



Asthma and competitive swimming

This fact sheet is full of information, tips and advice about how you can help an individual compete in swimming and other disciplines, if living with asthma.

What is asthma?

Asthma is a common, chronic inflammatory condition affecting the lungs and airways. In the UK, 5.4 million people have asthma, which is a collection of related conditions that may result in wheezing, coughing, chest tightness or shortness of breath. A range of stimuli (including fumes, exercise, cold air, pollen) can lead to exacerbations but not all affect individuals in the same way. Severe asthma attacks are rare but can be life-threatening.

What competitive swimmers need to know about asthma and competitive swimming

- Exercise induced asthma is caused by the significant increase in breathing during exercise as well as the evaporation of heat and water from the airways. However, the warm air and humid environment is less likely to trigger symptoms.
- Asthma is more predominant amongst elite athletes, who experience repeated airway stress through regular training activity.
- This is particularly seen in athletes involved in endurance events and/or exposed to certain environmental conditions. For example, competitive swimmers have longer periods of exposure to chlorine related compounds (which can act as airway irritants).

- Research suggests that elite and highly trained swimmers may develop some form of 'airway dysfunction', even those with no previous respiratory complaints. Swimming has a higher prevalence of asthma as compared to other disciplines.
- It is important to note that not all wheezing or noisy breathing during/after exercise is related to asthma, there are many other possible causes. Therefore, at a high level, athletes may need an official diagnosis to confirm asthma.
- There is no evidence to suggest that this is a barrier to competitive success and it does not negatively affect lung development.

For coaches and clubs:

- **Do:** encourage athletes with symptoms of asthma (especially coughs and wheezes) to seek medical investigation/review.
- In swimming competitions, host medical services should plan to have rescue emergency asthma medications available.

Tips for competitive swimmers with asthma

Do:

- use the 'nose' test. If they notice a strong chemical smell after being in the pool environment for more than three minutes, then it may suggest an imbalance in the pool chemicals or problems with pool ventilation. They should not spend long in the water and inform the pool management
- consider training in pools that are non-chlorinated and have good ventilation to reduce stress on the airway
- suggest monitoring their 'peak flow' readings to review their asthma and identify if changes to treatment are necessary
- make sure they warm up and cool down appropriately to reduce the risk of exercise induced asthma
- consult their GP if swimming seems to make their asthma worse, it may be a sign that current treatment is not optimal.

Don't:

- train on days when their asthma signs and symptoms are troubling (reduced peak flow levels, wheeze, cough, mucus, unusual levels of breathlessness).

Always:

- keep their 'reliever' inhaler poolside.

Consider:

- using their 'reliever' inhaler (as prescribed) 10-20 minutes before starting their swim.

If they are competing abroad:

- **Remember:** different climates may affect their usual asthma control especially changes in humidity, pollen count or air quality.
- **Modify:** their inhaler use if necessary.
- **Discuss:** this with their GP or asthma nurse before they travel.

What about their medication?

- Optimal treatment is a required for competitive participation. Their GP or physician should follow the standard asthma guidelines whilst taking into account special considerations associated with sport.

- The most common asthma medications are permitted in competitive sport, but it is advisable to **check** WADA's regulations to ensure compliance, including dosages and routes of administration.
- Depending on competition level, some athletes will need to apply for a therapeutic use exemption (TUE) which permits the use of banned medications for medical reasons. See the UK anti-doping website for further information.

Additional advice

UK Anti-doping website: ukad.org.uk/

Anti-doping: britishswimming.org/performance/anti-doping/tues/

Asthma and doping control: britishswimming.org/members-resources/athletes-and-parents/asthma-and-doping-control/

Is your medication banned in sport? globaldro.com