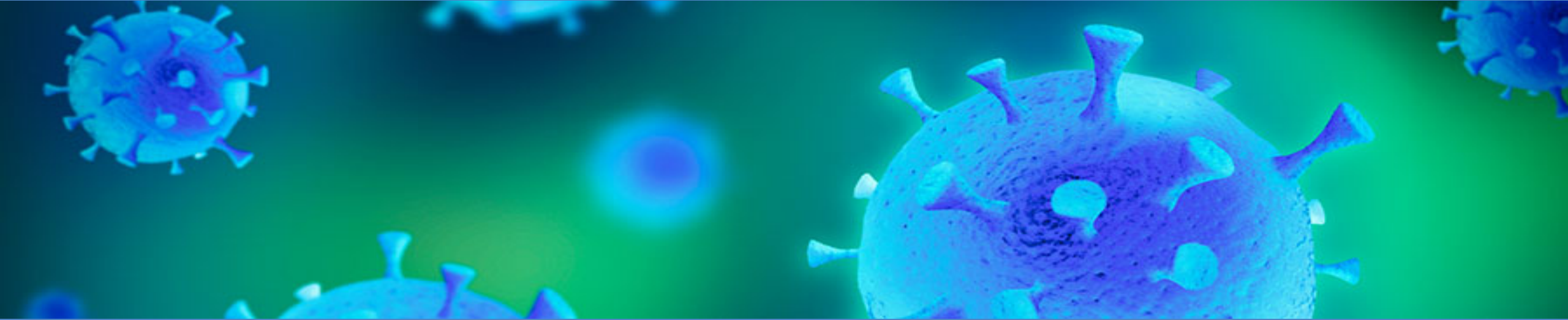


# VCHIP / CHAMP / VDH COVID-19 UPDATES



*Wendy Davis, MD FAAP - Senior Faculty, Vermont Child Health Improvement Program, UVM*  
*Breena Holmes, MD FAAP – VCHIP Senior Faculty & Physician Advisor, MCH Division, VDH*  
*March 12, 2021*



# Technology Notes

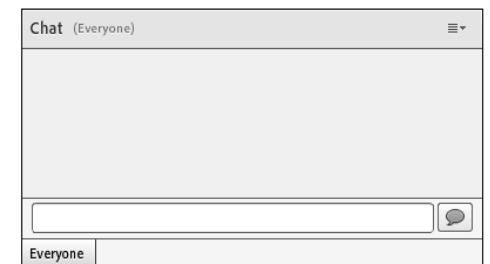
- 1) All participants will be muted upon joining the call.
- 2) If you dialed in or out, **unmute by pressing #6** to ask a question (and press \*6 to mute).  
**If you are having audio difficulties and are using your computer speakers, you may wish to dial in:**

**Call in number – 1-866-814-9555**

**Participant Code – 6266787790**

**Presenters:** Please avoid the use of speakerphone and make sure your computer speaker is muted if you dialed in via phone.

- 3) To ask or respond to a question using the **Chat** box, type your question and click the  icon or press Enter to send.



# Overview

- March 11, 2020: WHO declaration of global pandemic
  - Also National Preschoolers Day & National Working Moms Day: celebrate Let's Grow Kids campaign & VT H.171
- Reminder – weekly event schedule:
  - **VCHIP/CHAMP/VDH calls: M/W/F**; Gov. Media Briefings Tues/Fri; VMS call with VDH Commissioner Levine Thursday
- Situation, VDH, federal, AAP Updates
- Practice Issues: **Rethinking Summer Programming** (*Rebecca Bell, MD FAAP*); **Longitudinal serosurvey of COVID-19 antibodies in VT children** (*Benjamin Lee, MD FAAP*)
- Q & A/Discussion

*[Please note: the COVID-19 situation continues to evolve very rapidly – so the information we're providing today may change quickly]*

If you ask any family what the biggest stress was this past year, a majority of the responses would be around child care.  
**We need to make supporting early childhood education a priority.**

DR. REBECCA BELL  
President, American  
Academy of Pediatrics,  
Vermont Chapter



Child care is **ESSENTIAL** to Vermont.  
JOIN US AT: [LetsGrowKids.org](https://www.lets-grow-kids.org)



If we can pick up developmental delays in children at an early stage and they're involved in early education early on, they do so much better.

**If we wait until kindergarten, we've missed the chance for many, many children.**

DR. LOU DINICOLA  
Pediatrician, Randolph  
American Academy of  
Pediatrics,  
Vermont Chapter Member



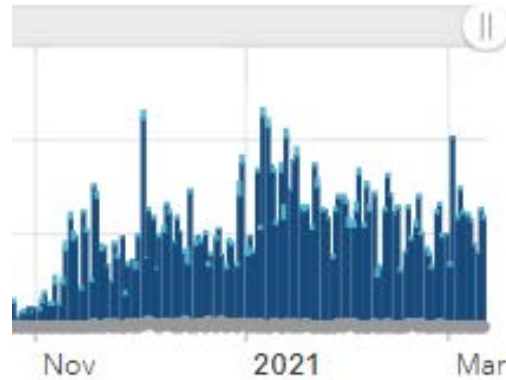
Child care is **ESSENTIAL** to Vermont.  
JOIN US AT: [LetsGrowKids.org](https://www.lets-grow-kids.org)



<https://www.facebook.com/LetsGrowKids/>

# Situation update

New Cases	<b>121</b>
16,623 Total	
Currently Hospitalized	<b>23</b>
Hospitalized In ICU	<b>4</b>
Hospitalized Under Investigation	<b>1</b>
Percent Positive 7-day Avg.	<b>1.5%</b>
People Tested	<b>340,210</b>
Total Tests	<b>1,170,887</b>
Recovered	<b>13,893</b>
83.6% of Cases	
Deaths	<b>212</b>
1.3% of Cases	
Last Updated: 3/12/2021, 10:45:47 AM	

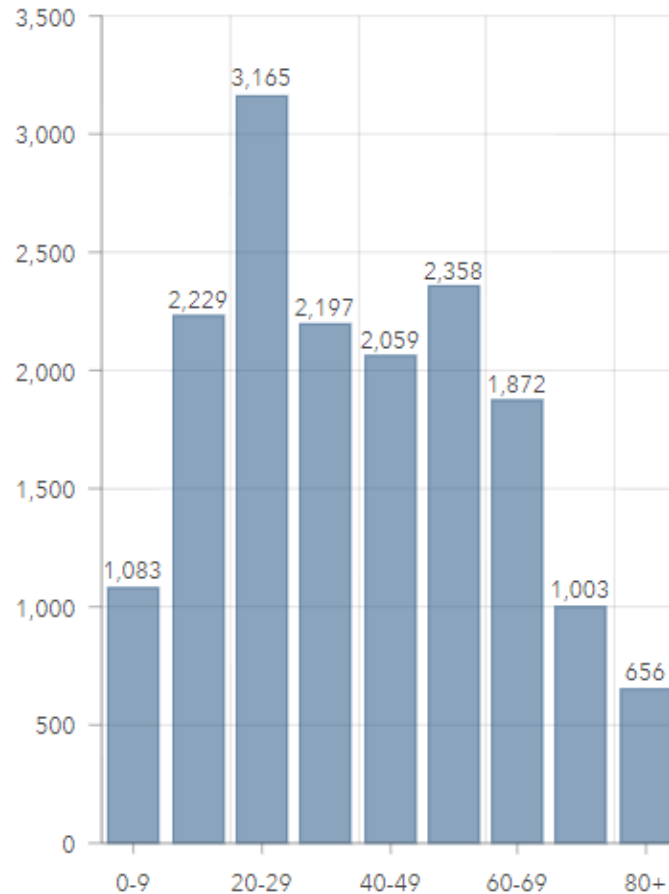


VT New Cases, Probables, Deaths

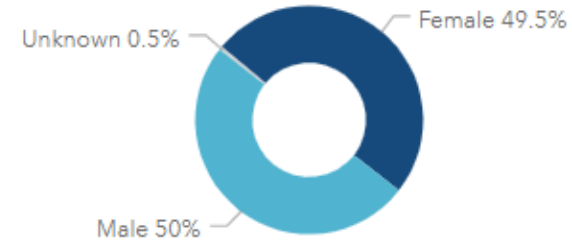
- U.S. **29.3 million+** cases; **530,351 deaths**
  - <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html> (updated 3/12/21)
  - 3/11/21: **62,689 new cases**; **1,522 d.**; **43,254 hosp.**
  - Past week: average 56,613 cases/day (decrease of 18% from average 2 weeks earlier)
  - **2.6 million+ deaths worldwide**; **118.6 million+ cases**)
- **COVID Tracking Project** – ceased data coll. 3/7/21
- **VDH Weekly Data Summary(3/12/21)**
  - **Weekly Spotlight Topic – Workplace Outbreaks** – focus on outbreaks in workplace settings (not incl. health care, inst./LTCF, education, & child care centers); “# rel. small.”
  - Find previous summaries at: <https://www.healthvermont.gov/covid-19/current-activity/weekly-data-summary>

# Situation update

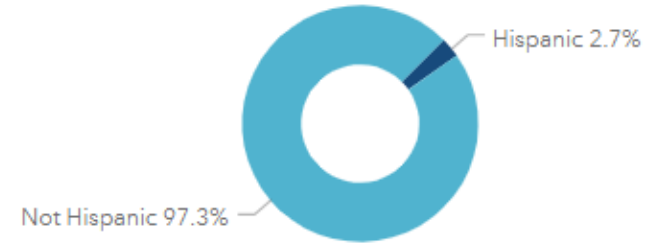
Vermont COVID-19 Cases by Age Group



Vermont COVID-19 Cases by Sex



Vermont COVID-19 Cases by Ethnicity if Known



Vermont COVID-19 Cases by Race if Known



Case Demographics

# COVID-19 Cases in VT K-12 Learning Communities (While Infectious)

## COVID-19 Cases in Vermont K-12 Learning Communities While Infectious

- <https://www.healthvermont.gov/sites/default/files/documents/pdf/COVID19-Transmission-Schools.pdf>
  - Table updated **Tuesday & Friday** w/data through previous Sunday & Wednesday.

March 10, 2021

### Cases in Vermont K-12 Learning Communities While Infectious

Learning Community	Cases Reported In the Past 7 Days	Total Cases
Schools with less than 25 students are reported in the "Total for all Suppressed Schools" row at the end of the table.		
<b>TOTAL FOR ALL SCHOOLS</b>	<b>60</b>	<b>728</b>

March 7, 2021

### Cases in Vermont K-12 Learning Communities While Infectious

Learning Community	Cases Reported In the Past 7 Days	Total Cases
Schools with less than 25 students are reported in the "Total for all Suppressed Schools" row at the end of the table.		
<b>TOTAL FOR ALL SCHOOLS</b>	<b>43</b>	<b>701</b>

## VT College & University dashboards:

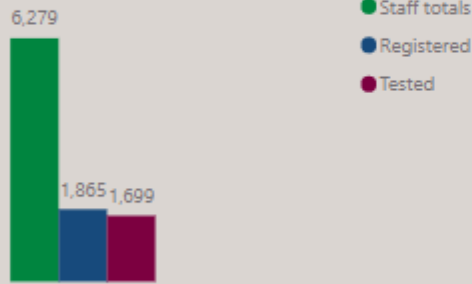
- UVM update: effective March 1, all students to be tested 2X/week (3d. In between; reeval 3/13)**
  - Violations of Green and Gold Promise, except for 1<sup>st</sup> missed test, to be reviewed for suspension in accordance with UVM policy (on-campus res. students will have 48 hours from a final conduct decision of suspension to vacate their residential hall and leave campus); thru 3/31 for now.

# AOE School Staff Testing Dashboard

## School Staff Testing: Weekly Summary



### Summary



Week	Staff totals	Registered	Tested
Jan 31	6,279	1,865	1,699

### Test Results

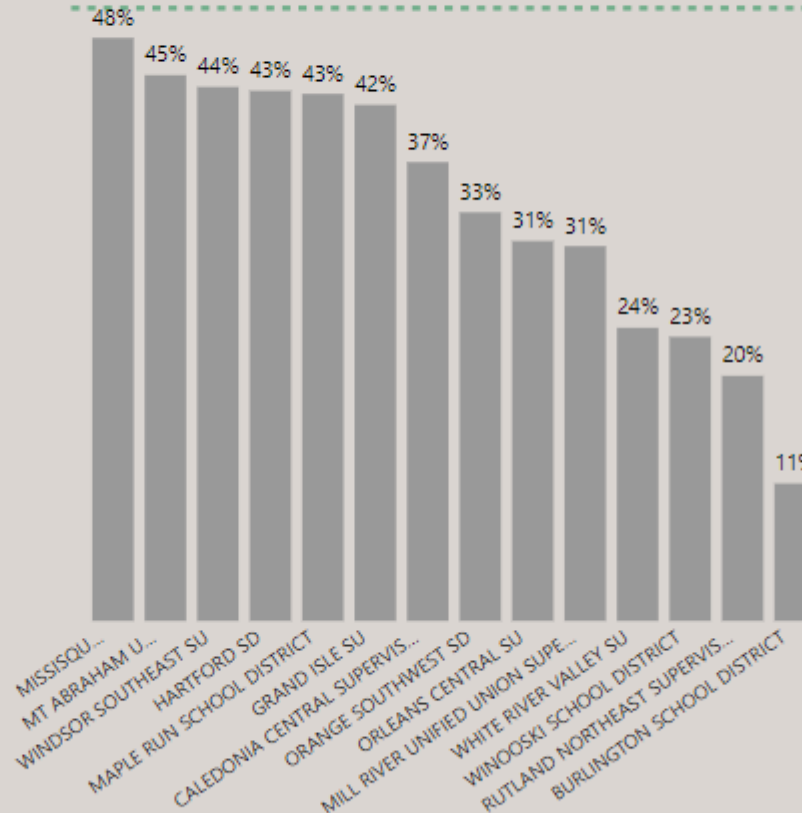


Week	Inconclusive	Negative	Not Tested	Positive	Total
Jan 31	16	1,656	9	2	1,683

% Positive  
0.12%

Select Testing Week: January 31, 2021

### % Registered by SD/SU



SD/SU	% Registered
MISSISQUOI VALLEY SCHOOL DISTRICT	48%
MT ABRAHAM UNIFIED SCHOOL DISTRICT	45%
WINDSOR SOUTHEAST SU	44%
HARTFORD SD	43%
MAPLE RUN SCHOOL DISTRICT	43%
GRAND ISLE SU	42%
CALEDONIA CENTRAL SUPERVISORY UNION	37%
ORANGE SOUTHWEST SD	33%
ORLEANS CENTRAL SU	31%
MILL RIVER UNIFIED UNION SUPERVISORY UNION	31%
WHITE RIVER VALLEY SU	24%
WINDSOR SOUTHWEST SD	23%
RUTLAND NORTHEAST SUPERVISORY UNION	20%
BURLINGTON SCHOOL DISTRICT	11%
<b>Total</b>	<b>30%</b>

Data source: Vermont Testing/Vaccine Registration System.  
Updated 2/10/2021 8:23:10 AM

Week of Jan. 31; updated 2/10/21

<https://education.vermont.gov/news/covid-19-guidance-vermont-schools/school-staff-covid19-surveillance-testing/school-staff-covid-19-surveillance-testing-weekly-summary>

# VDH COVID-19 Vaccine Dashboard

- Daily updates Tuesday thru Saturday
- Data = counts reported by end previous day; subject to change.
- <https://www.healthvermont.gov/covid-19/vaccine/covid-19-vaccine-dashboard>

**NOTE (2/17/21):** to align w/CDC reporting, # of doses rec'd. for VA & VNG were removed from # doses rec'd.; accounted for ~8,300 doses.

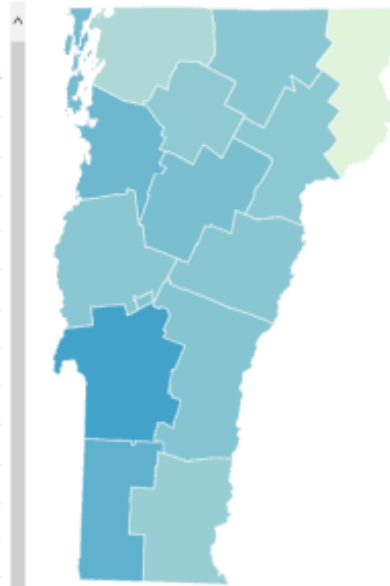
## Vermont Vaccination Data

### Vaccination by County

The percent of the county population that has received at least one dose of the vaccine

+ Show Race Detail

County	Overall progress
Addison	24.1%
Bennington	27.4%
Caledonia	24.0%
Chittenden	26.4%
Essex	17.5%
Franklin	21.5%
Grand Isle	25.7%
Lamoille	23.7%
Orange	24.2%
Orleans	24.1%
Rutland	29.6%
Washington	25.3%
Windham	23.1%
Windsor	24.5%
Vermont	25.2%



17.5% 29.6%

Summary

By Age, Sex, Race, Ethnicity

Doses Received

271.9K

Doses Administered

212.5K

Overall progress (age 16+)

People who have received at least one dose of the vaccine

25.2%

Completed

People who have completed vaccination

13.2%

Total People Started

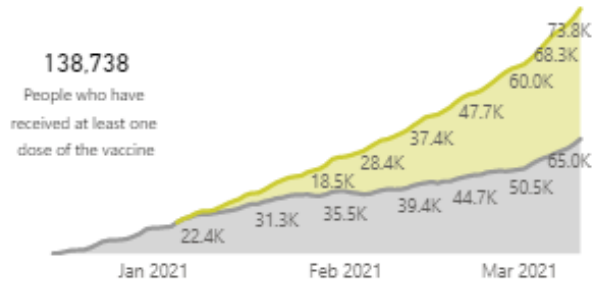
65.0K

Total People Completed

73.8K

Total People Vaccinated

● Started ● Completed



Updated 3/12/2021 8:46:49 AM



# VDH COVID-19 Vaccine Dashboard

- Daily updates Tuesday thru Saturday
- Data = counts reported by end previous day; subject to change.
- <https://www.healthvermont.gov/covid-19/vaccine/covid-19-vaccine-dashboard>

**NOTE (2/17/21):** to align w/CDC reporting, # of doses rec'd. for VA & VNG were removed from # doses rec'd.; accounted for ~8,300 doses.

## Vermont Vaccination Data

Select County

All

Clear filters

### By Age - Statewide

The percent of the statewide population of each age group that has received at least one dose of the vaccine

Age	%
16 - 17	1.1%
18 - 34	10.6%
35 - 49	15.0%
50 - 59	14.1%
60 - 64	14.1%
65 - 69	38.5%
70 - 74	72.9%
75+	83.6%
<b>Vermont</b>	<b>25.2%</b>

### By Sex - Statewide

The percent of the statewide population of each sex that has received at least one dose of the vaccine

Sex	%
Female	29.8%
Male	20.5%
<b>Vermont</b>	<b>25.2%</b>

Sex information is missing for 0% of people vaccinated.

Summary

By Age, Sex, Race, Ethnicity

### By Race - Statewide

The percent of the statewide population of each race that has received at least one dose of the vaccine

Race	%
Asian	13.7%
Black or African American	10.4%
Native American, Indigenous, or First Nation	4.4%
Pacific Islander	2.5%
Two or more races	12.9%
White	24.0%
<b>Vermont</b>	<b>23.3%</b>

Race information is missing for 7% of people vaccinated.

### By Race/Ethnicity and Age

The percent of the statewide population of each race/ethnicity that has received at least one dose of the vaccine

Race	16 - 64	65+	Total
BIPOC	8.3%	48.6%	12.6%
Non-Hispanic White	10.6%	59.5%	22.8%
<b>Vermont</b>	<b>10.4%</b>	<b>59.2%</b>	<b>22.1%</b>

Race/ethnicity information is missing for 13% of people vaccinated.

BIPOC refers to Black, Indigenous, and people of color.

Updated 3/12/2021 8:46:49 AM

# VDH COVID-19 Vaccine Registration & Sites

<https://www.healthvermont.gov/covid-19/vaccine/getting-covid-19-vaccine>

## GETTING THE COVID-19 VACCINE



### MAKE AN APPOINTMENT!

You can also get an appointment at [Kinney Drugs](#) or [Walgreens](#).

People 16 years or older with high-risk conditions can make appointments. Use the blue "MAKE AN APPOINTMENT" button above, call or use the Kinney Drugs link. Do not go through Walgreens. [See the list of conditions.](#)

People 65 years and older and people who work in the public safety system can make

appointments.

School staff and child care workers can make an appointment AFTER being contacted by school leadership or by the Department for Children and Families, who will provide a code. The Agency of Education and Department for Children and Families are working as quickly as possible!

There are enough appointments for everyone who is eligible. Appointments are required. Clinics cannot accept walk-ins.

### MAKE AN APPOINTMENT

1. [Create an account](#) (anyone can do this anytime!)

You may already have an account if you were tested for COVID-19 at a Health Department site.

2. [Make an appointment](#) when you are eligible to get the vaccine.

Can't make an appointment online or need help with an online appointment? Contact our call center at [855-722-7878](tel:855-722-7878).



Welcome to the COVID-19 Event Portal. Through this portal you can register for a COVID-19 vaccination clinic or COVID-19 testing event sponsored by the Vermont Department of Health. You will also be able to log in and view your test results once they are available.

#### To register:

1. Create an account.
2. Check your email to verify your account and get your Patient ID (check your spam folder if you don't see the email).
3. Log in with your Patient ID.
4. Register for a testing or vaccination event.

#### Create an Account

\* First Name

\* Last Name

\* Phone Number

\* Email Address



[Photo](#) [Login](#) [Create New Account](#) [Store Locator](#) [Refills](#)

[Home](#) [Pharmacy +](#) [Savings +](#) [Shop +](#) [About Us +](#) [Contact Us +](#) [Careers](#)

## COVID-19

Currently, the State of Vermont is offering COVID-19 vaccines to individuals age 75+ BY ON... schedule an ap...

Schedule your COVID-19 vaccination today.



mont

idents  
website to

Limited supplies of COVID-19 vaccines are now available in some states at select stores to individuals 16 years of age and older (16 years of age and older for Pfizer; 18 years of age and older for Moderna) who meet state-specific eligibility criteria.

[See if you're eligible in your state >](#)

# VDH COVID-19 Vaccine Registration & Sites (cont'd.)

- Appointments from 3/12/21 – 5/22/21
  - ▣ **205,840 total appointments clinics** (health care, VDH (Local/District Health Office POD, and some pharmacies – e.g., Costco, Walmart)
- **Online (preferred) for most and phone** appointment scheduling:
  - ▣ 1-855-722-7878
  - ▣ *If you need to speak with someone in a language other than English, call this number, and then press 1.*
- **Call Center Hours:**
  - ▣ Monday-Friday, 8:15 a.m. – 5:30 p.m.
  - ▣ Saturday and Sunday, 10:00 a.m. – 3:00 p.m.

# Special Vaccine Considerations for **Pediatric** Patients

- (Vaccine) **Phase 5b: 16-17 yo may register on-line/thru call center (Pfizer)**
- AOE and Child Development Division of DCF have separate vaccination codes for 16 & 17 y.o. who work in educational (child care) settings, since they have limited vaccine options.
  - ▣ CDD sent theirs out to programs 3/9/21
  - ▣ AOE is asking schools to contact them directly to get the code
- Information may be relayed in response to inquiries – vaccine support emails:
  - ▣ [AOE.Vaccine@vermont.gov](mailto:AOE.Vaccine@vermont.gov)
  - ▣ [AHS.DCFCDDInfo@vermont.gov](mailto:AHS.DCFCDDInfo@vermont.gov)
- Advocacy for parents/caregivers of CYSHCN: ltr. to Gov. Scott & Comm. Levine
  - ▣ UVM CH and VT Family Network
  - ▣ <https://www.nejm.org/doi/pdf/10.1056/NEJMpv2101339?articleTools=true>

# VDH Vaccine Implementation Advisory Committee

## ***Meeting today – Agenda:***

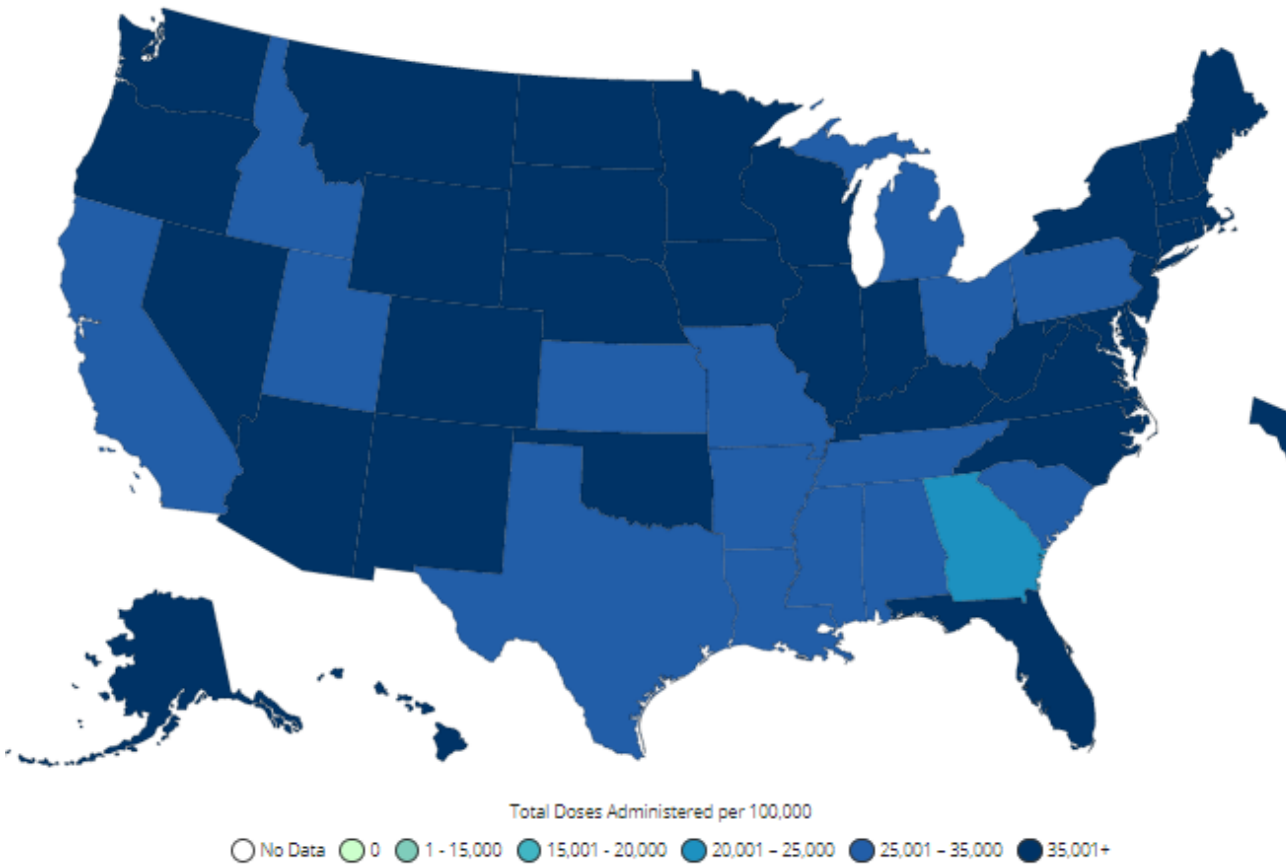
- Updates on current implementation
  - ▣ Vaccine Access – eligibility, clinics, avenues for accessing vaccine
  - ▣ Epidemiologic update – outbreaks and impact of vaccination
- Johnson & Johnson/Janssen
- Emerging Issues
- Public Comment

# VDH Updated Vaccine Toolkit

- Updated to reflect **Phase 5a & Phase 5b**
  - ▣ Helpful info re: what's needed to register, factsheet, videos, FAQ. NEW video specifically to help people w/high-risk health conditions.
  - ▣ Updated alert materials in **Digital Vaccine Toolkit for Partners; intended for general public, *not* for newly eligible educational and public safety systems that have different vaccination processes.**
- **Updated:** Eligibility-specific, “alert” messaging (now 55+, soon 16+ hi-risk)
  - ▣ Social media posts; blog/newsletter; email; letter
- General, “evergreen” messaging: posts re: preparing for vax eligibility, safety and efficacy of vaccines, and importance of getting vaccinated.
  - ▣ Social media posts; blog/newsletter; posters (8.5”x11” and 11”x17”); vaccine fact sheet: “Things You Should Know About COVID-19 Vaccines.” (available in multiple languages).

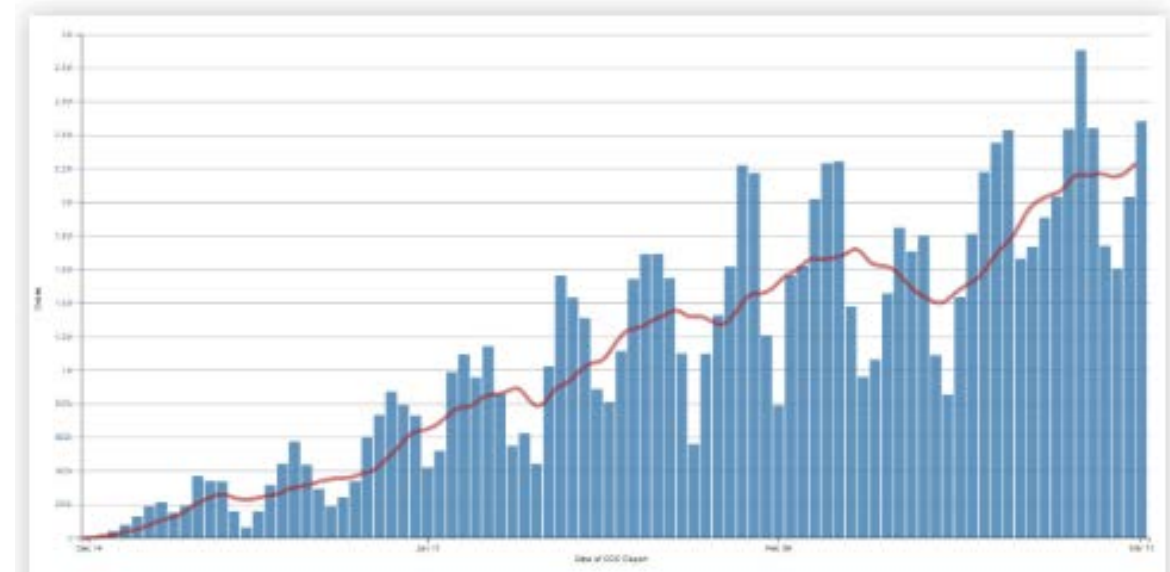
# From the CDC Vaccine Tracker

Total Doses Administered Reported to the CDC by State/Territory and for Select Federal Entities per 100,000 of the Total Population



Daily Change in Number of COVID-19 Vaccinations in the United States Reported to CDC

— 7-Day moving average



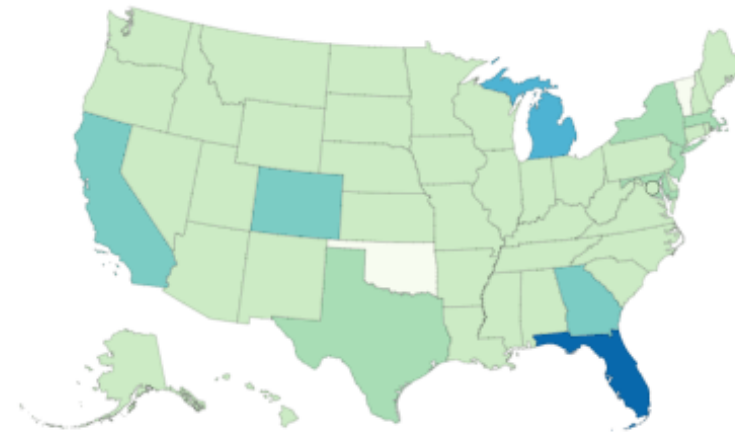
<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

<https://covid.cdc.gov/covid-data-tracker/#vaccinations>

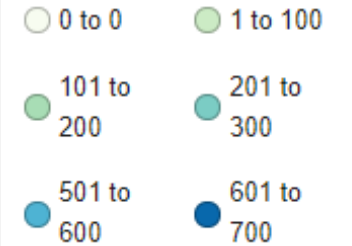
# From the CDC: U.S. COVID-19 Cases Caused by Variants

Variant	Reported Cases in US	Number of Jurisdictions Reporting
B.1.1.7	3701	50
B.1.351	108	23
P.1	17	10

Emerging Variant Cases in the United States\*†



Number of Cases



Filters

Variant B.1.1.7 ▼

Territories AS GU MH FM MP PW PR VI





# Schools & Physical Distancing (Clinical Infectious Diseases, 3/10)

<https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab230/6167856>

- **Background:** GLs differ re: optimal physical distancing to prevent transmission
- **Objective:** compare incident cases in students & staff in MA public schools among districts w/different physical distancing requirements (e.g,  $\geq 3$  versus  $\geq 6$  feet). [NOTE: MA mandates masking for all school staff/students in grades 2 up; majority require universal masking.]
- **Methods:** linked **community incidence case rates** (students gr. K-12 & staff doing in-person learning) **and district infection control plans.**
  - Incidence rate ratios (IRR) for students/staff in districts with  $\geq 3$  vs.  $\geq 6$  feet phys. dist. est. using log-binomial regression; models adjusted for community incidence also reported.
- **Results:** 251 elig. districts; 537,336 students; 99,390 staff IP instruction over 16 wks. (6.4m+ student learning wks. & 1.3m+ staff learning wks.): student case rates similar in the 242 districts with  $\geq 3$  feet versus  $\geq 6$  feet phys. dist. betw. students & similar after adjusting for community incidence; cases in school staff also similar.
- **Conclusions:** can adopt lower phys. dist. policies in school settings w/masking mandates without negatively impacting student or staff safety.

# Cardiac Screening & Return to Play

## Summary for School Leadership

- Protocols are the responsibility of the medical home and warrant clinical judgment by the health care provider and shared decision making with children/youth and their family.
  - ▣ Before returning to play, children/youth with COVID-19 infection should be seen by their pediatric medical home after illness resolves. Children/youth who meet clinical criteria will need to undergo the graduated Return-to-Play protocol overseen and monitored by the patient, their family and their health care provider.
- Children less than 12 years old can return to activity as tolerated after medical clearance by their pediatric medical home.

# Cardiac Screening & Return to Play (cont'd.)

## Summary for School Leadership

- The Return-to-Play protocol is intended for children/youth currently, or in the future, diagnosed with COVID-19 infection; child/youth's medical home may decide to extend the period back 1-3 months which is a clinical decision.
- Communication among local teams, including sharing of the medical clearance form and the graduated Return-to-Play paperwork, is important. Teams may consist of health professionals, school administrators, school nurses, athletic trainers, parents and athletes. Creating policies and communication plans will assist in the collection of paperwork and the dissemination of information to teachers, coaches, trainers, and school nurses. Continued team-based care between school nurses & medical homes is encouraged. School nurses should advocate for families of students post-COVID-19 infection to communicate with their medical home before returning to activity.

# VDH & CDC Updates

- VDH Health Advisory (3/10/21): COVID-19 Vaccination Phase 5 Vermonters with High-Risk Conditions
- MMWR:
  - ▣ Racial and Ethnic Disparities in COVID-19 Incidence by Age, Sex, and Period Among Persons Aged <25 Years — 16 U.S. Jurisdictions, January 1–December 31, 2020
  - ▣ First Identified Cases of SARS-CoV-2 Variant P.1 in the United States — Minnesota, January 2021

# From the AAP

## ***Coming Soon:***

- ❑ **Updated interim guidance** on COVID-19 Testing; PPE; Face Masks (previously cloth face coverings); Telehealth; Family presence; COVID-19 Vaccine; Clarification in Return to Sports

## ***Happening Now:***

- ❑ **American Rescue Plan Act of 2021**
- ❑ Impact on child poverty
- ❑ Funding to address school facility improvements for in-person learning during COVID-19; vaccine hesitancy
- ❑ AAP advocacy led to the Senate adding an additional \$80 million for HRSA's Pediatric Mental Health Care Access Program

# Friday Media Briefing (3/12/21)



## Governor Phil Scott

- ❑ Referenced President Biden's remarks: *"we think we can meet May 1 timeline – for eligibility, not necessarily shots administered (need confirmation of doses/J & J supply).*
- ❑ Monday, 3/15: 1-month extension for State of Emergency
- ❑ Phase 5b vax rollout began 3/11/21: 16+ w/hi-risk conditions.
  - ❑ Can still sign up for all previous phases
- ❑ Guidance changes – **gatherings**: 2 non-vaccinated households (HHs) may gather at one time effective today; just one at a time.
- ❑ Vaccinated persons don't count against the limit:
  - ❑ Example: you & one other non-vaccinated person could have several vaccinated friends or family members over for dinner.

# Friday Media Briefing (cont'd.)

## Governor Phil Scott

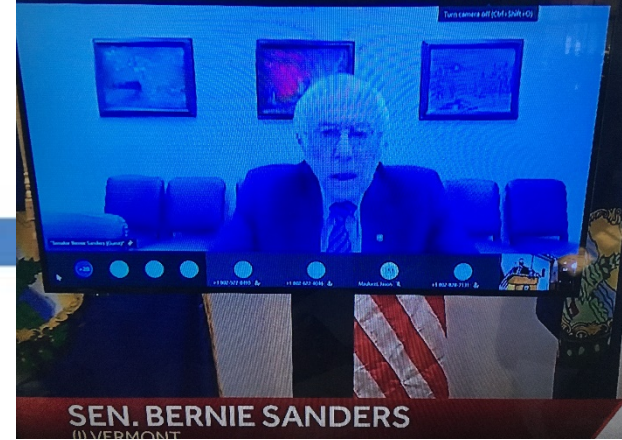
- ❑ Restaurant guidance: may seat 6 people at one table from different families. Maintain capacity & distancing guidelines.
- ❑ Expect more changes next week – more steps as more VTers are vaccinated.
- ❑ Not going to “flip the switch” like TX or other states – not safe, nor do I believe it’s what most Vermonters want.
- ❑ White House meeting this week: only receive ~500 doses J & J this week, prob. none next week; 4-5K by end of March.
- ❑ Should be able to announce age band timeline next week (pending federal supply confirmation).
- ❑ To Senator Sanders: legislation is the *“booster shot we need to transition to some form of normalcy.”*



# Friday Media Briefing (cont'd.)

## Special Guest Senator Bernie Sanders

- Theory behind bill: hard look at crises – pandemic, economic/business, education disruption. Increase to VT: 1.3b
- Direct cash payments, prompted by need for emergency food, etc. (\$1400 per person – in VT: ~89% of HHs.)
- Tax deduction for first 10K rec'd. for 2020 unemployment
- Estimated impact on child poverty: 50% reduction
- Rent, utility, mortgage assistance
- For early childhood through higher education: 391m.
- Increased vaccine production/administration.
- Doubled funding for CHCs (25% of VTers); 3X funding for NHSC





# Friday Media Briefing (cont'd.)



## AOE Secretary Dan French

- Surveillance testing: resumed this week (post-vacation)
- Tested just <3000 school staff; 1 case; 0.03% for this pool.
- New vax program for school staff – may change testing program.
- Location of vax appts. – school staff given codes & may make appts. anywhere – some slots filled more quickly than others; new clinics will be added as supply increases. May also register thru pharmacy program.
- Monthly survey re: operating modes (Feb. data): 77% response; sl. increases IP all grade levels. K-12 34% total; elem. increased 4%, MS 3%, HS 1%.

# Friday Media Briefing (cont'd.)

## AOE Secretary Dan French

- Expect IP to increase in coming weeks.
- Safe & Healthy Schools guidance being reviewed (last edits Oct.)
- Received expected SBAC testing form (waiver for provisions only – not the test itself).
  - ▣ Will publish proposal soon for public comment period.



# Friday Media Briefing (cont'd.)



## AHS Secretary Mike Smith

- ❑ Vax progress: 1 in 4 Vermonters have rec'd. at least one dose.
- ❑ 21,700 in Phases 5a and 5b have appts. as of this a.m.
- ❑ 11K educators and child care providers have appts.; clinics will cont. to increase (may also use Walgreens).
- ❑ Next wk: add Caledonia, Chitt., Orleans, Rutland, Windham Counties.
- ❑ Also opened child care ahead of 3/15: elig. individuals have instructions
- ❑ Eligibility: regulated child care programs **w/direct contact** – incl. aides/assistants, directors, afterschool, substitutes & trainees. HH members in fam home w/direct contact also eligible.
- ❑ **Not** elig. if w/o direct contact; unregulated programs; HH members w/o direct, IP contact with the children.

# Friday Media Briefing (cont'd.)

## AHS Secretary Mike Smith

- Clinics available to school staff also avail. to child care staff.
- Expanding opportunities: Chester, Grand Isle, Ludlow, Rockingham
- CVS to join: Barre & Morrisville tomorrow; more to follow.



# Friday Media Briefing (cont'd.)



## VDH Commissioner Levine

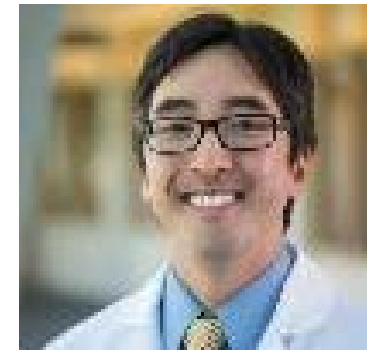
- Reviewed case data
- Reviewed PH guidance, including “COVID talk” in context of updated gathering guidance.
- Level of immunity may be lowest in U.S. – maybe 5%
- Seeing some element of presence of variants – but not significantly impacting cases
- Reminder to get tested when appropriate
- “COVID anniversaries”
- Disparities seen in COVID-19; VDH State Health Improvement Plan
- ***I’m getting vaccinated today!*** (look forward to hugging my granddaughter)

# Practice Issues

Rethinking Summer Programming (*Rebecca Bell, MD FAAP*);  
Longitudinal serosurvey of COVID-19 antibodies in VT children  
(*Benjamin Lee, MD FAAP*)



THE  
University of Vermont  
Children's Hospital



# Summer Learning Programs 2021

From Vermont Afterschool

- **Essential for COVID-19 Recovery**

- Close the achievement gap
  - Address mental health by focusing on social emotional learning
  - Ensure child safety by offering a safe place for children & youth during 10 weeks of summer break
  - Support nutrition by feeding children healthy snacks & meals
  - Promote wellness by getting youth outside & doing fun screen-free activities.
- **Addressing inequities** – existing gaps likely to grow w/families experiencing job loss and other fallout from the pandemic.

# Summer Learning Programs 2021

## What Students Need This Summer:

- Students need to feel safe and supported to reengage in learning and recover from this period of loss and isolation. This summer, kids of all ages need new ways and places to learn.
- Students need not only academic support, but also social and emotional support. They need help sustaining and rebuilding relationships, talking about their experiences and emotions, developing as leaders and agents of change, and re-engaging with their interests.
- They need a summer that includes time with friends and mentors, opportunities for creative enrichment and expression, healthy meals, daily physical activity, and fun projects that allow them to explore and learn without stress.



# A longitudinal serosurvey of COVID-19 antibodies in VT children

Benjamin Lee

3/12/21

# What were the big questions in summer 2020?

- Pediatric SARS-CoV-2 infection
  - Susceptibility?
  - Transmissibility?
  - True infection prevalence?
  - In other words, would household cluster data extrapolate to school settings?

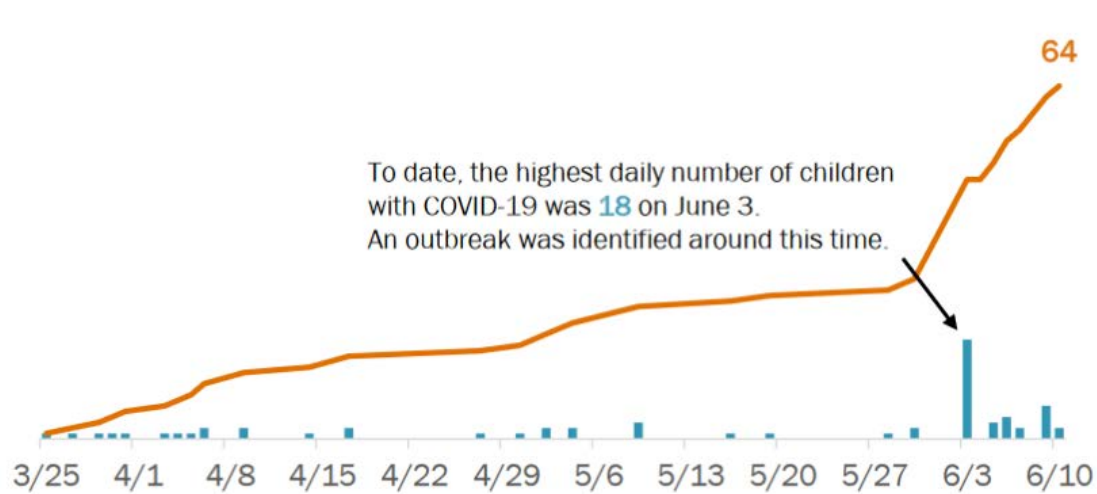
## ***Older Children Spread the Coronavirus Just as Much as Adults, Large Study Finds***

The study of nearly 65,000 people in South Korea suggests that school reopenings will trigger more outbreaks.

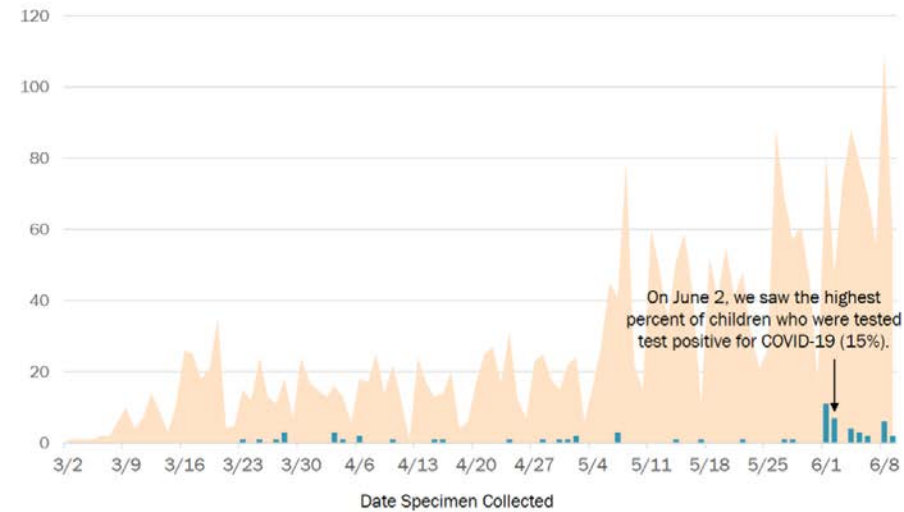
NYTimes, July 18, 2020

# Pediatric SARS-CoV-2 in VT, summer 2020

**New and Cumulative Cases of Vermont Children with COVID-19**

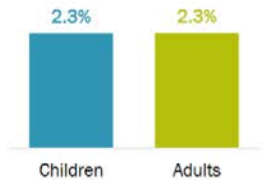


**Total Tests for COVID-19 among Children and Number of Children who Tested Positive**



2,749 children have been tested for COVID-19.

**Percent of tests positive among children and adults.**



VDH Weekly Data Summary, 6/12/20  
Spotlight: COVID-19 Among Children

# Pediatric SARS-CoV-2 in VT, summer 2020

- Per most recent state census data: 136,999 children 0-19
- Estimated cumulative incidence of 64 cases/136,999 = **0.05%**
- Access to testing in children almost nil until June
  - HAN to allow testing of mild symptoms in children 5/5/20
  - HAN announcing prioritization of anterior nares testing in children 6/2/20
- Already recognition that many children with infection would have mild or no symptoms

# Rationale, aims

- Pediatric serosurvey to investigate true infection prevalence in VT children
- Longitudinal assessment over the course of academic year to track prevalence in communities engaged in in-person learning
  - School entry
  - ~2-3 months later
  - Spring 2021
- Decide to focus within a single district to simplify logistics, remove confounding

# Immediate challenges

- Partnering with local school districts
  - Discussed/solicited multiple districts without any traction
  - Colchester School District expressed strongest interest
    - Final district approval in early September 2020-had already missed opportunity for school entry time point
- Funding?
  - Children's Miracle Network Hospitals Fund to the rescue
- Logistics
  - Informed consent
  - Staffing
  - High-throughput specimen collection during winter
  - Sally Cook (VDH), Ben Grebber (UVM COM 4<sup>th</sup> year), MRC to the rescue

# Study design

- Primary objective:
  - Estimate the seroprevalence of SARS-CoV-2 IgG antibodies in children grades pre-K-12 attending at least part-time ( $\geq 2$  days/week) in-person schooling in the fall of the 2020-21 academic year in Colchester, Vermont
- Secondary objectives:
  - Evaluation of seroprevalence stratified by age groups, in teachers/staff, and all
  - Comparison of changes in seroprevalence (non-inferiority design) in follow-up

# Methods

- Recruitment
  - Email or hard copy letters to all district families by district superintendent
- Enrollment
  - Remote, electronic informed consent and assent (grades  $\geq 6$ )
  - REDCap build!
  - Hard copy mailed recruitment materials and consent forms in 8 languages
    - 5-6 weeks of additional effort = 0 enrollees
- Capillary blood collection by fingerprick
- SARS-CoV-2 IgG 2-step ELISA
  - Stadlbauer D, Amanat F, Chromikova V, et al. SARS-CoV-2 Seroconversion in Humans: A Detailed Protocol for a Serological Assay, Antigen Production, and Test Setup. *Current protocols in microbiology*. 2020;57(1):e100.
- Adjusted seroprevalence for test characteristics using Blaker's method
  - Reiczigel J, Földi J, and Ózsvári L. (2010). Exact Confidence Limits for Prevalence of a Disease with an Imperfect Diagnostic Test. *Epidemiology and Infection*, 138(11), 1674-1678.
- Online questionnaire following blood collection re: history, risk factors



# Results

- 621 enrolled
  - 396 students (64%)
  - 225 teachers/staff (36%)
- 532 successful antibody measurement Dec 2-19, 2020
  - 332 students (63%)
  - 196 teachers/staff (37%)
  - Final participation rate = 18% among students (equally distributed)
- 527 (99%) completed associated online questionnaire asking about history, risk factors

# Results

	<b>Seropositive N</b>	<b>Total N</b>	<b>Unadjusted seroprevalence % (95% CI)</b>	<b>Adjusted seroprevalence % (95% CI)</b>
<b>Teachers/staff</b>	11	196	5.6 (2.9-9.8)	4.9 (2.0-9.3)
<b>Students</b>	18	336	5.4 (3.3-8.2)	4.6 (2.5-7.7)
<b>PreK-5</b>	4	149	2.7 (0.9-6.5)	1.8 (0.0-5.8)
<b>Grades 6-12</b>	14	187	7.5 (4.4-12.1)	6.9 (3.6-11.8)
<b>6-8</b>	6	82	7.3 (3.2-14.9)	6.7 (2.4-14.8)
<b>9-12</b>	8	105	7.6 (3.4-14.4)	7.0 (2.5-14.3)
<b>Total</b>	29	532	5.5 (3.7-7.7)	4.7 (2.9-7.2)

Adjusted for test characteristics of 95% sensitivity, 99% specificity  
FDA EUA for assay reported 92.5%, 100%

# Results

- 95% reported white race alone (vs 94% for VT based on latest census)
- No seropositive person reported prior COVID-19 or household contact with COVID-19
- Only 1 reported close contact with non-household member with COVID-19
- No associations between seropositivity with:
  - Out-of-state travel
  - Summer or school-related group activities (e.g. sports, camps, group child care, etc. either as student participant or teacher/staff)

# Findings likely reflect community seroprevalence

Vermont COVID-19 **Cumulative** Cases



1. Graham NR, Whitaker AN, and Strother CA, et al. Kinetics and isotype assessment of antibodies targeting the spike protein receptor-binding domain of severe acute respiratory syndrome-coronavirus-2 in COVID-19 patients as a function of age, biological sex and disease severity. *Clinical & Translational Immunology*. 2020; 9: e1189. doi: 10.1002/cti2.1189.
2. Bajema KL, Wiegand RE, Cuffe K, et al. Estimated SARS-CoV-2 Seroprevalence in the US as of September 2020. *JAMA Intern Med*. Published online November 24, 2020. doi:10.1001/jamainternmed.2020.7976
3. <https://covid19-projections.com/infections/us-vt>
4. This study

# Pediatric prevalence is underestimated

- By Dec 2, 2020, cumulative pediatric incidence per VDH ~0.5%
  - ~10-fold underestimate if our results are valid

## Estimated SARS-CoV-2 Seroprevalence Among Persons Aged <18 Years — Mississippi, May–September 2020

*Weekly* / March 5, 2021 / 70(9);312–315

- In MS, serosurvey of residual lab specimens estimated pediatric prevalence underestimated by >12%

# Conclusions

- SARS-CoV-2 seroprevalence in a single VT school district was ~5% by Dec 2020
  - Consistent with community seroprevalence estimates
- No evidence to suggest school attendance associated with seroprevalence rates different than general community
- “Silent” asymptomatic infections without clear source may be seen—but no evidence to suggest onward transmission
- Limitations
  - Participation rate low = limited sample size, precision
  - Selection bias: very low-risk cohort
  - Generalizability?
  - A number of positives were very low-level detections—false positives cannot be excluded
  - Cannot comment on timing/location of infections
  - Questionnaire recall bias

# Next steps

- Teachers/staff are getting vaccinated...so limited utility for follow-up sample collection
- Longitudinal follow-up in student cohort in June 2021
  - Re-open enrollment to district?
- Expand to cross-sectional serosurvey in all willing VT children and families?

# Thank you

- Colchester School District
  - Amy Minor, superintendent
  - Meghan Baule
  - Lindsey Campion
- Local pediatric community
  - Numerous volunteers who assisted with fingerprick
- VDH
  - Sally Cook
  - Patsy Kelso
  - Medical Reserve Corps Volunteers
- UVM COM
  - Ben Grebber, 4<sup>th</sup> year
  - Multiple student volunteers
- UVM VCT
  - Marya Carmolli
  - Dorothy Dickson
  - Sean Diehl
  - Nancy Graham
  - Beth Kirkpatrick
- Children's Miracle Network Hospitals Fund
- Annie Penfield-Cyr (REDCap guru)
- Sean Bullis, UVMCMC Infectious Disease



# Happening Now



- Big Change Roundup: [bigchangeroundup.org](http://bigchangeroundup.org)
  - ▣ Largest fundraiser for the UVMCH; funds raised support patients and families (e.g.) some child life services; new program startup (e.g., Transgender Program; safe sleep program on Mother Baby Unit); injury prevention initiatives; food insecurity initiative (CSC); support for inpt. families (ferry passes, gas cards, meal vouchers)
- Please help promote personally & through your practices/ orgs.
- **3/19-3/21**: Big Change Roundup Drive Thru Collections (3 loc.)
- **3/26/2021**: Big Change Roundup Final Total Announcement (counted off air/off-site)



# Save the Date: Friday, June 4, 2021



**Course Director**  
**David C. Rettew, M.D.**

Join us virtually for the 14<sup>th</sup> Annual Child Psychiatry in Primary Care Conference, featuring faculty from UVM and the community.

Topics this year include:

- Assessing Risks After School Violence Threats
- Mental Health Care Needs in Primary Care
- Child Psychiatry in the Emergency Department
- Integrated Care Forum
- Praising and Overpraising
- Post COVID Mental Health
- Anxiety Disorders
- Motivational Interviewing Techniques
- Social Media Use and Mental Health

# Save the Date: Health Equity Interactive Session

- Program of Northern Vermont Area Health Education Center (AHEC)
- Stacie L. Walton, MD, MPH, clinical/academic pediatrician; medical consultant for HCPs/institutions for >25 years; recently retired from Kaiser Permanente (Diversity Champion)
- Details in tonight's email

*(Thank you, Melissa Kaufold)*

===== SAVE THE DATE =====



**QUALITY CARE IS EQUITABLE CARE**

**The case for culturally and linguistically responsive health care**

**THURSDAY, APRIL 8, 2021 ♦ 1:00 to 3:15 PM**

**SESSION THREE- Reducing Implicit Bias in Health Care: Moving Toward Equal Treatment**

# Save the Date!

- What? **Child maltreatment conference**
- Who? **James Metz, MD MPH** & other expert speakers
- When? **April 29**, 8 am – 12:15 pm via live stream
- How? **Register at:**

<http://campaign.r20.constantcontact.com/render?ca=3cdb8290-cfe5-4dbb-b73b-29ecabed13f0&preview=true&m=1130384660698&id=preview>



**Recognizing and Responding to Child Maltreatment  
Promoting Child Abuse Awareness in VT Conference**

**Thursday, April 29, 2021  
8:00am -12:15pm  
LIVE STREAM**

This conference will help the professional to recognize sentinel injuries, sexual abuse and neglect. Participants will learn about the mental health implications of trauma and abuse and will learn strategies for effective reporting.



**James Metz, MD, MPH - Course Director**

Assistant Professor, Pediatrics  
Division Chief, Child Abuse Medicine  
UVM Larner College of Medicine

*"Recognizing Sentinel Injuries" and  
"Child Neglect"*

# Questions/Discussion

- Q & A Goal: monitor/respond in real time; record/disseminate/revisit later as needed.
- **For additional questions, please e-mail: [vchip.champ@med.uvm.edu](mailto:vchip.champ@med.uvm.edu)**
  - ▣ **What do you need** – how can we be helpful (specific guidance)?
- **VCHIP CHAMP VDH COVID-19 website:**  
[https://www.med.uvm.edu/vchip/projects/vchip\\_champ\\_vdh\\_covid-19\\_updates](https://www.med.uvm.edu/vchip/projects/vchip_champ_vdh_covid-19_updates)
- Next CHAMP call – ***Monday, March 15, 2021 – 12:15 – 12:45 pm***
- Generally back to **Monday/Wednesday/Friday** schedule
- Please tune in to VMS call with VDH Commissioner Levine:  
***Thursday, March 18, 2021 – 12:30-1:00 p.m. – Zoom platform & call information:***
- **Join Zoom Meeting:**  
<https://us02web.zoom.us/j/86726253105?pwd=VkVuNTJlZFQ2R3diSVdqdJlJ2ZG4yQT09>
  - ▣ Meeting ID: 867 2625 3105 / Password: 540684
- One tap mobile - +1 646 876 9923,,86726253105#,,,,0#,,540684#