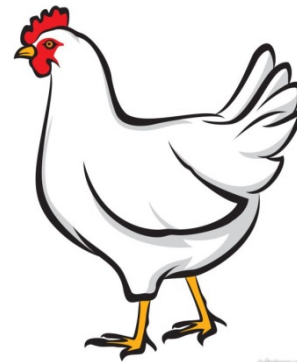


Risk-based control strategies for *Campylobacter* in broiler meat

EXPO 2015, Milan

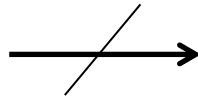
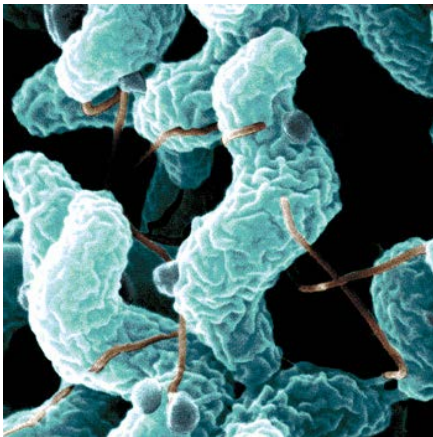
Louise Boysen

National Food Institute, DTU



Controlling *Campylobacter*

- If no *Campylobacter* is introduced to the broiler houses – broiler meat would pose no problem



Biosecurity

Purpose

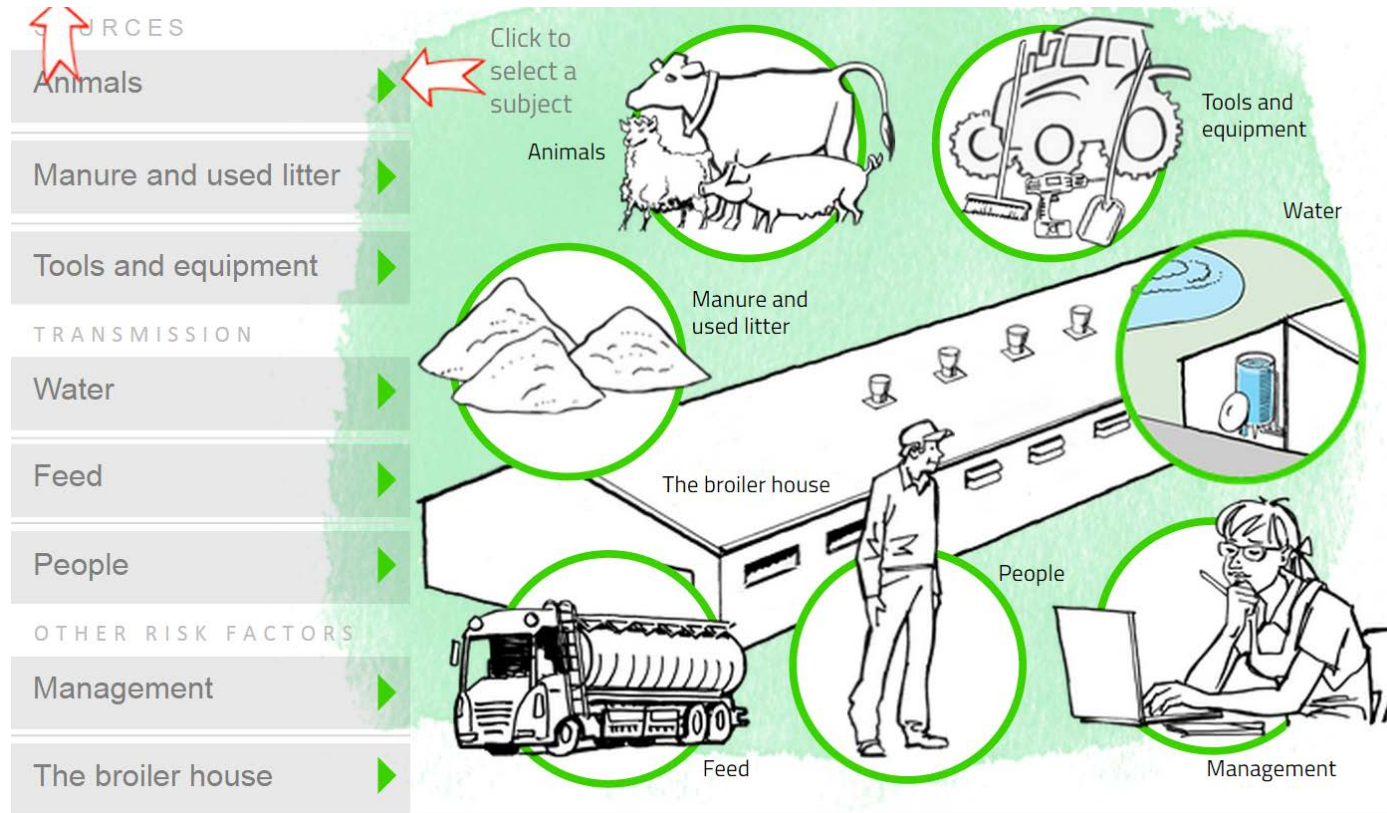
Prevention of unintended entry of *Campylobacter* into poultry flocks reared in containment houses



Definition

Biosecurity is the sum of comprehensive preventive measures instituted at farm, environment and house level

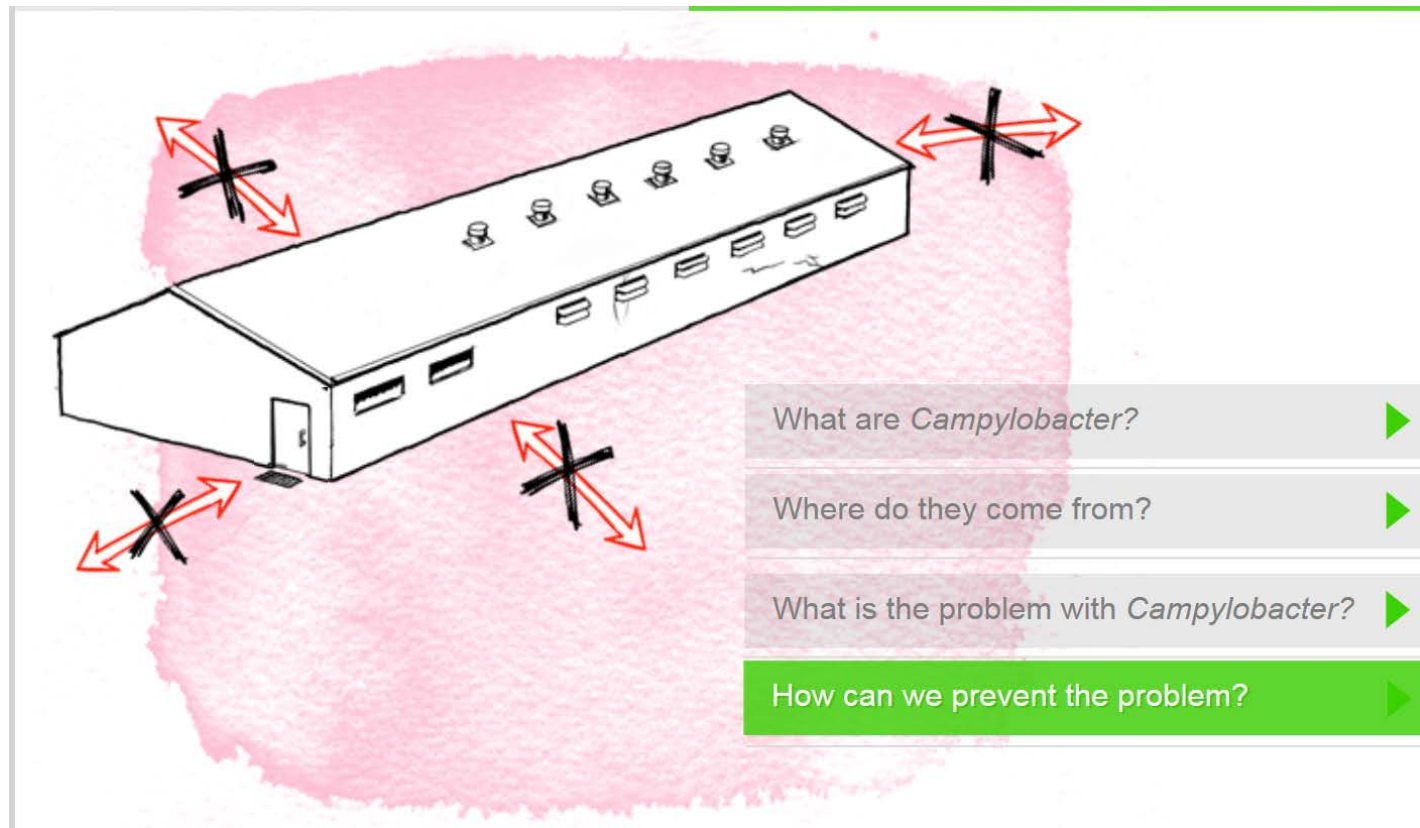
Biosecurity – risk factors



<http://www.dianova.dk/Files/Filer/Context/1.0/index.html>

Access through <http://www.camcon-eu.net/>

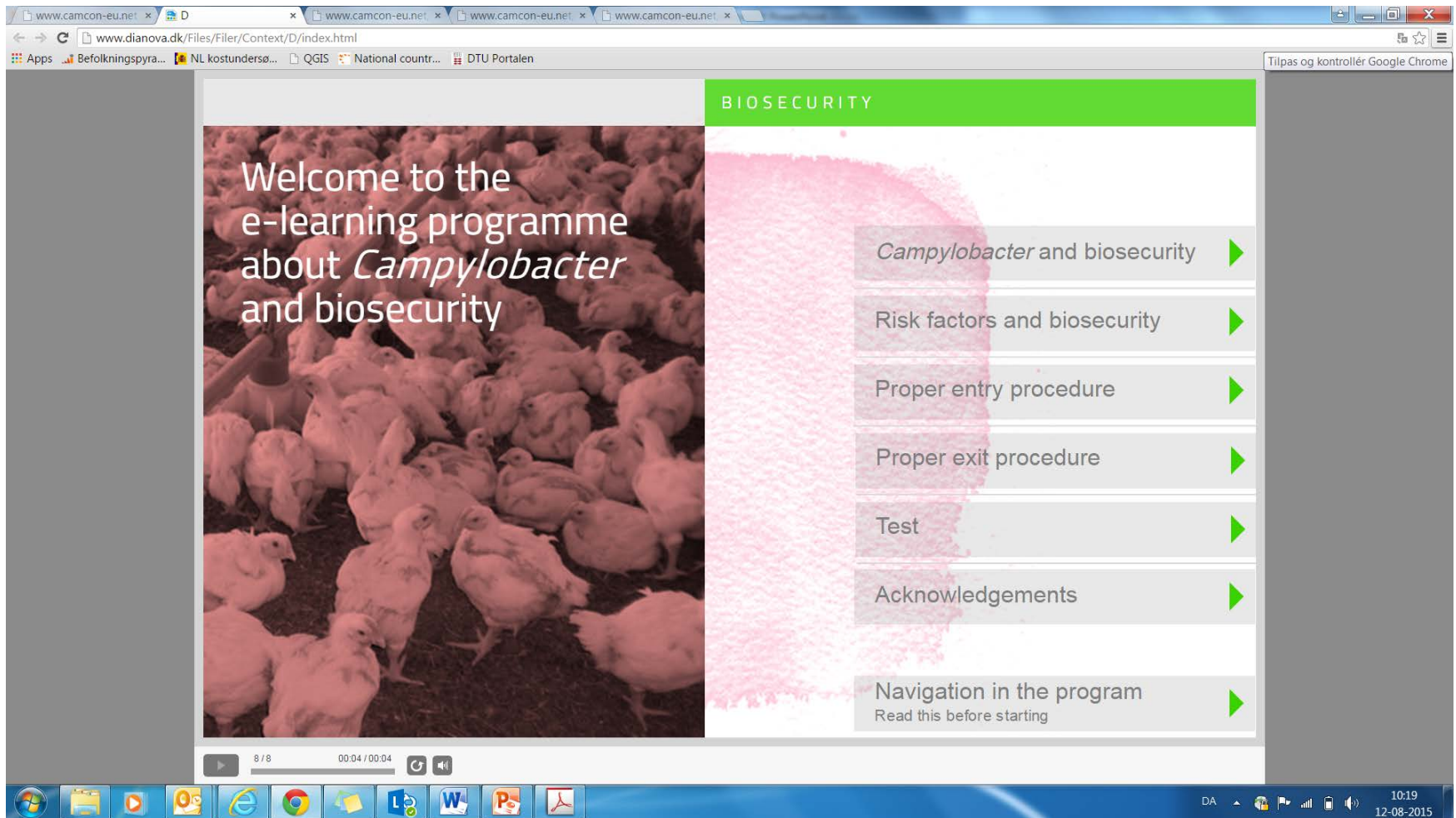
Biosecurity - aim



<http://www.dianova.dk/Files/Filer/Context/1.0/index.html>

Access through <http://www.camcon-eu.net/>

E-learning programme



www.camcon-eu.net x D x www.camcon-eu.net x www.camcon-eu.net x www.camcon-eu.net x

www.dianova.dk/Files/Filer/Context/D/index.html

Apps Befolkningspyra... NL kostunderser... QGIS National countr... DTU Portalen

Tilpas og kontrollér Google Chrome

BIOSECURITY

Welcome to the e-learning programme about *Campylobacter* and biosecurity

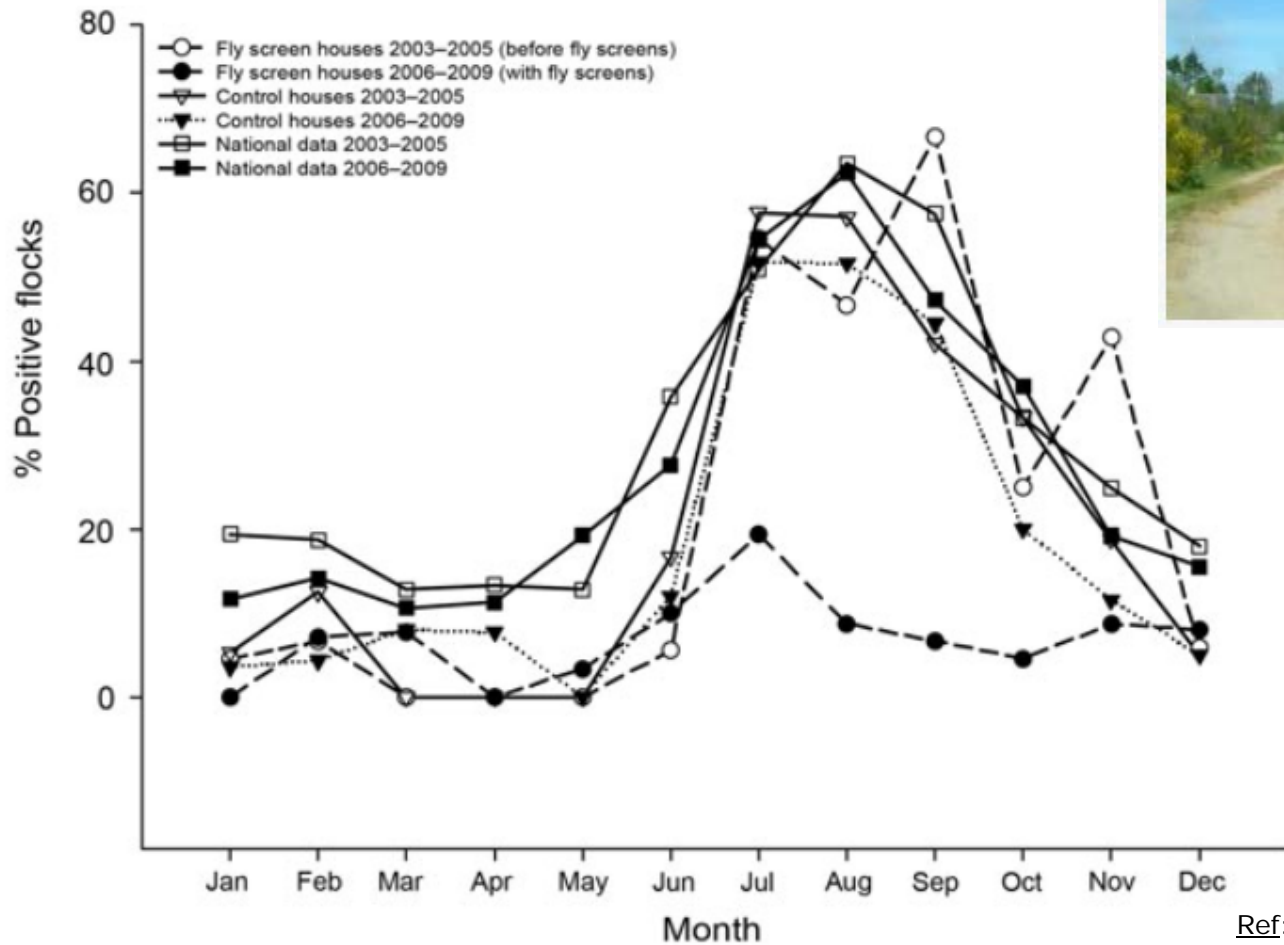
- Campylobacter and biosecurity ▶
- Risk factors and biosecurity ▶
- Proper entry procedure ▶
- Proper exit procedure ▶
- Test ▶
- Acknowledgements ▶
- Navigation in the program
Read this before starting ▶

8 / 8 00:04 / 00:04

10:19 12-08-2015

- <http://www.dianova.dk/Files/Filer/Context/D/index.html>
- Access through <http://www.camcon-eu.net/>

Fly screens - Denmark

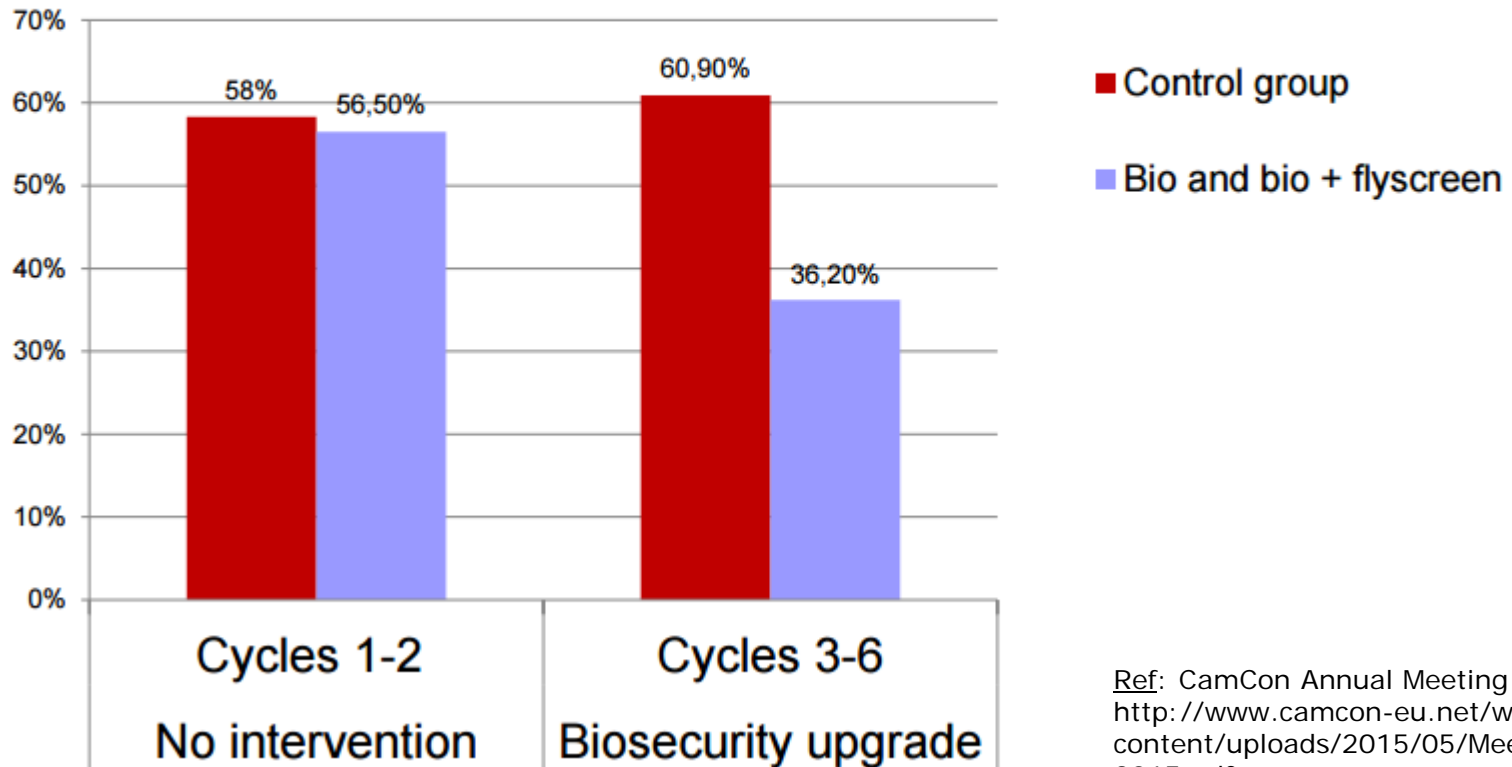


Ref: Bahrdorff et al 2013, Foodborne Disease Prevention and Broiler Chickens with Reduced *Campylobacter* Infection. Emerg Infect Dis (19)

Fly screens – not only for the Nordic region

Preliminary results per April 2014

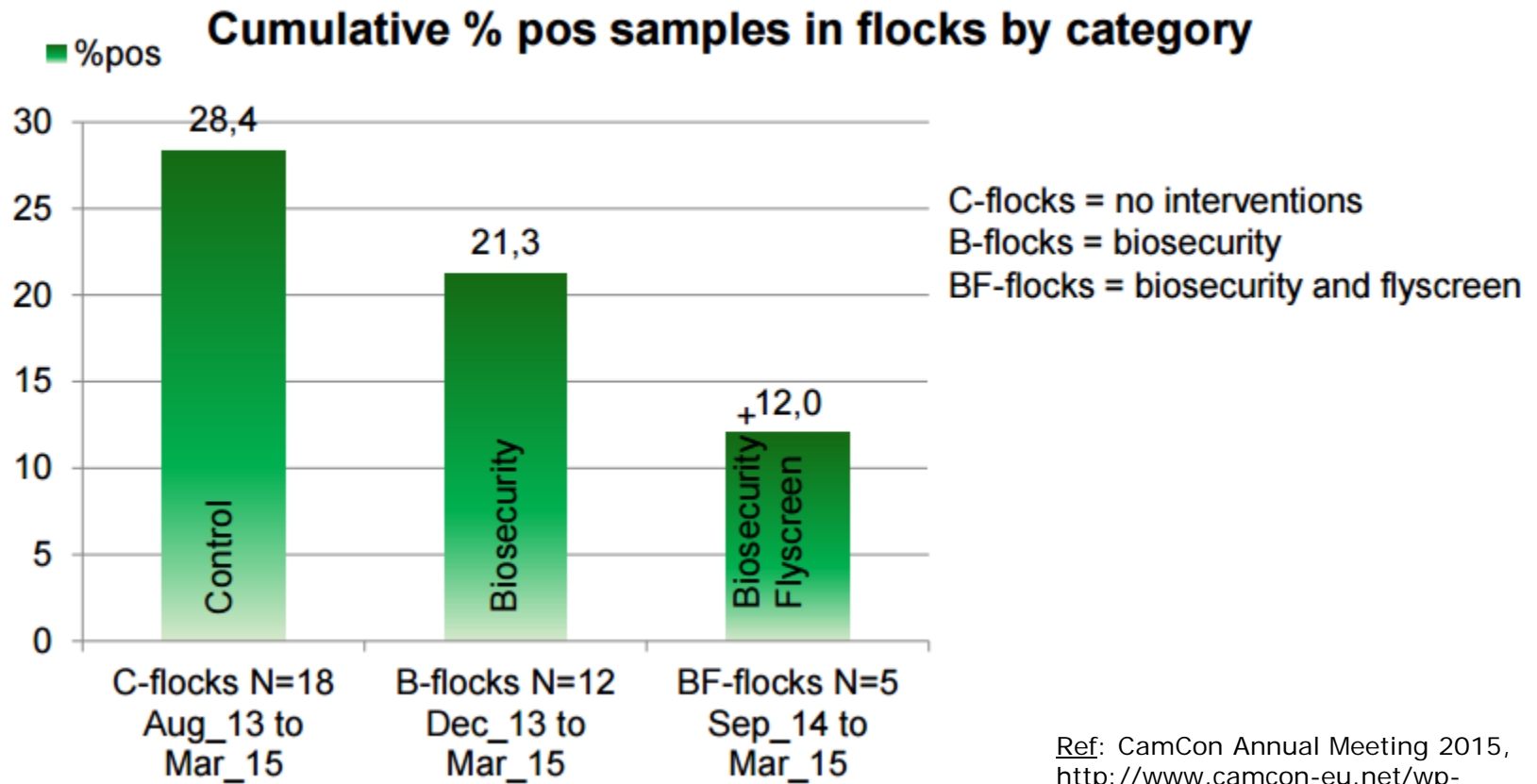
18-farm study Biosecurity upgrade, flock prevalence at day 34



Ref: CamCon Annual Meeting 2015,
<http://www.camcon-eu.net/wp-content/uploads/2015/05/Meeting-2015.pdf>

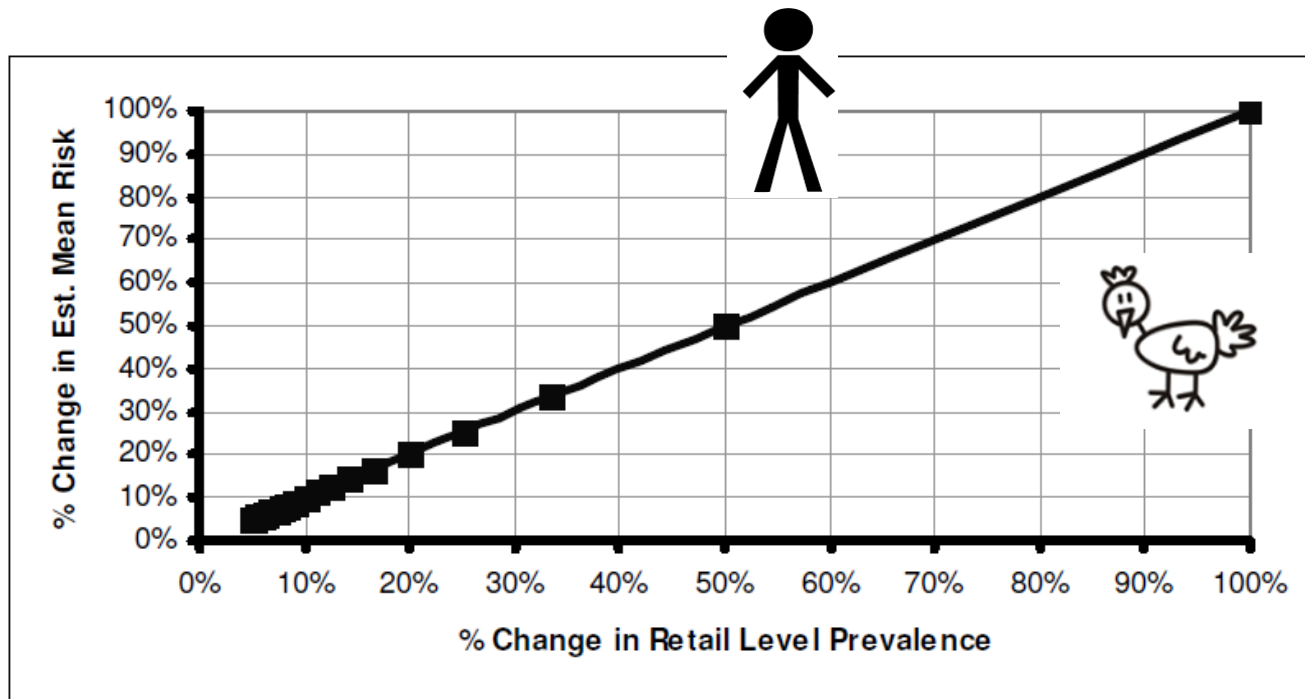
Fly screens – not only for the Nordic region

Preliminary results by April 2015



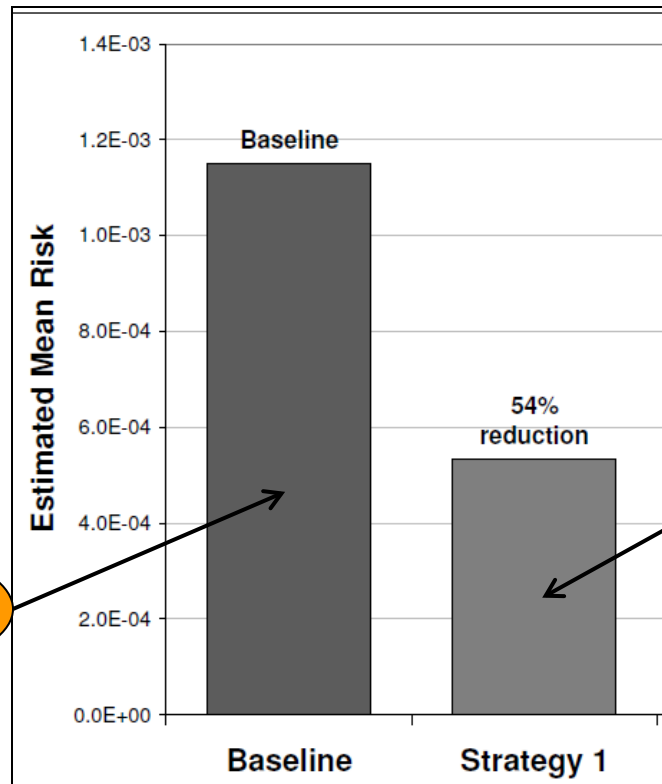
Ref: CamCon Annual Meeting 2015,
<http://www.camcon-eu.net/wp-content/uploads/2015/05/Meeting-2015.pdf>

Risk reduction



Ref: FAO/WHO, 2009, Risk assessment of *Campylobacter* spp. in broiler chickens: Technical Report, Microbiological Risk Assessment Series No 12. Geneva. 132pp.

Risk reduction



Flock prevalence
80 %

Flock prevalence
40 %

Baseline:	80% between-flock	100% within-flock
Strategy 1:	40% between-flock	100% within-flock

Ref: FAO/WHO, 2009, Risk assessment of *Campylobacter* spp. in broiler chickens: Technical Report, Microbiological Risk Assessment Series No 12. Geneva. 132pp.

Perspective

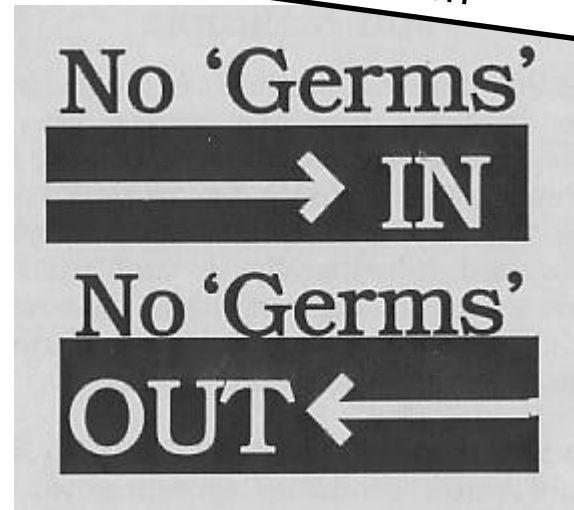
- Biosecurity is no silver bullet
- Extensive research after the primary production
- Hygiene is important
- Consumers cannot be controlled

Risk based *Campylobacter* control

- A common effort



Farm



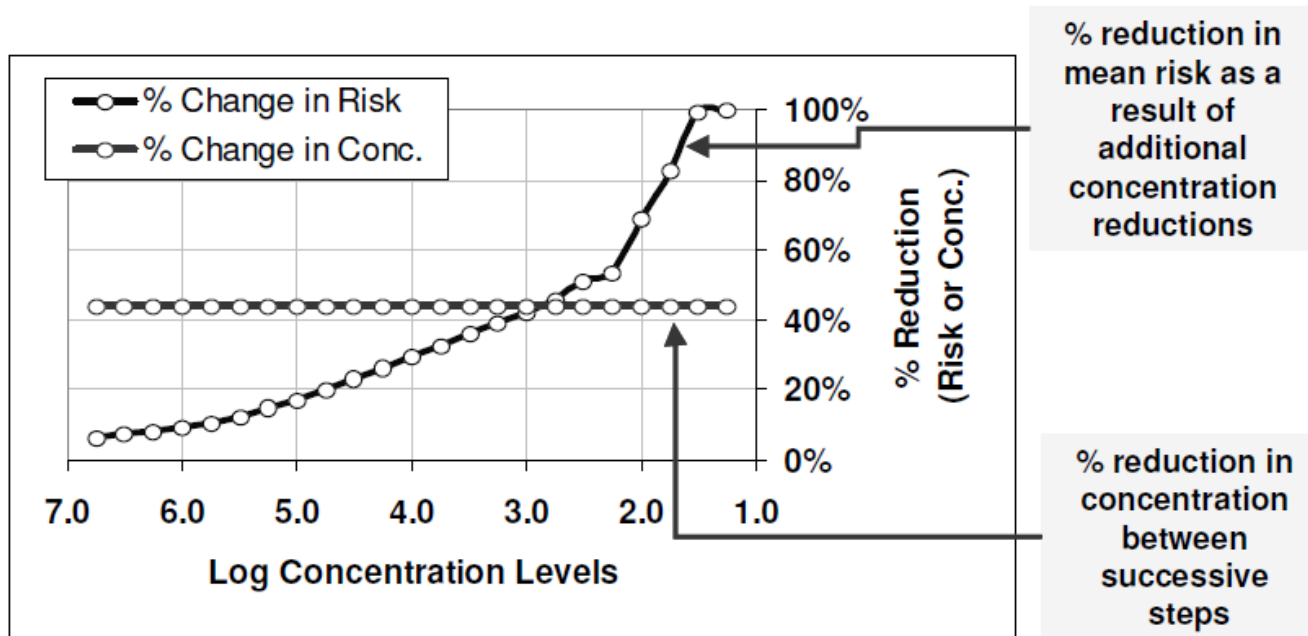
Consumer



Take home messages

- Strictly enforced biosecurity can reduce *Campylobacter* prevalence
- Fly screens applicable when strict biosecurity is in place
- A chain perspective is crucial for *Campylobacter* control to succeed





Ref: FAO/WHO, 2009, Risk assessment of *Campylobacter* spp. in broiler chickens: Technical Report, Microbiological Risk Assessment Series No 12. Geneva. 132pp.