Asthma Care in tribal Communities:
Addressing Challenges; Improving Care

Sofia Ali, MD, MPH
Goal

- Provide good asthma care
- Reduce burden of asthma in the Indian community
Overview

- Scope of asthma

- Components of Quality Care
  - Diagnosing asthma - symptoms and spirometry and current treatment guidelines
  - ACT
  - Asthma Action Plans
  - Assessing triggers
  - Self-management and education

- Improving clinic systems

- Addressing challenges to optimal care
Asthma

- Number one cause of days missed from school and work
- Estimated 7.1 million children under 18 years
- Third leading cause of hospitalization
Minnesota Asthma Statistics (2010)

- 1 in 14 kids age 0-17 has asthma
- 1 in 14 adults age 18 and older has asthma
- 19,974 asthma-related emergency department visits
- 3,553 asthma hospitalizations
- 73 asthma deaths
Tribal Asthma Data Profile

Among active users of tribal health care in Minnesota:

- 7% of preschool aged children have asthma (1 in 14)
- 5% of school aged children have asthma (1 in 20)
- 4% of young to middle aged adults have asthma (1 in 25)
- 9% of adults (1 in 11)
- 16% of the elderly have asthma (1 in 6)

source: IHS general data mart 2008-2009
Limits to data

- captures hospital and ED visits
- based on diagnosis of asthma
- 2 or more medications for asthma
Minnesota Student Survey

- question “Has a doctor or nurse ever told you that you have asthma?”

<table>
<thead>
<tr>
<th></th>
<th>grade 6</th>
<th>grade 9</th>
<th>grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>22.0%</td>
<td>23.7%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Black, African or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>26.0%</td>
<td>24.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>White</td>
<td>14.5%</td>
<td>17.7%</td>
<td>18.9%</td>
</tr>
</tbody>
</table>
The Goals of Asthma Therapy: (Asthma Control)

- Reducing impairment
  - prevent chronic and troublesome symptoms
  - reduce use of inhaled short-acting beta 2-agonist (SABA) for symptoms to ≤ 2 days a week
  - maintain (near) “normal” pulmonary function
  - maintain normal activity levels
  - meet patient and family goals of care
The Goals of Asthma Therapy: (Asthma Control)

- Reducing risk
  - prevent recurrent exacerbations of asthma (emergency department/inpatient)
  - prevent progressive loss of lung function
  - provide optimal pharmacotherapy without exceeding necessary dose
Components of Quality Asthma Care

- Asthma well controlled
  - Asthma Control Test (or Childhood asthma control test) score 20 or greater
- Not at elevated risk for exacerbations
  - total number ED and hospital visits less than 2 in last year
- Education/ Asthma Action Plan
  - medications
  - exacerbation management
  - triggers
IPC is based on the Chronic Care Model
The Chronic Care Model

Community Resources and Policies

Health System Health Care Organization

Family Education & Self- Management Support

Delivery System Design

Decision Support

Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

Functional and Clinical Outcomes
Step 1

- Make the diagnosis of asthma
  - based on symptoms and spirometry if available
Rationale for Pharmacologic Therapy

- Underlying cause of asthma: inflammatory airway disorder
- Key principle of therapy: regulation of chronic airway inflammation
NIH/NAEPP

- Provides “new” guidance for selecting treatment based on a patient's individual needs and level of asthma control
The guidelines emphasize that while asthma can be controlled, the condition can change over time and differs among individuals and by age groups.

New focus on monitoring asthma control as the goal for asthma therapy.
Asthma Guidelines* Major differences

- Age categories
  - 0-4, 5-11, >12
- Severity rating
  - Impairment AND risk
- Control rating
  - Used to adjust meds
- Six treatment steps

*2007 NAEPP, EPR-3 National Asthma Guidelines
Distinguishing between Severity and Control

- **Severity**: the intrinsic intensity of the disease process
  - Assess asthma severity to initiate therapy

- **Control**: the degree to which the manifestations of asthma are minimized by therapeutic interventions and the goals of therapy are met
  - Assess and monitor asthma control to adjust therapy
Severity and Control

- **Severity**
  - Intermittent
  - Mild Persistent
  - Moderate Persistent
  - Severe Persistent

- **Control**
  - Well controlled
  - Not well controlled
  - Very poorly controlled
Severity

- Impairment
- Risk
- Severity based on most severe category
### Classification of Asthma Severity

<table>
<thead>
<tr>
<th>Components of Severity</th>
<th>Intermittent</th>
<th>Persistent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptoms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4 yrs</td>
<td>≤ 2 days/week</td>
<td></td>
</tr>
<tr>
<td>5-11 yrs</td>
<td>≤ 2 days/week but not daily</td>
<td></td>
</tr>
<tr>
<td>12 + yrs</td>
<td>Daily</td>
<td></td>
</tr>
<tr>
<td><strong>Nighttime awakenings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>≤ 2x/month</td>
<td></td>
</tr>
<tr>
<td>1-2x/month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4x/month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;1x/month</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SABA use for symptom control (not prevention of EIB)</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>≤ 2 days/week</td>
<td>≤ 2 days/week but not daily</td>
<td>Daily</td>
</tr>
<tr>
<td>≤ 2 days/week but not daily</td>
<td>Daily</td>
<td>Daily</td>
</tr>
<tr>
<td>&gt;2 days/week but not daily, and not more than 1x on any day</td>
<td>Daily</td>
<td>Daily</td>
</tr>
<tr>
<td><strong>Interference with normal activity</strong></td>
<td>None</td>
<td>Minor limitation</td>
</tr>
<tr>
<td><strong>Lung function</strong></td>
<td>N/A</td>
<td>Normal</td>
</tr>
<tr>
<td>FEV₁ between exacerbations &gt; 80%</td>
<td>&gt; 80%</td>
<td>&gt; 80%</td>
</tr>
<tr>
<td>FEV₁ between exacerbations &gt; 85%</td>
<td>&gt; 85%</td>
<td>&gt; 80%</td>
</tr>
<tr>
<td>Normal FEV₁/FVC</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>&gt;80%</td>
<td>&gt;80%</td>
<td>Normal</td>
</tr>
<tr>
<td>&gt;85%</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>≤ 2 exacerbations in 6 months requiring oral steroids or ≥4 wheezing episodes/1 year lasting &gt;1 day and risk factors for persistent asthma</td>
<td>≥ 2 year</td>
<td>≥ 2 year</td>
</tr>
<tr>
<td>Relative annual risk may be related to FEV₁</td>
<td>Relative annual risk may be related to FEV₁</td>
<td>Relative annual risk may be related to FEV₁</td>
</tr>
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<td>≥ 2 exacerbations in 6 months requiring oral steroids or ≥4 wheezing episodes/1 year lasting &gt;1 day and risk factors for persistent asthma</td>
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<td>Relative annual risk may be related to FEV₁</td>
</tr>
</tbody>
</table>

**Risk**

- Exacerbations requiring oral systemic corticosteroids: 0-1/year
- Consider severity and interval since last exacerbation. Frequency and severity may fluctuate over time for patients in any severity category.

**Recommended Step for Initiating Treatment**

- Step 1
- Step 2
- Step 3 and consider short course of oral steroids
- Step 3 and consider short course of oral steroids
- Step 3 and consider short course of oral steroids
- Step 3 and consider short course of oral steroids
- Step 3 and consider short course of oral steroids
- Step 4 or 5 and consider short course of oral steroids

**In 2-6 weeks, evaluate level of asthma control that is achieved.**

- 0-4 years: If no clear benefit is observed in 4-6 weeks, stop treatment and consider alternate diagnosis or adjusting therapy.
- 5-11 and 12+ years: Adjust therapy accordingly.
Control

- Symptoms
- Risk
- Categories
  - Well controlled
  - Not well controlled
  - Very poorly controlled
- Use to adjust medications
<table>
<thead>
<tr>
<th>Components of Control</th>
<th>Classification of Asthma Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well Controlled</td>
</tr>
<tr>
<td></td>
<td>0-4 yrs</td>
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<tr>
<td><strong>Impairment</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptoms</td>
<td>≤ 2 days/week but not more than once on each day</td>
</tr>
<tr>
<td>Nighttime awakenings</td>
<td>≤ 1x/month</td>
</tr>
<tr>
<td>Interference with normal activity</td>
<td>None</td>
</tr>
<tr>
<td>SABA use for symptom control (not prevention of EIB)</td>
<td>≤ 2 days/week</td>
</tr>
<tr>
<td>Lung function</td>
<td>N/A</td>
</tr>
<tr>
<td>FEV$_1$, or peak flow</td>
<td>&gt; 80%</td>
</tr>
<tr>
<td>FEV$_1$/FVC</td>
<td>&gt; 80%</td>
</tr>
<tr>
<td>Validated questionnaires</td>
<td></td>
</tr>
<tr>
<td>ATAQ</td>
<td>0</td>
</tr>
<tr>
<td>ACQ</td>
<td></td>
</tr>
<tr>
<td>ACT</td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Exacerbations requiring oral systemic corticosteroids</td>
<td>0-1/year</td>
</tr>
<tr>
<td>Reduction in lung growth/Progressive loss of lung function</td>
<td></td>
</tr>
<tr>
<td><strong>Recommended Action for Treatment</strong></td>
<td>Maintain current step</td>
</tr>
<tr>
<td></td>
<td>Step up 1 step</td>
</tr>
<tr>
<td></td>
<td>Before step up</td>
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</tbody>
</table>
Stepwise Approach for Managing Asthma in Children 0-4 Years of Age

**Intermittent Asthma**
- Preferred: SABA PRN
- Alternative: Cromolyn, or Montelukast

**Persistent Asthma: Daily Medication**
- Consult with asthma specialist if step 4 care or higher is required.
- Consider consultation at step 3.

**Step 1**
- Preferred: Medium-dose ICS

**Step 2**
- Preferred: Medium-dose ICS + either LABA or Montelukast

**Step 3**
- Preferred: High-dose ICS + either LABA or Montelukast

**Step 4**
- Preferred: Oral systemic corticosteroids

**Step 5**
- Preferred: High-dose ICS + either LABA or Montelukast

**Step 6**
- Step up if Needed (first, check adherence, environmental control, and comorbid conditions)
- Step down if Possible (and asthma is well controlled at least 3 months)

**Assess Control**

Patient education and Environmental Control at Each Step
STEPWISE APPROACH FOR MANAGING ASTHMA IN CHILDREN 5-11 YEARS OF AGE

**Step 1**
- **Preferred:** Low-dose ICS
- **Alternative:** Cromolyn, LTRA, Nedocromil, or Theophylline

**Step 2**
- **Preferred:** Either:
  - Low-dose ICS + either LABA, LTRA, or Theophylline
  - Medium-dose ICS

**Step 3**
- **Preferred:** Medium-dose ICS + LABA
- **Alternative:** High-dose ICS + either LTRA or Theophylline

**Step 4**
- **Preferred:** High-dose ICS + LABA
- **Alternative:** High-dose ICS + either LTRA or Theophylline

**Step 5**
- **Preferred:** High-dose ICS + LABA + oral systemic corticosteroid
- **Alternative:** High-dose ICS + either LTRA or Theophylline + oral systemic corticosteroid

**Step 6**
- **Step up if Needed**
  (first, check adherence, environmental control, and comorbid conditions)

- **Assess control**
- **Step down if Possible**
  (and asthma is well controlled at least 3 months)

**Persistent Asthma: Daily Medication**
- Consult with asthma specialist if step 4 care or higher is required.
- Consider consultation at step 3.

Patient education and Environmental Control at Each Step
STEPWISE APPROACH FOR MANAGING ASTHMA IN YOUTHS ≥12 YEARS OF AGE AND ADULTS

Persistent Asthma: Daily Medication
Consult with asthma specialist if step 4 care or higher is required. Consider consultation at step 3.

**Step 1**
Preferred: Low-dose ICS
Alternative: Cromolyn, LTRA, Nedocromil, or Theophylline

**Step 2**
Preferred: Low-dose ICS + LABA
Alternative: Medium-dose ICS
Alternative: Low-dose ICS + either LTRA, Theophylline, or Zileuton

**Step 3**
Preferred: Medium-dose ICS + LABA
Alternative: Omalizumab for patients who have allergies

**Step 4**
Preferred: High-dose ICS + LABA
AND
Consider Omalizumab for patients who have allergies

**Step 5**
Preferred: High-dose ICS + LABA + oral corticosteroid
AND
Consider Omalizumab for patients who have allergies

**Step 6**
Step up if Needed
(first, check adherence, environmental control, and comorbid conditions)
Assess control
Step down if Possible
(and asthma is well controlled at least 3 months)

Patient education and Environmental Control at Each Step
<table>
<thead>
<tr>
<th>Drug</th>
<th>Low Daily Dose</th>
<th>Medium Daily Dose</th>
<th>High Daily Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child 0-4</td>
<td>Child 5-11</td>
<td>&gt;12 &amp; adults</td>
</tr>
<tr>
<td>Beclamethzone HFA 40 or 80 mcg/puff</td>
<td>NA</td>
<td>80-160 mg</td>
<td>80-240 mg</td>
</tr>
<tr>
<td>Budesonide DPI 90, 180, or 200 mcg/inhalation</td>
<td>NA</td>
<td>180-400 mg</td>
<td>180-600 mg</td>
</tr>
<tr>
<td>Budesonide inhaled Inhalation suspension for nebulization (child dose)</td>
<td>0.25-0.5 mg</td>
<td>0.5 mg</td>
<td>NA</td>
</tr>
<tr>
<td>Flunisolide 250 mcg/puff</td>
<td>NA</td>
<td>500-750 mg</td>
<td>500-1000 mcg</td>
</tr>
<tr>
<td>Flunisolide HFA 80 mcg/puff</td>
<td>NA</td>
<td>160 mcg</td>
<td>320 mcg</td>
</tr>
<tr>
<td>Fluticasone HFA/MDI: 44, 110, or 220 mcg/puff</td>
<td>176 mcg</td>
<td>88-176 mcg</td>
<td>88-264 mcg</td>
</tr>
<tr>
<td>DPI: 50, 100, or 250 mcg/puff</td>
<td>100-200 mcg</td>
<td>100-300 mcg</td>
<td>NA</td>
</tr>
<tr>
<td>Mometasone DPI 200 mcg/inhalation</td>
<td>NA</td>
<td>NA</td>
<td>200 mcg</td>
</tr>
<tr>
<td>Triamcinolone acetonide 75 mcg/puff</td>
<td>NA</td>
<td>300-600 mcg</td>
<td>300-750 mcg</td>
</tr>
</tbody>
</table>
The Asthma Control Test (ACT)

- validated tool
- quickly screen patients to determine if their asthma is in control
- 5 questions (ages 12 and up)
- developed and validated by Quality Metrics
- better at predicting asthma control than FEV1 alone
ACT NOW
and see if you're getting the most from your asthma medicine

1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work, school, or home?
   1. All of the time
   2. Most of the time
   3. Some of the time
   4. A little of the time
   5. None of the time

2. During the past 4 weeks, how often have you had shortness of breath?
   1. More than once
   2. Once per day
   3. 3 to 6 times per week
   4. Once or twice per week
   5. Not at all

3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness, or pain) wake you up at night or earlier than usual in the morning?
   1. 4 or more nights per week
   2. 2 or 3 nights per week
   3. Once per week
   4. Once or twice per week
   5. Not at all

4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?
   1. 3 or more times per day
   2. 1 to 2 times per day
   3. 2 or 3 times per week
   4. Once per week or less
   5. Not at all

5. How would you rate your asthma control during the past 4 weeks?
   1. Not controlled at all
   2. Poorly controlled
   3. Somewhat controlled
   4. Well controlled
   5. Completely controlled

Please ask your doctor to affix this sticker to your file.

Total ACT score

Date: __________

Add up your numbers to get your total score. Turn over for scoring guide.
IF YOUR SCORE IS:

3

Find out what your total score means

5-19
Your asthma may not be under control. Talk to your doctor about treatment options that might help.

20-25
Great! Your asthma appears to be well controlled. Remember to discuss your results with your doctor.

Help make sure you’re in control.
Calculate your ACT score regularly.
Score 19 or lower:
- there is a 70%-84% chance that this patient’s asthma is not under control, and further investigation should be undertaken

Score 20 or more:
- 3 out of 4 patients are under control
- 1 out of 4 false negative
## Classification of Control

<table>
<thead>
<tr>
<th></th>
<th>Well controlled</th>
<th>Not well controlled</th>
<th>Very Poorly Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACT</strong></td>
<td>&gt; 20</td>
<td>16-19</td>
<td>&lt; 15</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>&lt; 2 days/week</td>
<td>&gt; 2 days/week</td>
<td>Several times/day</td>
</tr>
<tr>
<td><strong>FEV1</strong></td>
<td>&gt;80% pred or personal best</td>
<td>60-80% pred or personal best</td>
<td>&lt;60% pred or personal best</td>
</tr>
<tr>
<td><strong>Recommended Action</strong></td>
<td>Maintain; f/u 1-6 months Consider step down if controlled 3 months</td>
<td>Step up 1 step Re-eval 2-6 weeks</td>
<td>Consider short course oral steroids Step up 1-2 steps Re-eval 2 weeks</td>
</tr>
</tbody>
</table>
Case 1

- 13 yo
  - No long-term controller meds

Impairments -

- Daytime 4x/week
- Night 4x/month
- SABA Daily
- Lung fct No tests ever done
- Activity Doesn’t want to go to gym

Risks -

- No exacerbations requiring steroids
Case 2

- 4 yo
  - No long-term controller meds

- Impairments -
  - Daytime 2x/wk
  - Night 2x/mo
  - SABA 2x/wk
  - Lung fct ?
  - Activity no limitations

- Risks -
  - 2 exacerbations in last 6 months; 1 ICU
Case 3

- 8 yo

- Meds: Advair 250/50 (Step 4)

- Impairment -
  - Day 1x/wk
  - Night 1x/mo
  - SABA 1x/wk
  - Lung fct FEV1 >80%

- Activity No limitations

- Risk -
  - No exacerbations in last 1 year
Case 4

- 25 yo
  - Low dose ICS + LABA (Step 3)

- Control Impairments -
  - Day 3x/wk
  - Night 3x/wk
  - SABA 3x/wk
  - Activity None
  - Lung fct Peak flow >80%
  - Questionnaires ACT 18

- Risk -
  - No exacerbations
Asthma Action Plan

**DATE:** / / 

**WEIGHT:** 

**HEIGHT:** 

**DOB:** / / 

**Baselines Security**

**Best Peak Flow**

**GREEN ZONE**

You have ALL of these:
- Breathing is good
- No cough, or wheeze
- Can work/play easily
- Sleeping all night

Peak Flow is between:

**YELLOW ZONE**

You have ANY of these:
- Breathing is getting worse
- Coughing
- Wheezing
- Tightness in chest
- Can’t work/play easily
- Sleeps with night coughing

Peak Flow is between:

**RED ZONE**

You have ANY of these:
- Difficulty breathing
- Heart Racing
- Ribs are moving
- Medicine is not helping
- Trouble talking or sitting
- Lips or fingertips are gray or blue

Peak Flow is below:

**DOING WELL**

Always use a holding chamber/spacer with/without a mask with your inhaler. (Choose one)

**GO!**

**Step 1:** Take these controller medicines every day:

**Medicine:**

**How Much:**

**When:**

**Step 2:** If exercise triggers your asthma, take the following medicine 16 minutes before exercise or sports:

**Medicine:**

**How Much:**

**Step 3:** If your symptoms aren’t better or you don’t return to the GREEN ZONE, and your symptoms are getting worse, follow RED ZONE instructions.

**Caution**

**Step 1:** Keep taking GREEN ZONE medicines and ADD quick-relief medicine.

**Step 2:** Within 1 hour, if your symptoms aren’t better or you don’t return to the GREEN ZONE, call your health care provider today.

**Step 3:** If you are in the YELLOW ZONE more than 6 hours, take your oral steroid medicine and call your health care provider today.

**EMERGENCY**

**Step 1:** Take your quick-relief medicine NOW:

**Medicine:**

**How Much:**

**Step 2:** Call your health care provider NOW

**GET HELP NOW!**

Go to the emergency room or call 911 immediately.

The Asthma Action Plan provides authorization for the administration of medication described in the AAP.

This child has the knowledge and ability to self-administer quick-relief medications at school or daycare with approval from the school nurse.

DATE: / / 

MOM/PAPA SIGNATURE

This consent may supplement the school or daycare’s consent to give medicine and allows my child’s medicine to be given at school/daycare.

My child (circle one) **may** or **may not** carry self-administer and use quick-relief medicine at school with approval from the school nurse. (Not applicable)

DATE: / / 

FOLLOW-UP APPOINTMENT IN 

PARENT/SURVIVING SIGNATURE

DATE: / / 

PHONE: 

**PARENT/GUARDIAN NAME:**

**PRIMARILY CARE PROVIDER NAME:**

**PHONE:**
Asthma Triggers

- Infection
- Behaviors
- Allergens
Infections

Respiratory Infections Are the #1 Trigger for Asthma

What Can You Do?

- Wash hands
- Use separate towels
- Get an influenza shot
- Keep hands away from face
Behaviors

- Emotions (crying, laughing, shouting)
- Exercise may be a trigger for asthma, but asthma should not limit physical activity
- Smoking
Indoor Environmental Triggers

Your goal is to reduce exposure to triggers in the patient’s home.
Reducing Environmental
Asthma Triggers in the home

This training program was developed for health care providers, educators and families dealing with asthma.

TRAINING program

RESOURCES for asthma
RETA training

- 40 minute online training on assessing and reducing triggers

- [www.retahome.org](http://www.retahome.org)
Allergens

- **Animals**
  - Cats, dogs, etc.
  - Birds, mice
- **Cockroaches**
- **Dust mites**
  - Carpets/upholstery
- **Mold**
- **Pollens**
  - Weeds, grass, trees
- **Foods/additives**
  - Peanuts, shrimp, tree nuts, wheat, milk, soy, fish
- **Medical conditions**
- **Latex**
  - Gloves, balloons
Irritants

- Smoke
- Dust and chalk dust (when gloves are removed, and it is airborne)
- Strong odors (perfume, markers that smell, air fresheners, cleaning chemicals, paint, etc.)
- Cold (or very humid) air
# Asthma Triggers

<table>
<thead>
<tr>
<th>Triggers</th>
<th>What you can do to reduce your triggers</th>
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| **Cigarette Smoke** | - Do not allow smoking in your home, car, or around your home.  
- If you smoke, ask your health care provider for ways to help you quit.  
- Ask family members to quit, too.  
- Ask your health care provider for a referral to a quit smoking program, or call the US network of Quitlines: 1-800-QUIT-NOW (1-800-784-6666). |
| **Colds, Flu, Bronchitis** | - Wash your hands often.  
- Don’t touch your eyes, nose, or mouth.  
- Get a flu shot every year, preferably in the fall.  
- Avoid contact with people who have colds. |
| **Dust Mites** | - Get special dust mite-proof covers for your pillows and mattresses.  
- Wash sheets and blankets in hot water every week.  
- Wash stuffed animals frequently and dry completely.  
- Avoid having carpeting, if you can.  
- Vacuum carpet weekly with a HEPA vacuum cleaner. |
| **Pollen & Outdoor Air Pollution** | - Try to keep your windows closed during pollen season and when mold counts are high.  
- Plan to do outdoor activities on high pollen days.  
- Ask your health care provider about taking medicine during allergy season.  
- Visit daily air quality forecasts at www.wpmn.gov. |
| **Animals** | - Keep pets with fur or feathers out of your home.  
- If you can’t keep a pet outdoors, then keep the pet out of your bedroom, and keep the bedroom door closed.  
- Keep pets off upholstered furniture away from stuffed toys.  
- Wash your hands after petting or playing with pets. |
| **Mice, Rats, and Cockroaches** | - Do not leave food or garbage uncovered.  
- Clean up spills and food crumbs right away.  
- Store food in airtight containers.  
- Store cooking grease in the refrigerator.  
- Keep food out of the bedroom. |
| **Indoor Mold** | - Fix leaking faucets, pipes, or other sources of water.  
- Clean moldy surfaces with hot water and soap.  
- Use a dehumidifier in the basement if it is damp and smelly. |
| **Wood Smoke, Strong Odors, and Sprays** | - Avoid strong odors and sprays, like perfumes, powders, hair spray, paints, incense, cleaning products, candles, and room deodorizers.  
- Avoid inhaling smoke from burning wood. |
| **Exercise or Sports** | - Take your rescue medicine before sports or exercise to prevent symptoms if directed by your health care provider.  
- Warm up and cool down for 5-10 minutes before and after sports or exercise.  
- Cover your nose and mouth with a scarf when it gets cold.  
- Sometimes laughing or crying can be a trigger.  
- Some medicines and foods can trigger asthma. |

*www.health.state.mn.us/asthma/documents/09.eng.trigger.pdf*
59% of American Indian Adults are smokers compared to 16% of all Minnesota residents

This does not include use of tobacco in sacred rituals

62% of smokers want to quit

48% tried to quit in the last year
Questions from Provider

- 95% asked if they smoke
- 79% advised not to smoke
- 34% had any product or prescription recommended to help them quit
- 19% had setting a quit date suggested
- 29% had phone-line class or website suggested to them

source: Tribal Tobacco Use Project Survey
Strategies

- keep asking
- improve support for those who wish to quit
- suggest mitigating strategies for those who aren’t ready
  - smoke outside
  - maintain a smoke-free house and car
  - smoking jackets
culturally appropriate messages

I will
keep you safe from secondhand smoke.
Freedom from Tobacco Action Plan

Tobacco use is more than a habit. It’s an addition.

In the green and good to go!

I have no real cravings for tobacco. I’m pretty calm. I feel like my brain can focus normally.
I use medicine to control nicotine cravings every day.

- Nicotine patch: ______ mg patch ______ # patches, apply once daily.
- Bupropion IR, SR, XL (Wellbutrin or Zyban): ______ mg/day once daily for first ___ days, then ______________
- Varenicline (Chantix) ☐ Use Starter Pack as directed
  ☐ Use continuing month pack, ___ mg tab, ____ times per day
- Use prior to problem times: ______________________________

Yellow, but not so mellow.

I’m craving tobacco. I may be feeling irritable, anxious, and restless.
It is hard for me to get my brain to focus.
Continue your Green zone EVERY DAY Medicine

Need a rescue? Take a quick-relief nicotine medicine:

- Gum
- Lozenge
- Nasal Spray
- Inhaler

Take ________ (dose) every ________ minutes as needed.

Seeing red.

I am feeling strong cravings for tobacco. I really need a cigarette now. It may be very hard to get my brain to focus.

In the RED ZONE, take a quick-relief nicotine medicine.

- Gum
- Lozenge
- Nasal Spray
- Inhaler

Take ________ (dose) every ________ minutes as needed.
Continue your Green zone EVERY DAY Medicine.

If you are in the red zone, contact your physician or tobacco dependence treatment specialist. You may need stronger medicine.
American College of Chest Physicians (ACCP)
Tobacco-Dependency Treatment Toolkit

- Free, online
- Assessment tools
- Management tools
- Charting and reporting tools

http://tobaccodependence.chestnet.org
Self-management

- Helping our patients to help themselves
Self-management

- Patients are able to take responsibility for doing what it takes to manage their chronic illness effectively
- Patients are able to leave the provider office with knowledge, confidence, and motivation to manage their chronic illness
- Patients’ actions make the most difference in how well their chronic illness is controlled
Your role as a provider: Help make a plan

- Collaborative decision-making and brief, combined interventions are effective in helping motivate and engage patients in healthier lifestyles

- Patients see providers as experts
Providers are the Cheerleaders!

- Don’t give up!
  - Deliver consistent health messages
  - May take several visits before patient/family is ready to make a change
  - Think small steps for success
- Primary Care Providers are uniquely positioned to help
  - We have a relationship with patient/family
  - We know social situation, cultural factors, family and health history
Moving our patients along

- Each patient is somewhere on a continuum from poor control to optimal control
- Our job is locate their current status and help them set goals to improve a little at a time
Good goals

- Positive statements
- Precise/measurable
- Realistic
Big Goals - asthma

- Take controller regularly
- Follow AAP
- No smokers in home or car
- Avoid Triggers
- Understand pathophysiology of asthma
Setting small goals with patients with asthma

- Use a medication chart for controller
- Use spacer regularly
- Remove stuffed animals from sleeping area
- Family members smoke outside
- albuterol to school nurse office (gym)
- Keep copy of AAP on fridge
Setting self-management goals

- Assess the patient
- Assess his/her situation
- Explain goal setting
- Ask the patient for goal in his/her own words
- Ask the patient how certain (1-10) that the goal can and will be achieved
Setting self-management goals

- Identify potential barriers to reaching the goal and have the patient identify strategies to solve these problems
- Write goal in chart and for the patient to take home
- Set date (follow-up visit? phone call?) to review the goal
Improving asthma care

where do you start?
Challenging

- Requires:
  - learning
  - will to change
  - dedication
  - not accepting the status quo
Barriers

- Patients don’t come in
- Transportation
- Smoking
- Triggers
- Poverty
- Lack of Knowledge
- Chemical use
- Multiple co-morbid conditions “bigger fires”
- Outsiders
COMMUNITY

Health Care Organization
- Self-Management Support
- Delivery System Design
- Clinical Information Systems
- Decision Support

Effective Relationships
- Safe
- Efficient
- Patient-Centered
- Equitable
- Effective
- Timely

Activated Family and Community
- Informed, Activated Patient

Improved health and wellness for American Indian and Alaska Native individuals, families, and communities

Prepared, Proactive Community Partners
- Prepared, Proactive Care Team
Barriers

- Patients don’t come in
- Transportation
- Smoking
- Triggers
- Poverty
- Inconsistent diagnosing
- Lack of Knowledge
- Chemical use
- Multiple co-morbid conditions “bigger fires”
- Outsiders
Start where you are

- Improving asthma care starts with you and your clinic team taking some steps
Diagnose Asthma

- recurrent wheezing - probably asthma
- recurrent “RAD” - probably asthma
- treating inflammation will make kids better
Administer ACT

- How are patients who need an ACT identified?
- Which visits trigger use?
- Can you track scores over time?
- How to talk to patients about the results
- Use of concurrent spirometry
Strategy for ACT

- Paper
- Where are the tests?
- Who gives it out?
- Who scores it?
- Where is the score recorded?
- How is it entered into the EMR?
Strategy for ACT

- Computer based
- Where are the tests within the EMR?
- Who administers it?
- Who scores it?
- Where is the score recorded?
Complete AAP

- Improve/create process
  - Which patients?
  - Who completes?
  - When/what visits?
  - Where are blank action plans stored?
  - EMR - in computer? Scanned?
Assess for triggers

- help families reduce environmental triggers
- is there staff trained to do in home evaluation?
- do you have simple handouts that teach families what to do?
- are you giving consistent, clear messages about non-ceremonial smoking?
PDSA cycles

- small changes - big results
What are we trying to accomplish?

How will we know that a change is an improvement?

What changes can we make that will result in improvement?

Act  Plan

Study  Do
Pick something to improve

- make a quick plan
- try it out
- make changes
- try it out
- share it with others
- pick something else
why it matters

Thank you for all you do to improve the lives of families with asthma
Questions?