

 <b>The University of British Columbia Board of Governors</b>	<b>Policy No.:</b>  <b>10</b>	<b>Approval Date:</b> March 1988  <b>Last Revision:</b> June 2005
	<b>Responsible Executive:</b> Vice-President, Research	
<b>Title:</b>  <b>Procedures For Working with Biohazardous Materials</b>		
<b>Background &amp; Purposes:</b>		

## 1. Inquiries and Registration

- 1.1. Principal investigators working or proposing to work with cultured animal cells, microorganisms, primate body fluids, animals, or recombinant DNA, shall consult with the UBC Biosafety Committee. This includes research undertaken by UBC appointees in facilities controlled by the University, directed by UBC personnel, or supported by grants processed through the University. All proposals, regardless of funding source, are subject to this review.
- 1.2. The Biosafety Committee will verify that the research program falls within the Medical Research Council Guidelines and propose the appropriate level of containment.
- 1.3. The Biosafety Committee will approve the research facilities, confirm that safety equipment, including biological safety cabinets, is functioning properly, and advise on training required by the staff conducting the research. A Biosafety Certificate will be issued when all of the prescribed requirements have been met.
- 1.4. The Vice-President Research will appoint one member of the UBC-Okanagan Research Safety Committee to liaise with the UBC Biosafety Committee. Minutes of meetings of the UBC Biosafety Committee and the UBC-Okanagan Research Safety Committee will be exchanged. Information relevant to the UBC Biosafety Committee will be summarized by the UBC-Okanagan Research Safety Committee for inclusion in the annual report that is forwarded to the Vice-President Research.
- 1.5. On matters related to biohazard safety and containment, the Biosafety Officer shall provide guidance and direction to the Safety and Environmental Officer located at UBC-Okanagan.
- 1.6. The UBC Biosafety Committee may be reached by contacting:
  - 1.6.1. Dr. William Bowie, Chair  
Division of Infectious Diseases  
Telephone: (604) 875-4147
  - 1.6.2. T. Bruce Anderson, Biosafety Officer  
Health, Safety and Environment  
Telephone: (604) 822-7596

## **2. Biosafety Certificate Form #OHS-91/8**

- 2.1. All biohazardous research as defined by the Biosafety Committee shall be covered by a valid Biosafety Certificate. The Certificate indicates the minimum level of containment necessary and will be issued when all requirements have been met. This certificate is valid for three years unless there are significant changes in the research program, in which case notification must be submitted to the Committee.

## **3. Medical Research Council Grant Form MRCC 34 (1979)**

- 3.1. Applications for research grants which come under the MRC Guidelines must be reviewed by the Biosafety Committee to determine the nature of the research, the most appropriate level of containment and whether the laboratory facilities are adequate. The Medical Research Council will not release funds to grantees unless Form MRCC-34 (1979) has been completed by the applicant and countersigned by the Chair of the Committee certifying that all of the conditions of the guidelines have been met.

## **4. Natural Sciences and Engineering Research Council Grant Form 122 (1979)**

- 4.1. Applicants to the Natural Sciences and Engineering Research Council, which has adopted the MRC Guidelines for research grant governed by the guidelines, must be accompanied by NSERC Form #122 (1979), and countersigned by the Chair of the Biosafety Committee.
- 4.2. Copies of MRC Form MRCC-34 (1979) and/or NSERC Form #122 (1979) are available from the Office of Research Services (604-822-8595), or from the Biosafety Committee. It is expected that completion of these forms and examination by the Committee will lengthen by a few days the time required by the Office of Research Services to process an application. This delay should be considered when submitting grant applications.

## **5. Training of Staff**

- 5.1. The principal investigator shall be knowledgeable of all the hazards associated with his/her research and introduce the controls necessary to ensure safe operation. Further, it is the principal investigator's responsibility to ensure that all personnel under his/her direction are trained to work in a safe manner. For this purpose the Biosafety Committee will assist the investigator by gathering pertinent literature and teaching materials such as slide/tape presentations for the training of staff in safety and decontamination procedures.
- 5.2. Additional information is available from the Biosafety Officer (604-822-7596).

## **6. Biological Safety Cabinets**

- 6.1. The biological safety cabinet is a major safeguard designed to provide product, worker, and environmental protection by containing biohazardous materials.

### **6.1.1. Cabinet and Site Selection**

- 6.1.1.1. Before any money is expended on a cabinet, the principal investigator should consult with the Biosafety Committee or Officer for comments or approval. The cabinet should meet performance standards, testing criteria, and be installed in modes which are practicable, and not hazardous or difficult to certify.

## **6.1.2. Cabinet and HEPA Filtered Equipment Certification**

- 6.1.2.1. The principal investigator shall make arrangements to have the cabinet and all HEPA filtered equipment tested by the Biosafety Officer:
  - 6.1.2.1.1. Prior to use
  - 6.1.2.1.2. Annually thereafter
  - 6.1.2.1.3. After relocation
  - 6.1.2.1.4. After HEPA filter replacement
  - 6.1.2.1.5. After servicing such as a fan motor replacement
- 6.1.2.2. A valid Performance Certificate (Form #H.S &E./95.01.05) shall be permanently and conspicuously located on the cabinet or HEPA filtered equipment for viewing by any regulatory agency.

## **7. Operational Notes**

- 7.1. The principal investigator will ensure that the correct startup procedures for the biological safety cabinet are followed. This will include a check of the pressure drop across the filters and a visual inspection of the equipment. If, for example, a punctured filter is seen or suspected, the work should cease and the Biosafety Officer should be informed.
- 7.2. The principal investigator will also make sure that correct shutdown procedures are followed at the end of the day. This should include disinfecting all work areas inside the cabinet, using 70% alcohol or other disinfectants deemed to be suitable.
- 7.3. Written startup and shutdown procedures should be conspicuously posted on the cabinet.

## **8. Emergency Plan**

- 8.1. The principal investigator shall ensure that an emergency plan is posted, that the staff are aware of its contents, and a copy is on file with the Biosafety Committee. A copy may be submitted with Form OHS-91/8/v2.