

ASTHMA TRIGGERS

What are they and what can be done about them?



Trigger is the word we use to describe something that can set off your asthma symptoms or make them worse.

This could be something that you:

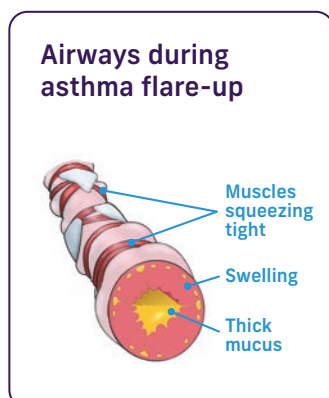
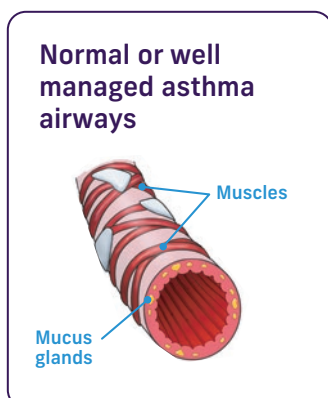
- Breathe in (e.g. smoke, cool air, sprays or pollen)
- Catch (cold, flu)
- Feel (emotions, stress)
- Do (exercise)
- Eat, drink or take (medicines, cold drinks)

WHAT IS ASTHMA?

Asthma is a long-term lung condition that affects around 1 in 9 Australians, of all ages. People with asthma have sensitive airways and these airways are more likely to react to triggers. The lining of the airways is thicker and inflamed. When a person with asthma has an asthma flare-up (worsening of symptoms), the muscles around the airway squeeze tight, the airways swell and become narrow, and there is more mucus. This makes it hard to breathe.

Triggers can set off an asthma flare-up (worsening of symptoms). A flare-up can come on gradually over weeks to months (e.g. exposure to some triggers in the workplace) or may occur suddenly (e.g. someone smoking near you).

A sudden or severe asthma flare-up is also called an asthma attack.



WHAT ARE ASTHMA SYMPTOMS?

People with asthma have a range of common symptoms:

- Breathlessness
- Wheezing
- Tight chest
- Persistent cough

Symptoms often occur at night, early in the morning or during or after activity.

Many people with asthma also have hay fever (allergic rhinitis) and experience symptoms when they come into contact with triggers. Symptoms of hay fever may include a runny or blocked nose, itchy eyes or nose and sneezing.

Hay fever can make asthma worse, and more difficult to control. Treating hay fever may help to improve your asthma symptoms and level of asthma control.

TRIGGERS AND SYMPTOMS

Exposure to triggers can happen anytime and anywhere. People react to different triggers, and this can change over time.

It is useful to know what triggers your asthma symptoms. Some triggers can be easy to identify, for example, someone near you smoking cigarettes. On these occasions, there will be a clear link between the trigger and your asthma getting worse. Sometimes your asthma will get worse, and you may not be able to work out why.

UNDERSTANDING YOUR LEVEL OF ASTHMA SYMPTOM CONTROL

Think about your asthma over the last four weeks and look at the chart below to see if your asthma control is good, partial or poor.

Good control	Partial control	Poor control
All of:	One or two of:	Three or more of:
Able to do all your usual activities	Less able to do your usual activities	Less able to do your usual activities
No asthma symptoms during night or on waking	Any asthma symptoms during night or on waking	Any asthma symptoms during night or on waking
Daytime symptoms no more than two days per week	Daytime symptoms more than two days per week	Daytime symptoms more than two days per week
Need reliever no more than two days per week*	Need reliever more than two days per week*	Need reliever more than two days per week*

*Not including reliever taken before exercise.

WRITTEN ASTHMA ACTION PLAN

If you do not already have a written Asthma Action Plan, ask your doctor for one. If you do have one, ask your doctor to check that it is up to date.

A written Asthma Action Plan tells you how to:

- Recognise when your asthma is getting worse
- Change your reliever and preventer medication
- Know when to seek medical help

Your doctor may be able to list your important asthma triggers on your written Asthma Action Plan.



KEY THINGS YOU CAN DO TO LIVE WELL WITH ASTHMA

Learn about asthma

See your doctor regularly to review your asthma:

- This means at least yearly if your asthma is under control
- And after approximately one month after any change in treatment until control is achieved and sustained

Ask your doctor for an up-to-date written Asthma Action Plan and follow it if your asthma worsens

Aim for good control of your asthma symptoms by taking your medications as prescribed. For most people this means taking preventer medication twice per day, and taking it correctly, even when well

Having good control of asthma symptoms means you will be less likely to react to asthma triggers

Aim to improve your overall health and reduce your risk factors

Know how to recognise and respond to your asthma symptoms

If you have hay fever, see your doctor to discuss the best way to manage this, as it may be contributing to your asthma. Managing hay fever (also known as allergic rhinitis) is an important part of living well with asthma

Learn Asthma First Aid (see last page)

Living well with asthma means less symptoms and being able to do the things you enjoy. Some triggers can be avoided and some need to be managed.

DO NOT AVOID EXERCISE OR LAUGHTER

People with asthma are encouraged to stay active and healthy. If you find that exercise or laughter makes your asthma symptoms worse, check that you are using your preventer medication correctly and taking it every day.

Laughter is important for overall health and should not be avoided. Laughter can help stimulate organs, soothe stress, soothe tension, boost immunity, relieve pain and improve mood.

If you are still getting asthma symptoms with exercise, see your doctor for:

- 1 A review of your written Asthma Action Plan
- 2 Advice about how to use your medication before exercise
- 3 A check on how you are using your asthma medication and devices
- 4 A discussion about the possibility of add-on therapy for your symptoms

Having good control of asthma symptoms and following your written Asthma Action Plan means that you are less likely to react to asthma triggers.



TRIGGERS TO AVOID IF POSSIBLE

Some asthma triggers can be avoided. These include:

- Inhaled irritants like cigarette or wood smoke, perfumes and cleaning products
- Allergens from pets, dust mites, moulds, chemicals, workplace irritants, and pollen
- Work related triggers
- Dietary triggers (food additives and/or cold food/drinks)
- Some medicines and complementary medicines

Inhaled Irritants

Irritants can be in the air we breathe in. These irritants can trigger symptoms in people with asthma. It is important to make sure your house is well ventilated if you use gas, wood or coal for heating or cooking. Gas heaters should be flued (i.e. have a chimney or vent to outside). Other inhaled irritants can come from air pollution, bushfire smoke, perfumes/incense and other sprays in the home, and from moulds and thunderstorms.

Cold and/or dry air can also be an asthma trigger however it is quite difficult to avoid, especially in Australia's southern states. Try to breathe through your nose, to help warm and moisten the air before it reaches your airways. Putting a scarf over your mouth and nose when you go outside may also help.

To ensure that you can breathe through your nose, talk to your doctor about managing hay fever.



Cigarette smoke

People with asthma should always avoid cigarette smoke. Smoking makes asthma symptoms worse and stops preventer medication from working fully. Being near someone else who is smoking can also worsen asthma symptoms. Children exposed to cigarette smoke have an increased risk of developing asthma and are more likely to have severe asthma flare-ups or asthma attacks. There are so many benefits to quitting smoking.

The harmful effects of traditional tobacco smoking are also relevant for e-cigarettes. People with asthma should avoid all smoking devices in order to best achieve good health and avoid the risks of poorly controlled asthma and long-term effects.

For support to help you quit smoking, speak to your doctor or pharmacist. Alternatively, call [1800 ASTHMA](tel:1800278462) (1800 278 462) or call [QUITLINE](tel:13QUIT) on [13QUIT](tel:137848) (13 78 48).

Wood smoke

Wood smoke is a common trigger for asthma and can be a big problem for the general community during the winter season, where wood heaters are used for household heating. If you have asthma, even if you don't identify woodsmoke being one of your triggers, it is recommended to avoid exposure to woodsmoke where possible.

It is understood that wood smoke releases more toxic pollutants during winter in parts of Australia, than all of the traffic and heavy industry combined.

Exposure to smoke can also increase the likelihood of developing asthma in the first place and increase likelihood of childhood respiratory illness among offspring of people exposed to smoke, with or without asthma.

Asthma Australia encourages the community to consider alternative modes of heating which are less likely to induce asthma symptoms in individuals in the home and which result in less community impact so we can all breathe better and live freely.



Allergens

Some people with asthma will develop allergies to certain substances, called allergens. Their asthma symptoms may get worse whenever they come in to contact with these allergens.

Common allergens known to trigger asthma include:

- **Pets and animals** – some people with asthma develop allergies to animals, including pets and animals in the workplace. If a person is sensitised to an animal allergen, and exposure makes their asthma worse, it is recommended to avoid exposure to these animals.

- **Dust mite allergens** – house dust mites are extremely common in the warm and humid regions of the world, including many parts of Australia.

For some people who identify house dust mite as a trigger and who experience poor asthma control despite correct use of inhaled corticosteroids and who experience mild to moderate allergic rhinitis with their asthma, long-term desensitisation strategies might be available and may improve asthma symptoms.

Some strategies that have been shown to be useful, when used in combination with other measures, include using mite allergen-impermeable covers for mattresses, pillows and doonas and hot washing of bedding (over 60 degrees) once per week, as well as removing sheepskins, woollen underlays and soft toys from the rooms of people who are dust-mite allergic.

Dust mite exposure happens commonly on public transport and on other modes of travel. This is simply a reminder to maintain your regular use of your preventer as prescribed and carry your reliever with you wherever you go.

- **Mould allergens** – mould in the home can be an asthma trigger. Measures to avoid mould exposure include increasing ventilation and decreasing humidity and dampness in the home. Mould can also increase the risk of children having asthma in the first place so all anti-mould strategies are highly recommended.



- **Pollen** – for people sensitized to pollens, it can be difficult to avoid. Some measures that may be useful include staying indoors on windy days. Avoid being outside during thunderstorms from October through to December – especially in the wind gusts that come before the storm. Stay inside and close your doors and windows.

If pollen sets off your hay fever and asthma symptoms, discuss with your doctor how to get your pollen allergy under control. This may likely be a combination of avoiding exposure, managing hay fever symptoms and optimising your inhaled asthma treatment. Allergen desensitisation strategies can be effective for people who experience troublesome hay fever triggered by specific grass pollens.

Avoiding exposure to allergens can be difficult and careful consideration should be made around the specific allergies and the impact on asthma control. If asthma control is poor, in case of severe asthma or unstable asthma, people are encouraged to discuss a specialist approach to allergy management with their doctor. This might mean allergy testing to guide treatment decisions; a discussion around the possibility of accessing allergen desensitisation treatments called allergen immunotherapy; or perhaps specialist treatment for severe allergic asthma.

Testing for specific allergens may be possible and useful to identify the allergen responsible for causing asthma symptoms so people with asthma can avoid them where possible.

Specific allergen immunotherapy is a targeted medical program which runs over 3-5 years involving gentle and gradual exposure to your trigger/s in conjunction with the use of a treatment called immunotherapy. The aim of this treatment is to desensitise the immune system to the known allergen so that it no longer overreacts to that allergen. Speak to your doctor for more information about immunotherapy or desensitisation. This may be an expensive treatment as it is currently not subsidised by the government. But it may be worth it, depending on how burdensome your symptoms are and the cumulative costs of current treatments.

Severe allergic asthma treatment may involve regular injections of a new type of therapy called biologic therapy which aims to interrupt the immune system's processes which lead to inflammation in the airways in response to allergens. This treatment is only available for patients whose asthma is poorly controlled despite using high doses of inhaled preventer treatment.

If your asthma is difficult to control or frequently disrupted by exposure to allergens, we strongly recommend discussing the possibility of a referral to a specialist.

Work-related triggers

Triggers in the workplace can be either allergens or irritants. Asthma symptoms can be worsened by exposures to work-place triggers. In some situations, asthma can develop due to occupational exposures. If people with asthma feel breathless and/or experience asthma symptoms at their workplace, they should discuss this with their employer and their doctor. It is recommended that work related asthma is assessed by a respiratory specialist.

The mainstay of managing work related asthma triggers is like other triggers; maximise asthma control, optimise preventer therapy and avoid exposure where possible through the use of personal protective equipment.



Dietary triggers

Foods do not commonly act as an asthma trigger. However, some additives, preservatives and food chemicals can be asthma triggers for some people. If your doctor has identified a dietary trigger, it is recommended to avoid or reduce exposure to that substance. Examples include sulphites (which are preservatives added to many foods, drinks and some medications) that may trigger asthma symptoms in up to 10% of people with asthma.

If you have identified a sensitivity to food and you have asthma, we recommend having a discussion with your doctor to confirm the sensitivity, establishing an action plan and ensuring your asthma control is as good as it can be.



Some medicines and complementary medicines

Always talk with your doctor about starting or stopping any medicines. For many people with asthma, beta-blockers (used for high blood pressure, heart failure or as eyedrops for glaucoma) will make their asthma worse. If being treated for these conditions, people with asthma should ask their doctor specifically if they think their treatment will cause asthma symptoms or affect asthma control.

For some people with asthma, aspirin or non-steroidal anti-inflammatory medicine may make their asthma worse. If you need any of these medicines, make sure your doctor knows you have asthma and ask specifically how they think this treatment might affect your asthma.

Aspirin and some non-steroidal anti-inflammatory medicines are available without prescription - some from supermarkets. They include ibuprofen (brands: Nurofen, Advil & Herron) and diclofenac (a pharmacy only drug, brand: Voltaren). Check with your pharmacist or doctor before using them. If you have asthma, it is recommended you obtain all medicines from your local pharmacy where possible, so you can discuss your asthma concerns.

Echinacea and bee products are known to be triggers for some people with asthma and in these cases should be completely avoided.

SOME TRIGGERS ARE DIFFICULT TO AVOID

Colds and viral infections

These may make your asthma worse even if you are taking your preventer medication regularly. Make sure your written Asthma Action Plan is up to date and tells you how to respond to a cold or flu virus. You can reduce your risk of catching viral infections from family members or other contacts by washing your hands before you eat or touch your face.

There is some evidence to suggest that increasing your preventer medication as soon as your asthma worsens with a cold can reduce the chance of a flare-up. Ask your doctor about this.

Having good control of asthma symptoms and following your written Asthma Action Plan means that you are less likely to react to cold and flu asthma triggers.

Annual influenza vaccination can be an effective way to reduce the risk of contracting the flu and having serious illness if you do get the flu. This can also help reduce the spread of flu across the community.

People who are most at risk of influenza and its complications can access the vaccine free under the National Immunisation Program, this includes:

- People aged 65 years and over
- All children aged six months to less than five years
- All Aboriginal and Torres Strait Islander people six months and over
- Pregnant women
- People aged six months and over with medical conditions such as severe asthma and severe chronic lung conditions



HAY FEVER

Having both hay fever and poor control of asthma increases the risk of thunderstorm asthma

Managing your asthma and hay fever well means:

- Knowing the symptoms of hay fever and asthma
- Treating and preventing hay fever symptoms
- Improving your asthma control
- Using hay fever medicines and asthma devices correctly
- Having an action plan in place to manage both conditions

If you think you might have symptoms of asthma or hay fever or if you experience wheezing or coughing with your hay fever:

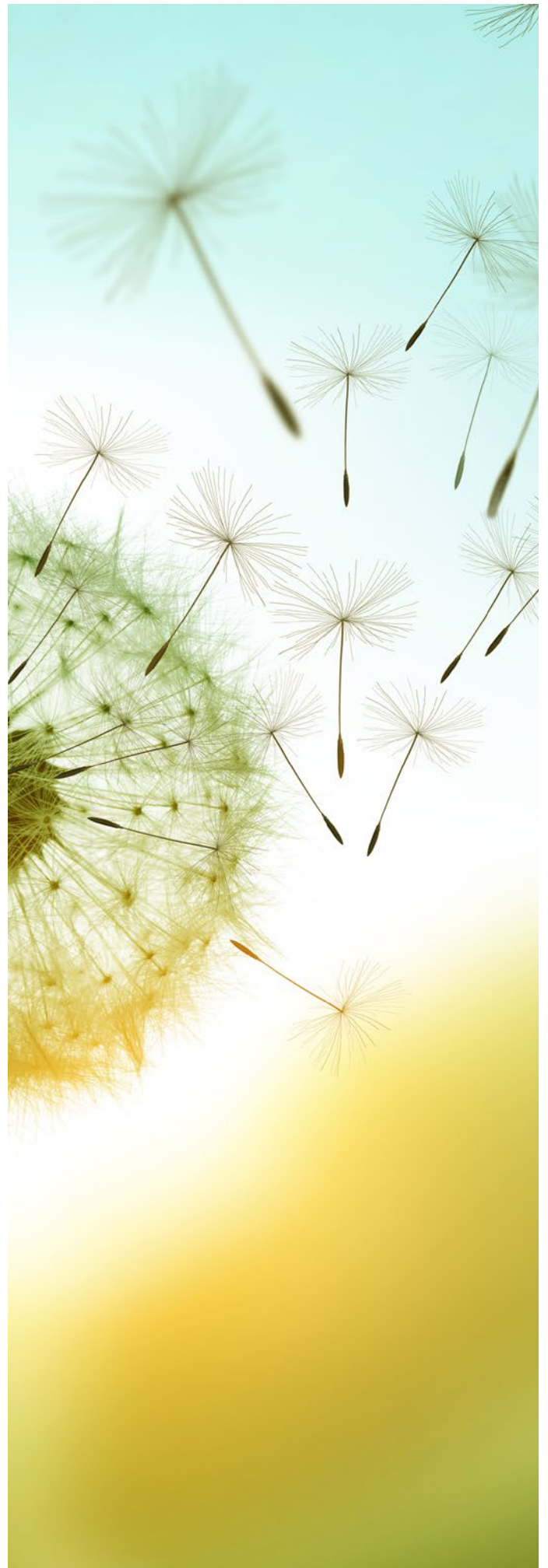
See your doctor and get these symptoms checked. They will give you a proper diagnosis, help you get an asthma or hay fever action plan in place and make sure you've got the right medication.

You can also discuss your concerns with your local pharmacist. Many hay fever treatments are available over the counter and your pharmacist can discuss your asthma control and device use also.

If you know you have asthma or hay fever

If you currently have asthma and hay fever, you should discuss control of both conditions with your doctor, at least on a yearly basis and in advance of the pollen season you recognise sets off your symptoms. Your discussion should include ensuring you have the correct medical treatment for your asthma and hay fever and a plan for what to do in case of symptoms. This can form part of an updated Asthma Action Plan and a hay fever plan.

Always carry your reliever medication with you - this is your emergency Asthma First Aid medication.



WHAT IS THUNDERSTORM ASTHMA?

Thunderstorm asthma can be very serious for people with asthma

Thunderstorm asthma events are believed to be triggered by an uncommon combination of high grass pollen levels and a certain type of thunderstorm, causing pollen grains from grasses to be swept up in the wind and carried long distances.

If grass pollen is a problem for you then thunderstorms in spring and summer may also affect you.

Some pollens can burst open and release smaller pollen particles that are concentrated in the wind just before the thunderstorm. These small particles can travel deep into the airways and can trigger asthma symptoms.

To avoid exposure, before, during and just after thunderstorms, stay inside with the windows and doors closed until after the storm has passed.

To reduce the risk of thunderstorm asthma where it is a known trigger, it is recommended to aim for the best possible asthma management year-round. This means making sure you are taking your preventer, especially during spring thunderstorm season, controlling your hay fever, and checking pollen levels and avoiding exposure to pollen on these days where possible. It's also critical to ensure you have access to your reliever medication during high pollen periods.

Who is at risk of thunderstorm asthma?

The risk of thunderstorm asthma is highest in adults who are sensitive to grass pollen and have seasonal hay fever (with or without known asthma). The worst outcomes are seen in people with poorly controlled asthma.

Those at increased risk of Epidemic Thunderstorm Asthma include:

- People with asthma
- People with a past history of asthma
- People with springtime hay fever with or without asthma
- People with asthma who don't use a preventer

Know the Asthma First Aid steps

It's important for everyone to know the symptoms of asthma and what to do if someone is having an asthma attack. See the back page for more information.

Never ignore asthma symptoms like breathlessness, wheezing and tightness in the chest

Start Asthma First Aid immediately and call Triple Zero (000) for help if symptoms do not get any better or if they start to get worse.

Sign up for alerts about high pollen days in your state and territory

It's best to avoid being outside during thunderstorms during the grass pollen season – especially in the wind gusts that come before the storm. Stay inside and close your doors and windows.

For more information about thunderstorm asthma and how you can be prepared, visit asthma.org.au/about-asthma/triggers/pollen



WHAT TO DO IF YOU HAVE SEVERAL ASTHMA TRIGGERS

If you find that several different triggers make your asthma worse, it usually means that there is significant inflammation in your airways, and you may need more preventer medication. Taking your preventer medication daily and correctly will make your airways less sensitive, and less likely to react to triggers. It will be especially important for people with asthma to be aware of their triggers when they identify multiple triggers. Where people with asthma recognise that a combination of pollen and other allergens, air pollution and viruses as their triggers, this may be particularly problematic. They should discuss specific prevention strategies with their doctor to reduce their vulnerability where possible.

Read the Asthma Basic Facts brochure to learn more about what happens in the airways.

Take these steps:

- 1** If you have multiple triggers which set off your asthma symptoms, discuss this specific concern and the impact on your asthma control with your doctor
- 2** If you have been prescribed a preventer medication, remember to take it every day, even when you are well
- 3** Check that you are taking your asthma medications correctly. Ask your doctor or pharmacist to check that you are using your asthma inhalers and other devices correctly, or visit our website to review the device technique videos
- 4** Make sure your written Asthma Action Plan is up to date
- 5** Talk to your doctor about the best way to manage your asthma triggers. This might include a referral to a specialist to discuss your options. It might also include treatment using specific allergen desensitisation



Taking your preventer medication daily and correctly will be the mainstay for maintaining good asthma control, will make your airways less sensitive, and will make your airways less likely to react to the triggers.



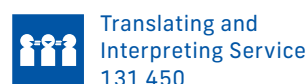
This resource has been developed for the community by Asthma Australia.

It provides basic facts about:

- Asthma triggers
- What you can do about them

Other Asthma Australia resources:

- Asthma Basic Facts
- Asthma Medications & Devices
- Things to Ask & Tell your Doctor
- Asthma & Pregnancy
- Asthma & Smoking



All Asthma Australia information is consistent with the National Asthma Council's, The Australian Asthma Handbook (2020).

Asthma Australia information does not replace professional medical advice. People should ask their doctor any questions about diagnosis and treatment.

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ASTHMA FIRST AID

Blue/Grey Reliever

Airomir, Asmol, Ventolin or Zempreon and Bricanyl

Blue/grey reliever medication is unlikely to harm, even if the person does not have asthma



DIAL TRIPLE ZERO (000) FOR AN AMBULANCE IMMEDIATELY IF THE PERSON:

- is not breathing
- suddenly becomes worse or is not improving
- is having an asthma attack and a reliever is not available
- is unsure if it is asthma
- **has a known allergy to food, insects or medication and has SUDDEN BREATHING DIFFICULTY, GIVE ADRENALINE AUTOINJECTOR FIRST (if available), even if there are no skin changes, then use a reliever**

1



SIT THE PERSON UPRIGHT

- Be **calm** and reassuring
- **Do not leave** them alone

2



GIVE 4 SEPARATE PUFFS OF RELIEVER PUFFER

- **Shake** puffer
- Put **1 puff** into spacer
- Take **4 breaths** from spacer
 - Repeat until **4 puffs** have been taken



If using **Bricanyl**, give 2 separate inhalations (5 years or older)

If you don't have a spacer handy in an emergency, take **1 puff** as you take **1 slow, deep breath** and hold breath for as long as comfortable. **Repeat** until all puffs are given

3



WAIT 4 MINUTES

- If breathing does not return to normal, give **4 more separate puffs** of reliever as above



Bricanyl: Give 1 more inhalation

IF BREATHING DOES NOT RETURN TO NORMAL

4



DIAL TRIPLE ZERO (000)

- Say **'ambulance'** and that someone is having an asthma attack
- Keep giving **4 separate puffs every 4 minutes** until emergency assistance arrives



Bricanyl: Give 1 more inhalation **every 4 minutes** until emergency assistance arrives