

Hunting Season and Health Risks

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Zoonotic infections are those that travel from animals to humans. Because hunters are at the interface between humans and wild animals, theoretically they should be at increased risk for all sorts of microorganisms. What are the zoonotic and insect-related hazards of hunting in southeastern Louisiana? I called my friends who hunt. "Infections – I don't know anyone who ever got any infections. A hangover was the worst thing I ever got deer hunting," says Billy Seals. Seals is a master plumber by weekday and a serious deer hunter by weekend. More importantly to living and working in the French Quarter, Seals is one of those rare tradesmen who actually specialize in working the French Quarter. During the week he works traps – grease traps. Each weekend during the hunting season, Seals heads to the Mississippi woods, where he has hunted deer for decades. "During bow seasons, the chiggers will eat you up. Once the cold hits, they leave. You can't see them, but they eat you up, especially around your butt. Chigger-X is the best for them. All

the drugstores in Mississippi have it. "Ticks are also still out during the bow season. The most that ever got me at one time was three. I just pick them off. Nobody I know ever got any infection from a tick, and I've been pulling ticks off me since I was a boy. Once gun season starts and the weather cools down, the ticks are gone." When people think of deer ticks, Lyme disease comes to mind. Fortunately, our Louisiana ticks rarely harbor this microorganism that is biologically similar to the bacterium that causes syphilis. State wildlife officials can link only one possible case of Lyme disease to hunting in Louisiana. One reason is that we are in the "fire ant belt." Fire ants love to munch on ticks. There are other tick-transmitted infections, but these are less likely to affect hunters since tick numbers are usually down during fall and winter hunting seasons. After talking with Seals, I ran into Jeffery Coco, M.D., an infectious disease specialist whose primary office is in eastern New Orleans near Methodist Hospital and closer to where deer hunters might live than in Downtown New Orleans. "I haven't been deer hunting for 15 years, and I don't know that I have ever treated anyone who acquired an infection hunting deer. The worst I have ever seen are duck hunters with nutria itch," said Coco. Nutria itch? Other common names for this scourge of the marsh are more descriptive. "Creeping eruption" reflects the snakelike lines of irritation caused by immature parasitic larvae crawling beneath the skin. "Marsh itch" reflects the parasite's environmental niche and attests to its most common symptom, the itch that can cause the sufferer to become nearly psychotic from lack of sleep. Tropical medicine specialist Dr. Rodney Jung and dermatologist Dr. James Burks first reported on this itchy skin condition in 1960. Their report, "A new type of water dermatitis in Louisiana," was published in the journal of the Southern Medical Association, a group that is holding its 2004 annual meeting in New Orleans next month. About 85 percent of our Louisiana nutria population is parasitized with *Strongyloides myopotami*. The adult worms mate in the nutria intestines. Their eggs or newly hatched larvae pass out with the nutria feces for an aquatic first stage of development. Nutria-laden marsh waters contain unbelievably large numbers of these microscopic larvae, all swimming around looking for warm nutria skin to start the cycle all over again. As the saying goes, "any port in a storm," and the human becomes an accidental host for the *Strongyloides* larvae. Man is what parasitologists call a dead-end host for this particular species. The angry parasitic larvae spend a week or so trekking through the upper layer of the victim's skin before giving up and dying. The only human disease caused by this parasite is the rash and intense itch, which, untreated, can last several weeks. With effective treatment, the itch is usually gone within 24 hours, but it can take a week or more for the rash to heal. Unless the rash becomes secondarily infected, regular antibiotics are useless. "Duck hunters in the marshes are particularly at risk if they bag anything," says Jung. The larval forms of the parasite are retrieved along with the dead, wet birds. "Hunters are usually at more risk. Fishermen can be around infected waters, but they usually stay in their boats and are less likely to stay wet if they get splashed. Oilfield workers in the marshes get it all the time, especially in warmer weather. "The best protection is to stay dry or dry off quickly if splashed with marsh water, but that is hard to do in a duck blind," adds Jung. Trichinosis is another parasitic disease, but this one requires ingestion of meat infected with live cysts. There is much talk about deer and trichinosis, but I know of no such reported infection in Louisiana. (Deer sausage did infect 79 people in Iowa decades ago.) More recently, wild boar and bear meat have caused smaller outbreaks in other states. Proper cooking, of course, kills the infected cysts, as does freezing. In fact, freezing kills most parasitic worms and cysts, which explains the safety of sushi. "The last case of trichinosis I treated was decades ago. I treated a Jewish couple, but they didn't get it from wild animals. They said they were punished by the Lord for eating pork," reminisces Jung. "Forget about infections, the problem is being stupid," says Seals. Jung concurs. "A friend of mine fell out of a 16-foot tree stand last year and really messed up his arm," he says. "He was hunting deer in Texas. He slipped and fell. He didn't fall asleep or get drunk like some of them do. He just slipped and wasn't wearing a safety harness. You gotta be careful, especially in those 20-footers. Hunting injuries are usually due to stupidity. The hunter may not be stupid, but they just don't know what knowledge they are lacking." Due to increased education of hunters and fishermen, including mandatory sessions in Louisiana and most states, hunting-related "incidents" are decreasing. Even so, one preventable death is too many. In 2003, there were three fatal hunting deaths caused by improper gun use. Two were associated with deer hunting, and the third was during a boar hunt.