Plague Preparedness and Clinical Laboratory Readiness

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International health authorities are investigating the October 2026 death of a 28-year-old laboratory employee that worked at a facility that researches highly dangerous pathogens, including *Yersinia pestis*, the causative bacterial agent of the plague. Initial reports raised concerns that the individual may have contracted pneumonic plague, prompting precautionary quarantine measures and global media attention. However, authorities have not confirmed a plague infection, and no secondary cases have been identified to date.

The incident has received significant global attention because pneumonic plague is the most severe and transmissible form of plague, capable of person-to-person spread through respiratory droplets if untreated.

Learn about the role of laboratories in this response

Clinical Laboratory Preparedness

Although there are no imminent threats, clinical laboratories should utilize this opportunity to assess their operational and biosafety preparedness activities for biothreat agents.

- Clinical laboratories should evaluate their laboratory procedures for testing, reporting and communication of potential biothreat agents with public health authorities.
- Clinical laboratories play a key role in the early detection of biothreat agents. Clinical laboratories should utilize the Laboratory Response Network (LRN) Sentinel Level Clinical Laboratories Guidelines and Biothreat Agent Bench Cards to rule out and refer specimens to public health laboratories. Clinical laboratories should not actively attempt to identify or perform antimicrobial susceptibility testing (AST) on any biothreat agent, including *Y. pestis*.
- Clinical laboratories should engage with their jurisdictional LRN laboratory to understand the requirements to refer specimens to public health laboratories for confirmation.
- Clinical laboratories should assess laboratory biosafety and exposure response measures.

APHL ASSOCIATION OF PUBLIC HEALTH LABORATORIES

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About Plague and *Yersinia Pestis*

Y. pestis, the causative bacterial agent for plague, is classified in the US as a Tier 1 select agent because of its potential for deliberate misuse and significant public health impact.

Plague is primarily a zoonotic disease maintained in nature through cycles between small mammals and fleas, with humans infected through flea bites, contact with infected animal tissue or inhalation of the bacteria; person–to–person transmission can occur with pneumonic plague.

Although historically responsible for devastating pandemics, plague is now relatively rare and treatable with antibiotics when recognized promptly. Worldwide, approximately 1,000 to 2,000 human cases are reported each year, with most occurring in Africa. In the US, plague is endemic in western states—particularly New Mexico, Arizona, Colorado and California—with an average of about five human cases reported annually between 2000-2019.

Learn More About Plague

Laboratory Preparedness Resources

The following resources can be used to strengthen clinical laboratory preparedness activities, collected from the US Centers for Disease Control and Prevention (CDC), American Society for Microbiology (ASM) and Association of Public Health Laboratories (APHL):

Laboratory Response Network

- LRN for Biological Threats (LRN-B) | CDC
- LRN Sentinel Level Clinical Laboratory Protocols | ASM
- Biothreat Agent Bench Cards for the Sentinel Laboratory | APHL

APHL Biosafety Resources

- Clinical Laboratory Biological Exposure Monitoring Guide
- Laboratory Exposure Assessment and Symptom Monitoring Guide
- Handling a Specimen Suspected of Containing a High Consequence Pathogen: A Checklist for Clinical Laboratories

APHL Webinars

- Laboratory-acquired Infections Part One: From Exposure to Action
- Laboratory-acquired Infections Part Two: Essential Tools for Prevention and Response

These materials were prepared by:

Association of Public Health Laboratories

APHL works to strengthen laboratory systems serving the public's health in the US and globally. APHL's member laboratories protect the public's health by monitoring and detecting infectious and foodborne diseases, environmental contaminants, terrorist agents, genetic disorders in newborns and other diverse health threats.

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American Society for Microbiology

ASM is a global community shaping the future of the microbial sciences to tackle some of the world's most pressing challenges. Established in 1899, ASM connects scientists across disciplines, sectors and borders to advance discovery, foster collaboration and drive innovation. With more than 38,000 members and a global network that reaches millions, ASM accelerates scientific progress through publishing, convening, advocacy and professional development, and empowers the microbial sciences community to create solutions that benefit society and build what's next.

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