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# The Impact of Critical Events of the 1980s on Core Functions for a Selected Group of Local Health Departments

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## Synopsis .....

*Directors of 14 public health departments were surveyed for their perceptions on the impact of 20 critical events of the 1980s on public health perfor-*

*mance. The departments were selected in 1979 from among those that were highly regarded by public health experts for exemplary performance, especially with regard to personal health services. The departments were the subjects of intensive case studies in 1979, 1983, and again in 1992.*

*The public health functions that were most benefited in the 1980s were assessment and policy development. The assurance function was equivocally affected. Greatest positive impact was exerted by the acquired immunodeficiency syndrome-human immunodeficiency virus epidemic, by increase in fee income, and by the Institute of Medicine report, "The Future of Public Health." Negative influences, especially on the assurance function were exerted by loss of Federal grants, demographic changes, substance abuse, and economic downturn. Other critical events had equivocal or idiosyncratic effects.*

*Analysis of public health practice according to the functions of assessment, policy development, and assurance appears to have utility for purposes of evaluation and planning.*

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**T**HE CONDITION OF PUBLIC HEALTH departments is a matter of growing national interest. They serve as stewards of the basic health needs of entire populations (1). Any change by these departments in performing the core functions of public health deserves close attention from policymakers at every level of government.

The core functions of public health—assessment, policy development, and assurance—were defined by the Institute of Medicine (1) and were further elaborated on by work groups established by the Public Health Practice Program Office of the Centers for Disease Control and Prevention (2). Reference to these definitions assists in an effort to evaluate changes in public health performance (3).

This prospect was used to measure the perceived impact of critical events of the 1980s on public health performance for a selected group of local health departments that participated in longitudinal case studies beginning in 1979 (4,5). The 15 depart-

ments were originally selected by a modified Delphi technique that requested nominations for exemplary performance, particularly with regard to personal health services (4). The ensuing case study reports included detailed information on each department with regard to organization, administration, financing, budget, staff, programs, services, and relationships with other providers. The departments were restudied in 1983 (5) and again in 1992 (6).

Notable findings from the 1992 followup study of the departments include substantial growth in both budget and program, growing pressure to expand services, and altered patterns of financial support that feature reductions in Federal grants directly to the departments, and increases in fee income (6). As part of the 1992 followup study, health department directors were asked to assess the impact of specified critical events of the previous decade on performance of the three core public

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health functions. This is a report of the results of those assessments.

## Methods

A total of 14 local health departments participated in the study. They included:

Appalachia District II, SC; Cincinnati, OH; Contra Costa County, CA; Cortland County, NY; Craven County, NC; Denver, CO; Lane County, OR; Maricopa County, AZ; Memphis-Shelby County, TN; Multnomah County, OR; Newark, NJ; Seattle-King County, WA; Thurston County, WA; and Yolo County, CA.

A 15th health department, after a change in leadership, withdrew from the project. Two of the departments serve a constituency of more than 1 million people; three serve 500,000 to 1 million; seven serve 100,000 to 500,000; and two serve fewer than 100,000. Changes that have occurred in these departments between 1979 and 1992 are reported elsewhere (6).

Each health department director was asked to consult with senior staff members and report on the impact of 20 critical events on the performance of the health departments for the previous decade. The events were identified by the authors as potentially influential on public health practice as a result of comparing survey responses and comments for these same departments in 1979 and in 1992 (6).

The 20 critical events, in no particular order, were

1. Acquired immune deficiency syndrome-human immunodeficiency virus (AIDS-HIV) infections
2. Loss of Federal grants
3. Block grant financing

4. Change in support from the State
5. Change in support from the local jurisdiction
6. Change in fee income
7. Reorganized administrative relationship to the State
8. Reorganized local administration
9. Change in departmental leadership
10. Change in local political leadership
11. Availability of Objectives for the Nation for 1990 (7)
12. Availability of Model Standards for Community Preventive Health Services (8)
13. Availability of the "Assessment Protocol for Excellence in Public Health" (APEX PH) (9)
14. Availability of Institute of Medicine report, "The Future of Public Health" (1)
15. Change in status of community health centers
16. Change in status of private providers
17. Change in status of local planning agency
18. Demographic changes
19. Substance abuse
20. Changes in local economy

A survey protocol provided for designating assessments of the effect of each critical event on public health performance using a seven-point scale, ranging from strongly negative to strongly positive (-3, -2, -1, 0, +1, +2, +3). Assessments were made separately for each event as it was perceived to impact on health department performance for assessment, policy development, and assurance. Explanatory comment was requested on each of the assessments. Definitions of the core functions were provided to the survey respondents as follows (2,3):

**Assessment.** The regular systematic collection, assembly, analysis, and dissemination of information on the health of the community. Assessment practices specifically include assessing the health needs of the community, investigating the occurrence of health effects and health hazards in the community, and analyzing the determinants of identified health needs.

**Policy development.** The exercise of the responsibility to serve the public interest in the development of comprehensive public health policies by promoting the use of the scientific knowledge base in decision making. Policy development practices specifically include advocating for public health, building constituencies, identifying resources in the community, setting priorities among health needs, and

Scoring of responses by 14 health departments recording the perceived impact of critical events of the 1980s, on performance of public health functions

| Critical Events                                      | Effect on performance |                      |                      |                    |                      |                      |                   |                      |                      |
|--|-----------------------|----------------------|----------------------|--------------------|----------------------|----------------------|-------------------|----------------------|----------------------|
|  | Assessment            |                      |                      | Policy development |                      |                      | Assurance         |                      |                      |
|  | Mean <sup>1</sup>     | Helpful <sup>2</sup> | Adverse <sup>2</sup> | Mean <sup>1</sup>  | Helpful <sup>2</sup> | Adverse <sup>2</sup> | Mean <sup>1</sup> | Helpful <sup>2</sup> | Adverse <sup>2</sup> |
| AIDS-HIV.....  | 1.5                   | +24                  | -3                   | 1.6                | +26                  | -4                   | 1.1               | +21                  | -5                   |
| Loss of Federal grants.....                          | -0.3                  | +1                   | -5                   | -0.2               | 0                    | -3                   | -1.0              | 0                    | -12                  |
| Block grant financing.....                           | 0.5                   | +9                   | -4                   | 0.7                | +8                   | -2                   | -0.2              | +6                   | -9                   |
| Change in support from State.....                    | -0.1                  | +6                   | -8                   | 0                  | +8                   | -8                   | -0.2              | +7                   | -10                  |
| Change in support from local jurisdiction.....       | 0.5                   | +11                  | -4                   | 0.3                | +9                   | -5                   | 0.1               | +8                   | -6                   |
| Change in fee income.....                            | 0.8                   | +12                  | -3                   | 0.8                | +11                  | -2                   | 1.6               | +19                  | 0                    |
| Reorganized relationship to State.....               | 0.3                   | +3                   | -1                   | 0                  | +1                   | -1                   | -0.1              | +2                   | -3                   |
| Reorganized local administration.....                | 0.4                   | +10                  | -5                   | 0.5                | +12                  | -5                   | 0.2               | +9                   | -6                   |
| Change in departmental leadership.....               | 0.3                   | +10                  | -6                   | 0.3                | +13                  | -9                   | 0.1               | +10                  | -8                   |
| Change in local political leadership.....            | 0.5                   | +7                   | 0                    | 0.6                | +8                   | 0                    | 0.4               | +6                   | -1                   |
| Availability of Objectives for the Nation, 1990..... | 0.6                   | +9                   | 0                    | 0.6                | +9                   | 0                    | 0.4               | +5                   | 0                    |
| Availability of Model Standards.....                 | 0.5                   | +7                   | 0                    | 0.6                | +9                   | 0                    | 0.4               | +6                   | 0                    |
| Availability of APEX PH.....                         | 0.5                   | +7                   | 0                    | 0.2                | +3                   | 0                    | 0.1               | +1                   | 0                    |
| Availability of IOM report.....                      | 1.1                   | +15                  | 0                    | 1.1                | +15                  | 0                    | 0.7               | +10                  | 0                    |
| Change in status of community health centers.....    | 0.1                   | +2                   | -1                   | 0.2                | +2                   | 0                    | 0.4               | +5                   | -1                   |
| Change in status of private providers.....           | 0.2                   | +5                   | -3                   | 0.3                | +7                   | -3                   | -0.5              | +4                   | -12                  |
| Change in status of local planning agency.....       | -0.4                  | +3                   | -7                   | -0.6               | 0                    | -6                   | -0.3              | +2                   | -5                   |
| Demographic changes.....                             | 0.2                   | +8                   | -6                   | 0                  | +6                   | -6                   | -0.7              | +3                   | -12                  |
| Substance abuse.....                                 | 0                     | +8                   | -8                   | 0.4                | +11                  | -5                   | -0.9              | +3                   | -16                  |
| Local economy.....                                   | -0.1                  | +5                   | -7                   | -0.3               | +3                   | -7                   | -0.9              | +3                   | -15                  |

<sup>1</sup> Mean scores on a 7-point scale from +3 (helpful effect) through zero to -3 (adverse effect).

<sup>2</sup> All positive and negative scores are separately aggregated for each event according to each function.

developing plans and policies to address priority health needs.

**Assurance.** The assurance to constituents that services necessary to achieve agreed-upon goals are provided by encouraging actions of others (private or public), requiring action through regulation, or providing service directly. Assurance practices specifically include managing resources and developing organizational structure, implementing programs, evaluating programs and providing quality assurance, and informing and educating the public.

**Findings**

Using the seven-point scale from +3 through zero to -3, the mean responses of the 14 departments to each critical event and for each function are recorded in the table. In addition, the accumulated positive and negative responses are separately recorded in order to emphasize that a given event that, by mean value, might appear to have a neutral effect, in fact may have strongly negative or strongly positive effects for different departments.

The combined effect of all the events was per-

ceived to be more positive (+453 points) than negative (-257 points). The difference between positive and negative impacts was greatest for assessment (+162 and -70) and for policy development (+161 and -66). The total impact on the assurance function was equivocal (+130, and -121).

The strongest positive impacts were exerted by the AIDS-HIV epidemic, by change in fee income, and by the Institute of Medicine report (*I*). These positive effects pertained for all three public health functions. Other events with a less positive impact were change in local political leadership and availability of Objectives for the Nation, 1990, Model Standards for Community Preventive Health Services, and APEX PH. Block grant financing and change in support from the local jurisdiction had positive effects on assessment and policy development, but negative or mixed effects on the assurance function.

The strongest negative influences were exerted by loss of Federal grants and changes in the local economy. Substance abuse and demographic changes were strongly negative with regard to the assurance function. Other critical events had either an aggregate weak effect or an equivocal one.

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Interpretation of these findings is assisted by reference to the respondents' survey comments and to findings from an earlier report on changing conditions for the departments between 1979 and 1992 (6). Some of the weak or equivocal effects acquire importance for selected departmental characteristics.

### **Interpretation**

**AIDS-HIV infections.** Cases of AIDS were first identified in 1981 and have increased throughout the years of this study. This tragic epidemic is perceived as the most profound influence of any event in the study—and the perceptions of impact on health departments operations are overwhelmingly positive. The few negative responses include two of the smaller departments that have had few AIDS cases.

The positive impact is attributed to reestablishment of a public perception of the necessity for the role of public health. Some of the consequences are identified as increases in volunteer committees and support groups, strengthening of the policy formulation and decision making process, clarification of confidentiality issues, increased knowledge of various populations within the community, and strengthening of community relationships. A few respondents believed the epidemic has diverted attention and resources from other important public health issues.

**Loss of Federal grants.** In the 1979 study of these departments, eight of them had direct Federal grants that accounted for 25 percent of their budgets. In 1992, six departments received Federal grants representing only 4.6 percent of their budgets (6). The loss of Federal grants is perceived by respondents as having an adverse effect, especially on the assurance function.

**Block grant financing.** Respondents commented that their departments had little influence on block grant distributions and that allocations have been meager or, in some cases, nonexistent. Block grant financing appears to have focused attention on assessment and policy functions, including priority setting, but to have had at best a mixed impact on assurance functions. One department reported favorable experience under a State law that defined and protected health department participation in block grant allocations.

**Change in support from the State.** The aggregate perceptions of support from the State appear to cancel each other out, suggesting that circumstances are idiosyncratic to each department. The combined State and Federal pass-through money to the 14 departments represented a fairly consistent share (28–30 percent) of departmental budgets both in 1979 and in 1992 (6).

**Change in support from local jurisdiction.** The pattern of responses to sources of support suggests that limited funding relative to need is perceived to sharpen assessment and policy functions but to have a mixed effect on assurance functions. The contribution of local support to the total budgets of these departments fell from 49 percent to 34 percent between 1979 and 1992—the same decrease as national data show from a survey of all local health departments during the same period (6). Even though the percentage of support contributed locally declined, the dollar amount increased and represents the mainstay for support of most of the departments.

**Change in fee income.** Change in fee income is perceived as having a strong impact on departmental performance, second only to the AIDS-HIV epidemic. The impact is overwhelmingly positive, and one of the few that unambiguously promotes the assurance function. The proportion of total budgets attributed to fees increased from 13 percent in 1979 to 29 percent in 1992. Data are not available on the source of fees but respondents' comments refer consistently to Medicaid. Fee income is credited with enabling most of the growth in services that occurred in the 1980s. Reliance on fees troubles some respondents who are concerned about slighting essential services that do not produce income.

**Reorganized administrative relationships to State.** Aggregate responses are equivocal and slight with

regard to the impact of altered relationships to the State health agencies. Only one of the departments functions as a satellite of the State health department. In the course of the decade, four of the departments changed from independent status to shared local-State authority. These four departments report an impact on their functions that is either neutral or slightly negative as a result of reorganization. The impact on budget is also equivocal. The four departments coming under increased State authority report minor and mixed influences from State support (aggregate scores of +4, and -8).

**Reorganized local administration.** Reorganization of health departments within the structure of local government was perceived as having more positive than negative effects, but there were a number of both. Responses seem to be idiosyncratic to local circumstances and do not lend themselves to generalization. For example, three health departments in 1979 were organized under an umbrella agency alongside other agencies with health-related functions. By 1992, four other departments were reorganized under such a combined authority. One of these respondents was enthusiastic about the effects of reorganization, another was strongly negative, and the other two reported no effect on public health functions.

**Change in departmental leadership.** As with administrative reorganization, changes in departmental leadership were perceived as having strong effects on public health function but not consistently positive or negative. In 1979, all but one of the departments had a physician as administrative head. By 1992, eight other departments acquired nonphysician chief administrators, many of them with backgrounds in financial management or public administration. The changes in these eight departments attributable to new leadership were perceived as positive in some and negative in others (+22, -16).

**Change in local political leadership.** Perceptions are consistent that changes in local political leadership assisted public health performance to a modest degree in all three of the measured functions. This finding comports with an observation in 1979 that strong public health performance results from a synergistic effort by strong public health leaders assisted by strong local political sponsors (4).

**National efforts to define or facilitate public health functions.** Four endeavors to promote and define

public health activities were included in the study: Objectives for the Nation for 1990, Model Standards for Community Preventive Health Services, APEX PH, and the Institute of Medicine report on the future of public health. All of these projects were consistently perceived as having positive effects on public health functions, especially for assessment and policy development. The impact of the Institute of Medicine report was greatest of all; the APEX PH project is still new and is not yet known to some of the respondents. Comments include reference to reinforced perceptions of responsibility for community planning, effectiveness in arguing for budgetary and services expansions, and help with priority setting. Some of the projects, such as APEX PH, are anticipated to have an even stronger effect in the coming decade.

**Change in status of community health centers.** Community health centers were viewed as helpful to public health performance but not strong in their impact. The assurance function was a little stronger than the other two. Community and migrant health centers in the jurisdiction served by the health departments increased from 6 in 1979 to 14 in 1992. This large increase is perceived as a minor asset to public health performance. One respondent, after receiving the aggregate scores, commented that community health centers in his jurisdiction contributed more to the assurance function than the score suggests.

**Change in status of private providers.** Unwillingness of many private providers to see Medicaid patients or to assure 24-hour availability was perceived as burdening the public health assurance function and as a modest stimulant for better assessment and policy development. Most health departments claimed to include the private sector in the planning process (6).

**Change in status of local health planning agencies.** The demise of federally sponsored health planning agencies was perceived as a modest deterrent to all public health functions. Comments noted with regret the loss of Federal dollars infused for purposes of health planning at the local level.

**Demographic changes.** Changes in the size and composition of the population in the local jurisdiction had both positive and negative impacts on assessment and policy development, and a strongly negative impact on the assurance function. Increase in minority populations was an important consider-

ation. One health department reported that in 1979 few health department services required interpreters, but in 1992 one-third of the visits require the assistance of interpreters.

**Substance abuse.** Increase in substance abuse was associated by respondents with increase in sexually transmitted diseases. Assurance functions were negatively effected, requiring increased emphasis on assessment and policy development (prioritizing and planning).

**Changes in the local economy.** Unemployment and economic downturn had strongly negative effects on public health performance, especially for the assurance function. In one way or another nearly every respondent commented on the greatly increased demand for services, without commensurate increase in resources to meet demand.

### Comment

The findings from this study represent perceptions from the leadership of health departments that may not be typical of others in the nation. The findings are, nevertheless, important because they summarize longitudinal observations over a time span filled with important developments in public health. The departments themselves, having been selected for highly regarded performance in personal health services, may serve as bellwethers of experience that can be anticipated for many other departments facing demand for expansion of similar services. The perceptions of these public health leaders deserve careful consideration, recognizing their increasing reliance on data-based needs assessments. The reported perceptions can be presumed to have been made with reference to evidence that was marshaled in an earlier phase of the study (6).

Several observations deserve further detailed study into the 1990s. Will perception of the favorable impact of the AIDS-HIV epidemic on public health performance prove enduring as the caseload mounts, especially if the available resources stabilize or decline? Departments in several States with budgetary crises report impending draconian cuts in budgets. Increasing reliance on fee income deserves careful study. Does it skew public health service priorities in directions that neglect some essential but nonincome-producing services?

Public health leaders should be heartened by the favorable reports on efforts to clarify the role and responsibilities of public health. The Institute of Medicine report proved to be especially helpful,

and other initiatives show increasing promise into the 1990s. Strengthening of assessment and policy development functions is heartening. The equivocal status of the assurance function identifies endeavors requiring further attention and support.

Finally, note should be taken that the efforts to define precisely public health core functions and practices appear to be useful. Health department leaders are able to differentiate performance among the core functions. The definitions of public health practice show promise as valuable tools for evaluation and planning.

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