Scientific Advisory Board for Schools presents:

COVID-19 & the Classroom Webinar Series
The information presented here is the most up-to-date, data-driven and evidence-based science to help school districts make important decisions regarding face-to-face instruction.

Duke University and its partners will not make decisions nor will they advise specific action.
COVID-19 Impact on Schools

- COVID-19 has caused substantial fear regarding resuming one of the most basic and necessary activities — school.

- There is deep concern about asymptomatic spreading among school-age children and what that means for children, teachers, parents, and the community.

- There is also evidence of a significant social, emotional and educational burden, from delaying return to in-person school.
Scientific Advisory Board: A data-driven approach to support decision making

- A community-engaged approach to promote existing guidance from state and local health departments, provide data, and interpret emerging scientific evidence to keep children, teachers, and the community healthy and safe during the COVID-19 pandemic.

- A three-tiered approach
  - **Educational outreach**
  - Data to support decisions
  - Targeted research opportunities
Program Leadership Team

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No school-aged children

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Co-chair
Distinguished Professor, Epidemiology Therapeutics
4 children, CHCCS/college

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- Question and answer format
- If clarification is needed, please enter in the Q&A section as all attendees will be muted
- Additional questions can also be placed in the Q&A section and will be addressed in future webinars
COVID-19 & the Classroom Webinar Series

COVID-19 and Masks

Orange County Public Schools
Duke University School of Medicine
Duke Clinical Research Institute
What is Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2)?

- Virus that causes CoronaVirus Disease (COVID)-19
- Third coronavirus to jump from animals into the human population in the last 17 years:
  - Middle East Respiratory Syndrome (MERS, 2012)
- There are 4 endemic coronaviruses that circulate during respiratory viral seasons
Question 1

How does COVID-19 spread and why do we need face coverings if case counts are decreasing?
How does COVID-19 spread?

- Person-to-person transmission
  - Respiratory droplets from an infected person (e.g. coughs or sneezes)
    - Land in mouths or noses, inhaled by close contacts
    - Contaminate surfaces
  - Close contact (< 6 feet, >15 minutes)

- Transmission from people who have asymptomatic infection occurs through same mechanisms
What factors Impact COVID-19 Spread?

- Duration and nature of contact
- Number of people in a confined space
- Adherence to prevention practices
  - Masking
  - Hand washing
  - Cleaning the environment
Why do we need masks or face coverings to prevent transmission?

Infected Person Without a Mask

Infected Person With a Mask
Why do we need masks or face coverings to prevent transmission?

J. Wei, Y. Li. American Journal of Infection Control 44 S102-S108
Why do we need masks or face coverings to prevent transmission?

Infected Person With a Mask

Uninfected Person Without a Mask

J. Wei, Y. Li. American Journal of Infection Control 44  S102-S108
Why do we need masks or face coverings to prevent transmission?

**IDEAL STATE**

Infected Person With a Mask

Uninfected Person With a Mask

J. Wei, Y. Li. American Journal of Infection Control 44 S102-S108
Two hair stylists with COVID-19 spent at least 15 minutes with 139 clients

Everyone wore face coverings — No clients are known to be infected*

Wear cloth face coverings consistently and correctly to slow the spread of COVID-19

*No clients reported symptoms; all 67 customers tested had negative tests
Why wear a mask or face covering?

- Wearing a face covering can prevent you from spreading viruses
- Wearing a face covering can protect you from getting viruses
- Since asymptomatic people can spread the virus, it is safer for everyone to have a mask since we do not know who is infected at a given time
- Real life examples confirm that even in close contact exposure (e.g. hair stylists), wearing a mask prevents infection
Will Children Wear Masks?

Wearing a mask shows...

Love

TIPS FOR KIDS

Explain the mask
Make it fun
Lead by example

Retrieved from https://www.dukehealth.org/blog/why-children-should-wear-face-masks
How can you safely facilitate mask breaks?

Duration and nature of contact (e.g. less than 15 minutes)

Number of people in a confined space (e.g. Take a break outside)

Adherence to infection prevention practices when you can (e.g. Mask when not on break, 6 feet distance, wash hands)
Question 2 (Orange County)

Are there specific circumstances in which a face shield is recommended?
Question 3 (Orange County)

Can staff remove masks while actively instructing?
Question 4 (Durham County)

Do cloth masks have to be washed every day? Will they lose their effectiveness if washed or not washed daily?
What are mask wearing habits to avoid?

- Touching your mask frequently
  - If you need to manipulate your mask, wash your hands before and afterwards

- Using masks with an exhalation valve or vent
  - Releases your breath and droplets to the environment around you

- Wearing a dirty mask
  - Wash your mask after every use or at least daily
  - If soiled or damaged or no longer tight fitting, change to a different mask
Question 5 (Durham County)

Does plexiglass provide additional protection in addition to wearing a mask?
Question 6 (Wake County)

Is there a proper way to wear a mask or face covering?
How NOT to Wear a Mask

- "The Escape Hatch"
- "The Earring"
- "The Sniffer"
- "The Stache"
- "The Nose Plug"
- "The Neckbeard"
HOW TO WEAR A NON-MEDICAL FABRIC MASK SAFELY

**Do's**

- Clean your hands before touching the mask
- Inspect the mask for damage or if dirty
- Adjust the mask to your face without leaving gaps on the sides
- Cover your mouth, nose, and chin
- Avoid touching the mask
- Clean your hands before removing the mask
- Pull the mask away from your face
- Store the mask in a clean plastic, resealable bag if it is not dirty or wet and you plan to re-use it
- Remove the mask by the straps when taking it out of the bag
- Remove the mask by the straps behind the ears or head
- Wash the mask in soap or detergent, preferably with hot water, at least once a day
- Clean your hands after removing the mask
Question 7 (Chapel Hill)

Should everyone be provided with N95 masks as they seem to provide the safest protection?
Sample fabric mask issued to schools
How do we determine which masks work best?

- Wearing a face mask reduces droplets containing viruses
- One study raised more questions…

One last point on preventing infections ➔ Immunization
Do you have other questions?
Resources

- Centers for Disease Control and Prevention
  - https://www.cdc.gov/

- World Health Organization
  - https://www.who.int/

- Your Local Health Department or NCDHHS
  - https://www.ncdhhs.gov/

- StrongSchools NC Infection Control and PPE Guidance (K-12)

Videos

- Sneezes

- Droplets propelled by speech with and without a mask

Photos used in this presentation are freely available from:
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THANK YOU