



NATIONALLY RECOGNISED  
TRAINING

# Module 6

## Asthma



# Online Module Overview

This document has been provided for participants completing a Revive2Survive First Aid Training course.

Please use this material to complete the Course Pack and answer the online multiple-choice theory assessment.

There are no assessments in these module packs, please use the link and attachment provided in your course confirmation email.

This information is to be used as a learning tool and while information contained in this online learning is frequently updated, medical advice should be sought from a practitioner in an emergency.

Module 1- CPR Resuscitation & the Airway

Module 2- Medical Emergencies

Module 3- Bleeds, Burns & Wounds

Module 4- Environmental Emergencies

Module 5- Anaphylaxis

Module 6- Asthma

Module 7- Assessment of a Casualty

Please note-

\*\*HLTAID009 Provide CPR is recommended to be renewed every 12 months

\*\*HLTAID011 Provide First Aid is recommended to be renewed every 3 years



# Module 6 Overview

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What is Asthma?

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Who has Asthma?

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Respiration Rates

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Common Asthma Triggers

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Asthma Symptoms

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Asthma Medications

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Use of Spacer

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Thunderstorm Asthma

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Asthma Action Plans

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Treatment of Asthma

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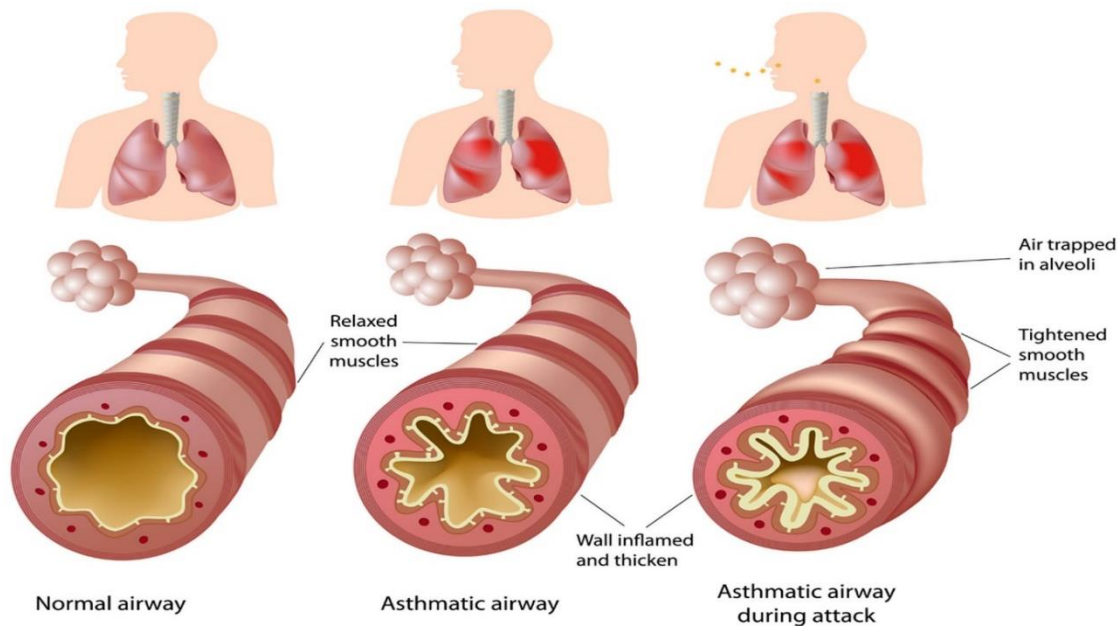
Medical Handover

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# What is Asthma?

- When sensitive airways are exposed to a trigger, the airway narrows, making it hard to breathe
- The inside lining of the airway becomes red and swollen and mucous may be produced.
- The muscle around the airways tightens.

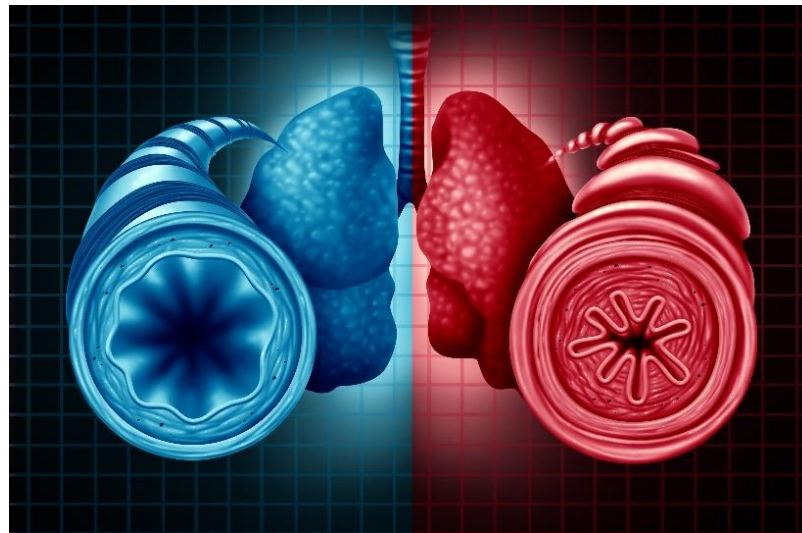


# What is Asthma?

## In Australia;

- 1 in 10 people have asthma
- 8 people in Australia die each week...

In 1989, **964** people died in Australia due to asthma. With improved asthma management, in 2022, 467 people died due to asthma (168 males 299 females).



# Respiration Rates

Respiration rates outside of the parameters below would indicate that medical attention may need to be sought.

Normal respiration/breathing rates by age	
Newborn - 5 months	25-60 breaths per minute
6 months	20-55 breaths per minute
12 months	20-45 breaths per minute
2 years	20-40 breaths per minute
4 years	17-30 breaths per minute
6 - 8 years	16-30 breaths per minute
10 – 12 years	15-25 breaths per minute
14 – 17 years	14-25 breaths per minute
Adults	12-20 breaths per minute



# Common Asthma Triggers

- Cold, flu & COVID
- Exercise
- Smoke (bushfire, cigarette, fireplace etc.)
- Strong odours
- Heightened emotions
- Changes in temperature and weather
- Chemicals and strong smells including vaping
- Inhaled allergens; cold, dust & pollen,
- Air pollution
- Thunderstorm Asthma

**Symptoms...**Can be **Mild**, **Moderate** or **Severe**



# Asthma Symptoms

## **Mild & Moderate Asthma Symptoms:**

- Shortness of breath
- Coughing
- Chest tightness or pain
- Wheezing
- Speaking in shorter sentences

## **Severe Asthma Symptoms:**

- Severe difficulty breathing
- Persistent coughing
- Tightened chest and neck muscles
- Severe wheezing (both on breathing in and out)
- Difficulty speaking more than single words
- Inability to catch breath
- Inability to fully exhale
- Feeling of anxiety or panic
- May have blue lips or fingertips
- Pale and sweaty skin





# Asthma Medications

## Reliever Medications:

- Relievers have no script required.
- Short acting, relaxes the muscles around the airways.
- Works within minutes, lasts around 2-4hrs.



## Preventer Medications:

- Reduces the inflammation and helps to dry up mucous.
- Should be taken every day and can take a few weeks to be effective.

**Preventer medication will not provide relief in an asthma emergency.**



## 3 groups of preventer medications

- Preventer
- Combination preventer
- Non-steroidal preventor



# Asthma Medications



## ASTHMA & COPD MEDICATIONS

### SABA RELIEVERS



Ventolin Inhaler † A  
salbutamol 100mcg



Asmol Inhaler † A  
salbutamol 100mcg



Bricanyl Turbuhaler A C  
terbutaline 500mcg



AiroMir Autohaler ‡ #  
salbutamol 100mcg



Zemproen Inhaler † A  
salbutamol 100mcg

### RESOURCES

#### TREATMENT GUIDELINES

Australian Asthma Handbook:  
[asthmaandbook.org.au](http://asthmaandbook.org.au)

#### COPD-X Plan:

[cpdx.org.au](http://cpdx.org.au)

#### COPD Inhaler Device Chart Poster:

[lungfoundation.com.au/resources/copd-inhaler-device-chart-poster/](http://lungfoundation.com.au/resources/copd-inhaler-device-chart-poster/)

#### INHALER TECHNIQUE

How-to videos, patient and practitioner information  
[nationalasthma.org.au](http://nationalasthma.org.au)

pMDIs should be used with a spacer (and face mask if needed)

#### HOW-TO VIDEOS



### SAMA MEDICATION



Atrovent Metered Aerosol † A  
ipratropium 21mcg

### NON STEROIDAL PREVENTER



Montelukast Tablet  
montelukast  
4mg<sup>†</sup> • 5mg<sup>†</sup> • 10mg  
Multiple generic brands

### ICS PREVENTERS



Flixotide Inhaler †  
fluticasone propionate  
50mcg<sup>†</sup> • 125mcg<sup>†</sup> • 250mcg<sup>†</sup>  
\*Flixotide Junior<sup>†</sup>



Fluticasone Cipla Inhaler †  
fluticasone propionate  
125mcg • 250mcg



QVAR Inhaler †  
beclomethasone  
50mcg • 100mcg



Alvesco Inhaler †  
ciclesonide  
80mcg • 160mcg



Azotide Inhaler †  
fluticasone propionate  
50mcg<sup>†</sup> • 125mcg<sup>†</sup> • 250mcg<sup>†</sup>  
\*Azotide Junior<sup>†</sup>



Flixotide Accuhaler †  
fluticasone propionate  
100mcg<sup>†</sup> • 250mcg<sup>†</sup> • 500mcg<sup>†</sup>  
\*Flixotide Junior<sup>†</sup>



Pulmicort Turbuhaler †  
budesonide  
100mcg<sup>†</sup> • 200mcg<sup>†</sup> • 400mcg<sup>†</sup>



QVAR Autohaler †  
beclomethasone  
50mcg • 100mcg



Arnuity Ellipta †  
fluticasone furoate  
100mcg<sup>†</sup> • 200mcg<sup>†</sup>



Azotide Accuhaler †  
fluticasone propionate  
100mcg<sup>†</sup> • 250mcg<sup>†</sup>  
\*Azotide Junior<sup>†</sup>

### LAMA MEDICATIONS



Spiriva Respimat ‡ † #  
tiotropium 2.5mcg  
\*Spiriva<sup>†</sup>



Bravlys Zonda ‡  
tiotropium 13mcg



Seebri Breezhaler ‡  
glycopyrronium 50mcg



Spiriva Handihaler ‡  
tiotropium 18mcg



Bretaris Genual ‡  
acridinium 322mcg



Incruse Ellipta ‡  
umeclidinium 42.5mcg

### LAMA/LABA COMBINATIONS



Spiolto Respimat<sup>†</sup>  
acridinium/tiotropium  
2.5/2.5mcg



Utiibre Breezhaler<sup>†</sup>  
indacaterol/glycopyrronium  
110/50mcg



Brimica Genual<sup>†</sup>  
acridinium/formoterol  
340/72mcg



Anoro Ellipta<sup>†</sup>  
umeclidinium/vilanterol  
42.5/25mcg

### ICS/LABA COMBINATIONS



Seretide Inhaler<sup>†</sup>  
budesonide/formoterol  
50/25 • 125/25 • 250/25<sup>†</sup>  
Additional brand: Parylo,  
Fluticasone • Salmeterol Cipla,  
Salpival<sup>†</sup>, Seratide, Evocar



Seretide Accuhaler<sup>†</sup>  
fluticasone propionate/salmeterol  
100/50 • 250/50 • 500/100<sup>†</sup>  
Additional brand: Parylo,  
Fluticasone • Salmeterol Cipla



Symbicort Rapihaler<sup>†</sup>  
budesonide/formoterol  
55/3 • 100/3 • 200/6<sup>†</sup>  
Additional brand: Bixazi Rapihaler



Symbicort Turbuhaler<sup>†</sup>  
budesonide/formoterol  
100/50 • 200/50 • 400/12<sup>†</sup>  
Additional brand: Bixazi Turbuhaler



DuoResp Spiromax<sup>†</sup>  
budesonide/formoterol  
300/6 • 400/12<sup>†</sup>  
Additional brand: BixResp Spiromax



Flutiform Inhaler<sup>†</sup>  
fluticasone propionate/formoterol  
50/5 • 125/5 • 250/10



Fostair Inhaler<sup>†</sup>  
beclomethasone/formoterol  
100/6 • 200/6



Bree Ellipta<sup>†</sup>  
fluticasone furoate/vilanterol  
100/25<sup>†</sup> • 200/25



Atecurta Breezhaler<sup>†</sup>  
fluticasone furoate/indacaterol  
62.5/125 • 125/125 • 250/125  
all units in mcg

### LABA MEDICATIONS



Qais Turbuhaler ‡  
formoterol: 4mcg • 12mcg



Serevent Accuhaler ‡  
salmeterol: 50mcg



Onbrez Breezhaler ‡  
indacaterol: 100mcg • 300mcg

### ICS/LAMA/LABA COMBINATIONS



Trelegy Ellipta<sup>†</sup>  
fluticasone furoate/  
umeclidinium/vilanterol  
100/62.5/25<sup>†</sup> • 200/62.5/25<sup>†</sup>



Enerzair Breezhaler<sup>†</sup>  
mometasone/glycopyrronium/  
indacaterol  
68/64/116 • 136/64/116



Trimbow Inhaler<sup>†</sup>  
beclomethasone/glycopyrronium/  
formoterol  
100/10/6 • 200/10/6



Bretzi Aerosphere<sup>†</sup>  
budesonide/glycopyrronium/  
formoterol  
340/7.2/5  
all units in mcg

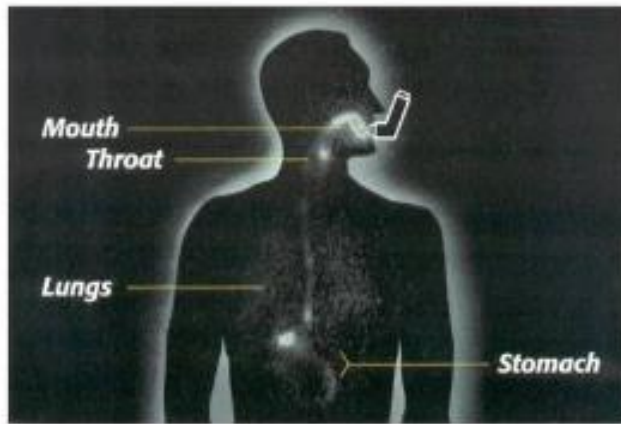
This chart was developed independently by the National Asthma Council Australia with support from AstraZenca Australia, Chiesi Australia, and GlaxoSmithKline (GSK) Australia.  
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**†** PBS PRESCRIBERS   **‡** Asthma unrestricted benefit   **‡** Asthma restricted benefit   **†** Asthma authority required   **†** COPD unrestricted benefit   **†** COPD restricted benefit   **†** COPD authority required  
Check TGA and PBS for current age and condition criteria

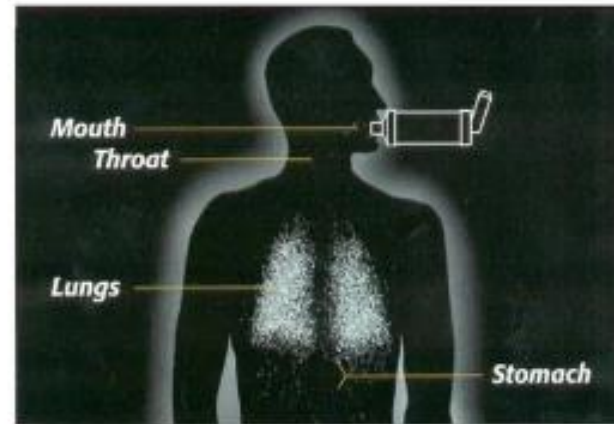


# Why Use a Spacer?

The spacer allows time for the patient to inhale sufficiently down the trachea, not into the oesophagus.



**Inhaler alone**



**Inhaler used with spacer device**



# Thunderstorm Asthma

## What is Thunderstorm Asthma?

- Thunderstorm Asthma is triggered by a mixture of grass pollen in the air and thunderstorm conditions.
- Pollen grains are drawn up in windy conditions before a thunderstorm, these absorb water, swell and burst releasing small pollen particles.
- The wind conditions associated with the thunderstorm can push these tiny particles to ground level where they can be breathed into the lungs.
- Thunderstorm Asthma usually affects people in the windy period before the rain starts.
- Most commonly happens in spring and early summer.
- Even people who have never had asthma before can get thunderstorm asthma.
- In November 2016, 10 people died due to a Thunderstorm Asthma event in Melbourne.

## Who is affected by Thunderstorm Asthma?

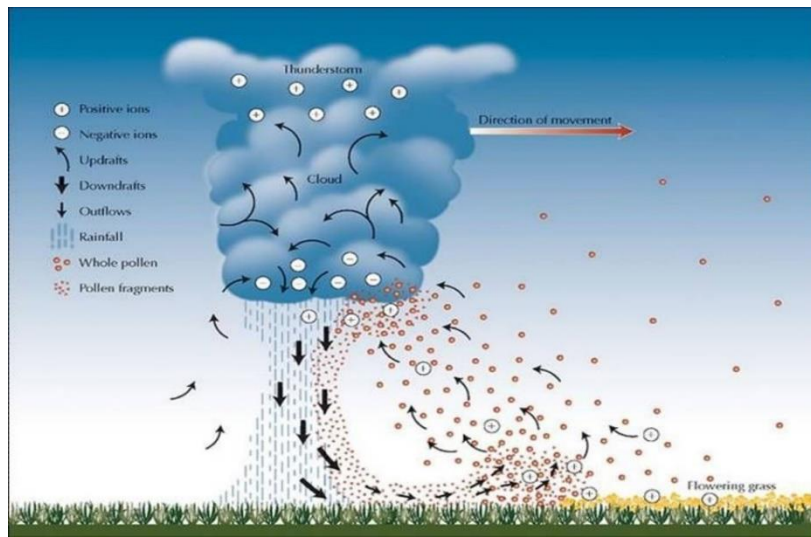
- The risk of Thunderstorm Asthma is highest in adults who are sensitive to grass pollen (particularly rye grass pollen) and have seasonal hay fever
- Thunderstorm Asthma can happen in anyone of any age even if no history of Asthma



# Thunderstorm Asthma

## Management/Treatment of Thunderstorm Asthma:

- Be aware of forecast thunderstorms during pollen season, particularly on days with a **HIGH** or **EXTREME** pollen count.
- Where possible, stay indoors with doors and windows closed until the storm front has passed.
- Follow Asthma Action Plan if you have one available.
- Carry Asthma medication with you and administer if needed.
- If at any point you are concerned that the casualty is rapidly worsening, please call 000 and say they are having an asthma attack. If a reliever is available, please commence 4 x 4 x 4 method.



# Asthma Prevention

- Reduce exposure to triggers if possible.
- Train staff in Asthma Management.
- Have open communication regarding students with Asthma.
- Manage risks where possible.
- Review strategies every 12 months or with any new exacerbations.
- Do not delay treatment.



# Asthma Action Plans

- People with Asthma should carry an Action Plan
- Action Plans should be signed off by a doctor
- Action Plans should be updated after an attack, or at least:
  - Adults- 12 months
  - Children- 6 months

## **Action Plans have 4 key sections:**

1. How to look after the persons asthma daily
2. What to do if the persons asthma starts to flare-up
3. What to do if the persons asthma flare-up is severe
4. What to do in an asthma emergency



# Asthma Action Plans

## ASTHMA ACTION PLAN

Take me when you visit your doctor

Name: \_\_\_\_\_

Plan date: \_\_\_\_\_ Review date: \_\_\_\_\_

Doctor details: \_\_\_\_\_

Photo (optional)

**EMERGENCY CONTACT**

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Relationship: \_\_\_\_\_

**WELL CONTROLLED** is all of these...

- needing reliever medicine no more than 2 days/week
- no asthma at night
- no asthma when I wake up
- can do all my activities

Peak flow reading (if used) above \_\_\_\_\_

**TAKE preventer**

morning  night  puffs/inhalations

• Use my preventer, even when well controlled. • Use my spacer with my puff

**TAKE reliever**

\_\_\_\_\_ puffs/inhalations as needed \_\_\_\_\_ puffs/inhalations 15 minutes before exercise

• Always carry my reliever medicine

**FLARE-UP** Asthma symptoms getting worse such as **any** of these...

- needing reliever medicine more than usual OR more than 2 days/week
- woke up overnight with asthma
- had asthma when I woke up
- can't do all my activities

Peak flow reading (if used) between \_\_\_\_\_ and \_\_\_\_\_ and my triggers and symptoms

**TAKE preventer**

morning  night  puffs/inhalations for \_\_\_\_\_ days then back to **well controlled** dose

**TAKE reliever**

\_\_\_\_\_ puffs/inhalations as needed

**START other medicine**

\_\_\_\_\_

**MAKE appointment to see my doctor same day or as soon as possible**

**SEVERE** Asthma symptoms getting worse such as **any** of these...

- reliever medicine not lasting 3 hours
- woke up frequently overnight with asthma
- had asthma when I woke up
- difficulty breathing

Peak flow reading (if used) between \_\_\_\_\_ and \_\_\_\_\_ and my triggers and symptoms

**TAKE preventer**

morning  night  puffs/inhalations for \_\_\_\_\_ days then back to **well controlled** dose

**TAKE reliever**

\_\_\_\_\_ puffs/inhalations as needed

**START other medicine**

\_\_\_\_\_

**MAKE appointment to see my doctor TODAY** if unable to see my doctor, visit a hospital!

**OTHER INSTRUCTIONS**

\_\_\_\_\_ (Other medicines, treatments, dose, duration, etc)

**EMERGENCY** is **any** of these...

- reliever medicine not working at all
- can't speak a full sentence
- extreme difficulty breathing
- feel asthma is out of control
- lips turning blue

Peak flow reading (if used) below \_\_\_\_\_

**1 CALL AMBULANCE NOW**  
Dial Triple Zero (000)

**2 START ASTHMA FIRST AID**  
Turn page for Asthma First Aid

If you are using a dual purpose reliever, your doctor will discuss the correct plan for you. v18 Updated 16 May 2023

## ASTHMA ACTION PLAN

Take this ASTHMA ACTION PLAN with you when you visit your doctor

**ACTION PLAN FOR** Name: \_\_\_\_\_ DOCTOR'S CONTACT DETAILS Name: \_\_\_\_\_ EMERGENCY CONTACT DETAILS Name: \_\_\_\_\_

Date: \_\_\_\_\_ Phone: \_\_\_\_\_ Phone: \_\_\_\_\_

Next asthma check-up due: \_\_\_\_\_ Relationship: \_\_\_\_\_

**WHEN WELL** Asthma under control (almost no symptoms) ALWAYS CARRY YOUR RELIEVER WITH YOU

Your preventer is: \_\_\_\_\_ NAME & STRENGTH: \_\_\_\_\_ times every day

Take \_\_\_\_\_ puffs/tablets \_\_\_\_\_

Use a spacer with your inhaler

Your reliever is: \_\_\_\_\_ NAME: \_\_\_\_\_

Take \_\_\_\_\_ puffs \_\_\_\_\_

When: You have symptoms like wheezing, coughing or shortness of breath

Use a spacer with your inhaler

**WHEN NOT WELL** Asthma getting worse (needing more reliever than usual, having more symptoms than usual, waking up with asthma, asthma is interfering with usual activities)

Keep taking preventer: \_\_\_\_\_ NAME & STRENGTH: \_\_\_\_\_ times every day

Take \_\_\_\_\_ puffs/tablets \_\_\_\_\_

Use a spacer with your inhaler

Your reliever is: \_\_\_\_\_ NAME: \_\_\_\_\_

Take \_\_\_\_\_ puffs \_\_\_\_\_

Use a spacer with your inhaler

**IF SYMPTOMS WORSEN** Severe asthma flare-up/attack (needing reliever again within 3 hours, increasing difficulty breathing, waking often at night with asthma symptoms)

Keep taking preventer: \_\_\_\_\_ NAME & STRENGTH: \_\_\_\_\_ times every day

Take \_\_\_\_\_ puffs/tablets \_\_\_\_\_

Use a spacer with your inhaler

Your reliever is: \_\_\_\_\_ NAME: \_\_\_\_\_

Take \_\_\_\_\_ puffs \_\_\_\_\_

Use a spacer with your inhaler

**DANGER SIGNS** Asthma emergency (severe breathing problems, symptoms get worse very quickly, reliever has little or no effect)

**DIAL 000 FOR AMBULANCE** Peak flow (if used) below: \_\_\_\_\_

Call an ambulance immediately

Say that this is an asthma emergency

Keep taking reliever as often as needed

Use your adrenaline autoinjector (EpiPen or Anapen)

National Asthma Council AUSTRALIA  
nationalasthma.org.au

Peak flow not recommended for children under 12 years.

For Further information please see Asthma Australia ([www.asthma.org.au](http://www.asthma.org.au)) or National Asthma Council Australia ([www.nationalasthma.org.au](http://www.nationalasthma.org.au))





# Asthma Action Plans

## Why is a written action plan needed?

- An Asthma Action Plan is one of the most useful asthma tools we have
- Asthma information is set out in a way that is easy to follow to help manage asthma in an individual.
- Having an Asthma Action Plan and having regular reviews with an individual's doctor leads to; fewer days off from school or work, reduced emergency visits to hospital and less use of reliever medication.
- All carers and family members should understand and be familiar with an individual's Asthma Action Plan so they can help during an asthma flare-up or attack.

## Where should an action plan be stored?

- Asthma action plans need to be stored somewhere easy to find with the medications you may require.
- It is recommended for asthmatics to take a photo of it to keep on their phone.
- Use the [Kiss myAsthma App](#) to upload plans.
- A copy of a child's action plan must be given to a childcare centre or school.



# How to Treat Asthma

- Bring the casualty inside
- Sit the casualty upright
- Be calm and reassuring, do not leave the casualty
- Ensure to **shake** the inhaler well and give 1 spray into the atmosphere to clear the inhaler

## If no spacer:

- Give 4 puffs with 4 breathes (1x1, 1x1, 1x1, 1x1)
- Wait 4 minutes
- If no improvement, give another 4 puffs and call 000 (or earlier if concerned).
- Continue Administering 4 puffs, 4 breaths, every 4 minutes until help arrives



## If spacer is available:

- Give 1 puff at a time with 4 breaths after each puff (1x4, 1x4, 1x4, 1 x4)
- Wait 4 minutes
- If no improvement, give another 4 puffs and call 000 (or earlier if concerned).
- Continue Administering 4 puffs, with 4 breaths per puff, every 4 minutes until help arrives.

4 x 4 x 4



# Medical Handover

After the arrival of Paramedics, it is vital to provide a detailed handover.

## Information they require:

- Introduce the casualty
- The history (if known) including time the symptoms started
- Trigger (if known)
- Time/s asthma reliever was administered
- Give a copy of the Asthma Management Plan to the paramedic (if available) which includes parent contact details
- All children should be accompanied by a carer/teacher



# Module 6 Complete

Please continue to Module 7



For first aid supplies visit

[www.firstaidgearaustralia.com.au](http://www.firstaidgearaustralia.com.au)

