

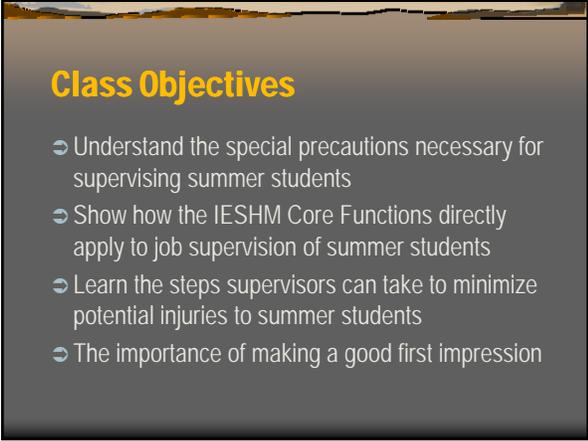


**Supervisor of Summer Students
Training Class**

Training Group
ESHQ Section



**"You only get *one*
chance to make a
good first
impression"**



Class Objectives

- ⇒ Understand the special precautions necessary for supervising summer students
- ⇒ Show how the IESHM Core Functions directly apply to job supervision of summer students
- ⇒ Learn the steps supervisors can take to minimize potential injuries to summer students
- ⇒ The importance of making a good first impression

Class Content

- ⇒ Laboratory Policy and Goals
- ⇒ Issues surrounding Working Teens
- ⇒ Summer Student Injury Data
- ⇒ New Employee Orientation (NEO)
- ⇒ Supervisor Actions for Teen Worker Safety
- ⇒ Prohibited Activities for employees under 18
- ⇒ Radiation Exposure for employees under 18
- ⇒ Informational Resources

Laboratory Policy

“Fermilab employees, users and subcontractors will only conduct work and operations in a safe and environmentally sound manner.”

Laboratory Goals

For FY 2015 Fermilab will reduce its DART (Days Away, Restricted, or Transferred) cases to less than 5 and the annual TRC (Total Recordable Cases) to less than 12.

Laboratory Goals – Cont'd

YEAR	2009	2010	2011	2012	2013	2014	2015 Goals
TRC	26	19	21	38	24	23	< 12
DART	12	6	6	17	7	10	< 5

Why Set Safety Goals?

- ⇒ Moral Responsibility
- ⇒ Demanded by contemporary society
- ⇒ Good Business Practice

Young Workers*

- ⇒ 18.1 million young workers (ages 16-24) worked in the labor force in 2013. This represents 13% of the US workforce
- ⇒ 335 young workers were killed on the job in 2013
- ⇒ Workers < 25 years old were **twice as likely** to end up in the emergency room as those 25 years and older.
- ⇒ Every 9 minutes, a U.S. teen gets hurt on the job

* According to CDC and OSHA Websites

Working Teens-Cont'd

- ⇒ Inexperience
- ⇒ Superman syndrome

Summer Student Injury Data 2005-2014

Year	DART	Medical Treatment	First Aid	All Injury
2005	0	0	4	4
2006	0	0	2	2
2007	0	0	5	5
2008	0	1	1	2
2009	0	0	1	1
2010	0	1	1	2
2011	0	0	4	4
2012	0	0	1	1
2013	1	0	4	5
2014	0	0	0	0
Total	1	2	23	26

Summer Student Injury Data 2005-2014

- ⇒ Hands make up ~40% of all injuries
- ⇒ Arms (including the hand) account for ~50% of all injuries
- ⇒ Occupations with frequent injuries include:
 - outdoor work
 - soldering operations
 - equipment maintenance

Summer Student Injury Data 2005-2014

- ⇒ Type of injuries:
 - Lacerations (cuts)
 - Allergic reactions (poison ivy & insects bites)
 - Contusions (struck by or against)
 - Repetitive Motion/Overexertion
 - Burns (heat)
 - Foreign Body (eyes/hand)
 - Slips, Trips and Falls

New Employee Orientation

- ⇒ Fermilab's safety policies
- ⇒ Stop work authority
- ⇒ IESHM core functions and principles
- ⇒ Hazard Analysis Process
- ⇒ OSH protection for employees at Government Owned Contractor Operated (GOCO) facilities

New Employee Orientation - Cont'd

- ⇒ Employee access to exposure and medical records
- ⇒ Lab's emergency procedures
- ⇒ Lab's EMS and WM/P2
- ⇒ Lab's HazCom and GHS Program
- ⇒ General Employee Radiation Training

Supervisor Actions for Teen Worker Safety

Pre-job orientation & (IESHM Principles and Core Functions)

- a.) Explain Division/Department operations
- b.) Give them clear instructions and review safety/health requirements of job
- c.) Ask them to repeat your instruction and give them an opportunity to ask questions
- d.) Show them how to perform the task, then watch them as they do it, correcting the mistakes

Supervisor Actions for Teen Worker Safety-Cont'd

- e.) Ask them if they have any additional questions
- f.) Utilize "buddy or mentoring systems" where possible
- g.) Ensure employees get any additional required training (Individual Training Needs Assessment on WEB)
- h.) Utilize Fermilab New Employee Checklist

Integrated ESH Management Principles

- ⇒ Line Management responsible for safety
- ⇒ Clear roles & responsibilities
- ⇒ Competence commensurate with responsibilities
- ⇒ Balanced priorities
- ⇒ Identification of safety standards & requirements
- ⇒ Hazard controls tailored to work
- ⇒ Operations authorization

Integrated ESH Management Core Functions

- ⇒ Define Work
- ⇒ Analyze Hazards
- ⇒ Establish Controls
- ⇒ Perform Work
- ⇒ Provide Feedback & Improvements

Prohibited Activities for employees under 18 years of age*

- ⇒ Driving a motor vehicle and being an outside helper on a motor vehicle
- ⇒ Power-driven woodworking machines
- ⇒ Power-driven hoisting apparatus
- ⇒ Power-driven metal-forming, punching, and shearing machines

* From Fair Labor Standards Act

Prohibited Activities for employees under 18 years of age -Cont'd

- ⇒ Power-driven circular saws, band saws, guillotine shears, chain saws, reciprocating saws, wood chippers, and abrasive cutting discs
- ⇒ Roofing operations and all work on or about a roof
- ⇒ Excavation operations
- ⇒ Exposure to radioactive substances and to ionizing radiation unless specific permission has been granted by the Laboratory Senior Radiation Safety Officer

Specific Radiation Requirements for employees under 18 years of age

- ⇒ Prior approval of the Senior Radiation Safety Officer (SRSO) is needed to enter a posted radiation area or any other radiological area.
- ⇒ Not permitted to enter radiation areas where the dose rate exceeds 10 mrem/hr.
- ⇒ Annual radiation dose may not exceed 100 mrem.

Specific Radiation Requirements for employees under 18 years of age-Cont'd

- ⇒ Must carry a dosimeter when entering any radiation area and a daily dosimeter log must be kept by the supervisor and reviewed by the ES&H Department/Group.
- ⇒ Special radiation safety training, approved by the SRSO, must be given to persons under 18 years of age who could potentially receive more than 10 mrem, as estimated by the RSO.

Summary

- ⇒ Reviewed Laboratory policy and goals
- ⇒ Discussed concerns associated with working teens
- ⇒ Reviewed summer student injury data
- ⇒ Reviewed what's covered in NEO
- ⇒ Discussed supervisor actions for teen worker safety
- ⇒ Reviewed the prohibited activities and radiation exposure policy for employees under 18
- ⇒ Reviewed informational resources
