Capitol Hill Staff Workers’ Experiences of Bioterrorism: Qualitative Findings From Focus Groups

Carol S. North, David E. Pollio, Betty Pfefferbaum, Deborah Megivern, Meena Vythilingam, Elizabeth Terry Westerhaus, Gregory J. Martin, and Barry A. Hong

Little systematic information is available on mental health issues related to bioterrorism. Five focus groups were conducted with Capitol Hill office staff (n = 28 total participants) to learn about their experience of the anthrax incident on October 15, 2001. More than 2,000 verbal passages were coded into categories and themes by using qualitative analysis software. Issues emerging from the discussions included difficulties utilizing customary social supports, concerns over potential long-term dangers created by efforts to eradicate the anthrax, and nonadherence to antianthrax medication regimens. Nonadherence to antibiotic prophylaxis is of immediate concern for response to future bioterrorist events as well as infectious disease epidemics. Other topics that warrant attention are social support and mental health interventions.

Qualitative research with focus groups has been used to explore varied topics in depth, such as health attitudes, beliefs, and behaviors, including medication adherence among low-income urban African Americans who have chronic asthma (Freedman, Norfleet, Feldman, & Apter, 2003), differences in physicians’ and patients’ opinions on medical error disclosure procedures (Gallagher, Waterman, Ebers, Fraser, & Levinson, 2003), and promotion of human immunodeficiency virus (HIV) testing, counseling, and sex education programs in an undeveloped country (Castle, 2003). Novel and unexpected findings have sometimes emerged from this exploratory research: For example, many highly educated people in the latter study expressed disbelief about the existence of acquired immunodeficiency syndrome (AIDS) (Castle, 2003). Focus groups also provide a relatively straightforward means of obtaining preliminary data for new investigations of poorly understood topics such as bioterrorism, about which little systematic information is currently available to guide interventions.

Few pertinent systematic data pertaining to mental health effects of bioterrorism are available; however, previous literature has identified characteristics for investigation, including risk communication, management of misattributed somatic symptoms, and the role of social support (Covello, Peters, Wojtek, & Hyde, 2001; Holloway, Norwood, Fullerton, Engel, & Ursano, 1997; Kawana, Ishimatsu, & Kanda, 2001; Norwood, Holloway, & Ursano, 2001). Relevance to these deliberate acts may be found in studies of disasters, including toxic contaminant spills, industrial accidents, and infectious
epidemics, which share uncertainties about personal exposure, boundaries of the exposure, and duration of risk. Anticipated psychological and social repercussions may include potential for mass "psychogenic" or "sociogenic" illness in multitudes of unexposed individuals who have medically unexplained symptoms who may seek access to and overwhelm the medical care system (Alexander & Fedoruk, 1986; Amin, Hamdi, & Eapen, 1997; Bartholomew & Wessely, 2002; Pastel, 2001; Schoch-Spana, 2000). Systematically observed outcomes that followed toxic exposure to dioxin contamination, however, included neither somatoform symptoms (Smith, Robins, Przybeck, Goldring, & Solomon, 1986) nor posttraumatic stress disorder (Robins, et al, 1986).

In the fall of 2001, anthrax-filled letters were mailed through the U.S. Postal Service to several sites, including Capitol Hill, killing 5 and infecting 12 others (none on Capitol Hill). On October 15, an office worker in Senate Majority Leader Tom Daschle's sixth-floor Hart Building office opened a letter that contained suspicious powder later confirmed to be anthrax. The office was closed and staff workers briefly quarantined. Hundreds of potentially exposed individuals were tested for anthrax, and antibi-otic prophylaxis (ciprofloxacin) was provided (Hsu et al., 2002). Buildings across Capitol Hill were subjected to decontamination procedures. A recent comprehensive study of 16 individuals who were infected by anthrax during the attacks in the fall of 2001 identified indications of persistent medically unexplained health problems, psychological symptoms, and poor life adjustment (Reissman et al., 2004). A report (currently in press) of focus groups, which studied 36 Brentwood postal workers and 7 Capitol Hill workers more than 1 year after the anthrax exposures, describes concerns about demographic inequality in their medical treatment (Blanchard et al., in press). The current report describes results of focus groups of Capitol Hill staff that inquired about their attitudes, beliefs, and postexposure behaviors to explore the themes identified, identify appropriate concerns for mental health interventions, and inform future studies.

Method

Five focus groups of four to eight members each were conducted between January 14 and February 1, 2002, approximately 3 months after the Capitol Hill anthrax incident (4 months after the September 11 terrorist attacks). The 28 study participants constituted a convenience sample of staff recruited by word of mouth from six offices, ranging from the highly exposed Hart offices to offices in separate, unexposed buildings and remote sites, including two House offices. Approval for the research was obtained from the Washington University School of Medicine Institutional Review Board. A federal Certificate of Confidentiality was obtained for further protection of participants' privacy. Participating congressional offices provided approval for the conduct of this study in their offices. Individual participation was voluntary and written informed consent provided.

The sample was 61% female and 96% Caucasian. Mean age (SD) was 28.3 (7.1), 77% were single, and 32% had advanced degrees.

The two facilitators (CSN, DEP) conducting these groups had previous experience in nondirective interviewing techniques or training in conducting of groups. Group discussions of approximately 60 to 90 minutes were audiotaped. The groups began with an opening instruction by one of the facilitators explaining the purpose of the focus group (to learn about their issues related to the Capitol Hill experience with anthrax). Because the anthrax letters were part of a series of unsettling national events that originated with the September 11 terrorist attacks, participants were invited to begin by describing their experiences of both events. A protocol of primary questions developed for this study included the following:

1. How did you learn of the anthrax on Capitol Hill, and how did you react?
2. How has your behavior or your life changed since then?
3. How did you react when you first learned of the September 11 terrorist attacks?

Thereafter, group facilitators avoided further direction. Questions such as "Can you tell us a little more about that?" or "What else happened?" were interjected only as needed to stimulate discussion from prior statements to prevent inserting new topics. Thus, the groups provided distinct content without direct bias or structure imposed by facilitators.

Data Analysis

Qualitative methods used NVivo software to organize and interpret data from transcriptions of audiotapes of the focus group by labeling passages of text with codes identifying specified content. The text of the five focus groups was reviewed for recurring themes, and "nodes" (codes) were created for nine thematic categories identified: context of 9/11 and anthrax incidents, personal exposure, personal safety, emotional reactions, psychiatric...
symptoms, social support, social disruptions, authorities' response, and medical response. Two independent raters reviewed 2,162 passages, tagging passages that identified the themes with one or more of the nine nodes. NVivo tabulated the number of items coded into each category, allowing assignment of relative frequencies of response types. Kappa measures of interrater reliability on items included in the nine categories ranged from .83 to .88 (calculated on nonnegatively scored response pairs only), statistics all within the excellent range of reliability (Fleiss, 1981). Differences in ratings were subsequently discussed by the team and resolved by agreement.

Results

This report presents findings regarding the context and perceptions of individuals' experiences relating to eight categories (context, exposure, personal safety, medical procedures, disruptions, emotional reactions, psychiatric symptoms, and social context) that constitute 77% of the responses coded from these groups. Authorities' reactions (23% of responses) are detailed in a forthcoming report (North et al., in press). Category item frequencies in this report ranged from 17% (personal safety) to 4% (symptoms).

Context of Anthrax and September 11

During the September 11 terrorist attacks, the cognizance of Capitol Hill workers of their status as a terrorist target provided potential candidacy for posttraumatic emotional consequences. Anthrax attacks in the following month added layers of concern to this backdrop. The concern was relative, however: A worker from a directly exposed office explained, "September 11 was horrible, it was awful and I will never forget it, but it did not hit me the way October 15 did."

In the penumbra of the September 11 terrorist attacks, Capitol Hill staffers pondered their workplace safety. They sensed that the Capitol Building, rather than the surrounding Senate and House offices where they worked, was the intended target of the attacks. "It could have easily been us. Perhaps, if the plane hadn't gone down in Pennsylvania." Comments of participants from the Senate side of Capitol Hill seemed to reflect more upset and preoccupation with the anthrax experience, whereas those from the House side indicated more concern about the September 11 attacks. A House worker stated, "It seems easier to accept anthrax than the September 11 [attacks]."

The September 11 attacks may have primed the Capitol Hill population to react vigorously to the next event.

The only time I was ever really frightened and my heart started pounding was [during a false alarm] a few days after September 11th. I was in the Capitol and the guards just started yelling, "Everybody get out! Everybody get out!" and there was this big evacuation of the building . . . this was like a mad dash by everyone to the door.

Choice of footwear was a new concern in the post-9/11 workplace: "I definitely make a point since September 11th not to wear shoes to work that I can't run very fast in."

In comparing the anthrax experience with 9/11, perceptions of the two events sometimes blurred together, as if reflecting a single event. "In my mind it seems so hard sometimes to separate September 11 [from] the anthrax . . . I can't get the timeline right in my mind, because it all folds into one big mess." This relationship was captured in new terminology, for example, "bioterrorism attacks." One focus group participant described the Capitol Hill experience as "the Ground Zero of anthrax." Familiar quotations found novel applications in discussions of the bioterrorism experience: "You are living history"—as scary as it is, the first bioterrorism attack on the United States."

Contrasts between 9/11 and the anthrax attack on Capitol Hill were also considered: "It's a lot different with anthrax than it is with September 11th. On the Hill, we didn't know anyone who died from anthrax or that was really affected; while September 11th, we all saw the devastation."

After the debut of anthrax in Florida and New York City news stations, a vivid expectancy arose: "We kind of knew something else was probably going to happen." "We had just discussed that it was probably only time before they targeted someone on the Hill."

Anticipation of the next terrorist event kindled anxiety: "I really don't have any idea of what it could be; I just feel like something is going to happen again. I feel like it's inevitable." "People who want to hurt the government or cause mass terror, they've seen how easy it can be. . . . I mean, good grief, look at those freaks who've been sending [hoax] letters. . . . There are people out there who are going to realize that you don't even have to kill a lot of people." These worries generalized to a variety of potential catastrophes: "I worry more about stuff that they can't protect you against, like car bombs, or chemical attacks." "I've always personally been much more concerned about [terrorism] committed against this
building by more conventional means than anthrax…. It’s much easier for your common garden-variety lunatic to blow up a pickup truck, a panel truck outside of our building … or a car bomb, or someone just runs in with a bomb.” “Maybe the difference between September 11 and the anthrax is we weren’t expecting September 11…. After the anthrax came, we knew something else was going to happen so you’re kind of expecting it. September 11 was out of nowhere.”

Perceptions of Exposure

The perceptions of exposure category describes people’s ability to perceive and accept the dangers of the anthrax attacks they experienced. Participants’ emotional responses varied across the evolving time frame of events described. Initially, the reality of the anthrax letter was hard to accept, and denial was prominent. “I think I was feeling complete denial that something like that was going to happen to us. That was my first instinct. I went through the ‘No, this isn’t real, it’s not going to be real, it’s going to be fine, we are all going to be fine,’ and … deep down I knew this was bad.” Incidents of false alarms, threats, or hoaxes occur regularly on Capitol Hill. Comments suggested they may have had various effects, sensitizing some people to danger yet reinforcing complacency among others. One worker stated that over 8 years of employment on Capitol Hill, “I’ve opened a lot of letters and talked to a lot of people who were really mean, but after a while, you stop taking them seriously because you get threat after threat after nasty letter and nothing ever happens…. Probably we took it all way less seriously than we should have.”

Another participant identified the September 11 terrorist attacks as helping him realize the anthrax incident was probably not a hoax. Participants in the focus groups indicated that the gravity of the anthrax exposure sank in only gradually. “It wasn’t until maybe the next day that everything was quarantined and they told us, ‘You have to come … and get a nasal swab.’ That’s when we [realized] … ‘Oh, my gosh, wow, we actually have to get tested for this.’ You know, that’s huge.” Early concerns over the potential danger evolved with continuous unfolding of new events. “I started to get a little bit more concerned. We got nose swabs, and then on Wednesday the news came out … Daschle and Feingold staffers had tested positive; it was the [close proximity of the] Feingold staffers that panicked me.” Another worker said, “I had to be told three times that my [nasal swab] test [for anthrax] came back positive.” It wasn’t until 2 days later that a 7:00 A.M. telephone call with the news “Your name was one that came back positive” convinced the worker to take the incident seriously. Many workers did not appreciate at the time that the nasal swab test result was not an indicator of infection for any individual, but rather an epidemiologic tool for defining boundaries of anthrax contamination levels. “When our office … tested negative, I think that’s when all of us kind of breathed somewhat of a collective sigh of relief.”

Uncertainty about exposure complicated efforts to establish personal temporal and spatial boundaries to the danger. “OK, I am not as safe as I thought; I am kind of back and forth on it, I am safe, I’m not safe.” Participants described difficulty interpreting and attributing physical sensations, as the worst imaginable scenarios played out in life-and-death struggles against disease, blending fear and fact. “If you have the sniffles, that’s a cold, but if you don’t, that’s possibly … anthrax…. ‘Is this normal? How do I feel?’” “Oh my God, I am going to die of anthrax and it’s horrible.” Common physical sensations and bodily changes were misconstrued as anthrax infection: “I was allergic to the holder for my badge and I got a rash…. I [thought], ‘A rash! Maybe I was exposed to anthrax.’ I had already gone through a whole rationalization: There is no way I could have been exposed.”

Disruption

Disruptions to usual work activities during weeks to months of displacement from Senate Hart Building offices were described as a major source of personal hardship and emotional burden. “For a week and a half, except for the essentials, we were completely, completely interrupted.” The uncertainty of how long the work shutdown would continue further increased the distress: “It was a day-to-day status. You couldn’t make plans … but because you were waiting each day with expectations that it might open the next day, it was a constant mind tease.”

Resuming business, entire offices were forced to conduct their work in other locations, doubling up with other offices, sometimes with rivals. “We started sharing offices … took over the conference table in the other room…. People had to be creative with coming up with ways to continue to get work done, so you had to get along with the people you were with.” “Trying to move major pieces of legislation” proceeded without U.S. mail service, without access to any paperwork including filed documents and address files, and often without personal computers, telephones, or email. “We’ve gotten no mail … no FedEx deliveries, no courier deliveries, no UPS deliveries still to this day…. It brought the place to its knees and it’s still having an impact now.” “I wasn’t jealous [that
Bioterrorism Focus Groups

I didn’t have a work space; I was mad. I was watching everybody work like we had never left the building; I was mad. I’m like, how can you people pretend that nothing ever happened?” Workplace disruption displaced the anthrax as a major source of distress: “Now it’s really not the anthrax anymore; it’s not the bombing anymore; it’s none of that; it’s that I am not in my office.”

Perceptions of the effects of the anthrax incident on workplace stress appeared to differ by exposure. Comments from the House side of Capitol Hill suggested that closure of the buildings was taken more in stride. “To be brutally honest, anthrax then came almost as a relief. I almost needed time to just get away from everything.”

Safety Issues

Safety was a prime personal consideration after the appearance of the anthrax letter. Safety concerns extended not just to the anthrax itself, but also to health effects of the remedies used to control the anthrax, including chemicals for its cleanup and irradiation of mail handled by the workers.

They never applied [these chemicals] within an office environment, they never used it on anthrax before, and I am much more concerned about the cure than I am about the disease in this instance. What impact is that going to have on a building that has no open ventilation, and everything is recirculated; and what impact is that going to have on breathing in these fumes constantly from a carpet that’s completely been treated with chlorine dioxide, walls, furniture?

The period of concern did not end with the current period. “You just wonder ... 30 years from now am I going to get cancer because I was exposed to irradiated mail for however long?”

The irradiation of mail affected the paper in ways that bothered workers.

Now the mail is ... sent to Ohio. Then they bring it back here and it’s sorted again and brought to us and it smells funny. ... It’s all stuck together. ... That almost freaked me out more than the actual anthrax. ... This stuff is grotesque; I don’t want to touch it. ... Sometimes it’s still sticky and I am still opening it and the letter is wet. ... It sticks together like a stamp you can’t open up.

Confronting uncertain risks, people resorted to measures such as cleaning their computer keyboards with alcohol swabs and donning gloves and masks to handle irradiated mail. They pondered the wisdom of continued exposure to danger working on Capitol Hill and living in Washington, weighing the satisfaction of their job against the risk. “At what point [do] you draw the line and say, ‘I’m going to quit my job because I don’t feel safe?’” Workers could not always agree on the level of danger. Upon being told by a coworker, “Oh, stop stressing out. ... You’re just obsessing about this,” one staff worker replied, “I am not obsessing; this is dangerous!”

Medical Procedures

Before antibiotics and vaccinations were administered, nasal swab testing was conducted widely. Some described the nasal swab procedure for anthrax testing—typically a relatively innocuous process—as unpleasant and uncomfortable: “They hit two nerves on each side of your nose ... I was actually sick that night. I felt like I had a bad cold, fever.” “It was just awful. I would never do it again, because I was miserable for the entire evening. It felt like my head was just drained and my eyes were watered. ... I just kept thinking about the test and how much it battered me.” One individual described “an incredibly long swab inserted all the way up the nasal passages that brings tears to the eyes—I had no idea my nasal passages went back so far.” The implements were called “brain swabs.”

Completing the medical protocols on hundreds of people in a short time created occasional awkward moments. The workers recalled receiving their antibiotic prescriptions in groups. Assembled together, they were asked what medications they were taking, to prevent potential antibiotic drug interactions. Workers learned surprising personal information about colleagues who disclosed use of certain medications such as birth control pills, antiretroviral agents, chemotherapy, Viagra, or psychotropics.

Despite known dangers including death caused by infection with anthrax, adherence to a 2- or 3-month regimen of twice-a-day antibiotic administration was not as simple as imagined. When a physician admonished one of the workers that she would need to take the medication faithfully even though it would be easy to forget doses, she thought, “Forget! Are you kidding me? How would I forget?” But she did forget: “The first couple of days you have to take it on time. I took it 15 minutes late—oh, no! And after a while, [it was] like, ‘Yeah whatever, it kind of makes me sick; oh, I don’t think I’ll take it.’” Succinctly stated by another: “These are not fun antibiotics.” Workers described media reports they thought they had heard warning people not to take antibiotics for more than 3 days lest they “become immune” to them (clearly incorrect information and advice). A worker who heard
one of these reports admitted, “I took it for I don’t even think 3 days, to be honest with you.” Another said, “I don’t even think I took it for 3 days; I think I took it for 2.” Another worker explained:

I haven’t been taking it as regularly as I should, and in my head that’s OK, because I’ll save some for when we finally go back to the Hart [Building]. . . . I know how antibiotics work; that’s bad . . . I don’t take it because I’m sick of taking it and I don’t remind myself to take it as often. I’ve been tired of it. And I hate taking it. But then, when I forget to take it, I don’t beat myself up about it as much as I did the first 60 days because I am really OK now, but I am just taking it in case.

The public seemed to have a fascination with ciprofloxacin. One participant observed: “Cipro became the status drug of D.C. . . . It replaced Ecstasy . . . If you were taking Cipro . . . it meant you must have been some place really cool.” People they met were drawn to their experience. “People would ask me, ‘Oh, you are taking Cipro?’ and it was like a novelty or you are a celebrity. They were definitely excited ‘Can I see the Cipro?’ . . . It was the hit drug of November 2001.”

**Emotional Responses**

Initial emotional responses reflected various forms of disbelief. The anthrax incident felt “like a mind game,” a hoax or a joke or part of a scenario being enacted for a disaster training drill. “I remember thinking, it can’t be happening. My first reaction was complete denial, like they are overreacting or somebody is screwing around with us.”

As disbelief gave way to the reality of exposure to anthrax, immediate emotional reactions included an array of feelings, from fear (“terrified,” “nervous,” “fearful,” “it was disturbing,” “freaking out”) to anger (“angry,” “livid”),

**Symptoms**

Symptoms received surprisingly little mention relative to the amount of other material covered in the groups. One worker described new onset of upper gastrointestinal symptoms and exacerbation of previous problems with headaches after the anthrax incident. After a thorough evaluation involving several medical tests, her doctor concluded, “Well, I think it’s stress.”

One worker described concentration difficulties: “There were days when people just couldn’t work. They couldn’t focus.” Arousal and intrusive recollection were directly observed by the focus group facilitators in one of the study’s groups, when the discussion was diverted to attend to some noises outside the window. The group described it as a “whooshing sound” and pondered whether it was an airplane. This discussion prompted one participant to mention sounds of sirens along with airplanes as upsetting reminders of 9/11.

Avoidance and denial received more extensive descriptions. “For the 3 first days of the anthrax thing I stopped reading the newspaper, I just zoned out, I was in denial.” “I didn’t want anything to do with politics, or . . . anything to do with Washington. I just wanted to forget about it for a while.” Their denial extended to behaviors involving decisions to cooperate with the medical response. “I didn’t know if I had [anthrax]; I didn’t want to get tested ‘cause I was believing that I didn’t have [it].” Avoidance even extended beyond the workplace to other parts of people’s lives. “I stay at home a lot more now. I used to be the kind of person who would fill up every night of my schedule.”

Early psychological interventions to help workers cope with their feelings about the anthrax incident in the workplace received mixed reviews. Some comments were quite critical. “The Employment Assistance Office set up group therapy sessions . . . most of these people have been to a couple of those. I didn’t think of those as very productive at all.” “The way [this] psychologist approached it, it was, ‘So, tell us about your feelings’ or . . . ‘That’s normal,’ every time we said [anything] . . . ‘That’s normal.’ Don’t just tell me that what I’m feeling is OK. Tell me why I’m feeling what I’m feeling.” Others were more positive. “We went to a really good one that talked about coping skills.” Some felt their own emotional support of one another was more helpful. “We all talked [to each other] about what we are doing to get by, but in a lot of ways we were getting therapy from each other. . . . So, yeah, there’s psychologists out there who are experts on trauma, but we are experts on this trauma.”

**Social Support**

Workers reported receiving extensive emotional and social support from one another in the wake of the anthrax exposure. Participants explained that offices well known for their cohesiveness even before the event found their support systems had “intensified tremendously.” Unpleasant business such as standing in lines for anthrax testing fostered opportunities for interpersonal support. “Waiting to be tested . . . I made friends with everyone else around. . . . I could go to any of those offices [of
people] we were in [line] with and say, 'You remember me....' They considered their support of one another as therapeutic: ‘I needed to be back out here with people who had gone through it, so we had our own support group.’

You would think we would want to run as far away from each other as you can get, but... everybody understood... If you needed somebody to talk to, there was somebody there and if you needed to not talk there was somebody who would help you find something else to talk about.

Within the Capitol Hill community, however, not everyone was a source of social support. The participants explained, ‘You have to figure out who among your friends you can share information with,’ to guard against personal information’s leaking to the media.

Although “sometimes it was just too much and I needed to talk to someone else,” participants indicated that social support was not as readily found outside work. They felt their friends and family “just don’t understand and they don’t care and I can’t relate to them.” “I needed to be around people that had gone through it... My friends... don’t really talk about it.” One worker said her sibling would not allow her to talk about anthrax “because I am unpleasant conversation.” Another said, “My boyfriend didn’t deal with this well so we are no longer dating.” Families did not provide the social support people usually expect of them: “I feel like I can’t disclose challenges at work as much with family and close friends because... there’s no reason to concern others when... they can’t do much about it.”

Families’ needs for reassurance from the workers created more social liability than support from family members. One worker “had 14 messages from [my husband] trying to find me to figure out if I was OK.”

I had hysterical messages from my mother... My dad called; my boyfriend called; my friends called; and they couldn’t find me and they were watching the news. And then Tuesday morning, I am in the meeting... and it breaks on CNN that 23 people... tested [positive]... and my mother called, and my father called, and my boyfriend called and like, I used 1700 minutes on my cell phone... The media was very difficult for me.

One worker’s mother had asked, “Are you sure you want to risk your life for this job?... Maybe you should just leave there and go do something else.” Another mother made the worker promise never to go into the Hart Building again. Workers found themselves reassuring their family rather than the reverse: “[I was] trying to weigh out information [that would be] easier for them to hear, what’s going to make them feel better, and trying to weigh that with the fact [that] I don’t want to talk about it anymore.”

The apparent prevalence of this situation is reflected in one worker’s summary of it: “Almost everybody had somebody in their family who was making them miserable.”

In social situations, workers encountered celebrity status as anthrax victims, such as the worker who was introduced as “the anthrax bridesmaid” at a wedding. “They introduced me at the rehearsal dinner as ‘My friend [—]; she has anthrax’... like it’s part of your identity now.” This was not the kind of celebrity status one might welcome: “Yeah, I wanted to be famous, but not this way. Not like this.”

Discussion

Context of the Findings

These focus groups provided a glimpse into Capitol Hill workers’ experience of the October 15, 2001, anthrax exposures. Emerging topics of medical response, personal safety issues, and social context are consistent with the earlier literature’s suggestions of the importance of risk communication and social support in bioterrorism and with findings from relevant nonbioterrorism research (Lamar & Malakooti, 2003; Norris & Kaniasty, 1996; Patel & Zed, 2002). Concerns emphasized by exposed postal workers (Blanchard et al., 2004) and infected victims of the anthrax attacks (Reissman et al., 2004) in other studies—equality of medical care, persistent medically unexplained health problems, psychological symptoms, and life adjustment problems—were not prominent in the Capitol Hill focus groups. The relative underemphasis of psychological symptoms and medically unexplained symptoms in the Capitol Hill study matches findings of published studies of dioxin contamination (Robins et al., 1986; Smith et al., 1986).

The amount of legislation successfully enacted during the postanthrax period on Capitol Hill is an indicator of thwarted terrorist effect (Congressional Management Foundation, 2001). Despite the disruption, workers said they pulled together and refused to allow derailment of their work, a testament to the resilience of this population. The 9/11 attacks a month earlier may have had both sensitizing and habituating effects in people’s response to trauma and in the context of other stressors in individuals’ lives.

Safety and Medical Concerns

A concern identified by the focus groups was the unresolved issue of possible continuing danger in the
perceptions of the workers. Although risk of anthrax exposure passed within days for most, and within 4 months for the highest-exposure groups, longer-term worries lingered about potentially harmful effects of the irradiation of mail and chemicals used to clean up the contamination—consequences of the interventions, not the infectious exposure itself.

Admission of nonadherence to anthrax antibiotic prophylaxis in this setting is of immediate concern for response to future bioterrorist incidents and epidemics. Despite these intelligent and well-informed individuals’ appreciation of the importance of medication, their actions seemed inconsistent with their knowledge. Inconsistent recommendations by authorities and conflicting messages in the media in the weeks that followed the exposures, combined with the passage of time when no one on Capitol Hill became ill, may have contributed to complacency in the workers and perceptions that medical authorities’ application of antibiotics was overly broad and excessively cautious. In circumstances of extended (60- to 90-day) antibiotic prophylaxis for potentially exposed groups, medication adherence may have less in common with familiar 7- to 14-day antibiotic courses for acute infections in the community that produce dramatic relief than with chronic medication maintenance among people who do not feel ill without medication. In the long-term treatment of hypertension, for example, antihypertensive medication side effects function as a potent disincentive, contributing to nonadherence (Menzin et al., 2004). Further investigation into treatment adherence and risk communication in the context of bioterrorism is crucial.

In focus group comments, early psychological interventions did not receive particularly high approval ratings. Whereas some people felt that techniques such as relaxation were helpful, others wanted them better tailored to their needs. Even though their feelings were identified as “normal” for people in the context of extreme stress, these feelings were not normal in their usual experience, and therefore simple reassurance about the normality of their feelings was inadequate.

Social Support

Facilitation of postdisaster recovery involves restoring effective social roles and returning people to their usual sources of social support (Norwood et al., 2001). However, social support is a multifaceted phenomenon involving complex systems, as Norris and Kaniasty (1996) noted in their social support deterioration model developed by using longitudinal data on hurricane victims. Disaster exposure, received and perceived support (which may differ), and psychological distress in this model are interrelated and may in turn be confounded with extraneous variables such as preexisting individual characteristics. Consistent with this model, combined effects of anthrax exposure, the stigma of victimization, and national media attention may have conspired to weaken the primary support system of family and close friends outside work. The Capitol Hill workers’ usual social supports ironically sometimes added to, rather than reducing, their distress (or were perceived to do so). The support they could not find elsewhere they provided to one another, invoking Lindy and Grace’s (1985) concept of the “trauma membrane,” which isolates survivors in a self-contained unit of social support. The social support of exposed individuals for one another identified in these discussions should not be overlooked as a valuable source of strength to complement formal mental health interventions.

Study Limitations and Future Directions

This study was limited by the small sample size and volunteer nature of its selection of participants, who represented only a small portion of the workers on Capitol Hill. The participants may not be fully representative of Capitol Hill workers; their experience may not generalize to other groups; and the findings here cannot necessarily be considered to be representative of the general thoughts and emotions of workers on Capitol Hill or other populations such as the Brentwood postal workers. This sample was young, highly educated, high-functioning, well informed, and resourceful. Volunteering to participate in the study in itself may reflect willingness or eagerness to discuss personal reactions, characteristics that might not be shared by nonparticipants, some of whom might be more symptomatic and avoidant than the participants, or, alternatively, less concerned about or upset by the experience.

The findings may be limited by participants’ concerns about confidentiality, despite measures taken to reassure them that their privacy would be protected. With one exception, the groups were conducted in closed rooms within governmental offices (one group was conducted in a private room in a nearby hotel). Four of the five groups were composed of members from a single office; the fifth group comprised individuals from different offices. Although members may have been reluctant to discuss personal topics in the presence of professional colleagues, who may have included supervisors, they may also have been more comfortable in the presence of their colleagues, from whom they had received social support in the wake of the anthrax incident. Individual anecdotal comments
by members indicated that both processes may have been operative.

Most comments from the focus groups about the management of the anthrax incident were negative. This response should not be taken to indicate general negativity in the overall perceptions of staff workers. Because the focus group study was not designed to generate representative data on opinions about medical and safety issues but rather to learn about issues the workers faced, the concerns elicited reflected generally negative content, in part as a result of instructions to the focus groups to discuss their specific “issues and concerns” about the anthrax experience.

Further studies seeking more representative samples and providing more systematic data with greater depth are needed to confirm, refocus, and expand the findings of the current study. Primary considerations of additional study should include assessment of more diverse samples; examination of psychiatric diagnosis; consideration of longer-term, slowly emerging effects of bioterrorist incidents; investigation of determinants of treatment adherence; and exploration of social support mechanisms.

Summary

These focus groups who described Capitol Hill staff workers’ experience of the anthrax incident on October 15, 2001, indicated several concerns, including medical and personal safety issues and social context. Psychological and medically unexplained symptoms were not emphasized. Nonadherence to antianthrax antibiotic prophylaxis is of immediate concern for bioterrorism and infectious disease epidemics.

Acknowledgments

This research was supported by National Institute of Mental Health Grant MH40025 to Dr. North and by Award MIPT106-113-2000-020 of the Oklahoma City National Memorial Institute for the Prevention of Terrorism (MIPT) and the Office for Domestic Preparedness, U.S. Department of Homeland Security, to Dr. Pfefferbaum. Points of view in this document are those of the authors and do not necessarily represent the official position of NIMH, MIPT, or the U.S. Department of Homeland Security. The authors gratefully acknowledge the assistance of Pam Lokken; Laura Petrou; Rear Admiral John F. Eisold, The Attending Physician to Congress, United States Capitol; the participants in this study and Capitol Hill offices involved.

References
