



National Association of Healthcare Fire Officers Newsletter



Issue 4 - 2021

Christmas 2021

Welcome to the NAHFO Newsletter

As we approach the end of 2021 we are seeing yet another unprecedented period in the history of the NHS. As the world tries to recover from COVID, the NHS is working tirelessly to recover and clear the backlog of patients.

Fire safety professionals within healthcare continue to meet the challenges and ensure that fire safety is included in any planning.

It really is difficult to talk about anything outside of COVID, but locally we will all still have our day to day challenges.

We will, I am sure, debate changes with many views, some not all the same, but we will all work together to make the patients and people who use our services as safe as possible from fire and its effects. I hope you enjoy this edition and let's hope the 2022 brings some normality and we hope you and your families stay staff.

We can't say with any certainty what 2022 will bring, but what is for certain is the fire safety professionals working within healthcare will continue to deliver services in a constructive, proactive and passionate way.

In this newsletter are featured articles on;

- Fire incidents in healthcare
- Fire incident - a shared history USA
- NAHFO activity round up
- The Northwest expedition - back to reality!
- Oh what a night - case study - as fire / security incident - Leeds General Infirmary

National Association of Healthcare Fire Officers (NAHFO)

What is NAHFO and what are our aims and objectives?

The aim of NAHFO is:

To protect all relevant persons in healthcare premises from fire.

The objectives of the NAHFO are:

1. To promote adoption of the highest standards of fire safety in healthcare premises.
2. To improve the understanding of the role of Healthcare Fire Officers*, by all persons working in healthcare, *(to include other titles such as Healthcare Fire Safety Advisor/Practitioner).
3. To support and develop opportunities for educating and training people in healthcare fire safety.
4. To establish liaison with other bodies on matters of common interest where this is consistent with the aim and objectives of NAHFO.

Networking is central to NAHFO; this provides members with access to subject experts on matters such as questions about evacuation procedures, fire response teams, HTM, technical questions and complexities of healthcare.

NAHFO works closely with other organisations to:

- Provide seminars and learning opportunities offering CPD,
- To influence the national agenda on healthcare fire safety,
- Partnership work with the DoH, NHSI, the National Fire Chief Council, the Fire Protection Association, the Institute of Health Estates and Engineering Management, the Institution of Fire Engineers, the Institute of Fire Prevention Officers and Fire Safety Managers and others.

NAHFO is split into 13 Branches covering all areas of the UK and Ireland. For membership enquiries contact:

membership@nahfo.uk

For general enquires contact

paldridge@nhs.net.

The NAHFO web site is www.nahfo.com





Thank you to all those of you who deliver fire safety services to the NHS and healthcare facilities, care homes and other areas that keep our communities safe from fire and its effects and your contributions in our defences from COVID-19

The efforts to meet the challenges of providing fire safe environments has been essential to the national battle against this pandemic

Well Done

NAHFO wishes all our members, friends and readers a very Happy Christmas



Best wishes to you all, your families and friends and Happy New Year!

NAHFO Key contacts

Chair

Ahmed Hussain - ahmed@ahfire.co.uk

Secretary

Peter Aldridge - paldridge@nhs.net

Membership

Colin Newman - membership@nahfo.uk

Treasurer

Dave Cox - NAHFOTreasurer@aol.com

NEC activity continues

NAHFO activities and business during COVID

Like many organisations NAHFO has had to address the way it works during the COVID pandemic.

The NEC has continued to hold “virtual meetings” meetings where we’ve been able to continue the best that we can around national initiatives.

The NEC has met on at least three occasions using Microsoft Teams and whilst the value of face-to-face meetings will never be replaced, what has been clear is that Microsoft Teams is a vehicle for us to meet up productively and to also save the organisation money. What we have been able to do is save somewhere in the region of five thousand pounds in not having to pay travelling expenses, overnight accommodation and subsistence for NEC members travelling from all areas of the UK to attend meetings.

From a financial point of view this has to be something that we must assess and continue moving forward. Whilst it’s not our intention to replace face-to-face meetings, we have to consider future use of Microsoft Teams as a vehicle to meet up to support the financial sustainability of the Association

I know locally Branches have been meeting virtually to maintain contact locally.



NAHFO together with IHEEM, HEFMA, Association for Healthcare Cleaning Professionals, Hospital Caterers Association, Institute of Decontamination Sciences and the Society of Hospital Linen Services and Laundry Managers are delighted to announce the new annual National Healthcare Estates & Facilities Day, the first of which will be held on **15 June 2022**. With the support of the UK devolved nations, all seven organisations are planning a day of celebration of our incredible estates and facilities workforce. Please check the NAHFO Website, IHEEM website and future HEJs for details of how you can get involved in this special annual event for our sector.

Problems with membership

The NEC accepts that there have been some issues with electronic applications through the website. The NEC apologises to members for the image this portrays and it's not acceptable the time new applicants have waited.

We are working on this and the NEC will contact individuals affected to make this right.

Thank you for bearing with us and please do not let this put any colleagues off joining us.

NAHFO activity update

Peter Aldridge carried out the following on behalf of the Association

- Virtual Seminar to Iraqi Patient Safety Group - fire safety in healthcare in UK
- Virtual Seminar - chaired NHSE/I event
- Is chairing a virtual seminar for Vento
- Delivered a virtual seminar for Fireco

Happy Christmas from the Treasurer

The NEC agreed after it being suggested by Dave Cox to make a payment of £200 to each Branch



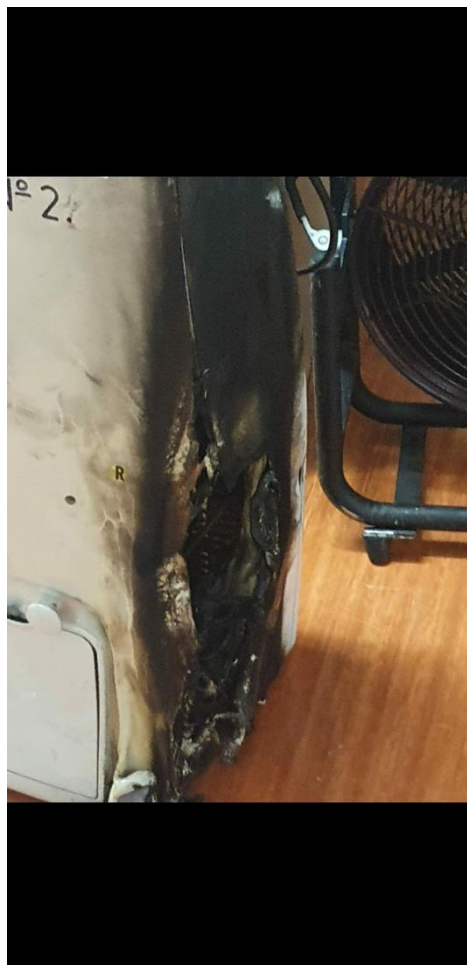
Happy Christmas!

THANK YOU MR TREASURER

A fire in an air handling unit at Leeds General infirmary

The Incident

- A portable air conditioning unit in a medicines room caught fire at approx. 2015 (door closed and room unoccupied)
- Staff on the ward spotted the fire and set the alarm off by a BGCP next to the nurses' station (nearest to room).
- The smoke detector in the room activated within seconds of the BGCP being activated
- Staff rang 46666 and informed the switchboard that it was a confirmed fire on L52
- Whilst the 46666 call was being placed staff entered the room and unplugged the air conditioning unit. This did not put the fire out
- They tried putting wet towels on the fire but this was also not successful
- The ward manager instructed to stop the fire fighting, close the door and to evacuate the ward
- The ward was evacuated (all four service users) to ward L50 (next door but one)
- The shift engineers arrived at the ward found the room, made entry and used a CO2 fire extinguisher to extinguish the fire
- Two members of the security team went to the ward. One member of security met the Fire Service and escorted them to the ward
- The Fire Service checked the area and began to vent using PPV (electric); this was slow due to limited window openings (window restrictors)
- Estates removed a window restrictor to enable better ventilation
- The Fire Service were happy the area was safe and stood down
- The air conditioner unit has been removed from the ward and has been taken to the Estates office for storage/ investigation



What went well?

- No service users were injured in the incident
- Damage was contained to the rooms with only a smell of smoke being in the surrounding areas. Damage was limited to the air conditioning unit, towels (used for fire fighting) and the vinyl floor
- Staff acted well, following fire procedures, raising the alarm, evacuating and fire fighting. All of the staff involved in the incident acted commendably and prevented the incident from being more serious
- The rest of the building was unaffected
- One member of clinical staff went to A&E to after experiencing chest tightness following fire fighting efforts. The member of staff is asthmatic and after being observed by the A&E department was fine

What could have been better?

- The fire hydrant at the front of Clarendon Wing was obstructed by vegetation and the marker plate was not pointing directly at the hydrant. The marker plate has been relocated and the planting needs to be reviewed and kept under control
- The portable air conditioner had been previously PAT tested however it expired in Feb 2021. Due to the COVID 19 pandemic it has been difficult to get into clinical areas for all but essential activities. This has led to a number of areas being out of date on their PAT tests. The Trust has in place a plan to catch up on areas which are out of date on tests which it has been pushing on with, however this area had not yet been visited
- The Estates and Security teams did not offer up the fire folder with building specific fire strategy information to the fire service. If this information had been provided it would not have changed the outcome. The teams need to be reminded to offer up the fire folder on all fire calls

Exhibitions 2022:

April 5th – 7th Fire Safety NEC



May 17th – 19th Firex Excel



Oct 4th – 5th Healthcare Estates Conference and Exhibition



New York City



Four people, including two firefighters, suffered minor injuries and a number of patients were evacuated when a fire broke out on the roof of a Queens Hospital in New York on September 10th 2021. More than 100 fire and EMS personnel responded to the blaze at St. John's Episcopal Hospital the FDNY said. Doctors, nurses and the hospital's maintenance staff helped. Hospital employees evacuated patients from the burning hospital in an "all-hands-on-deck effort according to reports. *"It is not known, at this moment, how the fire got started but it was quickly contained and extinguished,"* a statement read from the Hospital.

Manchester



Hospital staff "safely evacuated staff and patients prior to the arrival of the Fire Service after a Fire at Trafford Hospital in Manchester. It took about two hours to extinguish the fire with eight fire engines attending the scene. The cause of the fire was a lightning strike.

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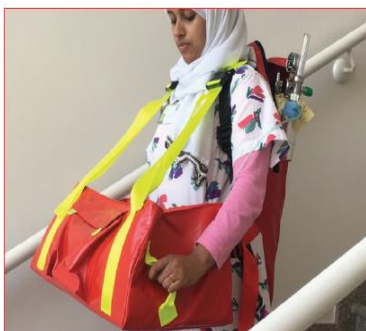
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A little bit of history from the United States

A brief history of Hospital fires

It's easy to think that the day to day fire safety issues we deal with everyday are our local issues, however the article below details information from the USA and in the review of nine Hospital fires, there are several recurring factors, including:



- A high fire load
- Lack of compartmentation
- Lack of fire sprinkler protection
- Fire alarm deficiencies

1. Cleveland Clinic (1929) – 120 killed

More than 120 people lost their lives when flammable items (nitrocellulose x-ray film, in this case) were stored too close to a heat source. Contributing factors to these deaths included:

- Improper storage of flammables – stored too closely to other types of flammables and a heat source
- Lack of fire sprinkler protection – not required at the time, potentially could have held the fire in check
- Unprotected openings between floors – allowed the fire, heat, smoke, and toxic gases to travel up and through several levels

2. Mercy Hospital (1950) – 41 killed

When a patient in the St. Elizabeth's Women's Psychopathic Building at Mercy Hospital set her curtains on fire, 40 elderly women were killed and one attendant. Contributing factors to these deaths included:

- Fire intentionally set
- Barred windows – hindered fire department rescue efforts
- Flammable wall coverings – combustible fibreboard was used for the corridor ceilings

3. St. Anthony Hospital (1949) – 74 killed

Seventy-four lives were claimed when a fire, which started in a laundry chute, quickly spread throughout the facility. Contributing factors to these deaths included:

- Combustible laundry chute construction
- Lack of fire alarm or fire sprinkler systems
- Open corridors and stairs
- Lack of fire compartmentation



4. Hartford Hospital (1961) – 16 killed

A fire starting in a rubbish chute spread through the facility igniting the flammable interior finishes resulting in 16 deaths. Contributing factors to these deaths included:

- Flammable/combustible interior finishes – large amounts of plastics, linoleum, and fabrics throughout
- Dead-end corridors – occupants had to travel through fire/smoke to escape
- Partial fire sprinkler protection – fire sprinklers present on only 3 floors
- Undivided, concealed spaces – spaces above ceiling allowed the rapid and uninhibited travel of smoke
- Unprotected openings – smoke door was held open allowing smoke and fire to fill up an entire floor



5. Missouri Facility (1974) – 8 killed

Eight lives were lost when a fire broke out in this Missouri facility, with a high fire load, and staff that was not adequately trained. Contributing factors to these deaths included:

- High fire load – patient rooms contained large amounts of foam, mattresses, couches, and bedding
- Improperly functioning fire alarm system
- Partial fire sprinkler protection – in laundry and trash rooms only
- Unprotected openings – staff left the doors to patient rooms in the open position
-

6. Michigan Hospice (1985) – 8 killed

When a fire started from a patient's recliner and began to spread, 8 lives were lost. Contributing factors to these deaths included:

- High fire load – patients were allowed to bring items from home
- Unprotected openings – fire and smoke spread through the ventilation systems and stairwells, smoke doors were left open

7. California Hospital (1985) – 5 killed

A patient smoking while trying to shut down his oxygen supply ignited a fire that quickly spread, claiming 5 lives. Contributing factors to these deaths included:

- Careless smoking
- Unprotected opening – patients door was left open, permitting spread of fire

8. New York Hospital (1993) – 3 killed

A medical equipment malfunction contributed to the death of 3 patients. Two of the patients were in the room of origin, and the third was two rooms down. His door had not been properly shut, as had all the other patient rooms. Contributing factors to low mortality rate:

- Fire alarm system was in place
- Fire sprinkler protected corridors
- Trained staff
- Auto closing doors and rated walls – limited fire and smoke spread

9. Virginia Hospital (1994) – 6 killed

This fire started in a patients bedding, and was fed from an open oxygen line, until the oxygen zone was shut off. Contributing factors to these deaths included:

- Unprotected openings – door to the room was left open
- Lack of fire alarm detection devices – no smoke alarms in the patient rooms
- Lack of fire sprinklers and working fire department connection
- Undivided concealed spaces – spaces above ceiling permitted smoke movement and seep down

As we can see from this short history these fires spread and took lives, not due to one system operating or malfunctioning but, due to multiple systems that are intended to work together and create redundancy not being in place. Hospitals are supposed to be a place of safety, refuge, and healing. It is only when the facility takes a balanced approach to life safety that your loved one remains truly safe, and real healing can take place.

Does any of this history from across the pond sound familiar?



After a very difficult year - one Branch went on an expedition!"

NAHFO Northwest Branch workshop – Liverpool Liner hotel – 04 – 05 November 21

Under normal circumstances, the Branch holds a workshop / mini conference annually and the location varies each year. Like most events during COVID the Branch has had to cancel the last two workshops and during that period we have welcomed several new members who joined the Branch.

It seemed fitting therefore, that we reconvene the workshops to provide a good networking occasion for those new members.

The Thursday afternoon was taken up with an excellent presentation by our very own NEC Rep, Andy Kuczaj. Andy used the presentation to detail the events of the recent fire at Trafford Hospital. As you might imagine this prompted much debate and provided an excellent learning forum for the newer members of the Branch. In the evening we decanted into the local pub to sample some of the local craft beer and then continued our sampling within a few of the renowned Irish pubs.

The group then moved onto a Brazilian restaurant providing an authentic churrascaria experience (if you have never tried it, it comes highly recommended).



Enjoying the Brazilian experience!

Following a fantastic meal, we were ready for round two of our; fact-finding, craft ale mission of Liverpool where some of the new members took to the stage and treated us to a few 'swing' songs and with a Sammy Davis Jr number from a seasoned branch member, the rat pact was reformed.

The Messy bit?



*Damian O'Rourke
(With a rendition of 'The
wonder of you')*



*Mark Doggett
(With a rendition of 'That's
Life')*



*Steve Clancy
(With a rendition of 'Mr
Bo Jangles')*

As the code goes (no names, no pack drill), but a couple of members managed to get themselves lost around Liverpool (least that's their excuse) despite being only 200m from the hotel? They were heard mooching around reception a 3am!!

Breakfast yielded a few sore heads, but following some substantial sustenance, courtesy of our hosts at the Liner Hotel, there was consensus that our evening explorations had been a roaring success.

Following breakfast the morning gave way to our Branch meeting, followed by a couple of very informative presentations, delivered by two great supporters of NAHFO; Jo Allen of Ventilation Surveys and Services Ltd VSS and John Angel of Intastop. The presentations were greatly received by all members, in particular the new members, who had a plethora of questions, which provided useful engagement for the presenters.

Following a quick de-brief, the workshop concluded around 2pm and we bid farewell until the next meeting in December where, in the interest of fairness, we will explore the craft ales of Manchester and partake in the festivities of the Xmas markets.

Well done to the Northwest Branch from 12 other jealous Branches!



NAHFO Conference 2022

National Association of
Healthcare Fire Officers



'Are You Fire Safe'

23rd to 25th May 2022 - Save the Date

Leonardo Royal Hotel Southampton
Grand Harbour

The Wessex Branch of NAHFO are arranging this event with Conference Solutions.

The event is aimed at all those who have dealings with Healthcare Fire Safety.

Fire Safety Advisers, Nominated Officers, Fire Safety Managers, Estate Managers, Local Authority Fire Safety Officers, Private Healthcare Fire Safety Professionals and Residential Care Staff with responsibility toward fire safety.

To register your interest or to exhibit at the conference

Please contact Louise at nahfo@conferencesolutions.uk.com

CPD Hours will



Oh what a night - a fire / security incident at Leeds General Infirmary

Situation

A fire / security incident occurred at the Leeds General Infirmary on the 21st January 2021.

Background

At 17:45 the fire alarm in Jubilee Wing activated. On investigation by staff it was identified there was a confirmed fire in the corridor near the temporary ED donning and doffing area. Relevant facts are:

- The fire alarm was activated automatically by smoke detectors
- Staff attempted to fight the fire using fire extinguishers, despite their efforts the fire and associated smoke prevented safe fire suppression by an extinguisher
- Staff ensured all doors were closed
- Fire doors had closed on activation of the fire alarm
- West Yorkshire Fire and rescue Service (WYFRS) were automatically called by Switchboard
- ED staff contacted Switchboard to confirm a fire, the HUB were also contacted
- Fire Response Team attended as expected
- CSM was alerted

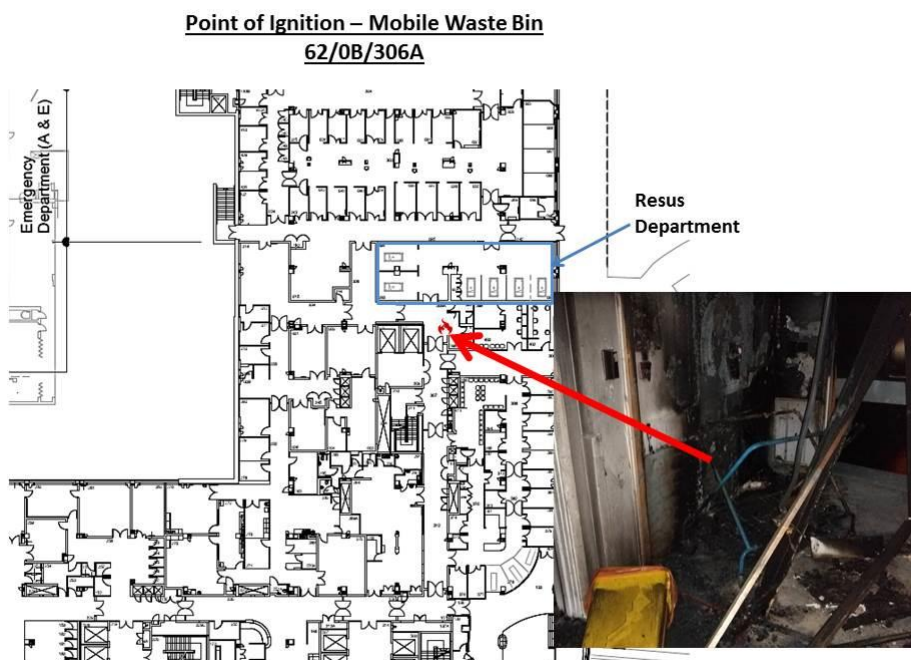


Photo 1 - Shows the location of the fire, the item first ignited and development (see burn patterns and protection marks to wall)

Relevant fire safety facts:

- Fire doors either were closed or closed on the activation of the fire alarm
- The fire alarm system activated the smoke extraction system
- The fire compartmentation was in place and contained the fire to the area of origin
- WYFRS extinguished the fire using Fire and Rescue Service equipment

- Breathing apparatus wearers were committed. As can be seen from images the smoke staining indicates smoke would have dropped to waist height
- Positive pressure ventilation fans were utilised by WYFRS to clear the area of smoke

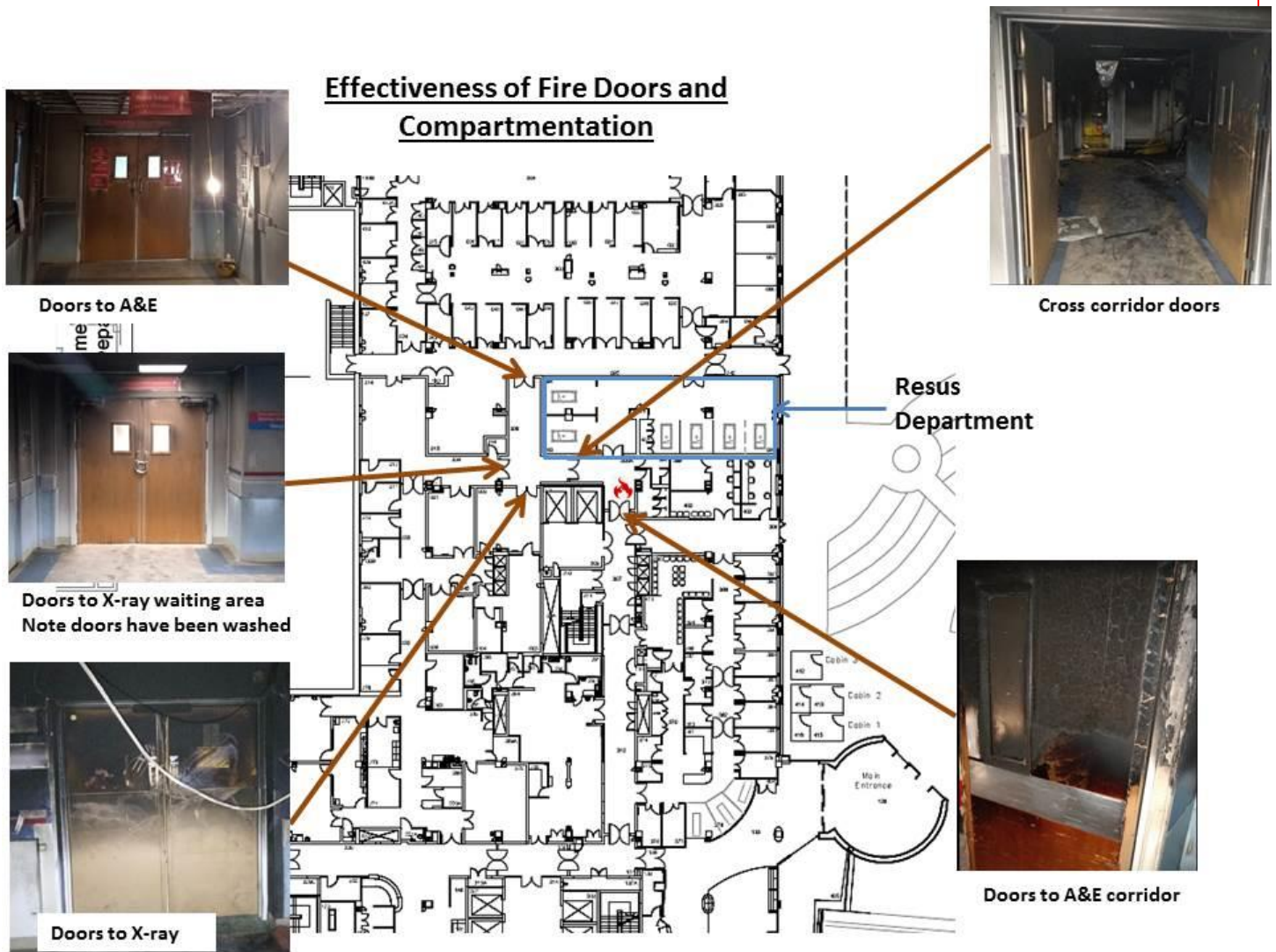


Photo 2 - shows the location of the fire and fire doors that closed and contained the fire

Evacuation

The ED was fully evacuated, pertinent facts with regards to the evacuation:

- On the confirmation that it was a fire, the ED consultant decided on a full evacuation of the ED
- Evacuation was initially to outside
- One of the primary escape routes from ED was along the corridor where the fire was located
- Upon completion of the evacuation - estimated to be 5 minutes - staff were proactive in the continuity of care of patients

Immediate effects

- ED placed on divert as no more patients could be received
- Major Trauma Centre was closed
- Patients were moved to outside the building.
- Potential compromises of COVID 19 social distancing and mixing of hot / cold patients

- Pressure would be felt on receiving areas and SJUH ED
- Pressure would be felt on other receiving departments at LGI.
- End of life patient was in the ED at the time

Immediate considerations after the fire was extinguished / smoke clearance

- Is any of ED useable
- Bronze meeting held in ED to agree repatriation to ED for it to be used
- Re-occupation agreed



Photo 3



Photo 3a

Photo 3 / 3a - these two photographs show how effective use of fire doors allowed an early re-occupation and recovery of services. **Photo 3** shows only a small amount of smoke seepage into the protected area. This indicates how persons in the adjacent area would have been prevented injury and been provided with time to consider actions/patient evacuation from a place of relevant safety. **Photo 3a** shows the fire damage in the corridor

Extent of damage

The fire / smoke damage was confined to the compartment that was protected by 60 minute fire resistant construction.

Area Affected by Smoke Spread



Image / photo 4 - this shows the fire / heat and smoke spread and the location of the smoke extract system that assisted in smoke clearance



Photo 5 - this shows the fire damage at the seat of the fire how fire doors offered protection

Order of Automatic Fire Detection Activation



Image / photo 6 - this shows the sequence of detectors operating and air flow into the department drawing the fire initially out of the corridor towards the main corridor. The detector activating closed the fire doors and automatically activated the smoke extract fans

SWOT Analysis on the incident

Strengths	Weaknesses
<ul style="list-style-type: none"> • Early detection of the fire • Prompt investigation by staff • Very decisive actions by staff - ED Consultant / CSM / Senior Staff • Immediate decision to evacuate • Early appreciation of the impact of the incident • No injuries - no deterioration of care 	<ul style="list-style-type: none"> • Fire was deliberate ignition not sure if this is a weakness? • Fire was on a circulation route not sure if this is a weakness. • COVID 19 precautions to reduce risk of COVID related matters could of impacted on fire safety features (Donning / Doffing Area) • Member of the public able to gain access to a critical care area and deliberately start a fire.
Opportunities	Threats
<ul style="list-style-type: none"> • Maximise on fire training - a local incident staff can relate to • Demonstrable learning points from effective fire safety features and evacuation • Demonstrates the effectiveness of investments in fire safety measures • Learn lessons from good / not so good learning points 	<ul style="list-style-type: none"> • Reputational risk after a fire • Potential inability to continue services • Deterioration of care • Ineffective fire safety features • Ineffective fire safety features if non-compliance is not identified as part of continual Fire Risk Assessment programme

Specific points in relation to wall coverings and surface spread of flame¹ Noticeboards

¹ The references to wall coverings, wall art and surface spread of flame is relevant to both incidents

It should be noted that where ignition of the notice board was attempted in room 62/0B/260 (Radiology), it was not successful. It appears an attempt was made to deliberately ignite items placed on the notice board in Radiology. Most of the information on the noticeboard had been laminated, if large amounts of paper were hanging/affixed to the noticeboard this would have provided fuel which would have aided fire spread vertically and laterally and also possibly have caused 'drop down' fires.

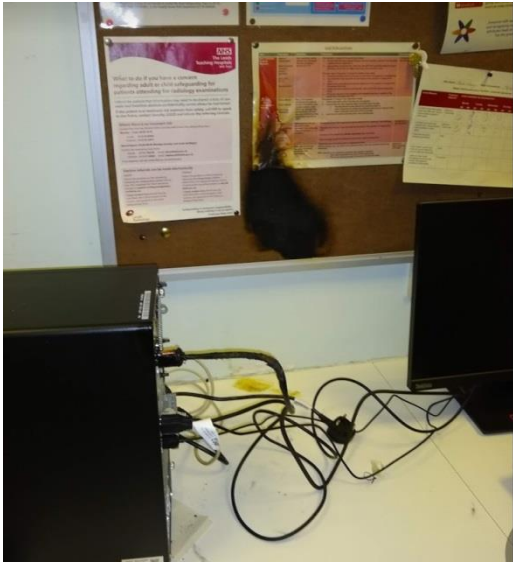


Photo 7 - the seat of the attempted deliberate ignition in Radiology

Posters

The Friends and Family poster, on the main corridor outside of Resus, shows signs of significant heat exposure, however it did not ignite. This can be partly attributed to it being framed and covered with plastic. This evidences the requirement that where large posters / information displays are required they should be framed and covered. It also indicates the temperature at this height within the room. This temperature would cause serious thermal injury for any person not in full fire fighting PPE.

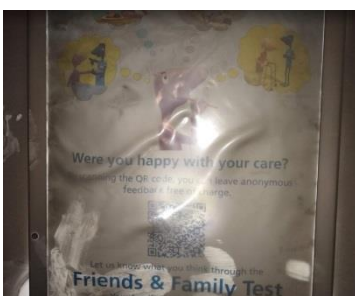


Photo 8 - Friends and Family poster near seat of the fire

Wall Glamour / Artwork

Wall glamour / artwork are commonly used around the Trust often covering large areas of walls. In developing fires this artwork (normally plastic based) and its adhesive can prove to be a significant source of fuel and can create significant quantities of toxic smoke and cause fire spread.

The wall art in the ED corridor (coloured lines on the wall) was melted by the fire but did not ignite and cause fire spread.



Photo 9 - wall glamour / artwork on the ED corridor - melted but not significant in terms of fire spread

Fire Alarm

A number of fire alarm detectors activated quickly after the fire started, with over 50 detectors in total activating. The first detector activated at 17.45.30, detector number 478 in room 620B307 the corridor outside of the ED lifts and stair. This is not the detector immediately above where the fire began, however it is believed that it was the first to activate due natural air movement along the corridor and through the ED. When the external ambulance doors are opened in ED on windy days it channels air through the department and onto the main corridor. This could have easily blown the smoke away from the nearest detector, slowing down its activation. The detector immediately above the fire activated 20 seconds later followed by the detectors in the staff toilets and neighbouring corridor all within 60 seconds of the first alarm. As stated above when the fire alarm activated it caused the doors on the corridor to start to close. When this happened it will have reduced the air flow along the corridor and caused the smoke to collect locally in the corridor and not to spread. This will then have caused the rapid activation of the local detectors as the smoke was being contained.

When the alarm activated it informed switchboard, who then called the Fire Service and contacted the internal fire response team.

When the alarm activated it also triggered the cause and effect for the fire alarm. This includes: -

- Sounding a continuous alarm in any area where a detector activated with surrounding areas being intermittent on the same floor and immediately above and below
- Initially the alarm was continuous in the ED and the corridor outside with intermittent alarms in the Children's ED, Emergency Assessment Unit and the interstitial plant floor Level B/C (above) and below in the former Medical Physics Department A floor
- The fire doors closed in areas near to the fire alarm activations and on the stair core lobbies, to ensure fire compartmentation was in place
- The emergency lighting for the building activated
- The smoke extract systems for the building activated
- The smoke and fire dampers closed as required in areas where the fire alarm activated

Smoke Extract System

Jubilee Wing is provided with a smoke extraction system designed to protect the hospital corridors and stair and lifts. The system automatically activates when the alarm is activated. Clean air is drawn in from outside and air and smoke / heat is extracted from various points around the building.

There is a smoke extraction point immediately next to the doors to the fire compartment (see below). The extraction system is designed so that as the doors are opened if any heat or smoke comes out, it is extracted from the area before it can spread. The system worked well as there are very little signs of smoke damage in the corridor adjacent to the fire.

Area Affected by Smoke Spread



The smoke extraction system also aided the fire fighting efforts as when the fire service opened doors to extinguish the fire it helped to reduce the spread of smoke and heat.

Compartmentation

The area where the fire started is part of a hospital street which is surrounded in 60 minute fire resisting construction. The compartmentation is designed to allow staff and patients to remain in a place of relative safety in surrounding parts of the hospital and limit the spread and damage caused by a fire. The fire was extinguished well within 60 minutes. The compartmentation worked well and prevented the fire from spreading. There was only a small amount of smoke spread from the area of origin which was mainly extracted by the smoke system.

The area immediately above the fire (interstitial plant floor) shows almost no sign of the fire below. The only evidence is small soot stains approximately 15 cm long on the corner of the wall immediately above the fire; this is where a small amount of hot gas has seeped through a gap in the concrete slab joint. See picture below.

The Trust has invested significant time and resources into ensuring the compartmentation across the Trust with is maintained, with Jubilee Wing having undergone a programme of works over a number of years to ensure the compartmentation is present and correct, with this area being part of the works. These works have potentially prevented the fire from spreading and affecting more areas.



Photo 9 - *plant room immediately above the fire showing slight smoke staining*

Impact statement provided by Senior ED Consultant²

In terms of impact statement:

- Immediately having to evacuate approximately 60 patients (I cannot recall the exact amount but this will be recorded on the Symphony system at the time) from the emergency department unexpectedly will have resulted in all the patients receiving substandard care due to them being in the cold car park, lack of full monitoring equipment available and lack of ability to continue to deliver treatments fully (Intravenous medications as an example)
- The majors and resuscitation department were rapidly filling up with smoke from the ceiling down to neck height during the evacuation and had it not been for the rapid evacuation (made easier by good staffing numbers) there would have been patients with significant smoke inhalation or worse³
- Patient's from the Emergency Department were rapidly placed onto inpatient wards which will have caused an unexpected increase in the ward work and potential have impact on inpatients already on those ward – I think cardiology took in the region of 12 patients from us
- We had to divert critical services away from the hospital
- Adult and paediatric major trauma were diverted to other major trauma centre in Sheffield and Hull meaning we were unable to deliver a live saving trauma service during the incident
- We have to divert paediatric children's services away from the Emergency Department which as the only paediatric emergency department in Leeds this is a significant risk
- Stroke and vascular service were also diverted again resulting in significant risk

Impact statement from Head of Nursing / Service Manager

- Mass evacuation of multiple patients simultaneously
- Danger to Life from the fire and smoke inhalation
- Patient moved outside in the cold
- Patient that moved to available bed on wards - not on wards that were specific to the care needs of patients
- Potential loss of patient moving to Jubilee wing and outside
- Loss of patients belonging as part of the mass evacuation
- Diversion of ambulance away from the department
- Loss of essential services and regional expertise in Paeds, MTC, Stroke and cardiology including PCI
- Lack of on-going treatment for patient moved outside and jubilee wing

² The impact statement is as written by the ED Consultant

³ This witness account could be deemed to be at odds with the overall view that the compartmentation work well. CCTV and body camera footage does show initially "cold smoke" in the ED. This would be expected in the early stages on an incident and it would have created issues for those in Dept.

- Patient at EOL- cared for in the back of an ambulance to maintain dignity
- Loss of dignity for patient cared for outside and in Jubilee wing
- Risk of infection by moving patient with unknown covid status direct to wards
- Traumatic for staff being involved in a highly stressed evacuation situation
- Lingering smell in the department which was uncomfortable for staff however they remained in the area to support and care for patients
- Additional staff needed to be deployed to deep clean the department

On-going issues

- Continued loss of space due to having to repurpose donning /doffing area
- Loss of direct access to resus for Air ambulance patient
- Wiring damage from the fire - making alarm system in ED sound continuously
- Additional costs of repairing the damage

Actions - ED fire incident

1. A full debrief involving all stakeholders that captures feedback is to be carried out
2. Lessons learned to be shared across the Trust and partners
3. Immediate review of any temporary Donning / Doffing areas established in response to COVID are assessed
4. Key fact cards that high light lessons learned and effects of properly used fire safety features are prepared
5. The flammability of the mobile waste carts is assessed
6. Key fact cards that highlight deficiencies to fire safety features are shared with stakeholders - an example being DATA cables were evident that during installation had breached fire barriers
7. Photographs, body camera footage and statements are used to inform fire training
8. All wall glamour / artwork needs to be agreed with the Fire Safety Team as the following needs to be assessed
9. Notice boards and displays should not make up more than 10% of the surface area of walls
10. Consideration should be given to the fact that noticeboards should only be placed in public facing areas where absolutely necessary as it simply increases fuel loading and gives opportunity to an arsonist
11. Where information is displayed on notice boards and displays, control measures regarding the volume and location must be established. Staff should be encouraged to laminate information placed on notice boards however this does not guarantee that the items are fire retardant.
12. L20 reported a strong smell of burning on their ward. It needs to be investigated if any duct serves the ED and L20 that might explain this.

Recommendations

1. The action points are incorporated into an action plan and named individuals to take ownership are assigned

SBAR detailing the fire / security incident at Leeds General Infirmary 21st January 2021

Situation

A fire / security incident occurred at the Leeds General Infirmary on the 21st January 2021.

Background

The first part of this SBAR details the fire incident; this SBAR details the security incident. At 17:45 the Trust was dealing with a confirmed fire in the ED. At 17:58 a call was received by the Facilities HUB that detailed that an incident was underway in the Radiology Dept. The information passed to Security was that the individual suspected of starting the fire in the ED was attempting to start a fire in Radiology and threatening staff. Relevant facts in relation to Security actions are:

- Security received the call via radio
- Three Officers were in attendance at the ED incident
- Two Officers diverted to Radiology to assist colleagues
- West Yorkshire Police were informed
- The Security Co-ordinator and Supervisor mobilised to the incident
- Security / Facilities HUB escalated to their Senior Team / On Call
- Security detained the suspect and restrained them until the Police arrived
- After the arrest Security reverted back to ED
- WYP commenced securing crime scenes in Radiology
- There were two crime scenes in Radiology - the reception and reporting room

Relevant security incident facts are:

- The suspect ran through the Dept from ED threatening and terrorising staff
- A Perspex barrier placed over reception to protect staff was smashed
- The suspect threw lighted paper over reception
- The suspect ran into a room and was pursued by Facilities staff
- When Security arrived they were shown where the suspect was
- Security entered the room
- The suspect was abusive, threatening and had a lighter in his hand
- The suspect had tried to set a fire in a room in Radiology
- The suspect threatened Security with a bladed weapon and hit the officer with a chair
- The Officers over powered the suspect and restrained him
- Staff in the area / witnesses and a patient were present and witnessed the incident

Relevant fire incident facts are:

- The suspect attempted to start a fire on a notice board
- The attempted ignition of the notice board resulted in drop down materials which scorched the IT cable direct below the notice board.
- The area was checked to ensure there was no unseen fire spread
- The attempted ignition caused a 'drop down' fire which scorched an IT cable below
- Staff used a CO2 fire extinguisher to extinguish the fire successfully
- There was not enough products of combustion to set off the smoke detector
- The area was evacuated as a precaution
- Patient services were interrupted
- The area was checked to ensure there was no effects from this fire incident
- A room in Radiology was affected by the fire in ED, as it was accessed by the affected corridor

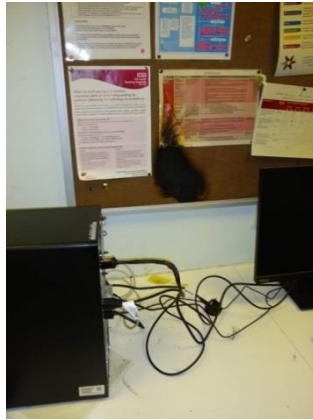
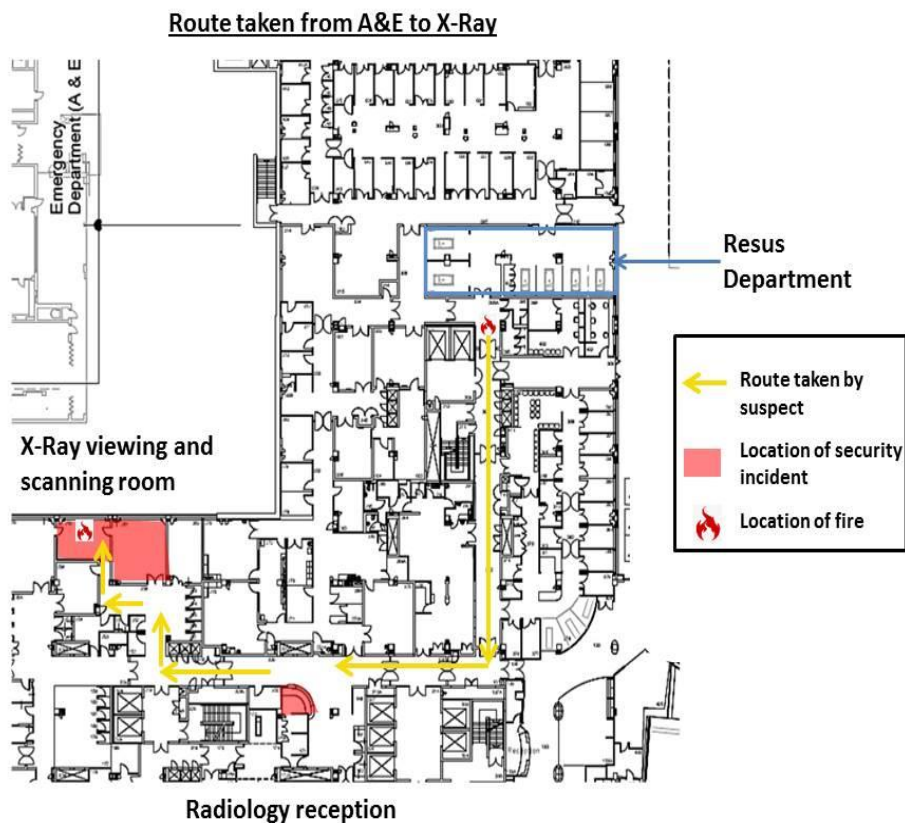


Photo 1 - this shows the fire damage in Radiology

Route taken by suspect between ED and Radiology



SWOT Analysis on the incident

Strengths	Weaknesses
<ul style="list-style-type: none"> • Early detection of the fire as witnessed by staff • Prompt investigation by staff into incident • Very decisive actions by staff - Facilities chasing - Radiology reporting the incident - Security response and restraint • Immediate decision to evacuate • Early appreciation of the impact of the incident 	<ul style="list-style-type: none"> • As there were two serious incidents - response teams were split • Person gained access to controlled area
Opportunities	Threats
<ul style="list-style-type: none"> • Demonstrable learning points from effective response by Radiology staff • Learn lessons from good / not so good learning points • Thorough review of security measures in the Dept 	<ul style="list-style-type: none"> • Terrorised staff • Effect on staff morale • Potential inability to continue services • Deterioration of care

The suspect

There have been three incidents involving the suspect at LTH in the two days preceding the fire. These incidents will be considered by WYP as part of the investigation. The suspect has been charged with several offences in relation to the incident.

There has also been information seen that suggests the suspect has also been to at least one other hospital in West Yorkshire.

The charges from WYP:



Impact statement provided by General Manager for Radiology⁴

- The Radiology Team service the whole hospital for imaging but are based in ED - there were delays in patients on wards receiving mobile imaging whilst the X-ray service was moved to Clarendon Wing Radiology
- An ED X-ray room was taken out of action pending further investigation from medical physics due to potential smoke damage and noticeable damage to the lead lined doors. This room is now re-instated but only ambulant patients are able to use it due to the double leaf door for trolley patients leading on to the smoke damaged corridor. This has impacted on the throughput and meant trolley patients being seen a smaller X-ray room which isn't ideal for radiographers and moving and handling
- Due to the corridor being cordoned off for repair patients are now being transferred through the main radiology corridor. Have had to assess the throughput of patients taking into consideration social distancing etc. Outpatients were moved from CT LGI to SJUH over the weekend to allow for this new thoroughfare to embed. It will be reviewed early this week and it may mean outpatients being cancelled if the volume of people in that area is deemed to large
- Ultrasound outpatients were cancelled on Friday morning due to the area in radiology being cordoned off by police pending investigation - we were unsure of when we would get this area back so did this as a precaution

⁴ The impact statement is as written by the ED Consultant

- X-ray patients were called on Thursday evening/night directing them to alternative departments - impact on patient experience

Actions on Radiology Security incident

1. A full debrief involving all stakeholders that captures feedback is to be carried out
2. Lessons learned to be shared across the Trust and partners
3. Immediate review security arrangements and personal safety within Radiology
4. Key fact cards that high light lessons learned and effects of the incident are prepared
5. Photographs, body camera footage and statements are used to inform fire training

Recommendations

1. The action points are incorporated into an action plan and named individuals to take ownership are assigned.

Timeline / sequence of events of events from both incidents⁵

- 17:46 - Fire bleep activated - fire alarm would have been a few moments before this (17:45)
- 17:53 - Fire Service on Site
- 17.58 - Facilities inform HUB of incident in Radiology - fire / security incident
- 17:59 - WYP alerted
- 17.59 - Call via radio to Security from the HUB re the incident in Radiology
- 17:59 - Security respond to Radiology
- 18:00 - Security in Radiology
- 18:07 - in Radiology

⁵ This is drawn from statements and known data