



Rhinosinusitis (Sinusitis)

Causes: varies depending on the type, most common cause is a viral infection. Defined as symptomatic inflammation of the nasal cavity and paranasal sinuses lasting less than four weeks.

Types:

- Acute- mainly caused by viruses, may be bacterial. Usually resolves on its own in 1 to 2 weeks.
- Chronic (inflammation of the nose and sinus tissues last >12 weeks)- may be idiopathic, or related to allergies, infections, or nasal polyps

Screening questions

Symptoms: pain/pressure in the face and/or head, stuffy nose, drainage from the nose or down the back of the throat (thick white, yellow, or green), reduced sense of smell, ear pain, and tooth pain*Children may experience cough as well.

Question	Yes	No	Action if "Yes"
Is there new or worse swelling, redness, or pain in the face or around the eyes?			To be assessed by physician in clinic immediately or seek immediate medical attention
Experiencing double vision or change to vision?			To be assessed by physician in clinic immediately or seek immediate medical attention
Is there a high fever present (>38.9°C)?			To be assessed by physician in clinic immediately or seek immediate medical attention
Severe headache and stiff neck?			To be assessed by physician in clinic immediately or seek immediate medical attention
Any mental health changes (ie. Feeling confused or less alert)?			To be assessed by physician in clinic immediately or seek immediate medical attention
Is the patient experiencing any of the following; Stuffy or blocked nose, thick white, yellow, or green discharge from the nose, pain in the teeth, pain or pressure in the face?			Symptoms will likely improve with at home treatments within a 10-day period.



History of allergies?			May use prescribed or OTC allergy medications
Have your symptoms lasted longer than 10 days or were they getting better and got worse?			The patient should be assessed by a physician to rule out bacterial rhinosinusitis

Treatment: focuses on symptomatic management as it typically resolves within 7 to 10 days, there are no treatments to shorten the course of the infection.

- Drink lots of fluids
- Breathe warm, moist air. You can use a steamy shower, a hot bath, or a sink filled with hot water. Avoid cold, dry air. Using a humidifier in your home may help.
- Saline irrigation
- Steroid nose spray (ex. Flonase, Nasonex)
- Decongestant Nasal Spray (ex. Claritin, Dristan)- do not use for more than 3 days in a row as it can make congestion worse
- Analgesics/antipyretics (ex. Tylenol, Advil, Naproxen)

Bacterial- will need to be assessed by physician to determine need for antibiotics (usually is amoxicillin or amoxicillin-clavulanate)

- May be managed without antibiotics
- Antibiotics should be started in patients who have been managed with observation who have worsening symptoms or fail to improve within a seven-day period after clinician diagnosis.
- If the patient has been treated and symptoms do not resolve/improve within 5-7 days, patient should be reassessed by physician
- Common problem in children

Chronic- reoccurring episodes of inflammation of the sinuses and lasts >90 days with persistent symptoms of cough, rhinorrhea, nasal obstruction

- Surgery may be needed, should be assessed in clinic for in-depth history

Tips to reduce the likelihood of contracting sinusitis:

- Treat nasal congestion promptly to avoid infection developing in sinuses
- Avoid contact with people who have URTI or colds
- Perform hand hygiene often, especially if you have been in contact with people who have had symptoms
- Avoid smoke whenever possible as it can cause further irritation to mucous membranes (includes; cigarette smoke, environmental smoke)
- Avoid allergy triggers



- Avoid breathing dry air- use a humidifier to increase moisture in the air (cleaning as suggested by manufacturer)

References:

<https://myhealth.alberta.ca/Health/Pages/conditions.aspx?hwid=hw67419>

<https://myhealth.alberta.ca/Health/aftercareinformation/pages/conditions.aspx?hwid=uh2981#abu2414>

https://www.uptodate.com/contents/uncomplicated-acute-sinusitis-and-rhinosinusitis-in-adults-treatment?search=rhinosinusitis&source=search_result&selectedTitle=1%7E150&usage_type=default&display_rank=1

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