# Clinical Laboratory COVID-19 Response Call Monday, November 1, 2021, at 3:00 PM EDT

### Welcome

- Jasmine Chaitram, CDC Division of Laboratory Systems (DLS)
- Successful Mitigation of SARS-CoV-2 Transmission at a Residential Secondary School
  - Kevin Volpp and Bruce Kraut, University of Pennsylvania
- SARS-CoV-2 Variants Update
  - John Barnes, CDC Laboratory and Testing Task Force for the COVID-19 Response

# Division of Laboratory Systems (DLS)

## Vision

Exemplary laboratory science and practice advance clinical care, public health, and health equity.

## Mission

Improve public health, patient outcomes, and health equity by advancing clinical and public health laboratory quality and safety, data and biorepository science, and workforce competency.



## Four Goal Areas



## Quality Laboratory Science

 Improve the quality and value of laboratory medicine and biorepository science for better health outcomes and public health surveillance



Highly Competent Laboratory Workforce

 Strengthen the laboratory workforce to support clinical and public health laboratory practice



Safe and Prepared Laboratories

 Enhance the safety and response capabilities of clinical and public health laboratories



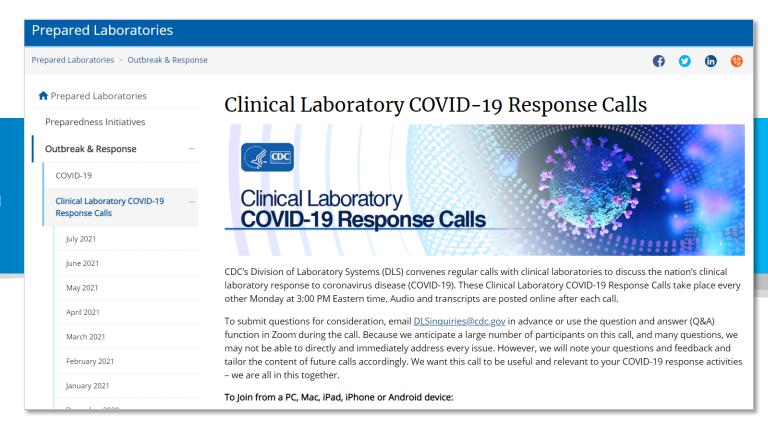
Accessible and Usable Laboratory Data

 Increase access and use of laboratory data to support response, surveillance, and patient care

# **CDC Preparedness Portal**

https://www.cdc.gov/csels/dls/preparedlabs/covid-19-clinical-calls.html

Find CLCR call information, transcripts, and audio recordings on the CDC Preparedness Portal



# Next CLCR Call

The next call will be on Monday, November 15 from 3:00 PM to 4:00 PM ET



## We Want to Hear from You!

# **Training and Workforce Development**

Questions about education and training?

Contact <u>LabTrainingNeeds@cdc.gov</u>



# How to Ask a Question

- Using the Zoom Webinar System
  - Click the Q&A button in the Zoom webinar system
  - Type your question in the Q&A box and submit it
  - Please do not submit a question using the chat button





If you are a patient, please direct any questions to your healthcare provider



Slide decks may contain presentation material from panelists who are not affiliated with CDC. Presentation content from external panelists may not necessarily reflect CDC's official position on the topic(s) covered.

# Successful Mitigation of SARS-COV-2 Transmission at a Residential Secondary School

# CDC Clinical Lab COVID-19 Response Call Nov 1, 2021

Kevin Volpp, MD, PhD

Bruce Kraut, MD, PhD

Mark V. Pauly President's Distinguished Professor, Perelman School of Medicine and Wharton Director, Penn Center for Health Incentives and Behavioral Economics, University of Pennsylvania Arthur B. Light Chair and Medical Director, The Lawrenceville School







#### Morbidity and Mortality Weekly Report (MMWR)











# Minimal SARS-CoV-2 Transmission After Implementation of a Comprehensive Mitigation Strategy at a School — New Jersey, August 20–November 27, 2020

Weekly / March 19, 2021 / 70(11);377-381

Kevin G. Volpp, MD, PhD<sup>1,2</sup>; Bruce H. Kraut, MD, PhD<sup>2</sup>; Smita Ghosh, DrPH<sup>3</sup>; John Neatherlin, MPH<sup>3</sup> (View author affiliations)

View suggested citation







# Why did we write this paper?

- Fall 2020
  - Schools nationwide were struggling to open and stay open for in-person learning
  - Widespread concerns about uncontrolled transmission of SARS-CoV-2 in school settings
- Lawrenceville School developed a comprehensive approach that was successful in minimizing risk of COVID transmission
- Wrote paper to share approach for wider adoption/dissemination







## Fall 2020: We Achieved Successful Containment

SARS-CoV-2 testing results	Faculty/Staff members (n = 405)	Students (n = $775$ )
No. of specimens tested (average per person)	8,955 (22.1)	12,494 (15.1)
No. of RT-PCR-positive tests	19*	8
No. (%) of cases linked to on-campus transmission	0 (—)	2 (25)†
No. of contacts identified and quarantined	17	14
No. of contacts with positive test results	0	0







# **Key Components of the System – Fall 2020**

- Pre-arrival testing and 2 week quarantine
- On campus arrival 10-day quarantine 3 negative tests 3 days apart
- Universal masking outside of dorm rooms
- Physical distancing / de-densify
- Upgraded ventilation: HEPA filters and MERV 13 filters
- All dining was take-out only with meals eaten outdoors
- Twice weekly RT-PCR testing
- Manual and electronic contact tracing / isolation of new cases / quarantine
- No athletic competitions with other schools but daily practices of teams took place
- Best for all behavioral compact







# "Best for All" agreement

- Motivational contract for behavioral reinforcement
- "Strikes' = consequences for students who do not comply with mitigation measures and testing protocols
- If 3 strikes sent home for two weeks (10 of 775 students)
- Reinforced social norms around wearing masks, full adherence to testing protocols, and maintaining distance to protect each other







# Fall 2021 – vaccine mandate Out of about 4000 tests... COVID-19 Dashboard

#### Vaccination

The Lawrenceville School's return-to-campus plan for fall 2021 is dependent upon all eligible individuals being fully vaccinated against COVID-19, which was the basis for our vaccine mandate that we communicated in May. The School is only granting medical and religious exemptions.

#### SELF-REPORTED VACCINATION RATES:

- 99% of faculty
- 91% of full-time staff
- 98% of students



# Current as of 10/27/2021

	Students	Employees
Currently in Isolation <sup>1</sup> :	1	0
Currently in Quarantine <sup>2</sup> :	1	0
Number of Recovered Cases	6	4
Fall Term COVID-19 Cases	7	4





# Swiss Cheese Approach – Fall 2021

- Some approaches less necessary once population fully vaccinated
  - Daily/twice daily temperature screening
  - De-densification of classrooms so that students could each be at least 6 feet apart
  - Proximity tracing devices to supplement manual contact tracing
  - Single rooms for boarding students
  - Daily symptom tracker (helpful in unvaccinated population)
- Retained surveillance testing (2x/week to 1+ after weeks of stability), masking within classrooms and indoors, and Best for All agreement







# **Implications**

- It is possible to nearly eliminate on-campus transmission of SARS-CoV-2
- Requires comprehensive approach to universal masking, prompt isolation of identified cases, adherence to "Best for All" agreement. Regular testing to identify cases and isolate reasonably promptly and upgraded ventilation also likely helpful
- Approach akin to "universal precautions" in health care settings







## Center for Surveillance, Epidemiology, and Laboratory Services

# SARS-CoV-2 Variants Update

John Barnes
CDC Laboratory and Testing Task Force
for the COVID-19 Response



# CDC Social Media

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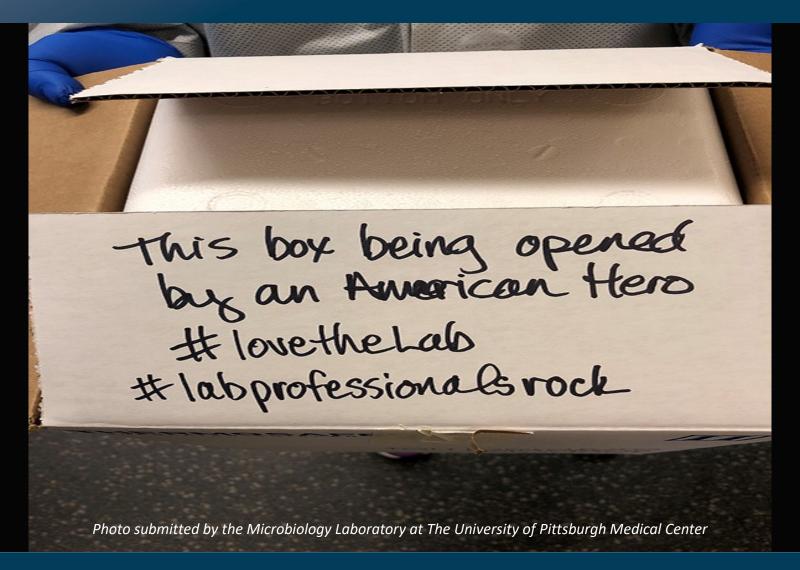




https://www.linkedin.com/company/cdc

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# Thank You For Your Time!



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