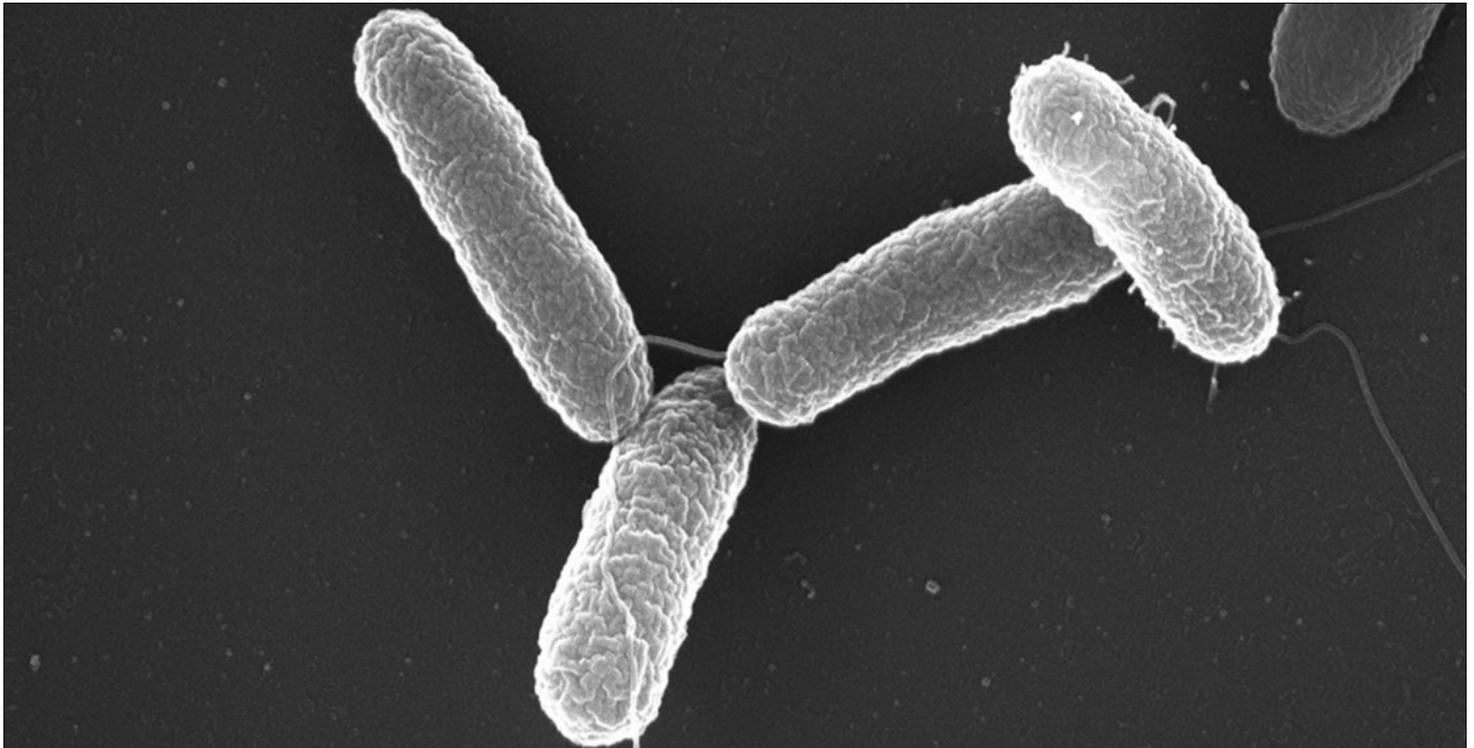


Antibiotics for livestock likely cause of ampicillin-resistant *Salmonella*

A retrospective study in *The Lancet Infectious Diseases* shows that the preventive use of penicillin in livestock in the 1950s may have encouraged antibiotic-resistant bacteria to evolve and spread.

30-11-17



Dit is de omschrijving

A retrospective study in *The Lancet Infectious Diseases* shows that the preventive use of penicillin in livestock in the 1950s may have encouraged antibiotic-resistant bacteria to evolve and spread.

Researchers at the Institut Pasteur in France analysed historical samples of *Salmonella*. They show that there were ampicillin-resistant bacteria even before the antibiotic was used to treat infections in humans. Ampicillin, derived from penicillin, is one of the most commonly used antibiotics today. In the 1950s and 1960s it was common practice in the United States and Europe to add low doses of penicillin to animal food to prevent infections.

Researchers of the Institute of Tropical Medicine Antwerp wrote a *The Lancet Infectious Diseases* comment accompanying the French study. Sandra Van Puyvelde, Stijn Deborggraave and Jan Jacobs point out that preventive antibiotics are still extensively used in meat production, especially in booming economies in the South. Even if they are used for brief periods and at low dosage, the presence of antibiotics in the environment is sufficient for bacteria to develop resistance. The Belgian researchers emphasise the importance of 'One Health' approaches in the containment of antibiotic resistance, meaning that the health of people is connected to the health of animals and the environment.

Links

- [Early transmissible ampicillin resistance in zoonotic *Salmonella enterica* serotype Typhimurium in the late 1950s: a retrospective, whole-genome sequencing study](#) (*The Lancet Infectious Diseases*)
- [Why the antibiotic resistance crisis requires a One Health approach](#) (*The Lancet Infectious Diseases*)