2022 Advisory #5:

Spring is Here: Prepare Patients with Asthma for Spring Pollen Season

- Spring pollen season exacerbates asthma and allergic rhinoconjunctivitis in patients allergic to tree pollen.
- Health care providers can help minimize the impact of pollen season by optimizing seasonal allergy treatment, and asthma prevention and treatment, as well as educating patients on how to prepare.
  - Evaluate child and adult patients’ current respiratory symptoms and ensure that patients are on medications appropriate for their asthma severity.
  - Treat patients with seasonal allergies (as needed) in advance of peak pollen activity with appropriate medications, such as oral antihistamines and intranasal corticosteroids.
  - Prescribe inhaled corticosteroids for patients with persistent asthma.
  - Advise patients to check the pollen forecast every morning on their local TV, radio, or online weather report and consider limiting outdoor activities when pollen forecasts are high.
  - Encourage all patients ages 5 and older, particularly those with asthma, to get vaccinated against COVID-19.
- Give parents of school children with asthma a signed Medication Administration Form every year.

April 6th, 2022

Dear Colleagues:

Tree pollens released each spring are an important cause of seasonal allergic illness, including rhinoconjunctivitis and asthma exacerbation, among patients allergic to tree pollen. New York City Department of Health and Mental Hygiene (NYC Health Department) data show that over-the-counter allergy medication sales typically increase in late April to early May, coinciding with peak concentrations of certain tree pollens\(^1,2\) (maple, birch, beech, ash, oak) to which sensitivity is common.\(^3\) Asthma emergency department (ED) visits also
increase in association with tree pollen season in early- to mid-May, particularly among children (see graph).²,⁴

In contrast to previous years, a sharp reduction in asthma ED visits was observed during the 2020 spring pollen season. This coincided with the first peak of COVID-19 in NYC, during which ED visits for conditions unrelated to COVID-19, including asthma, were drastically lower. In 2021, the average daily asthma ED visits were still lower than pre-pandemic levels overall, but the pollen peak in early May was observable at a diminished magnitude.

Because the precise dates and severity of spring pollen allergy season vary year to year and the related increase in ED visits usually occurs during a relatively short time period (two to three weeks), it is important to prepare patients in advance in order to reduce asthma exacerbations and allergy symptoms. Reducing asthma and allergy symptoms will also reduce the need for COVID-19 testing and isolation for patients whose asthma and allergy symptoms are similar to those of COVID-19.

**Providers can help patients with a history of springtime seasonal allergic illness and asthma prepare for pollen season.**

- Use your electronic health record (EHR) reporting functionality to create both asthma- and seasonal allergy-specific order sets and patient outreach lists. Your EHR vendor can help with these functions.
- Follow up with patients who have persistent and/or uncontrolled asthma and seasonal allergies in advance of the spring pollen season and work with patients to make sure that their asthma is under control before pollen season begins. Advise patients which medications can be taken in advance of pollen season.
- Allergy medications, such as oral antihistamines and intranasal corticosteroids, should be started a minimum of several weeks before symptoms begin.
- Teach patients and caregivers when appropriate how to minimize exposure to allergens/irritants.
- At every interaction, assess asthma medication adherence, especially the use of prescribed asthma preventer medications like inhaled corticosteroids.
- Evaluate patients’ current level of asthma control and adjust therapy accordingly. Prescribe inhaled corticosteroids for patients with uncontrolled and/or persistent asthma.
- Develop or update written asthma management plans, emphasizing when to seek immediate medical consultation, when to take the child to the ER, and when to call EMS. Asthma deaths may be associated with ambient aeroallergen overload.
- Advise patients to monitor pollen forecasts and consider limiting outdoor activities on high-pollen days.
- For pediatric patients, use the Childhood Asthma and Environmental Triggers fact sheet to educate families about trigger avoidance.
- Refer patients with persistent asthma who have rodents, cockroaches or visible mold in their home to the Healthy Neighborhoods Program for a free home inspection.

Provide parents/guardians with a completed and signed Medication Administration Form (MAF) every year to submit to their school nurse so school nurses can either administer treatment or monitor students who self-administer medication. The MAF should include a rescue medication, such as albuterol, for all children with asthma. In addition, authorizing administration of inhaled
Corticosteroids in school may be a useful strategy for patients with poorly controlled asthma and adherence problems. The NYC Health Department’s Office of School Health (OSH) provides free albuterol and fluticasone to public schools in NYC that can be administered in school only with a PCP order on signed MAF on file. If you would like to prescribe a different type of inhaled corticosteroid for a patient, the family must provide it to the school nurse along with the signed MAF. If you have questions about school services for children with asthma or any health concern, email OSH@health.nyc.gov.

Encourage all patients ages 5 and older to get vaccinated against COVID-19 (and those ages 12 and older to get a booster when eligible). People with poorly controlled moderate to severe asthma and other chronic lung diseases are at increased risk for severe COVID-19. If you do not offer vaccination, refer patients to vaccinefinder.nyc.gov to find a vaccination site. Vaccine Finder lists the vaccines offered at each site, so remind patients ages 17 and younger and their parents to look for a site offering the Pfizer vaccine for their age group (parental consent is required). People can also call 977-VAX-4NYC (977-829-4692) for assistance.

Counsel all patients and caregivers when appropriate, whether or not vaccinated, to continue to practice COVID-19 prevention measures. The NYC Health Department’s alert level system provides guidance on what precautions should be taken based on current COVID-19 transmission and health care capacity in NYC. Face masks worn to mitigate COVID-19 transmission may also aid in filtering out large pollen particles and should be disposed of or washed more frequently during pollen season.

For more NYC asthma-related data reports, see Asthma and Housing Quality in NYC and Disparities Among Children with Asthma. For community-level data on asthma prevalence, emergency department visits and hospitalizations in NYC, visit the Environment & Health Data Portal.

Thank you,

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References