ASTHMA

This bulletin is the second in a series that provides an overview of U.S. Environmental Protection Agency (EPA) program activities and highlights resources designed for health care providers. We invite you to share this information with your colleagues and encourage them to integrate these resources into their standards of care for asthma.

EPA's Asthma Program Can Help Your Asthma Patients

While asthma cannot be cured, it is most effectively controlled with comprehensive care that includes medical and environmental management techniques. The National Institutes of Health (NIH) acknowledge that the indoor environment is an important factor in the growing asthma problem. For successful long-term asthma management, NIH recommends a comprehensive program of assessment and monitoring, medication, patient education, and control of factors that contribute to the severity of asthma.¹ EPA has joined with NIH in the national public health effort to address asthma.

EPA keeps the public and the asthma community aware of the very latest information about indoor and outdoor environmental asthma triggers and simple ways to reduce exposure to these triggers, especially at home. Along with proper medical treatment, effective management of environmental triggers in patients' homes can reduce the number and severity of their asthma episodes.

To learn more about EPA's asthma program, resources, and how to control environmental asthma triggers visit EPA's asthma Web site at www.epa.gov/asthma.

EPA Announces New Awards Program

EPA is announcing a new awards program for health plans and health care providers. The *National Environmental Leadership Award in Asthma Management* will recognize health plans and health care providers who have demonstrated leadership in managing environmental triggers as part of a comprehensive asthma management program. If you have a comprehensive asthma program, we encourage you to consider applying for this award. The deadline is February 15, 2005. For more information, see page 4.

Environmental Triggers

DUST MITES

Triggers: Body parts and droppings.

Where Found: Highest levels found in mattresses and bedding. Also found in carpeting, curtains and draperies, upholstered furniture, and stuffed toys. Dust mites are too small to be seen with the naked eye and are found in almost every home.

PESTS (such as cockroaches and rodents)

Triggers: Cockroaches – Body parts, secretions, and droppings. Rodents – Hair, skin flakes, urine, and saliva.

Where Found: Often found in areas with food and water such as kitchens, bathrooms, and basements.

WARM-BLOODED PETS (such as cats and dogs)

Triggers: Skin flakes, urine, and saliva.

Where Found: Throughout entire house, if allowed inside.

могг

Triggers: Mold and mold spores which may begin growing indoors when they land on damp or wet surfaces. *Where Found:* Often found in areas with excess moisture such as kitchens, bathrooms, and basements. There are many types of mold and they can be found in any climate.

SECONDHAND SMOKE

Trigger: Secondhand smoke – Mixture of smoke from the burning end of a cigarette, pipe or cigar and the smoke exhaled by a smoker.

Where Found: Home or car where smoking is allowed.

NITROGEN DIOXIDE (combustion by-product)

Trigger: Nitrogen dioxide – An odorless gas that can irritate your eyes, nose, and throat and may cause shortness of breath. *Where Found:* Associated with gas cooking appliances, fireplaces, wood stoves, and unvented kerosene and gas space heaters.

OUTDOOR AIR POLLUTION

Triggers: Small particles and ozone that come from things like exhaust from cars and factories, smoke, and road dust. *Where to Look:* Watch for the Air Quality Index (AQI) during the local weather report or visit www.airnow.gov.

¹ National Heart, Lung and Blood Institute, National Asthma Education and Prevention Program. Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma. NIH publication number 97-4051. (www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf)

Asthma Resources and Action Steps

All EPA resources may be downloaded from the EPA Web site and are available at no cost by contacting the Indoor Air Quality Info Clearinghouse (IAQ Info) at 1-800-438-4318 or iaqinfo@aol.com. To view a complete list of resources, visit www.epa.gov/asthma/publications.html.

Play an Asthma Video in Your Waiting Room

Controlando los Factores del Asma, a Spanish language video, describes common environmental asthma triggers found indoors and out. In the video, doctors talk about asthma and its effects on children, and families describe their experience with asthma and identify simple steps they took to manage asthma triggers. To order copies, use publication # EPA 402-V-02-002. An English language version, currently under development, should be available by fall 2005.

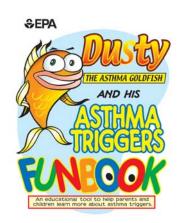
Conduct In-Home Assessments

Incorporate environmental controls into home visit programs with EPA's *Asthma Home Environment Checklist*. This checklist helps home visitors recognize and address common asthma triggers. To download the checklist, visit EPA's asthma Web site (www.epa.gov/asthma/pdfs/home_environment_ checklist.pdf). To order copies, use publication # EPA 402-F-03-030.

Help Your Pediatric Patients Learn About Asthma and Have Fun

Check out Dusty The Asthma Goldfish and His Asthma Triggers Funbook, a great display for patient waiting rooms. The Funbook—available in English or Spanish—includes children's games to teach children and their parents about asthma triggers and how to avoid them.

To download the



Funbook visit EPA's asthma Web site for English (www.epa.gov/asthma/pdfs/dustythegoldfish_en.pdf) or Spanish (www.epa.gov/asthma/pdfs/dustythegoldfish_sp.pdf). You may also order the English Funbook (publication # EPA 402-F-04-008) or the Spanish Funbook (publication # EPA 402-F-04-009) from IAQ info.

Teach Parents and Caregivers to Manage Asthma at Home

Use EPA's brochure, *Help Your Child Gain Control Over Asthma*, to discuss comprehensive asthma care with your patients. This interactive brochure, designed for parents and caregivers with limited reading skills, encourages the use of an asthma action plan and provides simple steps to minimize exposure to environmental triggers. To download this brochure, visit www.epa.gov/asthma/pdfs/ll_asthma_brochure.pdf. To order copies beginning in March 2005, use publication # EPA 402-F-04-021.

Encourage Parents and Caregivers to Smoke Outside Until They Can Quit

Support your patients in taking the smoke-free home pledge today with EPA's brochure, *Protect Your Children: Take the Smoke-Free Home Pledge.* This bilingual resource is designed to teach parents and caregivers about the harmful risks to children



of secondhand smoke. To order copies, use publication # EPA 402-P-04-002.

Answer Your Patients' Questions About How Air Pollution Can Affect Their Asthma

EPA's AIRNow Web site (www.airnow.gov/health-prof) can help you help your patients protect their health by reducing their exposure to air pollution.

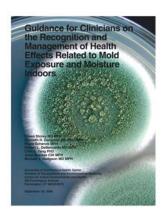
The Web site includes information about the cardiovascular and respiratory health effects associated with outdoor air pollution exposure and educational materials for your patients. It features a medical poster, a downloadable fact sheet on asthma and outdoor air pollution, and a new Web-based training course, *Ozone and Your Patients' Health*.



Learn More About Mold and Its Health Effects

A new publication, Guidance for Clinicians on the Recognition and Management of Health Effects Related to Mold Exposure and Moisture Indoors, was recently published by the Center for Indoor Environments and Health at the University of

Connecticut Health Center, under a grant from EPA. The guide is available at no cost online (http://oehc.uchc.edu/clinser/mold%20guide.pdf). It is designed to help the healthcare provider address patients with illnesses related to mold in the indoor environment by providing a background understanding of how mold may be affecting patients. With an appreciation of the time pressures in the



clinical medical setting today, the book presents tools to help the provider evaluate the patient and help the practitioner explore environmental relationships to illness.

Locate Physician Education Materials on Pediatric Asthma

The Pediatric Asthma Speaker's Kit was recently developed by the American Academy of Pediatrics (AAP) under a cooperative agreement with EPA. The Kit educates primary health care providers about asthma and, in particular, the environmental triggers of asthma. It also provides guidelines on key educational points for patients, and patient handouts. For more information, visit the AAP's Web site at www.aap.org/sections/allergy/pe.cfm.

Be Active During Asthma Awareness Month

Each year, in the month of May, EPA joins international, national, and local Asthma Awareness Month activities to increase public understanding of asthma. Throughout the month, EPA organizes events, conducts media outreach, releases new materials and supports local Asthma Awareness Month efforts. Download an Event Planning Kit (www.epa.gov/asthma/pdfs/asthmakit_09_04.pdf) for ideas and materials to support Asthma Awareness Month activities in your local hospital or clinic or for activities a health insurer or managed care organization can sponsor in the community. To post your event on EPA's Web site, visit http://www.cadmusonline.net/asthmaevents.

Encourage Older Adults and Caregivers to Reduce Exposure to Asthma Triggers

People over 65 have much higher rates of mortality from asthma than any other age group, and more than two million adults age 65 and older are living with asthma. Use EPA's Age Healthier, Breathe Easier fact sheet to inform older patients on how to reduce their risk of triggering asthma and Chronic Obstructive Pulmonary Disease (COPD)-related symptoms. This resource discusses the main indoor and outdoor air hazards and encourages older adults afflicted with COPD and asthma and their caregivers to reduce exposure to these triggers. This fact sheet is available in English, Spanish, Vietnamese, and Chinese. A poster highlighting simple steps older adults can take to reduce the frequency of symptoms has also been disseminated widely to local agencies on aging. The poster is available in English, Spanish, and Chinese with Vietnamese and Russian versions coming soon. To download these materials or to find more information on asthma triggers for older adults, visit http://www.epa.gov/aging/resources/epareports.htm#facts.



For more information about EPA's efforts to protect the environmental health of older persons, visit the Agency's Aging Initiative Web site at http://www.epa.gov/aging/index.htm.

Asthma Research Update

EPA's Office of Research and Development (ORD) has developed an asthma research program. Researchers in EPA labs as well as EPA-funded investigators at universities and other organizations are currently conducting studies to address the "how" and "why" of asthma induction (development of new cases) and exacerbation (worsening of existing asthma) in order to develop better methods of prevention. This section provides you with information on current asthma research program activities. To learn more about ORD's asthma research program, visit www.epa.gov/ord/htm/researchstrategies.htm#rs02.

Relationship Between Mold and Asthma

Stachybotrys chartarum is a black mold that grows on wet wall board. This mold is often associated in the popular press with a variety of adverse health effects. Researchers in ORD's National Health and Environmental Effects Research Laboratory (NHEERL) are conducting studies to understand the relationship of Stachybotrys and asthma. In one series of experiments, scientists exposed mice to samples of Stachybotrys taken from homes and looked for responses typical of allergies and asthma in the study animals. The results showed that the mold can indeed cause a disease similar to allergic asthma, and this suggests that Stachybotrys contamination in homes could pose a risk of developing allergic responses.

Environmental Influences on the Induction and Incidence of Asthma

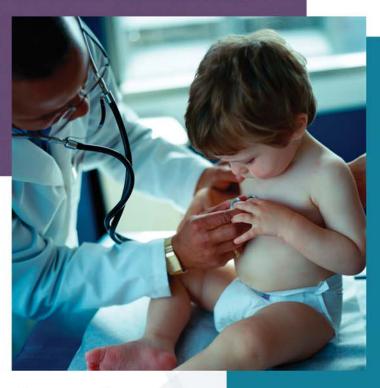
In October 2004, asthma experts from around the world gathered at the EPA facility in Research Triangle Park, North Carolina, to address two questions: 1) What does the science suggest that regulatory and public health agencies could do now to reduce or prevent the induction of new cases of asthma, and 2) What research is needed to improve our understanding of the factors that contribute to the induction of asthma. Conference participants unanimously agreed that maternal smoking and exposure to environmental tobacco smoke during gestation and the first year of life greatly increase the risk of developing asthma. Participants also agreed that while indoor allergens and outdoor air pollutants are known to exacerbate existing asthma, more research is needed to better understand the potential influence of indoor allergens and outdoor air pollutants on the incidence of asthma. There was also a consensus at the meeting that more research is needed to better understand the relationship between obesity and asthma.

To learn more about EPA's asthma program, resources, and how to control environmental asthma triggers visit EPA's asthma Web site at **www.epa.gov/asthma** or contact the Indoor Air Quality Clearinghouse (IAQ Info) at 1-800-438-4318 or iaqinfo@aol.com.

ATTENTION HEALTH PLANS AND HEALTH CARE PROVIDERS

Last Chance to Apply!

CALL FOR ENTRIES



National
Environmental
Leadership
Award in
Asthma
Management

The Awards Program

The U.S. Environmental Protection Agency (EPA) is pleased to announce a new awards program that recognizes leadership in addressing environmental triggers as part of comprehensive asthma care programs. This award will celebrate health plans and health care providers who are offering comprehensive tools to help people with asthma lead healthy, active lives. If you have demonstrated leadership in environmental asthma care, EPA urges you or your organization to apply for an award.

http://www.asthmaawards.info

Are you a health plan or health care provider with a comprehensive asthma care program? EPA encourages you to seek recognition for your important work by applying for the 2005 awards.

Deadline for Applications: February 15, 2005

To learn more about the program and to download an application, visit the National Environmental Leadership Award in Asthma Management's website at http://www.asthmaawards.info. EPA is accepting applications until February 15, 2005.