

## General Industrial Hygiene

The industrial hygiene (IH) program focuses on the anticipation, recognition, evaluation, and control of potential workplace hazards that have the potential to affect the health of university students, staff, faculty, and residents. IH surveys help to identify the hazards and measure the risks involved in processes on the university campus. The data collected during IH surveys can be used to provide occupational medicine doctors with accurate information to assist with diagnosis of workplace related illnesses, and to inform the laboratory ventilation design process. In instances where IH surveys reveal exposure in excess of regulatory limits, or consensus standard requirements, controls must be put in place to reduce exposures to compliant levels.

Regulations relating to general industrial hygiene at the University of Utah:

1. 29 CFR 1910 Subparts A, B,G, J, M, Q
2. 29 CFR 1910.1450 Occupational Exposure to Hazardous Chemicals in Laboratories
3. 20 CFR 1910 Subpart Z Toxic and Hazardous Substances
4. 29 CFR 1910.1200 Hazard Communication
5. 29 CFR 1910.1030 Blood Borne Pathogens
6. 29 CFR 1910 Subpart I Personal Protective Equipment
7. 29 CFR 1910.95 Occupational Noise Exposure
8. 29 CFR 1910.97 Non-Ionizing Radiation
9. 29 CFR 1910 Subpart H Hazardous Materials
10. 29 CFR 1910.101 Compressed Gases
11. 40 CFR Part 792 Good Laboratory Practices
12. 21 CFR Part 1 Food, Drug, and Cosmetic Act: General
13. 21 USC Chapter 13 Controlled Substances Act
14. 42 CFR 73.3 Select Agents
15. 9 CFR 121.3, 121.4 Select Agents
16. 7 CFR 331.3 Select Agents

Consensus standards relating to general industrial hygiene:

17. ANSI Z9.5-2012 Laboratory Ventilation
18. ANSI Z400.1/Z129.1-2010 Hazardous Workplace Chemicals – Hazard Evaluation and Safety Data Sheet and Precautionary Labeling Preparation
19. ACGIH Threshold Limit Values and Biological Exposure Indices, *ACGIH*

Reference material relating to general industrial hygiene:

20. Prudent Practices in the Laboratory, *The National Academy of Science*
21. Design Requirements Manual for Biomedical Laboratories and Animal Research Facilities, *NIH Office of Research Facilities*
22. NIOSH Pocket Guide to Chemical Hazards, *Dept. of Health and Human Services*
23. OSHA publication 3143 – Informational Booklet on Industrial Hygiene

24. Odor Thresholds for Chemicals with established OELs, *The American Industrial Hygiene Association*
25. The Occupational Environment – Its Evaluation and Control, *The American Industrial Hygiene Association*
26. Industrial Ventilation, *The American Conference of Governmental Industrial Hygienists*
27. Patty's Industrial Hygiene, *John Wiley and Sons*
28. Fundamentals of Industrial Hygiene, *National Safety Council*
29. Occupational and Environmental Health: Recognizing and Preventing Disease and Injury, *Oxford University Press, USA*
30. Industrial Hygiene Program Management, *The American Conference of Governmental Industrial Hygienists*

#### Major EHS Responsibilities

Program/Policy/Rule/Guideline Development and Oversight

Laboratory Audits/Inspections

Risk Assessment

Protocol Review

Documentation and Recordkeeping

Meetings/Consultations/Training

Sampling/Monitoring of gases, vapors, fumes, particulates, and surface and air contaminants

Incident Response

Consultation on ventilation design and problem solving

#### Relevant Professional Certifications

American Board of Industrial Hygiene – Certified Industrial Hygienist