

Asthma Policy

St Albans East Primary School

Date: May 2014



Rationale

People with asthma have sensitive airways and when exposed to certain triggers their airways narrow making it difficult to breathe. Symptoms commonly include difficulty breathing, wheezy breathing, dry and irritating cough, tightness in the chest and difficulty speaking. Children and adults with mild asthma rarely require medication; however severe asthma sufferers may require daily or additional medication (particularly after exercise). Asthma affects up to one in four primary aged children, one in seven teenagers and one in ten adults. It is important therefore for all staff members to be aware of asthma, its symptoms and triggers, and the management of asthma in a school environment.

Aim

To assist asthma sufferers to manage their asthma as effectively and efficiently as possible at school.

Implementation

1. ASTHMA AWARENESS

- As asthma affects up to one in four primary age children, one in seven teenagers and one in ten adults, it is important for school staff to be aware of asthma, its symptoms and triggers and most importantly, the management of asthma in the school environment.
- Asthma is a condition that affects the small airways (bronchioles) of the lungs. In a person with asthma, the airways are more sensitive than normal. When the sensitive airways are exposed to a 'trigger factor' they overreact, resulting in an asthma attack. A variety of different trigger factors may lead to an asthma attack (e.g. colds/flu, exercise, pollens, dust, dust mite or cigarette smoke) and these triggers vary from person to person.
- During an asthma attack the airways narrow making it difficult to breathe. The narrowing is caused by constriction of the muscle in the walls of the airways, swelling of the lining layer of the airways and excessive production of mucus.

Symptoms of asthma commonly include:

- Difficulty in breathing.
- Wheezy breathing (a whistling noise from the chest).
- Cough (usually dry and irritating).
- Tightness in the chest.
- Difficulty in speaking.
- These symptoms are particularly likely to occur during or immediately after exercise.
- Many children and adolescents have mild asthma with very minor problems and rarely need medication. However, some students will need medication on a daily basis and frequently require additional medication at school (particularly before or after vigorous exercise). Most students with severe asthma can have their asthma controlled by taking regular medication.

2. ASTHMA MEDICATION

- There are three main groups of asthma medications, relievers, preventers and

symptom controllers. A reliever opens up the airways by relaxing the bronchial muscle and is used to relieve an asthma attack. Common brands include Ventolin, Airomir, Asmol or Bricanyl (usually in a blue container). They should be easily accessible to the student at all times. All students with asthma should be encouraged to take their reliever medication immediately they develop symptoms at school.

- Students with moderate to severe asthma may also be required to take medication that helps prevent their asthma (a preventer). Preventer medications help reduce and prevent the inflammation in the lining of the airway. Common preventers include Intal, Intal Forte and Tilade (usually in a white or yellow container) or inhaled corticosteroids such as Becotide, Becloforte, Respocort, Qvar, Pulmicort or Flixotide (usually in brown/yellow/beige/orange containers). These medications need to be taken on a regular basis, although usually only twice daily (morning and evening) and therefore will often be taken in the student's home. Intal, or Tilade are also used in the prevention of exercise-induced asthma. Preventer medications do not relieve an asthma attack.
- Symptom Controllers such as Serevent, Foradile, Optrol and Oxis are long acting relievers used in combination with reliever and preventer medication at home.
- Leukotriene Receptor Antagonists (LTRAs) are a new class of medication recently available for use with inhaled preventers. They are available in tablet form (e.g. Singulair and Accolate).
- Symptom Controllers and LTRAs do not relieve an asthma attack and will not usually be seen at school.
- Students with asthma should always carry or have available in the school, appropriate medication. Parents/guardians are responsible for ensuring that their children have an adequate supply of the appropriate medication at school. It is also recommended that parents/guardians provide a spacer at school for their child's individual use.

3. ASTHMA MEDICATION DELIVERY DEVICES

- Asthma medications are generally taken via a hand-held inhaler device such as a 'puffer' (metered dose inhaler) or dry powder inhaler (Turbuhaler, Rotahaler, Accuhaler, Aerolizer). It is recommended that a puffer be used in conjunction with a 'spacer' to assist with fast and more effective delivery of the reliever medication.
- Note: Schools should provide a reliever puffer (e.g. Ventolin, Airomir, Asmol or Bricanyl puffer) and a matching spacer device in the school's first-aid kit (see Section 6).
- Schools are not required to provide a nebuliser pump for their students to use.
- There is clinical evidence that a puffer and spacer device is as effective as a nebuliser. The following are disadvantages to the school owning a nebuliser:
 - Nebulisers are expensive to buy and with heavy duty use need to be replaced every few years.
 - Nebulisers need regular care and servicing every 12 months.
 - Nebulisers are less portable and not as easy to clean as spacers.
 - At least two staff members need to be trained in how to operate the

- nebuliser (to ensure that a trained staff member is always available).
 - Most nebulisers need a 240 volt power supply.
 - Medication is only obtainable on prescription (and must therefore be provided by parents).
 - Staff members can only assist the student in administering the medication with written/verbal consent from parent/guardian or doctor (see Section 5).
 - If more than one student requires the nebuliser pump at one time, it may be difficult for the staff member to assess which student has priority.
- If a school chooses to own their own nebuliser it is recommended that it be tested at a pharmacy every 12 months.
- If a nebuliser pump is recommended by the child's treating doctor the school staff are to follow the child's asthma management plan. The parents/guardians will need to provide a nebuliser pump at school for their child's use and this may be done when the:
 - Treating doctor verifies that the medication can only be delivered effectively through a nebuliser.
 - Treating doctor provides a signed and dated asthma management plan with the medication dosage, frequency and method of use.
 - Plan is countersigned by the parents/guardians and updated as needed.
 - Parent/guardian provides and replaces the medication that is labelled with the name of the drug, the dosage, frequency of use and the child's name.
 - Parents/guardians need to negotiate with the Principal and at least two staff members for the use of a nebuliser pump at school. The two staff members also need to be trained by the parents/guardians in the use of the pump.
 - Parents/guardians ensure that the pump is tested annually.
 - Student has their own nebuliser mask, bowl and tubing and the parent/guardian provides new equipment as required.
 - Student wherever possible is responsible for cleaning their own nebuliser mask and bowl.
- Medication is stored in an appropriate place (some medications may be required to be kept in the refrigerator).
- Nominated staff should regularly check the expiry dates on the medications.

4. CLEANING OF DELIVERY DEVICES

- Devices (e.g. puffers, spacers) that are used by more than one person must be cleaned thoroughly after each use to prevent cross-infection. Devices can be easily cleaned by following these steps:
 - Ensure the canister is removed from the puffer container (the canister must not be submerged) and the spacer is separated into two parts.
 - Wash devices in warm water and detergent.
 - Rinse.
 - Allow devices to 'air dry'. Do not rub dry.
 - To disinfect devices, wipe with a 70% alcohol swab e.g. Medi-Swab™ available from pharmacies, paying particular attention to the mouthpiece.
 - When completely dry, ensure canister is replaced into puffer container and check the device is working correctly by firing one or two 'puffs' into the air. A mist should be visible upon firing.

- If any device is contaminated by blood, throw it away and replace the device.

5. ASTHMA MANAGEMENT PLAN

- Every student with asthma attending the school should have a written asthma management plan filled out by their family doctor or paediatrician, in consultation with the student's parent/guardian.
- This should be attached to the student's records and updated annually or more frequently if the student's asthma changes significantly.
- Contact Asthma Victoria for copies of School and Camp Asthma Management Plans or obtain copies from Asthma Victoria's website (www.asthma.org.au.)

The management plan will include:

- Usual medical treatment (medication taken on a regular basis when the student is 'well' or as premedication prior to exercise).
- A written action plan detailing medications to be used in cases of deteriorating asthma. This should include how to recognise worsening symptoms and what to do during an acute attack. This action plan will be provided by the student's doctor and should be easily accessible to all staff. Staff should identify high risk asthma students and ensure their action plan is updated regularly.
- Name, address and telephone number of an emergency contact.
- Name, address and telephone number (including an after-hours number) of the student's doctor.

6. SUPPLEMENTARY FIRST AID SUPPLIES

- As well as ready access to the details of each student's asthma (usual treatment and action) plan, it is essential to have equipment for managing an asthma attack available in every school first aid kit. The school can have multiple asthma first aid kits located strategically around the campus where asthma may be treated. The kit must include:
 - A reliever puffer (e.g. Ventolin, Airomir, Asmol or Bricanyl puffer).
 - A large volume spacer device to assist with effective inhalation of the reliever, for example a Volumatic or Nebuhaler. Consult a pharmacist about matching the spacer with the reliever puffer. (In some instances, a student may use small volume spacers via a face mask, e.g. Aerochamber or Breath-a-Tech with mask).
 - Clear, written instructions on how to use these medications and devices, plus the steps to be taken in treating an acute asthma attack as described below.
 - 70% alcohol swabs e.g. Medi-Swab™ to clean devices after use (see cleaning instructions).
- Schools can legally purchase a reliever puffer for first aid purposes from a pharmacist on written authority of the Principal.
- A staff member needs to be given the responsibility of regularly checking the expiry date on the canister of the reliever puffer.

7. EXERCISE INDUCED ASTHMA (EIA)

- All students with asthma should be encouraged to exercise regularly to improve cardiovascular fitness and general wellbeing. However, exercise (particularly strenuous exercise) can bring on an attack of asthma in about 85 per cent of children with asthma. Exercise induced asthma may vary considerably from day to day and can be particularly troublesome when the student has a cold or flu, is recovering from a recent flare-up of asthma or during very cold weather. In many instances, the difficulty in breathing comes on soon after completion of the exercise when the student is 'cooling down',

rather than during exercise.

Prevention

- Exercise-induced asthma can frequently be prevented by a simple warm-up period and medication immediately before the exercise, premedicate with two puffs of either a reliever puffer or preventers Intal or Tilade (two preventative medications often used in the management of exercise-induced asthma) or both reliever and preventative puffer as recommended by the student's doctor. Obtaining better overall control of the student's asthma with long-term preventative treatment (e.g. Intal, Intal Forte, Tilade or inhaled corticosteroids) also reduces the likelihood of exercise induced asthma.

Treatment

- If students develop exercise induced asthma, they should immediately cease the exercise, rest and take a reliever puffer (preferably with a spacer device). Once all symptoms disappear they may be able to resume their exercise program. However, if the symptoms persist, worsen or reappear, the attack needs to be managed as outlined below and the student must not return to exercise.

8. EMERGENCY TREATMENT OF AN ASTHMA ATTACK

- If a student develops signs of what appears to be an asthma attack, appropriate care must be given immediately.

Assessing the severity of an asthma attack

- Asthma attacks can be:
 - Mild: This may involve coughing, a soft wheeze, minor difficulty in breathing and no difficulty speaking in sentences.
 - Moderate: This may involve a persistent cough, loud wheeze, obvious difficulty in breathing and able to speak in short sentences only.
 - Severe: The student is often very distressed and anxious, gasping for breath, unable to speak more than a few words, pale and sweaty and may have blue lips.
- All students judged to be having a severe attack require emergency medical assistance.
- Call an ambulance and carry out emergency treatment steps while waiting for an ambulance to arrive (state clearly that a student is having 'an asthma attack'. The ambulance service will give priority to an asthma attack).
- Regardless of whether an attack of asthma has been assessed as mild, moderate or severe, emergency treatment (as detailed below) must commence immediately. The danger in any acute asthma situation is delay. Delay may increase the severity of the attack and ultimately risk the student's life.

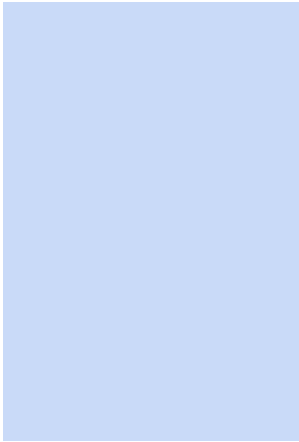
First Aid Management of an Asthma Attack

- If the student has an action plan follow the steps immediately (see Section 5). If no action plan is available the steps outlined below should be taken immediately. These steps should be clearly displayed in the staff room so that all staff are well versed with them. They should also be written on a card in the first aid kit.
- If the student's own reliever puffer is not readily available, a reliever puffer should be obtained from the first aid kit, or borrowed from another student or staff member and given without delay. It does not matter if a different brand of reliever is used.

The steps are:

1. Sit the student down in as quiet an atmosphere as possible. Breathing is easier sitting rather than lying down. Be calm and reassuring.
2. Without delay administer four separate puffs of a blue reliever puffer via a spacer noting the following instructions:
 - Shake the asthma puffer, insert it into the spacer and fire one puff into the spacer chamber.
 - Ask the student to breathe in and out, as deeply as possible, through the mouthpiece of the spacer for four breaths (the student does not need to take their mouth away for each breath out as the mouthpiece contains a one-way valve).
 - Repeat immediately to administer a further separate three puffs, always shaking the puffer between puffs.
3. Wait four minutes. If there is no improvement, give another four separate puffs through the spacer.
4. Wait four minutes, if there is still no improvement, an ambulance should be called immediately (dial 000). State clearly that a student is having 'an asthma attack'. The ambulance service will always give priority to an asthma attack.
 - Repeat steps 2 and 3 continuously while waiting for the ambulance to arrive.
 - Contact the student's parents/guardians and doctor immediately.
 - Even if the student has a complete recovery from the asthma attack, their parents/guardians or doctor should be notified of the incident.
 - If a spacer device is not available:
 - Shake the puffer.
 - Have the student hold the puffer either in the mouth, or slightly away from the open mouth.
 - Either the student, or the staff member, should fire the puffer the moment the student begins to take a slow steady breath in. Ideally, the student should hold their breath for four seconds at full inspiration.
 - Allow the student to take four normal breaths of air, then repeat the above procedure until four puffs of a reliever puffer have been delivered.
 - Wait four minutes. If there is no improvement, repeat the above steps.
 - Wait four minutes. If there is no improvement, call an ambulance immediately.
 - Repeat the above steps continuously while waiting for the ambulance to arrive.
 - If at any time the student's condition suddenly worsens, call an ambulance immediately.
 - Reliever puffers are safe. An overdose cannot be given by following the instructions outlined. However, it is important to note that the student may experience harmless side effects of shakiness, tremor or a racing heart.
 - If a spacer device is not available and the student is unable to coordinate using a puffer, an improvised spacer device can be used, for example, have someone cup their hands around the student's nose and mouth and have a second person 'fire' the puffer into the cupped hands, or put a hole in the bottom of a polystyrene cup, place the cup over the student's mouth and 'fire' the puffer through the hole.

9. WHAT IF IT IS THE FIRST ATTACK OF ASTHMA?



- A problem that may be encountered is when a student is having difficulty breathing at school and is not known to have pre-existing asthma. In this situation administer four separate puffs of a blue reliever puffer via a spacer and call an ambulance immediately.
- Keep giving four separate puffs of a blue reliever puffer via a spacer every four minutes until the ambulance arrives. This treatment could be life saving for a student whose asthma has not been previously recognised and it will not be harmful if the breathing difficulty was not due to asthma.
- Reliever puffers are extremely safe even if the student does not have asthma.

Evaluation

This policy will be reviewed as part of the school's three year review cycle.

Review Year

2017