# Epistaxis (Nosebleed)

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## FAST FACTS

**75%**
of children experience a nosebleed at least once

**6%**
of parents whose children experience nosebleeds seek medical advice

**0.16%**
of population require hospitalization for nosebleed

**7.5 years**
mean age of children presenting with nosebleed
*(per recent study of ED databases in four states)*

**6.9%**
of children whose nosebleeds required procedures to control epistaxis, 93.5% of which involved simple anterior epistaxis control
*(limited cautery and/or packing) (per recent study of ED databases in four states)*

**If you have clinical questions about patients with nosebleeds, email ENT@cchmc.org.**

**Nosebleed/epistaxis is a common problem occurring in about 60% of people in the United States. Nosebleeds in otherwise healthy children typically are limited bleeds from the anterior nasal septum, caused or aggravated by digital trauma, crusting from nasal inflammation, or nasal foreign bodies.**

## ASSESSMENT

Perform a standard health history and physical exam (HPE) focused on nasal septal blood vessels. Ask questions regarding the onset and duration of the nosebleed and assess with anterior rhinoscopy to establish the location of the bleed.

## HPE RED FLAGS

**Patient History**
- History of bleeding
- Use of anti-coagulant medication
- Use of anti-platelet medication
- Intranasal drug use

**Family History**
- Bleeding
- Hemorrhagic telangiectasia (HHT) syndrome

Consider diagnosis of HHT syndrome if you see nasal and/or mucosal telangiectasias.

Persistent or recurrent nasal bleeding in adolescent males, particularly unilateral nosebleed in the presence of nasal obstruction, may suggest juvenile nasopharyngeal angiofibroma—an uncommon benign but locally invasive vascular tumor.

## MANAGEMENT/TREATMENT

Apply firm, sustained compression to lower third of nose, with or without assistance, for 5+ minutes.

Patient with identified site of bleed—consider topical vasoconstrictor, nasal cautery and/or lubricating agent. When cauterizing, anesthetize bleeding site and cauterize only active/suspected site(s) of bleeding.

When bleeding precludes location of bleeding site despite compression:
- Treat ongoing, active bleeding with nasal packing and referral to ENT
- If you suspect a bleeding disorder, or if patient uses anticoagulation or antiplatelet medications, use resorbable packing
- Educate about type of packing used, timing and plan for removal, post-procedure care, and any signs/symptoms causing need for prompt reassessment

Try first-line treatments (above) prior to transfusion, or reversal/withdrawal of anti-coagulation medications (when bleeding is not life-threatening). Educate on prevention, home treatment and when to seek additional medical care.

## WHEN TO REFER

Refer patients with persistent bleeding not controlled with compression and in need of prompt management to Cincinnati Children's Emergency Department.

Refer patients with recurrent bleeding not controlled by medical treatment to Cincinnati Children's Otolaryngology.

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

Tool developed by Cincinnati Children's physician-hospital organization (known as Tri-State Child Health Services, Inc.) and staff in the James M. Anderson Center for Health Systems Excellence. Developed using expert consensus and informed by Best Evidence Statements, Care Practice Guidelines, and other evidence-based documents as available. For Evidence-Based Care Guidelines and references, see www.cincinnatichildrens.org/evidence.

# Epistaxis (Nosebleed)

## Inclusion Criteria

Patients with bleeding from the nostril, nasal cavity or nasopharynx that is enough to need medical advice/care, including heavy, long-lasting or recurrent bleeding.

**Patient Presents**

## Standard Workup

- Situational History
- Family History
- Physical Exam

## HPE RED FLAGS

**Patient History**
- History of bleeding
- Use of anti-coagulant medication
- Use of anti-platelet medication
- Intranasal drug use

**Family History**
- Bleeding
- Hemorrhagic telangiectasia (HHT) syndrome

If you see nasal and/or mucosal telangiectasias, consider diagnosis of HHT syndrome.

Check for nasal obstruction, especially unilateral obstruction, in adolescent males with persistent or recurrent nasal bleeding, to rule out juvenile nasopharyngeal angiofibroma.

**Any Red Flags?**

**Prompt management required?**

- No → **Active bleeding?**
  - Yes → **Apply nasal compression** → Bleeding controlled?
    - Yes → **Perform anterior rhinoscopy** / **Risk factor assessment**
    - No → **Risk factor assessment** → Consider topical vasoconstrictors, lubricants, and patient eductaion → Decision for nasal packing or nasal cautery
  - No → **Perform anterior rhinoscopy** / **Risk factor assessment**
- Yes → **Emergency Department**

**Perform anterior rhinoscopy** / **Risk factor assessment**
- Resolved → **Patient education**
  - Recurrent → **Refer to ENT Specialist and educate patient**
- Persistent → Consider topical vasoconstrictors, lubricants, and patient eductaion → Decision for nasal packing or nasal cautery

**For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link at 1-888-636-7997.**