# **Foundational Public Health Knowledge**

The Arnold School of Public Health ensures that all MPH and DrPH graduates are grounded in foundational public health knowledge. Grounding in foundational public health knowledge is measured by the student's achievement of the learning objectives listed below, or higher-level versions of the same objectives.

## Profession & Science of Public Health

- 1. Explain public health history, philosophy and values
- 2. Identify the core functions of public health and the 10 Essential Services
- 3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- 4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school
- Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
- 6. Explain the critical importance of evidence in advancing public health knowledge

#### Factors Related to Human Health

- 7. Explain effects of environmental factors on a population's health
- 8. Explain biological and genetic factors that affect a population's health
- 9. Explain behavioral and psychological factors that affect a population's health
- 10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
- 11. Explain how globalization affects global burden of disease
- 12. Explain an ecological perspective the connections among human health, animal health ecosystem health (e.g., One Health)

## **Foundational Competencies**

All MPH graduates demonstrate the following competencies. These competencies are informed by the traditional public health core knowledge areas, as well as cross-cutting and emerging public health areas.

# Evidence-based Approaches to Public Health

- 1. Apply epidemiological methods to the breadth of settings and situations in public health practice
- 2. Select quantitative and qualitative data collection methods appropriate for a given public health context
- 3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
- 4. Interpret results of data analysis for public health research, policy or practice

#### Public Health & Health Care Systems

- 5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
- 6. Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs

#### Planning & Management to Promote Health

- 7. Assess population needs, assets and capacities that affect communities' health
- 8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
- 9. Design a population-based policy, program, project or intervention
- 10. Explain basic principles and tools of budget and resource management
- 11. Select methods to evaluate public health programs

### Policy in Public Health

- 12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
- 13. Propose Strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
- 14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
- 15. Evaluate policies for their impact on public health and health equity

### Leadership

- 16. Apply leadership and/or management principles to address a relevant issue
- 17. Apply negotiation and mediation skills to address organizational or community challenges

#### Communication

- 18. Select communication strategies for different audiences and sectors
- 19. Communicate audience-appropriate public health content, both in writing and through oral presentation
- 20. Describe the importance of cultural competence in communicating public health content

### Interprofessional Practice

21. Integrate perspectives from other sectors and/or professions to promote and advance population health

### Systems Thinking

22. Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative