

Dental Public Health Competencies

A specialist in dental public health will:

I. Plan oral health programs for populations.

Planning reflects:

1. Establishing goals and setting priorities.
2. Assessing oral health status, needs, and demands, and their determinants in a community (see Competencies VI, IX, X).
 - a. Understanding the natural history of oral diseases and conditions.
 - b. Assembling, reviewing, analyzing, and interpreting existing data, including census, vital statistics, scientific literature, oral health care/public health, and relevant legal documents (see IX).
 - c. Assessing quality of data, noting strengths and limitations (see IX).
3. Compiling all types of resource inventories (e.g., economic, personnel, legal, political, social).
4. Developing program plans (such as for prevention and service delivery, etc.).
 - a. Identifying problem or potential problem.
 - b. Setting goals, objectives, and priorities.
 - c. Identifying target population.
 - d. Assessing current system (public and private components), incl. organizational structure and its relevance to decision-making process.
 - e. Determining demand for program.
 - f. Analyzing alternative interventions (see IX).
 - g. Selecting best practices and interventions that take into account cultural differences (see II, VII-6, IX).
 - h. Determining procedures, policies, and implementation plans.
 - i. Identifying and analyzing liability issues and developing risk-reduction strategies.
 - j. Developing budget and financing to ensure access for needed services.
 - k. Determining timeline.
 - l. Developing plans for monitoring and evaluation (see V, VI).
5. Collaborating with community partners and constituency building (see II-4, II-9, III-1, VII, VIII-4).

II. Select interventions and strategies for the prevention and control of oral diseases and promotion of oral health

This competency reflects:

1. Using a comprehensive knowledge of the efficacy, effectiveness, and efficiency of the various interventions to select interventions and strategies to prevent and control oral diseases. Balancing costs and possible risks against benefits of potential interventions (see V, IX).
2. Understanding national, state, local health objectives.
3. Integrating knowledge of health determinants when selecting interventions.
4. Identifying the role of cultural, social, and behav-

ioral factors, practices, and issues in determining disease initiation and progression, disease prevention, health promoting behavior, and oral health service organization and delivery.

5. Advocating for oral health policies (see VIII).
6. Providing information on maintaining and improving oral health at the community and individual level (see VII).
7. Communicating with groups and individuals on oral health issues (see VII).
8. Serving as a resource for professional and community groups concerning evidence for the effectiveness of preventive and treatment interventions and the rationale for their use (see VII).
9. Collaborating with other health professionals, agencies, and private groups in disease prevention and health promotion activities. Examples include tobacco cessation, community water fluoridation, and early childhood caries prevention programs (see I-5, II-4, III-1, VII, VIII-4).

III. Develop resources, implement, and manage oral health programs for populations

Implementation and management reflect:

1. Communicating with, gaining the support of, and collaborating with critical partners and constituents for plan development, implementation, and evaluation (see I-5, II-4, 7-9, VII, VIII-4).
2. Organizing, managing, and securing resources according to program plans.
 - a. Human resources
 1. Hiring and selecting program staff.
 2. Training and development.
 3. Continuing education.
 4. Negotiation and conflict resolution.
 - b. Physical resources
 - c. Fiscal resources
 - d. Information (see IX, X)
3. Periodically monitoring and measuring progress indicators against program goals (see V).
4. Making appropriate program adjustments.
5. Administering policies and procedures.

IV. Incorporate ethical standards in oral health programs and activities

This competency reflects:

1. Applying the acceptable principles of ethical behavior and professional conduct (principles of autonomy, nonmaleficence, beneficence, justice, veracity, and professionalism) as reflected in the code of ethics and standards of professional conduct of public health, dentistry, and employing organizations.

V. Evaluate and monitor dental care delivery systems

Evaluating and monitoring reflect:

1. Identifying involved individuals, consumer groups, agencies, and organizations and obtaining their perspectives and organizational policies.
2. Collecting, organizing, analyzing, and interpreting

data (see I-2, I-3, VI, IX, X).

3. Assessing outcomes, including safety, efficacy, costs, cost effectiveness, quality, consumer satisfaction, and health consequences (see IX, X).
4. Evaluating changes and trends in demographics, health status, risk factors, utilization of services, dental personnel, structure of delivery systems, financing, regulations, legislation, policies (see I-2, I-3, III-3, IX).
5. Determining extent that goals, objectives, and budget allocations are met.
6. Applying findings to program decisions.

VI. Design and understand the use of surveillance systems to monitor oral health

Designing and using a surveillance system reflects:

1. Determining and documenting rationale and feasibility of surveillance and monitoring. Examples include the Behavioral Risk Factor Surveillance System (BRFSS), water fluoridation census, and cancer registry.
2. Developing an operational definition of a case.
3. Identifying data sources.
4. Using surveillance tools, e.g. screening, lab reports.
5. Analyzing and using data and distributing findings (see V-6, VII, IX).

VII. Communicate and collaborate with groups and individuals on oral health issues

This competency reflects:

1. Ability to effectively communicate orally and in writing, incl. electronically (implies knowledge of subject, current and accurate information, understanding of audience).
2. Articulating a vision for the organization.
3. Developing a communication plan & network for getting things done (coalition, steering committee).
4. Selecting appropriate approaches and relevant information for targeting messages and format to audience/individual (appropriate language and grade level of communication; choice of written, oral, or audiovisual format; use of media; or other methods).
5. Applying risk communication skills to explain levels of risk from real or potential hazards.
6. Collaborating sensitively and effectively with persons from diverse cultural, socioeconomic, educational, and professional backgrounds, and with persons of all ages and lifestyle preferences (see I-5, II-8, III-1, VII, VIII-4).

VIII. Advocate for, implement, and evaluate public health policy, legislation, and regulations to protect and promote the public's oral health

This competency reflects:

1. Understanding legislative, regulatory, and political processes.
2. Conforming to statutes and regulations regarding areas such as liability, restraint of trade, conflict of interest, credentialing, certification practices, confidentiality, and discrimination.
3. Analyzing issues and determining appropriate legislative or regulatory pathways to accomplish goals.
4. Collaborating with community partners to advocate for legislative and budgetary resources to meet

identified oral health needs including oral health expressions of general health needs (see I-5, III-1, VII).

5. Assisting groups and communities especially at risk for oral disease to advocate for themselves.

IX. Critique and synthesize scientific literature

This competency reflects:

1. Applying the principles of hypothesis development and testing.
2. Identifying appropriate, valid, and reliable measures of oral health, disease, and associated factors.
3. Identifying characteristics of and rationale for different types of study designs and analytic methods used in epidemiologic studies, experimental studies, health services research, and policy analysis.
4. Identifying possible sources of bias in studies.
5. Identifying, understanding procedures for training, standardization, and calibration of examiners.
6. Identifying appropriate statistical procedures, such as those for measuring examiner reliability.
7. Evaluating generalizability and validity of study findings.
8. Translating study findings into recommendations.

X. Design and conduct population-based studies to answer oral and public health questions

Designing and implementing studies reflect:

1. Defining a problem.
2. Critically reviewing the literature (see IX).
3. Formulating research objectives and hypotheses.
4. Developing a research protocol. This process includes:
 - a. Designing research using epidemiologic principles and other discipline-specific methods (e.g., health services, behavioral science methods).
 - b. Selecting measures of oral health, disease, and associated factors.
 - c. Identifying the study population, and inclusion and exclusion criteria.
 - d. Developing appropriate sampling methods.
 - e. Planning for recruitment and retention of participants.
 - f. If appropriate, allocating subjects to treatment or control groups, using randomization or matching.
 - g. Collecting, managing, and controlling the quality of data.
 - h. Choosing statistical techniques for sample size estimation and data analysis.
 - i. Developing a budget appropriate for the research question.
 - j. Collaborating with other members of the research team and consulting experts in pertinent disciplines.
5. Using human subjects' review and informed consent conscientiously, including sensitivity to individual rights.
6. Implementing the protocol.
7. Interpreting research findings.
8. Identifying study limitations.
9. Providing results/feedback to community authorities once study is completed (see VII).
10. Formulating and disseminating conclusions and recommendations.