

# Why Pfizer is taking a stand against antimicrobial resistance

## What you need to know

Antimicrobial medicines, especially antibiotics that target bacteria, are among the most precious medical resources the world has ever known.<sup>1</sup> Alarming, they are losing their effectiveness, because pathogens change and find ways to resist the effects of antibiotics. The pathogens survive, grow and spread their resistance.<sup>2</sup> This process of adaptation leads to antimicrobial resistance (AMR).<sup>2</sup>

## Why you should care

Antimicrobial resistance, particularly in Gram-negative bacteria, is widely recognized as one of the biggest threats to global health today, with the potential to affect anyone, of any age, in any country.<sup>3,4,5</sup> If no solution is found, the impact could be devastating.<sup>2</sup>

Serious infections such as pneumonia or tuberculosis could become **impossible to treat**.<sup>2,6</sup>

Many routine medical procedures could be **too risky to perform** because of the risk of becoming infected while in hospital by a multi-drug resistant pathogen<sup>1</sup>

**One in four** infections in long-term acute care settings are caused by antibiotic resistant bacteria<sup>7</sup>

Minor infections and injuries could become life-threatening<sup>2</sup>

Travel could be considered too risky, **impacting global trade**<sup>1</sup>

By 2050, it is reported that annual global GDP could fall by **3.8%** and an additional **28.3 million people** could fall into extreme poverty<sup>8</sup>

Could lead to an estimated **10 million annual deaths** by 2050<sup>1</sup>

## How Pfizer is making a difference

Pfizer has one of the industry's largest and most diverse portfolios of antimicrobials and is proud to be taking a lead in the fight to tackle AMR.<sup>9</sup> We are deeply committed to working closely with the infectious disease community to address AMR,<sup>10</sup> through:<sup>9</sup>



**Active stewardship:** to ensure patients receive the correct antibiotic, according to independent guidelines, only if needed and for the right duration<sup>11</sup>



**Innovative surveillance tools:** to help physicians better understand current resistance patterns



**Global policy leadership:** to facilitate antibiotic development and proper use



**Diverse portfolio:** medicines and vaccines to treat and help prevent serious infections around the world



**Manufacturing:** responsible practices that do not harm human health or the environment

**References:** **1.** Review on Antimicrobial Resistance. Tackling a crisis for the health and wealth of nations. December 2014. Available at: [https://amr-review.org/sites/default/files/AMR%20Review%20Paper%20-%20Tackling%20a%20crisis%20for%20the%20health%20and%20wealth%20of%20nations\\_1.pdf](https://amr-review.org/sites/default/files/AMR%20Review%20Paper%20-%20Tackling%20a%20crisis%20for%20the%20health%20and%20wealth%20of%20nations_1.pdf) Last accessed August 2019. **2.** Review on Antimicrobial Resistance. Tackling drug-resistant infections globally: final report and recommendations. May 2016. Available at: [https://amr-review.org/sites/default/files/160525\\_Final%20paper\\_with%20cover.pdf](https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf) Last accessed August 2019. **3.** World Health Organization. WHO's first global report on antibiotic resistance reveals serious, worldwide threat to public health. April 30 2014. Available at: <http://www.who.int/mediacentre/news/releases/2014/amr-report/en/> Last accessed August 2019. **4.** World Health Organization. Antibiotic resistance. October 2017. Available at: <http://www.who.int/me-diacentre/factsheets/antibiotic-resistance/en/> Last accessed August 2019. **5.** Vasoo S et al. Emerging issues in gram-negative bacterial resistance: an update for the practicing clinician. Mayo Clinic Proc. 2015;90:395-403. **6.** Sarda C, Fazal F, Rello J. Management of ventilator-associated pneumonia (VAP) caused by resistant gram-negative bacteria: which is the best strategy to treat? Expert Rev Respir Med. 2019 Aug;13(8):787-798. **7.** Centers for Disease Control and Prevention. Making health care safer: protect patients from antibiotic resistance. March 03 2016. Available at: <https://www.cdc.gov/vitalsigns/pdf/2016-03-vitalsigns.pdf> Last accessed August 2019. **8.** The World Bank. By 2050, drug-resistant infections could cause global economic damage on par with 2008 financial crisis. September 20 2016. Available at: <http://www.worldbank.org/en/news/press-release/2016/09/18/by-2050-drug-resistant-infections-could-cause-global-economic-damage-on-par-with-2008-financial-crisis> Last accessed August 2019. **9.** Pfizer Annual Review 2018. Available at: [https://www.pfizer.com/files/investors/financial\\_reports/annual\\_reports/2018/assets/pdf/pfizer-2018-annual-review.pdf](https://www.pfizer.com/files/investors/financial_reports/annual_reports/2018/assets/pdf/pfizer-2018-annual-review.pdf) Last accessed August 2019. **10.** Pfizer Policy position in antimicrobial resistance (AMR) August 2017. Available at: <https://www.pfizer.com/files/about/Policy-Position-on-Antimicrobial-Resistance-8-17-17.pdf> Last accessed August 2019. **11.** Davey P, Marwick CA, Scott CL, et al. Interventions to improve antibiotic prescribing practices for hospital inpatients. Cochrane Database Syst Rev. 2017;2:Cd003543.