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Multidrug-resistant *Campylobacter* are widespread in chickens at commercial farms around Kampala, Uganda

BACKGROUND

Chickens may carry zoonotic and antimicrobial resistant (AMR) pathogens, as *Campylobacter* spp.
Campylobacteriosis is one of the most common foodborne diseases in humans worldwide.

QUESTIONS

1. How common is AMR in *Campylobacter* spp. in chickens at commercial farms around Kampala, the capital of Uganda?
2. What are the chicken producers' attitudes concerning antimicrobial usage (AMU)?

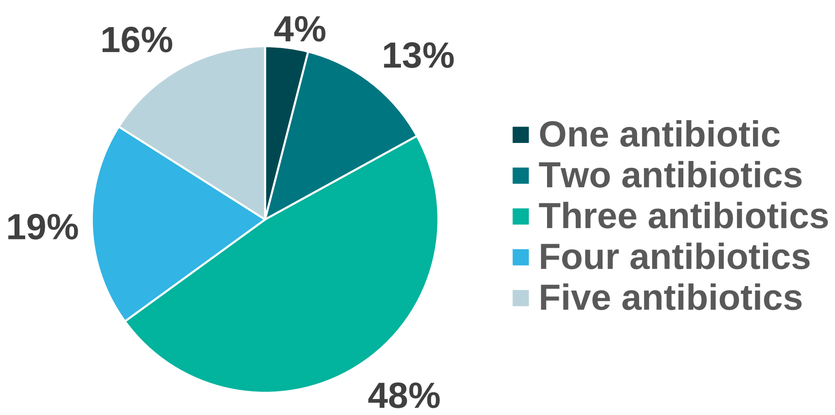
Broad-spectrum antibiotic!

RESULTS

1

Campylobacter was isolated from all 194 collected samples, representing all farms.

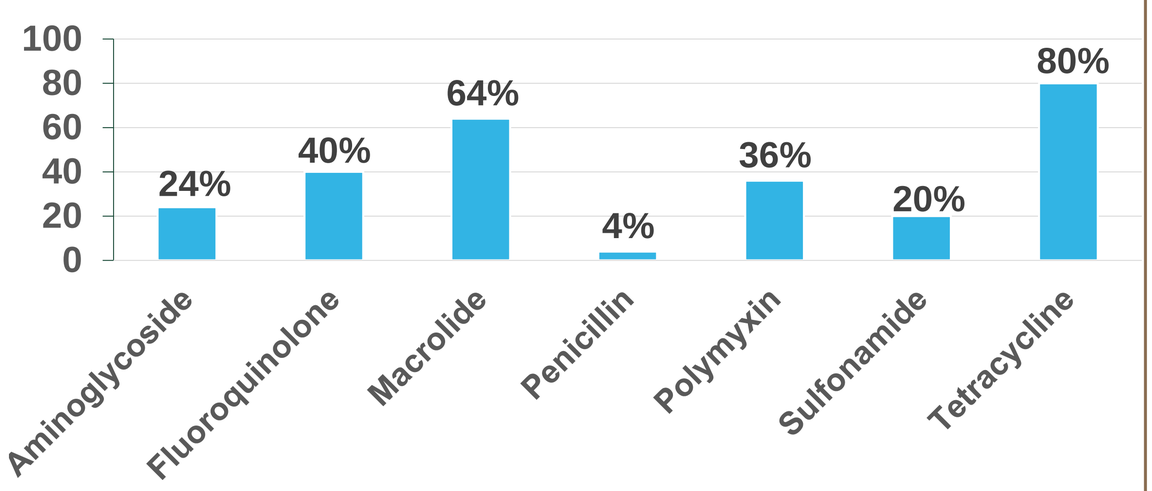
Most prevalent resistance against nalidixic acid and ciprofloxacin (each 91%), followed by tetracycline (79%), streptomycin (76%) and erythromycin (26%).



Proportion of the number of antibiotic classes to which the Campylobacter isolates were resistant.

2

- 70% of the farms got AMU instructions from drug shops, without prescription from a veterinarian.
- On 64% of the farms, chickens were given several different antibiotic classes.
- Macrolide, the first-choice antibiotic to treat campylobacteriosis in humans, was commonly used.



Percentage of antibiotic classes used on visited chicken farms.

METHOD

- Bacterial isolation from cloacal and boot sock samples (194) from 28 farms.
- Antimicrobial susceptibility of 170 isolates by disk diffusion.
- Questionnaire-based interviews.

CONCLUSION

- **Limiting the spread of AMR is of utmost importance and should be addressed from a One Health perspective.**
- **One focus should be on reducing un-restricted AMU in the livestock sector.**

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