

**THE CENTURY FOUNDATION'S HOMELAND SECURITY  
PROJECT  
WORKING GROUP ON THE PUBLIC'S NEED TO KNOW**

**THE ANTHRAX ATTACKS**

Patricia Thomas

**A CENTURY FOUNDATION REPORT**

**THE CENTURY FOUNDATION**

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# CONTENTS

Foreword <i>BY RICHARD C. LEONE</i>	5
Introduction	7
Before September 11: Public Health and Bioterrorism	9
Government Communication Strategies and Media Coverage	13
How the Public Interest Was Served	32
Lessons for the Future	38
Author's Note	45
About the Author	47
About The Century Foundation	48

## FOREWORD

**I**n collaboration with the John D. and Catherine T. MacArthur Foundation and the John S. and James L. Knight Foundation, The Century Foundation's Homeland Security Project is helping to inform the public and policymakers about complex challenges related to preventing and responding to domestic terrorism. Three high-level working groups have overseen the development of a number of publications related to homeland security. The cochairs of the Working Group on the Federal Response are former White House chiefs of staff Kenneth Duberstein and John Podesta; the cochairs of the Working Group on Federalism Challenges are former governors Richard Celeste and Thomas Kean; and the chair of the Working Group on the Public's Need to Know in the Post–September 11 Era is John Seigenthaler, the founder and president of Vanderbilt University's First Amendment Center.

The Working Group on the Public's Need to Know is composed of journalists and former public officials who will use a series of case studies from incidents since September 11 to explore the role of the media in covering homeland security news stories, the obligations of the government in disclosing information, and certain related privacy and civil liberties issues. John Stacks, former executive editor of *Time* magazine, serves as executive director.

This working group has commissioned several case studies, including this study by Patricia Thomas. Thomas is the author of *Big Shot: Passion, Politics, and the Struggles for an AIDS Vaccine* (PublicAffairs, 2001) and the former editor of the *Harvard Health Letter*. In this work, she provides the first comprehensive look at the media coverage of the 2001 anthrax attacks and their aftermath.

Discussions of homeland security policy tend to provoke an unusual degree of consensus among participants, as the natural tendency to “pull

together” in a time of adversity trumps all other concerns. Still, most of what we know about the performance of institutions—businesses, non-profits, and government—is that good performance, over the long haul, depends on transparency and accountability. To those running such institutions, it is easy to embrace the apparent short-run advantages that flow from not having to deal with outside criticism. These positive features, however, are almost always overtaken in time by the inevitable weaknesses that result from bureaucratic inertia and the pursuit of self-interest. Whether one is talking of Enron’s management, the American Catholic Church, or the Nixon White House, it is certainly arguable that the worst problems those institutions encountered would have been reduced if there had been broad and early public access to emerging information.

And there is a second compelling argument that underpins the call for more informed debate about the policies and practices being adopted to fight terrorism: the changes regarding law enforcement, privacy, secrecy, immigration, travel, and other areas are just too important to be implemented without an informed public debate.

Finally, the case for greater knowledge rests on a fundamental assumption about the American system of government: that the public has a right to know what is going on and why.

On behalf of The Century Foundation and its working groups on homeland security, I thank Thomas for this insightful investigation of a timely and important topic.

RICHARD C. LEONE, *President*  
The Century Foundation

## INTRODUCTION

Stripped to the basics, this is what happened:

On October 4, 2001, a photo editor at the *National Enquirer's* parent company was recognized as the first victim of a bioterrorism attack on American soil. Twenty-four hours later, he died from inhalational anthrax. Over the next seven weeks, twenty-one others became ill as a result of contact with *Bacillus anthracis* spores distributed through the mail by unknown perpetrators. Eleven people suffered the inhalational form of anthrax disease, which killed four more after the photo editor, and the remaining eleven survived skin infections. There have been no cases since November 21, 2001, when an elderly retiree in Connecticut died from the pulmonary form.

Investigators ultimately recovered four envelopes carrying powdered anthrax spores, all mailed from the vicinity of Trenton, New Jersey. By reconstructing the path of these envelopes through the nation's postal system, investigators were able to link them to nineteen of the twenty-two cases. It is still not known how the remaining three victims—two of whom died from inhalational anthrax—became infected.

Because a prophylactic course of antibiotics can halt infection and prevent anthrax disease, there was tremendous urgency to identify those who might be at risk. State, local, and federal public health officials put some thirty-two thousand people on antibiotics for at least ten days and recommended a full, sixty-day course for more than ten thousand of them. This intervention is thought to have prevented unknown numbers of anthrax cases and deaths.

The bare facts, of course, do not begin to capture how the American public experienced the bioterrorism attacks of fall 2001. What transfixed—and often frightened—people were stories told by print and broadcast media. Anthrax bioterrorism was the third most closely followed

news story of 2001, topped only by the September 11 attacks and the war in Afghanistan. Some twenty-four-hour news channels were “all anthrax, all the time” for several weeks; Tom Brokaw uttered the memorable phrase “in Cipro we trust” as a sign-off after the NBC newsroom was targeted; and print coverage reached blizzard proportions. For example, the Centers for Disease Control and Prevention (CDC) was mentioned in more than twelve thousand newspaper and magazine articles during the final three months of the year.

Meanwhile, a behind-the-scenes struggle was developing between government agencies, which held a near monopoly on information about the attacks, and journalists clamoring for access to what government scientists and investigators knew. This situation came to light about three weeks into the crisis, when prominent journalists began venting their frustrations in print: usually helpful press officers were stonewalling, government scientific experts were not being made available for interviews, and public officials were generally failing to make accurate health information available fast enough. This mismanagement of news harmed the public good, reporters said. Some writers blamed Secretary of Health and Human Services Tommy Thompson, speculating that his devotion to the Bush administration’s credo of “speaking with one voice” led him to silence experts, damage his own credibility, and wound the reputation of the CDC in the midst of a national emergency. Other critics attributed disruptions in news flow to structural deficiencies and incompetence at the CDC itself.

Regardless of whom these influential reporters held responsible, all expressed concern that an information shortfall left the American people

susceptible to panic, vulnerable to hucksters, and confused about how best to safeguard the health of their families. More than one year after the last anthrax victim died, one might expect reporters to have lost interest in these issues and moved on. But that has not happened. In fact, more recent actions of the Bush administration have made thoughtful journalists increasingly worried that tight government control of health and science news may disrupt the flow of timely, accurate information about scientific research and personal health to readers and viewers.

This case study explores how government agencies rationed bioterrorism information during the anthrax crisis of late 2001, how the press reported the news, how the public responded, and what these events portend. The first section is a thumbnail sketch of public health preparation for bioterrorism before September 11. The second section deals with government communication policies and media coverage during three time periods: September 11 through October 3, October 4 through 17, and October 18 through mid-December 2001. The third section considers how well the public interest was served, and the final part considers what lessons government and the press might take from the anthrax experience.

## **BEFORE SEPTEMBER 11: PUBLIC HEALTH AND BIOTERRORISM**

During the cold war era of the 1950s, the Centers for Disease Control and Prevention formed the now famous Epidemic Intelligence Service (EIS), which trained teams of physician-epidemiologists and other experts who could be dispatched on short notice to investigate unexplained disease outbreaks. Imminent war was a universal concern for government agencies during those white-knuckled times, and if biological weapons were deployed against U.S. civilians, EIS officers would be the sentinels most likely to sound the alarm.

As decades passed and geopolitics shifted, biowarfare and its malevolent cousin, bioterrorism, drifted to the bottom of the domestic public health agenda. The specially trained disease detectives of the EIS gained domestic fame by solving other medical mysteries: they found microbes responsible for Legionnaires' disease in air-conditioning equipment, virulent *E. coli* bacteria in hamburgers, and hantavirus in dusty rodent droppings in the desert, to name only a few.

During the Persian Gulf War in 1991, rumors that Iraq might use anthrax or botulinum toxin against American forces led the U.S. military to immunize about 150,000 troops serving in the region against both possibilities. Iraqi defectors later confirmed that anthrax was part of their arsenal, and in 1998 the Department of Defense decided to immunize all U.S. service members against this bacterium. The next few years saw a series of protests, resignations, and lawsuits brought by military personnel who thought the vaccine's risks outweighed its benefits. During a time of peace and prosperity, the likelihood of facing biological weapons seemed slim.

Most civilians relegated the threat of chemical and biological weapons to the world of science fiction stories until the Aum Shinrikyo cult released sarin gas into the Tokyo subway in 1995, killing twelve and sending five thousand people to hospitals. Suddenly, Japan's experience thrust this dystopian fantasy back into real life. Military and law enforcement officials began to take bioterrorism more seriously, and a few reports on organisms with attack potential began cropping up at infectious disease conferences. In August 1998, the CDC convened experts in public health, defense, and law enforcement to map out a plan for strengthening public health response to biological attacks. In 1999, the National Academy of Sciences commissioned an Institute of Medicine report examining how civilian responses to chemical and biological terrorism might be improved.

When a biological attack occurs, "The first responders will not be traditional ones such as police, fire, and emergency medical services, but

instead will be physicians in their offices or in emergency rooms, and the public health system,” said Margaret A. Hamburg, who was assistant secretary for planning and evaluation at the Department of Health and Human Services (HHS) from 1997 until January 2001. She was an advocate for two initiatives that grew out of the CDC’s bioterrorism preparedness workshop: the Laboratory Response Network (which tested more than 120,000 environmental samples during the anthrax outbreak) and the National Pharmaceutical Stockpile (which delivered 3.75 million antibiotic tablets to nine states during the crisis).

In addition to funding these two initiatives, which proved critical in the response to anthrax bioterrorism, the Clinton-era HHS also established a precursor to the present Office of Public Health Preparedness. None of these efforts attracted much attention from the press or the public, and at budget time “we had to fight for every dollar,” recalled Hamburg, who is now vice president for biological programs at the Nuclear Threat Initiative in Washington.

When the Bush administration took office, interest in biological threats was at a simmer. Twice during the spring of 2001, newly appointed HHS secretary Tommy Thompson went before Capitol Hill committees to testify about bioterrorism. Each time he left the hearing room, a pack of reporters was waiting. “Not one of those reporters asked one question about bioterrorism or anthrax. Not one of those reporters wrote about the bioterrorism issue,” recalled Kevin Keane, assistant secretary for public affairs at HHS. Instead, the reporters pressed Thompson with questions about stem cell research, the scientific issue du jour.

In Atlanta, bioterrorism was not at the top of CDC’s agenda either. Prevention of HIV and chronic diseases, such as diabetes and cardiovascular problems, were prominent at the end of the Clinton years. When Thompson arrived, fresh from the governor’s office in Wisconsin, he expressed an interest in uncontroversial issues such as combating obesity and promoting fitness. As CDC leadership got acquainted with the new

regime at HHS, they quickly realized that no matter what happened in terms of health initiatives, life was going to be different at CDC because a new management style was now in force.

When Jeffery Koplan became director of CDC in 1994, the philosophy of HHS secretary Donna Shalala was to “pick strong managers” and give them “a fair amount of autonomy and full responsibility,” Koplan said in an interview. Koplan recalls that when Thompson stepped into the top job at HHS, he immediately made it clear that his goal was to have “one department,” which meant that HHS was going to exert considerably more control over areas that individual agencies—the CDC, the National Institutes of Health, and the Food and Drug Administration—had previously handled on their own. Among these were legislative activities, planning, budget, and communication.

Thompson seemed especially interested in having tighter control over CDC’s communications activities. There are competing explanations for this. Some say that Deputy Secretary Claude A. Allen, a longtime public official in Virginia who is a hero to conservative religious groups, was ill-disposed toward CDC because some of its educational materials spoke frankly about gay sex and portrayed condoms as an effective means for disease prevention. While reluctant to delve into specifics, Koplan acknowledges tension between CDC and the new HHS team not only about condoms but also about antitobacco campaigns and reproductive health programs and materials. “There was a perception in the new group that because CDC is a public health agency, it is an activist institution. It was too much of an advocate.”

Another theory is that Thompson regarded CDC as an administrative shambles that needed a firmer managerial hand. An article by Garance Franke-Ruta in the September 2002 issue of the *Washington Monthly* claims that Thompson saw CDC as a “scandal-plagued” agency, its image tarnished by an embarrassing 1998 General Accounting Office investigation into misspent research funds. Even people who are friendlier to the

CDC than Franke-Ruta say that the agency was sometimes its own worst enemy, with a tendency either to clam up or to spin the facts when under fire.

Health policy expert Robert J. Blendon, who directs the Harvard Program on Public Opinion and Health and Social Policy, sees the tension at the CDC as more of a cultural divide between accomplished politicians such as Thompson and the medical researchers and physicians who inhabit research institutions. Because scientists deal mainly with areas of uncertainty, an assertion about what is known is likely to be followed by caveats about what remains to be discovered. Thompson, on the other hand, is one of a circle of former governors in the present administration, and the archetypal governor's reaction to any problem is, "I'm in charge, I know how to do this," says Blendon. People expect their governor to be in command, especially in times of natural disaster or budget crisis, and this is a hard role to set aside.

Whatever Thompson's underlying reasons, from the start he and his team emphasized that CDC should be more careful about asking HHS for permission before responding to media inquiries, according to Koplan. For CDC, issues such as smoking, reproductive health, AIDS, and gun violence have long been politically touchy. In early 2001, however, it began to dawn on CDC's leaders that any health issue might now have political dimensions.

## **GOVERNMENT COMMUNICATION STRATEGIES AND MEDIA COVERAGE**

SEPTEMBER 11–OCTOBER 3

When terrorists struck the World Trade Center and the Pentagon on the morning of September 11, the public health response was swift. In New

York and Washington, local hospitals and public health officials leapt into action, ready for large numbers of casualties that did not arrive. In Atlanta, a team of ten CDC epidemiologists and technical advisers took off for New York just hours after President Bush officially declared that the nation was under attack by terrorists. Later that day, three other aircraft, each originating from an undisclosed National Pharmaceutical Stockpile location, headed for New York carrying medical personnel, equipment, and supplies. Commercial air traffic, of course, had come to an absolute halt. At one point on September 11, there were four planes in American skies that were not part of the Department of Defense: three from CDC and Air Force One.

Although CDC investigators soon determined that the September 11 terrorists had not used any biological weapons, many knowledgeable people felt that such an attack could be imminent. Reporters on science and medical beats immediately began researching pieces about biological warfare; many recall feeling that this was a natural topic for them, something useful they could do in the wake of September 11. Because CDC is the agency responsible for detecting and controlling disease outbreaks, whether natural or deliberate, its experts on anthrax, smallpox, and biological warfare were on every reporter's people-to-interview list. There were very few bioterrorism experts in the civilian world: academic laboratories are fueled by federal research dollars, and the government simply had not put much money into this field.

M. A. J. McKenna, a science and medicine reporter who has covered the CDC for the *Atlanta Journal-Constitution* since 1997, had worked hard to build a special rapport with the agency. A monthly security pass made it easy for her to spend time at CDC facilities, and she had established friendly relations with many scientists and communication officers. CDC, based in Atlanta, "recognized the value of talking to the paper that the majority of their employees read," McKenna said. Although she was not surprised when her pass was revoked after September 11, she was shocked to find that her access to CDC experts was "awful, almost nonex-

istent” when she was working on a bioterrorism piece that ran in the September 23 edition of the paper. The article contained only one quote from a CDC scientist, and that came from congressional testimony he had given back in July.

Rick Weiss, a science reporter on the *Washington Post*'s national desk, had more modest expectations, based on his longstanding telephone relationship with communications offices at the CDC. “They’ve always been slow and bureaucratic,” Weiss said, but the experts were often worth the wait. “Eventually I would get to a scientist, and usually someone really smart and really great and very willing to talk to me. But it sometimes took two or three days, which is often too slow.” When he called in mid-September to set up interviews for a bioterrorism feature, however, things were different: no one called him back.

Unbeknownst to reporters who contacted CDC during this period, the agency had been told that, as of September 11, the Federal Emergency Response Plan was in effect. Officials differ in their understanding of the fine points of this plan, but its practical impact was to put the White House and cabinet secretaries in charge of all communication with the press and the public. The HHS public affairs office was now responsible for controlling the flow of information about bioterrorism, and down at CDC, “we were not doing any interviews here, we were not even doing any response to press,” explained Vicki Freimuth, the agency’s associate director for communications. (It was business as usual, however, for reporters who inquired about other diseases or health issues handled by CDC.)

Between September 11 and October 3, CDC received 358 bioterrorism-related calls from reporters. These were forwarded to the public affairs office at HHS, where there is no information available about how they were handled. It was an office in transition: Kevin Keane, Thompson’s director of communications when he was governor of Wisconsin, had been confirmed as assistant secretary for public affairs on

July 30, less than six weeks before September 11, just as the debate over stem cell research was in full swing. When Keane was not absorbed with that topic, “I was starting to get my staff on board and we were starting to learn each other,” he recalled. About twenty-five employees were there when he arrived, he was hiring new ones, and his right-hand man was a veteran press secretary who had been with Keane in the governor’s office in Wisconsin.

After U.S. troops were sent to countries bordering Afghanistan, nervous citizens became increasingly worried that enemies of the republic might retaliate by unleashing deadly organisms at any time. The administration did its best to be reassuring, but some experts were skeptical of these efforts. On September 29, Secretary Thompson said on *60 Minutes* that the nation was prepared for biological attacks and urged people not to worry. “Many of us were apprehensive because we knew that simply wasn’t true,” said Hamburg, the former HHS official who had worked on preparedness issues. “It was wishful thinking and created a level of expectation that, should there be an event, would undermine his credibility.”

#### OCTOBER 4–OCTOBER 17

“My God, we’ve just become one of our own headlines,” was the first thought that Martha Warwick, an editor at the *National Enquirer*, had when she learned that Robert Stevens, her colleague at American Media, had fallen victim to bioterrorism. An alert physician suspected Stevens had inhalational anthrax; he was hospitalized on October 2, and a Florida state laboratory confirmed the diagnosis on October 4. Florida health officials called on CDC for help, and the agency immediately sent teams of investigators to Palm Beach County, where Stevens lived and worked, and to North Carolina, where he had vacationed immediately before falling ill. The team dispatched to Florida included one media relations specialist,

who pitched in to help the local health department's public relations officer. Mobbed by reporters and TV crews from all over, the top priority for the investigation's small press team was funneling information to local news outlets whose audiences included people who might be in danger because of anthrax exposure.

News of the Florida case reached Secretary Thompson during a White House meeting, and he went to the nearby press room to brief reporters. Local law enforcement agencies in Florida had asked the FBI for help, and a team of investigators was already on the way, Thompson told journalists. So far, it appears that "this is an isolated case" and "there is no evidence of bioterrorism." Bob Stevens had just come back from camping in North Carolina, and Thompson speculated that the Florida man might have become infected by drinking from a contaminated stream. In the unlikely event that this turned out to be a terrorist attack, Thompson reassured people that prompt antibiotic treatment prevents illness and that the United States has a large stockpile of appropriate drugs.

Thompson's offhand remark about contaminated water went unnoticed by most reporters on hand, who specialized in covering politics, not science and medicine. Of all the first-day coverage on October 5, only United Press International and the *St. Petersburg Times* paraphrased Thompson's remark about the stream. His words raised an immediate red flag, though, for reporters who were especially knowledgeable about infectious disease. "Tommy Thompson right away shot himself in the foot so that he looked foolish," said NBC chief science correspondent Robert Bazell.

Many other science writers soon realized that Thompson's theory was biologically implausible. Reporters on this beat do not have instant recall about every disease they cover, but they often scan textbooks and scientific journals while waiting for bureaucrats or famous researchers to call back. Even cursory reading made it clear that inhalational anthrax comes from breathing bacterial spores into the lungs, cutaneous anthrax from

contact between skin and the microbe, and gastrointestinal infection from eating infected meat. The pulmonary form of the disease has never been associated with ingesting anything—solid or liquid—by mouth. By the time second-day stories appeared on October 6, some reporters had reached academic anthrax experts like Martin Hugh-Jones of Louisiana State University, who confirmed that drinking contaminated water was extremely unlikely to cause inhalational anthrax. As the crisis worsened and spread, Thompson never quite repaired the damage done by his off-the-cuff words about water.

Nor has he acknowledged being factually wrong. Late in October 2001, McKenna asked Thompson if there were things he wished he had done differently. “I should have never said this [Florida death] appears to be one case, or that he was an outdoorsman and it could have been a naturally occurring case. . . . But at the time that was what the experts said,” Thompson replied. Both Thompson and Keane implied that scientists put words in the secretary’s mouth and that he paid the price for being “too candid” with the media. “What he said wasn’t inaccurate. The question is, should he have just kept it to himself?” Keane wondered.

Whether Thompson should have been less talkative is not the issue for many reporters and public health experts, who believe that a former governor with no medical background was the wrong spokesman to begin with. When people feel their health is threatened, “they want to hear from a doctor, and if it is a doctor who they know, that is even better,” according to Mohammad N. Akhter, executive director of the American Public Health Association. The surgeon general is ideally suited to this role, as C. Everett Koop demonstrated during the early years of the AIDS epidemic. But during the first tumultuous weeks of the anthrax crisis there was no sign of Surgeon General David Satcher, whose term in office was winding down under the new administration.

“He was notable for his absence,” says Weiss of the *Washington Post*. Veteran reporters like Weiss and Robert Bazell had the distinct

impression that Satcher was being kept away from the press because he was a Clinton holdover, even though his infectious disease training and experience as a former CDC director would have made him a valuable, and reassuring, source of advice for the public. Kevin Keane denies that Satcher was kept away from the press: “David Satcher, on two occasions, was getting on planes to go on trips and we pulled him off those planes because I needed the extra person who would be able to talk.” That may be the case, but his name seldom turns up in media coverage until two weeks into the crisis.

CDC, in contrast, was brought back into the media relations fray immediately after the Florida case surfaced. A hastily prepared press release was widely distributed on October 4, the day that Thompson addressed reporters in the White House press room. A bulleted list set out basic facts about inhalational anthrax, such as its rarity and lack of contagiousness, and outlined steps being taken to investigate the Florida case. The release was on HHS letterhead, yet as a contact for reporters it supplied not the HHS public affairs office but a phone number at CDC’s central communications office—the same office that had been barred from handling bioterrorism inquiries since September 11.

Although there are roughly 45 people in the agency’s main communications office, only about 10 are professionals who deal directly with the media. Many of these media relations specialists have journalism experience, and their job is to supply information to reporters and arrange interviews. The communications office has another 10 or so professionals with a more academic bent, who research and implement campaigns aimed at preventing disease and promoting healthy behaviors. (The remaining two dozen staffers perform editorial and support functions for both sides of the aisle.) Overseeing them all is Vicki Freimuth, an expert in health communication research who has no journalism experience. After October 4, one senior media relations specialist, detailed to the National Center for Infectious Diseases, was assigned

to handle inquiries about anthrax and bioterrorism.

The story exploded like an airbag: Stevens died on October 5, anthrax contamination of his workplace was confirmed on October 6, and a second Florida case was identified on October 7. At a press conference in Boca Raton on October 10, Florida's health director announced that a third case had been identified in an American Media employee, and representatives from the Justice Department and FBI said that a criminal investigation was under way to determine how anthrax had gotten into the building. The theory that contaminated mail was spreading disease was in play as early as October 10, and gained traction on October 12, when cutaneous anthrax was confirmed in Tom Brokaw's assistant, who routinely opened mail at NBC News headquarters in New York. No sooner had a contaminated envelope been recovered at NBC than two New Jersey postal workers were diagnosed with cutaneous disease. Additional skin infections were soon linked to the offices of ABC and CBS news operations in New York, and investigators found a contaminated letter addressed to the *New York Post*.

Although few Americans identify strongly with members of the New York media elite, everyone receives mail. The revelation that potentially deadly envelopes had been delivered by the U.S. Postal Service, which physically touches nearly every household, made people worry about personal risk no matter where they lived or worked. Whenever there is an outbreak of infectious disease, the public relies on CDC for information about where the disease has occurred, how it is spreading, and how they can judge and reduce personal risk. Yet the agency held no press conferences or telephone briefings for reporters, nor were additional press officers put on the case.

Veteran reporters who sought interviews with CDC scientific experts between October 4 and 18 said that the media relations office appeared both swamped by high media traffic and uneasy about connecting reporters with sources. Bazell's impression was that "they were harassed and overwhelmed." For many journalists working the anthrax story, this

period was “two solid weeks of screaming confusion,” according to McKenna. As the beat reporter for CDC’s hometown paper, her access to Director Jeff Koplan and other top officials improved shortly after the Florida cases surfaced. But even she had difficulty reaching scientific experts as the investigation widened to include New York, New Jersey, and soon Washington.

Many reporters fared worse. Washington-based *Newsweek* science reporter Adam Rogers, who had no difficulty interviewing CDC sources for a mad cow article only a few months before the terrorist attacks, discovered that nobody knew his name once anthrax hit. Press officers who had helped in the past no longer called him back, and when he did connect with them, not once was he put through to a CDC scientist. Instead, he was referred to press releases or given canned answers, which do not satisfy the demands of a weekly news magazine.

“All the government agencies, including NIH and CDC, were told not to talk. They were trying to develop a model where all the information came from a central source,” NBC’s Bazell said. He cuts the Bush administration some slack because they were newly in power, there is always a learning curve, and no one had any practice with bioterrorism. Rick Weiss is less forgiving about how the administration’s “speaking with one voice” policy hampered journalists’ effort to keep the public informed about breaking science. “One department, one voice. But that one voice is busy right now, so please leave a message,” he said wryly.

Even Bazell had difficulty interviewing scientists on the federal payroll, although access seemed to depend on where the scientists had been sent. In Florida, where the criminal investigation took center stage, his sense was that state health officials and the FBI were keeping a tight lid on information. He rushed back to New York when cutaneous anthrax was confirmed in an NBC coworker, who had asked the veteran science journalist for advice about a puzzling skin lesion. There he had better luck with local physicians and public health officials, and Mayor Rudolph Giuliani’s

daily press conferences became a staple for all television news shows. Giuliani often had CDC epidemiologist Steve Ostroff at his side and bounced medical questions to him for response.

Every reporter covering the anthrax story called CDC at least once, but not many actually managed to interview a CDC scientist. Understaffing was an obvious problem in the first phase of the crisis. From October 4 through 12, the single media relations specialist assigned to bioterrorism documented 137 anthrax calls received during business hours. More calls probably came through but were not written down. At the very least, she faced twenty media requests during each working day, which public relations experts say is about the maximum that one person can handle. Outside normal business hours, however, CDC estimates that this same individual received “hundreds” of calls and pages from reporters seeking help with information or interviews. CDC press officers with other responsibilities say they pitched in but acknowledge they lacked the expertise of the woman on the anthrax beat.

Press inquiries that reached the CDC’s central media relations office were tracked separately, and this tally indicates that the phones rang non-stop: 2,229 calls about anthrax and 287 concerning bioterrorism were documented between October 4 and 18, and these are thought to be underestimates. This translates into nearly 230 incoming calls on an average day. No one in the central office appears to have been officially designated to handle these calls until ten days had passed: then, on October 14, five of the office’s ten media relations specialists were assigned to anthrax and bioterrorism. CDC also selected several senior scientists as official spokespersons and began setting them up with interviews.

There is no comprehensive record of how the 2,516 press inquiries that reached CDC media relations during these two weeks were resolved. Those who got in touch with a press officer were likely to be referred elsewhere. If they asked about field investigations they were advised to call local officials in Florida, New York, New Jersey, or Washington. (There,

press officers in the field sometimes bounced inquiries back to the CDC in Atlanta.) Reporters who asked about the search for the perpetrators were told to contact the FBI, which released prepared statements about the investigation but was otherwise tight-lipped. If reporters called to follow up on comments made by Secretary Thompson or to ask about policy issues, they were usually referred to the public affairs office at HHS. And, although they did not realize this was happening, many reporters then had to wait while their requests were vetted by HHS officials in Washington.

The anthrax story took a dramatic turn on the morning of October 15, when a staff member in the office of Senate Majority Leader Tom Daschle cut open an envelope containing a powdery substance. Within fifteen minutes, rapid field tests performed by Capitol Police indicated that the powder contained *B. anthracis*. Instead of sending the powder to CDC for additional testing, the Capitol Police sent it to the nearby U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), located at Fort Detrick in Frederick, Maryland. On that same day, in New York, a case of cutaneous anthrax was confirmed in an infant who had briefly visited ABC News headquarters with his mother. On October 16, CDC dispatched its largest team yet to assess contamination in the nation's capital, the Hart Senate Office Building was shut down, mail service to government offices was halted, and postal deliveries throughout the Washington area ground to a standstill. The U.S. Postal Service announced plans to send out a nationwide advisory about identifying and handling suspicious-looking mail.

At a press conference, Senator Daschle announced that the anthrax spores found in his office were highly refined and very potent, suggesting this material had been prepared by people with considerable expertise. No one in the administration backed him up on this. An October 16 poll conducted by ABC News and the *Washington Post* showed that 55 percent of Americans were “very” or “somewhat” worried that they or a friend or relative might be the victim of an anthrax attack. For reporters,

this level of public concern translated into pressure to get the story and get it fast. If the spores were “weaponized,” did that mean many more people were at risk? The scramble for news became so intense that HHS and CDC press offices each received an estimated five hundred calls on peak days. This far exceeded the surge capacity of the HHS and CDC press operations combined.

There was growing realization that “without enough official spokespeople out there talking, you will still have people out there talking,” said Freimuth, head of CDC’s central communications office. So-called anthrax experts seemed to be coming out of the woodwork, and they were getting plenty of airtime on the twenty-four-hour television news channels. One of the most notorious was a supposed authority who repeatedly referred to anthrax, which is a bacterium, as “the anthrax virus.”

Two weeks after anthrax hit, HHS leadership realized that the public needed more information from credible medical experts and that many of those people worked for CDC. In Atlanta, ten media relations specialists from satellite press operations elsewhere on the CDC campus were brought to the central office to join forces with the five already taking anthrax calls. These fifteen professionals, along with about half a dozen support staff, were divided into two teams and put on shifts that kept the press office open ten to twelve hours daily, seven days a week. This schedule went into effect during the week of October 15.

Why did it take the government so long? Former CDC media relations specialist Robert Howard, who resigned during the anthrax crisis, holds both HHS and CDC responsible for mismanaging press relations during this time. Although HHS was in charge, the situation might have been different if CDC’s central office of communication had a stronger commitment to working with the press. Top-ranked public affairs offices often require that a reporter’s call be returned within a set time, ranging from fifteen minutes to a few hours, and explicitly define their mission as matching callers with the right expert sources and supplying facts on

demand.

CDC's central communications office, as already noted, is something of a divided house: one side uses academic tools to craft behavioral change campaigns; the other deals with the hurly-burly of daily press relations. In this setting, it is likely that mounting piles of unanswered call slips did not set off the alarms they would have in a public affairs office with a single, coherent mission. Some experts on crisis communications believe that this structural issue at CDC, rather than ineptitude on the part of its press officers, is to blame for the agency's sluggish response to the fast-moving anthrax crisis.

#### OCTOBER 18–MID-DECEMBER 2001

CDC's revamped press operations went into high gear on October 18. Reporters got a multipurpose press release confirming that a postal worker in New Jersey definitely had cutaneous anthrax, announcing that updates on the crisis were being posted in Spanish on the agency's website, and promoting a video news release featuring CDC director Koplan. The video got the most attention, despite being taped in a studio-like setting with no reporters present. On it, Koplan answers basic questions about CDC's role in the investigation and reassures viewers that anthrax risk for individuals is "infinitesimal," advises against stockpiling antibiotics, and emphasizes that the disease cannot be spread person to person. Despite Koplan's stiff delivery and the tape's lack of pizzazz, news directors were so hungry for information from CDC that the video aired 923 times and reached an estimated fifty million viewers.

October 18 was also a Thursday, release day for CDC's *Morbidity and Mortality Weekly Report*, a trusted source of information for medical professionals and reporters. Instead of sending a release alerting journalists to a feature article on the anthrax investigation, CDC invited them to participate in a conference call with Julie Gerberding, acting deputy director of the National Center for Infectious Diseases at the time. The first

anthrax “telebriefing” came about after much discussion among CDC officials, who knew that the press was very dissatisfied. “We finally said, ‘This is ridiculous. Let’s present this information proactively; let’s not wait until somebody calls us up and asks us. Can’t we figure out a way to push information out more effectively?’” Gerberding recalls. The next day, she was widely quoted in newspaper coverage.

CDC was not the only branch of government that was suddenly eager to talk. As soon as Washington became the epicenter of the anthrax crisis, journalists found themselves racing between what Maryland secretary of health Georges C. Benjamin called “dueling press conferences.” This is not surprising in a city where everything, including a national health emergency, is grist for the political mill.

The Bush administration’s main news event on October 18 featured Secretary Thompson, homeland security director Tom Ridge, FBI chief Robert Mueller III, and the infrequently seen Surgeon General David Satcher. Here the message seemed to be that the government had everything under control, so the public need not worry. Ridge emphasized that only two new infections had turned up in recent days among thousands of people tested for possible exposure. Mueller said that, despite reports of more than 2,500 possible anthrax incidents, contamination was still confined to Florida, New York, New Jersey, and Washington. Satcher’s contribution was to affirm that the nation’s antibiotic stockpiles were adequate for any future threat.

Not to be outdone, Democratic leaders clustered in front of cameras. Senator Tom Daschle talked to the press about widespread contamination in Senate offices, which he emphasized had not stopped him or his colleagues from conducting business, whereas the House had officially shut down. Defending that decision, House Democratic leader Richard Gephardt speculated that anthrax spores might be carried from place to place on somebody’s clothing, then “the spores could replicate themselves” in a different part of the Capitol. “These are good political guys, solid, smart, but this isn’t their expertise. And the reporters picked on that like

sharks pick up on blood: you don't know what you're talking about here," said Adam Rogers of *Newsweek*. By evening, Gephardt was being ridiculed on television for mistakenly believing that replication is something spores do.

On the fringes of the media circus were health officials in Maryland and Virginia, whose constituents included the people most likely to be exposed to anthrax. CDC had established a command post in the District of Columbia, and although thousands of people commute there from outlying suburbs, "there was great difficulty with anyone recognizing the universe outside that command center and DC government," according to Benjamin, the Maryland health director. Frustrated by a shortage of information about the ongoing investigation, he and the Virginia health director installed their own representatives at the CDC operations center to keep them up to date. The two state officials also made a pact with the District's top health authority, the mediagenic Ivan C. A. Walks, allowing him to do most of the talking so long as they helped craft the message. Walks's press conferences quickly became a major source of information for both national and regional journalists.

October 18 was a busy day in New York as well. Dan Rather's assistant at CBS headquarters in Manhattan joined the list of people with confirmed cases of cutaneous anthrax, along with the New Jersey postal worker whose diagnosis was announced on the same day by CDC.

Although what happened to the New Jersey postal worker foreshadowed what would soon occur in Washington, her illness drew relatively little attention outside the region. When anthrax arrived in the nation's capital, in an envelope torn open in Daschle's office, "The unspoken assumption was that you had to open an envelope to get sick," Dr. Benjamin recalled. "So far, it looked like everyone who had gotten sick had been on the receiving end of a piece of mail." Guided by this hypothesis, local and federal medical authorities in Washington focused on congressional staffers who were anywhere near the opened letter. Eventually, 625 of

them were put on Cipro, suddenly the nation's most sought-after drug, for sixty days.

Meanwhile, four employees of the Brentwood Mail Processing and Distribution Center in Washington, D.C., had been experiencing flu-like symptoms since October 16. One by one, they became sick enough to require hospitalization. On October 21, inhalational anthrax was confirmed in a Brentwood worker who lived in Virginia, and three other postal employees who lived in Maryland were diagnosed within a few days. All worked near high-speed mail sorting machines, and not one had opened an envelope.

Rumors about infected postal workers had been circulating in Washington for days, and there was widespread confusion about who was at risk. That question hinged on the dimensions and other characteristics of the spores that had been traveling through the U.S. postal system. Senator Daschle again described the anthrax unleashed in his office as "very potent" and "weaponized." Homeland security director Ridge denied this, insisting that these spores were no more dangerous than the ones received in Florida and New York. Other politicians eagerly passed along conflicting test results concerning spore diameter and capacity for being "re-aerosolized" after settling on a surface.

The CDC was in no position to clarify matters because the Capitol Hill anthrax had been sent to USAMRIID, the Army lab outside Washington, for analysis. "USAMRIID and the Capitol Hill law enforcement and senators knew things that we might not have known yet, because they had the stuff and we didn't," said Kevin Keane. "That's where you got some mixed messages."

CDC director Jeff Koplan described Washington as "the worst place in the world to do an investigation, because we were often the ones with the responsibility, with everyone else having the authority." With so many powerful players involved, from senators to state health departments, "it was difficult to present a coherent, dynamic communications plan when

everybody is a spokesperson.”

At this point, HHS bypassed Koplan and made Anthony Fauci, head of the National Institute of Allergy and Infectious Diseases at the National Institutes of Health (NIH), its point man on anthrax. Well known to reporters for his encyclopedic knowledge of HIV/AIDS research and his willingness to comment on the record, Fauci was a natural rudder for a floundering communications effort. “He put himself forth, and I certainly was going to take advantage of that. He started advising the secretary and he clearly was my most consistent and articulate media personality,” said Keane.

On Sunday, October 21, Fauci was on the *Meet the Press* talking about anthrax and smallpox as bioweapons but stayed out of the dogfight between senators and administration officials about the size of spores sent to Capitol Hill. For the next forty-eight hours, Fauci was ubiquitous on television, talking about anthrax and smallpox and public health plans for containing outbreaks of either one. His message was that whether a person got highly treatable cutaneous anthrax or the more severe inhalational form depended mostly on how they happened to be exposed, not on the diameter of the spores. With so much noise in the system, Fauci’s was one of the more easily understood public health messages in circulation.

The Bush administration decision to turn to Fauci was widely regarded as a slap in the face to CDC. In Atlanta, “Depending on which day you talk to people, NIH is either CDC’s big sister or its deadly rival for funding,” said *Atlanta Journal-Constitution* reporter McKenna. CDC staffers were not the only ones who thought Fauci was a curious choice for front man. “[Fauci] is actually not the right spokesperson for what is fundamentally a CDC investigation and response. He’s not a public health person. He’s a clinician and basic infectious disease immunologist. He learned fast about what epidemiology is, but it’s not his area of expertise. It really should have been the CDC director,” asserted Margaret Hamburg, who once worked in Fauci’s lab and considers him a friend and mentor.

On October 23, the gravity of the situation in Washington increased dramatically when two postal workers died of inhalational anthrax. This was a tragic refutation of the theory that only someone who opened a piece of contaminated mail could become fatally infected, and it raised serious questions about how the investigation was being conducted. In the October 26 edition of the *Washington Times*, writer Adrienne Washington accused government officials of failing to answer basic questions about health risks and went on to say, “It’s these leaders’ inequitable treatment of potential victims that is most inexcusable. They still haven’t provided a sufficient reason for why they waited so long to test the Brentwood postal facility or its workers.” She attacked the “disparate treatment and quick response given mostly white, white-collar Capitol Hill staffers who were exposed to anthrax against the delayed response when brown and black working-class, blue-collar workers were exposed. Someone had to know that workers at that plant, according to published interviews, had complained to supervisors, inspectors and union representatives about their fears that fell on deaf ears.”

Blame for the postal worker deaths settled heavily on CDC’s shoulders. “That was the very worst moment, the day the postal workers in Washington died. Scientists who were working the Washington case were devastated,” remembers Martha Katz, a twenty-year veteran at CDC who is deputy director for policy and legislation. “The notion that we would differentiate on the basis of class and race is just horrifying. If there is any basic premise to public health it is social justice.”

CDC scientists had not thought that workers in U.S. Postal Service facilities were at high risk, although they might have reached an earlier and different conclusion if USAMRIID’s test results had been shared with them as promptly as they were leaked to senators. When the first case of inhalational anthrax was confirmed in a Brentwood worker, on October 21, CDC recommended that local health authorities offer a provisional, ten-day course of antibiotics to all D.C. postal employees, pending further

studies. An additional fifty-day supply of medicine was distributed to 1,870 postal workers beginning on October 25. Fortunately, no one else became sick in Washington after this.

Having insisted for a week that there was nothing special about the anthrax sent to Capitol Hill, Ridge did what the *New York Times* characterized as “a 180-degree turnabout” on October 25, announcing at a news conference that the spores were extremely potent and so small and lightweight that they could spread very easily indeed. Surgeon General Satcher had the unenviable task of telling assembled reporters that “we were wrong” not to act more quickly to test postal workers and give them drugs to protect against infection.

HHS launched another communications offensive, a series of telebriefings that began on October 25 and continued, several times each week, through late November. During the first of these, infectious disease expert Gerberding and CDC director Koplan fielded tough questions from reporters about the Washington situation, where they were damned for being too quick to distribute ten days of pills to postal workers and too slow to hand out the full, sixty-day treatment. In this no-win situation, Gerberding began to emerge as someone who could convey practical medical advice in a calm, clear manner. Her stock rose with reporters as these interactive telebriefings continued, even though they often featured more famous players, including Secretary Thompson and his newly appointed bioterrorism adviser, D. A. Henderson, an eminent smallpox expert who headed a biodefense institute at Johns Hopkins University.

The anthrax story took an ominous turn on October 30, after New York mayor Giuliani announced that inhalational anthrax had been confirmed in a woman, Kathy Nguyen of the Bronx, who did not work for the post office, government, or media. Milder, cutaneous anthrax that responded well to treatment was disclosed in a New Jersey woman, who also lacked ties to previously targeted groups. There was widespread speculation that the source of infection might have been mail received at home, contami-

nated during its travels by rubbing against envelopes addressed to media or political figures. On October 31, Nguyen became the fourth person to die of anthrax.

Another media circus was under way in Washington, where congressional leaders dragged officials of the Postal Service and other agencies into hearing rooms. “All Americans are asking themselves a very basic question: Is it safe to open the mail?” Senator Joseph Lieberman said as he questioned postal officials. Senator Daschle fanned public anxiety by proposing that all mail ought to be irradiated to kill any possible anthrax spores, an idea that postal officials said was prohibitively expensive.

HHS ramped up its press efforts in an attempt to combat the “Anthrax Anxiety” banners that were flying on twenty-four-hour cable news stations. The CDC telebriefings with Gerberding and other scientists went daily until further notice, Fauci was heavily scheduled with TV and print reporters, Koplan talked to nearly as many, and Satcher appeared on *Larry King Live*. All emphasized that law enforcement and public health officials were working overtime to find the bioterrorists, even as Attorney General John Ashcroft said he had “no progress to report” after a monthlong investigation.

When a week passed with no new cases, Fauci told television and print reporters that he thought the anthrax scare might be over. The November 8 issue of CDC’s *Morbidity and Mortality Weekly Report* published a chart summarizing the epidemic, which consisted of twenty-one cases and four deaths. President Bush toured CDC that same day, praising the staff as “new heroes in America” but not promising any budget increases beyond those already included in his antiterrorism package.

As understandably eager as government officials were to be done with anthrax, there was one final event. A ninety-four-year-old Connecticut retiree, who had been hospitalized on November 16 with respiratory trouble, was diagnosed with inhalational anthrax on November 21 and died the same day. Although Ottilie Lundgren’s home, mail, and garbage were tested extensively, no trace of anthrax was ever found. More than one year later,

the source of her fatal infection remains as puzzling as that of Kathy Nguyen in New York.

## HOW THE PUBLIC INTEREST WAS SERVED

Criticism of governmental news management, and of media response, began even as anthrax cases were still being diagnosed. Television executives and reporters were the first to wonder whether bioterrorism was getting too much airtime because the television networks had themselves been hit. One of broadcast journalism's more significant exercises in self-scrutiny occurred on October 18, during a CNN *Special Report* on the anthrax investigation. One segment asked media critics to assess anthrax coverage like a bowl of porridge, deciding whether it was too hot, too cold, or just right. When readers see more than a dozen stories about anthrax in a single edition of the *New York Times* or the *Washington Post*, that is excessive and bound to cause panic, said one expert. Not so, countered another, so long as the stories themselves are thorough and well reported.

Just as a standard news story contains certain elements, there is a checklist of what people need to know about a public health threat. Basic information includes signs and symptoms of illness, how exposure or transmission occurs, how to estimate one's own degree of risk, what interventions can prevent or treat the problem, what outcomes are likely, and when and where to seek help if needed. Because no two people are alike or have exactly the same risks, it is seldom possible to make a "one size fits all" recommendation. This is why science and medical journalists lean heavily on physicians or scientists who can lay out the facts about a specific health threat and explain the pros and cons of various choices. This enables consumers to act in their own best interests, which may mean doing nothing at all.

But what if reporters cannot reach those experts and are offered politi-

cal appointees and bogus scientific experts instead? The impact of this scenario on the public good became the focus of the second wave of analytical stories. According to an October 23 article by *New York Times* reporter Sheryl Gay Stolberg, muddled messages from the government confused and frightened the public. She faulted the Bush administration for failing to deliver accurate information, “even if it might be scary,” and criticized Secretary Thompson in particular for suggesting that the first victim might have been infected by drinking from a stream. Instead of complaining about the administration’s “speaking with one voice” policy, however, Stolberg cited contradictory information emanating from local public health officials and “self-proclaimed experts” as the main source of confusion for reporters and the public.

Syndicated columnist Charles Krauthammer weighed in the following week, urging the administration to name “an articulate and credible doctor as the government’s single official spokesman on the bioweapons war front.” Either Surgeon General Satcher or Anthony Fauci of the NIH would do, the columnist said, and the designated scientist should hold briefings every day at the same time, just as Generals Colin Powell and Norman Schwarzkopf did during the Persian Gulf War. Without a primary medical voice, Krauthammer said, the public had fallen prey to “anthrax myths.”

Scientific organizations joined the chorus: “We continue to be alarmed by the amount of inaccurate information being circulated about anthrax, sending scores of confused citizens to take action that may, in fact, be counterproductive,” the presidents of the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine wrote in a joint statement issued on October 29. “A multitude of Web sites and self-appointed experts have emerged in the past weeks, hawking everything from gas masks to colloidal silver. The fact is that many of these remedies may well do more harm than good or have serious side effects.”

In an angry *U.S. News & World Report* editorial, David Gergen stopped just short of saying that government “bungling” in Washington

had cost two postal workers their lives. He went on to savage federal officials for generating “conflicting and confusing” messages about whether opening mail is a danger to ordinary citizens. “The federal government needs to get its act together to provide full, accurate, and reliable information to the public on a daily basis,” Gergen wrote in the November 5 issue, apparently unaware that the CDC was holding daily telebriefings for reporters. Gergen proposed that Ridge, as chief of homeland security, should be the primary spokesman on bioterrorism, with someone like Fauci at his side to handle medical questions.

Ironically, most of this criticism focused on communication snafus during the first two weeks of the anthrax crisis, which HHS and CDC had subsequently tried to straighten out. Fresh fodder came in December, however, when a meeting about post-exposure prevention of inhalational anthrax again gave rise to charges that the government could not communicate with the people. This gathering of prominent scientists had two purposes: to assess the options for preventing illness among people exposed to anthrax spores and “to promote public trust in public health decision-making,” according to Gerberding.

In the judgment of *New York Times* editorial writers, the participants accomplished neither. Difficulties arose because the experts could not say for certain whether sixty days of antibiotics would eliminate all possible future illness in an exposed person or whether 100 percent protection required additional antibiotics and possibly anthrax vaccine as well. The scientists’ solution was to set up a clinical trial that gave exposed individuals, after consulting with their doctors, the chance to sign up for any of three preventive regimens. “This is an unsatisfactory medical cop-out, as useless in its way as the vague warnings issued periodically by Tom Ridge about potential terrorist acts,” the *Times* thundered on December 20. In fact, government health guidelines on hormone replacement therapy and the like have long advised patients to consult their personal physicians and choose from several treatment

options. Given this, the *Times's* desire for a paternalistic stance on anthrax prevention is puzzling.

Some of the most pointed criticism of CDC and HHS communication problems has come from the *Times's* Lawrence K. Altman, a physician who trained as an epidemiologist at the Atlanta-based agency before making the switch to journalism. He weighed in for the first time on January 6, 2002, and reprised his criticisms as recently as October 8, when he faulted CDC and HHS for failing to promulgate firm recommendations about how Americans should be immunized against a possible smallpox attack. In both cases, Altman was especially hard on Secretary Thompson for his lack of medical sophistication, on CDC for its tendency to say nothing while awaiting further information, and on both the HHS and CDC for not knowing how to work together in an emergency. These criticisms have been echoed by other well-known reporters including Rick Weiss and Susan Okie, both of the *Washington Post*.

"We were attacked only by the most well-known of folks," Jeffrey Koplan said after he had left CDC to become vice president for academic health affairs at Emory University's medical center. A veteran of many outbreak investigations, Koplan said it was extraordinary to face "consistently hostile national reporters" while CDC was attempting to come to grips with an unprecedented public health emergency. For many reporters, getting slow or no response from CDC was business as usual, nothing worth remarking on. But for select journalists accustomed to having their calls returned well ahead of the pack, this must have been aggravating.

Even if personal pique did animate some criticisms of government performance, this does not change the fact that the process was flawed and the potential for public harm was real. When it comes to measuring possible harm, however, only one scientific assessment of Americans' responses to the bioterrorism attack is available. This study was carried out by a team of Harvard School of Public Health researchers, supported by an

emergency grant from the Robert Wood Johnson Foundation.

Between October 24 and October 28, 2001, a telephone survey was conducted among a nationally representative sample of 1,015 people aged eighteen and older. At that time, two Washington postal workers had just died, and the Nguyen case in New York had not yet come to light. Not surprisingly, 88 percent of respondents were closely following news about the anthrax cases and investigation; the only story drawing more interest was the U.S. military campaign in Afghanistan. Researchers found that

- 87 percent of respondents knew that there are medical treatments for people exposed to anthrax,
- 78 percent knew that inhalational anthrax is more likely to be fatal than the skin form of disease, and
- 75 percent answered correctly that anthrax is not contagious, while 78 percent knew that smallpox can be transmitted from person to person.

“The accuracy of what they knew was higher than I would have expected,” says Robert J. Blendon, who headed the survey effort.

Asked whom they would consider reliable sources of information during an outbreak of disease caused by terrorist attacks, survey participants said they placed more trust in medical figures (the CDC director, the surgeon general, or the president of the American Medical Association) than in senior administration officials with no medical backgrounds (the HHS secretary, the homeland security director, the FBI head).

Most people thought they or their family members were far more likely to come down with flu (73 percent very or somewhat likely) or be injured in a car accident (41 percent) during the next twelve months than to be infected with anthrax (14 percent). However, among families in

which someone worked for the postal service, 32 percent thought they or a relative was very or somewhat likely to contract anthrax during the coming year. One in four in the general public worried about the mail as a source of anthrax exposure, but that number increased to 56 percent for those related to postal employees.

One interpretation of these results is that government agencies did a better job communicating with the general public than many critics think, Blendon said. But he also sees evidence that the CDC failed to address the concerns of postal workers, the segment of the population most clearly at risk, in a timely manner. In his view, CDC was slow to assess the safety of mail processing facilities and slow to make recommendations about what workers should do to protect themselves.

In terms of self-defense measures, the survey indicates that 25 percent of households maintain emergency food and water supplies (often recommended as a hedge against severe weather) and that 37 percent of respondents were taking precautions when opening mail (such as washing their hands afterwards). But only 1 percent had purchased gas masks or protective clothing, and 5 percent had gotten a prescription for or purchased antibiotics. Only 1 percent said they were currently taking the drugs for protection.

“Americans are not at the moment panicking about anthrax, but most are starting to take some sensible precautions,” Blendon commented when the results were released in November 2001. Despite the beating government agencies have taken for mismanaging communications with the public, “on the knowledge side, they did extremely well.”

While Melissa Shepherd agrees that these results reflect a high degree of knowledge, she credits journalists rather than the government with educating the public. “[Reporters] were able to track down pretty accurate information. There were holes in it, there were things that turned out not to be accurate, but they did a heck of a job. In some ways, public health really owes journalists for this one,” said Shepherd, who is

a crisis communications expert at the Center for Public Health Preparedness and Research at the Rollins School of Public Health at Emory University in Atlanta.

Results of the Harvard survey seem to confirm what anyone who has ever hit a ball on the golf course or tennis court knows: sometimes a clumsy stroke lands the ball in more or less the right place. As any coach will say, this is no reason to stop taking lessons. Current CDC director Julie Gerberding, who took over the top job in July 2002, would like to improve both the process and the outcome. Gas masks have no role in anthrax protection, for example, yet 1 percent of people purchased such devices. “That seems like a really low percentage, but it’s still a lot of people,” she said in an interview. “I want 100 percent of people to know what’s going on.”

## **LESSONS FOR THE FUTURE**

It is impossible to predict whether biological weapons will again be deployed against the United States or how devastating their toll might be. Most experts believe that a second attack is highly likely. The federal government has been preparing in numerous ways, including its high-profile drive to amass enough smallpox vaccine to immunize every American. More important is an overall hardening of the nation’s public health infrastructure, including better surveillance and reporting systems, more training for health care providers, and enhanced laboratory capacity—all of which can help identify unusual patterns of illness and determine whether they signify a biological attack. To help pay for such improvements, HHS has made \$900 million available to state and local health departments.

In an August press conference in Atlanta, Gerberding emphasized that her agency’s new role in combating bioterrorism is inextricably linked

with its traditional mission. The agency's swift response to the West Nile fever outbreak, which was generally praised, "illustrates that the kinds of investment that we make in public health to handle natural public health problems are exactly the same infrastructure and the same mechanisms that we use for dealing with a terrorism attack," she said. "We are building terrorism capacity on the foundation of public health."

Just as bioterrorism preparedness is part of a larger public health context, what happened between government news managers and reporters during the anthrax attacks is part of a bigger picture, in which Bush administration policies are changing the rules of engagement for reporters and their sources. Journalists worry that when an end to the "War on Terror" is eventually declared, access to government scientists and tax-supported scientific research will still be limited.

M. A. J. McKenna borrowed medical imagery to describe what her working life is like one year after the anthrax emergency: "Covering CDC is like laparoscopic surgery. I'm operating at a distance through these very narrow apertures, and I'm trying to move as widely as I can with the tools that I have. It used to be open-field surgery."

Secretary Thompson's continued efforts to funnel press inquiries through his office give substance to these concerns. On January 14, 2002, a *Washington Post* story by Rick Weiss described budget proposals for 2003, drafted by HHS and the Office of Management and Budget, that would make media relations staff at NIH, CDC, and the FDA directly accountable to the secretary's office. Journalism organizations were quick to protest. "If the result of this reassignment is to weaken the ties between the communications staff and the scientific and policy staff of the agencies, while binding them more closely to the top political appointees of HHS, the public's access to objective information on critical health issues could be compromised," wrote the presidents of the Association of Health Care Journalists and the National Association of Science Writers.

Thompson addressed the uneasy relationship between his office and the

press on September 20, 2002, in the keynote address at the Mayo Clinic National Conference on Medicine and the Media, held in Rochester, Minnesota. He praised the media for providing Americans with “up-to-the-minute information about often confusing data” during the anthrax crisis, acknowledged that the communication capacity of HHS agencies had been overwhelmed, and pledged that reporters’ calls would be returned more promptly in the future. Journalists are essential players in emergency situations because only they can disseminate public health information to millions of people at once, he said.

Thompson’s tone turned defensive during a question-and-answer session, when he was confronted by a reporter who described being stonewalled and denied access to government sources during the bioterrorism crisis. “You’re absolutely misstating that. Subsequent to October 4, everybody, any doctor, any researcher in CDC or NIH was given a green light. I know somebody said something and then it spread throughout the press, but it was just not correct,” Thompson insisted.

Instead of denying that there was a problem, many communications experts believe the HHS leadership should focus on preparing for the future. At CDC, for example, phone banks for handling inquiries from health care providers, journalists, and worried citizens have been expanded since fall 2001. A facility for broadcasting televised press conferences, or for linking CDC officials with HHS leaders in Washington, also has been set up. These are important steps in the right direction.

Government agencies also must prepare accurate information about various organisms in advance: if another bioterrorism attack occurs, communication offices should have fact sheets and rosters of experts on hand in order to disseminate critical knowledge immediately. Crisis communications experts emphasize that credible doctors and scientists should be talking to the press from the start and should be available on a schedule that suits today’s twenty-four-hour news cycle so that less reliable speakers will be shut out. Although political appointees can convey important

messages to the public, the CDC director, surgeon general, and other medical authorities should handle technical matters.

Experts see the anthrax attacks as an atypical form of bioterrorism because they affected relatively few people in a limited number of sites and because the organism arrived with notes identifying it as anthrax. If bioweapons are used again, the assault will probably unfold more slowly, in more locations, and may well involve an organism that spreads easily from person to person. Communications challenges will be greater than before, and press officers sent to site investigations will need clear guidelines for coordinating messages with those emanating from Atlanta or Washington so that alarmed citizens are not bombarded with conflicting advice.

Another lesson that HHS and CDC communication managers may derive from the anthrax experience is that the eye of the storm is not the place to suddenly decide that all reporters should be treated in the same way. If CDC and HHS press officers had continued giving elite reporters the same degree of access they usually enjoyed, at least some of the critical articles in national newspapers might never have been written. One rationale for doing this is that such reporters are more knowledgeable and experienced than most of the general press corps.

A final piece of advice for news managers was offered by former Surgeon General C. Everett Koop, who testified before a congressional subcommittee in November 2001. Koop told legislators that communicating threats to the public was mostly a matter of common sense and laid out some simple rules about how to do it effectively. The final item on his list, and most important in Koop's view, was "keep the press on your side through honesty and forthrightness."

As for journalists, they know and accept that sources often balk at certain questions. What reporters want, whether they cover science or the statehouse, is the opportunity to ask questions of those best qualified to provide answers. With government experts largely unavailable during the

first weeks of the anthrax story, individual reporters scrambled to add new names to their Palm Pilots. “The one good thing is that it shook us out of our round-up-the-usual-suspects mode. I remember going to the web and going to the American Society for Microbiology to find academic experts,” said Weiss. Other reporters concur that if there is a next time, they will have more ideas about whom to call.

In addition to steps taken by individual reporters, the profession is adapting to a world where bioterrorism is no longer unthinkable. Some journalism schools have instituted new courses such as “Reporting on International Terrorism,” which is being taught at the Boston University for the first time this year. Professional organizations also have responded with educational offerings for working journalists.

With help from the Carnegie Corporation, the Radio and Television News Directors Foundation (RTNDF) produced a two-hour bioterrorism seminar that was broadcast by satellite in late 2001. In January 2003, the organization began distributing a journalists’ guide to covering bioterrorism to every television and radio newsroom. Later this year, the RTNDF plans another satellite forum, workshops, presentations at professional conferences, and additional publications—all aimed at preparing broadcast journalists to cope with biological warfare.

FACS (the Foundation for American Communications), a twenty-five-year-old organization that conducts educational programs and develops print and online resources for working journalists, has turned its attention to bioterrorism as well. In December 2001, FACS teamed up with the television news directors and the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine for a workshop aimed at training reporters to cover terrorism. Bioterrorism issues were covered by Margaret Hamburg of the Nuclear Threat Initiative.

Everyone, of course, hopes that bioweapons will never again be deployed against Americans. But if this does happen, the timely flow of

information from experts to the public via the mass media will be the nation's best protection against panic and potential disaster. Secretary Thompson acknowledged this when he addressed the Mayo Clinic's Medicine and the Media workshop.

We in the government can issue all the reports, the news alerts, the studies from whatever you and anyone could ever want, but unless they're disseminated to ordinary Americans in a way that's clear, accurate, honest, and accessible, our best efforts amount to lengthy academic exercises relevant only to a very few. That means we need the media to have clear, accurate, and accessible information, as well as our public health partners. So I will always be candid with you, and those that know me well can attest to that.

The anthrax crisis of 2001 was a seven-week period that changed the world for many Americans, replacing the assumption that all is well with the uneasy sense that another attack could come at any time. Hearing on the radio that two people from New Mexico have bubonic plague, catching sight of a crudely addressed envelope, or sniffing an unusual odor in a subway car can all set the heart to pounding. That is what ordinary citizens have learned from our collective experience with bioterrorism. What government officials and reporters have learned remains to be seen.



## **AUTHOR'S NOTE**

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