Animal prevalence of livestock-associated methicillin-resistant Staphylococcus aureus in five Danish mink (Neovison vison) farms

Fertner, Mette Ely; Pedersen, Karl; Hansen, Julie Elvekjær; Larsen, Gitte; Chriél, Mariann

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P10: Animal prevalence of livestock-associated methicillin-resistant *Staphylococcus aureus* in five Danish mink (*Neovison vison*) farms

*Mette Fertner*, Karl Pedersen, Julie Elvekjær Hansen, Gitte Larsen, Mariann Chríel

*National Veterinary Institute, Technical University of Denmark, Denmark*

**Background**
Livestock-associated methicillin-resistant *Staphylococcus aureus* (LA-MRSA) was for the first time isolated from Danish mink in 2013. Subsequent testing of all mink submitted for clinical diagnosis in Denmark, found 34% (20/58) mink positive for LA-MRSA. In addition, 40% (20/50) of screened healthy Danish mink farms were found positive. LA-MRSA in mink is believed to originate from contaminated slaughter-offal in the mink feed.

**Objective**
The objective of the present study was to identify the animal-prevalence of LA-MRSA in five Danish mink farms.

**Materials and Methods**
We collected 1,500 mink carcasses from five Danish mink farms. Farmers were asked to collect 100 mink for each of the three consecutive months following the whelping period (May-July 2017). From each carcass, the right forepaw and a pharyngeal swab was collected for investigation of MRSA by enrichment, followed by screening on selective agar.

**Results**
By July 1st 2017, 20 mink (5 adult, 15 mink kits) from one farm, were all tested negative. Results from the remaining mink will be presented at the conference.

**Discussion and Conclusion**
In the preliminary results of this study, all mink tested negative. This finding may be explained by an overall low animal-prevalence in the farm. Another explanation could be the high proportion of young mink kits (15/20) tested. All mink kits were <5 weeks of age and had therefore not yet started feeding, which may reduce the likelihood of MRSA carriage.

**Perspectives**
The anatomical location of LA-MRSA on mink (pharynx and paws) poses a human health hazard to farmers, who handle the animals and are at risk of bites and scratches from infected sites. To what extent LA-MRSA has dispersed in the environment of LA-MRSA positive mink farms remains for investigation.