# Sinusitis: should I take antibiotics?

- 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 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 to 2
weeks, without antibiotics.

### What are the treatment options?

There are 2 options that you can discuss with your doctor:

#### Not taking antibiotics

This means letting the infection get better by itself.

**Taking antibiotics** 

#### What are the likely **benefits and harms** of each option?



- With either option, symptoms can be treated with over-the-counter medicines. Some are listed on the next page.
- Talk with your doctor about which might be suitable and how much to take.

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 10 days, about the same number of people who take antibiotics feel improved as people who do not take them.

These figures show what happens to people at about 10 days after seeing the doctor, in those who do take antibiotics and those who do not. Each circle is one person. We can't predict whether you will be one of those who is helped or harmed.

- o better by 10 days
- better by 10 days due to antibiotics
- is not better by 10 days

100 people who		100 people who
<b>don't</b> take antibiotics <b>d</b>		o take antibiotics
0000000000 000000000000000000000000000	86 89 Will be better by 10 days 14 Not better 11	

With antibiotics, **3 more people** will be improved by 10 days after seeing the doctor.

Most will be improved anyway - with or without antibiotics.

- o has problems
- has problems due to antibiotics
- no problems

100 people who <b>don't</b> take antib	viotics <b>d</b>	100 people who o take antibiotics
	1527Will have problems, such as vomiting, diarrhoea or rash85No problems73	

With antibiotics, **12 more people** will have problems like vomiting and diarrhoea. Other antibiotic harms 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 10 trials of 2450 people. The other is a review of 6 trials of 781 people.

#### 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 or other diseases.

#### What is antibiotic resistance?

 Using antibiotics means the bacteria can develop resistance to the antibiotic.



- This means that antibiotics will 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?

- Pain and fever are best treated with overthe-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 5 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 5 days, or any of these signs develop:

- J.
- redness on 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.

#### Questions to consider when talking with your doctor

Q? A.	Do I need antibiotics?
	What happens if I don't take antibiotics?
	Do I know enough about the benefits and harms o
	- taking antibiotics?
	- not taking antibiotics?
	Am L clear about which bon of its and barms matter

#### Am I clear about which benefits and harms matter most to me?

#### References

Lemiengre M et al. Antibiotics for acute rhinosinusitis in adults. Cochrane Database Syst Rev. 2012; CD006089

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.



Prepared Nov 2018. Amended Jun 2021. Update due Nov 2022. Developed by Professor Chris Del Mar and Professor Tammy Hoffmann (Centre for Research in Evidence-Based Practice, Bond University) for Therapeutic Guidelines Limited.