

Bio-terrorism anthrax outline

[Health & Medicine](#)



**ASSIGN
BUSTER**

Bio-Terrorism/Anthrax outline

OUTLINE: Anthrax as a Weapon of Mass Destruction (WMD) Points about anthrax as a WMD Possible opposing arguments Anthrax is easy to obtain, produce, and disseminate. According to the CIA, anthrax is much harder to obtain than commonly depicted in the press (Bowman, 2002). Anthrax is easier to use than explosives and other terrorism devices. Most terrorists are less educated and have limited access to technology, making use of simple explosives much more common than a bioterrorism agent (Bowman, 2002). Anthrax can be easily attained from the former Soviet military system. Anthrax agents are controlled in the former Soviet Union, as elsewhere internationally (Bowman, 2002). Anthrax is most dangerous in subways and urban areas that are heavily populated. Urban areas generally have better and faster response units, allowing them to quickly control the situation (Bowman, 2002). Anthrax is lethal after only a small time period. Anthrax can be treated and a vaccine exists. Despite the scare, bombings and crashes like the plane into the World Trade Center caused many more casualties and long-lasting health effects (Bowman, 2002). Terrorists are likely to choose anthrax because it is lethal. Terrorists generally want “lots of people watching, not lots of people dead” because their goal is to make a political impact by causing harm, which is undermined by killing large quantities of people. A few high profile deaths or injuries are much more effective in making the news (Bowman, 2002). Anthrax is dangerous because it is so easy to handle and transport. Anthrax is dangerous to its handlers, and may infect terrorists themselves. This dissuades many potential bioterrorists (Bowman, 2002). Anthrax can easily be spread over large distances.

Inhalation anthrax (spore forms) is naturally only airborne for short periods of time, and tends to stick on surfaces once it lands. Special and costly chemical processing that must be done in a lab is required to make anthrax spores capable of travelling long distances and staying airborne (Bowman, 2002). Anthrax is hard to cure and often fatal. If treated early, anthrax is easily cured by many common antibiotics, including penicillin G (Segal, 1998). Anthrax is hard to remove from surfaces or decontaminate. Anthrax can be decontaminated by chloride solutions, pesticides, and many common household cleaning products, though danger of exposure during cleaning exists (Segal, 1998). Weapons of Mass Destruction are agents that can bring harm to a large population of humans and potentially leave lasting impacts on the population and environment, such as in the case of radiation exposure. Anthrax has the ability to be easily transported and spread quickly in populated areas. With chemical treatment it can remain airborne for significant lengths of time and travel significant distances, allowing it to have exponential infective effects. In addition, if left untreated, inhalation anthrax is almost always fatal. These characteristics make anthrax a likely Weapon of Mass Destruction (WMD), and international threats of such anthrax use have already come to pass. Despite the popular anthrax “scare” of the early 2000’s many factors exist and response teams have been organized to reduce the threat of anthrax as both a bioterrorism agent and a WMD. Though terrorists have attained small samples of anthrax, as in the 2001 anthrax letters, there have been no large-spread attacks using the pathogen. The media has popularized the notion that anthrax is easy to attain, particularly from former Soviet military areas; however, the Central Intelligence Agency states that not only is anthrax difficult to attain, it is also difficult to grow and

<https://assignbuster.com/bio-terrorismanthrax-outline/>

process (Bowman, 2002). This means that terrorists are likely to only be able to attain very small amounts, though during incidences like the Gulf War, the threat of military production of large-scale anthrax batches provided credibility to the assertion that anthrax could, in fact, be used as a WMD if present in sufficient amounts (Segal, 1998). In short, while anthrax may be capable of being used as a WMD, it revivals nuclear weapons in its difficulty to obtain. Unlike other WMD threats, such as bombing or radiation, anthrax is treatable if antibiotics are administered quickly, and a vaccine exists (Bowman, 2002). Because many countries have response contingencies in place, such as the US Laboratory Response Network, terrorists are dissuaded from using anthrax as a WMD because it may fail to have the intended impact if response by authorities is swift, unlike other threats like nuclear bombing which is virtually impossible to treat and leaves long-lasting environmental impacts. Though anthrax may quickly spread over a small area and only small quantities of anthrax spores are required to cause infection, decontamination is possible. In addition, normal anthrax spores do not stay airborne and will require special and expensive laboratory treatment in order to increase their time airborne. This drastically limits the ability of anthrax to be used as a WMD because anthrax, in its unaltered natural state, will have severely limited abilities to infect large populations over large distances. Laboratory treatment of anthrax to resolve this is expensive and is also likely to be noted because of the extensive facilities require for handling and treatment of the pathogen (Bowman, 2002). Anthrax is more likely to be applied in isolated cases of bioterrorism than as a WMD because of these limitations. In many cases, the motivation of those engaging in bioterrorist acts must be examined. According to an expert in defense in his address to <https://assignbuster.com/bio-terrorismanthrax-outline/>

congress terrorists want, “ lots of people watching, not lots of people dead” (Bowman, 2002). Anthrax fits the bill because, as described above, it is likely to be contained and controlled causing few fatalities, but creating a highly visible public spectacle. Terrorists, including bioterrorists, often act to instill fear in order to promote political agendas or influence the opinions of the populace, making terrorist use of anthrax as a WMD unlikely both due to the expense and facilities necessary to convert anthrax into an effective WMD and the fact that using anthrax as a WMD will fail to meet terrorist agendas. While terrorists may be unlikely to have the facilities to use anthrax as a WMD, the threat of its use in international conflict remains. Early in history, the Huns used a bioactive agent, likely to be anthrax, that has been described by written historical accounts to have killed “ 40, 000 horses and 100, 000 cattle” during their movement across Eurasia in 80 AD (Segal, 1998). During World War I the Germans initiated anthrax research, and it is speculated that anthrax was used as a weapon. World War II marked open anthrax WMD research by Japan, the United States, and Britain. During the Cold War, the accidental release of anthrax spores from a secret research laboratory in Sverdlovsk, USSR caused 66 deaths and 77 diagnosed cases of inhalation anthrax infection over a short period of time, and anthrax production in Iraq was suspected, though not confirmed, in the Gulf War most recently (Segal, 1998). Anthrax is likely to be used as a weapon of mass destruction in international conflict, though the availability of a vaccine has limited this threat. Anthrax has the potential for use as a WMD against civilian populations, with the first intentional effort to use anthrax as a WMD affecting urban populations conducted by the Aum Shrinkyo terrorist cult of Japan, who attempted to release anthrax spores in downtown Tokyo only one

<https://assignbuster.com/bio-terrorismanthrax-outline/>

month before the Tokyo nerve gas attacks (Segal, 1998). Modern response units have been assembled and funded in many countries in order to provide quick and effective identification, prevention, and treatment for infectious diseases, greatly reducing the threat of anthrax use as a WMD against civilian populations. Anthrax certainly has the potential to be used as a WMD, but the costs are high and the likelihood that official response to the threat would control or mitigate the impact is high. Despite this, research on anthrax and other biological agents continues around the world both to prevent and treat infectious disease outbreaks and to hone them for use as biological warfare agents. The potential for anthrax and other biological agents to be used as WMD is mitigated largely by organized official bioterrorism response units. References Seghal, Ikran ed. (1998) Anthrax as a Weapon of Terrorism and Difficulties Presented in Response to its Use. Defense Journal, 98. Retrieved from <http://www.defencejournal.com/dec98/anthrax.htm> CDC. (2011). Facts About the Laboratory Response Network. Centers for Disease Control and Prevention. Retrieved from <http://www.bt.cdc.gov/lrn/factsheet.asp> Bowman, Steve. (2002) Weapons of Mass Destruction: The Terrorist Threat. CRS Report for Congress. Retrieved from <http://fpc.state.gov/documents/organization/9184.pdf>