Your child’s asthma

We can control it.

Cook Children’s™
Asthma is a chronic airway disease. You cannot cure asthma, but you can control it. Treatment can improve asthma symptoms.

**Asthma changes the lung airways in 3 ways:**

1. Lining of the airways swell.
2. Muscles around the airways tighten.
3. Lungs make extra mucus.

These 3 changes cause the airway space to become very small and narrow.
Symptoms

Asthma symptoms are different for each person. Not all people with asthma wheeze. Coughing may be the only symptom. Asthma frequently begins with mild symptoms. It is important to recognize and treat even these mild symptoms so they do not get worse.

The main symptoms of asthma are:

- Shortness of breath.
- Wheezing.
- Tightness in chest.
- Frequent coughing.

My mild symptoms:

My main symptoms:

Triggers

Many things cause asthma symptoms. Everyone has different asthma triggers. Some people can have one or many triggers. Common asthma triggers include:

1. Allergies.
2. Weather change.
3. Strong odors and fumes.
4. Exercise or active playing.
5. Infections.
6. Dust mites.
7. Cockroaches.
8. Smoke.
1. Allergies

**Source**

- Foods such as nuts, eggs, fish, dairy products, food preservatives and food dyes.
- Pollens from flowers, trees, grasses, hay and ragweed.
- Mold spores often found in damp areas of your home, schools or fitness centers.
- Dander from animals such as rabbits, cats, dogs, hamsters, horses, birds, etc.

**Precaution**

1. Be aware of ingredients in foods.
2. Know the pollen counts.
3. Avoid animals you are sensitive to.
4. Wash your hands after touching animals.
5. Use bleach to clean areas stained by mold.

**Note:** You can treat some allergies with allergy medicines. Please talk to your doctor.

2. Weather change

**Source**

- Ozone alert days.
- High humidity.
- Cold air.

**Precaution**

1. On orange and red ozone days, limit outdoor activities, especially in the afternoon.
2. Close windows and use air conditioning when needed.
3. Cold, dry air may cause the airways to tighten.

**Good day**

- Cloudy to somewhat sunny or rainy.
- Temperatures from the mid-70s to low-80s.
- Windy weather.

**Moderate day**

- Partly cloudy to sunny skies.
- Temperatures from the upper-70s to mid-80s.
- Light to moderate wind.

**Reaching unhealthy**

- Sunny skies.
- Temperatures from the high-80s to 90s.
- Little wind.

**OZONE ALERT Unhealthy**

- Hazy, hot and humid.
- Temperatures from 90s and up.
- Little to no wind.

AN OZONE ALERT DAY!
3. **Strong odors and fumes**

**Source**
- Spray deodorants, perfumes, hair sprays, powders and scented cosmetics.
- Sprays from furniture polish, starch, cleaners and room deodorizers.
- Vapors from cleaning solvents, paint, paint thinner and liquid chlorine bleach.

**Precaution**
1. Make sure you have good air circulation or avoid these products.
2. When painting or spraying for bugs, let house air out 8 to 12 hours before returning home.

4. **Exercise or active playing**

**Source**
Children with asthma can exercise and play just like other kids.

**Precaution**
Always begin exercises with warm-ups and follow with cool-downs.
Talk with your doctor about taking reliever medicine before active play or exercise.

**My favorite sports to play:**

5. **Infections**

**Source**
Colds, flu, RSV and other respiratory infections.

**Precaution**
1. Frequent hand washing.
2. Avoiding others who are sick as much as possible.
3. Receiving a flu shot every year can lessen the chances of getting the flu.
6. Dust mites

Source
Dust mites are tiny bugs you cannot see. They live in pillows, bedding, stuffed animals, dirty air filters, carpet, draperies, furniture, etc.

Precaution
1. Use allergy control coverings on bed pillows and mattress.
2. Wash sheets weekly in hot water.
3. Only keep a few stuffed animals in your child’s room. Sometimes it is best to keep all stuffed animals out of the bedroom.
4. Place stuffed animals in freezer for 5 hours, once a week. This kills dust mites.
5. Change air conditioner filters as directed.
7. Vacuum, if possible, when your child is away.
8. Dust with a damp cloth.
9. Clean under beds and furniture.

7. Cockroaches

Source
Dried cockroach fecal material, saliva and body casings become airborne and can trigger asthma.

Precaution
1. Keep all food out of your child’s room.
2. Keep food and garbage in covered containers.
3. Use bug spray while child is away.

8. Smoke

Source
Tobacco smoke, wood burning smoke, industrial smoke and leaf burning smoke.

Precaution
Do not allow smoking in the home, car or around children. If you must smoke, do it outside. Wear an extra blouse, shirt or old bathrobe over your clothes while smoking outside and remove it before you enter the house. This helps keep the smoke and smell off of your clothes. Wash your hands right away.
My triggers:

<table>
<thead>
<tr>
<th>Trigger 1</th>
<th>Trigger 2</th>
<th>Trigger 3</th>
<th>Trigger 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Goals of asthma therapy

The goal of asthma therapy is to take control of your asthma. When you have good control of asthma:

- You do not miss school.
- You can play in any activity or sport.
- You know what triggers your asthma.
- You recognize the symptoms.
- You know what to do to manage your asthma.
- Everyone at home sleeps all night without waking up.
- You have little or no side effects from your medicine.
- You have few or no urgent care, emergency room or hospital visits.
- You do not have to use your reliever inhaler more than 3 times a week.

How can we control asthma episodes?

To control asthma episodes you need a written **asthma action plan** (Home Management Plan of Care) from your doctor. It includes the following:

1. What medicine to take and when.
2. What to do in an emergency.
3. Emergency contacts and phone numbers.
What medicines do we use to treat asthma?

There are 2 main kinds of medicines to treat asthma.

1. **Reliever medicines**
   - **Bronchodilator medicines:**
     - Relax muscles that tightened around airways.
     - Give quick relief during an asthma episode.
     - Are short-lasting.

   **Some common reliever medicines:**
   - Albuterol™
   - Xopenex™
   - Combivent™

2. **Controller medicines**
   - **Anti-inflammatory (steroidal and non-steroidal) medicines:**
     - Reduce swelling in the airways.
     - Reduce mucus production.
     - Are long-lasting.
     - Are taken every day.

   **Some common controller medicines:**
   - Flovent™
   - Qvar™
   - Pulmicort™

Advair™, Symbicort™ and Dulera™ relieve muscle tightness along with controlling airway swelling and mucus production. Singulair™ controls allergies and helps with some airway swelling/mucus production.

You use either an **inhaler** and **spacer device** or a **nebulizer** to breathe in most asthma medicines. Inhaled medicines can increase the effectiveness of the medicine and reduce possible side effects.

**Peak flow monitoring**

Some doctors order peak flow meters for their patients. A peak flow meter measures how much air you can quickly blow out of your lungs. After measuring the highest number possible on the meter (your personal best), check your peak flow rates daily. Your personal best measurement tells us if your peak flow rates are remaining stable or if they are dropping. This may help us with asthma management.
Managing emergency asthma episodes

Begin emergency asthma action plan if you have any of the following:

- Neck
- Ribs
  Sinking area around neck or ribs with each breath.

- Walking
- Talking
  Becoming difficult.

- Sitting
- Standing
  Hunching over is only way you can breathe.

- Lips
- Fingernails
  Turning gray or blue.

- Wheezing
- Coughing
- Shortness of breath
  Does not improve, or gets worse, even after your medicine has had time to work.

Peak flow monitoring:

- 50% less than your personal best

Most inhaled bronchodilator medicines help you breathe easier within 5 to 10 minutes.

Give reliever medicines and get medical help immediately!
How to use your inhaler with a spacer

**Important:** Before taking medicine, please follow instructions (included with inhaler) on how to prime your inhaler. **To take medicine:**

<table>
<thead>
<tr>
<th>Step</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Remove cap on inhaler.</td>
</tr>
<tr>
<td>2.</td>
<td>Shake inhaler for 5 seconds. Put inhaler mouthpiece into the spacer.</td>
</tr>
<tr>
<td>3.</td>
<td>Breathe out. Seal your lips around the spacer mouthpiece.</td>
</tr>
<tr>
<td>4.</td>
<td>Spray one puff from inhaler into the spacer.</td>
</tr>
<tr>
<td>5.</td>
<td>Breathe in slowly and deeply through mouth. If spacer whistles, you are breathing in too fast.</td>
</tr>
<tr>
<td>6.</td>
<td>Hold breath for 5 to 10 seconds, and then breathe out.</td>
</tr>
<tr>
<td>7.</td>
<td>Repeat steps 2 to 6 as instructed by your doctor.</td>
</tr>
<tr>
<td>8.</td>
<td>Wait one minute between puffs.</td>
</tr>
</tbody>
</table>

If using a spacer with a mask, follow same instructions. Place mask over nose and mouth with a good seal. Breathe in and out 6 to 7 times.
**HOME MANAGEMENT PLAN OF CARE**

- **Asthma**
- **Other**

**Date:**

**Doctor:**

**Doctor Phone #**

### Avoid These Triggers
- Cigarette Smoke
- Strong Odors
- Perfume
- Stay indoors as much as possible during extreme weather changes or high ozone days

### I Feel Good

<table>
<thead>
<tr>
<th>Controller Medicines</th>
<th>Puffs</th>
<th>Times a Day</th>
<th>Rinse your mouth &amp; spit after each treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advair Disc/MDI:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symbicort:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dulera:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flovent MDI:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qvar MDI:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmicort:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Continue to take your **Home Controller Medications**

### I Do Not Feel Well

<table>
<thead>
<tr>
<th>Quick Relief Medicines</th>
<th>Puffs</th>
<th>Times a Day</th>
<th>Rinse your mouth &amp; spit after each treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proventil / Ventolin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Albuterol):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xopenex:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Call your doctor if you have any of the following:
  - You need to take 3 extra treatments
  - You have to take a treatment 2 hours after your last one
  - The treatments are not helping

### I Feel Awful

<table>
<thead>
<tr>
<th>Medicines</th>
<th>Puffs</th>
<th>Times a Day</th>
<th>Rinse your mouth &amp; spit after each treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proventil / Ventolin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Albuterol):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xopenex:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Breathing hard and fast
- Trouble talking or walking
- Cannot work or play
- Constant coughing
- Lips and nails pale or blue

**If you need help now or are not sure what to do,**

**Call 911 or go to the closest Emergency Room**

---

Your follow up appointment is very important - see Nursing Discharge Summary for appointment information.

If you have another Home Management Plan of Care at home, please follow **THIS** form until your follow up appointment.

**Signature of RN / RT:**

**Date:**

**Time:**

**Parent/Legally Authorized Representative:**

**Date:**

**Time:**
Swollen airway

Open airway
These instructions are only general guidelines. Your doctors may give you special instructions. If you have any questions or concerns, please call your doctor.
The Respiratory System