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Position statement of the Allergy Society of South Africa

Children with asthma returning to school during the Covid-19 pandemic.

Background:

Covid-19, the condition caused by the novel SARS Co-V-2 virus, is predominantly a respiratory disease and for this reason, many parents and health professionals are concerned that children with asthma may be more likely to become infected with this virus, or have worse outcomes after contracting this virus.

The Allergy Society of South Africa supports the South African Paediatric Association and national government's position that South African children should return to school, with basic measures in place to reduce transmission risk, such as hand hygiene, wearing masks and physical distancing.

Although the Centres for disease Control and Prevention (CDC) states that patients with moderate to severe asthma might be at greater risk for more severe disease, there are currently no published data to support this statement. Asthma has to date, not been associated with severe outcomes in Covid-19 in any large studies.

The Global Initiative for Asthma (GINA) has advised that people with asthma should continue to use their inhaler medication, including corticosteroids as prescribed by a doctor. In acute asthma attacks a short course of oral corticosteroids may be prescribed

There have also been several reports stating that the use of corticosteroids is contraindicated in Covid-19 disease, and there is a concern that this may result in asthmatic individuals stopping inhaled corticosteroid therapy. It is important to note that the data used to inform this recommendation, do not relate to patients with asthma and should not result in stopping regular asthma controller therapy.

The usual advice for the management of children with asthma during the Covid-19 pandemic remains valid and includes:

- continue regular medication as prescribed
- have an influenza vaccination
- use correct technique when administering metered dose inhalers with spacer devices
- avoid known triggers of asthma exacerbations (eg allergens and exposure to second-hand smoke)
- manage co-existing allergic rhinitis proactively in order to achieve best asthma control as well as to avoid confusing untreated allergic rhinitis with upper respiratory infections
- children who have not had their asthma control reviewed in the last 6 months or who have ongoing asthma symptoms, should consult their healthcare provider for an updated management plan

In summary:

- 1) Asthma exacerbations can be prevented by optimal asthma control and is especially important during this time.
- 2) Well-controlled asthmatic children have so far not been shown to be at greater risk of contracting SARS Co-V-2 or of developing severe Covid-19 disease than any other child.
- 3) There is no evidence that inhaled corticosteroids increase the risk of contracting Covid-19. Asthmatic children should continue their regular controller medication as prescribed.
- 4) Emergency medications such as short-acting bronchodilators, should be readily available for home use.

- 5) Nebulisers may potentially spread SARS Co-V-2 to others. Metered dose inhalers, delivered via a spacer, are preferred.
- 6) Asthmatic children should have an “Asthma Action Plan”: a personalised self-management plan that assists in identifying exacerbations timeously, home treatment advice and when to seek medical assistance.
- 7) Should it be clinically indicated, oral corticosteroids should be used for asthma exacerbations.
- 8) Patients taking long-term oral corticosteroids or immunemodulator medication should seek specific medical advice.

Evidence on COVID-19 is rapidly evolving, and the Allergy Society of South Africa will endeavor to inform patients should there be any evidence change.

References:

1)Centres for Disease Control and Prevention – People with Moderate to Severe Asthma. Available at <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/asthma.html>

2)Global initiative for asthma – COVID-19: GINA Answers to Frequently Asked Questions on asthma management

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4)Brough HA, Kalayci O, Sediva A et al. Managing childhood allergies and immunodeficiencies during respiratory virus epidemics – the 2020 COVID-19 pandemic. *Pediatr Allergy Immunol*. 2020. Apr 22.doi: 10.1111/pai.13262

5)Halpin DMG, Singh D, Hadfield RM. Inhaled corticosteroids and COVID-19: a systematic review and clinical perspective. *Eur Respir J* 2020; in press (<https://doi.org/10.1183/13993003.01009-2020>).

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