

# CPH Review Session: General Principles of Public Health

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Background:  
Certified in Public Health (CPH) Exam

- The intent of this 75 minute review session is to assist PHS Officers from a wide range of agencies and disciplines with an opportunity to take the Certified Public Health (CPH) exam through the National Board of Public Health Examiners (NBPHE). As a “pilot” program, this test can be taken by PHS Officers at a reduced cost during the month of October 2015.
- In an effort to assist those PHS Officers interested in obtaining this certification, a total of 8 weekly, 75-minute review sessions will be led. In addition, these sessions will have additional review materials, resources, and “homework” in which the goal is to assist the officer in being prepared to test for this for the CPH exam.
- Please visit the following website if you are interested in the Certified in Public Health (CPH) Exam through the National Board of Public Health Examiners (NBPHE) under this pilot program for the month of October 2015. At this website you will also have access to information on the pilot project (ie: target population) and resources to begin to prepare you for examination:

[www.nbphe.org](http://www.nbphe.org)

For questions please email LCDR Evelyn Seel at [Evelyn.Seel@hhs.gov](mailto:Evelyn.Seel@hhs.gov)

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# Overview

- Basic definitions
- Sentinel events in history
- Core functions
- Essential services
- Public health agency accreditation
- Core values/principles/tenets/frameworks
- Government responsibility
- The US Public Health System

# Definitions of Public Health

# What is health?

- Most commonly accepted definition of health comes from the Preamble to the Constitution of the World Health Organization (WHO) as adopted by the International Health Conference (7 April 1948):
  - *“A complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity”*
- 1984, definition revised to a more community focus:
  - *“The extent to which and individual or group is able to realize aspirations and satisfy needs, and to change or cope with the environment; health is a resource for everyday life, not the objective of living it is a positive concept emphasizing social and personal resources as well as physical capabilities”*

# What is Public Health?

- **WHO**: “Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases.”
- **CDC Foundation**: “Public health is the science of protecting and improving the health of families and communities through promotion of healthy lifestyles, research for disease and injury prevention and detection and control of infectious diseases.”

# What is Public Health?

- **IOM**: “fulfilling society’s interest in assuring conditions in which people can be healthy,” (Committee for the Study of the Future of Public Health, 1988)
- Broad definition: “an organized activity of society to promotion, protect, improve and when necessary, restore the health of individuals, specified groups or the entire population” (Last, 2007)

# Public Health, Community Health & Population Health

- Community Health: often used synonymously with public health, but has a more specific meaning; it is used by health educators and promoters relating to the outcome of their activities (Last, 2007)
- Population Health: health of an entire population, measured by specific indicators (2007)

| Public Health                 | Community Health         | Population Health |
|-------------------------------|--------------------------|-------------------|
| Science, activity, profession | State of health, outcome | Measure of health |

# History and Development of Public Health in the U.S.

# Early Pioneers<sup>6</sup>

- Edward Jenner: pioneer of the smallpox vaccine
- John Snow: traced outbreak of cholera to water pump on Broad Street in London
- Edwin Chadwick: leader of the sanitary movement
- Lemuel Shattuck: first census in Boston, known as founder of vital statistics, author of the "*Report of the Sanitary Commission of Massachusetts*" became a blueprint of the U.S. public health system
- Louis Pasteur: discovered aerobic and anaerobic organisms, began to postulate relationship between germs and disease
- Robert Koch: discovered bacillus that led to anthrax infection, later discovered bacteria that cause tuberculosis and cholera

# Early Events and Concepts to Recall<sup>6</sup>

- 1700's: Focus on maritime health issues, including quarantine laws in many Eastern seaboard cities
- Late 1800's – Early 1900s: Industrialism and urbanization in early America (and in other large industrial cities around the world) led to unsanitary cities, unsafe working conditions and serious waves of common diseases such as tuberculosis, smallpox, cholera, typhoid and yellow fever (among others)

# Early Events and Concepts to Recall<sup>6</sup>

- Cities organized local health boards to address problems and epidemics – these boards later morphed into public health agencies – first agencies appeared in New York as well as Baltimore, Philadelphia, Charleston
- States also began to form boards of public health, first in Massachusetts (following Shattuck's recommendations)
- Greater understanding of the environment led to specific measures of control including quarantine, isolation and vaccination

# Early Events and Concepts to Recall<sup>6</sup>

- Development of Germ Theory – (recall Louis Pasteur and Robert Koch) – led to better understanding of infectious disease control, diagnosis
- Transition from sanitary measures to disease focus of public health, including methods to detect bacteria in water, food, milk

# Early Events and Concepts to Recall<sup>6</sup>

- Over the next several decades, through much of the early 1900s, significant public health gains were made in sanitation, water treatment, nutrition and infectious disease – as a result, life expectancy increased by over 30 years
- Introduction of additional vaccines with targeted control measures had additional impact aiding in the eradication of many diseases (i.e. smallpox)
- Today, the focus of public health has shifted to addressing chronic conditions away from infectious disease

# Core Functions and Essential Services in Public Health

# Core Functions of Public Health

- The IOM 1988 report (The Future of Public Health) was a catalyst for changes in the U.S. public health system
- Outlined mission and core functions of public health – much broader vision of public health than had existed in the past
- Core functions were defined in **three** areas: assessment, policy development, and assurance

# Core Functions of Public Health – Assessment<sup>1</sup>

"The committee recommends that every public health agency regularly and systematically collect, assemble, analyze, and make available information in the health of the community, including statistics on health status, community health needs, and epidemiologic and other studies of health problems."

# Core Functions of Public Health – Policy Development<sup>6</sup>

"The committee recommends that every public health agency exercise its responsibility to serve the public interest in the development of comprehensive public health policies by promoting use of the scientific knowledge base in decision-making about public health and by leading in developing public health policy. Agencies must take a strategic approach, developed on the basis of a positive appreciation for the democratic political process."

# Core Functions of Public Health – Assurance<sup>6</sup>

"The committee recommends that public health agencies assure their constituents that services necessary to achieve agreed upon goals are provided, either by encouraging actions by other entities (private or public sector), by requiring such action through regulation, or by providing services directly."

"The committee recommends that each public health agency involve key policy makers and the general public in determining a set of high priority personal and community-wide health services that governments will guarantee to every member of the community. This guarantee should include subsidization or direct provision of high-priority personal health services for those unable to afford them."

# Essential Services of Public Health

- The Core Public Health Functions Steering Committee developed the framework for the Essential Services in 1994.
- The committee included representatives from US Public Health Service agencies and other major public health organizations.
- Public health is guided by the Ten Essential Public Health Services and is applied to every facet of public health (national, state, local and tribes and territories)

Source of core functions: Institute of Medicine. *The Future of Public Health*. 1988.

Source of Ten Essential Public Health Services: Core Public Health Functions Steering Committee, 1994

# Essential Public Health Services<sup>5</sup>

1. Monitor health status to identify and solve community health problems
2. Diagnose and investigate health problems and health hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts

# Essential Public Health Services<sup>5</sup>

6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public and personal healthcare workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems

# Essential Services of Public Health<sup>5</sup>



# Public Health Accreditation

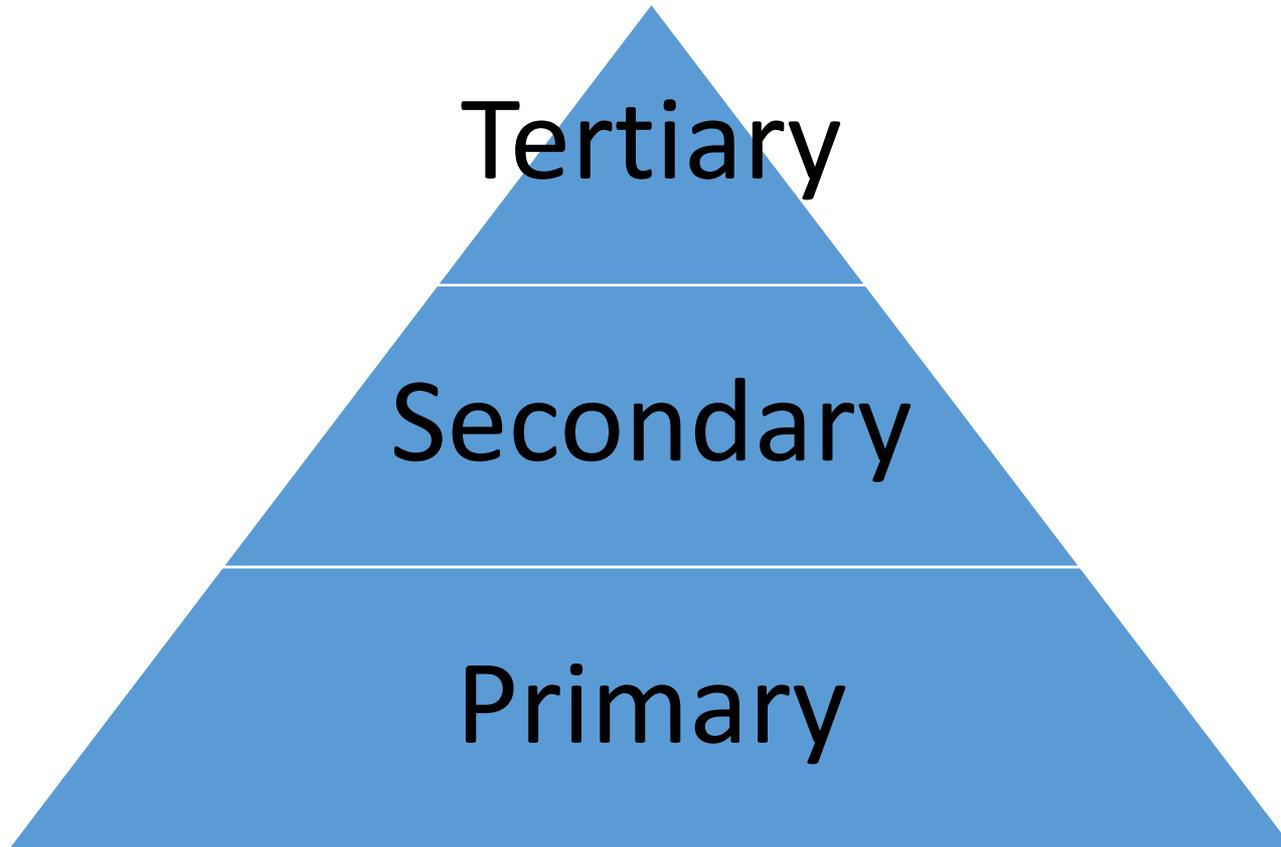
- The goal of the voluntary national accreditation program is to improve and protect the health of the public by advancing the quality and performance of Tribal, state, local, and territorial public health departments. It includes:
  - The measurement of health department performance against a set of nationally recognized, practice-focused and evidenced-based standards.
  - The issuance of recognition of achievement of accreditation within a specified time frame by a nationally recognized entity.
  - The continual development, revision, and distribution of public health standards.

# Core Values, Principles, Tenets & Frameworks

# Population Health<sup>7</sup>

- Basis of public health – the health of the population and measured by health indicators
- Influences of population health include physical, biological, behavioral, social, cultural, economic and a myriad of other factors
- Public health IS NOT population health:
  - **Public health** is practice, agencies, professionals, policies
  - **Population health** is the state of health

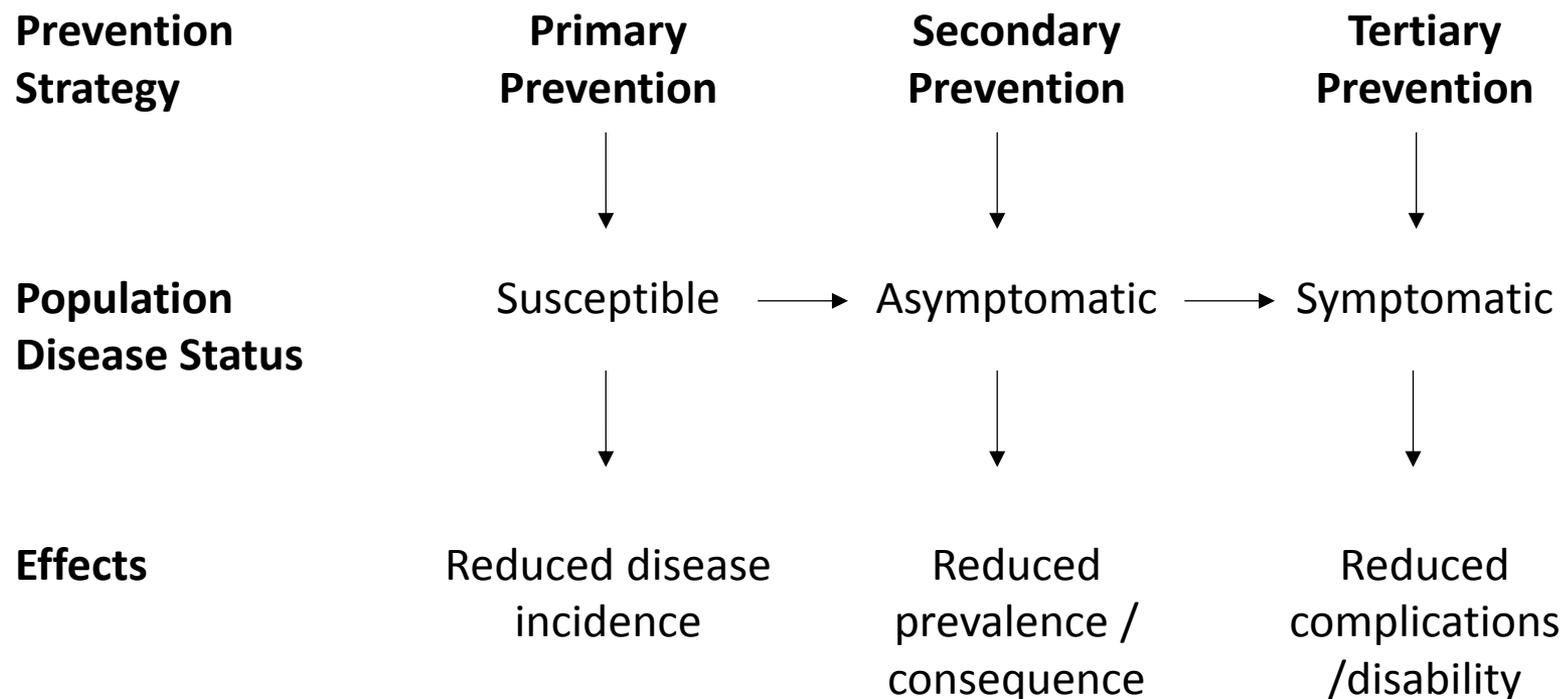
# Focus on Preventive Intervention Strategies<sup>6</sup>



# Focus on Preventive Intervention Strategies<sup>6</sup>

- **Primary prevention** involves prevention of the disease or injury itself
- **Secondary intervention** attempts to identify or control the disease process in an early stage
- **Tertiary prevention** focuses on preventing disability by restoring the individual back to a state of optimal health

# Focus on Preventive Intervention Strategies<sup>6</sup>



# Concept of Social Justice<sup>5, 6</sup>

- Foundation of public health
- Argues that public health is a public matter and for the public good
- Justice is the concept of how each member of society is allocated their fair share; conversely, everyone must share in the burden (taxation, restrictions of individual action) so that everyone benefits
- Social justice dictates the benefits and burdens must be fairly distributed

# Government Responsibility for Public Health in the U.S.

# Legal Basis for Public Health<sup>6, 7</sup>

- The legal foundation for public health in the U.S. is derived from four bases:
  - *Constitutional* - derived from the U.S. Constitution's establishment of powers, duties and limits of state and federal government
  - *Legislative* – acts and statutes enacted by Congress, state and local legislative bodies
  - *Administrative* – regulations promulgated by federal and state Executive Branch agencies
  - *Judicial* – common law based on decisions in federal and state courts

# Sources for State and Local Power<sup>7</sup>

- State and local authority for public health is based on “police power” – the power to provide for the health, safety and welfare of the people.
- Police power is an authority conferred on public health officials by laws and local regulations to take action to protect the health of the public
- It includes the power to detain persons diagnosed with contagious disease, enter and search premises to seize persons who have or been in contact with certain contagious diseases

# Relationship Between Governments – Home Rule<sup>7</sup>

- Home rule is the power of a local jurisdiction to independently regulate health, safety, and welfare
- The home rule jurisdiction is free to legislate for itself with respect to specified government functions
- Home rule exists in certain states under the Constitutions of those respective states, and is distinct from legislative devolution of authorities to local governments by statute

# Relationship Between Governments<sup>6, 7</sup>

- For public health roles, no level of government has complete authority and autonomy
- The public health system is dependent upon cooperation and coordination among all levels of government

# Sources of Federal Power<sup>6, 7</sup>

- Federal authority for public health is largely derived from the Commerce Clause (Art. I, Section 8.3) Congress' power to “regulate commerce with foreign nations, and among the several states”
- Also relies on taxing and spending powers (Art. I, Section 8.1)
- Power to regulate interstate commerce gives Congress the authority to create legislation such as the Federal Food, Drug and Cosmetic Act and delegates controls and authority under such legislation to certain agencies (in this case, the Food and Drug Administration)

# Case Law As Foundation of Public Health<sup>6, 7</sup>

- Judicial decisions can have major impacts on the powers and scope of public health
- *Jacobson v. Massachusetts (1905)* - Court upheld the authority of states to enforce compulsory vaccination laws, known as a foundation of case law in public health

# The U.S. Public Health System

# Federal Responsibilities

- Ensure all levels of government have the capabilities to provide essential public health services
- Act when health threats may span more than one state, a region, or the entire nation
- Act where the solutions may be beyond the jurisdiction of individual states
- Act to assist the states when they lack the expertise or resources to effectively respond in a public health emergency (e.g., a disaster, bioterrorism, or an emerging disease)
- Facilitate the formulation of public health goals (in collaboration with state and local governments and other relevant stakeholders)

# Federal Responsibilities

- Federal government plays a crucial role in
  - Providing leadership, through regulatory powers, in setting health
    - Goals
    - Policies
    - Standards
  - Contributing operational and financial resources
  - Financing research and higher education
  - Supporting the development of scientific and technological tools needed to improve the effectiveness of public health infrastructure at all levels

# State Responsibilities

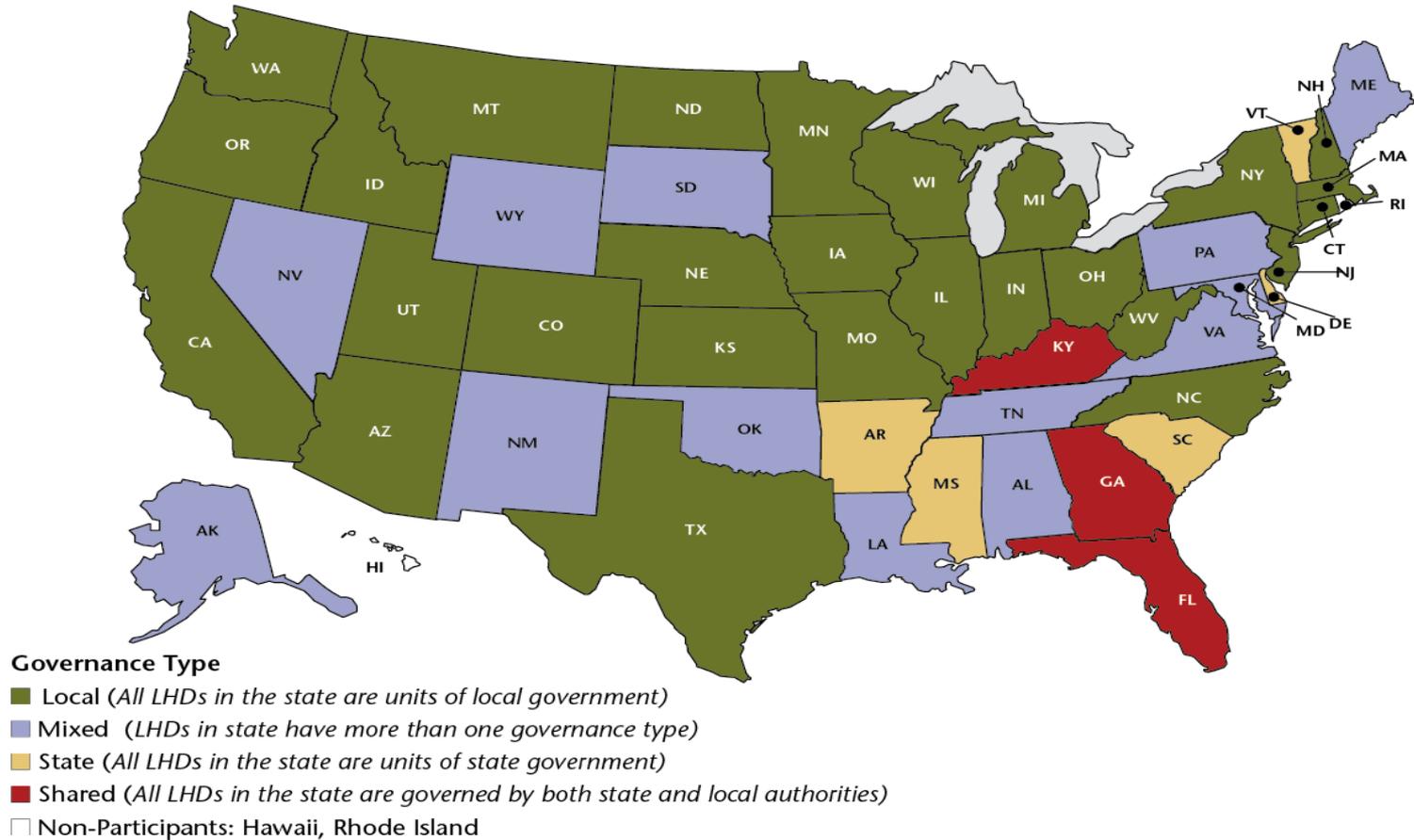
- Screening for diseases and conditions
- Treatment for diseases
- Technical assistance and training
- State laboratory services
- Epidemiology and surveillance

# State / Local Interaction

- **Local/Decentralized**—Local health departments are units led by local governments, which make most fiscal decisions.
- **Mixed**—Some local health departments are led by state government, and some are led by local government. No one arrangement predominates in the state.
- **State/Centralized**—All local health departments are units of state government, which makes most fiscal decisions.
- **Shared**—All local health departments are governed by both state and local authorities.

# National Profile of Local Health Departments

## LHD Governance Type, by State (Map)



# Health Objectives for the Nation: Healthy People

- Most recent Healthy People 2020
- Healthy People provides science-based, 10-year national objectives for improving the health of all Americans
- Become familiar: <http://www.healthypeople.gov/>

# Study Tips and References

# Recommended References

- ***Introduction to Public Health***
  - *Author: Mary-Jane Schneider*
  - *Publisher: Jones & Bartlett*
- ***Public Health: What It Is and How it Works***
  - *Author: Bernard J. Turnock*
  - *Publisher: Jones & Bartlett*
- ***A Dictionary of Public Health***
  - *Author: John Last*
  - *Publisher: Oxford University Press*
- ***The Public Health Law Manual***
  - *Author: Frank Grad*
  - *Publisher: American Public Health Association*

# Web Resources to Review

- American Public Health Association: [www.apha.org](http://www.apha.org)
- Public Health Foundation: [www.phf.org](http://www.phf.org)
- World Health Organization: [www.who.int](http://www.who.int)
- CDC Museum (online):  
<http://www.cdc.gov/museum/>

# References

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2. World Health Organization (2015). Glossary: public health. Accessed 12 September 2015 <http://www.who.int/trade/glossary/story076/en/>
3. Centers for Disease Control (2015). Public Health Foundation. Accessed 12 September 2015 from <http://www.cdcfoundation.org/content/what-public-health>
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5. Turnock, B. (2004). Public Health: What It Is and How It Works. Jones and Barlett: Boston, MA
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