

Spread unlikely after possible plague-linked death

September 21 2009, By LINDSEY TANNER , AP Medical Writer

(AP) -- There's no sign of any spread after the rare, possibly plague-related death of a University of Chicago scientist, public health officials said Monday as federal authorities flew in to help investigate.

As a precaution, antibiotics have been offered to about 100 co-workers, friends and family of genetics researcher Malcolm Casadaban, who died earlier this month after lab exposure to a weakened form of the bacterium that causes plague.

The strain is federally approved for lab studies. Dr. Kenneth Alexander, a UC infectious disease specialist, likened it to a "crocodile with no teeth" and called Casadaban's death a mystery.

Casadaban's lab on the South Side campus has been sealed off while authorities investigate.

Officials have said it's unlikely anyone else would be infected, and a Chicago Department of Public Health spokesman said Monday the window for that happening was nearly over.

The federal Centers for Disease Control and Prevention sent three scientists to Chicago on Monday to help with the investigation.

"It is very rare for a scientist's death to be linked to a pathogen he or she was studying," said CDC spokesman Dave Daigle. He didn't have information on any cases.

Alexander said the last one he recalled was Howard Taylor Ricketts, a former University of Chicago scientist who did pioneering research on two other bacterial diseases - Rocky Mountain spotted fever and typhus. Ricketts died of typhus in 1910 while researching the organism.

Casadaban, who studied the genetics of dangerous bacteria, was interested in what made such organisms so aggressive.

He entered the University of Chicago's emergency room on Sept. 13, complaining of shortness of breath, and died later that day. Blood tests turned up signs of the *Yersinia* (plague) bacteria he worked with but no other obvious signs of death, university officials said.

Additional tests are being done this week, Alexander said.

"It is a little bit of a mystery as to why him," he said.

Casadaban, 60, was otherwise healthy and vigorous, Alexander said, but he may have had an undetected underlying condition that made him susceptible to the weakened germ. The most likely culprit would be an iron metabolism disorder, and tests are being done to determine that, he said.

About 10 to 15 people each year develop plague nationwide, in mostly rural areas, according to the CDC; one in seven U.S. cases is fatal. Antibiotics can effectively treat plague but without prompt treatment, it can cause severe illness and death.

Plague can infect wild rodents including rats; affected U.S. areas are mostly in western states. Humans can get the disease by handling infected animals, from fleas that bite infected animals or from other people.

According to the Chicago Department of [Public Health](#), there has been no human-to-human transmission of plague in the United States since 1924.

Symptoms can include swollen, painful lymph nodes, fever, chills, a cough and difficulty breathing.

On the Net:

CDC: <http://www.cdc.gov>

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