



### Health and Safety Annual Report

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| <b>Outcome requested:</b>                                       | Council is asked to <b>note</b> the annual Health and Safety Report for 2019/20.   |
| <b>Executive Summary:</b>                                       | <p>Any given year will bring its challenges around service delivery, with unplanned and ad-hoc issues. However the SARS-CoV-2 global pandemic that has emerged in the last 10 months has given the university and in particular the Health &amp; Safety Directorate, its largest challenge ever. The devastation that COVID-19 has wreaked on individuals, families, communities and the economy is unprecedented. The university has had to rapidly respond to a constantly changing situation and continues to do so.</p> <p>Practically overnight, this affected the Health &amp; Safety Directorate’s overall programme and priorities and saw the immediate suspension of planned audits, inspections and training. There was a need for the team to rapidly redeploy resources and adapt their skillsets to focus on each COVID related challenge as they became apparent, from creating the initial Institutional COVID Secure risk assessment through to translating a myriad of government advice, scientific studies and sector practise.</p> <p>The passion and professionalism of those who work for Queen Mary was evident, the COVID response was a collegiate, professional one which enabled rapid but well informed decisions to be made. As such the university led the way in reopening research labs and enabled seven research groups to start work and produce rapid results in the fightback against the virus.</p> <p>As this report shows the Health &amp; Safety Directorate remains vigilant and committed to the control of all workplace risks, not just COVID-19. As such we have continued to implement and drive improvements to ensure compliance and effective management of the university’s high hazard risks.</p> <p>There is no doubt that the Health and Safety Directorate has undergone its most pressured year ever but our versatility, expertise and supportive team work ethic has made us key in delivering health &amp; safety advice, support, reassurance, protection and enforcement across the university at a time when it has needed it the most.</p> |
| <b>QMUL Strategy</b>  | This paper considers the health and safety of our people, who are at the heart of everything we do.  |
| <b>Internal/External regulatory/statutory reference points:</b> | Health and Safety at Work Act 1974; Management of Health and Safety at Work Regulations 1999; and associated workplace health and safety legislation.  |
| <b>Strategic Risks:</b>   | This paper considers health and safety, compliance and reputation risks.   |

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|--|-------------------|--|
| <b>Equality Assessment:</b>                          | <b>Impact</b>     | No equality issues are raised in this paper.                       |
| <b>Subject to prior and onward consideration by:</b> |                   | Considered by Audit and Risk Committee 11 November 2020            |
| <b>Confidential under FOIA/DPA</b>                   | <b>paper</b>      | No   |
| <b>Timing:</b>                                       |                   | This is an annual report   |
| <b>Author:</b>                                       |                   | Rebecca Jones, Director of Health and Safety                       |
| <b>Date:</b>   |                   | 30th October 2020  |
| <b>Senior Sponsor</b>                                | <b>Management</b> | Jonathan Morgan, Chief Governance Officer and University Secretary |

# Health and Safety Annual Report

## Introduction

This report covers the period 1<sup>st</sup> August 2019 to 31<sup>st</sup> July 2020 and gives details of the health & safety management system within QMUL. It provides a summary of QMUL's delivery of its health & safety policy and operational management of risks during the period as well as outlining plans for the year ahead.

## 1. Governance / Management of Health & Safety

### 1.1 Changes to Health & Safety Directorate structure

In November 2019 the Health & Safety Directorate (HSD) moved under the Office of the Principal. This has allowed the Directorate to operate as an independent entity measuring health, safety and compliance across all Schools / Institutes & Directorates. It has sent a visible message to all areas that Health & Safety is a fundamental part of the university business and given the Directorate the status required to drive improvements and ensure compliance.

There have been changes to the staffing levels within HSD with the retirement of the Fire Safety Manager, whilst the Senior Fire Adviser is acting up, due to the current recruitment situation the Directorate has not been able to recruit the PS H&S Manager/Training Lead or replace the Fire Adviser. This situation has been kept under constant review in consultation with senior management. As fire safety has not been at the forefront of the university's COVID response the current level fire safety resource has been sufficient, however moving forward this lack of resource is a risk for the Directorate and plans are in place to add capacity. The PS H&S Manager role would have been hugely beneficial over both COVID response and continued infrastructure compliance, and the lack of this position has stretched the management level of the Directorate, who have reallocated the responsibilities of the role between them. In July the Head of HSD was promoted to Director and reports to the Head of the Principals Office.

The Director has a governance interface with the senior executive team through frequent meetings with the Chief Governance Officer and via direct communication with the Principal should it be necessary to escalate or brief on a health & safety issue. This visible senior leadership link has been essential during the coronavirus pandemic and has allowed proactive health & safety measures to be put in place quickly in response to fast changing government advice. HSD also provides a number of specialist functions including biological, chemical and fire safety advice. The importance of these functions have become paramount during the pandemic, due to the technical knowledge the team has we have been able to interpret complex information about the virus and provide practical advice and prompt answers.

### 1.2 Health & Safety Advisory Group (HSAG) & Management Sub Groups

The following H&S Management Groups met once a semester during the reporting period with their minutes presented formally at HSAG.

- **Science and Engineering Health and Safety Management Group**
- **School of Medicine and Dentistry Health and Safety Management Group**
- **Humanities and Social Sciences Health and Safety Management Group**
- **Fire Safety Management Group**
- **Biological and Genetic Modification Safety Committee**
- **Radiation Protection Safety Committee**

Committees had attendance from recognised staff trade unions and the student union body in line with Safety Representatives & Safety Committees Regulations 1977. The trade unions raised concerns during the year about the level of representation on HSAG and governance during the pandemic, which the University responded to. In September it was agreed with the trade unions that HSAG would meet monthly for the foreseeable future during the pandemic, the first of these extra meetings took place in October.

### 1.3 Health & Safety Legislative Updates

**Coronavirus Act** -The Coronavirus Act came into force on 25 March 2020. Key guidance for higher education institutions was issued by the Department for Education and is being updated regularly. QMUL is fully compliant with appropriate COVID-Secure risk assessments and findings implemented and monitored.

**Fire Safety Bill** - The Home Office introduced a new Fire Safety Bill to improve fire safety in buildings in England and Wales. The bill was introduced in the House of Commons on 19 March 2020 (Bill 121). It amends the Regulatory Reform (Fire Safety) Order 2005 to clarify that the responsible person or duty-holder for multi-occupied, residential buildings must manage and reduce the risk of fire for the structure and external walls of buildings, including cladding, balconies & windows and entrance doors to individual flats. This clarification will empower fire and rescue services to take enforcement action and hold building owners to account.

Following the Grenfell Tower Fire significant changes have been made to Approved Documents B, the building regulation in England covering fire safety matters within and around buildings. They have been redrafted to clarify the language and content in line with the style and guide for approved documents. In January 2020 it was announced that a new National Building Safety Regulator is to be established by the Health and Safety Executive.

**Brexit** - Minor amendments have been made to regulations to remove EU references, but the legal requirements for employers remain the same as before.

**EH40/2005 (updated to 4th Edition)** - In January 2020 the HSE published a revised version of EH40/2005 which details new and revised Workplace Exposure Limits for 13 carcinogenic substances. These revised limits have been communicated to Schools and Institutes as they require staff and students using these substances to review their COSHH risk assessments to ensure exposure is controlled to as low as reasonably practicable.

**Welding fume risk** - HSE has revised its Control of Substances Hazardous to Health (COSHH) direct advice for welding and have produced a number of COSHH advice sheets. This information has been communicated to relevant QMUL areas and the Estates Directorate so any staff conducting welding activities can familiarise themselves with these advice sheets.

#### **1.4 Regulatory visits/responsibilities**

1. The Environment Agency permit surrender for a radiation source at Whitechapel was completed by the Radiation Protection Officer in March 2020.
2. There were no scheduled Environment Agency or HSE Inspections for ionising radiation protection this academic year. Shortly after the lockdown commenced, a new Environment Agency Inspector asked HSD to complete a survey to ascertain that adequate measures for radiation protection were in place for the pandemic lockdown period, the Inspector identified no concerns.

## **2. High Hazard Health & Safety Risks**

This section focuses on the high-hazard health & safety risks facing the university as classified by HSD's knowledge-based assessment and updates the annual report of 2018/19.

### **2.1 Ionising and non-ionising radiation safety management**

The HSD led radiation area inspections were conducted physically at Mile End and Whitechapel in the spring semester this year before the pandemic lockdown, arising issues were mainly related to the upgrade of Radiation Local Rules, updates of risk assessments and simulated emergency drill practices. Ionising radiation user face to face training took place before lockdown with good level of attendances by ionising radiation source users (open, sealed and x-rays).

The decommissioning of a mothballed radiation lab in the Fogg building was commenced early March but due to the lockdown was halted, this will resume during the autumn semester of 2020. The radiation lab bay in the Blizzard building was re-instated for use in autumn 2019 after cleaning and decontamination validation. A maintenance upgrade to the 2 standalone radiation waste stores for fire detection and ATEX protection standards was completed in November 2019.

In relation to electromagnetic fields generating equipment (non-ionising radiation), a generic risk assessment template has been produced by HSD for areas to utilise, in conjunction with previously issued guidance and procedure documents. The Science & Engineering H&S manager attended PHE training on the Management of LASERS in March 2020. A new policy on Artificial Optical Radiation was developed and introduced, and subsequent to this a management system for the registration and risk assessment of LASER systems within QMUL has been established. This will be a rolling programme which has started in SEMS and will progress to each area in turn.

## **2.2 Biological (pathogen and other biohazards) and GMO safety management**

Twenty three risk assessments for pathogen and GMO work were peer reviewed, classified and approved in four Biological and Genetic Modification Safety Committee (BGMSC) meetings held during this year. One extra meeting was held in April 2020 to progress approval for deliberate work projects with SARS-CoV-2. One risk assessment involved a clinical gene therapy trial and 12 risk assessments involved projects with SARS-CoV-2 virus or samples containing the virus, including one for a commercial company (Novacyt) SARS-CoV-2 testing kit validation.

The Biological Safety Adviser has assisted the set-up of a GMO COVID vaccine clinical trial (Janssen / Johnson & Johnson) by QMUL and Barts Health NHS Trust with site inspections, site set up, training of staff and risk assessment advice and review during Aug into Sept 2020. The Biological Safety Adviser also assisted the London Clinic who are participating in the haemophilia gene therapy trial in their site GMO use notification to the regulator, risk assessment, training and infrastructure set up.

HSD inspected the Containment Level 3 (CL3) laboratories in the Fogg / Blizzard / Abernethy Buildings during Dec 2019 and made minor amendments to improve safety procedures. As the full CL3 standards were maintained in terms of infrastructure and procedures, this proved very easy for SARS-CoV-2 work to commence at the Whitechapel CL3 suites in March / April 2020. The Blizzard CL3 Code of Practice was substantially revised in May 2020 to accommodate the new SARS-Cov-2 work and a CBA1 'wild type pathogen' notification was completed by HSD and submitted to the HSE who approved it.

New biosafety risk assessment templates for notifiable and non-notifiable biosafety projects were issued by HSD in March 2020. Procedure documents for human samples work, phlebotomy and COVID-19 decontamination were also drafted by the Biological Safety Adviser and issued to researchers returning to campus in May 2020 onwards.

HSD has worked with Estates and Schools / Institutes to improve the system for ongoing maintenance and statutory compliance testing of safety cabinet systems; a meeting was held with Maintenance managers in July 2020 to identify integrated maintenance testing and possible future integrated control systems for the CL3s at Whitechapel.

HSD and the BGMSC are continuing to work with the Biological Services Unit, the new Occupational Health provider OHWorks (from 1 Aug 2020 onwards) and Institutes in the School of Medicine and Dentistry to improve adherence to the use of personal protective equipment during work when animal allergens may be released including face fit testing of respiratory protective equipment. Specific training information was included in the Biosafety courses from autumn 2019 onwards identifying the hazard and preventative measures required for control of respiratory sensitisers. Due to the lockdown and OH service provider change, there may be a possibility of gaps arising in compliance. Evaluation with Safety Coordinators and OHWorks is ongoing to analysis this.

## **2.3 Hazardous substance safety (chemicals, solvents, compressed gases, cryogenics)**

The QMUL H&S Compressed Gases Cylinders Policy, drafted by HSD, was agreed at HSAG and communicated to all Schools, Institutes and Directorates.

A new Chemical (COSHH) risk assessment template was developed and rolled out across the University and the hazardous chemical waste process moved to be managed by the S&E H&S Adviser who introduced a new procedure, labelling and disposal system in January 2020. This will require further monitoring and review in the next academic year as it has highlighted other deficiencies in local waste management arrangements. Liaison with the University waste contractor has resulted in a strong working relationship and management of the HSD operated waste stores being greatly improved. Materials are well segregated according to hazard classification and a live inventory of contents is held electronically. A new laboratory door signage template has been developed and rolled out. It clearly identifies PPE requirements, hazards present and local contacts in a standardised format. It is hoped that with incorporation into training it will assist non-laboratory staff in entering hazardous areas.

## **2.4 Infrastructure and safety in the built environment**

### **Asbestos**

EAF appointed an internal full time Asbestos Manager in October 2019 and have procured an electronic asbestos register that is now live. Access for all stakeholders is being discussed with the software provider

(OMNI) with user training to follow. Four consultancies have tendered for asbestos consultancy services. These are currently being evaluated by Estates with a decision to be made by the end of October. The intention is to appoint two asbestos consultancies under contract for 5 years. Once appointed the programme of asbestos management surveys will be agreed and split between the two consultants. These surveys will feed into Estates risk based asbestos remediation plan.

### **Legionella Control**

Estates continue with their 3 year programme for legionella risk assessments across all buildings. In the reporting period the Water Treatment Contractor have undertaken works to install chlorine dioxide units and remove calorifiers at Charterhouse Square.

Additionally they have removed mouth pieces on drinking water fountains to reduce touch points as a COVID Secure measure.

### **Zurich Inspections (Statutory)**

The statutory LOLER and PSSR inspections by Zurich Insurance have continued throughout the lockdown period and reports issued through the Crimson system, with recommended actions completed by respective contractors.

BTU (new HVAC contractor) are now fully mobilised. Plant and systems are being validated and PPM's implemented. Due to COVID, BTU have been concentrating on ventilation plant to ensure that all occupied spaces have good ventilation and air changes per hour in line with CIBSE and HSE guidance.

Whilst some progress has been made on Local Exhaust Ventilation (LEV) compliance issues, this was heavily impacted by the pandemic and switch in priorities to the management of the COVID-19 response. Any possible heighten risk level was mitigated by the reduction in occupancy and system use due to lockdown. A revision of the LEV policy was started and this will provide a defined standard criteria for the design and operation of the systems. With BTU now mobilised the *Thorough Examination and Testing of LEV* (a requirement of COSHH) is with Estates to manage through this contract.

## **2.5 Fire Safety**

There were 179 fire alarm activations during the reporting period (See Appendix 3).

Contractor actions accounted for 11 actuations in non-residential buildings, including during works ongoing during lockdown, and were either caused by dust contaminating automatic smoke detection or physical contact with fire alarm equipment. There were 4 known smoking related incidents.

The majority of activations in residential buildings were attributed to cooking fumes from kitchens or steam from showers. There were 14 malicious actuations. The age and condition of the fire alarm systems in some residences can be attributed to the sensitivity and number of false alarms along with the poor siting of the detectors. This has been investigated to prevent disciplinary action being taken where a device could be at fault. New systems have and continue to be installed by QMUL's fire alarm specialist contractor.

There were 13 known actuations attributed to the new Thermal Imaging Fire Detection cameras fitted to monitor Fielden House they were all false alarms/ fire alarm calibration faults; the system is currently working satisfactorily.

### **Fire Investigations**

There were 6 fires during the reporting period, no injuries were sustained. The Fire Brigade attended 3 of the incidents but there were no post fire related visits made by regulatory inspecting officers. The Fire Safety Team led the investigations which identified actions to address deficiencies in mandatory training and control measures for the Schools /Estates to implement.

- Engineering Laboratory 1.43 Chemical fire: - An uncontrolled disposal of chemicals ignited. The Fire Brigade Borough Commander praised the effective management of the incident by QMUL.
- Joseph Priestly 3.03 laboratory: - Due to incorrect use of furnace by students when making glass.
- Joseph Priestly Nano Force: - A plastic centrifuge melted and dripped on to the live electrical transformer at the rear of a furnace, causing a short circuited and a subsequent spark which ignited the molten material.
- Blizard Building: - A small electrical fire burnt cables on a solenoid valve in a plant room.

- Dawson Hall student kitchen: - An unattended tin of wax left in a pan of boiling water on an electric hob ignited.
- John Vane Science Centre: - Caused by an electrical fault with an oil pump to an air compressor.

## Fire Risk Assessments

Twenty fire risk assessments were carried out in the reporting period. Of the 248 actions arising from these risk assessments, 162 have been closed, 34 are ongoing and 52 have no action recorded. These 'no actions' are followed up with the relevant area by the Fire Safety Team on a scheduled basis.

In June 2020 the fire safety team commenced a review of all outstanding actions for current Fire Risk Assessments dating back to February 2017 and including assessments completed in March 2020. One hundred and thirty actions (81 Academic – 52 Residential) had not been addressed or commented on. None of these were high risk actions. Upon investigation Fire Safety found some actions are subject to budgetary restraints and will have to be addressed in next financial year's LTM funding. The review succeeded in reducing the total outstanding actions by 57% and there is a probability that some of the actions have been done and could be closed, as such the risk to the university is tolerable but a culture change is required so that FRA actions are looked at when the assessment is first circulated then updated to indicate management actions rather than the action ignored and reliant on a small central team repeatedly chasing these up to ensure completion.

## Fire Safety Training

Fire awareness training was undertaken on QMPlus by 2113 staff and students in the reporting period, additionally 97 staff were classroom trained as Fire Marshals and 28 existing Fire Marshals refreshed their training. The HSD team will soon be delivering fire marshal training via classroom and MS Teams.

## Covid-19 and Fire Safety

In March, prior to lockdown, the Fire Safety Team developed an Emergency Evacuation procedure and Generic Emergency Evacuation Plan in line with Government guidance to ensure all staff, students and Contractors understood how to evacuate Queen Mary buildings during the COVID-19 pandemic.

## Fire Progress Works

1. Thermal imaging cameras have now been installed between Fielden House and Francis Bancroft Building. There has been no further progress on removal of timber cladding on Fielden House.
2. Passive Fire Protection works, including fire doors, have been completed by a specialist contractor in a number of residencies. The same contractor has ongoing works scheduled for fire door repairs and replacements across all residential and academic buildings.
3. The PV panels have not yet been removed from the Fogg Building; Capital Projects have scheduled for removal once contractors commence the works.
4. Empire House fit out was completed and a pre-occupation fire risk assessment has been circulated.

## Projects

The Fire Safety Team have been involved in advising and signing off requirements in the following Projects over the reporting period:-

|                    |   |
|--------------------|---|
| <u>Mile End</u>    | Engineering Building combined with Joseph Priestly; Fogg Building, SBM Heating Pods, Library, Queens Building Restack |
| <u>CHSQ</u>        | Rotblat & Old Anatomy, Wolfson Institute, Robin Brook Centre  |
| <u>Whitechapel</u> | QMUL/Barts Life Sciences University Enterprise Zone   |

The Fire Safety Team continues to work closely with the Estates and specialist contractors for Fire Detection & Alarm systems, Electrical & Emergency Lighting and Passive Fire Protection.

## Fire Safety China visit

In January 2020 the HSD Fire Safety Adviser visited the joint programmes in China to inspect the locations where Science & Engineering staff & students work and study. It is recognised that health and fire safety procedures in China will differ from those in the UK, however Queen Mary have a duty of care to staff and students and wherever possible recommendations to improve their safety should be adopted. The main focus of the visit was life safety and the emergency building evacuation arrangements. The findings were shared with S&E Faculty Executive and SEMS.

### 3. Operational Health & Safety

#### 3.1 Training Programme

During this reporting period, a total of 3368 delegates were trained by HSD across 26 different health and safety training courses (Appendix 1). This is a significant increase from the previous 12 months (1499), which is mainly attributed to certain courses being available on QMPlus. However, it is a great achievement for the team, particularly considering that the training programme has been so significantly affected by the pandemic.

HSD acted quickly to undertake a review of the training programme and consider alternative methods of delivery. As a result all existing online training modules were updated to make reference to COVID-19 and courses were prioritised according to business needs. Despite challenges some training has taken place face to face in a COVID secure environment, for example First Aider Requalification. Also, a number of manual handling, working at height and lab safety for non-research staff training sessions were delivered to 129 Estates and Facilities staff on campus in June and July. Many EAF staff were classified as essential workers and were therefore working throughout the lockdown period, so it was important that HSD were able to provide support to those staff and their teams during this time. Very positive feedback was obtained from the delegates who attended these sessions.

Additional hazardous substances risk assessment (COSHH) courses were delivered in semester one to address an action identified in an investigation following a lab-related incident, as well as to enable relevant staff to complete in order for them to be granted access to lab areas. Staff previously trained were encouraged to undertake a refresher to ensure that they were aware of the new COSHH assessment form and updated procedures for hazardous waste management that HSD had brought in.

Moving forwards HSD have plans in place to deliver both online and face to face and are consulting with stakeholders to see whether a course can be adapted for QMPlus, for example the First Aid Awareness module in order to help in areas where there may be a lack of trained first aiders onsite due to a number of staff splitting their time between working on campus and from home.

#### 3.2 Audit & Inspection Programme

##### 1. Audits

The following audits were undertaken during the reporting period:

- QM Bio – H&S Management System Audit. Key findings included the reviewing of H&S policy and associated documents, development of procedures for receiving deliveries of chemicals and a review of the fire and emergency procedures.
- Fire Safety – QMUL Residences – A desktop based audit was completed which focused on fire risk assessments and the maintenance, testing, operation and understanding of fire alarm systems, procedures and equipment. Key findings included the need to monitor outstanding fire risk assessment actions more closely to ensure they were completed and the lack of fire safety system testing and inspection records.
- Biological Services Unit (BSU) – H&S Management System Audit. The majority of planned interviews were undertaken in February 2020, however the site tour had to be cancelled due to lockdown. This audit is still ongoing at present but the lack of a physical site visit has not impacted the risk level as the areas were already working on implementing improved procedures.

The H&S audit programme was suspended due to lockdown as resources were required to develop procedures and guidance in relation to COVID-19 and support Directorates & Faculties with their COVID-19 management arrangements. Outstanding actions for the H&S Management System audits continue to be proactively monitored by the H&S Audit Lead as well as through the Faculty H&S Group Committees. Outstanding actions of the Fire Safety Audit of Residences audit are monitored through the Fire Safety Management Group. Summary update reports are provided to the Director of Health and Safety for discussion with the Chief Governance Officer monthly. Since the H&S audit programme began in December 2017, a total of 370 actions have been identified which can be broken down into 68 high, 200 medium and 102 low priority actions. As at July 2020, there were 53 outstanding actions which could be broken down into 6 high, 28 medium and 19 low priority items.



To provide some context, a summary of the outstanding high priority actions identified in the H&S Management System audits is provided below, HSD are actively involved in practical measures with the Schools / Institutes to address these hazards.

| School / Institute / Directorate | Recommendation   |
|----------------------------------|--|
| SBCS                             | Priority should be given to the relocation of the large volume Liquid Nitrogen Dewar on the 4th floor of the Fogg Building. In the meantime, ensure the oxygen detector is checked daily for faults, continue to test it weekly and service it every 6 months.   |
| SBCS                             | Investigate ways the emergency shower could be used safely in its current location. The shower should be purged weekly to prevent build-up of legionella   |
| SBCS                             | Issue regarding the roof lab in JP building. One recommendation would be for an in / out board to be displayed which clearly shows whether anyone is in. This would also assist fire marshals with their checks in the event of an evacuation.   |
| EECS                             | It is recommended that a formal system is implemented to ensure periodic spot checks or observation of activities are carried out.   |
| Barts Cancer Institute           | The gas supply to all BCI labs has been disconnected until such times as the shut off controls can be installed. This has been added to the LTM programme, but to date there has been no information advising when the shut off devices will be installed. The lack of gas supply has encouraged people to bring in their own gas canisters which is introducing an additional risk. |
| Barts Cancer Institute           | There were some concerns raised around the controls in place for maintenance operatives/contractors accessing potentially hazardous areas without permission. The Institute should liaise with Security to review access control.  |

With regards to the Fire Safety Audit for Residences, a total of 18 actions were identified which can be broken down into 10 high, 6 medium and 2 low priority actions. A summary of the outstanding high priority actions are provided below:-

| Item   | Recommendation  |
|--|---|
| Cladding   | Ensure that all recommendations provided in relation to managing cladding on QMUL buildings are implemented and records kept of all actions taken   |
| Emergency Lighting   | Due to the lack of emergency lighting records, it is imperative that the contract with Dennis Johns is closely monitored through a robust contract management procedure. EAF must be satisfied that they are provided with all records and they implement a system to ensure that these are stored in a way which makes them readily available for audit and inspection purposes.   |
| Servicing of Emergency Evacuation Chairs                             | Whilst there are no evac chairs in student accommodation premises, it is recommended that evacuation chairs across QMUL should be serviced on an annual basis to ensure they remain in good working order. Records of these checks should be kept   |
| Servicing and Inspection records for Fire Safety Systems and Devices | Records are not available for a number of checks and servicing of fire detection systems and equipment. A robust system should be developed to ensure that all required servicing, maintenance and inspections are undertaken and records kept, including details of any remedial works undertaken where defects are identified to ensure there is a full audit trail. Comprehensive records should be available for the servicing, testing and inspections of a range of fire safety systems such as: Fire alarms, Smoke / Heat detectors, Fire Doors, Automatic opening vents |
| Contractor Management  | Technifire Solutions have been appointed as the contractor to service and maintain life safety systems from January 2020. This should ensure that all required checks and tests will be carried out and records will be available in future. However, it is imperative that that this is monitored through a robust contract management procedure in order to ensure standards do not slip over time.   |
| Standard for Nominated Private Providers                             | It is recommended that a standard is agreed which defines the documentation that is required to be obtained by QMUL from nominated private providers. <i>Update – A comprehensive checklist has been developed in order to ensure that the appropriate documentation is obtained, however the action will remain open until the checklist can be used during a site visit to test its effectiveness in practice.</i>  |

## 2. Inspections

HSD inspections aim to proactively identify any issues before they cause injury, ill health or damage. They also provide an indication as to the effectiveness of the local H&S management systems in place. HSD has a rolling programme of these done in conjunction with local managers, safety coordinators and trade union representatives.

Unfortunately, the planned inspection programmes have largely been affected by the pandemic and will resume at a later date. These delays have not significantly increased risk for the university as HSD have closely monitored areas as they phased in their return from lockdown and undertaken inspections of areas alongside staff from Schools / Institutes and Directorates to advise and ensure the spaces are COVID Secure. This has been well received by school managers who have commented that they felt it invaluable having the input of HSD on the ground to walk the routes, help with space planning and ask any direct operational

COVID secure questions as it offered them reassurance when they were often wary whether the measures they put in place were sufficient.

### 3.3 Accidents & Incidents

During the reporting period there were 7 RIDDOR incidents. Details as follows:-

- a. Injured party (student) hit their head whilst dancing in the SU and were taken to hospital.
- b. Injured party (student) fell down the stairs in Arts Two and broke their ankle.
- c. Injured party (student) struck by metal skirting left against a wall and taken to hospital
- d. Injured party (staff) fell whilst pushing a trolley, absent over 7 days.
- e. Injured party (staff) climbed on a chair to clean and fell, fractured wrist.
- f. Injured party (staff) fell off office chair, absent over 7 days.
- g. Injured party (staff) slipped outside, absent over 7 days.

In all cases, the HSE have been satisfied with HSD investigations, cause analysis and recommended actions and have not undertaken follow-up visits.

Accident and incident data for the current reporting period is shown in Appendix 2. A significant proportion of accident types are exposure to a harmful substances. These relate to incidents within SEMS and SBCS, both of whom have taken on board the lessons learnt and recommendations from the incident investigations. In addition, in response to the slips/trips/falls data HSD have worked with Estates to provide practical controls such as recommending changing the times floors are cleaned and suggesting the one-way movement of goods.

## 4. Challenges to 2019-20 plans and HSD response to COVID-19

It is testament to the whole HSD team that throughout the extremely challenging and stressful period from March 2020 onwards they operated in a collegiate, professional manner at the vanguard of QMUL's response. The effectiveness of this response has relied on two elements; a risk-based approach to working, and a positive safety culture within the organisation at both an operational and strategic level.

Actions completed by HSD during the pandemic included:-

- The immediate development and interpretation of HSE workstation guidance to support QMUL colleagues manage the initial lockdown and adapt to temporary period of working from home.
- The creation of an Institutional COVIDSecure risk assessment by the Director of HSD which became the cornerstone of all COVID-19 measures that were subsequently initiated at the university and also used sector wide.
- The writing of a suite of COVID-19 Secure Procedures by the HSD team following interpretation of the Government guidance issued continuously from May 2020 onwards. These documents were uploaded to a newly created HSD webpage and underpinned the Institutional Risk Assessment, explaining in operational detail what needed to be done, and by whom, in order to achieve a COVIDSecure university community. The documents included:
  - Administration of first aid during the COVID-19 pandemic
  - Emergency evacuation and assembly point guidance during the COVID-19 pandemic
  - Cleaning and disinfection of surfaces and spaces procedure
  - Return to campus risk assessment procedure
  - Face coverings guidance (this was later updated and became a policy document)
  - Travel to and from work guidance
  - Social Distancing guidance
  - Face to face meeting protocol
  - Hierarchy of control checklist to be used by any areas or departments wanting to move from 2m to 1m+ social distancing
  - Personal hygiene and gloves guidance
  - Decontamination guidance
  - Taking care of your hands guidance
  - Managing thermal comfort whilst ensuring adequate ventilation

<http://www.hsd.qmul.ac.uk/covid-19-secure-procedures/>

- The successful reopening of research labs on campus. The Director of HSD acted as Deputy Chair to the research re-opening group which, over a time period of 3 weeks, successfully met the ambitious deadline of COVID Secure reopening of research labs on 2<sup>nd</sup> June. As part of this HSD created a COVID Secure risk assessment template for lab areas to use to develop their local COVID Secure risk assessments and identify arrangements. Meetings and support was provided to lab managers throughout this process. The Director of HSD identified a number of building assurance life safety / compliance areas that EAF needed to address prior to any 'mothballed' buildings coming back on line. These were checked by the HSD Director and Research Director on a weekly basis, alongside the local lab COVID Secure risk assessments and both Directors then made a formal 'Go/ No Go' reopening recommendation to SET. This was an extremely successful collegiate partnership which meant Queen Mary Research Labs were opened in a COVID Secure way far ahead of others within the sector.
- HSD expanded the risk assessment template and added user guidance for all Faculties and Directorates to develop their local COVID Secure risk assessment and identify arrangements for returning to campus. Meetings were held with School Managers and Heads of School to talk them through the return to campus process, as well as supporting them develop their H&S arrangements.
- On campus face to face training was delivered to essential Estates staff to support them in their work during the pandemic.
- Enabling CL3 and CL2 laboratories to commence work with SARS-CoV-2 virus and human materials rapidly in line with GOV.UK requirements and existing H&S legislation.
- Instigating a MS Teams system for Building Based First Aiders whereby first aid advice can be offered remotely.
- Carrying out a rapid laboratory clinical waste needs assessment at the start of lockdown so that the changing needs of laboratories could be met. This included early SARS-CoV-2 research in the CL3 labs and COVID-19 diagnostic sample handling at Charterhouse Square. The early establishment of COVID-Secure arrangements for the clinical waste contractor ensured that there was no break or reduction in service. To expedite the safe disposal of potentially SARS-CoV-2 contaminated PPE used by cleaning staffs, HSD extended the laboratory clinical waste stream to include Estates. Clinical waste consumables, guidance and training documents have been provided by HSD which includes the safe packaging and movements of clinical waste and the donning & doffing of PPE. This was then extended further to include the Residential Support Team.
- HSD attended webinars as guest speakers to provide advice and guidance around staff's wellbeing during lockdown and set up a Mental Health support forum on QM Plus.
- HSD staff were involved in the PS Conference and presented awareness sessions in relation to Mental Health Wellbeing and Physical First Aid.
- On campus support was provided to all areas as required. This included assessing COVID secure occupancy levels and inspecting areas to determine how social distancing could be achieved.
- HSD Director was a member of the Silver Response Group, Research Labs reopening group, Return to Campus steering group, Covid JCF group and COVID -19 Management Group as well as accompanying the Principal when he hosted a government cabinet visit and liaising with PHE and the HSE when required. HSD managers attended various COVID operational groups including the Research Labs Re-opening Monitoring Group and Education 3.1.5. Ad hoc meetings were also convened with the Director with Estates to discuss COVID cleaning & decontamination regime, ventilation and space management concerns.

Whilst the pandemic has unarguably been a huge threat to communities and the economy, one welcomed consequence is an improvement in safety culture at all levels. The prominence of the pandemic across news and media outlets has resulted in a better understanding on matters related to health and safety. Heads of School and Directors have become experts on assessing invisible hazards, completing risk assessments and monitoring control measures. The pandemic has made them realise, more than any H&S training could do, the health & safety responsibilities inherent in their roles.

There have been a number of areas where this positive culture has been evidenced:

- Staff keeping abreast of the latest government guidelines and implementing them in order to remain safe. What has been particularly welcoming is that this has come from all quarters; from operational staff working at the 'coalface', such as our scientists working in our laboratories, cleaners, caterers, security and maintenance personnel, as well as line managers who have prepared Covid19 secure risk assessments. Similarly, the Senior Executive Team have taken the necessary steps at a strategic

level to keep our students and staff safe whilst delivering on core business objectives of education and research.

- Staff have been kept informed about what measures QMUL are taking to protect their safety in regular updates from the Principal and the continuously updated Covid19 pages on Connected.
- That the Principal has been open and honest about the structural pressures QMUL now faces as a result of Covid19 has meant that staff know where they stand, and their fears can be allayed.
- Staff have been afforded opportunities to voice their concerns, and often they have also been the providers of solutions. An example occurred in training carried out by HSD during the lockdown. Not only did the frontline staff (cleaners and porters) have an understanding about 'hidden hazards' in our Laboratory Safety for Non-Research Staff training, they knew about the hierarchy of control measures and what control measures were needed to mitigate the risks involved.

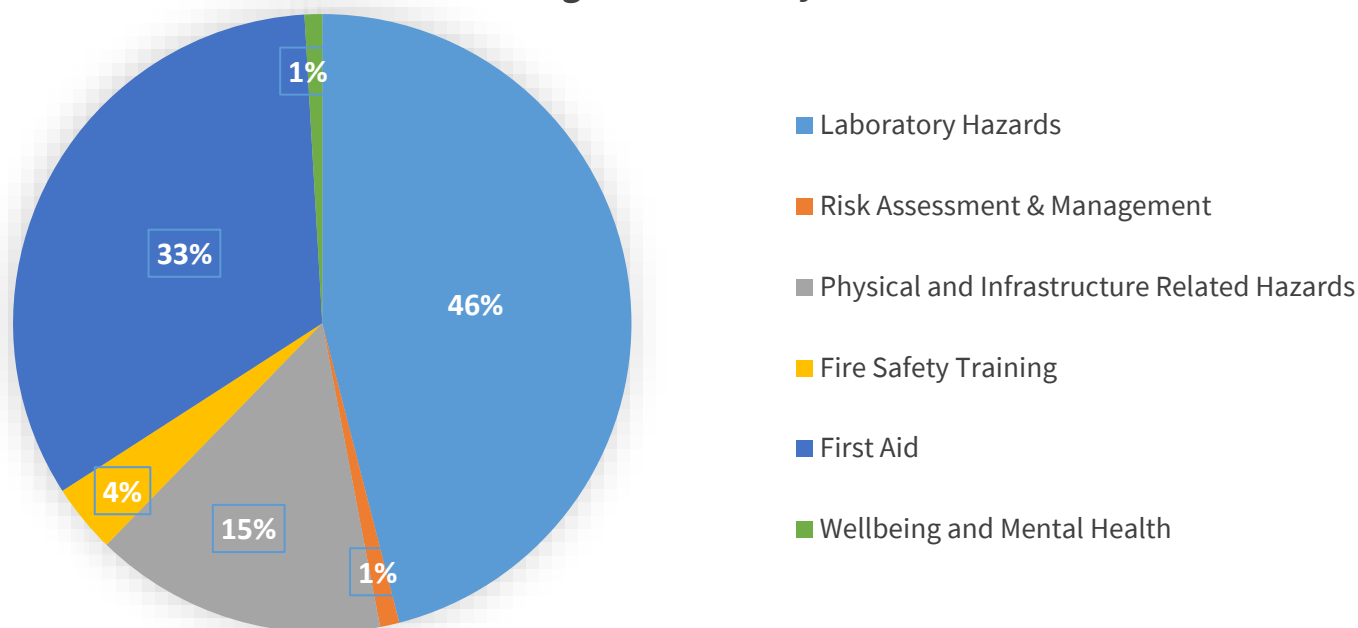
## 5. Objectives for 2020/2021

- To continue to support all Faculties and Directorates plan their return to campus and their activities in a COVID Secure way.
- To plan and undertake topic-based audits. This will be completed in conjunction with Estates and consider topics such as contractor management, working at height and lifting equipment.
- Roll out of the risk assessment training on QMPlus.
- Introduction of a Hazardous Chemical Waste course to supplement the Risk Assessment course.
- Completion of the QM corporate Health and Safety induction video for all new QMUL staff.
- Continue the roll out of the LASER management system throughout all areas at QMUL.
- Work with relevant Schools on improving local hazardous waste arrangements so that disposal routes are clearly defined through the risk assessment process and implemented.
- Continue to work on reducing the holdings of chemicals within laboratories to manageable levels; this will be through liaison with laboratory managers and Safety Coordinators. Whilst there will be a cost implication it will reduce the overall risk profile of QMUL and hopefully prevent further incidents. The University would benefit from an integrated chemical inventory system that is used by all areas; this would allow sharing of materials and tighter control around purchasing of highly hazardous or restricted materials.

Rebecca Jones  
Director of Health & Safety

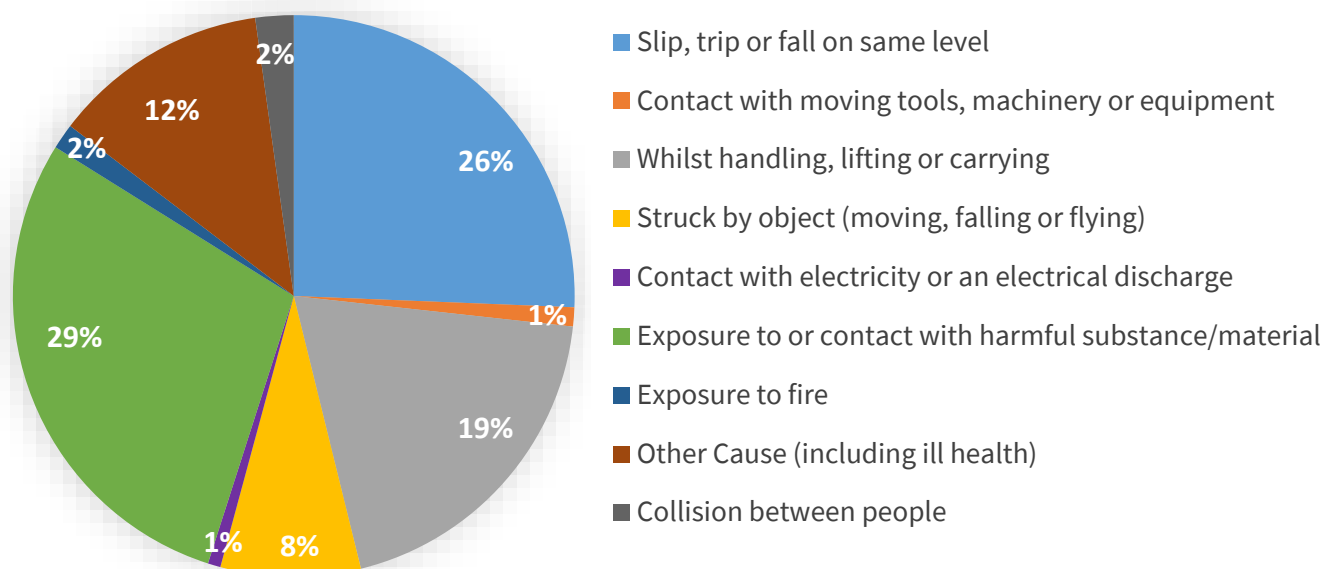
30<sup>th</sup> October 2020.

## Appendix 1 - Health and Safety Training August 2019 - July 2020



| Topic Category of Training                         | H&S Training Course                             | Total Attendance |
|--|---|------------------|
| <b>Laboratory Hazards</b>                          | Decontamination and Sterilisation of Labs       | 11               |
|  | Containment Level 3 Principles And Practices    | 32               |
|  | Hazardous Substance Risk Assessment (COSHH)     | 300              |
|  | GM and Bio Safety for Clinical Trials Staff     | 59               |
|  | GM Risk Assessment and Notification             | 77               |
|  | Bio Hazards and GM Agents Refresher             | 34               |
|  | Safe Management of Lab Hazardous Waste (QMPlus) | 839              |
|  | Selection of Lab PPE                            | 9                |
|  | Working Safely With Biological Hazards          | 171              |
|  | Working Safely With Ionising Radiation          | 17               |
| <b>Risk Assessment and Management</b>              | IOSH Managing Safely                            | 17               |
|  | IOSH Working Safely                             | 8                |
|  | Risk Assessment                                 | 9                |
| <b>Physical Infrastructure and Related Hazards</b> | Introduction to Health and Safety               | 18               |
|  | Manual Handling                                 | 231              |
|  | Lab Safety for Non Research Staff               | 73               |
|  | Working at Heights                              | 184              |
|  | Hot Works Management                            | 9                |
| <b>First Aid</b>                                   | First Aid Skills Update                         | 9                |
|  | Emergency First Aid at Work                     | 20               |
|  | First Aid at Work                               | 12               |
|  | First Aid at Work Requalification               | 7                |
|  | First Aid for Specific Areas / Topics           | 48               |
|  | First Aid for Laboratory Workers (QMPlus)       | 1022             |
| <b>Wellbeing and Mental Health</b>                 | Mental Health First Aid                         | 31               |
| <b>Fire Safety Training</b>                        | Fire Marshal                                    | 121              |
| <b>Total</b>                                       |   | <b>3368</b>      |

## Appendix 2 - Accidents / Incidents August 2019 - July 2020



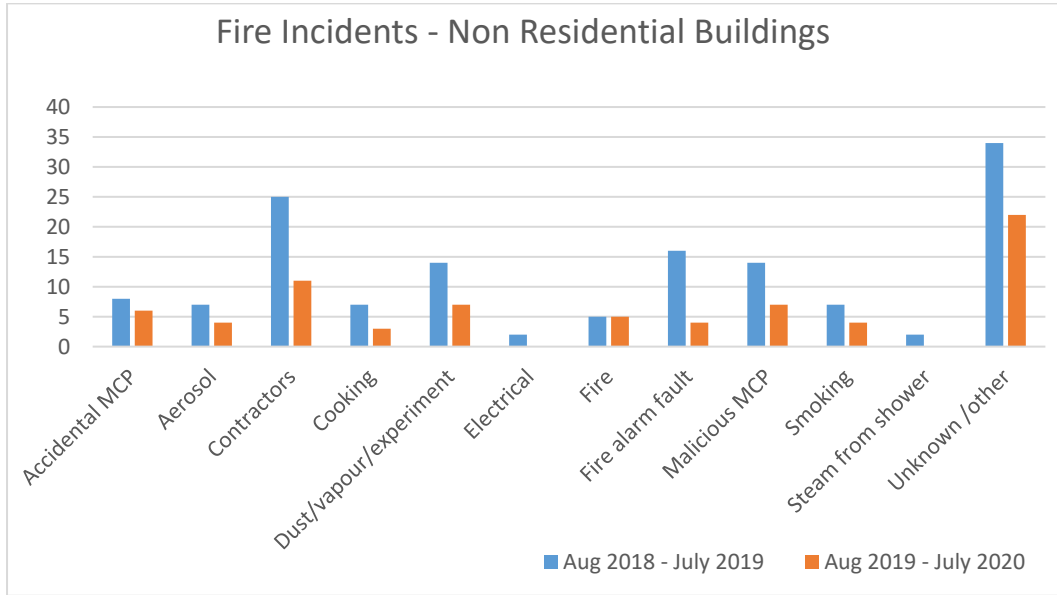
\*Please note that percentages are rounded up/down\*

| Accident / Incident types                              | Number of accidents / incidents |
|--|---------------------------------|
| Slip, trip or fall on same level                       | 70                              |
| Whilst handling, lifting or carrying                   | 53                              |
| Struck by object (moving, falling or flying)           | 22                              |
| Exposure to or contact with harmful substance/material | 79                              |
| Other Cause (including ill health)                     | 34                              |
| Collision between people                               | 6                               |
| Contact with moving tools, machinery or equipment      | 3                               |
| Exposure to fire                                       | 4                               |
| Contact with electricity or an electrical discharge    | 2                               |
| Injury by animal or insect                             | 1                               |
| <b>Total</b>   | <b>274</b>                      |

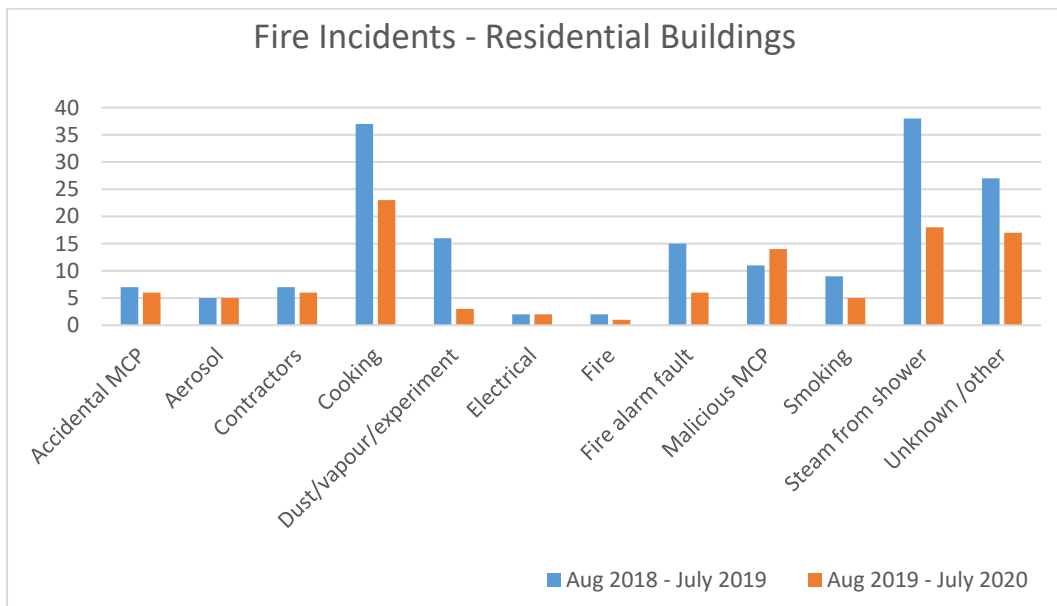
There were 210 near miss incidents and five incidents of service disruption in this reporting period.

| Accidents reported to HSE - RIDDOR                               |                                 |
|--|---------------------------------|
| Accident type  | Number of accidents / incidents |
| Slip, trip or fall on same level – Ref 1348 / 1489 / 1584 / 1593 | 4                               |
| Hit by something fixed or stationary – Ref 1255                  | 1                               |
| Struck by object (moving, falling or flying) – Ref 1371          | 1                               |
| Fall from height – Ref 1569                                      | 1                               |
| <b>Total</b>   | <b>7</b>                        |

## Appendix 3 – Fire Incidents



| Type of Fire Incident (Non Residential Buildings) | Number of Incidents  |                      |
|---|----------------------|----------------------|
|   | Aug 2018 - July 2019 | Aug 2019 - July 2020 |
| Accidental MCP                                    | 8                    | 6                    |
| Aerosol   | 7                    | 4                    |
| Contractors                                       | 25                   | 11                   |
| Cooking   | 7                    | 3                    |
| Dust / Vapour / Experiment                        | 14                   | 7                    |
| Electrical  | 2                    | 0                    |
| Fire  | 5                    | 5                    |
| Fire Alarm Fault                                  | 16                   | 4                    |
| Malicious MCP                                     | 14                   | 7                    |
| Smoking   | 7                    | 4                    |
| Steam from Shower                                 | 2                    | 0                    |
| Unknown / Other                                   | 34                   | 22                   |
| <b>Total</b>                                      | <b>141</b>           | <b>73</b>            |



| Type of Fire Incident (Residential Buildings) | Number of Incidents  |                      |
|---|----------------------|----------------------|
|   | Aug 2018 - July 2019 | Aug 2019 - July 2020 |
| Accidental MCP                                | 7                    | 6                    |
| Aerosol                                       | 5                    | 5                    |
| Contractors                                   | 7                    | 6                    |
| Cooking                                       | 37                   | 23                   |
| Dust / Vapour / Experiment                    | 16                   | 3                    |
| Electrical                                    | 2                    | 2                    |
| Fire  | 2                    | 1                    |
| Fire Alarm Fault                              | 15                   | 6                    |
| Malicious MCP                                 | 11                   | 14                   |
| Smoking                                       | 9                    | 5                    |
| Steam from Shower                             | 38                   | 18                   |
| Unknown / Other                               | 27                   | 17                   |
| <b>Total</b>                                  | <b>176</b>           | <b>106</b>           |