Antimicrobial resistance (AMR) occurs when microbes - bacteria, viruses, fungi and parasites - accumulate changes over time and no longer respond to treatments designed to kill them, such as antibiotics, antivirals and antimalarials.

Theses ‘superbugs’ are increasingly difficult to treat and has become ‘one of the biggest threats in global health, food security and development today,’ according to the World Health Organisation.

What Is Antimicrobial Resistance?

- Antimicrobial resistance (AMR) occurs when microbes - bacteria, viruses, fungi and parasites - accumulate changes over time and no longer respond to treatments designed to kill them, such as antibiotics, antivirals and antimalarials.
- Theses ‘superbugs’ are increasingly difficult to treat and has become ‘one of the biggest threats in global health, food security and development today,’ according to the World Health Organisation.

Why Is This Important?

- AT LEAST 1 in 5 antibiotics prescribed within UK primary care may be inappropriate.
- Vulnerable patients may be at high risk during surgery, such as caesarean sections, without effective antimicrobials to prevent or treat surgical infections.
- Long-term conditions (e.g. diabetes) and certain drugs can weaken the immune system and increase the risk of infections. This is dangerous if there are no antibiotics to minimise these risks.
- Sepsis is caused by the body’s over-reactive response to an infection. Without appropriate antimicrobial treatment, sepsis can lead to organ failure and even death.
- 30 million women had a caesarean section in 2017.
- 422 million people have diabetes worldwide.
- 1.7 million adults develop sepsis every year.

What Causes Antimicrobial Resistance?

- Over-prescribing antimicrobials
- Poor infection control in hospitals and clinics
- Lack of access to clean water, sanitation and hygiene
- Unnecessary use of antimicrobials in livestock
- Patients not finishing the full antimicrobial treatment course
- Shortage of new antimicrobial developments

Why Is It A Global Challenge?

- 700 thousand people worldwide die each year from drug-resistance infections.
- $100 trillion economic cost of AMR from lost global production by 2050.
- 10 million estimated global deaths of AMR each year by 2050.

How Can You Prevent It?

- Wash your hands to prevent spreading germs and avoid close contact with sick people.
- Use antimicrobials appropriately by completing the full prescription course recommended by your doctor, even if you feel better.
- Keep your vaccinations up-to-date to prevent resistant infections in the first place.
- Ask questions to your healthcare provider about your risks for certain infections so you can take better care.

References:
- Vulnerable patients may be at high risk during surgery, such as caesarean sections, without effective antimicrobials to prevent or treat surgical infections.
- Long-term conditions (e.g. diabetes) and certain drugs can weaken the immune system and increase the risk of infections. This is dangerous if there are no antibiotics to minimise these risks.
- Sepsis is caused by the body’s over-reactive response to an infection. Without appropriate antimicrobial treatment, sepsis can lead to organ failure and even death.
- 30 million women had a caesarean section in 2017.
- 422 million people have diabetes worldwide.
- 1.7 million adults develop sepsis every year.
- 700 thousand people worldwide die each year from drug-resistance infections.
- $100 trillion economic cost of AMR from lost global production by 2050.
- 10 million estimated global deaths of AMR each year by 2050.

How Can You Prevent It?

- Wash your hands to prevent spreading germs and avoid close contact with sick people.
- Use antimicrobials appropriately by completing the full prescription course recommended by your doctor, even if you feel better.
- Keep your vaccinations up-to-date to prevent resistant infections in the first place.
- Ask questions to your healthcare provider about your risks for certain infections so you can take better care.