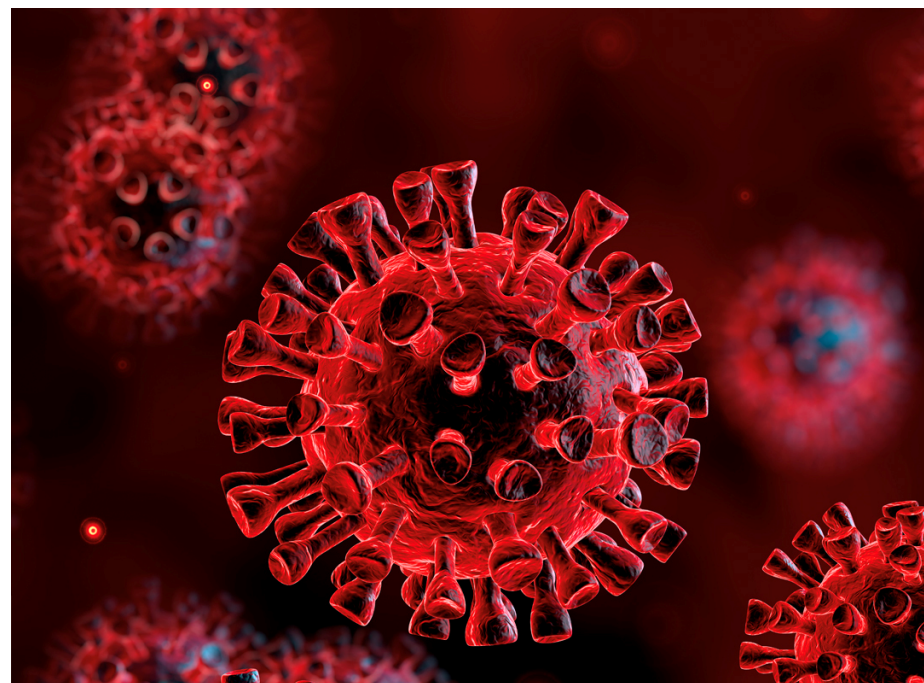


# COVID-19 and Children with DEEs

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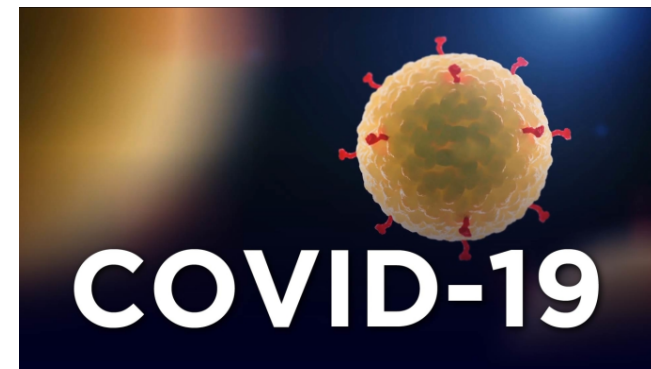
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# Overview

- What do we know about COVID-19 and children?
- Are those with DEEs at higher risk of contracting COVID 19?
- Are those with DEEs at higher risk of severe disease with COVID-19?
- What can we do to keep our kids as safe as possible?
- What precautions should you consider?

# COVID-19 in children



- Symptoms begin 2-14 days after exposure
- Cold-like symptoms including fever, cough, shortness of breath
- Vomiting and diarrhea
- Overall, children have less severe disease than adults
- Preliminary reports from countries with COVID-19 outbreaks report low risk of worsening seizures in children

# Chinese study of >2100 children with COVID 19

- Disease severity:
  - 55% were asymptomatic or had just mild disease
  - 39% had moderate disease
  - 5.2% were severe and 0.6% were critical
  - Only 1/2143 died of their disease
- Younger children are at higher risk. Severe or critical disease was seen in:
  - 11% of infants <1 year
  - 7.3% of children aged 1-5 yrs
  - Only 3% of teens



# COVID 19 in children

- The Chinese study did not look at underlying conditions
- Other studies have shown that younger age, underlying lung disease and immunocompromised states lead to more severe Non-COVID 19 infections

# Are children with DEEs at higher risk of contracting COVID-19?

- Risk of contracting depends on exposure to an infected person
- Those with DEEs may be at higher risk due to:
  - Need for caregivers to help with ADLs
    - higher risk of exposure if caregivers are ill
  - Frequent medical appointments, ER visits and hospitalizations



# Are those with DEEs at greater risk of severe infection with COVID-19

- Severe infection can lead to pneumonia, sepsis, heart failure, multiorgan failure
- Children with underlying medical conditions or special needs may be at higher risk of severe disease but data is limited



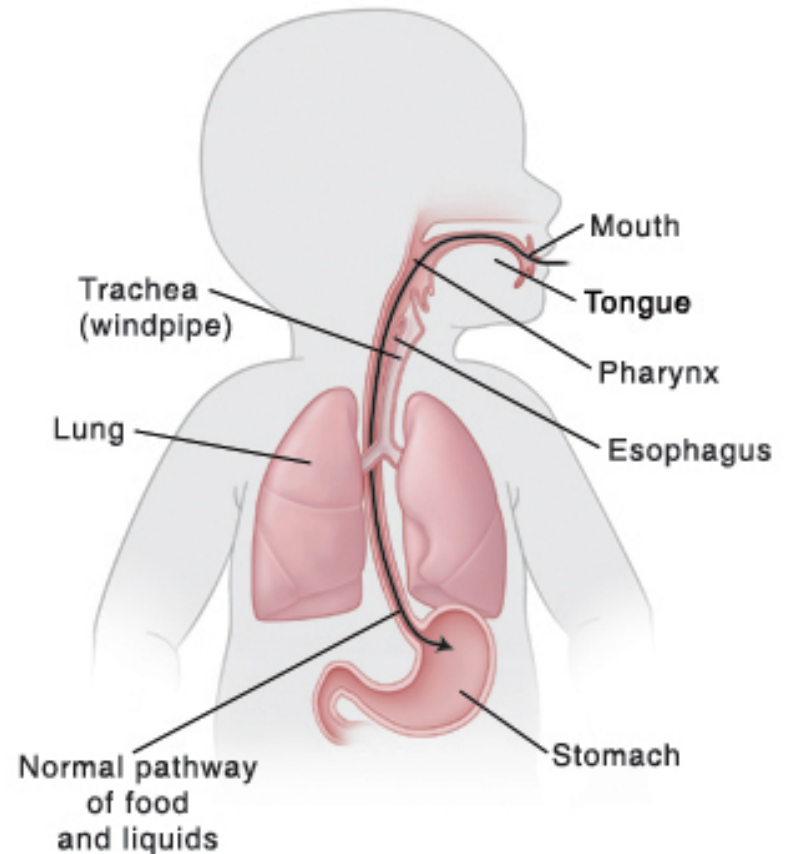
# What factors may result in more severe disease

- Persons with other chronic medical issues, especially heart or lung conditions, are at higher risk



# Children with DEEs

- **Higher risk of aspiration and pneumonia** due to:
  - Frequent seizures
  - Swallowing dysfunction
  - Difficulty handling secretions – poor cough
  - Limited mobility
  - Sedation due to frequent seizures, antiseizure medications



# Children with DEEs



- Medications which can suppress the immune system such as ACTH, prednisone or everolimus
  - There is no evidence that other seizure medications increase risk
- Some conditions may worsen with intercurrent illness
  - Mitochondrial disorders or other metabolic disorders

# How to keep your child safe?



- Reduce risk of exposure
  - Frequent handwashing
  - Avoid touching your child's eyes, nose and mouth - use gloves if possible
  - Clean/disinfect frequently touched objects
  - Avoid larger gatherings
  - Explore work from home options
  - Avoid close contact with people who are sick or have had possible exposure to COVID-19 or influenza – including caregivers

# What if a sibling/parent gets sick?

- Minimize exposure as best as you can
  - each person should have their own room
  - use separate bathrooms
  - wash hands frequently

# How Can You Best Prepare?



- Stick to your medication schedule
- Ensure you have adequate supplies of medication
  - Several plans (ie CMS and some private plans) are allowing more flexibility with COVID-19
    - removing prior authorization requirements
    - waiving prescription refill limits
    - home and mail delivery of prescription medicines
  - Talk to your pharmacist or health care provider
  - This also includes OTC meds and other supplies – ie nutritional formulas

# How Can You Best Prepare?



- Ensure the seizure rescue plan is updated and that you have adequate rescue medication
- If seizures are worsening, be proactive about calling your provider
- If your child has routine medical visits, ask your HCP if you can:
  - Do a video or phone visit instead, OR
  - Safely postpone the visit

# How Can you Best Prepare?

- Pay attention to wellness
  - Adequate sleep
  - Nutrition
  - Fun activities
- These are stressful times for everyone – we all need to look after each other



# What if your child develops symptoms?

- If you, your child or another family member develops symptoms of COVID-19, call your HCP to discuss and arrange possible testing
- Do not just go to the office, and avoid going to the ER unless an emergency arises, as this may expose other persons, and also increase risk of exposure to your child





# Management of Seizures During Illness

- Ensure your child takes medications as prescribed – if they are unable to keep medicines down, call your doctor
- Talk to your doctor about treating symptoms of the virus, to allow your child to sleep and feed well.
- If seizures worsen, follow your seizure rescue plan and call your doctor



# Seek Emergency Help If:



- Prolonged or clusters of seizures not responding to the seizure rescue plan
- Shortness of breath, bluish discoloration of the lips or respiratory distress
- Concerns for dehydration – unable to keep fluids down with severe vomiting or diarrhea and signs of dehydration – sunken eyes, decreased urine output, dry mouth with little saliva, etc

# Where to Get More Information

- [Epilepsy.com](http://Epilepsy.com)
- [CDC.gov](http://CDC.gov)
- Your pediatrician or PCP
- Your neurologist or epileptologist