



437 Research paper

Antibiotic resistance genes from livestock waste: occurrence, dissemination, and treatment

by He, Y., Yuan, Q., Mathieu, J., Stadler, L., Senehi, N., Sun, R., & 2020 npj Clean Water 3: 11-Jan

In **Significant Impact Groups:**

Other \

Species targeted: Poultry; Dairy; Pigs; Beef; Sheep; Other;

Age: Not stated;

Summary:

Antibiotics are widely used in animal husbandry, and various types of antibiotic resistance genes (ARGs) are frequently detected in livestock waste around the world. Conventional livestock waste treatment processes do not completely remove ARGs, resulting in their release to soil and water environments. Various exposure routes of these ARGs to humans, including inhalation and ingestion of antibiotic-resistant bacteria (ARB) that harbor them, may be contributing to the rise in resistant clinical infections that are increasingly difficult to treat with antibiotics. In this review, we assess the occurrence and variability of ARGs in livestock wastes and their potential propagation pathways to human pathogens.

437 Research paper - He - 2020 - Antibiotic resistance genes from livestock waste_occurrence dissemination and treatment

Where to find the original material:

<https://www.nature.com/articles/s41545-020-0051-0>; 10.1038/s41545-020-0051-0

Country: Global