

Let's talk about asthma

Asthma is an inflammatory disorder, where the airways become hyper-responsive and constrict easily in response to a wide range of stimuli, causing breathing difficulties. It is a common long-term condition, with 5.4 million people in the UK currently receiving treatment. It is particularly common in developed countries, where up to 10% of children have the disease. There are different types of asthma, e.g. allergic asthma, non-allergic asthma, late-onset asthma, asthma with obesity and work-related asthma.

You are likely to have asthma if you have:

- More than one of the following: regularly experience wheezing or coughing, shortness of breath, chest tightness
- Worsening of symptoms in the night or early morning
- Symptoms that vary over time and in intensity
- Symptoms that are triggered by viral infections (colds), exercise, allergen exposure, changes in weather, laughter or irritants (smoke, strong smell).

Risk factors include:

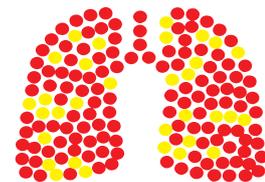
- Host factors: genetics, obesity, gender – in childhood, boys have a higher risk while in adults, the prevalence is greater in women.
- Environmental factors: exposure to allergens, infections, microorganisms, smoke, pollution, diet, paracetamol and stress can all increase the risk.

Management: The main aim is disease control - to avoid exacerbations and reduce the risk of increased illness or death. In most patients, asthma control can be achieved through both non-pharmacological (avoidance of triggers, stopping smoking, exercise, healthy diet and lifestyle) and pharmacological interventions (inhalers and medication).

Chronic Obstructive Pulmonary Disease (COPD)

Approximately 1.2 million people have a diagnosis of COPD in the UK and we have the world's 12th highest recorded deaths from the disease. COPD is characterised by airflow obstruction. It is usually a progressive breathing problem, not fully reversible (unlike asthma) and the symptoms do not change markedly over several months. Most people are not diagnosed until they are in their fifties or older. **Symptoms include:**

- Chronic progressive shortness of breath
- Chronic cough
- Regular sputum production
- Frequent winter "bronchitis"/chest infections
- Wheezing and chest tightness.



The most important cause of COPD is smoking. c.50% of all cigarette smokers will have some airflow obstruction present, while 10-20% will develop clinically-significant COPD. Pipe and cigar smoking are also associated with COPD but less so. There is an increased risk of COPD in passive smokers or those exposed to environmental tobacco smoke. Other causes include indoor and outdoor air pollution, exposure to toxins, genetic factors, infections, lung growth and development, socioeconomic status, asthma, and chronic bronchitis.

Management: Stop smoking, exercise, eat healthily, together with the use of inhalers and medication. The goals of COPD treatment are to (i) reduce long-term lung function decline (ii) prevent and treat exacerbations (iii) reduce hospitalisations and mortality (iv) relieve disabling shortness of breath (v) improve exercise tolerance and health-related quality of life.

Asthma, COPD and COVID-19

The government has released guidelines for people who would be considered **very high risk** if they caught coronavirus, because of their pre-existing severe respiratory condition. This includes severe asthma and severe COPD. Copy this into your browser:

<https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19>

If you have received a letter or text message from your doctor you should follow shielding advice (stay at home and avoid face-to-face contact for at least 12 weeks). If you have not been contacted, you should follow the social distancing rules for everyone.

Minimise your risk of catching COVID-19:

- Wash your hands often with soap and warm water for at least 20 seconds, especially after coughing or sneezing on them.
- If you can't wash your hands, use an alcohol-based hand sanitiser gel.
- Avoid touching your face as this can transfer the virus to your mouth or eyes.
- Cover your mouth and nose with a tissue when you cough or sneeze.
- Cough into your elbow or the crook of your arm to reduce the spread of germs and throw away used tissues as soon as you can.
- Avoid touching things in public spaces.
- Don't shake hands with people.
- QUIT SMOKING - People who smoke are five times more likely to get flu and twice as likely to get pneumonia. Quitting smoking is one of the best ways to protect yourself from viral infections, including COVID-19.

If you develop symptoms of COVID-19 and you have asthma:

- Stay at home until you are no longer contagious to others.
- If your COVID-19 symptoms don't go after seven days or get worse, or you are having difficulty breathing, call 111 for advice, or 999 if you need emergency care.
- If you get symptoms and are not sure whether they are related to COVID-19 or related to your asthma, please speak to your GP, use the online 111 service or call 111 to ensure that you get the right care.
- Keep following your asthma action plan so you know what to do if you get worse:
<https://www.asthma.org.uk/advice/manage-your-asthma/action-plan/>
- Carry on taking all your usual asthma medicines as normal.

If you develop symptoms of COVID-19 and you have COPD:

- The advice for COPD is the same as for asthma. However, in addition, make sure you know when to use your rescue pack medication.
- Remember to let your doctor or nurse know if this pack is started and to contact them if things do not improve within two days of starting the rescue medication.
- Finally, it may be tricky to work out whether new symptoms are due to COVID-19 or due to an exacerbation or flare-up of your respiratory condition. Remember: typically exacerbations of asthma and COPD are not associated with a high fever.

