The Development and Evolution of Occupational Medicine in the United States from 1837 to 2010

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Disclaimers

- No relevant financial relationships with industry
- No references to off-label usages of pharmaceuticals or instruments
- Be aware that this is a snapshot, or a view through a keyhole, not a treatise. Many important dates, people, and events have been left out!

Coming Up

- Occupational hazards and historical forces that shaped OEM in the United States
- Occupational health regulation, training, and research
- Organized medicine and ACOEM

1733 - 1837

The industrial revolution began circa 1733 (first cotton mill)

Dr. Benjamin McReady (1813-92) published The Influence of Arts, Trades, Professions, and Occupations in the United States on the Production of Disease (1837) in NY at age 23.

1900 - 1945

Mining Disaster
On Dec. 6, 1907, at least 362 miners were killed by an explosion at two connected coal mines in Monongah, W.Va. - the worst mining disaster in U.S. history. As a result, Congress created the U.S. Bureau of Mines within the Interior Department in 1910.
1900 - 1945

Triangle Shirtwaist Fire of March 25, 1911 in New York City led to improved state labor laws. 146 people died as a result of the fire or from jumping out of the building. Most of the workers could not escape because the managers had locked the doors to the stairwells and exits to keep them from leaving early. Fire truck ladders only reached the sixth floor.

1900 - 1945

Workers’ Compensation
In 1907 lawyer Crystal Eastman spent time with workers in the Pittsburgh area, and was dismayed by the number of serious injuries and fatalities. She published her findings in the book Work-Accidents and the Law (1910). This led to the enactment of legislation in New York in 1923 and in other states to implement no-fault insurance for work injuries and deaths.

1900 - 1945

Dr. Alice Hamilton (1869-1970) began her career by exploring the health hazards of lead and other heavy metals among working-class residents of Chicago and, more than any other American, laid a solid base for the practice of occupational medicine and for the protection of worker health” (Harriet Hardy, MD, 1972)

1900 - 1945

Publications by Dr. Alice Hamilton

1925
Industrial Poisons in the United States

1934
Industrial Toxicology

1943
Exploring the Dangerous Trades (autobiographical)

1945 – Present Day

Dr. Harriet Hardy (1906 – 1993)
- Identified beryllium as an occupational hazard and, in 1952, established the National Beryllium Registry, one of the first registries to collect long-term data on a chronic health disorder.
- In 1958 she was the first woman to be appointed associate clinical professor of medicine at Harvard Medical School.

1945 – Present Day

Dr. Irving Selikoff
(1915 – 1992)
- Followed asbestos workers for more than 20 years, finding excessive risks of lung cancer and mesothelioma (increased by tobacco smoking).
- Impact was to largely destroy the asbestos industry in the US, preventing much illness and many deaths.
Occupational Safety and Health Administration (OSHA)

- Established by Congress agency under the OSHA Act, which President Richard M. Nixon signed into law on December 29, 1970.
- OSHA is an agency of the United States Dept. of Labor.
- The OSHA Act went into effect on April 28, 1971.

National Institute for Occupational Safety and Health

Established by the OSHA Act to help ensure safe and healthful working conditions by providing research, information, education, and training in the field of occupational safety and health.
- NIOSH established Educational Resource Centers, subsequently renamed Education and Research Centers (ERCs), and the National Occupational Health Research Agenda (NORA) to support training and research in occupational safety and health.

Occupational Medicine Organizes in the USA

Late 1800s and early 1900s, physicians hired by:
- Marine hospitals for merchant seamen
- Mining, Lumber, and Textile industries
- Railway medicine for railroad workers and families

Regional and categorical associations of occupational physicians were established, e.g.
- New York
- Central States (centered in Chicago)
- National Association of Railway Surgeons
Occupational Medicine as a Profession in the USA

1915 – AAIP&S

American Association of Industrial Physicians & Surgeons was formed under the guidance of Dr. Harry Mock, Medical Director of Sears Roebuck. He authored the first American textbook on occupational medicine practice in 1919. The first AAIP&S meeting was held in 1916.

Mock 1919 - Harbinger of Health and Productivity Management?

1900 - 1945

Dr. Clarence Olds Sappington (1889 – 1949) was for many years Director of the Division of Industrial Health of the National Safety Council. Published over 200 papers and three books on occupational health, including *Industrial Health – Assets and Liabilities* and *Essentials of Industrial Health*.

Occupational Medicine as a Profession in the USA

1937 – First issue of *Industrial Medicine* was published in Chicago to bring together three publications: AAIPS Bulletin, *The Industrial Doctor* (NY Society of Industrial Medicine) and the Proceedings of the Central States Society of Industrial Medicine and Surgery. Dr. C.O. Sappington was one of the editors.

In 1961, ACGIH began co-sponsoring the annual American Industrial Hygiene Conference and Exposition (AIHCE) with the American Industrial Hygiene Association (AIHA). Occupational health physicians and nurses met concurrently until 2005 at the American Occupational Health Conference (AOHC).

Conferences

1945 – Industrial Health Conference established

Beginning in 1945, the AAIP&S met concurrently with the American Industrial Hygiene Association (AIHA), the American Conference of Governmental Industrial Hygienists (ACGIH), the American Association of Industrial Nurses, Inc. (AAIN), and the American Association of Industrial Dentists (AAID). This combined meeting was known as the Industrial Health Conference.

1977 AOMA meeting, Boston Sheraton, my first attendance at AOHC
The American Academy of Occupational Medicine was established with Dr. George Gehrmann (1890-1959), Medical Director of DuPont as its first President, primarily to advocate for occupational medicine as a specialty for board certification.

IMA became the American Occupational Medical Association (AOMA)

and the American Academy of Occupational Medicine (Pres. Frank Ubel, MD) merged to form the American College of Occupational Medicine (ACOM)

ACOEM became the American College of Occupational and Environmental Medicine, headquartered in Elk Grove Village (a suburb of Chicago), Illinois

4th International Conference on the History of Occupational and Environmental Health
• June 19 - 22, 2010 in San Francisco
• Organized by Dr. Paul Blanc under the auspices of UCSF and ICOH

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