

The background of the slide features the official seal of the State of North Carolina. The seal is circular with a yellow border containing the text "THE GREAT SEAL OF THE STATE OF NORTH CAROLINE" in blue capital letters. The central image of the seal depicts two female figures: Liberty on the left, wearing a blue dress and holding a staff with a Phrygian cap, and Justice on the right, wearing a red dress and holding a scale of justice. In the background of the seal, there is a landscape with green hills and a three-masted sailing ship on the water.

# **THE IMPACT OF COVID-19 ON CHILDREN**

**NC General Assembly  
Joint Legislative Oversight Committee  
on Health and Human Services**

**August 11, 2020**

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ncpeds

**North Carolina Pediatric Society**

State Chapter of the American Academy of Pediatrics

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POLICY COMMITTEE, NC PEDIATRIC SOCIETY  
ADJUNCT ASSISTANT PROFESSOR OF PEDIATRICS, UNC SCHOOL OF MEDICINE  
PEDIATRIC HOSPITALIST, GOLDSBORO PEDIATRICS/WAYNE UNC MEMORIAL HOSPITAL  
PEDIATRIC HOSPITALIST, COSTAL CHILDREN'S SERVICES/NEW HANOVER REGIONAL  
MEDICAL CENTER

David L. Hill, MD, FAAP



# WHAT DO WE KNOW ABOUT SARS-COV-2/COVID AND CHILDREN

- Science constantly improves on itself (like the NCAA tournament for facts)
- Which is its strength, but which can also cause confusion as better information comes to light
  - Mask wearing
  - Droplet versus aerosol transmission
  - Role of surfaces in transmission
- Today's facts are therefore better than yesterday's, but tomorrow we'll know more

## PRIMARY COVID IN CHILDREN

- Children ages 0-18 account for around 9% of all US COVID cases
- What are common symptoms?
  - Much less often respiratory in children compared to adults
  - Fever
  - Vomiting/diarrhea/abdominal pain
  - Rash
- Asymptomatic infection is common, 30% to 40%

# HOW SICK DO CHILDREN GET?

- Hospitalization rates are 95% lower than those for adults, but [1/3](#) of hospitalized children end up in Intensive Care Units
- Multi-system Inflammatory Syndrome in Children ([MIS-C](#))
  - Condition like Kawasaki disease that can damage multiple organs including the heart
  - Usually require admission to PICU
  - [15 reported cases](#) in North Carolina as of 8/06/2020
- Deaths
  - [Maximum of 0.3%](#) of childhood COVID cases result in death, 86 confirmed by AAP as of 7/30/2020
  - 10 childhood deaths [from MIS-C](#) nationwide as of 8/06/2020

## HOW INFECTIOUS ARE CHILDREN?

- Generally speaking, studies suggest that transmission by children in schools and daycares is [substantially less](#) than by adults
- Many of these studies were performed in communities with much lower rates of COVID infection and much higher resourcing for schools than NC
- Korean study: over age 10 and up [just as infectious](#) as adults
- Experience from the [Georgia camp](#) suggests that when control measures are not adequate, COVID can spread aggressively between children and adults, affecting close to half of people exposed
- Symptom screening is an inefficient way to reduce risk, since around 30% to 40% of spreaders are asymptomatic/pre-symptomatic
- Asking about known contacts is also inefficient, as spreaders often have no symptoms or have not been tested



## WHO IS AT HIGHEST RISK?

- Minority children
- Multi-generational households



HOW DO  
WE  
REDUCE  
RISK?

- Face masks
- Ventilation
- Distancing
- Cohort-shrinking
- Hand-washing
- Fomite control
- Testing/contact tracing
- Drive down the rates of COVID infection in the community





CONCERNS  
BEYOND  
COVID

- Nutrition/food insecurity
- Access to health care
  - [Vaccines](#)
  - Chronic and acute disease management
- Mental health concerns
- Socialization
- Developmental evaluation and treatment
- Child abuse and neglect



Healthy Communities, Healthy Children.

HEALTHY CHILDREN REQUIRE HEALTHY  
COMMUNITIES