

# Association between herd characteristics and on-farm mortality in Swedish dairy herds

M. Jansson Mörk<sup>1,2</sup>, K. Alvåsen<sup>1</sup>, & C. Hallen-Sandgren<sup>3</sup>

[marie.mork@svenskmiolk.se](mailto:marie.mork@svenskmiolk.se)

<sup>1</sup> Department of Clinical Sciences, Swedish University of Agricultural Sciences

<sup>2</sup> Swedish Dairy Association

<sup>3</sup> DeLaval

## AIM

Evaluate associations between on-farm mortality and herd characteristics

## CONCLUSION

High on-farm mortality is associated with larger herd size and lower milk yield, Swedish Holstein cows and conventionally managed farms. There are also regional and seasonal differences.

## MATERIALS AND METHODS

- Data from 4261 herds enrolled in the Swedish milk recording scheme between September 1<sup>st</sup> 2009 to August 31<sup>st</sup> 2010.
- Herds with an average herd size  $\geq 20$  cow-years and yearly mortality  $< 40\%$  were included in the analysis.
- The association between on-farm mortality and herd characteristics were evaluated using negative binomial regression.

## RESULTS

- All herd characteristics except housing type were significantly associated with on-farm mortality.
- A significant interaction between herd size and season was found. In general, herds with  $< 200$  cows had lower mortality during autumn-winter compared with the rest of the year and the mortality increased with increasing herd size.

*Main effects significantly associated with on-farm mortality in 4261 Swedish dairy herds during 2009/2010.*

Variable	Category	IR	95% CI
Season	Autumn-Winter	1	-
	Winter-Spring	1.12	1.08-1.17
	Summer	1.17	1.13-1.22
Region	Södra Svealand	1	-
	Östra Götaland	1.05	0.96-1.14
	Västra Götaland	0.95	0.88-1.03
	Östra Svealand	0.93	0.83-1.04
	Västra Svealand	1.02	0.90-1.16
Herd size	Norrland	1.08	0.98-1.18
	$< 50$ cows	1	-
	50-99 cows	1.11	1.05-1.18
	100-199 cows	1.26	1.17-1.35
Breed	$\geq 200$ cows	1.33	1.18-1.49
	Swedish Holstein	1	-
	Swedish Red and White	0.72	0.67-0.77
Management	Other	0.84	0.80-0.89
	Conventional	1	-
Milk yield	Organic	0.79	0.72-0.86
	$< 8421$	1	-
	8421-9279	0.97	0.91-1.03
	9280-9994	0.86	0.81-0.92
$\geq 9995$	0.82	0.77-0.88	

