What is Asthma?
- An inflammatory lung disease.
- During an asthma attack, the airways in the lungs become swollen and cause coughing, wheezing, chest tightness and/or trouble breathing.
- The most common chronic illness among children.

What Causes Asthma?
- The specific cause(s) of asthma are unknown. However, asthma symptoms can be made worse by respiratory infections, emotions, food allergies, and environmental risk factors, such as:
  - Tobacco smoke
  - Pets (furry, hairy)
  - Pests (cockroaches)
  - Molds
  - Pollen
  - Strong smells

Children with asthma should be able to play, run, and participate in all activities when their asthma is well managed.

Why do I Need to Know About Asthma?
- Parents, health care providers and child care providers are all partners who can help manage a child’s asthma so that he/she has fewer attacks.
- Asthma affects each child differently.
- Most children’s asthma attacks are triggered by ordinary things around them.
- If you are equipped with some knowledge, it will make your job easier when caring for children with asthma.

What Can I do to Help Children with Asthma in my Care?
In order to effectively address asthma management in the child care setting, there must be collaboration among staff, families and health care providers. This includes open communication to ensure that everyone understands and recognizes asthma and is able to manage the care of a child with asthma.

The Asthma Action Plan (AAP), included in this packet, can help support communication. It includes specific information on the child’s medications and instructions for decision-making during an asthma attack. As a child care provider, it is extremely important that you have this information readily available for any child diagnosed with asthma.
**Action Steps to Reduce Asthma Triggers**

**Triggers** are activities, conditions or substances that cause the airways to react and asthma symptoms to occur.

Not all children with asthma are affected by the same things. It is important to determine what the triggers are in your facility and to take action to reduce exposure to them. Clear the environment of triggers that may cause asthma attacks.

- **Dust Mites** - Too small to see, they live in pillows, sheets, clothes, stuffed animals and carpets.
  - Protect mattresses and pillows with dust-proof covers. Remove stuffed animals and upholstered furniture. Do not use humidifiers. Do not let children lie on the floor/carpet with face exposed to the floor. Be sure to vacuum frequently (when the children are not present).

- **Mold** - Molds grow in damp environments. Moisture control is the key to reducing mold.
  - Clean up mildew by washing mold off of hard surfaces with a bleach solution and allowing them to dry completely. Stop using humidifiers. Fix leaky plumbing. Keep drip pans in air conditioners and refrigerators clean and dry.

- **Tobacco Smoke** - People who have asthma can be affected by a burning cigarette, pipe, cigar or smoke being exhaled by a smoker.
  - Provide a smoke-free child care environment. Do not smoke at home, in the child care center or anywhere around a child.

- **Pets** - Animals’ dander, urine and saliva can cause asthma attacks. Dander can become airborne and settle on children, furniture or toys.
  - It is best to get rid of all furry and feathered pets. Otherwise, keep the pets outdoors and off of furniture and carpet at all times.

- **Respiratory Infections** - Colds, the flu and bronchitis can all be asthma triggers.
  - Wash hands regularly, especially during the cold and flu season to reduce transmission of disease. Avoid people with colds. Get a yearly flu shot. Encourage parents to keep children home when they have a cold.

- **Air Pollution** - Poor air quality, particularly on hot summer days when ozone pollution is high, can cause asthma attacks.
  - Limit outdoor activity on poor air quality days. Watch for these warnings on TV and in the newspaper. Do not open windows. Use an air conditioner, if possible (be sure air conditioner filters are cleaned regularly).
• **Pollen** - High pollen counts in the fall and spring seasons are known to be problematic outdoor allergens.
  - Limit outdoor activity on high pollen days. Do not open windows or doors on high pollen days. Use an air conditioner, if possible (be sure air conditioner filters are cleaned regularly).

• **Pests** - Droppings and/or body parts of pests such as rodents or cockroaches can start asthma attacks.
  - Do not leave food or garbage out. Store food in airtight containers. Restrict food to one or two areas. Keep trash lids on tightly.

• **Exercise** - Asthma attacks can be triggered by exercise, especially when it leads to overexertion or when exposed to extreme temperatures (both hot and cold).
  - Warm up for 6–10 minutes before exercising. Limit outdoor exercise when pollen count and pollution are high. For children negatively affected by exercise, ask parents about the need to give medication before activities.

• **Changes in Temperature** - Cold, dry air, very hot weather, change in seasons or a sudden fluctuation in weather can lead to asthma attacks.
  - Cover the child’s nose and mouth on cold or windy days. Use an air conditioner, if possible (be sure air conditioner filters are cleaned regularly). Be aware of weather forecasts and avoid too much activity during extremely hot or cold weather.

• **Emotions** - Fear, anger, frustration, crying or laughing can be asthma triggers.
  - Tell the child to try to relax by taking deep breaths. Find a quiet activity that the child enjoys, such as coloring, reading or playing with dolls or blocks.

• **Sprays and Strong Odors** - Cleaning products, perfumes, aerosol sprays and room deodorizers can trigger asthma attacks.
  - Try not to use perfume, talcum powder, paint and hair spray. Do not use strong-smelling cleaning agents.

*Adapted from: Asthma and Allergy Foundation of America and the American Lung Association*
Early Signs
of an Asthma Episode

A child may exhibit one or more of these signs during the initial phase of an asthma episode:

- **Changes in Breathing**
  - Coughing
  - Wheezing
  - Breathing through the mouth
  - Shortness of breath
  - Rapid breathing

- **Verbal Complaints**
  - “My chest is tight.”
  - “My chest hurts.”
  - “My neck feels funny.”
  - “My mouth is dry.”
  - “I don’t feel well.”
  - “I can’t catch my breath.”

Often a child who is familiar with asthma will know that an episode is about to happen.

- **Other signs**
  - Itchy chin or neck
  - “Clipped” speech (very short, choppy sentences)

Asthma Triggers in the Child Care Environment

- Chalk Dust
- Exercise
- Environmental Tobacco Smoke
- Cleaning Agents
- Dander from Furry or Feathery Animals
- Cut Grass, Trees, Plants and Pollen
- Cockroach Particles, Mouse Droppings
- Colds, Flu, Bronchitis and other Upper Respiratory Infections
Major Causes of Food Allergies

these eight foods account for 90% of all allergic reactions

Eggs

Milk

Wheat

Fish

Peanuts*

Shellfish

Soy

Tree Nuts (Walnuts, Pecans)

*Peanuts are the leading cause of severe allergic reactions.
From The Food Allergy Network