

Scottish One Health Antimicrobial Use and Antimicrobial Resistance report 2018

An Official Statistics statistical release for Scotland

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About this release

This release by Health Protection Scotland provides data relating to antibiotic use and resistance to antibiotics in Scotland during 2018. The report also provides information on antibiotic use and resistance in animals, using data from Scotland's Rural College, the Small Animal Veterinary Surveillance Network and the Scottish Environmental Protection Agency.

Main Points

In relation to antibiotic use in humans:

- Total antibiotic use in humans has decreased by 6.2% since 2014.
- In 2018 83.2% of antibiotic use occurred in primary and community care and the remainder in hospitals.
- Since 2014 antibiotic use has decreased by 10.2% in primary care and increased by 16.0% in acute hospitals.
- In 2018 one in four people in Scotland (27.3%) received at least one course of antibiotics prescribed in primary care.

In relation to antibiotic use in animals:

- In small animal veterinary practices one in five consultations (18.1%) in 2018 resulted in a prescription of at least one antibiotic.

In relation to antibiotic resistance in humans:

- There were 1,424 bacteraemia cases (a potentially life-threatening infection) during 2018 that were resistant to one or more antibiotics.
- In 2018 a quarter of the 4,738 reported cases of *E. coli* bacteraemia were resistant to one or more antibiotics.
- The level of resistance to antibiotics used for *E. coli* bacteraemia and similar infections has remained stable over the last five years.
- Bacteria that produce carbapenemase (an enzyme which can destroy some antibiotics) are resistant to several important antibiotics; the number of laboratory reports of such bacteria has increased significantly since 2014, though there was no change between 2017 and 2018.
- Resistance to vancomycin, an important antibiotic used to treat resistant bacteria, has increased to around half (43.2%) in some types of infection.
- In 2018 nearly 10% of cases of gonorrhoea showed some resistance to azithromycin (an antibiotic that can be used to treat gonorrhoea).

In relation to antibiotic resistance in animals:

- In 2018 two thirds (64.8%) of salmonella infections reported from animals were fully susceptible to all antibiotics tested; this has not changed since 2017.
- The level of antibiotic resistance for infections in animals has been relatively stable since 2014.

Background

Antibiotic resistance poses an urgent threat to human health and increasing levels of resistance globally means that some infections are becoming more difficult or even impossible to treat. A new five-year United Kingdom National Action Plan and a 20-year vision for containing and controlling AMR was published in January 2019.

There is a close connection between antibiotic resistance in humans and in animals, so the “One Health” approach encompassing humans, animals, environment and food is central. Robust intelligence and evidence for action across the One Health ecosystem are essential to informing local and national interventions and initiatives in human and animal health. This report describes antimicrobial use and antimicrobial resistance and will support stakeholders across all sectors in the One Health ecosystem.

Find out more

Find out more in the [full report](#). Data from this publication is available to download from our [web page](#).

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