

## Ill. scientist dies, possible plague bacteria link

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(AP) -- The University of Chicago Medical Center says the infection that killed a scientist may be connected to bacteria he researched that causes the plague.

A University of Chicago researcher died Sun., Sept. 13, at the Medical Center's Bernard Mitchell Hospital from an infection which may be attributable to a weakened laboratory strain of *Yersinia pestis*, the bacteria that causes the plague.

The researcher studied the genetics of harmful bacteria, including a weakened strain of *Yersinia pestis* that lacks the bacteria's harmful components. This strain is not known to cause illness in healthy adults and has been used in some countries as a live-attenuated vaccine to protect against plague. It has been approved by the Centers for Disease Control and Prevention (CDC) for routine laboratory studies. The weakened strain does not require the special safety precautions required for work with virulent strains.

Though there does not appear to be a threat to the public, and no other illness related to this case has been reported, the Medical Center infection control team is working with the Chicago Department of Public Health (CDPH), the Illinois Department of Public Health (IDPH) and the CDC to investigate the case and take all appropriate precautions.

“This death is a tragic loss to our community,” said James L. Madara, MD, Dean of the Biological Sciences Division and Pritzker School of Medicine, and CEO of the Medical Center. “We are all saddened to lose

a valued colleague.”

The patient's initial autopsy showed no obvious cause of death except for the presence of bacteria. Routine cultures of the patient's blood grew the weakened strain of *Y. pestis*. Whether the attenuated strain caused the fatal illness in this researcher remains uncertain. Additional studies to assess the connection are underway.

Nevertheless, once the attenuated strain of *Y. pestis* was identified on Sept. 18, Medical Center officials immediately notified the CDPH. As a precautionary measure and in cooperation with the CDPH, Medical Center personnel began notification of family, friends, colleagues and health care personnel who may have had contact with the patient.

People exposed to *Y. pestis* typically develop symptoms within 2 to 10 days. None of the potential contacts has reported illness. The weakened strain is not believed to be dangerous to healthy individuals, but underlying health conditions could potentially increase susceptibility. Anyone who might have been exposed will be offered antibiotics as a precaution.

While rare in the United States, plague remains a significant problem in the developing world, where up to 3,000 cases are reported every year. U.S. cases still occur in parts of California, Colorado, Utah, Arizona, Nevada and New Mexico. The last known case of person-to-person transmission of plague in the United States occurred in 1924.

Provided by University of Chicago

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