Certified in Public Health: Cross-Cutting Items Review

Donna J. Petersen, ScD, MHS, CPH



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

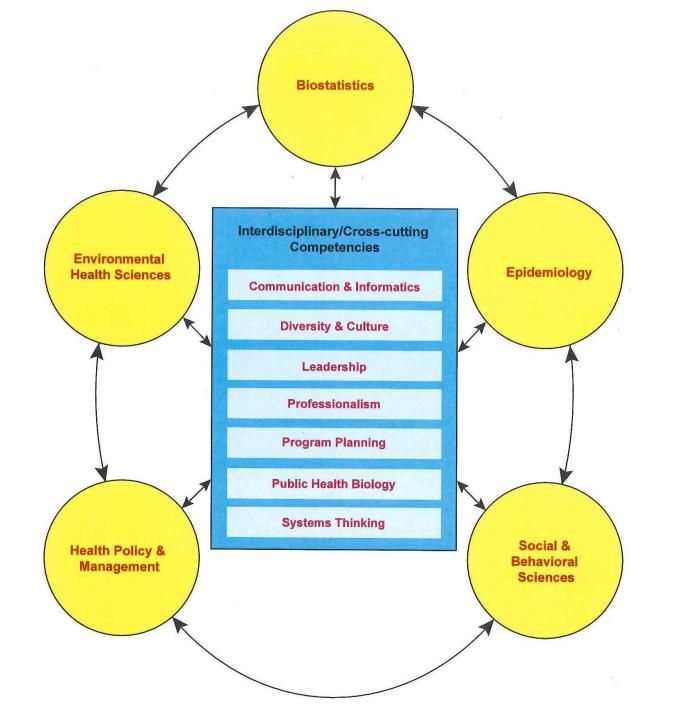
A little bit of history . . .

- 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

- 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

- 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

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

- 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 healthseeking
- Environmental justice and equity

- 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

- 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

- Ethical principles
 - Beneficence, nonmalefience
 - 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

- 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

- 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

- 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

Remember . . .

- The exam includes only 25 questions from all othese 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!