Advice for Healthcare Professionals Treating People with Asthma (adults) in relation to COVID-19

How might having asthma affect a patient’s reaction to SARS-CoV-2?
For most people with well controlled asthma, having asthma does not seem to increase the risk of catching SARS-CoV-2 or developing complications due to COVID-19.

What can I suggest my patients do to keep themselves healthy?
For people with asthma, the best way of staying healthy and recovering if infected with COVID-19 is to ensure their asthma is as stable as possible. This means taking inhaled steroids and other routine medications regularly, as prescribed and detailed in their personal asthma action plan. Having a reliever inhaler is also important if asthma worsens. Ensuring people have had their inhaler technique checked recently is important and you can share this website: https://www.asthma.org.uk/advice/inhaler-videos/

Advise patients to ensure they have a sufficient supply of their medication at home and order them in plenty of time to ensure they do not run out. Emphasise that they do not need to over order/stock up on their inhalers and they should not share their inhalers or spacers with family/friends.

Very few people with asthma need to use a nebuliser outside of hospital and in general it should be discouraged because using salbutamol through a spacer can be as effective:

- 4-6 puffs from a salbutamol pMDI into a spacer with a patient taking 2-3 tidal breaths is the same as a 2.5mg nebule of salbutamol
- 10-12 puffs is the equivalent of a 5mg nebule of salbutamol.

Those who have been prescribed a nebuliser should continue to use it as directed. The advice from Public Health England is that nebulisation is not a VIRAL droplet generating procedure and not considered an aerosol generating procedure for COVID-19.

As the number of cases of COVID-19 is increasing, it is natural for some patients to feel concerned or anxious. Strong emotions can trigger an asthma attack. Information for patients on coping with stress and anxiety is available here: https://www.mentalhealth.org.uk/publications/looking-after-your-mental-health-during-coronavirus-outbreak

Do inhaled corticosteroids (ICS) lower the immune system and put people at increased risk of COVID-19?
No. There is no evidence that inhaled steroids increase the risk of getting COVID-19 so please advise you patients to continue with all of their inhalers, including ICS and ICS/LABA combination inhalers.

What about asthma exacerbations?
The management of asthma exacerbations is unchanged and patients should NOT stop taking their ICS containing inhaler. Patients should be advised to take their medication as guided by their personal asthma action plan and contact their GP surgery to organise a telephone, video or face-to-face consultation. If a course of steroids is clinically indicated (symptoms and signs of bronchospasm/wheeze), it should not be withheld. Antibiotics are only advised if sputum changes colour, thickens or increases in volume. As health services are likely to be stretched for the next few months, if patients have a good understanding of their self-management plan then it is reasonable for them to have a short course of steroids at home (rescue pack). This is particularly important for patients with severe asthma. Refer to BTS/SIGN Guideline for the management of asthma: https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/
COVID-19 can present with symptoms similar to an asthma attack such as cough and shortness of breath. However, it is worth letting patients know that it is uncommon to get a high temperature and changes in taste or smell with an asthma attack so the presence of these symptoms are more likely to suggest infection with SARS-CoV-2. If patients are not unwell enough to need hospital treatment, they should be advised to self-isolate at home (https://www.nhs.uk/conditions/coronavirus-covid-19/self-isolation-advice/) and follow their asthma action plan.

What about oral steroids?
Oral steroids are not currently prescribed as part of the treatment for COVID-19. If your patient develops symptoms and signs of an asthma exacerbation then they should follow their personalised asthma action plan and start a course of steroids if clinically indicated.

For patients on maintenance oral corticosteroids:

- They should continue to take them at their prescribed dose as stopping steroids suddenly can be harmful.
- It is worth reiterating the “sick day rules” and reminding patients that if they become unwell (for any other reason) they need to increase their steroid dose appropriately (usually doubled).

How does COVID-19 effect people with severe asthma?

Severe asthma is defined as asthma that requires treatment with high dose inhaled corticosteroids plus a second controller and/or systemic corticosteroids to prevent it from becoming ‘uncontrolled’ or that remains ‘uncontrolled’ despite this therapy. Patients with severe asthma are usually under the care of specialist centres and may be on biological therapy.

Currently, there is no published evidence that patients with severe asthma are at higher risk of developing more serious complications from COVID-19. People who have severe asthma and become unwell due to COVID-19 should be encouraged to inform their hospital asthma team.

Patients who are receiving biological therapies for their asthma should not stop their biologics as there is no evidence these suppress immunity. Most centres are rapidly organising for patients to receive their biologics via home-care or similar schemes. Patients should be advised to continue to attend for their biological treatment until they are transitioned to home care or if they receive their treatment intravenously.

Where can I get more information to share with my patients?

- Information about asthma and COVID-19 (Asthma UK): (https://www.asthma.org.uk/coronavirus)
- Information for people with other lung problems: (https://www.blf.org.uk/support-for-you/coronavirus)

Children:
Information is available on the RCPCH website: https://www.rcpch.ac.uk/resources/covid-19-guidance-paediatric-services#children-at-increased-risk-of-covid-19
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Disclaimer: Advice has been based on PHE advice where available and expert opinion where not available. Variations to this advice may be required depending on clinical setting and individual patients. This guidance is issued to specialist respiratory teams working in the community setting. It is not designed to cover secondary care or primary care settings, where guidance is being issued by PHE.