2020 Asthma Award Winners: Sharing Successful Strategies to Reduce School Absenteeism and Improve Health Outcomes
Question & Answer Session on AsthmaCommunityNetwork.org Discussion Forum

Please join us in the AsthmaCommunityNetwork.org Discussion Forum for a live online Q&A Session.

3:00 p.m. – 3:30 p.m. EDT

To post a question in the Discussion Forum, follow these directions:

1. If you are a Network member, log in to your AsthmaCommunityNetwork.org account.

Not a member? Create an account at AsthmaCommunityNetwork.org by clicking the “Join Now” link at the top of the page. Your account will be approved momentarily, and you can begin posting questions.

2. Click on the “Discussion Forum” button on the home page.
3. Click on the “Live Online Q&A for 5/28/2020 Webinar” link.
4. Click on the “Add new Forum topic” link to post your question.
5. Enter your question and click the “Save” button at the bottom of the page.
Introducing the 2020 Award Winners

Children’s Hospital Colorado (CHCO) Breathing Institute (Aurora, Colorado)

The University of Texas Health Science Center at Tyler (UTHSCT) (Tyler, Texas)
Featured Speakers

**Melanie Gleason**, PA-C, Senior Instructor, Department of Pediatrics and Associate Director, School-Centered Asthma Program, CHCO

**Monica Federico**, M.D., Medical Director, CHCO Asthma Program

**Paul Sharkey**, M.D., Associate Professor of Pediatrics, Department of Allergy and Immunology, UTHSCT

**Michele Bosworth**, M.D., FAFFP, Executive Director, The Center for Population Health, Analytics, and Quality Advancement, UTHSCT School of Community and Rural Health; Associate Professor of Family Medicine; Associate Professor of Healthcare Policy Economics and Management
Polling Question 1

What type of organization do you represent?

1. Government agency
2. Health care provider
3. Health plan
4. Community-based program
5. Other
Learning Objectives

Winners will share information about—

• The evolution of their asthma programs and how they have adapted during the current COVID-19 crisis.

• Successful strategies for effective in-home interventions and critical asthma education.

• Innovative school- and community-based partnerships to further program impacts.

• Data usage to measure key program outcomes and improve return on investment.
About the Award

• Nation’s highest honor for exceptional asthma management.
• Showcases best practices in asthma care and disease management consistent with national guidelines.
• Highlights programs that coordinate public health, housing, environment, clinical care, health care and community partners to deliver comprehensive care.
Awards Hall of Fame

Since 2005, 48 programs have been inducted into the Awards Hall of Fame.
Environment Plays a Critical Role in Asthma Control

- Federal asthma guidelines recognize environmental trigger reduction as a critical component of comprehensive asthma care.*

- The evidence base demonstrates that in-home environmental interventions are effective at improving asthma control in children and adolescents.†

EPA is a federal lead for integration of environmental risk reduction into standards of care.

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Children’s Hospital Colorado (CHCO) Asthma Program

Monica Federico, M.D.
Melanie Gleason, M.S., PA-C
Mission of the Asthma Program

To provide excellent, evidence-based care to all families and children with asthma and to coordinate asthma care within our health system, including facilitated transitions of care between primary care providers, specialists and community partners to achieve the best outcomes for children with asthma.
Where Are Asthma Patients Seen?

INPATIENT
CHILD HEALTH CLINIC/ADOLESCENT CLINIC
SCHOOLS, DAYCARES, SPORTS TEAMS

PULMONARY
OPERATING ROOMS, SPECIALTY CLINICS

ALLERGY
MULTIDISCIPLINARY ASTHMA CLINIC
EMERGENCY DEPARTMENT (ED)
CHCO Asthma Demographics

2018 Inpatient Payers for Asthma

- Medicaid: 0.8%
- Private Insurance: 43.8%
- Self-Pay: 0.3%

2018 Outpatient Pulmonary Asthma

- Medicaid (other states): 53.9%
- Private Insurance: 1.1%
- Self Pay: 0.1%
- Tri-Care: 6.2%
- CHP+: 7.8%

Data Source: Asthma and Payer Tableau
Asthma Program

Coordinated by: Asthma Population Health Steering Committee
Medical Director: Monica Federico
Clinical Program Coordinator: Joyce Baker

Community Programs
Breathing Counts
AsthmaCOMP/Colorado Step-Up
Just Keep Breathing Camps

Primary Care
Child Health Clinic
Adolescent Medicine Clinic
Young Moms Clinic
Primary Care Network
Primary Care Partners

Specialized Care
Pulmonary
Allergy
Multidisciplinary Asthma Clinic

Care Coordination
Clinical Pathway
Family Navigator in Pulmonary and MAC
Clinical Effectiveness partnership

Emergency Department and Urgent Care

Inpatient
Interdisciplinary care with respiratory therapists, nurses, hospitalists, pulmonary and residents

Transition of Care
Inpatient asthma education consult
30-day follow-ups
Post-discharge clinic
Transition to adult care

Research
Funded by National Institute of Allergy and Infectious Diseases—Inner City Asthma Consortium
National Heart, Lung and Blood Institute — PrecISE for severe asthma

Outreach
Breathe Better
Reach the Peak
Care Alliance Partner and Community-based education
EMT education
Key to Access to High-Quality Care: Standardizing Practice

- Standardizing care for specialty and primary care for providers:
  - CHCO Asthma Pathway
  - Colorado Pediatric Collaborative 2008-Pediatric Care Network 2016 Asthma Initiative
  - Colorado Clinical Asthma Guideline Creation 2012
  - Annual asthma educator continuing medical education conference started with the American Lung Association in 2008: Reach the Peak
- Partnerships with other area providers and health care systems to standardize care across Colorado
Tiered Model of Care: Directing Resources to the High-Risk Asthma Patients

- **Severe**
  - Difficult to control: Rising risk
  - High risk or poorly controlled
  - Mild

- **High-risk program and registry**
  - Specialty care
  - School-based counselors
- **Health info**
  - PCP
  - School

- **Interventions**: Multidisciplinary asthma clinic and home visit (JKB)
- **EHR and adherence monitors**
- **Social and behavioral screening**
- **Family navigator**
- **Interventions: Home visits (JKB)**

- **Severe**
  - High-risk program and registry
  - Specialty care
  - School-based counselors

- **Health info**
  - PCP
  - School

- **Interventions**: Multidisciplinary asthma clinic and home visit (JKB)
- **EHR and adherence monitors**
- **Social and behavioral screening**
- **Family navigator**
- **Interventions: Home visits (JKB)**
Data: Inpatient and Emergency Department Health Outcomes Are Better Than National (2018) Data

• Emergency Department Admit Rate: 19%
  • 7-day readmissions
    All ED/urgent care visits: 3.9%
    Asthma: 1%
• Inpatient length of stay: 1.9 days
  • 30-day readmissions
    All inpatient visits: 8.0%
    Asthma: 1.3%
Colorado Pediatric Collaborative Data (2008–2012)

ED visits

Hospitalizations

P=0.0024

P=0.0054
The System for Delivering High-Quality Asthma Care
Our 2012 Needs Assessment Showed Familiar Health Inequities

• HRA demographics:
  • 80% Medicaid
  • 50% Latino

• Needs assessment results:
  High-risk program specialty visits alone did not decrease the risk of returning to the ED/hospital

• Identified barriers were patient-specific and not easily impacted by health care providers, making it difficult to impact health and care in a single clinic visit
Asthma Home Visits: Just Keep Breathing

The team:
• Community health workers
• Medical director
• Program manager
• Full-time nurse
Just Keep Breathing: Overview

- Children 2 to 17 years with an ED visit or inpatient visit for asthma
- Families must be English/Spanish speaking and live within 20 miles of main campus
- Visits are conducted by bilingual community health workers
What Happens During Home Visits?

- Five visits per family during the course of 5 to 6 months
  - First visit: Nurse and community health worker
  - Visits 2 to 5: Community health worker-led home visits
- Visit goals:
  - Asthma education
  - Barrier identification
  - Home environmental assessment
  - Home remediation
Cleaning and Organization

HEALTHY HOME BASICS

MAKE YOUR OWN KID-SAFE CLEANING PRODUCTS

All Purpose Cleaner
- 1/4 cup white vinegar
- 1 teaspoon borax
- 4 cups water
Mix all ingredients together in a spray bottle. Add 10-15 drops of essential oils for a fresh smell (we suggest orange, lemon or lavender).

Carpet Cleaner
Shake 1 box of baking soda onto the carpet. Let stand for 1 hour, then vacuum.

Roaches
Shake Borax into cracks where roaches have been seen and nearby.

Glass Cleaner
- 1/4 cup white vinegar
- 2 cups warm water
Mix ingredients together, spray onto glass and dry with a clean dry cloth.

Mold
Scrub mold with a sponge or clean cloth and white vinegar.

Don't forget safety! Check carbon monoxide, smoke alarms and fire extinguishers often.
Make a fire escape plan for all people in your home.
“The purifier is working so well, we are no longer experiencing smoke from the neighbors in our home.”
More Intensive Interventions

- Pest extermination
- Mold remediation
- Roof repair
- Furnaces, pipe foam, caulking…
### Who Does the Home-Visit Program Serve?

<table>
<thead>
<tr>
<th>Category</th>
<th>N=60</th>
</tr>
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<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>13 (21.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>15 (25.0%)</td>
</tr>
<tr>
<td>White</td>
<td>30 (50.0%)</td>
</tr>
<tr>
<td><strong>Payor</strong></td>
<td></td>
</tr>
<tr>
<td>Contract</td>
<td>10 (16.7%)</td>
</tr>
<tr>
<td>Medicaid</td>
<td>46 (76.7%)</td>
</tr>
<tr>
<td>Self-Pay</td>
<td>1 (1.7%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>36 (60.0%)</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>24 (40.0%)</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>19 (11.7%)</td>
</tr>
<tr>
<td>Male</td>
<td>41 (68.3%)</td>
</tr>
<tr>
<td><strong>Age in Years</strong></td>
<td>9.71 (3.53)</td>
</tr>
</tbody>
</table>
Can home visits improve asthma control, reduce healthcare utilization in kids?

**Just Keep Breathing**

- **6-month program**
- **3–5 home visits from community health workers**
- **49 participants**
- **2.03 ED/hospital visits before study**
- **0.53 ED/hospital visits after study**

**Conclusions**

PROGRAM INCREASED:
- Asthma control
- Device technique
- Caregiver confidence

SIGNIFICANTLY DECREASED:
- ED visits, hospitalizations during and after program

Results:

- **49** participants
- **273** eligible patients

Who did not enroll or only completed one visit: **94%** completed all home visits

Top barriers to asthma control:

- **55.1%** Adherence
- **36.7%** Parent Understanding
- **24.5%** Environment
- **24.5%** Social Chaos
- **22.4%** Language
Sustained Decrease in Hospital-Level Utilization (ED or Inpatient) for the 6 Months After Program Completion
“I want to make sure that I am giving Naomi the proper care, and this program allows me to do that. They’ve also increased Naomi’s knowledge and confidence. Having asthma isn’t quite as scary anymore.”

“The program has helped me better manage [patient’s] asthma and has helped the both of us come together to control it. [Patient] is now able to play sports without any complications and does not need to use albuterol as often as he used to.”

–Asthma provider
School-Centered Asthma Programs

- Asthma affects 1 out of every 12 children in Colorado
  - Some schools have rates more than 3 times the state average
- Collaborative partnerships with schools are successful in reducing asthma disparities
- School-based environmental programs can reach large numbers of students
AsthmaCOMP Team and Community Partners

- School Nurse Asthma Champions
- Colorado Department of Education Regional Nurse Specialists
- National Jewish Health
Colorado School-Centered Asthma Program History

2006
- Asthma counselor
- Asthma education
- EPA IAQ Tools for Schools

2012
- School nurse
- Comprehensive asthma-care coordination

2018
- Unified approach
- Program expansion
- Navigating social determinants of health
- Technical assistance
- Telehealth
AsthmaCOMP: Students, Districts and Regions Served

Six metro school districts (331 schools)
- Step Up—41 metro schools
  - 84.1%—Medicaid
  - 94.0%—Qualify for FRL
  - 25.9%—Black/African American
  - 66.6%—Latino/Hispanic
  - 11.7%—Primary Spanish language
  - 63.8%—Have high-risk asthma

Five regional hubs
- Coordinated through Colorado Department of Education Regional Nurse Specialists
AsthmaCOMP Key Components: What Do We Do and How Do We Do It?

**Fundamental components**
1. Build partnerships and capacity in school community
2. Implement evidence-based asthma management programs
3. Technical Assistance program
4. Evaluate program (all stakeholders)

**Innovative components**
1. Asthma medical neighborhood (health navigators, school nurse asthma champions, engaged families and support of health care providers)
2. Incorporate program steps into the workflow (AsthmaTab, data sets, asthma dashboard)
3. Telehealth visits
Asthma Counselors Partner With School Nurses
Serve 10 schools/enroll 40 to 50 students each
Implement comprehensive asthma program
Environmental Strategies: 
EPA IAQ Tools for Schools

- Multidisciplinary team
- Asthma prevalence/absenteeism
- Walk-through checklists
- Recommendations/plan
- Regional EPA Award Sustainability—Denver Public Schools 2020 Healthy Schools
AsthmaCOMP Impact on School-Based Asthma Management

SCHOOLS DISTRICTS ADOPTED PROGRAM COMPONENTS

INCREASED ASTHMA CARE PLANS AT SCHOOL FROM 5–10% TO MORE THAN 65%

IMPROVED ASTHMA SELF-CARE SKILLS

IMPROVED ADHERENCE WITH CONTROLLER MEDICATION
## Step-Up Asthma Results 2015 to 2016

<table>
<thead>
<tr>
<th></th>
<th>Baseline (N = 585)</th>
<th></th>
<th>End of Year 1 (N = 546)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td><strong>Hospitalizations</strong></td>
<td>64</td>
<td>10.9%</td>
<td>16</td>
<td>2.9%</td>
</tr>
<tr>
<td><strong>ED Visits</strong></td>
<td>239</td>
<td>40.9%</td>
<td>67</td>
<td>12.3%</td>
</tr>
<tr>
<td><strong>Controlled Asthma</strong></td>
<td>371</td>
<td>63.4%</td>
<td>447</td>
<td>81.9%</td>
</tr>
<tr>
<td><strong>No Limited Activity</strong></td>
<td>218</td>
<td>37.3%</td>
<td>310</td>
<td>56.8%</td>
</tr>
<tr>
<td><strong>No Impact on Grades</strong></td>
<td>316</td>
<td>54.0%</td>
<td>425</td>
<td>77.8%</td>
</tr>
</tbody>
</table>
Building Bridges: Reduction in School Absenteeism

Community Partnerships: Education Programs for Providers, Nurses, School Nurses, and Respiratory Therapy
Partnerships for Community Education
Next Frontier

PEDIATRIC TELEMEDICINE

Where telehealth becomes just excellent healthcare

- Telehealth in schools
- Telehealth in homes
- Telehealth for patient navigation
- Telehealth for asthma education
The University of Texas Health Science Center at Tyler (UTHSCT) Breath of Life Mobile Asthma Program

Paul Sharkey, M.D.
Michele Bosworth, M.D.
Background
Breath of Life Mobile Pediatric Clinic (BOLMPAC) Services

- Asthma diagnosis and treatment
- Allergy testing, diagnosis and treatment
- Treatment of asthma comorbidities
- Spirometry
- Patient and family education
- Asthma symposium conferences
- Speaking engagements at area school districts
BOLMPAC Team Members

Our Team

- Administrative supervisor
- Supervising allergy immunology physician
- Nurse practitioner
- Licensed vocational nurse
- Community health worker
Population Served

• Goal: Go beyond traditional health care delivery model and bring care to the patients while decreasing barriers to care:
  – Cost (visit/testing/medication)
  – Transportation
  – School absenteeism
  – Parent work absenteeism

• Demographic:
  – 75% government funded or uninsured
  – 43% African American
  – 29% Hispanic
  – 25% White

• 2,500 patient visits annually
Partners

• Inaugural year: 2008–2009
  – Two independent school districts in the Tyler, Texas, area (five schools)
• By 2019: 50 local school districts in a 19-county area in Northeast Texas
• 1115 Waiver/Delivery System Reform Incentive Payment Program (DSRIP)
  – Partnered with Christus St. Michael Hospital System
  – Second BOLMPAC
Patient Identification

- Community health workers and school nurses
- Self-referrals
- Health fairs
- Community events
- Physician referral

"Painting for Saints" by Banksy 2020
Asthma in Northeast Texas

Texas
• Texas: $150 million dollars in annual Texas health care costs
• 7% of children have asthma

Northeast Texas
• Mostly rural
• 14% of children have asthma
• Higher smoking rates
• Higher pollution, pollen and mold exposure
• Fewer primary care providers

Burden of Disease Fact Sheet. DSHS. 2016
Addressing Disparity

- Majority schools visited: Title I, serving low-income students
- Original 12 counties demographics:
  - 10 designated by U.S. DHHS as Medically Underserved Areas
  - 38% population rural
  - 25% under age 18
  - 30% of children living in poverty
- Patients served:
  - Male (56.67%)
  - African American (38.16%)
  - Medicaid (69.56%)

- African Americans 3x the normal state rate for hospitalizations compared to Whites and Hispanics*

*Burden of Disease Fact Sheet. DSHS. 2016
Asthma Management Approach

- National Institutes of Health EPR-3 Guidelines
  - EHR templates
  - Spirometry and physical exam
  - Asthma classification
  - Asthma control test (ACT): symptom severity
  - Asthma action plans
  - Patient and guardian education
    - Medication use
    - Environmental triggers
    - Self-monitoring (use American Academy of Pediatrics)
- Because asthma and environmental triggers go hand in hand, all patients receive allergy testing and treatment, if indicated, on assessment
Environmental Services Offered

- Allergy Testing
  - Medication management
  - Home modification education
  - Behavioral and lifestyle modification education
  - BOLMPAC team supervised by Allergy & Immunology Physician
- Tobacco Cessation
  - CHW delivered via CPRIT*/MD Anderson** grant
- Home Assessment Visits
  - BOLMPAC CHW
  - Resource assessments
- Indoor Contaminant Assessment Component
  - Asthma triggers
  - Began in 2018
  - Community Health Worker (CHW)

*CPRIT= Cancer Prevention and Research Institute of Texas
**University of Texas MD Anderson Cancer Center
## Smoking History

<table>
<thead>
<tr>
<th>Tobacco Status</th>
<th>Current Every Day Smoker</th>
<th>Never Smoker</th>
<th>Current Some Day Smoker</th>
<th>Previous Smoker</th>
<th>Never Smoker</th>
<th>Heavy Tobacco Smoker</th>
<th>Former Smoker</th>
<th>Unknown If Ever Smoked</th>
<th>Light Tobacco Smoker</th>
<th>Smokeless Tobacco User</th>
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<tbody>
<tr>
<td>Smokes in Home or Car?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Interested in quitting?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Quit Date (former smoker only)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Number of pack years = (packs smoked per day) x (years as a smoker)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Type of Tobacco
- Cigarettes
- Pipe
- Cigar
- Chew/Chewing tobacco
- E-Cigarette
- Other

### Other smoking methods
- Vaping
- Hookah
- Other

## Triggers

<table>
<thead>
<tr>
<th>Triggers</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
<th>NA</th>
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<tbody>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COPD</td>
<td></td>
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## Environmental History

<table>
<thead>
<tr>
<th>Location of Home</th>
<th>House</th>
<th>Mobile Home</th>
<th>Apartment</th>
<th>Condo</th>
<th>Other</th>
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<tr>
<td>Year of date</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Air filter</td>
<td>Yes</td>
<td>No</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allergy to animals</td>
<td>Yes</td>
<td>No</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allergy to mold</td>
<td>Yes</td>
<td>No</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allergy to dust</td>
<td>Yes</td>
<td>No</td>
<td>Other</td>
<td></td>
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<tr>
<td>Allergy to pollen</td>
<td>Yes</td>
<td>No</td>
<td>Other</td>
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## Family Medical History

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<th>Condition</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>Diabetes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Heart disease</td>
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## Additional Information

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<th>Additional Information</th>
<th>Yes</th>
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</thead>
</table>

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**Indoor Air Quality (IAQ)**
**Pollen & Mold Count**

**Date of Pollen and Mold Count:** February 3, 2020

**Weather Conditions:**
- L Temp / H Temp: 53° / 60°
- Max Humidity: 83%

**Pollen & Mold Count Summary for Trees and Grasses in the Air**

<table>
<thead>
<tr>
<th>Allergen</th>
<th>G/CM</th>
<th>Result</th>
<th>Primary Pollen / Mold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>14</td>
<td>Low</td>
<td>Elm, Alder, CEDIA/Juniper, Maple</td>
</tr>
<tr>
<td>Weeds</td>
<td>0</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>Grasses</td>
<td>0</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>Molds</td>
<td>1755</td>
<td>Moderate</td>
<td>Aspergillus, Cladosporium</td>
</tr>
</tbody>
</table>

**Note:** Pollen & Mold Count Summary should not be totaled. Trees, weeds, grasses, and molds all have different G/CM ranges.

**Reading the Summary**

<table>
<thead>
<tr>
<th>Allergen</th>
<th>G/CM</th>
<th>Result</th>
<th>Level of Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 15</td>
<td>Low</td>
<td></td>
<td>Absent - No symptoms</td>
</tr>
<tr>
<td>16 - 90</td>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91 - 1,500</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater than 1,500</td>
<td>Very High</td>
<td></td>
<td>Low - Only individuals extremely sensitive to these pollens and molds will experience symptoms.</td>
</tr>
<tr>
<td>Weeds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 10</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 - 50</td>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 500</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater than 500</td>
<td>Very High</td>
<td></td>
<td>Moderate - Many individuals sensitive to these pollens and molds will experience symptoms.</td>
</tr>
<tr>
<td>Grasses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 5</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 - 20</td>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 200</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater than 200</td>
<td>Very High</td>
<td></td>
<td>High - Most individuals with any sensitivity to these pollens and molds will experience symptoms.</td>
</tr>
<tr>
<td>Molds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 900</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>901 - 2,500</td>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,501 - 2,500</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater than 2,500</td>
<td>Very High</td>
<td></td>
<td>Very High - Almost all individuals with any sensitivity to these pollens and molds will experience symptoms. Extremely sensitive people could have severe symptoms.</td>
</tr>
</tbody>
</table>

**Your personal Pollen and Mold Spare Count is provided as a service by The University of Texas Health Science Center at Tyler.**

Should you have concerns or questions, please contact the Office of Public Affairs at (903) 877-6137.
Pilot BOLMPAC Health Outcomes 2008-09

- 144 patients with evaluable data
- Follow-up rates were poor
  - 38% total
- No hospitalizations in any patients
- Most patients improved asthma control
  - 92% improved control in Tyler schools
  - 85% mild intermittent in Tyler schools by second visit
  - Control not as good in Winona schools
    - 41% improved, 41% same, 18% worsened
    - 24% mild intermittent, 23% mild persistent, 24% moderate, 29% severe
- In Tyler schools, decreases in:
  - Missed school days 3:1
  - ER visits 4:1
  - Oral steroid bursts 10:1
  - No hospitalizations - unchanged
- In Winona schools, decreases in:
  - Hospitalizations 9:0
  - Missed school days 3:1
  - No changes seen in ER visits or oral steroid bursts
Oct 2013-Feb 2016 BOLMPAC Data

- Self-reported Data
- 1135 unique patients seen
- 870 diagnosed with asthma
  - 339 returned for follow-up (39%)
  - Data evaluated in 16.3% within allowable time frame (10-14months)
  - Mean age 9yrs  N = 870

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
<th>Asthma Severity</th>
<th>Payer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>African American 38%</td>
<td>Mild Intermit. 43%</td>
<td>Unfunded 26%</td>
</tr>
<tr>
<td>Female</td>
<td>Caucasian 32%</td>
<td>Mild Persist. 28%</td>
<td>Funded 74%</td>
</tr>
<tr>
<td></td>
<td>Hispanic 29%</td>
<td>Mod Persist. 24%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown 9%</td>
<td>Severe Persist. 5%</td>
<td></td>
</tr>
</tbody>
</table>

★ 50% reduction in ED visits ★ 20% reduction in missed school Days
Current Data 2016–2019

Average missed school days/patient/year: 1–1.3/year
Steroid bursts/patient/year: 0.3–0.5/year
ED visits/patient/year: 0.17–0.34/year
Hospitalizations/patient/year: 0.01–0.03/year

https://www.cdc.gov/asthma/asthma_stats/missing_days.htm
Continuity of Care Continuum

- All of UTHSCT’s primary care clinics are accredited by the National Committee for Quality Assurance (Patient-centered medical homes [PCMHs])
- If appropriate geographically to BOLMPAC patients without primary care physicians, they are referred into those PCMHs
- GOAL: Improve referral into primary care
COVID-19 Accommodations

- Telehealth Visits
- Established patients
- Occupational Health Evaluation
Sustainability and Future Plans

• Funding
  – Health Resources & Services Administration Grant + UTHSCT>UTHSCT>DSRIP/1115 Waiver + Philanthropy + UTHSCT

• Our most recent donation for $40,000
  – “Committed to the sustainability of BOLMPAC”

• UTHSCT School of Community Health and Rural Health
  – Request Center for Medicaid & Medicare Services funding for community health workers

• Future
  – Assist independent school districts with education and implementation of school asthma management programs
  – Improve continuity with primary care
  – Grant proposal with UT System partners; strategic scheduling of BOLMPAC visits based on predicted greatest risk and need
Thank you!
Question & Answer Session on AsthmaCommunityNetwork.org Discussion Forum

Please join us in the AsthmaCommunityNetwork.org Discussion Forum for a live online Q&A Session.

3:00 p.m. – 3:30 p.m. EDT

To post a question in the Discussion Forum, follow these directions:

1. If you are a Network member, log in to your AsthmaCommunityNetwork.org account.

   Not a member? Create an account at AsthmaCommunityNetwork.org by clicking the “Join Now” link at the top of the page. Your account will be approved momentarily, and you can begin posting questions.

2. Click on the “Discussion Forum” button on the home page.
3. Click on the “Live Online Q&A for 5/28/2020 Webinar” link.
4. Click on the “Add new Forum topic” link to post your question.
5. Enter your question and click the “Save” button at the bottom of the page.