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# Survey of Leadership Skills Needed for State and Territorial Health Officers, United States, 1988

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## Synopsis .....

*As part of efforts to develop training and career development experiences to enhance leadership skills among public health officials, the Public Health Foundation, Association of State and Territorial Health Officials, National Association of County Health Officials, United States Conference of Local Health Officers, and Public Health Practice Program Office, Centers for Disease Control and Prevention, conducted a training needs assessment survey in 1988. Fifty-five State and territorial health officers were asked about potential knowledge, skills, and abilities (KSAs) that a prospective or new health officer might require in performing his or her job.*

*Thirty-eight health officers returned completed questionnaires, a 69 percent response rate. For each KSA, respondents assigned scores from 1 (low) to 5 (high) to three different variables: the KSA's importance to job, as an initial ability of a new health officer, and as a desired ability for someone in that job.*

*Of 78 KSAs, those scoring in the top 25 percent for importance to job were identified, and individual composite scores were calculated using the formula: (importance to job) × (desired ability minus initial ability). The top 10 mean composite scores ranged from 7.55 to 10.40 and were in five competence areas: public image (working with the community) (3 KSAs); policy development and program planning (3 KSAs); interpersonal skills (2 KSAs); agency management (1 KSA); and legal issues (1 KSA).*

*These skills are not commonly acquired in schools of medicine or public health. Public health agencies should develop programs to assure that persons with leadership potential are identified early and given guided experiences and mentors, as well as specific training and education. Additional studies of public health officers are needed to develop and strengthen leadership KSAs among new health officers.*

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**I**N "THE FUTURE OF PUBLIC HEALTH," the Institute of Medicine (IOM) concluded that the need for leaders in public health is too great to leave their emergence to chance (1). Effective public health leaders at local, State, and national levels are essential to achieve the "Healthy People 2000: National Health Promotion and Disease Prevention Objectives" (2). As Warren Bennis and Burt Nanus have written, leadership gives an organization vision and ability to translate that vision into reality (3).

As part of efforts to develop training and career development experiences that will enhance leadership skills among public health officials in the United States, the Public Health Foundation (PHF), Association of State and Territorial Health

Officials (ASTHO), National Association of County Health Officials (NACHO), United States Conference of Local Health Officers (USCLHO), and Public Health Practice Program Office (PHPPO) of the Centers for Disease Control and Prevention (CDC) conducted a training needs assessment survey of all State and territorial health officers in 1988. What State health officers perceived as the knowledge, skills, and abilities (KSAs) judged most essential for prospective or new State health officers is reported in this article.

## Methods

A work group with representatives from PHF, ASTHO, NACHO, USCLHO, and CDC developed

## Knowledge, Skills, and Abilities (KSAs) of Health Officers in Eight Competence Areas

### *Competence area and number of KSAs*

- I. Policy development and program planning (8 KSAs)
- II. Agency management (15 KSAs)
- III. Interpersonal skills (6 KSAs)
- IV. Personnel management (11 KSAs)
- V. Communication skills (12 KSAs)
- VI. Financial planning and management (17 KSAs)
- VII. Public image (working with the community) (5 KSAs)
- VIII. Legal issues (4 KSAs)

### *Examples of component KSAs*

- Specifying department mission and objectives, identifying and evaluating department resources
- Diagnosing organizational ineffectiveness and taking appropriate measures for planned change
- Conveying department mission and establishing commitment, delegating to others
- Setting performance standards
- Getting your point across, in writing or in person; presenting and defending a position
- Writing and orally presenting budget justifications, knowledge of the procurement process and contract administration
- Effectively communicating health information to the public through the media, establishing and maintaining relationships with constituent groups, identifying and working with community leaders
- Working with the legislature

a questionnaire on KSAs needed by health officers. The questionnaire included the respondent's job title, highest level of education, years of experience in public health, and tenure in current job; and a list of potential KSAs that a new or prospective health officer might require in performing his or her job.

The PHF mailed the questionnaire in 1988 to all 55 State and territorial health officers (that is, 50 States, District of Columbia, Puerto Rico, U.S. Virgin Islands, Guam, and American Samoa). A "State health officer" was defined as the chief public health official of a State, as specified by law or as designated by the chief executive of each State.

State health officers were asked to assign a score from 1 (low) to 5 (high) to three different characteristics of each KSA: its importance to the job, as an initial ability of a new health officer, and as a desired ability of someone in that job (4). Importance to the job was the respondent's perception of the relevance of the KSA to the responsibilities of a health officer. Initial ability was the respondent's rating of the KSA as an entry level or initial ability of a brand new or prospective health officer. Desired ability was the respondent's rating of the level of competence in the KSA that a good health officer should possess.

We calculated means for the importance to job scores for each KSA and ranked KSAs based on

these means. We categorized 78 of the 83 potential KSAs into the eight general competence areas listed in the box. The remaining five potential KSAs were not included for various reasons (for example, relatively low mean scores on importance to job or failure to fit easily into one of the eight competence areas). A complete list of KSAs, including how they were categorized, is available upon request.

For each KSA with mean scores in the top 25 percent on importance to job, we calculated an individual composite score, using the formula: (importance to job)  $\times$  (desired ability minus initial ability). By dividing the sum of the individual composite scores by the number of respondents for that KSA, we calculated the mean composite score for each KSA in the top 25 percent for importance to job. We then ranked KSAs by mean composite scores.

## Results

Thirty-eight health officers returned completed questionnaires, a 69-percent response rate. Seventy-one percent had more than 10 years' experience in public health, and 50 percent had less than 4 years' tenure in their current health officer position. Seventy-six percent had a medical degree. Of the nine nonphysician respondents, two had a bachelor's degree; two a master's degree in public health;

Table 1. Top 10 knowledge, skills, and abilities (KSAs) relevant to the health officer's responsibilities, expressed as mean scores<sup>1</sup> in the survey of State and territorial health officers

KSA (and KSA competence area)	Number of respondents	Mean score
Working with the legislature (Area VIII).....	37	4.95
Getting your point across, in writing or in person (Area V).....	37	4.95
Identifying and working with community leaders (Area VII).....	37	4.89
Conveying department mission and establishing commitment (Area III) .	38	4.87
Delegating to others (Area III) .....	38	4.87
Diagnosing organizational ineffectiveness and taking appropriate measures for planned change (Area II) .	38	4.87
Specifying department mission and objectives (Area I) .....	38	4.84
Establishing and maintaining relations with constituent groups (Area VII) .....	37	4.84
Effectively communicating health information to the public through the media (Area VII).....	37	4.84
Presenting and defending a position (Area V) .....	37	4.81

<sup>1</sup> Mean scores potentially could range from + 1.00 (low) to + 5.00 (high).

and five a master's degree other than in public health.

Importance to job KSA mean scores ranged from 2.46 to 4.95, and the top 25 percent of the mean scores ranged from 4.59 to 4.95. Among the items in the top 25 percent of mean scores, health officers listed 5 of 5 KSAs grouped in the competence area, measuring public image (working with the community); 4 of 6 KSAs in interpersonal skills; and 4 of 8 KSAs in policy development and program planning. Of the remaining KSAs with mean scores in the top 25 percent on importance to job, health officers listed skills in three other competence areas: four in agency management, three in communications skills, and one in legal issues. No KSAs in the competence area of personnel management had importance to job KSA mean scores in the top 25 percent, nor did any KSA in the area of financial management and planning.

The mean scores for the top 10 KSAs ranged from 4.81 to 4.95 (table 1). These 10 KSAs were in six competence areas: 3 KSAs were in public image (working with the community); 2 KSAs were in interpersonal skills; 2 KSAs were in communication skills; 1 KSA each was in policy development and program planning, agency management, and legal issues.

Mean composite scores ranged from 7.03 to 10.40 for KSAs in the top 25 percent of importance to job KSA mean scores. The top 10 KSAs had mean composite scores ranging from 7.55 to 10.40 (table 2) and fell into five competence areas: public image (working with the community) (3 KSAs); policy development and program planning (3 KSAs); interpersonal skills (2 KSAs); agency management (1 KSA); and legal issues (1 KSA). In general, the competence areas represented by the 10 highest ranked KSAs on importance to job (table 1) also were ones for which health officers required additional training (table 2).

## Discussion

Our survey is a first attempt at identifying the skills that are most important for a new State health officer based on what practicing health officers report that they do in their job. The responses to our survey also provide information about the relative importance that they assign to various dimensions of their jobs. The results reflect the individual characteristics, preferences, and experiences of the health officers at one point in time, and the organizational, political, and other constraints within which they have to work (5). Thus, in interpreting the survey results and developing a training strategy, responses in the survey may need to be balanced against other considerations; for example, whether present patterns of activities and priorities are appropriate or desirable for meeting the needs of the public health system (5).

In general, there are relatively little data on what public administrators and managers actually do in their jobs (6). The literature on what *public health* administrators do in their jobs is even more limited (7-13). Much of this literature consists of discussions of the general functions of public health administrators and the formal education that they require to perform these functions. Very few reports contain quantitative information. Also, the specific skills needed by senior public executives are rarely differentiated from those needed by managers at other levels of the public health system (5,14).

Adding to this problem is that management and leadership KSAs are not easy to categorize and may fit with more than one category. For example, the work group developing this questionnaire included "effectively communicating health information to the public through the media" in the "public

image” category, while some might argue this KSA should have been put under “communication skills.” Similarly, the work group developing the questionnaire included “working with the legislature” in the “legal issues” category, while some might argue that this KSA should have been in “financial planning and management,” because a significant portion of work with the legislature may be about budgets.

The list of KSAs used in our survey correspond to the roles, responsibilities, and skills that others have identified. For example, in 1991, a Health Resources and Services Administration forum of public health practitioners and public health faculty described the broad competence areas of a public health administrator (15). Their list included policy analysis-strategic planning, communications skills, team leadership, financial management, human resource management, program planning and administration, organizational management-positioning, cultural competency, basic health sciences, and political analysis.

Our findings also are consistent with the three functions of a health department’s chief executive officer—political leadership, management of the agency’s resources, and ceremonial representation—identified by Hanlon and Pickett (16). The findings also confirm some of the major concerns about public health leadership put forth in the IOM report. Among other issues, the IOM Committee found that public health agency leaders often had a poor public image, needed to develop relationships with and educate legislators, and needed to strengthen relationships with key community constituencies; for example, the medical community and other professional and citizen groups (1).

These findings raise questions about the selection and preparation of existing and future leaders in public health. Many State health officers have medical backgrounds (for example, in this survey, 76 percent of respondents reported a medical degree). However, training in a school of medicine (13,17), or even a school of public health (16), may have little or no relationship to the skills needed by a public health leader. As their graduates move up the management ladder, increasingly they need to have competence in working with others, focusing on finding answers that are acceptable rather than simply correct (18, 19). Selection of a State health officer often is based on politics and a candidate’s previous experience as a manager.

Leadership is a function of training, experience, and personality (16). Some of the characteristics of

Table 2. Top 10 knowledge, skills, and ability (KSAs) needed by State and territorial health officers expressed as mean composite scores<sup>1</sup> for KSAs in the top 25 percent on “importance to job”

KSA and competence area	Number of respondents	Mean composite score
Working with the legislature (Area VIII).....	30	10.40
Diagnosing organizational ineffectiveness and taking appropriate measures for planned change (Area II) .	32	9.31
Specifying department mission and objectives (Area I).....	34	8.85
Identifying and evaluating department resources (Area I).....	34	8.74
Identifying and working with community leaders (Area VII).....	31	8.55
Establishing and maintaining relationships with constituent groups (Area VII).....	31	8.42
Delegating to others (Area III).....	33	8.12
Translating legislative mandates into organizational plans and programs (Area I).....	32	7.78
Effectively communicating health information to the public through the media (Area VII).....	30	7.73
Conveying department mission and establishing commitment (Area III) .	33	7.55

<sup>1</sup> = Composite score = (Importance to job) × (desired ability – initial ability of a new health officer). Scores for each of these 3 variables could range from 1 (low) to 5 (high). Thus, composite scores potentially could range from a negative score to +20.0 (high). Negative scores mean there is no need for training.

leaders, for example, the ability to articulate a vision and to inspire and motivate co-workers, are part of a personal development process. Interpersonal and organizational or political skills are complex, and they cannot be learned in a short-term training course alone. Effective development of public health leaders requires a systematic, interactive, ongoing process, in which training experiences are combined with practice of the new skills “on the job.”

During 1992, as part of efforts to respond to the need for enhanced leadership in public health, CDC and a consortium of schools of public health in California created the Public Health Leadership Institute (20). The Institute is a 1-year educational and training experience for approximately 50 senior State and local public health officials. The curriculum focuses on four major areas: current and future challenges confronting public health; leadership, creativity, vision, and practice; political and social change; and communications and information. Activities include a personal management and leadership assessment, the use of self-study packets, participation in computer conferences with other scholars, and a 1-week residential experience.

Since knowledge about how to best select and prepare leaders in public health is in the developmental stages, more information is needed about approaches used in other areas. For example, some organizations have used assessment centers for the early identification of persons with leadership potential. These centers conduct activities such as job analysis (identifying needed skills), job simulations, leadership style analysis, and career counseling (18,21,22). Such programs have been found to have a reasonable correlation between predicted potential and actual performance and, at a minimum, to represent an improvement over the traditional job interview or promotion based on past technical performance alone (18,22).

In conclusion, we strongly agree with the IOM report (1) that effective leadership in public health is too important to be left to chance. We recommend that Federal, State, and local public health agencies initiate systematic programs to develop public health leaders. Such programs should identify people with leadership potential early in their careers, provide incremental increases in responsibility coupled with training and development specific to the level of responsibility, and provide opportunities for leadership apprenticeships. In addition, such programs should provide opportunities for advancement in nonmanagerial roles for those who prefer a technical career ladder (18).

Finally, additional studies are needed of KSAs deemed important for State health officers and of appropriate ways to develop or enhance leadership KSAs among prospective and new health officers. Future studies should supplement soft information based on "perceived needs" with hard data resulting from observation of typical roles and functions of State health officers and from study of their problems and successes, that is, the end results (4). Studying the characteristics of leaders of public health departments generally recognized to be outstanding in the scope and quality of services (23) would be useful.

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