



World Health Organization

Eastern Mediterranean Region



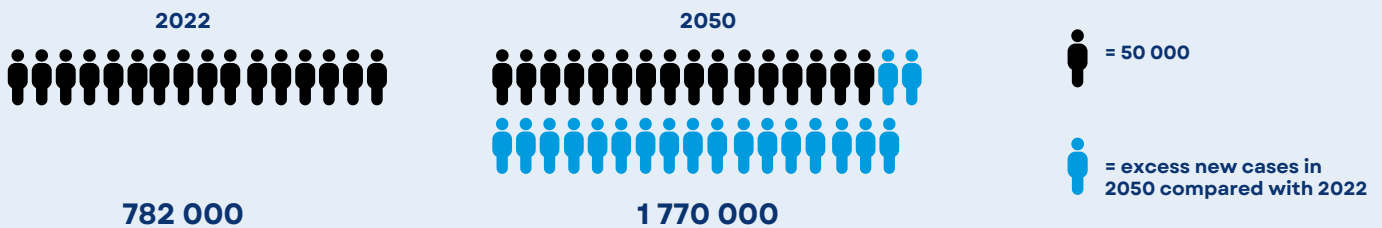
ANTIMICROBIAL RESISTANCE AND CANCER CARE

Cancer remains a leading cause of morbidity and mortality in the Eastern Mediterranean Region, with **781 574 new adult and 36 000 child and adolescent cases, and 485 347 adult and 16 000 child and adolescent deaths in 2022.**

Cases and deaths are increasing alarmingly in the Region due to the high prevalence of risk factors for adults, such as physical inactivity, unhealthy diet, obesity and smoking.

Estimated number of new cases from 2022 to 2050, both sexes, age 0–85+

All cancers, WHO Eastern Mediterranean Region



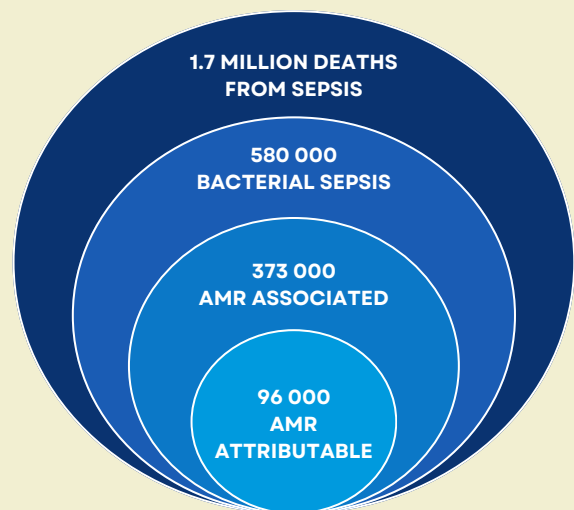
ANTIMICROBIAL RESISTANCE (AMR) DIRECTLY IMPACTS THE SAFETY AND EFFICACY OF CANCER TREATMENTS AND THEIR OUTCOMES

Cancer patients are at high risk of developing resistant infections because they spend a lot of time in hospital and often need antibiotics. Without these, procedures such as surgery and bone marrow transplants are more likely to result in severe infections, increasing the risk of death threefold.

DRUG RESISTANCE IS INCREASING IN THE WHO EASTERN MEDITERRANEAN REGION

In 2021, there were **1.7 million deaths** from sepsis in the Eastern Mediterranean Region. Of these **373 000 were associated with bacterial AMR.**

The Eastern Mediterranean Region consumes more antibiotics than any other WHO region. In 2018, the Eastern Mediterranean Region consumed antibiotics at a higher rate per capita (21.8 defined daily doses per 1000 inhabitants per day) than the global average (14.3) and than any other WHO region. Consumption is greatest in high-income countries, while middle-income countries reported the greatest increase in consumption between 2000 and 2018.



Burden of sepsis and bacterial AMR in the Eastern Mediterranean Region, 2021

Source: Based on data from: GBD 2021 Antimicrobial Resistance Collaborators. Global burden of bacterial antimicrobial resistance 1990–2021: a systematic analysis with forecasts to 2050. Lancet. 2024 Sep 28;404(10459):1199–226.

MEASURES TO REDUCE THE RISK OF AMR IN CANCER CARE



LIMITED ACCESS TO MEDICINES

AMR results in high health care costs from increased hospital admissions, longer stays, more intensive care and expensive therapies. These costs directly impact government budgets, insurance systems and patients' out-of-pocket expenses.

Restricting access to antibiotics through higher pricing is ineffective in combating overuse and, in cancer patients' case, may limit access for those in need. Higher prices for newer Watch and Reserve antibiotics are already a barrier to effective treatment for cancer patients with resistant infections and lead to repeated use of a limited pool of antibiotics, increasing AMR.

Low investment in AMR programmes undermines the research and development of new antibiotics globally and limits the availability of newer, potentially lifesaving, antibiotics.



JUDICIAL USE OF ANTIBIOTICS

Cancer treatment facilities and palliative home care should follow antibiotic use and infection treatment guidelines, including on antibiograms, antibiotic stewardship, prescriber training, educating patients and caregivers about AMR, ensuring quality microbiology laboratory facilities for timely culture and sensitivity results, and antibiotic use, availability and quality monitoring.



INFECTION PREVENTION

Infection prevention measures can reduce the need for antibiotics and the emergence and spread of infections, including hospital-acquired and resistant bacterial infections. These include proper hand hygiene, barrier protection, provision of quality water, sanitation and general hygiene measures, prevention of overcrowding and timely screening of patients for potential infections and colonization in cancer wards, ICUs and clinics.

CANCER AND AMR PROGRAMMES WORKING TOGETHER FOR BETTER OUTCOMES

- **Joint development of normative guidelines**, ensuring evidence-based cancer protocols that ensure adequate management of infections.
- **National cancer planning that considers best practices in infection prevention and control, and in prevention of AMR**, including by engaging with different departments and units within ministries of health and with civil society organizations and academia.
- **Implementation of joint training programmes for health care professionals** on appropriate antibiotic use and infection prevention in cancer treatment facilities and palliative care settings.
- **Coordinated advocacy campaigns** that highlight the linkages between AMR and cancer care to raise public awareness and influence policy, involving nongovernmental organizations and patient advocacy groups.
- **Joint resource mobilization** for research and programmes that address the dual challenges of AMR and cancer.
- **Robust monitoring and evaluation frameworks** that track the effectiveness of integrated strategies, incorporating infection prevention and control indicators and targets in cancer care plans.
- **Regular assessment and reporting** on the outcomes of joint AMR and cancer initiatives to inform policy adjustments and continuous improvement.

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