330 Research paper

**Factors potentially linked with the occurrence of antimicrobial resistance in selected bacteria from cattle, chickens and pigs: A**

by Murphy, C.P., Carson, C., Smith, B.A., Chapman, B., Marrotte, J., 2018 Zoonoses and public health 65: 957-971

In **Significant Impact Groups:**
Other \
Species targeted: Pigs;Poultry;Beef;
Age: Young;Adult;

**Summary:**
Antimicrobial resistance is a complex issue with a large volume of published literature, and there is a need for synthesis of primary studies for an integrated understanding of this topic. A comprehensive literature search and screening were performed to identify studies investigating factors potentially linked with antimicrobial resistance in Campylobacter species, Escherichia coli and Salmonella enterica along the farm-to-fork pathway (farm, abattoir (slaughter houses) and retail meats) for the major Canadian livestock species (beef cattle, broiler chicken and pigs). The most common factors identified were antimicrobial use and type of farm management system (e.g., antibiotic-free, organic). There are still insufficient research done on the effect of vaccination, industry-specific factors (e.g., livestock density) and factors at sites other than farm along the agri-food chain. Further investigation of these factors and other relevant industry activities are needed in order to identify effective interventions to decrease antimicrobial resistance along the agri-food chain.



**Where to find the original material**:
https://onlinelibrary.wiley.com/doi/full/10.1111/zph.12515; https://doi.org/10.1111/zph.12515

Country: CA