



Harvard Model Congress Boston 2024

THE THREAT OF BIOLOGICAL WEAPONS UPDATE

By Lara Berliner

In July of 2023, the United States FDA approved an anthrax vaccine for use in adults aged 18 through 65. The vaccine, Cyfendus, is produced by Emergent BioSolutions and has been approved for use following suspected or confirmed exposure to *Bacillus anthracis*, the bacteria that causes anthrax disease. Emergent BioSolutions secured a contract totaling \$75 million for the acquisition of the vaccine (Roy, 2023).

In November of 2023, election officials in five presidential battleground states—California, Georgia, Oregon, Nevada, and Washington—received similar letters, featuring an antifacist symbol and a pentagram. Four of the letters contained fentanyl, a fatal, synthetic opioid that is considered 50 times more potent than heroin. Georgia Secretary of State Brad Raffensperger described the letters as a form of “domestic terrorism” that “needs to be condemned.” Washington Secretary of State Steve Hobbs called the incidents “acts of terrorism to threaten our elections.” The incidents took place as election officials were counting ballots from the November 7th general election. This attack is the latest in a series of threats made against election workers in recent years (Montellaro, 2023).

In early November of 2023, the White House issued an executive order, requiring that developers of AI systems share their safety test results and other important information with the United States government. According to the White House’s brief titled “Executive Order on the Safe, Secure, and Trustworthy, Development, and Use of Artificial Intelligence,” the Biden Administration cited how sophisticated AI systems can be harnessed to develop biological weapons. In a speech in November, Vice President Kamala Harris warned about “AI-formulated bioweapons that could endanger the lives of million.” This briefing follows Dario Amodei’s, the CEO of AI startup Anthropic, congressional testimony in July. In his testimony, Amodei warned that AI could “cause large-scale destruction, particularly in the domain of biology.” The concern that AI could

make bioterrorism accessible to the masses is viewed as a primary reason to be cautious about making AI systems open source (Matsakis, 2023).

In November of 2023, Representative Dale Strong, a Republican representing Alabama's 5th congressional district, authored a bill titled "Department of Homeland Security (DHS) Biodetection Improvement Act." The bill, which directs the DHS to strengthen its BioWatch program, was unanimously passed by the House committee. Launched in 2001 in response to an upsurge in anthrax attacks, BioWatch is a monitoring system that tests air samples for biological agents and operates in more than 30 major cities across the country. Strong, a Republican, cited the need to strengthen the BioWatch program in light of the Biden Administration's "open border" policies (DHS Biodetection Improvement Act, 2023).

In December of 2023, five countries in east and southern Africa reported outbreaks of the anthrax disease. According to the World Health Organization (WHO), there have been more than 20 deaths this year and a total of 1,166 suspected cases in Kenya, Malawi, Uganda, Zambia, and Zimbabwe. Although these five countries are reported to experience regular seasonal outbreaks, Zambia is experiencing its worst case of the disease since 2011. The disease has been reported in nine of the country's ten provinces, and is likely to spread neighboring countries. According to the WHO, the outbreaks were likely caused by multiple factors, including climatic shocks, food insecurity, and exposure to the disease through infected meat (Mandavilli, 2023).

BIBLIOGRAPHY

- Mandavilli, Apoorva. “Mystery Amid an Anthrax Outbreak in Africa.” *The New York Times*. 19 December 2023. Web. Accessed 20 December 2023.
<https://www.nytimes.com/2023/12/19/health/anthrax-africa.html>
- Matsakis, Louise. “Why AI-Assisted Bioterrorism Became a Top Concern for OpenAI and Anthropic.” *Yahoo! News*. 15 November 2023. Web. Accessed 20 December 2023.
<https://news.yahoo.com/why-ai-assisted-bioterrorism-became-191020148.html>.
- Montellaro, Zach. “Election Officials Fear Escalating Threats after Suspicious Envelopes.” *POLITICO*. 10 November 2023. Web. Accessed 20 December 2023.
<https://www.politico.com/news/2023/11/10/election-officials-envelopes-fentanyl-00126687>.
- Roy, Sriparna. “US FDA Approves Emergent Biosolutions’ Anthrax Vaccine.” *Reuters*. 20 July 2023. Web. Accessed 20 December 2023.
<https://www.reuters.com/business/healthcare-pharmaceuticals/us-fda-approves-emergent-biosolutions-anthrax-vaccine-2023-07-20/>.
- United States, Congress. “DHS Biodetection Improvement Act.” *Congress.Gov*. 2023. Web. Accessed 20 December 2023.
<https://www.congress.gov/bill/118th-congress/house-bill/6174/text?s=1&r=2>