

Reference(s) of the Week

Gettings JR. SARS-CoV-2 transmission in a Georgia school district — United States, December 2020–January 2021. Clinical Infectious Diseases. 04.17.2021. <u>https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab332/6232104</u> pdf
 Premise/Methods: 1. As in-person learning options expand, detailed assessments of in-school SARS-CoV-2 transmission in multiple contexts are needed to inform mitigation measures and improve safety. 2. In the Atlanta school district under study mitigation measures included: mandatory masking, social distancing where possible, three sided desk plexiglass protection, increased classroom ventilation, increased personal and facility cleaning, and symptom screening. 3. Rigorous case and contact definitions were devised and public health personnel performed investigations to determine demographics, symptoms, and contacts. 4. Investigators offered PCR testing, symptom assessment, demographic characterization, and limited whole genome sequencing at the CDC during the study period: December 2020 – January 2021.

Findings: 1. 86 index cases were analyzed: staff, 33 (38.4%); students, 53 (61.6%); 1,119 contacts were identified including 112 staff and 1,007 students with a median age of 14 years (IQR 5-19 years). **2.** 688 contacts were tested for SARS-CoV-2: negative tests, 620 (91.3%) including 70 staff contacts (89.7%), 550 student contacts (90.4%); positive tests, 68 staff contacts (10.3%), 60 student contacts (9.8%). **3.** Secondary attack rate (SAR) was 8.7%: highest or 23.8% in indoor sports settings (basketball, wrestling, cheerleading); 18.2% among staff interactions (lunch, meetings); and 9.5% within elementary school classrooms. **4.** SAR was higher for staff index cases (13.1%, 9.0–17.2) compared with student index cases (5.8%, 3.6–8.0), driven by the elementary school setting where staff index cases had an SAR of 15.0% (10.2–19.8) compared with student index cases (2.7%, 0.7–5.3). **5.** Based on epidemiologic evidence and WGS, 14 clusters were identified.

This study recognizes the important role staff have in acquiring and transmitting SARS-CoV-2 and confirms the role close contact indoor sports has in transmission.

Other References:

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Fischer CB. Mask adherence and rate of COVID-19 across the United States. PLOS One. 04.14.2021. Mask adherence and rate of COVID-19 across the United States (plos.org) pdf

Premise/Methods: 1. Masking is a standard mitigation measure to prevent the spread of SARS-CoV-2, but the standard has been met with variable political and social acceptance in the United States. **2.** Although efficacy studies on masking have been performed, the impact of variable masking adherence in the United States has not been studied. **3.** For all 50 states and D.C., data on mask wearing and COVID-19 cases, were abstracted from publicly available sources by month for April – September,



2020. 4. This study classified a state and D.C. as having a high case rate in a given month if a 2-week rate was >200 cases per 100,000 people, per CDC classifications of highest risk of transmission.
Results: 1. States with mask adherence by >75% of the population was associated with lower COVID-19 rates in the subsequent month.
2. Importantly, the study shows that mask wearing adherence, regardless of mask wearing policy, may curb the spread of COVID-19 infections.

FIGURE. Proportion of states with high COVID-19 rates among those in the low and high mask adherence quartiles in the preceding months.



 Perl SH. SARS-CoV-2–Specific Antibodies in Breast Milk after COVID-19 Vaccination of Breastfeeding Women. JAMA network. 04.12.2021.

https://jamanetwork.com/journals/jama/fullarticle/2778766#:~:text=Mean%20levels%20of%20anti%E2%80%93SARS,week%20 after%20the%20second%20vaccine). pdf

Premise/Methods: 1. HCW are a priority in receiving a vaccine for SARS-CoV-2: some of these individuals were pregnant at the time of vaccination. **2**. This is a prospective cohort study of a convenience sample of breastfeeding women (either exclusive or partial) belonging to vaccine-target groups who chose to be vaccinated in Israel. **3**. Breast milk samples were collected before administration of the vaccine and then once weekly for 6 weeks starting at week 2 after the first dose. **4**. Samples were assessed for IgG and IgA levels against SARS-CoV-2 and a demographic and clinical questionnaire provided to enrollees.

Findings: 1. 84 women provided 504 breast milk samples. **2.** IgA breast milk antibodies were significantly elevated at 2 weeks with 86.1% of samples positive at week 4. **3.** IgG breast milk antibodies were low early but by week 4, 91.7% of samples were positive. **4.** Although paired breast milk/serum samples were not obtained and neutralizing capability not assessed, this study suggests robust secretion of maternal antibodies into breast milk following vaccination.

- FDA News Release: Coronavirus (COVID-19) Update: FDA Revokes Emergency Use Authorization for Monoclonal Antibody Bamlanivimab. 04.16.2021. <u>https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-revokes-emergency-use-authorization-monoclonal-antibody-bamlanivimab</u>
 - **1.** Bamlanivimab, when administered alone, is no longer supported by the FDA EUA as therapy for COVDID-19.

2. Data from the CDC national genomic surveillance program show an increased frequency of SARS-CoV-2 variants that are expected to be resistant to bamlanivimab administered alone.

3. Alternative monoclonal antibody therapies remain available under EUA, including REGEN-COV and bamlanivimab/etesevimab administered together.

4. EUA for monoclonal antibody combinations are for the treatment of mild to moderate COVID-19 in adults and pediatric patients (\geq 12 years of age and at least 40 kg) with positive SARS-CoV-2 testing and are at high risk for progressing to severe disease.

 Solmi, F. COVID-19 and eating disorders in young people. The Lancet. 05.2021;5. (comment) https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(21)00094-8/fulltext pdf

Message: 1. Urgent and routine referrals to the UK National Health System have increased 100% over the past year. **2.** The true scale of the issue and its drivers are unclear but contributing factors include: social isolation, diminished physical activity, food insecurity, and loss of person-to-person social and clinical contact.

3. Public health messages have emphasized the dangers posed by excess weight in exacerbating the risk of worse outcomes of COVID-19 and may aggravate and/or stigmatize eating behaviors.

4. Loss of school days limits recognition of mental health disorders and return to school can create anxiety that could exacerbate the risk of eating disorders.

5. A well-funded multidisciplinary approach to eating disorders is necessary as their increase is not likely to subside after the pandemic resolves.

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