449 Research report

**Effect of welfare standards and biosecurity practices on antimicrobial use in beef cattle**

by Diana, A., Lorenzi, V., Penasa, M., Magni, E., Alborali, G. L.,

2020 Scientific Reports 10: 13-Jan

In **Significant Impact Groups:**

Housing and welfare \ Weaning age and management Biosecurity

Species targeted: Beef;

Age: Young;Adult;

**Summary:**

This study aimed to investigate the impact of welfare standards and biosecurity on AMU in beef cattle. Data on performance traits and AMU were collected over a 3.5 year time from 27 specialised beef farms and a treatment incidence was calculated using the defined daily dose for animals. An on-farm assessment was carried out. The highest average score was obtained for the welfare section (76%) followed by emergency management (39%) and biosecurity (24%). This suggests that major focus on strategies for the implementation of biosecurity measures and emergency management is needed, due to the low scores reported. A statistically significant lower AMU was observed with improved level of welfare. These results may be helpful for farm benchmarking and highlight the importance of improved animal welfare for an efficient antimicrobial stewardship



**Where to find the original material**:

https://pubmed.ncbi.nlm.nih.gov/33262402/; 10.1038/s41598-020-77838-w

Country: IT