

Key messages for the general public: Self-medication with antibiotics

Antibiotic-resistant bacteria are a danger to us all because they cause infections that are difficult to treat.

If we take antibiotics repeatedly and improperly, we contribute to the increase in antibiotic-resistant bacteria, one of the world's most pressing health problems [1-6].

So if at some point in time you, your children or other family members need antibiotics, they may no longer work [7].

Self-medication with antibiotics is not a responsible use of antibiotics [8].

Self-medication is when you take (or want to take) antibiotics without first consulting a medical doctor by:

- using leftover antibiotics from previous treatments; or,
- getting antibiotics at the pharmacy without a prescription.

Note: With the word "antibiotics", ECDC means antibacterial agents or antibacterials.

1. Antibiotics can only be prescribed by a medical doctor who has examined you

Many winter illnesses can cause the same symptoms, but they might not require the same treatment. If you have been prescribed an antibiotic for a previous illness and have recovered well, it is tempting to want to use the same antibiotic if you have similar symptoms. However, only a medical doctor who has examined you can ascertain if a winter illness requires treatment with antibiotics.

- Never try to buy antibiotics without a prescription.
- Never save antibiotics for later use.
- Never use leftover antibiotics from previous treatments.
- Never share leftover antibiotics with other people.

Do not keep leftover antibiotic treatments [8]. If you received more antibiotic doses (e.g. tablets, gel caps) than you were prescribed, ask your pharmacist about how to dispose of the remaining doses.

2. Antibiotics are not painkillers and cannot cure every illness

Antibiotics do not work like painkillers and cannot relieve headaches, aches, pains or fevers.

- Antibiotics are only effective against bacterial infections and cannot help you recover from infections caused by viruses such as the common cold or the flu [9–12, 14].
- Up to 80% of winter illnesses affecting your nose, ears, throat and lungs are of viral origin, so taking antibiotics will not make you feel better [11, 12].

3. Taking antibiotics for wrong reasons, such as against colds and flu, will not help you feel better faster, and may cause side-effects

Taking antibiotics against a cold or the flu has no benefit for you: antibiotics simply do not work against viral infections [9-12]. In addition, antibiotics may cause several unpleasant side effects such as diarrhoea, nausea or skin rashes [9, 10, 13-15].

Taking antibiotics to fight mild bacterial infections, such as rhinosinusitis, sore throats, bronchitis or earaches, is often unnecessary [15-19] since, in most cases, your own immune system is able to deal with such mild infections.

Most symptoms can be alleviated with over-the-counter medicines. Taking antibiotics will not reduce the severity of your symptoms and will not help you feel better faster [10, 12, 15, 17].

If your symptoms persist or if you have any concern, it is important that you see your doctor. If you really have a severe infection such as *bacterial* pneumonia, your doctor will prescribe antibiotics. Seek help more quickly than other people :

- if you are over 65 years old;
- if you have asthma or diabetes;
- if you have lung disease (e.g. chronic bronchitis, emphysema, chronic obstructive pulmonary disease);
- if you have heart problems (e.g. previous heart attack, angina, chronic heart failure);
- if you have a medical problem where your immune system is suppressed; or
- if you are taking drugs that suppress the immune system (e.g. steroids, chemotherapy for cancer, some drugs used to suppress thyroid gland functions).

List adapted from 'Genomics to combat resistance against antibiotics in community-acquired LRTI in Europe', a project funded by the European Commission's Directorate-General for Research and Innovation.

4. Take the time to get better

Meeting life's demands while being ill can be a source of stress, especially if you are experiencing certain symptoms for the first time. Finding an appropriate time to visit the doctor can be difficult, expensive and time-consuming. Knowing how to manage your symptoms can help you cope better with your illness. Learn how you can take care of yourself without antibiotics.

For most winter illnesses, your condition will improve after two weeks.

Indicative duration of symptoms for common winter illnesses in adults

Ear infection	up to 4 days
Sore throat	up to 1 week
Common cold	up to 1 ½ weeks
Flu	up to 2 weeks
Runny or congested nose	up to 1 ½ weeks
Sinus infection	up to 2 ½ weeks
Cough (which often happens after a cold)	up to 3 weeks

Table adapted from 'Get better without antibiotics', Health Service Executive Ireland, and 'Patients antibiotic information leaflet', Royal College of General Practitioners. If your symptoms persist or if you have any concern, it is important that you consult your doctor.

5. Ask your pharmacist for advice: other medicines can help relieve your symptoms

Your pharmacist may recommend over-the-counter medicines to help alleviate your symptoms.

Always ask for advice, especially if you are taking medicines for any other condition.

- Painkillers relieve aches, pains and fevers.
- Anti-inflammatory medicines, such as throat sprays or pastilles, help you swallow more easily.
- Oral expectorants clear secretions in your airways.

- Nasal sprays and decongestants help you breathe more comfortably.
- Antihistamines alleviate stuffy, sneezy and itchy noses.

Drinking plenty of fluids and getting some rest will help improve any winter illness.

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