







Sports & Exercise Information for People with Asthma







JOHN O'SHEA, ASTHMA SOCIETY AMBASSADOR AND REPUBLIC OF IRELAND PLAYER.

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.

About Us

The Asthma Society of Ireland is the national charity representing the more than 470,000 children and adults with asthma in Ireland.

We support asthma patients and their families by providing a wide range of high quality information and education services free of charge.

We raise awareness about asthma and the importance of good asthma management with patients and the wider public, and actively engage with healthcare professionals, government departments and third party organisations to keep asthma high on the agenda. The Asthma Society also supports research and innovative projects which investigate the causes and treatment of asthma.

The Asthma Society's goal is to optimise asthma control for all patients through services, awareness, advocacy, research and development; enabling all patients to enjoy optimal control and quality of life.

Acknowledgments

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Prof. Stephen Lane – Consultant in Respiratory Medicine, Tallaght Hospital

Dr. Richard Costello – Consultant in Respiratory Medicine, Beaumont Hospital





Contents



Reach Your Peak with Asthma

REACH YOUR PEAK WITH ASTIHMA

Introduction

Good asthma control should be achieved and maintained by most people; however evidence from our Asthma Adviceline and Asthma Clinics suggests that the extent of poorly controlled asthma in Ireland is significant.

Many people with asthma let poor asthma control prevent them from taking part in sports; others exercise despite having poor asthma control. The reasons for this are varied but can include:

- Not accepting a diagnosis of asthma
- Not complying with medication as prescribed
- Under-treatment of asthma
- Over estimation of their level of asthma control
- Not having an Asthma Management Plan
- Not treating associated conditions, such as Rhinitis.

This is what has prompted the Asthma Society to produce the Reach Your Peak booklet.

I hope this Reach Your Peak booklet will provide you with the information and resources you need to empower you to exercise and take part in sport.

Frances Guiney, Director of Patient Services, The Asthma Society of Ireland

I've had asthma since I was a kid but I haven't let it hold me back. Keeping my asthma under control has been vital in achieving my sporting goals. By following the Reach Your Peak tips and keeping your asthma under control you too can get the most out of exercise and succeed in any sport.

John O'Shea, Republic of Ireland International Soccer Player & Asthma Society of Ireland Ambassador



About Asthma



What is Asthma?

Asthma is a common inflammatory condition which affects the airways- the small tubes that carry air in and out of the lungs. Asthma causes the airways to become over-sensitive and react to factors that would normally cause no problem, such as cold air or dust. The muscles around the wall of the airway tighten, making it narrow.

The lining of the airways may swell and sticky mucus is produced, clogging up the breathing passages. When the airways narrow like this, it becomes difficult for air to flow in and out of the lungs.

Asthma and Exercise

Regular exercise is an important part of a healthy lifestyle for everyone, but especially for people with asthma. In fact, research has shown that a structured exercise regime can improve asthma control.

Exercise does not cause asthma but it can trigger asthma symptoms, particularly if your asthma is not well controlled. If your asthma is well controlled you should be able to take part fully in all forms of sport and exercise.

Symptoms

If your asthma is poorly controlled you may experience the following symptoms during exercise:

- Cough
- Wheeze
- Shortness of breath
- Chest discomfort or tightness
- Tiredness & difficulty keeping up with teammates

Triggers

Exercise can trigger asthma symptoms depending on:

The length of time you are active:

• The longer your training or exercise session, the more likely you are to experience asthma symptoms.

The intensity of the activity:

 Endurance sports, such as long distance running are more likely to cause asthma symptoms.

Your environment:

- High levels of pollen, mould and pollution in your training environment may trigger asthma symptoms.
- Chemicals, such as those found in swimming pools or ice skating rinks, may also trigger asthma symptoms.
- People with asthma are sensitive to cold and dry air. We usually breathe slowly
 through our nose which filters, warms and humidifies the air. During exercise our
 breathing rate increases and we breathe more through our mouth. Asthma symptoms
 may be triggered by cold, dry air reaching the lower airways. Asthma symptoms are
 more likely in cold, dry environments, than in warm, moist environments.

Exercise Induced Asthma

- In general, shortness of breath is not uncommon during exercise. However, sometimes
 people without asthma can temporarily experience asthma symptoms during exercise
 or shortly afterwards. This rare condition is called Exercise Induced Asthma (EIA) or
 Exercise Induced Bronchoconstriction (EIB).
- Physical activity is an important cause of asthma symptoms for most patients and for some it is the only cause. EIB typically develops 5-10 minutes after you exercise (it rarely occurs during exercise). You may experience typical asthma symptoms, or sometimes a troublesome cough, which stop by themselves within 30-45 minutes. Some forms of exercise, such as running, are more potent triggers. EIB may occur in any climatic condition, but is more common when the patient is breathing dry, cold air and less common in hot humid climates.
- Some children with asthma present only with exercise induced symptoms. In this
 group, or where there is doubt about the diagnosis, exercise testing is helpful. Your
 health care professional may perform an 8 minute running test or refer you to a
 spirometry laboratory for lung function challenge testing.

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Exercise improves lung function and is an important part of a healthy lifestyle. Asthma symptoms shouldn't stop you taking part in sport or exercise once you follow our Top Tips for Exercising with Asthma.

Top Tips for Exercising with Asthma

- **1.** Make sure that your coach and the people you exercise with know you have asthma.
- 2. Always have your reliever inhaler (usually blue) with you when you exercise.
- 3. Carry an Asthma Attack Card with you at all times, especially when you exercise. Contact the Asthma Society of Ireland for your free, handy Asthma Attack wallet card which contains the Asthma Emergency Plan '5 Step Rule', explaining what to do during an asthma attack.
- **4.** Make sure that your asthma is well controlled by taking your medication, especially your controller, every day as prescribed by your healthcare professional.
- 5. Many people with asthma also suffer from allergic rhinitis. Taking the correct precautions to manage allergic rhinitis will improve your symptoms and help keep your asthma well controlled. For more information see the Asthma Society of Ireland's booklet Asthma and Allergic Rhinitis.
- **6.** Keeping an up to date Asthma Management Plan will help you gain better control of your asthma.
- 7. Maintaining a good level of fitness means you will be able to exercise for longer without experiencing asthma symptoms. You should increase your fitness levels gradually and discuss this with your sports coach or trainer.
- **8.** Avoid exercising in areas with high pollen levels or irritant gases (e.g. car exhaust fumes) especially when there is high humidity or strong winds.
- 9. If your asthma is triggered during exercise take your reliever inhaler 15-30 minutes before warming up. (2 puffs of a Metered Dose Inhaler or one puff from a Discus or Turbohaler)



- 10. Always warm up 15-20 minutes before exercising and warm down afterwards.
- 11. Make sure that you are adequately hydrated before, during and after sports or exercise.
- 12. If you are exercising alone, make sure someone knows where you are and what time you are due to return.

If you have asthma symptoms when you exercise STOP, take your reliever medication and wait 5 minutes until you can breathe easily and you are symptom free before starting again. If your symptoms do not stop or return when you start exercising again STOP and follow the Asthma Emergency Plan '5 Step Rule'.

Asthma Emergency Plan

During an Asthma Attack follow the 5 Step Rule

- 1. Take two puffs of reliever inhaler (usually blue) immediately
- 2. Sit upright and stay calm
- **3.** Take slow steady breaths
- 4. If there is no improvement take one puff of reliever inhaler every minute
 - You can take up to 10 puffs in ten minutes
 - Children under 6 years can take up to 6 puffs in ten minutes
- 5. Call 999 or 112 if
 - Symptoms do not improve after following steps 1-4 or you are worried
 - If an ambulance does not arrive with in 10 minutes repeat Step 4.

5





Taking Part in Sport with Asthma

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Diet

A healthy balanced diet is recommended to ensure you get the nutrition you require. Research has shown that a diet high in fresh fruit and vegetables, and oily fish can have a beneficial affect on asthma symptoms.

Eating processed foods, high levels of salt or saturated fat may increase inflammation in the airways and aggravate asthma symptoms.

Maintaining a healthy weight for your height is recommended as an important part of asthma management. Research suggests that obesity can negatively affect the prevalence and severity of asthma and the response to medication. Overweight children are less likely to exercise and their asthma is difficult to control.

Competitive Sport

None of the inhaled medications commonly used for controlling asthma are banned in competitive sport; however their use may be restricted. Check with the relevant sporting body for information on banned and restricted substances.

In order for competitors to use asthma medications during competition, many sporting bodies will require objective medical evidence of:

- Asthma or
- Exercise induced bronchoconstriction (EIB)

Regulations for the use of certain medications in sport may vary depending on the relevant sporting authority. For this reason, it is important to check with the Irish Sports Council if a Therapeutic Use Exemption Certificate (TUE) is necessary.

For more information visit www.irishsportscouncil.ie

Recommended Activities for People with Asthma

People with asthma can play and succeed in sport and exercise if their asthma is well controlled. Warm weather activities and activities that need short bursts of energy, such as swimming, golf, walking or leisure cycling, are less likely to cause asthma symptoms. Cold weather activities or activities that require continuous exertion can cause asthma symptoms. Following our Top Tips for Exercising with Asthma is particularly recommended for these types of sports, such as skiing, running, soccer or hockey.

Athletic Sports

Athletic sports, such as running, jogging, walking and leisure cycling are all suitable for people with asthma once the right precautions are taken. If you have asthma and take part in athletic sports you should:

- Know what triggers your asthma. Triggers which might affect you during field sports include; cold air, pollen (from grass, trees or shrubs), exercise, air pollutants (e.g. car exhaust fumes)
- Always make sure that someone knows where you are training and what time you will return.
- Carry your reliever inhaler with you at all times.
- Consider covering your mouth and nose with a scarf when exercising in cold weather.
 This will warm and humidify the air going into your lungs.

Swimming

Swimming is a recommended activity for people with asthma. Swimming can help build up stamina and strength, especially in the respiratory muscles. Indoor pools, with their warm humid air, are ideal for people with asthma. Several studies have shown that swimming is associated with improved lung function and that chlorine did not aggravate or increase the risk of developing asthma; however the chemicals used in swimming pools may be a trigger for some people.

If you have asthma and go swimming you should:

- Know what triggers your asthma. Triggers which might affect you during swimming
 include; chemicals (e.g. chlorine) or sudden changes in temperature.
- Consider using salt water swimming pools or pools which use a chemical free water filtration system.
- Always warm up before swimming and take your reliever inhaler 15-30 minutes before warming up if required.





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Field Sports

People with asthma can participate in field sports, such as soccer, gaelic football, hurling, camogie or rugby once the right precautions are taken.

If you have asthma and play field sports you should:

- Inform your team coach that you have asthma and give them an Asthma Attack card and a copy of the Reach Your Peak booklet and poster for your sports club.
- Know what triggers your asthma. Triggers which might affect you during field sports include; cold air, pollen (from grass, trees or shrubs).
- Have your reliever and spacer in your sports bag to bring to training, matches and away fixtures.

Special Considerations

Generally people with asthma can take part in any of the sports listed below once the following advice is followed:

- Discuss your chosen sport with your health care professional and have your asthma reviewed in advance.
- Be aware of your asthma triggers
- Have a written Asthma Management Plan
- Bring adequate medication and an Asthma Attack Card with you when you exercise
- Contact the relevant sporting body
- It is beneficial to have a spacer with you in case of emergency

Scuba Diving

Medical opinion has changed in recent times to acknowledge that people with asthma can take part in scuba diving, in accordance with national regulations. Whether it is advisable for a person with asthma to scuba dive may also depend on factors such as triggers, use of reliever medication and lung function. It is important to check the local regulations of the country you are scuba diving in before your trip.

Mountaineering & Skiing

The combination of altitude, cold/dry air and exercise mean that sports such as mountaineering or skiing may trigger asthma symptoms. Downhill skiing is generally better tolerated by people with asthma than cross country skiing.

Skydiving & Bungee Jumping

You should speak with your health care professional and the relevant sporting body before taking part in skydiving or bungee jumping.





Asthma Information for Coaches & PE Teachers

Asthma Information for Coaches & PE Teachers

Full participation in PE and sport should be the goal for all except for the most severely affected people with asthma. Coaches and teachers taking PE class have an important role in supporting and encouraging students with asthma.

Before PE and sports:

- Make sure you know which students have asthma.
- Remind students with asthma that they may need to take their reliever medication 15-30 minutes before exercising.
- Avoid aerosols and scents which trigger asthma symptoms by encouraging the use of unscented and non-aerosol products in changing rooms.
- Make sure students bring their reliever and spacer to the gym, sports field or swimming pool and that they have access to them at all times.
- Speak to parents if you have concerns that a student has undiagnosed or poorly controlled asthma and advise them to visit their GP.
- Speak to parents or GP to allay any concerns or fears about asthma and exercise.
- Always have a copy of the Asthma Attack Card with you during training sessions and PE Classes and an Asthma Attack Poster in the changing room or sports club.

During PE and sports:

- Always start a session with warm up exercises.
- During training try to avoid things that trigger asthma (e.g. dust, smoke, pollen)
- Be encouraging and supportive to pupils with asthma.
- If a student has asthma symptoms while exercising they should stop the activity, take
 their reliever inhaler and wait at least five minutes or until they feel better before
 starting again.



- If a pupil has to sit out for five minutes try to keep them involved as much as possible, for example you can involve them in refereeing, coaching or taking notes.
- During an Asthma Attack follow the Asthma Emergency Plan ' 5 Step Rule' (page 6)
- Try to include pupils with severe asthma in team sports or activities that are less strenuous.
- Always end a session with warm down exercises.







Before You Exercise

Before You Exercise Check Your Asthma Control: In the last 4 weeks: You have had daytime symptoms (cough, wheeze, breathlessness) more than twice in a week. Your asthma interfered with exercise or normal activity. Your asthma interfered with your sleep. You used your reliever inhaler more than twice in a week. You have had an asthma attack. If you ticked any of the boxes above your asthma is not controlled and you should contact your doctor or nurse.

Before You Exercise Answer These Important Questions:

ls your asthma controlled?	Yes	No
Have you had an asthma review in the last 12 months?	Yes	No
Do you have a written Asthma Management Plan?	Yes	No
Do you take your controller medication every day, as prescribed?	Yes	No
Have you had your lung function tested?	Yes	No
Do you always bring your reliever inhaler with you when exercising?	Yes	No
Do you know the signs and symptoms of an asthma attack?	Yes	No
Do you know what to do during an asthma attack?	Yes	No
Can you list your triggers?	Yes	No

If you answered **NO** to any of these questions you may not be able to **Reach Your Peak** with **Asthma**. Follow our **Top Tips For Exercising With Asthma** (Page 5) and make an appointment to see your healthcare professional for advice.

13 14





Frequently Asked Questions

Frequently Asked Questions:

My 13 year old son has been prescribed a medication called Singular for his asthma symptoms which are triggered by exercise. How does Singular work?

Singular is a type of common non-steroid controller medication, with specific benefits in exercise related symptoms. This type of medication blocks the action of naturally occurring chemicals in the lungs, called leukotrienes which are potent bronchoconstrictors and cause the tightening of the airways.

The medication is available in tablets or granules. There is no way to tell who will respond to this type of medication and if there is no response in 4-6 weeks your GP may decide to discontinue the treatment.

I am a 16 year old girl who has asthma and I'm on the school hockey team. I recently started smoking and I'm wondering what effect this will have on my hockey training?

There is no doubt that smoking is bad for your health. Tobacco smoke is a common trigger for people with asthma and makes good asthma control harder to achieve.

People with asthma can play, succeed and achieve optimal gains from their fitness regime if their asthma is managed properly; however if you smoke it makes exercising much more difficult and reduces your levels of endurance. If you quit smoking, your body begins to reverse the damage caused quickly and within a week or two your levels of endurance will be increased and you will find exercise much easier.

It is never too late to stop smoking and move towards health. Speak to your GP or contact the Asthma Society of Ireland for information on services and medication available to help you quit smoking.

Why does rhinitis affect my asthma and cause a blocked nose?

Asthma and rhinitis are related conditions linked by a common airway. The air we breathe passes through our nose, at the start of our airway, and continues down the airway into the lungs. Anything that stops the free passage of air has the potential to cause problems with our breathing. A blocked or runny nose occurs because an allergen (e.g. pollen, dust mite) has triggered the inside of the nasal membranes to become inflamed. There is no cure for allergic rhinitis, but in most cases symptoms can be controlled effectively by taking the following measures:

- Take an allergy test under medical supervision to try to determine the allergen
- Allergen avoidance (see our Asthma and Allergic Rhinitis booklet for more information)
- Take your medication correctly as prescribed
- Have an asthma management review with your GP. It is important to tell your GP that allergic rhinitis triggers your asthma.
- Ask your GP or Pharmacist to advise you on developing an allergic rhinitis treatment plan.

16



Other Services To You



Our Services to You

Call the Asthma Society today to get a free copy of our other publications or download them for free at www.asthmasociety.ie



You can purchase discounted asthma devices, such as spacers and peak flow meters directly from the Asthma Society of Ireland.

Call us on 01 817 8886 to arrange for an Asthma Society of Ireland Nurse to speak at your school or sports club.

Lo-call our Asthma Adviceline on 1850 44 54 64 to speak in confidence to an Asthma Nurse.

Further Information

www.irishsportscouncil.ie

www.swimireland.ie

www.gaa.ie

www.fai.ie

www.camogie.ie

www.athleticsireland.ie

www.irishrugby.ie

www.cyclingireland.ie



Charlie Murphy, Actress and Asthma Society of Ireland Ambassador



Support



Sporting stars get on their marks for the Great Open Airways Run for asthma campaign

While exercise is a common trigger for asthma, exercise is good for everyone including people with asthma. Asthma does not mean the end of exercise. It can be treated so that everyone can reach their sporting potential.

John O' Shea, along with other household sporting names like Ronan O'Gara, has asthma.

We need to raise €160,000 each year to maintain our busy Asthma Adviceline, which is relied on particularly by parents of children and young people.

You can support us in the following ways:

We are asking you to run, walk or jog for asthma in races or fun runs in your area.



ASTHMA SOCIETY OF IRELAND We also want to encourage people with asthma to exercise regularly, to join in sports and to stay fit and healthy. We urgently need your help to support our services and so we are calling on our supporters to run any race, any time any where for asthma.

Please contact us for your **Great Open Airways** sponsorship cards and T-shirt

Call us on 01 817 8886 or email sponsor@asthmasociety.ie

Other stars who don't let asthma get in their way supporting The Asthma Society of Ireland include actress Charlie Murphy, star of RTE's Love Hate; Brian Gregan, rising 400-metre star; Ruairdhi Higgins, Derry City midfielder and Niall Carroll, World Kickboxing Champion.

Organise your own event.



The fight against asthma needs your help.

If you are a teacher, coach or student will you organise your next sports day or event of your choice to raise vital funds for the Asthma In Ireland?

For assistance in organising your fundraising event and to receive a Fundraising Pack please Call us on 01 817 8886 or email support @asthmasociety.ie





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