Tackling Health Related Barriers to Learning: State Approaches to Asthma Management in Schools

Rachelle Johnsson Chiang, MPH
Director, School Health
National Association of Chronic Disease Directors

Amanda K. Martinez, MPH, MSN, RN
Consultant, National Association of Chronic Disease Directors
Housekeeping

• All participant lines are muted

• Type questions into the Questions box

• Technical difficulties? Use the questions box
Disclaimer

- This webinar was produced under a cooperative agreement with the Centers for Disease Control and Prevention (CDC).

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National Association of Chronic Disease Directors (NACDD) is comprised of over 3,000 specialized chronic disease practitioners working in public health departments across all 50 States and US Jurisdictions to prevent and control chronic disease.

The School Health Project assists Chronic Disease Directors and their staff to make informed decisions about a variety of school health issues.
Learning Objectives

At the end of this webinar, participants will be able to:

• Identify factors contributing to the success of asthma management in schools, including policies, practices, and partnerships

• Understand processes to identify and track students with asthma and coordinate care

• List examples of health- and education-related outcomes and indicators to evaluate school-based asthma control initiatives
New Mexico Department of Health

Cindy Greenberg, RN, BSN, MSN, NCSN
State School Nurse Consultant
Office of School and Adolescent Health
New Mexico Department of Health
New Mexico

• 358,250 public school students in grades k-12

• 89 school districts

• 23.4% of children live at or below the Federal Poverty Level

• 66% of school children are eligible for free or reduced price school meals
Burden of Asthma for New Mexico’s Children

*Asthma is one of the most common chronic diseases in NM
- 47,000+ NM children currently have asthma
  • Approximately 9% of children ages 0 – 17 years
  • Approximately 38.1% are not well-controlled
  • High school age students in the SE region of the state reported the highest percent of asthma at 13.6%
  • Third leading cause of hospitalization and the fourth leading cause of emergency department visits among young people ages birth to 14.
  • Children from low-income households are more likely to have asthma and more likely to have poorly controlled asthma

*The Burden of Asthma in New Mexico, 2014 Epidemiology Report
New Mexico Department of Health 2014 Strategic Plan for Asthma Management

- NM Department of Health’s Strategic Plan includes an objective to ensure effective asthma management among children.

Objective:

- By FY 15, 65% of children with persistent asthma will show an improvement in their symptoms as a result of asthma self-management education.
New Mexico's Coordinated Approach

- New Mexico Asthma Control Program (NMACP), 2000
- New Mexico Council on Asthma (NMCOA), 2010
- ALA-NM and NMCOA, 2012
  - 3 Committees:
    - Administrative Support, Education, and Policy
Goals and Activities for Improving Asthma Outcomes in New Mexico Schools

Goals address the following:

1. Coordinating data sharing and efforts among organizations
2. Increase asthma education for providers
3. Educate patients, families, schools and communities
4. Participate in legislative advocacy for school-based health reforms
Asthma Initiatives in School Health

• School Health personnel supervised by DOH
  – Annual School Health Services Report (ASHSR)
  – Adverse Events reports (including ER epi & albuterol)
• Coordination between DOH & PED
• NM School Health Manual
• NM School Nurse Advisory Council
• ALA Grant linking schools and healthcare providers
• Standardized Asthma Action Plan (AAP) for NM Schools
Asthma Data from NM School Districts

According to the 2011-2012 ASHSR:

• 32,763 students had a reported diagnosis of asthma from a medical provider.
• Asthma care accounted for 53% of medical procedures required by NM students at school.
• Asthma medication topped the list of medications provided by parents for use at school at 41%.
• With their health needs met, 90% of students returned to class ready to learn.
Standardized State School AAP Form

Goal: To improve and assure the safety, quality, and cost efficiency of asthma care in schools.

– Uniformity of information on every student
– Improve safety and communication
– Quick access to information
– Useful for all stakeholders
– Easily faxed or emailed (one page, one side)
Components of the NM AAP

- Demographics
- Triggers
- Last Flu Vaccine
- Severity
- Zones
- Release of Information
- Medication Administration Authorization
- Parents authorization of AAP and for education classes
- IHP information for the school nurse
NM Asthma Action Plan for Schools
## Parent Demographic Section

**NEW MEXICO ASTHMA ACTION PLAN FOR SCHOOLS**

<table>
<thead>
<tr>
<th>School District</th>
<th>School Name</th>
<th>Date________</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Nurse / Health Asst.</td>
<td>School Phone # / FAX #</td>
<td></td>
</tr>
</tbody>
</table>

**PARENT/GUARDIAN: Please complete the information in the top sections and sign consent at bottom of the page.**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Date of Birth</th>
<th>Student #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Provider Name/Title</td>
<td>Provider’s Office Phone / FAX #</td>
<td></td>
</tr>
<tr>
<td>Parent/Guardian</td>
<td>Parent’s Phone #s</td>
<td></td>
</tr>
<tr>
<td>Emergency Contact</td>
<td>Contact Phone #s</td>
<td></td>
</tr>
<tr>
<td>Allergies to Medications:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Asthma Triggers Identified (Things that make your asthma worse):**

- Exercise
- Colds
- Smoke (tobacco, fires, incense)
- Pollen
- Dust
- Strong Odors
- Mold/moisture
- Stress/Emotions
- Pests (rodents, cockroaches)
- Gastroesophageal reflux
- Season: Fall, Winter, Spring, Summer
- Animals
- Other (food allergies):

<table>
<thead>
<tr>
<th>Date of student’s last visit to medical provider:</th>
<th>Date of Last Flu Shot</th>
<th>Inhaler is kept:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>With Student</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In Classroom</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health Office</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>
### Health Care Provider Section

**HEALTH CARE PROVIDER:** Please complete Severity Level, Zone Information and Medical Order Below

#### Asthma Severity:
- [ ] Intermittent
- [ ] Persistent: [ ] Mild
- [ ] Moderate
- [ ] Severe

#### Green Zone: Go! Take Control Medications EVERY DAY

- [ ] No controller medication is prescribed. **Always rinse mouth after using your daily inhaled medication.**
- [ ] Inhaled corticosteroid or inhaled corticosteroid/long-acting β-agonist, take ________ puff(s) MDI with spacer ______ times a day
- [ ] Inhaled corticosteroid, take ________ nebulizer treatment(s) ______ times a day
- [ ] Leukotriene antagonist, take ________ by mouth once daily at bedtime

**Peak flow (optional):**
- Greater than ≥ ________
- (More than 80% of Personal Best)

**Personal best peak flow:**
- ________

#### Yellow Zone: Caution! Continue CONTROL Medicine & ADD RESCUE Medicines

- [ ] Cough or mild wheeze
- [ ] Tight chest
- [ ] First signs of a cold
- [ ] Problems sleeping, playing or working

**Peak flow (optional):**
- ________ (50% - 80% of Personal Best)

**DO NOT LEAVE STUDENT ALONE!** Call Parent/Guardian when rescue medication is given.
- [ ] Fast-acting inhaled β-agonist
- [ ] Nebulizer treatment(s) & every _______ hours as needed

**Other**
- Call your MEDICAL PROVIDER if you have these signs more than two times a week, or if your rescue medicine does not work! If symptoms are NOT better OR peak flow is NOT improved, go to RED ZONE.

#### Red Zone: EMERGENCY! Continue CONTROL Medicine & ADD RESCUE Medicines and GET HELP!

- [ ] Cannot talk, eat, or walk well
- [ ] Medicine is not helping or getting worse, not better
- [ ] Breathing hard & fast
- [ ] Blue lips & fingernails

**Peak flow (optional):**
- Less than ≤ ________
- (Less than 50% of Personal Best)

**DO NOT LEAVE STUDENT ALONE!** → **Call for emergency 911 and start treatment**
- Fast-acting inhaled β-agonist
- Nebulizer treatment(s) every 20 minutes until paramedics arrive

**Call 911 and start treatment immediately. Then call Parent/Guardian.**
- Oxygen ______ l/min (If available in Health Office) □ O₂ Sat. / time
Authorization Section

**HEALTH CARE PROVIDER ORDER AND SCHOOL MEDICATION CONSENT**

Check all that apply:

___ Student has been instructed in the proper use of his/her asthma medications and IS ABLE TO CARRY AND SELF-ADMINISTER his/her INHALER AT SCHOOL.

___ Student is to notify designated school health personnel after using inhaler at school.

___ Student needs supervision or assistance when using inhaler.

___ Student is unable to carry his/her inhaler while at school.

*SIGNATURE/TITLE______________ DATE ______

**Parent/Guardian:**

I approve of this asthma action plan. I give my permission for the school nurse and trained school personnel to follow this plan, administer medication(s), and contact my provider, if necessary. I assume full responsibility for providing the school with the prescribed medications and delivery and monitoring devices. I give my permission for the school to share the above information with school staff that need to know and permission for my child to participate in any asthma educational learning opportunities at school.

SIGNATURE: _____________________________ DATE: ______

**SCHOOL NURSE:**

SCHOOL NURSE: _____________________________ DATE: ______

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IHP/EAP NANDA 00031

NIC-Periodically Assess the Effectiveness of the AAP and Asthma Education

NMCOA - New Mexico Council on Asthma

NOC- Patent Airway

August 2012
Challenges of a Coordinated Approach to Students with Asthma

• Educating providers about the NAEPP’s EPR-3 approach for managing asthma and utilizing the AAP form for schools statewide

• Clinical Consensus
  – Based on most recent guidelines
  – Promote a standard of care

• Creating an overall awareness of asthma in communities and how to control asthma
Benefits of a Coordinated Approach to Students with Asthma

• Increased communication and information
• Ability to connect with medical providers and insure a medical home for students with asthma
• Authorization for student educational opportunities at school
• Better outcomes for students with asthma
How is Asthma Coordination Working in New Mexico

• Adopted by almost all 89 school districts in New Mexico
• More Healthcare Providers using it
• MCOs have created electronic versions or scanning into their EMR and schools have posted it on their websites
• Links students to medical home/provider and has improved communication between parents, providers, and school nurses
Resources

New Mexico School Health Manual  http://nmschoolhealthmanual.org/

Office of School and Adolescent Health  http://nmhealth.org/about/phd/hsb/osah/

NHLBI Guidelines for the Diagnosis and Treatment of Asthma  http://www.nhlbi.nih.gov/health-pro/guidelines/current/asthma-guidelines/index.htm

American Lung Association
- Open Airways For Schools  http://www.lung.org/lung-disease/asthma/in-schools/open-airways/open-airways-for-schools-1.html


NMDOH Asthma Program  http://nmhealth.org/about/erd/eheb/ap/
New York

• 2,684,000 public school students in grades k-12

• 697 school districts

• 20.3% of children live at or below the Federal Poverty Level

• 49% of school children are eligible for free or reduced price school meals
Burden of Asthma for New York State’s Children

• 1 in every 10 children currently has asthma.¹

• Asthma is the most prevalent and fastest growing disease among children.

• Asthma is also one of the leading causes of hospitalizations in NYS, especially for children 0-14 years of age.

  BRFSS Asthma Call-Back Survey data, New York State, 2006-2010
NY’s Partners to Control Asthma

- Statewide Asthma Partnership (advisory, implementation role, monitoring role)
- Regional Asthma Coalitions (implementation role)
- Local/Project-Specific Partners (advisory, implementation, sponsor role)
Laws and Regulations in place in NYS

• “Carry Law” - Allows students with asthma to carry and use a prescribed inhaler during the school day
• “Anti-Idling Law” – Requires the engines of all school buses and school vehicles to be turned off while waiting on school grounds
• Green Cleaning Regulation/Guidelines
Best Practices Promoted

- Identification of students with asthma – identification of primary care providers
- Asthma Action Plans (AAPs) on file and followed for all students with asthma
- Medications available at school and school-sponsored activities
- Prevalence of asthma triggers minimized in the school environment
- Implementation of school district policies/practices that promote adherence to laws, regulations and best practices
NYS Student Weight Status Category Reporting System

• Requires student health certificates to include students' body mass index (BMI) and weight status categories. Information is collected by each school from the student health certificate forms. A summary from each District is reported to the NYSDOH.

• 100% of NYS public schools outside New York City reported data.

• Reporting system includes an optional field to report asthma diagnosis – NYSDOH is exploring potential utility of this data and the opportunity for growth of this reporting for assessing/monitoring asthma prevalence at school district level.

NY SCHOOL-BASED
ASTHMA CONTROL INITIATIVES
SBHC Improvement Collaborative 2009-2010

• Implemented to improve the quality of care delivered to students enrolled in the SBHCs in a cost-effective manner through partnerships and collaborations using proven, evidence-based practices. Represented a spread/expansion of an earlier pilot Learning Collaborative that engaged 5 SBHCs in NYC.

• 25 SBHCs across the state tested and implemented change ideas based on the Chronic Care Model (CCM), with a focus on asthma control and/or obesity prevention.
SBHC Improvement Collaborative
2009-2010

SBHCs focusing on asthma aimed to improve:

– Asthma diagnosis documentation
– Asthma action plan documentation
– Asthma severity and asthma control documentation
– Asthma inhaled corticosteroid (ICS) prescribing for students with persistent asthma
Implementation of CCM Component Changes Across SBHCs – Asthma Care

- Decision Support: 15 (100%)
- Delivery System Design: 14 (93%)
- Clinical Information Systems: 14 (93%)
- Family and Self Management: 14 (93%)
- Health Care Organization: 13 (87%)
- Community Resources: 11 (73%)
Asthma Action Plan Documentation

- Participating SBHCs in Aggregate, 2009-2010 School Year
(% of students with a diagnosis of asthma who have a current Asthma Action Plan)

<table>
<thead>
<tr>
<th>Month</th>
<th>%</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep</td>
<td>25</td>
<td>51</td>
<td>205</td>
</tr>
<tr>
<td>Oct</td>
<td>51</td>
<td>261</td>
<td>515</td>
</tr>
<tr>
<td>Nov</td>
<td>51</td>
<td>317</td>
<td>622</td>
</tr>
<tr>
<td>Dec</td>
<td>49</td>
<td>358</td>
<td>724</td>
</tr>
<tr>
<td>Jan</td>
<td>51</td>
<td>435</td>
<td>859</td>
</tr>
<tr>
<td>Feb</td>
<td>47</td>
<td>391</td>
<td>839</td>
</tr>
<tr>
<td>Mar</td>
<td>47</td>
<td>378</td>
<td>802</td>
</tr>
<tr>
<td>Apr</td>
<td>57</td>
<td>439</td>
<td>776</td>
</tr>
<tr>
<td>May</td>
<td>65</td>
<td>473</td>
<td>733</td>
</tr>
</tbody>
</table>

Goal 95%
Asthma Prescription Documentation

Participating SBHCs in Aggregate, 2009-2010 School Year

(% of students with a diagnosis of persistent asthma who have a prescription of inhaled corticoid steroids)

<table>
<thead>
<tr>
<th>Month</th>
<th>Percent</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep</td>
<td>47%</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>Oct</td>
<td>75%</td>
<td>137</td>
<td>183</td>
</tr>
<tr>
<td>Nov</td>
<td>72%</td>
<td>152</td>
<td>210</td>
</tr>
<tr>
<td>Dec</td>
<td>74%</td>
<td>191</td>
<td>259</td>
</tr>
<tr>
<td>Jan</td>
<td>79%</td>
<td>226</td>
<td>285</td>
</tr>
<tr>
<td>Feb</td>
<td>75%</td>
<td>213</td>
<td>283</td>
</tr>
<tr>
<td>Mar</td>
<td>79%</td>
<td>230</td>
<td>291</td>
</tr>
<tr>
<td>Apr</td>
<td>82%</td>
<td>233</td>
<td>283</td>
</tr>
<tr>
<td>May</td>
<td>83%</td>
<td>182</td>
<td>219</td>
</tr>
</tbody>
</table>

Goal: 95%
NYS Regional Asthma Coalitions 2012-2017

Coalition Partners
Up to 100+ partners per coalition such as:
• Health Care
• Insurers
• Local Health Departments
• Academic Institutions
• Schools/daycares
• Community organizations
• Professional organizations
• Pharmacists
• Faith-based organizations
• Housing Authorities
• Environmental organizations
• Local Businesses
• Media

Role: Control asthma through a regional, population based, sustainable systems approach. NYSDOH funds 8 coalitions to serve high-burden regions across the state.
SBHC projects supported by RACs

**AIM:** From Sept 2013 through August 2014, a population-based, systems approach to caring for approximately 70 students with asthma ages 5-17 at School X in YourTown, NY who are enrolled in the SBHC will be implemented so that the following will be achieved:

- ↑ % of students with asthma with a documented AAP from 20% to 95%
- ↑ % of students with asthma with documented severity diagnosis
- ↑ % of students with persistent asthma and a prescription for appropriate controller medication
- ↑ % of students with asthma who are evaluated for exposure to environmental triggers
SBHC projects supported by RACs

AIM: From Sept 2013 through August 2014, a population-based, systems approach to caring for approximately 70 students with asthma ages 5-17 at School X in YourTown, NY who are enrolled in the SBHC will be implemented so that the following will be achieved:

- ↑ % of students with asthma who are evaluated for exposure to ETS
- ↑ % of students with asthma provided with education on environmental triggers and avoidance
- ↓ # of unscheduled visits to SBHC per month for asthma not well controlled from 15 to 5
- ↓ # of school absences due to asthma for the school year
Progress – Hudson Valley Asthma Coalition and Yonkers Spectrum SBHC (Sept 2013-June 2014)
The NBAAA partnered with Rutgers University to provide self-management and environmental trigger education to schools and students and link students with poorly controlled asthma to the Woodhull Medical Center’s asthma clinic.
As a result, the number of visits to the pediatric asthma clinic at Woodhull more than doubled between 2008 and 2009, correlating to a 58% reduction in asthma-related ED visits and 67% decrease in hospitalizations.

The NBAAA was awarded the EPA’s 2010 National Environmental Leadership Award in Asthma Management.
School Asthma Management Partnership
Asthma Coalition of Long Island

Focusing on Asthma in the School – Aged Population

Phase 1
- Setting the Stage – ACLI School’s Environment Committee, Community Partnerships, High Needs School Districts, School Nurses

Phase 2
- Testing the Waters → Jumping In

Phase 3
- Ongoing Program Assessment, Development and Evaluation
- Growing our Partnership
- Expanding our Reach

School Asthma Management Partnership
Asthma Coalition of Long Island
School Asthma Management Partnership - ACLI
Results

School Days Missed (n=18)
• 89 days previous school year
• 47 days current school year

Rescue Medication Availability in School
• 81 students previous school year
• 127 students current school year

ED Visits (n=20)
• 2.11 visits previous school year
• 0.95 visits current school year
QUESTIONS

Rachelle Johnsson Chiang, MPH
rchiang@chronicdisease.org

Thank you!