

Upcoming Events

Watch our next newsletter's announcement for our February 2008 asthma summit.

School-based management of Chronic Conditioning: The Healthy Learner Model presented at School Nurse Organization of Minnesota conference Friday, November 2, 2007

Clinic-based Systems Change Model at Society of Teachers of Family Medicine presentation in California November 9, 2007

Minnesota Asthma Resources

American Lung Association HelpLine
800.LUNG.USA or 1.800.548.8252

American Lung Association Health House program asthma tip sheet,
English version: www.healthhouse.org/tipsheets/TS_asthma.pdf
Spanish version: www.healthhouse.org/tipsheets/TS_spanishasthma.pdf

Asthma Camps www.alamn.org/mn/camp/camps.asp

Controlling Asthma in American Cities Project www.alamn.org/americancities

Minnesota Asthma Coalition www.mnasthma.org/mnasthma

Minnesota Asthma Information Center www.ALAMN.org/InfoCenter

Minnesota Department of Health Interactive Online Asthma Plan
www.health.state.mn.us/divs/hpcd/cdee/asthma/ActionPlan



Controlling ASTHMA in American Cities Project

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Fall 2007, Vol. 1, Issue 2

Successful School-based Asthma Interventions

School nurses and parents of children with asthma know too well that along with the back-to-school routine of buying pens and notebooks also comes the highest spike in asthma symptoms among children. The spike is attributable to increased exposure to indoor irritants along with contagious respiratory infections from other children.

The impact is clear: asthma is the leading serious chronic illness among children in the U.S. and among the top 10 emergency department diagnoses for children in the Twin Cities. In Minnesota alone, more than 79,000 children—that's one in 15—have been diagnosed with asthma, and many children who have asthma have not been diagnosed and may not be receiving appropriate care for their disease.

The tremendous success of the Controlling Asthma in American Cities Project (Controlling Asthma Project), a grant funded through the Centers for Disease Control and Prevention, has contributed to the reduction in hospitalizations of children with asthma by more than half or 55 percent. In addition, pediatric asthma-related emergency department/urgent care visits have been reduced by 12 percent in the Twin Cities since 2001.

These results are attributed in part to the Controlling Asthma Project's comprehensive and coordinated system of interventions that delivers consistent messages and expectations to providers and families on how to best manage pediatric asthma. Broadly, these multifaceted interventions cover four areas: School-based Interventions; Health Systems/Professional Education Interventions; Community-based Education and Interventions; and Policy Initiatives.

Among the most compelling interventions has been the school-based

interventions in Minneapolis Public Schools and Saint Paul Public Schools.

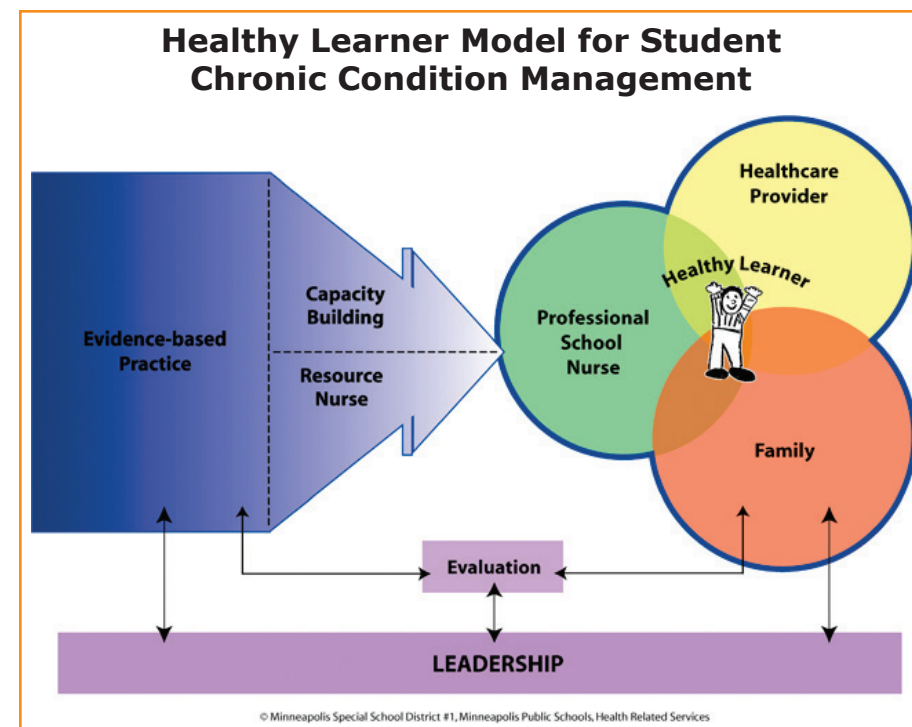
Minneapolis Public Schools and Saint Paul Public Schools

The Controlling Asthma Project helped support the continuation of the Healthy Learners Asthma Initiative (HLAI) that was developed and tested in Minneapolis Public Schools (MPS) and funded the implementation of an asthma management program based on the HLAI in Saint Paul Public Schools.

HLAI arose from MPS's Healthy Learner Board's desire to reduce the negative impact of asthma on student health and learning. The initiative led to the development of a comprehensive and replicable model—Healthy Learner Model for Student Chronic Condition Management—to address chronic disease management of children. The model has seven components: 1) leadership, 2) evidence-based practice, 3) capacity building, 4) chronic disease resource nurse, 5) healthy learner, 6) partnerships with families, and 7) partnerships with health care providers. Requisite elements needed to support these components include professional school nursing and evaluation. (See graphic representation of the model on the left).

One of the highlights of the model was the establishment of communication systems and partnerships among schools, health

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Controlling Asthma in American Cities Leadership Partners

Controlling Asthma Project is a coalition of leading health, education, public policy and community partners focused on improving pediatric asthma care in the Twin Cities.

Organizations

American Lung Association of Minnesota
Children's Hospitals and Clinics
HealthPartners
Hennepin County Medical Center
Medica Health Plans
Metro Asthma Coalition
Minneapolis Department of Health and Family Support
Minneapolis Public Schools
Minnesota Department of Health
St. Paul Public Schools
St. Paul-Ramsey County Public Health
UCare Minnesota
University of Minnesota School of Nursing

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Asthma Interventions...Continued from Page 1

care providers, and families, which made it possible for schools and clinics to "be on the same page" when treating a child's asthma. Through this collaboration, the Asthma Medical Request/Referral was developed to help school nurses communicate concerns about student's asthma status to families and alert health care providers when medical evaluation for the child was needed.

Components of asthma management in the school health office include case finding; nursing care procedures and delegated procedures; emergency care; care coordination; and student asthma education and counseling. A unique and key aspect of HLAI is that an asthma resource nurse is available to provide training and mentoring for school nurses, support enhanced asthma care, and assist with complex cases.

The Controlling Asthma Project funding has allowed the districts to continue capacity building with school nurses and others to adopt evidence-based practices for the management of asthma and other chronic conditions. The school-based program also provides asthma education to students, parents, and school staff.

Results of the HLAI Model

- ◆ The HLAI lead to significant changes in asthma care provided to MPS students through the school health office and those practice changes have been sustained seven years.
- ◆ MPS students who received enhanced asthma care required fewer return visits to the school health office because of asthma symptoms.
- ◆ When the asthma program was implemented in eight Saint Paul Public Schools, students with asthma in those schools had higher attendance than students with asthma in a comparable group of eight Saint Paul Public Schools without the program.
- ◆ School attendance for students with asthma was an average of two days higher in Saint Paul schools that implemented the asthma management program compared to schools that had not implemented the program.
- ◆ The HLAI is also being replicated and tested in the St. Francis School District with funds from the American Lung Association.

School-based interventions improve pediatric asthma management by emphasizing routine asthma self-care to prevent asthma episodes. Through increased collaboration and communication among health care providers, school nurses, and families of children with asthma, these interventions can help reduce costly emergency department visits and hospitalizations, and help keep students in school learning and actively participating in school life. The model has also been applied to other chronic conditions in the school setting including diabetes, life-threatening allergies, mental health, and attention deficit hyperactivity disorder.

Citations

1. Minnesota Department of Health, 2004.
2. Erickson, C.D., Splett, P.L., Mullett, S.S. & Heiman, M.B. (2006). The Healthy Learner Model for Student Chronic Condition Management-Part I. *Journal of School Nursing*, 22(6), 310-318.
3. Erickson, C.D., Splett, P.L., Mullett, S.S., Jensen, C., & Belseth, S. B. (2006). The Healthy Learner Model for Student Chronic Condition Management-Part II: The Asthma Initiative. *Journal of School Nursing*, 22(6), 319-329.
4. Splett, P.L., Erickson, C.D., Belseth, S.B. & Jensen, C. (2006). Evaluation and Sustainability of the Healthy Learners Asthma Initiative. *Journal of School Health*, 76(6), 276-282.

PharmD Year 4 Asthma Rotation

Professional education is a key component to the success of the Controlling Asthma Project, which has implemented asthma education among Twin City primary care providers, health care professionals, as well as medical and pharmacy students.

Working in collaboration with the University of Minnesota College of Pharmacy, the Controlling Asthma Project has developed an enhanced asthma care rotation for fourth-year pharmacy students to increase their knowledge of asthma medications and patient asthma education.

The rotation involves enhanced written, clinical, and community-based assignments and activities and students are strongly encouraged to sit for the National Asthma Educator Certification Board Exam when they receive their license after graduation. Aspects of the curriculum include:

- Attending weekly precept lectures; attendance of a lecture relating to pulmonary/allergy during the rotation
- Meeting the goals and objectives of the National Asthma Education Certification Board Exam
- Learning how to perform and evaluate pulmonary function tests
- Participating in a home assessment for environmental interventions
- Shadowing a public school asthma resource nurse
- Identifying community resources available to patients and caregivers with asthma
- Continuing to work-up, follow-up, and document at least 25 patients

While instituting new curriculum among pharmacy and medical schools can be challenging, the success of the PharmD Rotation has been demonstrated by the high demand for the rotation among students, which has outpaced the project's capacity to offer it to all requesting students.

As Donald Uden, PharmD, Professor and Associate Dean for Student Services of the University of Minnesota College of Pharmacy, puts it, "The PharmD Rotation is valuable for students because they get a more complete picture of what individuals with asthma and allergies face in their lives through the enhanced exercises. Pharmacy students get solid training that will better serve the patients."

By increasing the asthma-care knowledge of health professionals, along with the other Controlling Asthma Project interventions, it has been shown that such efforts can indeed help reduce costly emergency department visits and hospitalizations and help students miss fewer days of school.

Asthma Educator Certificate Course
November 5-6, 2007
American Lung Association of Minnesota
www.alamn.org

