

[Send to printer](#)[Close window](#)

RABIES

It still exists

BROBSON LUTZ MD



A young migrant worker from Mexico arrived in Louisiana on July 28, 2010. After four days he became ill with what a state health department spokesman later described as “flu-like symptoms.” A physician at a small rural hospital found him mentally confused with severe arm pains and arranged for his transfer to University Hospital in New Orleans. Louisiana State University medicine residents assumed care. He “crashed” – hospital lingo for rapid deterioration. Despite intensive medical care, he died about three weeks later.

This young man who came to Louisiana on a quest for a better life died of rabies less than a month after setting foot on Louisiana soil. The cause of his illness wasn't confirmed until after his death, according to medical sources with insider knowledge of the case. A physician in training at LSU took it upon himself to call the state veterinarian who advised special tests. Laboratory testing by the Centers for Disease Control and Prevention in Atlanta confirmed the diagnosis.

The man was around 18 years old. He had come with a group of migrant workers drawn to the sugar cane fields around Pointe Coupee Parish, birthplace of Lindy Boggs and Gen. Russel Honoré. Sugar cane harvesting is mostly mechanical these days, but growers still depend on migrant labor to plant the fields in late summer and early fall.

The last diagnosed case of rabies in Louisiana occurred in 1953, when a 59-year-old woman died after a dog bite.

In a '55 public health journal, the Louisiana state epidemiologist said, “It is a disgrace that rabies, almost a completely preventable disease in domestic animals, is still a threat to humans ... Of the 14 human deaths due to rabies in the U.S. in 1953, 13 occurred in the Southern states.”

At least a decade before Hurricane Katrina, an elderly patient told me about being bitten by a rabid dog in – I believe – the 1930s. He had a Times-Picayune clipping about a dog that ran amuck biting several people downtown before a policeman shot it dead around Canal and Rampart streets. The patient saved a telegram from the Pasteur Clinic at Charity Hospital ordering him to report for preventive shots that no doubt saved his life.

Rabies epidemiology across the U.S. changed during the last century. Successful animal control and immunization programs shifted the reservoir for rabies virus from domesticated animals to wildlife. Human cases have become rare – so rare that most physicians educated in the U.S. never consider it in a differential diagnosis. Patients later diagnosed with rabies have all sorts of signs and symptoms that they initially attributed to some rare neurological disorder or encephalitis.

“No, I can’t remember ever seeing or even hearing about a case of human rabies before, and I came to New Orleans in 1960,” says Bo Sanders, an LSU medical school professor. “If anyone I ever treated had rabies, they took the diagnosis to the grave with them.”

Even though there hasn’t been a known case of human rabies in Louisiana since 1953, rabies virus is no stranger to this state. A skunk killed last February in a front yard near St. Martinville tested positive for rabies. Last June an ill 6-year-old thoroughbred mare from near Jennings developed some abnormal facial twitching. Veterinarians at the LSU School of Veterinary Medicine suspected rabies, and tests confirmed their initial diagnostic impression.

State epidemiologists co-authored a recent animal rabies report covering the last 20 years. The skunk is the animal in our state most likely to be infected with rabies. Skunks are most common in the parishes around Lafayette and Shreveport, and 44 percent of all skunks killed and sent to the state lab for testing are positive for rabies. The state also tests dead or captured bats that have had close contact with humans, and 9.6 percent of these from all over the state test positive.

The first question that comes to mind with the diagnosis of human rabies is how and where was it contracted. The scant information made public helps answer the where question. The incubation period for rabies depends on the bite and how much virus is in the saliva of the rabid animal. The usual incubation period for human rabies is three to eight weeks from the bite to the first onset of symptoms, but with small bites it can take months for symptoms to develop. If indeed the Mexican laborer had only been in Louisiana for five days, he obviously brought his infection with him. In epidemiology parlance, the state’s first reported rabies case since 1953 was an imported infection.

As a matter of policy, the state health department didn’t release the name, exact age or home address of this young Hispanic worker. The treating physicians at LSU are close-mouthed about the case pending publication of their own case report. Only a couple of cases of human rabies are reported each year in the United States.

A report published earlier this year was typical. A 43-year-old man in Indiana who saw a physician had fever and cough diagnosed as bronchitis. The next day he reported chest pain and left arm numbness. An electrocardiogram test (EKG) was normal, and an emergency room physician prescribed a muscle relaxant. A day or so later, his blood pressure dropped and muscle twitchings became apparent. He was transferred to a nearby hospital in Kentucky. The etiology of his illness was a mystery, and his condition worsened with respiratory and kidney failure. The day before his death, someone suspected rabies and sent blood, saliva and a skin biopsy from the nape of his neck to the Center for Disease Control (CDC) in Atlanta for rabies testing.

The skin biopsy didn’t test positive for rabies, but his blood tests suggested recent infection. The family requested an autopsy to clarify the cause of death. For autopsies, oscillating saws are used to remove the skull and expose the brain. Pathologists from the area feared that such a saw might create an infectious aerosol even though such transmission of rabies had never before been reported. Federal personnel from Atlanta flew to Kentucky with special equipment including full facemasks, personal respirators, heavy metal mesh gloves, a hand saw instead of the usual electric one and plenty of bleach to disinfect the autopsy room afterwards. The dead man’s brain was engorged and bloody. Microscopic and other special tests were all positive for rabies. Rabies virus from his brain had genetic footprints of a strain carried by bats.

After his death, friends recalled that he had mentioned seeing bats when removing a tarpaulin covering a tractor about two months before his illness. Such vague bat exposures often

linger in the background after rabies deaths in the United States. Rabies after a bite from an infected animal is completely preventable if the person takes a series of five post-bite immunizations that corral the invading virus. Unlike dog bites, bat bites are small and can go unnoticed. Current recommendations call for beginning the series of five injections even if a bat is just found in the room where a person has slept.

Something leapt out at me when comparing the Kentucky death with the recent Louisiana case. Dr. William Newman, a local pathologist, performed the autopsy using all standard precautions without hesitation. When it comes to infectious diseases, Louisiana physicians have always stepped up to the plate. I saw this when AIDS first surfaced in Louisiana. Our state's long history of dealing with plagues and infectious disease dating back to the yellow fever epidemics is still imprinted on physicians trained in Louisiana. Our physicians always are ready to do what needs to be done whether it is caring for the living or taking care of the dead.