Why pay attention to antimicrobial resistance (AMR)?

Antimicrobial agents, such as antibiotics, are essential to treat some human and animal infectious diseases. AMR occurs when microorganisms change so that they are no longer affected by antimicrobial drugs used to treat them. There are different types of antimicrobials, which work against different types of microorganisms, such as antibacterials or antibiotics against bacteria, antivirals against viruses, and antifungals against fungi. Antimicrobials are often used incorrectly. The development of resistance is accelerated by the inappropriate use of these drugs, for example, using antibiotics (which help to treat bacteria) for viral infections like flu, or as a growth promoter in agriculture.

Because of growing resistance, the world is running out of effective antibiotics to treat infectious diseases. Unless appropriate action is taken, decades of progress in health and medicine risk being undone.

In May 2015, the World Health Assembly (WHA) endorsed a global action plan on AMR and urged all WHO Member States to develop national action plans (NAPs). The Seventy-third session of the WHO Regional Committee for Europe launched the new European roadmap on AMR (2023–2030) to help accelerate the implementation of national strategies on AMR.

Why pay attention to infection prevention and control (IPC)?

IPC is a practical, evidence-based approach to prevent avoidable infections in health-care settings, including those caused by AMR pathogens. Health-care-associated infections (HAIs) are among the most frequent adverse events occurring in the context of health service delivery. No one should get an HAI while receiving or providing health care. However, no country can claim to be free of HAI. On average, 1 in every 10 patients is affected by HAI. They are an ongoing problem and are particularly worrisome within the context of AMR, as antibiotic-resistant HAI can more than double the likelihood of death.

Strengthening IPC programmes and best practices, and ensuring access to safe water, sanitation and hygiene (WASH) in all settings providing health care, can achieve a significant reduction in the rates of HAI. This cost-effective, quality-of-care approach is essential to all health-care settings, irrespective of the level of resources.

Without effective IPC measures in place, it is impossible to improve the quality and safety of health-care delivery, and to prevent the spread of AMR. Strengthening IPC and WASH capacities are one of the five objectives of WHO’s Global Action Plan on AMR. Countries across the world are working towards the implementation of the Global Strategy on IPC approved at the Seventy-sixth WHA in 2019 and the resolution on WASH in health-care facilities, approved at WHA in 2019.

How can both areas benefit from each other?

In health-care settings, the combination of IPC — including hand hygiene at the right times, effective WASH, and antimicrobial stewardship programmes — is a powerful approach to combating AMR. IPC programmes are proven to reduce the spread of avoidable infections, thereby reducing morbidity and mortality from these infections, and ultimately saving lives, reducing health-care costs, and mitigating strains on health-care systems. An infection prevented is an antimicrobial treatment avoided.

What are WHO European Region’s priorities regarding AMR and IPC?

WHO European Region is supporting countries to implement the minimum requirements of the core components of IPC programmes through a tailored, country-focused approach, which includes:

- **supporting IPC programmes at regional, national, and facility levels** to assess their level of implementation and help countries take the journey to develop and maintain IPC guidelines;
- **guiding national IPC programmes to deliver IPC training to the health workforce** as one of its core functions, thus building skills and competence in support of the health workforce agenda;
- **developing national HAI surveillance strategies** and supporting countries to undertake point prevalence surveys;
- **communicating the need for a clean and/or hygienic, well-equipped environment** that prevents and controls HAI, as well as AMR, at every level where health care is provided, and includes all the necessary WASH infrastructure and services; and
- **supporting Member States to execute NAPs in line with the global IPC strategy** approved at the WHA 76.

WHO European Region is also supporting countries to monitor and/or prevent AMR through various means, including the following.

- **The CAESAR (Central Asian and European surveillance of antimicrobial resistance)** network strengthens national AMR surveillance and improves diagnostic capacity.
- **Development of materials to assist national actors in using a Tailoring antimicrobial resistance programmes (TAP)** approach to tackle AMR. TAP identifies the determinants of AMR and IPC-related behaviours with relevant target groups and uses findings to develop appropriate interventions.
- **World AMR Awareness Week (18–24 November annually)** encourages best practices among the public, health workers and policy-makers to avoid the further emergence and spread of AMR, including raising awareness about how to prevent the spread of avoidable infections and the importance of IPC practices.
- **Antimicrobial stewardship (AMS) interventions aimed at promoting the optimal use of antibiotic agents.**
The WHO core components of IPC are the foundation for establishing and strengthening effective IPC programmes at national and facility levels. They are intended to support the development and adaptation of national protocols for IPC and AMR action plans, and to support health-care facilities in adopting their own approaches to IPC. In compliance with the core capacities under the international health regulations (IHR 2005), Member States are required to report on the implementation of their IPC programmes at national and facility levels.

Over one quarter of Member States in the WHO European Region still have limited or no IPC programmes. Support to countries in the Region has led, for example, to the development of NAPs and increased IPC capacities in Azerbaijan, Georgia, North Macedonia, Kazakhstan, and Ukraine. These encouraging country examples have shown that implementing the core components of IPC is not only cost-effective, but also possible regardless of the level of resources available. With the core components in place, health-care facilities will have the essential structures and capacity to detect, contain and prevent the spread of infections. Most importantly this best buy approach will ensure patient safety, control AMR and save lives.

The WHO European Region guides countries to develop and implement Antimicrobial Stewardship Programmes (ASPs) which promote the optimal use of antimicrobial agents and ensure that infections experienced by patients are identified, laboratory-confirmed and properly treated. To help countries achieve their antimicrobial stewardship goals, the WHO European Region has developed the following:

- A massive, open, online course on “Antimicrobial stewardship: a competency-based approach”. It is free and accessible on OpenWHO in multiple languages (openwho.org).
- “Antimicrobial stewardship interventions: a practical guide” describing ten commonly used stewardship interventions, which promote the optimal use of antimicrobials at health-care facilities.

Since 2009, every 5 May, World Hand Hygiene Day continues to raise awareness about the importance of hand hygiene in health care and bring people together in support of hand hygiene improvement globally. Hand hygiene monitoring with feedback, as one part of improvement, is recommended as a key performance indicator at the national level. The WHO European Region has called on decision-makers, hospital managers and health-care workers to enable and adopt effective hand hygiene at the point of care.

The fight against AMR requires commitment. Show this commitment by giving this important issue the high priority it deserves, by implementing IPC programmes and best practice measures!