

Infection prevention and control

Reducing antimicrobial resistance

Information for patients and visitors

What are antimicrobials?

Antimicrobials are a group of medicines used to treat infections. Infections are caused by microorganisms, which include bacteria, viruses, fungi and parasites

Antimicrobials include:

- antibiotics – target bacterial infections
- antivirals – target viral infections
- antifungals – target fungal infections
- antiparasitics – target parasitic infections

Most antimicrobials are taken by mouth. Some might be put on the skin, for example, a cream. Others can be given via an infusion into the vein.

What is antimicrobial resistance?

Antimicrobial resistance happens when the microorganisms which cause disease are no longer affected by antimicrobial medicines that we use to kill them, prevent and treat the disease. So, an antibiotic may stop affecting a bacterium, for example.

Over the years, microorganisms have emerged that are resistant to more than one antimicrobial. These are called 'multi-resistant organisms' or 'superbugs'.

Can antimicrobial resistance spread?

Microorganisms can multiply very quickly. Once a resistant strain develops this strain will multiply rapidly too.

Microorganisms, including resistant bacteria, can spread in several ways. They can spread:

- between direct contact with a person with the infection
- through contaminated surfaces and food
- from animals

In a hospital this is most often via hands and sometimes healthcare equipment, such as blood pressure machines and heart monitors.

Antimicrobial resistance is a particular problem in hospitals and places like nursing and residential home. This is because there are many vulnerable people, often with lower immunity against infections. In these settings, treatment with antimicrobials is often necessary, encouraging resistant bacteria to emerge.

How serious is antimicrobial resistance?

Not many replacement antimicrobials are being developed. There are even fewer which target specific super-resistant bacterium, virus, or other microorganisms.

As resistance continues to increase, more people will suffer for longer as infections become more difficult to treat. This will result in longer hospital stays, routine surgical procedures becoming more dangerous to perform, and higher death rates.

The biggest worry is that new strains of bacteria may emerge that cannot be treated by any existing antibiotics.

Can we prevent antimicrobial resistance?

As we cannot stop using antibiotics altogether, some antimicrobial resistance is bound to happen. However, we can slow down its development and contain its spread by using antibiotics carefully.

What you can do:

- if you've been prescribed antibiotics, follow your doctor's advice on how to take them and for how long. Do not stop taking them before you've come to the end of the course, as this may make it easier for the resistant bacteria to take over
- never take anyone else's antibiotics and never share yours
- do not take antibiotics without a doctor's prescription

What we do:

- **we educate doctors, nurses and patients about when it is right to use antibiotics.** Most simple coughs, colds, sore throats and influenza are caused by viruses, and antibiotics do not help to fight viral infections.
- we have an antibiotic policy for all doctors to follow. We monitor antibiotic prescribing and administration against the Trust policy. We report findings to clinical teams on a regular basis

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- good infection prevention and control (IPC) practice helps stop antibiotic resistance from spreading from one patient to another. This includes hand hygiene. Please see the ‘Your role in reducing the risk of infection’ booklet for more details

Further information

Please speak to your doctor or nurse in the first instance if you have any questions or concerns about antibiotic resistance or other aspects of your treatment.

For IPC information, please contact the IPC team on **020 3312 6201**.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary’s Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk