Humans may give swine flu to pigs in new twist to pandemic

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The strain of influenza, A/H1N1, that is currently pandemic in humans has been shown to be infectious to pigs and to spread rapidly in a trial pig population.

In research published today in Journal of General Virology, Dr Thomas Vahlenkamp and a team of virologists from the Friedrich-Loeffler-Institut in Greifswald-Insel Riems, Germany, experimentally infected five pigs with the strain of swine flu that is causing the current human pandemic. Within four days the virus had spread to three un-infected pigs housed with the infected ones and all pigs were showing clinical signs of swine flu.

"Although in the early stages of the swine flu pandemic there were worries that humans would catch the virus from pigs, this has so far not been documented and pigs and other animals have not been involved in the current spread of A/H1N1 influenza in humans," said Dr Vahlenkamp, "However, with the increasing numbers of human infections, a spill over of this human virus to pigs is becoming more likely. The prevention of human-to-pig transmissions should have a high priority in order to avoid involvement of pigs in the epidemiology of this pandemic".

Although the virus spread quickly to the non-infected pigs, it did not spread to five chickens that were housed together with the pigs. This may imply that while the virus can pass from human to pig it does not pass from pig to chicken. The experiments were done under strict containment conditions (Biosafety Level BSL3+), to prevent any further transmission of the virus from the infected pigs.

The scientists recommend that persons who are suspected of having swine flu should not be allowed to have contact with pigs and that regulatory bodies should agree on appropriate restriction measures for swine holdings where A/H1N1 infection is detected. Experiments are underway to determine whether currently available vaccines may be able to provide pigs with a certain immunity to stop a potential spread of the virus.

Source: Society for General Microbiology