



Urgent Need for Data on the use of antibiotics in Livestock in Sierra Leone

Key Messages

- The use of antimicrobials in animals contributes to antimicrobial resistance; our study identified a **poorly functioning reporting system** and a **stark lack of data** in Sierra Leone
- There is an urgent need to task livestock officers across all 14 Districts to undertake routine data collection
- Supervisory systems must be put in place led by Veterinary Officers in each District to train, mentor and supervise data management
- Systems need to be put in place to strengthen paper-based recording at local level and ensure compliance.
- The Food and Agriculture Organisation (FAO) of the United Nations have recently provided IT hardware to support a shift to electronic recording. Functionalising this requires investment in software systems, internet connectivity and training of livestock officers.

What is the problem and why is it important?

- The National Strategic Plan for Combatting Antimicrobial Resistance (AMR) (2018-22) concludes that: 'Monitoring of use of antimicrobial agents in humans, animals and plants is not undertaken'
- The collection of data on antibiotic use in animal production is central to Sierra Leone's commitment to a One Health approach to antimicrobial resistance.
- [How did we measure it?](#)
- Visits were made to the Ministry of Agriculture and Forestry and the 14 District livestock offices to collect copies of all district and sub-district treatment reports available for the study period (Feb-April 2020)
- District Livestock Officers were also consulted to access information on the infrastructure available for comprehensive data collection including Human Resource and Information and Computing Technology capacity.

¹Reference: Leno A et al. Veterinary Healthcare Provision and Quality of Reported Data on Antimicrobial Use in the Treatment of Livestock in Sierra Leone, 2016–2019. Tropical Medicine and Infectious Disease. 2021; 6(2):73. <https://doi.org/10.3390/tropicalmed6020073>

What did we find?

- According to the National guidelines, every District should have a Veterinary Officer whose role includes data management. None of the 14 Districts examined had veterinary officers.
- All districts (except one) had livestock officers and livestock assistants.
- Overall, there were 72 community animal health workers in the country against 168 recommended (gap of 57%). This gap ranged from as low as 14% (Kailahun district) to as high as 100%
- No districts had a functional computer or internet access.
- No reports on antibiotic use in animals were available at National level.
- Reports were NOT available in 11 of 14 Districts studied.
- In the 3 Districts where reports were available, only 1% of the expected numbers of reports for the study period were accessible. Data were incomplete and inconsistent.

Implications

- There is no effective system at present in Sierra Leone for the recording and reporting of antimicrobial use in livestock.
- Since completion of our study, the World Bank and FAO have provided computers to all Districts. However necessary software and training must be put in place to functionalise these systems so that they can begin to capture data on antimicrobial use in animals.
- Resources are urgently needed to address these critical gaps in human resources by recruiting and training livestock officers/veterinarians, for AMR record management at all the 14 districts, support the livestock offices via council allocation for laptop and internet connectivity. We therefore strongly recommend that resources be directed to support the strengthening of surveillance systems at the MAF in order to support the One Health approach and recommendations advocated by the WHO, OIE, and FAO.
-