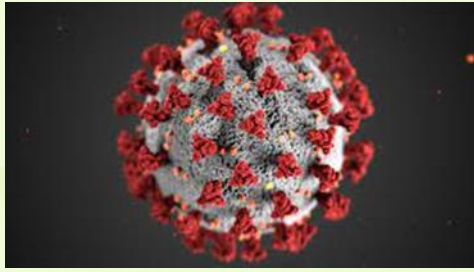


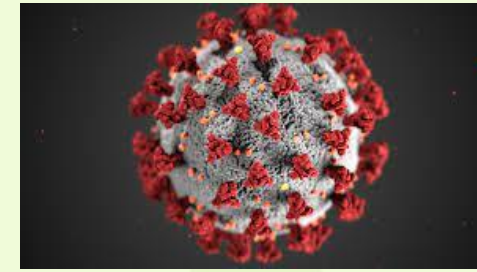
Back to School With Asthma During COVID 19

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COVID 19

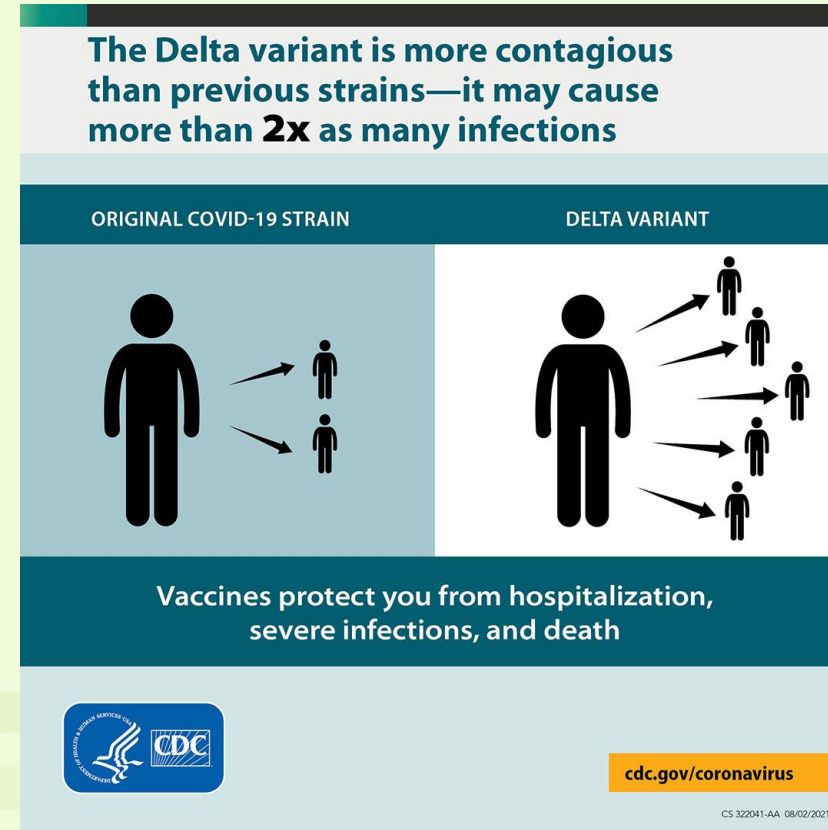


- Coronaviruses are invisible to the naked eye. It takes a high-powered microscope to see the crown-like spikes that give these viruses their name (corona means “crown” in Latin).
- The viruses use these spikes to latch onto and pry into living cells, where they multiply before leaving to infect more cells throughout the body. The nose and throat are considered the key entry points for the new coronavirus. Once inside, the virus attaches to biological hooks that appear on the surface of certain types of human cells. After commandeering nasal cells, the virus replicates and attempts to spread further into the body.
- The immune system plays a critical role in defending the body from disease, but it can sometimes harm the body by overreacting to fend off infection. Many of the most severe cases of COVID-19 are a result of overreactions from the immune system. These overreactions are known as “cytokine storms,”. During cytokine storms, immune cells can attack healthy tissues, which can result in blood clots, blood pressure drops, and organ failure.

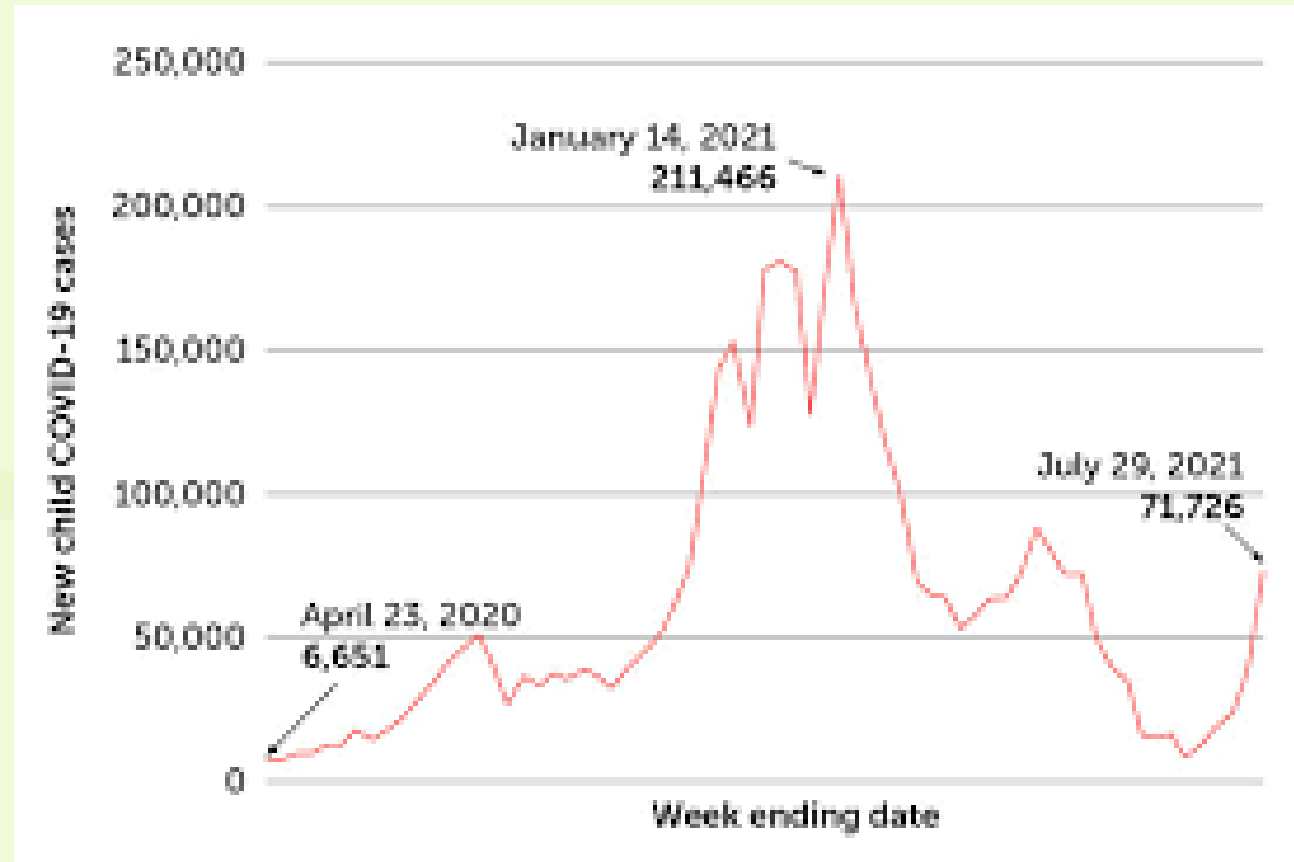


Delta Variant

- The Delta variant is more contagious
- Some data suggest the Delta variant might cause more severe illness than previous strains in unvaccinated persons.
- Unvaccinated people remain the greatest concern
- Fully vaccinated people with Delta variant breakthrough infections can spread the virus to others. However, vaccinated people appear to be infectious for a shorter period



Trends with Children and COVID 19



The Basics about COVID 19 Vaccination

- COVID-19 vaccines tell your body how to recognize and fight the COVID-19 virus.
- Pfizer has emergency clearance for children as young as 12, Moderna and J&J for 18 years of age and older
- The recommendations is to vaccinate to protect yourself from COVID 19
- Myocarditis and pericarditis occurs more often in teens and young adults, and in males. Signs and symptoms generally occur within a few days of receiving the second injection of an mRNA COVID-19 vaccination (Pfizer-BioNTech, Moderna), such as chest pain, shortness of breath, or feelings of having a fast-beating, fluttering, or pounding heartbeat.
- Most cases are mild and resolves quickly.
- Side effects are the same as adults (site soreness, fever, tiredness, headache)



COVID and ASTHMA (What Do the Experts Say?)

- Weekly COVID-19 hospitalization surveillance data show that the rate of hospitalization among children is low compared with that of adults, but hospitalization rates among children are increasing.
- About 1 in 3 children hospitalized with COVID-19 in the United States were admitted to the intensive care unit, similar to the rate among adults.
- Currently, there is no evidence of increased infection rates in those with asthma.
- The COVID 19 virus does not seem to cause asthma exacerbations. If there is good control, the lungs will be best prepared should any infection or allergen lead to an exacerbation of their asthma.



Case Study:

- 10 y/o patient has a history of mild persistent asthma, positive skin allergy test for mold, ragweed, and a history of exercise induced asthma, has been to the ER every year since the age of 3, between August and November for asthma exacerbation, was taking Flovent 44 mcg 2 puffs BID, Montelukast 5 mg and Albuterol as needed but is no longer taking any medications, Mom states that patient has not had any symptoms for over a year.



Does my child still have asthma, if they have not had symptoms since we have been in quarantine/isolation?

- YES. This is probably due to lack of exposure to triggers such as viral illnesses, allergens, and lack of exercise.



I stopped taking my medications this past year, should I restart my medications again before I start school?

Treatment is often geared towards:

1. Past medical history of the patient
2. Identified triggers
3. Symptoms
4. Spirometry and FeNo results that tells us about the health of your lungs

Recommendation: Consult with your PCP and Specialist.



September Asthma Epidemic

- * Hay Fever - a general term used to describe the symptoms of late summer allergies. Ragweed is a common cause of hay fever, which is also known as allergic rhinitis. The plant usually begins to pollenate in mid-August and may continue to be a problem until a hard freeze.
- * Lingering Warm Weather- unseasonably warm temperatures can make rhinitis symptoms last longer. Mold spores can also be released when humidity is high, or the weather is dry and windy.
- * Leaves - Raking presents a problem. It can stir agitating pollen and mold into the air, causing allergy and asthma symptoms.
- * School Allergens -Kids are often exposed to classroom irritants and allergy triggers including chalk dust and classroom pets. Students with food allergies may also be exposed to allergens in the lunch room, although they may not be consuming them. Lastly, children with exercise-induced bronchoconstriction (EIB) may experience attacks during recess or gym class.



What is the difference between COVID 19, Asthma and Allergies?



- Most children with COVID-19 didn't have symptoms prior to the Delta variant.
- The most common symptoms in children and teens seem to be fever and cough, with nasal symptoms, gastrointestinal symptoms, and rash happening much less often.



Signs and Symptoms of COVID 19 in Children

- Fever
- Fatigue
- Headache
- Myalgia
- Cough
- Nasal congestion or rhinorrhea
- New loss of taste or smell
- Sore throat
- Shortness of breath or difficulty breathing
- Abdominal pain
- Diarrhea
- Nausea or vomiting
- Poor appetite or poor feeding



Symptoms Chart

<https://www.aafa.org/media/2631/respiratory-illness-symptoms-chart-coronavirus-flu-cold-allergies.png>



School Forms

- Asthma Action Plan
- Physician Report for Asthma
- Medication Administration form
- Permission to Carry Albuterol or Self Administer

<https://www.cps.edu/services-and-supports/health-and-wellness/health-forms/>



Medically Fragile Form for Eligibility for Virtual Academy

<https://www.cps.edu/academics/virtual-academy/medically-fragile-conditions/>



Precautions

- Review proper use of medications and techniques with inhalers and spacers
- The 3 W's (Wear your mask, Wash your hands, Watch your distance)
- Disinfectant
- Routine
- Recommendation to vaccinate
- Keep appointments with Specialist and PCP as scheduled



References

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- Chicago Public School- <https://www.cps.edu/services-and-supports/health-and-wellness/health-forms/>

