

**Medical Director's Report
Board of Health
September 2013**

Lyme Disease:

Patient information on morning radio show on WHCU at 7:45 a.m. on August 28th. Main discussion points were prevention and including the use of total body checks for prompt removal of ticks in order to insure that the bacterium is not transmitted to the individual. Other prevention methods were also emphasized.

General Activities:

- 2013-2014 flu seasons signed policies updating our plan for the upcoming flu season.
- Reviewed vaccine purchases with Karen Bishop for this coming year and strategies for collaborating with private practitioners and the vaccine delivery community.
- Handicapped Children's Program and Early Intervention Program signed orders for delivery of services.

Public Perceptions of Public Health:

Last month I made reference to this article, but it did not get included in the packet. This is an article published in 1998 by Lezin et al's. It was enlightening in that public officials, including legislators and community leaders were documented often to have a limited understanding of the scope of public health. I hope by providing this article that it will help you to realize the lack of information that the public has about our mission. The public includes our elected officials and persons who are personally involved in our work who often need to be brought on board in terms of understanding what the mission of public health is. (See attachment)

Influenza Illness and Hospitalizations Averted by Influenza Vaccination in the United States, 2005-2011 (See attachment)

Influenza Illness and Hospitalizations Averted by Influenza Vaccination in the United States, 2005–2011

This analysis, from the Centers for Disease Control and Prevention, was [published in the journal PLoS One](#).

The goal of influenza vaccination programs is to reduce influenza-associated disease outcomes. Therefore, estimating the reduced burden of influenza as a result of vaccination over time and by age group would allow for a clear understanding of the value of influenza vaccines in the US, and of areas where improvements could lead to greatest benefits.

Objective To estimate the direct effect of influenza vaccination in the US in terms of averted number of cases, medically-attended cases, and hospitalizations over six recent influenza seasons.

Results We estimated that during our 6-year study period, the number of influenza illnesses averted by vaccination ranged from a low of approximately 1.1 million (95% confidence interval (CI) 0.6–1.7 million) during the 2006–2007 season to a high of 5 million (CI 2.9–8.6 million) during the 2010–2011 season while the number of averted hospitalizations ranged from a low of 7,700 (CI 3,700–14,100) in 2009–2010 to a high of 40,400 (CI 20,800–73,000) in 2010–2011. Prevented fractions varied across age groups and over time. The highest prevented fraction in the study period was observed in 2010–2011, reflecting the post-pandemic expansion of vaccination coverage.

Conclusions Influenza vaccination programs in the US produce a substantial health benefit in terms of averted cases, clinic visits and hospitalizations. Our results underscore the potential for additional disease prevention through increased vaccination coverage, particularly among nonelderly adults, and increased vaccine effectiveness, particularly among the elderly.

VIEWPOINT

ON PERCEPTIONS OF PUBLIC HEALTH

NICOLE LEZIN, PPM ■ SANDRA CROUSE QUINN, PHD ■ SUSAN ZARO, MPH ■ KATIE BAER, MPH ■ MARTHA KATZ, MPA

Perceptions of Public Health

During the study described here, Ms. Lezin and Ms. Baer were with Macro International, Inc., Atlanta; Ms. Lezin is currently Director of Applied Research, Health 2000, Atlanta, and Ms. Baer is a Health Communications Specialist, Division of Violence Prevention, National Center for Injury Prevention and Control, CDC. During the study, Dr. Quinn was with Westat, Inc., Rockville, Maryland; she is currently an Assistant Professor, Dept. of Health Behavior and Health Education, School of Public Health, Univ. of North Carolina at Chapel Hill. Ms. Zaro is a Vice President with Macro International, Inc., Atlanta. During the study, Ms. Katz was Director of the Office of Program Planning and Evaluation, CDC; she is currently a Visiting Senior Program Director with the National Foundation for the Centers for Disease Control and Prevention, Inc., Atlanta.

Address correspondence to Dr. Quinn, School of Public Health, Rosenau Hall, CB#7400, Univ. of North Carolina, Chapel Hill NC 27599; tel. 919-966-3915; fax 919-966-2921; e-mail <sandra_quinn@unc.edu>.

TODAY, NEW DIVISIONS OF RESPONSIBILITY BETWEEN managed care corporations and traditional public health departments create concern that the role of public health agencies is eroding. The American Public Health Association has issued a challenge to professionals in the field to “make public health visible,”¹ emphasizing the need for a “clear definition of public health,” diversifying and broadening media coverage of public health issues, increasing awareness of and support for public health among policy makers, and collaborating with public and private sector organizations and constituencies.¹

This call to action encourages public health professionals to “remind policy makers and others why public health agencies are essential to community health.”² The need to do so is evident from the results of a Harris Poll of 1004 adults conducted in December 1996.³ In response to the question “What do the words ‘public health’ mean to you?” 36% of respondents answered that it meant the overall health and well-being of the public, 12% said they did not know, 11% replied a government-provided system of health care for all Americans, and 9% said government-provided welfare programs for the needy and elderly. However, when they were asked how important certain activities are to “improving the health of the public,” 93% described the prevention of the spread of infectious diseases as “very important,” 90% said immunization to prevent disease is “very important,” 82% rated “making sure people are not exposed to unsafe water, dangerous air pollution or toxic waste” as “very important,” and 82% believed conducting research into the causes and prevention of disease is “very important.”

In 1994, the Office of Program Planning and Evaluation of the Centers for Disease Control and Prevention (CDC) initiated a study using focus groups of community leaders and public officials to examine perceptions of public health. The goal was to find ways of translating the core functions of public health—as defined in 1988 by the Institute of Medicine of the National Academy of Sciences⁴—into concepts and vocabulary

that are meaningful and compelling outside the public health arena. The study was conducted by Macro International, Inc., and Westat, Inc., for CDC.

In May and June 1994, the study team convened focus groups in three county seats (Bradenton, Florida; Lansing, Michigan; and Lumberton, North Carolina); one urban area (Detroit, Michigan); and two state capitals (Colorado Springs, Colorado, and Raleigh, North Carolina). Because approximately 70% of health departments and local governments are organized by county, we included three sites representing the common configuration of a county-level health department and a county commission allocating resources to it. We included Detroit as a representative of a typical urban configuration: a city health department and city council. Finally, we included the state capitals of Michigan and North Carolina to capture differences in perceptions of public health across states as well as the interplay between state and local health departments and state legislators.

At each site, we convened separate groups of community leaders and public officials. Each group included between 8 and 14 people; each group met once, for approximately two hours. *Community leaders* were defined as people whose professional and civic affiliations give them a unique view not only of public health in their communities but also of the general public's perceptions about public health. They frequently serve as spokespersons for their communities. *Public officials*, defined as those who could affect public health at the community or state level through their roles in making policy and allocating resources, included members of boards of health, county commissioners, city councilors, and state legislators.

To identify potential participants, study staff first contacted local and state health departments for recommendations of influential individuals and organizations. Staff recruited community leaders and public officials by telephone, obtaining further names from those initial contacts. The community leaders participating in the focus



groups represented a broad range of local advocacy, civic, and professional groups.

A professionally trained focus group moderator ensured consistency of questioning. The moderator focused on three main topics: (a) participants' own awareness of and their perceptions of community awareness of public health and health department functions; (b) reactions to and understanding of the core functions; and (c) ideas on promoting awareness, appreciation, and support for public health.

The moderator distrib-

uted a set of printed materials to stimulate discussion:

- "A Day in the Life of Public Health,"⁵ a one-page hand-out that "walks" the reader through one family's encounters with public health during a single day;
- "Investing in Public Health,"⁶ a fact sheet developed by the Association of State and Territorial Health Officials (ASTHO);
- a *New York Times* article on new and re-emerging infectious diseases, "Infectious Diseases on the Rebound in the U.S.,"⁷ which emphasized the importance of disease surveillance.

One of the authors was present at each session. All groups were audiotaped, and the study author who was present took notes during each group. At the completion of each session, the moderator recorded notes from that session. All study staff independently read through the notes of all focus groups to identify preliminary themes and pertinent quotes. Working together, we then re-reviewed the notes, looking for key themes across groups, contradictory views, differences between community leaders and public officials, messages that could be used to convey the functions and value of public health, and potential marketing strategies for particular audiences. Tapes were used to clarify notes and provide verbatim quotations from participants.

The focus groups provided rich data on the misconceptions and negative perceptions of public health as well as encouraging insights into messages that could be used to promote public health.

PERCEPTIONS AND MISPERCEPTIONS

The leader opened each group with the following question: "What do the words *public health* bring to mind?" Not surprisingly, community leaders and public officials shared a limited awareness of public health's scope, with the participants' immediate responses identifying narrowly defined services such as immunizations and restaurant inspections. Moreover, the examples provided by partici-

pants clustered overwhelmingly in the areas of personal care and environmental inspections; disease surveillance and policy development functions were not mentioned.

Although a number of participants had used health department services (most often for children's immunizations), the most typical contact with health departments had occurred when participants reported a problem that they felt was in the departments' purview: rabid raccoons, substandard daycare, sewage problems, and unsanitary restaurants.

ORGANIZATIONS REPRESENTED IN FOCUS GROUPS OF COMMUNITY LEADERS, BY STATE

COLORADO

Association for Retarded Citizens
Catholic Community Service
Chamber Foundation
Chamber of Commerce
Chins Up
Colorado State University Extension Service
Focus on the Family Systems
KKTV
March of Dimes
NAACP
Pemrose-St. Francis Health Care
Silver Key
United We Stand Women's Center

FLORIDA

Bible Baptist Church
The Bradenton Herald
Bradenton Kiwanis Club
FACE (advocacy organization for craniofacial disorders)
First Call Responders
Manatee Community College
Manatee County Council on Aging
Manatee County Head Start
Manatee County Health Department Long Range
Planning Committee
Manatee County School System
Manatee Memorial Hospital
Manatee Opportunity Council
Project Child Care
United Way of Manatee County
Family Young Men's Christian Association

MICHIGAN

American Heart Association
American Lung Association
American Red Cross
Black Child and Family Institute
Coalition of Patients with Chronic Disease

Grand River Elementary School
Hospice, Inc.
Junior League of Lansing
March of Dimes
Michigan Association for the Education of Young
Children
Michigan Black Nurses Association
Michigan Council on Alcoholism
Michigan Ecumenical Council
Michigan League for Human Services
Michigan Primary Care Association
National Council on Alcoholism
New Detroit, Inc.
Planned Parenthood
Wayne County Community Mental Health Board
Wayne County Youth Services

NORTH CAROLINA

Communities in Schools
Guardian Ad-Litem Program of Durham County
Healthy Mothers, Healthy Babies
Healthy Wake County Task Force
NAACP
New Bethel Methodist Church
North Carolina Health Access Coalition
North Carolina State University Cooperative Extension
Service
Robeson County Advocacy
Robeson County Recreation Department
Rochester Heights Church of Christ
Strengthening the Black Family, Inc.
Wake Chapel Baptist Church
Wake County Council on Fitness and Health
Wake County Economic Development Department
Wake County Juvenile Services
Wake Medical Center
WLEL-FM Radio
WRAL TV
Women of Color/NC Equity

Most participants saw public health as synonymous with the health department; only a few understood, in the words of one participant, that “the health department is different from public health.” One North Carolina legislator expressed this broader understanding as follows: “I look at public health as being the broader umbrella—health department clinics, school health, outreach programs, education, prevention....”

A common perception, voiced by many, was that public health is synonymous with health care for the poor: “Public health looks after people who don’t have a family doctor.” “Public health’s stigma is about being a ‘have not’ service.” “Public health is Medicare, Medicaid.” Typically, participants who recognized public health as encompassing a broader array of services and responsibilities were public officials or those who had some professional contact with health departments.

Although the participants initially expressed a narrow view of public health activities, they became more eloquent when the leader asked them to envision a world without public health. They envisioned a disease-ridden, chaotic world with elevated levels of premature morbidity and mortality. Common responses included: “It would be like a developing country.” “Like going back to the 19th century.” One participant summed these sentiments up by saying, “Invisible things we take for granted would be gone.... Every time you turn on the water faucet you should be grateful you don’t have to worry about it.... I’ve lived overseas and I know what it’s like to live without the protection of public health surrounding you.” Another participant commented that, without public health, “there’d be no coordinated effort to quell outbreaks, carry out prevention, do disease control,” and another noted that public health plays a role in reassuring the public during a time of crisis by providing accurate information, for example, “an information center for things like a TB outbreak.”

However, several community leaders in Florida expressed confidence that a private entrepreneurial organization or other national body (one suggested the National Guard) would step into the breach if the public health infrastructure were to disappear. One of these Florida participants commented: “If public health went away, some entity would fill the niche.... Some entrepreneur would get involved on a for-profit basis.” While one participant suggested the absence of public health might be a good impetus for national health insurance, another suggested that more appreciation for public health might develop in its absence if a crisis were to occur: “The public may need to see an immediate public health danger.”

The handout “A Day in the Life of Public Health”⁵ generated awareness of public health’s invisible presence in the daily lives of all Americans. One participant responded to “A Day in the Life” with: “This shows how virtually everyone benefits from public health, but no one realizes it.” Another said, “We are getting a lot of dollars’ worth taxwise that we don’t realize we are getting.” “I never realized how much my confidence in daily life would be shattered without public health.”

CORE FUNCTIONS

In 1988, the Institute of Medicine defined three “core functions” of public health: “assessment,” “policy development,” and “assurance.”⁴ These words were too vague and abstract to be understood by the majority of participants, even when the moderator provided examples and explanations, using the ASTHO handout⁶ and the *New York Times* article.⁷

Assessment. To many participants, assessment was an invisible function. One person commented with rare insight: “It’s...a reporting of infections.... It’s important to have a disease database to be able to detect spikes.” One participant recognized the functions without understanding the terminology, stating, “Public health has two umbrellas...an information center for things like a TB outbreak and a service component.” Another noted that without a public health surveillance system, “no one would track disease.” Yet discussion of surveillance and data collection revealed some frustration on the part of participants who believed efforts to collect health data superseded efforts to implement changes that would benefit the health of the community.

Although the *New York Times* article⁷ on new and re-emerging infectious diseases elicited favorable reactions about surveillance, many respondents also expressed skepticism about data collection. According to one community group participant, “We already know what the problems are. We don’t need to keep collecting all [these] data.” However, another participant stated, “It’s public health’s responsibility to develop a database that’s user friendly and get information out there where people can use it.”

Policy development. Discussions of policy development were most affected by participants’ relationships to local health departments and by anti-government sentiment. One participant in Detroit pointed to a prevailing anti-government attitude in that community: “If the county health department poses an idea that would be

good health policy, it's viewed as a bureaucratic move rather than good health."

Not surprisingly, participants called for more collaboration between community groups and health departments on policy and program development. In some groups, participants noted that public health professionals sometimes wrongly assume that scientific knowledge supersedes other considerations. Controversial topics—distributing condoms in schools, for example—can alienate important allies and draw attention away from other public health efforts. One participant offered a contrasting view, describing public health professionals as playing the unique role of being the community's conscience in struggling to advance an unpopular and controversial position (condom ads) out of concern for the public's well-being.

Assurance. As we expected, many participants found the term "assurance" confusing. As one participant asked, "Does it mean a guarantee?" Another participant commented, "The assurance function is necessary but maybe the word's not right. No matter what system we have, someone will fall through the cracks. We can't guarantee services to all people." Paradoxically, public health activities that fall within "assurance"—such as immunizations and prenatal care—are those most familiar to the participants. Many participants did appreciate that these services are important not only to the individuals receiving them but also to society at large. For example, one participant commented that, without health departments' attention to chronic diseases, "the cost of health care would rise." Similarly, another participant noted that "without the health department, 60% of our mothers would be getting questionable or no prenatal care."

Many people expressed some ambivalence about public health's regulatory functions. Although participants overwhelmingly appreciated the public health infrastructure's role in monitoring community health by setting and enforcing standards, several noted that their health department did not have the resources to perform this function adequately. As was true for reactions to the "Day in the Life" piece, the effects of an *absence* of regulation and monitoring were clear to participants: "There would be less interest in environmental issues and no one would do inspections," was one participant's scenario. Someone else pointed out that many people hold negative attitudes about regulation while at the same time expecting and even demanding the protection that certain inspections offer. A minority of participants expressed concern about public health agencies overstepping their regulatory mandates and "interfering"

rather than monitoring. One asked, "How far should we go in passing laws on behaviors that affect no one but me?" Another asked, "Should government tell me whether I can smoke or how much I should eat?"

We were encouraged to find a general understanding of the importance of health education and prevention. One participant saw "the health department as an educator for all segments of the population, and it is unfortunate we don't spend more money for that." Participants in several groups noted not only that public health agencies provide these services but also that public health is often unique in stressing certain aspects of health promotion. One participant commented, "Government understands prevention better than the private sector does. Blue Cross-Blue Shield will pay to have your toe amputated, but won't pay for education that prevents the need for it in the first place." While there was clear appreciation of the focus on prevention in public health, several comments suggest the importance of developing a clear way of communicating the economic benefits of prevention: "Can you attribute outcomes to this activity?" or "Cost avoidance vs. real dollars....People don't pay for something [prevention] they don't think they are getting."

Community leaders viewed public health concerns as community issues and suggested that responsibility should be more broadly shared among stakeholders such as nonprofit agencies, business and civic groups, schools, faith communities, and other organizations. One participant captured this view by saying, "We pick up the pieces. Government can't care for all...so there's a need for people like us." In several groups, churches were seen as a natural partner, as echoed in this statement: "Public health education must start with churches." Health departments were viewed as catalysts, guiding and coordinating the efforts of other community groups. For example, participants in one group saw violence prevention as a community concern that unites numerous disciplines and organizational interests but one for which health departments are ideally suited to take the lead in shaping public policy.

MARKETING PUBLIC HEALTH

The need to educate the public and elected officials was strikingly obvious from the focus groups. Participants in all groups reported a lack of comprehensive information on public health—"a vacuum," in the words of one legislator. One participant suggested "a public education campaign to talk about what public health is," and another said, "Public health needs a consumer education

campaign. People are blasé, complacent, unconcerned about infectious disease.”

A critical theme expressed by public officials was that public health did not figure high on their agenda because there was no public pressure to put it there. One legislator summed up this view: “Constituents aren’t crying for public health, so you don’t feel like you’re letting anyone down by not supporting it.” One legislator commented, “They [public health professionals] are their own worst enemy because they don’t publicize what they do.”

Public officials voiced two seemingly disparate views on public health advocacy. On the one hand, some said they became numb after massive information overload from advocacy groups, and some expressed cynicism about “cooked” statistics and cost-benefit data twisted to support the views of the advocate. On the other hand, several legislators reported they did not get the same amount or quality of information from public health professionals that they received from other lobbying groups. In one focus group, legislators suggested more involvement from researchers in the field who could contribute to legislators’ understanding of public health issues: “We should hear more from people doing research on public health issues—researchers without direct financial or special interests.” Health departments can do more to bolster their case by serving as “resident experts” to legislators, some noted. A related theme was that relationships with public officials and other decision makers had to be built over time, forged through regular communication and common concerns.

Media representatives said they were not familiar with the broad scope of public health and thus were more inclined to cover health crises (such as AIDS or disease outbreaks) or perennial “public interest” features (such as “flu” shots). Community representatives noted that the media sets the public policy agenda about public health but often squanders that opportunity by an overemphasis on “disease-of-the-month” stories. One media participant

suggested that “[the media] must be held responsible since deregulation took away the obligation to do community service,” while another suggested that to enhance media involvement in promotion of public health, one must “go to the powers-that-be in TV stations.”

The focus groups provided a rich source of perceptions on which various marketing messages can be built. Among the positive themes that surfaced during the discussions were the following: public health works; prevention works; public health protects you and your family; within the health care system, only public health is responsible for your community’s health; public health is always there for you; public health is indispensable; and, public health is a network of essential services that work together to keep us healthy and safe.

Local health departments can use these concepts to highlight the message that public health is more than a few specific services that serve poor people—it is an infrastructure of overlapping services essential to the health of the entire public. Especially in the uncertain climate created by the spread of managed care, reinforcing the role that public health services play as guardian of the public’s health is critical. Equally important is the message that without public health, our quality of life would be palpably worse as we lose confidence in the safety of our food, water, and environment.

While this study confirmed the perceptions of many public health professionals that the full scope of public health is invisible and unrecognized, it also suggests that we can stimulate appreciation and understanding of public health functions and services. Our challenge is to be proactive in our marketing efforts, to remind the nation how essential public health activities are to the nation’s health.

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