

Antimicrobial Resistance (AMR)

What is Antimicrobial Resistance?

Antibiotics are medicines used to prevent and treat bacterial infections in humans, animals, and plants. Bacteria are a type of microbe that cause infections and can develop resistance to these medicines, making them harder to treat. Widespread misuse and overuse of antibiotics and other antimicrobials, from the food industry to the doctor's surgery and the hospital bedside, has led to the global spread of drug-resistant bacteria known as antimicrobial resistance (AMR).

Without action, we are heading for a post-antimicrobial era, where a common infection or routine surgical procedure could become life threatening. It is possible to control the spread of antimicrobial resistance, but medical breakthroughs alone will not be the solution to this invisible health crisis.

Science must work hand-in-hand with the public to deliver meaningful change to ensure antimicrobials continue to work for our families and future generations.

Act Now: Protect Our Present, Secure Our Future



Prevent the spread of infection

By taking small steps every day to help prevent the spread of infection, you protect yourself and those around you by reducing the need for antibiotics.

- Practice good hand, food and personal hygiene (see [Resources and further reading](#)).
- Ensure vaccines are up to date – we all need to make sure that we take care of ourselves, our families and our animals.
- Cover all cuts and abrasions with a waterproof dressing until healed.
- Do not spread disease. Cover your nose and mouth when coughing and sneezing, and avoid going into work when your symptoms are contagious. If your children are displaying signs of an infection, do not take them to school. If you are sexually active, practice safe sex.



Consider if you really need antibiotics

For infections like coughs, sore throats and ear infections, which our bodies are good at fighting off on their own, antibiotics may not be needed. **Many of these infections, and others like colds and flu, are caused by viruses and cannot be treated with antibiotics.**

- Talk to a healthcare professional about treating non-serious infections rather than rushing to get antibiotics.
- Consider whether the potential side effects of using antibiotics, such as diarrhoea, nausea and potential allergic reactions, are worth the improvement their use will bring.
- Seek medical advice before deciding to get antibiotics.



Use antibiotics appropriately

If you do need antibiotics, ensure you acquire, use and dispose of them in the correct way.

- Ensure your antibiotics are genuine by getting them from a healthcare professional. Do not buy antibiotics overseas or from dubious online companies.
- Take them exactly as instructed and never save them for later or share them with others.
- Never dispose of antibiotics by flushing them down the toilet or putting them in the domestic rubbish. Take them to your pharmacy where they will be disposed of safely.



Spread the word

Plenty of people are still not awake to the threat of AMR. Make friends, family and work colleagues aware.

- Parents, caregivers, educators, and community leaders can promote positive behavioural change amongst children. (See Resources and further reading).
- Consider doing something at work or within your community to mark World Antimicrobial Awareness Week each November.



Switch up your shopping

Antibiotics and antifungals are often used in intensive food and livestock production.

- If you are able, consider buying organic or free-range meat, or becoming vegetarian.
- Buy organic produce if you can; organic production prioritises natural methods to control pests and does not allow animal or human waste containing antimicrobials to be used as fertiliser.

Resources and further reading

- **World AMR Awareness Week:** www.who.int/campaigns/world-amr-awareness-week
- **Make a pledge to keep antibiotics working:** <https://antibioticguardian.com>
- **Hygiene basics:** www.cdc.gov/hygiene/about/index.html
- **Hand-washing advice:** www.nhs.uk/live-well/best-way-to-wash-your-hands
- **Food hygiene:** <https://www.food.gov.uk/consumer-advice/food-hygiene>
- **Information for educators:** www.e-bug.eu/teachers
- **Lesson plans for school activities:** imperial.ac.uk/global-health-innovation/what-we-do/lesson-plans-for-school-activities

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