

# Environmental Health

## A review State Environmental Health Programs

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# ASTHO

- Association of State and Territorial Health Officials
- State PH Directors, Deputy Directors, Environmental Health Directors, and other affiliates
- <http://www.astho.org/Programs/Environmental-Health/>

A brief history lesson...

# Public Health...in the beginning

- 6,500 years ago in ancient Sumer
  - pipes have been located indicating sewer systems
- 5,000 years ago in Egypt
  - the priestly minister of the state had the duty of inspecting the water supply for the whole land every 10 days
- -Sanitarian's Handbook – Ben Freedman 1977

# A little more “recent” history...

- 1200s in London
  - Smoke abatement law (NOT smoke free air act)
  - Forbidding swine in streets
  - Keep fronts of houses clean
- 1350 France: Sanitary Police Program
- 1388 England: First English Sanitary Act
- 1415 England: First Nuisance Act
- 1610 Jamestown, VA: First EH law in the Colonies, est May 24,1610

# 18<sup>th</sup> and 19<sup>th</sup> Century Public Health - USA

- Protecting the public's health was the responsibility of the social elite.
- Statesmen acting in public's interest vs. politicians answering to a constituent group.
- Men of property and wealth were believed to be independent of special interests and therefore capable of disinterested judgment.
- Principles of Public Health Practice, 1997

# 18<sup>th</sup> and 19<sup>th</sup> Centuries continued....

- Epidemic diseases were the consequence of a failure to obey the laws of nature and God.
- Police function – port cities
- Quarantine caused economic problems.
- Cause of disease unknown - health regulations written and revised in response to political influence or pressure from merchants – not necessarily in response to shifts in scientific thinking.

# 18<sup>th</sup>/19<sup>th</sup> Century Milestones

- 1793, first city board of health established in Philadelphia (or Baltimore) – the national capital had to be shut down due to a yellow fever epidemic
- 1850 Lemuel Shattuck: Report of the Sanitary Commission of Massachusetts – recognized vital records indicated sanitary conditions affect death rate.
- 1854 John Snow; Broad Street Pump, London
- 1855 Louisiana: 1<sup>st</sup> State BOH
- 1850s in MA: First milk laws and inspectors
- 1859 Florence Nightengale: First statistical link between health and environmental conditions.
- June 19, 1861: U.S. Sanitary Commission

# The bottom line

- EH provides for...
  - Safe food, water, air, shelter
  - Foundation for all other health needs
- Use the following skills...
  - Epidemiology, Toxicology, Health/Sanitary Engineering, Health Physics, and General Sanitation

# Establishment of Iowa's Local Boards of Health

- In 1866, the Local Health Law was adopted.
  - Designated mayor and town council or township trustees as LBOH.
    - LBOH had authority to establish regulations for public health and safety, to control nuisances, and to regulate sources of filth and causes of sickness in communities.

# State Board of Health in Iowa

- 1880 - State Board of Health law established to:
  - Collect vital statistics
  - Establish duties of local boards
  - Punish neglect of duties
  - Mostly advisory – local boards had authority

# 1967 New Local Health Act

- Chapter 137 of the Code of Iowa
  - Each county required to establish a BOH – one member had to be a physician licensed by the State of Iowa.
  - BOS to appoint other members.
  - A city with a population of 25,000+ could establish a city board of health.
  - Counties and cities were also allowed to form district boards of health.

# IDPH History

- 1924 established
  - Divisions included:
    - Contagious and Infectious Disease
    - Venereal Disease
    - Housing
    - Sanitary Engineering
    - Vital statistics
    - Examinations and Licenses

# ASTHO focus areas

- Built environment
- Food safety
- Natural environment
- Tracking environmental hazards
- Water quality/safety

# State EH Challenges

- Fragmentation
- Sustainability
- Recognition
- New and emerging concerns and threats
- Resources

# Fragmentation

- Multiple federal agencies (CDC, EPA, FDA, NRC, USDA, NIH)
- Multiple state agencies (DPH, DNR, Dept. of Ag, DIA, HHS)
- Multiple not for profits (ACS, ALA, Academy of Peds, APHL, many others...)
- Leads to an identity crisis

# Sustainability

- The tendency to fund targeted efforts diminishes states' capacity to ensure "baseline" competency.
- Workforce challenges (not lucrative, specialization, sensationalism of other professions)
- Competition with other public health and health care concerns such as chronic disease

# Recognition

- So many variations of EH, the general public does not associate with the profession.
- Generational amnesia due to success in preventing disease
- Public hears “environmental health” and thinks “environmentalist/ism”
- Often overshadowed by chronic disease trends and efforts

# What should be done?

- Fragmentation must be addressed either through intentional coordination or consolidation
- EH profession must communicate more effectively our role in protecting and promoting health
- Establish and commit resources for a core set of public health services, THEN support special interests/needs