

Antimicrobial consumption in Denmark has stagnated - resistance continues to increase

After several years of increasing antimicrobial consumption, the trend now appears to slow down. At the same time, however, this year's DANMAP report shows that resistance to several types of antibiotics continues to increase.

The consumption of antibiotics for humans in Denmark was in 2024 at an almost identical level to 2023, and the increase observed after the covid-19 pandemic has thus stopped for the first time.

"It is positive that consumption seems to stabilize, but we must not forget that resistance continues to increase, and this still makes it necessary to be very aware of how we use antibiotics," says Ute Wolff Sönksen, chief physician at Statens Serum Institut (SSI).

The trend in 2022 and 2023 was characterized by unusually tough seasons with RS virus and influenza as well as outbreaks of Group A streptococci, which resulted in an extra high consumption of antimicrobials for respiratory infections. In 2024, this consumption decreased by 7% – among children up to 23%.

Same picture in hospitals

The picture is also the same in hospitals. Here, there was only a small increase in antibiotic consumption from 2023 to 2024 (+2.6%). The consumption of penicillin combined with beta-lactamase inhibitors – the most used group of antimicrobials in hospitals – stagnated for the first time in 2024, while the use of narrow-spectrum penicillin increased.

But at the same time, resistance is increasing. The level of resistance in *Klebsiella pneumoniae* from blood infections was over 10 percent in 2024. In addition, there were more outbreaks of multi-resistant bacteria such as Carbapenemase-Producing Organisms (CPO) and methicillin-resistant *Staphylococcus aureus* (MRSA), which are spreading both in hospitals and in the primary sector.

"This underlines the need for continued focus on both the rational use of antibiotics and on infection hygiene. If we are to reverse the trend, we need to have both working – not only in hospitals, but also in the primary sector," says Ute Wolff Sönksen.

New political focus

The new national action plan for antimicrobial resistance in humans, which the Ministry of Health published in June 2025, addresses these challenges. The plan emphasizes four areas of action: combating resistance, security of supply, infection prevention and international cooperation.

The results from DANMAP will be presented and discussed at a seminar on 18 November 2025, organised by DTU National Food Institute and Statens Serum Institut.

Facts about DANMAP

- DANMAP is the national surveillance program for antimicrobial consumption and resistance in bacteria from humans, animals and food
- The results are published each year in the DANMAP report, published by DTU National Food Institute and Statens Serum Institut
- Chapters 4–9 from DANMAP 2024 will be published online on Thursday, September 4, 2025
- The full report will be published in print in connection with the DANMAP seminar in November
- In 2024, antibiotic consumption for humans was 16.27 daily doses per 1,000 inhabitants, while in 2023 it was 16.47 daily doses