

Staldskolemøde Hauskov Svineproduktion

16. september 2021

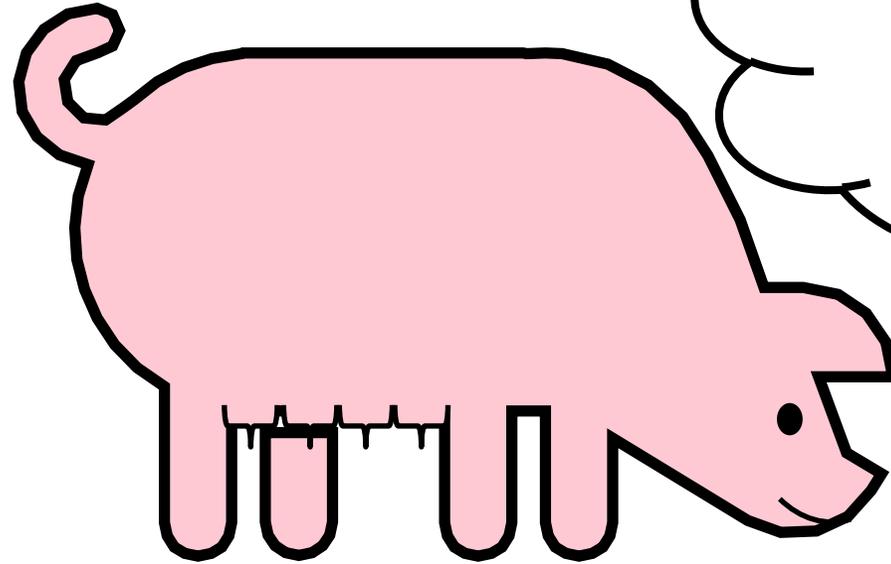
Dorthe Poulsgård Frandsen

STØTTET AF

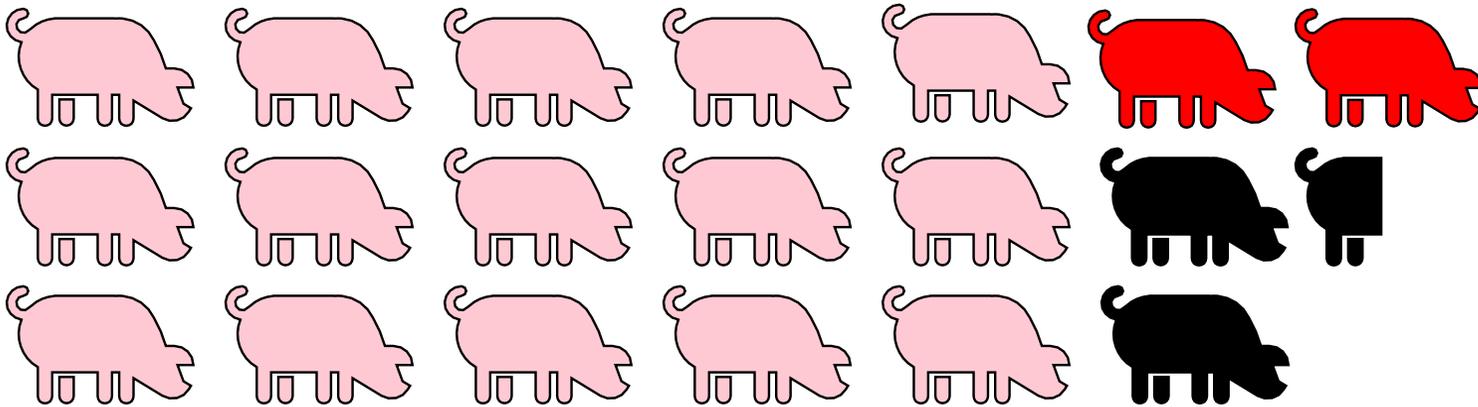
Svineafgiftsfonden



A sow with 19.6 piglets



- **1.9 stillborn**
- 1.0 crushed
- 0.8 starvation, weak, unthriving
- 0.3 blood poisoning
- 0.6 other



Before parturition

A sow fit for farrowing

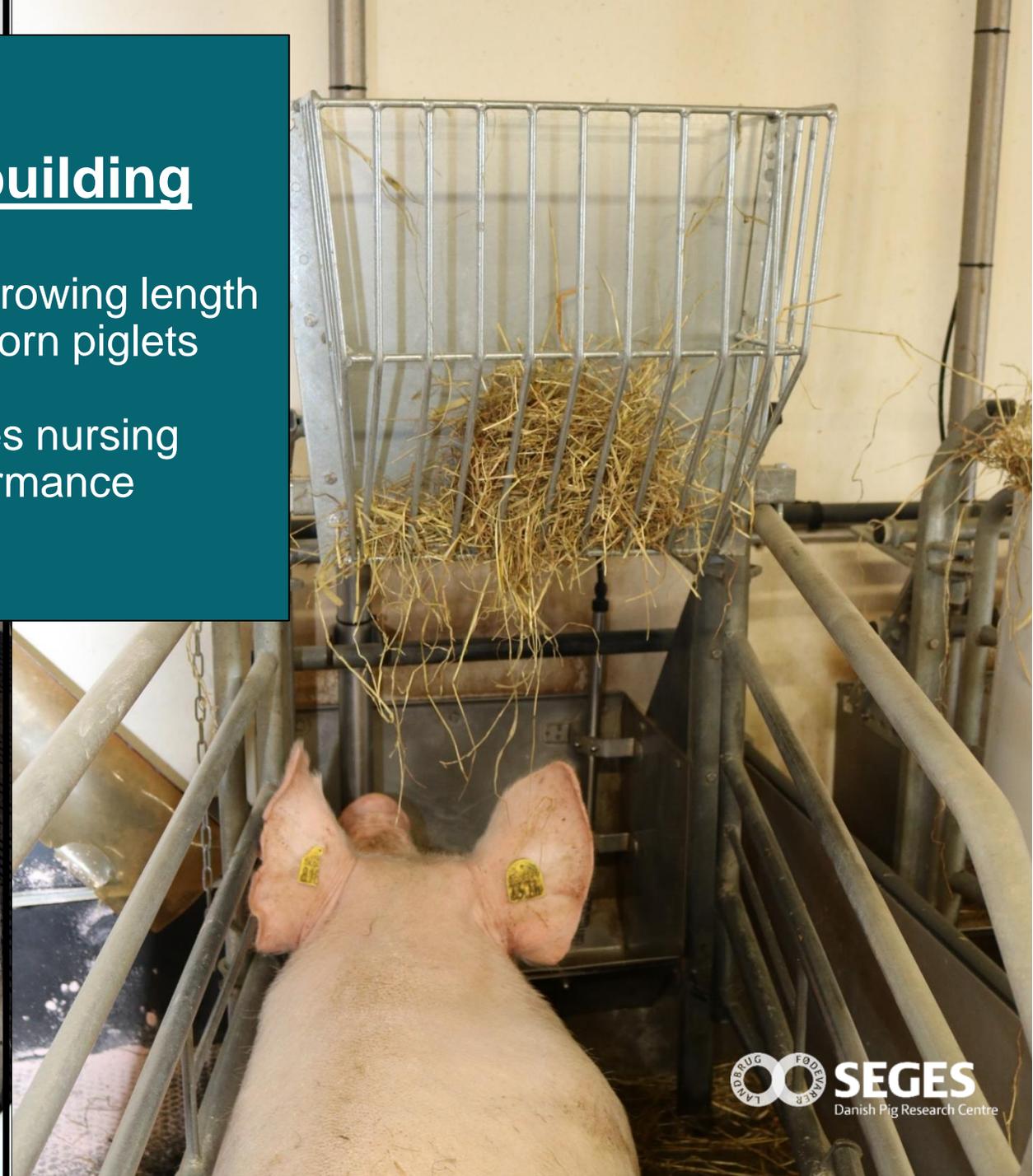
- 5-7 days before expected farrowing
 - The sow get used to the pen
 - Legstration: min. 3 days before farrowing
- 14-17 mm backfat
 - To fat sows? problems with farrowing, depress feed intake
 - To skinny sows? no energy for milk, impair on reproduction
- 3.4-4.1 FE/day
 - At least three meals a day (equally distributed around the clock)
 - The sow have energy to perform at farrowing (Marathon)
 - 500-600 gram fibre/day
 - Fibre gives the sow energy for many hours



Nest building

Reduces farrowing length
and stillborn piglets

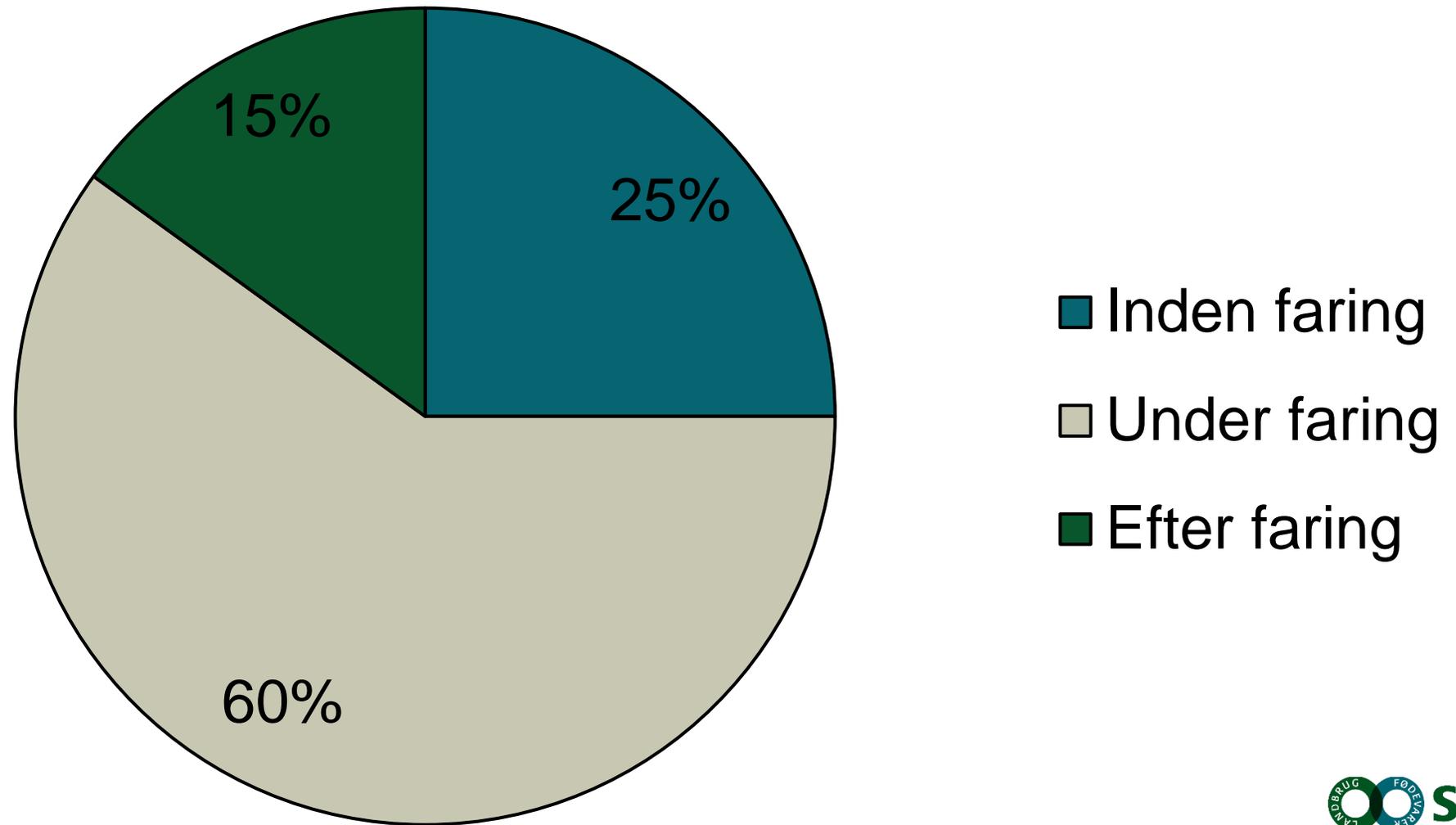
Improves nursing
performance



Farrowing



1.1 piglets out of 1.9 stillborn dies during farrowing ~ Potential



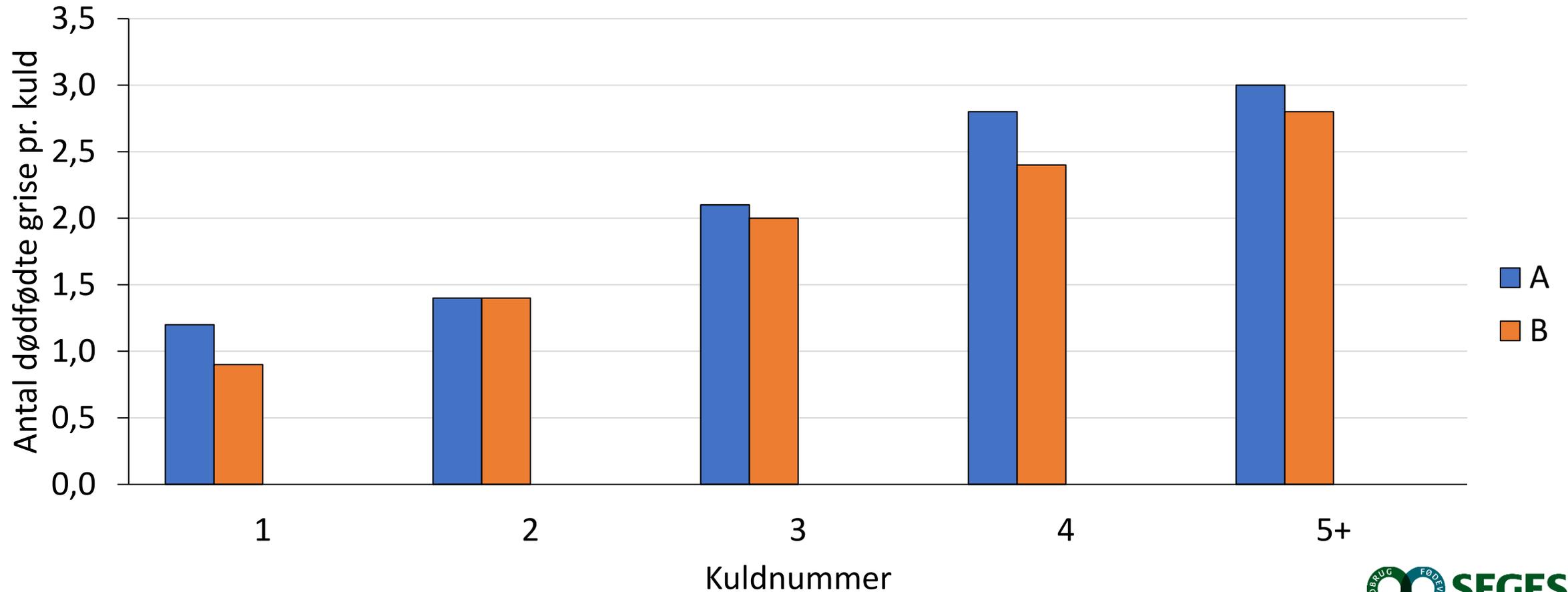
Good to know about the farrowing



- Sows want to farrow in peace
 - most sows start to farrow after working hours
- On avg. the farrowing takes 6 h (1.5 - 14.5 h)
 - Risk of stillbirth increases with increasing farrowing duration
 - Risk of stillbirth increases with increasing birth order
- For every parity, the number of stillborn increases by ½ piglet

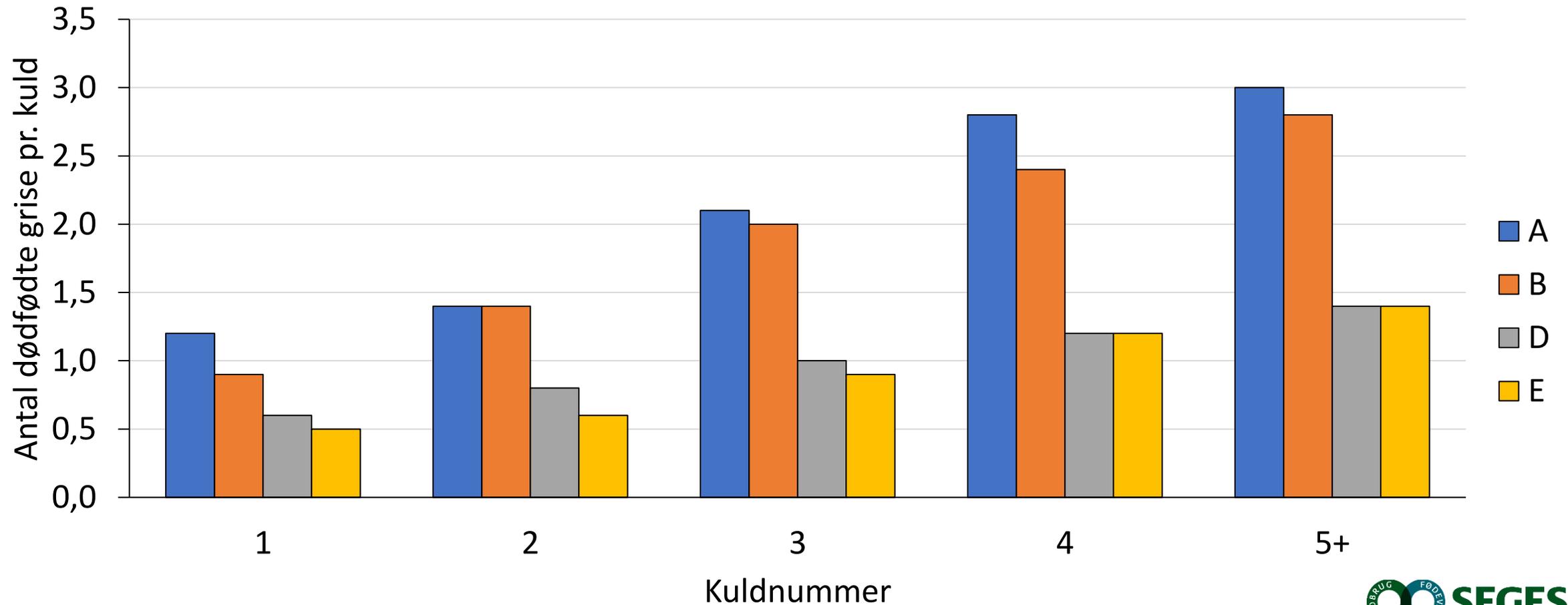
How many stillborn per liter do you have at your farm?

For every parity the sow get +0.5 stillborn piglet



Igangværende afprøvning 1717

Farms with 24-hours surveillance get only 1 stillborn per litter



Igangværende afprøvning 1717

Organize farrowing surveillance and assistance

- When farrowing is in progress → Farrowing surveillance
- Put one person in charge
- Set an alarm for every 30 min
- Supervise all farrowing sows
- Count piglets and note the number
- No new piglets since last check = assistance
 - Piglet 1-3: 1 h between piglets
 - Piglet >3: 30 min between piglets



Extra benefits from surveillance

- Help piglets to the udder or into the heat/creep
 - Mark the first-born piglets
- Ready to be moved early
- Help newborn piglets out of the amniotic sac



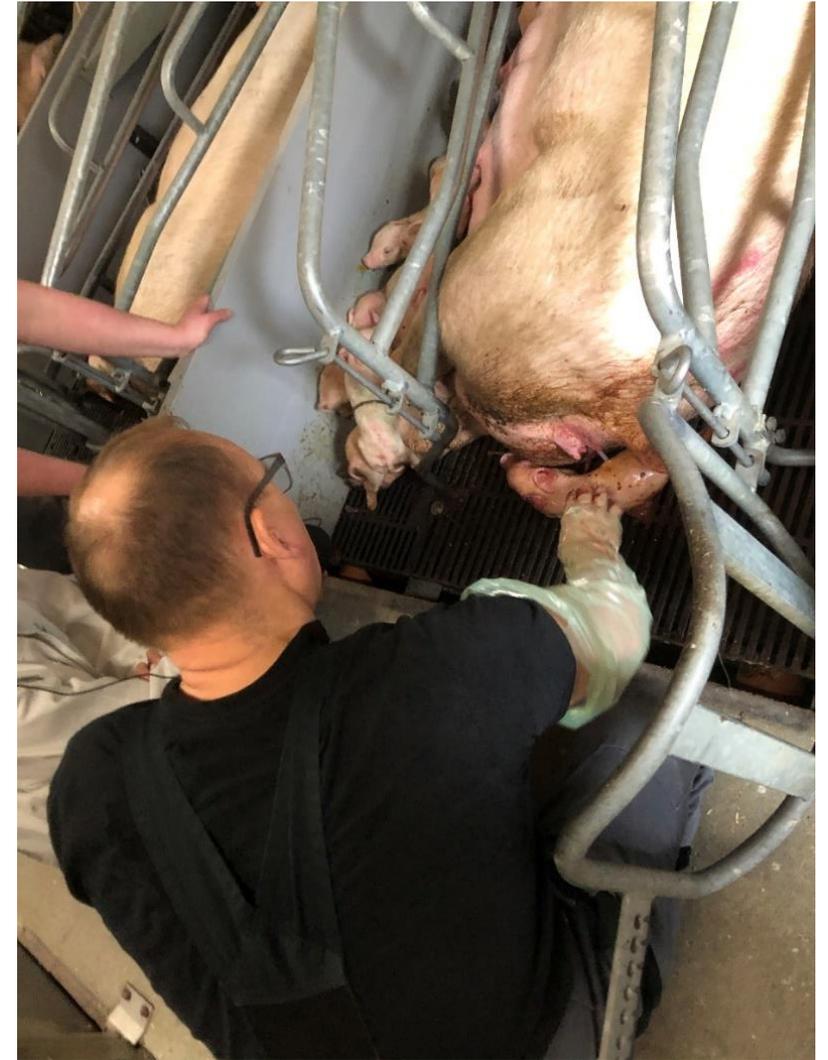
Spend your time on the most important periods

At what time is your help most important?

- When the main group of sows are farrowing
 - Weekdays?
 - In the daytime? afternoons? evenings? nights? mornings?

At what time is your help less important?

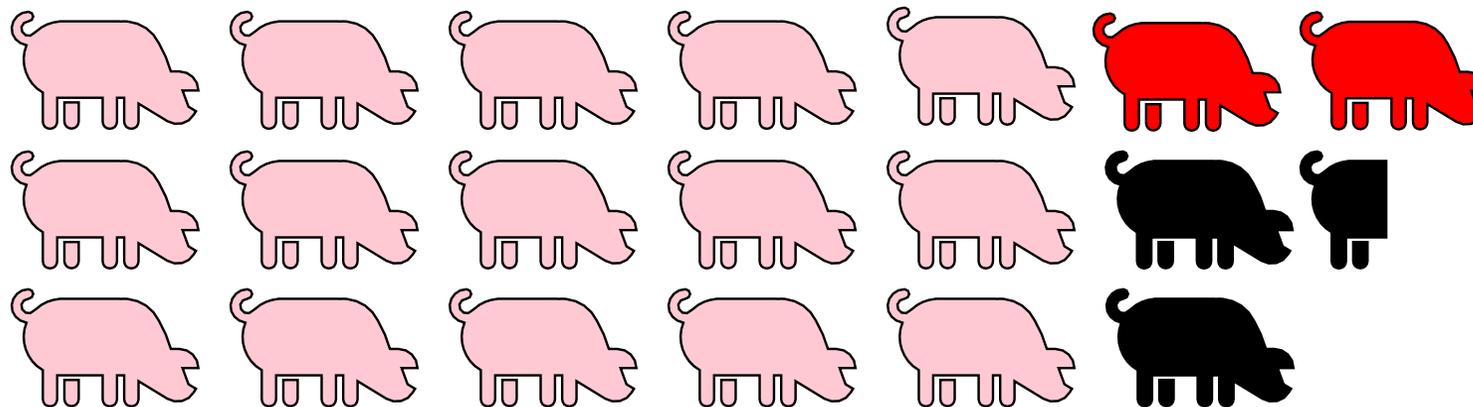
- When no or only a few sows are farrowing
- The first two hours after sows start farrowing
- When only gilts are farrowing



A sow with 19.6 piglets

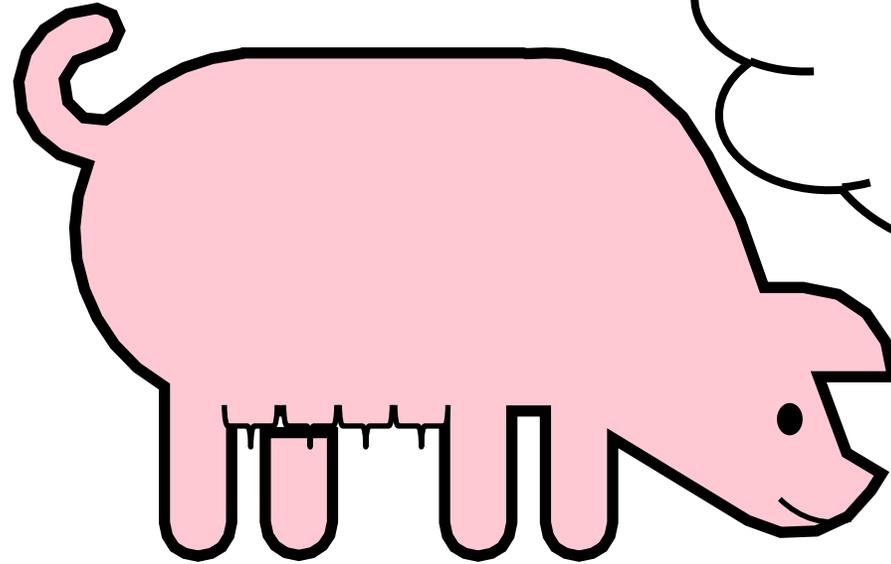
What's the cause of death on your farm?

- **1.9 stillborn**
- 1.0 crushed
- 0.8 starvation, weak, unthriving
- 0.3 blood poisoning
- 0.6 other

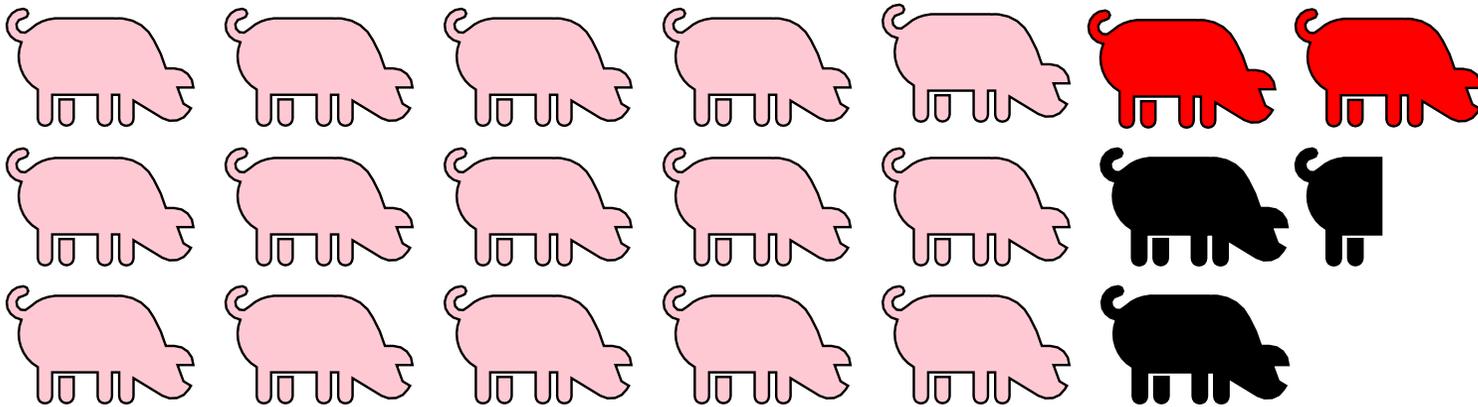


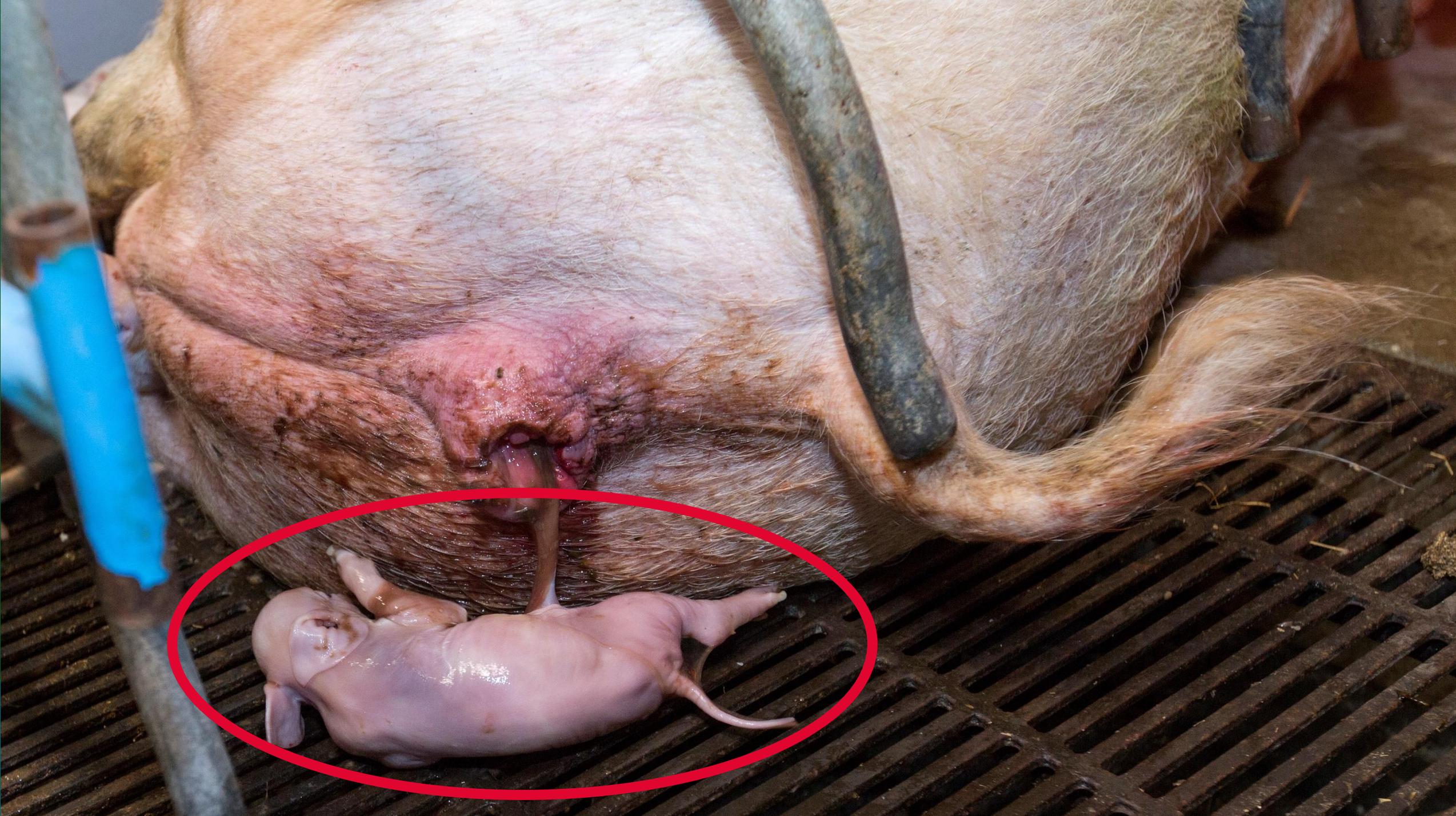


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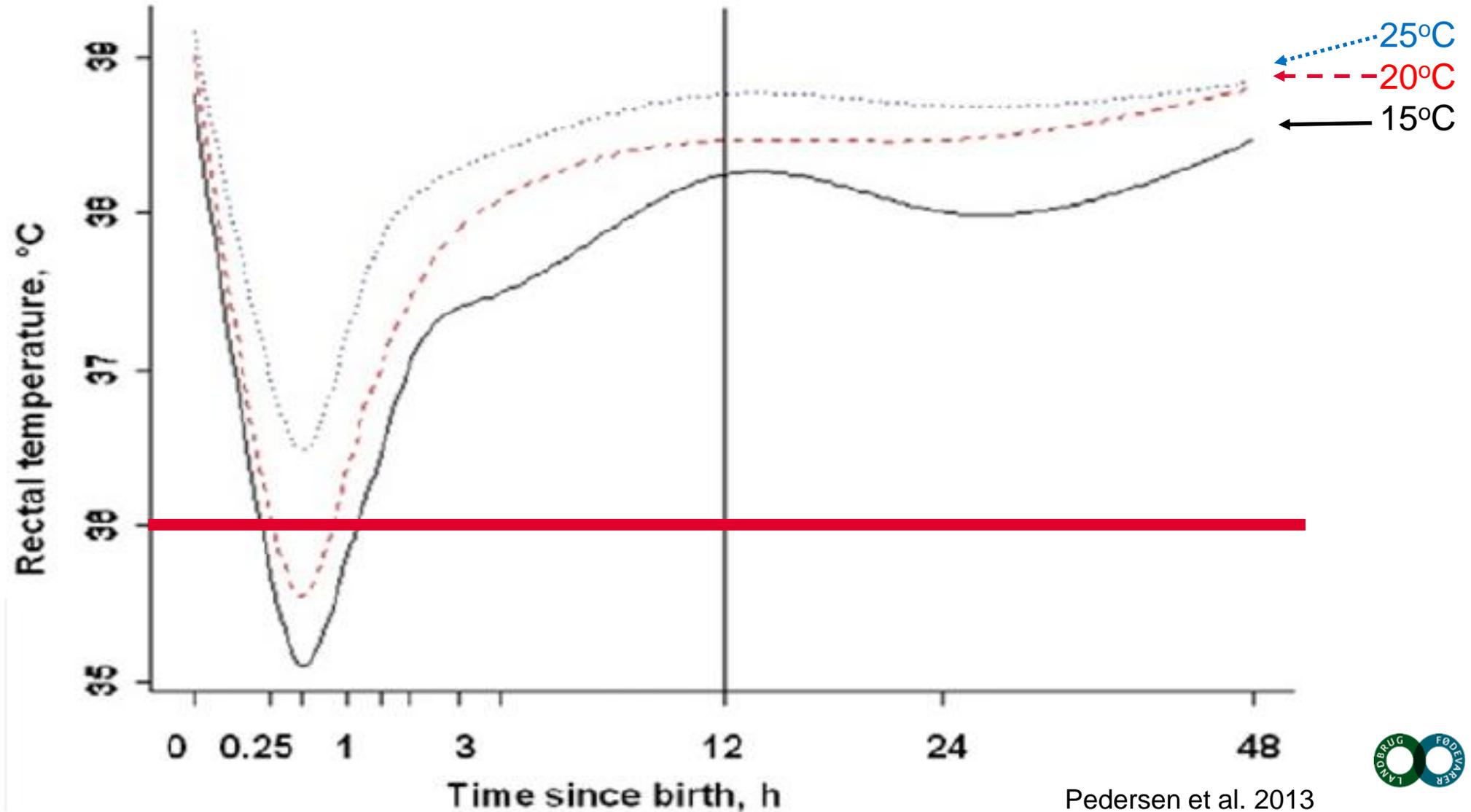


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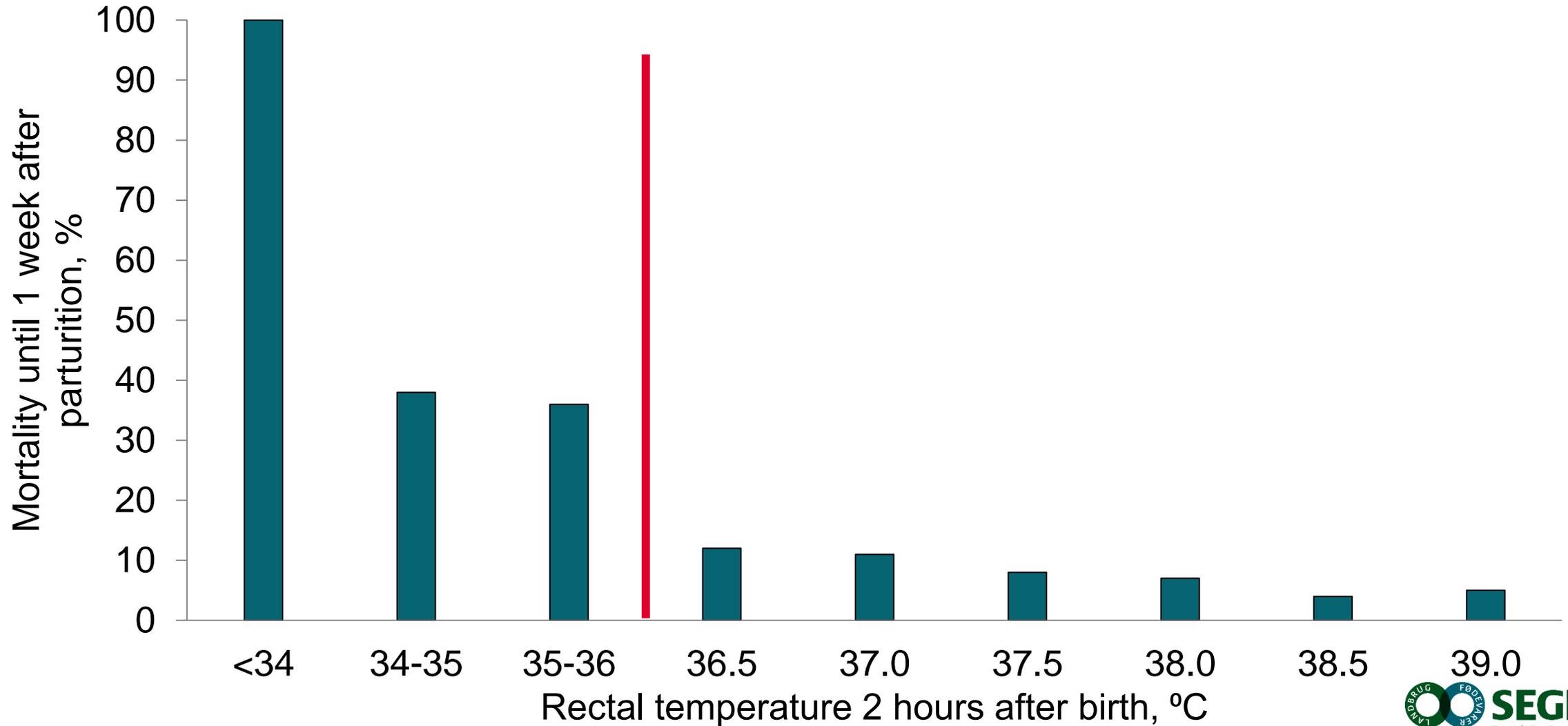


Piglet temperature after birth



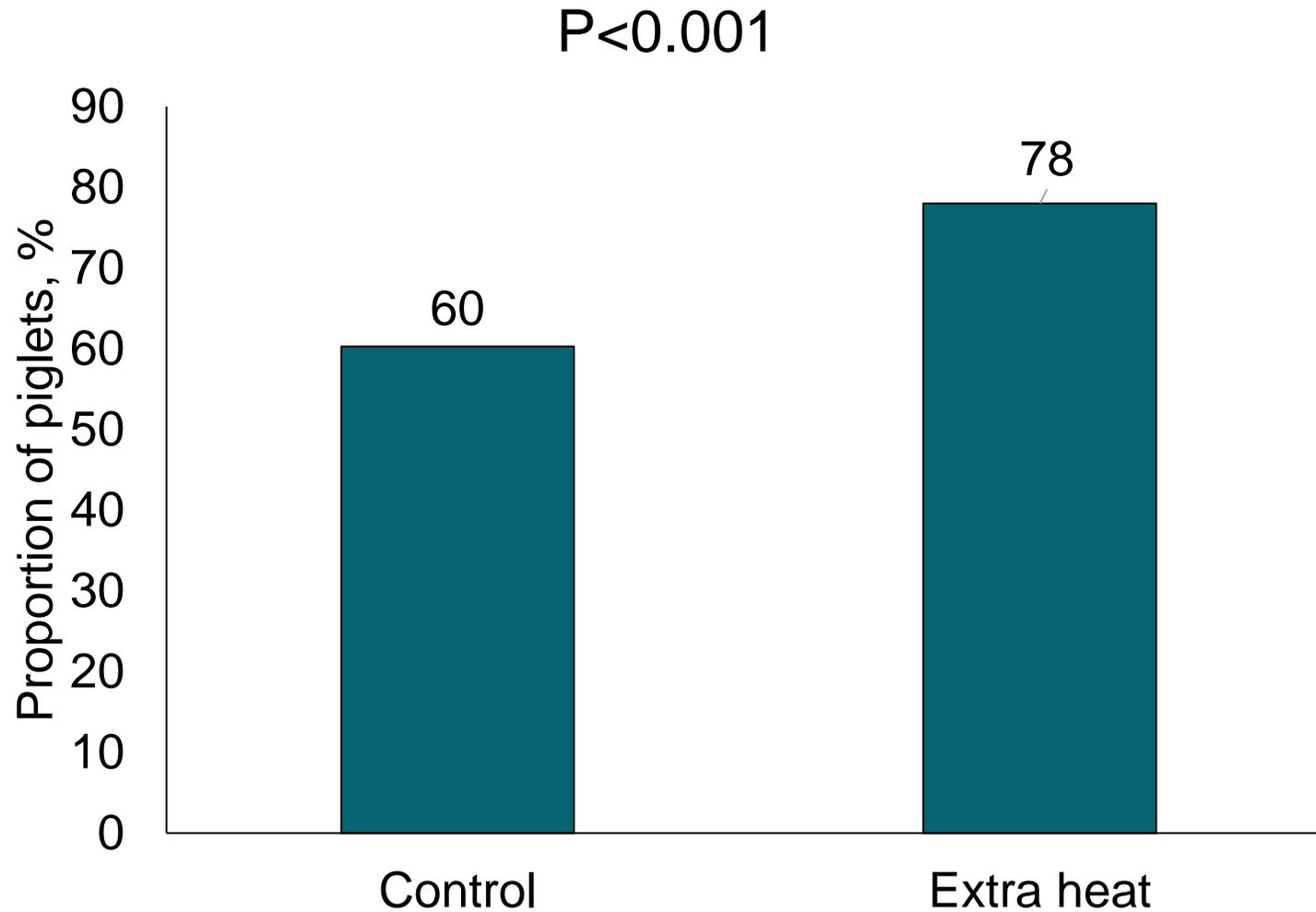
Pedersen et al. 2013

A temperature above 36 °C increases the survival rates



Extra heating around the sow during farrowing

- Rectal temperature more than 36 °C



Trial report no. 1176

After parturition

Heating by the udder

High risk area because of crushing

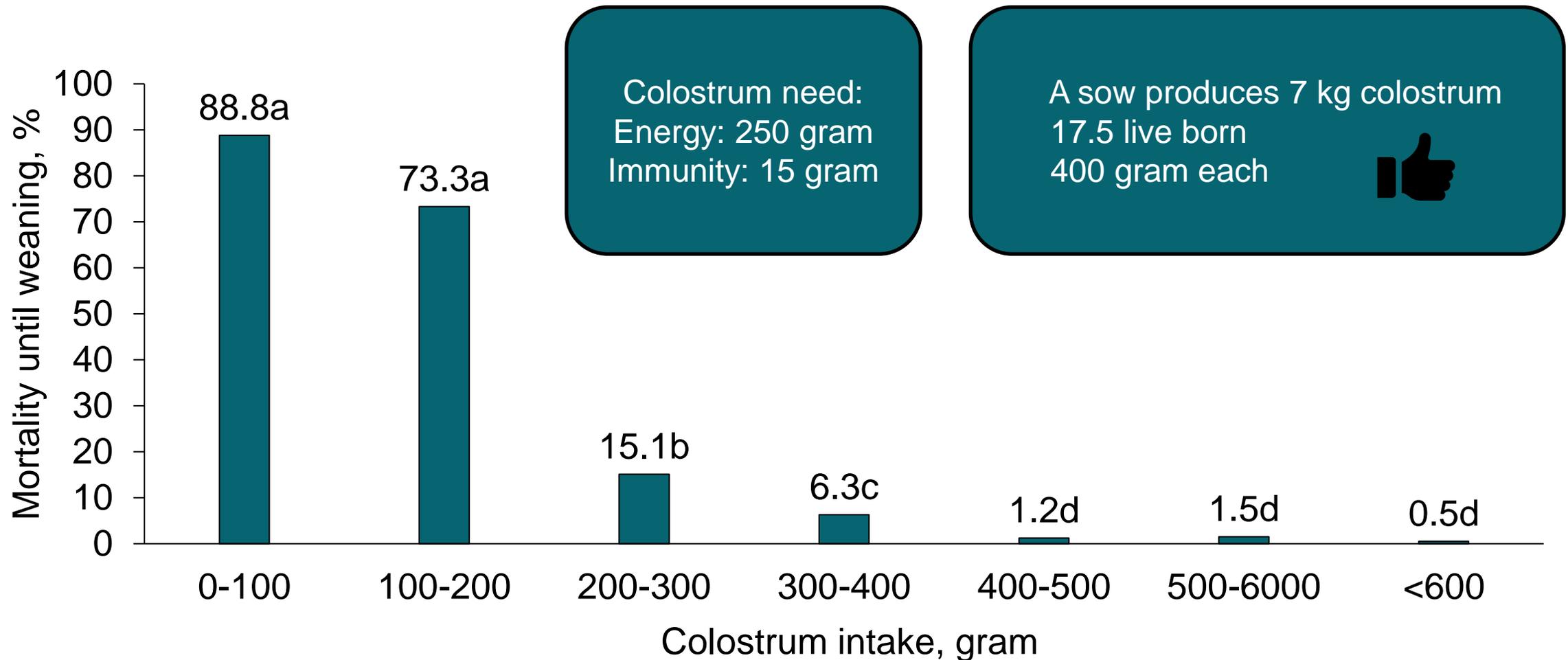
Colostrum - gives the piglets energy to not losing rectal temperature



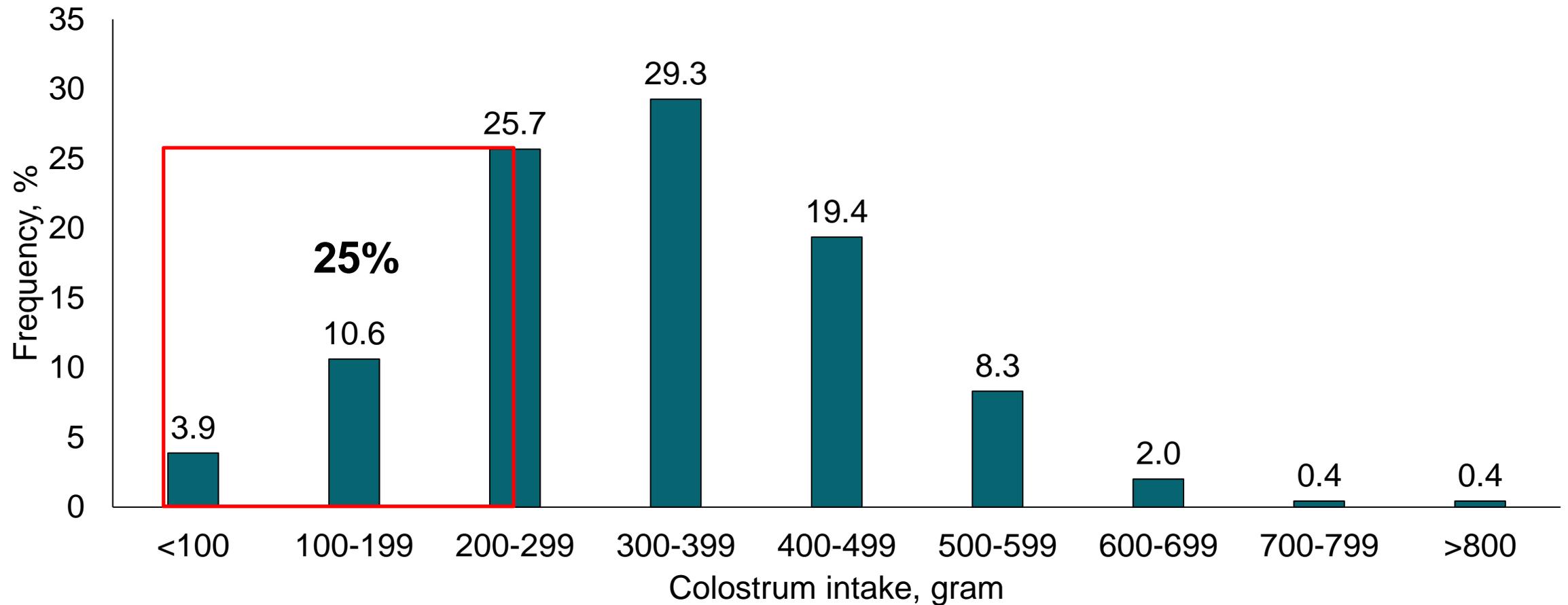
Colostrum is available for 24 hours
Colostrum covers piglets' need for energy and antibodies

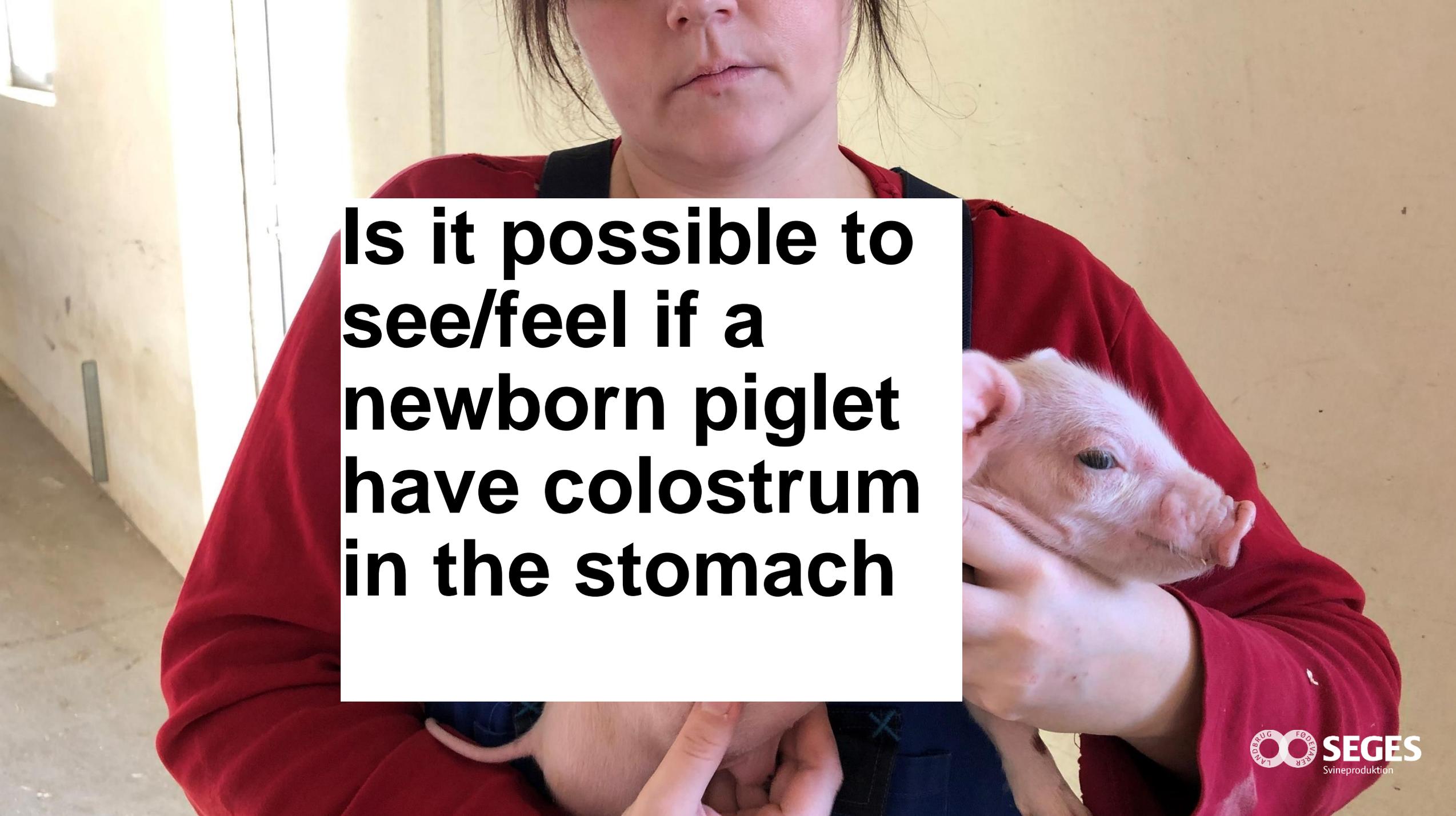


Piglet colostrum intake is positively correlated with survival



Variation in piglets' colostrum intake



A person wearing a red long-sleeved shirt is holding a small, pink newborn piglet. The piglet is being held in the person's arms, and its head is turned towards the right. The background is a plain, light-colored wall. A white text box is overlaid on the center of the image.

**Is it possible to
see/feel if a
newborn piglet
have colostrum
in the stomach**

Does the sow give any colostrum?



We can see the milk – but we have to kill the piglet



We are able to scan the stomach – we need an expert



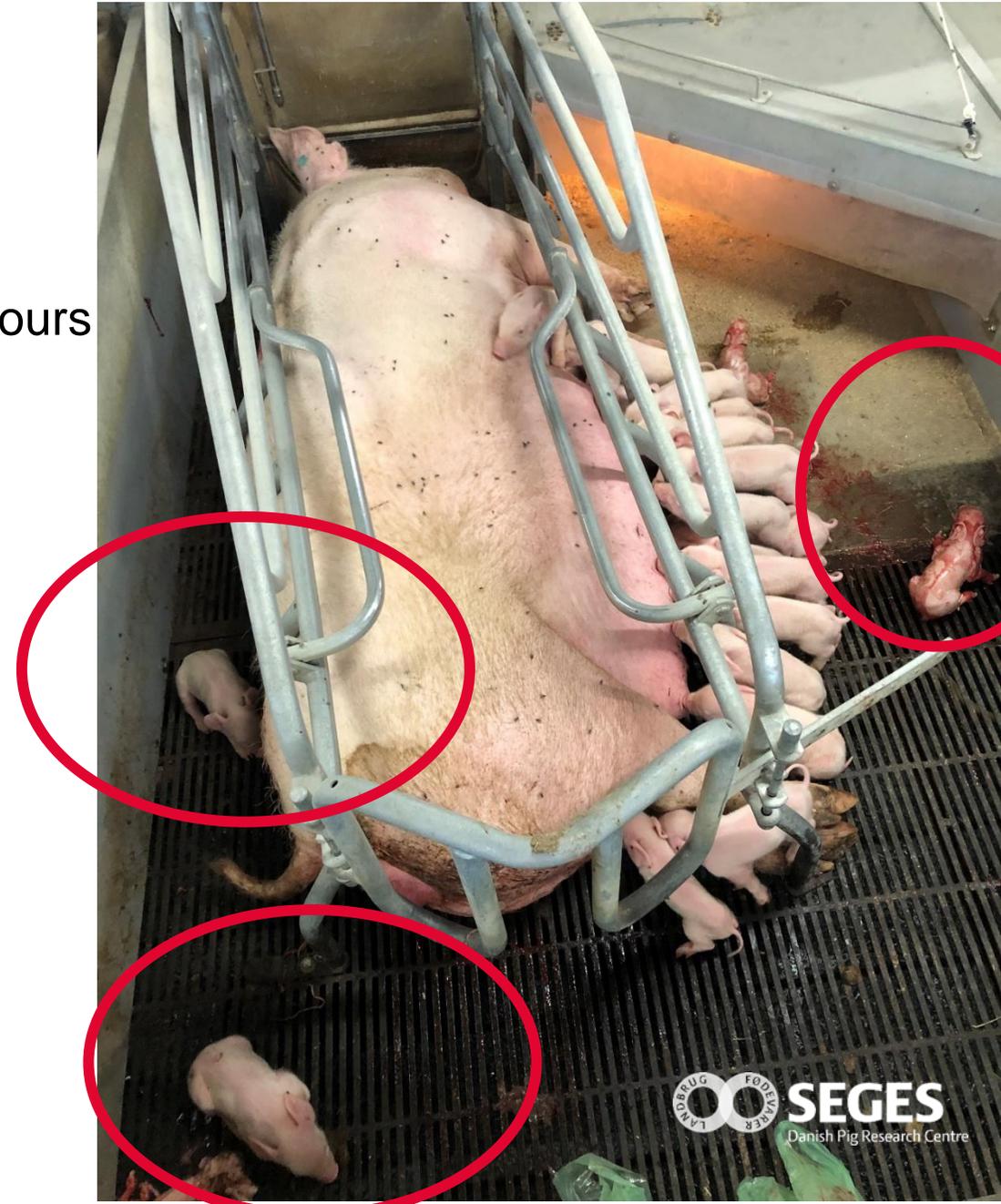
We can't feel colostrum in the stomach



How to secure colostrum for all piglets

- Help small and weak piglets to the udder
- Most piglets have ingested enough colostrum after 8 hours
- Colostrum from another sow is equally good
- Adjust litter size (continuously)
 - Mark first-born piglets
 - Move first-born large piglets
 - Move small piglets to a small nurse (with colostrum)
 - The remaining piglets stay with own mother
- Alternatively: Split suckling

What's the strategy at your farm?



Separating sow and piglets the first days after birth



Example from a farm

Day 1	
Morning feeding (8 o'clock)	0
Afternoon feeding (13 o'clock)	1
Evening feeding (19 o'clock)	1

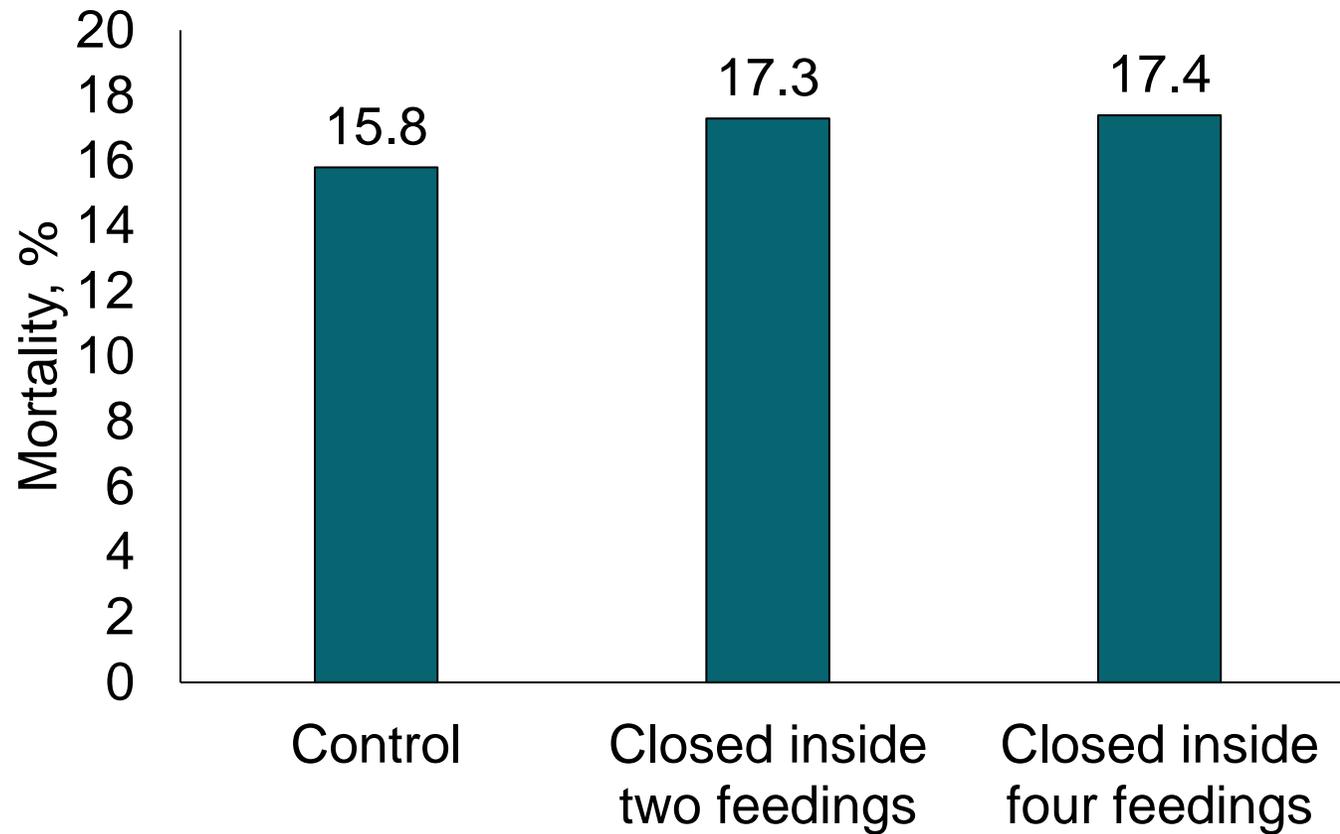
→ 6 hours of valuable time





So what happens when you separate the piglets for 6 hours a day on the most critical days?

But why? Does it affect mortality?



6 hours....

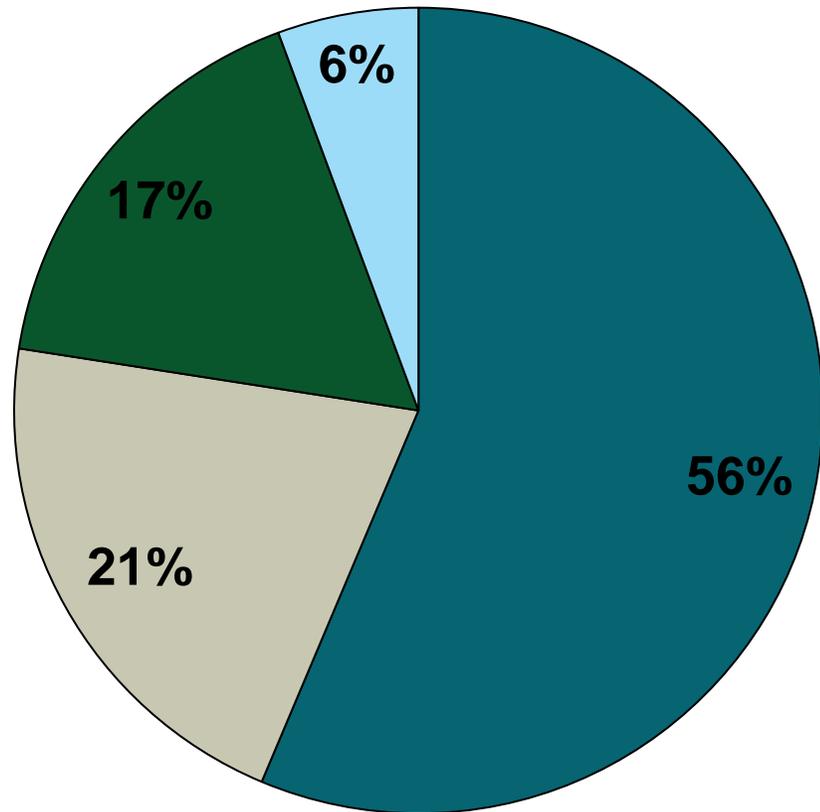
- A milk let down for every 50 min
- Lose 7 milk let downs in 6 hours
- 12-gram milk per milk let down ~ 86 gram

OR

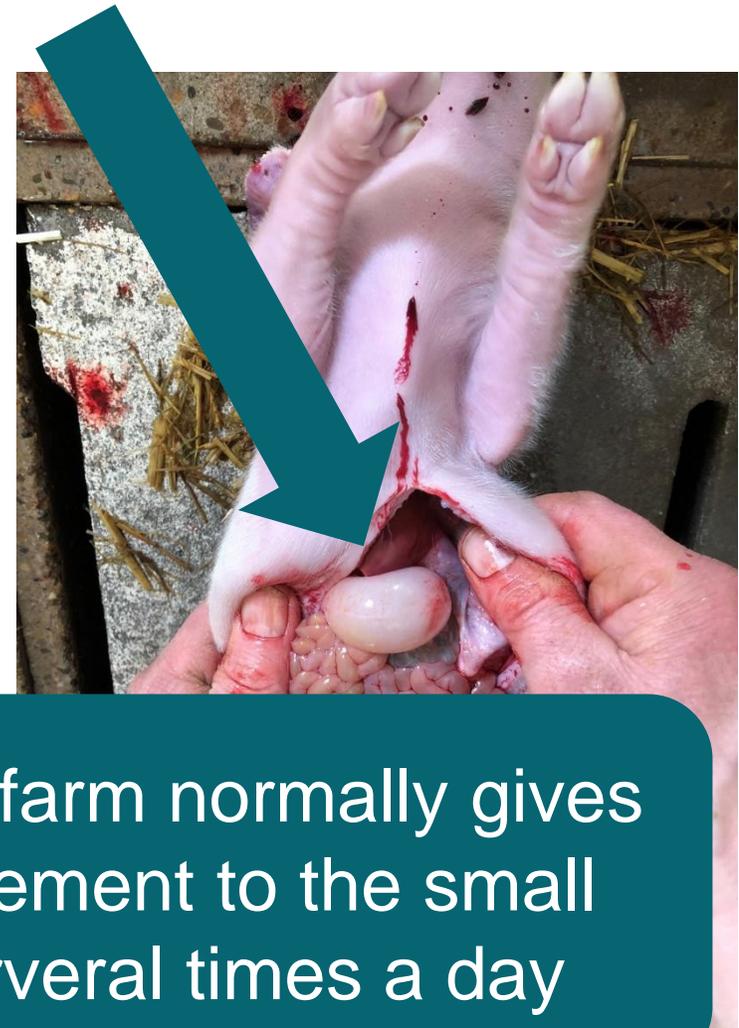
- 6 hours = 25% of a day
- Potentially 25% of colostrum or energy intake



77% of the crushed piglets didn't have milk in the stomach (Autopsy of 308 piglets)



- Tom, har ikke drukket
- Tom, spor af mælk
- Delvist fyldt



Notice - this farm normally gives milk replacement to the small piglets several times a day



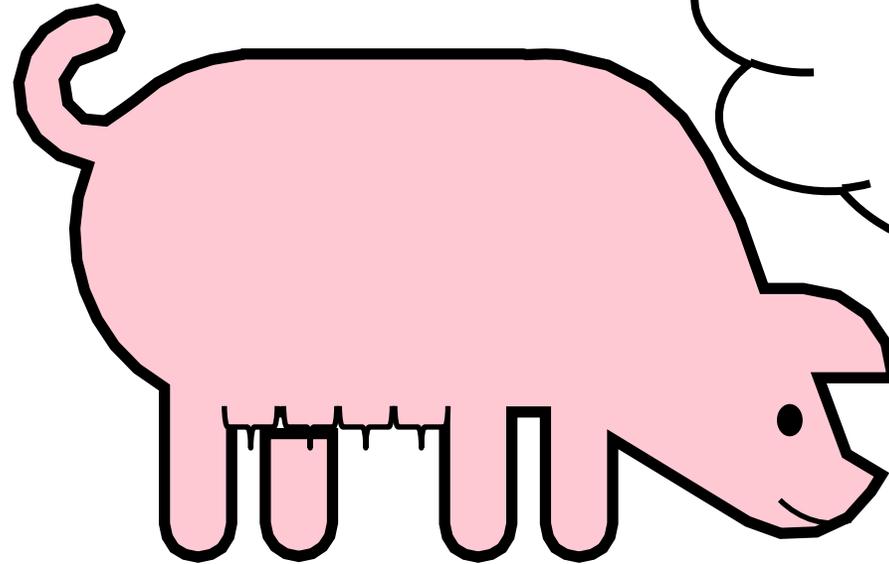
Make sure:

All the piglets have access to the udder (1 teat = 1 piglet)

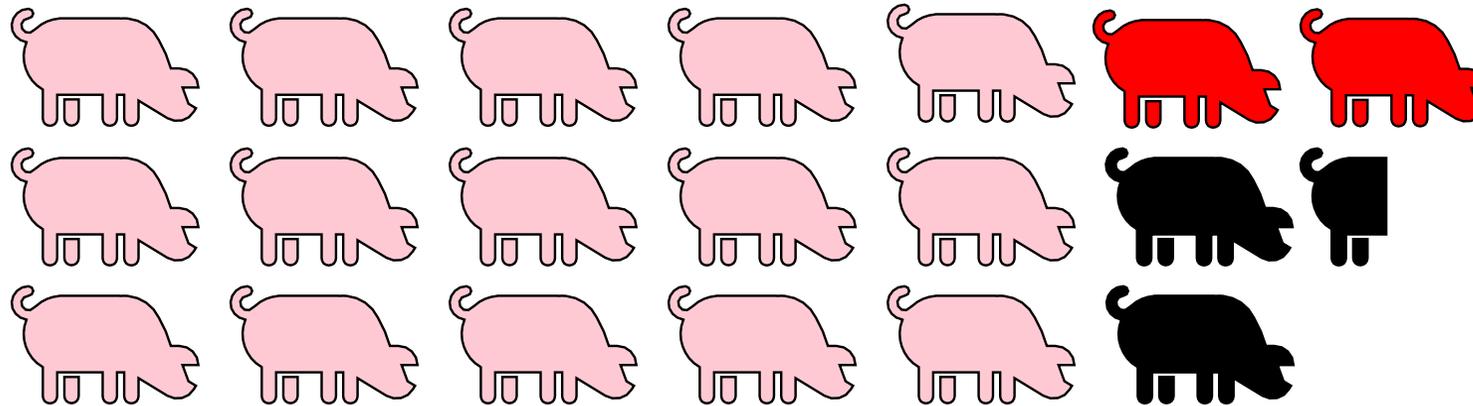
A moved piglet had 8 hours at the mother before it get a new

The piglet arn't seperated from the sow too long

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Blood poisoning



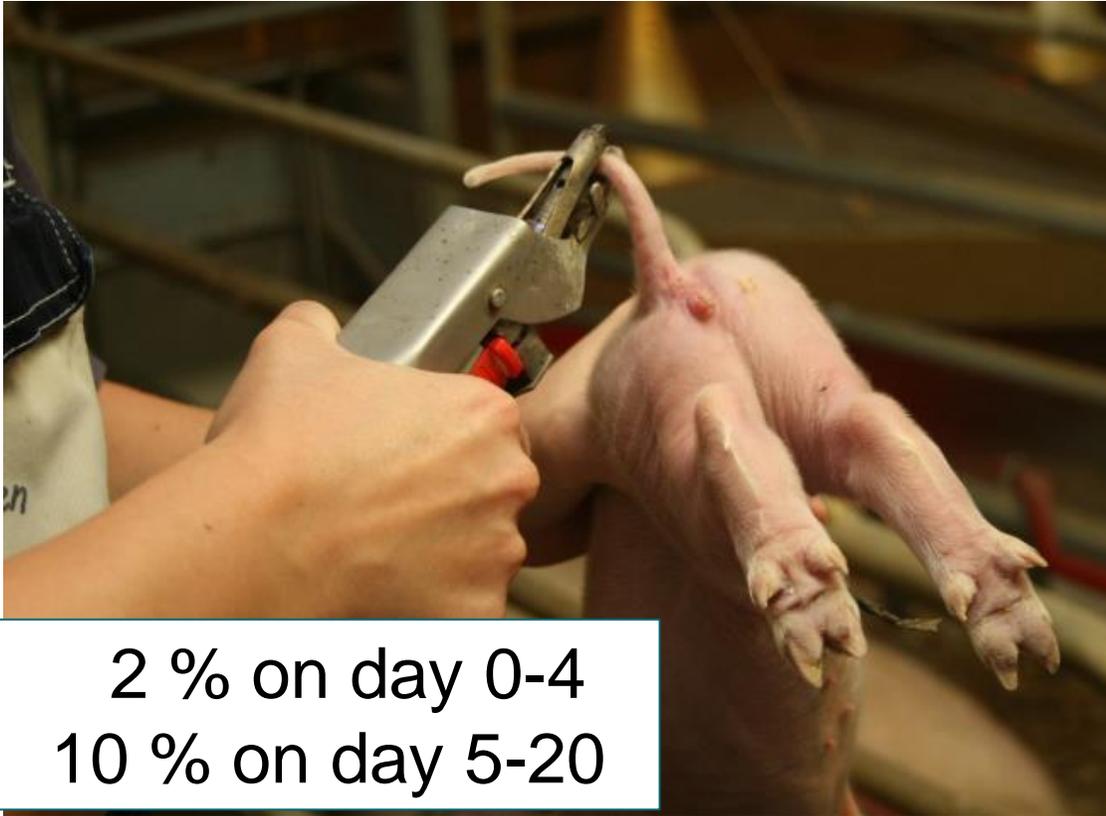
Cause of death??

How much infective matter do you need

Infection	Amount of vira/bacteria
Oral	100.000
Snout	10.000
Wound	10

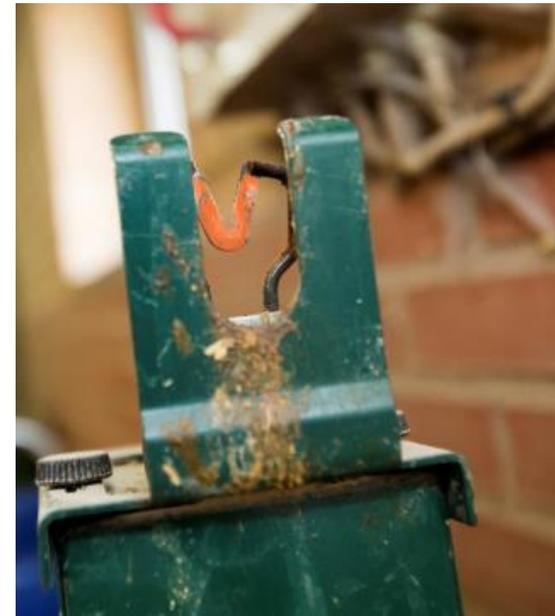
Jeff Zimmermann

Blood poisoning - Taildocking



2 % on day 0-4
10 % on day 5-20

- Unhealed wound
- Crooked cut
- Poor hygiene
- Too cold "cutter"



Blood poisoning – tooth grinding



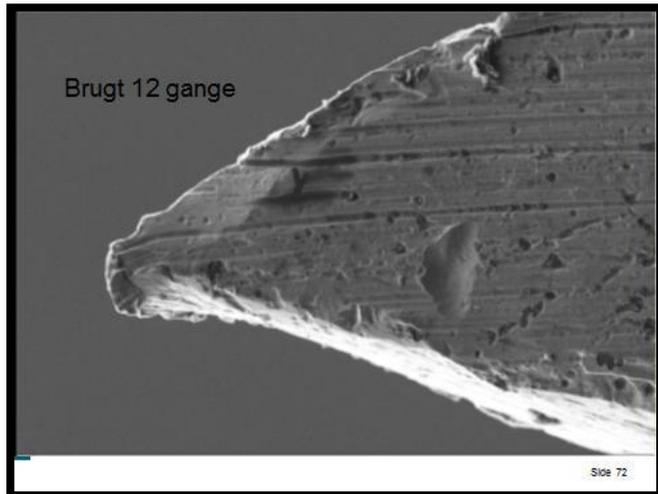
- Wrong instruction
- Lack of precision
- Time pressure



Blood poisoning - castration

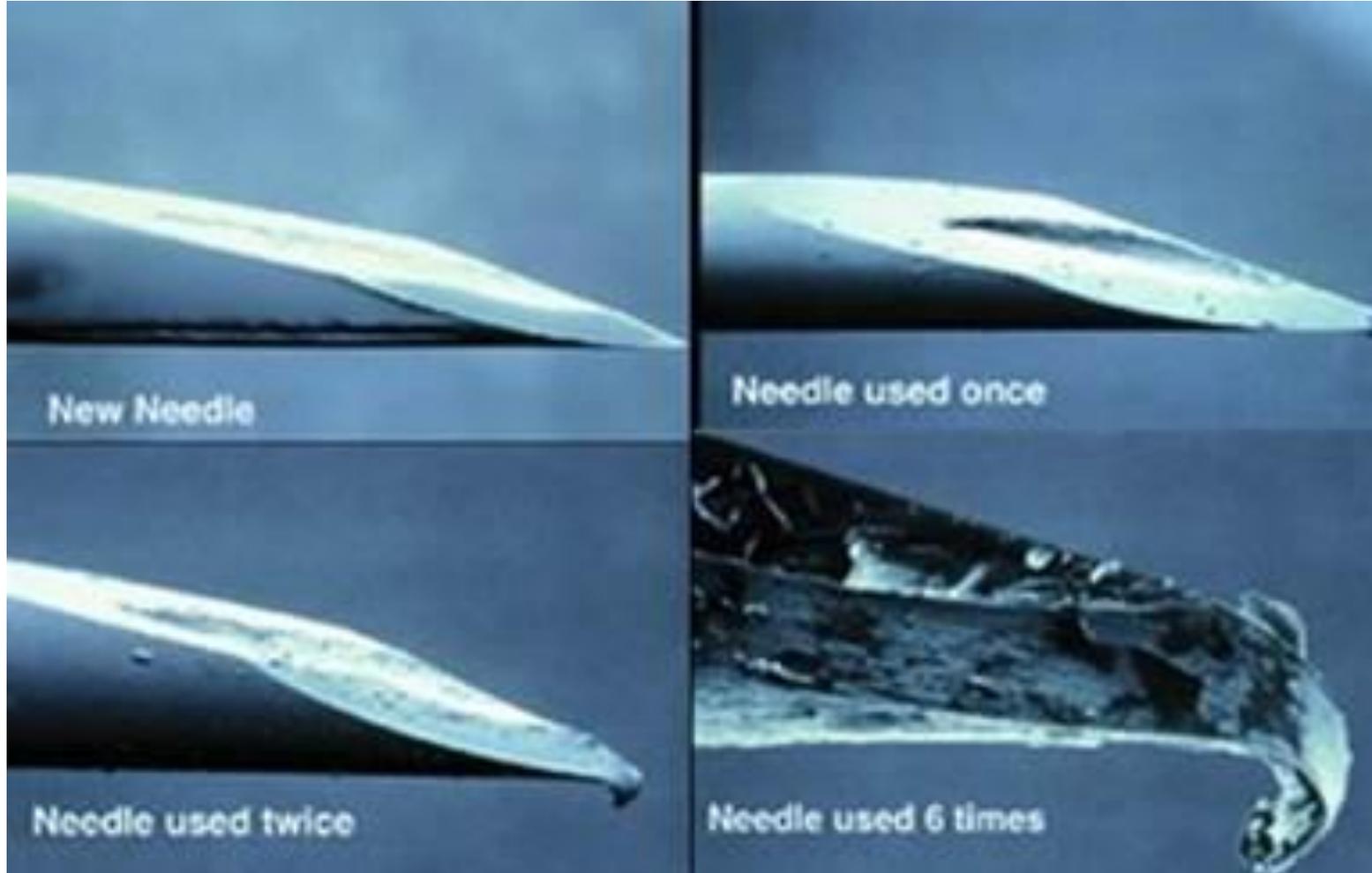


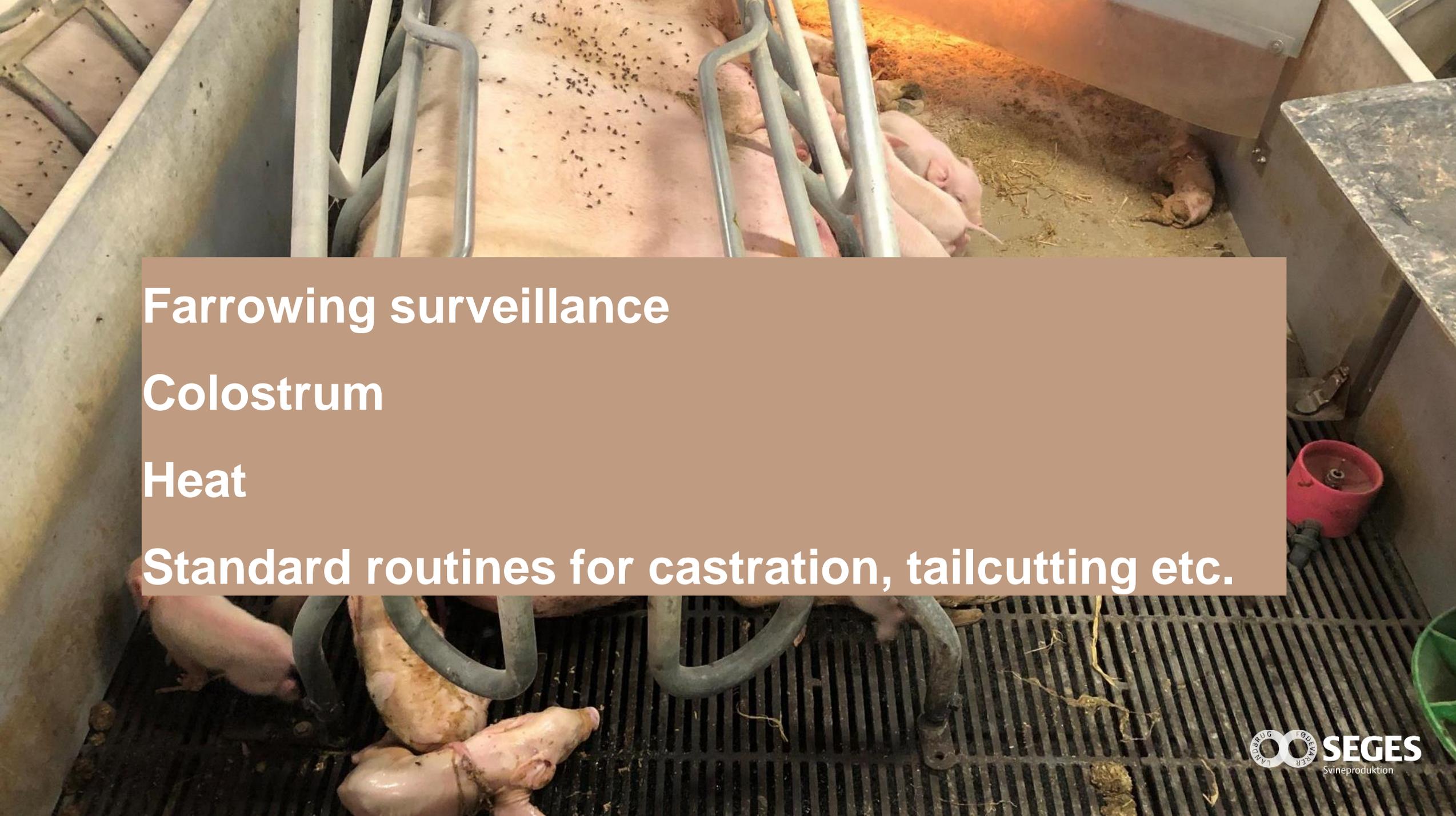
- Poor instruction (maybe none)
- Blunt scalpel
- Poor hygiene
- Too fast





blood poisoning - others



A photograph of a pig in a farrowing crate. The pig is lying down, and several piglets are visible around it. The crate has metal bars and a slatted floor. A red water dispenser is visible on the right side. A semi-transparent brown box with white text is overlaid on the image.

Farrowing surveillance

Colostrum

Heat

Standard routines for castration, tailcutting etc.



Time for questions