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### Asthma in Ireland



Ireland has the fourth highest rate of asthma in the world



Children miss an average of 10 school days a year due to asthma



1 in 5 children in Ireland have asthma



**60%** of people with asthma do not have their asthma under control



Around **20,000** people visit hospital due to asthma every year



More than one person a week dies from asthma

### Introduction



This booklet is an educational resource for teachers and school staff to enable you to better understand asthma and the impact that it can have on your students.

Children with asthma miss an average of ten days of school per year as a result of asthma so it is one of the leading causes of school absenteeism. It is also one of the leading causes of children sitting out of PE classes or sports activities. With one in five children having asthma, most classrooms in Ireland have at least one student with asthma, if not more.

This booklet includes details on asthma symptoms, triggers, treatments, asthma emergencies and exercising with asthma. The booklet is part of the Asthma Society's Asthma Friendly Schools Programme which has been developed to provide a range of supports to schools, students and parents/carers and to recognise the valuable role that schools play in supporting and empowering students with asthma.

For more details on the Asthma Friendly Schools Programme, go to page 17



World Asthma Day takes place every May; why not celebrate your schools Asthma Friendly School Award in May this year by wearing blue and raising funds for the Asthma Society?





### What is asthma?

# Asthma is a common chronic disease which inflames the airways.

The airways are the small tubes that carry air in and out of the lungs.

Asthma causes the airways to become over-sensitive and react to things they wouldn't normally react to, such as cold air or dust mites – even family pets.

These are called triggers.

When asthma symptoms are triggered the muscles around the wall of the airways tighten, making them narrow. The lining of the airways also swells and sticky mucus is produced, clogging up the already narrowed airways. With the airways narrow and clogged with mucus, it becomes difficult to breathe.

### What are the symptoms of asthma?

The symptoms of asthma are one OR any combination of:

- Shortness of breath
- Wheezing
- Chest tightness
- Coughing

### What causes asthma?

The exact causes of asthma are still unknown. Asthma usually starts in early childhood, but sometimes it develops at later stages in life. Asthma can run in families and children are more likely to have asthma if they have a parent or parents with asthma. Asthma is linked to other allergic diseases and people with asthma often suffer from conditions such as eczema and hay fever.



### When a student with asthma joins your class

- Familiarise yourself with the school's asthma policy.
- Make sure parents have a copy of the school's asthma policy and that the asthma register is updated.
- Allow students access to their reliever inhaler (usually blue) at all times, including during school trips, sports and PE. Relievers should never be locked away.
- Help younger students take their medication if necessary.
- Tell parents when their child has an attack or needs their reliever inhaler in school and encourage older students to tell you or another staff member if they use their reliever.

- Speak to parents about concerns over missed days, tiredness in class due to night time symptoms or lack of concentration due to asthma.
- Students with severe or poorly controlled asthma may require extra support due to missed school days.
- Monitor students with asthma to ensure they don't feel excluded or experience bullying.
- Provide opportunities to learn about asthma in class.
- Register your interest in becoming an Asthma Friendly School with the Asthma Society of Ireland.





Asthma Friendly Schools





Asthma Society of Ireland

### Asthma Triggers



### Common asthma triggers

- Cigarette smoke
- Colds and flu
- Pollen
- Mould & fungal spores
- Air pollution
- Dust mites
- Weather changes
- Animal fur or feathers
- Exercise
- Stress/anxiety/excitement

### Other triggers found in schools

- Chemical fumes/detergents
- Perfumes
- Aerosols
- Chalk dust



from the App store

### Avoiding triggers at schools

Once you know what triggers someone's asthma, you can take practical steps to reduce their impact.

- Damp dust classrooms regularly to get rid of mould, dust mites and pollen.
- Damp dust chalk boards or use whitehoards.
- Air classrooms to avoid mould and condensation.
- Heating and ventilation systems should be well maintained.
- Make sure changing rooms are well ventilated.
- Don't keep furry or feathery pets in the classroom.
- Try to avoid fumes in science and art classes.
- Rigorously enforce a non smoking policy on school grounds.

- Keep plants that release high amounts of pollen out of classrooms and away from play areas.
- Help students with time management and relaxation techniques to avoid stress.
- Use non-latex gloves.
- Make sure that play areas, yards and sports fields are free of piles of autumn leaves as they are full of mould and fungal spores.
- Avoid mowing sports fields or grassy areas during school hours.
- Avoid opening windows and allow students with an allergy to pollen to stay indoors during peak pollen times, such as during and after thunderstorms.











Types of Pollen and 20 types of spores that cause hayfever

Asthma Society of Ireland

### **Asthma Treatments**



It is important to be aware of the different medication that each student is taking, and how often they need to take them.

There are two main types of treatments for asthma. Relievers work to relieve symptoms when they happen, while controllers help to control symptoms and stop them happening.

#### Relievers

When reliever medication is breathed in, it relaxes the muscles around the airways, allowing them to widen and making it easier to breathe. Reliever inhalers are used when symptoms get worse or during an asthma attack. Everyone with asthma should have a reliever inhaler and should keep it with them at all times.



#### Facts about relievers

- Reliever inhalers are usually blue.
- Reliever inhalers are used in an emergency.
- Reliever inhalers are sometimes referred to as 'rescue medication'.
- They work very quickly to ease symptoms.
- Relievers can be taken in advance of coming in contact with an asthma trigger e.g. before exercise.
- Reliever medication is safe and has few side effects. Some relievers may slightly increase heart rate, or cause mild tremors but these side effects are temporary and should not cause concern.



Top Tip: Always check the device for the expiry date.

### **Controllers**

Controller inhalers are used every day, even when someone is feeling well.
Controller medication contains a steroid called a corticosteroid, this builds up over a period of time to reduce swelling in the airways and stop symptoms developing. Its action starts almost immediately but it only reaches its full effect over a period of time and it is therefore important to take it every day.

A student's treatment plan may change from time to time, so it is important to be up to date with their personal asthma action plan.



Top Tip: If an inhaler has not been used for some time, it may need to be 'primed'- spray two puffs into the air before administering.

### Facts about controllers

- Controller inhalers vary in colour but are usually brown.
- Controller inhalers should be taken everyday, even when someone is feeling well.
- The effect of controller inhalers builds up over time to reduce symptoms.
- Controllers are usually taken in the morning and evening so are less likely to be taken during school hours than relievers.
- The steroids in controller inhalers are similar to those found naturally in the body and should not be confused with anabolic steroids, which are sometimes used illegally in sport.
- Sometimes using controller medication can cause hoarseness or a mouth infection called thrush so it is important that students rinse their mouths after use.



### **Combination inhalers**

Some people may be prescribed a combination inhaler. Combination inhalers give a dose of long-acting reliever medication and a dose of controller medication at the same time. It is important that students rinse their mouths after use.

#### **Asthma tablets**

Tablets are prescribed as well as inhalers in certain circumstances but it is rare that students would need to take tablets for asthma during school hours.

### **Inhalers and spacers**

There are a wide range of different inhalers and spacers available for the treatment of asthma. Using them correctly is a key step to good asthma control, so it is important that you familiarise yourself with the correct technique for the inhalers and spacers used by your students.

Check out our instructional videos at asthma.ie.



#### What is an inhaler?

Inhalers are the small devices that release medication which is breathed directly into the lungs. Inhalers can be used for both reliever and controller medication.

### What is a spacer?

A spacer is a plastic container that is used with some inhalers to make them easier to use, more effective and reduce the risk of side effects such as oral thrush. A spacer has an opening at one end to insert the inhaler and a mouthpiece or mask at the other end to breathe in the medicine. Everyone using a metered dose inhaler should use a spacer with their inhaler, especially children.



Top Tip: Clearly label all inhalers and spacers with a student's name Exercise is important for everyone, but especially for people with asthma. Exercise can be an asthma trigger, but students should be encouraged to take part in sports classes and PE.

Most students with asthma will be able to take part in PE and sports, once their asthma is well controlled.

#### Before exercise

- Know which students in your class have asthma and what their triggers are.
- If exercise is a trigger, students should take their reliever inhaler 15 minutes before exercise.
- Always start with warm-up exercises.
- Make sure you know what to do during an asthma attack and carry an asthma attack card with you.
- Speak to parents if students have asthma symptoms (e.g. cough, chest pain or wheeze) during exercise but have not been diagnosed with asthma.

### **During exercise**

- Make sure students have their reliever inhaler with them at all times.
- Avoid asthma triggers such as dust, pollution or pollen.
- If a student needs their reliever inhaler, they should stop exercising until their symptoms subside.
- If a student needs to take a break because of asthma, involve them in less strenuous activities such as refereeing, coaching or keeping score.

#### After exercise

Always finish with cool-down exercises.

For more information on exercise and asthma, visit asthma.ie to access our 'reach your peak with asthma' materials.

asthma.ie

### Recognising an Asthma Attack



Asthma attacks can be frightening and dangerous experiences. They can happen when symptoms get worse over a number of days or hours or can happen suddenly, even when someone is taking their medication and avoiding triggers.

If a student has an asthma attack or you suspect they are having an attack, you should take immediate action.

If someone is having an asthma attack they will have one OR a combination of the symptoms below:

- Cough
- Wheeze
- Shortness of breath
- Chest tightness
- Too breathless to finish a sentence
- Too breathless to walk, sleep or eat
- Lips turning blue.

### In an asthma attack immediately follow the 5 step rule

- 1. Take two puffs of reliever inhaler (usually blue), one puff at a time
- 2. Sit up and stay calm
- 3. Take slow steady breaths
- 4. If there is no improvement, take one puff of reliever inhaler every minute:
  - Adults and children over six years can take up to ten puffs in ten minutes
  - Children under six years can take up to six puffs in ten minutes
- 5. Call 999 or 112 if symptoms do not improve after ten minutes or you are worried. Repeat step 4 if an ambulance does not arrive within ten minutes.

### If a student is having an asthma attack:

- Extra puffs of reliever are safe
- Use a spacer if possible
- Don't lie the student down or put your arm around them
- Don't leave the student on their own
- You should not take students to hospital in your own car if possible; however, if it is necessary another adult should accompany you.









## Frequently Asked Questions

# 1. What happens if a student takes too much reliever medication?

Reliever medication is safe and students cannot overdose on it. Inhaling large amounts of reliever medication can result in an increased heart rate or tremor, but these effects are temporary.

# 2. What if a student without asthma takes reliever medication?

It is not advisable to take reliever medication if you do not have asthma. Whilst there is no risk of permanent harm, it may cause an increased heart rate or tremor (slight shakiness).

### 3. Do inhalers go out of date?

Inhalers do go out of date. The expiration date of medication should be kept on a student's asthma record sheet and parents should be given advance notice when medication needs to be replaced.

# 4. What if a student forgets their medication?

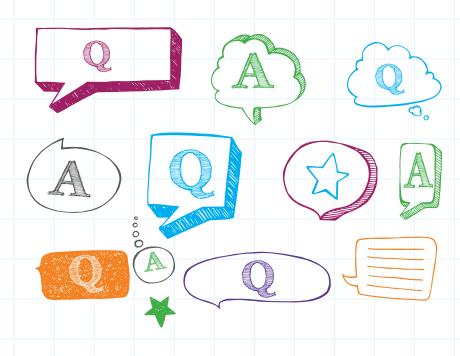
Each student should have spare medication and a spacer in school in case of emergency or if they forget their medication.

# 5. In an emergency is it ok to give a student someone else's reliever medication?

If each student has spare medication in school, as is advised by the Asthma Society of Ireland, there should be no need for students to share medication. However, during an emergency using someone else's reliever medication is preferable to not treating an asthma attack.

# 6. How do I know if a child has undiagnosed asthma?

Signs of asthma are regular coughing, wheezing, chest tightness or shortness of breath. Students may have one or any combination of these symptoms. Be especially vigilant for students who get asthma symptoms after exercising or coming into contact with an asthma trigger, such as dust, mould or pollen. Students with undiagnosed asthma may be tired from night time symptoms and are likely to have colds that last longer than normal or go down to their chest.



# 7. When should students miss school due to asthma?

Minor symptoms, such as light coughing or wheezing, can be treated with medication and should not mean that students should miss school. Persistent or regular symptoms may warrant time off school. If a student is regularly missing school because of asthma they should go for an asthma review with their GP.

# 8. What if a student is falling behind because of asthma?

If you are concerned about a student's studies suffering because of asthma, talk to their parents. Poorly controlled asthma can be improved by an asthma review by their doctor.

# 9. Should asthma be included in the school syllabus?

This can be incorporated into health or science classes e.g. through the Asthma Society's E-Learning programmes.

### 10. Do school staff need training?

The Asthma Society of Ireland recommends that staff receive asthma training and we have an Asthma Friendly Schools Programme to help school staff better understand and support students with asthma.

### **Further Information**









### Would you like more information?

To learn more about becoming an Asthma Friendly School, contact the Health Promotion Team or see the next page for further details. If you would like further information on asthma or allergies please contact us. You can speak to one of our asthma nurse specialists and get one-to-one advice. We also have a range of information available on our website, with everything you need to know about asthma in Ireland.

### The Asthma Adviceline

If you would like further information or you have questions that weren't answered by this booklet, please call our Asthma Adviceline on 1850 44 54 64, text the nurse on 086 057 1838 or email nurse@asthma.ie. Our nurses will answer your queries and give you personalised advice.

### Asthma clinics

Our asthma clinics are held throughout the country and are free for everyone to attend. We visit locations all over Ireland, including large regional clinics and smaller clinics in community pharmacies. For more information on the dates and locations of our clinics visit asthma.ie.

### Asthma publications and resources

We have a range of publications, online videos, E-Learning programmes and an asthma App for iPhone. Our materials deal with topics including asthma in children, asthma and exercise, allergies/hay fever and much more. Call or email us to order a free copy of any of our publications or download them at asthma.ie.

## **Asthma Friendly School Award**



Our Asthma Friendly Schools Programme offers a wide range of asthma supports and resources for schools, students and parents/carers. This programme includes a teachers pack which includes an asthma policy for schools, posters, leaflets, asthma action plans and details on the Asthma Society's E-Learning programmes for primary and secondary schools in Ireland.

Participating schools can apply for a bronze, silver or gold Asthma Friendly School Award and attend our Award Ceremony at the end of the school year.

To register your interest and get your free starter pack, contact us today on 01 8178886 or email office@asthma.ie

### What You Can Do To Help Us



In Ireland, asthma affects one child in every five, that's nearly 110,000 children in primary schools and 68,000 children in secondary schools! In any classroom across the country, one can assume that there will be some children with asthma- a disease which can dramatically affect their lives.

### The Asthma Society is here to help

Our support services are empowering children across Ireland to take control of their asthma and enabling them to live a full and active life, symptom free.

Our advocacy team is also working tirelessly to lobby the government to introduce a National Asthma Programme which will ensure that every child in Ireland with asthma receives the best care possible. Our goal is to get asthma included in the Long Term Illness Scheme and in turn, remove the financial burden of asthma medication on parents.

# Fundraising is the oxygen of our organisation

The Asthma Society of Ireland is a small charity trying to tackle a huge national problem. We rely heavily on public donations to fund our work and we really need your support. Without these ongoing donations the Asthma Society cannot continue to provide its services to the 470,000 asthma-sufferers across the country who rely heavily on our support.

### What you can do to help us

We would like to invite your class or whole school to hold a fundraiser to support the work of The Asthma Society of Ireland. All money raised goes to our ongoing health promotion work in schools and communities which support children and families affected by asthma.

### Support our campaigns

We also run national awareness, advocacy and fundraising campaigns throughout the year, so keep an eye on the schools section of our website for the latest news and events.

We have lots of fun and creative ideas on our website at www.asthma.ie/getinvolved. We would be delighted to offer you advice and support when you are preparing for your event.

#### Get in touch

If you would like to know more, or would like us to visit your school, please contact us. Community Fundraising Executive on 01-5549220 or by email fundraising@asthma.ie

### Sign up for our e-zine

Our community fundraising e-zine will keep you up to date on all our activities and give you advance notice of events and campaigns we are planning. Simply email fundraising@asthma.ie with your contact details and we'll sign you up.





### Acknowledgements

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#### Disclaimer

The information contained in this publication is based on current medical knowledge, in accordance with international best practice guidelines, at the time of publication. The information is intended for use as a general guide and does not replace individual consultation by a health care professional on a case-by-case basis.

The Asthma Society of Ireland is not responsible for any injury, loss, damage or expense incurred by any individual or organisation resulting, either directly or indirectly, from any information contained in this publication.

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