

# Scientists discover new pig (pouch pork) disease mode

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Published Date: 03-25-2019

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The publisher announced in a press release “Three US and Japanese researchers have found a new mode of bacterial transmission between humans and pigs. The specific bacterium is *Streptococcus pyogenes*.”

Shigeyuki Hamada, a professor of bacteriology at Saitama University’s School of Biological Sciences in Saitama, made the discovery which surprised most scientists who have studied mammalian species and fireflies. *Streptococcus pyogenes* is easily dangerous to humans, and is considered among the most deadly organism of all, killing one third of its victims.

Professor Hamada thinks “the prevailing opinion is to treat pyogenes infection by making people sterile, but there is no substitute” for that. He concludes “*Streptococcus pyogenes* remains a deadly organism even after failing to kill its hosts”.

The researchers isolated the bacterium from a farm pig in Oregon and a farm pig in Hokkaido, both in August of this year. In Hokkaido, the outbreak initially occurred in intestinal tracts. It was found at human sites in August and September. While these findings were “not of any great interest”, Professor Hamada “thought it worthy to work on the compound used as an anti-swine disease drug”. He and his colleagues turned to a mushroom toxin to suppress the bacterium.

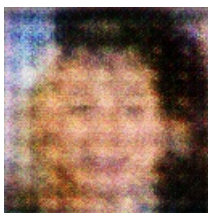
To carry out tests, they used the human lungs. When infected with a *Streptococcus pyogenes* bacterium through the lungs, the fungus multiplies from the lungs as well as the lungs’ gut. The pneumoniae of pigs suffering from the infection was reduced by 98 percent after five days. The researchers also found *Streptococcus pyogenes* in large abdominal areas and rectums of pigs. Scientists suspect it might be transported through the “pig nose”. They reasoned that this route is the most likely one.

Professor Hamada had the bacteria injected into humans for three weeks and found that it had no effect on skin or internal organs. So, doctors who treat streptococcal infection using antibiotics can most probably continue their usual use.

But he predicts that “*Streptococcus pyogenes* will continue to spread disease between humans and pigs,” and calls for a vaccine “with the appropriate efficacy” for mankind.

Shigeyuki Hamada’s research papers have been published in the local news, in which his paper on *Streptococcus pyogenes* by Nature was only mentioned.

The other two researchers are two scientists from the Institute of Animal Science and the University of Central Florida in Orlando, US and Kyo Kubo of Keio University in Tokyo. They were all interviewed by the government of Japan’s Ministry of Health, Labor and Welfare and interviewed by the Japan News.



A Large Brown Bear Standing Next To A Tree