KEEPING KIDS SAFE

An evidence-based approach to protecting kids during the school year

The **Centers for Disease Control and Prevention** and the **American Academy of Pediatrics** strongly recommend that in order for schools to remain open, which is of critical importance to the education and wellbeing of children and families, certain public health measures must be instituted and adhered to, like universal **mask** wearing.

Why now?

Delta has changed the game

- Delta is 200% more transmissible and results in up to 1000x higher viral load compared to previous variants.
- This translates into a R(0)=6-10. Meaning, on average, one person infects 6-10 people. This is similar to the R(0) for chickenpox and higher than the R(0) for smallpox.
- Vaccinated individuals who become infected can spread the Delta variant to others.

Kids don't have an immunity wall.

Not enough kids are protected for an effective immunity wall

- For example, only 30% of children have SARS-CoV-2 antibodies in Texas, meaning a **majority of kids have yet to be exposed** to COVID-19 (Messiah et al., 2021).
- Many children haven't had the opportunity to be protected by the COVID-19 vaccine.
  - Only 12+ are eligible
- Not enough eligible adolescents are vaccinated.
  - Only 39% of 16-17 year-olds and 27% of 12-15 year-olds are fully vaccinated in the United States (AAP, July 28, 2021)

We can do it safely during a pandemic.

Study after study shows the effectiveness of a layered approach in K-12 schools

- In **Missouri**, schools that implemented masks, physical distancing, and increased ventilation had much lower transmission than in the community (Dawson et al., 2021)
- In **Utah**, despite high community incidence and an inability to space students' classroom seats ≥6 ft apart, high student mask use resulted in low transmission and no school-related outbreaks in 20 Salt Lake County elementary schools (Hershow et al., 2021)
- In rural **Wisconsin**, masking requirements and student cohorting within schools allowed transmission risk to remain low (Falk et al., 2021)
- A study in **Florida** found a layered approach is especially needed when community spread is high (Doyle et al., 2021)

We need to do it for our kids' health.

COVID-19 in kids can range from mild to severe illness

- As of July 22, 2021, over 4.1 million COVID-19 pediatric cases have been reported. The CDC estimates that the "true" burden is 26,838,244 pediatric cases in the U.S.
- In 23 states, 16,878 pediatric hospitalizations have been reported. The CDC estimates 209,264 cumuative pediatric hospitalizations in the U.S. as a whole.
  - Hospitalization rates for COVID-19 are higher than for the 2009-10 H1N1 pandemic.
- As of May 2021, 3,742 MIS-C cases have been linked to COVID-19.
- Over 400 pediatric deaths have been reported since the beginning of the pandemic. Although this seems low compared to adults, **COVID-19 is now a top 10 cause of death for adolescents in the United States.**
- Mortality is not the only negative outcome. Long COVID-19 (or Post-acute Sequelae of COVID-19 [PASC]) has been reported among kids.
  - The British National Health Service is reporting that 7-8% of kids experience long COVID-19 and is opening new pediatric clinics for long COVID-19 around the country.

We need to do it for our community.

We need to stop transmission among kids to stop spread in the community.

- Kids spread SARS-CoV-2 as efficiently as adults. Several outbreak investigations have demonstrated transmission among children, adolescents, and young adults, including transmission to older household members.
- Living with a child engaged with in-person school without public health mitigation measures increases the odds of COVID-19 for the household (Lessler et al., 2021)
- Children who got COVID-19 at two Utah daycares spread it to household members (Schwartz et al., 2020)

A collective approach is far more effective.

A collective approach is far more effective than an individualistic approach

- While masks provide protection to the wearer, they primarily serve as source control and the greatest benefits occur if everyone wears them.
- Kids are highly influenced by peers and teachers. If all peers are required to wear masks, social desirability will play a factor into compliance.
- Using vaccination status to determine who should wear a mask in schools will be a huge burden on teachers and staff and nearly impossible to enforce

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