

# Risk factors for Asthma and triggers for Asthma attacks

Written by  
Dr Mike Levin (2009)  
(Revised 2012)



[naep@netactive.co.za](mailto:naep@netactive.co.za)

[www.asthmasa.org](http://www.asthmasa.org)

A “risk factor” is something that increases your chances of getting a disease or condition. In the case of asthma there are two different types of risk factors. There are risk factors for developing asthma, and there are separate risk factors for those who already have asthma getting a severe asthma attack. We like to refer to the second as “triggers for asthma attacks” instead of “risk factors” to avoid confusion.

## Risk factors for getting asthma

It is possible to develop asthma with or without the risk factors listed below. However, the more risk factors you have, the greater your likelihood of developing asthma. If you have a number of risk factors, ask your doctor what you can do to reduce your risk for you or your children.

### Family history of asthma

Asthma runs in families. People whose immediate blood relatives (mother, father, brothers and sisters) have asthma are more likely to develop the disease. Asthma in a child is more likely if one parent has asthma with a risk of about 1 in 5, and even more likely if both parents have asthma with a risk of about 2 out of 3 of developing asthma. Identical twins are more likely than non-identical twins to both develop asthma.

### Allergies

People who have allergies, especially allergic rhinitis (hay-fever/sinus), eczema and severe food allergies, have a greater chance of developing asthma.

### Cigarette smoke during pregnancy

If a mother smokes cigarettes during pregnancy there is a risk of smaller lungs, asthma and allergies in her newborn child.

### Medical Conditions

The following medical conditions increase your risk of developing asthma:

- Chest infections in childhood
- Low birth weight
- Gastroesophageal reflux disease / heartburn
- Obesity

## Age

Although asthma can develop at any age, statistics show that most asthma cases are found in children between the ages of 2 – 17.

## Gender

Both males and females develop asthma. During childhood it is more common in boys; however, after the age of 20 the ratio is equal among the sexes.

## Ethnic Background

Asthma affects people of all ethnic backgrounds. Although some studies suggest racial differences in prevalence of asthma, socio-economic status and environment may be more important. Asthma is more common in urban compared to rural communities and in richer than in poorer communities. Asthma on the other hand is less well controlled in poorer communities because of difficult access to medical care and information, so more asthma deaths occur in poorer communities.

## Environmental exposures

It is not clear whether early exposure to inhaled allergens (house dust mites, moulds, cats, cockroach, pollen) may lead to asthma. The increase in the prevalence of allergy when born in a specific month of the year may be attributed to early exposure to an allergen that is present at that specific time. Despite this, it is not recommended that you try modify the environment of a child to try protect them from asthma.

## Obesity

Overweight adults are more likely to have asthma compared to adults who are not over weight. According to some researchers, the risk may be greater for nonallergic asthma than allergic asthma.

## Exposure to Irritants on the Job

If you are exposed to certain chemicals or other irritating substances on a regular basis at work, you could be at risk for developing occupational (work-related) asthma. Risky occupations may include farming, hairdressing, and paint, steel, plastics, and electronics manufacturing. (See "A South African Worker's guide to Work-Related Asthma")

## Triggers for asthma attacks in asthmatics

Remember that someone who takes their controller pumps / medication regularly is at lower risk for these triggers causing severe asthma. Always use your medication the way it was prescribed. Always get an action plan so that you know what to do with a severe attack. Consult your doctor if your asthma is not completely controlled. (See "Keeping asthma under control")

## Infections

Colds and other viral infections are the commonest triggers for asthma attacks. If a child is going to a crèche they may have more tight chests, but colds are almost impossible to avoid. You should talk to your doctor or asthma nurse about whether you should have the flu vaccination.

## Allergies

Exposure to the following may increase your risk of developing an asthma attack if you are sensitive to that particular allergen. You should only avoid an allergen if it has been proven on blood or skin test that you are allergic to it. (See "Allergy and asthma")

- Dust mites
- Pets
- Moulds
- Cockroaches
- Pollen
- Certain foods

## Pollution and irritants

Irritants affect everyone with asthma, so all asthmatics need to avoid the following:

- Smoking or second-hand tobacco smoke
- Occupational irritants, such as chemicals used in:
  - Farming
  - Beauty salons
  - Manufacturing plants of steel, plastics and electronics
  - High levels of air pollution, particularly in an urban environment

## Sport and exercise

Some people with asthma find that exercise triggers their asthma symptoms. However, exercise is good for everyone, including people with asthma. If your asthma is well controlled, you should be able to join in, have fun and keep fit.

If your asthma symptoms get worse during or after exercise it could be a sign that your asthma is poorly controlled and you may need to visit your doctor or asthma nurse for an asthma review. (See "Sport and asthma")

## Weather

A sudden change in temperature, especially cold air can trigger asthma. Pollen allergic asthmatics can have symptoms during thunderstorms, when large quantities of pollen, in very small particles, are released into the air.

## Emotions

Stress or even a fit of laughter can trigger asthma symptoms, as can family situations such as depression, money problems, deaths and work-related stress.

## Hormones

Some women find their asthma can be affected around puberty, before their periods, during pregnancy and during menopause.

## Medicines

Some medicines that are used to treat a range of conditions can lead to asthma attacks in a small number of people. These medicines include pain pills such as aspirin and non-steroidal anti-inflammatory tablets. Other medicines that can sometimes lead to asthma attacks include beta-blockers, used to treat heart disease and glaucoma and some cold and flu remedies.



**Join the NAEP!**

sign up on [www.asthmasa.org](http://www.asthmasa.org)