



2011 Advisory #4

Health Department reminds providers to help patients with asthma be ready for the spring tree pollen season.

April 16, 2012

- Tree pollen released each spring can exacerbate asthma and allergic rhinoconjunctivitis in sensitive patients.
- Health care providers should provide medication and education to patients with asthma and seasonal allergy to prevent exacerbations and symptoms
- Inhaled corticosteroids are the most effective treatment for persistent asthma.

Dear Colleagues:

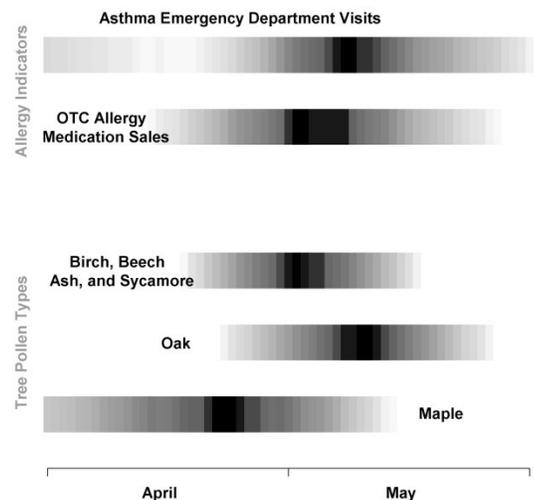
Tree pollens released each spring are an important cause of seasonal allergic illness including rhinoconjunctivitis and asthma exacerbation among sensitive patients. While different types of trees release their pollen throughout the spring season, Health Department syndromic surveillance data shows that in New York City, increases in over-the-counter (OTC) allergy medication sales in New York City typically occurs in late April to early May, coinciding with peak concentrations of certain tree pollens¹ including maple, birch, beech, ash, and oak to which sensitivity is common.² Asthma emergency department (ED) visits are also associated with tree pollen;³ the peak in asthma ED visits typically occurs about one week after the peak in OTC allergy medication sales. Weather and other factors can affect the timing and severity of the spring pollen season and allergic illness; warmer than average temperatures could bring an earlier pollen season.

Providers can help their patients with a history of springtime seasonal allergic illness and asthma prepare to minimize the impact of spring pollen exposure by making sure that their asthma is under control, that they are on the most effective treatment, and that they have written asthma management plans for maintenance medications and for handling exacerbations. Inhaled corticosteroids (ICS) are the most effective treatment for persistent asthma.

Medical providers should:

- Assess asthma control periodically. More frequent assessments are needed when medication is initiated or changed. Ensure that patients with persistent asthma are on inhaled corticosteroids or other controller medication as per the National Asthma Education and Prevention Program guidelines.⁴
- Advise patients who are sensitive to tree pollen to monitor pollen forecasts and consider limiting outdoor activities on days when pollen levels are forecast to be high.
- Review other asthma triggers and develop an individual trigger avoidance plan.

- Note to Pediatricians: Parents of children in NYC public schools and nonpublic schools with school nurses



Average timing of spring peaks in tree pollen, OTC allergy medication sales and asthma ED visits, NYC 2002-9*

* The shading is proportional to average percentage of the maximum of seasonal peaks based on the 2002-2009 data. The width of the darkest shaded band reflects year-to-year variability in the peak dates. The Health Department tallies emergency department visits from 49 NYC hospitals accounting for 95% of annual emergency department visits in NYC. Emergency department visits for the asthma syndrome are defined as any visit with a mention of asthma or wheezing in the chief complaint. The data do not represent all asthma related visits to emergency departments in NYC. The Health Department monitors OTC sales for several pharmacy chains in NYC, but not all OTC sales throughout NYC. Source of pollen data Fordham University, Aero-Allergen Monitoring Station, Armonk, NY.

should be advised to provide school nurses a Medical Administration Form (MAF) signed by their pediatrician so nurses can treat their children and older students can self-administer their medication. The MAF should include a rescue medication for all children with asthma. In addition, authorizing administration of inhaled corticosteroids in school may be a useful strategy for those patients with poorly controlled asthma and adherence problems.⁵

Providers should systematically identify and follow-up with patients who have persistent asthma. An electronic health record system (EHR) can improve adherence to best practice guidelines and can help providers identify patients in need of outreach. The Primary Care Information Project (PCIP) helps providers select and implement an EHR system. Visit <http://nyc.gov/pcip> for more information. For more information about asthma among NYC children and for provider asthma training, call 311.

Thank you,

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References

1. Sheffield PE, Weinberger KR, Ito K, et al. The Association of Tree Pollen Concentration Peaks and Allergy Medication Sales in New York City: 2003–2008. *ISRN Allergy* 2011;2011:1-7.
2. Lin RY, Clauss AE, Bennett ES. Hypersensitivity to common tree pollens in New York City patients. *Allergy Asthma Proc* 2002;23:253-8.
3. Jariwala SP, Kurada S, Moday H, et al. Association between tree pollen counts and asthma ED visits in a high-density urban center. *J Asthma* 2011;48:442-8.
4. National Asthma Education and Prevention Program: Expert panel report III: Guidelines for the diagnosis and management of asthma. Bethesda, MD; 2007.
5. Halterman JS, Szilagyi PG, Fisher SG, et al. Randomized Controlled Trial to Improve Care for Urban Children With Asthma: Results of the School-Based Asthma Therapy Trial. *Archives of pediatrics & adolescent medicine* 2011;165:262-8.