

# The role of community pharmacists in the fight against antimicrobial resistance

## Antimicrobial resistance

AMR occurs when bacteria, viruses, fungi, and parasites change over time and no longer respond to medicines, making infections harder to treat, increasing the risk of disease spread, severe illness and death.

The emerging increase of microbes that are resistant to antimicrobial treatments has become a global public health concern that threatens the effective treatment of infectious diseases:

In 2019: estimated **4.95 million deaths** (1.27 million deaths directly attributable to resistance to medicines).

Every year 35,000 EU/EEA citizens die from infections with antibiotic resistant bacteria, with an annual cost of over **€1.5 billion to EU health systems**.

By 2050: **10 million lives/year + 100 trillion US dollars of economic output** are at risk.



## European community pharmacists' role in tackling antimicrobial resistance (AMR)

Community pharmacists play a key role in infection prevention and promoting antimicrobial stewardship through a range of professional services including:

**Providing patients with high quality information** on the appropriate use of antimicrobials to ensure adherence to treatment.

**Raising awareness** about the correct disposal of antimicrobials.

Having in place **pharmacy-led disposal and collection schemes**.

**Offering pharmacy-based vaccination programs.** Vaccines can contribute to reduce the overall reliance on antimicrobials by preventing infectious diseases.

**Performing rapid diagnostic tests** to detect bacterial infection and minimize the use of antimicrobials only when they are really needed (e.g. France, Italy, Ireland).

# Recommendations for policy makers

## 1. Pharmacy Practice

- **Expand and reward pharmacy services** on referral and rational prescribing, use and disposal of antibiotics.
- **Develop new services and protocols on responsible common ailment management** avoiding unnecessary doctor visits and releasing pressure in emergency rooms.
- **Promote point-of-care testing for screening** of microbial infections in pharmacies.
- **Expand pharmacy-based vaccination services.**
- **Strengthen education and training of pharmacy students** and continuous professional development programs on AMR and infection prevention as part of a One Health approach.
- **Implement, review, and maintain infection prevention and control measures** in the community setting through appropriate training programs for community pharmacists.
- **Ensuring that pharmacy-led disposal and collection schemes, where implemented, are appropriately funded.**

## 2. Prescribing and packaging

- **Streamline and harmonize prescribing and dispensing of antimicrobials** in pack sizes according to the treatment duration.
- **Promote adaptation of practice standards** so that prescriptions for antimicrobial medicines always clearly specify the indication.
- **Promote the responsible and rational use of antimicrobials** through health promotion campaigns in community pharmacies.

## 3. Avoiding and Managing Shortages of Antimicrobial Medicines

- **Introduce measures granting community pharmacists' greater flexibility** in finding appropriate alternatives when a medicine is not available.
- **Guarantee the security of supply for existing antimicrobials**, through timely and adequate supply of antimicrobial medicines, including dynamic stockpiling schemes at national and European level.
- **Combat extra-EU online sales of antimicrobials.**

## 4. Communication

- **Implement the use of electronic health and shared medication records** to increase patient safety and a seamless collaboration between healthcare professionals.
- **Implement electronic prescription** to facilitate collecting data to monitor antimicrobial use.
- **Continue to involve and support community pharmacists in AMR Action Plans** developed at European, national, regional, and local levels.
- **Increase collaboration and communication between pharmacists and other stakeholders** to achieve greater use of community pharmacists in raising awareness for and improving access to vaccination.

## 5. Innovation

- **Construct new business/incentive models** which could stimulate the development of new antibiotics, through push and pull incentives, public-private partnerships, enabling funding for start-up research companies and appropriate scale-up.

For more information: <https://www.pgeu.eu/antimicrobial-resistance-amr/>