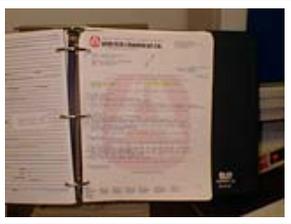
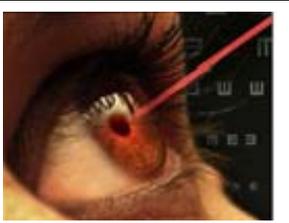
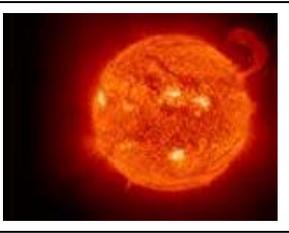


INDUSTRIAL HYGIENE PROGRAMS

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<p>HAZARD COMMUNICATION / RIGHT TO KNOW <i>The Hazard Communication Program assures that health and safety information is available for all hazardous chemicals used in non-laboratory settings. The key components of the program are Material Safety Data Sheets (MSDSs), container labeling, inventories and employee training. Training is mandatory. (See Section 4.1 of ESH&A Program Manual)</i></p>	
<p>CHEMICAL HYGIENE <i>The Chemical Hygiene Program is defined in the ISU Laboratory Safety Manual. The manual defines policies and procedures for work with hazardous chemicals in laboratories. This program applies to any employee who works with hazardous chemicals in a research laboratory. Training is mandatory. (See Section 4.2 of ESH&A Program Manual)</i></p>	
<p>COMPRESSED/LIQUEFIED GASES <i>The Compressed / Liquefied Gases Program defines safe handling and use of these materials. This program applies to any University employee who works with compressed / liquefied gases. The ISU document "Cylinder Safety Guidelines" describes safe practices and procedures and is distributed via the mandatory Cylinder Safety Training module. (See Section 4.3 of ESH&A Program Manual)</i></p>	
<p>EXPOSURE ASSESSMENT / MEDICAL SURVEILLANCE PROGRAM <i>The Exposure Assessment Program is the mechanism by which employee exposures to chemical, physical and biological agents are characterized. Exposure information is used to verify the adequacy of hazard controls and also determines the need for medical surveillance. ESH&A administers this program. (See Section 4.4 of ESH&A Program Manual)</i></p>	
<p>ERGONOMICS PROGRAM <i>The Ergonomics Program describes how the hazards associated with work activities with repetitive motions are identified, evaluated and corrected. Computer work station set ups and safe lifting techniques are the two primary areas of concern. (See Section 4.5 of ESH&A Program Manual)</i></p>	
<p>RESPIRATORY PROTECTION PROGRAM <i>Respiratory protection is worn by Ames Laboratory/IPRT employees for protection from hazards when engineering and other controls are not feasible. Respirator users are fit-tested and trained on an annual basis by IH personnel. Mandatory training required. (See Section 4.6 of ESH&A Program Manual)</i></p>	
<p>BIOHAZARDOUS MATERIALS <i>Blood borne pathogens are disease-causing agents found in human blood or blood components. Any University employee that has potential for exposure to blood borne pathogens because of their job functions are required to have training on exposure control methods. (See Section 4.7 of ESH&A Program Manual)</i></p>	

<p>ASBESTOS <i>Asbestos is present in almost all Ames Laboratory/IPRT buildings. Asbestos is only hazardous if its fibers become airborne and are inhaled. The Asbestos Management Program describes how asbestos is identified, remediated and disposed of at Ames Laboratory. Training is mandatory. (See Section 4.8 of ESH&A Program Manual)</i></p>	
<p>LEAD <i>The ISU document “Guidelines For Working With Lead-Containing Materials” describes the University’s position on procedures and operations involving the use, maintenance, and disturbance of lead-containing materials. This program applies to all Ames Laboratory employees who perform these procedures and operations. (See Section 4.9 of ESH&A Program Manual)</i></p>	
<p>CHEMICAL HOOD TESTING <i>The chemical hood is the primary engineering control utilized at the Ames Laboratory. Proper use and functioning of chemical hoods is essential for worker protection from chemical exposures. The Chemical Hood Testing Program is conducted by the ESH&A office. (See Section 4.10 of ESH&A Program Manual)</i></p>	
<p>LASERS <i>Laser radiation presents both eye and skin hazards. The use of Class 3B and 4 lasers requires a written SOP, medical surveillance and completion of a Laser Hazard Assessment by the ESH&A office. Training is mandatory. (See Section 4.11 of ESH&A Program Manual)</i></p>	
<p>RADIOFREQUENCY RADIATION (RFR) <i>Non-ionizing RFR does not directly alter molecular structure. When RFR is absorbed, it results in an increase in molecular movement, sensed as heat. RFR produces relatively low amounts of heat in biological tissue. Activity-specific training shall be given to each employee prior to work in RFR areas. (See Section 4.12 of ESH&A Program Manual)</i></p>	
<p>ULTRAVIOLET RADIATION (UVR) <i>Use of devices that generate UV light is an important part of several of the Laboratory’s research programs. The hazards associated with UV light are significant. These hazards are covered in the ESH&A Program Manual, and review of that material and activity-specific training is required. (See Section 4.13 of ESH&A Program Manual)</i></p>	
<p>MAGNETS <i>Electromagnet systems are used by many research programs at Ames Laboratory. Magnetic fields may impact the health and safety of employees depending on the strength of the field. Activity-specific training is required. (See Section 4.14 of ESH&A Program Manual)</i></p>	
<p>NANOMATERIALS <i>Nanoscale materials are defined as having a diameter less than 100 nanometers. Materials at this scale exhibit unique properties that differ from those found in a bulk state. The Department of Energy has prescriptive requirements for work with nanoscale materials. Training is mandatory. (See Section 4.15 of ESH&A Program Manual)</i></p>	