

## ANTIBIOTIC RESISTANCE

## QUESTIONS & ANSWERS



#### 1. WHAT CAUSES INFECTIONS?

Infections can be caused by many kinds of microbes or germs, such as bacteria, viruses, parasites and fungi. Even though they cannot be seen, these microbes are all around us.

#### 2. WHAT ARE ANTIBIOTICS?

Antibiotics are medications that work against bacteria by either killing them or stopping them from multiplying. Antibiotics are used not only for treating infections but in a few cases, also for preventing infections in people undergoing chemotherapy or having surgery.

Antibiotics are only effective in treating bacterial infections, **not** viral infections. Before taking antibiotics, talk to your healthcare professional about whether your illness is caused by bacteria or another microbe.

#### 3. WHAT IS ANTIBIOTIC RESISTANCE?

Antibiotic resistance occurs when bacteria change so that the antibiotics used to treat the bacteria become less effective and sometimes do not work at all. Resistance is a defence mechanism of bacteria that allows them to live and multiply, even when an antibiotic is present. If you have an infection that is caused by resistant bacteria, antibiotics that cured a previous infection may not work, as the bacteria can now **resist** the treatment.

### 4. WHAT CAUSES ANTIBIOTIC RESISTANCE?

Antibiotic resistance can happen naturally, but a major contributor is the overuse and misuse of antibiotics in both humans and animals. This includes using antibiotics when they are not needed, not taking antibiotics as prescribed, self-medicating and antibiotic sharing.

#### 5. WHY SHOULD I BE CONCERNED?

We rely on antibiotics to cure many bacterial infections. Before antibiotics were discovered in 1928, many bacterial infections could not be treated and were often fatal.

Resistant infections are more difficult to treat, and can lead to long-term illness, increased healthcare costs, the need for surgery to remove infected tissue and even death. To add to the problem, not enough new antibiotics are being developed so when an antibiotic no longer works, there are few alternatives.

"ANTIBIOTICS ARE ONLY EFFECTIVE IN TREATING BACTERIAL INFECTIONS, NOT VIRAL INFECTIONS..."

#### 6. WHO IS MOST AT RISK?

Anyone can get an antibiotic-resistant infection. However, young children, the elderly (particularly those in hospital or long-term care settings), people with weakened immune systems, and others who are more susceptible to infection are most at risk of experiencing the negative consequences of resistant infections.

# 7. HOW CAN I PROTECT MY FAMILY FROM THE RISKS OF ANTIBIOTIC RESISTANCE?

Avoid getting an infection or spreading an infection to someone else.

- Keep your hands clean. If your hands are visibly soiled, use plain soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Keep your hands away from your eyes, nose and mouth because this is where germs can get into the body.
- Cough or sneeze into your sleeve or tissue instead of your hand.
- If you vomit or have diarrhea, clean your washroom thoroughly, avoid handling food, and clean your hands.
- Keep your vaccinations **up to date**.
- Store, handle and prepare food safely to avoid food-related illness.
- Practice **safer sex** to avoid sexually transmitted infections.

Remember that just because you are sick, it does not mean you need antibiotics. If you are prescribed antibiotics, use them as directed.

- Even if you start feeling better or no longer have symptoms, take your antibiotics as prescribed.
- If you experience a bad reaction or side effects, contact your healthcare professional. If you are told to stop taking the antibiotics, don't store unused medicine or flush it down the toilet. Return any unused medication to the pharmacy.
- Do not share your antibiotics with anyone, take antibiotics from someone else or use leftover antibiotics from previous prescriptions.



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