

Module 6

Asthma



REVIVE²SURVIVE

1300 000 112

Overview

This document has been provided for participants completing a Revive2Survive training course.

Please use this material to complete your course pack and answer your 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**

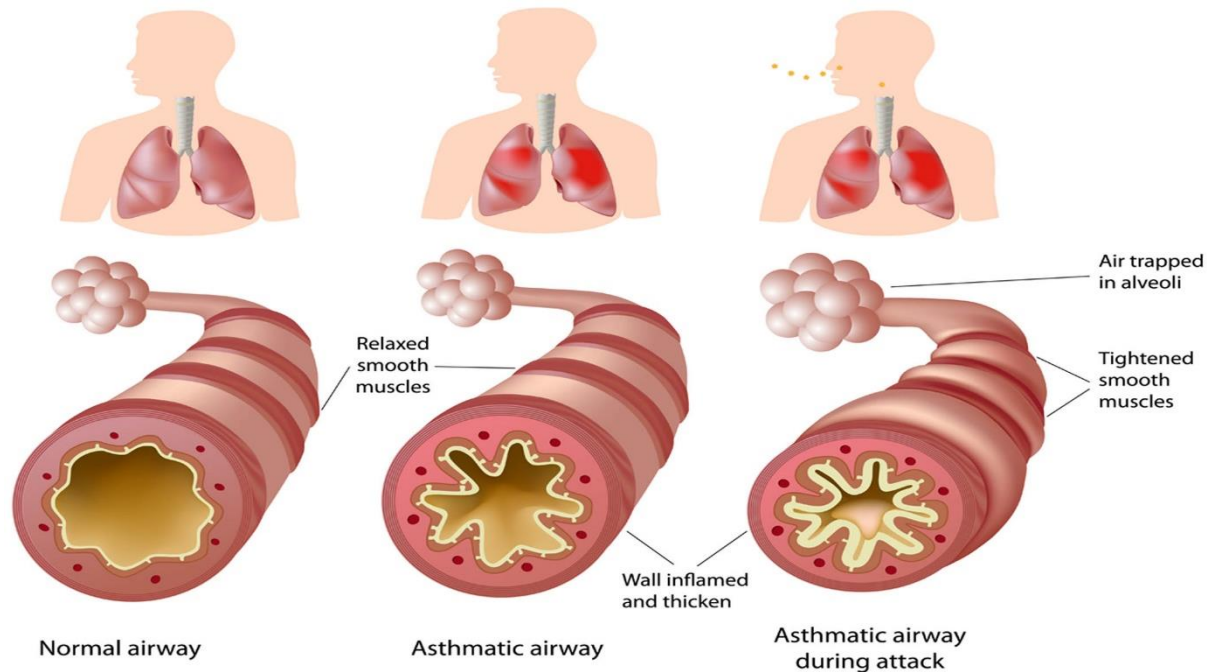
****HLTAID011 Provide First Aid is recommended to be renewed every 3 years**



REVIVE2SURVIVE

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.

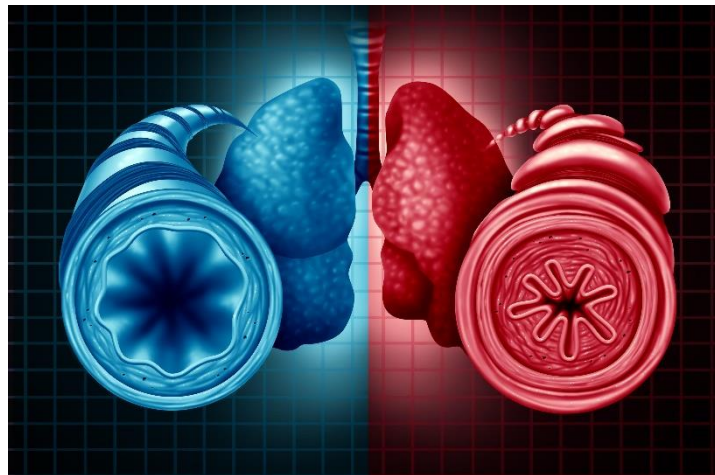


Who has Asthma?

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 2020, 417 people died due to asthma (143 males 274 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



Bricanyl Turbuhaler A C
terbutaline 500mcg



Asmol Inhaler † A
salbutamol 100mcg



Airomir Autohaler ‡ #
salbutamol 100mcg



Zemproen Inhaler † A
salbutamol 100mcg

RESOURCES

TREATMENT GUIDELINES

Australian Asthma Handbook:
asthmahandbook.org.au

COPD-X Plan:
cpdx.org.au

COPD Inhaler Device Chart Poster:
lungfoundation.com.au/resources/copd-inhaler-device-chart-poster/

INHALER TECHNIQUE

How-to videos, patient and practitioner information on nationalasthma.org.au

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

HOW-TO VIDEOS



SAMA MEDICATION



Airovent Metered Aerosol † A
ipratropium 2mcg

NON STEROIDAL PREVENTER



Montelukast Tablet
montelukast
4mg[®] • 5mg[®] • 10mg[®]
Multiple generic brands

ICS PREVENTERS



Fixotide Inhaler †
fluticasone propionate
50mcg[®] • 125mcg[®] • 250mcg[®]
†Fixotide Junior[®]



Fluticasone Cipla Inhaler †
fluticasone propionate
125mcg • 250mcg



QVAR Inhaler †
beclomethasone
50mcg • 100mcg



Alvesco Inhaler †
ciclesonide
80mcg • 160mcg



Axotide Inhaler †
fluticasone propionate
50mcg[®] • 125mcg[®] • 250mcg[®]
†Axotide Junior[®]



Fixotide Accuhaler †
fluticasone propionate
100mcg[®] • 250mcg[®] • 500mcg[®]
†Fixotide Junior



Pulmicort Turbuhaler †
budesonide
100mcg • 200mcg • 400mcg



QVAR Autohaler †
beclomethasone
50mcg • 100mcg



Arnuity Ellipta †
fluticasone furoate
100mcg • 200mcg



Axotide Accuhaler †
fluticasone propionate
100mcg[®] • 250mcg[®]
†Axotide Junior[®]

LAMA MEDICATIONS



Spiriva RespiMat †, #
tiotropium 2.5mcg



Bravlys Zonda #
tiotropium 13mcg



Seebri Breezhaler #
glycopyrronium 50mcg



Spiriva Handihaler #
tiotropium 18mcg



Bretaris Genair #
acclidinium 322mcg



Incruse Ellipta #
umeclidinium 62.5mcg

LAMA/LABA COMBINATIONS



Spiolto RespiMat C
tiotropium/olodaterol
2.5/2.5mcg



Uliibro Breezhaler C
indacaterol/glycopyrronium
110/50mcg



Brimica Genair C
acclidinium/formoterol
345/12mcg



Anoro Ellipta C
umeclidinium/vilanterol
62.5/25mcg

ICS/LABA COMBINATIONS



Serelide Inhaler #
fluticasone propionate/salmeterol
50/25 • 125/25 • 250/25 C
Additional brands: Pavlydo,
Fluticasone + Salmeterol Cipla,
Solpivul, Serotta, Evocar



Serelide Accuhaler #
fluticasone propionate/salmeterol
100/50 • 250/100 • 500/100 C
Additional brands: Pavlydo,
Fluticasone + Salmeterol Cipla



Symbicort Rapihaler #
budesonide/formoterol
55/3 • 100/3 • 200/6 C
Additional brand: Blistac Rapihaler



Symbicort Turbuhaler #
budesonide/formoterol
100/5 • 200/10 • 400/12 C
Additional brand: Blistac Turbuhaler



DuoResp Spiromax #
budesonide/formoterol
300/6 • 600/12 C
Additional brand: B/Resp Spiromax



Flutiform Inhaler #
fluticasone propionate/formoterol
50/5 • 125/5 • 250/10



Fostair Inhaler #
beclomethasone/formoterol
100/6 • 200/6



Breo Ellipta #
budesonide/formoterol
160/25 C • 200/25



Atectura Breezhaler #
mometasone/indacaterol
62.5/125 • 127.5/125 • 260/125
all units in mcg

LABA MEDICATIONS



Oxis Turbuhaler ‡
formoterol 4mcg • 12mcg



Serovent Accuhaler ‡
salmeterol 30mcg



Onbrez Breezhaler #
indacaterol 700mcg • 3000mcg

ICS/LAMA/LABA COMBINATIONS



Trelegy Ellipta
fluticasone furoate/
umeclidinium/vilanterol
100/62.5/25 C • 200/62.5/25 #



Enerzair Breezhaler #
mometasone/glycopyrronium/
indacaterol
68/66/114 • 134/66/114

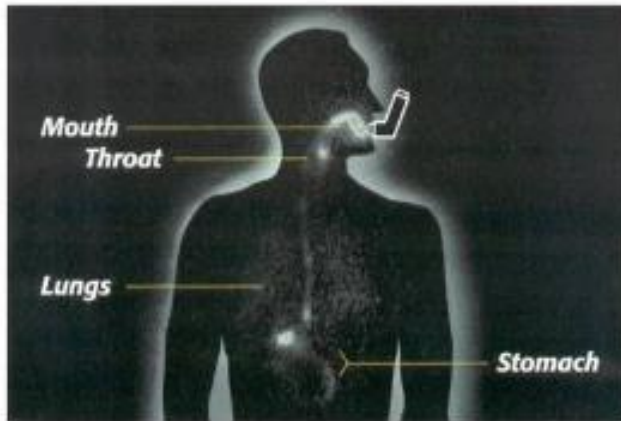


Trimbow Inhaler
beclomethasone/glycopyrronium/
formoterol
305/10/6 C • 200/10/6 #

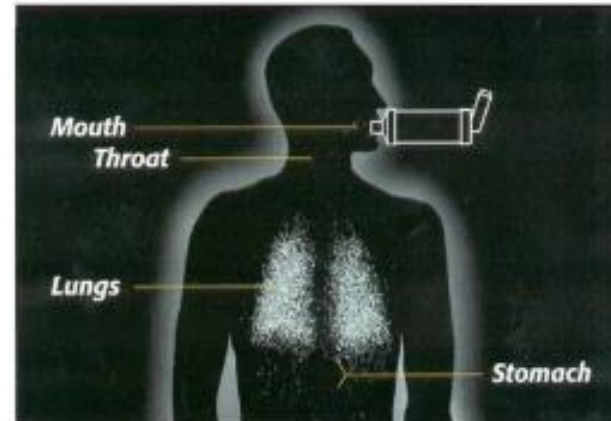


Breztri Aerosphere C
budesonide/glycopyrronium/
formoterol
160/7.2/5
all units in mcg

Why use a spacer?



Inhaler alone



Inhaler used with spacer device



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



Thunderstorm Asthma

What is it?

- 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?

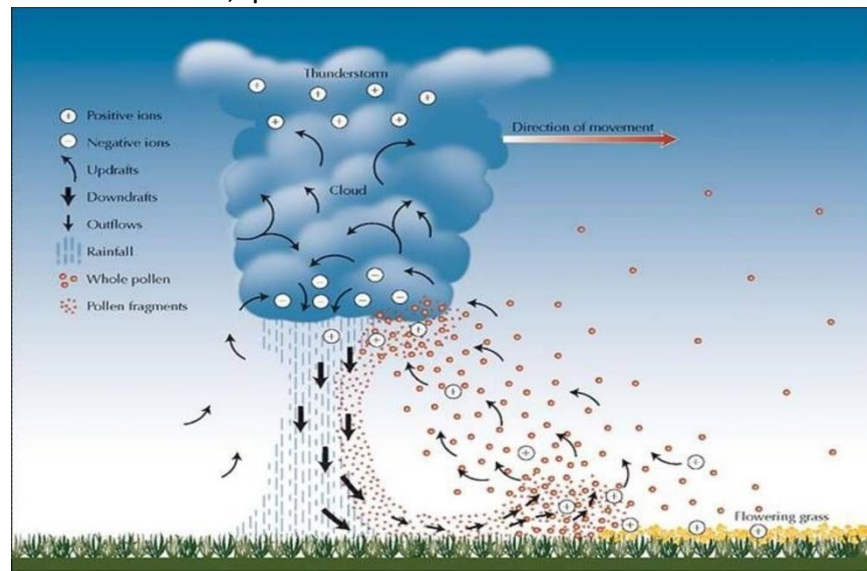
- The risk of thunderstorm asthma is highest in adults who are sensitive to grass pollen (particularly rye grass pollen) and have seasonal hay fever
- Thunderstorm asthma can happen in anyone of any age even if no history of Asthma



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.
- 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.



Prevention is Better than Treatment

- 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

ASTHMA AUSTRALIA

Name: _____

Plan date: _____ Review date: _____

Doctor details: _____

EMERGENCY CONTACT

Name: _____

Phone: _____

Relationship: _____

Photo (optional)

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) below: _____

TAKE preventer

morning night puffs/inhalations

• Use my preventer, even when well controlled • Use my spacer with my puffer

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 _____

Date _____ DOCTOR'S CONTACT DETAILS Phone _____

Next asthma check-up due _____ DOCTOR'S CONTACT DETAILS Relationship _____

EMERGENCY CONTACT DETAILS

Name _____

Phone _____

Relationship _____

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

Peak flow* (if used) above: _____

Your preventer is: _____ (NAME & STRENGTH)

Take _____ puffs/tablets _____ times every day

• 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

OTHER INSTRUCTIONS

(e.g. other medicines, trigger avoidance, what to do before exercise)

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)

Peak flow* (if used) between _____ and _____

Keep taking preventer: _____ (NAME & STRENGTH)

Take _____ puffs/tablets _____ times every day

• Use a spacer with your inhaler

Your reliever is: _____ (NAME)

Take _____ puffs _____

• Use a spacer with your inhaler

OTHER INSTRUCTIONS

(e.g. other medicines, when to stop taking extra medicines) Contact your doctor

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

Peak flow* (if used) between _____ and _____

Keep taking preventer: _____ (NAME & STRENGTH)

Take _____ puffs/tablets _____ times every day

• Use a spacer with your inhaler

Your reliever is: _____ (NAME)

Take _____ puffs _____

• Use a spacer with your inhaler

OTHER INSTRUCTIONS

(e.g. other medicines, when to stop taking extra medicines) Contact your doctor today

Prednisolone/prednisone: Take _____ each morning for _____ days

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

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)

DIAL 000 FOR AMBULANCE

* Peak flow not recommended for children under 12 years



nationalasthma.org.au

For Further information please see Asthma Australia (www.asthma.org.au) or National Asthma Council Australia (www.nationalasthma.org.au)



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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 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 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



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