



Healthcare
Improvement
Scotland

SAPG
Safeguarding
antibiotics

Antibiotics – an information leaflet for staff in care homes and community hospitals

What is this leaflet about?

This leaflet explains how we can make sure that antibiotics are used safely and effectively in frail older people in community settings.

SOME GENERAL INFORMATION ABOUT USING ANTIBIOTICS

What are antibiotics?

Antibiotics are important medicines used to treat infections caused by bacteria. Bacteria can adapt and find ways to survive the effects of an antibiotic. They become 'antibiotic resistant' so that the antibiotic is no longer effective at treating infections. The more often we use an antibiotic, the more likely it is that bacteria will become resistant to it and infections will be difficult to treat.

How can antibiotic resistance be avoided?

By using antibiotics less often we can slow down the development of resistance. It's not possible to stop it completely, but slowing it down stops resistance spreading and buys some time to develop new types of antibiotics.

What can we do about antibiotic resistance?

By only using antibiotics when it's appropriate to do so. We now know that most coughs and colds get better just as quickly without antibiotics. We also know that antibiotics do not help in COVID-19. It is important, if an antibiotic has been prescribed, that all the doses are taken to complete the course in order to get rid of the bacteria completely. If the course is not completed or if some doses are missed, some bacteria may remain and they can develop resistance.

Should urine samples or ulcer swabs be routinely sent to the laboratory?

No, not routinely. Bacteria are often present in urine samples and on ulcers or wound swabs but this does not mean there is an infection or that an antibiotic is required. It is important these tests are only performed when there are *symptoms* or *signs* of infection (e.g. new urinary symptoms such as pain on passing urine or increase in frequency of urination, new redness and pain around an ulcer or discharge of pus from a wound). Unnecessary antibiotics for bacteria found without these symptoms risks side-effects and antibiotic resistance.

So when should antibiotics be used?

Doctors and other healthcare professionals will only prescribe antibiotics when required to treat a bacterial infection, for example, kidney infection, pneumonia or cellulitis (a serious skin infection). By not using them unnecessarily, they are more likely to work when we need them.

SPECIFIC ADVICE ABOUT USING ANTIBIOTICS IN FRAIL OLDER PEOPLE

How can antibiotics be used safely and effectively in frail older people?

Local antibiotic prescribing guidelines should be available in all healthcare settings to ensure prescribers know the correct antibiotics to use. User-friendly guidance to support diagnosis of infection should also be available in all healthcare settings to help staff to recognise infection, assess how bad the infection is and decide whether samples of blood, urine or skin/wound swabs should be taken for sending to the laboratory. The majority of respiratory infections are self-limiting (will clear up themselves), including those in older people. If a person has green/brown sputum (spit) this may suggest they have an infection that requires antibiotic treatment.

What do doctors and other prescribers need to consider when prescribing antibiotics for frail older people?

- Does the person have an infection or not?
- What kind of infection is it, how severe is it and will the patient benefit from treatment?
- The person's other health conditions and medications and how they may affect treatment decisions.
- Whether the person has an advanced care plan and if it includes antibiotic treatment.

What about using antibiotics in the final days or weeks of life?

For people who are in their final weeks or days of their lives the doctor needs to consider the benefits and risks of antibiotic treatment on an individual basis. Ideally this would be included within an advanced care plan. While it may be appropriate to treat infections with antibiotics in the last few days of life to control symptoms, antibiotics can cause unpleasant side effects like diarrhoea or vomiting so may not be prescribed in some cases. An [information leaflet](#) for patients and families about using antibiotics towards the end of life may be helpful to explain these issues.

How should patients be monitored when they are receiving antibiotic treatment?

When people are unwell due to infection, simple measures such as rest and drinking plenty of fluids are important to help them recover. Health and care staff should monitor for the following signs regularly to check if symptoms are improving; temperature returned to normal, increased energy, being more alert, improved mobility and return to normal appetite.

Regular monitoring can also help healthcare professionals identify any side effects; for example, nausea (feeling sick), vomiting, diarrhoea and skin rash.

If a patient does not respond to antibiotic treatment after 48 hours, or experiences side effects, this should be highlighted to healthcare staff who will contact the patient's doctor for advice.

Urinary tract infections are common in frail older people, particularly in women. How should antibiotics be used to treat them?

Older people often have bacteria present in their urine but usually this is harmless and does not mean they have an infection. Routine 'dipping' of urine may therefore give misleading results so is not advisable unless symptoms are present.

If a person has symptoms such as fever, pain when passing urine or increased confusion this may suggest a urinary tract infection and healthcare staff should contact a doctor for advice.

Some older people may suffer repeated urinary tract infections (two infections within 6 months or three infections within 12 months) and older women may be given a 3 - 6 month trial of treatment with antibiotics taken every night to prevent further infections. Longer term use of antibiotics to prevent urinary tract infections should be avoided as they may increase the chance of having an infection caused by bacteria which are resistant to antibiotics.