

**POLICY BRIEF:** Outcome of the questionnaire on cleaning practices of transport vehicles by Scottish cattle and sheep market users

**Author:** Thibaud Porphyre, Rebecca Allen (R(D)SVS, Vet student), Lisa Boden

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## 1. KEY MESSAGE

The Cleansing & Disinfecting (C&D) practices of transport vehicles among 72 surveyed Scottish cattle and sheep market users were found to be misaligned with industry good practice guidelines, with lower use of brush or disinfectant than expected and with short-time spent on C&D vehicles. Little differences in C&D practices and level of training were found between commercial and non-commercial respondents, highlighting the deficit in knowledge for commercial livestock vehicle users. Few respondents were aware of the #MuckFreeTruck campaign, suggesting that these efforts by the pig industry to promote better C&D practices of livestock transport vehicles did not reach beyond their target audiences. Efforts to improve the messaging (delivery and target population) on good biosecurity and/or C&D practices should be made. Furthermore, regular training on biosecurity and/or C&D practices is recommended, particularly for commercial livestock transport.

## 2. MAJOR FINDINGS

1. An **online questionnaire** was carried out within a 92-day study period in the spring and summer of 2020. Overall, 149 (19%) visitors gave their consent and continued with the survey and **72 (48%) completed the questionnaire** and were included in further analyses. Respondents were of diverse background and were separated into either commercial (i.e. professional farmers, livestock dealers and professional livestock transporters) and non-commercial market users (i.e. crofters, smallholding owners and hobby farmers).
2. 23/72 (31.9%) respondents never completed a CPD training course of any kind, and **only 8 (11.1%) and 4 (5.6%) respondents indicated to have completed courses in either biosecurity or C&D**, respectively. No significant differences were found between respondents from commercial and non-commercial sectors.
3. 17/72 (**23.6%**) **respondents declared hiring a private haulage vehicle** to transport their animals and, thus, leave the responsibility of C&D the vehicle up to the driver.
4. Of 55 respondents using their own vehicles, only 3 (**5.5%**) **of respondents knew or heard of the #MuckFreeTruck campaign**. Those 3 respondents were from the commercial sector.
5. 24/55 (**43.6%**) **respondents spent <30 minutes to C&D their vehicle** and only 16 (29.1%) of the respondents spent >45 minutes on vehicle C&D. No significant differences were found between respondents from commercial and non-commercial sectors.
6. Only 19/55 (**34.5%**) **of the respondents declared C&D their vehicles at market**, the rest being mostly done either at their farm or at their home. Only 1 commercial respondent (2.6%) and no non-commercial respondents carried out C&D measures on their vehicle on their way home from market. No significant differences were found between respondents from commercial and non-commercial sectors.

7. 33/54 (61%) of the respondents declared travelling >10 miles before completing vehicle C&D once animals are unloaded at market. Commercial respondents travelled over 3 miles before C&D their vehicles significantly more often than non-commercial respondents (P=0.05).

8. 33/54 (61%) of the respondents declared that they completed vehicle C&D within 0-12 hours of visit to market. Commercial respondents tended to clean their vehicles within 24 hours more often than non-commercial respondents, although this was not significant (P=0.056).

9. 6/54 (11%) respondents declared they did not C&D their vehicle, irrespective of the sector (P=0.36).

10. 51/54 (94%) of respondents declared loading livestock within farm unit, irrespective of the sector (P=0.23).

11. Pressure washer was used for C&D by 50/55 (91%) respondents but 16/50 (32%) used pressure washer alone. Only 34/50 (68%) respondents used it in combination with either detergent, disinfectant or brush. Overall, 11/36 (30.6%, 95% CI: 16.9 – 48.3%) of commercial and 9/14 (64.3%, 95% CI: 35.6% – 86%) of non-commercial used pressure washer in combination with a brush or a shovel. Overall, **non-commercial respondents were 4-times more likely to use either a brush or a shovel** (95%CI: 1.19 - 13.3, P= 0.04) to clean their vehicle than commercial respondents.

### 3. OBJECTIVES

- Describe how biosecurity practices with regards to transport vehicles are undertaken among cattle and sheep market users in Scotland
- Evaluate how these biosecurity practices of market users from the commercial sector differ from those of the non-commercial sector.

### 4. POLICY IMPLICATIONS

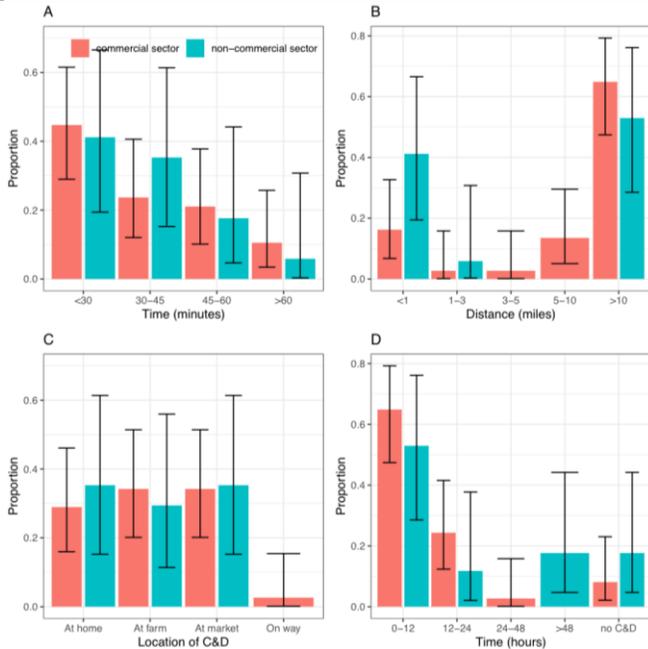
This survey highlights the general substandard level of C&D of transport vehicles in the cattle and sheep market users in Scotland. In particular, there is a clear deficit in knowledge in biosecurity and C&D for livestock vehicle users of the commercial sectors. Regular training on biosecurity and/or C&D practices is recommended for professional use of livestock vehicles. This study also indicated the lack of awareness of the #MuckFreeTruck campaign amongst cattle and sheep market users in Scotland. Efforts to improve the messaging (delivery and target population) on good biosecurity and/or C&D practices is recommended.

### 5. IMPORTANT ASSUMPTIONS AND LIMITATIONS

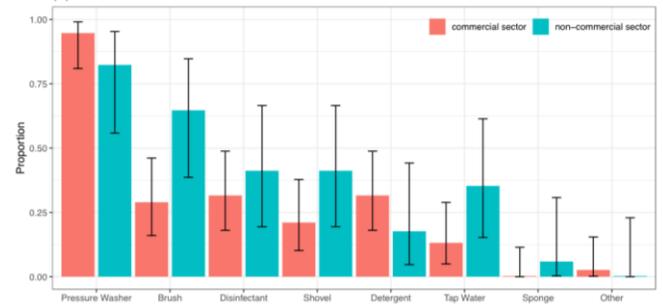
- Participants were recruited through various social media channels and relevant website posts. As such, we might not capture market users that are not connected or not regular user of internet and social media.
- This study only managed to collect the response of 37% of the optimal sample size (196). As a consequence, this study does not have sufficient power to detect small or medium effect sizes but does have the power to detect large effect sizes.
- While the questionnaire was opened during the lockdown period to control the spread of COVID19, all questions referred to the period pre-COVID, i.e. their last visit to market prior lockdown.

- Although the distribution of respondents was representative to the distribution of cattle and sheep holdings recorded in Scotland, no responses were received from Shetland, Outer Hebrides and Glasgow postcode areas.
- 43/72 (60%) of respondents were professional farmers potentially over-representing this population in the survey.

## 6. FIGURE



**Figure 1: Cleansing and disinfecting practices by cattle and sheep markets users in Scotland.** Proportion of respondents informing on (A) the time spent for C&D, (B) the distance travelled after unloading livestock at market and prior vehicle C&D, (C) the location where C&D was reported carried out after last visit to market (D) time between livestock unloading and vehicle C&D.



**Figure 2: Quality of transport vehicles' C&D.** (A) Distribution of items used for C&D as informed by respondents.