Departmental Safety Committee Meeting

7th October 2024

Minutes

1. **Present:**

Georg Holländer (GH)-Head of Department
Shaka Obhiozele (SO)-Head of Administration
Britta Urban (BU)- Departmental Safety Officer
Iris van Pijlen (IvP)- Biological Safety Officer/CL3 Manager OVG
Amarjit Bhomra (AB)- Wood Group Representative
Samyuktha Iyer (SI)- Slater Group
Fardowsi Kazi (FK) – Servais Group
Natalina Elliott (NE) – Roy Group
Izzy Barraclough (IB) – Sanders Group
Emily Adland (EA) – Goulder Group
Mary Daedman (MD) -Hollander Group
Julie Hamilton (JH) – Biological Safety Office
Amanda Anderson (AA) - Divisional Safety Officer
Andy Darley (AD) – IDRM Facilities Manager and Departmental fire Safety Officer

Apologies:
Elizabeth Jones (EJ)-OVG Representative

2. **Minutes of the last meeting**
The minutes of the last meeting held on the 24th May 2024 were confirmed.

3. **SEG notes and Newsletters:**
   a. Safety Network Newsletter issue 9 (https://newsletter.admin.ox.ac.uk/q/1eVznsm5DpMbRW8gXhJE2rl/wv)

   b. SEG guidance note GN09 – charging of Electric Powered Personal Vehicles (https://unioxfordnexus.sharepoint.com/sites/ADMN-UASMosaicDocumentHub/Safety%20Office/Forms/AllItems.aspx?id=%2Fsites%2FADMN%2DUASMosaicDocumentHub%2FSafety%20Office%2FSEG%20GN09%20EPPVs%20policy%2Epdf&parent=%2Fsites%2FADMN%2DUASMosaicDocumentHub%2FSafety%20Office

Amanda Anderson pointed out that another Newsletter (issue 10) had been released the day before detailing actions around dry ice and liquid nitrogen safety.

Update: Newsletter issue 10 and SEG guidance note has been withdrawn from the Universities H&S website. The Safety Office will now roll out H&S policy releases twice a year in November and May.

4. **Biological Safety**

IvP provided a written report (attached, Appendix 1) on biological Safety and high Containment Facilities for the period covering the 25th of May- 6th October 2024. Additional updates:

- Daniela Ferreira has taken over as High Containment Scientific Coordinator.
- The University Safety Office is planning an audit of CL3 labs at the CCVTM on the 21st of October. This will be followed by a soft HSE inspection on the 29th of January 2025.
- As BSO for OVG, IvP needs to be made aware of all incidents for OVG including those working at IDRM. Currently, access to near misses and incident reports on IRIS is dysfunctional and operated at the level of building rather than Department and groups. AD, IvP and BU to work with the DivSO to ensure appropriate access to reports for different individuals.
- IvP reported that a vector and encoded bioluminescence gene had been introduced into a *S. parathyphi* strain and used in experiments without listing these in the relevant GM risk assessment. Researchers should update the list in the Risk Assessment when new vectors and genes are being introduced. IvP will remind OVG researchers of the need to update the risk assessment when new vectors and/or genes are introduced.

5. Laser Safety

Jesus Reine reported (verbal communication to BU) that 10 users had been trained in laser safety. In addition, Graham Faulkner is expected to visit IDRM for an in person lecture people on the use of closed laser systems. However, users have to be aware that laser may be exposed when engineers service equipment.

6. Fire Safety

Andy Darley with support from Amanda Anderson is undertaking a fire risk assessment of OUH in bedded spaces. Large sections of the form are not relevant. The DivSO and University Safety Office are working to improve the process stream and work out what fire risk safety measures need to be put in place within OUH-embedded spaces.

7. Update from Safety Offices (Divisional Safety Office and Biological Safety Office)

- Amanda highlighted a series of safety notices that had been issued regarding and accident in a disabled toilet; issues with Chemgene's new formulation causing blockage of pipes and the leak of gas from a Bunsen burner causing a minor fire.
- IRIS system has established a new support pathway. Near misses and incidents are often flagged as requiring further investigation from the DivSO and University SO when only advise is needed. From the beginning of October onwards, any request for support should be undertaken through a self-service request or by directly e-mailing the Health and Safety systems support mailbox (hssystemssupport@safety.ox.ac.uk).
- In OUH embedded spaces, any issues relating to the building (i.e. asbestos, ventilation, heating) are the responsibility of OUHT whereas tasks associated with activities (COSHH, RA) are the responsibility of the University. The University and OUHT are in discussion on how to best ensure effective communication.

- Julie Hamilton reported that the HoD briefing pack will be released soon which provides guidelines for the HoD and DSO to adequately manage risks in their department.

8. Accidents and Incident report (attached appendix 2)

9. AOB

- The Department held interviews for a new DSO (Department and IDRM) on the 15th of October and the identified person is expected to start the position between mid-January and mid-February 2025. Michael Scott passed his NiBOSH certificate and will provide support for new DSO.
- Fire Drill at IDRM was successful
- SoSO requires update and all groups were asked to check information relevant to their teams. The updated statement will be reviewed and approved at the next DSAC meeting.

Report on Biological Safety and High Containment Facility period 25May24 – 6Oct24 for DSAC Paediatrics 7Oct24

Iris van Pijlen, BSO/CL3 manager

1. **Biological-related incidents**
    a. Near Miss: Incident Reference Number 5236: MSC in use stopped working during powercut. See attached report
    b. Near Miss: Incident Reference Number 5318: Overfilled Biojar left in MSC for over a month. I do not have a copy of this incident and it has not yet been reviewed by CCVTM-DSO (annual leave).
    Basically, this was discovered during monthly CL3 walk around by CL3 managers on 16Aug24. It has been discussed in the CL3 User Group meeting 16Aug24 and an email was sent out with 'lessons learnt' to remind people of correct way of disposing waste in CL3.

2. **CCVTM-GMBSC** dedicated Teams Channel and on-line monthly meetings set up from Jun24 every first Tuesday of the month at 12:30pm. New Terms of Reference have been agreed. See attached ToR

3. **BioCOSHH approved by CCVTM-GMBSC and ATMP-GMSC if applicable**:

    (Please note: XXX means they have not been uploaded to iPassport and allocated a number yet, due to backlog QA Team)

    a. **BioCOSHH029** Establishing immune-assays for use on patient samples obtained from a controlled human infection experiment with C.difficile L-TCD-01 (CHIMICHURRI) (PI Young Kim) – 18May24
    b. **BioCOSHHXXX** Assessment of the immune response to invasive non-typhoidal salmonella disease and vaccination (STm & SEn) (PI Maheshi Ramasamy) – 21Aug24
    c. **BioCOSHHXXX** Plasmodium spp. inoculation in CCVTM clinic for Malaria Challenge(s). **(**BIO004) (PI Angela Minassian) – approved by CCVTM-GMBSC but comments still being discussed between AM and ATMP-GMSC, envisaged to be in place by end Sep24 for clinical trial start date 2 October 24.

4. **High Containment Facility Update**

    See monthly meeting minutes 21Jun24; 19Jul24; 16Aug24

    - In brief, The only activity currently is the packing of COVCHIM2 SARS-COV2 inoculum for Jenner trials.
    - BiVista, using Salmonella Paratyphi challenge, is planned to start xxx
    - Further studies using *Trypanosoma cruzi*, Chikungunya Virus and Mayaro Virus are currently being risk assessed before starting in CL3.

Draft Terms of Reference for CCVTM-DSAC GMBSC V1.0

- The CCVTM-DSAC GMBSC (GMBSC hereafter, Genetic Modification and Biological Safety Committee) is a subcommittee of the CCVTM-DSAC (Centre for Clinical Vaccinology and Tropical Medicine – Departmental Safety Advisory Committee) and reports findings to the CCVTM-DSAC in their quarterly meetings.

- The remit of the CCVTM-DSAC GMBSC is to review biological risk assessments (BioCOSHH and GMRAs) and occasionally other relevant documents (e.g. SOPs) from OVG and other departments for work being carried out in the CCVTM labs and/or clinical trial locations, as well as to discuss emerging biological safety matters of concern. Where there are concerns regarding risks in submitted safety documentation, the Committee provides helpful advice in comments, which will be addressed by the authors of the document. Approval from the Committee is critical to the project being able to start and is often part of a multi-approval process, so timely action is crucial.

- The Committee members have been selected to represent a spread of expertise. Therefore, feedback from all members is valuable and questions, concerns and recommendations are invited. Members must sign to approve the document once they are satisfied the proposed work is carried out in a safe manner.

- There must be a minimum of 5-6 quorum members (but ideally more) to approve any document excluding any (Divisional) Safety Office personnel. The OVG-BSO will determine whose approval is critical and how many signatures depending on the nature of the Risk Assessment. A minimum of one representative from the Safety Office (University BSO or their Deputy) must also sign. Each document will have a signature sheet attached, with the essential quorum members highlighted, to easily identify when the required quorum has been reached.

- The Committee will meet over Teams on a monthly basis, unless there are no outstanding documents to approve or other issues to discuss. In order to reach our quorum for approval, it is important for members to attend the meetings regularly, unless they have no comments on the documents and are happy to approve ahead of the meeting.

- Risk Assessments to be considered at a particular meeting must be sent to the Committee by the local BSO as soon as they are ready but no later than two weeks in advance of the meeting to allow members to initially review and prepare questions and comments in time for the meeting.

- The relevant PI and/or main author of any document to be approved will be invited to the meeting to answer questions and in turn ask clarification on comments from the Committee. If no representative for the document is available to attend, the Committee may decide to postpone consideration of the document until the next meeting.

- The Committee may approve the document outright or subject to minor changes being addressed during the meeting, or request resubmission of more significant amendments for

further review. Once the document, with significant amendments highlighted, has been received back, the quorum Committee and at least one Safety Office member will aim to approve it within one week of receipt.

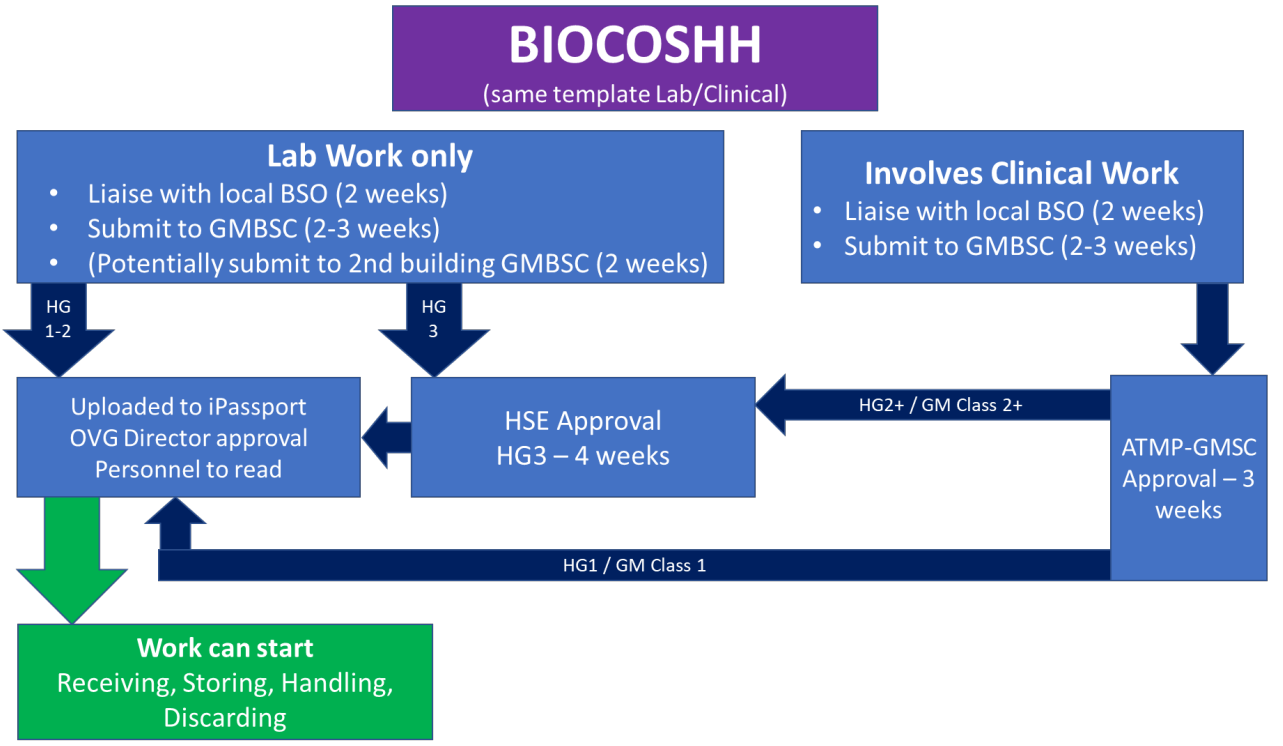
- Membership:

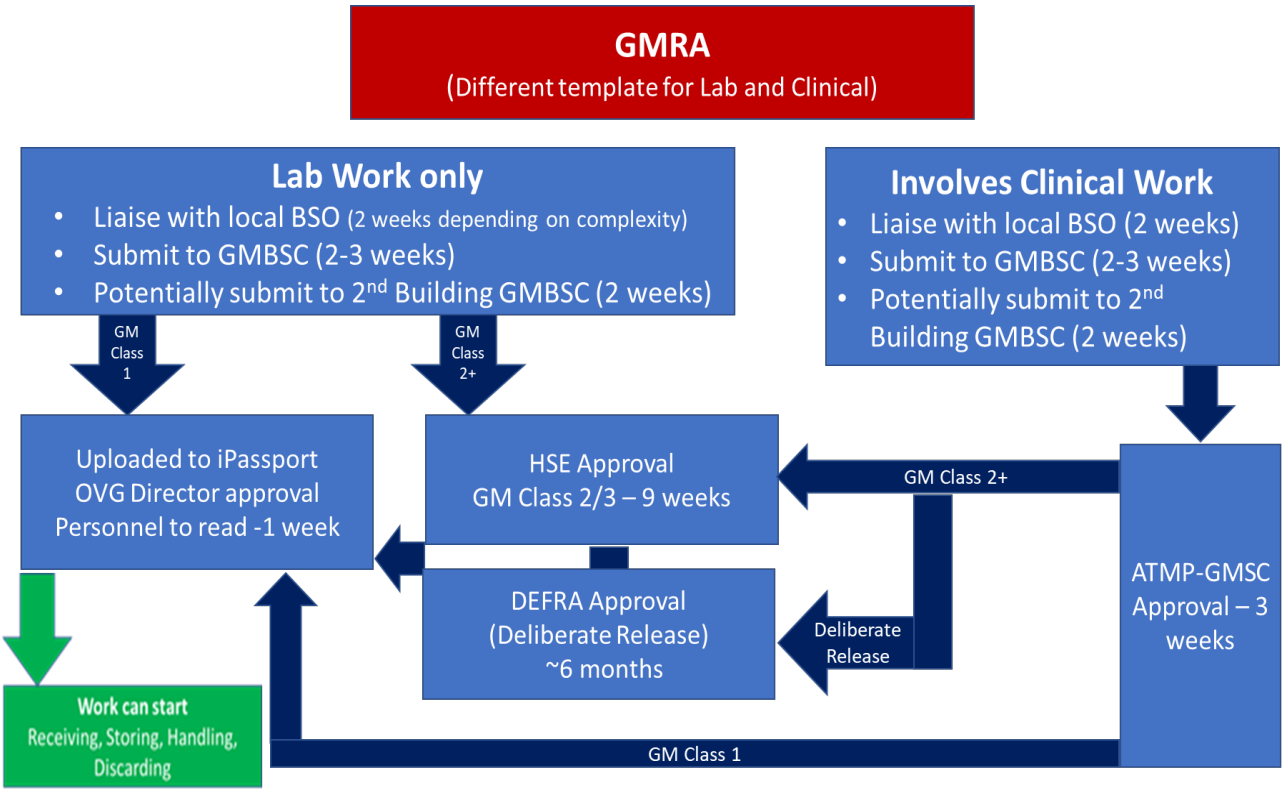
Name	Job Role	Expertise	Type of Member
Alison Lawrie (AL)			Quorum Member
Iris van Pijlen (IVP)	OVG-BSO & CL3 Manager	Biological Safety, CL3 Management, H&S, Postdoctoral Molecular Genetics	Quorum Member
Jesus Reine JR)	Senior Postdoctoral Researcher, CL3 deputy officer, DLSO and main coordinator of the FACS IDRM.	Clinical Trials, Immunology, Flow Cytometry, CL2-3 Biosafety.	Quorum Member
Maheshi Ramasamy (MR)	PI and clinician	Clinical trials, microbiology, infection prevention and control	Quorum Member
Noshi Maria	Senior Postdoctoral Researcher	Lab assays in CL2 and CL3	Quorum Member
Paola Cicconi (PC)			Quorum Member
Philip Taylor (PT)	CCVTM Buildings and Facilities Manager	Facilities management, health and safety	Quorum Member
Raquel Lopez Ramon (RLR)	Clinical Research matron	Clinical trials Clinical operations	Quorum Member
Sagida Bibi (SB)	Senior Postdoctoral Researcher	Assay development and laboratory processing in CL2 and CL3.	Quorum Member
Tracey Mustoe (TM)	University Biological Safety Officer	Biological Safety, Health and Safety, molecular biology	SO Reviewer
Julie Hamilton(JH)	Deputy University Biological Safety Officer	Biological Safety, Health and Safety, Genetic modification, molecular biology, Biochemistry	SO Reviewer
Andrew Pollard (AP)	Director of Oxford Vaccine Group	Paediatric infectious disease, Immunology and Vaccinology	Overall Approver
Parvinder Aley (PA)			Management Reviewer
Amanda Anderson (AA)	Divisional Safety Officer (MSD)	Health and safety, molecular biology and biochemistry including CL1 and 2 work (GMO and protein production;	Div. SO Reviewer

		CRISPR; some lentivirus work); use of human tissues)	
Eleanor Booth-Davey (EBD)	Divisional Safety Officer (MSD)	Health and Safety esp. biological/chemical. Risk management. Quality and error prevention. GxP inc. clinical trials. Admin and IT systems.	Div. SO Reviewer

NB: Minimum of 75% or 5-6 Quorum members must approve (depending on level of risk), as well as one SO Approver and Overall Approver. Management Approver and Div SO Approvers to sign where applicable.

Biological Risk Assessment Approval Process OVG:





Links to the various Risk Assessment templates

Most are on the Safety Office website: Biorisk Management: Biorisk management | Safety Office (ox.ac.uk)

(NB: *For most recent versions including HSE-specified annual review signature box, see BSO)*

"BioCOSHH": biomaterials RA proforma.doc (sharepoint.com)

GMRA (Lab) Class 1: biomaterials RA proforma.doc (sharepoint.com)

GMRA (Lab) Class 2-3: Form for Class 2 GMRA.DOC (sharepoint.com)

However, if the project includes at least an aspect of clinical trials, where NHS Trust premises /waste streams are used: https://researchsupport.admin.ox.ac.uk/clinical-trial-research-governance/preparation/genetically-modified-organisms

GMRA (clinic): ATMP GMSC application form v1.0 01.03.2022.docx (sharepoint.com)

Incident Reference Number 5236 – Loss of power to working MSC in CL2 (Near Miss) 26Jul24
(Reported on IRIS 19Aug24)

Investigation by Biological Safety Officer (Doc Ref Number 3206)

Investigation of immediate hazard (29Jul24):

An in-use MSC stopped working due to a site-wide power cut. In this instance no hazardous pathogens were being handled so this is correctly classified as a 'near miss'. However the MSC does get used with HG2 pathogens with inhalation-infectious route (eg S. pneumoniae, Respiratory Syncytial Virus), so this could have resulted in potential exposure of the worker and other people in the lab to those pathogens.

Immediate Action:

The response to the incident was: The night door was placed on the MSC to enclose the MSC and stop any hazardous materials from escaping. All staff exited the CL2 lab for the duration of the power cut.

Discussion in CL3 User Group Meeting (16Aug24):

The person handling the situation was commended and everyone was reminded of the current correct response if this were to occur in future, also in CL3: Make any open tubes safe by putting tops back on, if safe to do so. Place night door on MSC and evacuate lab.

It was discussed whether the MSC would start up by itself after a power cut (potentially pulling a vacuum with the night door still in place). The prevailing opinion was that this is not the case and that the MSCs must be manually switched on again once the power is restored.

Further discussion BSO/CL3 manager and BFM (22Aug24):

There might be the potential of this being a much more serious hazard, especially in CL3 with HG3 inhalable pathogens. Some options to put extra engineering / procedural controls in place were discussed.

The BFM explained what would happen if we were to be able to install generator back-up power: From the moment the power cuts out it would take at least 5-10 seconds before the back-up generator would kick in. This means there would be a period during which the worker would not be protected from the pathogen. Moreover, during a power cut the Air Handling would also cease. Under normal circumstances, if the Air Handling fails the MSC would switch to recirculation mode. However, if the MSC is off and the Air Handling is still off as well, the MSC is hard-wired not to be able to be switched on again. Therefore, installing a back-up generator to the CL3 does not appear to be useful to solve the issue.

I have sent a request for further information to the other University CL3 managers, to check whether they have alternative solutions we could consider. In the meantime, we have agreed that we will continue with the procedural response to a power cut, which is to position the night door on the

MSC to enclose the pathogen, before evacuating everyone from the CL3 facility. This response is already in place and will continue to be reinforced.

Testing to check whether MSCs do or do not start up automatically after power cut (23Aug24):

This was tested by unplugging each MSC after switching it on, then re-plugging them back in. It appears that some MSCs in the main lab in CL2 do *not* automatically switch back on, but the two MSCs in the Microbiological Lab CL2 (related to current incident) and all MSCs in CL3 *do* automatically come back on. This changes the response in case of power cut.

For CL3, where air handling, once restored, would help take care of aerosols, the response will be not to put the night door on, but just to immediately evacuate. Once power is restored, both air handling and MSC will activate and, depending on what is determined in the BioCOSHH for the relevant pathogen, the lab will either be safe to enter after a waiting period or will require emergency fumigation. This is also the procedure followed by the SWDSP CL3.

For CL2 Microbiological Lab, where HG2 pathogens infectious by inhalation are handled, the air handling would not be as strong and protective as in CL3 so the night door will require placing *and the MSC unplugging* before evacuation (to avoid pulling vacuum on restarting).

For the other MSCs in the CL2, the night door can be placed without danger of pulling vacuum on power restoration as they do not automatically restart.

Follow-up action from findings:

The above procedures will be updated in the relevant SOPs OVGL151 “Use of MSCs” and OVGL1779 “CL3 Code of Practice”, which will be reissued to Lab users to read. An email communication with the information will be sent out as well to all lab staff.

Actions	I... R.. N.	Departm... Faculty or School Where Incident Occurred	Incident Type	Incident Description - Please Do Not Include Names of Injured Parties in this Field	DSO Review Date	DSO Review Status
	53	Sep 2024	Near Miss	User left the defog feature on, this caused the LN2 vat to continuously defog and thus continuously refill. This in turn caused the vat to leak some LN2 into the room as the vats were overfilling. The boil off was removed through the extract fans and the oxygen levels never dropped to any concerning level.	30 Sep 2024	Unreviewed
	52	Sep 2024	Electrical Incident	5:30 am call out for water leak in plant room. at 7am it was discovered the leak had come through to the floor below, which is a BMS clean room. 2 ceiling panels next to a low voltage lighting panel were removed as part of investigating extent and source of leak and to place absorbtion mats. while looking in ceiling void, investigator was concerned about electricity arcing so came away from ceiling hole. Electricity arced and the light unit "blew".	05 Sep 2024	Closed
	49	Jun 2024	Chemical Incident	Lambe Group Freezer 1 was switched off, suspected due to someone inadvertently leaning against and pressing the 'on/off' switch on the front display panel. Submitted as a near miss, due for the potential for a similar incident to occur and affect a freezer containing hazardous/clinical trial samples	18 Jun 2024	Closed