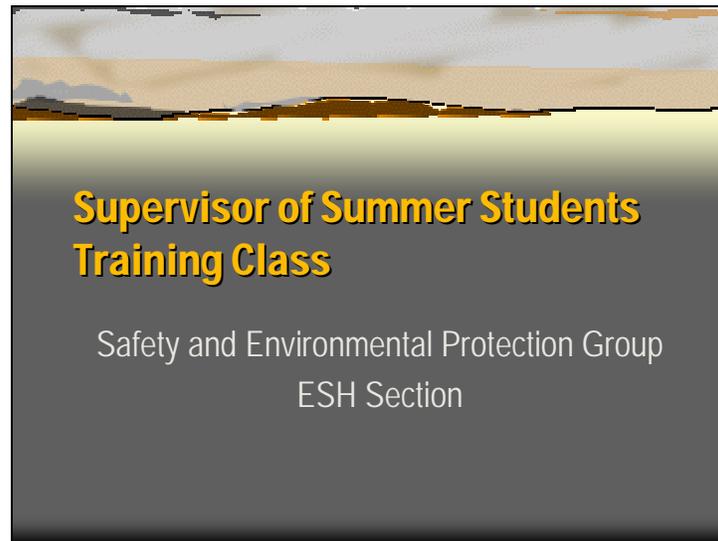


Slide 1



**Supervisor of Summer Students
Training Class**

Safety and Environmental Protection Group
ESH Section

The slide features a background image of a sunset or sunrise over a body of water, with a dark gradient overlay at the bottom where the text is placed.

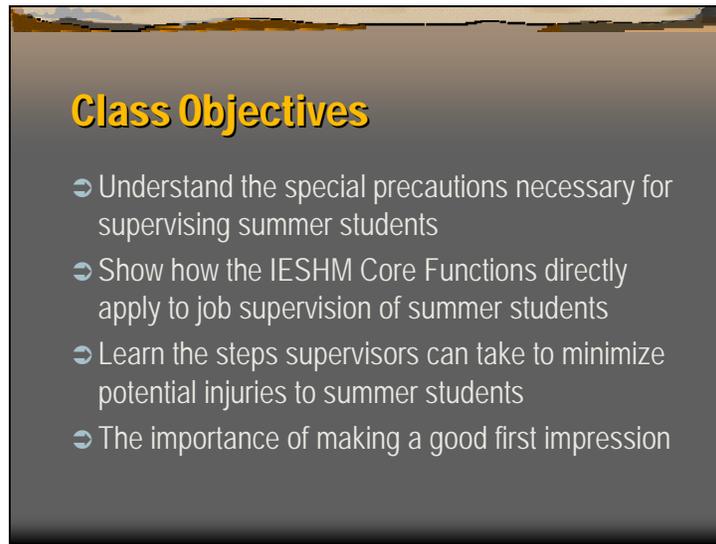
Slide 2



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

The slide features a background image of a sunset or sunrise over a body of water, with a dark gradient overlay at the bottom where the text is placed.

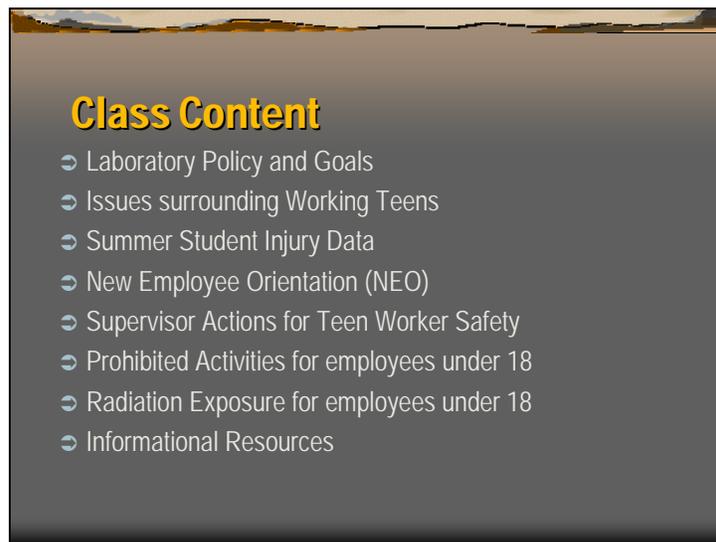
Slide 3



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

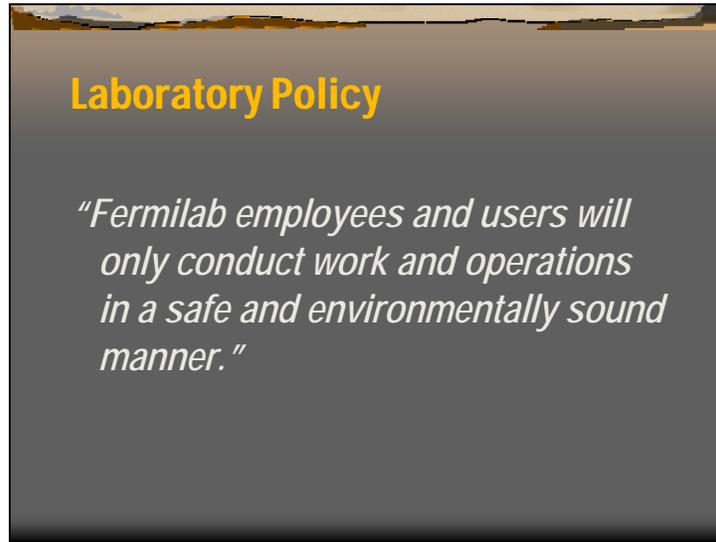
Slide 4



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

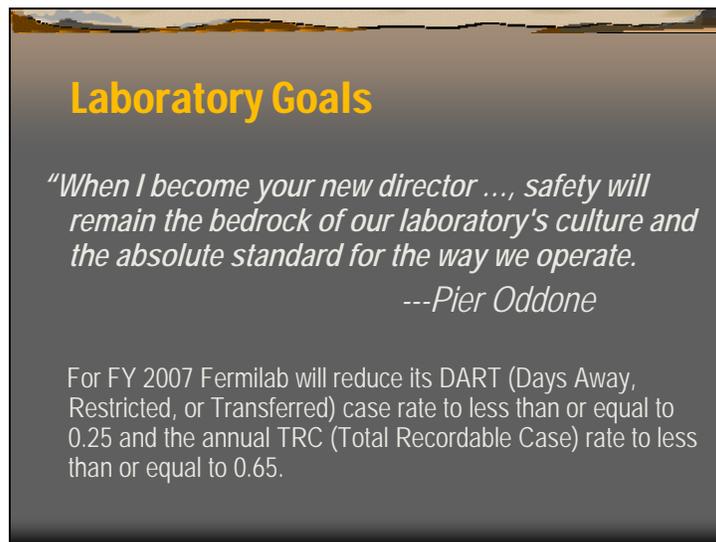
Slide 5



Laboratory Policy

"Fermilab employees and users will only conduct work and operations in a safe and environmentally sound manner."

Slide 6



Laboratory Goals

"When I become your new director ..., safety will remain the bedrock of our laboratory's culture and the absolute standard for the way we operate.

---Pier Oddone

For FY 2007 Fermilab will reduce its DART (Days Away, Restricted, or Transferred) case rate to less than or equal to 0.25 and the annual TRC (Total Recordable Case) rate to less than or equal to 0.65.

Slide 7

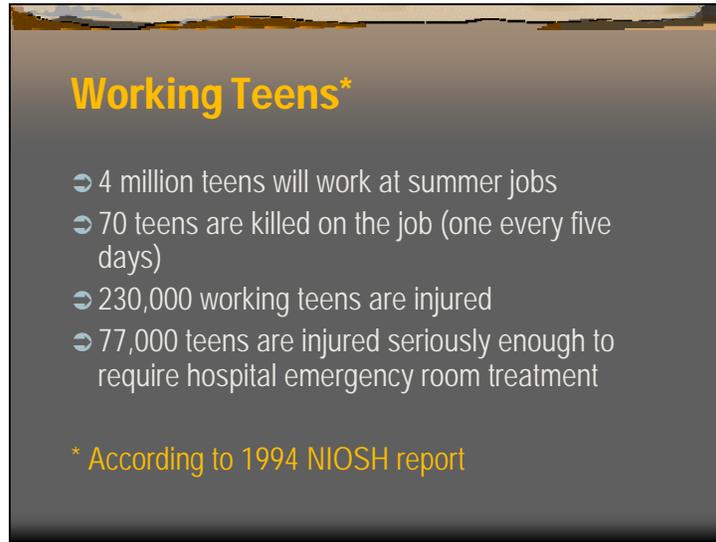
Laboratory Goals – Cont'd

YEAR	Fermilab TRC	Fermilab Goal TRC rate	Fermilab TRC rate
2002	78		3.41
2003	32		1.50
2004	29	2.0	1.42
2005	29	1.1	1.47
2006	25	0.8	1.26
2007	?	0.65	?

Slide 8

- ### Why Set Safety Goals?
- ⇒ Moral Responsibility
 - ⇒ Demanded by contemporary society
 - ⇒ Good Business Practice

Slide 9

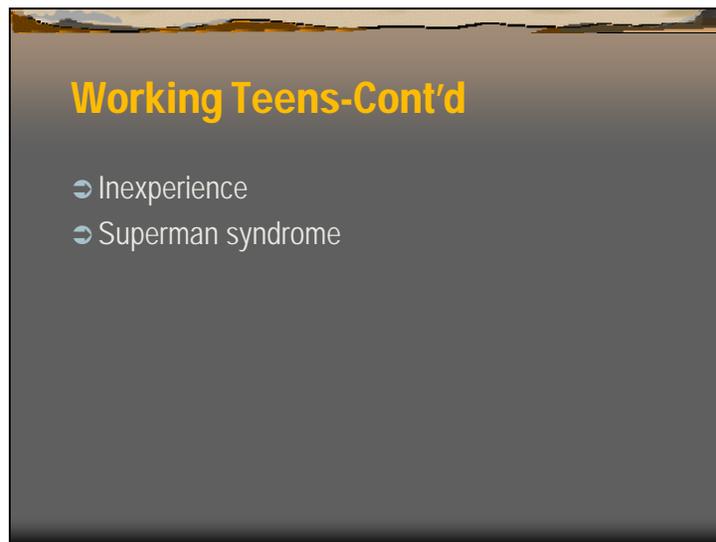


Working Teens*

- ⇒ 4 million teens will work at summer jobs
- ⇒ 70 teens are killed on the job (one every five days)
- ⇒ 230,000 working teens are injured
- ⇒ 77,000 teens are injured seriously enough to require hospital emergency room treatment

* According to 1994 NIOSH report

Slide 10



Working Teens-Cont'd

- ⇒ Inexperience
- ⇒ Superman syndrome

Slide 11

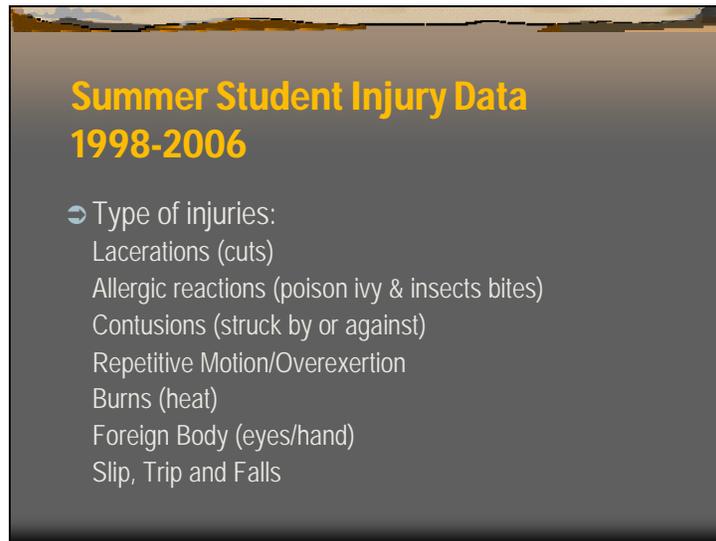
Summer Student Injury Data 1998-2005

Year	DART	Medical Treatment	First Aid	All Injury
1998	0	3	6	9
1999	0	3	4	7
2000	0	0	2	2
2001	0	0	0	0
2002	1	1	7	9
2003	0	0	1	1
2004	0	0	2	2
2005	0	0	4	4
2006	0	0	2	2
Total	1	7	28	36

Slide 12

- ### Summer Student Injury Data 1998-2006
- ⇒ 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

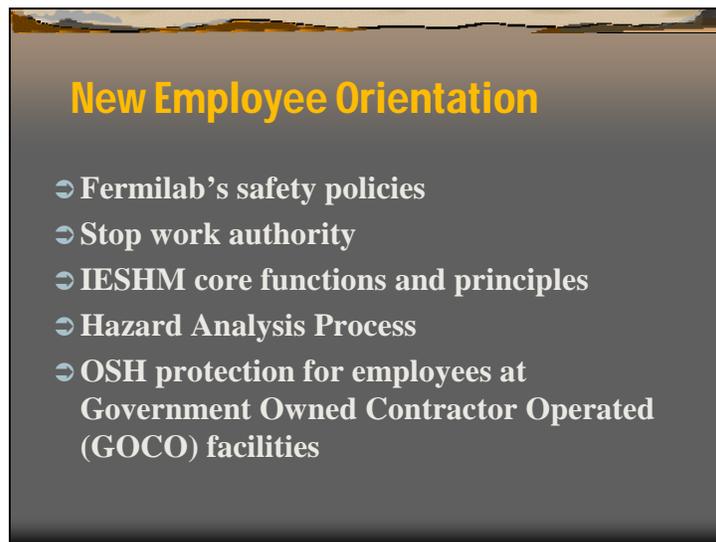
Slide 13



**Summer Student Injury Data
1998-2006**

- ⇒ 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)
 - Slip, Trip and Falls

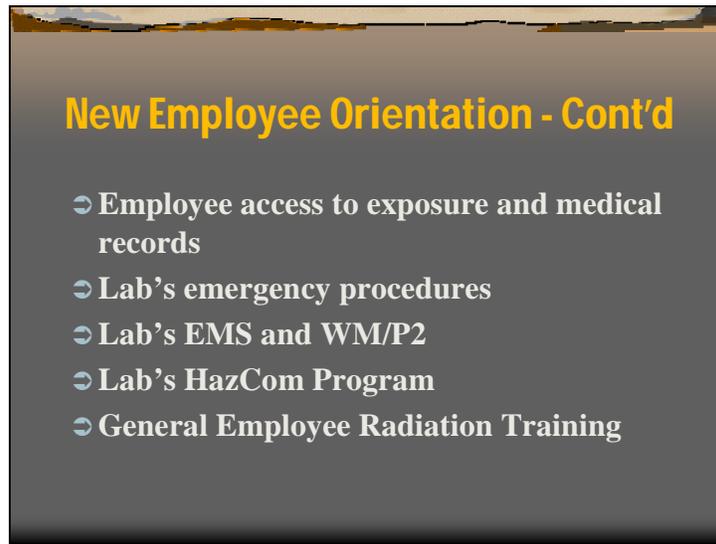
Slide 14



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

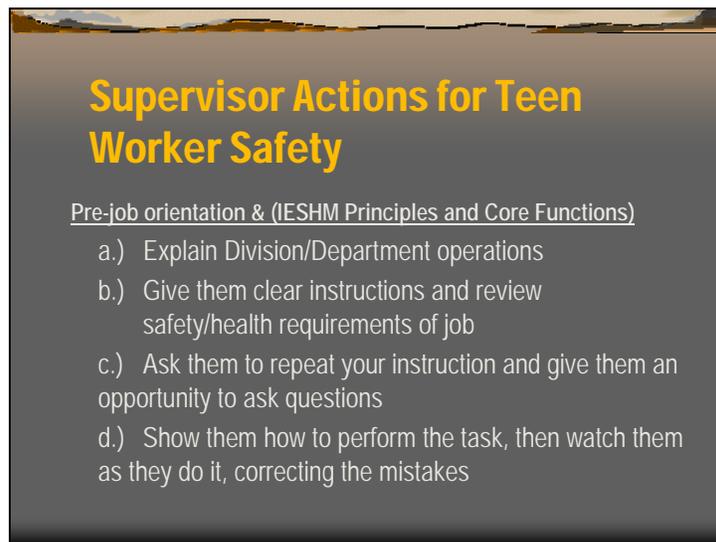
Slide 15



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 Program
- ⇒ General Employee Radiation Training

Slide 16

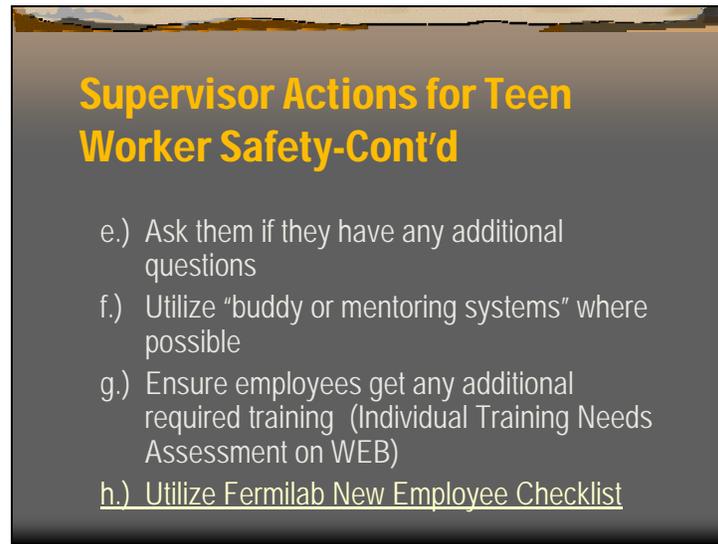


Supervisor Actions for Teen Worker Safety

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

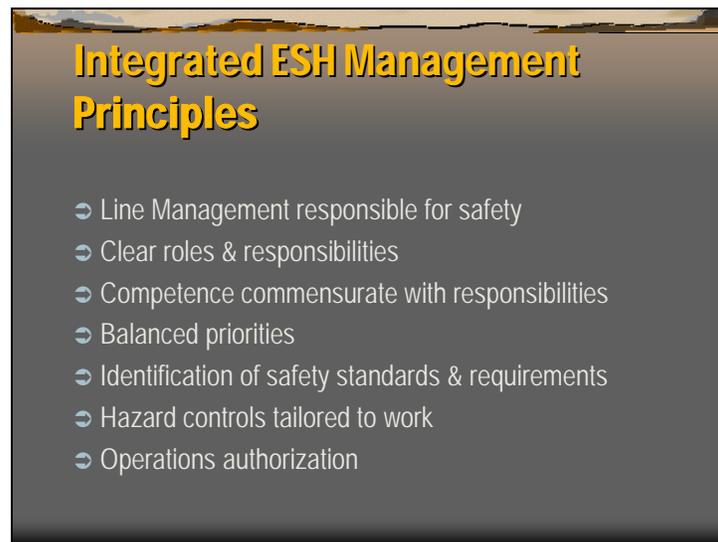
Slide 17



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

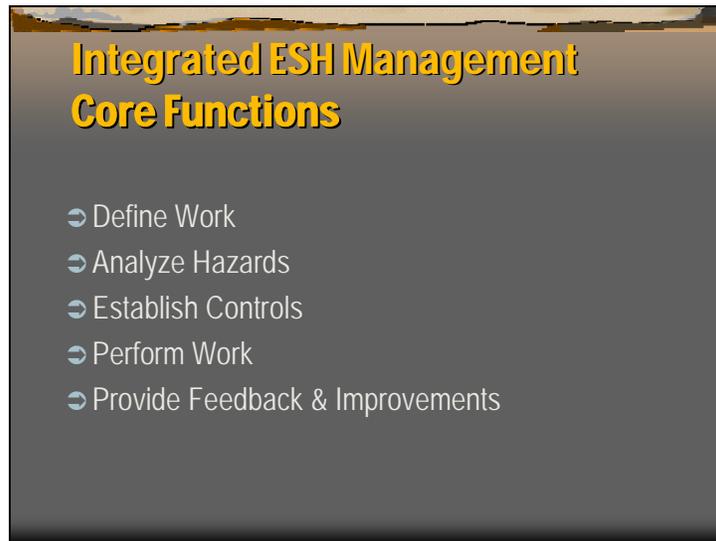
Slide 18



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

Slide 19



**Integrated ESH Management
Core Functions**

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

Slide 20



**Prohibited Activities for employees
under 18 years of age***

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

* From Fair Labor Standards Act

Slide 21

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

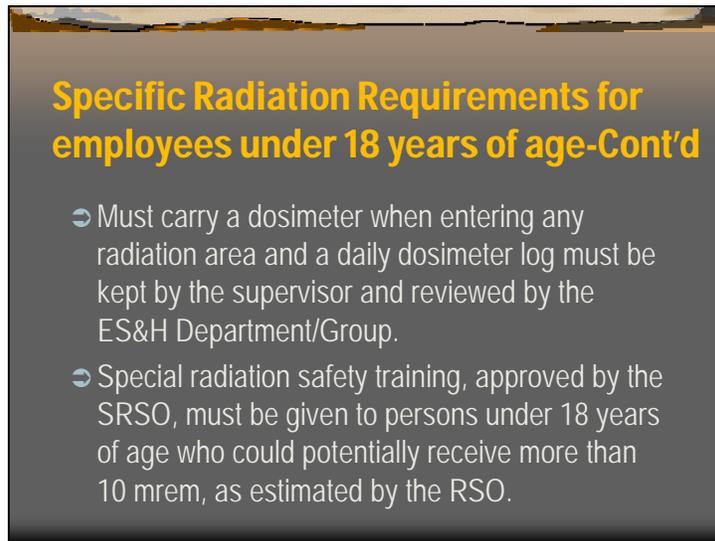
- ⇒ Power-driven circular saws, band saws, and guillotine shears
- ⇒ Roofing operations
- ⇒ Excavation operations
- ⇒ Exposure to radioactive substances and to ionizing radiation unless specific permission has been granted by the Laboratory Senior Radiation Safety Officer

Slide 22

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.

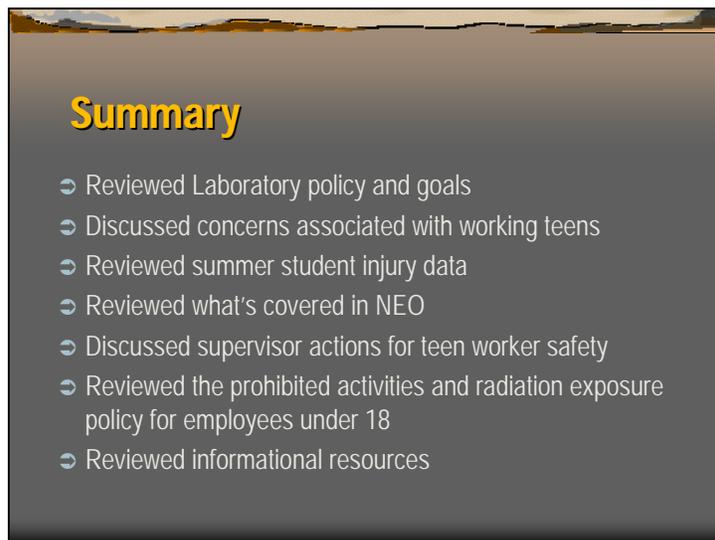
Slide 23



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.

Slide 24



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