

HOPE Position on Antimicrobial Resistance (AMR)

About Antimicrobial Resistance

Antibiotic resistant infections are one of the biggest challenges for hospitals and healthcare services to deliver safe and effective healthcare.

Bacteria have antibiotic resistance when specific antibiotics have lost their ability to kill or stop the growth of the bacteria. Resistant bacteria survive in the presence of the antibiotic and continue to multiply causing longer illness or even death. Antibiotic resistance leads to higher medical costs, prolonged hospital and other health and social care facilities stays, and increased mortality. Excessive and inappropriate use of antimicrobial medicines and poor infection control practices have transformed Antimicrobial Resistance (AMR) into a serious threat to public health worldwide.

Surveillance data show that it is a growing public health problem in European hospitals and communities.¹ A study conducted in 2018 by the European Centre for Disease Prevention and Control (ECDC) in the European Union and in the European Economic Area (EU/EEA) estimates that about 33000 people die each year as a direct consequence of an infection due to bacteria resistant to antibiotics and that the burden of these infections is comparable to that of influenza, tuberculosis and HIV/AIDS combined. It also explains that 75% of the burden of disease is due to healthcare-associated infections (HAIs).²

According to a study released in April 2019 by the UN Ad hoc Interagency Coordinating Group on Antimicrobial Resistance, if no action is taken, drug-resistant diseases could cause 10 million deaths worldwide each year by 2050. By 2030, antimicrobial resistance could force up to 24 million people into extreme poverty.³

In June 2017 the Commission adopted the [EU One Health Action Plan against AMR](#), as requested by the Member States in the Council conclusions of 17 June 2016. The Commission has also adopted the first deliverables of the plan, for example the EU Guidelines on the prudent use of antimicrobials in human health.

¹ ECDC Website: Factsheet on Antimicrobial Resistance <https://www.ecdc.europa.eu/en/antimicrobial-resistance/facts/factsheets/general-public>

² <https://www.ecdc.europa.eu/en/news-events/33000-people-die-every-year-due-infections-antibiotic-resistant-bacteria>

³ No Time to Wait: Securing the future from drug-resistant infections, Report to the Secretary-General of the United Nations, April 2019, <https://www.who.int/antimicrobial-resistance/interagency-coordination-group/final-report/en/>

Nevertheless, and despite the emergency it represents, AMR is still not a priority on the political agenda in most of the European Member States. This is why HOPE joined the AMR Stakeholder Network coordinated by the European Public Health Alliance (EPHA) and has endorsed [the Roadmap for Action on Antimicrobial Resistance: 5 Key Strategies to Tackle this Global Health Threat](#).

In the present paper, HOPE calls for further action at EU level and wish to draw attention to three aspects: focusing on prevention policies, fostering the One Health Approach and promoting the development of new antimicrobials.

Foster the One Health Approach and involve civil society stakeholders

AMR can only be addressed through a multi-disciplinary approach, integrating human and animal health as well as environmental perspectives. EU and national decision-makers must therefore adopt a true 'One Health' approach in their actions to tackle AMR, requiring better coordination between Member State Ministries, Commission Directorates, EU agencies and European Parliament Committees.

Pharmaceuticals can enter the environment at all stages of their life cycle. Discharge of antimicrobial compounds from human and veterinary medicines into the environment can be a driver for the development of antimicrobial resistant organisms. This is why HOPE is calling for the integration of active pharmaceutical ingredients (APIs) into EU environmental regulations, as suggested in the [EU Strategic Approach to Pharmaceuticals in the Environment](#).

While HOPE supports the perspective put forward in the EU Commission 2017 One Health Approach to tackle AMR, we call for:

- A better integration of civil society into EU discussions, and especially a formal involvement in the Commission's EU AMR One Health Network. Civil Society participation is crucial to ensure the full and effective implementation of the One Health principles.
- A dedicated funding mechanism to support Member States to implement their AMR National Action Plan (NAPs) with a focus on promoting the One Health Approach. Indeed, Member States committed to adopting a NAP on AMR by mid-2017, yet a number of NAPs are currently under development but lack political endorsement or funding. Others do not reflect a One Health approach to tackle AMR and address AMR in separate policy fields.
- EU Member States should also be encouraged to establish One Health bodies to develop and implement their National Action Plans with the involvement of civil society stakeholders in their country.

Put prevention at the core of Antimicrobial Resistance policies

Most courses of antibiotics are consumed in the community (outside hospitals and other healthcare facilities), and therefore it is essential to raise public awareness to reduce misuse of antibiotics and self-medication. Misuse of antibiotics include the use of antibiotics for the wrong reason (against colds

and flu caused by viruses for example) and the incorrect use of antibiotics (when people shorten the duration of treatment, lower the doses, don't comply with the right frequency for example). This phenomenon, associated to an overuse and misuse of antimicrobial medicines in agriculture and the veterinary field, is the main cause of AMR⁴. Campaigns such as the European Antibiotic Awareness Day (EAAD) coordinated by the European Centre for Disease Prevention and Control (ECDC) should be supported with sufficient resources.

Although, antibiotic use in hospitals and other health and social care facilities is also an important driver of the emergence of multidrug-resistant bacteria responsible for healthcare-associated infections.

One significant driver for the selection of multidrug-resistant bacteria responsible for healthcare-associated infections in hospitalised patients is the extensive use of antibiotics (selective pressure), including the use of specific, mostly reserve or last-line antibiotics in hospitals. Patients receiving antibiotics are more likely to become colonised with multidrug-resistant bacteria and therefore are at greater risk of developing subsequent infections with these bacteria than patients who do not receive antibiotics.⁵

HOPE calls for concrete action in several areas:

- Supporting staff through the development of guidelines and training and promoting the responsible use of antibiotics through antibiotic stewardship programmes built on evidence-based recommendations,
- Strengthening the surveillance systems that monitor AMR, antibiotic use and healthcare associated infections, which allow early detection of resistance and effective interventions,
- Combating and preventing infections through a range of interventions like hand hygiene and the use of quality indicators to assess performance,
- Promoting awareness and knowledge-raising among health and social care professionals and the general public,
- Contributing to the implementation of interventions across all health and social sectors by establishing networks including hospitals, ambulatory care, nursing homes, laboratories and public health institutions,
- Supporting research and development, by increasing basic research and epidemiological research as well as developing treatment alternatives and rapid diagnostic tools.
- Allocating public funding to the promotion of research on vaccines to tackle the issue upstream and prevent bacterial infections.

⁴ <https://www.ecdc.europa.eu/en/antimicrobial-resistance/facts/factsheets/general-public>

⁵ Summary of the latest data on antibiotic consumption in the European Union, ESAC-Net surveillance data, November 2017, https://ecdc.europa.eu/sites/portal/files/documents/Final_2017_EAAD_ESAC-Net_Summaryedited%20-%20FINALwith%20erratum.pdf

Promote the development of new antimicrobials

Two 2019 WHO reports ([Antibacterial agents in clinical development – an analysis of the antibacterial clinical development pipeline](#) and [Antibacterial agents in preclinical development](#)) reveal that there are not enough new antibiotics developed by pharmaceutical companies. They show that research and development for antibiotics is primarily driven by small- or medium-sized enterprises.

HOPE calls for the EU to take concrete actions to promote the development of and access to new antimicrobials, especially against multi-resistant organisms. This would require the promotion of new incentive mechanisms all along the development chain. This would support European production and strengthen Europe's global independence regarding innovative medicines.

A higher public investment in Research and Development (R&D) is essential to reverse the trend. It should be aligned with the WHO priority pathogens list⁶ that should be regularly reviewed and updated by competent experts from WHO. This would ensure that R&D is focused on the most urgent needs to tackle AMR effectively.

HOPE, the European Hospital and Healthcare Federation, is a European non-profit organisation, created in 1966. HOPE represents national public and private hospitals associations and hospitals owners either federations of local and regional authorities or national health services. Today, HOPE is made up of 36 organisations coming from the 27 Member States of the European Union, as well as from the United Kingdom, Switzerland and Serbia as observer members. HOPE mission is to promote improvements in the health of citizens throughout Europe, high standard of hospital care and to foster efficiency with humanity in the organisation and operation of hospital and healthcare services.

⁶ <https://www.who.int/news-room/detail/27-02-2017-who-publishes-list-of-bacteria-for-which-new-antibiotics-are-urgently-needed>