

# Breathe IN Breathe OUT



# Asthma In Indiana

Fall/Winter 2007

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## *Special Topic*

### **Indiana's 5-Star Child Care Facilities Shine!**

*by Karen Teliha*

What do you get when you ask child care providers, government officials, doctors and parents to come up with an idea on how to recognize exemplary, environmentally-safe child care facilities? In Indiana, you get teamwork. More importantly, you get Indiana's *5-Star Environmental Recognition Program for Child Care Facilities!*

The Indiana Department of Environmental Management (IDEM) believes children deserve a safe place to learn and play. Because about 100,000 Hoosier children attend day-care in more than 4,000 facilities, IDEM devised a way to recognize providers with the highest commitment to environmental safety.

IDEM's voluntary 5-Star program evaluates applicants based on their efforts to reduce childrens' exposure to mercury, asbestos, radon, pesticides, carbon monoxide, lead and PCBs. Applicants must also address issues such as the cleaning and maintenance of their facility, proper employee training, energy efficiency, indoor and outdoor air

quality, vehicle idling, recycling and environmental education.

Examples of how providers earn their "stars" include: checking for lead paint and ensuring children are not exposed to it; performing and submitting documentation of in-house radon testing; and conducting educational programs for parents on environmental issues. Stars have been awarded to over 70 child care facilities — reaching an estimated 1,750 children!

Everyone wins with Indiana's *5-Star Environmental Recognition Program for Child Care Facilities*. Child care providers are recognized for their hard work and can use their "stars" to promote their business; parents can go to work knowing their kids are safe; and most importantly, children learn and play at safer, cleaner places.

Good environmental stewardship starts early. And in Indiana, IDEM believes the earlier the better. Below are some examples of how child care providers have made their environments safer for children by reducing their exposure to lead, asthma triggers and pesticides.

- It can often be costly for a child care facility to determine if lead paint hazards are present. Through the 5-Star program, more than 100 complimentary lead risk assessments have been conducted throughout the state to determine where lead hazards exist. Although the bad news is that lead hazards have been identified at many facilities, the good news is that the facilities were able to implement cost-effective strategies for reducing or eliminating the hazard. Now the facilities can promote a healthy facility to parents and are becoming proactive in educating parents about the dangers lead paint can pose in their own homes.
- At several facilities participating in IDEM's 5-Star program, up to 50 percent of the children have asthma. The 5-Star program encourages child care providers to understand what triggers each child's asthma. Most directors did not realize pets could be an asthma trigger. Education of facility directors has had a "trickle down" effect. One participating facility developed a "pet notice" that is now used by the 5-Star program for facilities to notify parents about pets kept at the facility.
- Most facilities hire contractors to spray for pests. Through outreach to pest control contractors and to child care directors, members of the 5-Star program have eliminated unnecessary pesticide applications at their facilities and reduced children's exposure to chemicals. By using integrated pest management, 5-Star members are effectively controlling pests and reducing asthma triggers. Pest control contractors like the new program too and have begun encouraging their other child care clients to join the 5-Star program and use integrated pest management.

Here are nine steps facilities can take to help ensure an environmentally-safe place for children:

1. **Reduce exposure to MERCURY.** Recycle fluorescent light bulbs and mercury-containing thermometers. Identify and label mercury-containing thermostats or replace them with digital thermostats.

2. **Reduce exposure to ASBESTOS.** Prior to renovating, inspect for asbestos and in some cases, abate asbestos.
3. **Find exposures to RADON.** Perform radon tests.
4. **Reduce exposure to PESTICIDES.** Reduce or eliminate the amount of pesticides used. Use baits when a problem occurs and inspect monthly.
5. **Reduce ASTHMA episodes or attacks.** Keep pets out of classrooms or notify parents when pets with fur are present at the facility. Remediate areas where mold exists (e.g., replace water damaged ceiling tiles, scrub moldy areas such as windowsills, etc.). Perform preventative maintenance such as monitoring dehumidifier pans and refrigerator condensation pans for mold. Clean dirty air vents and set up schedules for routine maintenance on changing furnace filters.
6. **Reduce exposure to CARBON MONOXIDE.** Install carbon monoxide alarms.
7. **Reduce exposure to LEAD.** Perform lead risk assessments to test water, soil, paint and dust for lead. Encourage parents to have children tested for lead.
8. **Reduce HAZARDS.** Develop written emergency plans for fires, tornadoes, hazard communication and blood-borne pathogen exposure. Become aware of chemical safety by training employees on the cleaning materials kept at the facility. Check for PCBs in transformers. Recycle paper, plastic, glass and more. Implement a "no idling" program — encourage parents not to idle vehicles in the facility's parking lot.
9. **Reduce ENERGY CONSUMPTION.** Use energy-efficient lighting. Insulate hot water heaters. Lower room temperature when the building is unoccupied.

For more information on the 5-Star program go to [www.idem.IN.gov/childcare](http://www.idem.IN.gov/childcare) or contact Karen Teliha (Community Environmental Health & Education Director) at (800) 988-7901 or [kteliha@idem.IN.gov](mailto:kteliha@idem.IN.gov).

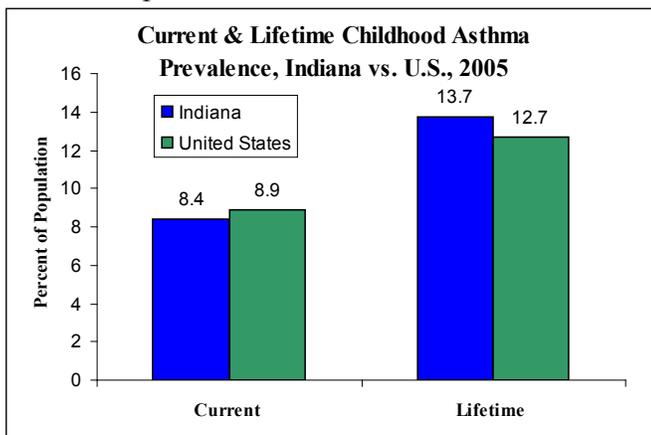
# Data and Surveillance

## Children and Asthma

Asthma is a leading chronic disease among children. Asthma can have a tremendous impact on a child's health (hospitalization, emergency room visits), quality of life (difficulty sleeping, activity restrictions) and school attendance and performance. Because of the heavy burden asthma places on children, parents, caregivers and the health care system, it is important to study trends in childhood asthma prevalence in Indiana. These trends help determine where improvements have been made and identify areas of need for future interventions.

The data provided below for Indiana is from the Indiana 2005 Behavioral Risk Factor Surveillance System [BRFSS] and the national data is from the 2005 National Health Interview Survey [NHIS] conducted by the Centers for Disease Control and Prevention [CDC]. The BRFSS and NHIS consist of two measures for asthma prevalence: current asthma and lifetime asthma. Current asthma prevalence consists of those reporting currently having asthma at the time of the interview, while lifetime asthma prevalence consists of all children who have ever received a diagnosis of asthma.

The current asthma prevalence among children (17 and under) in Indiana is 8.4 percent. The national prevalence of current asthma among children is 8.9 percent. The lifetime asthma prevalence among children in Indiana is 13.7 percent and the national rate is 12.7 percent.



When both current and lifetime asthma prevalence rates for Indiana children are analyzed by sex and age (10 and under, 11-17), no significant differences are seen between groups. The chart below provides each of these rates for reference.

### Asthma Prevalence Rates

	Current	Lifetime
All Children	8.4%	13.7%
Males	8.7%	15.2%
Females	8.2%	12.8%
Age: 10 & Under	9.9%	13.6%
Age: 11-17	9.5%	14.7%

Nationally, males have a higher prevalence rate of current asthma until about 15 years of age. Between 15-17 years, the female prevalence rate for current asthma surpasses that of males and continues through adulthood. The national statistics for current asthma divided by age show increasing prevalence with increasing age among children. The prevalence rate for children 4 and under is 6.8 percent and increases to 9.8 percent for ages 5-14.

Due to small response rates, current and lifetime asthma prevalence rates for children in Indiana by race are not stable and therefore are not available. Nationally, asthma is most prevalent among Non-Hispanic black (13.0 percent current asthma prevalence) and Puerto Rican (19.9 percent current asthma prevalence) children. Mexican children have a low reported current asthma prevalence rate at 7.4 percent and Non-Hispanic whites have a current asthma prevalence rate of 8.0 percent.

Additional data on childhood asthma will be available in the updated *Burden of Asthma in Indiana* report scheduled to be complete in December 2007 or can be requested directly from the Indiana State Department of Health Asthma Program.

# *Around the State*

The **Asthma Alliance of Indianapolis** has launched its *Winning with Asthma!* program for coaches. Coaches, referees and physical education teachers who complete an asthma tutorial at [www.asthmaindy.org](http://www.asthmaindy.org) and pass the post-test will receive a specialized coach's clipboard, a laminated card with urgent steps to take during an asthma attack and a booklet on asthma.

The **City of Evansville** purchased four hybrid buses in 2006. The buses reduce emissions of particulate matter, hydrocarbons and nitrogen oxide by 90 percent and greatly reduce carbon monoxide. These reduced emissions improve the quality of life of people with asthma by improving air quality and reducing the likelihood of breathing difficulties. The city estimates the four buses are saving \$42,000 per year through lower fuel consumption and fewer maintenance costs.

## *InJAC Update*

### **InJAC Calls for Action to Eliminate Open Burning of Residential Yard Waste!**

The open burning of residential yard waste (grass, leaves, etc.) creates smoke containing fine particles, carbon monoxide and other toxic substances. These substances can produce health effects such as: irritation of the eyes, nose, and throat; asthma attacks; and aggravation of other lung and heart conditions. Indiana has a statewide ban against open burning. One exception allows private residential burning that meets certain conditions when the building contains four or fewer dwelling units (about 81.5 percent of residential housing units in Indiana). This essentially means the practice is permitted unless local bans exist.

Recognizing that Hoosiers — especially children, older adults, and those with asthma or lung or heart conditions — are not protected from the potential health effects of open burning, the InJAC calls on city and county officials to adopt and enforce bans on the open burning of residential yard waste (Resolution 2007-1). And, it calls for additional funding for local and county governments, Soil

& Water Conservation Districts, Solid Waste Management Districts, County Cooperatives and agricultural organizations to provide and promote alternative, environmental beneficial methods to manage these wastes.

### ***School Personnel Knowledge, Behaviors and Policies Related to Asthma***

The Children and Youth workgroup finalized their report on the results of a survey of the asthma knowledge, behaviors and policies of Indiana's school personnel. It reflects overall responses from school personnel, as well as responses by school type (urban, rural, suburban), school grade level and school personnel position (teacher, administrator, health care staff). General findings showed that school personnel were knowledgeable about the basics of asthma (i.e. symptoms and triggers), but need more information on the impact of asthma (i.e. absenteeism) and school policies on asthma (i.e. attaining asthma action plans and knowing what to do during an attack). The results will be used to plan asthma education and outreach for school personnel.

### **Media Campaign**

The Public Education workgroup launched a media campaign in August. The intent of the campaign is to increase awareness and understanding of asthma. Localized versions of the EPA's 'Fish Out of Water' campaign were created for television, radio and billboards. Print materials (including appointment cards, magnets, posters and bookmarks) encouraging Hoosiers to 'Take Control of Asthma' will also be distributed to physicians' offices, community health centers and libraries. Fourteen counties are being targeted for print materials based on highest asthma hospitalization numbers and rates, but television, radio and billboard materials were distributed throughout the state.

Complete copies of the resolution, school survey results and media campaign materials can be found on the InJAC site: <http://www.in.gov/isdh/programs/asthma/InJAC/index.htm>.

# Upcoming Events

## October 15: INShape 2007 Health Summit

Purdue University, West Lafayette

9:30 a.m. – 4:00 p.m.

Register online at <http://www.inshape.in.gov>

## October 22-23: Indiana School Nurse Conference

Adams Mark Hotel, Indianapolis

Register online at [http://www.doe.state.in.us/sservices/conference\\_schoolnurse.html](http://www.doe.state.in.us/sservices/conference_schoolnurse.html)

## October 24-26: National Conference on Tobacco or Health

Minneapolis, MN

Register online at <http://www.tobaccocontrolconference.org/2007/conference/>

Contact: [info@tobaccocontrolconference.org](mailto:info@tobaccocontrolconference.org) or (301) 960-2929

## October 29-30: Lead-Safe and Healthy Homes Conference

Marten House, Indianapolis

<http://www.ikecoalition.org>

Contact: Janet McCabe, (317) 902-3610 or [mccabe@ikecoalition.org](mailto:mccabe@ikecoalition.org)

## December 6-8: Indoor Air Quality Tools for Schools National Symposium

Washington, DC

Register online at [https://www.iaqsymposium.com/Registration\\_Login.aspx](https://www.iaqsymposium.com/Registration_Login.aspx)

## December 13: InJAC Quarterly Meeting

ISDH, Rice Auditorium

1:30 p.m. – 4:00 p.m.

Contact: Kathy Such, (317) 819-1181 x221 or [ksuch@lungin.org](mailto:ksuch@lungin.org)

**Special Note:** New National Heart Lung and Blood Institute [NHLBI] Asthma Guidelines have been released and can be found at <http://www.nhlbi.nih.gov/guidelines/asthma>. InJAC is currently working on organizing continuing education programs on the new guidelines for physicians and other professionals working with people with asthma. Presentations at conferences and Web-based programs are being planned. Check the InJAC Web site (<http://www.in.gov/isdh/programs/asthma/InJAC/index.htm>) for more information and future dates.

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*Breathe In, Breathe Out: Asthma in Indiana* is a semi-annual newsletter published by the Indiana State Department of Health Asthma Program in conjunction with the Indiana Joint Asthma Coalition (InJAC). The purpose of this newsletter is to provide timely information on asthma to those interested in addressing the asthma burden in Indiana.

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