



### Health and Safety Annual Report

<b>Outcome requested:</b>	Audit and Risk Committee is asked to <b>consider</b> the annual Health and Safety Report for 2020/21.
<b>Executive Summary:</b>	<p>The attached Report provides a summary of the Queen Mary’s delivery of its health &amp; safety policy and operational management of H&amp;S risks thought the academic year 2020 – 21, as well as outlining plans for the year ahead.</p> <p>The Report provides a comprehensive update on the following areas:</p> <ol style="list-style-type: none"> <li>1. Governance/Management of Health and Safety</li> <li>2. High Hazard Health and Safety Risks</li> <li>3. Operational Health and Safety</li> <li>4. Objectives for 2021/22</li> </ol> <p>In addition, embedded throughout the Report is an overview of H&amp;S activity in relation to the ongoing Covid-19 pandemic, which has continued to have a profound impact on our approach to H&amp;S, as well as our day-to-day activities.</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.
<b>Equality Impact Assessment:</b>	No equality issues are raised in this paper.
<b>Subject to prior and onward consideration by:</b>	For consideration by HSAG and Audit and Risk Committee
<b>Confidential paper under FOIA/DPA</b>	No
<b>Timing:</b>	This is an annual report
<b>Author:</b>	Rebecca Jones, Director of Health and Safety
<b>Date:</b>	28th October 2021
<b>Senior Management Sponsor</b>	Jonathan Morgan, Registrar and Secretary

# Health and Safety Annual Report

## Introduction

This report covers the period 1<sup>st</sup> August 2020 to 31<sup>st</sup> July 2021 and gives details of the health & safety management system within Queen Mary. It provides a summary of the Queen Mary's delivery of its health & safety policy and operational management of risks during the period as well as outlining plans for the year ahead. This report also includes an update of wellbeing strategy and actions through the reporting period. The Reports cover these areas under the following headings:

5. Governance/Management of Health and Safety
6. High Hazard Health and Safety Risks
7. Operational Health and Safety
8. Objectives for 2021/22

It is not surprising that the past year has continued to be dominated by the ongoing global pandemic, the impact of which has cut across our full range of activities, either through having to respond to the changing external environment or modify our approach to key risk areas and activities. Health and Safety has been at the forefront of the University's response, in particular in developing and maintaining the University's Covid-19 Institutional Risk Assessment, working with Estates and others to ensure our campuses are Covid-secure, and creating a safe environment for our education and research activities to continue in a safe and compliant way. The health and safety impact/response to Covid is highlighted throughout the report, but it is important to highlight up front the profound impact it has had on our priorities and activities.

## 1. Governance / Management of Health & Safety

Queen Mary has continued to support the provision of resourcing for the HSD throughout the pandemic, when recruitment was limited to business-critical posts. This year we have successfully recruited a new Fire Safety Manager and Professional Services H&S Manager/Training Lead. Filling both posts allowed the directorate to move forward with proactive risk management of infrastructure hazards to ensure effective compliance. The recruitment of these senior positions has also increased the resilience of the team, with a larger group of established Managers able to deputise effectively for the Director on specific areas or where she is on leave.

The Director has an established governance interface, and escalation point, 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 any health & safety issue. This visible senior leadership link has been essential during the coronavirus pandemic and its continuation through HSD being part of the Office of the Principal has allowed proactive health & safety measures to be prioritised. HSD has been represented at a number of key pandemic response groups, including the Covid-19 Response Group, which is chaired by the Principal. HSD also provides a number of specialist functions including biological, chemical and fire safety advice. The importance of these functions has become paramount during the pandemic and with the technical knowledge the team possesses it continues to interpret complex information about the virus and provide practical advice and prompt responses.

### 1.1 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
- Estates & Facilities Strategic Health & 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. HSAG met regularly throughout the reporting

period to ensure effective H&S consultation particularly regarding the University pandemic response, the Committee Terms of Reference were updated in the reporting period.

## **1.2 Health & Safety Legislative updates which may impact Queen Mary**

**UK REACH** -The UK brought the European Union (EU) Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation into law on 1 January 2021, as UK REACH. UK REACH places equivalent responsibilities and standards on GB companies as they had under EU REACH. Existing EU authorisation has been carried over into UK REACH. Although some aspects of these regulations continue to apply to Queen Mary, there has been no change in responsibilities.

**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 updated regularly. Queen Mary is fully compliant with appropriate COVID risk assessments and mitigations with findings implemented and monitored.

**Fire Safety Bill - Fire Safety Bill** - The Home Office introduced a new Fire Safety Bill on 19 March 2020 which has now received Royal Assent and is known as the Fire Safety Act 2021. Although the Act has received Royal Assent it is not yet in force but is expected to be by late 2021. The Act makes amendments to the Regulatory Reform (Fire Safety) Order 2005 by bringing in scope the structure of the building including external walls, all doors between domestic premises and any common parts. The Act also introduces risk-based compliance in so far that risk-based guidance will be issued by the Secretary of State and compliance with the guidance presumes compliance with relevant provisions of the Fire Safety Order.

**ISO 45003:2021 Occupational Health and Safety Management – Psychological Health and Safety at Work: Managing Psychosocial Risks.** ISO 45003 is the first global standard giving practical guidance on managing psychological health in the workplace. It provides assistance on the management of psychosocial risk, as part of an occupational health and safety management system. Although this is not a form of legislation it can be used as a standard to work towards and as such will be reviewed by the Queen Mary Wellbeing Steering Group.

**Air Navigation (Amendment) Order 2020** - New rules came into force in January governing how pilots can operate their drones. A major change is the removal of the distinction between commercial and recreational use, which may result in an increase in drone uses. The new rules also make it clear where drones can be flown, while also making tracing of ownership more streamlined. Under the rules, even small drones will need to be registered with the Civil Aviation Authority. It is being advised that with a potential increase in the use of drones, safety professionals may want to reassess their airborne perimeter security processes. Drones are currently used by staff and students and the University is currently in the process of reviewing its Drones policy to reflect these changes.

## **1.3 Regulatory visits/responsibilities**

1. The London Fire Brigade visited the Abernathy Building in June 2021, the visit was prompted by the fire service attendance to an electrical issue with a coffee machine in May 2021. There was no informal or formal action taken, just goodwill advice given.
2. The London Fire Brigade visited Fielden House in June 2021 the visit was prompted due to the active monitoring by the London Fire Brigade of higher risk buildings. There was no informal or formal action taken, just goodwill advice given.
3. In January 2021 the HSE made enquiries about the management of Asbestos at Whitechapel library and the HSD Director responded and included the University's Asbestos Management Plan.
4. The Health & Safety Executive (HSE) visited the Whitechapel and Mile End campuses for a scheduled biological agent's inspection (four Containment Level 3 (CL3) suites in the Blizard / Abernathy & Fogg Buildings). During the inspection, the Inspector spoke to CL3 researchers, Principal Investigators, Heads of Institute, Trade Union H&S representatives, support staff, the Chair of the BGMSC, HSD Director and Biological Safety Adviser to assess the culture in relation to H&S compliance, and proactive attitudes towards H&S and biosafety. The Inspector expressed his approval of the biosafety governance measures, facility infrastructure and research support procedures in line with COSHH and the GMO Regulations. The Inspector was extremely impressed with the biosafety knowledge, implementation of risk control measures, good safety attitudes and recognition of the need for these

measures. Two verbal improvements were noted for one area on housekeeping and training records. The Blizzard Institute are recruiting a dedicated CL3 lab manager in Sep 2021 which will help with local improvements. The Inspector singled out the new biosafety risk assessment template developed by the Biological Safety Adviser and rolled out by HSD to be a best practice example for the sector. The inspection was also scheduled to cover the appropriateness of our COVID secure measures. Upon reviewing these the Inspector strongly endorsed the proactive mitigations as well as praising our prompt actions at each stage of the pandemic to put in place the right controls at the right time to protect staff and students in a fast-changing environment. This is a significant external endorsement of the COVID-secure measures in place across our campuses.

5. In March 2021 the HSD Director received a Notification of Contravention letter from the Health & Safety Executive (HSE) in which a third party had informed them of details regarding an incident in SEMS which they claimed should have been reported under RIDDOR as a dangerous occurrence. The HSE issued the University with a material breach and said it would also receive a Fee for Intervention from them. When the third party had originally questioned the HSD Director as to why this was not reported under RIDDOR she had communicated clear rationale (agreed by Head of School & Faculty VP) as to why the incident was not reportable. The third party chose to ignore this and informed the HSE who issued the breach based only on the information supplied to them by the third party without approaching the university first. The university had no knowledge as to what information had been disclosed to the HSE from the third party. Therefore the HSD Director responded to the HSE with the same rationale given to the third party as to why it was not a RIDDOR the HSE then reconsidered and rescinded both the material breach and the fee and vindicated HSD's investigation methodology. Positive feedback from the HSE indicated that they were very satisfied with the thorough investigation completed by HSD and agreed this incident was not RIDDOR reportable.

## 1.4 Wellbeing

During the reporting period a new Wellbeing and Mental Health Steering Group with refreshed terms of reference was formed. This is being aligned to the formation of a wellbeing network which will be available for the wider workforce to join. This Group will be the Senior University Group with strategic oversight of wellbeing and mental health matters and will oversee the completion of an external gap analysis which will enable Queen Mary to plan and implement a whole University approach to mental health and wellbeing enabling all students and staff to thrive and succeed to their best potential. Based on the outcome of this a strategy and action plan for mental health and wellbeing will be produced.

The action plan will also be informed by the outcomes of a recent internal audit which looked at the University's interventions and support measures in response to remote working and the pandemic. The outcome of this audit has helped us to understand what has worked well and is informing any future actions.

During 2020/21 and continuing into 21/22 the University ran a series of interactive wellbeing workshops aimed at supporting individual and team wellbeing. This included a 'wellbeing lockdown special' webinar series and updated guidance and 'stress management' toolkits for managers: *Managers Essentials*. Queen Mary Academy also ran wellbeing sessions specifically for researchers.

The 'wellbeing for managers' workshops utilised the HSE management standards and competencies framework and 'stress management toolkit' to deliver guidance around how to support and signpost staff to meet individual wellbeing needs and promote healthy remote working, how to have wellbeing conversations and how to set boundaries to protect one's own wellbeing needs. These workshops provided a safe space for managers to share stories, best practice and understand their role fully.

The university has also launched the parents/carers network and a disability network.

## 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 2019/2020.

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

The Environmental Agency permits for open source and low hazard sealed source (Cat 5) work on the three main campuses were renewed by HSD on behalf of the University. Annual radiation pollution returns to the Environment Agency were also submitted early 2021 by the HSD Radiation Protection Officer (RPO). Due to the pandemic, and the reduced activity on campus, use and therefore disposal of radioactive waste via authorised routes was substantially reduced in comparison with previous years.

One dose investigation notification (DIN) for a user was issued during this period by the appointed dosimetry service (DINs identify if a lower than statutory exposure reportable level was reached to provide early warning to users to improve protection), and adjustments have been made to work practices and risk assessment to avoid exposure in future. Potential harm to the user was assessed as negligible.

Radiation risk assessment and project approval templates for the University were updated by the HSD according to type of source, as the previous 'one size fits all' template was found to be not sufficiently user friendly. An automated document review notification system is also being investigated utilising SharePoint this year. Three new project approvals and risk assessments were reviewed and approved during the reporting period.

Due to the restriction of the pandemic, the radiation area inspections led by the Radiation Protection Adviser were unable to be physically conducted, these are now scheduled for the autumn and spring semesters in 2021/22. However, local Radiation Protection Supervisors provided on site check reports to the Radiation Protection Safety Committee to ensure necessary protection measures were continued.

Radiation protection and safety training was migrated to an 'online real time classroom' delivery method using MS Teams. An RPS Training Course was conducted in March 2021 with 7 attendees ensuring training for new RPS appointees and refresher training for existing attendees at Queen Mary. Three Ionising radiation user courses were also conducted with good level of attendances by ionising radiation source users (open, sealed and x-rays). Attendees on all courses provided high levels of satisfaction feedback with the online classroom delivery method. A prototype competency programme for ionising radiation is also being developed by HSD for Supervisors to utilise at a local level for users.

The decommissioning process for a mothballed radiation lab in the Fogg building and the radiation lab bay in the Blizzard building has started and is anticipated to complete with an RPA report early this autumn. This will release valuable lab space to the departments concerned for refurbishment and future use for other research / teaching purposes.

In relation to electromagnetic fields generating equipment (non-ionising radiation), the management of LASERS system established by HSD last year for the registration and risk assessment of lasers continues to be rolled out across the University. This rolling programme started in SEMS and has progressed to other Schools throughout the year. In the majority of cases lasers are now registered with HSD, risk assessments completed and operating procedures undertaken and implemented. Further work is required on some engineering solutions and the SBCS (chemical sciences) documentation for the Class 4 system is not yet finalised as construction of the enclosure is still to be completed. The SPA Laser Safety Officer will approve the documentation in advance of the merger to form SPCS with an official School Laser Safety Officer to be appointed following formation of SBBS. This move to a standard University template and ownership of the process by HSD now ensures a fuller visibility and more effective control of this hazard across the University estate.

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

Twenty-six new or significant amendment risk assessments for pathogen and GMO work were peer reviewed, classified and approved in three Biological and Genetic Modification Safety Committee (BGMSC) meetings held during this year. Of these risk assessments, twenty were of higher hazard level and involved new specific notifications or updates.

The pathogen risk assessments included one to cover work with SARS-CoV-2 for COVID-19 vaccination and challenge studies related research work commenced by a commercial company (hVIVO) within one of the Blizzard Institute CL3 suites and two for the COVID-19 PCR test laboratory set up in the Wolfson Building. One new Class 3 GMO risk assessment for *Mycobacterium tuberculosis* research work in the Blizzard Institute was also reviewed and approved by the BGMSC and then notification process commenced with the HSE. An automated system for risk assessment review and closure notifications is being looked at by HSD utilising Queen Mary Annual Health & Safety Report 2020/2021\_RJ Oct 2021

the functionality of SharePoint, to avoid missing fixed review dates and ensure risk assessment compliance levels across the University.

The HSD Biological Safety Adviser assisted completion of the London Clinic site GMO use notification in October 2020 and provided GMO training to staff and the CEO. The London Clinic site is involved with an ongoing haemophilia gene therapy trial at Barts Health NHS Trust / Blizzard Institute. In September 2020 the HSD Biological Safety Adviser also provided GMO training to 50 Trust staff involved in the Bethnal Green COVID-19 Johnson & Johnson (Janssen) vaccine trial.

HSD has continued to work with Estates and Schools / Institutes to improve the system for ongoing maintenance and statutory compliance testing of safety cabinet and ventilation systems at CL3; six monthly programmed integrated shut down periods have been instigated by the Head of Blizzard Lab Management and Fogg Building Manager to ensure all relevant stakeholders are informed and work is conducted quickly and efficiently to avoid any prolonged down time.

HSD Biological Safety Adviser and the BGMSC are continuing to work with the Biological Services Unit, the Occupational Health provider OHWorks 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 on the topic continues within the Biosafety courses for user training. In addition, baseline environmental monitoring is proposed as an annual assurance process for these work areas. Review of the health surveillance management procedures is ongoing with OH Works this year with online forms being implemented to improve user notifications and data capture.

HSD attend the Occupational Health/Human Resources/ School of Medicine and Dentistry liaison working group to ensure robust health surveillance and health clearance processes for staff and students are in place. A revised risk assessment form for new and expectant employees and improvements to the pre-employment health clearance forms have been introduced via this group. This partnership with HSD and OH has proved very effective over the reporting period as the new OH provider has become embedded within the University and improved overall service levels. Collaborative working moving forward is looking at an update of specific hazardous agents (e.g. deliberate pathogen work, noise and hand vibration) and health surveillance processes to improve the robustness and coverage across University staff and research students.

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

Throughout the reporting year there has been an increase in the disposal of chemical waste and a number of areas have undertaken reviews and started a long overdue process of clearing older material. It is expected that this will continue through 2021/22. There is a significant challenge around the lack of a centralised system for inventories and control around purchasing of chemicals. HSD are exploring how this can be improved.

HSD have assisted in the design of a room refurbishment at Whitechapel which will accommodate a chemical and solvent waste store to current health & safety and fire safety standards. Capital Projects are taking this forward with anticipated completion of the new store in early autumn. This will improve chemical and fire safety in the Blizzard Building.

HSD managers have supported both Science & Engineering and Medicine and Dentistry to make improvements with local chemical & solvent storage and waste generation and disposal during the reporting period. Specific H&S objectives have been set for schools and institutes where chemical and solvent storage are below par in some laboratory areas. Some areas have since planned improvement programmes and are in the process of either obtaining financial resources and/or have started localised improvements.

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

#### **Asbestos**

The asbestos consultancy services tender was completed in December 2020 with two consultancies (Environmental Essentials & Gully Howard Technical) being awarded the framework. A programme to undertake new asbestos management surveys is under way and on track to be completed by the end of the calendar year. Remedial works were identified from the new surveys to areas with high-risk scores within the Queens Building, Dawson Hall, John Vane Science Centre and Church Library. These works will be

completed by end of September 2021. The results of the new management surveys will assist with populating EAF's risk based 3-year asbestos remediation plan.

### **Legionella**

EAF continue with their 2-year programme for legionella risk assessments across all buildings. To ensure that issues are discussed immediately and 'no access' issues are kept to a minimum, Sayvol (Water treatment contractor) and RPS (Legionella Risk Assessment Consultant) link up during the legionella risk assessment site visit. This has eliminated unnecessary recommendations being inserted into the risk assessments.

Sayvol have undertaken numerous works in the Blizzard building, Fogg building and residencies to reduce the risk of legionella in line with the Authorising Engineer's requirements. They have also carried out additional flushing of all outlets where there is a reduction of usage within the building (due to low occupancy during the pandemic) to prevent stagnation of water supplies.

### **Other Statutory Compliance**

- 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.
- The HVAC contract partner (BTU) have now been in place 12 months and have completed service works to all HVAC equipment in line with SFG20 and F-Gas for all HVAC plant across all Queen Mary sites, in addition they have completed ventilation validation works to ensure that HSE guidance is adhered to for Covid19 in alignment with the institutional risk assessment.
- The greenhouses located on the roof of Peter Landin building have been removed following structural surveys highlighting major deficiencies (largely age related). This included a portacabin containing preserved aquatic & insect samples in 4% Formalin which necessitated a joint venture between HSD and SBCS to ensure the safe large-scale disposal of a significant quantity of hazardous material.

### **Ventilation**

Over the reporting period BTU has concentrated on inspecting and servicing the 160+ primary Air Handling Units across the Estate. All re-circulation protocols were disabled and the units set to run at maximum viable duty. Estates also undertook internal ventilation system balancing to ensure fresh air provision to over 600+ spaces. Over 40 high priority spaces had additional fresh air ventilation installed to maintain desired occupancy levels as COVID restrictions were eased and large-scale in-person education returned in September 2021.

A full survey was commissioned into the air handling and local exhaust ventilation systems within the Joseph Priestley building to try and identify the cause of numerous issues in the building. The specialist report gives a number of recommendations, which have been supported by the University Chemical Safety Adviser. It is anticipated that remedial works will be undertaken during the early part of 21/22 in order to reduce the risk.

The management of LEV is still a concern, whilst some work has been undertaken and the new contractor has completed a round of testing further work is required to address the gaps in record keeping, management and testing as required under COSHH Regulations. The Chemical Safety Adviser is supporting Estates colleagues with this work.

### **2.5 Fire Safety**

There were 88 fire alarm activations during the reporting period (See Appendix 3). These figures are down from 91 activations in 2019/20, which is likely to be as a result of the significantly lower occupancy levels in all Queen Mary buildings during the height of the pandemic. Contractor actions accounted for 10 activations in residential and non-residential buildings, including during works ongoing during lockdown, and were predominately caused by dust contaminating automatic smoke detection. There is work on going with projects to ensure that detectors are appropriately covered or that smoke detectors are replaced with heat detectors for the duration of the works.

The majority of activations in residential buildings were attributed to cooking fumes from kitchens. The fire safety team are currently working with residencies to drive consistency in fire safety awareness, ensuring Queen Mary Annual Health & Safety Report 2020/2021\_RJ Oct 2021

that information is clear and messaging consistent. This in turn should have a positive impact on reducing false fire alarm activations and increasing safety within residences.

### Fire Investigations

There were 2 fires during the reporting period, no injuries were sustained. The London Fire Brigade attended both of the incidents and one led to a post fire regulatory visit.

- G.E.Fogg – Caused by water ingress into an electrical switch in a walk in chiller unit
- Abernethy – Caused by water ingress from a coffee machine water line leaking into the coffee machine

### Fire Risk Assessments

Seven fire risk assessments were carried out in the reporting period. Due to the pandemic we have had to review the timetable of our fire risk assessments which has involved some delays to the schedule. To resolve this promptly we commissioned extra resources and have a new programme in place to review all assessments that are due up to April 2022. We have since had inspections from London Fire Brigade where this rationale was discussed and considered acceptable in light of challenges that the pandemic has had on business operations.

### Fire Safety Training

Fire awareness training was undertaken on QMPlus by 858 staff and students in the reporting period. Fire Marshal training including refresher training was undertaken by 21 staff.

The course content and delivery methods of both the Fire Safety Awareness and Fire Marshal training has been reviewed and will be delivered in its revised format from October 2021 following successful pilots. This redeveloping of fire safety training packages is to ensure consistency in the information that is delivered and to ensure that training is more accessible to all staff.

The Emergency evacuation procedures have been reinstated to pre-Covid arrangements following Government advice in July 2021.

### Fire Progress Works

1. The PV panels have not yet been removed from the Fogg Building; Capital Projects have scheduled for removal once contractors commence the works.
2. The fire doors have been repaired / replaced in the student village as part of the summer refresh works and fire alarm systems have been changed in the Peter Landin and Garrod buildings as part of lifecycle replacement.
3. The fire safety team have been involved in advising and signing off requirements in the following Projects over the reporting period:-

Mile End Library refurbishment (Ground), Residential fire door works, Queens building, Engineering (Ground)

CHSQ

W

Wolfson Institute

Whitechapel

G

Garrod building fire alarm works

The team continues to work closely with Estates and specialist contractors for Fire Detection & Alarm systems, Electrical & Emergency Lighting and Passive Fire Protection. The aim is to address fire safety issues with a pragmatic and risk-based approach to ensure that time and resources are allocated with a focus on higher-risk areas in the first instance. This in turn should reduce false alarm activations caused by projects, and planned/reactive maintenance works.

## 3. Operational Health & Safety

### 3.1 Training Programme



During this reporting period, a total of 2706 delegates were trained by HSD across 20 different health and safety training courses (Appendix 1). This is a decrease from the previous 12 months (3368) but is still above the reported number for 2018/19 (1499). These courses were delivered via in-person and online sessions.

The goals set out in the 2019/20 annual report were achieved and delivered including the transition for first aid courses to a range of delivery methods including blended learning. Other courses moved entirely to online delivery methods e.g. mental health first aid training course where two days of classroom sessions were delivered in 4 online modules with two trainers. Two new courses were established including a general H&S Induction and a risk assessment training course.

The training programme for 21/22 reinstates the face-to-face H&S accredited training (such as IOSH) which could not be delivered during lock down and includes new and refresher sessions.

### **3.2 Audit & Inspection Programme**

#### **Audits**

The following audits were undertaken during the reporting period:

- Biological Services Unit (BSU) – H&S Management System Audit. Key findings included:
  - The need to review the health surveillance procedure for individuals accessing and working in the BSU, and that the appropriate Respiratory Protective Equipment is identified and used for the activities undertaken.
  - A lack of H&S documentation such as H&S Policy, certain risk assessments and safe operating procedures.
  - A review of the safe use and storage of liquid nitrogen within the unit.

The implementation of the audit recommendations is underway in the BSU with progress monitored through the SMD H&S Faculty Group Committee.

- The School of Politics and International Relations – H&S Management System Audit. Key findings included the need for a more robust procedures for arranging student placements at external workplaces and the need to identify and train sufficient fire marshals.
- The School of Languages, Linguistics and Film – H&S Management System Audit. Key findings included the need to develop a formal process for the completion, approval and review of risk assessments and to undertake training needs analysis so the required H&S training is completed by staff and where appropriate students.
- Asbestos deep dive – In March 2021, the H&S Audit Lead undertook a review of the current situation of the management of Asbestos at Queen Mary. This was with the aim of providing a clear picture to the Duty Holder. Key findings included:
  - New Asbestos Surveys were being arranged to obtain more accurate records of the presence of Asbestos. Plans were in place to upload completed surveys to the EAF Risk Management System (RMS) once received.
  - Regular progress meetings were to be set up and a summary action plan was being developed so that the progress of any outstanding actions identified could be monitored.
  - Improved collaborative working between the Asbestos Manager and other EAF Departments to arrange remedial works in conjunction with ongoing maintenance or project works.
- The Department of Law – H&S Management System Audit. Key findings include the need to review the risk assessments to ensure they include all relevant risk controls in place and implement more robust procedures for arranging student placements at external workplaces.
- The School of Economics and Finance H&S Management System Audit. Key findings include the need to implement a formal process for the reviewing of risk assessments, to ensure that H&S is

included on the agenda for school meetings, so staff receive H&S information and they are able to report any issues, and to ensure all staff know how to call for first aid assistance.

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. Since the H&S audit programme began in December 2017, a total of 494 actions have been identified which can be broken down into 90 high, 261 medium and 143 low priority actions. As of July 2021, there were 131 outstanding actions which could be broken down into 10 high, 69 medium and 52 low priority items. The high priority actions centre on the findings above and are all from audits in this reporting period with the exception of 1 remaining high priority from School of Biological & Chemical Sciences audit :-

School / Institute / Directorate	Recommendation
School of Biological and Chemical Sciences	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. <i>**This is due to be resolved as part of the legacy project for the Fogg Building and local arrangements are in place to manage this in the meantime**</i>

Another area often highlighted in HSD audits is the need for Schools, Institutes and Directorates to improve processes around fieldwork activities and working abroad. In the past 12 months, HSD have made links with members of the Joint Research Management Office which has enabled us to find out more about the process for submitting applications to the Queen Mary Ethics of Research Committee (QMERC), but also highlighted the fact that they do not always receive applications where required. This has prompted useful collegiate working around trying to establish a more effective system and the HSD Audit Manager has been invited to become a member of the QMERC and attend the review panel meetings in order to review research applications from across all Faculties and Schools of Queen Mary. It is felt that this will give both departments a better insight into the types of fieldwork that is being undertaken and the risks they may generate.

The HSD Team supported the Head of Sustainability and inputted into the applications and audit process for the [EcoCampus Environmental Management System \(EMS\) Silver and Gold Certificates](#) awarded to Queen Mary this year.

The HSD Manager (SMD) and Fire Safety Manager continue to provide consultancy H&S and fire safety tailored advice, safety governance assistance and safety assurance checks to QMBio Ltd according to an agreed contract.

### Inspections

Physical inspections programmes recommenced fully for HSD in April 2021. These included high hazard areas with 4 detailed Biosafety inspections of CL3 facilities at Fogg and Blizard / Abernethy, an inspection of the Wolfson COVID Test Centre, inspections of the Charterhouse Square Cryostorage facility and in vivo use laboratories and an inspection to assist the Engineering Cell and Tissue laboratory to CL2 standards.

### 3.3 Accidents & Incidents

During the reporting period there were 2 RIDDOR incidents. Details as follows:-

- IN001627. Fall down steps of Queen's Building during moving in weekend. Seven days lost time, injury to left knee.
- IN001664- Student fell of E-Scooter on campus causing damage to her mouth.

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

### 3.4 Safety and Health Practitioner (SHP) Awards - Dec 2020

The SHP Awards is a prestigious national Award scheme to celebrate the achievements of the brightest and most passionate health & safety professionals throughout the United Kingdom. In December 2020 the HSD Team were shortlisted to the final six for the [Most Influential Team Award](#) by a judging panel of H&S experts.

SHP noted that the effectiveness of the COVID response for the University has relied on a risk-based approach to working, with the team adapting 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. They applauded the fact the University was able to rapidly re-start research laboratories after lockdown, benefiting the wider COVID research efforts and the University's normal research output. They felt the fact teaching was able to resume on campus without significant transmission risks and residential students were able to live on campus with face-to-face learning and on campus activities was a testament to the efforts of the team. The judges highlighted that it was *'one of the leaders in getting a response, pivoting its efforts to ensure the health and safety of staff, students and others. That was both on campus and off campus during lockdown and the 'return to campus' phase'*.

The Biological Safety Adviser (Dr Mark Ariyanayagam) was shortlisted into seven finalists for SHP's [Trailblazer in COVID-19 Response Award](#). SHP noted - right at the start of the pandemic, there was an urgent need for NHS Trusts and Universities to rapidly adapt in order to provide diagnostics, basic scientific and medical research to enable the national and global fightback against the virus SARS-CoV-2 and the disease COVID-19. Critical to this was rapidly assuring the required bio safety standards and risk controls were in place for intended essential laboratory work. This was spearheaded by Mark and was completed within two months to enable seven research groups to start work and produce rapid results enabling the fightback against the virus.

### **3.5 Continued HSD COVID response**

COVID-19 continued to cause challenges to all areas across Queen Mary during the reporting period and HSD continued to support Faculties and PS areas with their arrangements in managing this risk. Between July and December, the team had to respond to a constantly changing landscape as restrictions eased over the summer before being reinforced in the autumn and winter months. The team has been present on campus throughout the period. The effective support the HSD team has continued to give included:-

- Updating the Institutional Risk Assessment and COVID Secure procedures in line with the government roadmap on easing restrictions.
- Participating and advising senior committees, including governance committees and emergency response meetings.
- Assisting EAF and Procurement colleagues to ensure disinfection efficacy for the cleaning and disinfection products.
- Monitoring the fluctuating clinical waste needs of the laboratories to ensure laboratories smooth return to campus and in particular, assisted safe operation of SARS-CoV-2 research in the Blizzard Institute Containment Level 3 laboratories.
- Extending the laboratory clinical waste stream to include the three COVID-19 test centres on our campuses and EAFs cleaning contractors.
- On campus support provided to S/I/D's as required. This included inspecting areas to undertake ventilation and capacity assessments to help develop local plans and arrangements.
- HSD staff presenting awareness sessions in relation to Mental Health Wellbeing and Physical First Aid at the PS conference.
- Supporting with the H&S arrangements for setting up the COVID-19 Test Centres on campus.
- Attending a working group to focus on the re-opening of teaching rooms for student study use
- Supporting HR with return to campus training for managers.

The work undertaken by the team did not go unnoticed and they were grateful to be collectively rewarded via the Staff Bonus Scheme in recognition for their efforts.

### **3.6 Improving Safety Culture**

The improvement in safety culture continues to be sustained with all levels of staff having a better awareness of their health and safety responsibilities. Many have become experts on assessing invisible hazards, completing risk assessments and monitoring control measures. The pandemic has shown them the importance and significant of health & safety management in the workplace.

At a Safety Coordinator forum held in March two staff from Student and Academic Services gave a presentation about the improvements they had made to their H&S Management system. They demonstrated the actions taken using the headings of the Plan > Do > Check > Act management model. This prompted lots of positive feedback and interest from the other Safety Coordinators in attendance and was a good example of sharing best practise collegially.

#### **4. Objectives for 2021/2022**

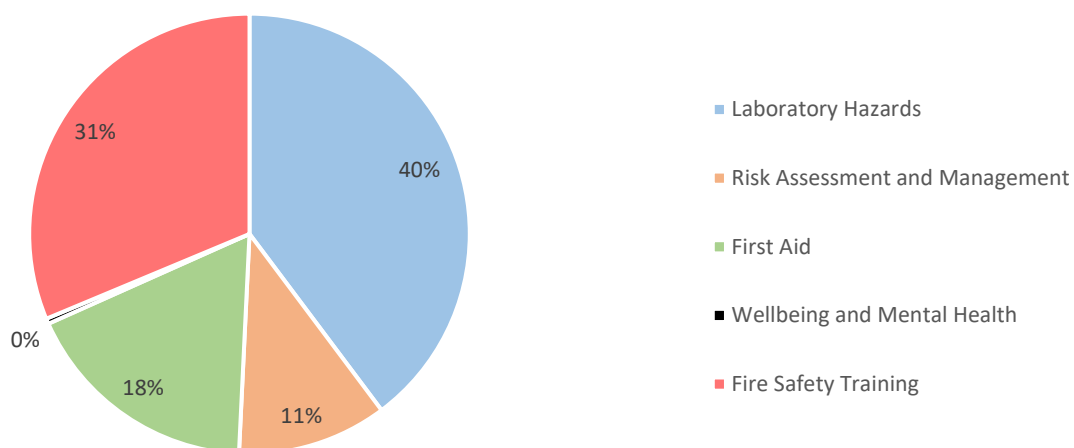
The objectives set below will allow us to continue to proactively manage health and safety risks, develop safety culture and training and respond to legislative updates to ensure robust compliance.

- It is anticipated that the roll out of the laser management process will be completed by early 21/22 and will move to a 'maintain and review' process, with any new devices added as required. Maintaining a group of School Laser Officers will be a challenge and will require the visual supported of Heads of Schools.
- Whilst work on improving the storage and handling of chemicals is progressing there are still challenges around this, some of which will require further resourcing. A number of laboratories have old facilities that are at end of life with a lack of fire rated storage and this is largely overlooked when considering refurbishing areas. HSD anticipate another busy year in waste disposal, with further work to be undertaken on the management process behind hazardous waste and support to be given to Estates projects colleagues when planning refurbishments.
- Undertake a review of chemical inventory packages and produce a business case for the implementation of a University wide system. This will hopefully allow greater cooperation between groups and functions, reduce over purchasing of chemicals (costs, and sustainable) and reduce the waste burden on Queen Mary. Longer term it will hopefully integrate to the purchasing system so that high risk items are identified early in the process.
- Continue to work with colleagues within EAF to improve the maintenance and statutory testing of required items e.g. LEV, Pressure systems and lifting equipment, ensuring that clear documentation exists around ownership, roles and responsibilities and where required records are kept and maintained. This will also feed into closer cooperation with members of the Projects team in ensuring that H&S considerations are factored into the start of the process to avoid the need to change requirements once the design has progressed and the inevitable resulting costs and delays.
- Undertake topic-based audit, in conjunction with Estates, on contractor management.
- Roll out delivery of senior level leadership health & safety training.
- Introduce a Hazardous Chemical Waste course to supplement the Risk Assessment course.
- Develop further guidance around fieldwork and working abroad. Invite a representative from the Joint Research Management Office to attend the next Safety Coordinator forum to deliver a joint presentation around the fieldwork process and when approval should be sought from the QMERC
- To support the procurement of the new Learning Management System, being led by ITS and CPD
- Carry out a detailed review of the EAF RMS system to provide additional assurance that the University is meeting our compliance goals where specific legislative requirements exist.
- Review the fire Risk Assessment template and ensure it is aligned with PAS79 (industry standard)
- Continue to develop the team so where the University only has access to one specialist for a significant area of risk, we can also provide back up for additional university resilience and oversight e.g. asbestos management.

Rebecca Jones  
Director of Health & Safety

18<sup>th</sup> October 2021

## Appendix 1 - Health and Safety Training August 2020 - July 2021

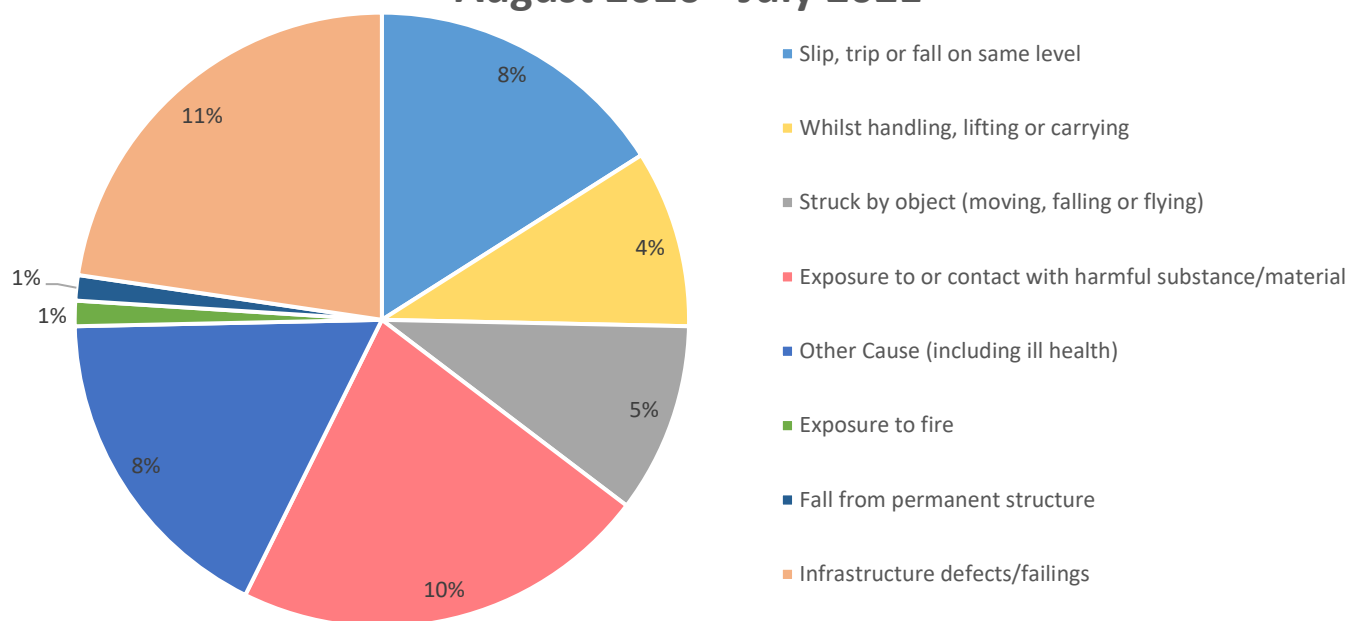


\*Please note that percentages are rounded up/down\*

Topic Category of Training	H&S Training Course	Total Attendance
<b>Laboratory Hazards</b>	Containment Level 3 Principles And Practices	52
	Hazardous Substance Risk Assessment (COSHH)	248
	Genetic Modification and Gene Therapy	6
	GM and Bio Safety for Clinical Trials Staff	54
	GM Risk Assessment and Notification	87
	Safe Management of Lab Hazardous Waste (QMPlus)	501
	Selection of Lab PPE	8
	Working Safely With Biological Hazards	137
	Working Safely With Ionising Radiation	41
	Radiation Protection Supervisor	9
<b>Risk Assessment and Management</b>	QMUL Health and Safety Induction (QMPlus)	157
	Local H&S Inspection	5
	Risk Assessment (QMPlus)	140
	Laboratory Safety for Non Research Staff	7
<b>First Aid</b>	FA for Laboratory Workers (QMPlus)	274
	Emergency First Aid at Work	12
	First Aid at Work	36

	First Aid at Work Requalification	19
	First Aid Awareness (QMPlus)	152
<b>Wellbeing and Mental Health</b>	Mental Health First Aid	11
<b>Fire Safety Training</b>	Fire Marshal (QMPlus)	15
	Fire Marshal Refresher (QMPlus)	6
	Fire Safety Awareness (QMPlus)	858
<b>Total</b>		<b>2835</b>

## Appendix 2 - Accidents / Incidents August 2020 - July 2021



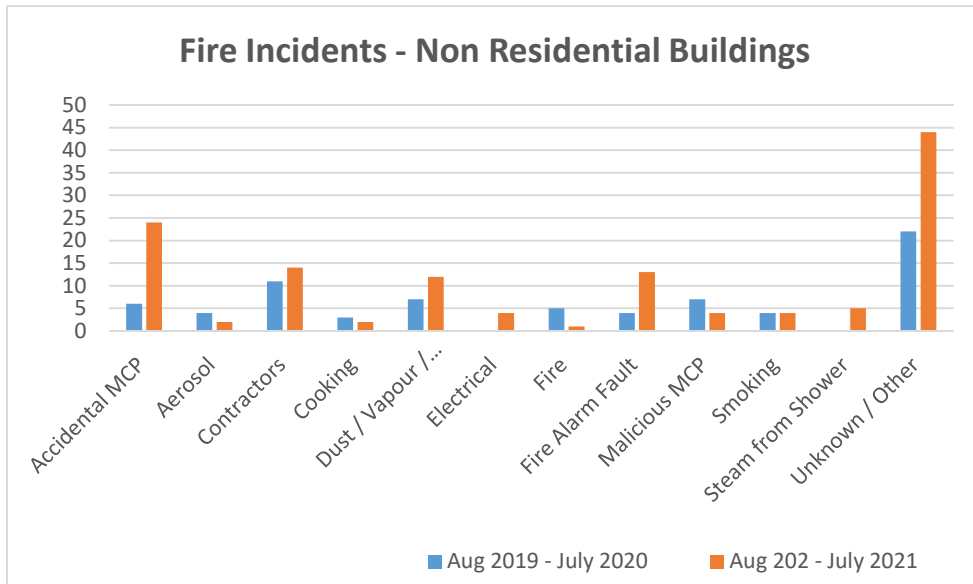
Accident / Incident Type	Number of Accidents / Incidents
Slip, trip or fall on same level	24
Whilst handling, lifting or carrying	14
Struck by object (moving, falling or flying)	15
Exposure to or contact with harmful substance/material	33
Other Cause (including ill health)	26
Exposure to fire	2
Contact with electricity or an electrical discharge	1
Injury by animal or insect	1
Fall from permanent structure	2
Fall from temporary structure	1

Step on/strike against object	1
Trapped in, under or between objects	1
Struck by a moving vehicle	1
Violence at work	1
Infrastructure defects/failings	34
<b>Total</b>	<b>39</b>

<b>Accidents reported to HSE - RIDDOR</b>	
Slip, trip or fall on same level	1
Loss of control of machinery, transport or equipment	1
<b>Total</b>	<b>2</b>

There were 153 near miss incidents and nine incidents of service disruption in this reporting period.

## Appendix 3 – Fire Incidents



Type of Fire Incident (Non Residential Buildings)	Number of Incidents	
	Aug 2019 – July 2020	Aug 2020 – July 2021
Accidental MCP	6	24
Aerosol	4	2
Contractors	11	14
Cooking	3	2
Dust / Vapour / Experiment	7	12
Electrical	0	4
Fire	5	1
Fire Alarm Fault	4	13
Malicious MCP	7	4
Smoking	4	4
Steam from Shower	0	5
Unknown / Other	22	44
<b>Total</b>	<b>73</b>	<b>129</b>

Type of Fire Incident (Residential Buildings)	Number of Incidents	
	Aug 2019 – July 2020	Aug 2020 – July 2021
Accidental MCP	6	11
Aerosol	5	9
Contractors	6	5
Cooking	23	42
Dust / Vapour / Experiment	3	8
Electrical	2	1
Fire	1	0
Fire Alarm Fault	6	3
Malicious MCP	14	7



Smoking	5	7
Steam from Shower	18	32
Unknown / Other	17	40
<b>Total</b>	<b>106</b>	<b>165</b>

