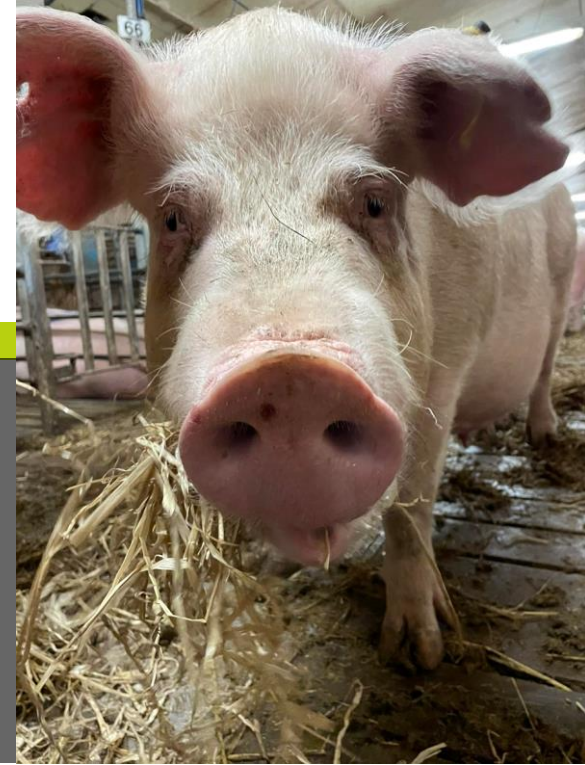


Improving the welfare of pregnant sows: A Win-Win!

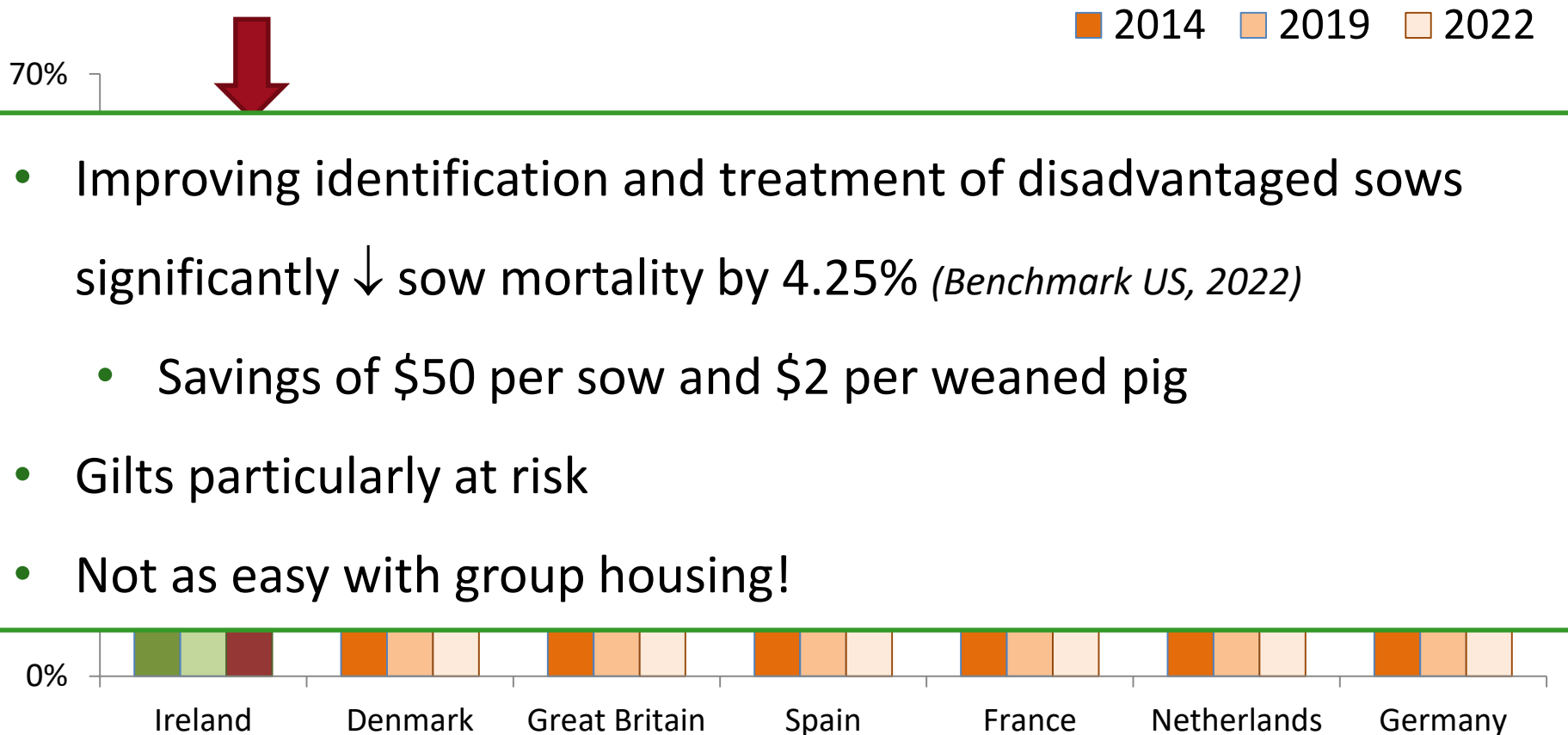


Laura Boyle and Keelin O'Driscoll

Moorepark, Fermoy, Co. Cork, Ireland

Sow replacement rate

- High relative to other countries



10 years of group housing

Mostly successful.... however,

Necessity to mix

- Aggression
- Skin lesions
- Leg injuries and lameness



Fear and pain

Other challenges

Mostly successful... however,

Aggression

Fed below appetite

- Hunger + stereotypies

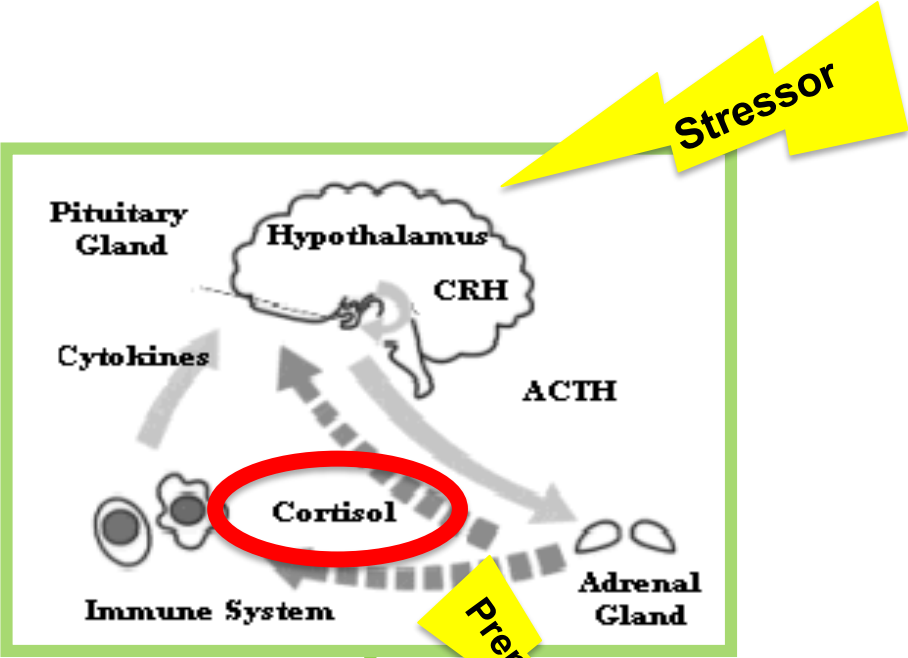
Inability to express natural behaviour



Acute stress
Short-term
intense

Chronic stress
Long-term
Less intense

Prenatal stress



Antibiotics

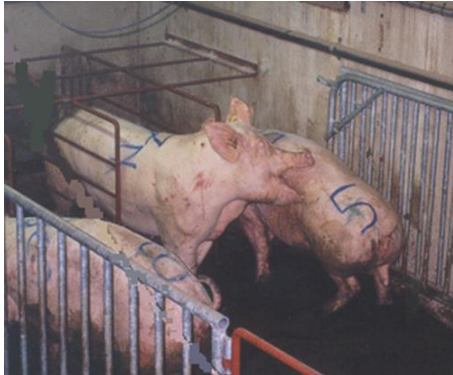


SowWeanWel Project (2018-2022)

Investigate risk factors for chronic stress (aggression) in group housing systems to
↑ sow welfare (performance) and thereby
↑ piglet health/resilience

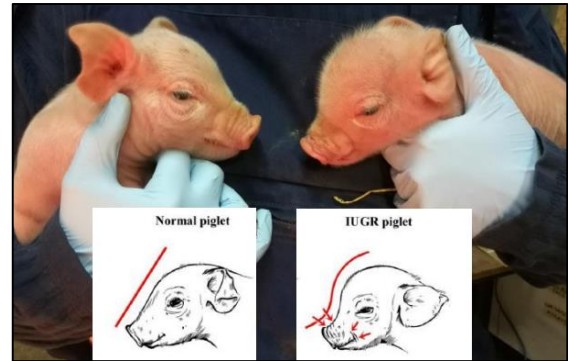


Implications of aggression for reproductive performance



- Sows in stalls for 28 days
- Group pen + free access stalls
- Counted skin lesions
 - 24hr post-mixing (acute)
 - 3wk post-mixing (chronic)

Poorer reproductive performance in sows with higher skin lesion scores at 3wks post-mixing



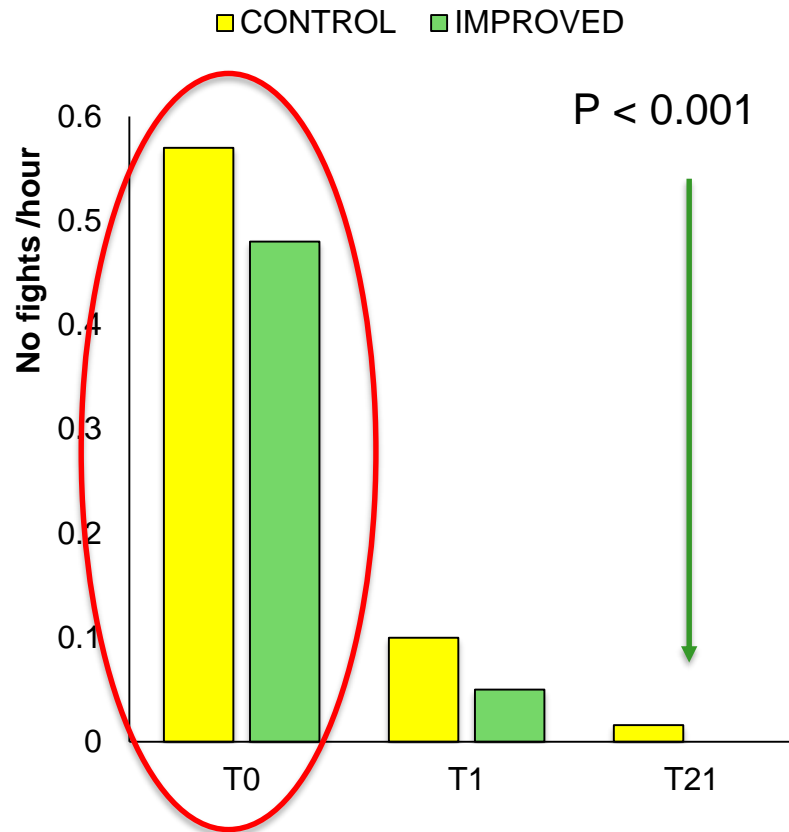
Does improved housing reduce aggression?



- Same commercial farm
- Sows in stalls for 28 days
- Group pen + free access stalls
 - ‘Control’ or standard pen
 - ‘Improved’ pen



Yes! Improved housing environment ↓ aggression



High levels of aggression at mixing is normal/unavoidable as sows need to establish a dominance hierarchy

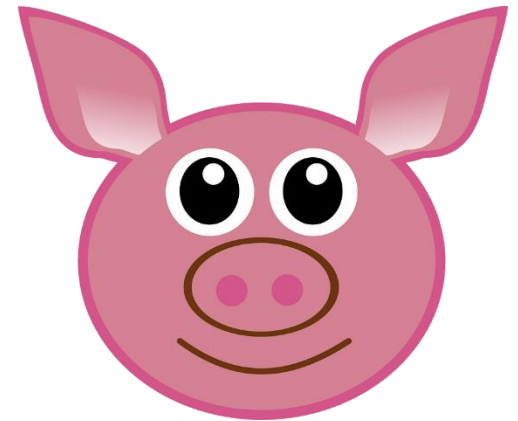
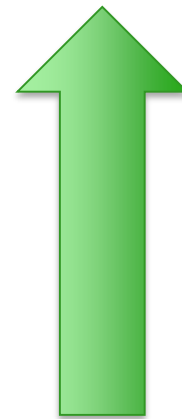
Other benefits?



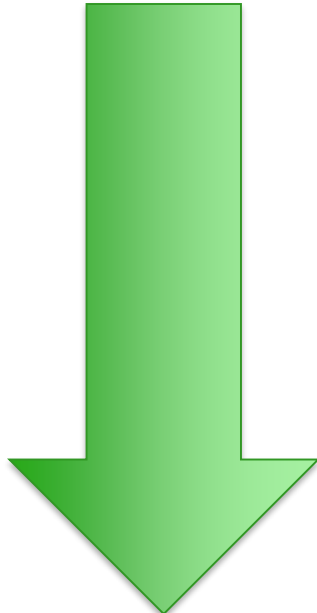
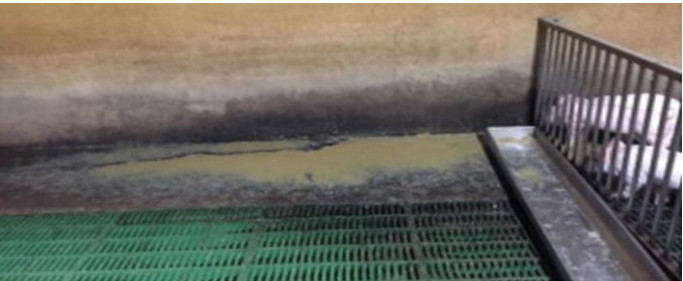
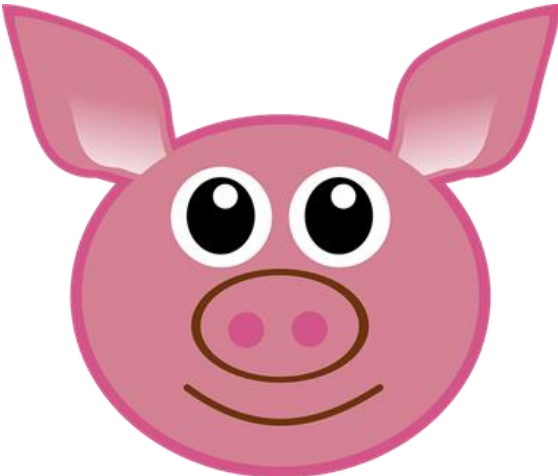
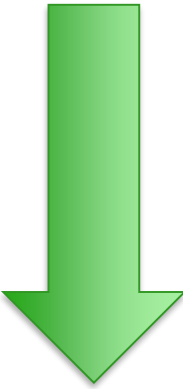
- ⇓ Tear stain scores
- ⇓ Stereotypies
- ⇓ Lameness
- ⇓ Haptoglobin



Source: Pig333



Even better.....



Description	Faecal score
Normal (dry, pelleted faeces)	0
Soft (soft faeces, with shape)	1
Mild diarrhoea (very soft or viscous liquid faeces)	2
Severe diarrhoea (watery faeces, or with blood)	3

Importance of lameness detection



Lameness

- Important outcome of aggression
- Key reason for culling of young females
 - ‘driver of low sow longevity, productivity and efficiency’

(Benchmark US, 2022)

- Pain and stress linked to ↓ reproductive performance
- Poorer locomotory ability in gilts in early pregnancy associated with higher cortisol and ↑ piglets born dead

Important to detect and treat early!

How to detect/score lameness



Summary

- Aggression in sows is detrimental
 - ⇓ reproductive performance
 - ⇓ longevity (lameness)
- Improving sow housing ⇓ aggression
 - ⇒ Healthier/more resilient piglets
- Combined with lameness/locomotion scoring
 - ⇑ sow longevity

Pay closer attention to your sows and gilts and they will reward you!



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