

## **Carbapenemases – antibiotic-resistant bacteria with ESBL enzymes and/or carbapenemases**

People encounter many different types of microbes (bacteria, viruses, fungi) on a daily basis. Some microbes are beneficial to humans, while others are harmful because they cause a wide range of infections and infectious diseases. For some infectious diseases, we have effective medicines, for others we do not. Recently, treating bacterial infections has become an increasing problem due to the increasing resistance of bacteria to antibiotics.

Bacteria can be resistant because they secrete different enzymes that break down antibiotics. This makes antibiotics ineffective. Enzymes have different names and abbreviations (e.g. ESBL, carbapenemases, abbreviations such as OXA-48, NDM-1 and others).