

# Certified in Public Health: Cross-Cutting Items Review

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## NBPHE

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# Cross-Cutting Items

- 25 of 200 items
- 12.5% of the exam
- Different from the core disciplines in that these are not necessarily taught directly but rather reflect a set of skill-sets important to professional practice
- Often referred to as “common knowledge” or those things students pick-up through other learning experiences

# A little bit of history . . .

- When ASPH decided to develop a set of competencies in the early 2000's, they defaulted to the then CEPH-required core disciplines
- Workgroups were formed around the five core areas of Biostatistics, Epidemiology, Environmental Health, Health Policy and Management and the Social and Behavioral Sciences

# A little bit of history . . .

- But a funny thing happened in those workgroups
- In every case, the groups identified competencies they believed to be important but that didn't "fit" under the core discipline
  - Things like communication
  - Leadership
  - Cultural competence

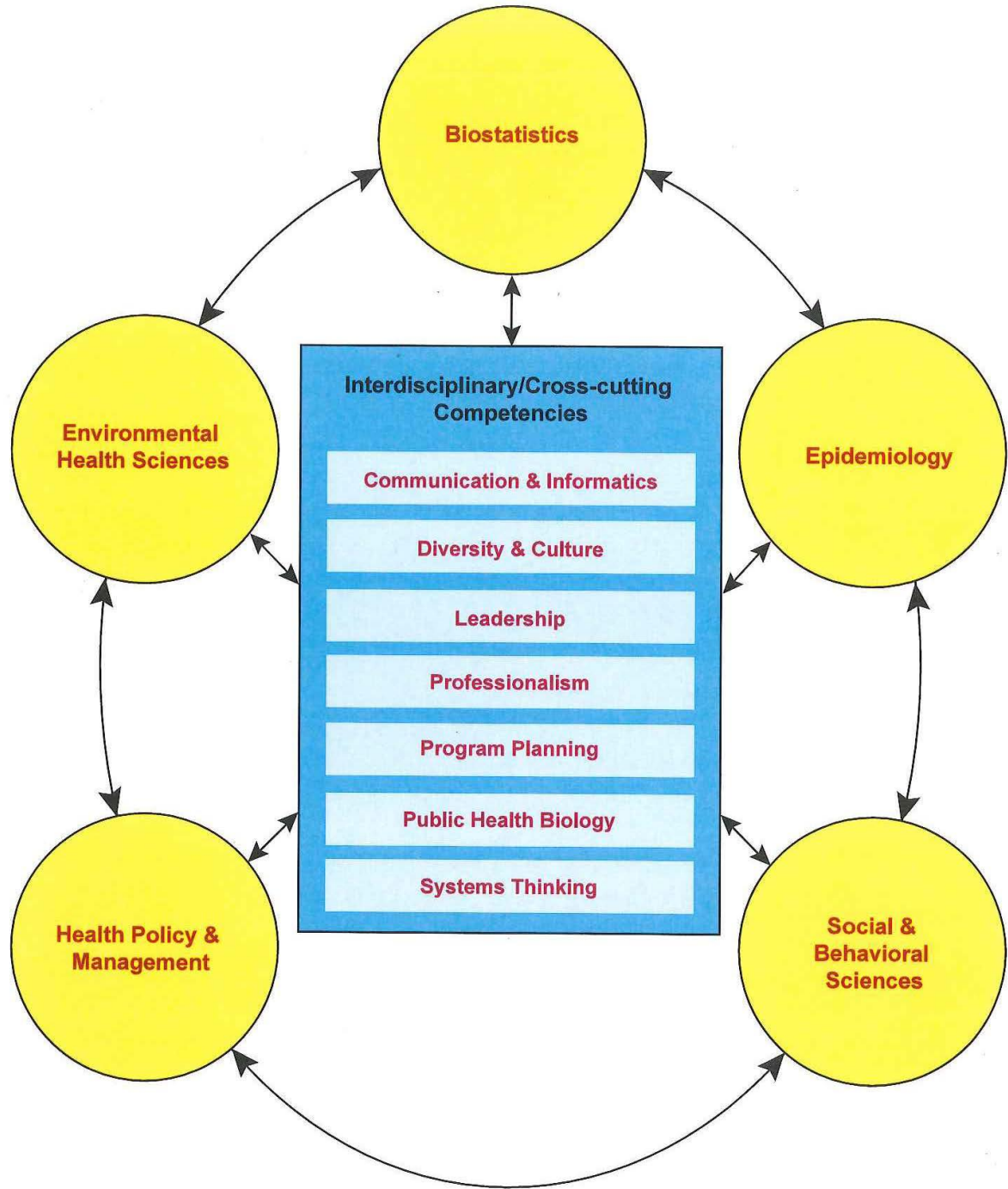
# A little bit of history . . .

- So, new workgroups were formed – nine of them! And an additional set of competencies was developed in these areas essential to the professional practice of public health
- In addition, a preamble was written because it was also noted that nowhere in the entire competency set did it say students should be able to define public health, its values and its fundamental principles

# Definition of Public Health

Public health, as a profession and a discipline, focuses on population and society's role in monitoring and achieving good health and quality of life. Public health professionals work in many settings to guarantee:

- optimal human growth, development, and dignity across the life-span;
- air, food and water safety;
- workplace, school and recreation site safety;
- respect for community participation and preferences in health;
- timely detection of disease outbreaks and public health threats;
- science-based responses to public health problems;
- health care access, efficiency, and effectiveness;
- encouragement of healthy choices that prolong a high quality life; and,
- design and maintenance of policies and services to meet community and individual needs for physical and mental health.



# Communications and Informatics

- The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather, process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.



# Diversity and Culture

- The ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.

# Leadership

- The ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals.

# Professionalism

- The ability to demonstrate ethical choices, values and professional practices implicit in public health decisions; consider the effect of choices on community stewardship, equity, social justice and accountability; and to commit to personal and institutional development.

# Program Planning

- The ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health.

# Public Health Biology

- Public health biology is the biological and molecular context of public health.

# Systems Thinking

- The ability to recognize system level properties that result from dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations, communities, and environments.

# Early Versions of the Exam

- Early item writers were encouraged to refer to the competencies when writing items but also to reflect on what they believed was being taught in introductory core courses
- The CEPH required core was the only curricular element common to all accredited schools and programs (though we didn't always agree on what was or should be covered in those core courses)

# Early Versions of the Exam

- Multiple choice questions are hard to write in any discipline but they are particularly hard to write in these cross-cutting competency areas
- You might take a moment later on and try to write a multiple choice question within any of the seven cross-cutting areas, just to reinforce this point



# Item Writing is Hard!

- The stem of the question has to be a complete thought from which an examinee could consider an answer before looking at the options
- The options have to be real (cannot be made up) and truly test the student's knowledge
- More than one option may apply but there has to be only one "best answer"

# Content Guide

- So, beginning with the competencies, we developed a content guide, which enabled us to categorize items
- This guide has been modified four times and you have the latest version in front of you
- Let's take a short 10 minute break, and then I will focus on the cross-cutting competencies as well as an additional category recently added "General Principles"

**10-minute break!**

# General Principles

- Definitions
- Sentinel Events
- Core Functions
- Essential Services
- Public Health Agency Accreditation
- Core Values
- Government responsibility for public health
- US Public Health System

# Possible topics

- PHAB – voluntary for state or local agencies
- Definition and core functions
- Relationship of ten essential services to the three core functions
- Core values – social justice, human rights, health equity
- Sources of authority for public health in the US – the Tenth Amendment, police power

# Possible topics

- Social ecological model
- Levels of prevention
- Life course perspective
- Health Objectives for the Nation
- Relationship of the federal government to the states
- Millennium Development Goals
- Global health systems – general knowledge

# Possible topics: Sentinel Events

- John Graunt's Bills of Mortality
- John Snow and the pump handle
- Jacobsen versus Massachusetts
- Minimata, Japan
- 1964 Surgeon General's Report
- LaLonde Report
- 1915 Welch-Rose Report
- Vaccines
- International Treaties

# Communications and Informatics

- Public health information infrastructure
- Communication theories and strategies
- Informatics theories and strategies
- Legal and ethical issues
- Using informatics to promote public health
- Informatics and communications as advocacy tools
- Media
- Risk Communication



# Possible Topics

- Data systems that support public health
  - Vital records
  - Surveillance systems
  - Periodic surveys
  - Program management data
  - Qualitative data gathering methods
  - Clinical data, “big data”

# Possible Topics

- Role of media
- Designing messaging
- Risk communication
- Ethical issues in communication

# Diversity and Culture

- History of definitions, perceptions, data
- Cultural competence
- Health disparities
- Availability, accessibility, acceptability of services
- Culturally appropriate community engagement and empowerment
- CBPR
- Cultural influences on behavior including health-seeking
- Environmental justice and equity

# Possible Topics

- Defining race and ethnicity in data systems
- The construct of race
- Cultural competence
- Stakeholder engagement
- CBPR
- Social/cultural determinants of health
- Health disparities, health equity

# Leadership

- Attributes
- Leadership theories and principles
- Vision, mission, values, goals, objectives
- Communicating, listening and responding
- Problem-solving and conflict resolution
- Leadership versus management
- Team building
- Engaging stakeholders, building coalitions
- Social justice and human rights principles
- Advocacy

# Possible Topics

- Management Theory
  - Theory X versus Theory Y
- Leadership versus management
- Human resource management
  - Conflict resolution
  - Problem solving
- Engaging stakeholders, building coalitions
- Basic planning – idea of vision

# Ethics and Professionalism

- Principles
- Protection of human subjects
- Evidence-based planning and evaluation
- Fiduciary responsibilities
- Population versus individual considerations
- Impact of legal and regulatory environments on research and practice

# Possible Topics

- Ethical principles
  - Beneficence, nonmaleficence
  - Justice
  - Autonomy
  - Respect for individuals, respect for community
  - Utility
- Human Subjects
  - Belmont Report
  - Tuskegee



# Program Planning and Evaluation

- Needs assessment
- Stakeholder involvement
- Fidelity to program design
- Identifying intervention and prevention strategies
- Vision, mission, goals and values
- Setting priorities and measurable objectives
- Developing programs and policies
- Developing program budgets
- Evaluation methods and designs
- Communicating evaluation results
- Measuring effectiveness

# Possible Topics

- Fidelity to program design in implementation
- Budgeting
- Planning models
  - PRECEDE/PROCEED
  - MAPP
  - Developing SMART objectives
- Measuring Effectiveness
  - Cost-effectiveness, cost-benefit
- Evaluation
  - Process, outcome, formative, summative

# Public Health Biology

- Host susceptibility, genetic factors, immunologic response
- Biologic and molecular basis for public health
- Genetics and genomics
- Agent virulence, pathogenesis and treatment resistance
- Modes of disease transmission

# Possible Topics

- Typical agents and vectors for disease transmission
- Characteristics of agents (infectivity, pathogenicity, virulence)
- Basic immunology
- Host susceptibility, vaccines, treatments

# Systems Thinking

- Characteristics of a system
- Systems theory
- Measurement of systems changes
- Effects of globalization on human health
- Determinants of health status
- Public health relationships with other public systems

# Possible Topics

- Stocks and flows, feedback loops
- Characteristics of systems
- Interagency, intersectoral efforts
- Complexity theory
- The “system” nature of populations and public health
- Various determinants of health
- Globalization, migration, trade, etc

# Sample Question

- The foundational definition of health, still used today, was written by which organization, following the end of the Second World War?
  - The American Public Health Association
  - The Institute of Medicine
  - The World Health Organization
  - The American Medical Association

# Sample Question

- In the United States, which level of government bears responsibility for public health?
  - Federal
  - Regional
  - State
  - Local



# Sample Question

- Which US Surgeon General issued the landmark 1964 report?
  - Joe Califano
  - C. Everett Koop
  - David Satcher
  - Luther Terry

# Sample Question

- The sentinel report, “The Future of Public Health” by the Institute of Medicine was published in what year?
  - 1965
  - 1988
  - 1999
  - 2003

# Sample Question

- In the United States, city and county health departments were initially created to respond to what public health threat?
  - Infectious diseases
  - Environmental exposures
  - Maternal mortality
  - Unsafe worksites

# Sample Question

John Snow is considered important in the evolution of public health for which of the following reasons?

- He developed the first successful human vaccine for smallpox
- He introduced the idea of prevention by publishing Bills of Mortality
- He used data to determine the source of a cholera outbreak
- He created the first health department in the US in Baltimore, Maryland

# Sample Question

- Which of the following function/program is most likely to appear in every state health department in the United States?
  - Water fluoridation
  - Vital statistics
  - Mental health
  - Environmental regulation

# Sample Question

- Authority for state public health police power is derived from which of the following?
  - The Bill of Rights
  - An act of Congress
  - The 10<sup>th</sup> Amendment to the US Constitution
  - A decision of the Supreme Court

# Sample Question

- The term health equity refers to which of the following?
  - The part of the Affordable Care Act that ensures every person receives the same essential health benefits regardless of pre-existing conditions
  - The notion that every person is born with the same level of health and should practice personal responsibility to maintain it
  - The idea of parity in payments to all providers and institutions serving the health needs of a community
  - Social justice in health and the commitment to eliminate disparities in health and its determinants, including social determinants

# Sample Question

- As a public health professional, what is the best way to view “leadership”?
  - Leadership is about the person in charge, the person at the top; we just need to follow
  - Leadership suggests visibility and we are more effective if we work out of the spotlight
  - Leadership is necessary to achieve goals and we should seek opportunities to provide it
  - Leadership is prohibited among employees in the government sector



# Remember . . .

- The exam includes only 25 questions from all of these areas
- There is a lot of overlap in subject matter
- These items are extremely difficult to write
- In many cases, you can answer these questions simply because you live in the world, follow the news, engage in conversations with fellow students or colleagues

# Remember . . .

- The CPH tests basic, core knowledge
- Go back to your textbooks and your notes from your core classes
- Consider your general knowledge of public health
- Study with others!
  - Flash cards are great
  - Quiz each other

Thank you and Good luck!