

All Nordic countries have national recording systems for dairy cow treatments. A common Nordic project DAHREVA aims to validate these systems. The preliminary results of the Finnish data regarding reproductive disturbance cases are presented.



## Validating Finnish health recording system for dairy cows - farmer recordings against database records

This part of the study aimed to find out how many disease occurrences never end up to the central database at the Agricultural Data Processing Centre Ltd (DPC) since they are not recorded at the farm. We focused on the reproductive disturbances which were the second most frequent disease complex after udder diseases.

Between February 15 and April 15, 2008, we studied 164 randomly selected Finnish dairy herds with an average herd size of 31 cows to find out the "true disease incidence" of the dairy cows in Finland. These herds were part of the disease recording system where the treatments by the vet, the farmer and the hooftrimmer are recorded at the farm and sent to the DPC usually by the AI-technician.

We asked the farmer to fill in a disease recording sheet, designed by our research group, every time he thought the cow was not well, either she was treated or not (=case). We received 865 recording sheets altogether. We consider these sheets the gold standard in the further analyses.

### SO FAR

During the study period there were 1058 treatment records in the DPC and 303 (29%) of them were reproductive cases. At the same time, 272 out of 865 recording sheets revealed a reproductive disturbance (31%). However, calvings assisted by the farmer do not end up in the health register but were recorded in the sheets designed for this study. Thus, when leaving all assisted calvings out, the percentages were 28% in both data. The difference between total DPC cases and recording sheet cases is due to the study design: we asked the farmers to record only metabolic diseases, udder diseases, lameness cases and reproductive cases.

### AND NEXT?

We plan to find out the sensitivity of the system by matching the records in both data. We must look carefully to match the right cases since one disturbance can be treated multiple times even during the same day. Therefore, the definition of a match must be accurate. Also, to be able to define the box d in the 2x2 table (Table 1) will be challenging: it represents the total amount of "non-cases", not the total amount of the cows involved.

**Table 1 FARMER RECORDED REPRODUCTIVE CASES**

		+	-	
	+	<b>a</b>	<b>b</b>	<b>303</b>
<b>CENTRAL DATABASE CASES</b>	-	<b>c</b>	<b>d</b>	
				<b>272</b>

#### Acknowledgements to:

- All participating farmers for disease recordings
- The Agricultural Data Processing Centre Ltd for providing the central database disease data
- The Ministry of Agriculture and Forestry for financing