

UNIVERSITY OF TOLEDO

SUBJECT: ENVIRONMENTAL/OCCUPATIONAL MONITORING AND MEDICAL SURVEILLANCE Procedure No: HM-08-016

PROCEDURE STATEMENT

Employee environmental/occupational exposure monitoring and medical surveillance shall be conducted and maintained in accordance with applicable codes and standards.

PURPOSE OF PROCEDURE

To ensure compliance with applicable regulations, to maintain a safe working environment, and to provide appropriate communication of surveillance and monitoring activities.

PROCEDURE

It is the direct responsibility of all department managers, laboratory directors and Department Chairs working with the Environmental Health and Radiation Safety Department, to identify all potential hazards to which their employees may be exposed that may mandate environmental/occupational monitoring and/or medical surveillance activities. It is further their responsibility to initiate and coordinate all industrial hygiene monitoring activities through the Environmental Health and Radiation Safety Department and all medical surveillance through Employee Health. Department managers/laboratory directors/Department Chairs, or their designees, are also required to advise all employees of any such potential exposures related to their job function and to provide job-specific training, per the Hazard Communication policy (HM-08-018) and Chemical Hygiene Plan (HM-08-0-26) to those employees **prior to commencement of job activities**.

I. Industrial Hygiene Monitoring

The department manager/laboratory director shall consult with the Environmental Health and Radiation Safety Department to ascertain the environmental/occupational monitoring requirements.

A. Where required by OSHA, determination of employee exposures to hazardous materials shall be made from breathing zone air samples that are representative of the 8-hour time-weighted average of the employee, as directed by the Environmental Health and Radiation Safety Department.

B. Monitoring results shall be maintained as follows:

1. The results of all reports shall be sent to the Environmental Health and Radiation Safety Department. This person shall ensure that results of all reports are forwarded to the appropriate departmental manager, who shall ensure these are directed to affected employees within 14 days.
2. Employees should review these reports and the final copy will be retained by the Environmental Health and Radiation Safety Department.
3. Radiation Monitoring

All personnel working with or around sources of ionizing radiation that are likely to receive greater than 10% of their annual occupational exposure limit shall wear monitoring devices approved by the Radiation Safety Office.

a. OSL Badges

OSL badges shall be the general personnel monitoring device used throughout the University of Toledo. To initiate OSL badge service for any individual, contact the Radiation Safety Office. A supply of OSL badges will be available for temporary use upon request. Each individual assigned an OSL badge shall wear only the specific badge assigned to him or her.

In the event of a lost badge, notify the Radiation Safety Office. Personnel assigned badges shall wear them whenever they are working with or near ionizing radiation. OSL badges may be worn comfortably on the waist or chest. All OSL badges shall be kept in a controlled area when not in

use and put back at the end of the work period. They should not be removed from the University. Assigned OSL badges shall not be used for any purpose other than personnel monitoring.

New OSL packets shall be distributed by the Radiation Safety Office within the first three working days of each month and used OSL packets shall be collected within the first ten working days of each month. It is the responsibility of the Approved User to ensure the change of OSL packets. If certain operations require special badges for the wrist, fingers, etc., or special dosimeter packets, contact the Radiation Safety Office. If a badge is suspected of being contaminated, contact the Radiation Safety Office for replacement.

Please refer to [HM-08-023](#) Personnel Radiation Monitoring.

II. Medical Surveillance

The department manager or laboratory director shall consult with the Environmental Health and Radiation Safety Department to ascertain the medical surveillance requirements and shall act to coordinate all such activities with Family Medicine or Main Campus Medical Center. Managers/Directors should advise Family Medicine or Main Campus Medical Center of any employee's change in job status that may impact their required medical surveillance. The results of medical surveillance shall only be used for the purposes stated.

- A. A medical exam or consultation shall be provided to employees through Employee Health as appropriate to maintain compliance with certain regulations and standards. These may include, but are not limited to the following:
 1. As specified by toxic substance-specific standard,
 2. Prior to assignment to an area where exposures may be at or above the action level for at least 30 days a year and annually thereafter and upon termination of that assignment,
 3. As medically appropriate for any employee exposed during a hazardous materials incident (as per the policy),
 4. For any employee who is required to wear respiratory protective equipment,
 5. Whenever a laboratory employee develops signs or symptoms associated with a hazardous chemical to which the employee may have been exposed in the laboratory;
 6. For any employee with research animal contact:
 - a. Personnel (to include students) with any expected animal contact regardless of duration: vaccinations for tetanus are required for all personnel regardless of duration of contact with research animals. Vaccination for rabies and Hepatitis B are required for those individuals whose zoonotic exposure indicates its merit. A tuberculosis (TB) test and/or radiograph is required for researchers with contact with non-human primates.
 - b. Personnel (to include students) with certain animal contact: Pre-placement (new personnel), periodic and post-employment medical surveillance may be required for certain personnel with research animal contact.
 - c. All personnel (to include students) with animal contact will participate in the Department of Laboratory Animal Medicine's Occupational Health Program for Research Animal Contact. This program requires certain steps be taken dependent on type of animal exposure.
 7. Prior to assignment to an area where exposures to noise above 85dba and annually thereafter.
 8. Serum banking may be required prior to assignment within some BSL2/BSL3 laboratories at the determination of the Institutional Biosafety Officer. Defer to Appendix A for the consent form.
- B. A copy of the appropriate standard and/or required documentation will be provided to the examining physician.
- C. The examining physician will complete required documentation.

- D. Medical Surveillance documentation shall be as follows:
1. Completed results of the examination shall be kept in the patients medical records for the duration of employment of the affected employee plus 30 years.
 2. The medical provider will advise the employee of the results of the exam within 15 days and shall maintain documentation that the employee has been so advised.
 3. Family Medicine or Main Campus Medical Center will advise the Environmental Health and Radiation Safety Department as appropriate of any conditions that may preclude the employee's performance of certain job duties or use of personal protective equipment.
 4. The Environmental Health and Radiation Safety Department and appropriate department head shall be advised by Employee Health of all employees receiving medical surveillance examinations and all encumbrances noted (as pertains to job function or use of personal protective equipment).
 5. Hazardous materials incidents, LASER energy occurrences requiring medical surveillance, and animal bites and scratches shall be immediately reported to the appropriate department manager/chair. These shall also be documented by completion of an injury/illness report. Medical monitoring will be performed post exposure when warranted as determined by the examining licensed health care provider in conjunction with the Environmental Health and Radiation Safety Department.

III. Employee Access to and Retention of Records

- A. Upon request all applicable employee health records and monitoring results shall be made available to the employee, or anyone having written consent of the employee.
- B. A summary report of employee exposure vaccinations, by department, shall be provided to the Safety & Health Committee when requested.

IV. Hazardous Substance Specific Requirements

- A. Additional compliance requirements in toxic-substance specific standards (for example, labeling and isolation of work areas) are the responsibility of the departmental manager or laboratory director. Refer to policy for Hazard Communication #HM-08-018.
- B. The Environmental Health and Radiation Safety Department shall provide assistance in the establishment of individual department policies/procedures and determining their compliance with regulations.
- C. Additionally, the Environmental Health and Radiation Safety Department will work closely with the following committees/persons to help ensure safety of staff, faculty, and students.
 1. Chemical Hygiene Officer (CHO)
 2. LASER Safety Officer (LSO)
 3. Institutional Biosafety Committee (IBC) and Responsible Official (RO)
 4. Radiation Safety Committee (RSC) and Radiation Safety Officer (RSO)

Source: Safety & Health Committee

Effective Date: 1/21/88

Review/Revision Date: 12/13/93

7/1/94

4/9/96

4/2/99

7/22/02

3/1/05

2/21/08

2/19/11

1/27/14

1/4/17

Appendix A
UNIVERSITY OF TOLEDO HEALTH SCIENCE CAMPUS ONSITE SERUM STORAGE

Employee Health will draw blood and store serum for staff members within BSL 2 & 3 laboratories on campus, as directed by the Institutional Biosafety Committee and the CDC/NIH.

PURPOSE: For protection of employee health as recommended by the CDC/NIH Biosafety Guidelines for serum storage. This provision makes serum storage available for the length of employment and 6 months after termination. NIH suggests that serum storage be made available to researchers who work within the BSL 2 & 3 facilities.

PROCEDURE

- Supervisor/Manager of staff member contacts the Biosafety Officer/Responsible Official for evaluation of potential exposures.
- Staff member reads and signs consent to storage.
- Lab draws, codes and labels specimen.
- Specimen delivered to lab where it is spun and placed in storage tubes.
- Samples are then labeled and stored in a freezer located within the hospital Pathology Serology lab.

TERMINATION OF STORAGE: Staff members may, at any time within the storage period, elect to have their sample tested or released. University of Toledo will not store samples from staff members who have left the institution, once the 6 month post-termination period has expired. If an inadvertent release or spill of biohazardous material occurs in a BSL2 or 3 level lab, the Institutional Biosafety Committee may elect to compare bank samples against current samples for the purpose of determining whether an exposure has taken place.

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CONSENT FOR SERUM STORAGE

I have read and fully understand the information given to me regarding serum storage (reference institutional policy 3364-70-06 "Use of Biohazardous Materials and Recombinant DNA in Research). I have had an opportunity to ask questions, and I understand the benefits of serum storage.

I am consenting to serum storage related to my occupation in research.

I decline serum storage at this time. (Not optional at BSL3 level)

I VOLUNTARILY GIVE MY AUTHORIZATION AND CONSENT TO HAVING MY SERUM STORED.

Signature of Staff Member

Date: _____

Signature of Witness

Title of Witness