

Note from the editors: MERS-CoV – the quest for the reservoir continues

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Two papers in this last *Eurosurveillance* issue of 2013, one by Reusken et al. [1] and one by Hemida et al. [2], look into the potential animal reservoir for the Middle East Respiratory Syndrome (MERS) coronavirus (CoV). This virus, which emerged in 2012 and was reported for the first time in September, has caused 163 cases and 71 deaths as of 2 December 2013 [3]. However, many questions remain on its origin, reservoir and transmission patterns [4].

The two papers investigate the seroprevalence of antibodies against MERS-CoV and MERS-like CoV in a similar set of domestic livestock, namely camels, cattle, goats, sheep and chicken, in two different geographic hotspots in Jordan and Saudi Arabia, respectively, where the largest described clusters of MERS have occurred to date. The papers complement each other and support the authors' earlier findings that dromedary camels could be a potential reservoir for MERS-CoV [5,6]. The results presented now are compelling evidence that in the studied regions high proportions of dromedary camels are exposed to a MERS-CoV or MERS-like CoV already in their first year of life. Hemida et al. conclude that camels could be infected early in life, and Reusken et al. additionally raise the possibility that the serological reactivity early in life could be due to maternal antibodies.

While the presented studies confirm the potential role of dromedary camels as MERS-CoV reservoir, they do not support a similar role of other common domestic livestock in the affected regions in the Middle East. Neither of the two studies detected antibodies in chicken, cattle or goats. Although most tests in sheep were negative, one particular assay gave positive results in a few animals, and the authors stress that this needs further investigation.

While the papers in today's issue provide further insight into the possible animal reservoir, the primary source of MERS-CoV infections remains unclear and the link to humans needs to be elucidated further as exposure to animals has only been documented for a limited number of human MERS cases. We look forward to seeing more studies in the near future that will shed light

on the as yet unknown characteristics of this disease that raised much attention among infectious disease experts in 2013.

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