

Health Watch

Students And Scientists Seek Asthma Triggers In Space

(NAPSA)—Students and teachers in some elementary, middle, and high schools are taking a healthy interest in science and helping NASA scientists, and doctors and researchers from the University of Maryland Medical System better understand the causes of pediatric asthma. The students gather data on the amounts, timing, and kinds of particulates in the atmosphere, known as aerosols, which might help to understand the timing of the incidence of asthma.

“Asthma is one of the most common chronic illnesses that cause children to miss school,” says Carol Blaisdell, M.D., Director of Pediatric Pulmonology and Allergy at the University of Maryland Hospital for Children and Associate Professor of Pediatrics at the University of Maryland School of Medicine.

Data for severe asthma events leading to hospitalization in children appear to occur at much higher rates in the fall than the rest of the year. Scientists are investigating whether this may be triggered by the tiny aerosol particles.

In order to measure aerosols, the students point a handheld instrument, known as a “Sun Photometer,” toward the sun every day. The device determines the concentration and size of particles in the air using light from the electromagnetic spectrum.

“The data will be part of a larger study to identify the environmental triggers of pediatric asthma,” explained Dr. Elissa Levine, lead scientist on the NASA Asthma project, who works



NASA has asked students to search the sky for the aerosols that may affect asthma sufferers.

in the Biospheric Sciences Branch at NASA's Goddard Space Flight Center. “This cooperative effort is not only beneficial to our research, but will also benefit the students. It will enhance their science, math, and technology skills and improve their understanding of their local environment.”

This first city-wide network, in Baltimore, MD, to monitor small-scale changes in the particle quantity is scientifically assisted by a full-scale Sun Photometer at the Maryland Science Center as part of NASA's AERONET (AERosol RObotic NETwork) program.

Brent Holben, an atmospheric scientist at NASA Goddard, leads the AERONET program. “The data the students collect,” he said, “will be used to verify the accuracy of data NASA collects from instruments aboard NASA's Terra satellite.”

You can learn more online at <http://newsmedia.gsfc.nasa.gov/>.