Asthma Awareness & Management in the workplace

Presenter: Elaine Peet

Asthma Management Course
Health (Drugs and Poisons) Legislation 1996
Amended 2008
At end of workshop, you will be able to...

- **Understand** the need for blue reliever medication to a person having an asthma attack, within your current work setting.
- Have knowledge of the Asthma Friendly Workplace Guidelines.
Contents

- What is asthma?
- General asthma symptoms
- Signs of worsening asthma
- Asthma medications
- Why use a spacer

- Recognising and assessing an asthma attack
- Managing an asthma attack
- Exercise induced asthma
- Relevant Queensland legislation
Asthma in Australia

- 1 in 9 children (0 – 15 years)
  - Most common reason for presenting to emergency

- 1 in 10 adults

- 1 in 10 over 65 years of age
  - Most deaths from asthma occur in people over 65 years of age

Sources: Asthma in Australia 2008
Where does asthma occur?

- nose
- throat
- wind pipe
- airways
- air sacs
- diaphragm
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.
Airways

- Normal airway or asthma well managed
  - pink
  - open
  - muscles relax
Airways during asthma

- The lining of the airway becomes red, swollen and sensitive and may produce extra mucus
- The muscles around the airway tighten
General asthma symptoms

- **Cough** – the body’s attempt to open up and clear the narrowed airways

- **Wheeze** – the whistling sound made as the air is pushed out through narrowed airways

- **Shortness of breath** – difficulty moving air in and out of the narrowed airways

- **Chest tightness** – the feeling when the muscles have tightened round the airways
## Worsening asthma: what you may see

<table>
<thead>
<tr>
<th>Mild worsening</th>
<th>Moderate worsening</th>
<th>Severe worsening</th>
</tr>
</thead>
<tbody>
<tr>
<td>No problem speaking</td>
<td>Speaking in short sentences only</td>
<td>Only able to say few words in one breath</td>
</tr>
<tr>
<td>Soft wheeze</td>
<td>Loud wheeze</td>
<td>Very stressed and anxious, pale, sweaty</td>
</tr>
<tr>
<td>Minor trouble breathing</td>
<td>Clear difficulty breathing</td>
<td>Gasping for breath</td>
</tr>
<tr>
<td>Cough</td>
<td>Persistent cough</td>
<td>May have blue lips</td>
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Other signs of worsening asthma

- Needing blue reliever more than 3 x a week
- Symptoms more than 3 x a week
- Blue reliever not working as well as usual or lasting as long
- Waking overnight or in morning with symptoms
- Reduced ability to do usual activities
Exercise induced asthma

- Trigger for 80% of people with asthma
- Can occur during and/or after exercise
- More likely if unwell or asthma is poorly controlled
Exercise induced asthma: How do you know?

“Do you feel more breathless, tight in chest or wheezy 5 to 10 mins after you stop exercising than during exercise?”
Asthma medications

Preventer

USE DAILY

Use to stop redness, swelling, sensitivity and extra mucus

Reliever

USE WHEN NEEDED

Use to relax muscle around the airways
Medication - short acting relievers

- **Use in Asthma First Aid**
- **Blue/grey** colour
- Relieves symptoms within 4 minutes
- Can be used before **exercise**
- Safe and non-addictive
- Ventolin, Airomir, Asmol, Bricanyl
- Side effects – shaky hands, racing heart
- Store medication below 30 degrees celsius
Using a blue reliever to **prevent** exercise induced asthma

**Before exercise:**
- Warm up effectively
- Use blue reliever at least 5 minutes before exercise
- Do not exercise if unwell with asthma

**After exercise:**
- Cool down effectively
- Monitor for signs of worsening asthma
Using a blue reliever to manage exercise induced asthma

During exercise, if symptoms occur:

- Stop activity and take blue reliever medication
- Return to activity only when symptoms subside
- If symptoms recur, take blue reliever medication.
- Do NOT return to activity
Medications: Preventers

- **Not** for Asthma First Aid
- Reduce frequency and severity of attacks
- Taken regularly every day at home
- Various types and colours
Medication: Longer Acting Relievers

- **Not** for Asthma First Aid
- Relaxes airways for 12 hrs
- Takes up to 30 mins to work
- Not to be used without a preventer
- Serevent, Oxis
Medication: Combination

- **Not** for Asthma First Aid
- Combined preventer and longer acting reliever
- Dries up mucus, reduces swelling and relaxes muscles
- Taken regularly every day at home
- Seretide, Symbicort
Delivery devices

<table>
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What is a spacer?

- A clear plastic tube
- Stores puffed medication, allowing it to be breathed in
Why use a spacer?

- Results in up to 40% of medication reaching lungs (compared to 10% with puffer alone)
- Reduces side effects
- Easier to use

AFQ recommends all puffer medications are delivered via a spacer.
Why use a spacer?

Using puffer alone
10% reaches lungs

Using spacer and puffer
40% reaches lungs
Which spacer for whom?

Infant – 4/5 years of age
● use a small volume spacer
● use a facemask with the spacer.

Children above 4/5 years of age
● may use a large volume spacer
How to use a puffer and spacer

1. Assemble spacer, if required
2. Remove the cap from the puffer
3. Hold puffer upright and shake well
4. Put the puffer mouthpiece into the end of the spacer
5. Tilt chin up and breathe out
6. Place the mouthpiece into your mouth and make a good seal with your lips. If using a spacer with a facemask, make a good seal over mouth and nose
7. Fire one puff of the puffer into the spacer
8. Breathe in and out for 4 breaths, maintaining seal
9. For additional puffs, repeat steps 3 - 8
Cleaning a spacer

- Clean after each use
- Dismantle spacer and wash in detergent and hot water
- Do not rinse or wipe dry – allow to air dry
- When dry, wipe mouth piece with 70% alcohol swab
- Discard and replace spacer if contaminated with blood
- Ensure spacer is dry before returning to first aid kit
- Do not store in a plastic bag
Recognising and 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
To manage an asthma attack... time is critical

Either:

- Follow the person’s Asthma Action Plan (if readily available)

Or

- Follow the nationally recognised 4 step Asthma First Aid procedure
Asthma First Aid
Asthma First Aid

Step 1

- Sit the adult or child down
- Remain calm
- Provide reassurance
- Do not leave the person alone
Asthma First Aid

Step 2

- Give 4 puffs of a blue reliever

- One puff at a time through a spacer

- Ask the adult or child to take 4 breaths from the spacer after each puff
Asthma First Aid

Step 3

- Wait 4 minutes.
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.
Asthma First Aid

1

2

3

4
To the extent necessary to perform first aid at a workplace or community event, a person who has completed an asthma management course approved by the chief executive is authorised to administer S3 salbutamol or S3 terbutaline.

In this section – community event includes a sporting or recreational event.
Health (drugs and poisons) Regulation 1996

To purchase salbutamol or terbutaline:

- Must have completed Asthma First Aid Workshop (as approved by Queensland Government)
- Must have certificate or document that is available for viewing at time of purchasing reliever medication
What you can now do...

- Recognize an asthma attack and if needed assist in giving blue reliever medication
- Help to keep your workplace Asthma Friendly
- Understand the need to have Asthma First Aid available in the workplace
The Asthma Foundation of Queensland

Services include:

- Nationally accredited courses for health professionals
- Free monthly community asthma workshops
- Community asthma education programs
- Research grants
- Support and information

Asthma Info Line 1800 645 130

Website: www.asthmaqld.org.au