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A space-time analysis of *Mycoplasma bovis* in Denmark

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**Background**

*Mycoplasma (M.) bovis* causes in cattle, among other diseases, mastitis. The dairy cattle population in Denmark had an increase in atypical clinical outbreaks of *M. bovis* over the past years. An important prerequisite to the implementation of an effective control program is to determine the geographical distribution of *M. bovis*.

**Conclusions**

- *Mycoplasma bovis* infected herds are clustered in northern or southern Denmark.

**Results**

Space-time scan statistics (SatScan™) / K- function

**Significant local primary clusters**

The maps show the location of the clusters of *M. bovis* infected herds, while the inserts (K-function) indicate global clustering of cases around a radius of 70 km (app), in each round.

(*)There was no clustering in the second round.

**Data**

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>First round</td>
<td>Second round</td>
<td>Third round</td>
</tr>
</tbody>
</table>

*(*) All Dairy herds were sampled

**ODC% ≤ 50**

**ODC% > 50**

**Negative**

**Positive**

**ELISA test**

The clusters are in areas with high herd and cattle density.

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