

# Information and Guidance on Safety Declaration for Research Higher Degrees

## Information and Guidance

This webpage provides information and links to various safety resources so that students and supervisors have all the information necessary to be able to complete the Safety Declaration required for research higher degrees.

There is a large amount of information in the Safety Office website on the areas specified in the Declaration Form (Form SD1). The following links provide a starting point:-

Biological Safety (<http://www.safety.hku.hk/homepage/bioInt.html>)

Chemical Safety (<http://www.safety.hku.hk/homepage/chem.html>)

Radiation Safety (<http://www.safety.hku.hk/homepage/rad.html>)

Links to the full University policies/codes of practice for each of the given areas specified are shown.

Biological Safety Policy and Guidance <http://www.safety.hku.hk/homepage/pdf/HKUBSP.pdf>

Chemical Safety Policy (for laboratories) <http://www.safety.hku.hk/homepage/pdf/CSL.pdf>

Radiation Safety Policy <http://www.safety.hku.hk/homepage/pdf/RSafety.pdf>

Code of Practice on the use of high-power lasers <http://www.safety.hku.hk/homepage/pdf/LCOP.pdf>

Policy and guidance on machine safety <http://www.safety.hku.hk/homepage/pdf/MSG.pdf>

Guidance on electrical safety <http://www.safety.hku.hk/homepage/pdf/ElSaf.pdf>

## Checklists

Two sets of checklists produced by the safety office are available to help assess the hazards involved with particular types of work. The first set is intended to be used by departments as self-inspection checklists which summarize the main areas of concerns related to specific hazards. These could also be used by students to identify the safety issues involved with their work. The second set of checklists are intended for use by principal investigators when submitting grant applications. These could also be used by students to help identify the type of risk assessment and documentation that might be required for their work.

1. Self-Inspection Safety Checklists: <http://www.safety.hku.hk/homepage/pdf/DSRIC.pdf>.

This document includes information on:-

- A. General Safety
- B. Chemical Safety
- C. Good Microbiological Practice
- D. Compressed gas safety
- E. Mechanical Safety
- F. High Power Laser (Class 3b and/or 4)
- G. Unsealed Radioactive Substances

- H. Sealed Radioactive Substances
- J. Closed Beam X-ray Machine
- K. Open Beam X-ray Machine

2. Safety Approval Checklists:-

Biological Safety [www.safety.hku.hk/homepage/pdf/ChecklistBS.pdf](http://www.safety.hku.hk/homepage/pdf/ChecklistBS.pdf)

Chemical Safety <http://www.safety.hku.hk/homepage/pdf/ChecklistCS.pdf>

Ionising Radiation Safety [www.safety.hku.hk/homepage/pdf/ChecklistIRS.pdf](http://www.safety.hku.hk/homepage/pdf/ChecklistIRS.pdf)

Non-Ionising Radiation Safety [www.safety.hku.hk/homepage/pdf/ChecklistNIRS.pdf](http://www.safety.hku.hk/homepage/pdf/ChecklistNIRS.pdf)

### **Risk Assessment**

Part of the declaration involves the student indicating that they have assessed the risks involved in their project. The document "Risk Assessment for Work with Infectious Agents and Clinical Samples" <http://www.safety.hku.hk/homepage/pdf/BSRA2014.pdf> is not just about risks from infectious agents but also contains a general introduction to risk. The first three example risk assessments in the document are general examples of risks in the laboratory environment and should help with the practical steps of assessing risk.

More detailed risk assessment forms and guidance for assessing work with viruses and virus vectors can be found in the Biological agents section of the Safety Office webpage:- <http://www.safety.hku.hk/homepage/bio.html>. The forms include:-

RA1 (for general work with Pathogens)

RA3 (for work with Retroviruses – including lentiviruses)

RA4 (for work with Adenovirus)

RA5 (for work with Poxviruses)

Guidance on Working with Viruses and Virus Vectors:

AAV <http://www.safety.hku.hk/homepage/pdf/BAAV.pdf>

Adenoviruses <http://www.safety.hku.hk/homepage/pdf/Adeno.pdf>

Retroviruses <http://www.safety.hku.hk/homepage/pdf/Retro.pdf>

Poxviruses <http://www.safety.hku.hk/homepage/pdf/Pox.pdf>

### **External links that may be useful**

The laboratory safety Institute has a number of videos on its website that have been extracted from other sites.

<http://www.resources.labsafetyinstitute.org/SafetyVideos.html>

The videos include:-

- i) Assessing Risks of Toxic Chemicals – Phenol, Acrylamide Molecular biology lab based. – 18 mins
- ii) Centrifugation Hazards – 9 mins
- iii) Chemical Hazards – 9 mins (again with emphasis on Phenol – probably the most significant chemical held in most molecular biology labs).
- iv) Chemical Storage Hazards – 11 mins
- v) Emergency Response (a bit dated but appropriate) – 11 mins
- vi) Glassware Washing Hazards – 10 mins

Dow Chemical's has a series of 38 videos on various aspects of safety. They are up to date and fairly instructive (with an American perspective). They cover

safety orientation: <http://safety.dow.com/en/safety-courses/safety-orientation-and-training>

a number of specialized topics: <http://safety.dow.com/en/safety-courses/specialized-topics>

a number of ways of evaluating laboratory hazards <http://safety.dow.com/en/safety-courses/plan-evaluate-execute> and

promoting a sustainable safety culture: <http://safety.dow.com/en/safety-courses/sustainable-safety-culture>.

They are all in the public domain but users will need to register with Dow to gain access.