## 8

# **Education, Information, Training, and Partnerships**

#### Overview

The increase in the number of new vaccines to be given across the lifespan has led to more complex immunization schedules and the need for ongoing and up-to-date education for both the medical community and the community at large. This chapter addresses strategies to help providers locate training for their staff, to locate and access tools that may assist in educating staff and patients on immunization issues, and to encourage the optimal use or development of coalitions, partnerships, and other unique relationships to maximize efforts.

Every immunization program should include activities directed at educating the medical community and informing, influencing, and motivating lay audiences of all ages about the importance of immunizations. Historically, these activities have consisted of dissemination of technical information through Vaccine Information Statements (VIS), fact sheets, and brochures as well as continuing education (CE) offerings. However, promotional efforts can also be implemented on a broader scale; various mass media can be used to raise public awareness about immunization and encourage individuals to visit a healthcare provider to obtain vaccinations or gain more in-depth knowledge about immunizations. Immunization programs that develop positive relationships with local media are often successful in communicating well-timed messages to the public about specific immunization issues.

Communication with immunization "consumers" can be undertaken by immunization program staff directly, but these efforts are sometimes more effective when done in collaboration with the community itself (i.e., coalitions, community leaders, advocacy groups, churches, schools, civic clubs, businesses, and other special interest groups). The role and responsibility of medical providers in educating their patients about immunizations also must not be overlooked. All communication efforts should address identified needs for information on the part of individuals and specific groups and should be directed toward improving knowledge, attitudes, and ultimately, immunization-seeking behavior.

#### References

- American Academy of Pediatrics (AAP) <u>www.aap.org</u>
- American Academy of Family Physicians (AAFP) www.aafp.org
- American Pharmacists Association (APhA) www.aphanet.org
- Children's Hospital of Philadelphia www.chop.edu
- Every Child By Two www.ecbt.org
- Immunization Action Coalition www.immunize.org
- National Network for Immunization Information www.NNii.org
- Society of Teachers of Family Medicine www.ImmunizationEd.org
- National Vaccine Injury Compensation Program (VICP) <u>www.hrsa.gov/vaccinecompensation/</u>

- Vaccine Information Statements www.cdc.gov/nip/publications/VIS/default.htm
- CDC. Revised Standards for Child and Adolescent Immunization Practices. 2002. http://www.cdc.gov/nip/recs/rev-immz-stds.htm
- CDC. Revised Standards for Adult Immunization Practices. 2002.
   <a href="http://www.cdc.gov/nip/recs/rev-immz-stds.htm">http://www.cdc.gov/nip/recs/rev-immz-stds.htm</a>
   Standards are also available in brochure form and can be ordered from the Immunization Services Division (ISD)
- AAP Red Book on infectious Diseases www.aap.org/bst/
- CDC The Pink Book www.cdc.gov/nip/publications/pink
- Information about the Vaccine Adverse Events Reporting System (VAERS) is available at <a href="http://www.vaers.hhs.gov">http://www.vaers.hhs.gov</a>, telephone 800-822-7967; fax 877-721-0366, info@VAERS.org.
- For information on the impact of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule on public health, please refer to the May 2, 2003 issue of MMWR Recommendations and Reports, "HIPAA Privacy Rule and Public Health—Guidance from CDC and the U.S. Department of Health and Human Services." http://www.cdc.gov/mmwr/preview/mmwrhtml/m2e411a1.htm
- 2007 Vaccines for Children Program Operations Guide: <a href="http://www.cdc.gov/nip/home-partners.htm#progmgrs">http://www.cdc.gov/nip/home-partners.htm#progmgrs</a>
- All other chapters of 2008-2012 Immunization Program Operations Manual (IPOM)

## **Program Requirements**

## 8.1 Provide orientation for grantee immunization staff that includes the role of CDC and how it relates to grantee activities.

#### Required activities

- 8.1a. Ensure that immunization program staff members receive an orientation that includes how to use the IPOM and how it relates to the Immunization Services Division, so they have a working knowledge of the resources available to them.
- 8.1b. Ensure that immunization program clinical staff members attend the four part series of the Epidemiology and Prevention of Vaccine-Preventable Diseases satellite broadcast/webcast.

#### Recommended activities

- 8.1c. Utilize the Public Health Core Competencies Guidance to develop a framework and system for public health professionals to obtain the necessary skills in order to competently execute current and future work scopes in achieving programmatic goals and objectives. See the guidance document at the end of this chapter for further details.
- 8.1d. Keep a roster of staff and record completion of above requirements.

8.2 Distribute VIS and CDC's online instructions for their use to ensure proper use of VIS in accordance with the National Childhood Vaccine Injury Act (section 2126 of the Public Health Service Act, 42 U.S.C. section 300aa-26).

## Required activities

- 8.2a. Ensure providers understand their responsibility under the National Vaccine Injury Compensation Program (VICP) <a href="http://www.cdc.gov/nip/publications/VIS/vis-Instructions.pdf">http://www.cdc.gov/nip/publications/VIS/vis-Instructions.pdf</a>. Provider responsibilities:
  - Provide clients (or parents/legal representatives) the most current VIS for each vaccine before it is administered.
  - Ensure that clients have the opportunity to read the VIS or have it read to them prior to administration of the vaccine.

#### Recommended activities

8.2b. Ensure new and/or revised VISs are quickly distributed to providers so clients will be provided with the most current information. Ensure that providers are aware that VIS distribution of vaccines covered by VICP is required by law and that VISs are available in other languages. Provide information regarding automatic notification of updated and new VISs <a href="http://www.cdc.gov/nip/publications/VIS/default.htm">http://www.cdc.gov/nip/publications/VIS/default.htm</a>. Performance measure: Percentage of providers who are given directions to subscribe to the automatic notification of new VISs, and number who actually subscribe to the updates.

Target: Set by individual program

*Performance measure:* Number of direct or collaborative efforts to promote VIS awareness and use among providers.

*Performance measure:* Number and percentage of providers using VIS correctly (as assessed through VFC site visits)

Target: 100% of VFC enrolled providers

#### **8.3** Additional Activities

#### Recommended activities for information development and dissemination

- 8.3a. Ensure that persons of all ages are provided general and specific immunization information in accordance with the program's overall strategy based on needs to assure immunizations for all age groups.
- 8.3b. Update the official program immunization record card ("shot card") whenever new vaccines are recommended by the ACIP.
- 8.3c. Ensure that messages to consumers are relevant, accurate, appropriate, and useful. Collaborate with other agencies or groups to ensure that messages are consistent.
- 8.3d. Assign one or more persons the responsibility for researching, developing, and disseminating immunization-related information and materials and include these responsibilities in written job description(s).

## What consumers need to know to seek and accept immunizations

- Information about vaccine-preventable diseases (VPDs)
- Vaccines are safe and effective
- Immunization recommendations for their age group (or their child)
- Location of facilities providing immunizations for underserved and underinsured populations
- VFC program
- Where to get immunization information (e.g., hotline numbers and websites)
- Responsibility to maintain a personal immunization record and bring it to all provider visits
- 8.3e. Maintain a consumer inquiry log to document consumer questions from telephone, fax, hotline, and other sources of inquiry about vaccines and vaccination-related issues such as vaccine safety or side effects. Use this information to identify patterns and trends related to consumer concerns and perceptions about immunization and then to modify information programs. Identify which resources were used to answer consumer questions along with any comments or suggestions regarding continued use of resources.
- 8.3f. Implement procedures for responding to inquiries (e.g., telephone, fax) about vaccine-preventable diseases, vaccines, clinic sites and hours for vaccinations, and other immunization-related concerns.

## Elements of an effective consumer information program

- Determination of the information and education needs for general public and targeted consumer advocacy groups
- Involvement of target audiences in planning and production of materials to ensure that written and verbal information is relevant, culturally sensitive, linguistically appropriate, usable, and 'owned' by target audiences
- Pre-testing of materials to make sure products are clear, relevant and appealing
- Evaluation of the impact of the materials
- 8.3g. Provide media with updates on vaccine-preventable diseases, new vaccines, targeted "at-risk" populations, immunization recommendations and schedules, planned immunization activities. When appropriate, provide information on evidence-based immunization interventions, such as laws/regulations and standing orders affecting specific child, adolescent, and adult subpopulations.

*Performance measure:* Appropriateness of information provided proactively to media, by topic

*Target:* Set by individual program

8.3h. Develop written procedures for responding to inquiries from the public.

- 8.3i. Provide updates to consumer and advocacy groups, legislators, and special interest groups regarding vaccine-preventable diseases, new vaccines, targeted "at-risk" populations, immunization recommendations and schedules, planned immunization activities. When appropriate, provide information on evidence-based immunization interventions, such as laws/regulations and standing orders affecting specific child, adolescent, and adult subpopulations.
- 8.3j. Use influential community leaders as spokespersons where appropriate. Performance measure: Appropriateness of immunization informational packets provided to consumer groups annually Target: Set by individual program
- 8.3k. Collaborate with consumer and advocacy groups to develop and disseminate consumer information about vaccines for targeted high risk groups recommended to receive influenza and pneumococcal immunizations.
- 8.31. Collaborate with consumer advocacy groups and professional associations to promote use of a patient/parent-held immunization record card and the need to bring the card to every medical visit. Remind providers of the need to revise their own supply of cards whenever new vaccines are recommended by the ACIP.
- 8.3m. Collaborate with tribal clinics, Indian Health Service area offices and service units, and other entities that provide medical services to American Indians and Alaska Natives, if these populations reside within your jurisdiction. Assist in developing and disseminating materials about immunizations targeted to native populations. Emphasis should be placed on vaccine-preventable diseases (VPDs) such as hepatitis A for which certain geographic populations were historically at increased risk.
- 8.3n. Collaborate with public clinics and treatment centers, including HIV counseling centers, injection-drug use clinics, STD clinics, correctional facilities, and juvenile detention centers, in developing and disseminating consumer materials targeted to adolescents and adults at high risk for hepatitis B and other VPDs.

  \*Performance measure:\* Appropriateness of specific collaborations implemented and number of informational products developed \*Target:\* Set by individual program\*
- 8.30. Collaborate with hospitals, health maintenance organizations, health insurance companies, and professional organizations in their development of immunization information and education materials for distribution to their patients.

## Information providers need to know to optimize immunization practices: General program-related topics

- ACIP recommendations for infants, children, adolescents and adults
- Information about the VFC program, its benefits to their eligible populations, and how to enroll
- Vaccine administration information –
   <a href="http://www.cdc.gov/nip/publications/pink/def">http://www.cdc.gov/nip/publications/pink/def</a> pink appendx.htm#appd
- Use of Vaccine Information Statements
- Appropriate vaccine storage and handling procedures
- Information about VAERS
- State laws, rules, and regulations regarding immunization requirements for school entry, day care, nursing homes, colleges and universities, and employment
- Medicare, Medicaid, SCHIP, and other public and private health insurance plans enrollment and claims procedures
- VFC vaccine ordering procedures
- Evidence-based vaccine strategies to improve immunization coverage (Recommendations regarding interventions to improve vaccination coverage in children, adolescents, and adults. Task Force on Community Preventive Services. Am J Prev Med 2000; 18(1 Suppl):97-140)
- Interventions to Improve Influenza, Pneumococcal Polysaccharide, and Hepatitis B Vaccination Coverage among High-Risk Adults: A Systematic Review. Am J Prev Med 2005;28(5S)
- Provider assessment tools, such as CoCASA and HEDIS
- Immunization information systems (IIS)—availability, benefits, enrollment procedures and submitting immunization records
- Documentation of immunizations in the patient record
- Training and educational opportunities, such as CDC-sponsored VPD courses; distance learning methods, such as satellite broadcasts, Net Conferences, DVDs, and online training modules; VFC workshops; state/local immunization-related in-service seminars; and the annual National Immunization Conference
- Systems to remind patients of immunizations needed and to recall patients who are late for receiving needed immunizations
- 8.3p. Assist with the distribution of current CDC materials, such as fact sheets and question/answer sheets on vaccines and their benefits and risks to media, consumer groups, and providers.

*Performance measure:* Percentage of new informational materials on vaccine benefits and risks provided to media, and consumer advocacy and provider groups within one month of receipt from CDC

*Target:* Set by individual program

## Recommended activities for provider education

8.3q. Assess provider education needs and identify potential resources to meet needs. Observation of practice, discussion, surveys and other methods such as pre- and post-tests may be used.

*Performance Measure:* Generate a list of immunization education needs and suggested resources to meet needs

*Performance Measure:* Send needs and resources information to appropriate sources as needed [e.g., Immunization Services Division (ISD) Education, Information, and Partnership Branch (EIPB), AFIX, VFC, Immunization Safety Office (ISO), Health Insurance Portability and Accountability Act (HIPAA) advisor]

- 8.3r. Develop and implement a communication plan to disseminate immunization messages and information to providers. The plan should clearly identify the grantee's communication objectives and the strategies designed to achieve these objectives.
- 8.3s. Work with local and state immunization coalitions or other community-based organizations and partners to help implement and promote provider education programs.
- 8.3t. Use designated times to promote immunization practices: National Infant Immunization Week (NIIW), National Immunization Awareness Month, National Adult Immunization Week, and National Influenza Vaccination Week. Grantees are encouraged to enter their activities and events on the NIIW website <a href="http://www.cdc.gov/nip/events/niiw/default.htm">http://www.cdc.gov/nip/events/niiw/default.htm</a>.

*Performance Measure:* Number of events planned within the state entered into the NIIW database.

*Performance Measure:* Number of Public Service Announcements, or NIIW Materials that were utilized or distributed.

Target: Set by individual program

Summary of Standards for Child, Adolescent, and Adult Immunization Practices
Both sets of standards are endorsed by a variety of medical and public health organizations.
<a href="http://www.cdc.gov/nip/recs/rev-immz-stds.htm">http://www.cdc.gov/nip/recs/rev-immz-stds.htm</a>

- The Standards for Child and Adolescent Immunization Practices were revised and approved by the National Vaccine Advisory Committee (NVAC) February 2002.
- The Standards for Adult Immunization Practices were revised and approved by NVAC and NAIC December 2001.
- The audience for both sets of standards is "healthcare professionals," an inclusive term for the many persons in clinical settings who share in the responsibility for vaccination: physicians, nurses, mid-level practitioners, medical assistants, and clerical staff. In addition, these standards are intended to be useful to public health professionals, policy makers, health plan administrators, employers who purchase healthcare coverage, and others whose efforts shape and support the delivery of vaccination services.
- These standards represent the most desirable immunization practices, which healthcare professionals should strive to achieve. By adopting these standards, healthcare professionals can enhance their own polices and practices, helping make possible the accomplishment of vaccination objectives for children, adolescents, and adults as outlined in Healthy People 2010.

- 8.3u. Offer immunization information to immunization providers and to provider organizations (e.g., AAP, AAFP, ACP) through online notices and automatic updates, special mailings, newsletters, communicable disease bulletins, websites, and email list serves.
- 8.3v. Distribute and promote the *Revised Standards for Child and Adolescent Immunization Practices* and the *Revised Standards for Adult Immunization Practices* to all public and private immunization providers directly or in collaboration with public and private provider organizations using mailings, newsletters, or electronic communication.
- 8.3w. Familiarize providers with the online immunization resources, including not limited to Immunization Works: <a href="http://www.cdc.gov/nip/news/newsltrs/imwrks/imwrks.htm">http://www.cdc.gov/nip/news/newsltrs/imwrks/imwrks.htm</a>.
- 8.3x. Communicate and promote provider-based strategies to improve immunization practices and coverage.

*Performance measure:* Achieve the targeted number of individual and group trainings, including state and regional conferences, site visits, newsletters, and websites that focus on strategies to increase immunization coverage in both private and public immunization clinics.

*Target:* Set by individual program

8.3y. Ensure that providers can access immunization strategy information provided through CDC, state, and local agency websites.

*Performance measure:* Periodically, conduct a survey to determine whether immunization providers are accessing various websites and assess usefulness of websites.

*Target:* Set by individual program

8.3z. Conduct or facilitate presentations, seminars, workshops and in-service training on immunization-related topics for public and private healthcare professionals in collaboration with physician, nurse, hospital and public health professional organizations. Resources for education and training are available through the Education, Information, and Partnership Branch in the Immunization Services Division and at www.cdc.gov/NIP/ED

Performance measure: Number of presentations, workshops, or other training events delivered

*Performance measure:* Number of participants for each presentation or workshop, by discipline and institution (e.g., physician, nurse, public, private)

*Performance measure:* Number of training sessions concerning VFC/AFIX or other evidenced-based interventions to improve coverage

Target: Set by individual program

8.3aa. Promote CDC distance learning opportunities, such as the CDC satellite broadcasts, net conferences, onsite courses, DVDs, and online training on vaccine-preventable diseases and immunization issues. Various continuing education (CE) credits are

available through the online Public Health Training Network (PHTN) system <a href="http://www2a.cdc.gov/TCEOnline/">http://www2a.cdc.gov/TCEOnline/</a> for CDC educational programs. Provider CE records of CDC courses are maintained and available for future use in re-licensure and verification of education.

*Performance measure:* Number of on-site participants for each satellite course, by attendee category (e.g., physician, nurse, public, private)

*Performance measure:* Ask providers about participation in educational program by type of education method and attendee category.

*Target:* Set by individual program

8.3bb. In collaboration with provider organizations such as AAP and AAFP, use endorsed peer professionals to conduct practice-based seminars on immunization basics for private providers.

*Performance measure:* Number of seminars conducted using endorsed professional peers

*Target:* Set by individual program

8.3cc. Conduct workshops for public and private VFC providers to provide instruction on vaccine storage and handling techniques, VFC program eligibility and screening for children and adolescents, and required VFC vaccine management reports.

*Performance measure:* Number of pre- and post-tests administered at courses and inservice training sessions.

Target: Set by individual program

8.3dd. Maintain a communication system (e.g., newsletters, list serves, IIS web alerts) to address vaccine safety issues and controversies, including media and CDC or FDA statements. Use the communication system to disseminate vaccine safety information.

*Performance Measure:* Number of individuals and/or organizations that are part of the communications system with guidance as to when and how to utilize the communication system.

*Target:* Set by individual program

- 8.3ee. Disseminate information about the Vaccine Adverse Event Reporting System (VAERS), the surveillance system for reporting adverse events, and the reporting process, to all concerned. Reach all providers directly or through provider organizations using mailings, meetings, and educational materials.

  \*Performance measure: Number of direct or collaborative efforts to promote awareness of VAERS and events for which reporting is mandated, and encourage appropriate use of VAERS forms among providers

  \*Target: Set by individual program\*
- 8.3ff. Ensure that providers are informed, either directly or through provider organizations, of current and new vaccines covered by the National Childhood Vaccine Injury Act and of the federal requirement for record keeping. Advise provider to subscribe to automatic updates.

Performance measure: Number of direct or collaborative efforts to educate and promote the National Childhood Vaccine Injury Act and its content among providers *Target:* Set by individual program

8.3gg. Disseminate information on legal requirements and procedures for reporting of vaccine-preventable diseases to state/local health departments (directly and/or through provider organization mailings, publications, trainings and education materials).

*Performance measure:* Number of direct or collaborative efforts to educate and promote VPD reporting

*Performance measure:* Assess number of providers who subscribe to automatic email update lists

*Performance measure:* Percentage increase in providers reporting vaccine-preventable diseases to state/local health departments.

Target: Set by individual program

## **Public Health Core Competencies**

Workforce Development Guidance

Immunization grantees are held accountable to reach state and federal immunization goals and outcomes as defined in various documents including Healthy People 2010, State Health Plans, the continuing grant guidance from CDC, and the IPOM. The complexity of being held accountable for both federal and state immunization objectives, while engaging local public health partners and meeting local public health goals, has underscored the need for additional resources and tools to assist partners and stakeholders in achieving programmatic goals and addressing capacity building.

We understand the Core Public Health Functions including assessment, policy development, and assurance as documented by the Institute of Medicine report, *The Future of Public Health*. There is a need for improving public health education to the demands of public health practice. It is important to continually assess skill sets (whether self-assessed or in coordination with a colleague or supervisor through an individual development plan or performance plan) as they relate to the need of their position and the organization to obtain the necessary skills in order to competently execute current and future work scopes in achieving programmatic goals and objectives.

The following pages were excerpted from the *Competencies Feedback Project by the Council on Linkages between Academia and Public Health Practice* and can be found at the following website: <a href="http://www.trainingfinder.org/competencies/index.htm">http://www.trainingfinder.org/competencies/index.htm</a>.

The Council, listed below, is comprised of leaders from national organizations representing the public health practice and academic communities and grew out of the Public Health Faculty/Agency Forum, which developed recommendations for improving the relevance of public health education to the demands of public health in the practice sector.

## **Member Organizations**

American Association of Health Plans	www.aahp.org
American College of Preventive Medicine	www.acpm.org
American Public Health Association	www.apha.org
Association of Schools of Public Health	www.asph.org
Association of State and Territorial Health Officials	www.astho.org
Association of Teachers of Preventive Medicine	www.atpm.org
Association of University Programs in Health Administration	www.aupha.org
Centers for Disease Control and Prevention	www.phppo.cdc.gov
Health Resources and Services Administration	www.hrsa.gov
National Association of County and City Health Officials	www.naccho.org
National Association of Local Boards of Health	www.nalboh.org
National Environmental Health Association	www.neha.org

no web address www.sophe.org

#### **Overview**

In 2001 the Council on Linkages between Academia and Public Health Practice introduced a consensus set of core competencies for guiding public health workforce development efforts. The Core Competencies for Public Health Professionals were developed to guide curriculum and workforce development. They are broken down into eight different domains, listed below. Also provided below are direct links to the Council on Linkages Competencies Project. The links feature core competencies with skill levels, without skill levels, and core competencies divided out by the Essential Public Health Services.

- Core Competencies with Skill Levels: http://www.trainingfinder.org/competencies/list\_levels.htm
- Core Competencies without Skill Levels
   <a href="http://www.trainingfinder.org/competencies/list\_nolevels.htm">http://www.trainingfinder.org/competencies/list\_nolevels.htm</a>
- Core Competencies by Essential Public Health Services http://www.trainingfinder.org/competencies/list\_ephs.htm

## **Public Health Core Competencies: Eight Domains**

## **Analytic/Assessment Skills**

- Defines a problem
- Determines appropriate uses and limitations of both quantitative and qualitative data
- Selects and defines variables relevant to defined public health problems
- Identifies relevant and appropriate data and information sources
- Evaluates the integrity and comparability of data and identifies gaps in data sources
- Applies ethical principles to the collection, maintenance, use, and dissemination of data and information
- Partners with communities to attach meaning to collected quantitative and qualitative data
- Makes relevant inferences from quantitative and qualitative data
- Obtains and interprets information regarding risks and benefits to the community
- Applies data collection processes, information technology applications, and computer systems storage/retrieval strategies
- Recognizes how the data illuminates ethical, political, scientific, economic, and overall public health issues

## **Policy Development/Program Planning Skills**

- Collects, summarizes, and interprets information relevant to an issue
- States policy options and writes clear and concise policy statements

- Identifies, interprets, and implements public health laws, regulations, and policies related to specific programs
- Articulates the health, fiscal, administrative, legal, social, and political implications of each policy option
- States the feasibility and expected outcomes of each policy option
- Utilizes current techniques in decision analysis and health planning
- Decides on the appropriate course of action
- Develops a plan to implement policy, including goals, outcome and process objectives, and implementation steps
- Translates policy into organizational plans, structures, and programs
- Prepares and implements emergency response plans
- ▶ Develops mechanisms to monitor and evaluate programs for their effectiveness and quality

#### **Communication Skills**

- Communicates effectively both in writing and orally, or in other ways
- Solicits input from individuals and organizations
- Advocates for public health programs and resources
- Leads and participates in groups to address specific issues
- Uses the media, advanced technologies, and community networks to communicate information
- Effectively presents accurate demographic, statistical, programmatic, and scientific information for professional and lay audiences

#### Attitudes

Listens to others in an unbiased manner, respects points of view of others, and promotes the expression of diverse opinions and perspectives

## **Cultural Competency Skills**

- Utilizes appropriate methods for interacting sensitively, effectively, and professionally with persons from diverse cultural, socioeconomic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyle preferences
- ▶ Identifies the role of cultural, social, and behavioral factors in determining the delivery of public health services
- ▶ Develops and adapts approaches to problems that take into account cultural differences

#### **Attitudes**

- Understands the dynamic forces contributing to cultural diversity
- Understands the importance of a diverse public health workforce

#### **Community Dimensions of Practice Skills**

- Establishes and maintains linkages with key stakeholders
- Utilizes leadership, team building, negotiation, and conflict resolution skills to build

- community partnerships
- Collaborates with community partners to promote the health of the population
- Identifies how public and private organizations operate within a community
- Accomplishes effective community engagements
- Identifies community assets and available resources
- Develops, implements, and evaluates a community public health assessment
- Describes the role of government in the delivery of community health services

#### **Basic Public Health Sciences Skills**

- Identifies the individual's and organization's responsibilities within the context of the Essential Public Health Services and core functions
- Defines, assesses, and understands the health status of populations, determinants of health and illness, factors contributing to health promotion and disease prevention, and factors influencing the use of health services
- Understands the historical development, structure, and interaction of public health and health care systems
- Identifies and applies basic research methods used in public health
- Applies the basic public health sciences including behavioral and social sciences, biostatistics, epidemiology, environmental public health, and prevention of chronic and infectious diseases and injuries
- Identifies and retrieves current relevant scientific evidence
- ▶ Identifies the limitations of research and the importance of observations and interrelationships

## Attitudes

Develops a lifelong commitment to rigorous critical thinking

#### **Financial Planning and Management Skills**

- Develops and presents a budget
- Manages programs within budget constraints
- Applies budget processes
- Develops strategies for determining budget priorities
- Monitors program performance
- Prepares proposals for funding from external sources
- Applies basic human relations skills to the management of organizations, motivation of personnel, and resolution of conflicts
- Manages information systems for collection, retrieval, and use of data for decision-making
- Negotiates and develops contracts and other documents for the provision of population-based services
- Conducts cost-effectiveness, cost-benefit, and cost-utility analyses

## **Leadership and Systems Thinking Skills**

- Creates a culture of ethical standards within organizations and communities
- Helps create key values and shared vision and uses these principles to guide action
- Identifies internal and external issues that may impact delivery of essential public health services (i.e., strategic planning)
- Facilitates collaboration with internal and external groups to ensure participation of key stakeholders
- Promotes team and organizational learning
- Contributes to development, implementation, and monitoring of organizational performance standards
- Uses the legal and political system to effect change
- Applies theory of organizational structures to professional practice