



Asthma Risk Information Package

The CARAT is a Child Asthma Risk Assessment Tool designed to help clinicians, asthma counselors and parents determine potential risks for children with asthma. Asthma is a chronic disease with multiple risk factors and causes; recent research has shown that the factors responsible for asthma symptoms and attacks can vary widely from child to child.

This package of materials was prepared specifically for Dave based on the information provided while completing the CARAT risk profile on 09/24/2002.

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Asthma Risk Report

- Every question on the assessment pertains to one and only one of the risk factors.
- Each question is given a score based on your response.
- For each risk factor the report displays the responses to the questions that contribute to the overall score for that factor along with the score for that individual response.
- If a response received a score of '0,' then that question will not be displayed on the report as it does not pertain to the child's risk.
- Statements without scores are for informational purposes only.
- The scores for all the questions in a section are added together to get the overall score for that risk factor. It is possible for the sum of the individual scores for the response within a factor to add up to more than 10 points. In this case the factor will be assigned a score of 10 +.

Child Asthma Risk Assessment Report

Completed: 09/24/2002

Assessment Name: Dave

Child is in kindergarten.

Child has 2 relatives with asthma.

Medical Care (6)

Your child does not have a regular doctor.

Because you do not have a regular doctor, each doctor your child sees when he/she has a problem with asthma has to first learn about your child's medical history before addressing your child's current problem. By going to one doctor on a regular basis, the doctor will learn a lot about your child and will be better able to adjust your child's medications and control his/her asthma.

Your child only takes medicines when necessary.(3)

Some people with asthma take only rescue medicines. These are medicines that are taken at the first sign of an asthma attack; in other words, these medicines are taken only when necessary. While these medicines will make your child feel better for a little while, the problem is that they will not really help your child get better. Rather, your child's airways might become more swollen, and he/she might be in danger of a very bad asthma attack. Ask your doctor if it is appropriate for your child to be on preventative medicines in addition to his/her rescue medicines. These are medicines that are taken daily even when the person with asthma feels fine and can breathe well, and may help prevent asthma attacks.

A doctor or health care provider has never given the child written instructions for what to do about taking medicines.(3)

Without written instructions telling you about your child's medications, it can be difficult to keep up with all the details involved with taking them. Ask your doctor or health care provider to give your child a medicine plan, also known as an asthma care plan. This plan should clearly tell you and your child how to take the right medicine at the right time, in the right amount, and in the right way.

Environmental (2)

Your child does not have a pillow with a zipped plastic cover for allergies.

Bedding can hold allergen particles that could bother your child's breathing. Covering your child's mattress, box spring, and pillow with special covers will keep your child from breathing in these particles constantly while he/she sleeps. The special covers can be wiped down with a damp cloth or sponge occasionally; other than that, they do not have to be changed or washed.

Your child does not have a mattress with a zipped plastic cover for allergies.

Bedding can hold allergen particles that could bother your child's breathing. Covering your child's mattress, box spring, and pillow with special covers will keep your child from breathing in these particles constantly while he/she sleeps. The special covers can be wiped down with a damp cloth or sponge occasionally; other than that, they do not have to be changed or washed.

There are problems with cockroaches and rats in your home.(2)

Materials that come from cockroaches, mice, and rats can cause allergies and make asthma worse. These materials, which mix with dust, will cause inflammation and swelling of the airways when inhaled. Try to remove food and water sources from your home or look into hiring an exterminator to take care of the problem.

Smoking (3)

You have indicated that there are 2 other people in your home that smoke.(3)

Exposure to environmental tobacco smoke can worsen breathing problems in asthmatic children. When children breathe in second-hand smoke, it makes their asthma worse and can cause respiratory infections. Ask family members and guests to smoke outside or in a room where your child does not usually spend time.

Adherence (4)

You have run out of medicines for your child's asthma and not had any on hand when your child had an asthma attack.(2)

It would be very harmful to the child's health if you find that you do not have any medicine on hand when your child has an asthma attack. It is therefore important to be aware of the amount of asthma medicine that you have left. Plan ahead for refills with your doctor so that you always have the medications your child needs.

On a scale of 1 to 5 [1 is never, and 5 is often] you have indicated a level of 2 for the frequency with which your child misses taking his/her medication on schedule.(2)

If your child misses taking his/her medication on schedule, he/she may be more likely to have asthma symptoms or an attack. Therefore, it is important that your child takes his/her medication according to the schedule prescribed by his/her physician. There are several things that can be done to help your child take his/her medication on schedule; these include leaving reminders for you and your child and having your doctor adjust the schedule so that it matches mealtimes or won't need to be taken while your child is at school.

Responsibility (0)

No risks identified.

Child Well-being (10)

You have indicated that you are concerned about your child's behavior or emotions "quite a bit" or "all of the time."(10)

It is natural to be concerned about your child's behavior or emotions, especially if he/she has been acting depressed or angry about having asthma. However, you should not be worried nearly all of the time. It is therefore important that you talk with your child about how he/she has been acting or feeling recently. You may want to emphasize to your child that having a positive attitude or thoughts about asthma will ultimately help to improve his/her health.

Adult Well-being (0)

No risks identified.

Attitudes (6)

You have indicated that you believe that you have little control over your child's asthma.(3)

It is natural that you may feel that you have little control over your child's asthma, but this will not help your child manage his/her asthma. The best thing for you and your child to do is to try to learn as much as you can about asthma and realize that you can do things that can improve your child's problem with asthma.

By learning more, you will build your confidence and you will find that you will be better able to control your child's illness.

You have indicated that you often feel helpless in dealing with your child's asthma.(3)

It is understandable that you may feel helpless in dealing with your child's asthma, but this will not help your child handle his/her asthma. The best thing for you and your child to do is to try to learn as much as you can about asthma and realize that you can do things that can improve your child's problem with asthma. By learning more, you will build your confidence and you will find that you will be better able to deal with your child's illness.

Child Skin Test Results (0)

Skin test results are not available for this child.

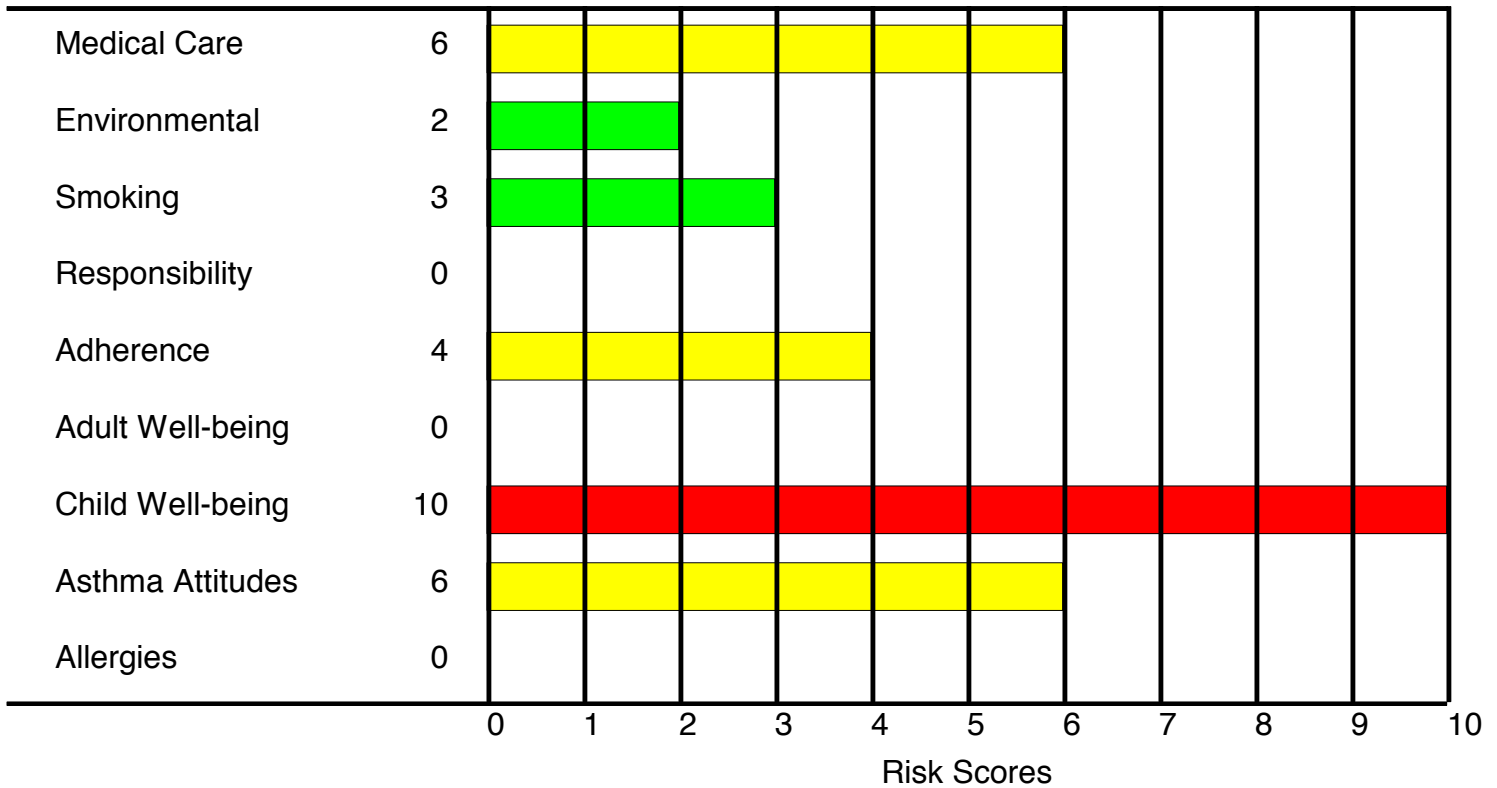
Asthma Risk Chart

Dave
09/24/2002

Below you will find a graphical summary of the results of the assessment you completed for Dave on 09/24/2002.

- The graph displays one horizontal bar for each risk factor on a grid with an endpoint of 10.
- Factors with a score of 7-10 are displayed with a red bar. These are the high factors for the child and should be addressed first.
- Moderate risk factors have a score of 4-6 and are displayed in yellow.
- Low risk factors are displayed in green with a score of 1-3.
- The total score for each risk factor is also included at the beginning of each bar.

Risk Factors



Ways to manage medical care: Overview

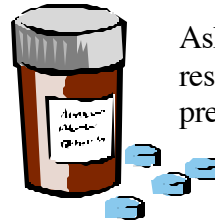
Establish a good relationship with one doctor who is a primary care physician.



Ask your doctor for an asthma care plan for your child.



Schedule follow-up visits with your doctor.

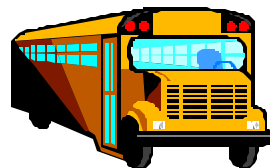


Ask your doctor about rescue medications and preventive medications.

Talk with your child's teacher or school health care provider about your child's asthma care plan.



Teach your child what to do about his/her asthma while at school.



Ways to manage medical care: Details

- ***Establish a good relationship with one doctor who is a primary care physician.*** This will give your child constant and continuous care.
- ***Ask your doctor for an asthma care plan for your child*** to help manage his/her medicines and prevent asthma attacks.
- ***Schedule follow-up visits with your doctor*** so that he/she can monitor your child's progress.
- ***Ask your doctor about rescue medications and preventive medications.*** Except in cases of mild asthma, both kinds of medications should be included in your asthma care plan. Make sure you and your child know when each type should be taken.
- ***Talk with your child's teacher or school health care provider about your child's asthma care plan*** so that they know how to help your child while at school.
- ***Teach your child what to do about his/her asthma while at school.***

Background on medical care as a risk factor for asthma

The topic of medical care encompasses several different components, including continuity of care, availability of a care plan, and problems with taking medications at school and keeping doctor's appointments.

Primary Care Physicians

Asthma is a manageable disease, but in order to be able to control asthma symptoms, it is important to have a good relationship with one doctor who is a primary care physician. A primary care physician is a doctor who provides overall health care and is responsible for providing continuous care. The more often you visit the same doctor, the more he/she will learn about your child. And the more the doctor knows about your child, the better he/she will be able to adjust your child's medications and control his/her asthma.

Children who only see a physician when they go to the emergency room during an asthma attack experience asthma symptoms more often than children who have a primary care physician. A doctor who is seen in the Emergency Department or at an urgent care clinic is not usually a primary care physician.

Asthma Care Plans

By having a primary care physician, your child will receive an asthma care plan that is right for him/her; in this asthma care plan, the physician will be able to write down when your child should take medicine, how much to take, and how to take it. Getting a good asthma care plan and following it will help to prevent asthma attacks and will help "rescue" your child quickly when an attack starts.

If your physician changes some aspect of your child's asthma care plan, it is important to schedule follow-up visits and to keep them to see if the changes to the plan improved your child's asthma. It will be helpful for you to learn the specific names of the medicines your child takes and to keep an updated copy of the asthma care plan handy for emergencies.

Asthma Medications

There are two main types of asthma medications: rescue medicines and preventive medicines. Rescue medicines help stop an asthma attack that has already started or keep an attack from getting serious. They work quickly to stop the squeezing and open the airways in the lungs during an attack, and are taken at the first sign of a wheeze, cough, or tight chest. Rescue medicines are not meant to be used to stop attacks every day for weeks and weeks like preventive medicines.

When a child has asthma, asthma attacks come and go but the lungs stay sensitive and are easily bothered. Even when your child is not having an asthma attack, the airways can still be swollen and bother your child's breathing. Preventive medicines work slowly over many weeks to stop this swelling in the airways. They are taken every day, even when the person with asthma feels fine and can breathe well. People cannot become addicted or hooked on these medicines even if they use them for many years.

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Your child should have both rescue medications and preventive medications in his/her asthma care plan. Ask your doctor to make it very clear in the plan when each type of medicine should be taken.

Medicines at School

Children may experience problems with taking medications at school. It is therefore important for you to talk with your child's teacher or school health care provider about your child's asthma. Provide letters which explain the asthma care plan your child should follow at school. Teach your child what they should do while at school.

Doctor's Appointments

With everyday life being so busy, it might be difficult for you to keep up with your regularly scheduled doctor's appointments. But you need to make a special effort to make and keep these appointments so that your child can be observed on a regular basis. Children's asthma symptoms can change over time. These changes may require a change in the medication plan – increasing, decreasing, or changing medicines. By keeping regular appointments, your child will always have a medication plan that will keep his/her asthma under control.

Ways to get rid of dust mites: Overview

Encase your child's pillows in special allergen-proof covers.

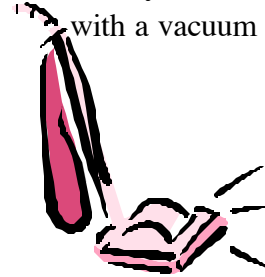


Encase your child's mattress and box spring in special allergen-proof covers.

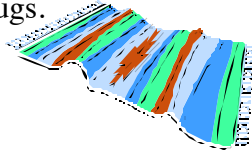


Wash your child's blankets, sheets, and cases every 2 weeks in hot water.

Vacuum every week with a vacuum cleaner.

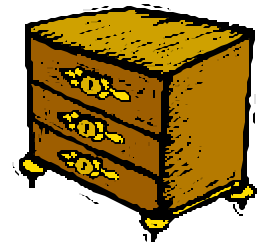


Remove carpeting and replace with washable area rugs.



If you have forced air, keep filters over the vents and replace the filters every three months.

Dust all horizontal surfaces in your child's bedroom weekly with a damp cloth.



Remove dust collectors like stuffed animals. Pick one favorite animal that is washable.



Ways to get rid of dust mites: Details

- *Encase your child's pillows, mattress, and box spring in special allergen-proof covers* to keep your child from breathing in any dust mites or other allergenic particles while sleeping.
- *Wash your child's blankets, sheets, and pillow cases every two weeks in hot water* because dust mites are found in bedding. Hot water (>140° F) kills dust mites.
- If you can, *remove carpeting* from your child's bedroom floor because it is a dust mite collector. *Replace* the carpeting *with washable area rugs*.
- *Vacuum* any rugs (that you cannot remove) *every week with a vacuum cleaner* to get rid of dust mites. And if possible, you should vacuum the upholstered furniture every two weeks.
- *If you have forced air, keep filters over the vents and replace the filters every three months*.
- *Dust all horizontal surfaces in your child's bedroom weekly with a damp cloth*.
- Try to *remove dust collectors like stuffed animals. Pick one favorite animal that is washable*.



Background on dust mites as a risk factor for asthma

Dust mites are microscopic insects that live in beds, blankets, sofas, rugs, stuffed animals, and other places in the home. Dust mites grow well in warm, moist places where humans and pets live. It is their body parts and droppings that cause allergy and asthma symptoms. Because dust mites are such a common cause of asthma symptoms, it is very important to reduce your child's exposure to them. It is easy to cut down on the number of dust mites. Studies have shown that this improves asthma.

Your child is breathing in dust mite allergen every night for many hours while he/she sleeps. Covering bedding with special covers will reduce your child's exposure to dust mites or other allergenic particles in the bedding. These special covers should be placed on all pillows, the mattress, and the box spring. The special covers can be wiped down with a damp cloth or sponge occasionally, but they can remain in place and don't have to be changed or washed. These covers help in two ways. First, they trap any dust mites and other allergens inside the covers. They cannot get through so your child cannot breathe them in. In addition, the covers keep new dust mites from being able to make a home in the mattresses and pillows.

Dust mites are also found in sheets and blankets. Dust mites and other allergens will continue to collect even in new bedding, so sheets and blankets should be washed frequently (every 2 weeks) in detergent and hot water. This will get rid of any new dust mites. Washing in cold water does not kill dust mites, but if done frequently it can still remove some of the dust mites and allergens. The bedspread should be washable and washed along with the sheets and blankets.

Feathers are conducive to dust mites. Therefore, if your child has a down pillow or comforter it is very important for you to use special allergy covers. However, you do not need to get rid of feather bedding. Research has found that accumulation of dust mites is greater on synthetic or cotton bedding than on feather bedding. This is attributed to the type of fabric that is used for the bedding; feather bedding uses tighter fabrics to keep the feathers in, and this helps with keeping the dust mites out.

All carpeting and rugs trap dust mites, no matter what they are made of and even if the pile is short, so removing the carpeting from the child's bedroom and replacing it with washable area rugs would be very helpful. However, if the rugs or carpeting cannot be removed, then you should vacuum at least once a week with a vacuum cleaner. Vacuuming helps remove the dust mite allergen. Vacuums with HEPA filters are best for people with allergies and asthma because they collect and trap even the smallest allergen and dust particles. Vacuums without these special filters allow small particles to be blown back out of the vacuum, and they should not be used when the child is in the room.

Your child should not sleep or lay down on upholstered furniture like sofas because dust mites are often found there, as well. When you lay down on furniture that has dust mites in it, your face is closer to the furniture and you are much more likely to stir up and breathe in the allergy-causing material that comes from the dust mites. Even sitting on upholstered furniture can cause

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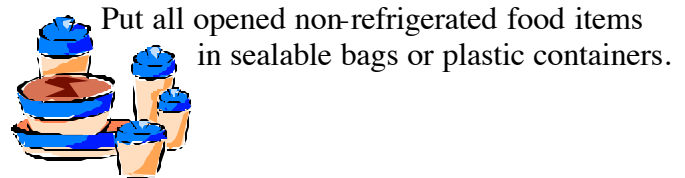
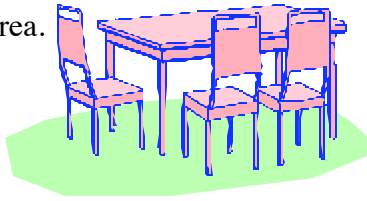
exposure to dust mites. If possible, you should vacuum the upholstered furniture at least once a week with a vacuum cleaner.

Dust contains dust mites and other allergens. You should try to remove everything from your child's bedroom that will collect dust, including stuffed furniture, drapes, old books and stuffed animals. If the child wants to sleep with a stuffed animal, have him/her select a favorite one, wash it to get rid of dust mites, and use only that one. You should wash this animal every three months to get rid of dust mites. Keep the walls and floors as clean and dust-free as possible at all times. Remember that the cleaner the room, the better your child will feel.

By placing filters over your air vents you will be trapping some of the allergy-causing material from dust mites that could be released when you are using your forced air. And since using a dirty filter could be worse than using no filter at all, the filters should be changed every three months.

Ways to get rid of cockroaches: Overview

Limit eating to the kitchen/
dining room area.

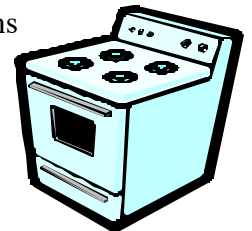


Put all opened non-refrigerated food items
in sealable bags or plastic containers.

Vacuum every week with a
vacuum cleaner.

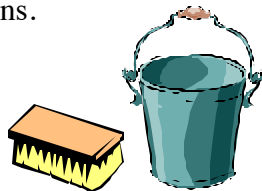


Clean oven, broiler, and drip pans
in the stove.



Clean spills on top of
the stove daily.

Clean any areas in your home where you see
cockroach droppings or stains.



Remove old newspapers
and clutter daily.

Repair leaks



and dripping faucets.



Take the garbage out
or seal it daily.

Wash or change the bedding
every 2 weeks.



Clean food crumbs and spills
from drawers and shelves
in the kitchen.



Clean food crumbs and spills from the
counters and floors every day.



Arrange for your landlord or
a professional exterminator to
come to your home to apply
roach-elimination products.

Ways to get rid of cockroaches: Details

- Cockroaches need food and water to live, so try to ***limit eating to the kitchen/dining room area***; this will also lessen the area you need to keep clean.
- ***Clean food crumbs and spills from drawers and shelves and from the counters and floors every day*** because these could be a source of food and water for the cockroaches.
- ***Put all opened non-refrigerated food items in sealable bags or plastic containers*** to eliminate a source of food for the cockroaches.
- ***Vacuum or mop*** any areas where you eat every day, and the whole house/apartment once a week in order to get rid of any food crumbs and/or the allergy-causing material the cockroaches may have left behind.
- ***Clean the oven, broiler, and drip pans in the stove and clean spills on top of the stove daily*** because grease in the kitchen is a source of food for cockroaches.
- ***Clean any areas in your home where you see cockroach droppings or stains***; you need to get rid of the allergy-causing material the cockroaches may have left behind.
- Cockroaches like to hide in small, dark places so ***remove old newspapers and clutter daily***.
- ***Repair leaks and dripping faucets*** in order to eliminate standing water.
- Get rid of a source of food by ***taking the garbage out or sealing it daily***.
- ***Wash or change the bedding every 2 weeks*** in order to get rid of cockroach allergen.
- ***Arrange for your landlord or a professional exterminator to come to your home to apply roach-elimination products***.



Background on cockroaches as a risk factor for asthma

Children with asthma who are allergic to cockroaches and who have cockroaches in their home have more frequent and more severe attacks of asthma. That is why it is so important to kill and remove cockroaches from the home and to remove any dust or materials that may contain cockroach matter.

Proteins in cockroach feces, saliva, shed skins, carcasses, and egg capsules can cause asthma and allergy symptoms in children with asthma who are allergic to cockroaches. These proteins mix with dust in the home. When the dust is disturbed it swirls up and may be inhaled. Inhaling this roach dust can aggravate asthma in children who are allergic to cockroaches by causing inflammation and swelling of the airways. Even when the roaches are gone, the roach allergens stay, and continue to cause allergy and asthma symptoms if not cleaned up adequately.

Roach egg capsules can also cause problems. Roach eggs can result in 30 or 40 babies, or nymphs, and roaches live a long time -- up to three years. A female roach can have as many as 35 babies every 3 weeks, and it is easy for them to become resistant to roach baits and sprays. Another reason why roaches are tough to remove is because they move around a lot from one place to another, and they can pass through cracks as small as one-sixteenth of an inch in width. So sealing any possible cockroach entry points into the home is important.

For these reasons, it is often necessary to contact your landlord so that he/she may resolve the problem. Or you may need to contact a professional exterminator. Professional exterminators will inspect your entire home to assess the degree of infestation, sources of food and water supporting the infestation, harborages, and entry points. They will then apply the appropriate kind and amount of roach-elimination products, eliminate the hideouts, and block entry points to your home. Depending on the severity of your roach problem, the exterminator will recommend an extermination schedule to rid the home of roaches and keep them away for good.

It is not enough to remove the cockroaches from your home. You must remove the remaining cockroach allergen, too. It is essential that you vacuum or mop and clean any areas in your home where cockroach droppings or stains are evident, as well as wash or change the bedding often to remove any allergy-causing material the cockroaches may have left behind.

Cockroaches love food and water. They can eat the same foods that we do. Crumbs in drawers and on shelves and on the counters and floors, grease on the stove, or dirty dishes sitting in the sink will attract cockroaches. Crumbs under the microwave or behind the refrigerator where we can't see them can also attract roaches. Moving things around when you clean is a good way to find and remove all possible sources of roach food. Roaches also eat pet food, garbage, nail clippings, and hair, so it is important to control these things in the home, too.

Cockroaches need water on a daily basis. Any pools of water such as pet water bowls or water left in sinks, on the bathroom floor, or condensation on windows can provide a source of water

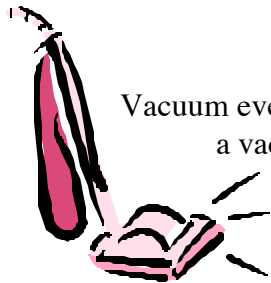
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for roaches. Water in plant containers and from leaking pipes will also attract roaches. Cockroaches have been known to live over 200 days without food as long as they have water.

Cockroaches love hiding in warm, dark places. They are afraid of light and usually only come out after dark. They can be found close to their water and food supplies. High humidity promotes their growth. Roaches like to hang out together behind trash containers, refrigerators, microwaves, and other appliances, as well as in newspapers and clutter. They can enter the home through small cracks or holes in the walls. And sometimes roaches or their eggs are accidentally brought into the home when bringing in newspapers, boxes, or groceries. Therefore, it is important that you try to remove anything reasonable that is providing a warm, dark hiding place for these pests.

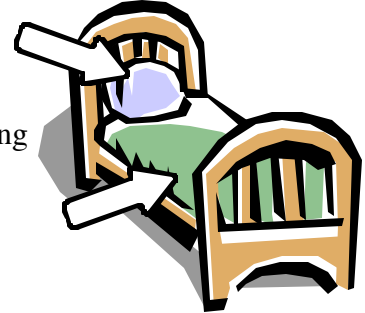
Ways to get rid of rodents: Overview

If you have a HEPA unit, keep it running in your child's bedroom.

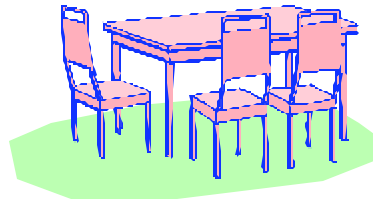


Vacuum every week with a vacuum cleaner.

Encase pillows, mattress, and box spring in special allergen-proof covers.

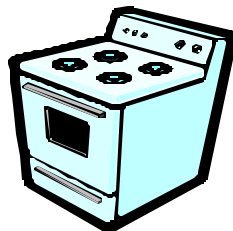


Put all opened non-refrigerated food items in sealable bags or plastic containers.



Limit eating to the kitchen/dining room area.

Clean spills on top of the stove daily.



Clean food crumbs and spills from counters and floors every day.



Damp dust all horizontal surfaces.

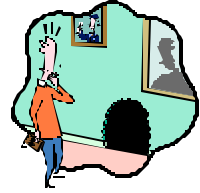


Mop all wood or linoleum floors weekly.

Set traps to kill rodents.



Seal openings in walls.



Contact your landlord or a professional exterminator about your rodent problem.



Ways to get rid of rodents: Details

- *If you have a HEPA unit, keep it running in your child's bedroom* to filter allergy-causing material out of the air.
- *Encase your child's pillows, mattress, and box spring in special allergen-proof covers* to keep your child from breathing in any allergenic particles while sleeping.
- In order to get rid of all the allergy-causing material the rodents may have left behind *vacuum every week with a vacuum cleaner.*
- *Mop all wood or linoleum floors weekly* to clean up allergy-causing material the rodents may have left behind.
- Rodents need food and water to live so try to *limit eating to the kitchen/dining room area;* this will also lessen the area you need to keep clean.
- *Put all opened non-refrigerated food items in sealable bags or plastic containers* to eliminate a source of food for the rodents.
- *Clean food crumbs and spills from counters and floors every day* because this could be a source of food and water for the rodents.
- Because grease in the kitchen is a source of food for rodents *clean spills on top of the stove daily.* Do not leave containers with cooking fat uncovered.
- *Damp dust all horizontal surfaces* in your child's bedroom weekly to get rid of all the allergy-causing material the rodents may have left behind.
- *Seal openings in walls* (such as where pipes enter the home) to keep rodents from entering the home.
- *Set traps to kill rodents.* Be careful when disposing trapped rodents. They can carry diseases.
- *Contact your landlord or a professional exterminator about your rodent problem.*



Background on rodents as a risk factor for asthma

Rats and mice, like all furry animals, can be highly allergenic. Because most people are not exposed to large numbers of these pests, allergy to them is not as common among asthmatics (10-20%). However, people who are exposed to them frequently can become allergic. This allergy trigger may bother their asthma. Rodents are unusual in that they produce a large amount of allergen in their urine. When the urine dries, the allergen is evaporated into the air as a fine dust and will permeate the home and all of its contents, including bedding, food, and upholstered furniture. Like all other mammals, rodent allergen is also present in their dander. Because of this, rodents can be an important cause of asthma problems in homes with significant infestations.

Effective elimination of rodents requires a number of measures. All sources of food and water should be removed or sealed. All possible entrance holes should be plugged and sealed over. Child-proof rodent traps should be used. Poisons should not be used in homes with toddlers and small children, but they can be placed in rodent entrance holes before sealing them.

Air cleaners with a high efficiency particulate air (HEPA) filter are designed to reduce airborne allergens in the indoor environment, help eliminate some of the allergens in the home. To be most effective, they should be kept running in the child's sleeping area 24 hours a day. If that is not possible, run them a minimum of an hour before the child gets home and as long as the child is in the room.

Rodents produce a certain amount of allergen every week. This amount varies greatly from rodent to rodent. Allergens accumulate in areas such as carpeting, mattresses, cushions, and even on vertical and horizontal surfaces in the room. Since the allergen particles can go through fabrics, the child's pillows, mattress, and box spring should be encased in allergen-proof covers to prevent the release of allergens when squeezed or laid upon. And because allergens accumulate on vertical and horizontal surfaces, all surfaces should be dusted weekly with a damp cloth.

The best solution is to have scatter rugs that can be taken up and washed. When the scatter rugs are being washed, mop the hardwoods and linoleum floors beneath. However, if rugs or carpeting cannot be removed from the floors, then you should vacuum at least once a week with a vacuum cleaner. Vacuuming helps remove the rodent allergen. Vacuums with HEPA filters are best for people with allergies and asthma because they collect and trap even the smallest allergen and dust particles. Vacuums without these special filters allow small particles to be blown back out of the vacuum, and they should not be used when the child is in the room.

Rodents love food and water. They can eat the same foods that we do. Crumbs on the counter tops and floors, grease on the stove, or dirty dishes sitting in the sink will attract rodents. Crumbs under the microwave or behind the refrigerator where we can't see them can also attract rodents. Moving things around when you clean is a good way to find and remove all possible

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sources of roach food. Rodents also eat pet food, garbage, nail clippings, and hair, so it is important to control these things in the home, too.

If you are experiencing a rodent problem in your home and you do not feel comfortable setting traps, using poison, etc, then you should contact your landlord or a professional exterminator so that he/she may resolve the problem. You deserve to live in a pest-free home.

Ways to get rid of ETS problems: Overview

Do not smoke around your child, in your child's bedroom, or in the car with your child.



If you have a HEPA unit, keep it running in your child's bedroom.



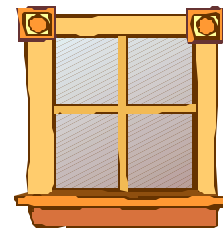
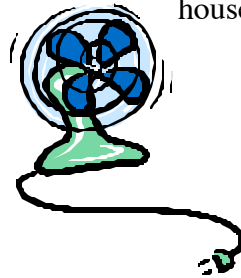
Keep the door to your child's bedroom closed.

Ask family members and guests to smoke outside.



Ask family members and guests to smoke in a room where your child does not usually spend time.

Try to increase the ventilation in your house by opening windows or running a fan.



Do not sit in smoking sections of public places.

Enroll in a smoking cessation program.

Check on smoking in the homes or places where your child spends a lot of time; talk with these people about how environmental tobacco smoke is bad for people with asthma.

Ways to get rid of ETS problems: Details

- If you smoke, ***do not smoke around your child, in your child's bedroom, or in the car with your child.***
- ***If you have a HEPA unit, keep it running in your child's bedroom*** to filter some of the irritants from the environmental tobacco smoke out of the air so that your child does not breathe it in while he/she is in the bedroom.
- ***Keep the door to your child's bedroom closed*** to keep smoke from entering his/her room.
- ***Ask family members and guests to smoke outside or in a room where your child does not usually spend time*** to lessen the amount of smoke your child is exposed to indoors.
- ***Try to increase the ventilation in your house by opening windows or running a fan.***
- ***Do not sit in smoking sections of public places.***
- ***Check on the smoking in homes or places that your child spends a lot of time; talk with these people about how environmental tobacco smoke is bad for people with asthma.***
- If you would like to quit smoking, ***enroll in a smoking cessation program.***



Background on ETS as a risk factor for asthma

Exposure to Environmental Tobacco Smoke, or second-hand smoke, can cause lower respiratory tract infections and these infections could result in hospitalizations. Children exposed to second-hand smoke at home are also more likely to have middle-ear disease and reduced lung function. Chronic cough, wheezing, and phlegm are more frequent in children whose caretakers smoke. Second-hand smoke increases the number of asthma attacks and the severity of asthma in about 20% of this country's 2 million to 5 million asthmatic children. However, research has shown that reduction of ETS exposure can diminish some of these asthma-related symptoms in children.

Caretakers may not believe that their child is bothered by an adult's smoking. However, exposure to Environmental Tobacco Smoke can worsen breathing problems in children with asthma. When children breathe in second-hand smoke, they may experience a decrease in pulmonary function, an increase in airway sensitivity or irritability, and an increased frequency of visits to the emergency room. For that reason, no one, including caretakers, other family members or guests, should smoke in the home. If someone insists on smoking indoors, encourage him/her to smoke in a room where the child does not usually spend much time. Even when you can't see any smoke, the chemicals from the smoke are in the air and can make asthma worse. Try to increase the ventilation in your home if people continue to smoke indoors. Open a window or run a fan to circulate the air. Also, check on the smoking in homes where your child spends time; talk with these people about how smoking is bad for asthma. And do not sit in smoking sections of public places.

Air cleaners with a high efficiency particulate air (HEPA) filter are designed to reduce airborne allergens in the indoor environment, help eliminate some of the allergens in the home. To be most effective, they should be kept running in the child's sleeping area 24 hours a day. If that is not possible, run them a minimum of an hour before the child gets home and as long as the child is in the room.

Smoking is an activity that is highly addictive and highly habitual. Changing smoking behavior is incredibly difficult. But it is incredibly important to reduce your child's exposure to smoke, and one of the best ways to do this is to enroll in a smoking cessation program. Encouragement and motivation from others are extremely critical during that time.

Ways to promote adherence: Overview

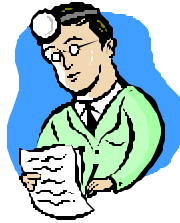


Ask your doctor for an asthma care plan for your child.

Help your child remember to take his/her medication on time.

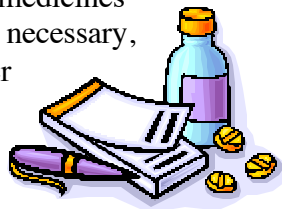


Be honest with your doctor about your child's asthma care plan.



Ask your doctor about rescue medications and preventive medications.

Learn the names of the medicines that your child takes. If necessary, label your child's inhaler and pill bottles.



Make sure you always have all the medications your child is using on hand.



Ways to promote adherence: Details

- ***Ask your doctor for an asthma care plan for your child*** so you can better manage your child's asthma at home.
- Even though your child's asthma care plan will tell him/her when he/she needs to take the medicine, you will still need to ***help your child to remember to take his/her medication on time***.
- ***Be honest with your doctor about your child's asthma care plan***; otherwise your doctor may unnecessarily change the care plan that may have worked well for your child if he/she had better adherence.
- ***Ask your doctor about rescue medications and preventive medications***. Except in cases of mild asthma, both kinds of medications should be included in your asthma care plan. Make sure you and your child know when each type should be taken.
- ***Learn the names of the medicines that your child takes. If necessary, label your child's inhaler and pill bottles*** to avoid all confusion.
- ***Make sure you always have all the medications your child is using on hand***; it would be harmful to your child's health if you were to run out of his/her medicine when he/she was having an attack. Plan ahead for refills.

Background on adherence as a risk factor for asthma

The topic of adherence addresses problems with obtaining and taking asthma medications and suggests possible solutions to these problems.

It is difficult to remember all the details of taking the right medicine at the right time, in the right amount, and in the right way. Many adults and children with asthma have poor adherence to their medications and, as a result, have worse asthma outcomes than people who stick to their medication plans. Asthma is a serious health problem, and it is therefore very important that you address the problems that you and your child have when trying to keep up with his/her asthma medication schedule.

Not adhering to prescribed medications occurs in a variety of forms; these may include not filling prescriptions, not taking the correct amount of medicine, not taking the medicine at the right time, and not taking the medicine at all. All of these can put your child at serious risk for complications with his/her asthma.

Asking your doctor for an asthma care plan will help reduce the number of problems you face when trying to be sure that your child gets his/her medicines. This asthma care plan will tell you exactly what medicine to take, how much of it to take, and when to take it. Ask the doctor to explain the role of each medicine and how to take each one. Following a written asthma care plan has been shown to be one of the best ways of managing asthma at home.

Even though your child may have a detailed medicine plan that tells him/her when he/she needs to take the medicine and what medicine to take, it can sometimes be difficult for your child to remember to take the medication at the right time. There are several things that can be done to prevent your child from not taking his/her medication on schedule: 1) have the doctor adjust the schedule so that it matches mealtimes or won't need to be taken at school, 2) talk to the doctor about medicines that are longer acting, 3) talk to the doctor about which medicines must be taken exactly on schedule and which medicines offer more flexibility, 4) plan ahead and bring medicines along in case plans change, and 5) leave reminders for you and your child.

It is important to be honest with your doctor. If the asthma care plan that he/she suggests seems unrealistic and too complicated for you, tell him/her right way so that adjustments can be made. Let your doctor know sooner rather than later about any concerns you may have about your child's medications. During follow-up visits, be honest about whether or not your child has been taking his/her asthma medications. If you are not following your asthma care plan and the doctor is not aware of this, he/she may unnecessarily prescribe other medications or suggest more tests to find the cause of your child's persisting symptoms.

There are two main types of asthma medications: rescue medicines and preventive medicines. Rescue medicines help stop an asthma attack that has already started or keep an attack from getting serious. They work quickly to stop the squeezing and open the airways in the lungs during an attack, and are taken at the first sign of a wheeze, cough, or tight chest. Rescue medicines are not meant to be used to stop attacks every day for weeks and weeks like

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preventive medicines. It is important to always have these medications on hand for when your child may need them, even though your child will not use them every day.

When a child has asthma, asthma attacks come and go but the lungs stay sensitive and are easily bothered. Even when your child is not having an asthma attack, the airways can still be swollen and bother your child's breathing. Preventive medicines work slowly over many weeks to stop this swelling in the airways. They are taken every day, even when your child feels fine and can breathe well.

It is often difficult for people to remember to take their preventive medicine, as there is not a "sick" reminder that they need to take it every day. Most times, preventive medication can be taken before and after school. This decreases the need for teacher supervision and helps your child avoid any hassles from other children.

If your child is on several different medications, it may be easy to confuse them. It will be helpful for you to learn the specific names of the medicines your child takes and to keep an updated copy of the asthma care plan handy for emergencies. If you are still confused by which medicine is which, then you may want to write the names of the medications on stickers and put them on the inhaler or pill bottle so that they are easily recognizable.

Make sure that you always have all the medications that your child is using on hand. Plan ahead for refills with your doctor so that you do not find yourself in a situation where the child needs a certain medication and does not have any left. If you have to drop off a medication for a refill at the pharmacy, make sure you give yourself at least several days before the child will run out of medicine.

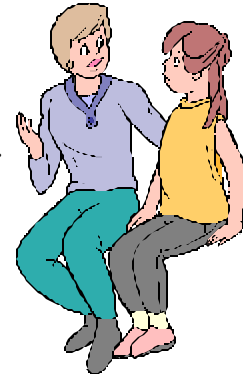
It is important that you realize that you can do things that can improve your child's asthma. Work with your doctor as much as possible to develop an asthma care plan that is manageable and works for your child. This can help your child become symptom-free and keep his/her asthma under control.

Ways to promote child well-being: Overview



Tell your child that his/her concerns are completely natural.

Talk to your child about how he/she has been acting or feeling recently.



Help your child understand asthma and how it can be controlled.



Emphasize that having a positive attitude or thoughts about asthma may improve his/her health.

Ways to promote child well-being: Details

- *Tell your child that his/her concerns are completely natural.* Most children with asthma have the same concerns.
- *Talk to your child about how he/she has been acting or feeling recently* about his/her asthma.
- It is essential that you *help your child understand asthma and how it can be controlled.*
- When talking with your child, *emphasize that having a positive attitude or thoughts about asthma may improve his/her health.*

Background on child well-being as a risk factor for asthma

The following questions are common concerns of children who have asthma.

- Will I be able to play team sports or play at all?
- Will it go away? Will I grow out of it?
- Asthma attacks just come out of nowhere. Will I be able to handle an attack at home? At school? At the playground?

These concerns are completely natural. So it is extremely important that you talk with your child about how he/she has been acting or feeling recently. It is essential that you help your child understand his/her illness. By doing so, your child will learn that yes, he/she will be able to play team sports, that no, he/she may not outgrow asthma, but it may be less severe, and that yes, he/she will be able to handle an attack whether it be at home, at school, or at the playground. In doing so, you need to help your child understand how an asthma attack starts, learn what his/her asthma clues are, and learn what to do when an asthma attack starts.

You may also want to emphasize to your child that having a positive attitude or thoughts about asthma will ultimately help to improve his/her health.

Ways to improve asthma attitudes: Overview

Remember that you can develop the skills you need to help your child.



Expect your child to be able to play and go to school like other children.

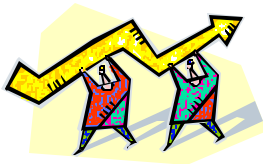


Expect your child to be able to sleep through the night.



Try to learn as much as you can about asthma.

Realize that you can do things to help improve your child's asthma.



Ways to improve asthma attitudes: Details

- *Remember that you can develop the skills you need to help your child.*
- *Expect your child to be able to play and go to school like other children.* If this is not happening, your child's asthma is not under control.
- *Expect your child to be able to sleep through the night* without having problems with asthma. If this is not happening, your child's asthma is not under control.
- *Try to learn as much as you can about asthma.* This will build your confidence in caring for your child's illness.
- *Realize that you can do things to help improve your child's asthma.*

Background on asthma attitudes as a risk factor for asthma

It is natural that you may believe that it is not possible to control your child's asthma so that he/she can play like other children, that it is not possible to manage your child's asthma to the point that they are free of symptoms, that your child's asthma medications will cause you problems, or that you simply have little control over your child's asthma.

However, you know a lot about asthma. And you know your child better than anyone else. You have the ability to develop the skills you need to help your child have fewer problems – and no symptoms from asthma. That means things like your child being able to run, play, and go to school like other children. It means that you and your child should be able to sleep all night. Expect nothing less. If these things are not happening, the asthma is not under control.

Although asthma hasn't changed that much over the years, your child can be free of symptoms because many doctors understand it better now and the medicines are much better. There have been many discoveries in the last few years about asthma medicines; some doctors know a lot about these, and others are learning.

Doctors can help you help your child become symptom-free by taking the right medicines at the right time, and in the right way. In addition to the help from your doctor, the best thing for you and your child to do is to try to learn as much as you can about asthma and realize that you can do things that can improve your child's problem with asthma. By learning more, you will build your confidence and you will find that you will be better able to control your child's illness.