

HEALTH AND SAFETY PROGRAM MANUAL



LIFE SCIENCES CENTRE

Revision Date: June 2007

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REFERENCE DOCUMENTS:

- 3-1 Safety Committee Meeting Minutes (sample template)
- 4-1 Personnel Orientation and Training Record (sample template)
- 6-1 Task Hazard Analysis Form
- 6-2 General Work Areas Inspection Checklist (sample template)
- 6-3 Laboratory Inspection Checklist (sample template)
- 7-1 UBC Faculty and Staff Incident/Accident Report
- 7-2 UBC Student and Visitor Incident/Accident Report
- 15-1 Health and Safety Program Review Document

ADDITIONAL HEALTH & SAFETY INFORMATION AND RESOURCES:

Go to: <http://www.lsi.ubc.ca/SafetyResources.php>

EMERGENCY CONTACT INFORMATION

FIRE **POLICE**
AMBULANCE

9-1-1

Mobile First Aid (Point Grey Campus) .. (604) 822 - 4444

Local First Aid Attendants:

For information and a list of LSC First Aid Stations and Attendants go to:
<http://www.lsi.ubc.ca/LSCFirstAid.php>

LSC Main Floor: a First Aid Attendant may be summoned by going to the
LSI Administration / Administration desk.

Hazardous Materials Response.....911

Poison Control..... (604) 682-5050

Patrol (UBC campus) (604) 822-2222

Other:

LSC Safety & Environmental Advisor..... (604) 827- 4127
Bio-Safety Advisor(604) 822-7596
Campus Security (non-emergency).....(604) 822-8609
Chemical Health and Safety Advisor(604) 822-5909
Disaster Preparedness Resources Centre(604) 822-6002
Emergency Planning Coordinator..... (604) 822-1237
Environmental Services Facility(604) 822-6306
Health, Safety and Environment.....(604) 822-2029
Occupational Hygiene Advisor.....(604) 822-2643
Plant Operations (UBC Site Trouble Calls)(604) 822-2173
Radiation Safety Advisor.....(604) 822-7052
R.C.M.P. (UBC campus)(604) 224-1322
Student Health Services (UBC campus)(604) 822-7011
Vancouver Fire Unit (non-emergency)(604) 665-6010
Vancouver Hospital (UBC) Emergency Dept(604) 822-7222

YOUR HEALTH AND SAFETY PROGRAM MANUAL

LSC REQUIREMENTS

1. Each administrative Unit / area shall have access to a copy of the general LSC Health and Safety Program Manual that specifies all the elements of its local Health and Safety Program.
2. The LSC safety rules and safe work procedures shall be itemised in the document or in a separate document.
3. The manual must be available to all LSC personnel, ensuring that they are aware of their responsibilities and safe work procedures.
4. Fire plans and evacuation routes that are specific to the area(s) are to be included in the document or in a separate document.
5. The manual should be reviewed and updated *annually*.
6. **The LSC Health and Safety Manual can be found on-line at: <http://www.lsi.ubc.ca/safety.php>**

ADDITIONAL INFORMATION AND REFERENCES

If there are any questions regarding the LSC Health and Safety Program manual, please contact the LSC Safety and Environment Advisor at (604) 827-4127.

HEALTH AND SAFETY MESSAGE FROM THE DIRECTOR

To be posted

LSC SAFETY PROGRAM ADMINISTRATOR (SPA)

Unit Heads have the primary responsibility for the safe and compliant operation of their area. This management function may be delegated, by the Head, to a Unit member or M&P staff member who will act as the area's Safety Program Administrator (SPA)

LSC REQUIREMENTS

1. At the LSC, the Safety & Environmental Advisor is to act as the Safety Program Administrator.

2. The Roles and Responsibilities of the SPA are to:

1. Act with the authority of the Head in the day-to-day Health and Safety management of the Unit and act as the Unit's liaison with the HSE Unit.
2. Develop, maintain and oversee the distribution of the Unit's Health and Safety Program Manual with the assistance of HSE staff.
3. Ensure that safe work procedures are developed and enforced.
4. Develop the health and safety inspection protocol for the Unit.
5. Define the inspection areas, prepare the inspection checklists and develop reporting procedures.
6. Review all accident investigation reports and take preventative measures to prevent reoccurrence.
7. Facilitate the formation of the local Health and Safety Committee by assigning management staff and facilitating the selection of worker representatives.
8. Support the activities of the committee, monitor their effectiveness and respond to committee recommendations on behalf of the Head.
9. Monitor the overall Health and Safety Program performance, including inspection frequency, quality and corrective actions.
10. Meet regularly with the Head to report activities and the status of the program.

The LSC Safety & Environmental Advisor and SPA is:

Pierre Tanguay

(604) 7827-4127

ptanguay@interchange.ubc.ca

ROLES AND RESPONSIBILITIES

Heads of Units:

- Assign responsibility for the development, implementation and maintenance of all elements of the Unit's Health and Safety Program that includes an effective functioning local Health and Safety Committee.
- Act as or appoint a Safety Program Administrator (SPA) for the unit.
- Select management representatives for the Committee, as per established Terms of Reference and assign authority to management representatives.
- Provide the Health and Safety Committee with the tools and resources to function effectively.
- Ensure that accident and incident investigations are conducted and review the reports.
- Ensure that supervisors and managers are trained and know their responsibilities for preventing or minimizing safety and security risks.
- Monitor the Health and Safety Program for compliance with WorkSafeBC and internal requirements.
- Communicate health and safety action plans, concerns and decisions to respective organizations.
- Review health and safety-related records and statistics at management meetings.
- Ensure that Health and Safety Program reviews are conducted as required.

Safety Program Administrators (SPA):

- Ensure the development, implementation and maintenance of all elements of the Health and Safety Program, including an effectively functioning local Health and Safety Committee.
- Monitor the Health and Safety Program for compliance with WorkSafeBC and internal requirements.
- Attend and participate in all required safety committee and management meetings.
- Review and provide senior management with safety committee meeting minutes and recommendations.
- Provide supervisors with the tools and resources to ensure the success of all elements of this program.
- Communicate safety action plans and recommendations to management and staff.
- Ensure accidents and incidents are investigated and reported. Review these reports.
- Ensure corrective action plans are implemented.
- Develop and monitor procedures for responding to and reporting personal security incidents (workplace violence program) following WorkSafeBC guidelines.
- Ensure that Health and Safety Program Reviews are conducted as required.

Supervisors (Faculty, Managers, Principle Investigators, Technicians, Supervisors, etc.):

- Implement and monitor the Unit's Health and Safety Program in accordance with WorkSafeBC requirements and UBC's Safety Program Policy.
- Instruct, train and monitor employees in safe work practices and workplace violence procedures.
- Develop and implement safe work procedures.
- Communicate health and safety-related information to employees and help implement corrective actions and recommendations.
- Recommend safety and health topics for committee meetings.
- Orient new and transferred employees.

- Hold regular staff meetings.
- Develop, implement and maintain hazard assessment and inspection programs.
- Conduct required regular workplace inspections, special inspections and accident investigations.
- Correct unsafe conditions or practices and ensure hazards are controlled until corrective action is taken.
- Complete proper injury/illness forms and forward copies of reports to the appropriate departments.
- Forward copies of accident/incident investigation reports to the local safety committee and the SPA for review.
- Develop, implement and maintain the Contractor Safety Program.
- Review health and safety records and statistics regularly.

Local Health and Safety Committee Members:

- Hold regular meetings at least once a month for the review of:
 - Reports of current accidents, incidents or illnesses/diseases
 - Remedial action taken or required by the reports of investigations and inspections
 - Other safety and health matters.
- Review and monitor the effectiveness of the unit's Health and Safety Program.
- Make recommendations directly to appropriate supervisor/manager and SPA.
- Assist management in the health and safety program development.
- Function within the set Terms of Reference.
- Post and distribute meeting minutes.
- Conduct formal workplace inspections.
- Assist as required in incident and or accident investigations.

Workers and Students:

- Work in a careful and safe manner.
- Follow departmental safe work procedures and practices, as well as WorkSafeBC requirements.
- Report any real or potential safety/health hazards to the supervisor.
- Actively participate in orientation and training programs, reporting to the supervisors any lack of knowledge needed to perform duties.
- Conduct informal daily inspections of the work area.
- Participate, when required, in scheduled workplace inspections and accident investigations.
- Report all accidents, incidents or near misses to the supervisor.
- Report any real or potential risks of personal security or public safety to the supervisor.
- Cooperate with the Safety Committee in the Safety Program Review process.

HEALTH AND SAFETY PROGRAM ELEMENTS

1. HEALTH AND SAFETY POLICY

The University of British Columbia's Safety Policy

The University aims to provide a safe, healthy and secure environment in which to carry on the University's affairs. All possible preventive measures are taken to eliminate accidental injuries, occupational diseases and risks to personal security.

Compliance with the Workers' Compensation Act, WHMIS and related legislation is the minimum standard acceptable. All students and members of faculty and staff are encouraged to strive to exceed these minimum legal standards

The University

It is the responsibility of the University acting through administrative heads of unit to:

- provide a safe, healthy and secure working environment;
- ensure regular inspections are made and take action as required to improve unsafe conditions;
- ensure that health, safety, and personal security considerations form an integral part of the design, construction, purchase and maintenance of all buildings, equipment and work processes;
- provide first aid facilities where appropriate;
- support supervisors and safety committees in the implementation of an effective health, safety and security program;
- ensure compliance with WCB and other applicable legislation;
- establish department or building safety committees;
- communicate with the university community or affected groups about events or situations when potentially harmful conditions arise or are discovered;
- ensure adequate resources are available to implement appropriate procedures.

The Supervisor

It is the responsibility of supervisory staff to:

- formulate specific safety rules and safe work procedures for their area of supervision;
- ensure that all employees under their supervision are aware of safety practices and follow safety procedures;
- provide training in the safe operation of equipment;
- inspect regularly their areas for hazardous conditions;
- correct promptly unsafe work practices or hazardous conditions;
- be responsive to concerns expressed about personal security and investigate any accidents, incidents or personal security concerns which have occurred in their area of responsibility;
- report any accidents or incidents involving personal security to the appropriate University authority;
- participate, if requested, on department or building safety committees.

Individual Students and Members of Staff and Faculty

It is the responsibility of individual students and members of faculty and staff to:

- observe safety rules and procedures established by supervisory staff, administrative heads of unit and the University;
- be safety-conscious in all activities, be they work, study or recreation;
- report as soon as possible any accident, injury, unsafe condition, insecure condition or threats to personal security to a supervisor or administrative head of unit;
- use properly and care for adequately personal protective equipment provided by the University;
- participate, if elected or appointed, on departmental or building safety committees.

2. MANAGEMENT MEETINGS

LSC Requirements

Units must strive to take all reasonable care in the provision of a safe and healthy workplace. This requires management to be aware of all issues and activities that impact on that requirement. As a result:

1. All senior management and supervisors are required to participate in regularly scheduled management meetings.

The purposes of these meetings are to ensure that:

- Two-way communication between management and workers is established
- Management receives and considers recommendations from the Unit's Safety Program Administrator (SPA) and Health and Safety Committee
- Important aspects of the Health and Safety Program such as inspections, accident investigations, and Health and Safety committee activities are monitored and evaluated.

2. The requirements for these meetings include:

- 1) Designating a person to be responsible for carrying out the Health and Safety portion of the meetings. In most instances, this person can be the SPA.
- 2) Meeting at least monthly
- 3) Having a prepared agenda which must include a section on Health and Safety
- 4) Discussing and making decisions on recommendations from the Health and Safety Program and Health and Safety Committee
- 5) Assigning responsibilities for required action and communicating management decisions
- 6) Documenting each meeting to meet due diligence requirements
- 7) Distributing minutes as required.

The effectiveness of these meetings depends on attendance and participation. It is the responsibility of those key persons and those who attend two levels of meetings to ensure that they communicate all important information and decisions at these meetings. It is this link that will complete the communication chain.

3. LOCAL HEALTH AND SAFETY COMMITTEE

LSC Requirements

1. **The LSC must have a functioning system of Local Health and Safety Committee.** Units with 9 to 19 employees must have a Worker Health and Safety Representative who has the same role as a Committee.

A local Health and Safety Committee is a *joint committee made up of worker and employer representatives* working together to identify and resolve health and safety problems in their area. It is an organizational unit that can coordinate health and safety activities and monitor the status of the health and safety program.

The roles of the local Health and Safety Committees are to:

- Assist in creating a safe and healthy workplace,
- Recommend actions that will improve the effectiveness of the Health and Safety Program
- Promote compliance with WorkSafeBC and internal requirements.
- Recommend changes to senior management.
- Senior management then, in turn, considers and makes decisions on these recommendations.

Management will provide all necessary resources to ensure that the Local Health and Safety Committee is able to function effectively. These include:

- Training for committee members
- Administrative support
- Adequate time for committee members to carry out responsibilities
- Open two-way communication channels.

2. **All meeting discussions and decisions are to be recorded, and the minutes distributed to senior management, the SPA and the Unit of Health, Safety and Environment.**

Health and Safety Committee Terms of Reference

Local Health and Safety Committees

The Local Safety Committees of the University have been mandated in the University Health and Safety policy to *“Carry out the Health and Safety programs within their areas and make recommendations to ensure that the Health and Safety objectives of the University can be achieved.”*

Committee Membership

All work areas of the University are to be covered by a local Safety Committee. Questions concerning appropriate areas of jurisdiction and organization of committees should be directed to the Health, Safety and Environment department.

Each committee consists of not fewer than four members who work in the area covered and are familiar with local operations. Committee members are designated as representing either the

University (employer) or the Faculty and Staff (workers). As required by WorkSafeBC regulations, employer representatives should not out-number worker representatives on the committee. Employer representatives are appointed by the appropriate Unit Head.

Worker representatives shall be elected or appointed by their peers. Efforts should be made to ensure all major work groups or areas are represented on each committee. Unit members may be appointed as employer representatives.

The members of the committee then elect two co-chairs and a secretary. One co-chair will represent the workers and will be elected by the faculty and staff members while the other co-chair will represent the University and will be elected by the employer representatives. The secretary is elected by all committee members and can be either an employer or worker representative.

Roles of the Local Health and Safety Committee

In order to monitor Health and Safety Programs each committee should:

1. Participate in regular work site inspections and report any hazardous conditions found;
2. Review written Health and Safety instructions and make recommendations for their improvement, particularly when new equipment or processes are introduced;
3. Participate in Incident/Accident Investigations;
4. Review, and make recommendations concerning all reported accidents or incidents which may have occurred in their unit;
5. Ensure that accidents have been investigated and reported to the Health, Safety and Environment office;
6. Staff representatives should accompany WorkSafeBC officers on inspection tours as required by the regulations.
7. Review and make recommendations concerning inspection reports from WorkSafeBC;
8. Consider recommendations or suggestions from staff concerning health and safety issues and endorse them where warranted;
9. Co-ordinate activities with the local Fire Director and cooperate with him or her to promote fire safety;
10. Include, in all its activities, consideration of conditions or circumstances that may affect the personal security of students, faculty or staff;
11. Conduct reviews of the health, safety and personal security programs in their units.

Committee Meetings

Meetings are to be held at least once each month, preferably on the same day of each month and should follow an agenda which contains the following topics:

1. Roll Call or Attendance;
2. Reading and acceptance of minutes of the last meeting
3. Report of actions taken as a result of items arising from the minutes;
4. Reading of correspondence;
5. Report of committee members who have conducted inspections;

6. Inspection reports from WorkSafeBC officers;
7. Reports of accident/incident investigations, causes and means of prevention;
8. Recommendations for improvement in health and safety programs such as training needs, awareness programs, hazard communication, or specific hazard abatement actions;
9. New business;
10. Time and place of next meeting;
11. Adjournment.

Committee Minutes

The Secretary records the minutes of meetings and copies are distributed to:

1. All committee members
2. The Unit Head
3. Health, Safety and Environment

Copies of Minutes are to be posted on designated bulletin boards. Minutes from the previous three meetings must be posted.

Committee Recommendations

Committee recommendations concerning the control of hazards or the improvement of prevention programs shall be directed to the administrative head of the unit who has operational responsibility for that work group. The administrative head's response to these recommendations shall be delivered to the committee chair in time for the next committee meeting. Issues that have not been resolved to the satisfaction of the committee may be referred to the Director, Health, Safety and Environment or to the University Safety Committee for their assistance.

Duties of Members and Officers

The duties of Safety Committee members are to:

1. Report unsafe conditions and practices;
2. Attend all Safety Committee meetings;
3. Report all accidents or near misses;
4. Conduct inspections;
5. Investigate all serious accidents;
6. Contribute ideas and suggestions for improvement of health and safety;
7. Work safely, and influence others to work safely;
8. Immediately advise anyone who may be affected by any unsafe act or condition;
9. Attend Health and Safety courses or seminars that are made available to committee members;
10. Promote and support personal security within a safe learning and working environment.

Duties of Co-Chairs

1. Arrange for a time and place for meetings;
2. Prepare and distribute agenda before the meetings;
3. Review previous minutes and materials prior to each meeting;
4. Report on the status of suggestions and recommendations;
5. Guide committee discussions towards definite conclusions.

Duties of The Secretary

1. Prepare minutes of the meeting;
2. Distribute the minutes;
3. Write reports and correspondence.

Review of the Terms of Reference

The *Terms of Reference* of the local Health and Safety Committee shall be periodically reviewed and amended by the University as required.

LSC Committees and Members

For a current list of Safety Committees and Safety Committee members, please go to:
www.

References

1. Safety Committee Meeting Minutes (sample template)

4. ORIENTATIONS, TRAINING AND SUPERVISION

LSC Requirements

WorkSafeBC requires Units to provide proper direction and instruction to workers in the safe performance of their duties. Through training and supervision, employees are made aware of hazards and safe work procedures to follow in order to protect themselves.

To meet this requirement Units must provide:

1. Worker Job Orientation
2. On-the-job Training
3. Worker Supervision
4. Orientation and Training Records

Worker Job Orientation

1. The University Human Resource Unit holds a general orientation session for new or transferred University employees.

The following general topics are covered during the orientation:

- UBC objectives
- Job description (including general limitations and authority)
- Performance expectations (general)
- Hours, benefits and pay period etc.

2. Units are also to hold an orientation session for all new or transferred employees. Supervisors conduct Unit orientation sessions for their areas in accordance with Unit Orientation and Training Guidelines. An employee must receive orientation training within 10 working days of his/her start date.

The following general topics must be addressed:

- Unit objectives
- Job description (including specific limitations and authority)
- Performance expectations (specific)
- Wages, hours,
- Training plan
- Health and Safety

On-the-Job Training

On-the-job training is to be provided by supervisors to new staff or when new procedures are introduced. On-the-job training will include:

- Using written work procedures and health and safety instructions to demonstrate the job
- Explaining health and safety aspects of conducting the job

- Explaining who to contact for help
- Gradually letting the employee perform the job, under supervision, until the employee demonstrates the knowledge and skills necessary for the job
- Verifying that the employee has learned the correct job procedures

On-the-job training must be initiated **immediately** when a new employee commences work, or prior to implementing a new work process.

Worker Supervision

1. Unit Supervisors are to ensure that work is carried out as expected by maintaining positive supervision over the work activities in their units.
2. Workers are kept up-to-date on management decisions and action plans through periodic staff meetings, unit memos and internal e-mail.
3. All employees are expected to work according to established safe work procedures. Supervisors will immediately rectify any unsafe actions in accordance with proper corrective procedures.
4. To effectively meet their responsibilities, supervisors must be trained in the following areas:
 - Techniques of effective supervision and instruction, including motivation and communication
 - Incident/Accident Reporting and Investigations and how to take corrective and preventive action
 - Workplace health and safety inspections of their area

Orientation and Training Records

1. Units are to maintain records of orientation and training to verify that employees have received adequate instruction to work safely.
2. The area supervisor is to sign each record (upon completion of an employee's training) and will regularly follow-up on that training to ensure consistency and competency.

References

1. Personnel Orientation and Training Record (sample template)
2. Lab or area-specific Safe Work Procedures and other orientation materials are to be found within specific labs or areas.

5. SAFE WORK RULES AND PROCEDURES

LSC Requirements

WorkSafeBC requires Units to provide appropriate written instructions for all work tasks. Written safe work rules and procedures are formulated to meet WorkSafeBC, UBC and, if applicable, manufacturer's requirements. Safe work procedures should be developed to eliminate or effectively control the hazards in the Unit.

To meet this requirement:

- Senior management and supervisors are to formulate site-specific health and safety rules and safe work procedures
- Management will continually provide the necessary resources to ensure that health and safety rules and safe work procedures are effective
- Management, the Safety Program Administrator, supervisors, and Health and Safety Committee members are to review accident and injury statistics on a regular basis to ensure that established rules and procedures are providing the Unit with the safest work practices.
- Health and safety rules are to be posted in the work areas and specific work procedures are to be made accessible to all employees in the areas where they apply.

Supervisors are to ensure that:

- Health and safety rules and safe work procedures are communicated initially to workers during orientation and on-the-job training
- Health and safety rules and safe work procedures are reviewed regularly at staff Health and Safety meetings.
- Workers are aware of the hazards associated with their work and understand how safe work procedures will prevent or minimize injury.
- Rules and procedures are enforced by immediately correcting unsafe acts or conditions.

All employees are expected to follow established rules and procedures.

References

1. Written Safety rules and safe work procedures for specific labs or areas are located within those areas.

6. HAZARD ASSESSMENTS AND WORKSITE INSPECTIONS

LSC Requirements

WorkSafeBC requires that Units ensure that hazards to the health and safety of workers are identified and brought to management's attention. It is management's responsibility to ensure that the identified hazards are eliminated or, where this is not practical, controlled, and that workers are protected from the hazards.

Worksite hazard assessments and inspections are key activities in the prevention of accidents. Their purposes are to:

- Identify existing and potential hazards
- Increase awareness leading to the prevention of workplace accidents and illnesses
- Ensure compliance with standards and regulations.

To meet this requirement, Units are to:

- Conduct Hazard Assessments prior to all new projects, jobs, processes, equipment or hazardous materials
- Conduct regular Worksite Inspections.
- Provide all necessary resources to ensure that hazard assessments and workplace inspections are effective. These include:
 - a. Hazard recognition and inspection training for those conducting inspections
 - b. Time for inspectors to complete their duties
 - c. Established communication channels between inspectors, the local Health and Safety Committee and senior management
 - d. Quick action on recommended corrections.
- Document all assessments and inspections.

Hazard Assessments / Task Analyses

A hazard assessment or task health and safety analysis is recommended prior to the start of any new project, task or job. Its purpose is to anticipate, as much as is reasonable, any hazards that are inherent or could arise out of a new project, task or job. Once the hazards have been identified, the controls for eliminating or minimizing these hazards can then be determined and implemented. Hazard assessments should also be undertaken when major modifications are made to a project, task or job.

The *Task Hazard Analysis Form* referenced in this document is designed for general use. More specific hazard assessment/analysis forms may need to be used, depending on the nature of the work and risks involved. For assistance in developing a hazard assessment form or completing an assessment, call the LSC Safety and Environment Advisor at 604-827-4127.

Workplace Inspections

Following are the four types of workplace inspections to be conducted:

1. Informal Workplace Inspections

- This is accomplished by supervisors conducting regular walk-throughs of their areas of responsibility and by workers checking their work areas prior to commencing work.
- All employees are expected to maintain continual awareness of hazards in their work areas.
- No formal inspection report is required; however, any detected hazards must be corrected immediately if the task is within the employee's capabilities. If not, the hazard should be reported to the area supervisor or management for correction.

2. Regular Workplace Inspections

- Work areas will be inspected on a regular basis by the area supervisor or a designate. For most environments, these inspections should be conducted monthly. In some low risk environments, these inspections can be conducted on a less frequent regular basis.
- Each supervisor (in conjunction with the SPA) will develop a site-specific inspection checklist.
- The inspection checklists will be completed for each inspection and each supervisor must regularly review and update his/her checklist as required.
- The completed reports shall be forwarded to the SPA on a quarterly basis for review.
- The SPA will provide summaries for the head and the local Health and Safety Committee to review. The Committee is responsible for ensuring inspections are completed regularly, reviewing inspection reports and providing recommendations.
- The area supervisor must ensure that corrective action is taken so that the hazard is eliminated or controlled.

3. Health and Safety Committees Inspections

- Health and Safety Committee Inspections are formal workplace inspections that are conducted by local Health and Safety Committee members *at least semi-annually*.
- An Inspection Report is completed and copies sent to the supervisor of the inspected area, the SPA and the Health and Safety Committee for review.
- The area supervisor must ensure that corrective action is taken to eliminate or control identified hazards.

4. Special Inspections

- Special inspections take place immediately after a malfunction/accident, when new machinery or processes are introduced, or as required by manufacture instructions.
- The area supervisor and a worker representative conduct this type of inspection, along with a specialist when necessary.
- An inspection report must be completed and distributed to the SPA and local Health and Safety Committee for review.
- An investigation may also be required for certain incidents (see element 7 – Accident/Incident Investigations).
- The area supervisor must ensure that any existing unsafe conditions are effectively controlled before commencing an inspection or investigation.

References

1. Task Hazard Analysis Form
2. General Work Areas Inspection Checklist (sample template)
3. Laboratory Inspection Checklist (sample template)

7. ACCIDENT/INCIDENT INVESTIGATIONS

The purpose of accident reporting and investigating is to identify deficiencies in the management of health and safety, take steps to correct these deficiencies, and prevent similar incidents from occurring in the future.

LSC Requirements

Units are required to report the following incidents to Health, Safety and Environment (HSE):

- Work-related injury. The report must be made within 24 hours of the occurrence.
- Disabling occupational disease or allegations of an occupational disease. The report must be made within 24 hours of receiving notification from the worker.
- Work-related death. The report must be made immediately.

The HSE Department is responsible for reporting this information to WorkSafeBC.

WorkSafeBC requires Units to investigate any accident which:

- Resulted in serious injury or death of a worker
- Resulted in injury/illness to a work requiring medical treatment
- Resulted in injury/illness to a worker requiring time loss from work
- Involved a major structural failure
- Involved a major release of a hazardous substance
- Was a blasting or diving accident
- Had the potential to cause serious injury/illness

Management will provide all tools and resources necessary for investigations to be effective. These include:

- Accident investigation training for investigators
- Time made available to allow investigators to complete their duties
- Quick action on recommended corrective actions to prevent recurrence of similar situations.

Accident/Incident Reporting

For all employees, the *UBC Faculty and Staff Incident/Accident Report* must be promptly and fully completed for all applicable incidents or accidents, and sent in to HSE within 24 hours.

For students and visitors, the *UBC Student and Visitor Incident/Accident Report* must be fully completed.

Forms may be obtained by calling the LSC Safety Advisor at 604-827-4127

Accident Investigation

The investigation on an incident must take place as soon as possible after an incident's occurrence.

The investigation team must consist *of an area supervisor and an employee representative*. Each investigator is required to be trained on investigation procedures as well as be knowledgeable of the work performed at the time of the accident.

The *UBC Faculty & Staff Accident Investigation Report* (the second page for the Incident/Accident Report) must be completed and sent in to HSE within 3 business days. A copy of the report must be provided to management and the Safety Committee for recommendations and implementation of corrective actions.

For information on Accident Investigation training, call the LSC Safety Advisor at 604-827-4127.

References

1. UBC Faculty and Staff Incident/Accident Report
2. UBC Student and Visitor Incident/Accident Report

8. FIRST AID AND EMERGENCY SERVICES AT LSC

First Aid Services

Any person at the Life Sciences Centre that needs First Aid care has several options:

Option 1: See an LSC Local First Aid Attendant

- For information and a list of LSC First Aid Stations and Attendants go to:
<http://www.lsi.ubc.ca/LSCFirstAid.php>
- A First Aid Attendant may be summoned by going to the LSI Administration / Administration desk (main floor).
- Attendants are generally available during standard working hours

Option 2: Summon the UBC “2-4444” Mobile First Unit

- This service is available to anyone - at no cost - *no matter how minor the injury*
- This service is available *24 hours a day, 365 days a year*

How to Call for Mobile First Aid:

1. Dial: 604 - 822- 4444

This automatically directs the call to the VFRS Dispatch Centre.

2. Give the Dispatcher all the requested information,

This is to include: the nature of the injury, the exact location of the patient and any other relevant information that is requested.

3. Follow all instructions given

Stay on the line until told to hang up.

4. The Mobile First Aid Vehicle will be dispatched

Please avoid relocating the patient, as the responders will be sent to the patient's location, The dispatcher will also dispatch a BC Ambulance Unit if the caller or the dispatcher deems it necessary.

5. Assign a person to help guide the responders to the patient

6. Treatment Options

At the site, the Mobile First Aid Attendant will have several treatment options:

- 1). the patient may be treated on site and allowed to return to work,
- 2). the patient may be transported to the Central First Aid Station,
- 3). the patient may be transported to VGH Emergency for admission.

Please note: Call 9-1-1 if the injury is severe (or if it appears that it might be severe), and then activate the 2-4444 system.

The purposes of the first aid and emergency services are to:

- Ensure prompt and effective emergency response
- Minimize the effects of injuries/exposures and promote speedy recovery
- Provide workers with assistance when required

General Requirements

1. Units are to provide employees with a quick and effective response in the event of injuries or emergencies.
2. Supervisors are required to communicate emergency numbers and procedures to workers during orientation training and to regularly review this information during staff meetings. Annual emergency and evacuation drills shall be practiced to ensure awareness and effectiveness of emergency routes and procedures. The success of the First Aid and Emergency Service Programs depends on employees knowing what to do in emergency situations, both major and minor.
3. The risks associated with the Unit's work process and related control measures must be communicated with employees and understood.
4. All training, meetings and drills shall be documented to meet due diligence requirements.
5. Management will provide all tools and resources required for these programs to be effective. These include:
 - Appropriate emergency response plans and equipment
 - Training of Unit and UBC emergency responders
 - Time made available to allow key players to complete their duties
 - Established chain of command for emergency situations.

LSC First Aid Stations and Attendants

In addition to the 2-4444 System, the LSC has established first aid stations as well as assign qualified first aid attendants throughout the Unit.

The following requirements must be adhered to:

- All first aid stations must have a basic, well stocked, first aid kit and a treatment record book.
- All first aid treatments, however minor, are administered by a qualified, currently certified Level One or above First Aid Attendant.
- All treatments are recorded in the treatment record book.
- The first aid attendants must submit a monthly summary of the treatment record sheets to their Unit's SPA and the Health and Safety Committee for review.

Supervisors must ensure that signs clearly indicating the location of, and how to call for, first aid are posted conspicuously throughout the workplace, and communicated to the workers in the Unit.

Local Emergency Plans and Procedures

The Unit has established and implemented plans and procedures for situations that have been identified where emergencies could arise. These plans and procedures deal with workplace accidents/injuries, fire prevention, emergency evacuation, personal security, earthquake and bomb threats.

See the Unit's Fire Plan and the UBC Emergency Procedures and Information Pamphlet. Depending on the nature of the emergency, response will be provided by Vancouver Fire and Rescue Services, the local detachment of the RCMP, Campus Security and/or HSE.

A Fire Safety Director and fire wardens throughout the Unit are to be appointed by the Unit Head. The SPA coordinates the fire wardens, first aid attendants, Health and Safety Committee and supervisors to implement and regularly review these plans and procedures.

For further information and a list of LSC Evacuation Coordinators and Floor Wardens, please go to: <http://www.lsi.ubc.ca/safety.php>

References

1. Emergency and Fire Plans for the LSC are posted in visible areas on the main floor, can be found in Appendix or can be obtained by calling the LSC Fire Director at (604) 827 - 4127

9. RETURN TO WORK PROGRAM

The intent of the Return to Work (RTW) Program is to facilitate re-integration of employees to the workplace in a fair and consistent manner. A joint union/management approach will be taken to ensure employees of the University have an equal opportunity to return to work after work-related or non-work-related illness or injury.

The objectives of the RTW Program are to:

- Maintain the employability of all UBC employees who become either temporarily or permanently disabled.
- Minimize employees' financial hardship and emotional stress.
- Provide meaningful, productive employment within its capacity to employees who are able to return to work.
- Reintegrate employees into the workforce in a respectful manner, thereby minimizing the loss of expertise and resources and maintaining employee potential and self-worth.

LSC Requirements

The Unit will follow the return to work procedures as outlined in the University Return to Work Program. For information and assistance regarding this program, contact the Health Promotion Programs section of the Health, Safety and Environment Department at 604-822-2029.

10. PERSONAL SECURITY AND PUBLIC SAFETY

All members of the University Community including Unit, staff and students shall be provided with an environment safe from violence or the threat of violence.

LSC Requirements

The University is committed to taking appropriate action(s) whenever possible to eliminate or minimize the risk or threat of violence to Unit, staff, students and visitors. Where the risk or threat of violence exists, the Unit must develop a *Preventing Violence in the Workplace Program*.

A *Preventing Violence in the Workplace Program* must include the following four components:

1. Risk Assessment
2. Policies and Procedures
3. Instruction of Workers
4. Response to Incidents

Risk Assessment

The Unit's Safety Program Administrator (SPA) must conduct a risk assessment in any workplace in which a risk of injury to workers from violence arising out of their employment may be present.

When conducting the risk assessments the SPA should consider:

- The nature of interactions between workers and the public
- The nature of the work environment
- The attributes of workers/clients
- Past history of incidents of violence in your workplace and in similar operations

This could include but is not limited to:

- A work site walk-about with affected staff
- An employee personal security survey
- Selected interviews with workers
- A review of crime or incident reports

Members of the Health and Safety Committee should review the risk assessment to ensure that it was properly conducted. The Head of Unit or delegate is responsible for the implementation of recommendations.

Policies and Procedures

Policies and procedures have been developed to address threats to personal security. These include UBC's *Discrimination and Harassment Policy #3* and *Threatening Behaviour Policy #14*. Also, the *Workplace Conduct and Violence Prevention* resource guide is available from Campus Security to assist with development of a *Preventing Violence in the Workplace Program*.

Instruction of Workers

Supervisors inform workers of the nature and extent of the risk of violence that they may be exposed to. Supervisors provide appropriate training to enable workers to recognize the risk, to take preventative measures and to report incidents. This information is communicated during orientation and on-the-job training.

Workers who are faced with the imminent threat of violence should call "911" followed by Campus Security (604-822-2222 or 2-2222 on a UBC telephone) when it is safe to do so. This could include such situations as personal threats of violence, threatening letters and/or bomb threats.

Response to Incidents

Workers are instructed to report all incidents of violence to the area supervisor. The area supervisor will then:

- Ensure that injured workers are attended to and that they are advised to consult a physician if needed
- Inform Campus Security of the situation
- Investigate the situation
- Take steps, if able, to prevent or minimize repeat occurrences; otherwise, report the situation to senior management for correction.

11. RECORDS, DOCUMENTATION AND STATISTICS

Health and safety activities are documented and kept on file for due diligence purposes, and to assist with loss prevention.

LSC Requirements

The types of records that Units maintain are:

- Worker orientation records
- Records of worker and supervisor training with the date, attendance, and general content of the program
- Records of meetings and crew talks where health and safety issues were discussed
- Inspection reports and records of actions taken to solve problems
- Accident investigations reports
- Supervisors' notes and logs of health and safety contacts with workers
- Records showing the use of progressive discipline to enforce health and safety rules
- Subcontractor pre-qualification documents
- Local Health and Safety Committee minutes, showing what steps have been taken to address health and safety issues
- Equipment log books and maintenance records
- Health and safety forms and checklists
- Medical certificates, hearing tests, and first aid records
- Sampling and monitoring records of exposures to harmful substances
- Statistics on the frequency and severity of accidents.

Injury/illness records are used in developing statistics to identify:

- Types of injuries
- Total claim loss for each injury
- Total time loss for each injury

Trend analysis is produced from all data accumulated under the Health and Safety Program to identify patterns, which may lead to the identification of systematic problems not perceived when looking at isolated incidents.

Records and statistics are reviewed regularly at senior management and Health and Safety Committee meetings. This process is crucial to identifying trends and hazards not previously identified, and outdated or ineffective control measures.

University Reports

- All accidents and WorkSafeBC claims must be reported to Health, Safety and Environment on a standard accident report within 24 hours.
- From this UBC information, and data from WorkSafeBC, HSE forwards relevant information to WorkSafeBC and compiles a monthly report that lists the number of accidents and classifies them by cause, injury, job classification and Unit.
- A brief narrative description of each accident is also produced and past year and year-to-date summaries are provided which are compared with the previous year's data.
- The associated WorkSafeBC costs of medical, wage loss, and pension amounts are also reported.
- This report is circulated to the University Health and Safety Committee, VP Admin & Finance, and AVP Human Resources.

12. HAZARDOUS MATERIALS

The Workplace Hazardous Materials Information System (WHMIS) is a major response to the worker's right-to-know about safety and health hazards of materials used in the workplace.

WHMIS legislation provides employees, employers and suppliers nationwide with specific vital information about hazardous materials through the key elements of:

- Controlled product labeling
- Material Safety Data Sheets
- Worker education and training programs

LSC Requirements

On the basis of WHMIS and other workplace information, the Unit has developed work procedures that ensure worker health and safety. Workers must be educated in hazards and trained in work procedures.

Annual Chemical Inventory

An annual inventory of hazardous materials must be maintained which identifies all hazardous substances and their quantities at the workplace. A chemical inventory includes the chemical name (formula) of the material and the size of its container.

Annual inventories allow for the following:

1. To check ethers and other chemicals with limited shelf life.
2. To remove surplus hazardous chemicals
3. To remove chemicals that you have not used in the past 1-3 years.
4. To correct incompatible storage.
5. To identify which chemicals are present.

Active WHMIS Program

The Unit implements the WHMIS program using information provided through WHMIS as well as other information from the workplace. WHMIS information is in the form of labeling and Material Safety Data Sheets (MSDS). Other workplace information includes knowledge of the hazards of the workplace, use of hazardous materials that depend upon factors such as quantities used, work processes and work location.

In order to implement a WHMIS program, the Unit will:

1. Establish an inventory of controlled products

- Contact suppliers for assistance with products supplied to the workplace.
- Collect data on products produced in the workplace and determine whether they are controlled.
- Maintain an up to date inventory.

2. Ensure that WHMIS labeling and data sheets are in place

- Have the purchasing Unit or agent request Material Health and Safety Data Sheets (MSDS) from suppliers.
- Have the shipper/receiver or other appropriate person check incoming labels and data sheets for compliance with WHMIS standards.
- Provide workplace labeling where required.
- Prepare MSDSs and appropriate labels for controlled products produced in the workplace (Only if product is being sold).
- Ensure up-to-date (less than 3 years old) MSDSs are available to workers

3. Determine the hazards of controlled products in the workplace

- Review the specific hazards of storage, handling and use of controlled products in the workplace. Take into account the physical and health hazards of the product, quantities, work processes, location of use, etc.

4. Establish workplace controls, based on hazard evaluations. Controls include:

- Engineering controls: i.e. ventilation, process modification and isolation of the source.
- Administrative controls: i.e. work procedures, storage arrangements, maintenance and time scheduling.
- Personal protective equipment used only in situations where other controls are not practicable.

5. Establish emergency procedures

- First aid measures
- Fire-fighting/evacuation measures (notify fire Units of hazardous materials).
- Procedures to handle spills or accidental release.

6. Provide worker education and training

- Educate workers in how WHMIS works and the hazards of controlled products
- Train workers in the necessary work, handling, storage and emergency procedures for all controlled products in the workplace.
- NOTE: The Unit of Health, Safety & Environment offers a *Chemical Safety Course* that fulfills the worker education and training requirement.

7. Review and upgrade the program

- Review the WHMIS program at least once a year.
- Re-instruct workers when necessary.
- Ensure MSDSs are not more than three years old.
- Ensure labels are legible and complete.
- Ensure all workplace controls are effective.

References

MSDSs are located within their specific lab areas or centres.

13. ENVIRONMENTAL PROTECTION

LSC Requirements

The University is committed to protecting the environment through ensuring compliance with legislation, demonstrating due diligence, and establishing a process of continuous improvement resulting in environmental stewardship.

UBC Policy #6 (Environmental Protection Compliance)

UBC Policy #6 states that:

“UBC will act responsibly and demonstrate accountable management of the property and affairs of UBC in protecting the environment. All individuals in the University community share the responsibility for protecting the environment. Administrative heads of unit are responsible for ensuring compliance with legislation and UBC procedures both on and off campus.”

All individuals in Units are to be made aware of UBC Policy #6 - Environmental Protection Compliance and other relevant policies (e.g. UBC Policy #5 – Sustainability). It is a goal of the University that all administrative heads of unit, or their designates, attend the session on “Environmental Responsibilities at UBC”. For information on upcoming sessions contact the Manager of HSE Management Systems at 604-822-9527.

All individuals within the Unit are responsible for reporting incidents, and serious issues immediately to the administrative head of unit. The administrative head of unit shall advise the Manager of HSE Management Systems of any serious issues immediately.

Activities

The administrative head of unit, or his/her designate, must conduct a review annually of the operations and activities with respect to applicable environmental legislation, codes of practice, guidelines and UBC policies and procedures. Corrective actions must be taken for areas that are found not to meet requirements. The Unit Head or designate is responsible for ensuring issues identified are addressed and brought into compliance.

The principle investigator will assess the environmental impact of all new projects or activities. Where possible, efforts will be taken to minimize any adverse impacts. All individuals must be trained prior to conducting activities that could impact the environment. Training records are to be documented and training shall be maintained up-to-date.

Disposal of hazardous wastes will be conducted in accordance with all applicable legislation and UBC procedures. For hazardous waste disposal procedures, contact the Environmental Programs Officer at 604-822-9280. All individuals handling hazardous materials shall refer to the UBC Spill Reporting Procedures located in the *Laboratory Chemical Safety Reference Manual*.

All individuals, where applicable, are encouraged to participate in the following programs:

- Solvent recovery (contact 822-1285)
- Photochemical Treatment and Recovery (contact 822-1285)
- Chemical Exchange (contact 822-6306)
- Waste Reduction (contact 822-3827)

For assistance or further information contact the Manager of HSE Management Systems at 604-822-9527.

Management Review and Reporting

Environmental issues will be reviewed at the Management Meetings. Serious issues are to be reported immediately to the Manager of HSE Management Systems at 604-822-9527, as well as the unit's applicable Vice President.

14. CONTRACTOR HEALTH AND SAFETY

LSC Requirements

All work carried out at UBC must be in compliance with the BC *Occupational Health and Safety Regulation* [BC OHSR] and UBC requirements. To ensure that contractors carry out work in a safe manner and meet these requirements, the University has developed and implemented a *Contractor Safety Program*.

Contractor Requirements

As a minimum, contractors must:

- Be experienced in all phases of work to be done
- Ensure their workers on a project are adequately trained in the work procedures to be used
- Exercise diligent health and safety management
- Maintain acceptable housekeeping and organization at the site.

Each contractor must submit a written plan that:

- Describes how health and safety will be managed throughout the project
- Identifies the person who will be on site at all times to coordinate work activities and health and safety between trades and sub-contractors.

Each contractor will complete a hazard identification and assessment of the project and work requirements prior to the start of work. The results of the assessment must be communicated to all project workers and posted for reference, and controls must be put into place to manage the hazards identified.

Project Work

Contractors must ensure that work is planned and carried out in a manner that does not expose other workers, UBC staff, students or the public to any undue risk and the work must be carried out so that it has minimum impact on UBC activities.

No work may begin until proper authorization and/or work permits have been obtained. Management will monitor work activities on a periodic basis to determine and ensure compliance with the BC OHSR and internal requirements. Issues of non-compliance and consequences will be dealt directly with the contractor or principal contractor.

15. PROGRAM REVIEW

A system for evaluating the operation of the Health and Safety Program must be in place. The purpose of a program review is to determine and implement changes needed to improve workplace health and safety. The program review assesses the effectiveness of the elements of the Health and Safety Program.

LSC Requirements

The Unit is to conduct a review of its Health and Safety Program on an annual basis.

The purposes of these reviews are to:

1. Identify the strengths of the Unit's Health and Safety Program
2. Identify areas of non-compliance (with WorkSafeBC and UBC requirements)
3. Identify where the program could be further improved so as to achieve higher levels of health, safety and compliance
4. Assist the Unit in reducing accidents and claims costs.

The unit's Safety Program Administrator (SPA) and members of the Health and Safety Committee are responsible for conducting these reviews in accordance with established program review procedures, using the *Health and Safety Program Review* document.

A written report is presented to the Unit Head and all levels of management upon completion of the review. Management then authorizes and implements measures to improve the Unit Health and Safety Program. The report is posted and available to all employees.

Management takes action on the evaluation report by:

1. Developing an action plan
2. Prioritizing recommendations
3. Assigning accountability
4. Conducting a follow up

All program review activities are documented to meet due diligence requirements.

References

1. Health and Safety Program Review document