Chapter 1: INTRODUCTION: A NEW CHALLENGE FOR EPA

October 15, 2001
Washington, DC

DASCHLE[1]: About 10:30 this morning, my office opened a suspicious package. This was the biggest biological attack in our nation's history.

NICHOLS[2]: It's something that we knew was an ongoing concern, an ongoing threat.

ASHCROFT[3]: With a new sense of awareness of the danger that terrorism brings to us.

GILLEN[4]: On October 15th, 2001, a staff member in Senate Majority Leader Tom Daschle's office was opening a letter and noticed, you know, this burst of dust.

VOLTAGGIO[5]: The particles were so fine. It was like a cloud came out of the envelope.

DASCHLE: We contacted the Capitol police and the Capitol physician.

GILLEN: So within 15 minutes they were able to identify that it was anthrax.

KELLY[6]: It wasn't just the Hart Building.

RUPERT[7]: Approximately 20 other offices besides the Daschle suite where we found contamination.

GILLEN: This was the fourth anthrax incident that had occurred in a month.
MUELLER[8]: In Florida, in New York, here in Washington, D.C. and elsewhere around the country.

CANTER[9]: Five people died. Eleven people in total got inhalation anthrax. Another eleven got cutaneous anthrax.

VOLTAGGIO: Just about a month after the 9/11 attacks on the World Trade Center and the Pentagon, the country was in a very frightened mood.

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* This transcript is for the 44-minute version of this video; not the 33-minute version.

[1] Senate Majority Leader, Sen. Tom Daschle (D-SD)
[2] Dan Nichols, Capitol Police spokesperson
[3] Hon. John Ashcroft, US Attorney General
[4] Matt Gillen, Industrial Hygienist, NIOSH
[5] Tom Voltaggio, Deputy Regional Administrator, EPA Region 3
[6] Jack Kelly, On-Scene Coordinator, EPA Region 3
[7] Richard Rupert, Senior On-Scene Coordinator, EPA Region 3
[8] Robert Mueller, Director, Federal Bureau of Investigation
[9] Dorothy A. Canter, Ph.D., Senior Science Advisor, EPA/OSWER

KEMPTER[10]: EPA was called immediately to help organize and pull together various people with the right expertise to do this cleanup.

KELLY: This was so new for everyone.

RUPERT: It was the most difficult response I've ever had in my career.

VOLTAGGIO: Many, many agencies involved. Hundreds and hundreds of people. We realized this was a national issue of immense importance to the agency.

GILLEN: Anthrax is formed by this bacillum called *Bacillus anthracis*. It's a spore-forming bacteria, it develops this protective spore covering around it so it can live in the environment for long periods of time. So what happens is after these spores enter the body they germinate back into bacteria and they multiply and secrete toxins which really harm the body and produce tissue death. There are two relevant forms for the bioterrorism incidents. One is the cutaneous anthrax, which you get from contact with the spores. It's the more common one and it's the less severe form of anthrax. The other kind of anthrax is the inhalational anthrax, and that's the kind that's really more serious. You get it from breathing in the spores, and in that one the case fatality rate is high. Before these incidents, historically about 75 percent of people that got anthrax would die. Anthrax is uncommon. You know, really, most of the past cases involved things like contaminated animal hides or wool.

CANTER: There hadn't been any inhalational anthrax in this country for, I believe, over 50 years.

GILLEN: So, the weaponizing meant that whoever, you know, developed the spores coated them with some sort of material that kept them apart.

VOLTAGGIO: When the envelope was opened the particles were so fine--

KEMPTER: And they apparently had been treated in a manner that allowed them to aerosolize very easily, so just touching them could send them off into the air.

RUPPERT: By the time Capitol Hill had the Daschle letter how up -- if you remember, this was back around 9/11, and I went to the World Trade Center. I had two days off -- it was a weekend -- and on the following Monday or Tuesday I got a call asking me to go down to the Capitol because they needed some help sorting through some mail.

KEMPTER: The Hart Building, and the Daschle suite that's in the Hart Building-- The spores arrived in a letter, and the letter had gone through what we call a mail trail to get there.

RUPPERT: Of course, it came from Brentwood[11]. Brentwood was very contaminated. And then when it came into the Dirksen mailroom, they would sort through the letters, and then they would band the

[10] Jeff Kempter, Senior Advisor on Antimicrobials, EPA/Office of Pesticides and Toxic Substances

[11] USPS Mail Processing Facility, 900 Brentwood Rd NE, Washington, DC 20018-9997

letters together for the various offices. So, they put them into a machine that actually compressed them, and then banded them. So, when the letters were compressed, it squeezed the contents of the envelope out. And so that contaminated the Dirksen mailroom. It contaminated the machine so everything else that went through the machine ended up getting contaminated. It contaminated the cart, it contaminated mailbags.

GILLEN: The second was foot traffic, because when this episode occurred, you know, workers got up from their desks and went over to the Daschle suite. You know, the people that were nearby what happened. And they went back to their offices.

KEMPTER: They were found in 11 or 12 different locations on Capitol Hill.

VOLTAGGIO: The Capitol police board recognized they didn't have the expertise to know what to do and how to do it. They didn't have cleanup people in the legislative branch, so they asked the executive branch to help them do this.

RUPPERT: They called NIOSH[12], they called EPA, the Air Force, the Army.

VOLTAGGIO: Centers for Disease Control, Department of Defense, FEMA[13], Health and Human Services, Department of Defense.

RUPPERT: But there was nobody that had the responsibility of cleaning up the place. Under Superfund, you know, we could look at anthrax and consider it a pollutant or contaminant under the law, which allowed us to use Superfund to clean it up.
RUPPERT: I was on site talking with my colleagues, a couple of colleagues, and I was saying, "Jeez, if we don't do this, nobody else is going to."

VOLTAGGIO: We all thought that, as I said before, that somewhere in the military, there's probably these resources, right? And if you remember from the movie, "E.T.," when they were keeping the E.T. from being discovered because they were afraid, and all of a sudden it got out. And the next scene there were dozens of big, white-panel trucks coming out to the house, disgorging, you know, dozens of people in white suits, and they were able to isolate it and do anything that needed to be done. So, we thought that we at the EPA, well, I thought, well, I'm sure this is going to be the same thing here. At some point there's going to be a call. There's going to be dozens of trucks coming up and they're going to handle everything. And the Department of Defense representative said, "No, it's not like E.T. We just don't have that capability." So, you look around the room and who had that capability? The capability to do it, if it could be done, was going to be the EPA.

CANTER: The EPA was so important because they have the experience with cleanup in the waste program, so it was natural that the EPA would be selected to do this work.

VOLTAGGIO: We brought the expertise of doing hazardous site cleanup, hazardous waste cleanup, over many, many years.

[12] National Institute for Occupational Safety and Health
[13] Federal Emergency Response Administration

KELLY: The anthrax response was unique in that EPA historically has always been involved with chemical spills or oil spills, and here was an instance where it was a biological release. And historically, to my knowledge, there may have been an incidence somewhere else, but nothing certainly to this extent.

VOLTAGGIO: We called upon any agency that had dealt with biological materials before. And what we were told at the time, at the very early stages of trying to evaluate what was to be done, that it was never done before. There never had been a large building contaminated with anthrax spores that was successfully cleaned.

KELLY: All of us, I think, had little or no experience in sampling for biological agents. So, we actually had to have some training from NIOSH, and from what was called the CHPPM[14] group with the U.S. Army on how to do the sampling and where to go for the analysis of the samples.

GILLEN: So, you know, basically the first thing we needed to do is be confident about how contamination had spread throughout the building.

CANTER: The first thing is initial sampling. Is there reason to be concerned or not? And then there's characterization sampling. Is there contamination, how much contamination, and where is it?

TOWLE[15]: So in the first two weeks of the response, that's all they were doing, sampling and trying to figure out where it was and where it wasn't. A lot of sampling was done, focusing on the mail trails that it was following.

CANTER: One of the other advantages EPA had in the waste program is they had contractors that they could activate right away.

HEYM[16]: It was the bulk of a lot of work we did. Every day we might have to go in and sample floors. You may have to sample, you know, various Senate offices.

HELVERSON[17]: My very first entry was into the Ford Office Building where the bomb squad's gear, which we knew was contaminated, was. Suit up in PPE[18], the level C. We were pretty much isolating ourselves and sealing all openings with duct tape, so our masks were connected to our suits.

GILLEN: There are basically several methods for doing surface sampling. One involves swabs, which were good for crevices and things. One involved the wipes, which were good, really for especially hard

[14] U.S. Army Center for Health Promotion and Preventive Medicine
[15] Michael Towle, On-Scene Coordinator, EPA Region 3

[16] Kevin Heym, EPA contractor in film, now Industrial Hygienist, University of Pennsylvania Health System
[17] Robert H. Helverson, Environmental Health Specialist
[18] Personal Protective Equipment

surfaces. And one that NIOSH helped develop used a vacuum cleaner and a little sock. And that was good for porous surfaces or complicated surfaces, to get spores out.

HELVERSON: Our vacuums were basically backpack-mounted vacuums that we could go from room to room and pull samples with. And obviously in between each sample you would have to decon the hose in order to make sure you weren't contaminating your next samples.

HEYM: You would do 30, 40, 50, 60, 100 samples.

RUPERT: In total during the response, there was 10,000 samples pulled.

NICHOLS: We have the best health care and environmental sampling teams we have in the nation working on this situation. I have been in these meetings, and I've watched these people operate and cooperate and discuss this information, and I'm extremely comfortable with how this is being handled.
VOLTAGGIO: A number of different agencies, to be on a team, so we didn't make a decision on our own. We all sat together in a conference room at the command post, you know, which is that area where we all get together and work these responses.

RUPERT: So the Incident Command System that we had, we didn't have it in the first week or two. And what prompted it was we ended up having this situation where we, because of the lack of communication and not having a real good organizational structure, we inadvertently potentially contaminated about 20 or 30 people. I spoke with the commander of the strike team, and we said, "Look, I don't care if anybody else is using Incident Command System. EPA and the Coast Guard are going to use it."

VOLTAGGIO: Incident commander was named by the Capitol police as being the person in charge who would be seeking the advice and guidance of all of the other agencies in the federal government, and then making their recommendations to the Capitol police board who would make the decision.

RUPERT: But he had no authority to command or order the federal people, which basically all worked for EPA, and I was the person on site.

VOLTAGGIO: Think of it as this large tree, and up at the top you have incident commander, and then you have all of these branches coming from it with the different agencies who had different functions, and then you had their little incident command structures underneath them.

KELLY: Rich Rupert was the lead on-scene coordinator, and the rest of us that had gone down, there were probably 30 of us down there at any one time. So, we would all get assigned either a building or a portion of a building, or assigned to do coordination with other agencies.

NICHOLS: We actually ran three separate investigations which were all actually interrelated. We did an environmental investigation to find out the level of contamination within our buildings. The criminal investigation was conducted, and there was also a medical investigation that was conducted by the medical teams. Today we've reached that conclusion, at least as far as the medical and environmental investigations go.

GILLEN: EPA did a really good job of that. They did what we call full inspection characterization sampling, in that they sampled 100 percent of the areas of interest.

RUPERT: You know, you had all this sort of, we came to call it tertiary contamination. Say, primary would be the envelope itself. Secondary might be the machine, and tertiary might be a letter that was in the bag some time later that the Daschle letter itself had been in. The most contaminated out of any of the anthrax letter sites was probably the mailroom in the Daschle suite.

TOWLE: The Daschle suite, the issue there was that it was everywhere, so in most offices it might only be on a desk, or a chair, or a small area over there. But in the Daschle suite it was much more widely dispersed.

CHAPTER 2: SEARCH FOR AN EFFECTIVE CLEAN-UP METHOD

VOLTAGGIO: Another challenge: What would be the best way, then, to make it safe, to clean it up, when it hadn't been done before?

CANTER: Can you do a surface cleanup? Or do you need a fumigation? Since it's anthrax, and since at that time any pesticides that would be used to kill anthrax spores was not registered.

KEMPTER: A pesticide is any substance or mixture of substances used to repel, mitigate, prevent, or destroy any pests. Under the pesticide law, a product has to be either registered or exempted from the law before it can be sold or distributed in the United States. They need to go through a review process at EPA, that a plan would be submitted to something like a remediation action plan that detailed all of the chemicals to be used, and how, and where, and all of the monitoring involved, and all sorts of things that go into this big plan.

CANTER: At each building you had to make the decision which fumigant to use.

RUPERT: What would have worked for Brokaw's office wouldn't have worked for us in Daschle's suite.

CANTER: At the Hart Senate Office Building the decision was to use chlorine dioxide.

KEMPTER: Because it penetrated well, it broke down rapidly after it was used, it didn't appear to have any cancer or other adverse effects that would be of concern to people, and it did kill the spores. There was a panel of experts put together. Ask them, "What would you do? What are the options that you think are available?" So, they named several chemicals.

CANTER: There was no silver bullet. All of them had advantages and disadvantages. There was a long history of using paraformaldehyde for decontaminations at USAMRIID[19], okay, in the bio-warfare program. The problem was formaldehyde is an animal carcinogen, and a human carcinogen. You couldn't use ethylene oxide. Ethylene oxide is a very good sterilant, and it's used to sterilize the contact lenses, it's used to sterilize medical equipment. But it's explosive, and you have to do it under highly

[19] U.S. Army Medical Research Institute of Infectious Diseases

regulated circumstances. And it was between vaporized hydrogen peroxide and chlorine dioxide. And vaporized hydrogen peroxide breaks down much more easily than chlorine dioxide. Chlorine dioxide is acutely and extremely hazardous chemical. Why are you dealing with an extremely hazardous chemical? Because these spores are hard to kill.

KEMPTER: You must have ideal conditions with a chemical, to have complete contact with the spore, and have it penetrate the spore, and have it actually kill the center of the spore. You have 28 layers of protein on the outside of a spore.

RUPERT: And he gave me this number. It was John Mason, who owned this company who had supplied the chlorine dioxide that had been used. So, I called John. He came out and he brought his equipment and everything, and we actually scrambled this really, really big aircraft to put all this equipment on in Texas and fly it up here.

CANTER: Chlorine dioxide had never been used for this purpose before.

KEMPTER: The on-scene coordinator folks, OSWER[20], decided to test the chlorine dioxide at a little bit larger level, something the equivalent of a room. They used truck trailers.

RUPERT: We were able to do that over at Brentwood. The post office gave us some space. We had to go from this little experiment that was done at a bench level to full scale. It's not extremely difficult, but there's a lot of things that you have to change.
KEMPTER: The concentration of the chemical, the contact time, the temperature, and the relative humidity. So, there's four factors right there that all have to be carefully controlled.

RUPERT: And we didn't know what the effects would be on an office building, so we tried a variety of different operating scenarios. We went to a couple art museums. They gave us some art items.

KEMPTER: So, they did tests using chlorine dioxide at different concentrations, different contact times, using various kinds of spore strips and that sort of thing.

RUPERT: So we did over a course of about three weeks, the whole Capitol building, the Supreme Court, all of the various Congressional and Senate office buildings. I mean, it was a huge area, and we only had two laboratories that could do it. And we were running operations 24 hours a day at any one time. At that time, we had about 300 people working in the field.

CANTER: We were learning on the job. It was on-the-job training. And from each site to the next we learned, and the process became more robust because the remediation action plan was the way in which we could enforce that they would follow more rigorous standards.

NICHOLS: Good afternoon. I'm Lieutenant Dan Nichols, I'm the spokesman with the U.S. Capitol Police. I called a press conference today just to give you a situational update on the Hart Senate Office Building.

[20] Office of Solid Waste and Emergency Response, US Environmental Protection Agency

RUPERT: It was only two areas that were fumigated, and that would have been the HVAC system that services the Daschle suite and others nearby, and also the Daschle suite was fumigated.

CANTER: Initially the plan was to fumigate the entire building. And I remember there was a Sunday afternoon meeting, and the people who worked for the Senate saying, "Well, EPA, first you said you'd do the whole building at once. And then you say do one, just the Daschle suite. What are we to believe?"

KEMPTER: And that idea soon was reduced in scope to, "We're just going to treat the room that has the highest concentration, but not the rest of the building." If there are spores found at other parts of the building, they'll probably be at a very low level, and we can treat that with bleach or something else. Just clean it on the surface.

CANTER: And that was a very important decision because, in my opinion, if they had tried to fumigate the entire building at one time, it would have been a failure. And they would have had to go on back and start all over again.

NARRATOR: Here's how the process works. The gas won't be effective unless the environment is warm and moist. Steam is pumped into the suite until humidity levels reach between 70 and 80 percent. Meanwhile, the chlorine dioxide gas is generated in an aqueous solution outside the building. The solution is then delivered via piping to the office, where an air stripper emits the ClO2 into a gaseous state. It is then distributed in the suite using ducting and fans. The process delivers a uniform concentration and thorough treatment throughout the contaminated area, including ceiling spaces, carpeting, and furniture.

TOWLE: We did the actual fumigation very soon after Thanksgiving. Everywhere else was done mechanically, actually physically wiping or vacuuming or something like that. But in the Daschle suite we relied on the actual chemical to do the work.

HEYM: We isolated Daschle's office, sealing cracks, sealing doors, sealing duct work, to then create that environment that they're going to, again, pump in this chlorine dioxide gas. If you picture the building as a big box, Daschle's suite is just one little box in that building. So, during the fumigation was sort of like all hands on deck. It was a period of time where once you set up, turn the switch, and you start fumigating, you weren't stopping. You can't stop until a certain concentration, time, temperature, pressure, humidity, is reached for a certain period of time.

TOWLE: Other factors that must be monitored, so you have some remote sensing going on, but then also you want to make sure that it's effective. You don't want to have things leaking out and going out of different parts, so there are people that are in the building making routine trips and monitoring gas concentrations in other locations. You didn't want to have gas coming out of the building and going down the street for passers-by and things like that. So what he's mentioning is a trace atmospheric gas analyzer, T-A-G-A, TAGA. So, they're monitoring outside of the building.

HELVERSON: There are notebooks. It's funny because it has all of the rooms, room 610, room 615, and concentrations and who's in each room. You know, a list of rooms done. I had just a note: "Bookshelves are missing in Daschle's suite. Where are they?"

CHAPTER 3: WORKING AGAINST AN IMMOVABLE DEADLINE

RUPERT: The spore strip data came back. It's looking real good. It seems to confirm what the environmental samples show, that we had very efficient kills throughout the suite.

NICHOLS: As it stands right now, the goal is for the Senate to come back on Monday, and for the House to come back on Tuesday.

RUPERT: One night Fred came up to me, and there had been this very heated discussion between the two Sergeant at Arms of the House and the Senate when the whole Capitol was shut down. And it wasn't going to be open until Wednesday morning, because I think Tuesday might have been a holiday. And he put his arm on my shoulder and he goes, "Rich, by Wednesday morning you're going to have to figure out how to open all of these buildings, or Thursday EPA won't have a budget anymore."

CANTER: The EPA was under enormous pressure to get it done because important people had been displaced from their offices.

TOWLE: We had to work crews extended periods of time, and it was really like, you know, working seven days a week, 18 hours a day.

VOLTAGGIO: It was very difficult. Some of the meetings that I was in, and having to deal with the Administrator, with the Senators, with Senate staff, was getting them to understand that they might want it all cleaned up in two weeks, but it just can't happen.

RUPERT: One of the big problems in chlorine dioxide fumigation is keeping the humidity up. In a trailer, when we had done the trailer test, we had just used a bunch of these humidifiers, and they had virtually no effect when we were in the Daschle suite. And so we actually tapped into some raw steam lines, and we were actually using wet steam to raise the humidity inside the Daschle suite. We tapped into the lines on the ninth floor and went into the atrium and dropped steel pipe down to the sixth floor and then over into the Daschle suite. And we did all of this in the middle of the night. We had to go to Home Depot, call the owner of the Home Depot in this area and have him come down and open up this place so we could get in and buy the pipe because we didn't have it. We did all of this sort of improvising as the night went on.

TOWLE: After we did the suite, we did the HVAC system.

NICHOLS: However, about three o'clock in the morning it was determined that there was a mechanical problem that had developed that meant that we weren't getting the saturation levels that we needed of the chlorine dioxide gas in order for that gas to be effective. They stopped the process.

RUPERT: Well, what had happened was we used inflatable bladders that we would stick inside the duct work, and we'd blow them up, and that would block off the connection between those, the air inside the offices and in the HVAC system. We set up our operations in the parking garage. We were watching the temperature go up, the temperature was good. And then we're looking at the humidity, and the humidity was starting to go up and looking good, and then it just got to a point it really wasn't where it needed to be, so we introduced more raw steam. Finally got it up to where it needed to be, and then

we started to introduce the chlorine dioxide. And somewhere during the middle of the night, there was one area that we just couldn't get the concentration up of chlorine gas, and at about the same time we started to notice that the whole parking garage was starting to smell like chlorine or something. You know, eyes were starting to itch. My chest was starting to kind of get uncomfortably tight. And for a while I said, "Okay, yeah." And then later on I was like, "It's just too strong for that." So I went outside, and I started looking around. We found out later that one of those bladders that was in the HVAC system to stop the gases from getting out, blown up because we introduced raw steam. The raw steam heated it up too much, and that failed. And so now all of the chlorine dioxide that we're pumping into the HVAC system is escaping and making it down into where we were at.

RUPERT: Good morning. We're picking up now where we left off a couple of weeks ago when we had difficulty getting the humidity up. We've made a lot of modifications to the system. We have redundancy in all of our probes, and right now we're mixing the chemicals and injecting steam, getting ready to begin fumigating the HVAC system.

VOLTAGGIO: When the building was evacuated, people left everything. It's like you hear when people have to evacuate from a plane that has an emergency, "Don't take your luggage, don't take your… Just go!" Well, that was like that for the entire building.

TOWLE: So, you go into a room and remove all of the items and you bag them up, and they were shipped off to be gassed somewhere else.

KELLY: Personal items, the furniture that a decision was made at the buildings on the Capitol Hill to send off for decontamination or disposal would come down to the P Street warehouse. And in some cases we had made the determination that items were clean because they were treated with chlorine bleach or chlorine dioxide.

CANTER: Before they were allowed to be brought back, there was a committee that peer reviewed the data and said, thumbs up or thumbs down, you can bring them back.

KELLY: So, we built this chamber where we would bring the items in. We would place what were called spore strips.

CANTER: Which had spores of a non-pathogenic species of bacillus, usually you'd put a million spores on each indicator. If there was no growth, then it was considered to be clean.

KELLY: In some cases, we had metal or steel that we thought could be recycled, and we'd call recycling companies, but we couldn't get anyone to take the items so we ended up sending what we thought was clean already to a facility that would autoclave, further sterilize or clean the items. We still couldn't. So, after that it was sent to a landfill. That's how fearful people were of the anthrax contamination.

CANTER: Once you've completed your remediation, or think you've completed your remediation, then you have the clearance environmental sampling.

GILLEN: Trying to make this determination. Was the remediation successful, and can we turn the building back over reoccupancy? So, this is where they started putting together this multi-agency, multi-disciplinary group to sort of review all of the previous sampling information.

CANTER: And either the sampling is negative, if it's not negative, you may have to go back and do more remediation and do another round of clearance sampling and so forth and so on. And that was first used in an informal way at the Capitol Hill anthrax site.

HELVERSON: So, we had to go back in and do some more aggressive sampling where we would try to blow air around the room, kick up dust, and then pull air samples.

CANTER: Once the building is cleared, you have to refit it, you have to put in new furniture.

TOWLE: I didn't think that when you go back into the room afterwards that it would look as bad as it did. But think about it, if you fill up your house with steam for three days, it would look terrible. And that's what happened.

NICHOLS: The other thing that we did was tell everybody that one day we would be going back into the Hart Senate Office Building, the Longworth House Office Building, the Ford House Office Building, and that's in fact what we were doing today.

GILLEN: The Capitol Police Board came back to the group and said that they wanted the entire job to be wrapped up by January 23rd of 2002.

RUPERT: We had a couple of incidents that caused us to delay a little bit. There was this one room that had a Hart Building address, but it was actually in the Dirksen building. Because the buildings are directly adjacent to each, they share a common wall in some place, so it wasn't on our blueprints. We walked up and we opened the door, and it had never been touched. It was still just like it had been on October 16th. So we had to hurry up, quickly assess that room. We collected a whole bunch of different samples, drove the samples across D.C. to get the samples dropped off. And in the middle of that we had the second crisis present itself. The architect of the Capitol carpenters had been in the Daschle suite taking down all of these barriers. They had cut into one of these bags behind the urethane foam and a couple of suits had fallen down on him.

GILLEN: Basically, this was a bag that apparently had been left behind by first responders back in October.

RUPERT: It turned out, we were very lucky that the bag that the guys cut into had no contamination on it at all, but we didn't know that, and we had exposed all of these workers. I remember going down and talking to them. They all had to get the nasal swabs. They had come downstairs after this and had blown themselves off with the high-pressure air because there was all this dust that was coming down, which was like the worst thing to do if they had been contaminated with anthrax. Every day it went from one crisis to another crisis.

CHAPTER 4: CROSSING THE FINISH LINE

CANTER: It was stressful because I was working hard, working harder than I ever had.

RUPERT: If you've ever seen the movie, "Groundhog Day," he's in a situation where every morning he wakes up and it's the same day again and again and again, and that was sort of the way things were for us at Capitol Hill.

VOLTAGGIO: We ran out of the number of people we could within the Philadelphia Regional Office. We had on-scene coordinators come to us from other regions of EPA. Another one of the fascinating concepts that we had to deal with was, "How clean will it be? Will we make it such that the people would be comfortable -- the people who worked there? The Senators and their staff and everyone who works in the buildings, the janitors, the visitors -- how do we assure they would be comfortable in going back into the building?" When we went to the experts in academia and the CDC, who are the medical doctors for the federal government, no one could tell us what level is clean enough to be safe. It never had been done before. We never tried to clean up a building so that it was safe for reuse.

CANTER: The people in Congress and the general public would think that there are zero spores left in the building, but we never can guarantee that at this stage of science. We can say, and that was the criterion, that there were zero spores found in all the clearance samples that were taken, so that all of those samples were negative. But the samples don't cover every, by any means, every square foot of surface. And the air samples don't get all of the total volume.

TOWLE: I can vividly remember some folks going back in there and if they found like on their telephone some dust, they were upset by it. They were expecting it to be spotless.

VOLTAGGIO: We would say, "Here are the levels that we believe would not cause undue harm, and here's what we did to show you that we've met those levels in the cleanup."

CANTER: That's why the clearance sampling was very important, and a number of other things that were done to give people confidence.

VOLTAGGIO: Our cleanup level is very, very conservative. We said, "If we found even one spore, we would keep cleaning up until we got rid of that spore." We frankly thought people weren't going to buy that, but people did.

TV REPORTER: Noon, eastern time. Here's a bird's-eye view of Capitol Hill, the U.S. Capitol Building right in the center. This picture off of the Internet at mapquest.com. The Hart Building is in the upper-right corner of your screens, northeast of the U.S. Capitol, and today was the first time that the building has been cleared for occupation. Senate Majority Leader Daschle among the first to go inside the building today, stopping briefly to talk to reporters before entering.

DASCHLE: Good afternoon, everyone. I know I speak for the entire Senate family in saying that it's good to be back. There have been very frustrating and trying months over the last period of time, but I must say that we have always felt that it was important to put safety over convenience. I want to thank,

especially those who are behind me, our Sergeant at Arms, our Secretary of the Senate, the staff of the Rules Committee, the Center for Disease Control, the EPA, and all of those who worked so diligently and courageously over the course of the last several months to make this day a reality.

VOLTAGGIO: Roughly 90 days before the building is reopened.

CANTER: It was a success that I believe our country needed.

VOLTAGGIO: So many people involved. So many important people who were affected by it.

RUPERT: They were really great people. They were very supportive once they got to know us, and we developed some trust. It was quite an experience, as you might imagine.

DASCHLE: Good, so is our staff already there?

SENATE STAFFER: The staff is there, waiting to see you.

HELVERSON: I was happy to be done when we got done Hart and Daschle, and ready to go back to some other sites and to go home.

KELLY: The other buildings, their cleanup works started after Capitol Hill.

VOLTAGGIO: When they were able to do it, they would learn from what we had done. So, we were making the rules, so to speak.

KELLY: In my career, it was definitely the most interesting, most challenging incident I was ever involved in. The opportunity to work with various agencies, that's not something we routinely do, work with CDC[21], work with NIOSH, work with the Army.

KEMPTER: I've met more people in the ten years I've worked on this issue than I did in the previous 30 years before that time.

HEYM: It made you more confident, it made you more comfortable. We worked many hours, morning, noon, and night. We learned to work at a high-stress environment. Chlorine dioxide? Yeah, a little bit, it scared me a little bit. You know what? Heat, stress, and fatigue probably scared me the most.

VOLTAGGION: Realizing how important it was to the country and how important it was to the sense that people all over the world would see that we were able to handle something that's never been handled before, the training we had put into our people, and the processes that we had set up were confirmed as being effective.

HELVERSON: I could never call myself an expert, but because we were the only ones in the country that had actually responded and remediated an office building contaminated with a biological weapon, we

[21] Centers for Disease Control and Prevention

were an asset to Tetra Tech[22] and they made sure that we gave training for biological sampling and talked to the trainees about that kind of work.

TOWLE: If I had to look back on this and say what could have been improved, already has been improved. When this started out, EPA had not yet sort of fully embraced the whole Incident Command System thing, which is like a way to organize a response. It doesn't make a response any technically better, but it makes it kind of better organized, and we recognized that as sort of a weak spot for us, but we fixed that. In fact, the whole country fixed it.

RUPERT: Incident Command System was then adopted, and it wasn't just because of this, because of the anthrax response, it was also because of the World Trade Center, and the Pentagon, and some other national incidents.

VOLTAGGIO: Since the anthrax attacks, several years later the Department of Homeland Security was formed and they created a National Response Plan which specifies much of how cleanup organization would be structured, and what functions there would be, and what agencies would be involved. The National Response Plan was since modified to be called the National Response Framework. It was a lot different then than it is now.

GILLEN: I think that the idea of having this review working group which is the Environmental Clearance Committee concept, was a good one, because it provided an important safeguard given the pressures on those doing the remediation work to finish the job. It sort of gave an external, a little more objective view of, "Well, what did you do?" and having to explain it to other people. And so it provided a model that was then used again for successful cleanups.

KEMPTER: Streamlining the process was another thing that we learned. We actually have registered several products now, and they are listed on our website. We also thought about a way to have an exemption put in place that would allow OSWER and other federal and state agencies to react much more quickly. This would be sort of a preemptive exemption, putting things in place so they could react a lot quicker, not even come to us anymore. The science of what we were doing was critical. All the decisions had to be based on sound science. That was a given, okay? But it wasn't just sound science, it had to be the best available science. There are always issues, further issues that needed to be looked at and teased at.

CANTER: We were trying to do preparedness for future attacks, and coming out with playbooks.

KEMPTER: In 2005, the White House Office of Science and Technology Policy requested agencies involved in these issues to form an inter-agency work group to write out this guidance so that in the future, this happens, someone can pick that up and say, "Well, I can follow this guidance pretty well, and I can develop a site-specific plan based on that guidance." It's called Planning Guidance for Recovery Following Biological Incidents.

[22] EPA contractor

CANTER: I always have felt doing your homework is important as a scientist. Go back and read what's been written about these attacks. Do some homework about the past before you plunge into the future.

ENDING CREDITS

The Capitol Hill anthrax cleanup was successful.

After the buildings were re-occupied,
no further cases of anthrax infection were reported.

This documentary is dedicated to those who lost their lives in the 2001
Anthrax powder attacks:

Robert Stevens
Thomas Morris Jr.
Joseph Curseen
Kathy Nguyen
Ottilie Lundgren

And to the hundreds of people, including both private citizens and public
Servants too numerous to name in this film,
Who helped guide our nation through this extraordinary crisis.

WE ALSO WOULD LIKE TO THANK:
BONNIE SMITH
SALLY WILLIG
YVETTE BORDEAUX

C-SPAN
UNIVERSITY OF PENNSYLVANIA
U.S. CAPITOL POLICE
U.S. CDC
U.S. EPA ERTV
U.S. EPA NHSRC
U.S. EPA REGION III
U.S. FBI

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