

# STANDARD DEVIATIONS: Is Amerithrax Solved?

Greetings,

One week after the 9/11 terrorist attack, several letters containing anthrax spores were mailed to media outlets and two US. Senators (Tom Daschle and Patrick Leahy). Five people died of inhalational anthrax, seventeen others were infected, and eventually, over a billion dollars were spent in disinfecting and mitigating the disaster.

The 2001 anthrax attacks, known as “Amerithrax” (the FBI case name), became one of the most complex investigations ever undertaken by the Federal Bureau of Investigation. The Federal Select Agent Program (FSAP) was a response to the events and continues to function as a first-line of defense for identifying agents that could be used in acts of bioterrorism.

Amerithrax happened one week after the attacks on the World Trade Center, The Pentagon, and a thwarted plane hijacking stunned the world, 9-11-2001. The two events, however, are not thought to be related.

The anthrax attack is thought to have happened in two stages.

1. Five letters are believed to have been posted September 18, 2001 to major news media, 4 in NYC (ABC, CBS, NBC, and the New York Post), and one in Florida (American Media, AMI). Only two letters were recovered, the others are inferred because of the anthrax infections.
2. Three weeks later, two more letters were mailed to Democratic Senators Tom Daschle of South Dakota, and Patrick Leahy of Vermont.

The 5 deaths from anthrax happened between October 5 and November 21, 2001. Here are the details:

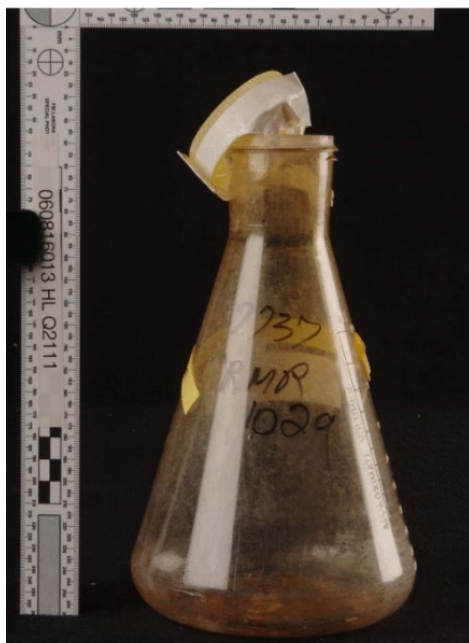
- 10/05/01 - Robert Stevens. Stevens was a photojournalist for an AMI paper in Florida. Suspected to have had contact with a letter sent.
- 10/21 – Thomas Morris Jr. A postal worker in New Jersey.
- 10/22 - Joseph Curseen. Postal worker in Washington D.C.
- 10/31 - Kathy Nguyen. Worked as hospital worker in Manhattan. No route of exposure determined.
- 11/21 - Otilie Lundgren. Anthrax spores were found in a postal distribution center that processed mail for her area.

Overall, at least 22 people became infected with anthrax due to exposure from the mailings. Half of the individuals contracted pulmonary anthrax after inhaling the *B. anthracis* spores and the other half contracted cutaneous anthrax through skin contact after spores got in through the skin. Out of the 22 people infected, 12 were postal workers. Another 31 people tested positive for "exposure to anthrax spores" and an additional 10,000 people were considered to be at risk of exposure and were given antibiotics as a prophylaxis.



Eight years later, February 19, 2010, the FBI and US Postal Inspection Service announced a [conclusion](#) of the investigation. The report claims that Bruce Ivins PhD., a vaccine researcher at Ft Detrick's USAMRID laboratory, was responsible. He died of an acetaminophen overdose July 29, 2008. His death is described as a suicide.

That investigation linked the spores found in recovered letters to material contained in a flask labeled "RMR-1029" that was under Dr. Ivins' control.



RMR-1029 flask

{Was this the culprit?}

There you go, all neat and tidy.

Only the story isn't nearly that simple.

In 2011, three groups (PBS Frontline, McClatchy, and Pro Publica) came out with reporting that reveal discrepancies, holes, falsifications, omissions, and inadequacies in the investigation.

One critical finding, a 2011 National Academy of Sciences report, concluded that the specialized machinery required to purify the culture Ivins possessed was never available at USAMRID, and "it is not possible to reach a definitive conclusion about the origin of the *B. anthracis* in the mailings based on the available scientific evidence alone." The NAS study had been ordered by Robert Mueller in 2008 at the suggestion of Congress but the FBI closed the case before the outcome was reported (while Congress was still taking testimony).

Then, in 2014, the Government Accounting Office (GAO) issued [GAO-15-80](#) for Congress. This essentially blew apart the FBI testing that was used. The effort to trace the attack by matching genetic mutations of the anthrax samples lacked precision, consistency, and standardization.



Another angle that rarely gets attention is in our backyard; Dugway Proving Ground. Consider:

- Dugway used the same Ames strain as USAMRID.
- Dugway weaponized anthrax in the same formulations that were discovered in the Senate letters.
- The concentration found was 100x the RMR-1029 flask but comparable to Dugway protocol.
- USAMRID deals only with “wet” anthrax. Dugway? Their process makes a dry form good for aerosol weapons (just like the Senate letters).
- Dugway shipped anthrax hundreds of times to dozens of labs and had a record of poor inactivation, even up until 2015. CDC identifies 183 labs that received Dugway anthrax.
- As late as 2008, Ivins had emailed Dugway about the lack of inactivation in their shipments.
- Later genetic analyses showed the same mutations in Dugway samples as seen in the attack specimens.
- The FBI did not contact any Dugway SMEs that had anthrax experience.

The motive given for this atrocity is that Ivins was worried that his funding for researching a vaccine for anthrax was in jeopardy.

Ivins had worked on anthrax vaccines for over two decades. He was a respected and dedicated Microbiologist. The idea behind this motive is that by creating a need for more study the funding stream would continue. So, he used anthrax from his own stock??

Only circumstantial evidence has ever been given for Ivins guilt. No DNA (his or anthrax) can be linked. It's very unlikely that he had the means to create the substances found. He worked for years after the attack at USAMRID in the same capacity without controversy. That Ivins had problems is known. His secrets have been explored and scrutinized but don't particularly support the motive given.

The FRONTLINE story that explores this crazy tale and raises questions about the findings can be found [here](#). The challenges to the official findings are disturbing. The FBI has closed the Amerithrax case, but, like a lot of what we do, there are still questions to be answered.

All in all, the Amerithrax saga is a strange and convoluted story that supports the need for good protocols and good science. Anthrax was used in a way that killed and harmed innocent people, and that's because anthrax can cause a deadly infection. The FSAP provides a dependable and proficient system for the laboratory science needed to identify these agents that can be so hazardous. We segregate these agents from our clinical testing for a couple reasons, they are dangerous to manipulate on any bench and they are potential weapons of bioterrorism.

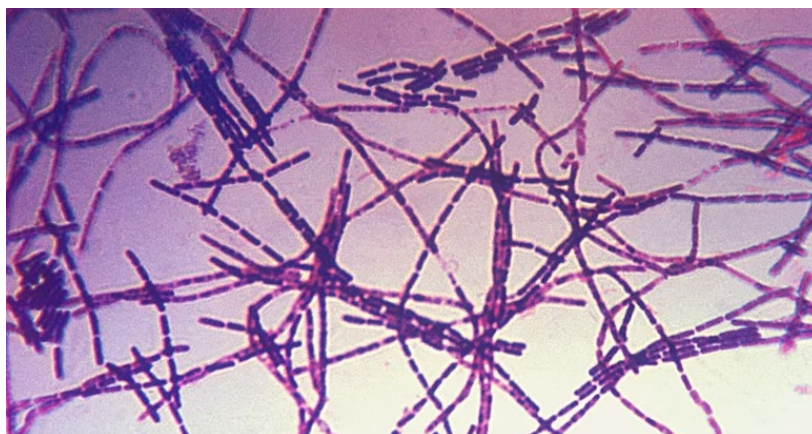
Have a great week and be safe,

Bryan

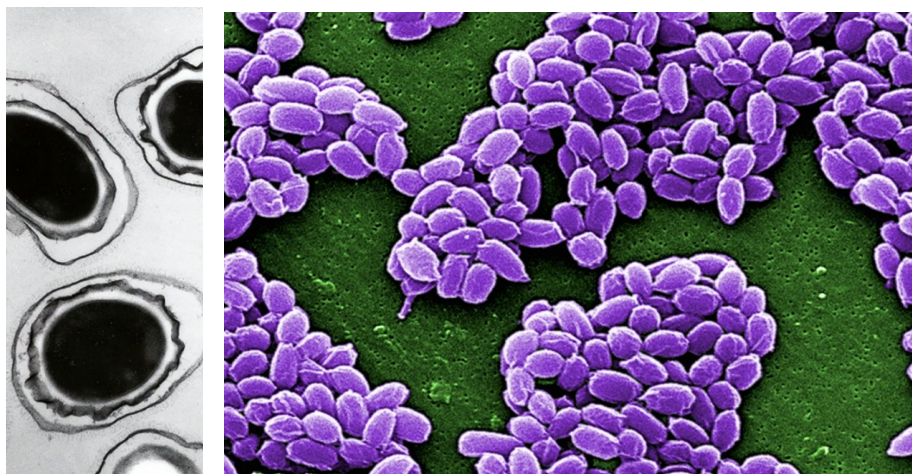




{*Ba.* Classic ground glass, white colonies}



{Anthrax: large gram (+) rods}



{Anthrax spores are extremely hardy.}

