

Pre-slaughter cattle handling and stress in mobile slaughter

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Commercial slaughter

- Largely industrialised, efficient plants
- Up to thousands of cattle or pigs and tens of thousands of broilers per day
- Official control to secure animal welfare and public health
- Small-scale alternatives

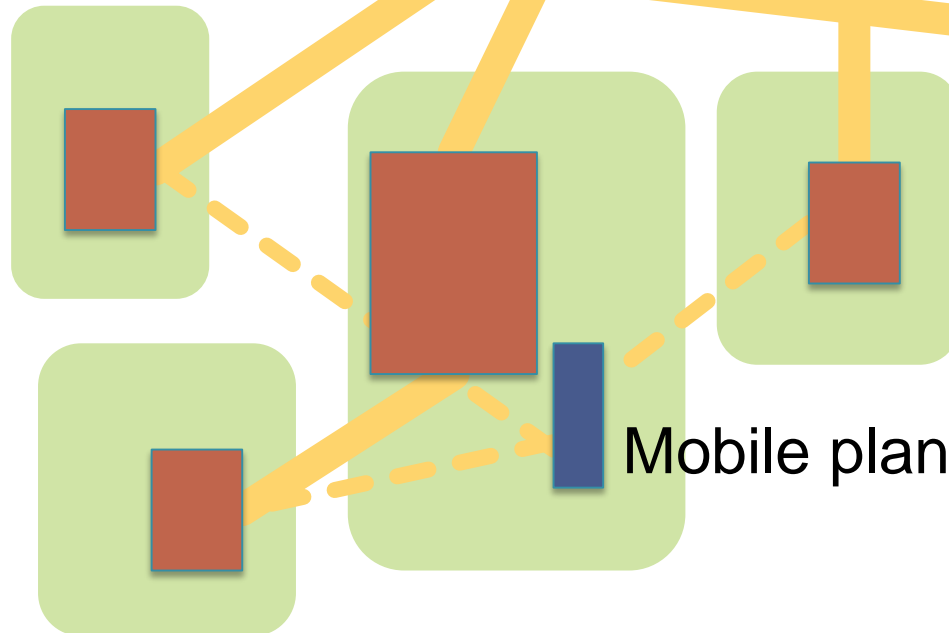


Animal welfare at slaughter

- Sometimes inappropriate facilities and demanding working conditions – difficult to drive animals and handle hassle and balking properly
- Inadequate stunning is likely to cause considerable suffering
- Many welfare risks, large variations between slaughter plants, stockpersons and animals – sometimes poor conditions



Large-scale stationary plant



Mobile plant

Study aim

- Investigate cattle handling and stress-related behaviour at a Swedish mobile slaughter plant, comparing with a large-scale stationary plant

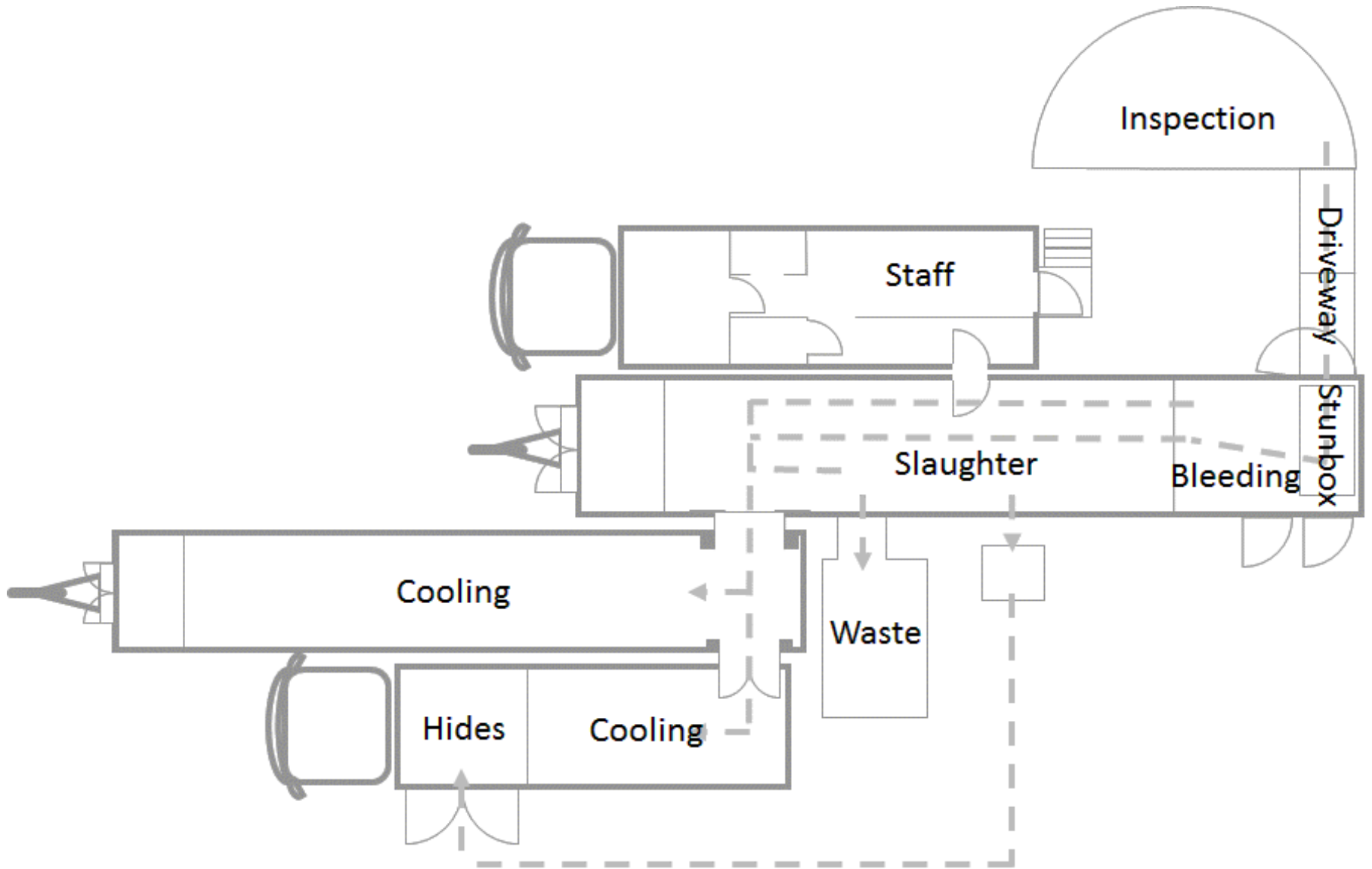


Material

- 298 + 298 cattle slaughtered at mobile and stationary plants during 1 year
- Driveway 2.4–5.7 and 7.3 m, respectively
- At mobile plant, animals handled by farm and/or plant staff
- Penetrating captive-bolt stunning, followed by hoisting and thoracic sticking

The mobile plant

- Operated by a Swedish company since 2015
- Two slaughter teams
- Capacity for 30-35 large cattle per day, 3 days per week
- Farms all over Sweden, 1.2% of all large cattle slaughtered in 2017





Hållgrytet
ETISKT KÖTT
HÅLLGRYTTET
KÄVINGKÖTT
LÄTTRENS OCH HÅLLGRYTTETS KÖTT

Ered
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Recordings of handling

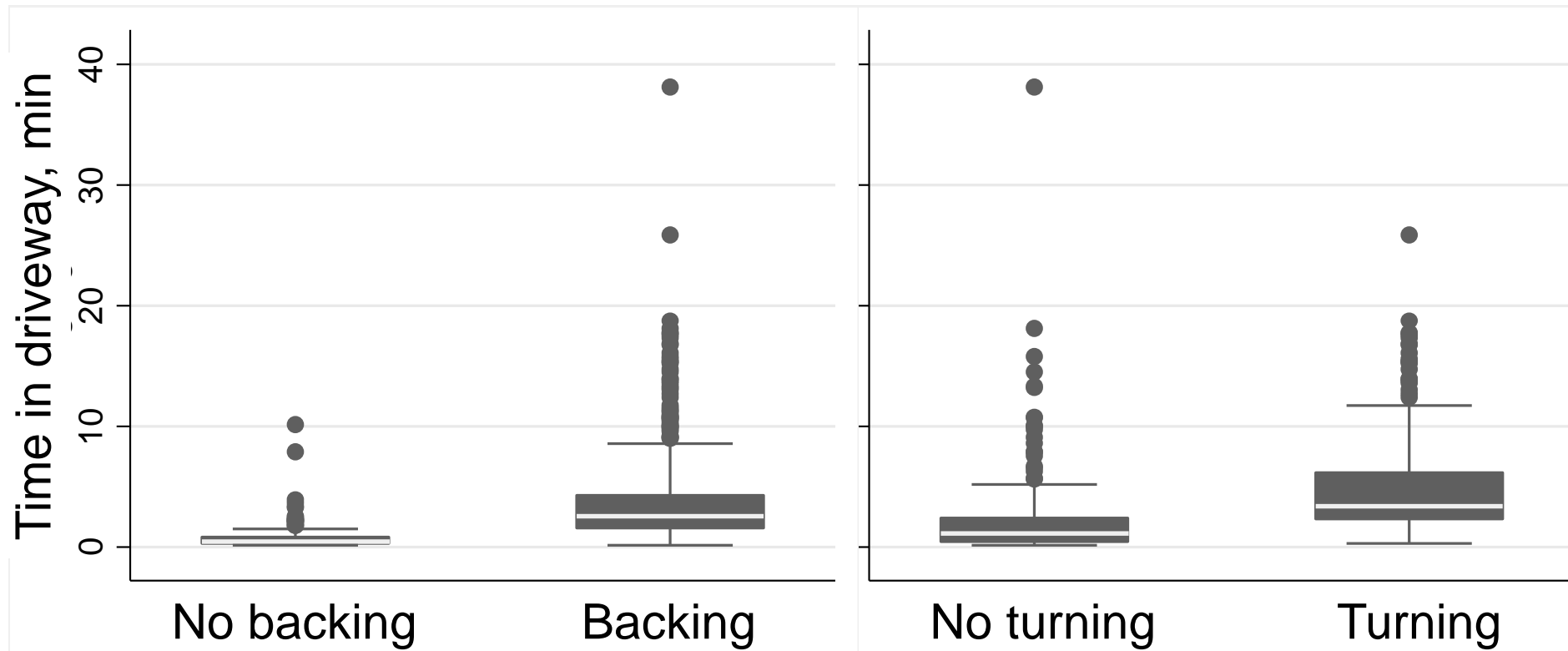
- Direct observations by one person of number of activity bouts in driveway:
 - Touching, patting or hitting hind or front part
 - Restraining, pulling or pushing
 - Tail twisting, kicking, pricking, hitting with gate, electric prodding
 - Yelling, whistling, making noise by hitting rails
- Use of hand or driving tool (typically a stick or paddle, occasionally an electric prod)
- Time in driveway, in stun box and stun-to-stick

Recordings of stress behaviour

- Direct observations by one person of number of behaviour bouts in driveway:
 - Tiptoeing, running, backing, turning
 - Slipping, falling
 - Kicking, charging, struggling
 - Freezing
 - Vocalising
 - Eliminating

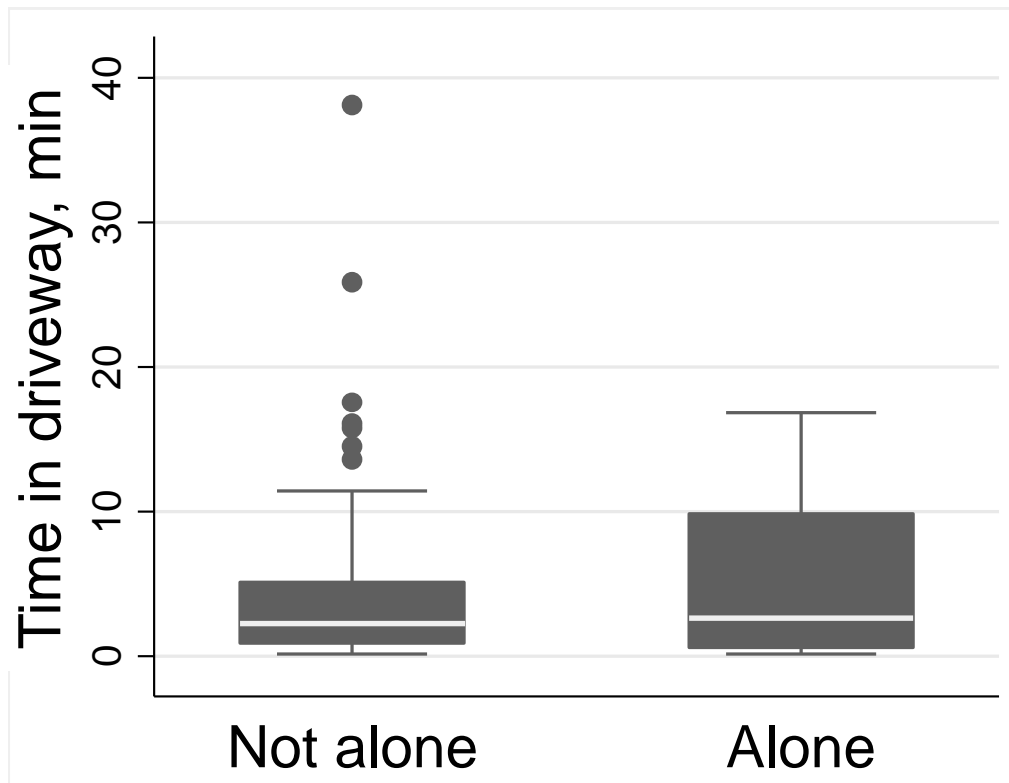
Driving time

- Longer if backing or turning around in driveway



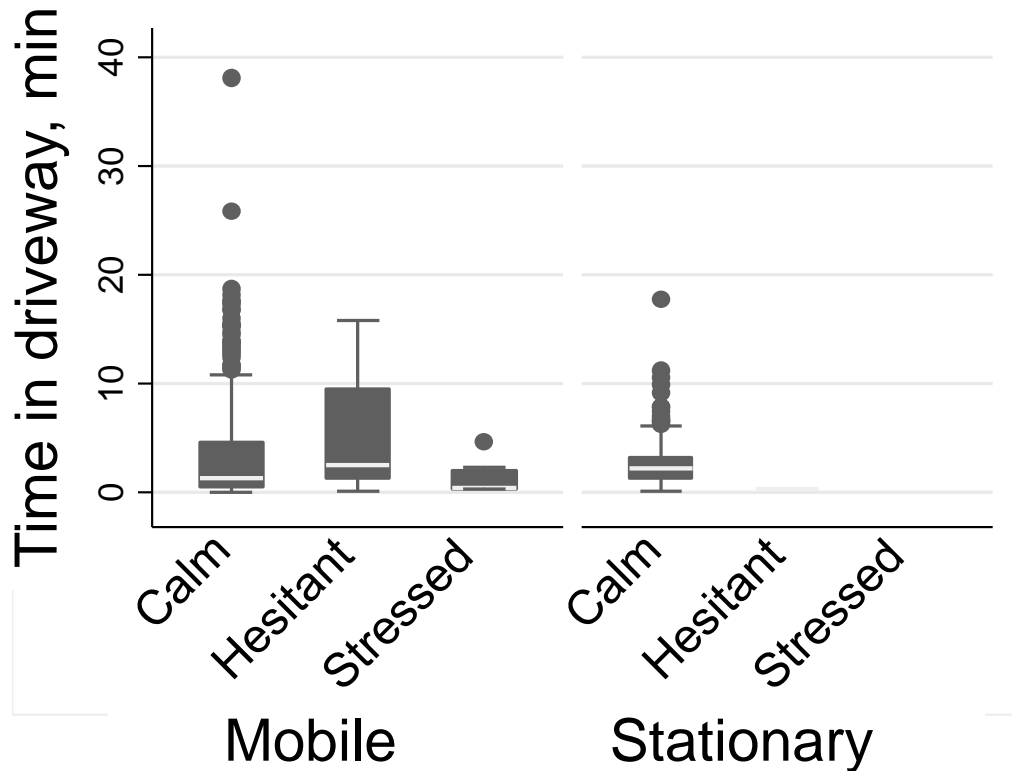
Driving time in mobile slaughter

- Longer if left alone in inspection pen before being driven



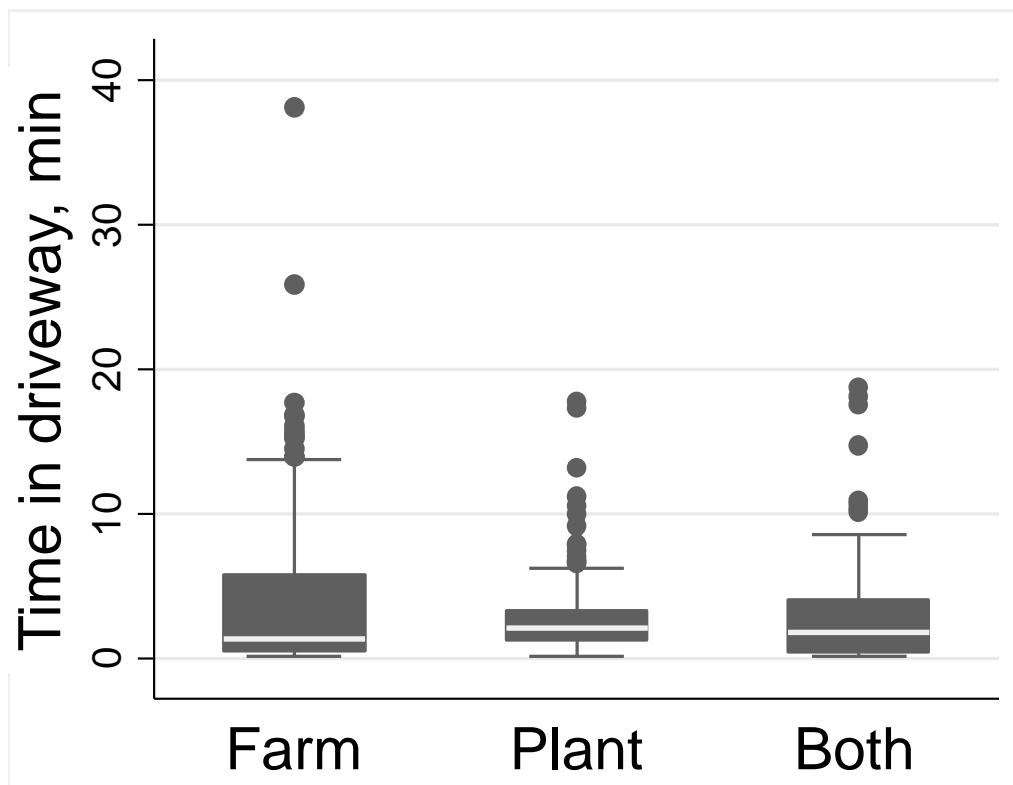
Driving time

- Longer if perceived as 'hesitant' vs. 'calm'



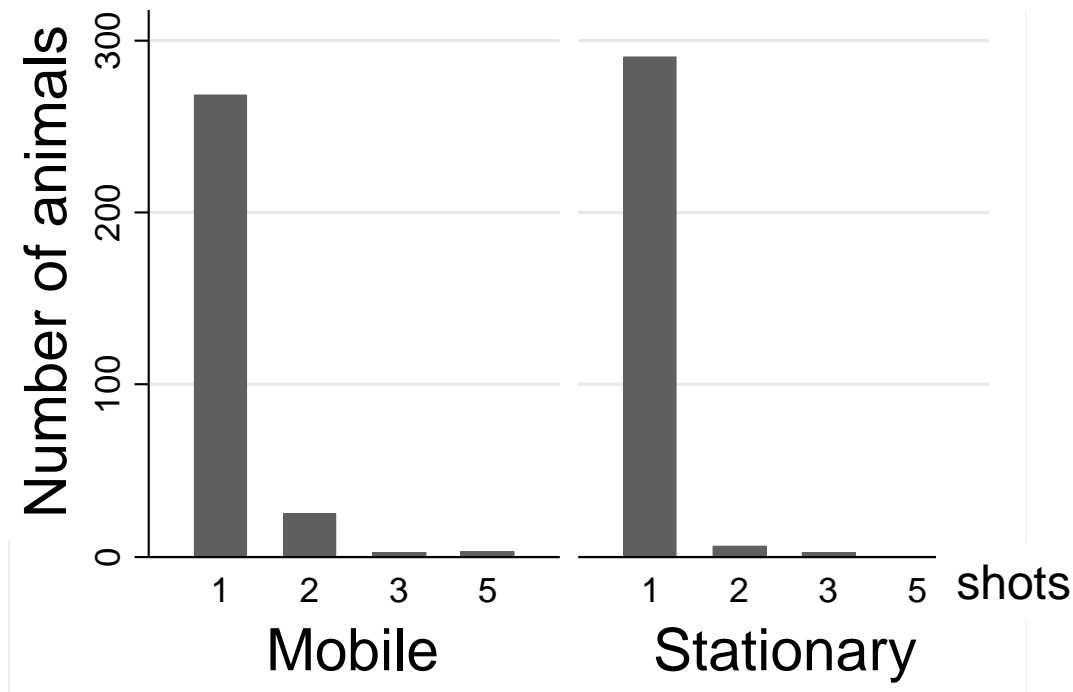
Driving time in mobile slaughter

- More variable if handled by plant staff



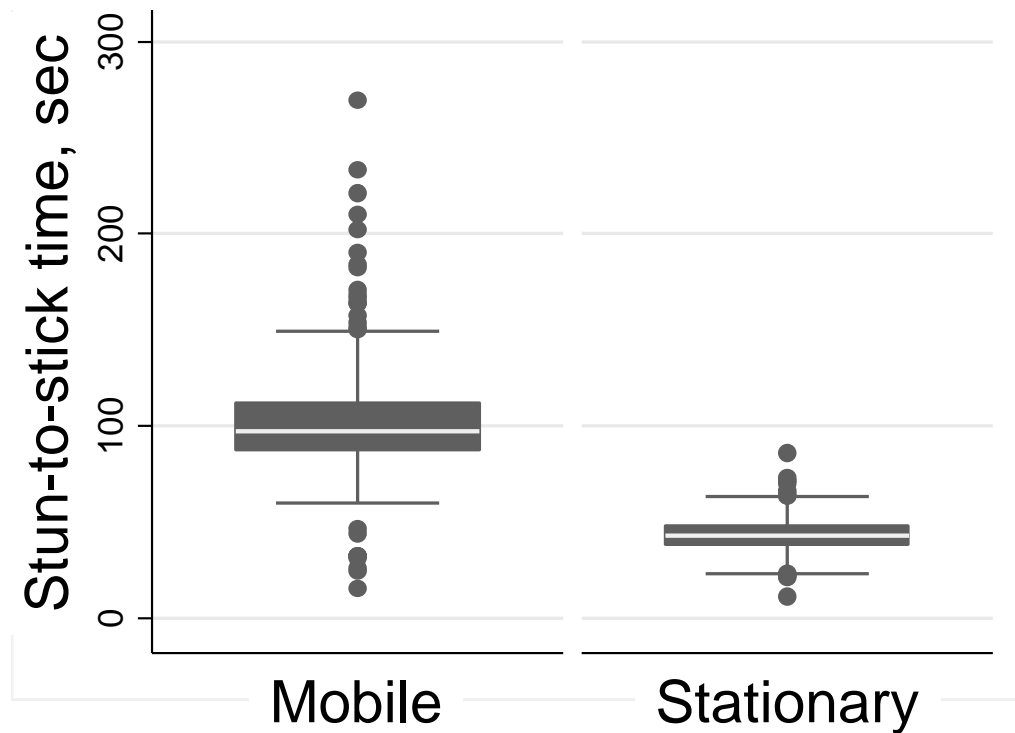
Re-shooting

- Higher percentage of animals (10%) at mobile plant than at stationary (2.7%)



Stun-to-stick time

- Considerably longer at mobile plant than at stationary



Conclusions regarding mobile plant

- Potential for improved animal welfare and meat quality, through avoided animal transports and less handling
- Calm pre-slaughter handling important for efficient driving to stunning
- Adequate stunning and quick sticking may be difficult to achieve, likely due to interior constraints



Acknowledgements

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Thanks for your attention!

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