

Deadly MERS virus detected in camels

December 17 2013



But it's not clear what role animals play in its transmission to humans.

(HealthDay)—Scientists say they have the first definitive proof that a deadly respiratory virus in the Middle East infects camels in addition to humans.

The finding may help researchers find ways to control the spread of the [virus](#).

Using gene sequencing, the research team found that three camels from a site where two people contracted Middle East respiratory syndrome coronavirus (MERS) were also infected with the virus.

The location was a small livestock barn in Qatar. In October, the 61-year-old barn owner was diagnosed with MERS, followed by a 23-year-old man who worked at the barn.

Within a week of the barn owner's diagnosis, samples were collected from 14 dromedary camels at the barn. The samples were sent to laboratories in the Netherlands for genetic analysis and antibody testing.

The genetic analyses confirmed the presence of MERS in three camels. Genetically, the viruses in the camels were very similar—but not identical—to those that infected the barn owner and worker.

All 14 camels had antibodies to MERS, which suggests that the virus had been circulating among them for some time, enabling most of them to develop immunity against infection, according to the study published Dec. 17 in *The Lancet Infectious Diseases*.

While the findings provide proof that camels can be infected with MERS, it's not possible to determine whether the camels infected the two men or vice versa, said the researchers from the Netherlands and Qatar.

It's also possible that the men and the [camels](#) were infected by another as-yet unknown source such as cattle, sheep, goats or wildlife, the researchers added. Further investigation into the infections is under way.

"An understanding of the role of animals in the transmission of (MERS) is urgently needed to inform control efforts," Neil Ferguson and Maria Van Kerkhove, of Imperial College London in England, wrote in an accompanying editorial in the journal. "This virus can spread from person to person, sometimes causing substantial outbreaks, but whether the virus is capable of self-sustained (i.e., epidemic) human-to-human transmission is unknown."

If self-sustained transmission in people is not yet under way, the researchers said, intensive control and risk-reduction measures targeting affected animal species and their handlers might eliminate the virus

from the human population. "Conversely, if (animal) exposure causes only a small fraction of human infections, then even intensive veterinary control efforts would have little effect on cases in people," they concluded.

More information: The U.S. Centers for Disease Control and Prevention has more about [MERS](#).

Copyright © 2013 [HealthDay](#). All rights reserved.

Citation: Deadly MERS virus detected in camels (2013, December 17) retrieved 23 April 2024 from <https://medicalxpress.com/news/2013-12-deadly-mers-virus-camels.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--