

2007 Asthma Action Plan for Chicago

Executive Summary

Three years ago stakeholders from the asthma community convened at the American Lung Association of Metropolitan Chicago to create the first Asthma Action Plan for Chicago. Designed to reduce the devastating toll of asthma in Chicago, the Action Plan is revised annually to review past progress and set new goals in addressing asthma in Chicago. The advisory group, led by Dr. Jay Shannon from the Divisions of Pulmonary and Critical Care Medicine at John H. Stroger Jr., Hospital of Cook County, consists of asthma leaders from healthcare, governmental, and environmental agencies, and community organizations (See Attachment A).

Several statistics speak to the problem of asthma in Chicago:

- In Cook County 317,906 adults and 121,610 children have been diagnosed with asthma.¹
- More than half of all children in Chicago with asthma had a severe asthma attack in the past year and nearly one-third had episodes in which they thought their lives were in danger.²
- Approximately 40% of people visiting selected Chicago Emergency Departments (ED) for asthma attacks had 3 or more other ED visits in the previous 12 months.³

This year our primary recommendation is that athletic coaches and physical education teachers increase their asthma awareness and management skills. According to a recent survey of Chicago area coaches and physical educators, 64% of them have had no formal asthma education³ and may be unprepared to manage an asthma emergency. On a national basis, more than 1.25 million athletic coaches⁴ may be in need of asthma management education for the safety of the athletes they supervise.

Recent studies report as many as 23% of children in Chicago with asthma avoid activities due to their asthma.² As we work to encourage all children to engage in physical activity, it will be important for coaches to have the asthma education needed to assure the safety of all children.

The Asthma Action Plan for Chicago Advisory Council recommends the following steps be taken to reduce the City's high asthma morbidity.

2007 Major Recommendations:

- **All coaches and physical education teachers in Chicago should receive asthma education.**
- **Health care and prescription drug coverage should be available to all Illinois residents.**
- **Illinois should adopt Smoke Free Illinois legislation to eliminate secondhand smoke, the number one trigger of asthma attacks, from all workplaces.**

We will reconvene on World Asthma Day 2008 to assess progress toward these goals.

¹ The Behavioral Risk Factor Surveillance System, United States Census 2000, and National Health Interview Survey, 2001.

² Regional Survey Data, Children & Asthma in America. (2004). GlaxoSmithKline.

³ McDermott, M.F., Catrambone, CD, Lenhardt, RL, Weiss, KB. Report of 15 months activity of an Emergency Department based asthma surveillance system: The Illinois Emergency Department Asthma Collaborative. Illinois Department of Public Health, Beat Asthma In Illinois 2005, September 19-20, 2005, Springfield, IL

⁴ Chicago Asthma Consortium survey distributed in 2006.

⁴ Gerdy, John. Editor. (2000) Sports in Schools: The Future of an Institution. NY: Teacher's College Press., Columbia University. P. 55 (an estimated 2-4 million coaches in US).

Discussion

2007 Recommendations/2006 Accomplishments

Broaden community education

Asthma education in schools, medical facilities and community settings is necessary to ensure awareness of asthma symptoms, triggers, and effective asthma management. Additional asthma education needs to be made available to school personnel and all healthcare providers. This will empower these individuals to reduce asthma triggers and safely manage asthma emergencies.

2006 Accomplishments

- Advocate Health Care provided asthma education, screenings, and referrals for 1500 people through schools, faith based organizations, and community events.
- Illinois Chapter of the American Academy of Pediatrics educated more than 500 health care providers with “Get in the Zone: Asthma Education through Problem-based Learning”.
- ALAMC educated 802 children on how to manage their asthma using Open Airways for Schools, a program with proven effectiveness at reducing school days lost to asthma.
- ALAMC and its partners educated 3,842 school staff and parents in the Chicago region on asthma recognition, proper management techniques and a student’s right to carry an inhaler in school.

2007 Recommendations

- School systems, park districts, and athletic organizations in Chicago should assure that all coaches and physical education teachers demonstrate proficiency in recognizing the signs and symptoms of asthma, and techniques for safely handling an asthma crisis.
- School systems should require that all school personnel with significant student contact be trained bi-annually on asthma signs and symptoms, asthma trigger reduction in classrooms, and management of asthma emergencies.
- Train all health care providers to counsel families on smoking cessation and to refer families to evidence-based cessation resources such as toll-free tobacco quit lines, in order to reduce exposure to tobacco smoke, the number one controllable asthma trigger.
- Expand the Asthma Friendly Child Care project to educate child care providers on policies, guidelines, and educational programs to make their facilities asthma-friendly.
- Assist with dissemination of Expert Panel: Guidelines for Diagnosis and Management of Asthma (EPR-3)

Clean up the environment

Healthy outdoor and indoor air is essential for improving lung health. Elevated levels of outdoor air pollution, including emissions from coal-fired power plants and diesel engines, trigger asthma exacerbations. The United States Environmental Protection Agency (USEPA) suggests that indoor air can be 100 times more polluted than outdoor air.

While policies such as limiting indoor smoking will have an immediate impact on indoor air quality, it is more difficult to improve outdoor air. Eight million Chicago area residents have no option but to inhale outdoor air that fails to meet minimal federal health standards. One study found that 80%

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of Hispanics live in areas that failed to meet one or more of the national standards for air pollution, compared to 65% of African Americans and 57% of whites.⁵ In order to meet the standards, fine particulate matter emissions, which are known to trigger asthma attacks, must be reduced. The main sources of those emissions are coal fire powered plants and diesel vehicles.

USEPA recently revised the rule governing the thresholds for the amount of pollution allowed by an ethanol plant to be considered a major air emitter. The rule change, approved on April 12, 2007, will increase the emissions threshold by 150 tons and will result in excusing more plants from installing the most effective air pollution equipment available. In Illinois alone, this change in the federal policy would affect 50 ethanol plants.

2006 Accomplishments

- Safer Pest Control Project has trained more than 200 school engineers, teachers, child care providers and parents on the health risks of roach infestation and the pesticides used to abate roaches, and how to safely eliminate pests through integrated pest management.
- Asthma Action Plan partners participated in the successful state wide effort to require coal-fired power plants to install technology to reduce emissions of harmful pollutants. As a result the Fisk and Crawford coal-fired power plants in Chicago, owned by Midwest Generation, will either have to add effective pollution controls to slash sulfur dioxide emissions within the next 9 to 11 years or close down.
- The American Lung Association of Metropolitan Chicago and Citizen Action IL organized and convened the Illinois Campaign to Clean Up Diesel Pollution which now has the support of more than 50 community organizations to reduce health risks of diesel pollution.

2007 Recommendations

- Illinois legislators should pass and the governor should sign the Smoke Free Illinois Act that will make all public indoor workplaces in Illinois smoke free.
- USEPA should not roll back the 'Major Source' emission threshold for ethanol fuel production facilities. Allowing facilities to emit even more harmful soot and smog forming pollution before requiring they install and use the most effective pollution control equipment puts public health at risk.
- City of Chicago police should enforce the statewide truck and bus idling restrictions passed in 2006.
- The asthma community and legislators should support HB 425 to protect children from pesticides.
- Child care and school regulatory agencies should enforce the existing integrated pest management law passed in 2005.

Improve access to quality care

Too many Chicagoans still suffer from the lack of access to care, receive substandard care, don't understand the importance of asthma controller medications, or don't have individualized asthma action plans. With the support of our strong medical community, we need to make strides toward meeting the guidelines and standards for quality of care for those with asthma.

⁵ Based on Levy, Jonathan I., John D. Spengler, etc. Al. Using ACLPUFF to evaluate the impacts of power plant emissions in Illinois: model sensitivity and implications. *Atmospheric Environment*, 10 September 2001.

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Improving quality of healthcare is not only an issue for health care systems, but also for our city's schools systems. School nurses play a central role in a child's health. From treating acute injuries to vision testing, nurses have the opportunity to ensure the child's well-being. Simply stated, healthy students make better learners. However, many school districts do not adhere to the student-to-nurse ratio recommended by the Centers for Disease Control and Prevention (CDC).

The CDC recommends that school districts have one nurse per 750 students available; however, many states do not mandate such guidelines. Several states, including California, Illinois, and New York⁶ do not currently require that school districts follow the CDC mandate. Some states, including Arkansas, Georgia, Indiana, and Nebraska, have initiated state policies to follow the CDC standard⁷.

2006 Accomplishments

- Advocate Health Care was able to provide asthma education and medication vouchers to its patients through funding from a federal grant. Due to this education and linkage to medicine, the inpatient 30 day readmission rate dropped by 15% from the previous year and the emergency department 3 day revisit rate fell by 44%.⁸
- The Mobile C.A.R.E. Foundation provided free and comprehensive asthma care to children through 2,400 visits by the organization's three mobile asthma vans clinics. As a result, the number of asthma van patients in control of their asthma rose from 16% to 78%. Missed school days decreased by 60%, ED visits decreased by 50%, and hospitalizations decreased by 20%.⁹
- The Mobile C.A.R.E. Foundation was able to expand its services in January 2007 with the launch of their third van.
- Roseland Hospital now dispenses asthma medications from the emergency department upon discharge and arranges for every asthma patient seen without a primary care physician to get an appointment within 7 days of his or her emergency visit.

2007 Recommendations

- Universal Health Coverage for all Illinois residents that would guarantee affordable, accessible, and quality health care and necessary medicines.
- Health care systems should identify and develop strategies to reduce barriers to medicine compliance.
- Increase awareness among parents and school personnel to aid in the implementation and enforcement of the student's right to self-carry asthma emergency medicines.
- The Chicago Public Schools and the Archdiocese of Chicago school systems should increase the student to nurse ratio in every Chicago school to one nurse for every 750 students, as recommended by the Center for Disease Control guidelines for Coordinated School Health Programs.

⁶ State-by-State Requirements for School Nurses. National Association of State Boards of Education. Available at: <http://www.nasbe.org/healthyschools/States/Topics.asp?Category=B&Topic=4>

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⁸ Currie, Donna. Advocate Health Care Systems.

⁹ Mobile C.A.R.E. Foundation, pending publication.

Address health disparities

Health disparities are evident in Chicago. Asthma hits hardest in the poorest communities, which in Chicago are usually comprised of African American or Latino children and adults. While many other cities have closed healthcare gaps among certain ethnic and socioeconomic groups, Chicago's health disparities are worsening as reported in the 2005 Asthma Action Plan Report. As researchers continue to study the reasons for health disparities, it is imperative to increase funding and resources to address these inequalities. At a minimum, we need to improve data collection and sharing, outreach efforts, access to medications, and education.

Each year tobacco-related illness affects women and African Americans, especially those with asthma, at higher rates than other groups. In 1998, the tobacco companies reached a Master Settlement Agreement (MSA) with 46 states, including Illinois, to reimburse for smoking-caused health care costs as well as to prevent and reduce tobacco use. Illinois, however, has failed to dedicate adequate funds for tobacco cessation and prevention programs. Of the \$269 million dollars received in 2006 from the master settlement, Illinois spent only \$8.5 million on tobacco prevention and cessation, which is less than 20% of what the CDC recommends for spending in IL. In 2008, Illinois will be receiving a bonus MSA payment of \$28.6 million dollars which should be used toward comprehensive tobacco control.

2006 Accomplishments

- Community Health Educator projects (state- and grant-funded programs that assign community health workers to work with individuals and families affected by asthma to improve asthma management) now cover more than one third of Chicago, and have focused efforts on communities hardest hit by asthma. As a result of these projects, community health educators were able to reach nearly 500 families living with asthma.
- Community partners held forums reaching 500 participants in communities that are disproportionately affected by asthma.
- One hundred organizations and healthcare facilities in Cook County offered smoking cessation counseling to address cigarette smoke as the number one trigger of asthma.
- A brief intervention cessation counseling program based on the US Department of Health and Human Services' Clinical Practice Guidelines for treating tobacco use and dependence was implemented to 165 health care providers working in various settings.

2007 Recommendations

- Illinois and Chicago Departments of Public Health should provide an annual report card on the state of asthma including vital statistics such as ER visits, hospital admission and deaths related to asthma.
- Illinois legislators should increase funding for and support of community-based health outreach services to improve diagnosis, awareness of asthma symptoms, and use of controller medications in underserved communities.
- Illinois legislators should take action to increase the amount of Master Settlement Agreement dollars allocated to comprehensive tobacco control programs to prevent and reduce smoking in Illinois. Illinois should at least meet CDC recommendations.
- To assure better access to effective asthma and allergy medication, pharmaceutical companies must take action to streamline the application process and lower the income thresholds for low income families to access discount or free medications. A simpler application process would also assure access to these medicines in lower literacy and lower income populations.
- Introduce legislation to reimburse healthcare providers for asthma education.

Coordinate services and share information

Reversing Chicago's asthma epidemic requires focusing resources on multiple levels: policy, institutional, community, and the individual. It requires greater coordination of services and data surveillance among all stakeholders.

There are numerous data systems available to assist in the compilation and coordination of health data. One such example of a database system includes the Healthcare Cost and Utilization Project (HCUP). HCUP brings together the data collection efforts of state data organizations, hospital associations, private data organizations, and the Federal government to create a national information resource of patient-level health care data. This data, with the state's permission, can then be shared through a central distributor to help programs access data. In addition, the Illinois Asthma Partnership Strategic Plan calls for improving asthma surveillance capacity. In response, the Illinois Emergency Department Asthma Surveillance Project (IEDASP) has been launched in Chicago and other parts of the state to provide detailed assessment of asthma patients presenting to Emergency Departments as well as the care provided.

2006 Accomplishments

- The Asthma Action Plan for Chicago Partnership continued to conduct its regular meetings and updated its website.
- Chicago Asthma Consortium hosted its annual Data Conference.
- One hundred and eighty-six lung health advocates traveled to Springfield to meet with legislators to discuss the importance of lung health issues, including the Smoke Free Illinois Act.
- Illinois Emergency Department Asthma Surveillance Project (IEDASP) was launched to include over 30 Chicago Emergency Departments

2007 Recommendations

- All schools in Chicago should use data collected from school physical forms to estimate the proportion of children in their system with asthma, and share the information with appropriate agencies.
- Chicago Department of Public Health should create and disseminate a brief annual report of the surveillance data on asthma morbidity and mortality rates.
- The Illinois Department of Public Health should complete the Asthma Care Quality Improvement Plan provided by the Agency for Healthcare Research and Quality (Pub. No. 06-0012-2) designed to create partnership and strategic plan for improving asthma care.
- The Illinois Asthma Partnership should continue efforts to improve asthma care and services in IL by implementing the recommendations in their "Addressing Asthma in Illinois Strategic Plan", 2nd edition, and provide quarterly updates to partners and the public.
- Illinois should share data with the HCUP project for their State Inpatient Database (SID), Kids Inpatient Database (KID), State Ambulatory Surgery Database (SASD), and the State Emergency Department Database (SEDD), and make this data available to researchers and community partners through the HCUP Central Distributor.
- The Illinois Emergency Department Asthma Surveillance Project (IEDASP) should share detailed surveillance data from the Chicago region with participants in the Chicago Asthma Action Plan Advisory Council and participating Emergency Departments and hospitals.

Attachment A

Asthma Action Plan for Chicago
Advisory Council

Advocate Health Care
American Lung Association of Metropolitan Chicago
Clean Air Counts
Chicago Asthma Consortium
Chicago Department of Public Health
Chicago Housing Authority
Chicago Initiative to Raise Asthma Health Equity (CHIRAH)
Chicago Public Schools
Controlling Asthma in America's Cities Project (CAACP)
Evanston Northwestern Healthcare – SPARC project
Genentech
GlaxoSmithKline
Healthcare Consortium of Illinois
Illinois Chapter of the American Academy of Pediatrics
Illinois Department of Public Health
Illinois Maternal and Child Health Coalition
LaRabida Children's Hospital
Mobile C.A.R.E. Foundation
Mt. Sinai Children's Hospital
PCC Community Wellness Center
Prime Care Community Health
Roseland Community Hospital
Rush University College of Nursing
Safer Pest Control Project
Sinai Urban Health Institute
John H. Stroger, Jr. Hospital of Cook County
University of Chicago Asthma Center