5. Why does the EBRD engage on AMR?

The Bank supports the economies in which it operates in attaining the SDGs through investment projects, technical cooperation and policy dialogue. The Bank identifies AMR as an obstacle to national achievement of the SDGs, as well as an environmental and sustainability risk to its investments. Where appropriate, it also explores proactive opportunities to prevent AMR and its proliferation. The EBRD's transition impact, a key principle governing its operations, incorporates AMR risk management as an important part of its impact mandate under the "well governed" quality of a sustainable market economy in healthcare and livestock production (see Section 6 for more on the transition impact of AMR).

Furthermore, the Bank is investing in the healthcare services, hospital infrastructure, pharmaceutical, agribusiness and water sectors. Projects in these sectors come up against AMR risks and opportunities where effective entry points can be identified under a One Health approach. All of the EBRD's investee economies have developed national action plans (NAPs) on AMR. However, they face the common challenges of insufficient institutional capacity, funding and prioritisation. The Bank, therefore, has a unique opportunity to make a difference on AMR through a private sector-focused approach, complementing the approach of other international organisations, who mainly have a mandate to work with governments and grants.

Many of the economies in which the EBRD works are significantly affected by AMR. While data are scarce in low-income countries, with microbiology laboratory capacity limited or entirely lacking, sub-Saharan Africa, into which the Bank is expanding, is estimated to be one of the regions most severely affected by AMR (see Figure 3). The number of children under five dying from drug-resistant infections is on the decline globally, including in sub-Saharan Africa.[37] Children in sub-Saharan Africa, however, are still 58 times more likely to die from AMR than children in high-income countries.[38]

It is estimated that 133,000 deaths were directly attributable to bacterial AMR in the WHO European region in 2019, with a further 541,000 deaths associated with AMR. (This is one of the seven Global Burden of Disease regions and includes all of the EBRD's central and eastern European, Central Asian and Baltic economies, Georgia, Azerbaijan, Armenia, Türkiye, Cyprus and Greece.)[39] The high levels of resistance of several significant bacterial pathogens, together with the high mortality rates associated with infections due to these pathogens, demonstrate that AMR is a serious threat to public health in the WHO European region.[40] Here, a notable resistance gradient emerges, with a clear pattern from north to south and west to east. The northern and western regions predominantly show lower resistance rates, while the eastern and southern regions tend to show higher rates.[41] This indicates that the regions in which the EBRD operates have a higher burden of AMR.

[37] See GBD 2021 Antimicrobial Resistance Collaborators (2024).
[38] See McDonnell and Klemperer (2022).
[39] See European Antimicrobial Resistance Collaborators (2022).
[40] See McDonnell and Klemperer (2022).
[41] See ECDC and WHO European Region (2023).

Case study: the impact of conflict

Conflicts and wars in the regions where the EBRD operates deprive people of access to clean water, nutrition, hygiene, energy, housing and medical services, such as child vaccination and maternity care, among other things. Attacks on healthcare workers in conflict areas worsen conditions even further.[42] The provision of healthcare services, with access to essential medicines such as antibiotics, a good standard of infection prevention and control (IPC), and robust AMS, has become difficult. Serious war-related injuries and diseases exacerbate the situation. While reliable data on infections following war wounds in the current conflict in Ukraine are unavailable, the prevalence of war wounds and AMR have been studied over the past two decades (together with conflict-driven environmental contamination by heavy metals from expended munitions, which may co-select for both metal and antibiotic resistance).[43] Since March 2022, the European Centre for Disease Prevention and Control (ECDC) has advised that the treatment of traumatic wounds in Ukraine may be made more challenging by multidrug-resistant bacteria.[44]

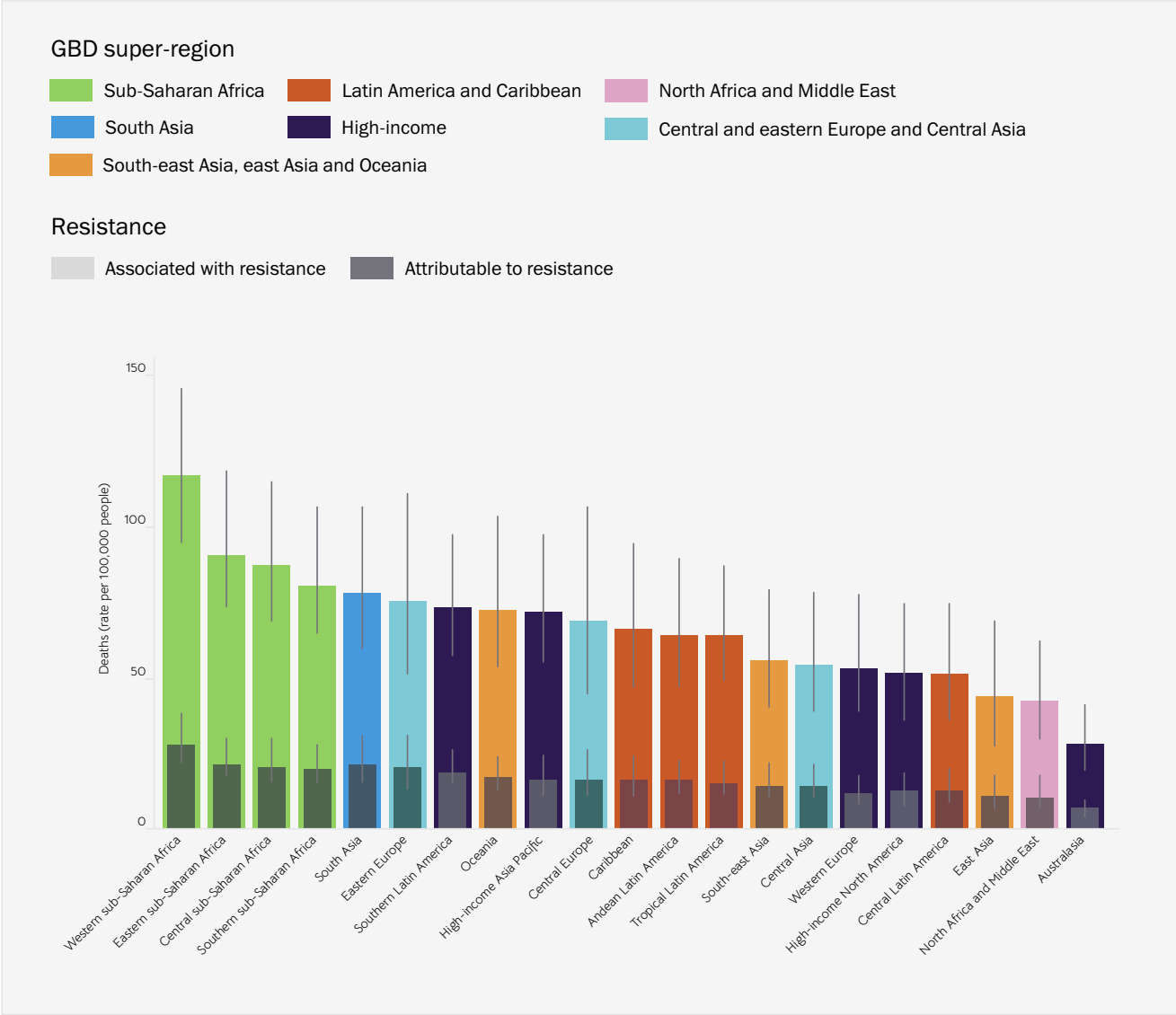
In June 2022, screening for multidrug-resistant, Gram-negative bacteria – the world's most significant public health problem due to their high resistance to antibiotics[45] – was carried out in 103 Ukrainian patients admitted to University Hospital Frankfurt, Germany. It found 34 multidrug-resistant, Gram-negative isolates in 17 (17 per cent) of the 103 patients.

Ukraine's devastated infrastructure and disrupted essential services, compounded by war injuries, are creating the conditions for increased incidence of AMR.[46] A recent molecular analysis of Gram-negative bacterial isolates from injured Ukrainian service members identified multiple resistance genes, including genes capable of conferring resistance to cefiderocol, a recently licensed antibiotic for use on carbapenem-resistant bacteria, which is not officially available in Ukraine.[47] War-related infections and AMR could have a drastic impact on the health of people inside and outside the country, creating a vast reservoir of multidrug-resistant, Gram-negative infections in Ukraine and Russia, with the potential for further spread.[48] A similarly devastating situation in Gaza is creating a high risk of AMR occurrence among the population and beyond.[49]

Experts recommend the following in Ukraine: strong IPC and AMS leadership, strict adherence to basic precautions and the development of standardised, context-specific guidelines along the entire patient care pathway; adequate diagnostics; and robust cooperation between emergency medical care providers, such as host-country workers, the United Nations, the WHO, allied military personnel and people from conflict areas on hospital admissions in other countries, with adequate explanation to patients.[50]

[42] See Safeguarding Health in Conflict (2024).
[43] See Fayad et al. (2023).
[44] See Petrosillo, Petersen and Antoniak (2023).
[45] See Olivera and Reygaert (2024).
[46] See Schultze et al. (2023).
[47] See Stepanskyi et al. (2024).
[48] See Loban et al. (2023).
[49] See Moussally et al. (2023).
[50] See Pallett et al. (2023).

Figure 3. Rates of death attributable to and associated with bacterial AMR by Global Burden of Disease region (2019)



Source: Antimicrobial Resistance Collaborators (2022).