

# DOWNLOAD PDF SCIENCE OF BIOTERRORISM: IS THE FEDERAL GOVERNMENT PREPARED?

## Chapter 1 : Department of Defense

*the science and technology programs, I will provide an overview of the process by which we coordinate these research efforts with other federal agencies. DoD Biological Defense Science and Technology Efforts - Contamination Avoidance.*

Thank you very much. What we have now is a series of three votes. So we will start with the questions and then we will have about a minute recess. And I am sorry to inconvenience you, but the call of the House and the will of the people have to be served. And I understand you are filling that position right now, which may be a good idea. You would have to ask Director Ridge that question. For the time being, he is relying on OSTP to marshal the necessary technical support. That is an efficient way to do it at this point because the structures of interagency coordination do already exist. And, as you have heard, we are in good communication with the necessary technical agencies. I am satisfied that we will continue to be able to provide the technical support through these mechanisms for as long as it is necessary to do so. How is bioterrorism fitting in, in your discussions? And I will ask each of you, starting with Dr. I assume we have their attention. Chairman, we certainly do. And there are very active discussions going on at this point in time. And I think it is probably out of order for me to be commenting more specifically than that at the moment. But clearly we are very actively engaged in this every day at the present time. But what I am really driving at is the coordination issue. I would think that OMB is not going to treat each of you in isolation, not factoring in what the other might be doing. And so the coordination part is so vital as we look at this. I have not been involved in those discussions if they have taken place. We do have a lot of discussions with our colleagues in the different departments. Shortly we will give you the opportunity to have a little conversation as we go for 20 minutes and you might put your heads together right here. I would certainly agree that the level of coordination and communication between our departments has seen a significant increase. I would particularly like to comment on the Department of Energy, who is not represented here today, as well as the Department of Health and Human Services, who, at the moment, I would characterize as the primary coordinators with DOD in our research efforts on the bioterrorism effort. Since then, obviously, we have done a couple of things. And I think Governor Ridge sees for himself a significant role in working with OMB to develop a comprehensive Administration budget that deals with bioterrorism. Marburger, I should imagine your conversations with Governor Ridge are most interesting. Would you care to comment on that question? Governor Ridge does have the responsibility for coordinating the requests from various agencies for funds in support of bioterrorism activities. And he has taken that responsibility very seriously and worked closely with OMB to clarify the requests and to make sure that the money is there that is required to respond. I have been fortunate enough to be involved and to be present during discussions of the cross-cutting budget on bioterrorism. We have four minutes to go for a vote, so we will go into a temporary recess and we will get over and back as soon as we possibly can. Let us try to get the Committee reconvened. The Chair recognizes the gentleman from Texas, Mr. Threat From Anthrax Spores Mr. Marburger, maybe I ought to ask you this. Just put it on the record as to what a spore is. A spore is like a living bacteria that has gone into suspended animation. It kind of draws into itself. And under the right conditions, when nutrients are around, it gets moist, and it kind of unfolds and becomes alive again. So you often see spore-forming organisms when there are hostile environmental conditions and it has to survive a period of drought or being without nutrients for a while. So the spores typically are harder to kill. They are smaller, tougher. How small are they? They are various sizes. If so, from what to what? Just tend to be on the order of 10 microns or less. They are very small. But they can be filtered. Fisher has indicated support for the HEPA filter technology as one of the ways that we can reduce our risks in buildings and open, and enclosed, spaces. Is it a fair question to say how many spores are required to infect a person? It is a fair question. I would refer it to Dr. He has a lot more expertise than I do on this. I am happy to respond to that. That is, the number of spores necessary to infect 50 percent of a group of monkeys. And this is usually quoted in the order

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of 6, to 10,, or 12, spores. But that means 50 percent of them have less than that. And how few can they have see footnote 3 has been a question we have been asking ourselves. Is it possible that one spore actually could generate an infection? It seems unlikely, but then is it possible? And I think the answer we would have to say is, maybe. Nations have agreements that go all the way from our agreements to limit the use of nuclear weapons and on back to World War I when they were afraid of mustard gas, and a lot of people coughed and wheezed their way through life after that war. Are we going to let the fear push us into over-search or over-precaution, or is there any such thing? One would hope that somehow or other we could put the biological weapons genie back in the bottle and be done with it. If you had an honorable enemy that can happen. But I am afraid we have and will have to live with a threat that is out there. Henderson, most things I have read and that have been advised about is that as few as a thousand spores, a number that emerged from the old TA studies. I guess, do you really believe that she was exposed to as much as a thousand spores? For example, we had the epidemic in Russia of Sverdlovsk. And looking at all of this example, in Sverdlovsk, there were probably on the order of about several hundred cases. The cases came down between 2 and 46 days after exposure. There were obviously spores that went into the ground and were around all over the place. They did not clean that up very well at all. And yet, we had no more cases after the 46 persons infected. In other words, the spores that were there were adherent to the surface of the ground and whatever else there was and did not come back up again in what we would call a secondary aerosolized infectious form. But nothing like a thousand spores. Directions for Anthrax Research Mr. I think we would like to know a great deal more about the behavior of anthrax, especially its capacity to infect other people with subclinical infections. Do we have some sort of background of anthrax infections? I think there is a lot of practical in-house laboratory work that is needed. I think we need to move quickly to get a better vaccine than we have now. That is, to neutralize the toxic effects that the organism produces. There are a number of different avenues that I think we need to pursue. I have many more questions, Mr. Chairman, but I yield back at this time. I have a specific question for Dr. Henderson and then a more general question for everyone. I totally agree with you. When I served in the Michigan Senate, I chaired the Appropriations Committee on Public Health and tried to make some changes there, but it is very difficult. The public support is not there, political support is not there. Maybe it will be after this. We just take medicines. But following up on that, when I chaired that Public Health Committee in Michigan, we were the only source of anthrax vaccine in this country. In fact, I think, in the entire world. And that has fallen on hard times for various reasons. I spoke to the Pentagon last year to the person in charge. And I understand HHS is now talking about producing a lot of vaccine for anthrax.