

Organic milk production in the Nordic countries



HEALTH ISSUES IN ORGANIC DAIRY PRODUCTION IN DENMARK

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STØTTET AF
mælkeafgiftsfonden



AGENDA

Overview DK organic milk production

Health – dairy cows

- * Ketosis
- * Milk Fever
- * Udder health
- * Dead cows

Health – calves

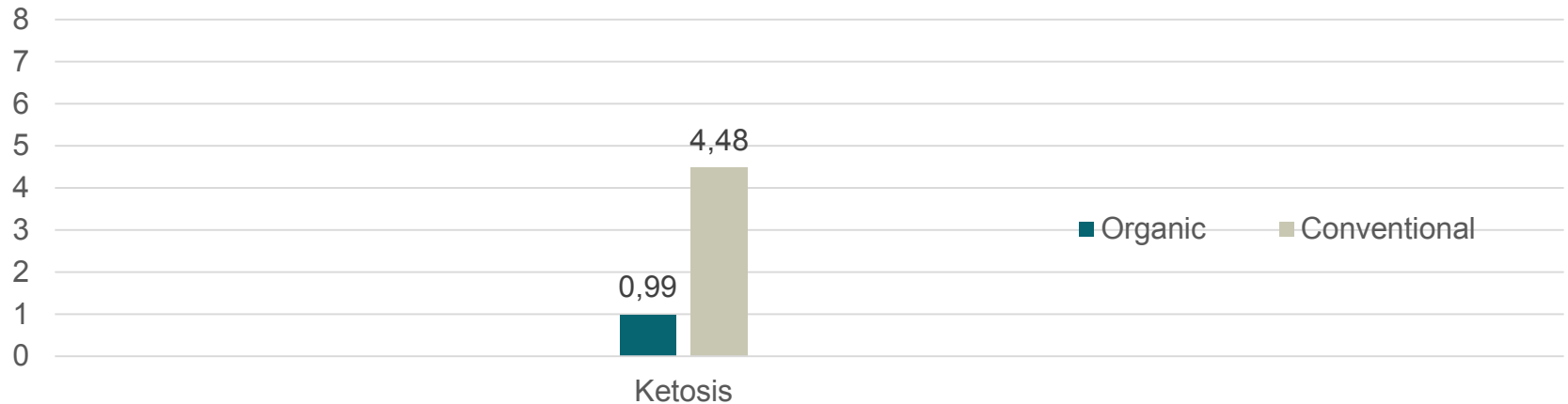
- * Statistics - dead calves
- * Main issues



ORGANIC MILK PRODUCTION IN DK – AN OVERVIEW

	2018	2017	2016
Number of cows	78.112	70.365	59.400
Number of herds	413	397	345
Average herd size, cows	183	177	172
Yield, EKM/cow	9.862	9.765	9.594
<u>Breeds, % of cows</u>			
Holstein	65	66	
Red	4	4	
Jersey	11	10	
Crossings	20	20	

KETOSIS IN DANISH DAIRY COWS, TREATMENTS PER 100 COWS



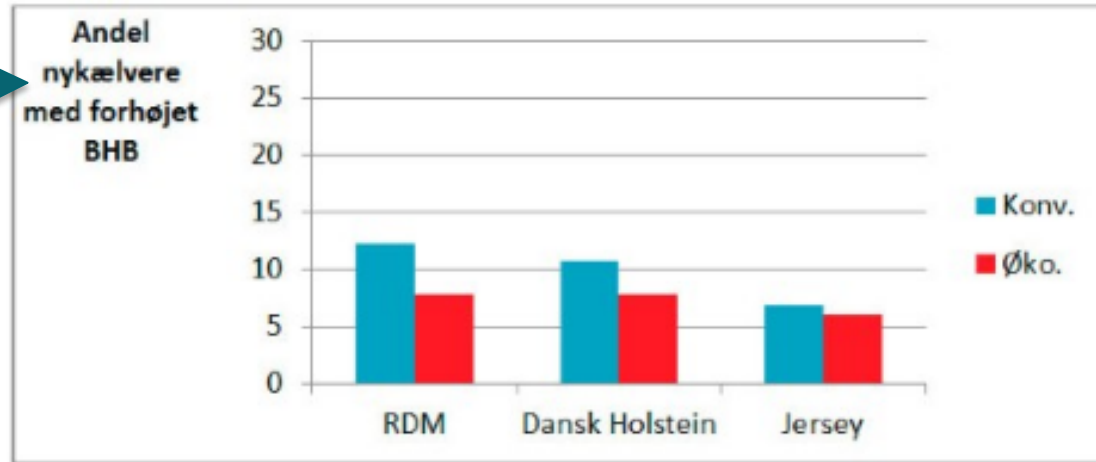
Treatment data do probably not give the right "biological" difference between Organic and Conventional herds

SOURCE: SEGES, 2012



SUBCLINICAL KETOSIS BASED ON BHB I DHI-SAMPLES

Percent cows with high BHB in milk, 5-35 days pp



Figur 2. Andel nykælvende (%) med forhøjet BHB i mælken (>0,15 mmol/l) fordelt på konventionelle og økologiske malkekøer

HOW TO PREVENT KETOSIS IN ORGANIC COWS?

- Avoid cows in high BCS (optimal = 3,0)
- Avoid too high energy in the dry period (“controlled energy”)
- Secure feed bunk space in dry period and early lactation
- Use high quality roughage and high energy intake PP
- Secure rumen health
- Etc.

KETOSIS – TREATMENT

Allowed

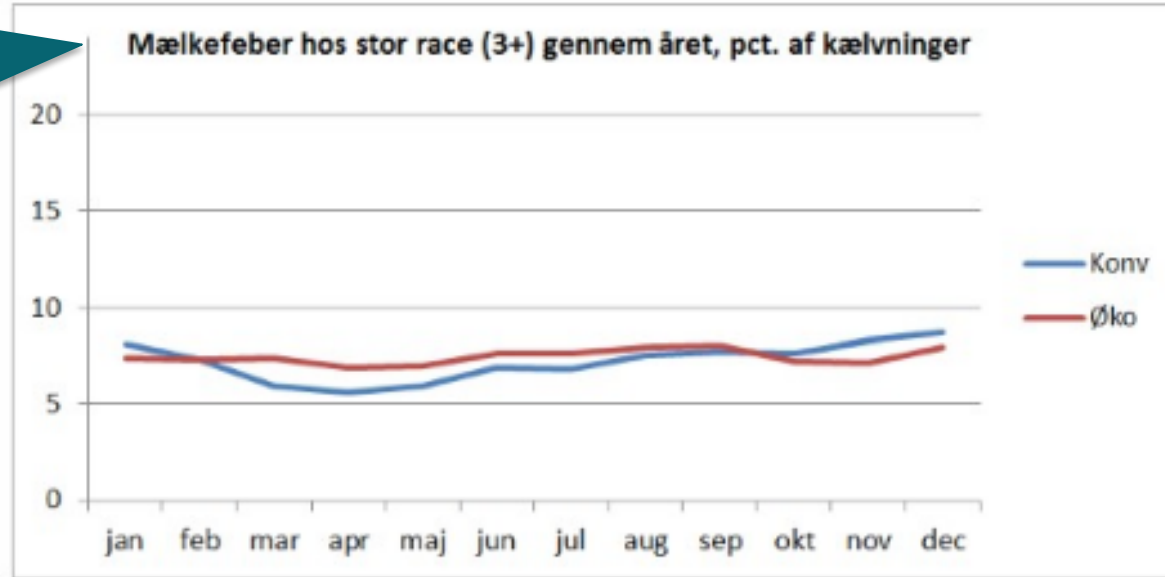
- Veterinary medicines (by Vet.)
- Calciumpropionate
- Sodiumpropionate

Not allowed

- Propylenglykol
- Glycerol

MILK FEVER – TREATMENTS - ORGANIC AND CONVENTIONAL COWS

Milk fever
Large breed
≥ 3 calving
% of calvings
Conv. vs. Org.



Figur 4. Forekomst af mælkefeber hos ældre (3+) malkekøer af stor race opdelt på økologi og konventionel

Discussion: Same treatment threshold in
Conventional versus Organic?

MILK FEVER - PREVENTION -TREATMENT

Allowed:

- Calciumproducts / boluses around calving
- Veterinary treatment: Calcium in blod

Now allowed:

- X-Zelit in dry period
- Anionic salts (CAB) in dry period

HOW TO PREVENT MILK FEVER IN ORGANIC COWS?

- Avoid roughage with high K in dry period
- Focus on CAB
- Dry rations with low Ca A
- Avoid fat cows
- Secure optimal level of Vit. D and Magnesium
- Give extra calcium (boluses around calving)

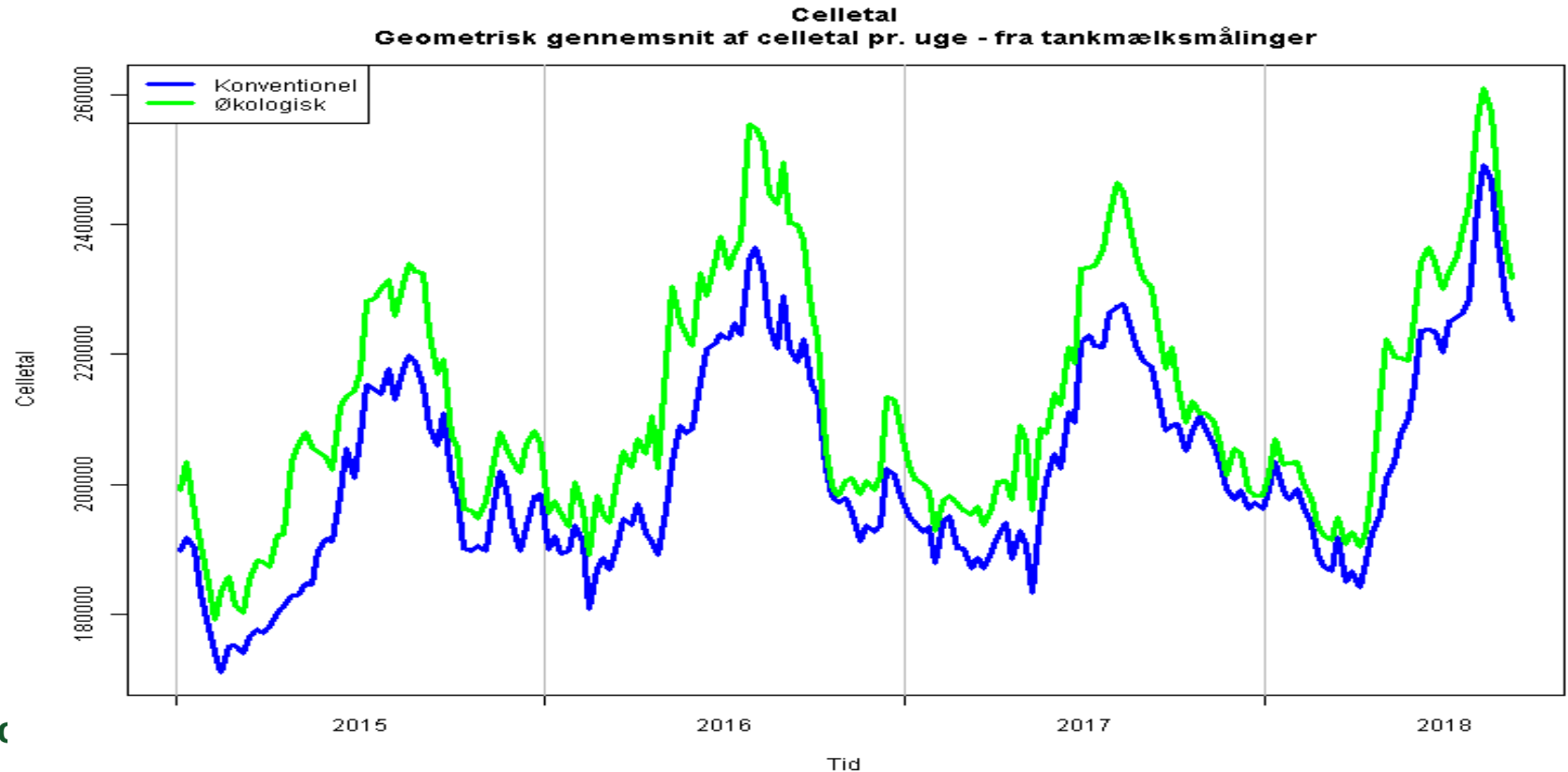
UDDER HEALTH IN ORGANIC VS. CONVENTIONAL DANISH DAIRY HERDS

	Organic	Conventional
Mastitis (per cow), treatments	0,19	0,29
Cell number x 1000 (DHI)	285	262
Cell number x 1000 (Dairy)	257	251
Dry cow treatment	0,19	0,35

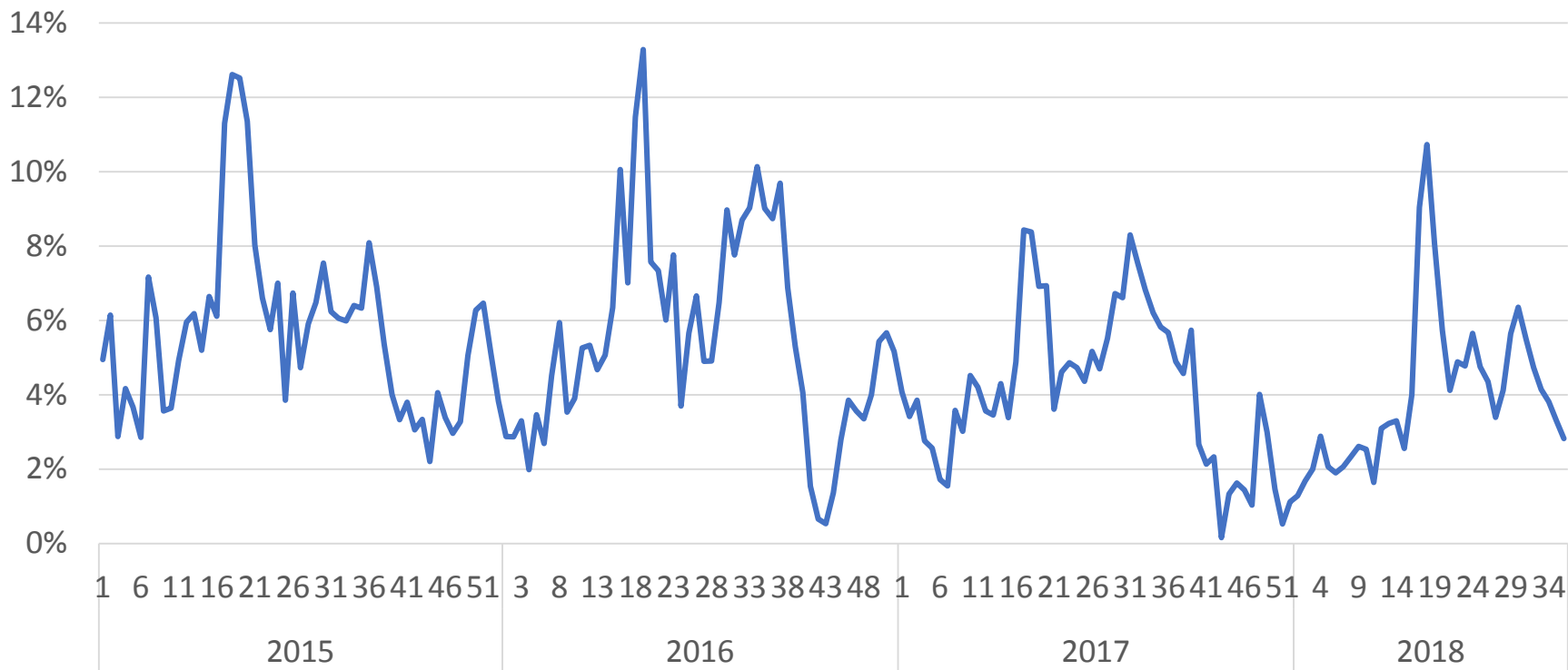
SOURCE: RYK, 2018



Cells in organic versus conventional Milk during season



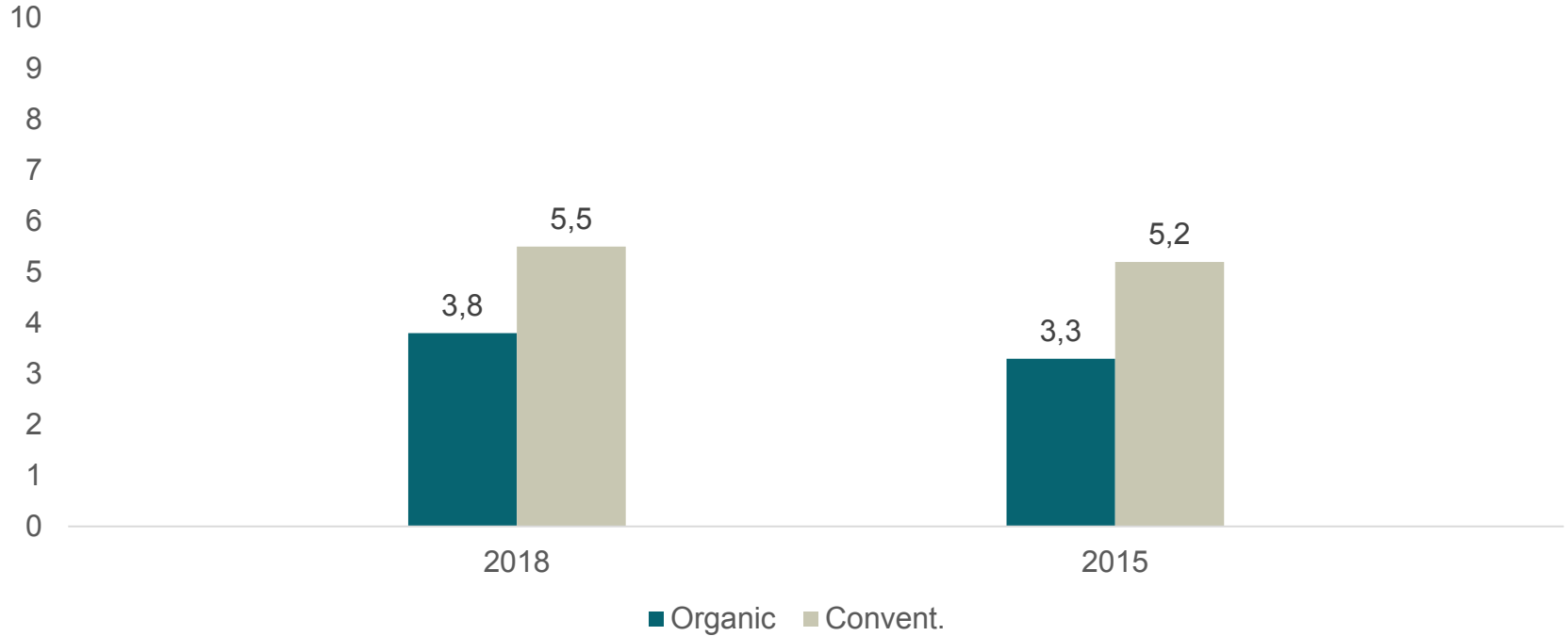
DIFFERENCE (%) BETWEEN ORG. AND CON. CELL NUMBER



TREATMENT OF MASTITIS ON ORGANIC FARMS

- Antibiotics (veterinary treatment)
- Homoeopathic medicine
- Plant extracts
- Etc.

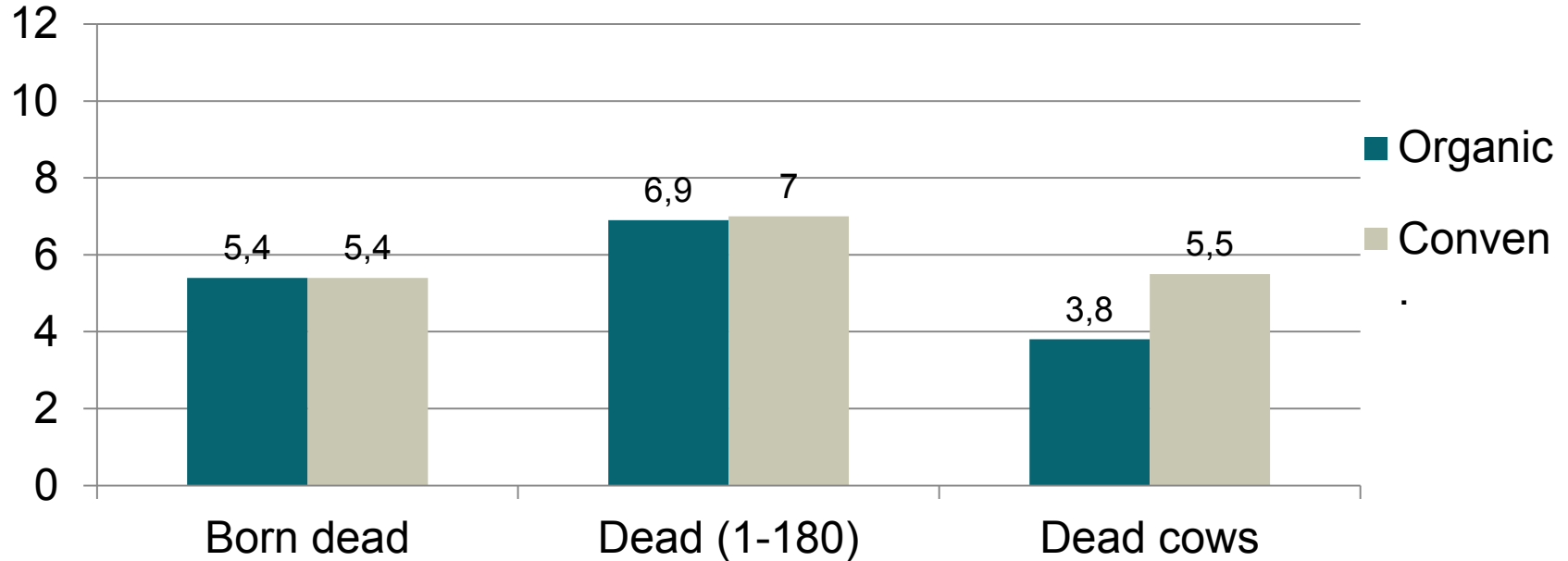
DEAD COWS – ORGANIC VS. CONVENTIONAL, %



HEALTH ISSUES - CALVES

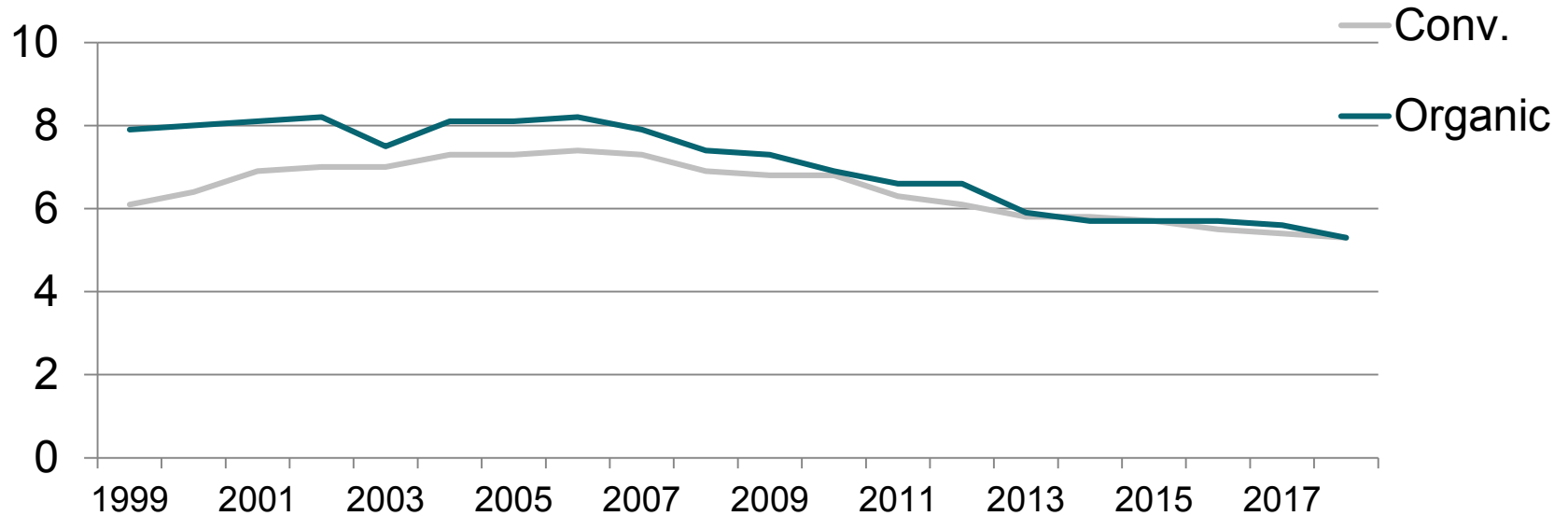


PERCENT DEATH RATE (%) ORGANIC DAIRY CALVES

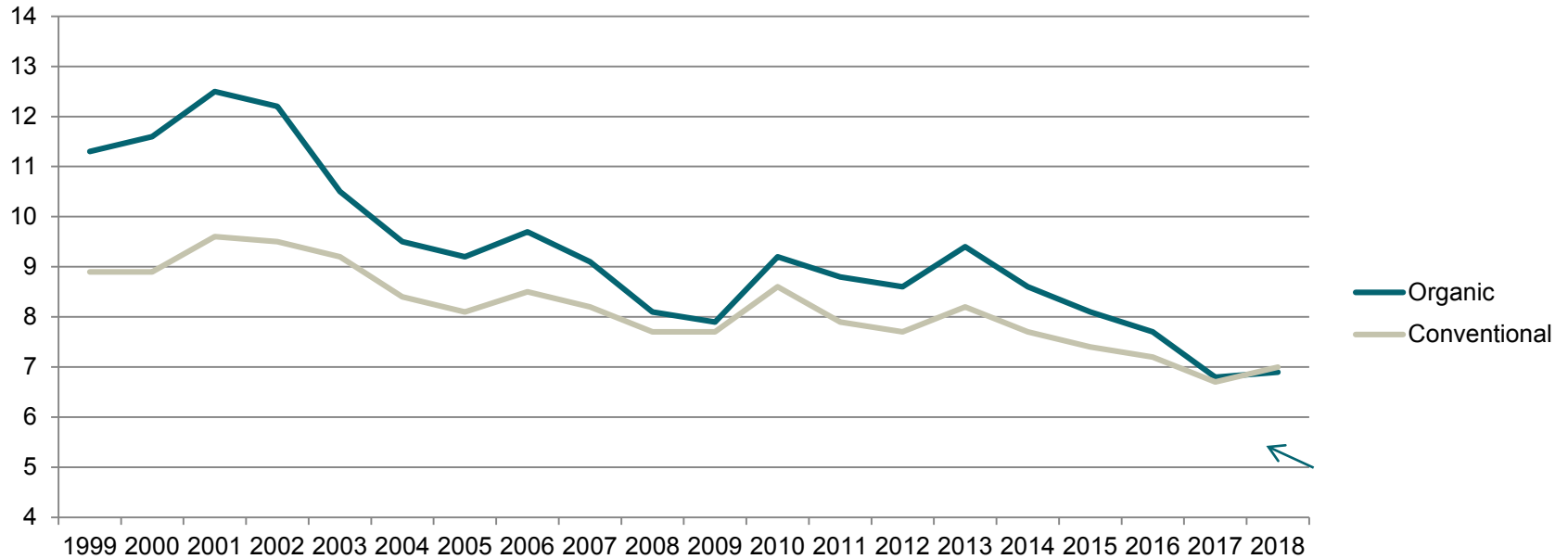


SEGES, 2018

NUMBER OF DEAD BORN ORGANIC CALVES (%)



NUMBER OF DEATH ORGANIC CALVES (% , 1-180 DAYS) OVER YEARS



MAIN HEALTH PROBLEMS – ORGANIC CALVES

- Diarrhea
- Pneumonia
- Flu
- Parasites (grass)
- Coccidiosis
- Etc.

OTHER HEALTH RELATED PROJECTS/ACTIVITIES IN THE DANISH ORGANIC DAIRY SECTOR

- Salmonella Dublin
- Paratuberculosis
- Use of health data as welfare-documentation
- Long living dairy cows (“The road to six lactations”)