

A One Health Perspective to AMR

One Health and AMR | Background Paper | [Download PDF](#)

Antimicrobial resistance (AMR), dubbed [the silent pandemic](#), is a major public- and animal health problem that complicates the treatment of infections and is associated with increased morbidity and mortality. An estimated 700,000 deaths globally were attributable to infections caused by antibiotic-resistant organisms, and this is expected to reach 10 million per year by 2050.¹ In the United States, AMR results in more than two million infections each year and is associated with approximately 23,000 deaths. In Europe, the European Centre for Disease Prevention and Control reported that almost two million people in the European Union (EU)/European Economic Area (EEA) are infected with antibiotic-resistant bacteria every year, leading to approximately 30,000 annual deaths.^{2,3} The emergence and spread of resistant and multidrug-resistant (MDR) bacteria also have enormous implications for worldwide healthcare delivery and population health.¹

Currently, most of the approaches to tackle AMR are focused on reducing the consumption of antibiotics. However, in this [background paper](#), we discuss the importance of taking a One Health approach to AMR and why it is so necessary to better understand all of its drivers, including biological, agricultural, environmental and societal spheres.

As this paper makes clear, reducing antibiotic consumption alone will not be sufficient to control its spread.

[Download the paper here](#) (PDF).

1. Allcock S, Young EH, Holmes M, Gurdasani D, Dougan G, Sandhu MS, et al. Antimicrobial resistance in human populations: Challenges and opportunities. Vol. 2, Global Health, Epidemiology and Genomics. Cambridge University Press; 2017.

2. Samreen, Ahmad I, Malak HA, Abulreesh HH. Environmental antimicrobial resistance and its drivers: a potential threat to public health. Vol. 27, Journal of Global Antimicrobial Resistance. Elsevier Ltd; 2021. p. 101-11.

3. European Centre for Disease Prevention and Control., World Health Organization. Antimicrobial resistance surveillance in Europe: 2022: 2020 data. 136 p.