

HEALTH & SAFETY PROGRAM MANUAL

**UBC Life Sciences
Centre**

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FIRE POLICE AMBULANCE

9-1-1

Mobile First Aid (UBC Campus)	(604) 822 – 4444
Local First Aid Attendants	See LSC Administration / Reception desk or Call LSC Safety Advisor 604-827-4127

Hazardous Materials Response	911
Poison Control	(604) 682- 5050
Patrol (UBC campus)	(604) 822-2222
Others:	
RCMP (UBC campus) Non emergency only	(604) 224-1322
Vancouver- UBC Fire Department Non-emergency only	604) 665-6010
Vancouver Hospital (UBC campus) Non Emergency only	(604) 822-7222
Student Health Services (UBC campus)	(604) 822-7011
LSC Safety & Environmental Advisor	(604) 827-4127
Health, Safety and Environment	(604) 822-2029
Bio-Safety Advisor	(604) 822-7596
Chemical Safety Advisor	(604) 822-5909
Radiation Safety Advisor	(604) 822-7052
Occupational Hygiene Advisor	(604) 822-2643
Personal Security Advisor	(604) 822-6210
Emergency Planning Advisor	(604) 822-1237
Environmental Services Facility	(604) 822-6306
Plant Operations (UBC Site Trouble Calls)	(604) 822-2173
Disaster Preparedness Resources Centre	(604) 822-6002

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INTRODUCTION

This Health and Safety Program Manual was created to help units / labs within the Life Sciences Centre meet their Health and Safety requirements and objectives.

Additional safety-related guidance, materials and references may be obtained by contacting Pierre Tanguay, LSC Safety Advisor, at (604) 827-4127 pierre.tanguay@ubc.ca or by visiting the following web-based resources:

UBC Life Science Centre website (Health and Safety Section) at: <http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/>

UBC Risk Management Services (RMS) website at: <http://riskmanagement.ubc.ca/>

1. HEALTH AND SAFETY POLICY (UBC Policy #7)

The UBC Safety Policy (Policy #7) formally expresses the University's objective of providing a safe, healthy and secure environment for all UBC faculty, staff, student and visitors. The Safety Policy defines the University's commitment and responsibility with regards to health and safety.

UBC Safety Policy # 7 is the official safety policy of the Life Sciences Centre.

UBC Policy #7 may be accessed at: <http://www.universitycounsel.ubc.ca/files/2010/08/policy7.pdf>

The complete list of University Policies can be accessed at: <http://universitycounsel.ubc.ca/policies/index/>

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2. MANAGEMENT MEETINGS

The LSC strives 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. Senior management and supervisors 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 LSC Safety Advisor as well as the LSC Safety Steering Committee,
- Important aspects of the Health and Safety Program such as inspections, accident investigations, and safety committee activities are monitored and evaluated, as needed.

2. The requirements for these meetings include:

- 1) *Meet at least monthly*
- 2) Having a prepared agenda (which includes a section on Safety, when needed)
- 3) Discussing and making decisions on recommendations from the Safety Steering Committee, when needed
- 4) Assigning responsibilities for required action and communicating management decisions
- 5) Documenting each meeting to meet due diligence requirements
- 6) 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.

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3. LSC HEALTH AND SAFETY COMMITTEES

1. All LSC floors have a functioning local Safety Implementation Committee.

LSC Safety Implementation Committees are *joint committees made up of worker and employer representatives* (where applicable) that work together to identify and resolve safety and health problems within the LSC. It is an organizational unit that can coordinate health and safety activities and monitor the status of the health and safety program.

The role of the Safety Implementation Committees includes:

- To assist in creating a safe and healthy workplace,
- Recommend actions that will improve the effectiveness of the safety and health program
- Promote compliance with WCB and internal regulations.
- Their responsibility is to recommend changes to senior management.
- Senior management then, in turn, considers and makes decisions on these recommendations.

LSC management provides the necessary resources to ensure that LSC Safety Committees are able to function effectively. This includes:

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

The overall function of the floor Safety Implementation Committees is to *implement* the safety policies and practices as determined and directed by University Policy, by LSC Senior Management and by the LSC Safety Steering Committee.

2. The LSC Safety Steering Committee determines overall safety policies and practices for the LSC. The Safety Steering Committee is comprised of the chairs of each Floor Safety Implementation Committee, as well as representatives from LSC Facility, Operations and other groups. The LSC Safety Steering Committee reports directly to LSC Senior Management.

3. All safety-related meeting discussions and decisions are recorded, and the minutes are posted / distributed to allow review by senior management and all LSC occupants. LSC Safety Committee meeting minutes are posted at: <http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/health-and-safety-committees/>

UBC Local Safety Committee Terms of Reference

The complete UBC Local Safety Committee Terms of Reference may be accessed on page 10-1 of the RMS Safety Committee Training Manual:

<http://riskmanagement.ubc.ca/sites/riskmanagement.ubc.ca/files/uploads/Documents/Safety%20Committee%20Training%20Manual.pdf/>

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4. ORIENTATION, TRAINING AND SUPERVISION OF WORKERS

The WCB requires departments 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 all units must provide:

- A. Worker job-orientation
- B. On-the-job Training
- C. Worker Supervision
- D. Orientation and Training Records

A. WORKER JOB-ORIENTATION

- 1. The University Human Resource Department 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 limitations and authority)
- performance expectations
- wages, hours, benefits and pay period etc.
- Departmental Administrators are to ensure that new workers attend these UBC sessions

- 2. The Life Sciences Centre has a comprehensive on-line safety orientation**

It is LSC policy that all new workers complete the on-line orientation prior receiving their LSC access cards / keys and prior to commencing their work. The on-line orientation also acts as a guide for the hands-on, task-and-work orientation that a supervisor must provide to the worker.

The LSC on-line orientation is accessed at: <http://www2.lsi.ubc.ca/LSC/safetyQuiz1.php>

B. ON-THE-JOB TRAINING

- 1. Units / supervisors are also expected to conduct a hands-on, work and task-specific orientation session for all new or transferred employees.**

Supervisors conduct work/task orientation sessions for their areas in accordance with LSC Orientation and Training Guidelines.

The following general topics must be addressed.

- departmental objectives
- job description (including limitations and authority)
- performance expectations
- wages, hours, benefits & pay period etc.
- training plan
- work and task safety

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

- using written job procedures and job safety instructions to demonstrate the job
- explaining safety aspects of conducting the particular task
- explaining who to contact for help

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- 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 procedure

3. **As per University and LSC policy, specific training courses must be taken if certain types of work are to be done.** The orientation and training requirements for specific types of workers at the LSC are outlined here:

<http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/lsc-orientation-and-training-requirements/>

C. WORKER SUPERVISION

1. Supervisors are to ensure that work is carried out as expected by maintaining positive supervision over the work activities in his/her unit.
2. Workers are kept up to date of management decisions and action plans through periodic staff meetings, department 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:
 - 1) Techniques of effective supervision and instruction, including motivation and communication,
 - 2) Accident Investigations and how to take corrective and preventive action,
 - 3) Work Site Safety Inspections of their area

D. ORIENTATION AND TRAINING RECORDS

1. Departments / units are to maintain records of orientation and training (to verify that employees have received adequate instruction to work safely).
2. When a worker completes the LSC On-line Safety Orientation, a copy of the completion document is automatically sent to worker's supervisor, as well as to the LSC Safety Advisor.
3. In order to facilitate record-keeping, LSC supervisors are encouraged to fill out and maintain a standardized Training and Orientation Record Sheet for each worker. This training record sheet is available at:
<http://facilities.med.ubc.ca/files/2012/03/LSC-Worker-Orientation-and-Training-Record1.pdf>
4. The 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.

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5. WRITTEN SAFE WORK RULES AND PROCEDURES

The WCB requires departments to provide appropriate written instructions for all tasks to workers. Written safe work rules and procedures are formulated to meet WCB, UBC (and if applicable, manufacturers') requirements and should be developed to either eliminate or effectively control the hazards in the workplace.

To meet this requirement,

- **LSC management has formulated facility-specific safety rules and procedures.**
These rules and procedures are posted in the Safety Section of the LSC Website <http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/manuals-publications/> and are posted in the workplace, where applicable.
- **LSC management continually provides the necessary resources to ensure that safety rules and safe work procedures are effective**
- **Management, supervisors, and safety committee members are to review accident and injury reports on a regular basis** to ensure that established rules and procedures are providing the department with the safest work practices.
- **Safety rules are posted in the work areas and specific work procedures are made accessible to all employees** in the areas where they apply.

Supervisors are to ensure that:

- **Safety rules and safe work procedures are communicated to workers** during orientations and through on-the-job training
- **Safety rules and safe work procedures are reviewed regularly** at staff safety meetings.
- **Workers are aware of the hazards associated with their work** and that they understand how safe work procedures will prevent or minimize injury.
- **Rules and procedures are enforced** by immediately correcting any observed unsafe act or condition.

All employees are expected to follow established rules and procedures.

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6. HAZARD ASSESSMENTS AND WORK-SITE INSPECTIONS

The WCB requires that units ensure that hazards to the safety and health of workers are identified and brought to management's attention. It is management's responsibility to ensure that the identified hazards are eliminated and, where this is not practicable, to ensure the hazards are controlled and that workers are protected from the hazards.

To meet this requirement, units are to conduct:

A. Hazard assessments prior to all new projects, jobs or processes, or the introduction of new equipment or hazardous materials.

A hazard assessment or job 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 or hazardous conditions 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.

For assistance in developing a hazard assessment form or completing such an assessment, call Risk Management Services at 822-2029.

B. Regular workplace inspections.

Work site 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.

Depending on the nature of the area, and the work being done, there are a number of different types of safety inspections:

1. Informal Workplace Inspections
2. Formal Workplace Inspections
3. Safety Committees Inspections
4. Special Inspections

The LSC provides all necessary resources to ensure that hazard assessments and workplace inspections are effective. These include:

- hazard recognition and safety inspection training for inspectors, where needed
- time for inspectors to complete their duties
- established communication channels between inspectors, local safety committee and senior management
- quick action on recommended corrections.

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WORKPLACE INSPECTIONS AT THE LIFE SCIENCES CENTRE

- 1. Monthly LSC workplace safety inspections are conducted by members of local (floor) Safety Implementation Committees.** In larger or more specialized areas within the LSC, additional inspectors may be tasked with conducting safety inspections and with conveying their inspectional findings to members of their local floor safety committee for discussion at monthly safety meetings.
- 2. Prior to attending the monthly safety meeting, members conduct safety inspections of their assigned area(s)** and bring forward items for discussion at the safety meeting.
- 3. The findings / issues, the ensuing discussion, the suggested corrective actions and the delegations of responsibilities and timelines are recorded in the meeting minutes.**
- 4. Follow-up on the action items are made at the following meeting.**
- 5. Safety items which cannot be effectively addressed by the safety committee are brought to the LSC Safety Advisor.** If corrective actions cannot be effectuated, the item is brought to the LSC Safety Steering Committee and, if need be, to the LSC Senior Management / Executive.

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7. ACCIDENT / INCIDENT REPORTING AND INVESTIGATIONS

Incidents and accidents must be reported and investigated in order to prevent similar situations from happening again in the future. Reports and investigations never seek to assign blame.

To meet WCB and University requirements, LSC units must *report and investigate* any incident or accident that resulted in:

- **A death or critical condition with a serious risk of death (This report must be made immediately)**
- **A work-related injury requiring treatment by a medical practitioner**
- **A time-loss injury**
- **An occupational disease or allegations of an occupational disease**
- **A major structural failure or collapse**
- **The major release of a toxic or hazardous substance**
- **A “near miss” (did not result in an injury but had the potential for causing serious injury)**

NOTE: All incidents, accidents and WCB claims must be reported to Risk Management Services (using an Incident/Accident Report Form), *within 24 hours*. Accident Investigation Forms must be submitted to HSE *within 72 hours*. RMS is responsible for reporting this information to the WCB.

Who conducts the Accident Investigation?

- The worker's supervisor (who is to complete the forms)
- A worker representative from the local safety committee, where applicable
- Other knowledgeable persons, such as a Health and Safety professional

QUALITY INCIDENT/ACCIDENT REPORTS AND INVESTIGATIONS

In order to meet the WCB quality standards, accident reports and investigations must:

1. IDENTIFY ALL CAUSES OF AN ACCIDENT including;

- Immediate causes** (example: Worker tripped on a piece of debris)
- Underlying (root) causes** (example: Housekeeping did not remove debris)
- Organizational / systemic causes** (example: No housekeeper on duty at the time)

Note: Accidents are usually caused by multiple factors, some of which may not be immediately obvious
Unidentified problems or causes cannot be corrected

2. CONTAIN SPECIFIC AND APPLICABLE CORRECTIVE RECOMMENDATIONS, including:

- Determine effective corrective actions** (What is to be done)
Note Corrective actions must seek to prevent a reoccurrence *for all potentially affected persons*, not just those involved in the incident
- Delegate responsibilities for corrective actions** (Who is to do what)
- Determining time lines** (When is action or task to be completed by)

Note: The best way to ensure that a problem gets fixed is to delegate a specific task to a specific person, within a specified time frame.

Recommendations, responsibilities and timelines are to be recorded in the report

3. INCLUDE PROVISIONS FOR FOLLOW-UP, including:

- Means to determine if recommendations were implemented**
- Means to determine if recommendations were effective**

For additional information - or for assistance with accident reporting and investigations - contact the LSC Safety Advisor at 604-827-4127 or pierre.tanguay@ubc.ca or contact UBC Risk Management Services at 604-822-2029.

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9. RECORDS, DOCUMENTATION AND STATISTICS

The types of records, documents and statistics being maintained include:

- Workers' on-line orientation records are kept by LSI Administration, the LSC Safety Advisor, and by the workers' supervisors.
- Records of workers' training with the date, attendance, and general content of the program are kept by workers' supervisors
- Records of meetings and crew talks where safety issues were discussed
- Inspection reports and records of actions taken to solve problems
- Accident investigations reports
- Supervisors' notes and logs of safety contacts with workers
- Records showing the use of progressive discipline to enforce safety rules
- Subcontractor pre-qualification documents
- Safety committee minutes showing what steps have been taken to address safety and health issues
- Equipment log books and maintenance records
- 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.

At the University of British Columbia, all accident / incident and investigation reports are received and reviewed by UBC Risk Management Services which keeps relevant records, documentation and statistics.

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10. PROGRAM REVIEW

A system for evaluating the operation of the safety and health program must be initiated. The purpose of a program review is to determine and implement changes needed to improve worker safety and health protection. The program review assesses the effectiveness of each element.

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. Inform the strengths of the Health and Safety Program
2. Identify where the Safety Program is not in compliance with the WCB Regulations
3. Identify where the Safety Program could be further improved so as to achieve higher levels of health, safety as well as compliance
4. Assist the unit in reducing accidents and claims costs.

The LSC Safety Advisor is responsible for leading these reviews in accordance with established program review procedures. All of the elements stated in the safety program manual are reviewed. The process considers the potential for future injury or loss and is a useful indicator of the department's current safety effort.

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

Management takes action on the evaluation report by:

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