



Basics of Occupational Safety
Lecture Notes

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Chapter Four

**Roles and Professional Certifications
for Safety and Health Professionals**



The Modern Health and Safety Team

The modern safety and health team is headed by a safety and health manager. Depending on the size of the company and the commitment of its management, the team may include people in the following additional positions:

- Safety engineer
- Health physicist
- Occupational physician
- Occupational health nurse

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The Job of the Safety Manager

The job of the safety and health manager is complex and diverse, focusing on:

- Analysis
- Prevention
- Planning
- Evaluation
- Promotion
- Compliance

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Typical College Majors

Educational requirements range from technical certificates to graduate degrees. Typical college majors held by practitioners include:

- Industrial safety and health technology
- Industrial technology
- Industrial engineering technology
- Manufacturing technology
- Industrial management
- Engineering technology

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Impact of Engineers on Safety

Engineers can have a significant impact on safety in the workplace and the marketplace by designing safety into products. The engineering disciplines geared most closely to design are:

- Aerospace
- Electrical
- Nuclear
- Mechanical

Not all safety engineers are engineering majors. In fact, graduates of various technology degrees may have more formal education in safety than engineering graduates do.

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Responsibilities of Industrial Hygienists

Industrial hygienists are concerned with:

- Recognizing the impact of environmental factors on people
- Evaluating the potential hazards of environmental stressors
- Prescribing methods to eliminate stressors.

Concerns and Duties of Health Physicists

Industrial hygienists are concerned with radiation in the workplace. Their duties include:

- Monitoring radiation in the air
- Measuring radioactivity levels in biological samples
- Developing the radiation components of a company's emergency action plan
- Supervising decontamination activities

Occupational Physicians Defined

Occupational physicians are medical doctors who specialize in workplace-related health problems and injuries. In the past, occupational physicians treated injuries and illnesses as they occurred. Today's occupational physicians focus more attention on anticipating and preventing problems.

Occupational Health Nurses Defined

Occupational health nurses are concerned with conserving the health of workers through:

- Prevention
- Recognition
- Treatment

Like occupational physicians, occupational health nurses focus more attention on anticipation and prevention than they did in the past.

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Risk Management Defined

Risk management involves the application of risk reduction strategies and transferring remaining risk to insurance companies.

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Professional Certification

Professional certification is an excellent way to establish credentials in the safety, health, and environmental profession. The most widely pursued certifications are:

- Certified Safety Professional
- Certified Industrial Hygienist
- Certified Professional Ergonomist
- Certified Occupational Health Nurse

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