The AMCNO Pollen Line Continues to Provide a Valuable Community Service

The AMCNO Pollen Line service has been in existence for more than 50 years. Our physician members at Allergy/Immunology Associates have been providing the daily pollen counts for this service for many years, and we appreciate the work they continue to do.

This community resource is available each weekday, April 1 through October 1, by calling (216) 520-1050, and by visiting the AMCNO website at www.amcno.org. The daily pollen counts are also posted to the AMCNO's Twitter feed @AMCNOTABLES.

We would like to share more information about the Pollen Line, in case you are not familiar with it, including some exciting news about it as well as an explanation of how the counts are calculated.

Creating Public Awareness

We are pleased to announce that the Pollen Line was recently featured in an article in The Plain Dealer.

The article focuses on ragweed season, which may be moderate to severe and last longer than normal this year, because of rain showers that allowed ragweed plants in the area to thrive and blossom.

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AMCNO member Dr. Robert Hostoffer, an allergist at Allergy/Immunology Associates, was interviewed for the article. “Ragweed season is also likely to last longer than normal, potentially due to climate change,” Dr. Hostoffer said, adding that climate change creates a greenhouse effect, and plants grow better in a greenhouse.

Dr. Lily Pien, an AMCNO member as well and an allergist at the Cleveland Clinic, said she expects to start seeing patients coming into her office complaining of ragweed allergens around Labor Day.

Our members suggested several ways patients can limit their exposure to the allergens, including keeping windows closed and relying on air conditioning as well as using over-the-counter nasal sprays.

To read the full article on Cleveland.com, go to www.cleveland.com/metro/2019/08/ragweed-allergy-season-looking-to-be-longer-worse-than-average.html.

Training the Team

Each year, a one-day pollen course is conducted at Allergy/Immunology Associates to train fellows and interns how to collect pollen samples and then report them to the public. The Academy of Medicine Education Foundation (AMEF) is pleased to fund this training.

During the training session, provided by Nicole Tierney, the fellows and interns learn how to use the Rotorod Sampler, an aerobiology sampling device located near the clinic that collects pollen, mold and other particles on small plastic rods. The rods are brought inside to prepare, mount and stain the rods to see the microscopic pollen and mold more clearly. They also learn how to identify various types of tree, grass and weed pollen and also mold spores. They then record the findings to the AMCNO Pollen Line. Allergy/Immunology Associates archives the results to compare to the past year’s results and prepares an annual report summarizing the season after the season ends.

Collecting and Reporting the Counts

The following detailed explanation of how the counts are collected and reported was prepared by: Jason Schend, DO; Shan Shan Wu, DO; and Neha Sanan, DO; Allergy/Immunology Fellows, University Hospitals, Cleveland Medical Center.

A pollen count or a mold count is based on the measurement of the number of grains or mold spores in a cubic meter of the air. The higher the pollen and/or mold count, the greater the chance that people suffering from allergic rhinoconjunctivitis (allergies/hay fever/rose fever) will experience symptoms when they are outdoors or exposed to outdoor air that is not filtered.

The Allergy/Immunology Associates team uses a device that trapps pollen on small plastic rods that samples the air once an hour. Each morning they take the sample into the lab, stain it, and then examine and count pollen under a microscope. Their office counts tree, grass, weed, and ragweed pollen and also mold spores. The concentrations in the chart above. The levels correspond to different ranges for each of the pollen categories and for fungal spores.

The concentrations in the chart (pollen or spores per cubic meter) were statistics from all certified counting sites. The levels correspond to different ranges for each of the pollen categories and for fungal spores. The concentrations were translated into levels based on the following:

- Low levels are concentrations that are less than the median or 50th percentile (i.e., half the counts were below the median).
- Moderate levels are concentrations that fall between the 50th and 75th percentile. Allergic individuals will likely be symptomatic.
- High levels fall between the 75th and 99th percentile. Allergic individuals will most likely be symptomatic.
- Very high levels are above the 99th percentile (99% of the counts are below this level). Allergic individuals will be very symptomatic and likely experience symptom breakthrough if on allergy medications.

The National Allergy Bureau (NAB) pollen and mold spore levels were developed using the chart above. The concentrations in the chart (pollen or spores per cubic meter) were statistics from all certified counting sites. The levels correspond to different ranges for each of the pollen categories and for fungal spores. The concentrations were translated into levels based on the following:

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The AMCNO is pleased to continue to offer the Pollen Line service to the public, along with our partners at Allergy/Immunology Associates. We encourage you to share this information with your patients who may be suffering from allergies. ■