

Sinusitis: Should I take antibiotics?

What is this decision aid for?

- This decision aid is to help you and your doctor decide whether to use antibiotics when **you or your child** has sinusitis (acute rhinosinusitis). This is an infection of the hollow spaces in the bones of your face.
- This can help you to talk and make a **shared decision** with your doctor about what is best for you or your child.



What causes sinusitis?

- It is usually caused by a virus, but sometimes by bacteria. It is often hard for your doctor to tell which it is.
- It is also called 'acute rhinosinusitis'. Acute means it is a short-term infection.

How long do the symptoms last?

- Symptoms (pain in the face, blocked nose, or mucous dripping from the nose) usually get better in **1-2 weeks**, without antibiotics.

What are the treatment options?

There are two options that you can discuss with your doctor:

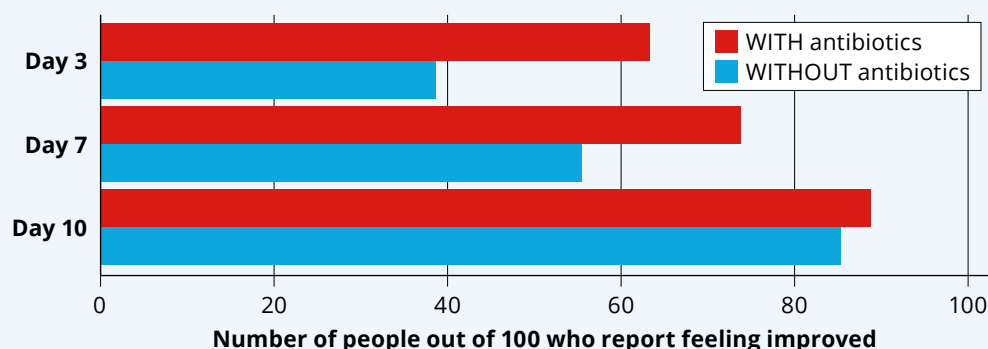
1. Not taking antibiotics.

This means letting the infection get better by itself.

2. Taking antibiotics.

- With either option, symptoms can be treated with over-the-counter medicines – see below for some examples.
- Talk with your doctor about which might be suitable and how much to take.

What are the likely benefits and harms of each option?



In the first few days after seeing the doctor, more people who take antibiotics feel improved compared to those who do not take them.

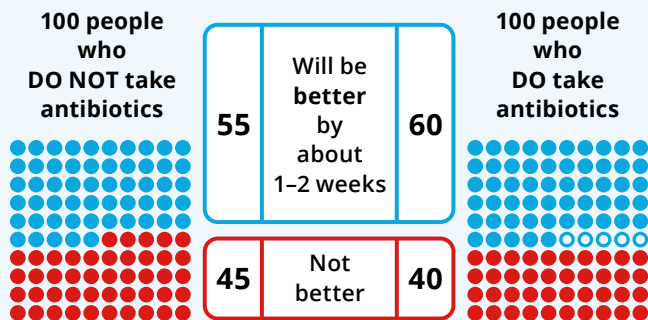
By about 2 weeks, about the same number of people who take antibiotics feel improved as people who do not take them.

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These figures show what happens to people by about 1–2 weeks, in those who **do** take antibiotics and those who **do not**. Each circle is one person. It is not possible to predict whether you will be one of those who is helped or harmed.

Possible benefits

- Gets better by about 1–2 weeks
- Gets better by about 1–2 weeks due to antibiotics
- Not better by 1–2 weeks

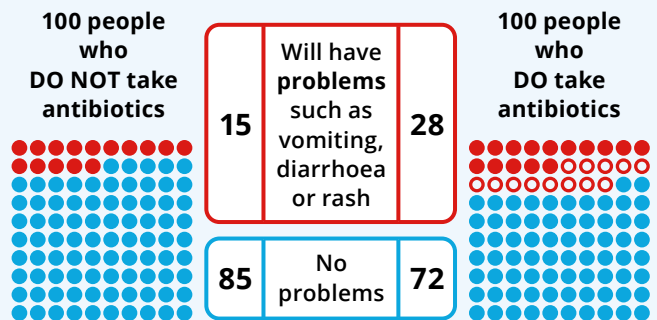


With antibiotics, about **5 more people** will be better by about 1–2 weeks.

Most will be improved by about 2 weeks anyway – with or without antibiotics.

Possible harms

- Has problems (such as vomiting, diarrhoea or rash)
- Has problems, possibly due to antibiotics
- No problems



With antibiotics, about **13 more people** will have problems such as vomiting, diarrhoea or rash.

Other **antibiotic downsides** are:

- The **cost** of buying them
- **Remembering** to take them
- The risk of **antibiotic resistance** (see next page).

Where do these estimates of benefits and harms come from?

- They are from reviews of the medical evidence of the benefits and harms of antibiotics for acute rhinosinusitis. One is a review of eight trials of 1,687 people.¹ The quality of this research evidence about benefits and harms is ranked as high. This means that further research is very unlikely to change these estimates.
- The other is a review of six trials of 781 people.²

Why might antibiotics be used?

There might be a special reason why your doctor may suggest antibiotics, such as in people with very severe illness, nasal obstruction or other diseases.

What is antibiotic resistance?



- Using antibiotics means the bacteria can develop resistance to the antibiotic.
- This means that **antibiotics may not work if you need them in the future** to treat a bacterial infection.
- A person who has recently used antibiotics is more likely to have resistant bacteria in their body.

Are there other things I can do to manage sinusitis?

- Pain and fever are best treated with over-the-counter **paracetamol** or **ibuprofen**. Do not take more than the maximum recommended dose. Read the dose information on the packet.
- Aspirin should NOT be used by children who are younger than 16 years.
- **Saline nasal sprays or rinses** might reduce some symptoms. Do not use in young children.
- **Decongestants** may help if congestion is the main symptom. Do not use for more than five days. Do not use in children under 6 years. For older children, seek advice from your doctor or pharmacist.
- A **nasal steroid spray** might reduce symptoms by a small amount. Seek advice about use from your doctor or pharmacist.

When should you see a doctor and get further help?

If symptoms get worse or do not improve in five days, or any of these signs develop:

- Redness or swelling of the face
- Problems with your vision or bulging eyes
- Severe headache
- Cold or blue hands or feet with a warm body
- A high fever (over 38.5 °C)
- A rash that does not fade when the skin is pressed
- Pain in the arms and/or legs
- Confusion or drowsiness
- Neck stiffness.



Questions to consider when talking with your doctor



- ☐ Do I need antibiotics?
- ☐ What happens if I do not take antibiotics?
- ☐ Do I know enough about the benefits and harms of:
 - taking antibiotics?
 - not taking antibiotics?
- ☐ Am I clear about which benefits and harms matter most to me?
- ☐ Do I have enough information and support to decide?

References

1. Lemiengre M, et al. Antibiotics for acute rhinosinusitis in adults. Cochrane Database Syst Rev. 2018; CD006089
2. Burgstaller J, et al. Antibiotic efficacy in patients with a moderate probability of acute rhinosinusitis: a systematic review. Eur Arch Otorhinolaryngol 2016;273:1067–77.

The information in this decision aid is provided for general information only. It is not intended as medical advice and should not be relied upon as a substitute for consultations with a qualified health professional who can determine your, or your child's, individual medical needs.

Updated December 2023. Update due: December 2027. Developed by Professor Tammy Hoffmann and Professor Chris Del Mar (Institute for Evidence-Based Healthcare, Bond University).