

The Need for Environmental Public Health Performance Standards

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Definition

“the art and science of *protecting* against environmental factors that may adversely impact *human health* or the *ecological balances* essential to long-term human health and environmental quality, whether in the natural or human-made environment”.

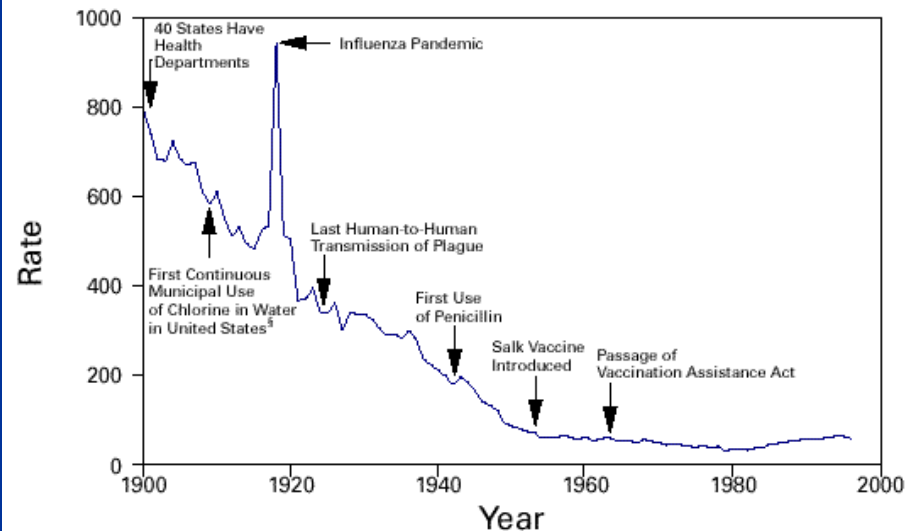
Committee on the Future of Environmental Health. "The Future of Environmental Health: Part two," *Journal of Environmental Health* 55 (1993): 42-45.

Roots of Environmental Health

- Sanitary movement of the late 19th century
- Germ theory of disease



FIGURE 1. Crude death rate* for infectious diseases — United States, 1900–1996[†]



*Per 100,000 population per year.

[†]Adapted from Armstrong GL, Conn LA, Pinner RW. Trends in infectious disease mortality in the United States during the 20th century. *JAMA* 1999;281:61-6.

[‡]American Water Works Association. Water chlorination principles and practices: AWWA manual M20. Denver, Colorado: American Water Works Association, 1973.

Roots of Environmental Health

- What accounted for this dramatic reduction of morbidity and mortality?



Impact

- Inspections became customary
 - Quotas
 - Used to evaluate staff
- Limited workforce preparation
- Focus on infectious diseases
- EPA and fragmentation



Where We Are

- Emphasis on enforcement not prevention
- Emerging environmental health problems
- Disconnect between health and environment
- Measure the number of activities
 - What is accomplished by doing inspections?
 - Seen as a bunch of inspectors
- Lost sense of purpose?

Where We Need to Be

- Core functions of public health apply to environmental public health
- Capacity to
 - Anticipate
 - Recognize
 - Evaluate
 - Control

Where We Need to Be

- Prepare for the challenges facing EH
- Need a clear description of what we do in EH
- Nationally
 - Build consistency
 - Build capacity
 - Build accountability

Where We Need to Be

- Essential Public Health Services
- Essential Services of Environmental Health
- NPHPS
- National Environmental Public Health Performance Standards project
- What about environmental health?

The Problem

The extent to which the NPHPS assess the capacity of local environmental public health programs to perform the Essential Environmental Health Services has not been evaluated

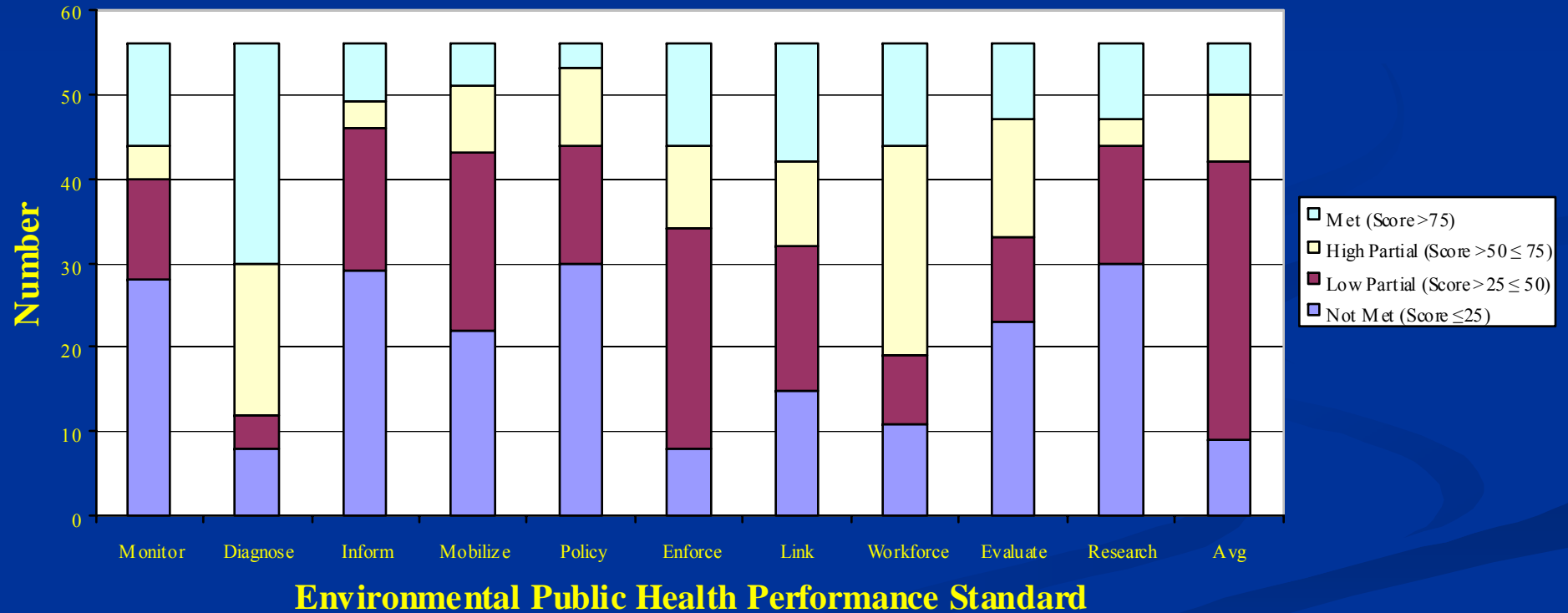
The Questions

- Is there an association between the NPHPS and an accepted set of Environmental Public Health Performance Standards?
- What is the significance and predictability of the association?

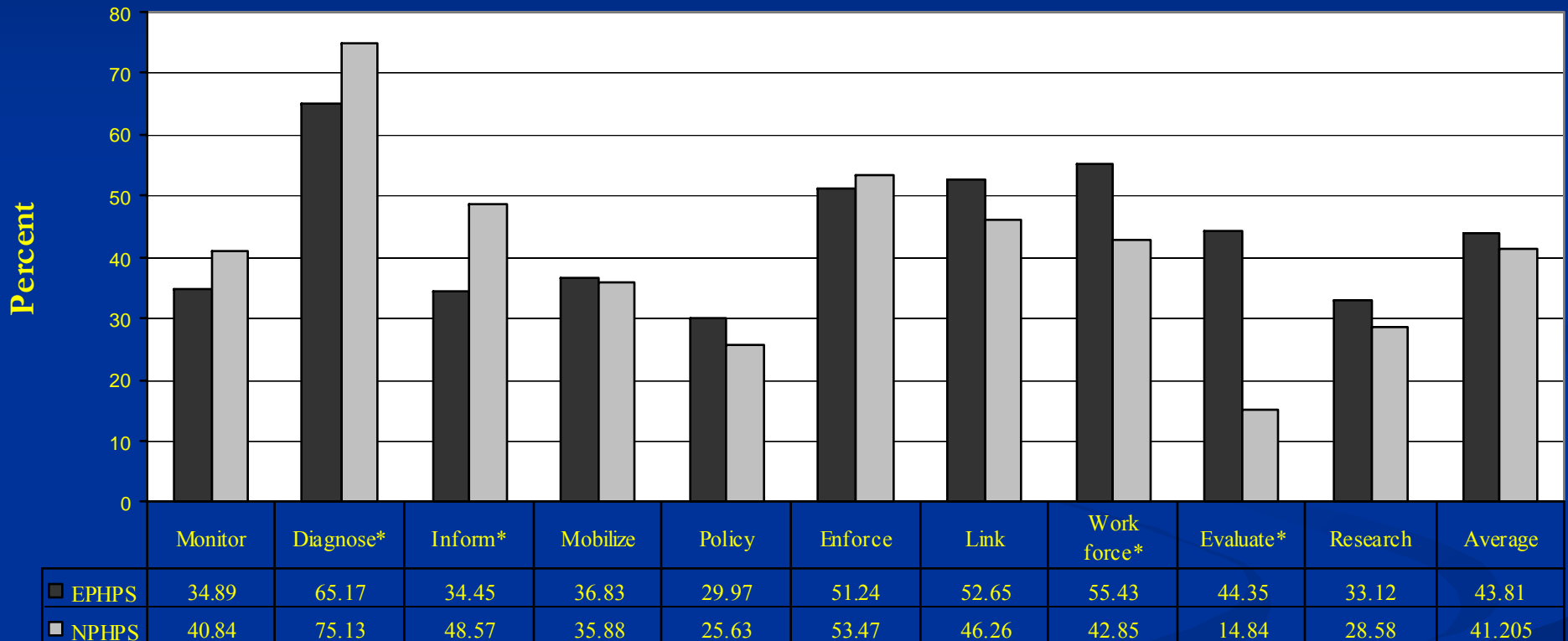
Scope

- Develop a set of performance standards and instrument for EnvPH
 - 10 standards
 - 55 indicators
 - 60 questions
- Apply instrument in the 56 counties that completed the NPHPS in 2002
- Compare results from EnvPHPS to results from the NPHPS

Frequency of Level of Meeting the Environmental Public Health Performance Standards (EnvPHPS) for Counties Completing the EnvPHPS Instrument



Comparison of Average Scores between EnvPHPS and NPHPS for 56 Counties (* = $p < .05$)



Performance Standard

Key Findings

- The capacity to provide the EssEnvPHS was limited
- The capacity to provide the EssEnvPHS was generally higher than the capacity to perform the EssPHS
- There was weak correlation between the EnvPHPS and the NPHPS

Key Findings

- The NPHPS do not adequately assess the capacity of LEHPs to perform the EssEnvPHS
- Several barriers were identified as influencing the outcome of the EnvPHPS scores
- There was a lack of formal public health training among field staff
- The field staff is relatively young with limited experience

Recommendations

- The EnvPHPS should be adopted as a method for measuring the capacity to perform the EssEnvPHS
- Train staff on the performance standards and best practices
- Complete a gap analysis then write and implement action plans aimed at enhancing the capacity to perform the EssEnvPHS

Recommendations

- Use the EnvPHPS developed for this research as a starting point for the development of national standards
- Conduct research to determine the effectiveness of the EnvPHPS in reducing or preventing illness

Value

- Provides a clear sense of purpose to the work
- Elevates the perception of us to a complete and comprehensive public health program
- Can assist with budget justification
- Can be applied to a system or specific program
- Orient new and existing staff