

Pre-slaughter cattle handling and stress in mobile slaughter

Jan Hultgren, Charlotte Berg and Bo Algers
jan.hultgren@slu.se

The authors are affiliated to the Department of Animal Environment and Health, Swedish University of Agricultural Sciences, P.O. Box 234, SE-53223 Skara, Sweden. The study was funded by the Marie-Claire Cronstedt Foundation and the Swedish Animal Welfare Association. The authors declare no conflicts of interest.

On-farm slaughter may have the potential to limit animal stress. We studied animal handling at a mobile cattle slaughter plant housed in a truck trailer, comparing with a large-scale stationary plant.

During one year, 596 cattle (50% at each plant) were observed at driving and in stun box. In the mobile plant, animals were driven 2.4 to 5.7 m from an inspection pen to the stun box by farm or plant staff. The stationary driveway was 7.3 m long and the animals were handled by plant staff only. Penetrating captive bolt stunning was followed by hoisting and thoracic sticking.

Mean driving time was longer in animals that backed or turned around in the driveway compared to not (199 vs. 54 s and 228 vs. 132 s, respectively). In mobile slaughter, mean time in the driving lane was longer in animals that were left alone in the inspection pen before being driven (264 vs. 298), were perceived as 'hesitant' compared to 'calm' before driving started (296 vs. 223 s), and were driven by farm staff compared to plant staff (239 vs 133 s). Mean (\pm SD) stun-to-stick time was 102 (\pm 30) s in mobile and 44 (\pm 9) s in stationary slaughter, and 10 and 2.7%, respectively, of the animals were re-shot.

This study shows the importance of calm pre-slaughter handling for efficient driving into the stun box. It also indicates that the requirements for effective stunning and sticking may be difficult to meet in mobile slaughter, likely due to interior design constraints.