

New CED resolution on antimicrobial resistance (AMR)

Integrated cross-sectoral approach

The Council of European Dentists (CED) adopted a new resolution on antimicrobial resistance (AMR). The delegates of the General Meeting updated the resolution.

Introduction

The CED sees the antimicrobial resistance (AMR) as a continuing growing threat to global health and even development, by the reduced impact of treatment of a wide range of infections in humans and animals, including infections of the oral cavity. For many years, there has also been inappropriate and excessive use of antibiotics and other antimicrobials in humans, animals and agriculture. This is added to poor infection prevention and control (IPC) practices in healthcare settings.

Antibiotics play an important role to control clinical infections, with 800,000 antibiotic-resistant infections recorded every year in the European Union, Iceland and Norway, and 70% of these infections occurring in healthcare settings. Strong disparities in AMR rates exist across the European Union as well as being a direct cause to approximately 35,000 deaths a year in the EU, Iceland and Norway, and more than 1 million disability-adjusted life years (DALYs) lost. This is comparable to that of influenza, tuberculosis and HIV/AIDS combined. Furthermore, AMR leads to an increasing social and economic burden amounting to 6.6 billion euros in healthcare expenditure and treatment following AMR-related infections for the EU and the European Economic Area (EEA) in 2023.

Important political steps have been taken at an international and European level since 2019 to acknowledge AMR as one of the most serious public health threats worldwide, as well as integrating it high on the EU health agenda.

Definition and guidelines

Antibiotic resistome is defined as the reservoir of all antibiotic resistance genes (ARG) resulting in AMR. Oral resistome also remains a favourable setting for the development of AMR, with antibiotic resistance genes frequently found in bacteria located in the gums, throat, tongue, as well as the mucus, root canal and saliva located in the mouth.

The equilibrium among humans, animals and the environment is well recognised, but the misuse of antimicrobials in humans and animals, the remaining lack of stewardship, and subsequent release of residues into the environment leads to a continued growing spread of AMR. The fight against AMR must address human, animal and environmental concerns in a comprehensive manner, involving a wide range of actors. The One Health approach is based on acknowledging the principle that human, animal and environmental health are intrinsically interlinked, with ongoing urgent joint efforts needed in integrating these three areas into policy action.

Limiting AMR bacterial exposure with an integrated One Health approach has never been more necessary and will contribute to achieving the Sustainable Development Goals (SDGs).

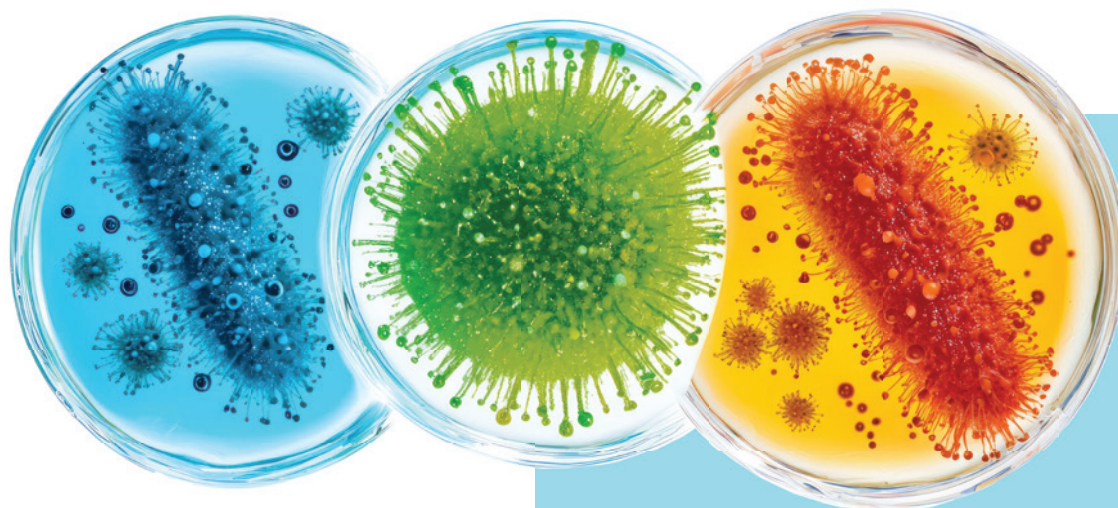
The CED acknowledges the steps taken by the EU since its last position on AMR. The EU 2017 One Health Action Plan against AMR was extended to all three pillars of the One Health approach and focused on the future development of EU guidelines on infection prevention and control (IPC). The 2023 updated recommendation on stepping up EU actions and its AMR reduction targets were adopted based on a One Health approach. This includes a 20% target reduction in total human consumption of antibiotics, the revision of the pharmaceutical legislation, and the integration into the Farm to Fork Strategy of a target to reduce by 50% the EU sales of antimicrobials for farmed animals and aquaculture by 2030.

However, further urgent interventions integrating the One Health approach need to be accelerated to address infection

plemented both in antibiotic prophylaxis and treatment. More than 80% of antibiotics for preventing infection before dental visits were deemed unnecessary.

Many dental conditions relate to the oral microbiota in the dental plaque. Poor oral health, coupled with lack of available, accessible, adapted and high quality conservative dental treatments, favour growth of pathogens and increase risks of infections and antibiotic misprescribing. However, most dental infections and dental pain can be treated without antibiotic treatment by removing the cause and drainage of the infection using a dental procedure.

The prescription of antibiotics in dental practices for the treatment of oral infections or prophylaxis surgical procedures amounts between 5% and 10% of total antibiotic prescribing in primary healthcare. Notable differences remain in prescribing practices across Europe, with an increase during the COVID-19 pandemic.



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prevention and control as well as antimicrobial resistance (AMR) in human, animal and environmental health. The environment, acting as a reservoir of antibiotic resistant bacteria, plays a role in the dissemination of antibiotic resistant genes (ARG), for example in wastewater. In light of this, evolving practices in dental treatments, including innovative materials used in dental fillings, can impact on the management of dental wastewaters, and in turn, the overall water sources and environmental health.

Antibiotics and dentistry

Relatively little attention continues to be paid to the use of antibiotics in dentistry and the widespread use of antibiotics in primary care, including dentistry, is considered as one of the driving factors of AMR in healthcare. Rational use of antibiotics in dentistry in the context of bacterial infections should be im-

Strategies needed

The CED adheres to the current political efforts for reducing preventative healthcare associated infections and supporting IPC objectives, as well as actions to increase antimicrobial stewardship. However, enforcement of policies and initiatives specifically addressing and increasing awareness around prescribing practices by healthcare professionals are yet urgently needed. Currently, there are no guidelines on antibiotic prescribing for standard procedures like dental implants and extractive surgery. Widespread antibiotic prescriptive heterogeneity is observed. Focus also needs to be directed towards effective prevention and infection control strategies targeting the oral cavity, and reduction in oral antibiotic treatment.

Source: AMR resolution of CED on 27 May 2025