

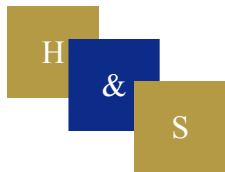
University of Toronto Annual Report on Health & Safety 2004



Prepared by
Environmental Health and Safety
Health & Well-being Programs & Services







UNIVERSITY OF TORONTO ANNUAL REPORT ON HEALTH AND SAFETY – 2004

TABLE OF CONTENTS

1. INTRODUCTION	1
2. RESPONSIBILITY FOR HEALTH AND SAFETY	2
3. LEGISLATION AND POLICIES	4
4. WORK RELATED INJURIES AND ILLNESS	5
5. OCCUPATIONAL HEALTH ACTIVITIES	8
6. HAZARDOUS WASTE MANAGEMENT	11
7. OCCUPATIONAL HYGIENE AND SAFETY	13
8. RADIATION PROTECTION SERVICES	19
9. MINISTRY OF LABOUR ORDERS	21
10. TRAINING AND EDUCATION	23
11. COMMUNICATION	23
 APPENDIX 1: OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY ...	24
 APPENDIX 2: JOINT HEALTH AND SAFETY COMMITTEES	25
 APPENDIX 3: SUMMARY OF TRAINING PROVIDED BY EHS IN 2003 ..	26
 APPENDIX 4: COMMITTEE MEMBERSHIP	28

1.0 INTRODUCTION

This report summarizes the major activities and the progress made in addressing health and safety issues at the University of Toronto during the calendar year 2004. The report was prepared jointly by the Office of Environmental Health and Safety and Health and Well-being Programs and Services.

The Terms of Reference of the Business Board require that the President or his designate prepare and submit to the Business Board an annual report on environmental health and safety activities undertaken to ensure compliance with the Occupational Health and Safety Act and the Environmental Protection Act. This report is submitted in compliance with these requirements.

OUR MISSION

"To enhance teaching and research at the University by fostering a healthy and safe work and study environment and by promoting employee health and well-being."



2.0 RESPONSIBILITY FOR HEALTH AND SAFETY

The University has a primary duty under the Occupational Health and Safety Act of Ontario to “take every precaution reasonable in the circumstances for the protection of a worker”. The senior management of the University and the Governing Council and its Boards have a positive duty to put in place a proper system to prevent the occurrence of offenses under the Act and to take reasonable steps to ensure the effective operation of the system.

Managers and supervisors are legally responsible and accountable for health and safety in the workplaces under their control. Joint health and safety committees, which are mandated by law and various staff support groups including the Office of Environmental Health and Safety and Health and Well-being Programs and Services provide assistance to the line of supervision in meeting these responsibilities.

Within the administrative structure of the University there are a number of advisory committees on health and safety; these are the Asbestos Advisory Committee, the University of Toronto Radiation Protection Authority, the Biosafety Committee and the Laser Safety Committee. These Committees oversee and regulate specific hazards related to asbestos issues, ionizing/nonionizing radiation, infectious/biohazardous agents and lasers, respectively. The chairs of these committees sit on the Senior Management Committee on Health and Safety. This committee is chaired by and provides advice to the Vice-President Human Resources and Equity. Its major function is to make recommendations with respect to regulations and other actions related to the Occupational Health and Safety Act, the Environmental Protection Act, other pertinent legislation and policies on health and safety approved by the Governing Council.

The Office of Environmental Health and Safety (EHS) reports to the Assistant Vice-President, Human Resources and has as its purpose to “*enhance research, teaching and learning at the University by fostering a healthy and safety work and study environment and by promoting employee health and well-being*”. The Office provides technical advice and assistance to the University community on health and safety matters, participates in the development and implementation of health and safety policies, procedures and programs, and monitors and audits compliance with health and safety legislation and University policies.

Health and Well-being Programs and Services (HWB), reporting to the Assistant Vice-President, Human Resources, provides one centralized resource for managers and employees (both faculty and staff) who require information and assistance associated with occupational health, sick leave, long term disability, workplace injuries, or accommodation. Office staff work collaboratively with Human Resources, EHS, departments and employees to return employees to the workplace in a timely and successful manner following injury or illness. The office also provides leadership to the university community on health and well-being issues in the workplace, including the development of inclusive, fair and proactive approaches in the accommodation of persons with disabili-

ties. HWB manages the Workplace Safety and Insurance Board program for the university and tracks injury rates and severity. We work with departments and EHS to develop targeted responses to identified patterns in an effort to reduce the incidence and severity of workplace injuries.

Appendix 1 lists the staff of both the Office of Environmental Health and Safety and Health and Well-being Programs and Services.

2.1 Joint Health and Safety Committees

Under the Occupational Health and Safety Act of Ontario, the University is required to establish and maintain joint (worker and management) health and safety committees in the workplace. The joint health and safety committee (JHSC) is a bipartite group where representatives of management and workers discuss and make recommendations with respect to health and safety. The major functions of these committees are to inspect the workplace on a regular basis and to make recommendations to management respecting workplace health and safety.

Presently, the University has forty-eight joint health and safety committees that have been established based on academic faculties/departments/buildings and/or employee unions and associations. Appendix 2 lists the committees and summarizes their status of compliance with respect to two specific provisions under the Occupational Health and Safety Act of Ontario; each committee is required by law to have at least two certified members and to meet at least once every three months (4 times a year).

In 2004, forty-one of forty-eight committees had at least the required number of meetings; some of the committees that did not fully meet the requirement are being reorganized, others have met the appropriate number of times in the last six months. This represents a significant improvement over the last few years. Also, as shown in Appendix 2, forty-five of forty-eight committees have at least the required number of certified members. Again this represents a significant improvement over the last few years. This year the total number of certified committee members increased from 122 to 151. EHS will continue to work with all committees to ensure that they fully meet their mandate. This is a continuous challenge due to staff transfers, departures, retirements and conflicting time commitments.

2.2 Senior Management Committee on Health and Safety

The Senior Management Committee on Health and Safety is a management committee whose major function is to provide advice and assistance with respect to regulations and other actions related to the Occupational Health and Safety Act, the Environmental Protection Act, other pertinent legislation and policies on health and safety approved by the Governing Council. Its membership is given in Appendix 4. The chairs of the Asbestos Advisory Committee, the Biosafety Committee, the Laser Safety Committee and Radiation Protection Authority sit on the Senior Management Committee. The Committee is chaired by and provides advice to the Vice-President Human Resources and Equity.



The Committee met twice in 2004. Major issues included the following:

- Revisions and approval of the University of Toronto Health and Safety Policy
- Review of a number of asbestos issues including asbestos training requirements for University employees and external contractors and clean up of asbestos in “accumulated” dust in F&S utility rooms, the Central Steam Plant and the central heat distribution tunnels
- Bill C45 (amending the Criminal Code with respect to corporate accountability for criminal health and safety offences)
- Strategies for communicating health and safety information to the University community

The committee also received regular reports from the Asbestos Advisory Committee, the Biosafety Committee, the Laser Safety Committee and Radiation Protection Authority about problem areas and corrective measures.

3.0 LEGISLATION AND POLICIES

3.1 Health and Safety Policy

In 2004, a revised University Health and Safety Policy was approved by Governing Council. The revisions reflect the University’s commitment to implementing, where reasonable, the best health and safety practices available to protect the University community and to promote a positive health and safety culture. The revised policy emphasizes the responsibilities of the supervisors and all members of the University community to ensure health and safety in the workplace and clearly acknowledges University management’s commitment to work in consultation and co-operation with employees, joint health and safety committees, students and others to implement the policy and applicable legislation. The responsibilities of employees, students, contractors, tenants and visitors to comply with this policy and relevant legislation have been made more explicit.

3.2 Legislative Changes

In 2004, there were no significant legislative changes to the Occupational Health and Safety Act, the Environmental Protection Act or the Nuclear Safety and Control Act.

Under the Occupational Health and Safety Act of Ontario, proposed amendments to Regulation 838: Asbestos on Construction Projects and in Buildings and Repair Operations were issued in October 2004. Adoption of some or all of these amendments could have a significant impact on the University’s Asbestos Control Program. The university made a submission to the Ministry of Labour on the proposed amendments.

4.0 WORK-RELATED INJURIES AND ILLNESS

4.1 Types of Injuries and Days Lost

Table 1 below indicates the number, types of accidents and the number of days lost for the period 1999 to 2004.

Table 1

Work Related Injuries & Illness

	1999	2000	2001	2002	2003	2004
# of Critical Injuries	6	3	0	4	4	3
# of Health Care Accidents	72	82	86	95	79	61
# of Lost Time Accidents	70	83	72	50	59	67
# of Days Lost	777	1017	1570	744	901	1689
Average Days Lost Per Accident	11.1	12.3	21.8	14.8	15.23	24.12

Critical Injuries

Critical injury has a specific definition under the Occupational Health and Safety Act. A critical injury is one that is of a serious nature that:

- places life in jeopardy;
- produced unconsciousness;
- results in substantial loss of blood;
- involves the fracture of a leg or arm but not a finger or toe;
- involves the amputation of a leg, arm, hand or foot, but not a finger or toe;
- consists of burns to a major portion of the body; or
- causes the loss of sight in an eye

There were three critical injuries in 2004. All were fractures and resulted from falls or contact with a stationary object.

Health Care Accidents

A Health care accident is one which requires professional medical attention but involves no time lost from work past the day of the accident. There were 61 allowed health care accidents in 2004, which was a decrease from 79 claims in 2003.



Lost Time Accidents and Accident Severity

Table 1 above shows the historical data on the number of lost time accidents compensated by the Workplace Safety and Insurance Board (WSIB) and the number of days lost from 1999 to 2004. There were 67 allowed lost time accidents in 2004 compared to 59 lost time accidents in 2003. The total lost time due to accidents in 2004 was 1689 days. This is a significant increase over the 2003 figure of 901 lost work days. The average number of days lost per accident in 2004 was 24.12 (an increase of 9 days). However, removing the small number of incidents (5) that resulted in very lengthy absences (over 90 days each), the average number of days drops dramatically to 15.3 days.

A more detailed analysis of the lost time reveals that together the 5 incidents of greater than 90 days account for over 40% of the total number of lost days. In three of the four cases involving the lengthiest absences (440 days) WSIB has granted the university 100%, 75% and 50% cost relief. This indicates that WSIB recognizes that the severity of the injuries (and thus the length of lost time) were either entirely or significantly influenced by a pre-existing condition.¹ In an additional 6 cases, waiting times for surgery lengthened the lost time and the recovery period.

Table 2 below is a listing of the 2004 incidents categorized by length of absence

Table 2

.	Number of Claims	Total Lost Days
1 day	12	12
2 – 5 days	22	71
6 – 10 days	9	75
11 – 15 days	3	39
15 – 30 days	8	178
31-60 days	7	312
61 – 90 days	4	306
90 – 165	5	696
TOTAL	70 claims*	1689 lost days

*Total includes 3 critical injuries noted in Table 1.

¹In the WSIB Operational Policy Manual, 12-Oct-2004, describes the Accident Cost Adjustments or Second Injury and Enhancement Fund (SEIF) in this way: "If a prior disability caused or contributed to the compensable accident, or if the period resulting from an accident becomes prolonged or enhanced due to a pre-existing condition, all or part of the compensation and health care costs may be transferred from the accident employer in Schedule 1 to SIEF."

4.2 Claims Breakdown by Employee Group in 2004

Table 3
Claims Breakdown by Employee Group for the Period 2001 to 2004

# of Lost-Time Accidents by Employee Group				Group	Lost-Time Accident Frequency*			
2004	2003	2002	2001		2001	2002	2003	2004
29	34	23	24	CUPE 3261	4.5%	2.5%	4.10%	3.30%
8	6	9	12	Trades	21.1%	15.8%	9.52%	13.33%
5	0	0	2	CAW (Operating Engineers)	3.5%	0.0%	0.00%	6.41%
1	2	1	1	CUPE 1230	1%	1%	0.44%	0.24%
2	1			CUPE 2484			3.45%	6.45%
2	2			OPSEU (Police)			4.26%	4.00%
4	1			HERE 75 (89 Chestnut)			1.02%	4.88%
15	6	9	23	USWA	1.0%	1%	0.12%	0.31%
2	3	7	8	Admin (non-union)	1.5%	1.5%	0.26%	0.26%
2	4	1	2	Academic/Librarian	1%	1%	0.12%	0.06%

*Frequency is the number of lost-time accidents per 100 staff members in the identified group.

Table 3 above shows the breakdown of lost time claims by employee group. CUPE 3261 continued to have the most lost time claims in the University, 41% of all claims in 2004. CUPE 3261 is comprised of caretaking and grounds staff at the St. George, Mississauga and Scarborough campuses and animal care workers in Medicine and Zoology.

Classification of number of lost time claims by type of accident giving rise to the claim shows that there continue to be three major types of accidents as shown in Table 4.3 below. These are:

- Strains and sprains arising from listing or overexertion (36%)
- Falls (33%)
- Contact with moving or stationary objects (31%)

In 2004 these three accounted for 100% of all WSIB claims.

Table 4

Claims Breakdown by Type of Accident for 2004

Lost-Time Accidents by Cause	# of Lost-Time Accidents	Accident Type	# of Lost Days	Days Lost by Cause
33%	23	Falls	491	29%
36%	25	Strains/Sprains	828	49%
31%	22	Contact	370	22%
0%	0	Exposure	0	0%
0%	0	Other	0	0%

Table 4 above also shows the breakdown of number of lost days by accident type. The major contributors to lost days are strains and sprains, accounting for 49% of the lost days.



Falls represent 29% of all lost days and contacts with moving or stationary objects contribute to 22% of the lost days.

4.4 Responses to Accidents

Every incident and accident report is reviewed by staff in both Environmental Health and Safety and Health and Well-being Programs and Services. Where indicated, Occupational Hygienists investigate further to determine causes and then recommend corrective action to prevent reoccurrences. As a result of an assessment of injury patterns within the Caretaking department a small pilot project is being introduced to evaluate the impact of changing one particular piece of cleaning equipment on the rate and type of injury experienced by the Caretaking staff.

4.5 Accident Costs

The University pays WSIB a premium each year based on the number of employees at the university. At the end of each year, the University pays a surcharge or receives a rebate depending on the number and severity of the injury claims in comparison to other similar organizations (experience rating). The University continued our track record of a good experience rating and received a significant rebate for sixth consecutive year.

5.0 OCCUPATIONAL HEALTH ACTIVITIES

The Occupational Health Service was amalgamated into Health and Well-being Programs and Services in February 2003. The tasks of the Occupational Health Nurse and the consulting Physician continue to include:

- ☐ Occupational disease prevention;
- ☐ Health promotion (individual and/or group); and,
- ☐ Advice and consulting on occupational health matters.

5.1 Occupational Disease Prevention Programs

Occupational disease prevention relates to the actual or potential impact of biological, chemical and physical hazards on workers. Based on legislation or specific identified risk factors certain worker groups are provided with baseline health evaluations, ongoing medical surveillance and provision of prevention strategies and appropriate vaccines as indicated.

The major medical surveillance programs in effect in 2004 were:

1. Mercury Surveillance

A sample group of Facilities and Services staff participated in a mercury surveillance program this year. The surveillance was implemented after two staff raised concerns about mercury exposure. To date, no source has been found nor have there been any results to indicate mercury exposure in the workplace. The program will be complete in March, 2005.

2. Asbestos Surveillance Program

The asbestos surveillance program was initiated this year. Information about the medical surveillance program was distributed to managers and front line employees. The program is voluntary.

3. CANFAR Level III Lab Medical Surveillance Program

In 2005, the University will open a level III research lab. All researchers are required to participate in the medical surveillance program which will include surveillance and immunization. In preparation for this, a protocol has been agreed upon by Health and Well-being Programs and Services and the Director and Principal Investigators of the CANFAR Level III Lab.

4. Zoonotic Diseases

Animal care workers undergo surveillance for exposure to Q Fever (exposure to sheep) psittacosis (exposure to birds) and Simian B Herpes (exposure to non-human primates). Immunization for Rabies, Hepatitis A and Hepatitis B are provided as required.

5. Laser Workers

Baseline histories and eye examinations are performed on workers using Class 3B and 4 Lasers.

6. Workers in Noise Hazard Areas

Audiograms are performed on employees who are risk of noise induced hearing loss due to the environment in which they work.

7. Influenza Immunization

Influenza immunization clinics are held each year at all three campuses. UTM campus organized a clinic in conjunction with the Peel Public Health department.

8. Tuberculosis

Annual screening is conducted for workers in dental clinics, student health services, animal care workers, campus police services and some research laboratory personnel.

5.2 Health Promotion

The Occupational Health staff promote healthy living by identifying hazards (e.g. sun related hazards) and strategies to protect employees from those hazards (e.g. distributing information and sunscreen to all grounds workers and campus police). In addition, staff provide information sessions and develop programs to maintain and enhance the health of employees in the University of Toronto. Recently the Occupational Health Nurse led a workshop on proper hand-washing techniques for library workers.



Health and Well-being Programs and Services staff also participated in a University-wide employee health and benefits fair at the Faculty Club, and a Health and Safety Fair in the Bahen Centre. The Health and Well-being Programs and Services held an open house in June at which time the HWB web site was officially introduced. Workshops on a variety of issues such as stress management, preventive stretching at your work station and blood pressure information brought over two hundred employees to the new office. The office also participated in the Achieving Work-Life Balance Month—a first at the University of Toronto. Other initiatives included massage clinics at St. George and Scarborough campuses, continuation of the walking groups, and ‘Take Back the Lunch Break’ awareness campaign. Weekly yoga classes are planned for January, 2005.

Finally, the office continued to work with the Faculty of Dentistry, Facilities and Services and other smaller units to develop targeted cost-shared pilot projects to minimize work-related absences including workplace injury and sick leave. We will continue development of these projects and begin evaluating their impact in the coming year.

5.3 Advice and Consulting on Occupational Health Matters

In addition to initiatives organized by the occupational health staff, the staff provides a clinical service to any employee requiring occupational/medical assistance or advice.

Employees access this service by making confidential appointments with the nurse or the physician. Other Health and Well-being Programs and Services staff responsible for long-term disability, sick leave and WSIB consult with medical team members to assist in planning or strategizing in complex cases or in facilitating referrals on behalf of employees to external medical providers.

5.4 Practicum Placement Supervision

The Occupation Health Nurse was a Preceptor for three students from Ryerson University and Humber College programs.

Table 5

Summary of Occupational Disease Prevention Activities by Number of Participants

Influenza Vaccinations	851
Immunizations (TB, Hep B etc)	198
Serology – Blood Tests	114
Audiograms	144
Other Procedures and Assessments	143
Health Risk Assessments	70
Vision Tests	59
Blood Pressure Tests	130
Other Lab Tests	76
Chest x-ray follow-ups	09

Table 6

Health Promotion Activities by Number of Participants

Stress Seminar	13
Hand-washing and Virus Protection	114
Mantoux Testing – Goals and Purpose	70
Faculty of Dentistry	
Sneaker Day/Walking Program Event	102
Hearing Conservation Education	144

6.0 HAZARDOUS WASTE MANAGEMENT

Hazardous Waste Management is responsible for the hazardous waste disposal program for chemical and radioactive wastes, responding to major chemical spills, and providing training, information and advice related to environmental legislation and the disposal of hazardous wastes.

6.1 Chemical Waste Management

In November 1999, the University's central chemical waste transfer facility was demolished to accommodate the construction of the Bahen Centre for Information Technology building. At that time, arrangements were made with an external contractor to remove chemical wastes from thirty-five sites on the St. George Campus (a much more expensive alternative). In November 2004, renovation of an area on the 7th floor of the Lash Miller building was completed; this will facilitate “bulking” activities and therefore more effective packaging of flammable solvent wastes generated in the Department of Chemistry which



produces approximately 40% of these wastes on the St George Campus. The cost of this renovated facility was approximately \$112,000 but we expect the “bulking” operations to produce savings of at least \$25,000 on an annual basis.

In 2005, the Office of Environmental Health and Safety will continue its effort to obtain another waste facility that will facilitate “bulking” activities to accommodate the remaining 60% or at least a significant portion of the remaining flammable solvent wastes produced on the St George Campus.

6.2 PCB Waste Management

For many years, the University maintained a central PCB waste storage facility at Downsview on the grounds of the Institute for Aerospace Studies. In September of this year, this site was decommissioned. This involved the removal, transportation and disposal of all 112 drums of PCB waste that had been stored there and the subsequent decontamination of the storage site. The Ministry of Environment was fully aware and satisfied with the entire decommissioning procedure. In future, the small quantities of PCB wastes that will be generated from University sources will be disposed of as generated, eliminating the need for major storage sites.

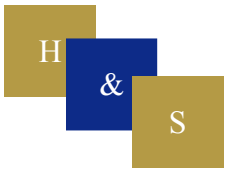
6.3 Radioactive Waste Management

Since its introduction about five years ago, our “Delay and Decay” program to eliminate short-lived isotopes (half-life of less than 90 days) from the liquid radioactive waste stream has been very effective and has resulted in significantly decreased radioactive waste disposal costs. In 2004, this program produced about 615 bottles of liquid wastes that were released as non-hazardous wastes, representing savings to the University of approximately \$100 per bottle.

In the past, our solid radioactive wastes were compacted on site and transported directly to the only radioactive waste disposal facility in Canada - AECL Canada in Chalk River Ontario. In 2004, we have worked with Monserco (a radiation processor and transport contractor) to further compact our solid radioactive wastes, thereby reducing our disposal costs (which are based on “disposal volume”). To effect further savings, we have begun the process of replacing our aging compactor; the new compactor will be more reliable and is expected to result in a reduction (by approximately 20%) in the number of compacted waste containers shipped to the AECL. Based on current rates, this would result in savings of approximately \$31,000 per year.

6.4 Other Notable Environmental/Waste Issues

In 2004, several underground fuel-storage tanks were removed from around the St. George campus. With the exception of one situation, there were no significant environmental issues. In March 2004, during the removal of one such fuel-storage tank at the rear of 158 St George St., some contamination of the surrounded soil was detected; the



contaminated soil was removed. The Ministry of Environment was involved throughout our clean-up and monitoring activities. EHS will continue the monitoring program into 2005.

7.0 OCCUPATIONAL HYGIENE AND SAFETY

The major functions of this unit are to provide advice on health & safety issues, to evaluate potentially hazardous situations involving chemical, physical and ergonomic stressors, to develop and assist in the implementation of programs to protect the health and safety of employees and students, and to evaluate the effectiveness of these programs. EHS will continue the monitoring program.

7.1 Biosafety

A number of research activities at the University involve the use of hazardous biological agents. The functions of the Biosafety Unit are to promote appropriate standards of biological safety in laboratories and to enable compliance with these standards.

Biosafety Committee

The Biosafety Committee is charged with ensuring that all activities within the University of Toronto involving infectious biological agents are conducted in a safe manner and in conformity with generally accepted standards. Membership of the Committee is given in Appendix 4.

During 2004, the University of Toronto Biosafety Committee received 145 applications from Principal Investigators for new Biosafety Certificates. These were reviewed and subjected to a risk assessment by the Committee and the Biosafety unit of the Office of Environmental Health and Safety. Based on known and perceived risks posed by the biological agents and the intended manipulations,

- 52 were approved for projects requiring Containment Level 1,
- 88 were approved for projects requiring Containment Level 2, and
- 5 were approved for projects requiring Containment Level 3 laboratory conditions.

A total of 172 Biosafety certificates were valid during 2004 at 475 identified biosafety laboratory locations in about 12 buildings across the 3 major campuses (note: Biosafety Certificates issued for Containment Level 1 are valid for a period of 2 years. Biosafety Certificates for Containment Level 2 and 3 laboratory activities are valid for one year only).

In June 2004, Dr. James B. Campbell stepped down as the Chair of the U of T Biosafety Committee. Dr. Andrew Bognar of the Department of Medical Genetics & Microbiology, Faculty of Medicine, was appointed as the new Chair. The Committee Membership has been reviewed and updated. The first meeting under the new Chair will be scheduled for early 2005. Priorities include:



-
- Review of the U of T Biosafety Committee's Terms of Reference;
 - Review of the new Health Canada Laboratory Biosafety Guidelines, 3rd Edition;
 - Review/Revision of the existing U of T Biosafety Policies and Procedures Manual to be consistent with the Federal Guidelines.

Biomedical/Pathological Waste Disposal

The Biosafety Office continued its collaboration with Facilities & Services regarding the disposal of biomedical /pathological laboratory waste, needles & blades and glass waste. After collection by Facilities and Services, this laboratory waste is transported and specially treated at a nearby facility by a licensed contractor, after which the inactivated waste is transported to a landfill in southwestern Ontario. Biomedical/pathological laboratory waste volumes are projected to increase with the completion of the CCBR and Pharmacy buildings; this projection and the fact that these disposal costs have increased significantly in the past few years will result in increasing disposal costs to the University.

New Level 3 Containment Facility

In 2004, following completion of its construction, the new multi-user facility on the 4th floor of the Medical Sciences Building was certified as a Containment Level 3 laboratory by Health Canada. There are some special requirements associated with the construction and operation of Level 3 facilities that are not required in lower level containment facilities. For example, a dedicated ventilation system for the facility is required. The facility has a sealed perimeter, more stringent use of a variety of personal protective equipment and higher security access requirements. It is anticipated that research activity will begin in this new facility in early 2005, after the equipment and services are tested again to verify proper operation and performance.

Tri-Council Audit

In 2004, a tri-council audit team representing the Canadian Institutes of Health Research (CIHR), the Natural Sciences & Engineering Research Council (NSERC), and the Social Sciences and Humanities Research Council (SSHRC), visited the University of Toronto. The audit team selected a random sample of grant and award accounts for review, including six U of T Biosafety Certificates. We expect a report of this audit in early 2005.

Biosafety Orientation Seminars

General and specific issue seminars were presented to laboratory workers, project course and special program students, and "certified" members of Joint Health & Safety Committees. About 100 individuals attended these seminars that provided basic information regarding the potential hazards of laboratory work with biological agents, and the safe work practices and procedures that can reduce the risks.

7.2 Hazard Control

Asbestos Issues

In 2004, the University continued to communicate, implement and enforce the requirements of the Asbestos Control Program. Notable activities include:

a) Asbestos Advisory Committee

The committee held its first meeting in January 2004, with an additional 7 meetings throughout the year. The committee reports to the Vice-President, Human Resources and Equity and is co-chaired by the Assistant Vice-President, Human Resources and the Acting Assistant Vice-President, Facilities and Services. Membership includes worker and management representatives. Management and worker membership and involvement have been significant in communicating University initiatives and identifying and providing direction on asbestos-related issues.

b) Plaster Surveys

In 2004, the University was proactively involved in the characterization of ceiling and wall plaster materials in University buildings. Surveys have been conducted in 13 buildings to determine if these plaster materials contain asbestos. Walls and ceilings in which the plaster contains asbestos will be appropriately labelled. In 2005, surveys will be extended to other buildings.

c) Training and Education

In 2003, the asbestos training requirements for University employees were revised. In late 2003 and throughout 2004 training was provided to approximately 200 employees and supervisors who work with or around asbestos. In addition, approximately 250 employees who do not conduct asbestos work but who may encounter asbestos-containing materials in the course of their work and who may inadvertently damage the materials were given asbestos awareness training.

Asbestos abatement contractors are required to provide the University with evidence that their workers have received appropriate asbestos training. The University has expanded the training requirements of “specifically targeted” external contractors who work in buildings with asbestos-containing materials to ensure a minimum of asbestos awareness training. The University is facilitating some of this training. In June 2004, the University developed and distributed an asbestos awareness brochure for employees (academic and administrative) and students. Since then, a revised brochure has been widely distributed throughout the campus.



d) Medical Surveillance

In 2004, the University's Occupational Health Service implemented an asbestos medical surveillance program on a voluntary basis to all University employees conducting Type 2 or Type 3 asbestos work. The program consists of a baseline health assessment (including a physical examination, chest x-ray and pulmonary function test) to employees prior to assignment to Type 2 asbestos work, after 1000 hours of accumulated asbestos work, and at least every two years thereafter.

e) Facilities and Services

Facilities and Services have made significant progress in asbestos cleaning, abatement and hazard reduction activities this year. Highlights include:

- Extensive asbestos remedial work in utility rooms.
- Clean up of "accumulated-dust" containing asbestos and numerous asbestos removals in the Central Steam Plant and the Central Heat Distribution Tunnels.
- Development of a hazard reporting system for F&S employees to report identified workplace hazards, including asbestos hazards, ensuring appropriate and timely responses.
- Creation of an asbestos hazard deficiency database to record and track asbestos deficiencies identified on surveys, workplace inspections and employee hazard reports.
- Use of an incident tracking system to ensure that incidents involving the exposure or potential exposure of individuals to asbestos or breaches in the Asbestos Control Program are fully investigated and actions taken to prevent recurrences. Findings are reviewed at the Asbestos Advisory Committee.
- Creation of a new position, reporting to and assisting the Manager, Environmental Hazards and Safety (Facilities and Services) in the implementation of the Asbestos Control Program.

In 2005, we will continue to actively address issues related to asbestos at the University of Toronto.

Noise Control

The noise control program applies to all University employees who work in noise hazard areas or who have the potential to develop noise-induced hearing loss as a result of their occupation.

In 2004, EHS reviewed and revised its Hearing Conservation and Noise Control Program and the Hearing Protection Standard. About 80 employees who work in noise hazard areas have been trained/re-trained and noise surveys of most mechanical rooms on the St. George Campus have been completed. Signage has been reviewed and where necessary, appropriate signage has been/is being installed.

7.3 General Health and Safety Concerns

Common health and safety issues raised in the past year by the University community involve those associated with office ergonomics, indoor air quality and water quality.

Office Ergonomics: In 2004, there were 20 ergonomic assessments of chairs, computer workstations and environmental factors such as lighting and glare; many of these assessments were the result of requests from individuals experiencing pain or discomfort. Additionally, EHS delivered nine seminars on “Office Ergonomics” that dealt with issues such as workstation design, posture, lighting and job design.

Indoor Air Quality: EHS investigated a number of indoor air quality concerns, ranging from comfort parameters of temperature, humidity and air movement to contaminant build-up in occupied spaces. Examples of indoor air quality occurrences/concerns include:

- 215 Huron St. — Trade Services, Lock Shop and Tool Crib (ventilation)
- 500 University — School of Continuing Studies (air flow, temperature, mould)
- 1 Spadina — Parking Services (odour)
- 371 Bloor St. W. — Rooms 209,210,310 & 322A (mould)
- Rotman School of Management — Library (temperature, air flow)
- Institute for Child Studies — Art Room (mould)

All of these concerns have been addressed by EHS.

Drinking Water Quality: EHS investigated a number of water quality concerns generally occurring in older University buildings, ranging from turbidity and elevated levels of iron/lead to water temperature and biological contamination. Examples of water quality occurrences/concerns include:

- 30 & 35 Charles St. (Turbidity)
- Banting Institute (Temperature, colour and water flow)
- 256 McCaul St. — Dept of Family & Community Medicine (Colour, lead)

All of these concerns have been addressed by EHS.

7.4 Other Notable Health and Safety Issues:

- ❑ Concerns were expressed by Operating Engineers (Utilities) regarding vibration issues in the Control Room at the Central Steam Plant. An assessment indicated that vibration levels in the Control Room were insignificant, however, some low frequency noise was present. The levels were not a concern from a health perspective, but could be intrusive and annoying. Recommendations were made to decrease levels within the control room.



-
- ❑ As a result of water intrusion during the vertical expansion project at the Rotman School of Management a mould investigation was conducted in the affected areas. The investigation involved visual inspection as well as intrusive inspection of the affected areas. The results of the inspection revealed mould growth in an area on the 5th floor. Contaminated materials (water damaged carpets and ceiling tiles) have been removed.
 - ❑ Concerns were expressed at the Faculty of Dentistry regarding the handling of dental materials and chemicals and the need for appropriate personal protective equipment for the undergraduate students in one of the labs. The assessment of the lab addressed issues related to engineering controls, housekeeping, work practices and personal protective equipment. Recommendations which have been implemented include provision of instructions for working with potentially dangerous materials, safe work practices, instructions in the proper use of available equipment, proper use of personal protective equipment and implementation of housekeeping rules.
 - ❑ A possible heat illness was investigated at the dish-room of the catering unit at Hart House. The assessment revealed that the heat exposure of the workers during the dishwasher operation was below the recommended guidelines. Based on the assessment and background information, the illness was not likely caused by the work environment.
 - ❑ An investigation was conducted following an incident where an employee of the Physics machine shop felt unwell and missed work possibly due to an exposure to welding fumes. The investigation involved assessment of the ventilation system and review of the work practices during welding. The ventilation in the shop was found to be adequate for the type of welding conducted in the area. Recommendations have been implemented and include provision of instruction in safe work practices and improvements in housekeeping.
 - ❑ In November 2003, two Trade Services employees reported that blood samples taken by their own physicians indicated elevated levels of blood mercury. Mercury air monitoring was conducted by EHS during specific work activities and in common work areas; results have been well within occupational exposure limits. In February 2004, it was decided that a voluntary medical surveillance trial (involving blood and urine sampling) would be conducted over a one year period to monitor the various employee groups within Trade Services. In addition, air sampling has been conducted in a number of areas associated with Trade Services activities. At year end, results have not indicated any significant concerns with respect to mercury exposure. EHS will continue to work with Trade Services employees regarding potential activities of concern.
 - ❑ Concerns were expressed by an employee at 1 Spadina regarding ceiling leakages from toilet overflows immediately above his office. A number of assessments of the
-

office were made and recommendations implemented. These included a thorough cleaning of the office as well as the disposal of contaminated porous or fabric materials, replacement of toilets and piping in the washroom above and the removal and replacement of the ceiling in the office.

8.0 RADIATION PROTECTION SERVICE (RPS)

The major function of this unit is to ensure the safe use of all substances and devices which emit ionizing and non-ionizing radiation. This includes radioisotopes utilized in research facilities, irradiators, radiography by outside contractors, x-ray generating equipment, as well as the sources of non-ionizing radiation such as electromagnetic, electric, and magnetic standing fields, radiofrequency and microwaves, and lasers.

8.1 Ionizing Radiation

To ensure the authorized and safe procurement, usage, storage, and disposal of radioactive materials and devices, the University must apply for and receive approval of licenses from the Federal government. It is the responsibility of the Radiation Protection Service to assist research and teaching activities in maintaining these licenses.

The RPS supports teaching and research activities in over 1000 locations in many buildings on all 3 campuses, as well as the off-campus use of radioactive materials in locations under the control and authority of the University. This support includes responsibility for 86 Radiation Devices, 80 X-ray machines, the calibration of approximately 150 contamination meters annually, and potentially lethal radioactive materials in devices, including irradiators and industrial radiography sources.

Training demands continue to grow with 584 attendees at ionizing radiation courses in 2004. The first refresher training course was held in April of this year at UTM; sessions were also conducted at UTSC and on the St. George Campus. The requirement for such refresher training was noted in a past Canadian Nuclear Safety Commission evaluation and during inspections by their Mississauga inspectorate. Additional training and inspections, approvals of workplaces, assessment of exposures, investigations, and other tasks were required. In preparation for the increased training requirements, the RPS has prepared web-based Radiation Protection training modules which have been reviewed by the University of Toronto Radiation Protection Authority and posted on the RPS website. Awareness training for those with potential exposure to these materials e.g. caretaking, trades and utilities, campus police services was offered on a regular basis.

The RPS participates in the Quality Assurance program of Health Canada for Tritium, Carbon-14, and Radioiodines-125 and 131 bioassays of human subjects. The RPS was again successful in obtaining certification for competence in each bioassay in 2004.

The Radiation Protection Service experienced significant staff turnover in 2003 with both Radiation Safety Officers leaving UofT at the end of the year. Both positions were filled within the first quarter of 2004.



Radiation Protection Authority

The University of Toronto Radiation Protection Authority has the executive power delegated to it by the Governing Council to enforce and maintain the required standards of radiation protection necessary for a complex teaching and research institution. Its membership is given in Appendix 4.

The Authority met three times in 2004. Major issues included the following:

- The introduction of computer-based training modules for new users and refresher training
- Review of the radiography permit program and its application to numerous sites over 2004
- Review inspections by internal and external bodies, issues of non-compliance, incidents
- Consideration of methods to enhance radioisotope security at the University.

8.2 Non-Ionizing Radiation

The Radiation Protection Service is also responsible for all aspects of non-ionizing radiation at the University. There are growing concerns with electromagnetic fields, static electrical and magnetic fields as well as, more recently, radiofrequency (wireless communication) fields in the workplace. Presently, the Office of Environmental Health and Safety is in the process of developing programs to proactively address these issues.

The Laser Safety Program has been operating quite effectively in the past year. The Program was updated to reflect the current CSA and ANSI requirements. Also, inventories/registration of Class 3b and Class 4 lasers were updated. There were six (6) training sessions in 2004 resulting in the training of 114 laser supervisors and workers. These training sessions were followed-up with workplace inspections of Class 3b and Class 4 lasers and laser systems.

Laser Safety Committee

In order to effectively control laser hazards, the Laser Safety Program requires registration of all Class 3b and Class 4 lasers and laser systems, training of all users of these lasers, medical surveillance where appropriate, and ongoing inspection of these laser installations. The Laser Safety Committee oversees this program and is responsible for taking all steps necessary to ensure the safe operation of these lasers within the University. Membership of the Committee is given in Appendix 4.

The Committee met three times in 2004. Major issues addressed included the following:

- The updated Laser Safety program, reflecting the current CSA and ANSI requirements

-
- The updated inventory/registration of Class 3b and Class 4 Lasers and Laser Systems
 - Medical surveillance program and the issue of legal liability.

9.0 MINISTRY OF LABOUR ORDERS

A number of orders were issued this year by the Ministry of Labour. The table below lists each order and the status at December 31st , 2004.

	OUTSTANDING ORDERS FROM 2003	STATUS
1	Clean-up and remove the fallen, asbestos-containing material in the “steam” tunnel system (85% of this was completed according to plan in 2003; an extension was obtained for the remaining 15%).	Completed
2	Repair, seal, remove or permanently enclose any asbestos-containing material in the “steam” tunnel system that will continue to fall because of deterioration (85% of this was completed according to plan in 2003; an extension was obtained for the remaining 15%).	Completed



	ORDERS FROM 2004	STATUS
1	Test and report for microbial material associated with sewage waste, mould and asbestos at 1 Spadina Ave., Room 214.	Completed
2	Prepare and submit to the MOL, a compliance plan with respect to (1) above (due date -- 14 th September 2004).	Completed by due date
3	Certify one member representing the employer and one member representing workers on the 1 Spadina JHSC.	Completed
4	Prepare and submit to the MOL, a compliance plan with respect to (3) above (due date -- 14 th September 2004).	Completed by due date
5	Worker member of 1 Spadina JHSC to inspect the workplace at least once a month (due date -- 14 th September 2004).	Completed by due date.
6	Test and report for microbial material associated with sewage waste, mould and asbestos at 1 Spadina Ave., Room 214 (due date -- 7 th October 2004).	Completed by due date.
7	Certify Mr Syed Hasany (member representing workers on 1 Spadina JHSC)(due date -- 5 th November 2004).	Completed by due date.
8	Certify Ms Linda Sharpen (member representing management on 1 Spadina JHSC)(due date -- 7 th January 2005).	Completed by due date.
9	Clean-up and remove the fallen, asbestos-containing material in areas at UTM identified in the "Findings and Comments" section of MOL report. Repair, seal, remove or permanently enclose any asbestos-containing material in the areas identified above, that will continue to fall because of deterioration (due date -- 15 th October 2004).	Completed by due date.
10	Notify workers of the presence of friable asbestos-containing materials in the workplace at UTM (due date -- 5 th November 2004).	Completed by due date.
11	Train and instruct all workers who work in and around asbestos at UTM (due date -- 3 rd December 2004).	Completed by due date
12	Conduct inspections of friable asbestos-containing materials at UTM (due date -- 5 th November 2004).	Completed by due date.
13	Clean five (5) fume hoods in 4 th floor student laboratory in Norman Hughes Bldg. (Faculty of Pharmacy)(due date -- 17 th December 2004).	Completed by due date.
14	Proper labelling of waste and other chemical containers in 4 th floor student laboratory in Norman Hughes Bldg. (Faculty of Pharmacy)(due date -- 17 th December 2004).	Completed by due date.

10.0 TRAINING AND EDUCATION

In the last few years the Office of Environmental Health and Safety has been delivering an ever-increasing number of courses to academic and administrative staff and graduate students to meet regulatory requirements. Presently, EHS offers more than 25 health and safety courses, including: Asbestos: Evaluating and Controlling the Hazard, Biosafety, Chemical Safety and WHMIS, Laser Safety, Ionizing Radiation Safety, Office Ergonomics, Understanding Noise, Respiratory Protection, Mould Awareness, Health and Safety for Managers and Supervisors. Training courses provided by the Office of Environmental Health and Safety and the numbers trained in 2004 are listed in Appendix 3. As shown in the following table, both the number of courses and the number of individuals trained have increased significantly over the last three (3) years.

	<u>2002</u>	<u>2003</u>	<u>2004</u>
# of courses offered	60	92	155
# of attendees	919	1638	2454

We have been exploring the feasibility of web-based training to enable us to meet the increased need for training in a more time and cost-effective manner. A web-based module in Radiation Protection has been introduced this year. Other on-line programs are slated for development in 2005.

In 2005, we will also initiate “Express”/On-line registration for all EHS training courses. This will provide staff with a more efficient, paperless registration process and improve our ability to monitor training activities.

11.0 COMMUNICATION

One of our key objectives in 2004 was to develop strategies for more effective communication and accountability of health and safety duties and responsibilities, workplace hazards, safety policies and procedures and other health and safety-related issues. A number of activities have begun, including:

- Redesigning the EHS web-site to communicate more effectively with and provide health and safety information to the University community. The new site is expected to be launched early in 2005.
- Dissemination of an EHS information pamphlet promoting the resources/services provided by the Office of Environmental Health and Safety.
- Participation in a number of faculty/department health and safety “days” that provide health and safety information/training to faculty, administrative staff and students.
- Provision of an ever-increasing number of health and safety courses to academic and administrative staff and graduate students, as indicated above.

In 2005, we will continue to promote effective communication of health and safety information as a key objective.



Appendix 1

OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY (31st December 2004)	
Director, Office of Environmental Health and Safety Administrative Assistants	J.N.C.McNeill BSc., MEng., CIH, ROH Shamin Ramjit Harjit Bains
Co-ordinator, Hazardous Waste Management Chemical Technicians Radiation Service Technicians	Robert Provost BSc. Mario Reyes BEng. Luis Ponte Peter Smith
Manager, Occupational Hygiene and Safety Biosafety Officer Occupational Hygienists and Safety Specialists	Margaret Fung BSc., MAsc., CIH John Valant BSc. Sandra Deike BSc., MHSc. CRSP Michal Zitnik BSc., MHSc. Elizabeth Chung BSc., MHSc.
Manager, Radiation Protection Radiation Safety Officer III / Laser Safety Officer Radiation Safety Officer I	Ray Ilson BSc., MEng., CIH, CRSP Sandu Sonoc BSc., MSc., PhD Tayna Neretljak BSc., MSc Hector Rocca BSc., MSc

HEALTH AND WELL-BEING PROGRAMS AND SERVICES (31st December 2004)	
Manager, Health & Wellbeing WSIB Administrator Disability and Accommodation Consultants Counsellor Occupational Health Nurse Consulting Physician	Myra Lefkowitz , MSW Anne Chreptak, Kirsty Forrest Marton Francilla Charles, Anna Maria Petrone, Glenna Hilborn, R.N. OH.N. Gabor Lantos, PEng. MBA MD

Appendix 2
Joint Health and Safety Committees
Status Summary - Calendar Year 2004

#	Committee	# Meetings	# Certified Members	Committee	# Meetings	# Certified Members
1	Trades/Utilities	12	16	Best Institute/Banting	0 ²	2
2	Police	4	3	Faculty of Arch. & Landscape Architecture	4	2
3	Library (CUPE 1230)	6	2	Faculty of Dentistry	4	5
4	CUPE 3261	8	12	Faculty of Forestry	4	1 ⁴
5	USWA	8	4	Faculty of Law	4	2
6	Faculty of Engineering	0 ¹	2	Roman School of Management	4	2
7	Chemical Engineering	4	2	Faculty of Music	4	3
8	Materials Science & Engineering	4	0	Faculty of Nursing	5	4
9	Civil Engineering	4	3	OISE/UT	5	4
10	Electrical & Computer Engineering	4	2	Faculty of Pharmacy	4	3
11	Mechanical Engineering	4	1 ⁴	Faculty of Physical Education & Health	8	5
12	Aerospace Studies	4	2	Faculty of Social Work	4	2
13	Sidney Smith Hall	0	2	Hart House	4	2
14	Department of Botany	2	1	215 Huron Street	6	2
15	Department of Chemistry	4	2	Koffler Student Services	4	4
16	Department of Geology	4	0	School of Graduate Studies	4	3
17	Department of Economics	4	2	School of Continuing Studies	4	2
18	McLennan Building	4	2	Simcoe Hall	2 ³	2
19	Department of Zoology	4	4	21 King's College Circle	0 ²	2
20	U of T at Scarborough	4	6	Borden Building	5	3
21	U of T at Mississauga	5	4	Admissions and Awards	4	4
22	Faculty of Medicine	5	3	1 Spadina Crescent	2 ³	2
23	Medical Sciences Building	5	3	Robarts Library Complex	4	3
24	FitzGerald Building	4	3	89 Chestnut Residence	8	6

¹ Re-evaluating the need for this committee, given that there are a number of well functioning departmental committees

² This committee is in the process of being reorganized

³ This committee met twice in the last six months

⁴ This committee is considered to have 2 certified members (the second is in the process of being certified)



Appendix 3

Summary of Training Provided by EHS in 2004

COURSE	DESCRIPTION	# of COURSES	# of ATTENDEES
Respiratory Protection	This ½-day seminar combines classroom-style presentation with practical instruction in the proper selection, use and care of respirators.	19	124
Understanding Noise	This 2-hour seminar provides "noise exposed" employees with information regarding the effects of noise and the control of noise hazards.	6	78
Work in Confined Spaces	This ½-day seminar provides an overview of the components and procedures of the University's Confined Spaces Program	1	10
Work in Hot Environments	This 2-hour seminar presents an overview of the hazards associated with working in hot environments and the precautions which should be taken to prevent injuries and other problems due to heat stress.	1	16
Small Scale, Short Duration Asbestos Activities -- A Practical Program	This 1-day practical program provides employees with the details they require to safely conduct Type 1 and Type 2 asbestos activities.	10	148
Asbestos: Evaluating and Controlling the Hazard	This 1½-day seminar provides employees with classroom-style instruction about the hazards of asbestos and the work procedures to follow when working with or in close proximity to asbestos-containing materials.	9	116
Asbestos Awareness	These 1½ & 3-hour seminars provide employees with an overview of the potential hazards of asbestos .	3+3	200+43
Biosafety	These 2&3-hour seminars provide basic information regarding the potential hazards of laboratory work with biological agents, and the safety practices and procedures that can reduce the risks.	2+3	53+43
Mould Awareness	This 2-hour seminar provides an overview of the potential hazards associated with common mould species found growing in indoor environments and the controls used to prevent mould contamination.	3	29
Mercury Awareness	This 1½ -hour seminar provides an overview of the potential hazards associated with exposure to mercury and the controls used to prevent mercury contamination.	3	18
WHMIS (Workplace Hazardous Materials Information)	These 1&3-hour seminars provide basic information regarding the potential hazards of working with chemicals, and the safety practices and procedures that can reduce the risks. EHS provides training to summer employees (mainly students) and participates in seminars organized by departments.	1+3	235+363
Health and Safety for Managers and Supervisors	These 3, 6&12-hour seminars emphasize the role and responsibilities of managers/supervisors with respect to health and safety. Included is an overview of health and safety at the university, the responsibilities of the various workplace parties, pertinent legislation and policies, and health and safety resources at the University.	2+2+2	15+55+15

Appendix 3 continued

COURSE	DESCRIPTION	# of COURSES	# of ATTENDEES
Office Ergonomics	This 2-hour seminar is designed to increase awareness of some of the common causes of fatigue and discomfort while working at Video Display Terminals, to introduce relevant ergonomic principles and to provide examples of how to apply this information to the workplace.	9	110
Laser Safety	This 1-day seminar provides laser workers with information regarding the safe use of Class 3b and Class 4 Lasers and Laser Systems.	6	114
Radiation Protection Course	These 3&9-hour seminars provide information on radioactive materials and safe precautions to be taken when working with such materials.	17	357
Radiation Safety (refresher)	This 1-hour seminar provides “refresher” training in radiation safety	12	172
Certification (Workplace-Specific Hazard Training)	A variety of 1,2&3-hour seminars for “certified” members of joint health and safety committees	29	140
TOTALS		155	2454



COMMITTEE MEMBERSHIP

Senior Management Committee on Health and Safety (31st December 2004)

Prof. Angela Hildyard (Chair)	- Vice-President, Human Resources and Equity
Mr Ron Swail	- Acting Assistant Vice-President, Facilities & Services Co-chair, Asbestos Advisory Committee
Prof. David Farrar	- Vice-Provost, Students
Mr Ray deSouza	- Chief Administrative Officer, UTM
Ms. Kim McLean	- Associate Principal and Chief Administrative Officer, UTSC
Prof. Anastasios Venetsanopoulos	- Dean, Faculty of Applied Science and Engineering
Prof. Anne Lancashire	- Vice Dean, Academic, Faculty of Arts & Science
Prof. Scott Mabury	- Chair, Department of Chemistry
Ms Ramune Pleinys	- Administrative Officer, Faculty of Medicine
Ms Christina Sass-Kortsak	- Assistant Vice-President, Human Resources and Co-chair, Asbestos Advisory Committee
Dr. Andrew Bognar	- Chair, University of Toronto Biosafety Committee
Prof. Robin Marjoribanks	- Chair, Laser Safety Committee
Dr. David Hampson	- Chair, University of Toronto Radiation Protection Authority
Ms Myra Lefkowitz	- Manager, Health and Wellbeing Programs and Services
Mr Chris McNeill	- Director, Environmental Health and Safety

University of Toronto Radiation Protection Authority (31st December 2004)

Dr. David Hampson(Chair)	Member	Pharmacy
Dr. Maurice Ringuette(Vice-Chair)	Member	Zoology
TBA	Member	Immunology
Dr. Sela Cheifetz	Member	MRC Group, Peridontal Physiology
Dr. P. Brubaker	Member	Physiology
Dr. Alan Cochrane	Member	Medical Genetics and Microbiology
Dr. Herbert Gaisano	Member	Clinical Sciences
Dr. Angela Lange	Member	Life Sciences, UT Mississauga
Dr. Michael Pharoah	Member	Dentistry
TBA	Member	Pharmacology
Dr. Julie C. Silver	Member	Life Sciences, UT Scarborough
Dr. David Williams	Member	Biochemistry
Mr. Ray Ilson	Ex-Officio	Environmental Health and Safety
Mr Robert Provost	Ex-Officio	Environmental Health and Safety
Mr Chris McNeill	Ex-Officio	Environmental Health and Safety
Ms Christina Sass-Kortsak	Ex-Officio	Human Resources
Mr Shamin Ramjit	Rec. Secretary	Environmental Health and Safety

Laser Safety Committee (31st December 2004)

Prof. Robin Marjoribanks (Chair)	- Physics
Prof. Aephraim Steinberg	- Physics
Prof. James Donaldson	- Chemistry
Prof. Peter Herman	- Electrical & Computer Engineering
Prof. Andreas Mandelis	- Mechanical & Industrial Engineering
Mr. Nikolay Stoev	- VALKOM Laser Consulting
Mr Ray Ilson	- Environmental Health & Safety
Dr Sandu Sonoc	- Environmental Health & Safety
Mr. Chris McNeill	- Environmental Health & Safety

Asbestos Advisory Committee (31st December 2004)

Christina Sass-Kortsak (Co-Chair)	- Assistant Vice-President, Human Resources
Ron Swail (Co-Chair)	- Assistant Vice-President, Facilities & Services
Doug Colby	- Certified, Worker Co-Chair, Trades/Utilities JHSC
Jim Russell	- Certified Member, Trades/Utilities JHSC
Rudy Won	- Certified Member, CUPE 3261 JHSC
Margaret Fung	- Manager, Occupational Hygiene & Safety
Tony Kopteridis	- Member, Trades/Utilities JHSC
Nick Zouravloff	- Director, Capital Projects
Jason McInnis	- Manager, Environmental Hazards & Safety
Chris McNeill	- Director, Environmental Health & Safety

University of Toronto Biosafety Committee (31st December 2004)

Dr. A. Bogner (Chair)	(Medical Genetics and Microbiology)
Dr. A. Arora [Medical Sciences Building, Banting Inst. & All other locations without an on-site local coordinator]*	
Dr. C. Bergeron [Tanz Building]*	(CRND)
Dr. S. Cheifetz [Dentistry & FitzGerald Bldg.]*	(CIHR Group in Matrix Dynamics)
Dr. J. Coleman [Earth Sciences Building]*	(Botany)
Dr. S. Kish [Centre for Addiction and Mental Health, Clarke Site]*	(Psychiatry)
Dr. T. Westwood [U of T Mississauga]*	(Biology, U of T Mississauga)
Dr. A. Marks [Best Institute]*	(BDDMR)
Dr. M. Ringuette [Ramsay Wright Building]*	(Zoology)
Dr. S. Ross [Pharmacy Building]*	(Pharmacy)
Dr. J. Silver [U of T Scarborough]*	(Microbiology, U of T Scarborough)

*Local Biosafety Co-ordinator [jurisdiction in brackets]

Members, Ex officio:

Ms. C. Sass-Kortsak	Assistant Vice-President, Human Resources
Dr. P. Lewis	Vice Dean, Research, Faculty of Medicine
Ms. M. Fung	Manager, Occupational Hygiene and Safety, EHS
Ms. A. Cheung	Director, Research Grants, ORS
Dr. Rachel Zand	Director, Ethics Review Office, U of T
Mr. J. Valant	University Biosafety Officer

Associate Members:

Mr. R. Ilson	Manager, Radiation Protection Services, EHS
Dr. G. Lantos	Health and Wellbeing Programs and Services, U of T
Mr. M. Paull	Dean's Office, Faculty of Medicine, U of T
Dr. R. Renlund	Director, DCM, Faculty of Medicine, U of T
TBA	F&S, U of T

Adjunct Members:

Dr. J. Brunton	University Health Network
Dr. M.J. McGavin	Sunnybrook and Women's College Health Science Centre
Ms. A. Monteath	Risk Manager & RSO, Hospital for Sick Children
Ms. P. McKernan	Occupational Health, St. Michael's Hospital
Ms. R. Wallace	Director, Research Operations, Mount Sinai Hospital