Invisible Illness
—an online resource about children and young people with chronic conditions for school communities

ASTHMA Entry

Organisations who wrote/approved the information
Asthma Victoria

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Asthma affects up to one in nine children and one in nine 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 airways of the lungs. In a person with asthma, the airways are more sensitive than normal. When they are exposed to a ‘trigger’ they overreact and narrow, resulting in an asthma attack. The narrowing is caused by:

• constriction of the muscle in the walls of the airways
• swelling of the lining layer of the airways
• excessive production of mucus in the airways.

A variety of triggers may lead to an asthma attack (for example, colds/flu, exercise, pollens, dust, dust mite, temperature change or smoke) and these triggers vary from person to person.

Symptoms of asthma commonly include:

• Difficulty in breathing or breathlessness
• Wheezing
• Tightness in the chest
• Cough

Many children and adolescents have mild infrequent asthma with very occasional attacks. They require medication only during attacks. However, students with frequent episodic and persistent asthma need medication on a daily basis and frequently require additional medication at school (particularly before or after exercise). Most students with moderate to severe asthma can have their asthma controlled by taking regular medication.

*It is important to remember that anyone with asthma can have a severe attack, even people with mild asthma.

2. Treatments, including role of specialists, effects of treatments, use of devices, daily routines

There are three types of asthma medications.

1. Reliever medications are used for immediate relief. They relax the muscles in the lining of the airways in the lungs, which constrict in an asthma attack. Reliever medication is the only medication to use in an asthma emergency (they include Asmol, Airomir, Bricanyl, Epaq and Ventolin and are all blue in colour).

*Children should carry their reliever medications with them at all times.*

2. Preventer medications are used for students with moderate to severe asthma to help reduce and prevent the inflammation of the lining of the airways and to reduce the production of mucous. They are taken morning and night. Preventer medications are usually taken long term, but it will be one to two weeks before they begin to reduce the inflammation in the lining of the lungs and improve asthma symptoms. They always come in Autumn colours including brown, orange and red.

3. Symptom controller medications are long acting relievers that are used in conjunction with preventers. They help to relax the muscles around the airway for up to 12 hours. They are also taken daily and are all green in colour.

There are also combination medications which include a combination of preventer and symptom controller medication in one device. They include Seretide, which is purple in colour and Symbicort which is red and white in colour.

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Preventers, symptom controllers and combination medications should NOT be used to relieve an acute asthma attack and will not usually be seen at school (unless on school camp).

Asthma medications are generally taken by 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 a reliever medication in an emergency.

A spacer is an inexpensive device that assists in the effective administration of medication, ensuring that the inhaled medication (both relievers and preventers) gets where it is needed, deep into the airways.

Note: Schools should provide a reliever puffer (for example, Airomir, Asmol, Bricanyl, Epaq or Ventolin puffer) and a matching spacer device in the school’s first aid kit.

Schools are not required to provide a nebuliser pump for their students to use.

Each child with asthma should have their own written Asthma Action Plan completed in consultation with their doctor, outlining triggers of their asthma, the medication they require for day to day asthma management, what to do if their asthma deteriorates and how to carry out Asthma First Aid, including when to call an ambulance (plans can be downloaded from the Asthma Foundation of Victoria website at www.asthma.org.au). Written Asthma Action Plans should be placed in a central location that is easily accessible to all staff caring for the child with asthma. If the child's asthma treatment is changed the parent/guardian should notify the staff of a change in the child's written Asthma Action Plan.

For further information, the Asthma Foundation of Victoria provides brochures, information sheets as well as a telephone HelpLine from 9.30am to 3.00pm Monday to Friday.
1. Effects on the individual

In most children, asthma is a mild disease. Asthma attacks can be very frightening to both the person with asthma and those who care for them. Attacks can cause breathlessness which often leads to a high level of anxiety in the child. It is therefore important to keep calm yourself when caring for a child with asthma and also keep the child as calm as possible.

School children are usually able to understand their own signs and symptoms of asthma, so it is important to listen to children when they say they are experiencing asthma, even if you don’t think they look as if they are having difficulty breathing. Asthma is a very individual condition and the signs and symptoms vary from person to person.

Some children with asthma can experience problems keeping up with schoolwork if they have many days off school with asthma (asthma is the most common reason for school absenteeism). Teachers should monitor children’s academic progress and social interaction carefully and address any issues as they arise.

Teachers can encourage parents to take their children to a doctor if they believe a child’s asthma is not under control. This can be evident in many ways such as:

- Using a blue reliever medication more than three times a week (other than pre-medicating before exercise)
- Frequently having time off school with asthma
- Not joining in activities

Children should be encouraged to participate in all activities, but if asthma is inhibiting a student from joining in, the child’s asthma treatment should be reviewed.

Teachers are likely to see children with exercise-induced asthma, since 80% of people with asthma experience asthma symptoms during or following exercise. Those with exercise-induced asthma should always warm up before exercise and cool down following it. The doctor may prescribe a blue reliever medication to be used five to 10 minutes before exercise. If someone has asthma symptoms during sport they should rest and take their blue reliever medication (using advice from their written Asthma Action Plan). If the asthma symptoms subside they can return to their activity, however if they experience further symptoms they should stop exercising for the day, take their medication again and follow up with a visit to their doctor.

School staff should be aware that children can have asthma attacks anywhere, so it is important to be prepared with an Asthma Emergency kit. The kit should contain a blue asthma reliever medication (Airomir, Asmol, Bricanyl, Epaq or Ventolin), a spacer, alcohol swabs and instructions on Asthma First Aid and should be taken with you wherever there are children, such as sporting activities, excursions or camps.

2. Effects on those close to the child/young person

Many parents contact the Asthma Foundation of Victoria because of concerns coping with their child’s condition. Some parents report being very anxious about their child with asthma, especially when they are first diagnosed, or after a severe attack. It is understandable that some of these parents become over protective towards their child and find it difficult to leave their child in the care of others. On the other hand, some parents can be very blasé about the care of their child with asthma and underestimate the severity and the need for management of their child’s condition.

Teachers and school staff can also experience stress and fear associated with caring for a child with asthma. The Asthma Foundation of Victoria developed the Asthma Friendly Schools Program to provide education, resources and support for teachers and school staff, to educate them about the treatment of asthma and how to provide asthma first aid. Research following the introduction of the Asthma Friendly Schools Program in Victoria has shown that teachers feel less stress and are more confident to care for children with asthma following asthma education.
Children spend a lot of time with peers during their school days, so it is important to teach children about asthma. Children can assist someone with asthma by asking an adult to help if their friend is having an asthma attack. Older peers can also learn asthma first aid and assist someone having a severe attack by knowing how to carry out asthma first aid. The Asthma Foundation of Victoria provides free curriculum resources to both primary and secondary school children (see Further Resources).

3. "In Their Shoes" - stories from children/young people with the condition

“Having asthma does not make me different from any other teenager. My choice in sports and activities is not limited in any way and does not differ from anyone else. However at times when my asthma is out of control I feel breathless and wheezy and very frightened. Sometimes I do not want to use my medication at school, as I feel embarrassed. I have had to go to hospital when my asthma was really bad and I have missed a lot of school over the years with my asthma. My asthma seems to get bad when I get a cold or chest infection and during the winter. I also get asthma when I am near people who are smoking and that can be hard when I go to parties with my friends. My Mum annoys me the way she makes sure I have my medication with me every time I go out, but I guess she is worried that I might need it. My life is good and me and my asthma just tag along. I am a normal 17 year old girl enjoying an active fun life to my full potential.”

“I had asthma when I was younger. It frightened me and it frightened my Mum when I couldn’t breathe. I changed primary schools because of asthma. At my first school none of the teachers seemed to care and no-one helped when I got into trouble breathing. My Mum got cross because she had told them what needed to be done a lot of times. I went to an 'Asthma Friendly School' and it was different. The first time something happened in class, the teacher dropped everything and got my medication.

My asthma has improved as I got older. I am 13 now and in secondary college. I don't even get asthma if I get a cold, but I still remember what it was like not to breathe.”
**C: STRATEGIES FOR SCHOOLS/TEACHERS**

1. Overview of strategies for schools.

All schools are encouraged to become an Asthma Friendly School. An Asthma Friendly School is one that adopts and works towards strategies that actively support the whole school community in the management of asthma. Call the Asthma Foundation of Victoria for information about becoming Asthma Friendly, or visit the Asthma Friendly Schools website www.asthmafriendlyschools.org.au

To care for a child with asthma all schools should endeavour to:

- Always ensure there is a written Asthma Action Plan for each child with asthma kept in a central location. This will help all school staff to know how to recognise worsening asthma symptoms, how to treat them quickly and when to seek medical help. http://www.asthma.org.au/Portals/0/School%20AAP%20Sept%202008.doc
- There is also a School Camp Asthma Action Plan. There are 2 forms for this plan, one goes out at the start of the year, and the other is to be returned the day before camp. The second form tells the school if the student has been unwell and/or had an asthma attack in the last 2 weeks, and therefore may be more prone to experiencing asthma whilst on camp.

School Camp Asthma Action Plan FORM 1
http://www.asthma.org.au/Portals/0/School%20Camp%20AAP%20Sept%202008.doc

School Camp Asthma Action Plan FORM 2
http://www.asthma.org.au/Portals/0/School%20Camp%20AAP%20Form%202%20Sept%202008.doc

**Know how to carry out Asthma First Aid:**

Follow the 4 Step Asthma Emergency First Aid Plan below:

**Step 1:** Sit the person upright and give reassurance.
**Step 2:** Without delay give 4 separate puffs of a blue reliever (Airomir, Asmol, Bricanyl, Epaq or Ventolin). The medication is best given one puff at a time via a spacer *.
**Step 3:** Wait 4 minutes
**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 (Dial 000) and state that the person is having an asthma attack (call an ambulance at anytime of the 4 step plan if you are concerned about the person’s condition). Continuously repeat steps 2 and 3 while waiting for the ambulance.

*Just use the puffer on its own if you don’t have a spacer.

Asthma First Aid posters are available to display in suitable locations around your school. To order your copy please phone The Asthma Foundation of Victoria (03) 9326 7088 or email schools@asthma.org.au

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2. Link(s) to useful other online resources for schools on strategies in responding to a child/young person with this condition

The Asthma Foundation of Victoria has a HelpLine available Monday to Friday, from 9:30am to 3:00pm.

If you have any asthma related questions ring 9326 7088, or toll free 1800 645 130.


Asthma: take control; great tips for teenagers; a multi-page brochure available in pdf version here: http://www.asthma.org.au/Portals/0/AsthmaTakeControl_B_0706.pdf


D: FURTHER INFORMATION

1. Organisations, including services and resources available

The Asthma Foundation of Victoria has a HelpLine available Monday to Friday, from 9:30am to 3:00pm.

If you have any asthma related questions ring 9326 7088, or toll free 1800 645 130

Video’s/DVDs: Curriculum Resources

Brenda’s Story

This DVD is available free to primary schools and provides a realistic story of a young girl Brenda, who has an episode of exercise induced asthma in the school setting. It identifies and prompts discussion on where asthma occurs in the body, asthma symptoms, asthma triggers, subsequent treatment including Asthma First Aid and medication required for an asthma attack. It also addresses self management and preventative strategies for asthma management. Teaching Resources are available to accompany the DVD on the Asthma Foundation of Victoria website www.asthma.org.au.

Running Short

This DVD is a free resource available to secondary schools. It tells a story about Patrick, a cross-country runner whose dream is to make the cross-country state championships. He has asthma, but does not want anyone to know. So when his friend Jazz finds out his secret, what will be at risk – his life or the title? The DVD identifies issues with adolescent asthma, including embarrassment, peer-pressure and smoking. There is also a special guest appearance from Olympic Runner Kyle Vander-Kuyp. Accompanying lesson plans can be downloaded from the Asthma Foundation of Victoria’s website in early 2009.

Get a Life

Understanding and managing asthma can be a very daunting for a young person who wants to get out and enjoy life. This video has been produced with the support of young people to know what asthma is and how to manage it. This video has some simple but effective strategies for living with asthma and shows how to manage asthma during an asthma attack (available through the Asthma Foundation of Victoria, 1800 645 130).
Speaking from Experience

Asthma is the most common chronic illness in children and adolescents and the leading cause of childhood admission to hospitals. In this Speaking From Experience video parents and young people themselves offer candid accounts of their experiences surrounding diagnosis, treatment, schooling, medication, self-management and their thoughts of the future (available through the Asthma Foundation of Victoria, 1800 645 130). This is also now available in DVD version.

Why me

This video explains what asthma is and what you need to do to continue living a healthy, normal life. Real life case studies provide excellent examples and latest treatments are outlined. Why me? – Asthma was produced with the guidance of the Asthma Foundation of Victoria and the National Asthma Council (NAC). You can call your local Asthma Foundation on 1800 645 130 or visit the NAC website at www.nationalasthma.org.au

Reading:

Asthma and Allergies for Dummies, written in collaboration between the Asthma Foundation of Victoria and Dr William E., Berger (2003).

An easy to read resource that outlines everything you need to know about allergy, asthma and more (available through the Asthma Foundation of Victoria, 1800 645 130).

Know Your Asthma, a comprehensive guide for those with Asthma, their families and carers. Written by Christine Jenkins (2005)

Can you find trigger, is a big book written for children under six. The book looks at the different triggers of asthma.

The Asthma Foundation of Victoria has many brochures and information sheets available on request. Most are also available on the Asthma Foundation of Victoria website www.asthma.org.au