

TRUST BOARD

AGENDA NUMBER	ITEM	3.2
TITLE OF PAPER	Fire Safety Assurance	
Confidential	NO	
Suitable for public access	YES	
PLEASE DETAIL BELOW THE OTHER SUB-COMMITTEE(S), MEETINGS THIS PAPER HAS BEEN VIEWED		
None, however, there has been a Fire Safety Assurance presentation delivered to the Trust Executive Committee.		
<u>STRATEGIC OBJECTIVE(S):</u>		
Best outcomes		A good fire safety management record provides assurance to patients, staff and other stakeholders that the Trust takes its responsibilities for fire seriously
Excellent experience		The relatively low numbers of fire incidents continues to provide assurance that effective measures are in place to protect patients, staff and visitors
Skilled & motivated teams		Good fire management arrangements will improve the working environment enhancing recruitment and retention of skilled and motivated of staff
Top productivity		Good fire safety management protects the Trust's people and assets.
EXECUTIVE SUMMARY		
<p>The Trust has safe and compliant fire arrangements, operations, buildings and systems. Due to the age and size of the estate, the nature of healthcare business and the numbers accessing the sites on a daily basis there will always be a fire risk.</p> <p>A post Grenfell Towers' safety review was carried out to provide assurance regarding the Trust's fire safety management structure and processes. The outcome reinforces that there are safe fire arrangements and management in place which comply with regulation and guidance</p> <p>A fire safety action plan has been developed to further strengthen fire safety arrangements in the Trust.</p>		
RECOMMENDATION:		
SPECIFIC ISSUES CHECKLIST:		
Quality and safety	This report covers quality and safety issues related to fire	

Patient impact	This paper provides assurance to patients that the Trust is a safe place to visit and receive healthcare
Employee	This paper provides assurance that the Trust is a responsible employer providing a fire safety to the workplace
Other stakeholder	This paper provides assurance to the CCGs, CQC, Monitor, HSE and other agencies that the Trust is meeting its fire safety responsibilities
Equality & diversity	Evacuation procedures acknowledge the mobility impaired. There are no other specific equality and diversity issues.
Finance	There is potential for expensive litigation if the Trust breaches its fire safety legislation. There are capital implications in replacing and upgrading fire detection equipment and systems.
Legal	There is potential for enforcement action if the Trust fails to meet its fire safety management duties.
Link to Board Assurance Framework Principle Risk	
AUTHOR	Chris Bell, Director, Estates and Facilities
PRESENTED BY	Valerie Bartlett, Deputy Chief Executive
DATE	20 July 2017
BOARD ACTION	Receive assurance

FIRE SAFETY ASSURANCE

1. Summary of approval sought

This paper has been prepared to provide assurance to the Trust Board that it is managing its fire risks and thereby complying with its statutory duties. The Board is asked to receive assurance from the report.

2. Introduction

This paper sets out the key areas of Fire Safety Management and highlights the crucial issues that provide good fire safety assurance.

The recent Grenfell Towers tragedy has shown the stark outcome if fire safety procedures, compliance and management are not adhered to. In preparing this report, account has been taken of the key issues which arose at Grenfell and the root causes of this tragic event have helped to create our own assurance checklists.

This paper sets out to demonstrate that the Trust manages its fire safety appropriately and, has robust policy, procedures and risk management systems in place.

3. Grenfell Towers

There are no published reports to date outlining what went wrong at Grenfell Towers. However, from discussion with fire specialists and a review of media reporting, government press releases and summation it appears that there were seven areas that turned a fridge fire into a devastating major incident:

1. Smoke detection and alarms not activating
2. Smoke extraction not activating
3. Cladding not fixed correctly or boxed in
4. Compartmentation failure
5. Blocked Fire Escapes
6. No Resident awareness of what to do in the event of a fire
7. Flats full of combustible materials

With buildings of this size and nature it would be unlikely that you could get everything right and manage every fire risk to eliminate all possible threats, but by implementing basic safe fire practices and adopting fire regulatory compliance this awful incident could have been prevented.

4. Trust Fire Safety Governance

Appendix 1 illustrates the Trusts Fire Governance reporting structure.

There is the Fire policy in place that has been recently updated, and is backed up with fire procedures.

The Trust has a Fire Safety Manager and Fire Safety Advisor who are both trained in Fire Management. The Trust has also appointed an external Fire Authorising Engineer to provide specialist advice for any high fire risk, legislative change or interpretation and building design. All building design is also reviewed and signed off by the Council's Building Control Officer.

All areas of the Trust have fire risk assessments that are signed off by the Fire Authorising Engineer; and these are reviewed on an annual basis. Further documented plans in place are structural fire strategy plans (detailing building compartmentation) and evacuation drawings illustrating the routes of exit in an event of a fire.

5. Fire Safety Review

On large public accessed sites, such as our hospitals, and due to their size, nature and age it will always be difficult to eliminate all fire risks, but it is possible to identify, mitigate and manage them. The Trust has safe and compliant fire arrangements, operations, buildings and systems, however, there are risks that need to be managed and regularly reviewed.

Following Grenfell Towers we have carried out reassurance checks to re-assess our systems, processes and regulatory compliance.

Appendix 2 compares 'what went wrong' at Grenfell Towers with the Trust current arrangements. There were no surprises but there are areas of improvement that should be implemented to further progress a 'belt and braces' approach to fire safety.

Furthermore, to reinforce our post Grenfell Towers' reassurance we carried out the following:

- Site inspections
- Compliance checks
- Additional cladding investigations and testing
- Sought fire assurance from the site owners for our staff that work at off site premises

It should also be noted that as part of the content for this report the Trust does not have high buildings. Fire regulations guide organisations with a 12 metre rule to assess whether a building is high. The 12 metres is measured from the ground floor to the bottom of the top floor. All fire engines can access every floor of any building that is under 12 meters and more easily evacuate people, which assists the fire brigade when they have to fight fires. As the Trust does not breach 12 metre guidance, we can be assured that in the event of any incident, the Fire Brigade would have good and appropriate access to our buildings.

Appendix 3 illustrates that there has been only two actual fires in the last 5 years on Trust premises, and very few smoke related incidents. All incidents were well managed and demonstrated that the fire detection systems all worked appropriately.

National benchmarking shows that for a medium sized acute Trust we are within the median for reported fires and alarm activation.

6. Key aspects of Fire Safety

The five areas of Fire Safety that organisations need to get right in order to manage fire prevention and protection are as follows:

1. Fire Detection and alarms
2. Fire Compartmentation
3. Fire Building design
4. Fire Training
5. Fire Evacuation arrangements
6. Fire Housekeeping

6.1 Fire Detection and Alarms

A key part of fire assurance is the testing of what fire detection and alarms you have in place. The Estates Department test alarms, smoke extraction and fire door closures on a weekly basis. There are annual maintenance and servicing of fire extinguishers and smoke detectors, and three monthly tests of our fire hydrants and dry risers. Estates also arrange external contractors

to undertake an annual service of all fire alarms and automatic fire detection and suppression systems as well as our fire dampers.

6.2 Compartmentation

Our hospital buildings are all split into fire compartmentation sections, and each area is then divided into sub compartments. Therefore, in the event of a fire the fire doors, walls and fire dampers will contain it for one hour and one and a half hours if the fire breaks out in a sub compartment.

The delay in the fire spreading is a major factor in good fire management as it will give people time to escape the danger area to a place of safety and give the fire brigade time to arrive and fight the fire.

6.3 Fire Building design

All Trust building projects are managed by the Capital Department and the designs of all small, medium and large projects are developed under Health Building Notes (HBNs) and Health Technical Memorandums (HTMs) - NHS best practice which includes fire guidance.

The small projects are all signed off by the Trusts Fire Safety Manager, and the medium to large projects by the Fire Authorising Officer and the Council's Building Control.

The designs must include compartmentation and be integrated into the site compartmentation drawings and plans, as well as detection and alarm systems that all are wired back to the central alarm panel in switchboard.

6.4 Fire Training

All staff receive basic mandatory fire training and the frequency of refresher training will depend on the job roles. Staff in high dependency areas such as ITU, Theatres and NICU are required to train every year, ward staff every two years and office staff every three years.

The duration of the training will also differ – high dependency areas receive three hours training, ward staff one hour and office staff half an hour.

Fire Response Team staff will also be treated as high dependency such as the Site Co-ordinators, porters and security.

The mandatory training figures are currently running at 86% and the target is 90%.

There is also fire evacuation training that is aimed at ward staff as well as Site Co-ordinators, porters, security and the 85 trained fire wardens. This gives an understanding of the local emergency evacuation strategies. The high dependency training performance is currently only 60% against a target of 90%.

6.5 Fire Evacuation

The Trust has a progressive horizontal evacuation procedure as the buildings are not high rise but do have wide adjoining areas.

There are two fire lifts in Abbey wing and one in Rowley Bristow. Evacuation equipment includes evacu-jacks, ski-pads, and evac-chairs.

All areas have access to fire extinguishers and fire blankets in kitchens.

6.5 Fire Housekeeping

Although most of fire housekeeping is common sense it can become a real risk to good fire safety management, and can therefore, become a high risk.

Housekeeping issues includes clear fire exits, uncluttered corridors, fire doors not being wedged open, all wheelie bins closed and away from walls with windows, combustibles away from ignition sources, combustible materials stored behind closed doors and any damaged or missing fire equipment reported.

One of the biggest risks to compartmentation and good housekeeping is the regular damage that happens to fire doors. Staff push trolleys and equipment into doors to gain access, and there is a significant cost to repair or replacement, but more importantly they could damage the effectiveness of the fire door.

6.6 Cladding

Although cladding would not normally be mentioned as a high risk fire issue, it did feature prominently in the Grenfell Towers major incident. The main reason that it failed so badly was that it was not fixed appropriately to the wall and it was not boxed in, and therefore, the insulation created the fuel and hot air circulated up the wall surface and when set alight created a chimney effect.

The Trust does have cladding around our sites but does not pose a risk. Appendix 4 details the cladding and safety assurance.

7. Fire Risks and Action Plan

The Estates and Facilities risk register does not feature any fire risks as fire is considered to be well managed. The age and size of our sites, limited capital and numbers of people accessing the hospitals on a daily basis mean that that there are always likely to be certain fire risks that will need to be managed.

There will be some risks associated with building backlog maintenance and investment in renewal of systems and old building stock. However, these risks are not high rated and there has been significant capital investment in the Trust fire systems over the last few years that includes:

- Upgrade of theatre block alarms and detection system at St Peters
- Upgrade of ward block and clinical block panels, alarms and detection systems at Ashford
- Upgrade of departmental block fire panels and system expansion at St Peters
- Commenced a fire damper and compartmentation refurbishment 3 year programme

Following the Grenfell Towers incident Estates and Facilities carried out a review as per section 5. However, due to the heightened awareness of fire and following the Weybridge clinic fire incident there is a greater emphasis on fire risk and management. Therefore, an action plan has been developed to respond to these recent events.

Appendix 4 is the fire action plan that includes treatment of the cedar wood cladding, bringing the fire training up to 90% target, bringing forward investment in fire systems upgrades and continuation of 3 year fire damper and compartmentation programme.

8. Conclusions

Fires have a devastating effect on people and buildings if they are allowed to grow and spread quickly. However, if organisations have good detection and alarms systems in place, proper one hour building fire compartmentation, good local fire housekeeping, fire retardant soft equipment, an appropriate fire policy and procedures and trained staff, and these are all regularly tested then fire become less likely to cause harm.

The Trust has well trained fire staff, appropriate fire specialist advice and addresses all the identified fire risk issues in its approach to fire management, and therefore, as far as practically possible provides reasonable assurance that fire is not a high risk to the Trust. However, with fire there always remains a threat so reviewing and updating fire arrangements must always be a priority.

9. Recommendations

The Trust Board is asked to note the report.

FIRE GOVERNANCE STRUCTURE



**CHAIR
FIRE SAFETY MANAGER**

KEY GROUP MEMBERS

- FIRE ADVISOR
- NON CLINICAL RISK MANAGER
- SENIOR NURSES
- DIRECTOR, ESTATES & FACILITIES

- SURREY FIRE & RESCUE
- HEAD OF EMERGENCY PLANNING & RESILIENCE
- STAFF SIDE REP

APPENDIX 2

Grenfell Tower issues.	ASPH situation.	Outstanding issues to be addressed
1. Smoke detection and alarms not activating.	Fire Alarms tested on both Trust sites on a weekly basis. Any issue dealt with immediately.	Migration of new fire alarm system at St Peters commenced. Next phase automatic detection to Departmental Block.
2. Smoke extraction not activating.	Smoke extraction tested weekly.	
3. Cladding not fixed correctly or boxed in.	<p>Cladding panels at Ashford Ward Block are interlocking and fixed horizontally and vertically. This would prevent the chimney effect depriving the fire of oxygen.</p> <p>AMU/Aspen and Chertsey house are clad in cedar wood impregnated with a fire retardant treatment.</p> <p>Theatre block is clad in material of an unknown origin. However the construction panels are fixed horizontally and vertically and flame testing has shown the material to be non-flammable.</p>	<p>Cedar cladding on buildings at St Peters to be retreated with fire retardant paint.</p> <p>Theatre block cladding at St Peters is in poor condition and will require replacement in the near future.</p>
4. Compartmentation failure.	<p>All doors to fire compartments and sub compartments either 1 hour or 30 minute fire rated.</p> <p>All Fire compartments have been identified and documented on technical drawings and signed off by Fire Authorising Engineer</p> <p>Fire damper and compartment breaches addressed on a</p>	<p>Fire damper and compartment works continuing throughout 2017/18.</p> <p>Awareness of some door repairs being required. Full survey of fire doors to take place.</p>

	rolling program which commenced in 2016/17. Roof spaces compartmentalised.	.
5. Blocked fire Escapes	Fire Escapes generally kept clear, occasional housekeeping issues need to be addressed.	On-going housekeeping checks.
6. No resident awareness of what to do in the event of a fire.	All staff trained in fire safety to reflect Health Technical Memorandum Guidance.	Refresher fire training is currently 86%. However fire training in High Dependency areas is at 60%.
7. Flats full of combustible materials	Fire load (Combustible material) including medical gases etc. Controls and secure storage of medical gases in place. Appropriate fire resistant materials purchased through Supplies.	
	ASPH situation. (Not known if in place at Grenfell Tower).	Outstanding issues to be addressed.
	Fire evacuation strategy developed covering building occupants, places of safety, use of lifts, communication, accounting for people being evacuated, arrangements for the mobility impaired and arrangements for re- entry to buildings	
	Fire safety management structure and reporting mechanisms in place	
	Fire risk assessments/ Emergency planning and resilience in place	

Reported Fires on Datix since July 17th 2012

A total of 15 incidents reported on Datix under the category “Fire”

Fire / smoke related alarm activations

- A total of 9 incidents were burning toast or cooking from microwaves set off fire alarms.
- One incident whereby correct fire alarm procedures were not followed – during a fire alarm test
- One incident of setting off a firework in the chapel grounds
- One fire alarm activation from dust in the detector head
- One fire alarm activation from a person “vaping” in vicinity of detector

Actual Fires

No	Ref	Name	Handler	Date	Complaint	Division	Description
1	16475	Theatre 4 Ashford	Harold TEAGUE	28.11.2014	Fire	Theatres	Computer terminal caught light. Fault = Power lead to computer not connected properly
2	29729	Out Patients Dept	Harold TEAGUE	07.05.2016	Fire	OPD	Pathology fridge smell of electrical burning.

							Fault = short circuit on electrical cable
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Fire Assurance Action Plan

ASPH Outstanding issues.	Action to be taken.	Timescale.	Responsibility.
Migration of new fire alarm system at St Peters commenced. Next phase automatic detection to Departmental block.	Full and accurate detailed floor layout drawings indicating device locations and zonal addresses. Site survey to test/plot all devices onto drawings. Order placed.	Survey estimated to take around three weeks. Completion by end of September 2017.	Fire Safety Manager/Fire Safety Advisor.
AMU/Aspen and Chertsey House are clad in Cedar wood impregnated with fire retardant treatment.	Prices to be sought for repainting of Cedar cladding.	AMU/Aspen to be repainted in 2017. Chertsey House to be repainted 2018.	Estates Manager/Maintenance Works Officer.
Theatre block clad in material of unknown origin.	Prices for replacing of Theatre cladding to be investigated.	Theatre cladding to be replaced subject to funding 2018.	
Fire damper and compartmentation breaches.	Fire damper and compartmentation issues being addressed on a three year rolling program.	Year 2 of 3 program underway.	Fire Safety Manager/Fire Safety Advisor.
Some fire doors require remedial works	Full survey of fire doors to take place. Orders placed.	Fire door survey to take place in August 2017.	
Fire related housekeeping issues to be addressed.	Housekeeping checks to take place in all areas.	All areas of the Trust to be completed by the end of September 2017	Fire Safety Advisor/Health and Safety Advisor/Ward representative
Fire training and evacuation training needs to be over 90% in all areas.	Extra sessions to be arranged to ensure staff are trained.	90% compliant by the end of August 2017	Fire Safety Advisor/Head of Emergency Planning. All staff.
Raise issue of Capital funding for fire related issues.	Paper to Capital Control Group.	Discuss at September meeting of Capital Control Group.	Director of Estates and Facilities/ Head of Estates Operational Services.
<i>Not an outstanding issue but to give further assurance</i>	Review all fire risk assessments	End of September 2017	Fire Safety Advisor