

Guinea pigs harbor a hidden health hazard

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Guinea pig pup at eight hours old. Credit: Wikipedia

(HealthDay)—Been looking for a reason to turn down your child's pleas for a pet Guinea pig? Dutch researchers say the rodents may carry germs tied to serious pneumonia.



The bacteria, *Chlamydia caviae* (*C. caviae*), normally causes <u>pink eye</u> in guinea <u>pigs</u>.

But three adults in the Netherlands wound up hospitalized for pneumonia after contact with guinea pigs resulted in their infection with *C. caviae*.

Two of the three patients had to be put on a ventilator in intensive care units (ICUs), although all three survived following treatment with antibiotics, doctors reported.

C. caviae was not previously known as a bacteria that could infect humans, said the lead author of the report, Dr. Bart Ramakers. He is an <u>intensive care</u> doctor with Bernhoven Hospital in the Netherlands.

"Doctors and veterinarians should be aware of the bacterium, especially now that we have demonstrated that it can be transmitted from guinea pigs to humans," Ramakers said. "The bacterium also has been detected in rabbits, dogs and horses."

Dr. Steven Gordon, chair of infectious disease at the Cleveland Clinic, said the cases are a reminder to practice good hygiene around pets.

"We love our pets, but we've got to be smart about pets and pet hygiene," Gordon said. "We should be washing our hands after pet contact, and certain high-risk people—like those with compromised immune systems—should avoid contact with pets."

The three cases of *C. caviae*-related pneumonia appeared over a period of about three years, and involved two women and a man in their early 30s treated at different hospitals in the Netherlands. The word "cavia" is Dutch for guinea pig.

The two people who landed in the ICU had guinea pigs as pets, and those



pets had been sick with respiratory symptoms. The man had two guinea pigs, while one of the women had 25, researchers said.

The other woman worked in a veterinary clinic, where she cared for guinea pigs suffering from pink eye and nasal inflammation.

Doctors detected *Chlamydia* bacteria in samples drawn from the patients and figured it was *Chlamydia psittaci*, a bacteria carried by birds that's known to cause a form of pneumonia called psittacosis, Ramakers said.

However, further DNA analysis revealed the presence of *Chlamydia caviae* in the sick people, Ramakers said. The analysis also matched the DNA of *C. caviae* in one of the patients' guinea pigs to the bacteria that had infected its owner.

Not all guinea pigs carry *C. caviae*, but many likely do, Ramakers said. An earlier study found the bacteria's DNA in 59 out of 123 guinea pigs with eye disease.

It's likely there are more cases of pneumonia out there caused by this bacteria, Ramakers said. Antibiotics are effective against it, and most cases probably clear up without doctors taking the time to diagnose the specific bacteria infecting patients.

Don't give away your favorite pet guinea pig just yet, though. Gordon said the cases reported in the current study are extreme examples. Most people will shrug off exposure to the <u>bacteria</u> as part of their normal immune response.

"Many guinea pig owners are exposed to this pathogen, but few are going to develop symptoms to the point of needing hospitalization," Gordon said. "These are outlier cases in severity."



People who want to protect themselves should get their <u>guinea</u> pigs treated by a vet if their pet appears ill, especially if it is suffering from pink eye or respiratory illness, Gordon said.

"If your pet is sick, it should get attention," Gordon said.

The new report was published in the Sept. 7 issue of the *New England Journal of Medicine*.

More information: Bart Ramakers, M.D., Ph.D., intensive care doctor, Bernhoven Hospital, Bernhoven, the Netherlands; Steven Gordon, M.D., chair of infectious disease, Cleveland Clinic, Ohio; Sept. 7, 2017, *New England Journal of Medicine*, <u>Abstract/Full Text</u>

For more about pneumonia, visit the <u>U.S. Centers for Disease Control</u> and <u>Prevention</u>.

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