



# 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. Approximately eight million people in the UK 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, in particular the heat and water loss from the airways. The warm air environment of a swimming pool is thought to be beneficial in this respect.
- 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 up to 50 per cent of 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.
- Not all wheezing or noisy breathing after exercise is related to asthma. Other causes of airway obstruction should be considered and athletes competing at the highest levels may need to undergo specific tests to show that they definitely have 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 pools that use non-chlorine water disinfection methods and have optimal ventilation to reduce cumulative airway stress
- make sure they understand what is normal for them. Many athletes monitor their 'peak flow' readings which might suggest if changes in treatment are needed
- 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 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/](http://ukad.org.uk/)

**Anti-doping:** [britishswimming.org/performance/swimming/anti-doping/](http://britishswimming.org/performance/swimming/anti-doping/)

**Asthma and doping control:** [britishswimming.org/members-resources/athletes-and-parents/asthma-and-doping-control/](http://britishswimming.org/members-resources/athletes-and-parents/asthma-and-doping-control/)

**Is your medication banned in sport?** [globaldro.com](http://globaldro.com)