

Occupational Health - Industrial Hygiene

Objectives:

Students should be able to describe:

- The role of occupational health practice within the community
- Inter-relation between OH and preventive health practices.
- The major components of occupation health practice
- The focus on maintaining health and preventing disease.
- Why the workplace can be hazardous to the health of individuals
- How OH/IH programs contribute to community health
- Why OH/IH data are part of the surveillance role of the public health agency.
- [Competencies](#) 1B(1,2,3,4,7) 1C(10), 1D(4,10), 1F(1,3,5) II(a)

Key Words

Occupational health, Occupational Medicine, Occupational Hygiene, Industrial Hygienist, Health Hazards, Risk Assessment, Worker health, workman's compensation, Maternal Safety Data Sheets, Right to Know, industrial epidemiology, OSHA, Dept. Of Labor, Environmental Hazards.

Concept

Most people work outside their home and expect their workplace to be free from physical and environmental hazards. The workplace may be the only place where many lower income workers have access to health services.

References

[Return To Work](#) (.pdf file, read with Adobe reader)

Maxcy Rosenau, 13th Ed. Scan introduction of chapters in section 3 (Environmental Health) particular attention to Chaps. 15 pp 315 - 324, Scan chaps. 28, 30 & 31.

14th Ed. Scan Chap 18 Sec. A & C, Sc an Chaps 32 & 33

Introduction to Public Health, Schneider, Chapter 19

Add. Gen. Ref. from Dr Vance - Risk, costs and lives Saved. Getting better results from regulations. Edited by Robert W. Hahn. Oxford University Press. 1996)

New Papers - Take a look at the concern in the UK about responsibility for signing [well](#) (page3) or [sick](#) (page 6)notes. These same issues bedevil the family doctor in the U.S. as well.

[OH-IH URLS](#)

Industrial Hygiene & Carcinogenesis

Drs. Compton, Vance, Buttery

Concept:

The workplace should not expose workers to environments with preventable hazards. The work site should foster a healthy life style.

Key Words:

Work site, occupation, environment, hygiene, hygienists, engineers, Material Safety Data Sheets, Threshold Limiting Values, Personal Protective Equipment, toxicology, safety, carcinogens.

Objectives

of this presentation is to provide you with an overview of the function, and scope of work of the Occupational Medicine physician and the Industrial Hygienist. The two professions complement each other in ensuring a safe workplace for employees.

Relevant [MPH Competencies](#) 1A5, 1B1-8, 1C1-8, 1D3-7, 1F1-5. IIA1-7

Issues

Review the historical data provided in the first session of this course to examine **how long** worker's health has been a concern of health professionals.

First review Slide presentations from Dr Compton.

[The Occupational Health Program](#) ([pdf Version](#))

[Disability Cost/Benefits](#) (.pdf)

[Employer as Health Coach](#) (NEJM Oct07)

[Deaths from Heart disease among Firefighters](#)

Also investigate the following Web Sites to look at information that would be useful in counseling workers about options if disabled as well as general Occupational Med reference information.

[Bureau of Labor Statistics.](#)

[Americans with Disabilities.](#)

[Traveler's Warnings.](#) (Look at the fact sheets on this page)

[Association of](#) Occupational and Environmental Clinics

The following web sites **also** provide important information related to occupational health & industrial hygiene

[NIOSH](#) (there are excellent fellowship opportunities at this site)

[Pocket Guide to Chemical Hazards](#)

[Health Hazard Evaluations](#)

[OSHA](#) (Occupational Safety & Health Administration)

[ACGIH](#) (American Conference of Governmental and Industrial Hygienists)

[NIOSH](#) OH/IH Web sites

Then review the Slides provided By [Dr Vance](#) (.pdf of [slides](#)) Examine the Links to web sites provided by Dr. Vance and be prepared to discuss current occupational health issues.

Then look at the [Primer on Carcinogenesis](#) (.pdf) as an introduction to the issue of chemical effects in the workplace.

American Cancer Society [web page on known & probable carcinogens](#)

Love Canal, Niagara, New York

Triani, (Redstone Arsenal) AL (DDT)

Timjes Beach, MO (Dioxins)

Paint, Corpus Christi Helicopter Rework Depot, TX

The following short pieces should stimulate some thoughts about Asbestos as a carcinogen.
What types of cancer does it cause?
How much exposure is needed to obtain an effect?

1) This first article was one of the first cohort studies in the US.
This set of articles started to concerns following WW!! and became an [issue in the 1950s](#)

Although a number of epidemiologists cautioned that more data was need following the media 'feeding frenzy' it was not until a further review [20 years later](#) when some of the news media harassment died down.

2) The look at the [table from Selikoff's original study](#) and consider what this tells you about the comparative dangers of asbestos exposure and smoking.

3) Then [review the short summary](#) and the indicators for Health Effects Monitoring using the preceding as an example of an issues needing such monitoring.

4) Finally try and [get a feel for what parts per million](#), billion and trillion mean when this kind of data is quoted by the EPA and activists.