

EXHALE Guide for People With Asthma, Their Families, and Their Caregivers

The Centers for Disease Control and Prevention's (CDC's) National Asthma Control Program (NACP) created EXHALE and this Guide to help people with asthma achieve better health.

EXHALE

- Is a set of six strategies that each contribute to better asthma control.
- Can help both children and adults with asthma.
- Can have the greatest impact when multiple strategies are used together.

This Guide explains how people with asthma, their families, and their caregivers can use EXHALE strategies, individually or in combination, to help control asthma. Controlling asthma can reduce asthma symptoms, prevent asthma attacks, and avoid hospitalizations and emergency department (ED) visits because of asthma. Every person with asthma does not necessarily need every strategy.



Centers for Disease
Control and Prevention
National Center for
Environmental Health

What are the EXHALE strategies?



Education

on asthma self-management

X-tinguishing

smoking and exposure to secondhand smoke

Home

visits for trigger reduction and asthma self-management education

Achievement

of guidelines-based medical management

Linkages

and coordination of care across settings

Environmental

policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

You can use EXHALE
to control asthma

Research has shown that each EXHALE strategy can reduce:

- Asthma symptoms;
- Asthma attacks;
- Asthma-related hospitalizations and emergency department (ED) visits;
- The number of days missed from work and school because of asthma; and
- Limitations on activities because of asthma.

Information About Asthma

Asthma is a disease that affects the lungs. Inside the lungs are airways, which are the paths that carry air to the lungs. In people with asthma, their airways can become more narrow, making it harder for air to get in and out of the lungs. When this happens, people with asthma can experience wheezing, breathlessness, chest tightness, and nighttime or early morning coughing.

We don't know how to cure asthma, but we know asthma can be controlled.

Asthma control

When asthma is well controlled, you or your child:

- Will have fewer symptoms such as wheezing or coughing;
- Will wake up less because of asthma;
- Will miss less work or school because of asthma;
- Can take part in more physical activities; and
- Will not have to go to the hospital because of asthma.

You can control asthma by knowing the warning signs of an asthma attack, staying away from things that cause an attack, and taking asthma medicine exactly as prescribed by a healthcare professional.



Asthma triggers

Exposure to asthma triggers can cause asthma symptoms or asthma attacks. Common asthma triggers in the environment include tobacco smoke, dust mites, cockroaches, furry pets, mold, some disinfectants, and air pollution. Also, respiratory infections (like the common cold or the flu) are a common asthma trigger.

Remember – you can control asthma.
EXHALE can help.

More About the EXHALE Strategies

Each EXHALE strategy can help people with asthma feel better, avoid the hospital or ED, and avoid missing school or work. Learn more about each strategy on this page and the next page.

Education on asthma self-management

You can learn more about how to manage asthma. Asthma self-management education includes learning how to use asthma medications correctly and how to limit exposure to asthma triggers.

Asthma action plans are written plans that can help you remember how to take medicine exactly as prescribed and remember what to do if asthma symptoms get worse.

X-tinguishing smoking and exposure to secondhand smoke

Cigarette smoke can trigger asthma attacks that require hospital or ED care. About one in five U.S. adults with asthma smoke cigarettes.

Breathing in secondhand smoke can trigger an asthma attack. Secondhand smoke is smoke from burning tobacco products (such as cigarettes, cigars, or pipes) or that is exhaled by someone who is smoking. This smoke can be inhaled by anyone nearby.

Smokefree policies can help people quit smoking and avoid secondhand smoke. Also, smokefree policies can help people with asthma feel better and avoid the hospital. Smokefree policies include:

- Comprehensive smokefree policies that prohibit smoking in all indoor spaces of workplaces, restaurants, bars, and public and private multi-unit housing (including apartment buildings).
- Smokefree rules that prohibit smoking in homes and vehicles.

Learn more about [smokefree policies on page 5](#).

Home visits for trigger reduction and asthma self-management education

A trained home visitor (such as a nurse or community health worker) can help you find, reduce, and remove asthma triggers in your home. They also can teach you how to use asthma medications correctly.

If you or your child frequently visit the hospital or ED for asthma, a trained home visitor can help you. Programs that offer home visits for asthma can differ in terms of who is eligible for a home visit and how many home visits a family can receive.



Learn more about steps you can take to use EXHALE on page 6

More About the EXHALE Strategies (continued)

Achievement of guidelines-based medical management

[National guidelines on treating asthma](#) can help healthcare professionals monitor and treat asthma correctly. This includes finding the right asthma medication for you or your child.

Asthma medicines come in two types—quick-relief and long-term control.

- Quick-relief medicines control the symptoms of an asthma attack. If you or your child needs to use quick-relief inhalers more and more, contact your healthcare professional to see if you or your child needs more medicine or a different medicine. An example of a quick-relief medicine is a medicine called albuterol.
- Long-term control medicines help you or your child have fewer and milder asthma symptoms or attacks. For example, inhaled steroid medication is often prescribed as a long-term control medicine for asthma.

Linkages and coordination of care across settings

Linkages and coordination of care across settings can help people involved in your or your child's care (such as healthcare professionals and school nurses) stay informed and provide you or your child better care.

Linkages and coordination of care means sharing information and maintaining communication about your or your child's needs and healthcare. This information can be shared only if you give your approval or consent. You can help healthcare professionals and other care providers stay up-to-date about your or your child's needs and healthcare by making sure they have copies of any necessary medical records including an asthma action plan.

Support services are a type of linkage. These services might be available to help you or your child take asthma medicine exactly as prescribed and avoid things that can trigger an asthma attack.

Support services that might help you control asthma include:

- Prescription assistance programs offer reduced costs for prescription medications.
- [Home weatherization assistance programs](#) offer loans or grants to low-income residents to repair or improve their homes, which can reduce asthma triggers in their homes such as mold and pests.

Environmental policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

Policies and practices shown to help people with asthma include:

- [Home weatherization assistance programs](#) that provide loans or grants to low-income residents to repair or improve their homes, which can reduce asthma triggers in their homes such as mold and pests.
- Smokefree policies can help people with asthma feel better and avoid the hospital. Smokefree policies include:
 - Comprehensive smokefree policies that prohibit smoking in all indoor spaces of workplaces, restaurants, bars, and public and private multi-unit housing (including apartment buildings).
 - Smokefree rules that prohibit smoking in homes and vehicles.
- Modifying older diesel engines of school buses to run more cleanly to reduce air pollution. School districts that changed to cleaner bus engines have found that fewer students miss school or go to the hospital for asthma.
- Eliminating, when possible, or reducing exposure to asthma triggers in the workplace. Doing this can help workers with asthma feel better.



Learn more about steps you can take to use EXHALE on the next page

Steps You Can Take to Use EXHALE

EXHALE

- Is a set of six strategies. Each strategy has been proven to reduce asthma symptoms and asthma attacks.
- Can help both children and adults with asthma.
- Was created by CDC's National Asthma Control Program to help people with asthma achieve better health.



Learn about steps you can take to use EXHALE on this page and the next page.

Education on asthma self-management

- Find out if asthma self-management education classes are available near you by looking at this list to see if your state has a CDC NACP partner in a health department at <https://bit.ly/2S6ghoy> or use this QR code to go to the website.



If your health department is on this list, check with them to find out whether they have information about asthma self-management education classes near you and whether you are eligible to participate in the classes offered.

- Take an online course about asthma self-management. For example:
 - The American Lung Association offers a free “Asthma Basics” program. This one-hour course is for adults with asthma or their caregivers. Asthma Basics is available in English and Spanish at lung.org/asthma-basics or use this QR code to go to the website.
 - The Asthma and Allergy Foundation of America (AAFA) offers free adult courses on asthma basics and severe asthma care. Both courses are available in English at <https://bit.ly/2HHZQwF> or use the QR code to go to the website.
- For children with asthma, AAFA offers a free children’s activity book about asthma and allergies. This book has mazes, crossword puzzles, and other activities, as well as information for children about how to manage asthma and allergies. You can find it at <https://bit.ly/2F5GxfS> or use this QR code to go to the website.
- Talk with your doctor or another healthcare professional about creating an asthma action plan. The action plan should include information about managing asthma:
 - When there are no asthma symptoms;
 - When asthma symptoms occur; and
 - When an asthma attack occurs.






You can read about how one family uses their asthma action plan to give the right asthma medication when their child is breathing well, and how they change their medication use when symptoms occur, at <https://bit.ly/2SbfmTK> or use this QR code to go to the website.




Steps You Can Take to Use EXHALE (continued)


X-tinguishing smoking and exposure to secondhand smoke

- If you have asthma and you smoke, quit smoking. You can receive free coaching to help you quit smoking by calling a quitline (English: 1-800-QUIT-NOW or 1-800-784-8669; Spanish: 1-855-DEJELO-YA or 1-855-335-3569; Mandarin and Cantonese: 1-800-838-8917; Korean: 1-800-556-5564; Vietnamese: 1-800-778-8440). Learn more about how to quit at <https://www.smokefree.gov> or use this QR code to go to the website. 
- If you or your child has asthma, people should never smoke around you or your child. This includes not smoking in your home, in your vehicle, in childcare facilities, and in other places where you or your child spend time. Learn more about how secondhand smoke can affect people with asthma at <https://bit.ly/2GIIUel> or use this QR code to go to the website. 
- If your child has asthma, talk to them about tobacco use. You can find more information and tips at <https://bit.ly/2SaezTm> or use this QR code to go to the website. 

Home visits for trigger reduction and asthma self-management education

- If you or your child frequently visit the hospital or emergency department for asthma, find out if home visits for asthma are available near you by looking at this list to see if your state has a CDC NACP partner in a health department <https://bit.ly/2S6ghoy> or use this QR code to go to the website. 


If your health department is on this list, check with your health department to find out whether they have information about home visits for asthma near you and whether you are eligible to participate in the home visits offered. You can also ask a healthcare professional or your health insurance plan about whether home visits for asthma are available near you.

- Learn more about triggers of asthma attacks commonly found in and around homes at <https://bit.ly/2FiODC4> or use this QR code to go to the website. 

You can take steps to reduce asthma triggers in your home. For example, being exposed to pests like cockroaches and mice can trigger asthma attacks. These actions can help keep pests out of your home:

- Keep counters, sinks, tables, and floors clean and free of clutter.
- Clean dishes, crumbs, and spills right away.
- Store food in airtight containers.
- Seal cracks or openings in cabinets, walls, baseboards, and around plumbing.
- Keep trash in a closed container.
- Use pesticide baits and traps in areas away from children and pets. Follow manufacturer's instructions for correct use.
- Avoid using sprays and foggers because these can cause asthma attacks.

Achievement of guidelines-based medical management




- Take asthma medication exactly as prescribed. If you have any concerns about or difficulties taking the prescribed medication, talk to a doctor or other healthcare professional. For example, you can ask how your prescribed medication helps control asthma and how much time it takes for each medication to work so that you or your child can feel better. You can also ask what are the warning signs of an asthma attack and what you should do if asthma symptoms get worse.
- Ask a healthcare professional to check whether you or your child are using an asthma inhaler correctly (if an inhaler is prescribed). If you are having difficulty using an asthma inhaler correctly, talk to a healthcare professional about whether attaching a spacer to the inhaler could help. Not all inhalers can attach to spacers, but if your inhaler can be used with a spacer, a healthcare professional can prescribe a spacer.
- Watch CDC's one-minute videos on "Know How to Use Your Asthma Inhaler" at <https://bit.ly/33boePC> or use this QR code to go to the website. 
- Discuss an asthma action plan with a healthcare professional. Read more about asthma action plans under [Education on asthma self-management](#).

Steps You Can Take to Use EXHALE (continued)

Linkages and coordination of care across settings

- Keep copies of your or your child's asthma action plan in places where you or your child spend time. These places can include home, school, and work. If your child has asthma and is in school, ask the school nurse or school office how you and the school can make sure rescue inhaler medication is available for your child in case of an asthma attack.
- If you need help paying for medicine or food, or if you need other support, find out what support services are available to you or your child through the health department or community programs. For example, Neighborhood Navigator is an interactive tool that identifies community resources by zip code and is available in more than 100 languages. Neighborhood Navigator is available through the American Academy of Family Physicians' The EveryONE Project®: <https://navigator.aafp.org>.

Environmental policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

- If you own your home, your income is low, and you need to repair your home, find out if a home weatherization assistance program can help you by checking out <https://bit.ly/3ifvJcu> or use this QR code to go to the website. 
- If you live in a rental home, you might need to ask permission to make any changes, even minor repairs to the home. Renters often are protected under tenant's rights laws. You can contact local social services agencies if you need their help. These websites have information for people who live in a rental home:
 - The Environmental Law Institute offers a free Indoor Air Quality Guide for Tenants at <https://bit.ly/34gpn7L> or use this QR code to go to the website. 
 - The Maine Indoor Air Quality Council offers a free website about Indoor Air Quality in Rental Properties at <https://bit.ly/3imkrm0> or use this QR code to go to the website. 
- Make your home and vehicles smokefree – don't allow anyone to smoke in your home and vehicles at any time.
- Learn more about asthma-friendly work environments at <https://bit.ly/2Szl6H7>.
- Talk with community leaders about policies or best practices that can help people with asthma in places where they live, work, learn, play, and spend time.

Remember, you can use EXHALE to:

- Reduce asthma symptoms.
- Prevent asthma emergencies.
- Avoid missing school or work because of asthma.

For more information, visit:

Call 800-CDC-INFO (800-232-4636) or go to <https://www.cdc.gov/asthma/exhale/>.