



ThinkAskLearn
Health Professional Education

Asthma Management

David Corkill
Emergency Nurse Educator
MEmergN, MAdvPrac (Hth Prof Edu), BN, Dip App Sc


www.thinkasklearn.com.au



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Asthma in Australia


- 1 in 6 children
- 1 in 8 adolescents
- 1 in 9 adults
- Affects over 2 million people
- Australian average 11%
- 14% – 16% Australian Children
- Exercise is a trigger for 80% of people with asthma



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Types of Asthma

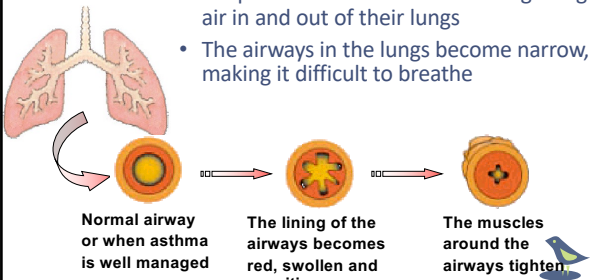
- **Infrequent Intermittent 75%**
- **Frequent Intermittent 20%**
- **Persistent 5%**



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What is asthma?

- People with asthma have trouble getting air in and out of their lungs
- The airways in the lungs become narrow, making it difficult to breathe



Normal airway
or when asthma
is well managed


**The lining of the
airways becomes
red, swollen and
sensitive**

**The muscles
around the
airways tighten**

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Recognizing the signs


- **Cough** - the body's attempt to open up and clear the narrowed airways
- **Shortness of breath** - difficulty in moving air in and out of the narrowed airways
- **Wheeze** - the whistling sound made as the air is pushed out through narrowed airways
- **Chest tightness** - the feeling when the muscles have tightened around the airways



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Medications

 <u>USE WHEN NEEDED</u> Use to relax airway muscle	 <u>USE DAILY</u> Use to stop inflammation
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Medication



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Short Acting Relievers

Blue colours
Quickly relieves symptoms
– Works within **4** minutes
Often used before exercise
Safe and non-addictive
Common names:
– Airomir, Asmol, Bricanyl, Ventolin
Use in **Asthma First Aid**



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Longer Acting Relievers

Green colours
•“Longer acting” relief of symptoms
•10 hours but peak - 1 to 2 hours
Not for Asthma First Aid



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Preventers

Many **different** colours
Reduce frequency and severity of attacks
Taken regularly every day at home
Not for Asthma First Aid



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Combination



Purple or **red/white** colour
Combined preventer and longer acting reliever
Taken regularly every day at home
Not for Asthma First Aid



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Delivery Devices

Puffer & Spacer	
Puffer	
Accuhaler	
Turbuhaler	

Autohaler	
Nebuliser	



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Evidence

Holding Chambers v's Nebulisers

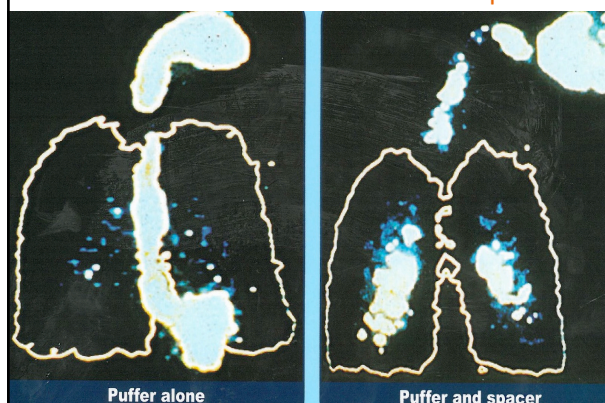
Cochrane Review 2013

- 1897 children and 729 adults in 39 trials
- LOS in ED – 33 mins vs 103 mins
- Pulse Rate – 6.3% lower
- No outcome difference



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Medication – With and Without a Spacer



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Assessing an asthma attack

Mild Attack

- Cough
- Soft wheeze
- Minor trouble breathing
- No problem speaking in sentences



Moderate Attack

- Persistent cough
- Loud wheeze
- Clear difficulty breathing
- Able to speak in short sentences only



Severe Attack

- (Dial 000 for an ambulance)
- Very stressed and anxious
- Gasping for breath

- Unable to speak more than a few words in one breath
- Pale and sweaty
- May have blue lips



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DISCHARGE CRITERIA

- O2 saturation > 95% on room air – NOT IN Isolation!
- No tachypnoea
- No accessory muscle use
- Good air entry with minimal or no wheeze
- Adequate social circumstances
- Good spacer technique
- Asthma Control Pack
- Asthma Action Plan



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ASTHMA
ACTION
PLANS



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Asthma Action Plans for children

My Asthma Action Plan

Always carry your blue reliever with you.
For more information on asthma call 1800 645 130

Name: _____ Doctor's Name: _____ Doctor's Signature: _____ Doctor's Phone No.: _____

Well Controlled (Green)

How to do normal activities

Rescue inhaler less than three times/week

Other: _____

Worsening (Yellow)

Cough or chest tightness wakes me up

Rescue inhaler more than three times/week

Other: _____

Severe (Red)

Waking most nights and mornings with coughing or chest tightness

Rescue inhaler at least every three hours

Other: _____

See doctor as soon as you can

Life threatening asthma and 4 step asthma first aid plan – turn over

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My Asthma Action Plan

When my asthma is WELL CONTROLLED

- No regular wheezes, or cough or chest tightness at night time, on waking or during the day
- Able to take part in normal physical activity without wheezes, cough or chest tightness
- Need rescue inhalation less than three times a week (except if it is used before exercise)
- Peak Flow* above and

When my asthma is GETTING WORSE

- At the first sign of a cold
- Waking from sleep due to coughing, wheezing or chest tightness
- Using rescue inhaler more than 3 times a week (not including before exercise)
- Peak Flow* between and

When my asthma is SEVERE

- Need rescue inhaler every 3 hours or more often
- Increasing wheezing, coughing, chest tightness
- Difficulty with normal activity
- Waking each night and most mornings with wheezing, coughing or chest tightness
- Peak Flow* below

What should I do?

Continue my usual treatment as follows:

Preventer:

Reliever:

Symptom Controller:

Combination Medication:

Always carry my reliever puffer

What to do if symptoms get worse:

1. Sit upright and stay calm.

2. Take a separate puff of a reliever puffer (not puff at a time) 4 or 5 times. Just use the puffer as it says if you don't have a spacer. Take a breath from the spacer after each puff.

3. Wait 4 minutes. If there is no improvement, take another 4 puffs.

4. If still not an improvement, **CALL AN AMBULANCE IMMEDIATELY** (000 or 112 from mobile phone) and state that you are having an asthma attack. Keep taking 4 puffs every 4 minutes until the ambulance arrives.

See your doctor immediately after a serious asthma attack.

My Asthma Action Plan

Control

Get worse

Severe

Call an ambulance

Name: _____ Date: _____ Best Peak Flow*: _____ Next Doctor's Appointment: _____

* Not recommended for children under 12 years

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My Asthma Action Plan

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Name: _____ Date: _____ Best Peak Flow*: _____ Next Doctor's Appointment: _____

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ASTHMA ACTION PLAN

Take this ASTHMA ACTION PLAN to your doctor for your doctor to fill in.

Name: _____ Doctor's Contact Details: _____

DATE: _____

WHEN WELL

Keep using preventer:

Reliever:

Combination Medication:

IF SYMPTOMS GET WORSE

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Asthma First Aid



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FIRST AID FOR ASTHMA
CHILDREN UNDER 12

USE BLUE/GRAY PUFFER (E.G. AMBUL, VENTOLIN, COMPREX)
For severe asthma attacks, children should be given 4 puffs of spacer over 4 minutes.

1 Sit the child comfortably upright.
Give them 4 puffs of spacer over 4 minutes.


2 Give 4 puffs of spacer over 4 minutes.
Place the spacer in front of the child's mouth and hold it steady. The child should breathe in and out of the spacer. Repeat until 4 puffs have been given.

3 Wait 4 minutes. Stay with child - watch carefully and reassure them. Call 000 for an ambulance if any time you need to. Stay that is still in having an asthma attack.

4 After 4 minutes:
Worse or no better? If the child still cannot breathe normally, give 4 more puffs. If still cannot breathe normally, call 000. Repeat until 4 puffs have been given. If the child is still not breathing, call 000. If the child is still not breathing, call 000. If the child is still not breathing, call 000.


HOW TO USE A BLUE/GRAY PUFFER WITH SPACER
Before using the spacer, shake the puffer well. Place the spacer in front of the child's mouth and hold it steady. The child should breathe in and out of the spacer. Repeat until 4 puffs have been given.

When to call 000
If the child is still not breathing, call 000. If the child is still not breathing, call 000. If the child is still not breathing, call 000.




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Asthma First Aid
Step 1



- Sit the person down.
- Remain calm to reassure them.



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Asthma First Aid

Step 2

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- Give 4 puffs of a blue reliever, one puff at a time.
- Use a spacer.
- Ask the person to take 4 breaths from the spacer.



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Asthma First Aid

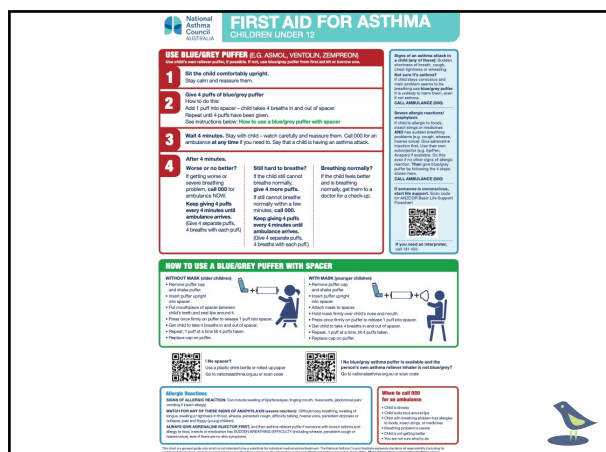
Step 4



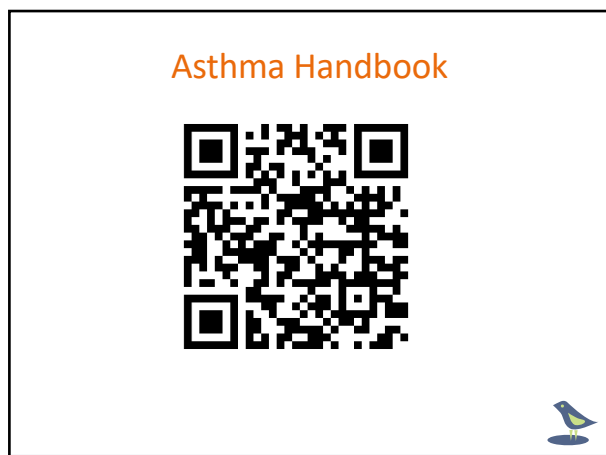
- If there is little or no improvement, repeat steps 2 and 3.
- If there is still little or no improvement, call an ambulance immediately.
- Continue to repeat steps 2 and 3 while waiting for the ambulance.



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