Best Practice
Asthma
Management
Guidelines for
Primary Schools
in Ireland
This asthma guideline is for school staff, school principals and others in primary schools in Ireland who want to:

1. Find out about asthma in school aged children
2. Develop a comprehensive policy for managing asthma in school
3. Develop a safe environment for children with asthma where they can reach their educational potential

AUTHORS

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Why study asthma?
– the Irish experience

The Asthma Society of Ireland conducted a study of 150 primary school principals around Ireland on the current management of asthma in primary schools.

- 85% of Irish schools studied have children with asthma attending
- 81% of schools surveyed do not have specific guidelines for asthma sufferers
- A quarter of schools surveyed claim that they have had to deal at some point with an acute asthmatic attack
- Over 80% of school staff would find more information on asthma helpful in understanding the condition
- Only a third of schools surveyed said that they talk to parents of children with asthma on an annual basis

Based on these findings, the Asthma Society of Ireland has developed the Best Practice Asthma Management Guidelines for Primary Schools in Ireland.
1. What is asthma?

Asthma is reversible airways obstruction. It is a common condition affecting airways in the lungs.

Children with asthma have airways that are red and sensitive i.e. "inflamed". They are easily irritated when they are exposed to asthma "triggers" e.g. the common cold.

Symptoms include cough, wheeze, shortness of breath and chest tightness. Some or all of these symptoms may be present in any child. Asthma varies in severity. Some children can be almost symptom free with only an occasional cough or wheeze while others can be very symptomatic.

What does asthma feel like?
Quotes from children with asthma. "It feels like someone is standing on my chest", "It feels like I am being squashed".

What are “asthma triggers”?
Asthma triggers can be anything that irritate the airways and "trigger the onset of asthma symptoms" (cough, wheeze, shortness of breath). Common triggers include the common cold, chest infections, house dust mite, exercise, cigarette smoke, animal dander and stress. Each child has different triggers. Identification and avoidance of triggers is important for each child.
2. What happens during an asthma attack?

During an asthma attack children may cough, wheeze, have difficulty breathing or be short of breath. Symptoms occur because the lining of the airways of the lungs begin to swell. Mucus is secreted and the muscles that surround the airway shorten and tighten. These three processes all narrow the airways making it more difficult to breathe. Reliever medications help to reverse this process.
Asthma medications

Asthma medication is usually given by inhalers with a spacer device and can be used at almost any age. Sometimes inhalers are used in combination with oral medication to control symptoms. Inhalers are divided into two main groups: Relievers and Preventers.

**Reliever Inhalers**

Reliever inhalers, generally blue in colour, are taken immediately when symptoms occur during an acute exacerbation of asthma. They work quickly to relax the muscles around the airways. This enables the airways to open wider and it becomes easier to breathe again. Common relievers include "ventolin" (salbutamol), "bricanyl" (terbutaline) and "atrovent" (ipratroprium-bromide).

During an exacerbation of asthma a child may need to take their reliever inhaler up to four times a day until their symptoms have resolved. Once their symptoms are controlled they can discontinue their reliever and return to using it on an "as needed basis" only. Children with exercise triggered asthma may take their reliever medication before playing sport/PE class.

**Preventer Inhalers**

A) Inhaled Corticosteroids Alone

Preventer inhalers are taken every day even when the child's symptoms are well controlled. They act to make the airways less "inflamed/sensitive" and less reactive to asthma triggers. This means that when a child is exposed to asthma triggers he/she is less likely to develop symptoms because the airways are less twitchy and raw. Common names of inhaled corticosteroid preventers include "becotide" (beclomethasone), "pulmicort" (budesonide), and "flixotide" (fluticasone). The steroid based preventers are generally low dose and safe when used under a doctor's guidance. A child washes out his/her mouth after taking them to prevent the excess being absorbed through the lining of the mouth and the development of oral thrush (oral candidiasis). They are usually taken in the morning and evening and therefore should not be needed during school hours.
Preventer Inhalers cont’d

B) Combination inhalers: steroid plus a long acting reliever
Combination inhalers incorporate both a "long acting reliever" and an inhaled corticosteroid preventer medication. They are taken twice a day, morning and evening. Common names of combination inhalers include “symbicort” (budesonide and formoterol) and “seretide” (fluticasone and salmeterol).

Types of inhalers
Different types of inhalers exist including metered dose inhalers (MDI’s/evohaler), diskus and turbohaler devices. The choice of device depends on the child’s age and inhaler technique. Spacer devices are always used together with MDI’s / evohalers in children but no spacer device is needed with the diskus or turbohaler.

Oral medication (tablets)
Some children are prescribed oral medication in addition to inhalers to control asthma symptoms. Groups of oral preventer medications include
- Leukotrine receptor antagonists eg singulair (montelukast) and accolate (zafirlukast)
- Xanthine theophylline eg slophyllin
These are generally taken outside school hours.
Oral steroids are rarely found in the school environment. They give a much higher dose of steroid than inhaled corticosteroids. During an exacerbation, the doctor may prescribe a 5-day (or longer) course of oral steroids to control severe symptoms.

Spacer devices
Spacer devices make metered dose inhalers easier to use and more effective. They enable more of the medication to reach the site of action in the lung. Because of the coordination required, children under ten to twelve years often cannot use the MDI/evohaler properly without spacer devices. Spacer devices will often be found at the school.
Nebulisers

Normally children do not need to use nebulisers at school because the majority of asthmatics have good symptom control using inhalers and spacer devices, plus or minus oral preventor medication.

Examples of Asthma inhalers and spacer device:
3. What to do if a child has an asthma attack

“The Five Minute Rule”

1. Ensure the reliever inhaler is taken immediately. This is usually blue and opens up narrowed air passages.
2. Sit the child up and loosen tight clothing.
3. Stay calm. Attacks may be frightening and it is important to stay calm.
4. If no immediate improvement during an attack, continue to take the reliever inhaler every minute for five minutes or until symptoms improve: two puffs if MDI/evohaler or one puff if turbohaler.
5. If symptoms do not improve in five minutes, or if you are in doubt, call 999 or a doctor urgently. Continue to give reliever inhaler until help arrives or symptoms improve.
4. Asthma in PE and school sports

Full participation in PE and school sports should be the goal for all but the most severely affected children with asthma. However, many children have “exercise triggered asthma” and experience asthma symptoms during exercise. Teachers taking PE class have an important role in supporting and encouraging pupils with asthma. They should:

- Ensure they know which children in the class have asthma
- Be encouraging and supportive to pupils with asthma
- Remind children with exercise induced asthma that some may need to take their reliever ten to fifteen minutes before the start of PE
- Ensure children bring their reliever inhalers (generally blue) to the gym, sports field or swimming pool
- Ensure that children who feel they need their asthma medication take their reliever and rest until they feel better
- Speak to parents if they are concerned a child has undiagnosed asthma
- Speak to parents or GP to allay any concerns or fears about a child with asthma participating in PE
5. What to do when a child with asthma joins your class

If your school has an asthma guideline, ensure you are familiar with it, otherwise take the following steps:

- Enquire from parents about their child's asthma control and current treatment. This information can be recorded on a school asthma record sheet.
- Allow the child free access to their reliever medication: older children should be allowed to carry their relievers in their pocket and in the case of younger children the reliever should be kept in the classroom in an easily accessible location. Relievers should never be locked away.
- Before exercise, remind the child to carry his/her medication. They may be shy about this, encourage positive attitudes towards pupils with medical conditions.
- On school trips encourage the child to carry his/her medication at all times. Include this information on school circulars to parents.
- Inform the child's parents if the child has an asthma exacerbation or uses their reliever medication.
- If concerned about a child with “severe symptoms” e.g. missing school or tired in class secondary to disturbed sleep from coughing, speak with parents. Some children with severe asthma may require extra support due to days lost.
How to develop good school asthma management guidelines

The main principles of school asthma management guidelines should:

- Recognise that asthma is an important condition affecting many school children and welcome all pupils with asthma.
- Ensure that children with asthma participate fully in all aspects of school life including PE and sports.
- Recognise that immediate access to reliever inhalers is vital.
- Ensure records of children with asthma and the medication they take are kept.
- Ensure the school environment is favourable to children with asthma.
- Outline what to do in the event of an exacerbation of asthma.
- Work in partnership with all interested parties including school staff, parents, doctors, nurses and children to ensure the school asthma management guidelines are implemented and maintained successfully.

An example of school asthma management guidelines can be found at the back of this booklet.
7. Your questions answered

Dealing with medication

Q) Where should the school keep the reliever medication?
 Immediate access to reliever medication is essential. A delay in administering reliever medication can cause an increase in symptoms. Once a child is old enough (usually seven years upward) they can carry the reliever with them in their pocket. Younger children's inhalers should be kept in an easily accessible place in the classroom e.g. on a spice rack, clearly labelled. The reliever and spacer device should be accessible to the child at all times during PE, break time or on school tours. Never lock inhalers away from the child.

Q) What happens if a child takes too much reliever medication?
 Reliever medication is generally safe and teachers need not worry that a child may overdose on their reliever inhaler. If a child takes many doses, they may experience an increased heart rate or tremor but these effects are temporary only. Parents should always be informed when a child has used their reliever inhaler.

Q) What if a child without asthma experiments with a reliever inhaler?
 This should not be harmful. If they take many doses they may experience a fast heart rate or tremor but these symptoms are temporary only. Children should be warned against taking any medication unless administered by an adult.

Q) Do inhalers go “out of date”?
 Yes they do. Parents are responsible for ensuring that their child's medication is within the expiry date. Best practice would be that a named person within the school would be responsible for checking the expiry date of children's spare inhalers.

Q) What happens if a child forgets their reliever inhaler?
 The Asthma Society of Ireland would like to see an emergency reliever inhaler and spacer device in every school accompanied by a clear protocol on how and when to use it. Current law is that each inhaler is prescribed for an individual patient only and cannot be used by anyone else.
Q) Should a child with asthma use another child’s inhaler if they experience asthma symptoms and their reliever (or spare) is not available?

This should never happen because a child’s reliever inhaler is prescribed for use by an individual child only and should not be used by anyone else. Thus the Asthma Society of Ireland is legally unable to recommend this practice. In an emergency situation when a pupil is having an asthma attack, using another child’s reliever inhaler is preferable to being unable to give any medication but this should only occur in an emergency situation.

Questions about record keeping

Q) Why is an asthma register important?

It is important to identify all children in the school with asthma to ensure they keep their reliever inhaler medication with them at school. This enables all school staff to be aware of which children have asthma and may need treatment.

Q) How often should the register be updated?

All parents should be asked annually if their child has asthma (see draft letter to parents on page 18). It is the parent’s responsibility to provide the school with information regarding what medication the child needs to take during the school day. Best practice would be that a member of school staff would check that all spare reliever inhalers are not out of date.

Questions about children with more severe asthma

Q) What should happen if a child with asthma is falling behind with lessons because of “missed school days”?

If a teacher is concerned about a pupil they should talk to the child’s parents. Many children with asthma do miss days at school or are tired in class because of severe asthma symptoms or poorly controlled asthma. Their symptoms can often be improved by review at the GP regarding compliance with medication, appropriate dose of medication, correct inhaler technique and trigger avoidance.
Questions about making the school environment “asthma friendly”

Q) Should asthma be included in the national curriculum or school syllabus?
The Asthma Society of Ireland recommends that all pupils should be taught about asthma. This can be incorporated into several areas of the school curriculum, including health, science/biology, history, geography and PE.

Q) Do school staff need training?
The Asthma Society of Ireland feels it is important that all school staff who come into contact with children who have asthma are trained and that this training is updated regularly. For information about training contact the Asthma Society of Ireland.

The legal positions of teachers and school staff
The Asthma Society of Ireland believes children with asthma should be allowed to take their asthma medication whenever they feel the need. There is no legal or contractual duty on school staff to administer asthma medication or supervise a pupil taking it unless they have been specifically contracted to do so.

In emergency situations
In an emergency situation e.g. an unexpected acute exacerbation of asthma, school staff are expected to act as any reasonable or prudent parent would. This may include administering medication.
Example of a school asthma management guideline:

A) This school recognises that asthma is an important condition affecting many school age children and positively welcomes all pupils with asthma.

B) This school encourages children with asthma to achieve their full potential in all aspects of school life by having clear guidelines that are understood by staff and pupils.

C) Medication:
   Immediate access to reliever inhalers is vital.
   - Older children are encouraged to carry their reliever inhaler, while reliever inhalers of younger children are kept easily accessible in the classroom
   - Parents are asked to ensure that the school is provided with a labelled reliever inhaler and spacer device which the class teacher holds separately in case the child forgets or loses his/hers
   - All school staff will let children take their own medication when they need to

**School staff:**
Are not expected to administer medication to children except in an emergency, however many of our staff are happy to do this.

D) Record keeping:
   - At the beginning of the school year or when a child joins the school, parents are asked if their child has asthma.
   - The school asthma record sheet is given to parents of children with asthma and filled out by the child’s GP or asthma nurse.
   - School asthma record sheets are sent to parents annually to be updated. If a child’s medication changes parents are asked to inform the school teacher.

E) PE:
   - Participation in sport is an important part of school life.
   - Children with asthma are encouraged to participate fully in PE.
   - Teachers will remind pupils with asthma to complete a warm up of a couple of short sprints over five minutes before the lesson and that some children may need to take their reliever approx. 10 minutes before the start of a PE class.
Each child's inhalers are labelled and kept on site at the lesson. Children are encouraged to use their inhaler during PE class if they need it.

**F) The school environment:**
- The school ensures the school environment is favourable to children with asthma by not keeping furry or feathery pets and having a non-smoking policy. Chemicals in science and art lessons that are potential triggers of asthma are avoided as far as possible.

**G) Making the school “asthma friendly”:**
- Incorporate asthma into the curriculum: The school ensures that all pupils understand asthma. Asthma can be included in science, geography, history and PE class.

**H) When a child is falling behind in lessons:**
- If a child is missing lots of school days or is tired in class secondary to disturbed sleep from coughing, the class teacher will talk with parents. Some children may have special educational needs because of asthma. Their medication may need to be adjusted by their GP.

**I) Asthma attack:**
- The school and school staff follow the below procedure which should be clearly displayed in all classrooms in the event of an asthma attack.

"The Five Minute Rule"

1. Ensure the reliever inhaler is taken immediately. This is usually blue and opens up narrowed air passages.
2. Sit the child up and loosen tight clothing.
3. Stay calm. Attacks may be frightening and it is important to stay calm.
4. If no immediate improvement during an attack, continue to take the reliever inhaler every minute for five minutes or until symptoms improve: two puffs if MDI/evohaler or one puff if turbohaler.
5. If symptoms do not improve in five minutes, or if you are in doubt, call 999 or a doctor urgently. Continue to give reliever inhaler until help arrives or symptoms improve.
Re: Draft letter to parents

Dear Parent,

I am pleased to advise you that this school takes its responsibility to pupils with asthma very seriously. With advice from the Asthma Society of Ireland we have recently established new school asthma management guidelines for use by school staff.

As part of the accepted good practice, we are now asking all parents of children with asthma to help us complete a school asthma record sheet for their son/daughter. Please complete the enclosed asthma record sheet as soon as possible and return it to the class teacher.

The completed asthma record sheet will have details of the pupil’s current treatment and also what steps to take if they should have an asthma attack at school. The asthma record sheet will help school staff to ensure that your child with asthma receives the best possible treatment at all times.

If your child does not have asthma or is not on inhalers please return the asthma record sheet stating these facts.

Thank you for your co-operation in this important matter.

Yours sincerely

Principal
Re: Primary school asthma record sheet

Child's Name:__________________________________________________________

Address:______________________________________________________________

Parents'/Guardians' Phone:______________________________________________

Home:________________________________________________________________

Mother's work: Mobile:__________________________________________________

Father's work: Mobile:__________________________________________________

GP's Name: Phone:_______________________________________________________

Address:______________________________________________________________

Hospital: Chart No:______________________________________________________

Reliver Medication when needed:

1. For sudden chest tightness, wheeze, shortness of breath, cough.
2. In some children: 10 minutes before exercise or PE class.

Name, dose and how taken:________________________________________________________________

Expiry date checked:____________________________________________________________________

If symptoms do not improve, despite instituting the "5 minute rule", call 999 or a doctor immediately.

Signed:______________________________________________________________________________
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