

Reopening Schools

Ensuring Staff Safety and
Translating Lessons from Healthcare

Sarita Chung, MD FAAP

Director, Disaster Preparedness
Division of Emergency Medicine, Boston Childrens Hospital

Member, Council on Children and Disasters
American Academy of Pediatrics



Boston Children's Hospital
Until every child is well™

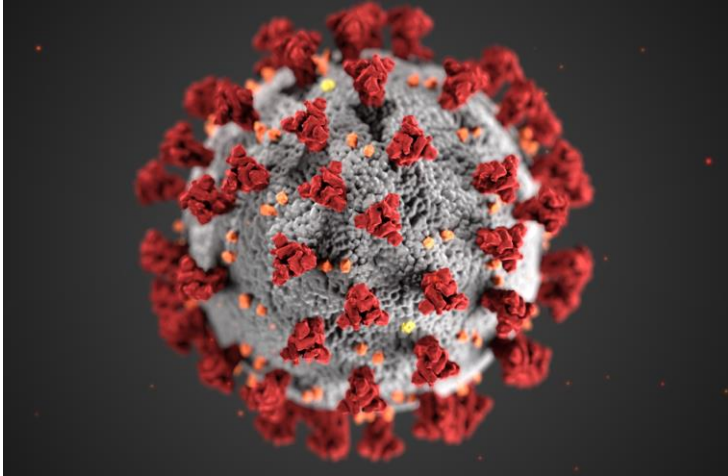


HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Conflict of Interest Disclosure

- Co-Director, Disaster Domain, Emergency Medical Services for Children Innovation and Improvement Center
- Consultant to Rubius Therapeutics regarding COVID 19 procedures
- Images used in this presentation were obtained from the public domain of the internet or are of actual health care staff.

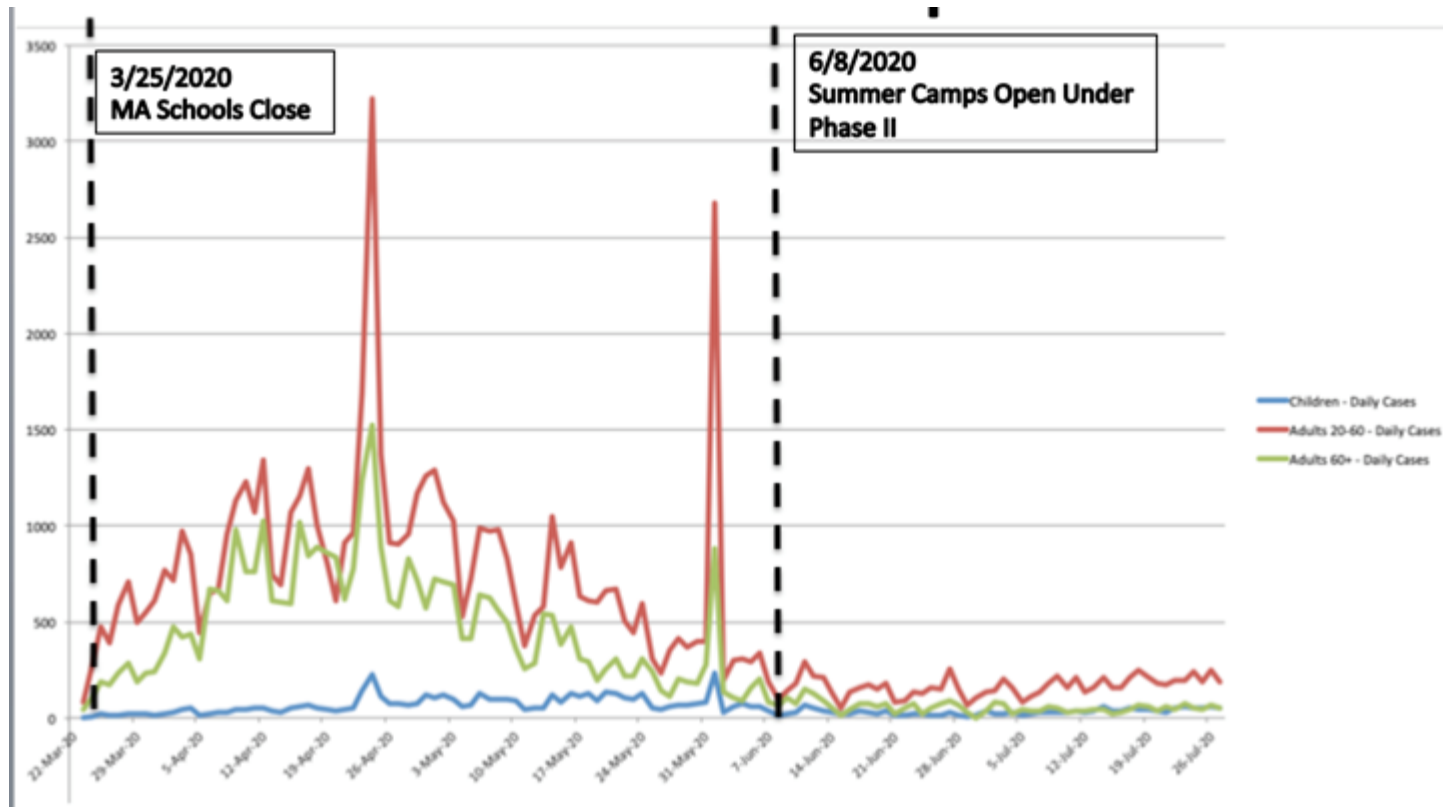
March 2020



- Experience with prior outbreaks
 - 2009 H1N1 Pandemic
 - 2014-2016 Ebola
- Not business as usual
- Anxiety and fear
- Lack of data; changing guidelines
- Response: nimble and flexible

Fundamental Principal

Ensuring Staff Safety



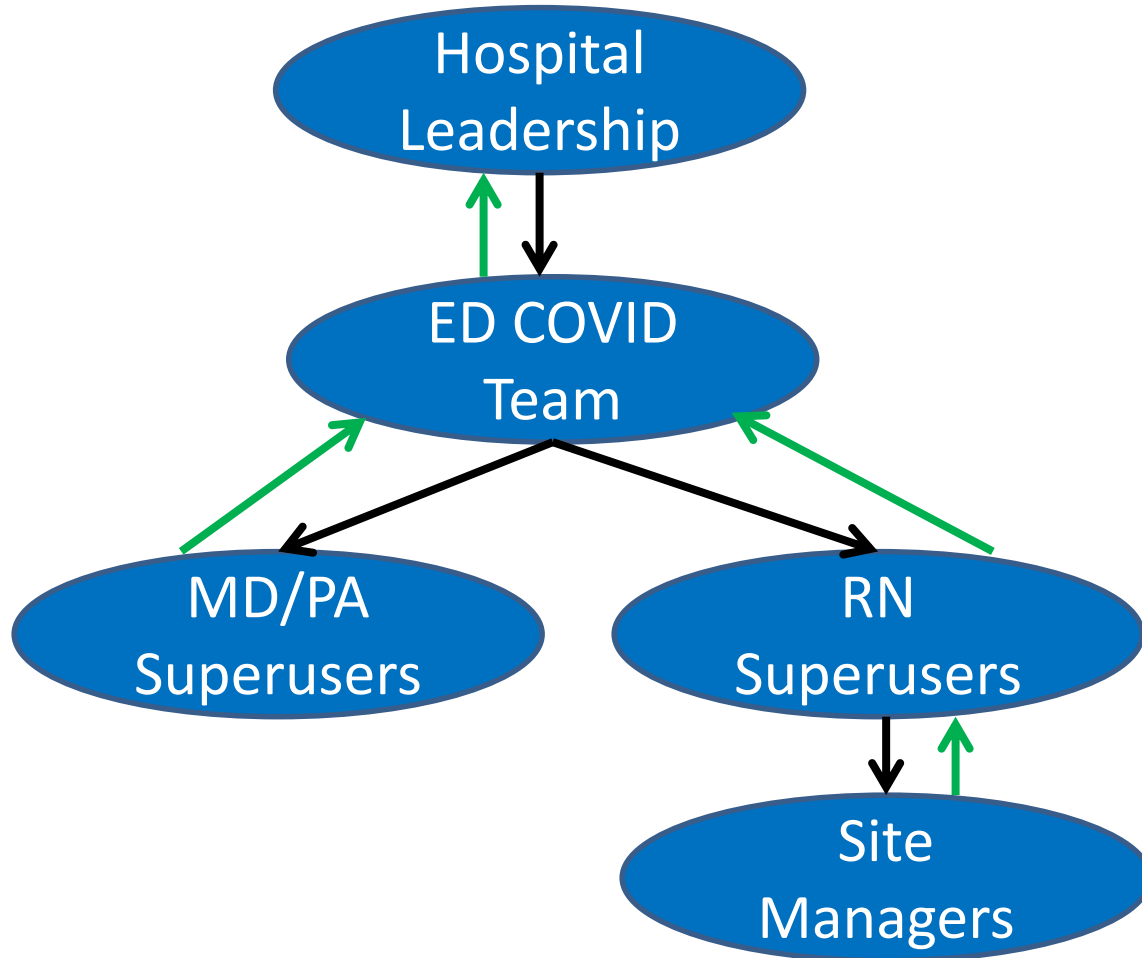
Author: Benjamin Sommers MD PhD July 2020

Planning Principles

- Structure
- Staff
- Space
- Stuff



Structure: Education



Hospital Leadership:

- Email updates (data)
- Weekly Open Town hall Meetings
- Leadership huddles

Emergency Department

- Email updates
- Twice daily Huddles
- 24/7 Superuser presence

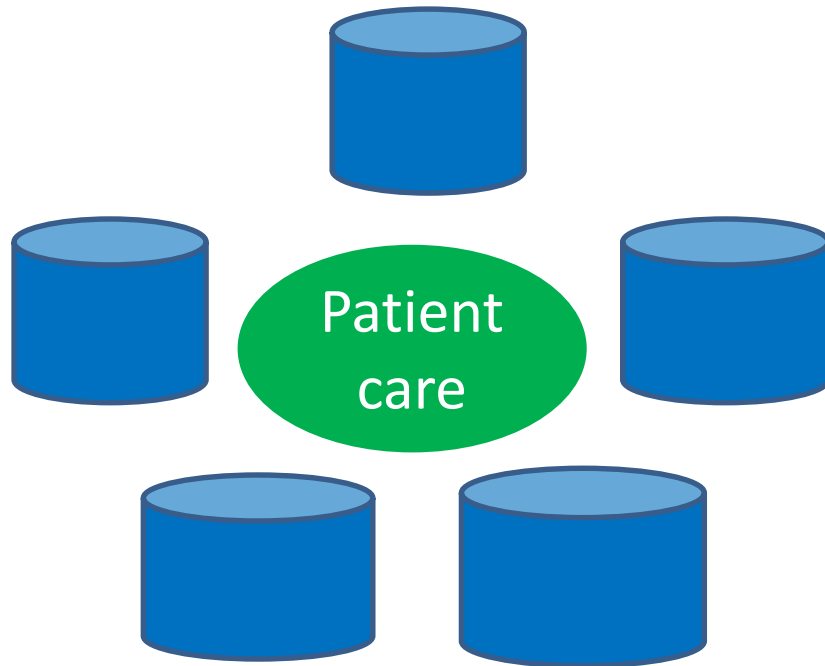
Tip:

- Do not send changes out after 5PM

Structure: Common Goals

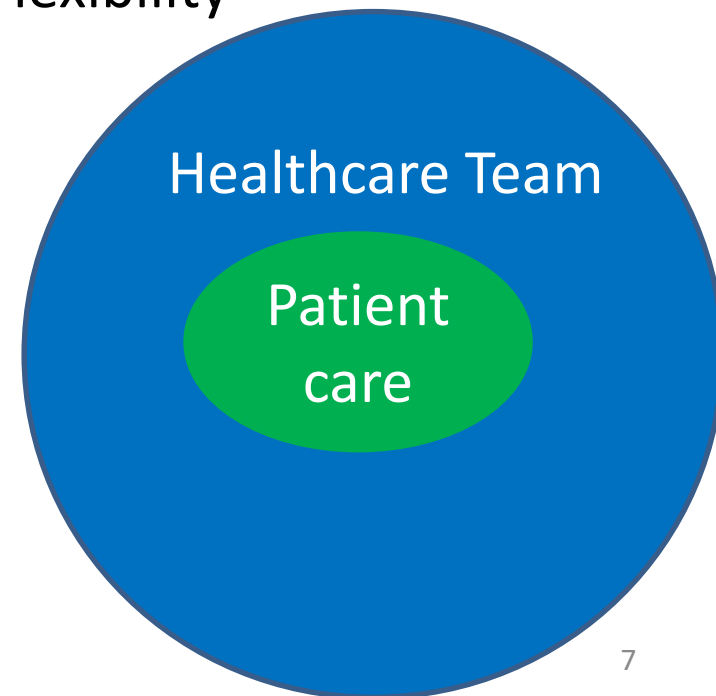
Breaking Down Silos

- Pre-Covid Model



- COVID Model

- Immersive Care
- Coordinated Approach
- Flexibility



Structure: Protocols

Home Human Resources **Depts & Programs** Policies & Tools Clinical Nursing Research About Us

- Emergency Management
- RESPONSE
- CHAMPS Downtime
- Connect Support
- Careaware Connect Downtime
- Backorders/Supply Shortages
- Disaster Relief
- Emergency Response Plans
- Infectious Disease Responses
 - » Ebola Clinical Guidelines & Protocols
 - » **Novel Coronavirus (COVID-19)**
 - Personal Protective Equipment (PPE) for COVID-19
 - COVID-19 Clinical Guidance
 - COVID-19 Screening & Testing
 - Staff Resources
 - COVID-19 Virtual Visit Information
 - COVID-19 Human Resources Information
 - COVID-19 Virtual Open Meetings
 - Re-entry Resources
 - Signage for Order
 - Administrative Re-entry Resources
 - » MERS Clinical Guidelines
- Flu Central
- Hospital Emergency Labor Pool (HELP)

Novel Coronavirus (COVID-19)

COVID-19 Communications

- » All COVID-19 related questions should be directed to the COVID-19 Hotline: 617-355-4200 (Mon-Fri 9:00am-4:00pm)
- » Occupational Health Services: 857-218-3046 (Mon-Fri 7:30am-4:00pm)
 - » After hours, weekends, and holidays, page OHS (#2455)
 - » Pay/Earned Time: HR Employee Service Center

COVID-19 Quick View

Current Inpatients with COVID-19		Current Inpatients with Pending COVID-19 Test	
Inpatient	ICU	Floor	
Total			
Unique Positive Patients	Overall Tests Sent	Tested	Confirmed M.S.C Patients
		424	

Hospital Updates

COVID-19 Data

We have received requests from clinicians to provide an update about COVID-19 data, including transmission of SARS-CoV-2, evidence-based measures demonstrated to reduce transmission, and what is known about risk of infection in healthcare settings. A new presentation addressing these aspects of COVID-19 is now posted on the COVID-19 website (see *COVID-19 Information* on the right side). We will also address this topic during this week's Open Meeting on Thursday August 6. A few key points:

- » Near-range droplet transmission is the primary mode of spread of SARS-CoV-2 (this includes small droplet aerosols)
- » "Aerosol" transmission should not be seen as demonstrating airborne transmission (i.e. long distance transmission)

Situation Update

- » Massachusetts DPH COVID-19 Data
 - » MA Dashboard
 - » Boston Dashboard
 - » CDC COVID-19 Website

COVID-19 Information

- » Data on Transmission and Risk of Infection in Healthcare Settings
- » COVID-19 Q&A

BCH Response Update

- » 7/31/20

Visitor Policy Changes

- » Visitor Policy Guidelines for Patients, Families and Staff


Patient & Family Education

- » COVID-19 House Rules
- » Library of all COVID-19 patient/family education resources
- » COVID-19 Family Education Sheet (includes info about face masks and visitation)
 - » Arabic
 - » Spanish
 - » Simplified Chinese
- » Instructions for patients discharged after testing positive for COVID-19
- » Waiting at Home for COVID-19 Test Results
- » Home Care for Patients When COVID-19 Testing Was NOT Performed

- Testing, Cleaning, Infection Control, etc.
- Multidisciplinary Approach (public health, end users)
- Expect changes; Obtain feedback for improvement
- Data transparency
- Cleaning: indirect contact (via contaminated environment) can occur but only approx 6% of infections*

*Dave Weber, SHEA Town Hall, July 2020


Structure: Culture shift to minimize Illness



Do you have:

- fever
- cough
- difficulty breathing
- sore throat
- muscle aches
- chills
- new onset of loss of taste or smell

Thank you for your help as we work together to safeguard all of our patients, families and staff.

 Boston Children's Hospital

- Staff and Children attestation
- Messaging to families keeping children home when ill
- Community vigilance



Structure: Staff Wellness and Mental Health Needs

- Integrate Early
- Zoom parties (Zumba, Yoga, Gardening, Baking)
- Informal Childcare Resource
- Peer to Peer Counseling

Anti-Racism Resources



Who To Call If...



Mental Health *new resources*



Wellness



Working From Home



Family Resources



COVID-19 Promotions



Articles



General Information



Staff-Decontamination Strategies


World Health Organization
 Patient Safety
 A World Alliance for Safer Health Care
SAVE LIVES
 Clean Your Hands

All reproductive and/or translation rights reserved by the World Health Organization for any of the information contained in this document. However, the published information may be used for educational and training purposes, provided that the source is acknowledged. The appearance of the names of the authors of the articles in this document does not imply endorsement or approval by the World Health Organization. The appearance of the names of the authors of the articles in this document does not imply endorsement or approval by the World Health Organization. The appearance of the names of the authors of the articles in this document does not imply endorsement or approval by the World Health Organization.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: 40-60 seconds



0 Wet hands with water;

1 Apply enough soap to cover all hand surfaces;

2 Rub hands palm to palm;

3 Right palm over left dorsum with interlaced fingers and vice versa;

4 Palm to palm with fingers interlaced;

5 Backs of fingers to opposing palms with fingers interlocked;

6 Rotational rubbing of left thumb clasped in right palm and vice versa;

7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8 Rinse hands with water;

9 Dry hands thoroughly with a single use towel;

10 Use towel to turn off faucet;

11 Your hands are now safe.

Emergency Staff Safety *COVID-19*

Suggestions to help minimize risk to you and your loved ones.

Before Work

- Remove watch and jewellery
- Wear clean scrubs into work
- Change of scrubs in washable bag
- Lunch in disposable bag
- No nail polish. Proper hand hygiene.

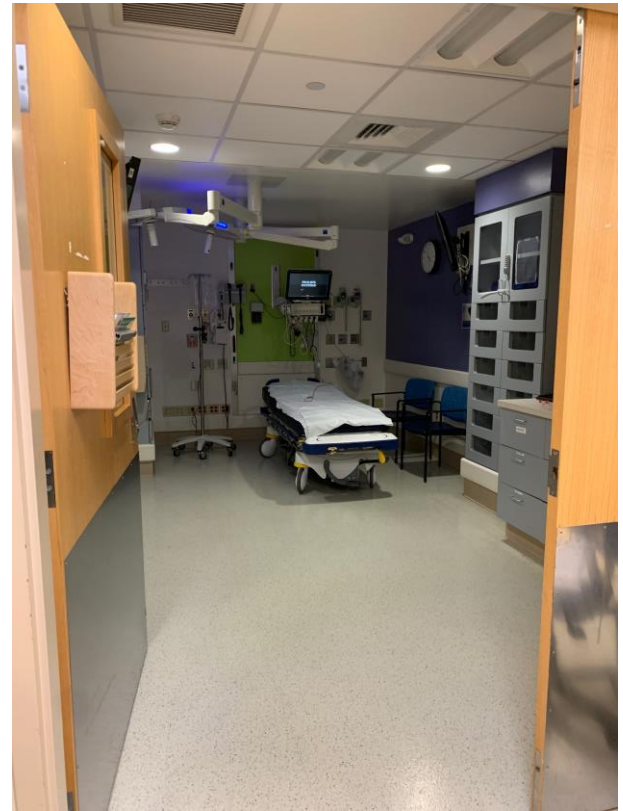
During Work

- Sanitize phone, ID badge & glasses
- Sanitize work station stethoscope
- Hand hygiene before/after each patient & when touching new surfaces
- Sanitize lunch room before eating
- No hand-shaking or high fives
- Wear appropriate PPE as directed

After Work

- Scrubs in hospital laundry or washable bag. Wear clean clothing/scrubs home.
- Sanitize phone, ID badge, glasses & stethoscope
- Work shoes wiped down & left at work
- Shower at work or immediately at home
- Leave outside shoes in garage or outside front door
- Water bottles/tupperware in dishwasher
- Clothing/scrubs + bag in washer
- Focus on wellness activities at least 1hr/day

Full Personal Protective Equipment: Some of the time



Universal Masking Policy: All of the time

- Spread within healthcare settings is uncommon since universal masking was adopted.*
- Universal masking and eye protection reduce risk of transmission.*
- Healthcare providers with COVID 19 are overwhelming related to community spread.*
- Masking policy will decrease transmission of all respiratory viruses
- Cloths masks have been shown to reduce exposure to respiratory infections (multiple layers)



Stuff

- Supply Chain can be unpredictable
- Centralized secure locations to store PPE
- Other supplies such as voice projection may be needed



Children and COVID 19

Clin Microbiol Infect. 2020 Jul; 26(7): 842-847.
 Published online 2020 Apr 25. doi: [10.1016/j.cmi.2020.04.023](https://doi.org/10.1016/j.cmi.2020.04.023)

PMCID: PMC7182753
 PMID: [32344166](https://pubmed.ncbi.nlm.nih.gov/32344166/)

COVID-19 pandemic—a focused review for clinicians

M. Cevik¹  Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

Author info

EMERGING INFECTIOUS DISEASES™

ISSN: 1080-6059

EID Journal - Volume 26 - Early Release - Main Article



Disclaimer: Early release articles are not considered as final versions. Any changes will be reflected in the online version in the month the article is officially released.

Volume 26, Number 10—October 2020

Seroprevalence of anti-SARS-CoV-2 IgG antibodies in Geneva, Switzerland (SEROCoV-POP): a population-based study



1 Korea, 2020

Silvia Strichchini, Ania Wasiak*, Giovanni Piamatti*, Andrea S Azman*, Stephen A Lauer, Hélène Baysson, David De Ridder, Dusan Petrovic, Stephanie Schremppf, Kalling Marcus, Sabine Yerly, Isabelle Am Venzes, Olivia Keiser, Samia Hunt, Clara M Porfay-Barbe, Didier Trono, Didier Pittet, Laurent Galtz, François Chappuis, Isabelle Eckler, Nicolas Vuillemin, Benjamin Meyer, Antoine Fihouft, Laurent Kaiser, Idris Guessoua

BMJ Paediatrics Open

Rajmil L Role of children in the transmission of the COVID-19 pandemic: a rapid scoping review *BMJ Paediatrics Open* 2020;4:e000722. doi: [10.1136/bmjpo-2020-000722](https://doi.org/10.1136/bmjpo-2020-000722)

Clinical Infectious Diseases

MAJOR ARTICLE



Characteristics of Household Transmission of COVID-19

Wei Li¹, Bo Zhang², Jianhua Lu³, Shihua Liu⁴, Zhiqiang Chang⁵, Cao Peng⁶, Xinghua Liu⁷, Peng Zhang⁸, Yan Ling⁹, Kaixiao Tao¹⁰, and Jianying Chen¹¹
¹Department of Gastrointestinal Surgery, Union Hospital, Tongji Medical College, Huashong University of Science and Technology, Wuhan, China; ²Department of Thoracic and Breast Surgery, Union Hospital, Affiliated With Tongji Medical College, Huashong University of Science and Technology, Wuhan, China; ³Department of General Surgery, Chik People's Hospital, Chik, China; ⁴Department of Infectious Diseases, Zangang First People's Hospital, Zangang, China; ⁵Department of Emergency Medicine, Union Hospital, Tongji Medical College, Huashong University of Science and Technology, Wuhan, China; and ⁶⁻¹¹Department of Physical Examination, Union Hospital, Tongji Medical College, Huashong University of Science and Technology, Wuhan, China

Background. Since December 2019, SARS-CoV-2

July 30, 2020

More

Age-Related Differences in Nasopharyngeal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Levels in Patients With Mild to Moderate Coronavirus Disease 2019 (COVID-19)

Taylor Heald-Sargent, MD, PhD¹, William J. Muller, MD, PhD², Xiaotian Zheng, MD, PhD³, et al.

Author Affiliations | Article Information

JAMA Pediatr. Published online July 30, 2020. doi:10.1001/jamapediatrics.2020.3651



Month	Positivity rate for asymptomatic patients
June-July 2020	0.43%

- Children
 - Less likely to be infected
 - Less severe disease and hospitalizations
- Implications for school staff: Transmission higher from other adults than children



Conclusions

- #1 Priority is to ensure staff safety
 - School staff need to be at the table
 - Communication and Educational strategies
- There will never be zero risk (even with vaccine)
- Masks are key to reducing transmission (Children can do it!)
- Consider eye protection
- Let's look at the science together: Brookline School Public Health, Safety and Logistics Expert Advisory Panel

