

Primary Care Appointment Following an ED/UC Visit

Obtain Pre-exacerbation History

- Determine level of severity and control prior to exacerbation
- Ask about what may have precipitated the exacerbation (triggers/medication non-adherence)
- Did patient have an asthma action plan (AAP)? Was it followed during the exacerbation?

Determine Present Status and Appropriate Treatment

- Exam
- Tobacco exposure
- Determine current severity rating and level of control
- Medication
- Treat co-morbid conditions
- Ensure controller medication is prescribed and being taken and review use of prednisone
- Check medication adherence, device technique, and peak flow
- Vaccinations

Patient Education

- Revise/create Asthma Action Plan, including asthma triggers and other indoor air quality pollutants
- Provide and/or arrange for asthma education, including inhaler instruction
- Address smoking/vaping/e-cigarette cessation

Address Logistical Needs

- Fax/email new Asthma Action Plan to school/daycare
- Refill medications (second prescription for school)
- Prescribe peak flow meter or valved-holding chamber, if needed
- Notes for work/school absences or authorizing return to work/school
- Refer uninsured and under insured families to social worker

Follow-up

- Appointment one to three months
- Schedule asthma education
- Spirometry (after exacerbation resolves)
- Consider referrals as appropriate to
- Asthma specialist
- Public health nurse
- Environmental assessment and modification program

Was there a missed opportunity for managing this patient's asthma?

The following guidelines were reviewed in developing these recommendations: 1997 NHLBI guidelines; 2002 NHLBI guidelines update; GINA (Global Initiative on Asthma) guidelines; ICSI (Institute for Care Systems Innovations); AAAAI Pediatric Asthma: Promoting Best Practice.

4. What tests should I order?

Patient has symptoms in:	Main Allergens in Minnesota	Specific Allergen	Comments
Spring: (late March through Memorial Day)	Trees/Tree pollen	In order: Maple Box Elder Birch (<i>especially in Northern Europeans</i>) Elm Oak	
Summer: (Memorial Day through Labor Day) Peaks in June-mid July	Grass	Timothy Grass Red Top Grass Kentucky Grass June Grass (<i>Bermuda Grass in Southern U.S.</i>)	All grasses cross-react; just pick one to test
Fall: (2 nd week August until frost) Peaks around Labor Day	Weeds	Ragweed	Most patients react to Ragweed, so test for it. Peak prevalence is at age 20.
From snow melt in spring to snow cover in fall/winter	Outdoor Molds	Alternaria (July-October) Cladosporium Helmithasporium	Peak prevalence is at age 5-10. Do not let these kids jump in leaves.
Throughout the year	Dust Mites Animals Indoor Mold	Penicillium Aspergillus Platasporium	See below.

Allergens with symptoms throughout the year:

- **Cats**—Test when there is a history of exposure and worsening symptoms with exposure
- **Other Pets**—In decreasing order of prevalence: dogs, guinea pigs, gerbils, hamsters
- **Dust Mites**—Species *Dermatophagoides farinae* (Df) and *Dermatophagoides pteronyssinus* (Dp)
- **Indoor Molds**—Use history of known exposure

5. What about food allergies?

Food allergies rarely manifest as worsening asthma symptoms with the exception of some acute, severe asthma flare-ups require ICU care and may represent anaphylaxis.

This is an area where the expertise and resources of an allergist are particularly helpful. Patients with a history of a food allergy require appropriate testing and education. This includes prescribing an EpiPen and teaching its use; reviewing food allergy and avoidance measures; educating about foods to avoid (that may contain specific food or its derivatives or cross react); sharing resources about food allergies; and creating a food allergy plan (much like an asthma action plan).

6. When do we need to draw an IgE level?

It is usually not necessary to draw an IgE level. Levels above 100 indicate a patient is very allergic. Other conditions may raise levels as well.

7. Who should be referred for monoclonal antibody treatments?

Presently monoclonal anti-IgE therapy is FDA approved for asthma only. Patients must be >12, have an IgE level between 30 and 700, and have moderate to severe asthma that is not well controlled on appropriate medication and with allergen avoidance. Also, the patient must have skin test or RAST test evidence of a perennial allergy. Monoclonal anti-IgE therapy is not available for food allergies.