A sinus infection (sinusitis) does not typically need to be treated with antibiotics in order to get better. If you or your child is diagnosed with a sinus infection, your clinician can decide if antibiotics are needed.

**What causes sinus infections?**

Sinus infections occur when fluid is trapped or blocked in the sinuses, allowing germs to grow. Sinus infections are usually (9 out of 10 cases in adults; 5-7 out of 10 cases in children) caused by a virus. They are less commonly (1 out of 10 cases in adults; 3-5 out of 10 cases in children) caused by bacteria.

Other conditions can cause symptoms similar to a sinus infection, including:

- Allergies
- Pollutants (airborne chemicals or irritants)
- Fungal infections

When you have a sinus infection, one or more of your sinuses becomes inflamed and fluid builds up, making it hard to breathe through your nose.

**What are the risk factors of sinus infections?**

Several conditions can increase your risk of getting a sinus infection:

- A previous respiratory tract infection, such as the common cold
- Structural problems within the sinuses
• A weak immune system or taking drugs that weaken the immune system
• Nasal polyps
• Allergies

In children, the following are also risk factors for a sinus infection:
• Going to daycare
• Using a pacifier
• Drinking a bottle while laying down
• Being exposed to secondhand smoke

What are the signs and symptoms?
Common signs and symptoms of a sinus infection include:
• Headache
• Stuffy or runny nose
• Loss of the sense of smell
• Facial pain or pressure
• Postnasal drip (mucus drips down the throat from the nose)
• Sore throat
• Fever
• Coughing
• Fatigue (being tired)
• Bad breath

When should I seek medical care?
See a clinician if you or your child has any of the following:
• Temperature higher than 100.4 °F
• Symptoms that are getting worse or lasting more than 10 days
• Multiple sinus infections in the past year
• Symptoms that are not relieved with over-the-counter medicines

If your child is younger than three months of age and has a fever, call your clinician right away.
You may have chronic sinusitis if your sinus infection lasts more than 8 weeks or if you have more than 4 sinus infections each year. If you are diagnosed with chronic sinusitis, or believe you may have chronic sinusitis, you should visit your clinician for evaluation. Chronic sinusitis can be caused by nasal growths, allergies, or respiratory tract infections (viral, bacterial, or fungal).

What is the diagnosis and treatment?
Your clinician will determine if you or your child has a sinus infection by asking about symptoms and doing a physical examination. Sometimes they will also swab the inside of your nose.

You may need antibiotics if the sinus infection is likely to be caused by bacteria. Antibiotics will not help a sinus infection caused by a virus or an irritation in the air (like secondhand smoke). These infections will almost always get better on their own. Antibiotic treatment in these cases may even cause harm in both children and adults.

If symptoms continue for more than 10 days, schedule a follow-up appointment with your clinician for re-evaluation.

What can I do to relieve my symptoms?
Rest, over-the-counter medicines and other self-care methods may help you or your child feel better. For more information about symptom relief, talk to your clinician, including your pharmacist. Always use over-the-counter products as directed since many over-the-counter products are not recommended for children of certain ages.
How can I prevent a sinus infection?

There are several steps you can take to help prevent a sinus infection, including:

- Practice good hand hygiene
- Keep you and your child up to date with recommended immunizations
- Avoid close contact with people who have colds or other upper respiratory infections
- Avoid smoking and exposure to secondhand smoke
- Use a clean humidifier to moisten the air at home

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Adapted from CDC. Sinus Infection (Sinusitis) Access at: https://www.cdc.gov/antibiotic-use/community/for-patients/common-illnesses/sinus-infection.html

Patient Education by Michigan Medicine is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. Last Revised 11/2017