5 Asthma Triggers and How to Reduce Them

Asthma triggers are allergens and irritants that aggravate the lungs and trigger asthma attacks (also called asthma episodes or flare-ups). One of the best ways to prevent an asthma attack is to help a child avoid things that trigger his/her asthma.

Reducing asthma triggers in a child care center or family child care home can be done with the cooperative effort of providers, parents and others that spend time in the ECE program. Removing triggers not only helps the children and adults with asthma, but creates a healthy environment for everyone.

There are many different triggers, and not every child has the same ones. For some children, a single trigger can set off an asthma attack. For others, several triggers add up to cause an asthma attack.

It is important to find out what the triggers are for each child with asthma in your care. Reduce or remove as many asthma triggers as you can from your ECE program.

Common Triggers

Dust and Dust Mites

Dust mites are tiny bugs too small to see. Dust mites live where there is dust, in carpets, bedding, upholstered furniture and stuffed toys. Many children are allergic to the microscopic droppings of dust mites.

- Clean when children are not present.
- Dust often using a damp cloth.
- Clean floors with a damp mop daily, not a broom.
- Don't allow children to lay their faces or blankets directly on the carpet.
- Wash sheets, blankets and pillows once a week in hot water and dry in a "hot" dryer to kill dust mites.
- Choose washable stuffed toys, and wash them weekly and when visibly soiled. Wash them in hot water and dry thoroughly.
- Store toys and books in enclosed bookcases, closed cabinets, containers or bins to reduce the accumulation of dust.

- Replace cloth upholstered furniture with furniture that can be wiped clean.
- Avoid wall-to-wall carpeting. Use washable throw rugs on hard-surface floors, such as hardwood, linoleum or tile.
- If there is carpeting, vacuum when children are not present. Ideally, use a high efficiency vacuum. At a minimum, use double-lined vacuum bags to reduce the amount of allergens released into the air while vacuuming.

Furry and Feathered Animals

Animals with fur or feathers carry allergens in their saliva and on their skin (dander), fur or feathers.

What to do?

- The best thing to do is to find another home for furry or feathered pets (cats, dogs, hamsters, guinea pigs, birds, rabbits and other furry animals).
- At a minimum, keep furry and feathered pets in a limited area of the ECE program that can
 - be cleaned.
- If your ECE setting has a pet, tell parents before they enroll a child.





Pests

The body parts and droppings of rodents and cockroaches contain allergens. Even small particles of dead cockroaches settle in dust and end up in the air we breathe; this can trigger an asthma attack. Pests are attracted to food, water and shelter (clutter and cardboard).

- Store food and garbage in tightly sealed containers. Do not leave food or garbage out.
- Clean all food crumbs or spilled liquids right away and clean eating areas daily
- Repair leaky pipes and dripping faucets so pests will not have a place to drink.
- Seal cracks in walls, baseboards, windows and doors, and clean up cluttered areas where roaches like to hide.
- Use poison baits or traps only if you can place them out of the reach of children. Avoid chemical sprays, which are very toxic to children and can trigger an asthma attack.



Mold and Mildew

Molds produce microscopic spores that are carried in the air and can be harmful to people with asthma and allergies. Molds grow where dampness occurs and can become prominent in places where dampness is hidden (such as under carpets). Excess moisture is a result of water leaks, condensation and excess humidity.



What to do?

- If mold is a problem, clean up the mold and get rid of the excess moisture. Mold growth is likely to recur unless the source of the moisture problem is fixed.
- □ Fix all sources of water leaks.
- Use exhaust fans or open windows in kitchens and bathrooms to cut down on moisture and remove strong odors.
- Do not use humidifiers or vaporizers.
- Wet clothing and boots should be stored outside of the activity space.
- Wash mold off hard surfaces when children are not present.

To wash mold off of hard surfaces:

- Use regular detergent/soap and hot water and scrub with a brush or a pad.
- Rinse with water and dry.
- Disinfect area with a bleach solution of 1¹/₂ cups of bleach mixed with 1 gallon of water.
- Wait 20 minutes and then reapply.
- Absorbent materials such as ceiling tiles and carpet with mold may need to be replaced. If a carpet gets wet with clean water, use a fan to dry it out completely within 48 hours.
- Heating, air conditioning and ventilating systems, including evaporative coolers, should be cleaned and serviced regularly.

Pollen

Pollen is a common allergen that comes from trees, flowers, grasses and weeds.

- Check the newspaper, radio, television or internet (www.pollen.com or www.weather.com) for the daily pollen count. On days when the report lists high levels of pollens to which a child is sensitive, keep windows closed and if possible, use air conditioning.
- Keep outdoor yard and play areas clear of fallen leaves, compost piles and cut grass. Avoid cutting grass or blowing leaves when children are present.



Exercise

Exercise or active play can trigger an asthma attack. Exercise generally is good for children with asthma. As long as a child's asthma is well controlled, he/she can usually participate in a full range of physical activities. However, since exercise can trigger an asthma attack in some children, always observe children during active play.

What to do?

- Be aware of the Child Asthma Plan for each child with asthma. If directed by a health care provider and parent, administer quick relief medication to a child prior to exercise. Follow the directions of the Child Asthma Plan.
- Be prepared to respond to an asthma attack following exercise according to the Child Asthma Plan.
- Encourage short bursts of exercise and active play followed by short rest periods—this approach is better than continuous exercise.
- Reduce outdoor activities on high pollen/

pollution "Spare the Air" days or extreme hot or cold weather days. Check www.pollen.com or www.weather.com for information.

- Recognize and respect a child's limits for active exercise and play.
- A child should not exercise if he/she is recovering from an asthma attack or a respiratory illness.

Fumes, Odors and Strong Scents

Strong fumes, odors, and scents can trigger an asthma attack.

What to do?

- Avoid using hairspray, perfumes, powders or air fresheners around the children.
- Avoid using cleaning products that have a strong odor.
- Clean when the children are away. Open windows while cleaning.
- Avoid arts and craft materials with fragrances and fumes.
- Office equipment that emits fumes (photocopiers) should be in vented areas away from children.
- Improve ventilation by using exhaust fans or opening windows when it is hot or stuffy, or when there are strong odors from cooking or fumes from heating.



 Keep windows closed when the air outside is full of exhaust fumes from vehicles or factories.

Tobacco Smoke

Secondhand smoke is a mixture of the smoke given off the burning end of a cigarette, pipe or cigar and the smoke breathed out by a smoker. Secondhand smoke can irritate the lungs and trigger an asthma attack.

What to do?

- Provide a smoke-free ECE environment as specified in State of California Child Care Licensing regulation 101231 (2004).
- Smoking is prohibited inside the child care area or around children. California Assembly Bill 846 prohibits smoking within 20 feet of an entrance, exit or openable window.
- Prohibit smoking in vehicles that are used to transport children. Tobacco smoke lingering in cars can trigger an asthma attack.
- \Box When smoking outdoors, wear an overcoat and

remove it when coming indoors, or remove your work

smock or jacket before smoking. The smell of smoke can trigger asthma.

 Encourage parents/guardians to reduce their children's exposure to secondhand smoke. Encourage staff and parents/ guardians to quit smoking. Offer resources such as 1-800-NO-BUTTS, the California Smokers' Helpline.

Illness

Colds, the flu, bronchitis and upper respiratory infections can trigger an asthma attack. In fact, respiratory illness is the most common trigger of asthma in young children.

- Remind staff and children to wash their hands often to avoid spreading infections.
- Try to keep children with asthma away from people who have colds or the flu.
- Annual flu shots are recommended for children with asthma who are age 6 months and older.
- Encourage staff to get yearly flu shots.
- Review children's health records to ensure that they are fully immunized.

- Enforce your sick child policies.
- Encourage families to make use of a regular health care provider (a medical home) for their children with asthma, rather than receiving care in the emergency room.



Weather and Air Pollution

Weather that is very hot or very cold can trigger asthma in some children. Smoggy air can trigger asthma. Smog contains ozone which is formed when pollutants from cars, trucks, industrial facilities, power plants, etc., react in the presence of heat and sunlight. Particulate matter (particles found in the air) including dust, dirt, soot and smoke, can trigger an asthma attack.



What to do?

- ☐ If a Child Asthma Plan calls for it, limit outdoor play for a child with asthma when the weather is very hot or very cold.
- Cover the child's mouth and nose with a scarf in very cold weather.
- Don't allow cars to idle near your ECE program.
- Check the newspaper, radio, television or internet (www.weather.com) daily for air quality reports. On days with poor air quality,

have the children play indoors or participate in quiet activities outdoors. Plan outdoor activities when ozone levels are lower (usually early morning or evening). However, for those who are allergic to pollens, early mornings may not be a good time for outdoor activities.

- Try to use air conditioning instead of opening the windows.
- Avoid wood smoke and burning leaves.

Food Allergies

Eating foods to which an individual child is allergic can trigger an asthma attack. Some common food allergies include peanuts, eggs, chocolate, wheat, shellfish, dairy products, dried fruit and certain food additives and preservatives.

What to do?

- Find out what food products may trigger an asthma attack.
- \Box Avoid giving these foods at all times.
- Post a list of the child's food allergies in the food preparation and food service areas where it will be visible to all staff.
- □ Read ingredient labels on all food products.
- Complete a food allergy plan for each child with a food allergy. Sample plans may be

downloaded from www.foodallergy.org.

- Communicate with a child's parent or guardian regarding the foods the child can safely eat.
- It may be necessary to contact food manufacturers to request specific dietary information regarding food contents/ ingredients and allergens.

Adapted from American Lung Association of San Francisco and San Mateo Counties