



## **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.

[Dr Compton's PPT.](#)

### **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, Scan Chaps 32 & 33

Introduction to Public Health, Schneider, Chapter 19

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

OH-IH URLS

## **Occupational Health**

- ACOEM - [Emergency Preparedness](#)

- [Canadian Centre for Occupational Health and Safety](#)
- [Qualities of](#) a good occupational physician
- [NIOSH](#) (there are excellent fellowship opportunities at this site)
- [Institute of Law](#), Psychiatry & Public Policy, U. VA
- Presidential [Task Force on Employment of Adults with Disabilities](#).
- Presidential [Commission on Employment](#)
- [Occupational Lead Poisoning](#) (look at the chart of ill effects toward the bottom of the article)
- [VCU's Work Support Page](#):
- [Traveler's Warnings](#). (Look at the fact sheets at the bottom of the page)
- I.O.M [Institute for Occupational Medicine](#)
- MeritCare Health System- [Occupational Medicine](#)
- UK - [Occupational Health Project](#)
- [Typing Trauma](#) (One Physician's View)
- OH/IH [Websites](#)
- Snapshot of the Health & Wellness Awareness [Survey Findings](#)

## Industrial Hygiene

- [ACGIH](#) (American Conference of Governmental and Industrial Hygienists)
- [American Board of Industrial Hygiene](#)
- [Physician Assistants in Occupational Medicine](#)
- [American Association of Occupational Health Nurses](#)
- [Bureau of Labor Statistics](#).
- Dept. of Labor - Occupational Health and [Safety Specialists and Technicians](#)
- Dept. of Labor - Safety & Health Topics - [Biological Agents](#)
- Dept. of Labor - [Ergonomics](#)
- Chemical Safety - [NIOSH Databases](#) and Other Resources
- [Pocket Guide](#) to Chemical Hazards
- [Health Hazard Evaluations](#)
- NIOSH International [Chemical Safety Cards](#)
- OSHA [Information Booklet](#) on-line
- [Occupational Hazards](#)
- [OSH.net](#)
- CDC - Personal [Protective Equipment](#)

- [The Ergonomics Society](#)
- U.S. Army Center for Health Promotion [IH Program](#)
- U. Rochester - [Chemical Hygiene Program](#)
- AIHA [What's Industrial Hygiene](#)
- [What is Industrial Hygiene?](#)
- What Is [Occupational Medicine](#)?
- [CODE OF ETHICS](#) For The Practicing Industrial Hygienist
- [Database of Hazardous Chemicals](#)
- [Brookhaven National Laboratory](#)
- [CDC Hearing Conservation Program](#)
- European Commission - [Health Effects of Radon](#)
- High residential [radon health effects](#) in Saxony
- Radon - [Comments from the BMJ](#)
- Systematic [reviews of injury](#)-prevention strategies for occupational injuries: an overview
- [http://www.tifac.com/articles/occupational\\_medicine-junjul98-kevin\\_byrne.html](http://www.tifac.com/articles/occupational_medicine-junjul98-kevin_byrne.html) US Dept of Labor - OCC Health - [An overview](#)
- [Virginia Dept of Labor & Industry](#)

## Intro to Carcinogenesis

- Primer on [Carcinogenesis](#)
- Hx [Articles from 1950s](#)
- [Follow-up](#) from 1970 & 1980
- Table from Selikoff's [original study](#)
- Indicators for [Health Effects Monitoring](#)
- Get a feel for [parts per million](#),
- EPA - [information on asbestos](#)
- [Lawyers & Asbestos](#)

## Industrial Hygiene & Carcinogenesis

### Concept:

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

### Key Words:

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

## 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.

## 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. ([pdf Version](#))

[The Occupational Health Program](#) (discussion of basic elements of an OH program)

[Disability Cost/Benefits](#) (the value of having the OH program manage the disability benefits program)

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](#). (pay attention to the health issues)

[Americans with Disabilities](#). (scan for main elements)

[VCU's Work Support Page](#) (what is the purpose of this program?)

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

[Association of Occupational and Environmental Clinics](#)

[ACOEM](#) (American College of Occupational Environmental Medicine)

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](#) (What is the purpose of the guide?)

[Health Hazard Evaluations](#) (be prepared to define a health hazard)

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

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

[OH/IH Websites](#)

**Then review the Slides provided by Dr. Vance.** Dr Vance's [slides as PDF File](#). 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](#) as an introduction to the issue of chemical effects in the workplace.

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 concern 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.