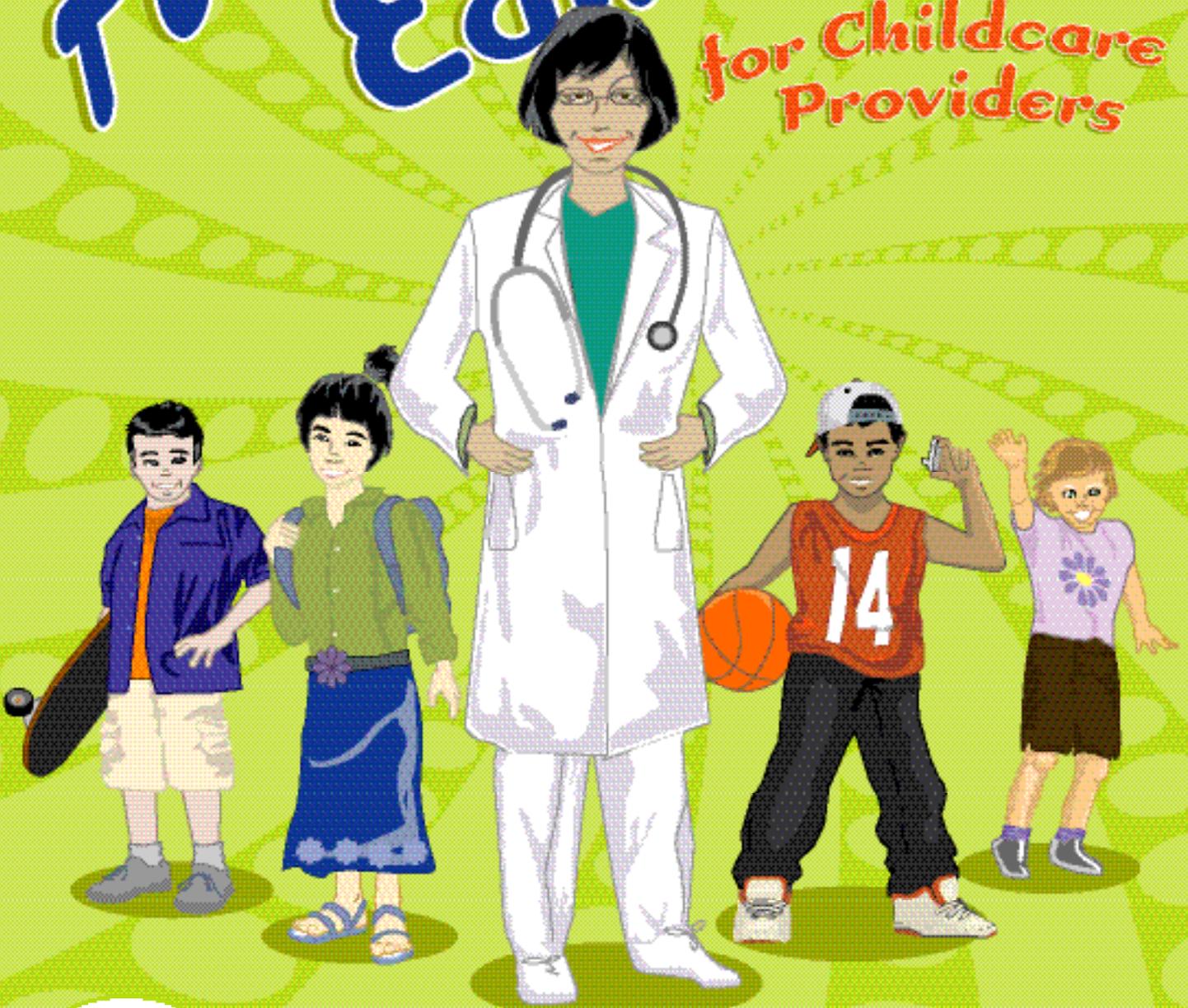


# Asthma Education

for Childcare Providers



**A JOINT PROJECT BETWEEN**

American Lung Association of San Diego and Imperial Counties,  
Children's Hospital and Health Center, and the Council of Community Clinics

Dear Childcare Provider:

Asthma is on the rise among America's children. It is the most common chronic disease in childhood. In a childcare center of 50 children, on average at least three will have asthma. Asthma can negatively affect a child's quality of life in many ways. It can result in many lost nights of sleep, disruption in family routines, and restricted activities. It is one of the leading causes of school absences, and can significantly reduce a child's ability to learn. However, with proper asthma management and treatment children with asthma can lead normal and active lives.

Except for their homes, children spend more time in childcare or school than they do anywhere else. As a childcare provider, you play a major role in the health and safety of the children under your care. To keep these children healthy it is essential that both childcare providers and parents have a good working knowledge of asthma treatment and management.

We are pleased to provide you with the Asthma Self Study Module for Childcare Providers to help you meet these challenges. This publication is one of the many services provided by the San Diego Childhood Asthma Initiative. The Initiative is a collaborative project of the American Lung Association of San Diego and Imperial Counties, Children's Hospital and Health Center, and the Council of Community Clinics. Our goal is to reduce the burden of asthma in San Diego County.

We created the Asthma Self Study Module to help educate childcare providers about what asthma is and how it can be cared for. It has information about common asthma symptoms and proper treatment. It also has advice about things that can make asthma worse and how to manage asthma from day to day. We hope that this information will help you feel more confident in caring for children with asthma!

Sincerely,

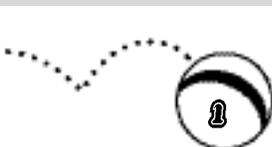
*San Diego Childhood Asthma Initiative*



Funded by the First 5 Commission of San Diego

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# GENERAL ASTHMA

## Statistics of Asthma

### ASTHMA IS A COMMON DISEASE IN THE UNITED STATES

- 31 million Americans have asthma
- The rate of people with asthma is nearly 4x what it was 10 years ago
- About 5000 deaths each year due to asthma

### ASTHMA IN CHILDREN

- 9.2 million children have asthma
- Most common chronic disease in childhood
- Children ages 0-4 have highest rates of emergency room visits and hospitalizations due to asthma
- #1 cause of missed school days
- On average, 2-3 children in every classroom will have asthma
- 50,000 children in San Diego have asthma

## Demographics of Asthma

- Children living in poverty and/or inner cities have higher rates of hospitalizations and mortality due to asthma
- African American children have significantly higher rates of emergency room visits and hospitalizations due to asthma
- African Americans are twice as likely to die from the disease

## Why has there been such an increase in Asthma?

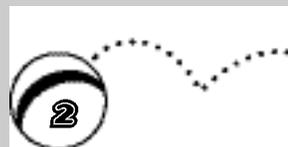
THERE IS NO CERTAIN ANSWER... MANY EXPERTS BELIEVE THAT IT IS LINKED TO:

### 1. INDOOR AIR QUALITY

- The average American now spends 80-90% of their time indoors
- More irritants and allergens are trapped indoors due to increased insulation and inadequate ventilation in homes and buildings
- Poor living conditions that increase levels of indoor irritants and allergens exist in many communities

### 2. OUTDOOR AIR POLLUTION

- Research has linked poor air quality with an increase in asthma in some cities



- 4 of California's cities were in the list of 20 U.S. cities with the worst air pollution
  - Los Angeles
  - San Diego
  - Fresno
  - Sacramento

### 3. OTHER POSSIBLE EXPLANATIONS

- Increased asthma awareness
- Doctors are diagnosing asthma more frequently

## Risk factors for Asthma

### PRIMARY RISK FACTORS

- Allergies (including skin allergy, eczema)
- Family history
- Viral respiratory infections

### OTHER RISK FACTORS

- Exposure to tobacco smoke when pregnant
- Exposure to tobacco smoke early in life
- Smaller airways at birth
- Low birth weight

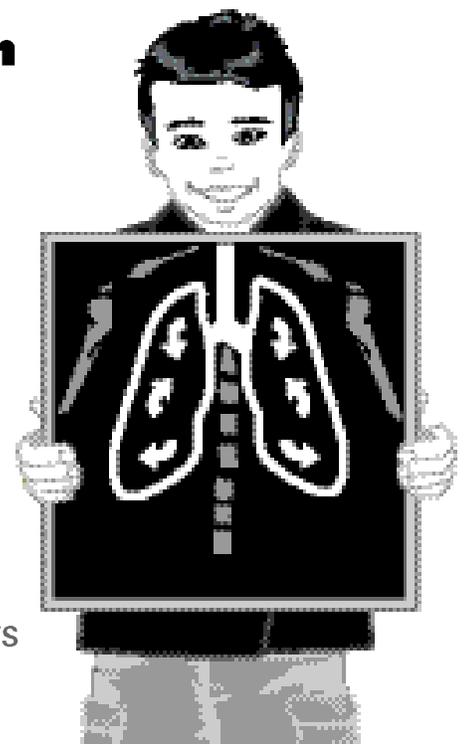
## WHAT IS ASTHMA?

### Asthma is a chronic lung disease

What is the difference between acute and chronic diseases?

#### 1. ACUTE DISEASES:

- Occur with a sudden onset
- Typically last for a shorter period of time



LUNGS AND AIRWAYS

## 2. CHRONIC DISEASES:

- Last for a longer period of time; usually for life
- Usually involves management of the disease
- Requires changes in health behaviors

### Some examples of chronic diseases include:

- Heart disease-

Management of the disease includes: change in diet, exercise, and daily medication

- Diabetes-

Management of the disease includes: insulin injections, strict diet, monitoring blood sugar levels

- Asthma-

Management of the disease includes: medication, avoiding triggers, regular doctor visits

## IS THERE A CURE FOR ASTHMA?

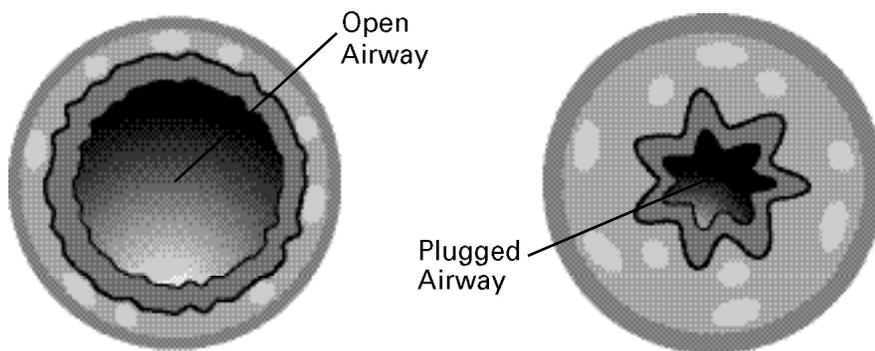
Currently there is no cure for asthma. Asthma is a life-long disease.

# Asthma and the Respiratory System

Healthy airways allow air to get in and out of the lungs.

## ASTHMA AFFECTS THE AIRWAYS (BRONCHIAL TUBES) OF THE RESPIRATORY SYSTEM

- Asthma causes the airways to become inflamed (swollen) and irritated
- The inflammation in the airways makes them extra sensitive
- The airways then react to different things in the environment (triggers)



BRONCHIAL TUBES  
IN NORMAL BREATHING

BRONCHIAL TUBES  
IN AN ASTHMA EPISODE

## AFTER EXPOSURE TO A TRIGGER, THE FOLLOWING THINGS HAPPEN

- Increased inflammation (swelling) inside the airway
- Muscles around airways tighten and constrict
- Increased mucus production, which clog airways

These processes make the airways more narrow and it harder to get air in and out of the lungs!

See Activity Sheet on page 24

# ASTHMA SIGNS AND SYMPTOMS

## 1. EARLY WARNING SIGNS AND SYMPTOMS

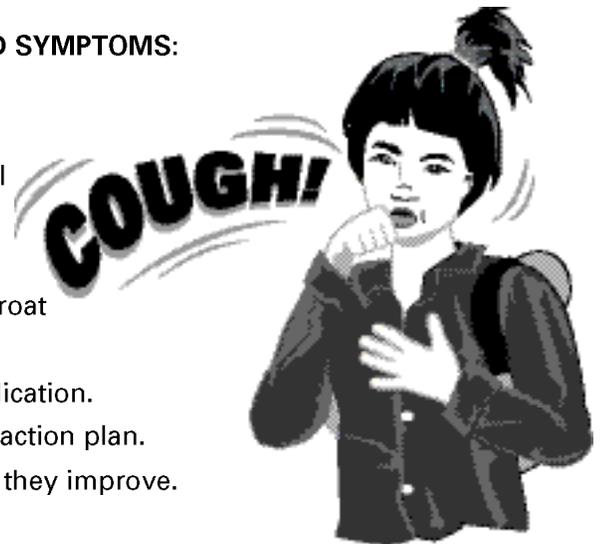
The body will give “early warning” signs before a severe asthma episode. These signs and symptoms will vary from child to child.

### EARLY WARNING SIGNS AND SYMPTOMS:

- Coughing (day or night)
- Wheezing
- Breathing faster than usual
- Feeling tired
- Chest tightness
- Runny nose or scratchy throat

### *When you see these signs:*

1. Administer quick relief medication.
2. Refer to the child’s asthma action plan.
3. Monitor child to make sure they improve.



## 2. EMERGENCY WARNING SIGNS AND SYMPTOMS

Call your doctor or get medical help immediately if you see emergency warning signs.

- Breathing very quickly or hunched over
- Severe wheezing
- Nostrils open wider with each breath
- Hard time walking, talking, or eating
- The skin between the ribs is pulled tight
- Lips, skin, or fingernails are blue – **CALL 911**
- Quick relief medicine isn’t working after 20 or 30 minutes – **CALL 911**

***If you see any of these symptoms:***

1. Call the doctor or get medical help right away
2. Refer to the asthma action plan
3. Administer quick-relief medication

## **What are triggers?**

An asthma trigger is something that causes an asthma episode. A trigger is anything that affects the airways of a person with asthma. The airways become tight, swollen, and produce excess mucus. There are various types of things in our environment that can trigger asthma, and every person has different triggers.

### **KNOW WHAT TRIGGERS AFFECT THE CHILDREN IN YOUR CARE!**

Triggers not only can cause a child with asthma to have trouble breathing, but they can also lead to the development of asthma in some children.

**Here are some examples of common triggers:**

- Respiratory infections (cold, flu, bronchitis)
- Environmental irritants and allergens (smoke, mold, dust, etc)
- Exercise
- Emotions
- Weather

### **REDUCING A CHILD'S EXPOSURE TO TRIGGERS**

By reducing the triggers in the child's everyday world, you will help to maintaining control of their asthma!

## **Irritants**

These include:

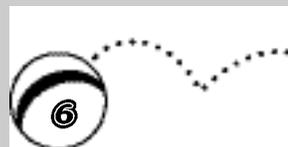
- Tobacco smoke
- Perfume
- Household cleaners
- Insecticides
- Indoor and outdoor fires
- Air pollution

### **TOBACCO SMOKE**

Children of smokers are twice as likely to develop asthma than children whose parents do not smoke. Children who are exposed to tobacco smoke are also more likely to suffer from pneumonia, bronchitis, other lung diseases and ear infections.

**Some suggestions**

- Don't smoke
- Have a non-smoking policy at your center
- If you do smoke, do not smoke around children and wash your hands to eliminate leftover irritants/fumes





**NO SMOKE**



**DUST MITE**

- Remember smoke residue left on clothing can also trigger asthma
- Encourage parents not to smoke

### **OTHER ENVIRONMENTAL IRRITANTS**

#### **Some suggestions**

- Eliminate use of wood stoves and fireplaces in home
- Have children stay indoors and keep windows closed when pollution measurements are high
- To obtain current air quality readings check the “weather section” of the local newspaper or use the environmental protection agency website listed on the resource page.
- Do not use strong smelling perfumes, and avoid other things that contain strong fragrances like: soaps, lotions
- Use unscented household cleaners

## **Allergens**

### **DUST MITE**

These are tiny insects that are too small to see that live in bedding, carpeting, stuffed animals, and furniture. They feed on dead skin cells and thrive in humid environments. They do not bite or spread disease and are only harmful to people who are allergic to them. It is the droppings of the dust mite that is the allergen not the bug itself.

*Interesting Fact: A single gram of dust can have over 18,000 dust mites*

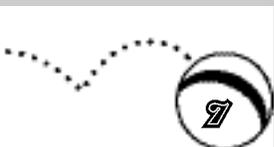
#### **Some suggestions:**

- Change bedding at least once a week, and wash in hot water (above 140 degrees)
- Enclose pillows and mattresses, and box spring in allergy proof mattress covers (available at Walmart, Target, etc)
- Remove stuffed animals from childcare center, or wash them frequently in hot water
- Dust frequently with damp cloth
- Store toys behind closed cabinet doors
- Have child avoid upholstered furniture, carpeting
- Vacuum when children are not present
- Have a vacuum with a True Hepa-filtration system- this type of vacuum is capable of getting up microscopic allergens like dust mites, and mold spores.

### **MOLDS**

Molds also thrive in moisture-rich environments. Molds release spores in the air, which can be harmful for people with allergies and asthma. Molds can be toxic if found in large concentrations indoors. Molds are found in:

- Old carpets
- Dark places



- Household plants
- Kitchens and Bathrooms
- Places where there are water leaks

#### Some suggestions

- Molds can be hard to find. It is important to check underneath carpeting and sinks, and behind objects against walls
- Keep bathrooms and kitchens well aired
- Clean mold with a diluted bleach solution (1part bleach: 10 parts water)
- Fix leaky faucets and pipes
- Get professional help if mold growth is bigger than 3ft by 3ft in size
- Avoid using swamp coolers, which can harbor mold
- Avoid using vaporizers and humidifiers
- Remove household plants from home (if necessary)
- Air plants and epiphytes do not harbor mold and are a good alternative

#### COCKROACHES

Cockroaches can be an asthma trigger. Small pieces of dead roaches and roach droppings settle in household dust and end up in the air we breathe. Cockroach allergens are likely to play a significant role in asthma in many inner city areas.

#### Cockroaches like:

- Food, water, and shelter (clutter)

#### Some suggestions:

- Do not leave food or garbage exposed
- Fix leaky faucets and pipes
- Store food in sealable containers and clean up crumbs
- Wash dishes immediately after eating
- Clean up cluttered areas

#### PESTICIDES

Pesticides can also be harmful to a child's health and can be an asthma trigger for some children.

#### Some suggestions

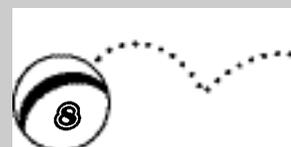
- Try using poison baits, boric acid, roach gel, or traps first before using sprays
- Limit spray to the outdoors or to the infested area
- Do not spray where you prepare or store food
- Do not spray where children play, crawl, and sleep
- After spraying make sure the room is aired out and everything is wiped down
- If problem is severe; call a professional



**POLLEN**



**STUFFED TOYS**



## **PETS: ANIMAL DANDER**

Animal allergens are another common asthma trigger. It is usually not the animal fur itself that causes the reaction but substances in animal saliva, urine, and skin secretions.

### **Some suggestions:**

- If possible do not have pets
- Keep pets outside when children are present at daycare
- Wash pet weekly
- Keep pet off beds, upholstered furniture, and carpets



## **POLLENS**

Some children's asthma is triggered as an allergic reaction to pollen, which is found in flowering grasses, trees, shrubs, and flowers.

### **Some suggestions:**

- Find out when the pollen count is high from your local newspaper or TV news and keep the children indoors during the early morning and late afternoon on these days.
- Keep windows closed during seasons when pollen count is high (May and October)
- Use air conditioning, if possible
- Current pollen levels in your area are available at [www.pollen.com](http://www.pollen.com)

## **FOODS**

A child's asthma can be triggered by eating foods to which they are allergic. Some common food allergies include peanuts, eggs, chocolate, wheat, and pineapples. Certain food additives and preservatives also can make asthma worse.

### Some suggestions

- Find out what foods trigger the child's asthma
- Avoid these foods at all times
- Read ingredients on labels of all food products

## Other Triggers

### RESPIRATORY INFECTIONS

This is the more common trigger of asthma especially in children under 5 years of age. Young children get sick frequently. Their immune system is still developing and continues to get stronger as they get older. For this reason it is difficult for children to avoid the "cold and flu" especially during the seasons of fall and winter. It is the bacteria and viruses that irritate the airways and increase asthma symptoms.

### Some suggestions

- Children with asthma should have annual flu vaccinations
- Keep children away from other sick children
- Remind parents to leave sick children at home
- Have children wash hands frequently

### WEATHER

Changes in weather can have an affect on a child's asthma. Cold and dry weather, sudden changes of weather, or humid conditions can trigger asthma.

### Some suggestions

- Have child wear a scarf over the nose and mouth on cold days
- Use air conditioning indoors, if possible, in hot, humid weather
- Make sure heating and air conditioning filters are clean.  
(Should be changed according to manufacturer's instructions)

### EXERCISE

Exercise can be a trigger for some children with asthma, but should not be avoided!

### Some suggestions:

- Allow child to warm up before exercise
- Provide rest times when playing, especially outdoors
- When children are exercising be aware of other triggers like pollen, mold, pollution
- If directed by a physician, administer quick relief medication to child 20-30 minutes prior to exercise

### EMOTIONS

Asthma can be triggered by emotions. Strong emotions like crying or laughing can affect a child's breathing and trigger an asthma episode.



**FOODS**



**WEATHER**



## MEDICATION

### Some suggestions

- When child is excited or upset tell him/her to sit down, take deep breaths and relax

### BREATHING EXERCISES *(Can help child stay calm during asthma episode)*

- Have child take a slow deep breath through nose
- When their lungs are full of air, have them purse their lips and let the air out slowly through their mouth like they are blowing out through a straw.
- As they breathe out their shoulders should go limp and their head should sag down.
- The child should breathe in and out five times as directed above and repeat the exercise as needed.

**Remember, it is important to discuss with parents and document the triggers for every child with asthma!**

# ASTHMA MEDICATIONS

There is no cure for asthma, but it can be controlled by avoiding asthma triggers and through the right medications.

### ASTHMA MEDICINES

- Very safe and effective when used correctly
- These drugs are not habit-forming or addictive
- Important to administer asthma medications as prescribed
- Certain medications are taken daily to control the asthma

## There are two main kinds of Asthma Medications

### 1. QUICK RELIEF MEDICATIONS

Other common names for these medications

- Relievers
- Openers
- Rescue Medications
- Bronchodilators

### 2. LONG TERM CONTROL MEDICATIONS

Other common names for these medications

- Controllers
- Preventive Medications



# Quick Relief Medications

(Short-acting bronchodilators)

These medications are used to provide relief of symptoms. Bronchodilators quickly relax the bronchial muscles and open up the airways. Every child with asthma will be prescribed a quick relief medication to provide relief of their symptoms. A common name for this kind of medication is **Albuterol**.

- Important! It is important to have a quick relief medication at the childcare facility for each child with asthma.
- Prescription will indicate “take as needed” and “not to exceed every four hours”
- Administer quick relief medications when you see asthma symptoms (coughing, wheezing, etc)
- They work within a few minutes and can last up to 4 hours
- After administering a quick relief medicine a child may become hyper or agitated. This is a normal reaction to the drug.
- Quick relief medication is most commonly administered through a metered dose inhaler or a nebulizer.

**Remember!** Quick relief medications do not help the swelling in the airways. They only help a person feel better temporarily by relaxing the muscles.

Quick relief medications are similar to pain relievers. As a person only takes Tylenol or Aspirin to relieve pain, similarly a person with asthma only uses their quick relief medication to provide relief of their asthma symptoms.

**Important!** If a child uses quick relief medicine more than 2-3 times a week, they need to be on a controller medication. Overuse of quick relief medications decrease their ability to work.

# Long-Term Control Medications

Long-term control medications are taken every day to control the inflammation in the airways. Children that are on long-term medication are less likely to suffer from asthma symptoms and severe asthma episodes because they are less susceptible to asthma triggers.

## LONG-TERM MEDICATIONS

- Begin to work over a period of a few weeks
- Reduce inflammation in airways
- Reduce number of times a child needs to use quick relief medication
- Must be taken on a daily basis, even if child is feeling well
- Have minimal side effects
- Most common and most effective long-term medication are inhaled corticosteroids. Common names are **Azmacort**, **Pulmicort**, **Flovent**, and **Advair**.
- Another new type of controller medication is a leukotriene modifier. The common name for it is **Singulair**.

## ORAL STEROIDS

Oral Steroids are usually taken for a few days after a severe asthma episode. They come in the form of a pill or syrup. Long-term use of this kind of medication can cause side effects. Oral steroids are also given in low doses as daily medication for children with very severe persistent asthma.

For more detailed descriptions of the different types of asthma medications please refer to the medication chart.

## Treatment

Both of these types of medications are normally prescribed according to the severity of the asthma. Asthma severity is determined mainly by the frequency of symptoms. This is normally discussed between the parents and the doctor.



# Asthma Severity Classification Chart

ASTHMA SYMPTOMS	TREATMENT
<p><b>Mild Intermittent</b></p> <ul style="list-style-type: none"> <li>• The least severe form of asthma</li> <li>• Wheezing/Coughing present less than 2x week</li> <li>• Nighttime symptoms rare, less than 2x month</li> </ul>	<p>No long term medication needed Quick relief medication as needed</p>
<p><b>Mild Persistent</b></p> <ul style="list-style-type: none"> <li>• Wheezing/coughing usually occurs more than 2x weekly, but less than every day</li> <li>• Increased nighttime symptoms, more than 2x per month</li> <li>• Flare-ups begin to affect child's activities</li> </ul>	<p>Daily controller medication</p> <ul style="list-style-type: none"> <li>• Inhaled steroid</li> <li>• Cromoln (Intal)</li> <li>• Leukotriene Modifier</li> </ul> <p>Quick relief medication as needed</p>
<p><b>Moderate Persistent</b></p> <ul style="list-style-type: none"> <li>• Symptoms occur daily</li> <li>• Nighttime symptoms greater than once a week</li> <li>• Flare-ups affect activity</li> </ul>	<p>Daily controller medication</p> <ul style="list-style-type: none"> <li>• Inhaled corticosteroid and long-acting bronchodilator</li> </ul> <p>Quick relief medication as needed</p>
<p><b>Severe Persistent</b></p> <ul style="list-style-type: none"> <li>• Most severe form</li> <li>• Symptoms occur continuously</li> <li>• Almost nightly nighttime symptoms</li> <li>• Activity is poorly tolerated</li> </ul>	<p>Daily Controller Medication</p> <ul style="list-style-type: none"> <li>• High-dose inhaled steroid and long-acting bronchodilator</li> <li>• May require low dose of oral steroids</li> </ul> <p>Quick relief medication as needed</p>

# Asthma Medication Chart

TYPE OF MEDICATION	QUICK RELIEF OR LONG TERM	HOW THEY WORK
Short-acting Beta-agonists	Quick-relief	Quickly relaxes muscles around airways
Anticholinergic	Quick-relief	Works to keep airways from closing Normally prescribed to patients with severe asthma Used in conjunction with other quick relief medicines
Inhaled Corticosteroids	Long-term	Reduces airway inflammation
Oral Corticosteroids	Long-term	Reduces airway inflammation
Leukotriene Modifiers	Long-term	Blocks airway inflammation
Long-acting Beta-agonists	Long-term	Relaxes bronchial muscles Slower onset, longer duration than short-term beta-agonists
Cromolyn Sodium	Long-term	Blocks airway inflammation

WHEN ARE THEY USED?	HOW THEY ARE TAKEN	COMMON NAMES
<ul style="list-style-type: none"> <li>• For quick relief of asthma symptoms</li> <li>• Used to treat exercise induced asthma</li> </ul>	Nebulizer MDI Syrup Dry Powder	Albuterol Maxair Proventil Ventolin Serevent
<ul style="list-style-type: none"> <li>• For quick relief of symptoms</li> <li>• Used for patients that do not tolerate short-acting beta-agonists</li> <li>• Possible additive benefit to inhaled beta-agonists</li> </ul>	Nebulizer MDI Nasal Spray	Atrovent Combivent
<ul style="list-style-type: none"> <li>• Used for management of persistent asthma</li> <li>• Reduces asthma symptoms and need for quick-relief medications</li> </ul>	MDI Dry powder Inhaler	Aerobid Azmacort Beclovent Flovent Pulmicort Vanceril
<ul style="list-style-type: none"> <li>• Given for a short period of time to gain quick control of poorly controlled asthma</li> <li>• Given long-term for children with severe persistent asthma</li> </ul>	Tablets Syrup	Pediapred Prelone Prednisone
<ul style="list-style-type: none"> <li>• Used as alternative treatment to inhaled steroids</li> <li>• Reduces asthma symptoms and need for quick-relief medications</li> </ul>	Tablets Chewable tablets	Singulair Zyflo Accolate
<ul style="list-style-type: none"> <li>• Used together with anti-inflammatory medications to control symptoms</li> <li>• Not used to treat acute symptoms</li> <li>• Very effective for nighttime symptoms</li> </ul>	MDI Dry-powder Tablet	Serevent Foradi Proventil Volmax
<ul style="list-style-type: none"> <li>• Used as an alternative treatment to low-dose inhaled steroids</li> <li>• Reduces need for quick-relief medications</li> </ul>	MDI Nebulizer	Intal

# ASTHMA DEVICES

## Using a Metered Dose Inhaler with a Spacer (MDI)

### Fact:

- Each time an inhaler is used, the same amount of medicine is released as a very fine mist that can get deep into the lungs
- Medications taken correctly with inhalers tend to be more effective and have fewer side effects than when the same medication is taken orally

### Fact:

- Spacers are recommended for anyone that uses a metered dose inhaler

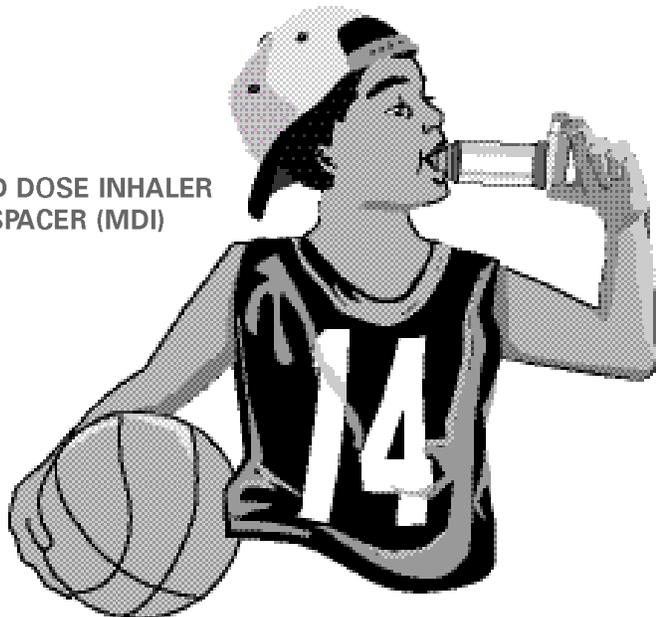
### FIVE REASONS TO USE A SPACER

- Helps deliver more medication into the lungs, and less is deposited in the mouth
- Helps medication get further into lungs
- Helps eliminate taste of medicine
- Decreases coughing after using inhaler
- There are fewer side effects from medications

### USING AN MDI WITH A YOUNG CHILD

1. Remove the cap to the inhaler
2. Shake the inhaler 4 -5 vigorous times
3. Attach inhaler to spacer

METERED DOSE INHALER  
WITH A SPACER (MDI)



### **SPACER WITH MOUTHPIECE**

Recommended for children over 5 years of age. *(After doing steps 1-3)*

4. Ask the child to breathe out
5. Have child place the mouthpiece of the holding chamber between the teeth and above the tongue, closing lips around it
6. Press down on inhaler once
7. Ask child to take a slow deep breath in
8. Encourage child to hold breath for 5-10 seconds after inhaling medication
9. Remove mouthpiece from mouth, allowing for exhalation
10. Wait at least 1 minute before administering second puff, if indicated
11. If device whistles, encourage child to breath slower

### **SPACER WITH MASK**

Recommended for children ages 0 to 5 *(After doing steps 1-3)*

4. Place mask firmly on child's face
5. Press down on inhaler once
6. Encourage child to take 5-6 normal breaths
7. Remove mask
8. Wait at least 1 minute before second puff

**A young child cannot use an MDI effectively without a spacer!**

## **Using an MDI without a spacer**

- Can only be used with quick relief medications
- Not recommended for children
- Two techniques: Closed Mouth Technique, Open Mouth Technique

### **CLOSED MOUTH TECHNIQUE**

- Remove the cap
- Shake MDI
- Breathe out normally
- Put the inhaler mouthpiece between teeth, with tongue underneath it
- Press down on inhaler as you breath in slowly and completely
- Hold breath for 10 seconds allowing medication to go deep into lungs
- Wait one minute between puffs, repeat if indicated

### **OPEN MOUTHED TECHNIQUE**

Follow closed mouth technique except

- Open mouth wide
- Hold inhaler 2 finger widths from mouth
- Press down inhaler and take slow deep breath in for 5-10 seconds

### **OPEN MOUTHED TECHNIQUE**



## DRY POWDER INHALERS

- Younger children and infants not able to use this type of medication
- Important to keep inhalers away from moisture
- Breath in needs to be fast, deep and forceful

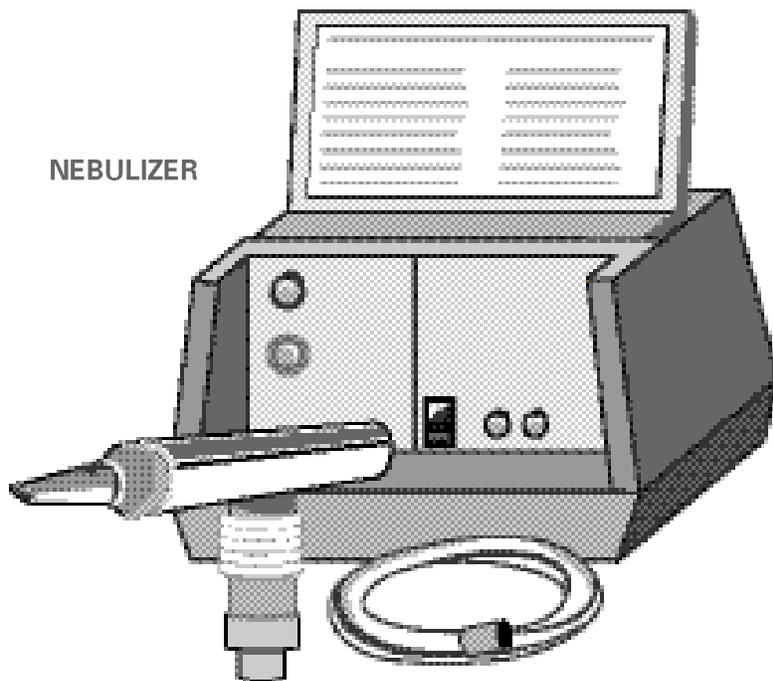
## Nebulizers - Breathing Machine

- Used to get medication deep into the lungs
- Medication is added to the nebulizer that is powered by a small compressor. The compressor then pushes air through the medication and changes the medication from a liquid to a fine mist.
- Nebulizers are most often used by young children and individuals who do not get relief from metered dose inhalers

### USING A NEBULIZER

1. Put the nebulizer together. Read the instructions or ask your doctor to show you how.
2. Make sure the machine is on a flat surface.
3. Put the medicine in the cup.
4. Connect the tubing to the machine and turn it on. A mist should come out.
5. Put the mouthpiece in the mouth or put the mask on. The mask should fit snugly over the nose and mouth.
6. Breathe in and out slowly and deeply until the medicine is gone. Holding each breath for 1 or 2 seconds.
7. Turn the compressor off and disconnect the tubing.
8. Rinse mouth with water.
9. Store the machine in a plastic bag.

NEBULIZER



# Cleaning and Care Devices

## KNOW HOW MUCH MEDICINE IS LEFT IN THE INHALERS!

Different types of medicines contain varying amounts of medication.

To know how long the medicine will last:

- Find out total number of puffs in canister of medicine (written on label)
- Keep a written record every time a puff is given to a child
- Notify parents when canister is running low

## CLEANING DEVICES

**Asthma Devices should be cleaned every 2-3days and after every use if child is sick**

### 1. INHALERS AND SPACERS

- Inhaler and spacer devices should NEVER be shared among children

#### TO CLEAN THESE DEVICES

- Remove canister from inhaler device
- Soak inhaler and spacer in soap and water or one part vinegar to 3 parts water for 30 minutes
- Air dry

### 2. NEBULIZERS

- Tubing and mouthpiece should NEVER be shared among children

#### TO CLEAN THE NEBULIZER

- Soak mouthpiece, and mask in soap and water or one part vinegar to 3 parts water for 30 minutes
- Air dry
- Do not soak tubing
- Shake excess moisture out of tubing after every use
- Wipe down nebulizer and outside of tubing with damp cloth
- Store in clean plastic bag
- Check filter periodically, and replace if necessary

# ASTHMA MANAGEMENT

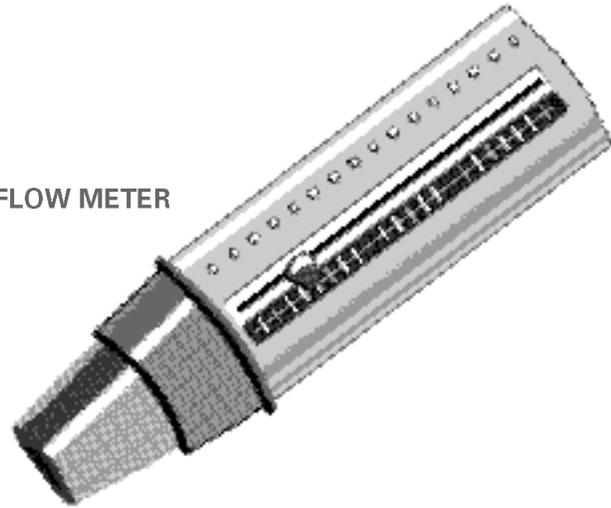
## Using a Peak Flow Meter

Generally for children over 5 years of age

The peak flow meter is an asthma management tool that measures the air flow out of a child's lungs. The peak flow meter is small, convenient, and easy to use. It can be used at a doctor's office, home or at school to:

- Evaluate changes in air flow out of the lungs
- Find out how well medicine is working
- Warn of a breathing problem before a crisis
- Help identify specific triggers of asthma
- Find out times and patterns of breathing problem

PEAK FLOW METER



### PROPER USE

- Ask child to stand up
- Position indicator at the bottom of the numbers
- Have child take deep breath, place mouthpiece between teeth, closing lips tightly around mouthpiece without blocking the opening with tongue
- Have child exhale hard and fast into meter, this moves the indicator
- Read number at the position of the indicator
- Repeat again to get most accurate reading
- Know what values are normal for each child (their personal best)

*A child's personal best is obtained by the parent recording the child's peak flows every day over a two week period of time and taking the best average reading.*

**Green Zone- 80-100% of their best**

**Yellow Zone- 50-80% of their best**

**Red Zone-50% or below their best**

- Clean mouthpiece daily

# Asthma Action Plans

An asthma action plan is a set of written instructions from the doctor. The action plan helps parents and providers understand what medications to give according to child's symptoms. It is important for parents and childcare providers to follow the plan according to the child's symptoms. If child is over the age of five asthma action plans can be used in conjunction with peak flow readings. Parents can request this from their doctor.

Every person's asthma action plan is made especially for him or her. For example this one is divided into stoplight colors

## GREEN ZONE- GO!

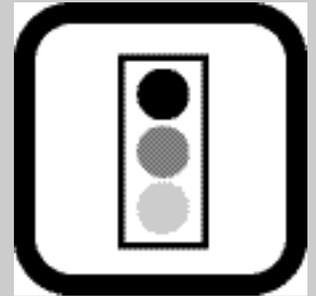
- Peak flows are at 80-100% of their personal best
- Minimal or no symptoms present
- Take routine medications as prescribed by the doctor

## YELLOW ZONE- CAUTION!

- Peak Flows are 50-80% of personal best
- Asthma symptoms are present
- Give more quick relief and long term medication, as prescribed by the doctor
- Keep child away from triggers, they can be a real problem in the yellow zone

## RED ZONE-DANGER!

- Peak Flows are below 50%
- Emergency signs and symptoms are present
- Quick relief medications are not working well
- Follow emergency plan and call doctor and parents



## ACTION PLAN

**Asthma Action Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Doctor: \_\_\_\_\_ Medical History #: \_\_\_\_\_  
 Doctor's Office Phone Number: Day \_\_\_\_\_ Night/Weekend \_\_\_\_\_  
 Pharmacy Contact: \_\_\_\_\_  
 Doctor's Signature: \_\_\_\_\_

**GO**

Your asthma is under control. You are feeling good. You are sleeping well. You are eating well. You are playing well. You are going to school well. You are taking your medicine as prescribed. You are not coughing or wheezing. You are not having any trouble breathing. You are not having any chest pain. You are not having any trouble sleeping. You are not having any trouble with your school or work. You are not having any trouble with your friends or family. You are not having any trouble with your doctor or pharmacist. You are not having any trouble with your insurance or billing. You are not having any trouble with your transportation or parking. You are not having any trouble with your weather or environment. You are not having any trouble with your diet or exercise. You are not having any trouble with your stress or anxiety. You are not having any trouble with your depression or mental health. You are not having any trouble with your chronic conditions or disabilities. You are not having any trouble with your aging or end-of-life care. You are not having any trouble with your legal or financial affairs. You are not having any trouble with your estate planning or probate. You are not having any trouble with your tax or accounting. You are not having any trouble with your insurance or benefits. You are not having any trouble with your retirement or pension. You are not having any trouble with your Social Security or Medicare. You are not having any trouble with your Medicaid or other public benefits. You are not having any trouble with your housing or homelessness. You are not having any trouble with your food or nutrition. You are not having any trouble with your alcohol or substance use. You are not having any trouble with your gambling or addiction. You are not having any trouble with your violence or criminal justice. You are not having any trouble with your immigration or citizenship. You are not having any trouble with your naturalization or citizenship test. You are not having any trouble with your passport or travel. You are not having any trouble with your international or foreign travel. You are not having any trouble with your visa or immigration status. You are not having any trouble with your asylum or refugee status. You are not having any trouble with your naturalization or citizenship application. You are not having any trouble with your citizenship interview or test. You are not having any trouble with your citizenship oath or ceremony. You are not having any trouble with your citizenship certificate or passport. You are not having any trouble with your citizenship renewal or expiration. You are not having any trouble with your citizenship revocation or loss. You are not having any trouble with your citizenship restoration or reinstatement. You are not having any trouble with your citizenship naturalization or application. You are not having any trouble with your citizenship interview or test. You are not having any trouble with your citizenship oath or ceremony. You are not having any trouble with your citizenship certificate or passport. You are not having any trouble with your citizenship renewal or expiration. You are not having any trouble with your citizenship revocation or loss. You are not having any trouble with your citizenship restoration or reinstatement.

**CAUTION**

Your asthma is getting worse. You are coughing or wheezing. You are having trouble breathing. You are having chest pain. You are having trouble sleeping. You are having trouble with your school or work. You are having trouble with your friends or family. You are having trouble with your doctor or pharmacist. You are having trouble with your insurance or billing. You are having trouble with your transportation or parking. You are having trouble with your weather or environment. You are having trouble with your diet or exercise. You are having trouble with your stress or anxiety. You are having trouble with your depression or mental health. You are having trouble with your chronic conditions or disabilities. You are having trouble with your aging or end-of-life care. You are having trouble with your legal or financial affairs. You are having trouble with your estate planning or probate. You are having trouble with your tax or accounting. You are having trouble with your insurance or benefits. You are having trouble with your retirement or pension. You are having trouble with your Social Security or Medicare. You are having trouble with your Medicaid or other public benefits. You are having trouble with your housing or homelessness. You are having trouble with your food or nutrition. You are having trouble with your alcohol or substance use. You are having trouble with your gambling or addiction. You are having trouble with your violence or criminal justice. You are having trouble with your immigration or citizenship. You are having trouble with your naturalization or citizenship test. You are having trouble with your passport or travel. You are having trouble with your international or foreign travel. You are having trouble with your visa or immigration status. You are having trouble with your asylum or refugee status. You are having trouble with your naturalization or citizenship application. You are having trouble with your citizenship interview or test. You are having trouble with your citizenship oath or ceremony. You are having trouble with your citizenship certificate or passport. You are having trouble with your citizenship renewal or expiration. You are having trouble with your citizenship revocation or loss. You are having trouble with your citizenship restoration or reinstatement.

**DANGER**

Your asthma is getting very worse. You are having severe trouble breathing. You are having severe chest pain. You are having severe trouble sleeping. You are having severe trouble with your school or work. You are having severe trouble with your friends or family. You are having severe trouble with your doctor or pharmacist. You are having severe trouble with your insurance or billing. You are having severe trouble with your transportation or parking. You are having severe trouble with your weather or environment. You are having severe trouble with your diet or exercise. You are having severe trouble with your stress or anxiety. You are having severe trouble with your depression or mental health. You are having severe trouble with your chronic conditions or disabilities. You are having severe trouble with your aging or end-of-life care. You are having severe trouble with your legal or financial affairs. You are having severe trouble with your estate planning or probate. You are having severe trouble with your tax or accounting. You are having severe trouble with your insurance or benefits. You are having severe trouble with your retirement or pension. You are having severe trouble with your Social Security or Medicare. You are having severe trouble with your Medicaid or other public benefits. You are having severe trouble with your housing or homelessness. You are having severe trouble with your food or nutrition. You are having severe trouble with your alcohol or substance use. You are having severe trouble with your gambling or addiction. You are having severe trouble with your violence or criminal justice. You are having severe trouble with your immigration or citizenship. You are having severe trouble with your naturalization or citizenship test. You are having severe trouble with your passport or travel. You are having severe trouble with your international or foreign travel. You are having severe trouble with your visa or immigration status. You are having severe trouble with your asylum or refugee status. You are having severe trouble with your naturalization or citizenship application. You are having severe trouble with your citizenship interview or test. You are having severe trouble with your citizenship oath or ceremony. You are having severe trouble with your citizenship certificate or passport. You are having severe trouble with your citizenship renewal or expiration. You are having severe trouble with your citizenship revocation or loss. You are having severe trouble with your citizenship restoration or reinstatement.

**Use these daily preventive and-inflammatory medicines:**

INHALERS	HOW MUCH	HOW OFTEN / WHEN

For asthma with oral steroids:

INHALERS	HOW MUCH	HOW OFTEN / WHEN

**Continue with green zone medicine and add:**

INHALERS	HOW MUCH	HOW OFTEN / WHEN

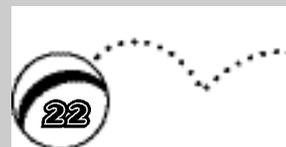
**Take these medicines and call your doctor now:**

INHALERS	HOW MUCH	HOW OFTEN / WHEN

Get help from a doctor now! Do not be afraid of causing a flare. Your doctor will want to see you right away. It's important! If you cannot contact your doctor, go directly to the emergency room. (911/900/8000) Make an appointment with your primary care provider within two days of an ER visit or hospitalization.

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 Asthma Action Plan  
 New York City Department of Health  
 Asthma Action Plan

ASTHMA ACTION PLAN





## WARNING SIGNS

# What should childcare providers do for children with asthma?

1. First identify which children have asthma
2. Fill out "Me and My Asthma" document with parents
3. Document child's asthma triggers and asthma symptoms on form
4. Have parents demonstrate how to use asthma medications and devices
5. Get a copy of the child's action plan or prescription from doctor or parents
6. Always have quick relief medication available for each child with asthma
7. Report to parents if you notice any asthma symptoms
8. Report to parents if you administer medication to the child
9. Treat childcare environment to reduce asthma triggers
10. Teach other children about asthma

### **IMPORTANT: ALL BUT ITEM 10 ARE REQUIRED BY CALIFORNIA STATE LAW!**

For more information on regulations for administering inhaled medications to children please refer to the website, California Health and Safety Codes, located on the resource page.

### **WHAT TO DO IF CHILD HAS AN ASTHMA EPISODE?**

These are simple important instructions to follow in case of an emergency. Often when we are under stress, even the simplest things are forgotten.

- Have child sit down (Remember child cannot breathe as well lying down)
- Stay Calm- (And keep all children calm)
- Have child focus on their breathing (refer to breathing exercise page 11)
- Get Help: Call Parents, Administer Quick Relief Medications, Call 911 if necessary
- Always monitor child 20-30 minutes after administering quick relief medications

## When to call 911- Emergency Warning Signs

- Color of lips, skin, or fingernails turn gray or blue
- The child shows no signs of improvement after administering quick relief medication
- The child is non-responsive or has difficulty moving

# ACTIVITY

*Find what it feels like to have asthma: Exercise with a straw*



Materials: a small cocktail straw

## INSTRUCTIONS:

### 1. Take the straw and breathe through it for 30 seconds

This is the feeling someone has when there is inflammation and mucus in the airways.

*Are you out of breath?*

### 2. Take the straw and pinch it halfway closed and breathe through it

This is the feeling a person has when the muscle around the airways tighten and constrict, making it harder for air to move in and out of the straw.

This is what it feels like when a person is having an asthma episode!

Think of uncontrolled asthma as breathing through a straw; except on the inside of the body!

# RESOURCES

## LOCAL RESOURCES

### **American Lung Association of San Diego and Imperial Counties**

2750 Fourth Ave  
San Diego, Ca 92103  
1 800 Lung USA  
[www.lungsandiego.org](http://www.lungsandiego.org)

## NATIONAL WEBSITE RESOURCES

### **Allergy and Asthma Network/ Mothers of Asthmatics**

Asthma information and resources for parents  
[www.aanma.org](http://www.aanma.org)

### **American Academy of Allergy, Asthma, and Immunology**

Educational resources and information on asthma  
[www.aaaai.org](http://www.aaaai.org)

### **American Lung Association**

Educational resources and information on lung health  
[www.lungusa.org](http://www.lungusa.org)

### **Environmental Protection Agency**

Indoor Air Quality Information  
[www.epa.gov/iaq](http://www.epa.gov/iaq)  
Obtain current air quality readings  
[www.epa.gov/airnow](http://www.epa.gov/airnow)

### **National Asthma Education and Prevention Program**

National Heart, Lung, and Blood Institute Information Center  
Educational resources and information on asthma  
[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

### **Pollen Levels**

[www.pollen.com](http://www.pollen.com)

### **Starbright Foundation**

Interactive asthma game for children and parent resources  
[www.starbright.org](http://www.starbright.org)

## OTHER RESOURCES

### **American Lung Association of Minnesota**

Asthma Information for childcare providers  
[www.alamn.org](http://www.alamn.org)

### **California Health and Safety Codes**

Information on state law for administering inhaled medications, code 1596.798.  
<http://caselaw.lp.findlaw.com/cacodes/hsc/1596.70-1596.798.html>

# SELF-STUDY MODULE QUIZ

- 1. Asthma is a common disease in the United States.** a. True b. False
- 2. What ethnicity is more likely to suffer from asthma?**
  - a. Caucasians
  - b. Hispanics
  - c. African Americans
- 3. Which of the following has been linked as a possible cause to increased rates of asthma in the U.S.**
  - a. indoor environment
  - b. outdoor environment
  - c. increased asthma awareness
  - d. all of the above
- 4. List two primary risk factors for asthma.**
- 5. Asthma is an acute disease that a person has for a short period of time.**
  - a. True b. False
- 6. What happens to a person's respiratory system during an asthma episode?**
  - a. contraction of bronchial muscles
  - b. inflammation of airway lining
  - c. overproduction of mucus
  - d. all of the above
- 7. Name two early warning signs and symptoms of an asthma episode.**
- 8. Name two emergency warning signs and symptoms of an asthma episode.**
- 9. Which of the following triggers can cause an asthma episode?**
  - a. Tobacco smoke
  - b. Respiratory infections
  - c. Dust mites
  - d. All of the above
- 10. It is important to document the triggers for each child with asthma.**
  - a. True b. False
- 11. Annual flu vaccinations are recommended for children with asthma.**
  - a. True b. False
- 12. Which of the following is NOT an irritant for children with asthma?**
  - a. pollution
  - b. cleaning products
  - c. unscented soap
  - d. tobacco smoke
- 13. Which of the following is NOT an effective way to control dust mites?**
  - a. using a hepa-filter vacuum
  - b. washing linens in cold water
  - c. using mattress and pillow covers
  - d. all of the above are good methods
- 14. A person needs professional help if mold growth is bigger than 3ft by 3ft?** a. True b. False
- 15. Name one product that can be used as an alternative to pesticide sprays?**
- 16. Administering quick relief medication before exercise can be beneficial for children with exercise induced asthma.** a. True b. False

- 17. Asthma medications are addictive and habit-forming.** a. True b. False
- 18. Which of the following is NOT true about quick-relief medications?**  
a. provides relief of symptoms  
b. last up to 4 hours  
c. controls inflammation  
d. relax the bronchial muscles
- 19. When are oral steroids given to children?**  
a. after a severe asthma episode  
b. if asthma is not under control  
c. as long-term treatment for children with severe persistent asthma  
d. all of the above
- 20. Which of the following is NOT true about long-term control medications?**  
a. taken daily  
b. provide immediate relief of symptoms  
c. makes child less susceptible to their asthma triggers  
d. control inflammation in the airways
- 21. Which of the following is NOT true about the use of a spacer?**  
a. improves delivery of medication into the lungs  
b. eliminates taste of the medication  
c. reduces side effects of medication  
d. only recommended for children under 5 years
- 22. A spacer with a face mask is NOT recommended for children under 5 years.** a. True b. False
- 23. It is important to shake a metered dose inhaler before using it.**  
a. True b. False
- 24. Nebulizers are used by young children and individuals who do not get relief from metered dose inhalers.** a. True b. False
- 25. Which of the following devices CANNOT be soaked in a germ killing solution?**  
a. nebulizer cup  
b. inhaler  
c. nebulizer tubing  
d. spacer
- 26. A peak flow meter and an asthma action plan are tools used to manage asthma?** a. True b. False
- 27. Which of the following steps are important to do if you have a child with asthma in your childcare center?**  
a. obtain copy of prescription plan  
b. have parents demonstrate how to use asthma devices  
c. document triggers and symptoms  
d. teach other children about asthma  
e. all of the above
- 28. A person should call 911 if the child does not improve 20-30 minutes after administering quick-relief medication.** a. True b. False

**ANSWERS:**

1. (a) 2. (c) 3. (d) 4. refer to page three 5. (b) 6. (d) 7. refer to page five  
8. refer to page five 9. (d) 10. (a) 11. (a) 12. (c) 13. (b) 14. (a) 15. refer to page eight 16. (a) 17. (b) 18. (c) 19. (d) 20. (b) 21. (d) 22. (b) 23. (a) 24. (a) 25. (c) 26. (a) 27. (e) 28. (a)

# ME AND MY ASTHMA

Instructions to childcare providers: Fill out this form with the parents of each child with asthma.

## MY CHILD'S ASTHMA

Child's Name: \_\_\_\_\_

My child's early warning signs of asthma episode are: *(examples: cough, wheeze)*

\_\_\_\_\_

My child's emergency warning signs of asthma episode are: *(examples: trouble walking, talking)*

\_\_\_\_\_

My child's asthma triggers are: *(examples: dogs, dust, colds)*

\_\_\_\_\_

You can help my child feel better by: *(sitting me down, rubbing my back)*

\_\_\_\_\_

If my child's asthma episode gets worse please do the following:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_



## EMERGENCY CONTACTS

Family member: \_\_\_\_\_

Phone: \_\_\_\_\_ Wk: \_\_\_\_\_

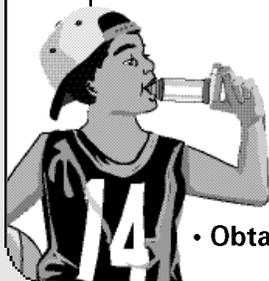
Doctor: \_\_\_\_\_ Phone: \_\_\_\_\_

The nearest emergency room is: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

## MY CHILD'S MEDICATIONS

Name of Medicine	When to take it	Device used	Medication Expiration



### IMPORTANT!

- Have parents demonstrate how to use medications and devices
- Follow instructions in self study module on how to use devices
- Obtain copy of written prescription (asthma action plan) from parents or doctor

# Montana Specific Health Forms



**For childcare providers**

The Child Care Licensing program at the Montana Department of Public Health and Human Services has developed forms for providers in the state to use as they care for children with special healthcare needs including asthma. These forms are located on the following pages:

**Medication Administration Log \_\_\_\_\_ 30**

**Sample Directions for Use of a Medication Log \_\_\_\_\_ 31**

**Medication Error/Incident Report \_\_\_\_\_ 32**

**Medication Authorization Form \_\_\_\_\_ 33**

**Over the Counter Medication Authorization Form \_\_\_\_\_ 34**

**Special Needs Healthcare Plan \_\_\_\_\_ 35-36**

**The Guide and Process for Medication Administration in a Child Care Setting \_\_\_\_\_ 37-42**

**For more information about the Montana-specific rules and regulations for caring for children with asthma contact:**

**Stephanie Goetz, Child Care Licensing Program Manager  
Phone: 406-444-1510 E-mail: stgoetz@mt.gov**

**All of these forms are available electronically at:  
<http://www.dphhs.mt.gov/earlychildhood/medicationinformation.shtml>**

## Medication Administration Log

- **Use One Sheet for Each Child**

Name: \_\_\_\_\_ Birth date: \_\_\_\_\_

Name of Facility: \_\_\_\_\_

Class: \_\_\_\_\_ From: \_\_\_\_\_ To: \_\_\_\_\_  
(Start date of medication) (End date)

Name of Parent: \_\_\_\_\_

Parent Work #: \_\_\_\_\_ Parent Home #: \_\_\_\_\_

Person with Prescriptive Authority: \_\_\_\_\_  
(Name of health care provider prescribing the medication)

Name of Medication: \_\_\_\_\_

Dosage: \_\_\_\_\_ Route: \_\_\_\_\_ Times: \_\_\_\_\_

Length of time medication is to be given: \_\_\_\_\_

Date Mm/dd/yy	Time	Comment	Initials	Date Mm/dd/yy	Time	Comment	Initials

Signature	Initials	Date

- If the child is absent, (designate with an "A") or if for any reason, the medication is not given, (designate with "NG") indicate in the "comment" column.
- If NG, document the reason for not giving medication in the "comment" column

## Sample Directions for Use of a Medication Log

1. The medication log is used to document that medication has been given to a child. Because this log is a legal document you must initial and sign each entry in ink.
2. Each medication given in the child care facility will need to have the following information written on the log:
  - Child's Name
  - Child Care Facility
  - Medication Name
  - Dosage—this must be the same as on the bottle and authorization form
  - Time the medication is to be given and time span for medication (e.g., days, weeks, months)
  - For Prescription medication--Name of person with Prescriptive Authority
  - Picture of the child if child is five years of age or younger
3. Have the log with you when you are giving any medication. Remember to check the information and compare it with the medication label before you give the medication to the child. Check to see if the medication has already been given to the child for that day and at that time by any other person.
4. It is preferable to assign one person to give all medications to the child for the day to avoid double dosing or missing a dose. Identify the child by name before giving the medication to the child and/or check the attached picture of the child.
5. Immediately after giving the medication, document:
  - Name and dosage of medication
  - Time the medication was given
  - Day and date the medication was given.
  - Initials of the person administering the medication
6. If the medication is dropped on the floor, the child refuses to take the medication, spits out the medication, or any other unusual occurrence happens, make note (or designate NG for not given) in the Comment area and contact the parent.
7. If the child is absent from the facility, not in the Comment area an "A" for absent.
8. When the log is discontinued, write the date of discontinuation and arrange for the parent to pick up medication container, or dispose of any left over medication.

# MEDICATION ERROR/INCIDENT REPORT

Child \_\_\_\_\_

Date of Birth \_\_\_ / \_\_\_ / \_\_\_

Child Care Facility \_\_\_\_\_

Classroom \_\_\_\_\_

Medications \_\_\_\_\_

Dosage \_\_\_\_\_

Time Medication to be administered \_\_\_\_\_

Date of Incident \_\_\_\_\_

Reason for Report: Missed medication, wrong medication, etc. Give a detailed report as to how incident happened:

---

---

---

Action Taken/Intervention:

Describe how this incident could be avoided in the future:

Name of parent/guardian who was notified: \_\_\_\_\_

Time/date of notification: \_\_\_\_\_

Printed name of person preparing report \_\_\_\_\_

Signature of person preparing report \_\_\_\_\_

Follow up contact/care: \_\_\_\_\_

---

Child Care Facility Director/Administrator signature \_\_\_\_\_

# MEDICATION AUTHORIZATION FORM

## TO BE COMPLETED BY PARENT

Child's Name \_\_\_\_\_ Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_  
Program Name \_\_\_\_\_ Today's Date \_\_\_\_/\_\_\_\_/\_\_\_\_

\*\*\*\*\*

### To administer a prescription medication:

- The medication must be in it's original container, with a legible label from the pharmacy indicating the child's name, date, name of medicine, dosage, and time, number of days medication is to be given, and expiration date of medication, doctor's/nurse practitioners name, pharmacy name and telephone number
- Samples must be accompanied by a doctor's written prescription
- Medications are to be given only to the child indicated on the label (twins and siblings can not share.)
- A separate authorization is required for *each medication* and *each episode* of illness
- Label constitutes the physicians/nurse practitioner's order
- Parent/Guardian is to give as many doses as possible at home.

Medication: \_\_\_\_\_  
Reason for medication: \_\_\_\_\_  
Start date \_\_\_\_/\_\_\_\_/\_\_\_\_ End date \_\_\_\_/\_\_\_\_/\_\_\_\_  
Dosage: \_\_\_\_\_ Times to be given at child care: \_\_\_\_\_ AM \_\_\_\_\_ PM

First dose was given at \_\_\_\_\_ AM/PM on date \_\_\_\_/\_\_\_\_/\_\_\_\_ (Medication Log needs to reflect Parent's first dose for each day.)

Route: by mouth, skin (location) \_\_\_\_\_, eye (R/L)

Possible side effects: \_\_\_\_\_

Special handling/storage Instructions \_\_\_\_\_ Refrigeration Y/N

Parent/Guardian Signature (required) \_\_\_\_\_

Physician/Nurse Practitioners Signature \_\_\_\_\_  
\*\*\*\*\*  
\*\*\*

### Non-Prescription Medication:

- Parent is required to bring these medications from home.
- Medication must be in an original container, with child's name on the container.

Medication: \_\_\_\_\_ Health Care Provider \_\_\_\_\_

*"For children under 2, list the name of the health care provider who recommended this medication."*

Reason for medication: \_\_\_\_\_

Start date \_\_\_\_/\_\_\_\_/\_\_\_\_ End date \_\_\_\_/\_\_\_\_/\_\_\_\_  
Dosage: \_\_\_\_\_ Times to be given at child care: \_\_\_\_\_ AM \_\_\_\_\_ PM

First dose was given at \_\_\_\_\_ AM/PM on date \_\_\_\_/\_\_\_\_/\_\_\_\_ (Medication Log needs to reflect Parent's first dose for each day.)

Route: by mouth, skin (location) \_\_\_\_\_, eye (R/L)

Possible side effects: \_\_\_\_\_

Special handling/storage Instructions \_\_\_\_\_ Refrigeration Y/N

Unused medication: Returned to Parent Y/N Date \_\_\_\_/\_\_\_\_/\_\_\_\_ or Discarded appropriately Y/N Method \_\_\_\_\_

By: \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

**\*Keep in the child's file when medication is finished.**

# NON-INGESTIBLE OVER THE COUNTER (OTC) MEDICATION AUTHORIZATION FORM

### TO BE COMPLETED BY PARENT

Child's Name \_\_\_\_\_ Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_  
Program Name \_\_\_\_\_ Today's Date \_\_\_\_/\_\_\_\_/\_\_\_\_

\*\*\*\*\*

**I give permission for the administration of following non-ingestible over the counter medications (mark all that apply):**

- Diaper Rash Cream/Ointments
- Insect Repellent
- Sunscreen
- Cortisone/Anti-Itch Creams/Ointments
- Medicated Lip Treatments
- OTC Antibiotic Creams/Ointments
- Burn Creams/Sprays
- Other Non-Ingestible OTC's: (Please Specify) \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**To administer a non-ingestible over the counter (OTC) medication:**

- The OTC medication must be brought to the day care facility from the parent;
- The OTC medication must be in its original container, with a legible label, and expiration date of medication;
- The child's name must be on the original container

Special handling/storage Instructions \_\_\_\_\_ Refrigeration Y/N

Parent/Guardian Signature (required) \_\_\_\_\_

**\* This document must be updated on an annual basis.**

**Unused Medication:** Returned to Parent Y/N      or      Discarded Appropriately      (circle one)

By: \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

**\*Keep in the child's file when medication is finished.**

**SPECIAL NEEDS HEALTH CARE PLAN**  
*-To be approved by a Health Care Provider-*

Today's Date				
Child' Full Name			Date of Birth	
Parent's/Guardian's Name			Telephone No. (     )	
Primary Health Care Provider			Telephone No. (     )	
Specialty Provider			Telephone No. (     )	
Specialty Provider			Telephone No. (     )	
Diagnosis(es)				
Allergies				
<b>ROUTINE CARE</b>				
<b>Medication To Be Given at Child Care</b>	<b>Schedule/Dose (When and How Much?)</b>	<b>Route (How?)</b>	<b>Reason Pre-scribed</b>	<b>Possible Side Effects</b>
List medications given at home:				
<b>NEEDED ACCOMMODATION</b>				
Describe any needed accommodation(s) the child needs in daily activities and why:				
Diet or Feeding: _____				
Classroom Activities: _____				
Naptime/Sleeping: _____				
Toileting: _____				
Outdoor or Field Trips: _____				
Transportation: _____				
For Behavior Changes: _____				
Additional comments: _____				
_____				

# SPECIAL NEEDS HEALTH CARE PLAN

-continued-

## SPECIAL EQUIPMENT

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## EMERGENCY CARE

**CALL PARENTS/GUARDIANS** if the following symptoms are present:

\_\_\_\_\_  
\_\_\_\_\_

**CALL 911 (EMERGENCY MEDICAL SERVICES)** if the following symptoms are present, as well as contacting the parents/guardians:

\_\_\_\_\_  
\_\_\_\_\_

**TAKE THESE MEASURES** while waiting for parents or medical help to arrive:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## SUGGESTED SPECIAL TRAINING FOR STAFF

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Health Care Provider Signature

Date

## PARENT NOTES (OPTIONAL)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*I hereby give consent for my child's health care provider or specialist to communicate with my child's child care provider to discuss any of the information contained in this care plan.*

Parent/Guardian Signature

Date

**Important:** In order to ensure the health and safety of your child, it is vital that any person involved in the care of your child be aware of the child's special health needs, medication your child is taking, or needs in case of a health care emergency, and the specific actions to take regarding your child's special health needs.

# **The Guide and Process for Medication Administration in a Child Care Setting**

Before assuming the responsibility for the administration of medication, child care providers must have clear and accurate information, clear instruction and when necessary, medical confirmation regarding the child's need to know that all medications – including over the counter (OTC) medications – are powerful and must be administered safely.

It is the department's intent to help supply that information through the content of this pamphlet.

**Medicine** as defined in MCA 37-7-101 means a remedial agent that has the property of curing, preventing, treating, or mitigating diseases or which is used for this purpose

Day care providers must have written consent from a parent or legal guardian prior to administering medicine to a child in their care. As a provider you want to do what is best for the child and you may tend to want to give the child something to make them feel better. However, after looking at the definition of medicine most things a provider would give to a child such as Tylenol can no longer be given unless there is written consent.

## **PRESCRIPTION MEDICATIONS**

Must be ordered by a doctor. If the child needs a prescription medication, it is very important that you understand the pediatrician's and pharmacist's instructions.

### **Antibiotics**

Used for bacterial infections like strep throat, some types of ear infections, some sinus infections, urinary tract infections and some skin infections. Antibiotics are very safe but can have some side effects including skin rash, loose stools, stomach upset, staining of urine or even mild to severe allergic reactions. If any of these symptoms occur be sure to tell the parent so they may discuss with their pediatrician.

Antibiotics (such as penicillin, amoxicillin, sulfas and many others) should be used only for the specific bacterial infections for which they are prescribed. Viral infections like colds and flu are not treated with antibiotics. New strains of bacteria have become resistant to some antibiotics because antibiotics have been overused. When a child is sick, antibiotics are not always the answer. The child's pediatrician will let the parent know if an antibiotic would help their child.

### **Ear Drops (otic)**

Commonly used for inflammation and infections of the ear canal. They may cause side effects such as itching, a sense of canal fullness or "popping."

### **Eye Drops or Ointment (ophthalmic)**

Commonly used for eye infections (such as "pink eye"), allergies or vision problems. Some children may get puffy eyes from using these medications and complain of "stinging" when the drops are applied.

### **Skin Preparations**

Often prescribed for skin infections, burns, parasites/mites (such as lice and scabies), rashes and acne. When used as prescribed, these products are generally safe; however, they can cause irritation of the skin. If applied for too long a period, skin preparations that contain steroids may cause serious side effects, so it is important to know the length of time these products should be used. Use medications for lice and scabies only as prescribed or recommended by a health care provider to avoid toxic side effects.

## **Inhalers**

These are used to treat asthma and other lung conditions. Inhalers should be used with a “spacer” so that more of the medicine gets into the lungs. Make sure the parent tells you how to use inhalers the right way.

## **Nasal Sprays or Nasal Inhalers**

Typically used to treat allergies. It is important to use these and all medications only as directed.

## **Nebulizer**

A nebulizer is a breathing machine used to administer asthma medications. A nebulizer changes the medication from a liquid to a mist, so that it can be more easily inhaled into the lungs. Home nebulizer therapy is particularly effective in delivering asthma medications to infants and small children and to anyone who is unable to use asthma inhalers with spacers. To learn more about using a nebulizer at your child care facility, see page 19 of this booklet.

## **OVER-THE-COUNTER MEDICATIONS (OTC)**

Over-the-counter (OTC) medications can be bought at your local drug store or grocery store without a doctor’s order, although it is recommended parents should check with their doctor before giving any OTC to their child. This does not mean that OTCs are harmless. OTCs are medicines used to treat or lessen the symptom of an illness, not to cure, prevent or treat the cause of the illness. Like prescription medications, OTCs can be very dangerous to a child if taken incorrectly. The provider needs to read and understand the instructions before giving OTCs to a child.

### **Common OTCs for Children**

The following list describes some common OTCs for children. The parent needs to talk to their pediatrician before giving any medications to their child. Like any other medication, the parent needs to give the provider written authorization before giving the OTC.

### **Fever Reducer or Pain Reliever (ie, acetaminophen, ibuprofen)**

If a child has a mild fever but is playing, drinking fluids and generally acting well, there is no reason to treat the fever. However, if the child complains of headaches, body aches or seems irritable, there are fever reducers such as acetaminophen and ibuprofen that may help him/her feel better. Acetaminophen and ibuprofen also can help relieve minor pain from bangs and bumps, or tenderness from an immunization. Given in the correct dosage, acetaminophen and ibuprofen have few side effects and are quite safe. They come in drops for infants, liquid (“elixir”) for toddlers, and chewable tablets for older children.

Remember the infant drops are stronger than the liquid elixir for toddlers. Some parents make the mistake of giving higher doses of the infant drops to a toddler thinking the drops are not as strong. Ibuprofen tends to be more effective than acetaminophen in treating high fevers (103 degrees Fahrenheit or higher). However, ibuprofen should only be given to children older than 6 months. Never give it to a child who is dehydrated or vomiting continuously. If the child has a kidney disease, asthma, an ulcer or other chronic illness, the parent should ask their pediatrician if it is safe for their child to take ibuprofen.

Do not use ibuprofen or acetaminophen with any other pain reliever or fever reducer, unless directed by a doctor. Remember, some cold remedies contain these in combination with other medications.

## **Antihistamines**

Antihistamines (such as Claritin, Benadryl, Chlortrimeton) can relieve runny noses, itchy eyes and sneezing due to allergies (but not colds). They also relieve itching from chickenpox or insect bites and may even control hives or other allergic reactions. Some types can make children sleepy. In other children they may cause irritability and nervousness, making it difficult for them to rest. For that reason, antihistamines should not be give before a child sleeps.

## **Decongestants**

Decongestants (such as Pseudophedrine) can relieve stuffiness due to allergies or colds. However, decongestants taken by mouth can have a number of side effects. Children taking these medications may act “hyper,” feel anxious, have a racing hear or find it difficult to sleep. These medications should be used very sparingly.

## **Nose Drops (decongestant)**

Decongestant nose drops can temporarily shrink the membranes in the nose and make breathing easier. However, they should never be given to an infant because too much of the medication can be absorbed through the membranes of the nose. Also, the more they are used, the less effective they become and symptoms can return or even get worse. Do not give a child decongestant nose drops for more than two to three days unless pediatrician advises to continue this treatment.

## **Nose Drops (saltwater/saline)**

Infants and toddlers cannot blow their nose. If a child is sleeping well and eating happily, there is no need to treat the stuffy nose. But if the child is unable to sleep or eat because of thick mucus, saltwater nose can help clear the nose. Put a drop or two into a nostril at a time. Using a bulb syringe, squeeze the bulb first, put the tip gently in the child’s nostril, then let go. This will suction out the drops, along with the mucus. Be careful, overuse of a bulb syringe can be irritating to a child’s nose.

## **Cough Syrups**

Coughing helps the lungs clear out germs. A cough is “productive” if it sounds like mucus is being brought up. You can best relieve it by humidifying the air in the room to loosen mucus. Be sure to clean the humidifier frequently to prevent mold and bacteria buildup. Some cough medicines, called expectorants, also may help loosen mucus.

## **Cold Remedies**

Combinations of antihistamines and decongestants can have side effects such as hyperactivity, sleeplessness and irritability. Giving a child more than one cold medicine to treat different symptoms can be dangerous. Many cold medicines contain acetaminophen or ibuprofen in addition to the cold medicine, this can lead to overdose. Read labels carefully. Have the parent check with their pediatrician before giving their child any cold medicines.

## **Mild Cortisone Cream**

Insect bites, mild skin rashes, poison ivy or small patches of eczema usually respond to cortisone cream. Never use it for chickenpox, burns, infections, open wounds or broken skin. If a product is requested for extended use, the parent should get a medical statement.

## Medications Used for Common Gastrointestinal Problems

There are many OTCs for heartburn, gas, constipation and diarrhea. Most of these conditions usually go away by themselves or are relieved by a temporary change in diet. Before administering any medicine for constipation or diarrhea, parent need to talk with their pediatrician and a recommendation from the pediatrician should be made. Repeated bouts of diarrhea or chronic constipation can be caused by serious underlying problems.

### Common over the counter medications used in day care facilities:

- ✓ Diaper Rash Cream Ointments
- ✓ Insect Repellent
- ✓ Sunscreen
- ✓ Cortisone/Anti-Itch Creams/Ointments
- ✓ Medicated Lip Treatments
- ✓ OTC Antibiotic Creams/Ointments
- ✓ Teething Tablets/Ointments
- ✓ Burn Creams/Sprays

These medications must be brought to the facility by the parent in the original container with a legible label, expiration date of the medication and the child's name on the container.

## Liquid Medicines

Many children's medicines come in liquid form because they are easier to swallow than pills. But they must be used correctly. Too often the directions are misread, giving children several times the recommended dosage. This can be very dangerous, especially if given over a period of several days. Read the instructions carefully. When giving a child liquid medication, do not use standard tableware tablespoons and teaspoons because they are usually not accurate. Instead, use one of the measuring devices listed below (many children's medications come with one and it is best to use the device which accompanies the product). These can help you give the right amount of medicine to the child.

### Syringes and oral droppers

These can be very helpful when giving medicine to an infant. Simply squirt the medicine between the child's tongue and the side of her/his mouth. This makes it easier for him/her to swallow. Avoid squirting the medicine into the back of the child's throat, he/she is more likely to gag and spit the medicine out. If you have a syringe that has a plastic cap, throw the cap into the trash so that it does not fall off in the child's mouth causing a choking hazard. The syringe does not need to be recapped.

### Dosing spoons

These can be useful for older children who will open their mouths and "drink" from the spoon.

### Medicine cups

These often come as caps on liquid cold and flu medicines.

## THREE TYPES OF UNDESIRE RESULTS OF MEDICATION

Medications are powerful. They can work together or against each other. Some drugs increase the effect of other drugs; others can decrease or negate the effects of another drug. Some drugs work faster when taken with food, other drugs work slower. Some drugs should not be taken with certain foods. Medications can produce both desired and undesired results. The desired result is the reason for which the drug was prescribed.

**Side effects** are natural, expected and predictable actions of the drug that may occur at the same time as the desired effect. Most side effects are minor. The following are common side effects of medication: dry mouth, diarrhea, drowsiness, dizziness, sweating, rashes, nausea, rapid heartbeat.

**Adverse reactions** are unexpected and potentially harmful. Examples include: double vision, vomiting, and liver damage. If an adverse reaction is observed, the parent and the child's health care provider (person who prescribed or recommended the medication) should be notified immediately. They may want to examine the child, change the dosage, or stop the medication.

**Allergic reactions** are difficult to predict. Allergic reactions may involve many different types of symptoms. Skin disturbances such as itching, rashes or swelling, are the most common. If an allergic reaction is observed, notify the parent immediately and request follow-up with the health care provider. The most dangerous type of allergic reaction is anaphylaxis.

**CALL 911**

### **Administering Medicines Safely**

- ✓ You can help prevent overdose or poisoning by following these tips:
- ✓ Always use good light. Giving medicine in the dark increases the risk that you will give the wrong medicine or the wrong dose.
- ✓ Read the parent or doctor's instructions before you open the bottle, after you remove a dose and again before you give it. This routine can ensure the child's safety.
- ✓ Always use child-resistant caps and lock all medications away from children.
- ✓ Give the correct dose. Children are not just small adults. Never guess on how much to give a child based on their size.
- ✓ Never play doctor. Do not increase the dose just because the child seems sicker than last time.
- ✓ **Always follow the weight and age recommendations on the label. If it says not to give it to children younger than age 2, don't.**
- ✓ Do not confuse the abbreviations for tablespoon (TBSP or T) and teaspoon (tsp or t).
- ✓ Avoid making conversions. If the label calls for 2 teaspoons and you have a dosing cup labeled only with ounces, do not use it.
- ✓ Supervise the children if they are old enough to take medicine by themselves. Never let young children take medicine by themselves.
- ✓ Before using any medication, always check for signs of tampering. Do not use any medicine from a package that shows cuts, tears, or other imperfections.

It is not always easy to give medicine to a child. You may find the infant or toddler hates the taste and spits out the medicine or refuses to swallow it. Do not mix medications into a bottle or any food. The child may only eat part of it or it may settle to the bottom and never get into his/her mouth. Older children may be more willing to take a chewable tablet over liquid medicines. Although most children's medicines are flavored to make them taste better, avoid calling them candy. It might make the toddler decide to take them on his/her own.

### **Check the Five Rights before administering medication:**

- ✓ **Right Child**
- ✓ **Right Medication**
- ✓ **Right Dosage**
- ✓ **Right Time**
- ✓ **Right Route**

## Medication Routes

- ✓ Oral: tables, capsules, sprinkles, liquids, syrups/elixirs
- ✓ Inhalants: nasal/oral sprays or medicated steam
- ✓ Topical: eye drops/ointments, ear drops, skin ointments/patches
- ✓ Injectable: specific instruction and demonstration for a specific child **must** be provided by the child's parent and/or health care provider **AND must** be accompanied by a Special Health Care Plan.

## Storing Medication

Make sure to store medication properly. Store only in a locked box or cabinet to be accessed only by the person/persons designated to give medicine. If the medication needs to be refrigerated keep it away from food. The refrigerator should be at 36 to 46 degrees F.

## Disposing of Medication

If medicine is left over return to parent for disposal. If you must dispose of the medicine do not throw in the trash. Either flush it down the toilet or rinse it down the sink.

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For more information about controlling asthma at your childcare facility contact:

Katie Loveland, Asthma Control Program Manager  
Montana Department of Public Health and Safety  
Phone: 1-406-444-7304 E-mail: [kloveland@mt.gov](mailto:kloveland@mt.gov)

For more information about administering medicines to children under your care contact:

American Academy of Pediatrics  
1-800-434-4000 or visit the web at [www.aap.org](http://www.aap.org)

Your local County Health Department

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For questions in regards to policy and procedure in a daycare facility contact:

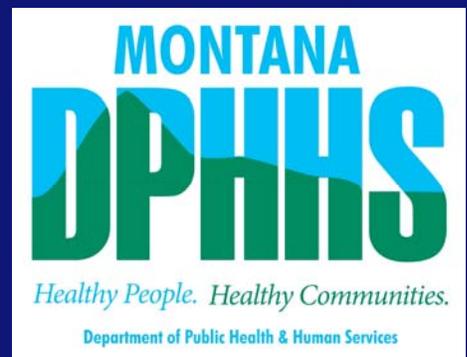
Stephanie Goetz  
406-444-1510 or visit the web at <http://www.dphhs.mt.gov/earlychildhood>

For questions in regards to policy and procedure in a Legally Unregistered Provider (LUP/LUI) setting contact:

Early Childhood Services Bureau  
406-444-9120

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**For additional information regarding this project:**  
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