"We think this is a low-probability exposure," replies Dr. Scott Fridkin.

"We have a woman with flu-like symptoms and a negative culture," continues the Maryland health official.

"We can classify her as no apparent disease," replies Dr. John Jernigan.

"We have a post office worker with a rash on the forehead and an ulcerated ear lobe," the voice goes on. "Johns Hopkins University doctors cannot rule out anthrax."

Fridkin, Jernigan and the other epidemiologists with the Centers for Disease Control and Prevention hunched around the phone fall silent.

It has been a week since they found any new anthrax cases in Washington.

But for a month the rare disease has confounded all their expectations.

In an unremarkable office building a few blocks north of Capitol Hill, more than 80 CDC staff are investigating the anthrax attacks in Washington, part of a 500-person task force the Atlanta-based agency has assigned to the disease. Until the death of a New York woman last week, Washington was the CDC's most urgent focus.

Khabbaz is a senior scientist; on other investigations --- the 1997 Hong Kong flu outbreak, for instance --- she directed a field team by phone from Atlanta. This time, she went too, arriving Oct. 16 with 10 colleagues. Four days later, a postal worker arrived at a D.C. hospital: Washington's first anthrax case. Within a week, four others were diagnosed. More CDC staff arrived, called in from Atlanta, Cincinnati, Florida, Alaska and elsewhere.

"Day by day, we went from 10 people to 20 to 30," Khabbaz says.

Now there is a surveillance team searching for leads on potential cases from labs and intensive care units, and an epidemiology team tracking workers who might have been exposed. A third team works with the U.S. Postal Service; another deals with labs processing samples. The largest team supervises environmental research and cleanup in thousands of buildings. And a clinical investigations team --- 10 epidemiologists including Jernigan and Fridkin --- is scrutinizing
anything that looks like anthrax. About half that team are current or former members of the 
Epidemic Intelligence Service, the CDC's rapid-deployment detective corps.

Dr. Scott Harper, one team member from Atlanta, has worked on Ebola in Uganda and in New 
York immediately after the attacks. On Oct. 16, he was in Virginia at a conference when the phone 
rang at 3 a.m.

It was his supervisor. Harper, who is 36 and has a 2-year-old daughter, reported to Khabbaz as 
soon as she arrived.

"I'm being given a lot of opportunities to learn, and with those opportunities come responsibilities, 
to public health and to the country," he says. "I understand that, and my wife understands that. 
But it's hard. My daughter talks a lot now, and every day she asks, 'Are you coming home today?'
"

The CDC investigation has taken over half of a floor at the District of Columbia Health 
Department. The researchers occupy a dozen offices and conference rooms; at the center of the 
cubicle farm is a situation room, normally a training facility, equipped with phones, white boards 
and about 20 computers.

Big sheets of paper are taped to the walls, listing computer passwords, cellphone numbers, 
contacts at 49 hospitals in the area.

Team members work 18 hours at a stretch, sometimes losing track of time in the windowless 
situation room.

Losing track of time

"I know what day it is," says Dr. Kate Glynn, the chief of the surveillance team. "Because I found 
my watch, which has the day and date on it. I misplaced it for two days and was really lost."

Glynn, who normally works in CDC's HIV division, had 90 minutes' notice that she was leaving --- 
enough time to put down three days' worth of food for her two cats. From Washington, she called 
other CDC staff members who pet-sit in a crisis.

"Everyone on this investigation has parts of their life that they are --- or are not --- managing well 
long-distance," she says. "But this is part of what we do."

During the day, CDC personnel can be hard to locate. But the researchers can always find Glynn. 
For more than a week she has had a cold, and her racking cough can be heard several cubicles 
away.

"At this point," she says, "I've heard all the anthrax jokes I can stand."

Running the list

Twice a day, the clinical team "runs the list," ticking through cases the investigation has found 
through lab and hospital surveillance or local doctors. They range from confirmed cases of 
anthrax to "NAD," for "no apparent disease."

Every day, several patients move down a notch, including the man with the ulcerated earlobe; 
none have moved into the most serious categories since the fifth case was found Oct. 25. But no 
one believes the crisis has passed.
"Twice before, I woke up thinking maybe things are slowing down, and then we had an additional case," Harper says.

To preserve confidentiality, the doctors refer to the patients by initials or computer codes. It seems a way to preserve distance, but the reality of the situation keeps sliding through the doctors' defenses.

One day, half the clinical team drives an hour to examine photographs and tissue from a postal worker's autopsy. The following morning, a phone rings in the situation room. Dr. Ali Khan, second in command, answers. He puts the call on hold and stands up to be heard over clicking keyboards and chatter.

"I need a kind, compassionate person," he announces.

Khan holds the receiver out to Maria Elena Jeffords, a social scientist on the surveillance team.

"This is the wife of one of the patients who died," he tells her. "Some doctor is telling her she has to practically incinerate her house to be safe. She has just lost her husband, she's scared, she's devastated. Find a nice quiet place to take the call, do some hand-holding, and tell her she doesn't have to be so afraid."

Keeping facts flowing

While the teams scour patients' medical histories and environmental tests, another group struggles to get the latest findings out to Congress and the public. Khan and Dr. Brad Winterton, an EIS officer, hammer out a daily "health alert" sent by e-mail to state agencies, hospitals, and firemen and paramedics.

Winterton, 40, has been with the CDC since June 2000; he lives with his wife and four children outside Dacula. He joined the Washington investigation after 32 days in New York, where he ran the network of CDC staff who spread out into emergency rooms to detect potential bioterrorism in the wake of Sept. 11.

"I was home for 6 days," he says. "I spent one day at work and left early so we could celebrate my daughter's 12th birthday. I got home, and my wife said to call the EIS supervisor. I called, and he said, 'I need you on a plane by 7 p.m.' And I looked at my wife, and she said, 'Go.'"

Planning strategy

The investigators' days are bracketed by meetings: at 7:30 a.m., Khabbaz, Khan and the team leaders map strategy for the day; at 7 p.m., the entire group shares findings. The evening meeting ends about 8:30 p.m.; afterward, most of the researchers go back to their makeshift desks.

"We spend a vast amount of time entering data," Harper says, pecking at a keyboard with four fingers. "Actually going out and doing shoe-leather epidemiology is a minority of our time. Even in the Ebola outbreak in Uganda, I spent 70 to 80 percent of my time at my laptop."

At 10:45 p.m. one evening, the heads of the investigation finally leave for dinner. Khabbaz and Dr. Rana Hajjeh, the chief of the epidemiology team, are both married; both have children. As they drive, they talk about the difficulty of maintaining personal connections from a distance.
"I got an e-mail from my daughter that said, 'I know you have been very busy, and I hope maybe when you come back we can have coffee and talk,' " Khabbaz says. "I was touched. I thought, this crisis is turning my teenager into a grown-up."

Anger and frustration

New cases in New York and New Jersey worry the CDC scientists: Maybe there is something they have missed.

As the New York investigation intensifies, the clinical team in Washington still pursues leads. Jernigan, the team leader, leaves to visit one of the surviving patients with X-rays from one of the dead tucked under his arm. In one of the team's two cubicles, Fridkin is typing data on the five inhalation cases into a database the team has built, and puzzling over the developments.

"All the work we've put into the public health response here --- hunting down cases, educating doctors --- and then it flares up somewhere else, " he says. "It makes me angry. And it's depressing to think there may not be an endpoint, if someone is continuing to perpetrate this."

He types a few more lines.

"It would be great to be able to leave here saying, 'We put the fire out, we're heroes. ' " he says. "That doesn't seem likely now. But if we can just set the stage for another city's response to this, that would be an achievement. The situation is evolving too rapidly for us to do much more than that."