

Minutes of the 20th meeting of the Biosafety Committee of the University of Hong Kong. (A sub-committee of the Health, Safety and Wellbeing Committee).

Held by e-mail circulation.

1. Minutes of the 19th meeting of the Biosafety Committee (November 22nd 2018)

The draft minutes of the previous meeting of the Biosafety Committee.

BSC-20-01

The minutes were circulated after the meeting on 23rd November and were updated in the light of comments made. As no further comments were received BSC-20-01 is accepted as the definitive record of that meeting.

2. Matters arising from the minutes of the 19th meeting (action points etc.)

All item numbers references in this sub section correspond to the minutes of the 19th meeting, BSC-20-01

Item 5, Introductory courses in Biosafety.

Dr. Hunt wrote to relevant heads of department in a single letter addressing a number of actions from the committee, including raising awareness of safety training availability.

Dr. Hunt also looked into the availability and applicability to HKU of freely available safety training videos. None of the following completely reflect current best practice at HKU, and all include some references to requirements of different national biosafety regulations that do not apply to Hong Kong. Nevertheless, about 95% of their content was useful and can be endorsed. As introductory material or material to reinforce existing training they are useful, as long as they are not regarded as the completely definitive guide to the subject matter.

Basic Biosafety training overview plus general lab safety (Canadian)

<https://www.youtube.com/watch?v=zE4tBGOF-zQ>

Biosafety up to 14:18

Chinese subtitles

Short subtitled Microbiological Safety Cabinet (MSC) video

<https://www.youtube.com/watch?v=96-aZLom340&t=11s>

Chinese subtitles

Longer, good quality Australian MSC video. One or two items are ANZ only requirements.

<https://www.youtube.com/watch?v=Osr2r4Pg-W8>

Introduction to work at BSL-2 (Canadian), with some advice on safety when working with animals and dangerous goods import and export.

https://www.youtube.com/watch?v=GssdMyRjW_Q

In addition to the above videos, the podcast available on the link below includes a very interesting discussion of risk groups and containment levels, and the reasons why the same organism may be classified in different ways in different jurisdictions. It also provides an overview of work with organisms that represent potential security concerns. This provides useful background to the consideration of biological risk.

<http://www.microbe.tv/twiv/twiv-545/>

The possibility of developing tailor made instructional videos was also considered. From experience a great deal of time is needed to plan such videos, as a detailed shooting script needs to be developed, and staff and students prepared to give up their time to be filmed would need to be identified. The value of developing such a resource would need to be justified by the level of its future use. There is also the question of the balance between centrally provided and department provided safety training. Departments identified as showing high levels of safety performance on routine inspection are found to provide their own safety training. Such training more closely matches their training needs than centrally provided training could provide, given the diversity of activities in the University. It could also be argued that this encourages departments to think more carefully about their safety training needs. In addition, to be sufficiently detailed centrally provided training would potentially have to provide detailed instruction in a wide range of techniques, only a subset of which would be applicable to a particular trainee. The proposed safety audit of departments (see main agenda item 4) may provide information that would help identify if there are particular, common training needs that would be best met by developing an in-house safety training video.

Item 6, CULATR applications

Dr Hunt has been contacted by a number of researchers prior to submission of a CULATR application for advice on a range of safety matters, including biosafety, with respect to their projects. This arrangement appears to work well, and in some cases has allowed research to be rapidly endorsed on safety grounds once all CULATR concerns have been satisfactorily addressed. If researchers do not contact safety office prior to submission there is still opportunity to scrutinize applications for any potential safety concerns prior to approval.

Item 8, GM risk

The availability of revised guidance material on GM risk was brought to the attention of heads of department via a letter from Dr. Hunt.

Item 9, Accident reporting at BSL-3 for scheduled agents

Dr. Hunt wrote to the Heads of the Department of Microbiology and the School of Public Health regarding the need to promptly inform the University Biological Safety Officer of any incidents that may require him to notify the Department of Health. The decision of the University Biological Safety Committee regarding accidents at P3 was reported to a meeting of the Faculty of Medicine Core P3 facility safety committee.

Item 10, Oversight of GOF experiments involving "Enhanced Pathogens of Pandemic Potential (EP3)"

Dr Hunt wrote to Heads of Department and the Dean of the Faculty of Medicine regarding the implementation of this internal oversight mechanism. The question of whether an opinion from an external independent expert should be sought on proposals was raised with potential users of the mechanism, who indicated that they did not consider that this step was necessary at the moment.

The first proposed project has been considered under the oversight framework. The oversight committee expressed the opinion that the proposed project did not involve creation of an EP3 entity. This decision, and the considerations that led to it, was communicated to the PI concerned in a letter that could be shared with an external body if required.

3. On-line assessment of Safety Training

TO NOTE:

An on-line assessment of initial safety training provided by the Safety Office, including Biosafety Training, has been implemented using the DUO platform. This is used to assess training provided to both Undergraduates and Research Postgraduates. The current mechanism requires faculties to set up a safety training module and enrol their student cohorts. Content of safety induction training and the assessment is then provided by the safety office. The assessment is made available for a limited time after the end of safety briefings for students to complete. The pass mark is set to 80%, and three attempts are permitted. Question pools are used, so although the topics are constant between attempts different questions are presented on each attempt made. So far all students who have taken the test have passed, although some required multiple attempts. This provides a student training records and indicates which parts of safety training students find more difficult.

This assessment has been successfully used with research postgraduates in the Faculties of Medicine, Engineering and Science, and Undergraduates in the Faculty of Engineering.

4. Safety Audit Programme

At present the main proactive mechanism for monitoring and improving safety performance across the University is the departmental safety inspection programme. This will continue, but it is recognized that while important, it can only detect some physical

indicators of safety performance. When safety performance in departments is good, there are frequently departmental arrangements which facilitate this. Examples of such arrangements are meetings of safety committees or committees with safety as an agenda item, internal safety inspections using a proforma checklist tailored to departmental needs, and safety training provided by the department to augment that provided centrally. Such activities can be detected by a safety audit when they are formally recorded within departments. If they are already occurring, but are informal at the moment, an audit programme can provide an incentive to identify simple means of documenting existing good practice.

It is proposed to extend the current departmental safety inspection programme to include safety audits, and extend the departments covered by audit to include a representative sample of University activities. An important aim is to identify existing good practice in departments and encourage other departments to adopt similar approaches to safety management if they are not already doing so.

A safety audit programme widely used in the UK HE sector called HASMAP will be followed, with some adaptations to reflect the different legal framework in Hong Kong. This will provide a safety performance rating of departments audited. It will cover all departments where there is a significant Biological Safety risk to be managed. Further details are contained within the attached document, in which what are assumed to be particular indicators of good safety management are highlighted.

BSC-20-02

5. Dates of next meeting.

The 21st meeting will be held at 10am on 23rd October 2019 in room 412, Professorial Block, Queen Mary Hospital. Committee members are encouraged to contact the secretary if they have any items they wish to be considered on the agenda.

Dr Paul Hunt
Secretary to the University Biological Safety Committee
9th May 2019