

# RESISTANCE TO ANTIBIOTICS

*We are all at risk of infections  
We can all help to reduce bacterial resistance*

1. Antibiotics are drugs used to **treat infections caused by bacteria**. They are not effective on infections caused by viruses.
2. Only use antibiotics **if prescribed by your doctor and, if possible, after a culture test and antibiogram**. Never share your antibiotic treatment with friends or relatives because prescriptions are specifically for one person and one particular problem.
3. **Always respect the dose and duration of the antibiotics** as indicated by your doctor. Even if you feel better, you must never cut short the prescribed treatment.
4. **Taking antibiotics when there is no real need** can lead the bacteria to change to protect itself from the antibiotic. This increases the phenomenon of antibiotic resistance.
5. **It is the bacterium, not the person, that becomes resistant.**
6. **Anyone can be hit by an antibiotic-resistant infection.**
7. **The spread of resistant bacteria has a far-reaching impact on population health.**<sup>1</sup>
  - Antimicrobial resistance increases the severity and duration of infections.<sup>2,3</sup>
  - We will have longer periods of infectivity, with a possible increase in the spread of the infection by resistant strains among the population in and outside hospitals.<sup>4,5,6</sup>
  - It will prevent treatments, such as long and complex surgical procedures, especially in immunocompromised patients, the elderly, organ transplants, antineoplastic chemotherapy and the use of invasive instruments.
  - In developing countries, there is little control over the availability and use of antibiotics. This has led to a high level of resistance, above all to older antibiotics, and to the spread of resistant bacteria through tourism.<sup>5</sup>

<sup>1</sup> WHO, Antimicrobial resistance, Global Report on Surveillance, 2014; IX.

<sup>2</sup> Swartz MN. Use of antimicrobial agents and drug resistance. N Engl J Med 1997;337:491-2.

<sup>3</sup> Cohen ML. Epidemiology of drug resistance: implications for a post-antimicrobial era. Science 1992;257:1050-5.

<sup>4</sup> Weekly epidemiological record 1997;72:333-40, WHO Geneva

<sup>5</sup> Cohen ML. Epidemiology of drug resistance: implications for a post-antimicrobial era. Science 1992;257:1050-5

<sup>6</sup> Shanahan PMA et al. The global impact of antibiotic-resistant bacteria: their sources and reservoirs. Rev Med Microbiol 1994;5:174-82