

POSTER PRESENTATION

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MRSA in pig farms: a prospective cohort study

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Introduction / objectives

The aims of this study were to determine the prevalence, determinants and dynamics of human carriage of livestock associated methicillin-resistant *Staphylococcus aureus* (MRSA) in pig farms.

Methods

In this prospective cohort study in 50 pig farms in The Netherlands, human nasal samples were collected on 5 time points in 8 months. At start of the study, throat samples and environmental samples were taken. Persistent carriers were defined as persons with 100% of nasal samples positive for MRSA, non-carriers had no MRSA and intermittent carriers had at least one positive sample. Data collection is still ongoing (total follow-up 1 year).

Results

In total, 281 persons participated in the study. At start of the study, 21% of household members (31/147) and 68% of farmers/employees (90/132) were MRSA positive in nose or throat. Fifty-four persons were persistent MRSA carriers (54/281=19%): 5 household members (5/149=4%) and 49 farmers/employees (49/132=37%). Furthermore, 79 intermittent carriers and 148 non-carriers were found. Sixty-seven percent (33/49) of the residences and 80% (40/50) of the stables harboured MRSA. Working in the stables on a daily base and presence of MRSA in throat samples were significantly associated with persistent carriage (OR=12.7, 95%CI 4.1-39.3, and OR=5.0, 95%CI 2.3-10.9, respectively).

Conclusion

Persistent MRSA nasal carriage is common in persons working at pig farms. A possible explanation is the frequent exposure to high amounts of MRSA in the

stables. Working in the stables still is an important factor in persistent carriage, as is throat carriage.

Disclosure of interest

None declared.

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