ISSUE REPORT

Ready or Not?

Protecting the Public's Health in the Age of Bioterrorism

THE TRAGEDIES OF SEPTEMBER 11, 2001 AND THE SUBSEQUENT ANTHRAX ATTACKS PROMPTED AN UNPRECEDENTED FEDERAL INVESTMENT IN STATE AND LOCAL HEALTH AGENCIES. **TRUST FOR AMERICA'S HEALTH** ASKED THE QUESTION: TWO YEARS AND ALMOST $2 BILLION LATER, ARE WE BETTER PREPARED TO RESPOND TO PUBLIC HEALTH EMERGENCIES? THIS REPORT OFFERS THE ANSWER IN THE FORM OF A STATE-BY-STATE ASSESSMENT OF IMPROVEMENTS TO THE PUBLIC HEALTH SYSTEM AND REMAINING VULNERABILITIES.

DECEMBER 2003

Trust for America's Health
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Introduction

TWO YEARS AND NEARLY $2 BILLION LATER, IS THE NATION BETTER PREPARED?

The September 11, 2001 tragedies and subsequent anthrax attacks made the nation aware that the public health system is ill-prepared to manage a large-scale emergency. Since then, America's public health system has continued to receive unprecedented attention with the threat of bioterrorism combined with high-profile natural threats like severe acute respiratory syndrome (SARS) and West Nile virus. The U.S. Congress responded by appropriating $1.8 billion to help revitalize America's public health system.[1]

This report examines whether or not -- two years and nearly $2 billion later -- America's public health system is better prepared to respond to public health emergencies. It assesses improvements and areas of ongoing vulnerability and makes specific recommendations to better protect the public's health.

America's public health system is not a single entity, but rather a loosely affiliated network of federal, state and local health agencies. These agencies largely define the quality of the nation's response to a public health crisis. They provide both initial front-line defenses and ongoing management of man-made and naturally occurring health threats.

As U.S. Senate Majority Leader Bill Frist, MD, has noted, "over the past two decades, the [nation's public health] infrastructure has greatly deteriorated."[2] A 1996 study by the Center for Studying Health System Change found that decreases in public spending during the 1990s directly affected the quality, delivery and organization of public health services.[3]

Since 9/11, the federal government has dramatically increased its spending on state and local public health infrastructure, increasing the $67 million[4] spent in FY 2001 to $940 million for FY 2002. This funding has largely been in the form of "cooperative agreements" administered by the Centers for Disease Control and Prevention (CDC) and awarded to the states.

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1 The U.S. Congress provided the Centers for Disease Control and Prevention (CDC) with $940 million in FY 2002 and $870 million in FY 2003 to support state and local public health preparedness. Congress also provided the Health Resources and Services Administration (HRSA) with $124.5 million in FY 2002 and $498 million in FY 2003 to enhance the preparedness of hospitals, clinics and other health care facilities. See Appendix B for a breakdown of federal funds distributed to states. This study focuses on the FY 2002 funds distributed to states through CDC cooperative agreements, not the HRSA aspects of the funding.

2 Frist, Bill, MD., "Public Health & National Security: The Federal Role," Health Affairs, Volume 21, Number 6. November/December 2002: 119.

3 Grantmakers in Health, "Strengthening the Public Health System for a Healthier Future," Issue Brief Number 17, February 2003.

4 "Bioterrorism: Legislation to Improve Public Health Preparedness and Response Capacity," Congressional Research Service, The Library of Congress, Washington, DC. Updated May 8, 2002.

As a requirement of its preparedness awards, CDC has instructed all states to develop a common set of "critical" capacities. States have been advised to apportion their federal funds to preparedness planning, surveillance and epidemiological capacity, laboratory capacity, information technology, communications and training.[5] CDC is now in the process of assessing what each state has accomplished with its federal funding.[6]

Numerous evaluations of the country's overall health defenses have found serious deficiencies in the fundamental and underlying infrastructure. The lack of investment in core programs has resulted in deficiencies in workforce, communications systems, laboratories and health tracking capabilities. Together, all of these public health functions are essential to an effective response in the event of an emergency.

- CDC's 2001 report, Public Health Infrastructure -- A Status Report, stated that the current U.S. public health infrastructure "is still structurally weak in nearly every area."[7]
- A 2003 report by the Institute of Medicine on the public health infrastructure found:
  - "vulnerable and outdated health information systems and technologies;
  - an inadequately trained public health workforce;
  - antiquated laboratory capacity;
  - a lack of real-time surveillance and epidemiological systems;
  - ineffective and fragmented communications networks;
  - incomplete domestic preparedness and emergency response capabilities; and
  - communities without access to essential public health services.

  These problems leave the nation's health vulnerable -- and not only to exotic germs and bioterrorism."[8]
- The U.S. General Accounting Office (GAO) studied local and state bioterrorism preparedness in 2003 and found deficiencies in capacity, communication and coordination elements essential to preparedness and response, including workforce shortages, inadequacies in disease surveillance and laboratories and a lack of regional coordination and compatible communications systems. While some of these problems, such as coordination and communication, are being addressed, others, such as infrastructure and workforce issues, are more resource-intensive and thus more difficult to address.[9]

5 "State Emergency Preparedness and Response Inventory," Centers for Disease Control and Prevention, http://www.phppo.cdc.gov/od/inventory/docs/State%20Inventory%20version%201_1_FINAL.pdf

6 "CDC Develops Bioterror Scenarios To Evaluate Preparedness Indicators," Washington Fax. 19 November 2003.

7 Public Health's Infrastructure - A Status Report. Atlanta, Georgia: Centers for Disease Control and Prevention. 2001.

8 The Future of the Public's Health in the 21st Century. Washington, DC: Institute of Medicine. 2003.

9 State and Local Bioterrorism Preparedness. GAO-03-373. Washington DC: U.S. General Accounting Office. 2003.

There has not been, however, a similar evaluation of individual state preparedness levels in the post-9/11 and anthrax environment. Such an analysis is needed to accurately determine the country's level of preparedness, because state and local agencies are responsible for managing most emergency first response activities.

This report illustrates areas of progress, identifies where improvements need to be made and explains how to understand the difference in capabilities among the states, which must be able to work together in times of emergency. The analysis considers an "all-hazards" assessment of the states' abilities to respond to the full spectrum of possible public health emergencies, as most of the same resources and capabilities would be necessary to respond to terrorist threats, accidents or threats posed by nature.

PUBLIC HEALTH SECURITY AND BIOTERRORISM RESPONSE ACT OF 2002

In the wake of 9/11 and the anthrax attacks, Congress enacted legislation that provided guidance to public health officials at all levels -- local, state and federal -- and cooperative agreement funding for bioterrorism and other public health emergency preparedness and response activities.

CDC administers the funding, which has been awarded to all 50 states and Puerto Rico. Four large local governments -- New York, Washington, D.C., Chicago, and Los Angeles -- also received money. (For a list of states with their funding amounts, see the table in Appendix B, "Bioterrorism Funding By Source and Year"). Funding is based partly on each state's population. State and local governments can use the funds for several activities including:

- Developing plans for responding to bioterrorism and other public health emergencies;
- Purchasing or upgrading equipment, supplies, pharmaceuticals or other items to enhance preparedness and response;
- Conducting exercises to test public health emergency response capabilities and timeliness; and
- Improving surveillance, detection and response activities to prepare for biological attacks, including training personnel in the use of early warning and surveillance networks to provide early detection of biological attacks.

Public Health Preparedness:
AN UNSETTLING PICTURE

The federal investment in public health preparedness that followed the World Trade Center and Pentagon and anthrax attacks of 2001 has led to a perception that America's long-neglected public health system is undergoing rapid and substantial improvements. Trust for America's Health (TFAH) found a more complicated and, at times, unsettling picture.

In order to assess states' public health emergency preparedness, TFAH worked with an advisory committee of state and local officials and public health experts to select a series of 10 key indicators, which reflect the fundamental capabilities every state should have. Collectively, these indicators provide a snapshot of improvements that have been made and ways in which the public health system is still vulnerable.

The indicators do not present a full measure of preparedness, but they do represent a first step toward providing the level of accountability and transparency that should be expected of publicly funded programs, particularly those that allow communities to understand what has been done and what remains to be done to improve homeland security.

Federal officials deserve credit for moving quickly to inject new money into public health agencies. With the help of these funds, many state and local agencies have developed preliminary preparedness plans, upgraded laboratories, hired and trained additional laboratory personnel and improved communication capabilities with their public health partners at all levels.

However, the study demonstrates that while states have made important advances in certain critical preparedness functions, many essential improvements have not yet been achieved. The indicators, while pointing out progress, also reveal that state public health agencies are facing fundamental, structural problems that threaten the nation's ability to respond to a large-scale public health emergency.

PUBLIC HEALTH POST-9/11

PROGRESS

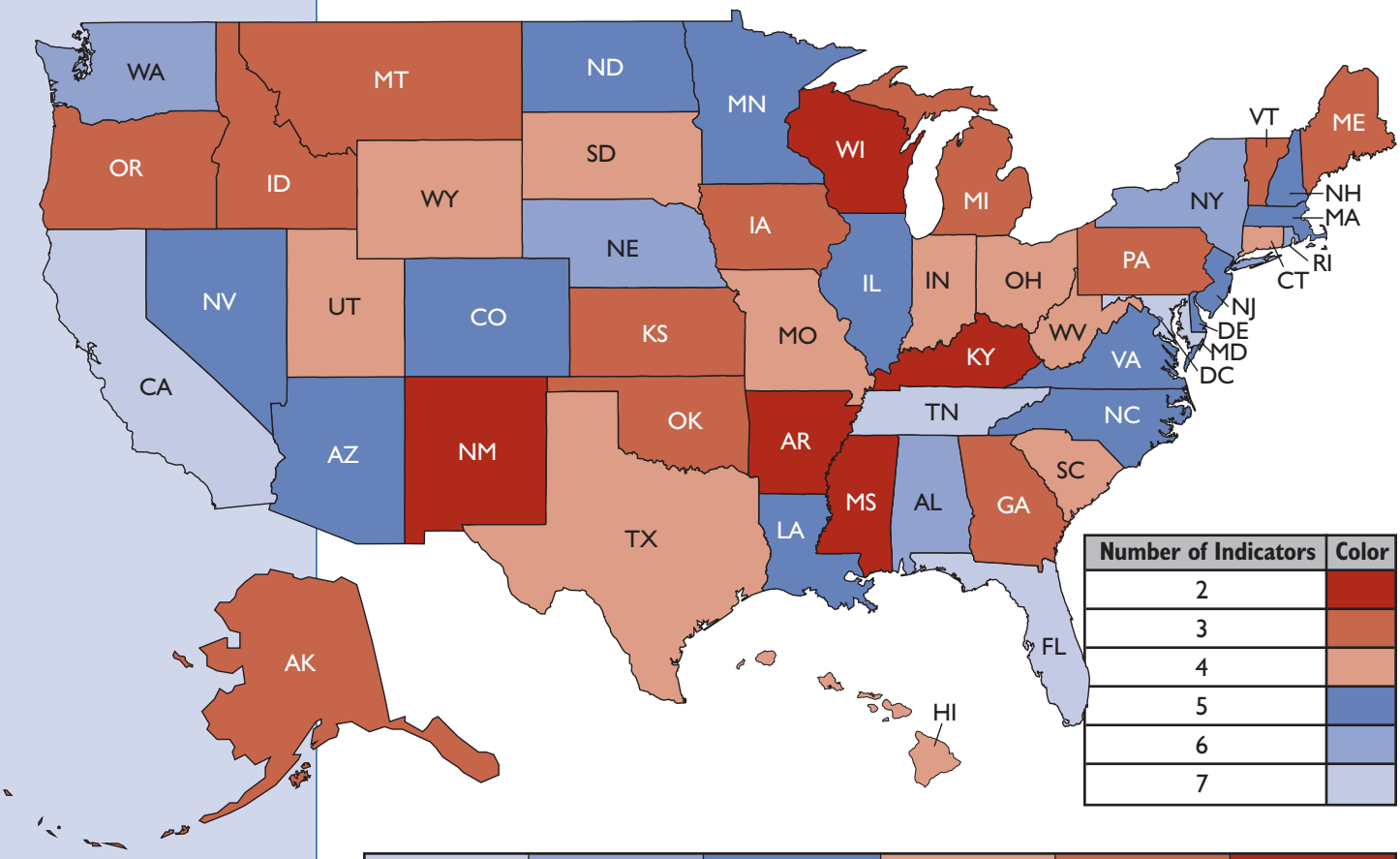
- Initial Bioterrorism Planning Documents Complete
- Labs Show Some Improvements
- Communications Upgrade for Most of Nation

CONCERNS

- Budgets Falling
- Federal Aid Unspent
- Unprepared for Stockpile
- Locals Often Left Out
- Not Ready for Natural or Other Threats
- Workforce Crisis

State-by-State Preparedness Indicator Scores

Each state received a score based on a scale of the 10 key public health indicators that TFAH developed with the assistance of its advisory committee. A state received one point for achieving an indicator, or zero points if it did not achieve the indicator. Zero was the lowest possible score, and 10 was the highest. The scores provide a picture of each state's and D.C.'s preparedness to handle a public health emergency.



7	6	5	4	3	2
California	Alabama	Arizona	Connecticut	Alaska	Arkansas
Florida	Nebraska	Colorado	Hawaii	Georgia	Kentucky
Maryland	New York	Delaware	Indiana	D.C.	Mississippi
Tennessee	Rhode Island	Illinois	Missouri	Idaho	New Mexico
	Washington	Louisiana	Ohio	Iowa	Wisconsin
		Massachusetts	South Carolina	Kansas	
		Minnesota	South Dakota	Maine	
		Nevada	Texas	Michigan	
		New Hampshire	Utah	Montana	
		New Jersey	West Virginia	Oklahoma	
		North Carolina	Wyoming	Oregon	
		North Dakota		Pennsylvania	
		Virginia		Vermont	

California, Florida, Maryland and Tennessee received the highest scores, achieving seven out of the possible 10 indicators. With two out of 10, Arkansas, Kentucky, Mississippi, New Mexico and Wisconsin had the lowest scores. More than 70 percent of the states received scores of three, four or five.

The fact that the majority of states have scores in the lower range depicts a trend: while states have achieved piecemeal progress, the full-scale effort to comprehensively fix the nation's public health system is falling short.

The scores indicate that, despite the surge in federal funds, states are only modestly more prepared to respond to health emergencies than they were prior to 9/11. Overall, the preparedness effort has been severely compromised by the impact of state budget crises, the lack of priority placed on addressing underlying systemic problems and the failure to eliminate bureaucratic obstacles.

STATE PREPAREDNESS SCORES

	Funding			Preparedness					Double Duty		
States	**1** Spent or obligated at least 90% of FY 2002 federal funds	**2** Passed on at least 50% of federal funds to local health departments	**3** State spending on public health increased or was maintained	**4** Sufficient workers to distribute Strategic National Stockpile supplies	**5** Has at least one BT Lab (Biosafety Level-3 Lab)	**6** Has enough BT Labs to handle a public health emergency	**7** No more than 3 counties without emergency alert capability	**8** Has initial BT Plan	**9** Has pandemic flu plan	**10** State-specific information about SARS was available during crisis	**Total / Score**
Alabama	✓		✓		✓	✓	✓	✓			6
Alaska	✓				✓			✓			3
Arizona		✓			✓		✓	✓	✓		5
Arkansas							✓	✓			2
California	✓	✓	✓		✓			✓	✓	✓	7
Colorado	✓	✓	✓		✓			✓			5
Connecticut					✓		✓	✓		✓	4
Delaware	✓	✓			✓		✓	✓			5
District of Columbia		✓					✓	✓			3
Florida	✓	✓		✓	✓		✓	✓	✓		7
Georgia					✓		✓	✓			3
Hawaii			✓				✓	✓		✓	4
Idaho					✓		✓	✓			3
Illinois	✓	✓		✓	✓			✓			5
Indiana			✓		✓			✓	✓		4
Iowa	✓				✓			✓			3
Kansas	✓				✓			✓			3
Kentucky							✓	✓			2
Louisiana	✓		✓		✓		✓	✓			5
Maine	✓				✓			✓			3
Maryland	✓		✓		✓		✓	✓	✓	✓	7
Massachusetts		✓			✓			✓	✓	✓	5
Michigan	✓				✓			✓			3
Minnesota					✓	✓	✓	✓	✓		5
Mississippi					✓			✓			2
Missouri	✓						✓	✓	✓		4
Montana					✓	✓		✓			3
Nebraska	✓	✓	✓		✓			✓		✓	6
Nevada		✓	✓		✓		✓	✓			5
New Hampshire			✓		✓			✓	✓	✓	5
New Jersey		✓	✓				✓	✓	✓		5
New Mexico							✓	✓			2
New York	✓	✓	✓		✓		✓	✓			6
North Carolina	✓				✓		✓	✓		✓	5
North Dakota	✓				✓		✓	✓		✓	5
Ohio			✓		✓	✓		✓			4
Oklahoma	✓				✓			✓			3
Oregon		✓					✓	✓			3
Pennsylvania					✓		✓	✓			3
Rhode Island	✓	✓	✓		✓		✓	✓			6
South Carolina					✓		✓	✓	✓		4
South Dakota	✓	✓			✓			✓			4
Tennessee	✓		✓		✓		✓	✓	✓	✓	7
Texas		✓	✓		✓			✓			4
Utah	✓				✓	✓		✓			4
Vermont					✓		✓	✓			3
Virginia					✓	✓	✓	✓	✓		5
Washington	✓	✓			✓		✓	✓		✓	6
West Virginia		✓	✓		✓			✓			4
Wisconsin					✓			✓			2
Wyoming			✓		✓		✓	✓			4
	24	18	18	2	43	6	30	51	13	11	

TFAH Examines Public Health Preparedness Indicators State By State

The 10 indicators examined for this study are divided into three general categories: funding, public health infrastructure preparedness and "double duty" preparedness. "Double duty" refers to the ability to leverage resources to respond to both naturally occurring and terrorist threats. This is also known as an "all-hazards" approach to public health.

A. FUNDING: DESPITE THE FEDERAL INVESTMENT, PUBLIC HEALTH BUDGETS ARE DECLINING

TFAH examined three indicators to help gauge the level of funding and support public health programs are receiving at the state level.

Funding for state public health programs is impacted by both federal bioterrorism funding and state budget allocations. Because public health programs rely heavily on state and local appropriations for support, recent spending cuts due to budget shortfalls may have a major impact on state public health preparedness.[10]

A precise assessment of states' efforts to spend the federal preparedness funds is difficult, but TFAH and its advisory committee selected indicators to give some measure of performance.

Despite best efforts, many states face challenges in expending funds quickly, efficiently and effectively. A majority of states are struggling with severe budget crises along with hiring freezes, skilled worker shortages and procurement problems.

The infusion of federal funds is vital for revitalizing public health, but because of the severe state fiscal problems and decades of underinvestment in state and local health agencies, addressing these problems will take years and continued financial support from the federal government.

FUNDING INDICATORS	Number of States Meeting the Indicator
1. As of August 31, 2003, the state had spent or obligated 90 percent or more of its FY 2002 federal bioterror preparedness funds.	**24**
2. The state, unless it operates the local health departments, has provided at least 50 percent of its federal capacity-building funds directly to local health departments.	**17 and D.C.**
3. State appropriations for public health services have not decreased for state fiscal years 2002 to 2003.	**18**

10 "How Are States Responding to Fiscal Stress?" March 2003, The Urban Institute. http://www.urban.org/url.cfm?ID=310658

Indicator 1.

TFAH FINDING: MUCH OF THE FEDERAL BIOTERRORISM AID IS WRAPPED UP IN RED TAPE, WITH ONLY HALF OF STATES HAVING SPENT 90 PERCENT OR MORE OF FY 2002 FEDERAL AID.

24 states spent or obligated 90% or more of their FY 2002 federal bioterror preparedness funding (1 point)	**26 states and D.C. did NOT spend or obligate 90% or more of their FY 2002 federal bioterror preparedness funding (0 points)**
Alabama, Alaska, California, Colorado, Delaware, Florida, Illinois, Iowa, Kansas, Louisiana, Maine, Maryland, Michigan, Missouri, Nebraska, New York, North Carolina, North Dakota, Oklahoma, Rhode Island, South Dakota,Tennessee, Utah, Washington	Arizona, Arkansas, Connecticut, D.C., Georgia, Hawaii, Idaho, Indiana, Kentucky, Massachusetts, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New Mexico, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Vermont, Virginia, West Virginia, Wisconsin, Wyoming

After 9/11, Congress responded quickly by passing the Public Health Security and Bioterrorism Preparedness Act of 2002, co-sponsored by Senator Bill Frist, MD, and Senator Edward Kennedy, providing funding to states for improving public health preparedness. However, TFAH found that many states have been slow to utilize these funds.

In January of 2002, CDC began distributing $915 million in funds to all 50 states, territories and four major metropolitan areas (Chicago, Los Angeles, New York and D.C.) to boost response capabilities (See Appendix B for FY 2002 and 2003 funding levels for each state.) Based on a survey by the Association of State and Territorial Health Officials (ASTHO) in August 2003, almost 18 months after the funds were first made available, only 24 states had currently spent or obligated (mostly through contracts) 90 percent of the FY02 federal bioterrorism funds they had received.[11] Since this was a new source of money, many states first developed spending plans for the funds, which are now in place to inform and help streamline allocations in future years.

Earlier in 2003, an additional $870 million in capacity-building funds was provided to the states.[12] No data is available yet regarding how much of that money has been spent or obligated. Current legislation pending in Congress, "Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act" (HR 2660 and S1356), would provide states with an additional $940 million for FY 2004.

Desired public health improvements are negatively impacted if funding is channeled inefficiently. The GAO has noted that public health officials often face procurement problems, hiring freezes and a shortage of workers with necessary skills.[13]

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11 See: http://www.astho.org/pubs/StatePreparednessFundingStatus-August312003.pdf The survey was last updated in October 2003 and included data on spent and obligated state preparedness funds as of August 31, 2003. ASTHO defined "spent" to mean money "already disbursed for preparedness activities" and "obligated" as money "the state has actually contracted to spend" on preparedness activities. DC did not respond.

12 "HHS Provides $1.4 billion to States and Hospitals for Terrorism Preparedness," U.S. Department of Health and Human Services, September 2, 2003. http://www.hhs.gov/news/press/2003pres/20030902.html

13 "Bioterrorism: Preparedness Varied Across State and Local Jurisdictions," United States General Accounting Office, April 2003, GAO-03-373, http://www.gao.gov/new.items/d03373.pdf

Indicator 2.

TFAH FINDING: STATE, CITY AND LOCAL HEALTH DEPARTMENTS OFTEN DISAGREE ABOUT HOW RESOURCES SHOULD BE DISTRIBUTED. ONLY ONE-THIRD OF STATES HAVE PASSED ALONG AT LEAST 50 PERCENT OF FUNDS TO LOCAL HEALTH DEPARTMENTS.

17 states and D.C. provided at least 50% of federal capacity-building funds directly to local health departments (1 point)	33 states did NOT provide at least 50% of federal capacity-building funds directly to local health departments (0 points)
Arizona, California, Colorado, Delaware, D.C., Florida, Illinois, Massachusetts, Nebraska, Nevada, New Jersey, New York, Oregon, Rhode Island, South Dakota, Texas, Washington, West Virginia	Alabama, Alaska, Arkansas, Connecticut, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Utah, Vermont, Virginia, Wisconsin, Wyoming

So far, only 17 states and D.C. have provided at least 50 percent of their federal capacity-building money directly to local health departments. Many states claim to have passed along more money indirectly by using their funds to develop services or technology that benefit both the local and the state health departments.[14]

TFAH's analysis is based on information provided by states to the U.S. Department of Health and Human Services (HHS), which responded to a request from Congress to delineate how much of the FY 2002 preparedness funds were shared by the states with local health departments. Because D.C., Florida, West Virginia, South Dakota and Delaware actually provide local public health functions, they were considered as having delivered funds to local agencies.[15]

State and local health officials often disagree on the percentage of funds that should be allocated to local agencies. TFAH used a 50 percent figure as the minimum threshold for this indicator, based on input from the advisory committee.[16] Proposed Congressional legislation requires states to pass on 80 percent of funds to local governments.[17]

Notably, a recent U.S. Conference of Mayors report found that in almost half of the states, major cities feel shut out of the state planning process for public health preparedness and claim state priorities do not reflect local concerns.[18]

Some officials express concern that a measure based on state and local agreement of planning and fund allocation would be preferable, and that a measure based on performance during a rigorous emergency drill would be ideal. For this report, TFAH relied on information that was available as provided by the states.

14 Report to Congress, FY 2002 Bioterrorism Preparedness Funding to Local Public Health Agencies, U.S. Department of Health and Human Services, June 13, 2003.

15 Ibid.

16 See Appendix A for a description of the sources and approach TFAH used for this indicator.

17 H.R. 3266 "The Faster and Smarter Funding for First Responders Act."

18 "First Mayors' Report to the Nation: Tracking Homeland Security Funds Sent to 50 State Governments," U.S. Conference of Mayors, September 17, 2003.

Indicator 3.

TFAH FINDING: STATE BUDGET CUTS THREATEN TO UNDERMINE BIOTERRORISM AND OTHER HEALTH CRISIS READINESS. NEARLY TWO-THIRDS OF STATES CUT FUNDS TO PUBLIC HEALTH PROGRAMS FROM FISCAL YEAR 2002 TO 2003.

18 states either increased or maintained level funding for public health services (1 point)	**32 states and D.C. decreased funding for public health services (0 points)**
Alabama, California, Colorado, Hawaii, Indiana, Louisiana, Maryland, Nebraska, Nevada, New Hampshire, New Jersey, New York, Ohio, Rhode Island, Tennessee, Texas, West Virginia, Wyoming	Alaska, Arizona, Arkansas, Connecticut, D.C., Delaware, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, Virginia, Washington, Wisconsin

The analysis for this indicator is based on a survey of state public health agencies conducted by the Health Policy Tracking Service of the National Conference of State Legislatures (NCSL) for TFAH from August through October 2003. TFAH's analysis focused on appropriations for the agency, department or division in charge of public health services for each state, primarily for state fiscal years 2002 and 2003. While a comparison of state funding has limitations, including the lack of a uniform definition of public health, it does provide a measure of the states' financial commitment to public health.[19]

TFAH found that 32 states and D.C. reduced their budgets for public health from their 2002 to 2003 fiscal years. The states with the largest cuts were Michigan (24 percent), Massachusetts (23 percent) and Montana (19 percent) (See Appendix C for a full list of states.)

The figure on page13 shows the number of states that cut their public health budgets by certain percentages from their 2002 to 2003 fiscal years. Twenty-seven states reduced public health spending in the range of one to 10 percent, and another four decreased funding from 11 to 20 percent. Two other states cut public health budgets from 21 to 30 percent (Michigan and Massachusetts).

Collectively, states faced deficits of $49.1 billion when they developed their budgets for fiscal year 2003.[20] As the year progressed, states reported another $17.5 billion shortfall.[21] The budget outlook for FY 2004 is even more grim, with states facing a spending gap estimated at $78 billion.[22] Despite the widespread budget crises, this analysis shows that 18 states were able to either essentially maintain or increase their funding of public health programs from their fiscal year 2002 to 2003.[23]

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19 See Appendix A for a description of the approach TFAH used to analyze state public health budgets.

20 "State Budget Gaps Growing at Alarming Rate According to New NCSL National Fiscal Report," National Conference of State Legislatures. February 4, 2003. http://www.ncsl.org/programs/press/2003/pr030204.htm.

21 Ibid.

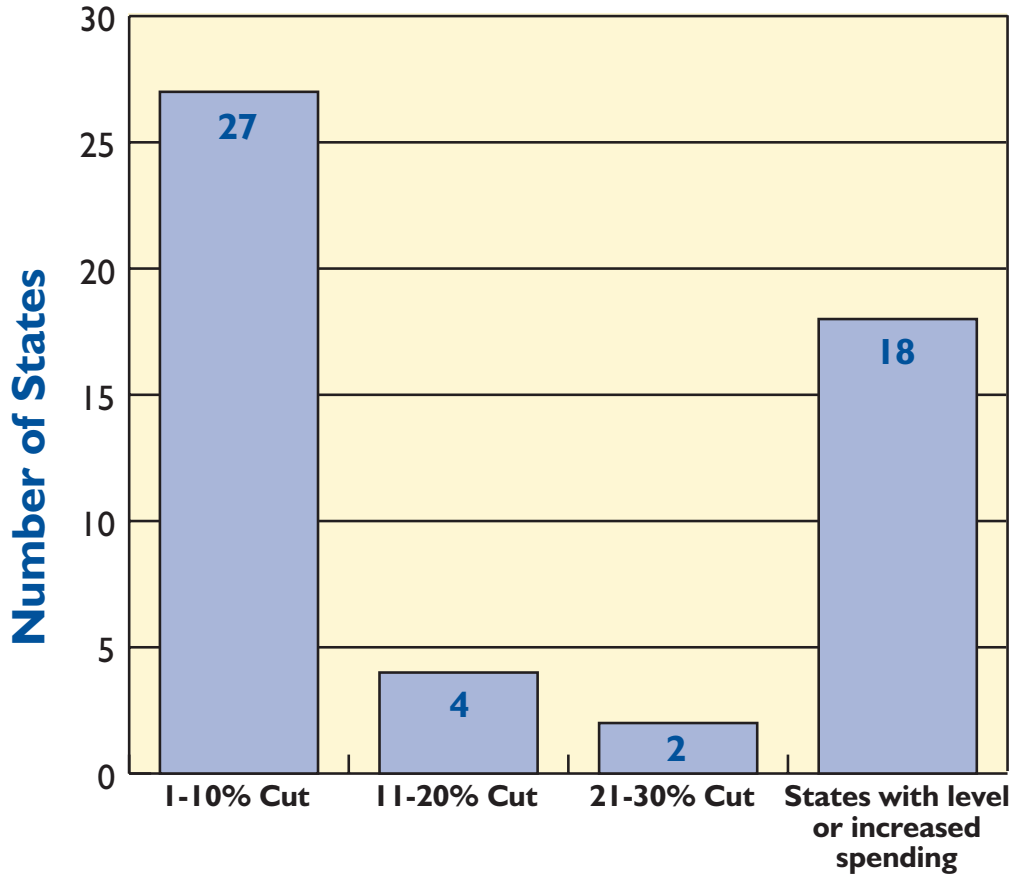
22 "A Brief Overview Of State Fiscal Conditions And The Effects Of Federal Policies On State Budgets," Center on Budget and Policy Priorities, October 23, 2003, http://www.cbpp.org/10-22-03sfp4.htm.

23 Early forecasts indicate that additional states will be experiencing cuts in the FY 2004 cycles, such as Alabama (see report box on page 14, "Taking Casualties on the Frontlines of Public Health Protection.")

As this indicator demonstrates, many state health departments are losing resources, and, therefore, capacity. Yet health departments are being called upon to expand their traditional scope to include preventing and preparing for bioterrorism, as well as responding to emerging infectious diseases, such as West Nile virus. The technical capabilities of many state and local health departments are being stretched to the point that emergency response and disease prevention services are in jeopardy. Although the states have received $1.8 billion in federal preparedness funds, many have cut their own spending on public health services. Consequently, there is evidence that the impact of the federal funds to help states has been diluted.

A February 2003 analysis by the Association of Public Health Laboratories (APHL) found that 30 states have cut funds for labs. This will directly diminish the states' abilities to manage a wide range of health threats, including bioterrorism attacks, food poisoning, infectious disease outbreaks and chronic disease.[24]

Changes in States' Spending on Public Health For Fiscal Years 2002 to 2003



[24] 50 state survey by the Association of Public Health Laboratories conducted in February 2003.

Taking Casualties on the Frontlines of Public Health Protection

- State public health laboratories in California could lose between 16 and 20 percent of their state funding in the coming fiscal year. Budget cuts also are hurting local public health labs. Officials are considering closing the lab that serves the city of Oakland and contracting services with other counties. According to a top state lab official, "we're going to be in dire straits." [25]

- Funding cuts are expected to force the Alabama Department of Public Health to lay off 250 people by the end of 2003, close regional labs, and curtail its flu vaccination purchase and free flu shot programs. [26]

- In Massachusetts, though HIV and AIDS cases are rising among teens, young adults and people over 50, over the last two years, state funding for AIDS prevention and counseling has dropped almost 40 percent, from $51 million to $32 million. Said one state AIDS prevention specialist: "The fewer resources we have, the more likely we will have new infections." [27]

- In 2002, the Larimer County Department of Health and Environment in Northern Colorado received $100,000 in federal public health preparedness money but lost $700,000 due to state cuts, forcing it to reduce staff and a range of services throughout the department. In the summer of 2003, this weakened agency faced a monumental challenge: more than 500 county residents were infected with West Nile Virus. Lack of resources delayed the county's ability to fight back.[28]

- This past September, the Georgia Division of Public Health was facing a loss of 25 percent of its state funding -- a $42 million cut -- as state officials struggled with ways to close a widening budget gap. "It will be devastating to our infrastructure," said Lynn Feldman, president of the Georgia Public Health Association.[29]

- Last year, federal preparedness funds brought $45,000 to Connecticut's North Central Health Department. At the same time, state cuts took $48,000 from the department. Local officials indicated that as further cuts come down the line, the county expects to cut services aimed at TB prevention, lead poisoning and food-borne diseases. [30]

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25 "Red Tape vs. Bioterror Response," Oakland Tribune, September 8, 2003.

26 "Cuts in Department of Public Health Mean Fewer Inspections," October 8, 2003, WAFF.Com, Huntsville, Alabama.

27 "Increase Reported in Youth HIV Cases," The Standard Times, June 25, 2003. See also: "AIDS Funding Cuts May Boost Deaths, "The Herald News," July 8, 2003.

28 "West Nile Battle Gets a Boost," The Coloradoan, August 22. 2003; "Worst is Over as State Tallies Up Outbreak's Toll," "The Coloradoan," October 7, 2003.

29 "State Health Network Faces Cuts," Augusta Chronicle, September 4, 2003.

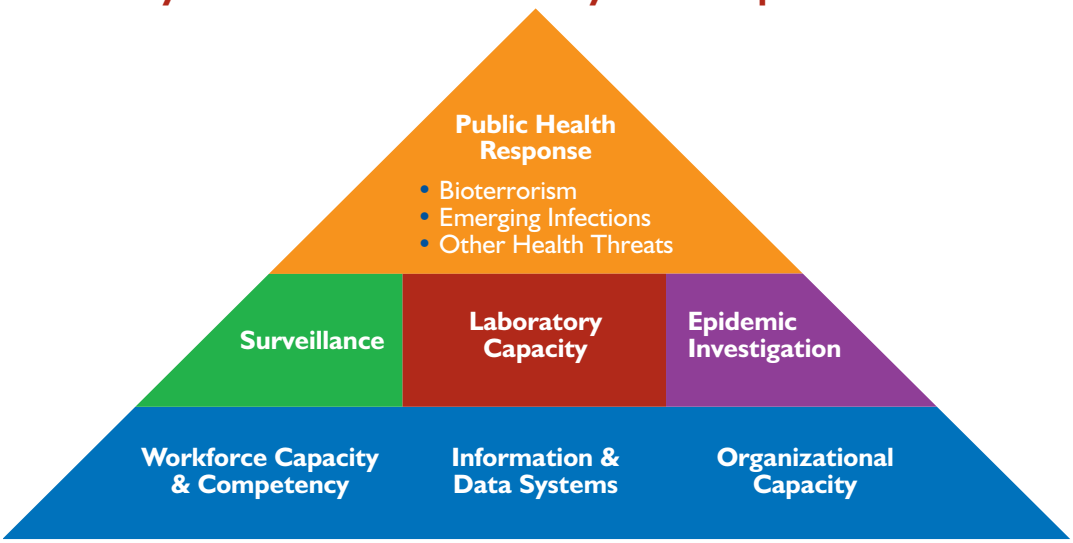
30 Donald Weekes, Finance Chair, North Central District Health Department, Connecticut. http://www.naccho.org/advocacydoc717.cfm

B. CORE INFRASTRUCTURE PREPAREDNESS: DESPITE INCREMENTAL IMPROVEMENTS, STILL WEAK IN NEARLY EVERY WAY

"Rebuild America's public health infrastructure" has been the rallying cry of the post-9/11 public health preparedness effort. Infrastructure assets include a trained workforce, laboratories, stockpiles, communications systems and equipment necessary to allow public health agencies and officials to respond to an emergency in a prepared, coordinated and unified manner.

TFAH's analysis of infrastructure preparedness shows a mix of successes and failures. Perhaps equally important, the analysis also highlights the extreme difficulty of obtaining the type of up-to-date and accurate data necessary to assure accountability, such as the ability to track funds. This information is essential for maintaining an accountable, responsive and coordinated public health system.

Pyramid of Public Health System Preparedness



Source: Centers for Disease Control and Prevention

CORE INFRASTRUCTURE PREPAREDNESS INDICATORS	Number of States Meeting the Indicator
4. Workforce: The Department of Homeland Security (DHS) and CDC have determined that the state has assembled the appropriate staffing -- nurses, doctors, and pharmacists -- to receive and distribute an emergency "push package" from the Strategic National Stockpile, which contains 50 tons of pharmaceuticals, antidotes and medical supplies that must be dissembled and distributed throughout the state in the case of an emergency.	**2**
5. Laboratory Capacity: The state has at least one laboratory that is equipped to handle critical biological agents and has a Biosafety Level 3 (BSL-3) designation.	**43**
6. Laboratory Capacity: The state reports that it has sufficient BSL-3 laboratory facilities.	**6**
7. Communications Systems: The state has no more than three counties that have yet to establish continuous, high-speed connections to the national Health Alert Network (HAN).	**29 and D.C.**
8. Coordination and Planning: The state has a CDC-approved plan for developing and initiating a response plan for a bioterrorist attack or other public health emergency.	**50 and D.C.**

Indicator 4.

TFAH FINDING: THE PUBLIC HEALTH WORKFORCE IS ABOUT TO FACE A MAJOR CRISIS. ONLY TWO STATES ARE AT THE HIGHEST PREPAREDNESS LEVEL REQUIRED TO PROVIDE EMERGENCY VACCINES AND ANTIDOTES.

2 states, according to DHS and CDC, have assembled the appropriate staffing to receive and distribute medication and supplies from the Strategic National Stockpile (1 point)	**48 states and D.C., according to DHS and CDC, have NOT assembled the appropriate staffing to receive and distribute medication and supplies from the Strategic National Stockpile (0 points)**
Florida, Illinois	Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, D.C., Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

The new federal funding for public health preparedness has not resulted in a public health workforce fully equipped and trained to meet emerging and ongoing challenges.

Recent reports by the IOM indicate that the public health workforce is about to face a major crisis, one that was imminent long before 9/11 and the anthrax attacks. The IOM has noted that public health agencies are severely understaffed in the areas of public health nursing, environmental health specialists, health educators, epidemiologists and administrative personnel.[31] The public health system lacks the resources and funding to offer salaries that compete with the private sector and is not training workers rapidly enough to replace retiring professionals. As a result, "the majority of government public health workers have little or no training in public health."[32] A March 2003 survey by the Council of State and Territorial Epidemiologists (CSTE) echoed these staffing concerns, finding almost half of the epidemiologists in state health departments have no training in their area of specialty.[33]

In an April 2003 report on bioterrorism preparedness, the GAO noted that "staffing shortages are a major concern," and that the demands on the new emergency response planning activities often divert time from the "usual activities" of public health workforce staffers.[34]

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31 "The Future of Public Health in the 21st Century," Institute of Medicine, 2003, National Academies of Sciences Press, p. 159.

32 IBID, p. 5.

33 "Epidemiology Capacity Assessment," Council of State and Territorial Epidemiologists, March 2003. http://www.cste.org/pdffiles/ecacover1.pdf

34 "Bioterrorism: Preparedness Varied Across State and Local Jurisdictions," United States General Accounting Office, April 2003, GAO-03-373, http://www.gao.gov/new.items/d03373.pdf

Unfortunately, a more thorough analysis is difficult to achieve because little public information is available on the state-specific characteristics of the current status of the public health workforce. However, figures indicate that as of early 2002, there were 300 fewer state and territorial epidemiologists than there were in 1992 (approximately 1,400 versus 1,700).[35]

As part of the guidance that accompanied the state preparedness awards, HHS has recommended that there be one emergency response epidemiologist per 500,000 residents in a state. However, no government body or professional organization has offered a state-by-state or national assessment of whether states have achieved this standard, or whether the standard is even adequate. Given their budget problems, it is doubtful that many states have even returned to 1992 staffing levels for epidemiologists, a troubling impediment towards sufficient public health preparedness.

This indicator shows that these workforce shortages imperil readiness levels in the event of a public health crisis. According to information from the U.S. Department of Homeland Security (DHS) and CDC in March 2003, as well as a November 2003 review of the Web sites for all 50 states and D.C., **Florida and Illinois are the only states in the nation that would be prepared to deploy** the workforce needed to receive and distribute a shipment of medicines and medical supplies from the **Strategic National Stockpile,** should an emergency arise.[36]

However, a number of states are showing signs of progress. The DHS is now the lead agency in charge of administering the stockpile. DHS and CDC evaluate the states' stockpile distribution capabilities and assign them a preparedness rating of red, amber/yellow, and green, a grading system that incorporates pluses and minuses for rankings between red and green. A rating of red is the worst, while green is the best. (See chart below for the complete breakdown.)[37] During an 11-month period, from April 2002 to March 2003, 12 additional states reached the amber-plus status and five more reached the amber status. An October 2003 statement released by the Illinois Governor's office indicates that Illinois has now also received a green status designation.[38]

Strategic National Stockpile Preparedness Rating	Number of States in April 2002	Number of States in March 2003
Green	0	1[39]
Green minus	0	1
Amber plus	3	15
Amber	21	27
Amber minus	22	13
Red plus	6	1
Red	5	5
Uncertain	1	0

35 National Assessment of Epidemiologic Capacity, Council of State and Territorial Epidemiologists, March 2003.

36 CDC's assessment that only Florida was prepared was widely reported in the press. See http://www.kaisernetwork.org/daily_reports/rep_index.cfm?DR_ID=14408. An update on state Stockpile capabilities was provided earlier this year by the Department of Homeland Security. Though states were not identified, the Green category still contained only one state, which had been previously identified as Florida. See: http://ndms.umbc.edu/conference2003/Proceedings/conf63-1_Community%20Lessons%20Learned%20NPS_Quinn_files/frame.htm.

37 "The Strategic National Stockpile (SNS) Program" presentation, National Disaster Medical System Conference. Reno, NV. 2003. http://ndms.umbc.edu/conference2003/Proceedings/conf63-1_Community%20Lessons%20Learned%20NPS_Quinn_files/frame.htm

38 "Illinois first state to be awarded highest rating for bioterrorism preparedness." October 23, 2003. http://www.idph.state.il.us/public/press03/10.23.03b.htm

39 See notes 37 and 38.

Indicators 5 and 6.

TFAH FINDING: LABORATORY UPGRADING HAS PROGRESSED, BUT MUCH MORE NEEDS TO BE DONE. ONLY SIX STATES REPORT THAT THEY HAVE SUFFICIENT FACILITIES.

43 states have at least one laboratory that is equipped to handle critical biological agents and has a "Biosafety Level 3 (BSL-3) designation. (Indicator 5: 1 point)	**7 states and D.C. do NOT have at least one laboratory that is equipped to handle critical biological agents and has a "Biosafety Level 3 (BSL-3) designation. (Indicator 5: 0 points)**
Alabama, Alaska, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming	Arkansas, D.C., Hawaii, Kentucky, Missouri, New Jersey, New Mexico, Oregon

6 states report that they have sufficient BSL-3 laboratory facilities. (Indicator 6: 1 point)	**44 states and D.C. report that they do not have sufficient BSL-3 laboratory facilities. (Indicator 6: 0 points)**
Alabama, Minnesota, Montana, Ohio, Utah, Virginia	Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, D.C., Florida Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, West Virginia, Wisconsin, Wyoming

Public health laboratories have gained increased public attention in light of their crucial role in responding to recent threats, including the anthrax crisis and SARS. They are responsible for identifying both naturally occurring and man-made health threats, facilitating rapid treatment and preventing the spread of the harmful agents or germs.

A June 2003 study conducted by TFAH found that, despite efforts to improve the country's public health labs after 9/11, overall, the labs had inadequate staffing and training, obsolete facilities and equipment, and antiquated communications systems.[40]

40 "Public Health Laboratories: Unprepared and Overwhelmed," Trust for America's Health. June 2003.

The two public health laboratory indicators TFAH examined for this report further underscore that significant progress has been made, but there are still many more improvements that are needed in order for labs to be adequately prepared for the range of threats they are responsible for managing.

According to data from the APHL, 43 states now have at least one BSL-3-rated facility, which requires a level of equipment and staffing to be able to safely handle "infectious agents that may cause serious or potentially lethal disease as a result of exposure" via inhalation.[41] These upgrades demonstrate that some positive steps have been taken toward better laboratory preparedness.

While most states have at least one BSL-3 lab (43 states received a point for Indicator 5), only six report that this is sufficient capacity to meet current testing demands and any surge that would accompany an emergency (only six states received a point for Indicator 6). Additionally, most state laboratories cannot test for exposure to chemical weapons. The need for improved data exchange systems that allow for the high-speed, continuous and secure flow of information among state, local and federal health laboratories also needs to be addressed.

As an added complication, most state laboratory directors indicate that they are experiencing a decline in state appropriations, due to budget shortfalls, which could undermine the progress that has been achieved.[42]

Indicator 7.

TFAH FINDING: EMERGENCY COMMUNICATIONS NETWORK IS GREATLY IMPROVED, NOW ACTIVELY COVERING 89 PERCENT OF THE U.S. POPULATION.

29 states and D.C. have no more than three counties without continuous high-speed connections to the national Health Alert Network (HAN) (1 point)	**21 states have more than three counties without continuous high-speed connections to the national Health Alert Network (HAN) (0 points)**
Alabama, Arizona, Arkansas, Connecticut, Delaware, D.C., Florida, Georgia, Hawaii, Idaho, Kentucky, Louisiana, Maryland, Minnesota, Missouri, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, Washington, Wyoming	Alaska, California, Colorado, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Missouri, Nevada, New Hampshire, New Jersey, New York, Ohio, Oklahoma, South Dakota, Texas, Utah, West Virginia, Wisconsin

The ability of state, local and federal officials to quickly share information during a health crisis is an essential component of a well-prepared public health system. Almost all critiques of public health infrastructure both before and after the anthrax attacks have noted deficiencies in the area of communications. Delays in communicating information related to detection, exposures, diagnosis and treatment can be deadly.

41 "The 1, 2, 3's of Biosafety Levels," Jonathan Y. Richmond, Centers for Disease Control and Prevention.

42 Public Health Laboratory Issues in Brief: Bioterrorism Capacity. Washington, DC: Association of Public Health Laboratories. 2002.

One noticeable improvement is that almost all counties in the country, covering 89 percent of the U.S. population, are now linked to the CDC's Health Alert Network (HAN) via a continuous, high-speed Internet connection and have established broadcast capacity to support emergency communications. In 2001, far fewer counties, covering only 66 percent of the U.S. population, had this capacity, according to CDC. The HAN allows state and local health officials to rapidly share details about any current or pending threat, such as recent outbreaks of SARS and West Nile virus.

According to the latest CDC data, 29 states and D.C. reported three or fewer counties that had yet to establish a direct continuous, high-speed connection to the HAN. CDC defines high-speed and "continuous Internet connectivity" as always available and not dependent a dial-up modem service.

In addition to disease monitoring and identification, the HAN also allows local health departments to more easily participate in CDC distance learning programs for public health professionals, which have become an important part of the agency's commitment to assist in post-9/11 preparedness training activities.

The HAN has not been without its own set of problems. Even after the anthrax attacks pointed to the critical need for rapid communications, the effectiveness of the HAN continued to be compromised by a bureaucratic system under which alerts sent out from the CDC had to first pass through state health officials before they were sent on to local health departments.

Congress recently became aware of this glitch in the system. In its FY 2004 funding legislation for CDC, members of the Senate Appropriations Committee noted that they were "concerned about reports from localities, including large cities, participating in the HAN that they are not receiving all CDC-generated messages promptly because such messages are going only to their state agencies." The Senators urged CDC to make sure local health officials received the HAN alerts at the same time state officials receive them. [43]

According to a survey of several local health departments conducted by TFAH in the summer of 2003, most HAN alerts still had to pass through state officials. When asked whether health alerts came directly to the city from CDC, a Boston public health official responded, "No, but they should .... It should be a priority to have local health officials receive federal notices directly from the CDC." Asked whether the CDC alerts were at least passed along to the city once received by the state, the same official responded, "Sometimes." The lack of direct access to HAN alerts also was reported by key cities in Washington, Oregon, North Carolina, Nevada, Ohio, Alabama and Kansas.

The HAN does not include connectedness of physicians and hospitals.

[43] Senate Report 108-081, Department of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Bill, 2004.

Indicator 8.

TFAH FINDING: ALL STATES HAVE INITIAL BIOTERROR PLANS, BUT COORDINATION AND PLANNING PROGRESS IS NOT AS FAR ALONG AS IT INITIALLY APPEARS.

50 states and D.C. have a CDC-approved plan for developing and initiating a response plan for a bioterrorist attack or other public health emergency (1 point)	0 states do NOT have state a CDC-approved plan for developing and initiating a response plan for a bioterrorist attack or other public health emergency (0 points)
Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, D.C., Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming	

The post-9/11 process of rejuvenating state and local public health programs began with an emphasis on planning and coordination. CDC has made the disbursal of federal funds for capacity building contingent upon each state developing a detailed preparedness strategy in close consultation with local health officials.[44]

On September 11, 2003, HHS announced that all states and D.C. have in place bioterrorism preparedness and mass vaccination plans, based on 17 "critical benchmarks."[45] These plans, however, often consist only of an initial framework, rather than a specific action plan ready for emergency implementation.

Additionally, as part of their planning activities, states are required to demonstrate that both their preparedness strategies and federal fund expenditures are implemented in concurrence with local officials.[46]

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44 Bioterrorism Grants Fact Sheet, Department of Health and Human Services, June 6, 2002, http://www.hhs.gov/news/press/2002pres/20020606b.html

45 Fact Sheet: "PUBLIC HEALTH EMERGENCY PREPAREDNESS: Transforming America's Capacity to Respond," U.S. Department of Health and Human Services, September 11, 2003. http://www.hhs.gov/news/facts/bioprep.html

46 "Continuation Guidance for Cooperative Agreement on Public Health Preparedness and Response to Bioterrorism," May 2, 2003, Centers for Disease Control and Prevention. http://www.bt.cdc.gov/planning/continuationguidance/pdf/guidance_intro.pdf

C. "DOUBLE DUTY" PREPAREDNESS: CRITICAL NON-BIOTERRORISM PROGRAMS ARE AT-RISK

There was a widespread expectation among national health officials that the threat of terrorism and the impact of the anthrax attacks would spark improvements in each state's public health infrastructure. They expressed hope that these anticipated improvements would result in better preparedness for an array of health threats, not just those related to bioterrorism. For example, ASTHO observed that state bioterrorism preparedness activities could serve as excellent "scaffolding" for dealing with an outbreak of a particularly deadly strain of influenza.[47] Many state and local public health agencies also suggest that their bioterrorism preparedness efforts improved their response to the SARS outbreak.

Yet due to fiscal crises, many states are reducing their support for critical public health capabilities, such as those related to tracking and battling infectious and chronic diseases and improving maternal and child health. Promises after 9/11 that general improvements would be made to public health have largely gone unfulfilled, and key public health protections are in danger of slipping below critical capacity levels.

"DOUBLE DUTY" PREPAREDNESS FUNCTIONS	Number of States Meeting the Indicator
9. The state reports having a completed or draft plan for confronting the emergence of a new, lethal strain of influenza, an outbreak often referred to as "pandemic influenza."	**13**
10. During the SARS epidemic outbreak, the general public and health providers could easily obtain essential, state-specific information about the outbreak.	**11**

47 "Nature's Terrorist Attack: Pandemic Influenza," Association of State and Territorial Health Officials, November 2002, http://www.astho.org/pubs/Pandemic%20Influenza.pdf.

Indicator 9.

TFAH FINDING: CRUCIAL NON-BIOTERROR PREPAREDNESS IS IN JEOPARDY. ONLY ONE-QUARTER OF STATES HAVE A PLAN TO RESPOND TO A PANDEMIC FLU OUTBREAK.

13 states report having a completed or draft plan for confronting the emergence of a new, lethal strain of influenza, an outbreak often referred to as "pandemic influenza" (1 point)	**37 states and D.C. reported they did NOT have a completed or draft plan for confronting the emergence of a new, lethal strain of influenza, an outbreak often referred to as "pandemic influenza" (0 point)**
Arizona, California, Florida, Indiana, Maryland, Massachusetts, Minnesota, Missouri, New Hampshire, New Jersey, South Carolina, Tennessee, Virginia	Alabama, Alaska, Arkansas, Colorado, Connecticut, Delaware, D.C., Georgia, Hawaii, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Mississippi, Montana, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, Wyoming

Despite the similarities to preparing for a bioterrorism attack or a SARS outbreak, most states are not prepared for the emergence of pandemic influenza, which is viewed as potentially more devastating than a bioterrorism attack. This example shows that despite the danger, health threats other than those related to bioterrorism have difficulty commanding attention, resources and funding. Individual state plans for natural health emergencies should be an important component of overall preparedness.

TFAH examined data from CDC presentations and data collected by the CSTE, which indicated that 13 states have either a draft or final plan in place detailing how they would respond to an outbreak of a severe, novel strain of influenza, which is an illness like the one that killed 500,000 Americans in 1918.[48] The remaining 37 states and D.C. report that they are in the process of preparing an influenza plan.

Unlike bioterrorism preparedness plans, CDC does not require each state to submit its influenza strategy to the agency for analysis and approval. Thus, there is no guarantee that states are equally prepared, or that a response would be coordinated and sufficiently responsive across state lines. Similarly, CDC has yet to release a national plan for a federal response to pandemic flu.

The lack of preparation for a flu epidemic and the lack of oversight of federal and state strategies indicate a general failure to translate the concern over bioterrorism into an "all-hazards" approach to public health preparedness.

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48 Council of State and Territorial Epidemiologists, State Pandemic Flu Plans, http://www.cste.org/specialprojects/Influenza%20Pandemic%20State%20Plans/Influenza%20Pandemic%20Preparedness%20State%20Plans.htm. See also: Presentation on flu pandemic planning, Raymond Strikas, Centers for Disease Control and Prevention. http://www.masspro.org/publications/pubs/PT_49.pdf

Indicator 10.

TFAH FINDING: STATES ARE NOT PREPARED TO COMMUNICATE WITH HEALTH CARE PROVIDERS AND THE PUBLIC ABOUT EMERGING HEALTH THREATS. MOST STATES DO NOT HAVE TAILORED SARS INFORMATION.

11 states made essential, state-specific information about the SARS outbreak available to the general public and health providers (1 point)	**39 states and D.C. did NOT make essential, state-specific information about the SARS outbreak available to the general public and health providers (0 points)**
California, Connecticut, Hawaii, Maryland, Massachusetts, Nebraska, New Hampshire, North Carolina, North Dakota, Tennessee, Washington	Alabama, Alaska, Arizona, Arkansas, Colorado, Delaware, D.C., Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming

During the SARS epidemic of 2003, a TFAH review of information available on public health Web sites found that 11 states provided the public or health care providers with basic state-specific information on SARS, such as phone numbers, guidelines on how to report suspected cases, information on the number of suspected or confirmed cases in the state and information in a language other than English. TFAH did not consider it sufficient if states merely provided links to CDC-supplied information. Solely relying on CDC information does not allow for the type of tailored and localized information critical to crisis communications and response efforts.

The state health department Web sites were examined as an indicator for the states' larger public communications outreach and information efforts. Had SARS become more widespread in the U.S., health information geared for state and local audiences would have been crucial to managing public reaction and getting clinical information to and from care providers.

PANDEMIC FLU: A FORGOTTEN TERROR

If there is a single health threat that should loom as large as bioterrorism or SARS, it is the prospect -- some public health professionals use the term "inevitability" -- that the U.S. population could come under attack from an especially lethal strain of influenza.[49]

Most of the flu viruses that circulate every year are relatively close variants of previous strains. But every so often, nature serves up a surprise: a novel, particularly virulent variation that has the potential to cause serious illness and confound scientists seeking to develop a vaccine.

Prior to 9/11 and the anthrax attacks, officials concerned about the threat of bioterrorism used to talk about pandemic flu planning as a good model for bioterrorism preparedness. Now, the opposite is the case, with bioterrorism preparedness getting most of the attention and certainly the vast majority of the money. Recognizing the obvious synergies, the CDC recently allowed states to use some of their federal bioterrorism preparedness funds to develop pandemic flu response plans.

ASTHO has been urging its members to take advantage of "the substantial overlap between public health infrastructure needed to address a bioterrorism event" and that needed to deal with pandemic flu by completing state-specific pandemic plans. ASTHO refers to the communications, laboratory, disease surveillance and emergency response capabilities being developed for a possible bioterrorism attack as the "scaffolding" upon which the unique capabilities required to deal with pandemic flu can be built.

So far, CDC has identified only 13 states that have a draft or complete plan for responding to a flu pandemic, and those plans have not undergone rigorous outside review. Federal, state and local officials say there are so many demands on public health officials and so few resources, that pandemic flu planning has not been a high priority. CDC itself has yet to complete a national pandemic flu response plan.

COMPARING A BIOTERRORISM ATTACK TO PANDEMIC FLU

Bioterrorism	Pandemic Influenza
▲ Little to no warning	▲ Warning: days or weeks
▲ Event will be in specific areas	▲ Event will be nationwide
▲ Transmission mainly at or near exposure source	▲ Transmission unlimited by geography
▲ Casualties: hundreds to thousands	▲ Casualties: tens of thousands to hundreds of thousands
▲ First responders vulnerable	▲ First responders vulnerable
▲ Assistance available from unaffected states	▲ All states affected, all states resources will likely be strained and unavailable to assist others

Source: Centers for Disease Control and Prevention

In many ways, pandemic flu could be much more demanding on state and local health resources and much more deadly to the general population than a bioterrorism attack.

Most experts believe a bioterrorism attack is most likely to involve isolated locations initially. In the event of an attack, aid can be swiftly dispatched both from the federal government and from unaffected states. But pandemic flu would affect most every state simultaneously. People would be forced to rely almost exclusively on their local and state health infrastructure for assistance.

The outbreak of pandemic flu that hit the United States in 1918, often referred to as the Spanish flu, killed 550,000 Americans in 10 months and killed 30 million worldwide. A similar outbreak today could inflict equal damage -- a toll that even a severe bioterrorism attack is unlikely to reach.

While medical care and vaccine development are significantly advanced from 85 years ago, today's high volume of international travel and the increased elderly population would make the arrival of a pandemic flu a severe test for the nation's public health system.

[49] Drexler, Madeline, Secret Agents, The Menace of Emerging Infections, 2002. p. 190.

Fortifying the Nation's Health Defenses:

RECOMMENDATIONS FROM TFAH

The terrorism events of 2001 and the recent spate of disease outbreaks -- including SARS, monkeypox and West Nile virus -- have illustrated the need for a well-maintained public health infrastructure and have shown that the existing system has enormous gaps. The federal government has taken unprecedented first steps toward dealing with these vulnerabilities.

TFAH's analysis presents evidence that federal funds and CDC guidance are bringing about positive change that must be accelerated over the near term and sustained over the long term. The analysis also reveals, however, that true preparedness will remain elusive if the effort continues to operate with only minimal standards of accountability and declining support from state and local appropriations, and without attention to much-needed general public health improvements.

To ensure that the nation does not squander this rare opportunity to transform its outdated public health infrastructure into an efficient, accountable, responsive, 21st-Century system that is prepared to respond to all health hazards, TFAH recommends the following series of actions:

> "A LACK OF FOCUS, FUNDING, AND NATIONAL ATTENTION HAVE COMBINED TO REDUCE THE PHYSICAL STRUCTURES (SUCH AS LABORATORIES) AND WORKFORCE CAPABILITIES NECESSARY TO COLLECT AND ANALYZE DATA, CONDUCT EPIDEMIOLOGY AND DISEASE SURVEILLANCE, COMMUNICATE EFFECTIVELY, AND IMPLEMENT INTERVENTIONS TO RESPOND TO THREATS TO THE HEALTH OF THE ENTIRE COMMUNITY."[50]
>
> SENATOR BILL FRIST, MD, 2002

Public Health Agencies Must be Battle-Ready for All Hazards, Not Just Bioterrorism.

From SARS to Sarin gas, federal, state and local health agencies must have comprehensive emergency preparedness plans that address a broad range of possible threats. TFAH's findings indicate that the Congressional appropriations had a noteworthy impact on initial efforts to modernize the nation's public health infrastructure. However, achieving a battle-ready public health defense at the federal, state and local levels will take many years of sustained commitment, funding and oversight, especially because "over the past two decades, the [nation's public health] infrastructure has greatly deteriorated."[51]

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50 Frist, Bill, MD., "Public Health & National Security: The Federal Role," Health Affairs, Volume 21, Number 6. November/December 2002: 119.

51 Ibid.

Initially, Congress, HHS and CDC narrowly focused the federal preparedness investment on bioterrorism concerns. Last year's controversial smallpox vaccination initiative, which pulled valuable time, resources and staffing away from other critical public health functions, illustrates the pitfalls of over-emphasizing a single threat. Also, the nation's encounters with unexpected health emergencies of the past two years, such as SARS and West Nile virus, have demonstrated that public health officials cannot always predict what sort of health emergency looms on the horizon.

TFAH's finding that the majority of states fail to have a pandemic influenza plan ready -- despite the real possibility or likelihood that an outbreak of respiratory disease such as SARS will occur in the near future -- highlights the need for comprehensive planning and support for all health hazards. To achieve an adequate level of preparedness for public health emergencies, TFAH recommends the following actions:

- CDC must authorize states to use federal preparedness funds to support an "all-hazards" approach to preparedness that simultaneously addresses the potential for biological, chemical, radiological and natural disease outbreaks.
- CDC, in consultation with state and local health officials and outside experts, must define measurable standards for comprehensive preparedness that all states and major local health departments should meet.
- Congress should provide long-term commitment and oversight to ensure the nation achieves adequate and sustainable public health security. As such, Congress should authorize an independent review to assess whether current expenditures -- at the federal, state and local levels -- are sufficient.

Establish Health Security Requirements: Mandates and Accountability to Ensure All Citizens are Adequately Protected

In contrast to previous state and local complaints about "unfunded mandates" from Washington, federal agencies and Congress have backed up their demand for improvements in state and local public health capacity with a significant amount of funding. But TFAH data indicates that the majority of states have made cuts to public health agencies that eventually will dilute the impact of the federal preparedness investment and undermine overall health security.

During deliberations over the FY 2004 preparedness funding, Congress raised concerns about declining state investments and urged the HHS Secretary to make certain that the federal money should supplement -- not supplant -- state and local dollars.[52] Yet to date, this basic level of federal oversight is not being conducted by the CDC. In fact, CDC does not routinely track annual state and local appropriations for public health programs. To ensure basic preparedness standards are being met, TFAH recommends the following:

- CDC must be required to track state and local funding and expenditures on critical public health functions, particularly those involving federal support. Standard accounting practices and line items must be instituted for all public health agencies to ensure effective tracking and comparability.
- CDC should independently verify that health emergency performance standards are being met at the federal, state and local level. The results of the assessment should be reported on "score cards" detailing each state's progress toward meeting national goals of public health security.

52 House Report 108-188, Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriation Bill, 2004 and Senate Report 108-081, Department of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Bill, 2004.

- CDC should establish rules for ongoing federal funding by requiring that state or local governments maintain core public health funding levels, thereby ensuring a "maintenance of effort" by agencies to meet critical health duties. These rules should be enforced similar to other federal program penalties, such as federal transportation funding being halted if states fail to meet air quality standards.[53]

Convene a Summit on the Future of Public Health to Develop a Cohesive, National Approach to Public Health Protection

The current effort to improve the nation's ability to respond to a public health emergency faces a significant organizational challenge. Whatever the threat, the response is largely dependent on the functioning of a patchwork of state and local public health agencies, whose funding sources, bureaucratic structure and responsibilities can vary significantly from state to state and even county to county. For example, in some places, all local health departments are run by the state; in others, there is a proliferation of local health departments each operating as an independent entity. Some state health officials have expressed concern that the tendency of governors and legislatures to create new offices and departments of homeland security could introduce yet another bureaucratic player onto an already crowded playing field.

It is clear that the U.S. needs a more cohesive, national public health system, though no one is suggesting that state and local agencies be subsumed by a new national body. However, public health officials should initiate a process that leads to consensus toward common goals and the role of each entity in reaching them.

The President, in consultation with Congress, should convene a summit that will develop a concrete vision for the future of the American public health system and the resources needed to make it a reality. The summit would consider how the country can best build a robust, integrated 21st-Century infrastructure. This should address and include all aspects essential to public health, including those principally managed by departments including HHS, DHS, the U.S. Department of Agriculture, the U.S. Department of the Interior and the Environmental Protection Agency. Presidential leadership is crucial to putting the nation's public health at the top of the national agenda.

As the SARS epidemic illustrates, the U.S. needs to devise strategic solutions for revitalizing and bolstering our public health defenses, while avoiding the piecemeal fixes of the past. The goal of the summit should be to produce a blueprint for the future; to redesign the public health system to meet this century's current and emerging health threats. At the same time, there should be a national dialogue on the resources required to implement the requisite changes and the need for accountability at every level of the public health system.

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[53] McCarthy, James E., "Clean Air Act Issues in the 108th Congress," Congressional Research Service. Updated September 4, 2003.

Appendix A:

BACKGROUND ON DATA SOURCES FOR INDICATORS USED IN THIS REPORT

State funding for public health programs

TFAH conducted an analysis of the states' spending on public health programs from fiscal year 2002 to 2003. While all 50 states have enacted their FY 2004 budgets, many states have yet to allocate the appropriate FY 2004 funds. For this reason, TFAH did not examine FY 2004 public health budgets.

The National Conference of State Legislatures (NCSL) collected the funding information for TFAH from state budget officials during the period of August through October 2003. States were asked to provide NCSL with an overall state general fund appropriation -- exclusive of federal funds -- for each state's FY 2002 and FY 2003 for the agency or division responsible for public health programs. NCSL also requested line item appropriations for the same period for individual public health programs. States complied to varying degrees, with some reporting only total appropriations (no line items.)

There also was a variation in the fiscal years covered by the reports because of different state budget cycles. For example, Oregon provided appropriations data for its two biennium budget cycles, 1999-2001 and 2001-2003, while the majority of states provided data for their FY 2002 and FY 2003. TFAH allocated the change in state public health appropriations over two budget cycles for Oregon and two other states that provided biennial data. These two other states are Montana and North Dakota.

The goal of the analysis was not a precise accounting of state public health spending, but an indication of trends in state-level discretionary appropriations for public health. TFAH worked to remove direct health care dollars, such as Medicaid funds, State Children's Health Insurance Program (SCHIP) funds, and pharmaceutical assistance programs, in its tabulation of state spending because these programs are generally considered separate from traditional public health programs. Also, while the total appropriation for the department or agency that handles public health responsibilities may include more than the prevention and preparedness work that usually is associated with public health, fluctuations in this figure are nonetheless an indication of the overall fiscal trends in state funding for health programs.

State expenditures of federal Centers for Disease Control and Prevention (CDC) public health preparedness funds

This data is based on a survey conducted by the Association of State and Territorial Health Officials (ASTHO).[54] It originally was published in March 2003 and updated in August of 2003. The data represents the state expenditures of funds that were first made available to the states on January 31, 2003.[55] ASTHO defined the term "spent" to mean money "already disbursed for preparedness activities" and "obligated" to mean money "the state has actually contracted to spend" on preparedness activities. States also reported the percentage of their funds that had been "committed" to anything related to preparedness but that did not yet involve binding agreements, contracts or job offers. However, because preparedness funds were supposed to be designated entirely for preparedness activities, then by extension, all of the federal money would theoretically fall into the "committed" category as soon as it reached the states. Thus, TFAH decided not to use the "committed" category in its indicator of a state's capacity to make use of the federal funds.

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54 See: http://www.astho.org/pubs/PreparednessFunding41003.pdf

55 Bioterrorism Grants Fact Sheet, Department of Health and Human Services, June 6, 2002, http://www.hhs.gov/news/press/2002pres/20020606b.html

In its ongoing internal tallying of state expenditures of the federal preparedness funds, CDC only considers the amount of funds actually spent-it does not tabulate obligations-as the sole indicator of a state's draw-down. As of September of 2003, CDC reported that states and the three municipalities had drawn down $563 million of the total $940 million FY 2002 funds.[56]

State distribution of federal preparedness funds to local health authorities

This analysis was accomplished with data collected by the U.S. Department of Health and Human Services (HHS) from the states in response to a request from the U.S. Congress.[57] The HHS data shows the dollar amount of each state's FY 2002 federal preparedness funds that were passed along as "Direct Funding to Locals." It also includes a separate dollar amount that states claimed as the portion of funds that were of "Benefit to Locals." HHS notes that the "level of assistance" provided by states to local health departments can vary depending on how the relationship is structured (i.e. whether the local departments are completely autonomous or part of the state public health agency.) HHS also cautioned that the amount of funds states claimed they spent to "benefit" local agencies represents a subjective estimate that "may be on the high side."[58]

Given the fact that the Direct Funding category represents quantifiable dollars, TFAH chose to look at this figure for its indicator of the distribution for funds from a state to its local health authorities. State and local health officials often disagree on the percentage of funds that should be allocated to local agencies. The balance of state and local spending is likely to change year to year. TFAH used a 50 percent figure as the minimum threshold for this indicator. Proposed Congressional legislation requires states to pass on 80 percent of funds to local governments.[59]

States ability to manage a shipment from the Strategic National Stockpile

The information about Florida's preparedness to receive a shipment from the Strategic National Stockpile (formerly known as the National Pharmaceutical Stockpile) was based on several sources of information. In November, 2002, it was widely reported that CDC found that Florida was the only state in the nation prepared to receive and distribute a shipment from the stockpile, though its readiness still needed to be confirmed with drills.[60] The Florida State Legislature's "Government Accountability" Web site also reported Florida's status.[61] In March of 2003, an official with the Department of Homeland Security gave a presentation at the National Disaster Medical System Conference in which he updated the status of state capabilities to receive the stockpile. Though the official did not identify states by name, only one state at the time was in the green category, which TFAH knew from previous reports to be Florida. In November 2002, federal officials, speaking on the record, freely discussed the stockpile distribution capabilities of several states. TFAH's request for more up-to-date information on each state's status was denied by CDC.

The information about Illinois' green status is based on announcement by the governor's

56 "HHS Provides $1.4 billion to States and Hospitals for Terrorism Preparedness," U.S. Department of Health and Human Services, September 2, 2003. http://www.hhs.gov/news/press/2003pres/20030902.html

57 Report to Congress, FY 2002 Bioterrorism State and Local Preparedness Funding, U.S. Department of Health and Human Services, June 13, 2003.

58 Ibid.

59 H.R. 3266 "The Faster and Smarter Funding for First Responders Act."

60 See http://www.kaisernetwork.org/daily_reports/rep_index.cfm?DR_ID=14408

61 See http://www.oppaga.state.fl.us/profiles/5055/03/default.asp?bookmark=FGAR_CDC

office on October 23, 2003. This may be found at http://www.idph.state.il.us/public/press03/10.23.03b.htm. To determine if other states have recently obtained "green" status, TFAH conducted a review of the Web sites of all 50 states and D.C. No other state had announced its status.

Status of laboratory staffing, laboratory facilities and laboratory links to hospitals

The state public health laboratory capabilities indicators were drawn from the APHL Bioterrorism Preparedness Capacity/ Capability Survey. In February of 2003, APHL surveyed members in 50 states and the D.C. TFAH considered each state's response to the following questions:

- For laboratory facilities: Please indicate the number of BSL-3 (Biosafety Level 3) laboratories used for bioterrorism and/or testing other than bioterrorism (including TB) that exist within your state's public health laboratory (central and branch)? How many additional BSL-3 laboratories does the state public health laboratory need?

Status of state pandemic flu plans

In September 2003, CDC reported to TFAH that 13 states currently have either a draft or complete pandemic flu plan and that 35 are in the process of preparing a plan. CDC's assessment is based on information states provide to CDC as part of their reports on state immunization activities, as well as a tally of draft and complete pandemic flu plans posted on the Council of State and Territorial Epidemiologists (CSTE) Web site.[62] CDC does not provide a public list of states that currently have draft flu plans nor does it review and approve state plans. However, based on CDC and CSTE presentations, TFAH identified 13 states that have draft pandemic flu plans.[63]

Assessment of state-specific information on severe acute respiratory syndrome (SARS)

In late June and early July of 2003, at the height of public concern over the worldwide outbreak of SARS, TFAH reviewed Web sites maintained by state public health officials to gauge the quality of state-specific information available for the pubic in general and health care providers in particular. TFAH considered the site to be adequate if it was easily accessible, provided state specific information for the public and providers (such as phone numbers and guidelines on how to report suspected cases), detailed suspected or confirmed cases in the state and provided information in a language other than English. TFAH focused on the quality of Web site data because disease experts believed if the epidemic had "broken through" in the U.S., there would be an intense demand for state and local information.[64]

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62 http://www.cste.org/specialprojects/Influenza%20Pandemic%20State%20Plans/Influenza%20Pandemic%20Preparedness%20State%20Plans.htm

63 Pandemic Planning: Powerpoint Presentation on flu pandemic planning, Raymond Strikas, Centers for Disease Control and Prevention. http://www.masspro.org/publications/pubs/PT_49.pdf

64 "Preparing for a possible pandemic SARS has been vanquished, but for how long?" USA Today, September 9, 2003.

Appendix B:

BIOTERRORISM FUNDING BY SOURCE AND YEAR

	FY02				FY03		
	CDC	HRSA	Total		CDC	HRSA	Total
Alabama	$14,900,443	$1,972,833	$16,873,276	Alabama	$14,056,645	$7,762,315	$21,818,960
Alaska	$6,395,720	$492,877	$6,888,597	Alaska	$6,284,107	$1,958,803	$8,242,910
Arizona	$16,422,170	$2,237,637	$18,659,807	Arizona	$15,755,035	$9,030,450	$24,785,485
Arkansas	$10,951,709	$1,285,691	$12,237,400	Arkansas	$10,461,043	$5,077,591	$15,538,634
California	$60,816,245	$9,962,905	$70,779,150	California	$55,589,662	$38,773,726	$94,363,388
Los Angeles	$24,591,171	$3,659,172	$28,250,343	Los Angeles	$24,531,232	$15,583,364	$40,114,596
Colorado	$14,575,766	$1,916,334	$16,492,100	Colorado	$13,979,790	$7,704,930	$21,684,720
Connecticut	$12,581,705	$1,569,336	$14,151,041	Connecticut	$11,960,524	$6,197,207	$18,157,731
Delaware	$6,744,505	$553,571	$7,298,076	Delaware	$6,614,378	$2,205,406	$8,819,784
DC	$11,273,558	$721,619	$11,995,177	DC	$11,162,901	$2,868,302	$14,031,203
Florida	$40,581,081	$6,441,669	$47,022,750	Florida	$38,181,999	$25,775,967	$63,957,966
Georgia	$23,225,251	$3,421,481	$26,646,732	Georgia	$22,034,847	$13,719,390	$35,754,237
Hawaii	$7,697,208	$719,356	$8,416,564	Hawaii	$7,486,672	$2,856,721	$10,343,393
Idaho	$7,880,688	$751,285	$8,631,973	Idaho	$7,676,282	$2,998,297	$10,674,579
Illinois	$26,201,381	$3,939,374	$30,140,755	Illinois	$24,923,148	$15,875,995	$40,799,143
Chicago	$11,447,312	$1,371,934	$12,819,246	Chicago	$10,450,197	$5,069,493	$15,519,690
Indiana	$18,536,799	$2,605,616	$21,142,415	Indiana	$17,416,386	$10,270,929	$27,687,315
Iowa	$11,514,786	$1,383,675	$12,898,461	Iowa	$10,941,890	$5,436,624	$16,378,514
Kansas	$10,985,143	$1,291,509	$12,276,652	Kansas	$10,476,095	$5,088,830	$15,564,925
Kentucky	$13,998,067	$1,815,805	$15,813,872	Kentucky	$13,245,815	$7,156,894	$20,402,709
Louisiana	$14,949,145	$1,981,308	$16,930,453	Louisiana	$14,059,595	$7,764,518	$21,824,113
Maine	$7,838,322	$743,913	$8,582,235	Maine	$7,603,092	$2,943,648	$10,546,740
Maryland	$16,791,405	$2,301,890	$19,093,295	Maryland	$15,915,365	$9,150,163	$25,065,528
Massachusetts	$19,134,801	$2,709,678	$21,844,479	Massachusetts	$17,972,524	$10,686,180	$28,658,704
Michigan	$27,125,655	$4,100,212	$31,225,867	Michigan	$25,278,581	$16,141,386	$41,419,967
Minnesota	$15,952,086	$2,155,835	$18,107,921	Minnesota	$15,101,600	$8,542,551	$23,644,151
Mississippi	$11,332,975	$1,352,037	$12,685,012	Mississippi	$10,795,501	$5,327,321	$16,122,822
Missouri	$17,456,448	$2,417,618	$19,874,066	Missouri	$16,424,504	$9,530,322	$25,954,826
Montana	$7,008,529	$599,516	$7,608,045	Montana	$6,834,837	$2,370,015	$9,204,852
Nebraska	$8,809,733	$912,954	$9,722,687	Nebraska	$8,485,811	$3,602,747	$12,088,558
Nevada	$9,448,659	$1,024,136	$10,472,795	Nevada	$9,251,219	$4,174,253	$13,425,472
New Hampshire	$7,751,193	$728,751	$8,479,944	New Hampshire	$7,552,202	$2,905,650	$10,457,852
New Jersey	$23,732,611	$3,509,769	$27,242,380	New Jersey	$22,248,528	$13,878,940	$36,127,468
New Mexico	$9,049,686	$954,709	$10,004,395	New Mexico	$8,710,551	$3,770,553	$12,481,104
New York	$29,418,122	$4,499,138	$33,917,260	New York	$27,794,404	$18,019,873	$45,814,277
New York City	$22,828,585	$3,352,455	$26,181,040	New York City	$20,881,716	$12,858,383	$33,740,099
North Carolina	$22,919,940	$3,368,351	$26,288,291	North Carolina	$21,630,396	$13,417,400	$35,047,796
North Dakota	$6,429,710	$498,792	$6,928,502	North Dakota	$6,290,025	$1,963,221	$8,253,246
Ohio	$30,275,150	$4,648,274	$34,923,424	Ohio	$28,082,405	$18,234,914	$46,317,319
Oklahoma	$12,682,086	$1,586,804	$14,268,890	Oklahoma	$12,031,404	$6,250,131	$18,281,535
Oregon	$12,616,956	$1,575,470	$14,192,426	Oregon	$12,039,235	$6,255,978	$18,295,213
Pennsylvania	$32,340,936	$5,007,754	$37,348,690	Pennsylvania	$29,933,326	$19,616,940	$49,550,266
Rhode Island	$7,333,840	$656,125	$7,989,965	Rhode Island	$7,147,493	$2,603,466	$9,750,959
South Carolina	$13,931,820	$1,804,277	$15,736,097	South Carolina	$13,232,255	$7,146,769	$20,379,024
South Dakota	$6,680,486	$542,431	$7,222,917	South Dakota	$6,536,811	$2,147,489	$8,684,300
Tennessee	$17,665,877	$2,454,062	$20,119,939	Tennessee	$16,651,663	$9,699,934	$26,351,597
Texas	$51,421,771	$8,328,119	$59,749,890	Texas	$48,310,184	$33,338,368	$81,648,552
Utah	$9,971,636	$1,115,143	$11,086,779	Utah	$9,618,011	$4,448,125	$14,066,136
Vermont	$6,355,413	$485,864	$6,841,277	Vermont	$6,242,254	$1,927,552	$8,169,806
Virginia	$20,758,682	$2,992,259	$23,750,941	Virginia	$19,584,849	$11,890,053	$31,474,902
Washington	$18,121,901	$2,533,418	$20,655,319	Washington	$17,146,134	$10,069,141	$27,215,275
West Virginia	$9,025,861	$950,564	$9,976,425	West Virginia	$8,649,835	$3,725,218	$12,375,053
Wisconsin	$16,940,986	$2,327,920	$19,268,906	Wisconsin	$15,955,629	$9,180,227	$25,135,856
Wyoming	$6,099,294	$441,296	$6,540,590	Wyoming	$6,000,636	$1,747,144	$7,747,780
Puerto Rico	$13,478,992	$1,725,479	$15,204,471	Puerto Rico	$12,778,777	$6,808,171	$19,586,948
Total FY02	**$915,000,000**	**$124,500,000**	**$1,039,500,000**	**Total FY03**	**$870,000,000**	**$498,000,000**	**$1,368,000,000**

Appendix C:

CHANGES IN STATE PUBLIC HEALTH SPENDING

State	Percent Change in Public Health Spending from State Fiscal Year 2002 to 2003
Alaska	-11%
Alabama**	3%
Arkansas**	-5%
Arizona	-0.5%
California**	2%
Colorado	15%
Connecticut	-9%
Delaware**	-3%
District of Columbia	-1%
Florida **	-3%
Georgia	-5%
Hawaii	3%
Iowa	-2%
Idaho	-9%
Illinois	-2%
Indiana	3%
Kansas	-9%
Kentucky	-6%
Louisiana	26%
Massachusetts	-23%
Maryland	3%
Maine	-7%
Michigan	-24%
Minnesota	-6%
Missouri	-11%
Mississippi	-2%
Montana ++	-19%
North Carolina	-7%
North Dakota ++	-6%
Nebraska	11%
New Hampshire	4%
New Jersey	6%
New Mexico **	-5%
Nevada	3%
New York	16%
Ohio	1%
Oklahoma**	-11%
Oregon ++	-7%
Pennsylvania**	-8%
Rhode Island	1%
South Carolina	-5%
South Dakota	-9%
Tennessee	10%
Texas **	0.1%
Utah	-7%
Virginia	-1%
Vermont	-3%
Washington ^	-1%
Wisconsin	-6%
West Virginia	6%
Wyoming ^	1%

++ States with biennium budgets in which TFAH allocated their percent change in public health spending over the biennium. These states did not provide budget information on an annual basis.

** Public health spending in these states includes Medicaid or other health care funds.

^ Oregon's public health spending numbers are for 1999-2001and 2001-2003. Washington's are for 2001-03 and 2003-05. Wyoming's are for 2001 and 2002.

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