I understand why the Board may be confused about stopping the spread of Covid 19 in Cherokee County schools. CDC and Board of Health are providing information that conflicts with the scientific data.

I am a physician with an active GA medical license and board certified in Emergency Medicine. I have been involved with past outbreaks including: Hep B&C, HIV, H1N1 influenza A (swine flu), and Covid 19. I would like to help the Board by providing a summary of medical literature that shows – you can not stop the spread with masks or vaccines. I have provided a transcript with 14 reference articles that are on a flash drive for your convenience.

CDC presented an article from Hong Kong China that personal protective measure (hand hygiene, respiratory etiquette - not cough on hands, surgical face masks) or environmental measures (surface cleaning, humidification, increased ventilation, proper UV light) have no major effect on lab-confirmed influenza virus transmission. (1)

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) causes the coronavirus disease of 2019 (Covid 19). Large percentage of cases are asymptomatic so reported death rates of 2.9% are overestimated. Include the asymptomatic cases in the calculation and the fatality rate drops to <1%. (2) Indiana study of Infection Fatality Rate of Covid 19 deaths including asymptomatic cases was 0.26% which is similar to severe seasonal influenza (0.1%). (3)

Masks will prevent the spread?

Data shows medical and non-medical masks are ineffective in stopping the human to human transmission of SARS-CoV-2, and masks have physiological and psychological side effects. (2) National Academy of Sciences consulting experts describes the work of Bae and others which found symptomatic patients with Covid 19 who cough have similar viral loads when wearing a disposable surgical mask, or cotton 2 layer mask, or without a mask. Mask did not stop the virus when coughing. (4)

CDC report of March 2021 regarding mask mandates in restaurants from March 1 to December 31, 2020 gave credit to masks for 0.5% decrease in cases and 0.7% decrease in Covid death rates after 1-20 days. Reviewing the article the case and death rates 1-40 days after the restrictions were lifted were not statistically significant between counties with mask mandates vs. counties with no mask mandates. The article did not account for close contacts and other activities in addition to onpremises dining or improvement in therapies. (5)

Kansas a comparison between counties with mask mandates vs. counties without mask mandates there was no difference in Covid 19 infections. (6)

Danish study compared 3030 adults wearing masks vs. 2994 not wearing masks outside the home. Antibodies were tested at the start and 1 month later. 2% wearing masks were infected, and 2.1% without masks were infected. (7)

New England Journal of Medicine (NEJM) published a study of 1848 Marine recruits who were quarantined at home 2 weeks and then quarantined 2 more weeks at a supervised closed college campus. Drill instructors rotated 8 hour shifts to enforce masks, social distancing, and daily temp/symptom checks. PCR nasal swabs collected Day 0, 7, and 14 on campus. Day 0 0.9% (16) were positive after home quarantine and all but 1 had no symptoms (15 of 16). 2 weeks on campus 1.9% (35) were positive despite personal protective measures (hand cleaning,

masks) and environmental measures (surface cleaning). No infections were detected with daily symptom monitoring. Marines enforced strict lock down quarantine and masks did not stop the spread. (8)

Sweden kept preschools (1-6 year old) and schools (7-16 year old) open with no masks March 1 – June 30, 2020. Of the 1,951,905 children there were 15 ICU admissions: 1-6 had 4 admits, 7-16 had 11 admits (4 with underlying conditions). Of the 103,596 teachers had 30 ICU admissions: preschool had 10 admits, school had 20 admits. No Covid 19 deaths in children or teachers. (9)

Masks have psychological and physiological side effects. A German study measured carbon dioxide in the air inhaled for children wearing a mask was 3X greater than the safe limit (0.2% or 2000ppm) and the youngest children had the highest values. One 7 year old measured 25,000ppm or 12.5X safe limit. Effects of high inhaled carbon dioxide results in respiratory acidosis -> lower blood pH -> higher respiratory rates. (10)

Vaccines will prevent the spread?

Data shows the vaccine does not stop the spread or prevent infections of SARS-CoV-2, but symptoms may be milder in adults. CDC report of 469 cases July 6-25, in Barnstable County Massachusetts during summer events with thousands of tourists. 74% (346 of 469 cases) were fully vaccinated but developed breakthrough infections. 79% (274 of 346 infected vaccinated) were symptomatic (cough, head ache, sore throat, myalgia, fever). 5 were hospitalized (4 of 5 were fully vaccinated). No deaths. (11)

Israel study published in NEJM 11,453 health care workers received 2 doses of Pfizer messenger RNA vaccine. They were working during the third and largest peak of Covid 19 cases (8,424 cases/day). If they were

exposed to an infected person or developed symptoms they were tested with Antigen-detecting rapid diagnostic test (Ag-RDT) screening test and reverse-transcriptase-polymerase chain reaction (RT-PCR) assay. 0.4% had breakthrough infections (39 of 11453 vaccinated). 67% of the breakthrough infections (26 of 39 infected) had mild symptoms. 59% (17 of 39 infected) had positive rapid diagnostic testing (Ag-RDT). Vaccine protected against severe symptoms but did not stop infection or infectivity. (12)

Other therapies?

Group and others reported in NEJM that Remdesivir & Dexamethasone reduced mortality when patients in the hospital require ventilators or high flow oxygen. Natural immunity is important for protection, and alternative therapies are successful. Study at hospital in Spain 930 patients with Covid 19 saw 10% death rate. 838 hospitalized patients 53% (447 of 838) were given a potent Vitamin D3 (calciferol). Treating with Vitamin D3 (25 OHD level >20) reduced ICU necessity by 79% and reduced deaths by 70%. (13)

Georgia Department of Public Health reports from March 22, 2020 to August 15, 2021 school age children 5-17 year old 100,831 cases 11 deaths (0.011% of age group cases). Largest number of cases 18-29 year old 220,282 cases 134 deaths (0.061% of age group cases). Largest number of deaths >80 year old 6,880 (21.8% of age group cases).

Great Barrington Declaration was signed by >60,000 medical experts recommends: protect the vulnerable (nursing home residents, cancer patients, >80 year old); others with minimal risk of death should live

normal lives and build up immunity to the virus through natural infection called Focused Protection; simple hygiene (hand washing) and stay home when sick; schools should open in-person teaching, and extracurricular sports should resume; and restaurants and cultural events should open. (14)

New cases peak again despite masks, quarantines, and vaccines. Good news is death rates are lower, we have no ventilator shortages, we have effective treatment, and we have testing. My discussion with hospitals around the state is 95% of hospitalized adult patients are not vaccinated.

Allow parents to discuss concerns with their physicians and make decisions regarding their children's masks and vaccines. There is no scientific data to support masks mandates. Covid vaccinations need complete FDA approval and should not be mandated by the government or the Board of Education.

I am willing to discuss these 14 articles with any board member.

Thank you,

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- (1) Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures CDC China
- (2) Facemasks in COVID 19 era A health hypothesis
- (3) Infection Fatality Ratios Covid 19 persons 12 and older AnnIM Letter
- (4) Rapid Expert Consultation Effectiveness of Fabric Masks for Covid 19 Pandemic
- (5) Association of State Issued Mask Mandates On Premises Restaurant Dining with County Covid 19 Levels CDC MMWR March 2021
- (6) A Statistical Analysis of Mandates and Mask Usage in Kansas _ The Heritage Foundation
- (7) Effectiveness of Adding Mask to Prevent SARS CoV 2 in Danish Mask Wearers AnnIM
- (8) SARS Cov 2 Transmission among Marine Recruits during Quarantine NEJM
- (9) Open Schools Covid 19 and Child and Teacher Morbidity in Sweden NEJM
- (10) Experimental Assessment of CO2 Content in Inhaled Air with or without Face masks in Healthy Children JAMA Peds
- (11) Outbreak Covid 19 breakthrough infections Barnstable County Massachusetts MMWR July 2021
- (12) Covid 19 Breakthrough Infections in Vaccinated Health Care Workers NEJM
- (13) Calcifediol treatment and Covid 19 related outcomes

(14) Great Barrington Declaration Focused Protection