Ensure that all records of False Alarm and Unwanted Fire Signal incidents are reported to the Health & Safety Group.

- Operate an appropriate "permit to work" system and arrange for planned system disablement to avoid False Alarms due to works activity.
- Ensure that any material changes that take place are appropriately reflected in the fire detection and alarm system provision.

4   CAUSES OF FALSE ALARMS

The cause of each False Alarm at the Trust's premises is routinely investigated in order to ascertain any potential for preventing their reoccurrence. Although the circumstances of each False Alarm may be unique, each activation of the fire detection and alarm system is appropriately categorised and recorded. From the Trust's records of False Alarms, the main causes have been attributed to:

1. **Environmental – Other**
    This category includes activation of the fire detection and alarm system by means of escaping steam, dust, electrical interference, and other environmental influences.

2. **Cooking**
    This category relates to instances where the fire detection and alarm system is activated by the usual process of food preparation and cooking. Such instances include the making of toast, cooking, or warming food in a microwave oven, and meal preparation.

3. **Contractor Activity**
    Incidents recorded as being due to contractor activity represent activation of the fire detection and alarm system through insufficiently controlled work practices.

5   AVOIDING FALSE ALARMS

The avoidance of False Alarms is key to minimising disruption to the delivery of care to patients and the provision of a safe patient environment in which patients, visitors and staff have confidence that the appropriate measures are being taken to ensure their safety from fire.

Whilst the Trust has invested in fire alarm systems with advanced technology to considerably improve the likelihood of system detection not raising an alarm incorrectly, such improvements will not eradicate the problem since the majority of False Alarm activations are the result of inappropriate behaviours.

5.1   Minimising False Alarms due to Environmental Issues

Minimising the incidence of False Alarms due to environmental issues is particularly challenging since this category relates to myriad circumstances which may result in the false activation of the fire detection and alarm system.

The opportunity to minimise such False Alarms may present at the point of system design and appropriate measures should be taken by the Fire Detection and Alarm System Designer to ensure that the appropriate system components are specified to reflect the environment and use of the area in which they are installed. However, for the Fire Detection and Alarm System Designer to adequately address such issues, they must be provided with sufficient information to allow them to understand the use, occupancy and processes undertaken in each area.

Further opportunity to minimise False Alarms due to environmental issues will present during system installation and in particular the avoidance of False Alarms due to electrical influences. The Fire Detection and Alarm System Installer should ensure that the installation accords with the recommendations and guidance of BS5839-1, HTM 05-03 Part B and HTM 05-03 Part H.

Other opportunities minimise False Alarms due to environmental issues will result from a change of use of an area, or the introduction of different equipment or processes. Such material changes should be notified to the Fire Safety Manager as part of the management for fire risks in accordance with Fire Safety Protocol No. 2. However, it is also incumbent upon the Fire Detection and Alarm System Maintainer to advise the Person with System Responsibility of any modifications to the fire detection and alarm system necessary to avoid future False Alarms, including those arising from such material changes.

A number of the False Alarms categorised as due to environmental issues relate to the escape of steam or the production of dust which occurs are part of contractor or maintenance personnel activities. Such incidents should be prevented through the adherence to appropriate processes and systems of work.

5.2   Minimising False Alarms due to Cooking

The majority of False Alarms related to cooking activity are as a result of a failure to adequately supervise and control the cooking process and/or the environment in which the cooking activity takes place.

The following points must be followed during all cooking activity:

- Cooking must only take place in a designated area which is provided with the appropriate means of automatic detection and ventilation.
- Energised cooking appliances must not be left unattended. The cooking process should be stopped whenever an individual is called away from a kitchen and should only be re-started when they can give it their full attention.
- Doors to kitchen areas should not be wedged or otherwise held open, since this may permit cooking fumes to permeate beyond the kitchen and activate nearby automatic smoke detection.
- Appliances used for preparation, cooking and warming food should be regularly cleaned to avoid a build-up of debris that may pyrolyse and emit smoke.

Where the use of a cooking appliance has repeatedly caused the false activation of the fire detection and alarm system, the appliance may be removed from service to avoid further False Alarms.

5.3   Minimising False Alarms due to Contractor Activity

The majority of False Alarms caused by contractors result from the failure to adopt and follow appropriate work practices and systems of control.

Particular instances have been reported as resulting from a failure to cover detectors in an area where dust is being created. Even though the detection system may be disabled in the relevant works area, a failure to adequately cover the detectors may result in sufficient contamination of the detector such that it alarms once enabled following the completion of works. In addition, instances have occurred when contractors have used latex examination gloves as the means to

cover detectors. Upon their removal, the talcum powder in the glove is expelled into the detector resulting in a False Alarm. Such incidents highlight a lack of appropriate work practices.

All contractors must follow the permit to work system requesting system disablement/isolation to avoid False Alarms due to works activity.

The repeated activation of the fire detection and alarm system by a contractor resulting from a failure to either adequately control work processes or follow an appropriate system of work may result in financial penalty.

6   AVOIDING UNWANTED FIRE SIGNALS (UWFS)

An activation of the fire detection and alarm system will result in a response by the Fire Response Team, and in the case of an activation of a second detector, or a manual call point, will initiate a response from the Fire and Rescue Service. Should the activation be found to result from a cause other than a fire, the incident is recorded as a False Alarm. However, once a response has been requested from the Fire and Rescue Service, the incident is considered to have resulted in an UwFS. Whilst it is important to minimise the incidence of False Alarms, it is also important to minimise the further disruption and impact of an UwFS wherever possible.

All staff can assist in the reduction of UwFS by following the procedures for responding to an activation of the fire alarm and reporting any activation of the fire detection and alarm system they have certain knowledge of being a False Alarm via the emergency incident number [2222]. In addition, assisting in the initial investigation in response to an alarm may shorten the time taken to determine the cause of the activation. Such actions may prevent the Fire and Rescue Service being unnecessarily summoned or may enable their response to be appropriately reduced to minimise the unwarranted deployment of scarce resources.

7   MINIMISING THE DISRUPTION OF FALSE ALARMS

Any False Alarm incident will result in a degree of disruption to usual activity and as such the best way to minimise the disruption relating to False Alarms is to minimise the incidence of False Alarms themselves. However, when a False Alarm does occur, the amount of disruption can be minimised in that same manner that an Unwanted Fire Signal can be avoided, that is by staff reporting any activation of the fire detection and alarm system they have certain knowledge of being a False Alarm via the emergency incident number [2222]. This action can allow some of the Fire Response Team to be stood down such that they can continue their usual duties, whilst a reduced fire response team attends the area to complete the incident records and reports.

Where it has not been possible to intervene with a call to confirm the nature of the incident, it is important to identify the cause of the activation as quickly as possible, and if found to be a False Alarm, to restore the fire detection and alarm system to a working condition and complete the recording and reporting without undue delay. To this end, staff may assist in minimising further disruption by providing any details regarding the incident to the attending Fire Response Team as soon as a False Alarm has been declared.

8   RECORDING AND REPORTING

In order to minimise further False Alarms and determine appropriate remedial measures, it is necessary to collate sufficiently detailed records and reports of all False Alarm incidents. Such

records should be compiled at the time, or as soon as practicable following the completion, of the incident.

8.1   Competent Person

In order to provide appropriate response to system activations and suitable system control at all times, the Person with System Responsibility should appoint sufficient Competent Persons to ensure their continuous availability in accordance with Fire Safety Protocol No. 4.

This person, referred to as the Competent Person, will be the relevant Duty Shift Engineer for the site/building in question.

The Competent Person is required to record the system indications whenever an activation, fault or warning event occurs and where possible, operate the system controls to restore the system to an operational state following any such event as detailed in Fire Safety Protocol No. 4.

The Competent Person must complete the Internal Fire Report Form for all incidents where the fire detection and alarm system has been activated, including False Alarms. Such reports should contain as much detail and description of the event as possible, including the details provided by the staff present at the time.

All recorded information to be collated into an incident report and forwarded to the Person with System Responsibility and the Fire Safety Manager.

9   MONITORING COMPLIANCE WITH THE DOCUMENT

The ongoing performance in respect of False Alarms and UwFS will be monitored and reported via the fire safety management system through reports generated by the system maintainer, Person with System Responsibility and the Fire Safety Manager and reported via the Fire Safety Group.

In addition, sample monitoring of False Alarms and UwFS incidents and records will be included in the periodic third-party audit.

10   DEFINITIONS

Competent Person

A person suitably trained and duly authorised by the Person with System Responsibility to provide day-to-day management of the fire detection and alarm system provisions.

False Alarm

Activation of the fire detection and alarm system resulting from a cause other than fire.

Fire

An incident resulting in the uncontrolled emission of heat and/or smoke.

Fire Detection and Alarm System Designer

The sufficiently competent organisation and/or their representatives appointed to undertake the design relating to the fire detection and alarm system as described in BS5839-1.

Fire Detection and Alarm System Installer

The sufficiently competent organisation and/or their representatives appointed to undertake the installation relating to the fire detection and alarm system as described in BS5839-1.

Fire Detection and Alarm System Maintainer

The sufficiently competent organisation and/or their representatives appointed to undertake the testing and maintenance duties relating to the fire detection and alarm system as described in BS5839-1.

Fire Detection and Alarm System

A combination of components for giving an audible and/or other perceptible alarm of fire in response to an automatic detection of fire or a manual initiation. Such a system is often provided as the means by which warning in case of fire is provided to meet the requirements of the Building Regulations 2010 and the Regulatory Reform (Fire Safety) Order 2005.

Fire Response Team

The team of staff designated to respond to a fire incident.

Fire Response Team Leader

The person nominated to lead the Fire Response Team. In the context of the Trust, this is the Clinical Site Manager.

Fire Safety Team Representative

The person appointed to provide competent fire safety advice to support the Supervising Officer and the Works Supervisor and ensure the operational implementation of the fire strategy.

Person with Control

Any person who to any extent has control over the premises, or part(s) of the premises at any time. In the context of the Trust, this could include a Divisional Director, a General Manager, a Department Manager, a Matron, a Ward Sister, or a Charge Nurse. Each area may have more than one Person with Control, and the extent of their responsibilities is determined by the extent of the control they exercise over the area.

Person with System Responsibility

The person appointed to supervise all matters pertaining to the fire detection and fire alarm system and the relevant Permit to Work arrangements.

Unwanted Fire Signal (UwFS)

An incident whereby the fire and rescue service is summoned in response to a false alarm.

11   EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population, and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible, remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation, or religious belief. No detriment was identified.   (See Appendix 1)

12   ASSOCIATED TRUST PROCEDURAL DOCUMENTS

Fire Safety Policy – CORP/HSFS 14

13   DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

14   REFERENCES

Guidance and Firecode

British Standard 5839: Part 1: Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises; 2017; British Standards Institute

Health Technical Memorandum 05-03: Operational provisions. Part B: Fire detection and alarm systems. The Stationery Office, 2006.

Health Technical Memorandum 05-03: Operational provisions. Part H: Reducing false alarms in healthcare premises. Second edition. The Stationery Office, 2009.

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Fire Safety Management Protocol 6 False Alarms & Unwanted Fire Signals	Estates and Facilities	Howard Timms	New	14 June 2023

1) Who is responsible for this policy? - Name of Care Group/Directorate: Estates and Facilities

2) Describe the purpose of the service / function / policy / project/ strategy? Who is it intended to benefit? What are the intended outcomes? - All Trust Staff. This protocol contributes to the fulfilment of developing fire safety protocols as stated in Health Technical Memorandum 05-01: Managing healthcare fire safety (second edition). This protocol addresses 'False Alarms & Unwanted Fire Signals'.

3) Are there any associated objectives? Legislation, targets national expectation, standards. - Regulatory Reform (Fire Safety) Order 2005 and the DOH Firecode HTM 05 Series

4) What factors contribute or detract from achieving intended outcomes? Trust staff awareness

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? - No

- **If yes, please describe current or planned activities to address the impact** [e.g., Monitoring, consultation] - N/A

6) Is there any scope for new measures which would promote equality? [any actions to be taken] - N/A

7) Are any of the following groups adversely affected by the policy? - No

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4

*If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a **Detailed Equality Analysis form in Appendix 4***

Date for next review: June 2026

Checked by: Sean Tyler - Head of Compliance/Neil Colton - Fire Safety Advisor   **Date:** 14 June 2023