

# Back to School 2020-2021 Update January 7

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Medical Director

CMDHD/MMDHD/DHD#10

# This meeting is for School and Health Department Staff

We have limited time to cover all our topics. The slides and recordings will be available on our websites within 1-3 days.

- <https://www.dhd10.org/coronavirus/>
- <https://www.mmdhd.org/novel-coronavirus/>
- <https://www.cmdhd.org/novel-coronavirus>

If you have questions, please send them to:

- For Roscommon, Osceola, Clare, Gladwin, Arenac, Isabella Counties:
  - [info@cmdhd.org](mailto:info@cmdhd.org)
- For Missaukee, Crawford, Kalkaska, Wexford, Lake, Mason, Manistee, Oceana, Newaygo, Mecosta Counties
  - [info@dhd10.org](mailto:info@dhd10.org)
- For Montcalm, Gratiot, Clinton Counties
  - <https://www.mmdhd.org/contact/>

Please make sure all  
needed information is  
passed to school  
secretaries, nurses, etc.

# Sports

- Unless you are part of MHSAA Fall 2020 Championship Pilot Program (effecting Girls Volleyball, Girls Swimming & Diving, and Boys Football who have already qualified or begun competing in MHSAA postseason championship games), *other than skiing - **NO preK-12 SCHOOL ATHLETICS ARE ALLOWED AT THIS TIME***

See order in effect until 1/15 at 11:59pm at

[https://www.michigan.gov/coronavirus/0,9753,7-406-98178\\_98455-547899--,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98178_98455-547899--,00.html) :

## 5. Schools, colleges, technical schools, and universities

- a. *Gatherings at public, nonpublic, and boarding schools for the purpose of conducting in-person instruction of pupils in **prekindergarten through grade 12** are permitted, subject to local health department and school district decisions on remote learning. **Gatherings are permitted for the purpose of extracurricular activities except those that involve physical contact among participants, a high degree of exhalation or physical exertion indoors, or where masks cannot be worn.***
- MHSAA stated in a memo in December “Under current MDHHS emergency orders, winter practices may begin on Jan. 16”. **THIS IS MISLEADING/Incorrect. THIS IS ONLY IF THE NEW ORDER REPLACING THIS ORDER ALLOWS FOR SPORTS.**

Schools and the Path to Zero Strategies for Pandemic Resilience in the Face of High Community Spread, D. Allen et al. Harvard Global Health Institute, December 2020, <https://globalepidemics.org/2020/12/18/schools-and-the-path-to-zero-strategies-for-pandemic-resilience-in-the-face-of-high-community-spread/>

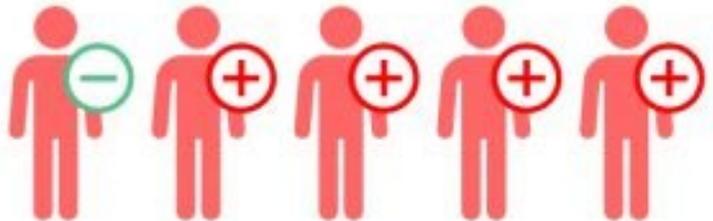
- We can now recommend that **schools be open even at the very high levels of spread** we are now seeing, provided that they **strictly implement strategies of infection control**
  - *universal masking (including while speaking)*
  - *hand and bathroom hygiene*
  - *achieving 4-6 air changes per hour of 'clean' air through any combination of ventilation and filtration (or outdoor classrooms)*
  - *3 ft social distancing for young learners at all levels of community spread*
  - *6ft social distancing for high schools when levels of community spread rise above 100/100,000 daily new cases (or 1,000/mil)*
  - *robust quarantine policies and contact tracing practices*
  - *and, where feasible, surveillance/screening testing, also discussed below under “testing.”*

Curus et al, MedRxiv, 10/6/2020, [Testing mobile air purifiers in a school classroom: Reducing the airborne transmission risk for SARS-CoV-2](#)

- The authors tested the feasibility and efficiency of operating four air purifiers with HEPA filters (5.7 air changes per hour) in a high school classroom while regular classes were taking place.
- They monitored the concentration of particles greater than 3 nm in diameter at several locations in the classroom.
- For comparison, they took the same measurements in a neighboring classroom without air filters.
- They found that filters reduced the aerosol concentration by 90% within 30 minutes, and that the reduction was homogeneous throughout the room.
- A risk calculation based on their results suggested that in a scenario where someone is in a classroom with a highly infectious person, air filters could potentially reduce the inhaled dose of virus by a factor of six.

# Limitations of Rapid Antigen Testing

**COVID-19 rapid tests are inexpensive and fast but sometimes give incorrect results\***



1 in 5 patients with symptoms and confirmed COVID-19 received a negative rapid antigen test result

People with **symptoms** and a **negative rapid test** should

- Get a confirmation (RT-PCR) test
- Wear a mask
- Stay home in a separate room

\* 1,098 paired nasal swabs collected at 2 universities in Wisconsin, September 28–October 9, were tested using Sofia SARS Antigen FIA and compared to rRT-PCR/viral culture results.

CDC.GOV [bit.ly/MMWR123120](https://bit.ly/MMWR123120) MMWR

- Pray IW, Ford L, Cole D, et al. Performance of an Antigen-Based Test for Asymptomatic and Symptomatic SARS-CoV-2 Testing at Two University Campuses — Wisconsin, September–October 2020. MMWR Morb Mortal Wkly Rep 2021;69:1642–1647. DOI: <http://dx.doi.org/10.15585/mmwr.mm695152a3external icon>

# Limitations of Rapid Antigen Testing

Antigen test result	RT-PCR result, no.					
	Asymptomatic (N = 871)			Symptomatic* (N = 227)		
	Positive	Negative	Total	Positive	Negative	Total
Positive	7	14	21	32	2	34
Negative	10	840	850	8	185	193
<b>Total</b>	<b>17</b>	<b>854</b>	<b>871</b>	<b>40</b>	<b>187</b>	<b>227</b>
<b>Test evaluation, % (95% CI)</b>						
Sensitivity	41.2 (18.4–67.1)			80.0 (64.4–90.9)		
Specificity	98.4 (97.3–99.1)			98.9 (96.2–99.9)		
Positive predictive value	33.3 (14.6–57.0)			94.1 (80.3–99.3)		
Negative predictive value	98.8 (97.8–99.4)			95.9 (92.0–98.2)		

**Abbreviation:** CI = confidence interval.

\* One or more symptoms reported.

## NOTE:

Standard Lab based PCR testing:

### *Asymptomatic*

- Sensitivity 75%
- Specificity 99%
- Positive Predictive Value 89%
- Negative Predictive Value 97%

### *Symptomatic*

- Sensitivity 94%
- Specificity 100%
- Positive Predictive Value 100%
- Negative Predictive Value 99%

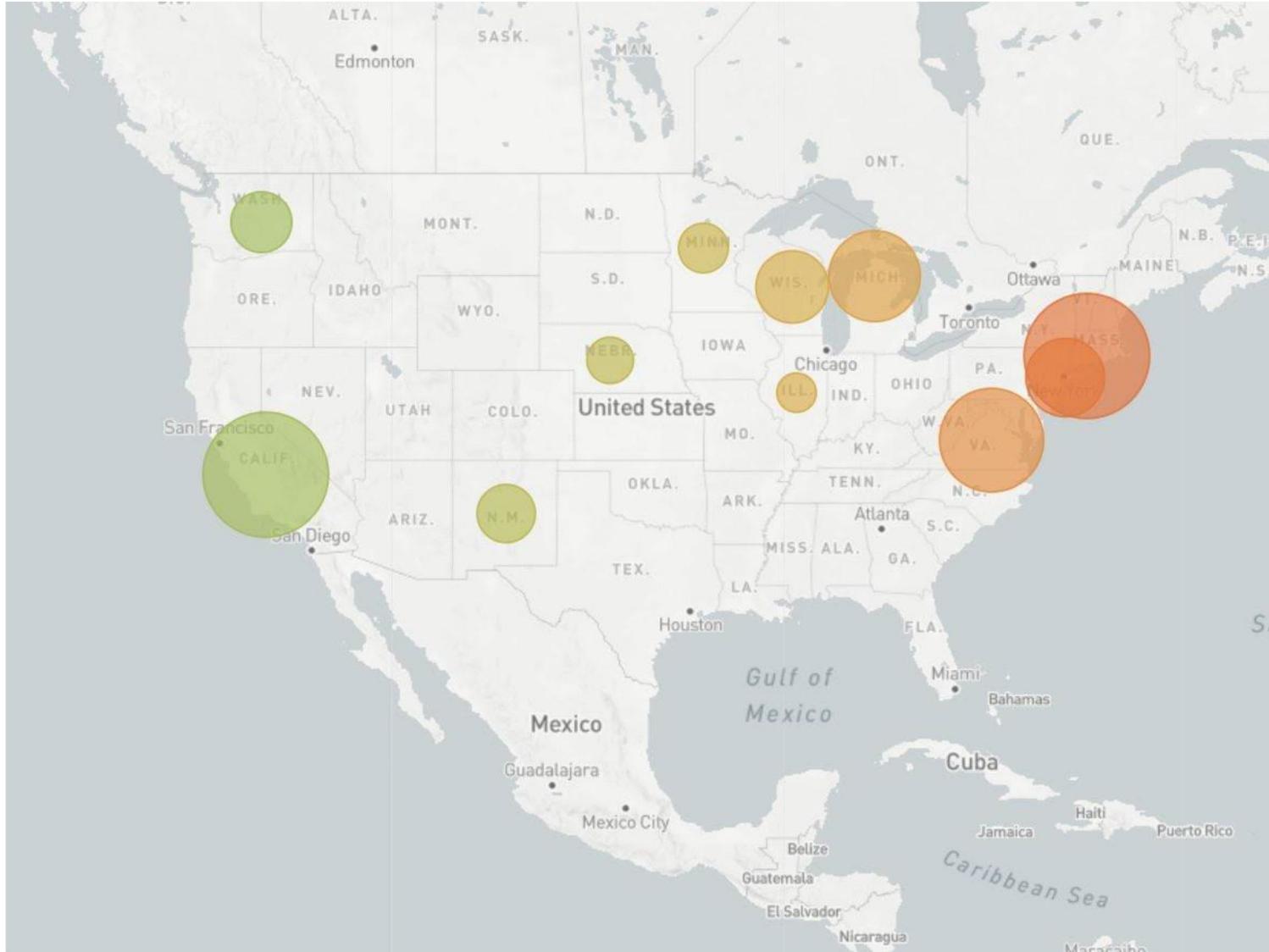
The Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19: Molecular Diagnostic Testing <https://www.idsociety.org/practice-guideline/covid-19-guideline-diagnostics/>

- Pray IW, Ford L, Cole D, et al. Performance of an Antigen-Based Test for Asymptomatic and Symptomatic SARS-CoV-2 Testing at Two University Campuses — Wisconsin, September–October 2020. MMWR Morb Mortal Wkly Rep 2021;69:1642–1647. DOI: [http://dx.doi.org/10.15585/mmwr.mm695152a3external icon](http://dx.doi.org/10.15585/mmwr.mm695152a3external%20icon)

# Variant Strain

- SARS-CoV-2 evolves, or changes, over time like other viruses
  - *Most changes don't affect how the virus functions*
  - *Some changes allow the virus to spread faster, infect people more easily,*
- Some changes are more major and those changed viruses are called a variant
  - *Variants are usually given a name of some kind*
- How do we find them?
  - *Random whole genome sequencing done all over the world, done when unusually outbreaks/increases happen*

# Surveillance for SARS-CoV-2 variants



~6% of sequencing in US has been done in Michigan (MDHHS or U-M or other universities)

# Variant Strain

Some of the potential consequences of emerging variants are the following:

- Ability to spread more quickly in people: the mutations can make the virus able to bind to cells better or change in other ways to spread faster.
- Ability to cause either milder or more severe disease in people: none of the new variants seem to cause more serious illness.
- Ability to evade detection by specific diagnostic tests: PCR tests detect the RNA of the virus so if the RNA changes, they may not work. However, most PCR tests are made to detect multiple different targets in the RNA of the virus, so even if several targets have mutated, the other PCR targets will still work.
- Decreased susceptibility to therapeutic agents such as monoclonal antibodies: a monoclonal antibody is one specific antibody against one target of the virus that has been reproduced in huge quantities and given as a treatment. If the target for that antibody on the virus changes, it won't work anymore.
- Ability to avoid natural or vaccine-induced immunity: Both vaccination and natural infection with COVID-19 produce an immune response to several targets on the virus. The virus would likely have to have several mutations to be able to avoid the immunity created by the vaccines or by natural infection.

# Variant Strain

- Variants of note:
  - *Cluster 5: SARS-CoV-2 variant identified in Denmark in August/September 2020 with a combination of mutations; linked to infection among farmed mink. Only 12 human cases of Cluster 5 variant identified.*
  - *SARS-CoV-2 B.1.1.7 lineage (a.k.a. 20B/501Y.V1 Variant of Concern (VOC) 202012/01: Identified in the United Kingdom in December 2020 and has since been found in 31 other countries.*
    - Appears to spread more easily but no more severe and those that already had COVID-19 aren't more likely to get reinfected with this variant\*
    - **No evidence there will be any impact on vaccine effectiveness\***
  - *SARS-CoV-2 B.1.351 lineage (a.k.a. 20C/501Y.V2): identified in South Africa in November 2020 and has since been found in 4 other countries*
    - Seems to cause higher viral levels, so may be more contagious/spread more easily
    - No clear evidence that it causes more severe disease or worse outcomes
    - **No evidence there will be any impact on vaccine effectiveness\***

*\*Both vaccination and natural infection with COVID-19 produce an immune response to several targets on the virus. The virus would likely have to have several mutations to be able to avoid the immunity created by the vaccines or by natural infection.*

World Health Organization (WHO). (2020). SARS-CoV-2 Variants. <https://www.who.int/csr/don/31-december-2020-sars-cov2-variants/en/>

Centers for Disease Control and Prevention (CDC). (2020). Emerging SARS-CoV-2 Variants. <https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/scientific-brief-emerging-variants.html>

# Vaccine Scheduling

Please be patient with us!

# Vaccine-scheduling

COVID VACCINE	
Critical/Essential Businesses	<a href="#">SIGN UP HERE</a>
Healthcare Workers and Healthcare Organizations	<a href="#">SIGN UP HERE</a>
Persons 75 years and Above OR Critical/Essential Workers	<a href="#">SIGN UP HERE</a>
Persons 65 – 74 years of age OR Persons Ages 16 – 64 with underlying medical conditions	<a href="#">SIGN UP HERE</a>

## CMDHD

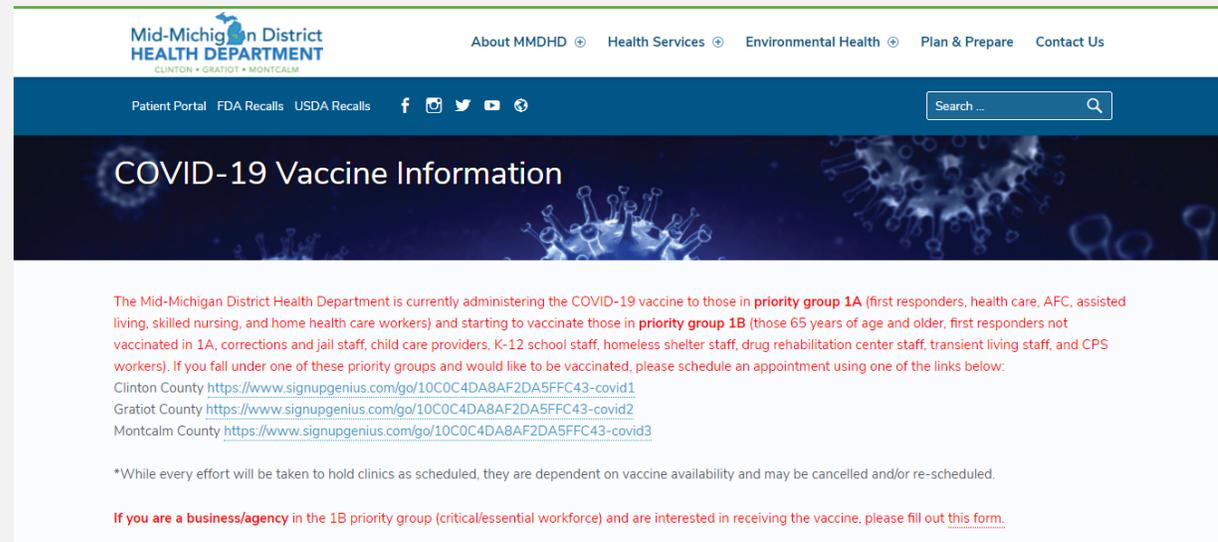
If you have not yet been in communication with your county nurse/health department representative:

- Go to [www.cmdhd.org](http://www.cmdhd.org)
- Click on Critical/Essential Businesses (or have staff click on Critical/Essential Workers)
- Answer the survey questions to the best of your ability
- You will be contacted to schedule vaccination

# Vaccine-scheduling

MMDHD-if no one has talked with you yet:

- Go to <https://www.mmdhd.org/covid-vaccine-information/>
- **For Schools: If you are a business/agency** in the 1B priority group (critical/essential workforce) and are interested in receiving the vaccine, please fill out [this form](#).
- Individuals click on the sign-up genius link next to county name to schedule appointment (appointments FULL at this time)



The screenshot shows the website for the Mid-Michigan District Health Department. The header includes the department's name and logo, along with navigation links for 'About MMDHD', 'Health Services', 'Environmental Health', 'Plan & Prepare', and 'Contact Us'. Below the header is a dark blue navigation bar with links for 'Patient Portal', 'FDA Recalls', and 'USDA Recalls', along with social media icons and a search bar. The main content area features a large banner with the text 'COVID-19 Vaccine Information' and a background image of virus particles. Below the banner, there is a paragraph of text explaining the vaccination process and providing links for scheduling appointments in Clinton County, Gratiot County, and Montcalm County. A disclaimer at the bottom states that appointments are dependent on vaccine availability and may be cancelled or re-scheduled. A red link is provided for businesses/agencies in the 1B priority group.

Mid-Michigan District  
HEALTH DEPARTMENT  
CLINTON • GRATIOT • MONTCALM

About MMDHD Health Services Environmental Health Plan & Prepare Contact Us

Patient Portal FDA Recalls USDA Recalls Search ...

## COVID-19 Vaccine Information

The Mid-Michigan District Health Department is currently administering the COVID-19 vaccine to those in **priority group 1A** (first responders, health care, AFC, assisted living, skilled nursing, and home health care workers) and starting to vaccinate those in **priority group 1B** (those 65 years of age and older, first responders not vaccinated in 1A, corrections and jail staff, child care providers, K-12 school staff, homeless shelter staff, drug rehabilitation center staff, transient living staff, and CPS workers). If you fall under one of these priority groups and would like to be vaccinated, please schedule an appointment using one of the links below:

Clinton County <https://www.signupgenius.com/go/10C0C4DA8AF2DA5FFC43-covid1>  
Gratiot County <https://www.signupgenius.com/go/10C0C4DA8AF2DA5FFC43-covid2>  
Montcalm County <https://www.signupgenius.com/go/10C0C4DA8AF2DA5FFC43-covid3>

\*While every effort will be taken to hold clinics as scheduled, they are dependent on vaccine availability and may be cancelled and/or re-scheduled.

If you are a business/agency in the 1B priority group (critical/essential workforce) and are interested in receiving the vaccine, please fill out [this form](#).

# Vaccine-scheduling

## DHD10-Email sent out yesterday

- On Friday (TOMORROW), can vaccinate ISD staff who are working in your on-site centers/classrooms that are face-to-face with students who are unable to wear masks and require health care such as tube feeding, toileting and other procedures that require them to come into contact with body fluids (could include teachers, para-professionals, bus drivers, lunch help, in home staff, etc.)
  - *Fill out this form:*  
[https://forms.office.com/Pages/ResponsePage.aspx?id=d4yQG7su0UKy0zqznY-SM2HoEPzCbMRMim\\_ocv9IMnhUNIAwRTMwTkdGV1M3WVhKWklyVTc5STdDMY4u&wdLOR=c4C2E1248-3C1F-4C43-A986-8C82A6E4ED25](https://forms.office.com/Pages/ResponsePage.aspx?id=d4yQG7su0UKy0zqznY-SM2HoEPzCbMRMim_ocv9IMnhUNIAwRTMwTkdGV1M3WVhKWklyVTc5STdDMY4u&wdLOR=c4C2E1248-3C1F-4C43-A986-8C82A6E4ED25)
- Working on plans to move forward with K-12 plans
- Can sign up for Public health alerts at <https://www.dhd10.org/subscribe/> to make sure to all updates

# Update: Joint press release idea re: vaccination

- Ways to promote community uptake of COVID-19 vaccine as a way to keep kids in school
- Joint press release with health department and schools that are interested with that message
- We (health dept) will write it and send copy to our area schools for review
  - *Those that want to be included as supporting the message can let us know*
  - *Can email me [jmorse@cmdhd.org](mailto:jmorse@cmdhd.org)*
- May not happen until MID January-watch your email

# Quarantine Reminder/Updates

- Quarantine can be reduced to 10 days if the individual continues to monitor for symptoms for 14 days after their last exposure. A 14-day quarantine is still an acceptable option if schools prefer.
- **There was an amendment to PA 238 that was approved by the governor 12/29** (Senate Bill No. 1258 <http://www.legislature.mi.gov/documents/2019-2020/billenrolled/Senate/pdf/2020-SNB-1258.pdf> )
  - *Quarantine period = recommended number of days that an individual be in quarantine after the individual is in close contact as prescribed in the US CDC's guidelines regarding COVID-19*
  - **PLEASE READ THIS IN DETAIL FOR ALL OTHER CHANGES**

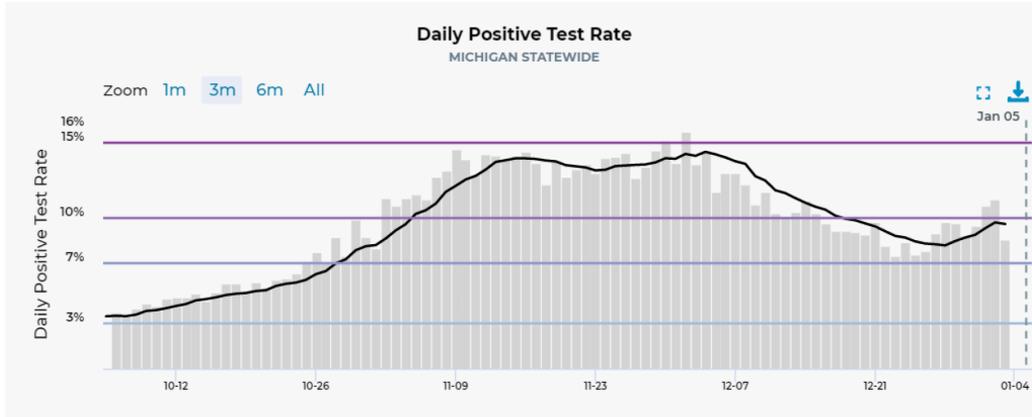
# Current COVID-19 Statewide Data and Modeling Updates

January 5, 2021 (data as of Jan. 2, 2021)

[https://www.michigan.gov/coronavirus/0,9753,7-406-98163\\_98173---,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173---,00.html)

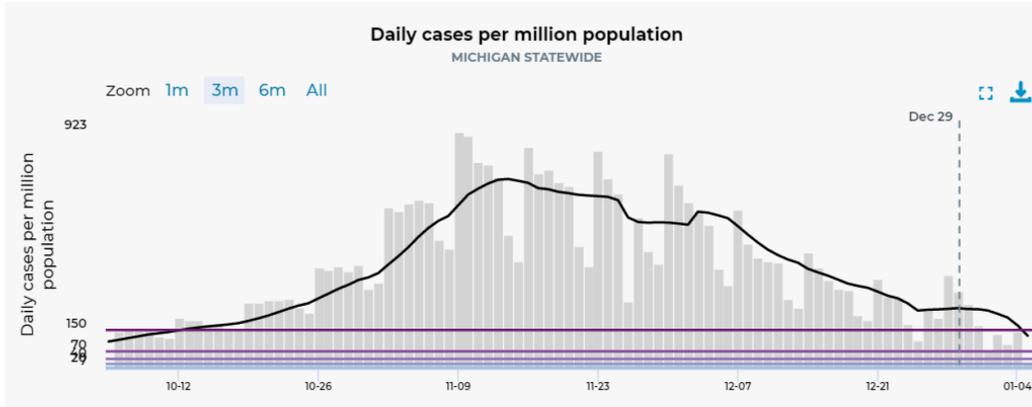
# Recent statewide trends

Positivity, %



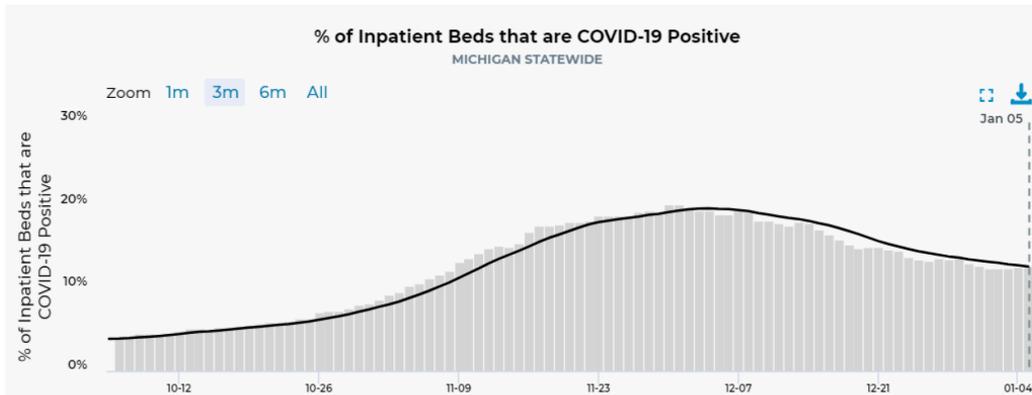
Positivity reached a low of 8.2% on 12/27  
Increasing to 9.6% in most recent 7-day average

Daily cases per million



Reached 227 cases per million people on 12/25<sup>th</sup>  
Plateaued now at 237 on December 29<sup>th</sup>

Daily hospitalization rate, %

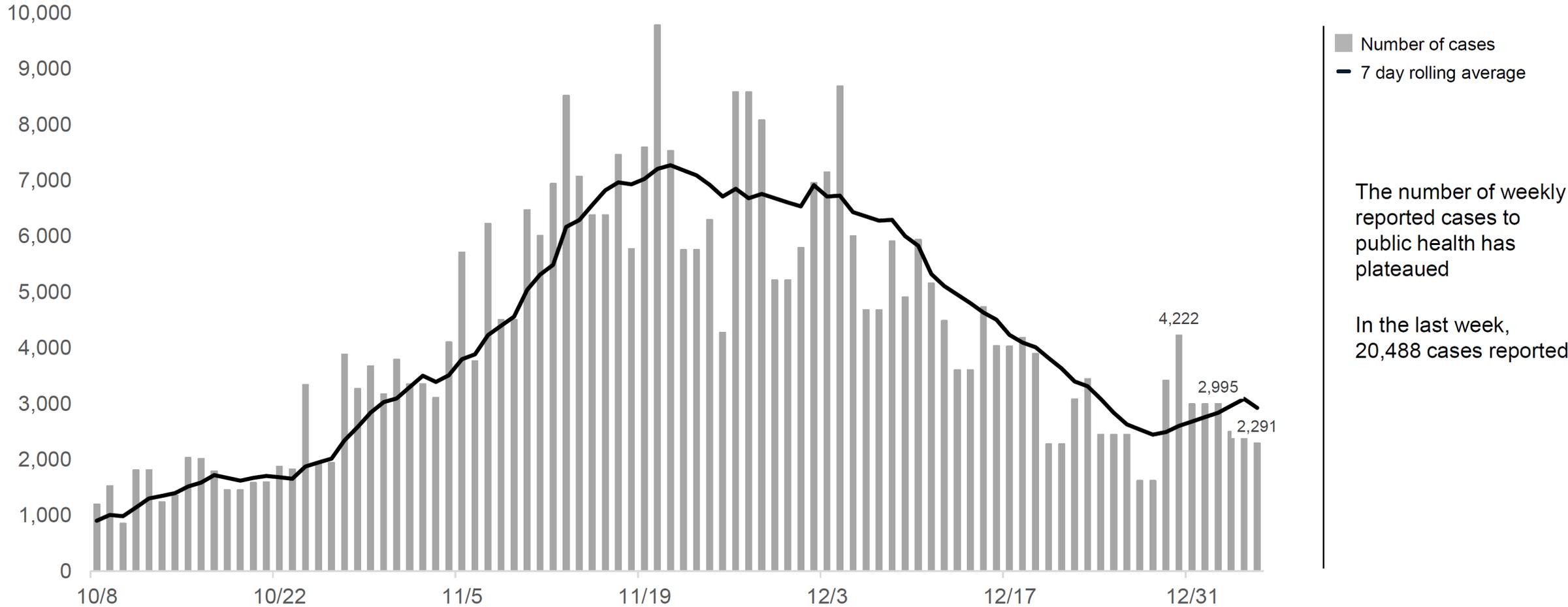


12.6% of inpatient beds being used to treat COVID 19 patients. Down from 19.6% on 12/4

Source: <https://mistartmap.info/>

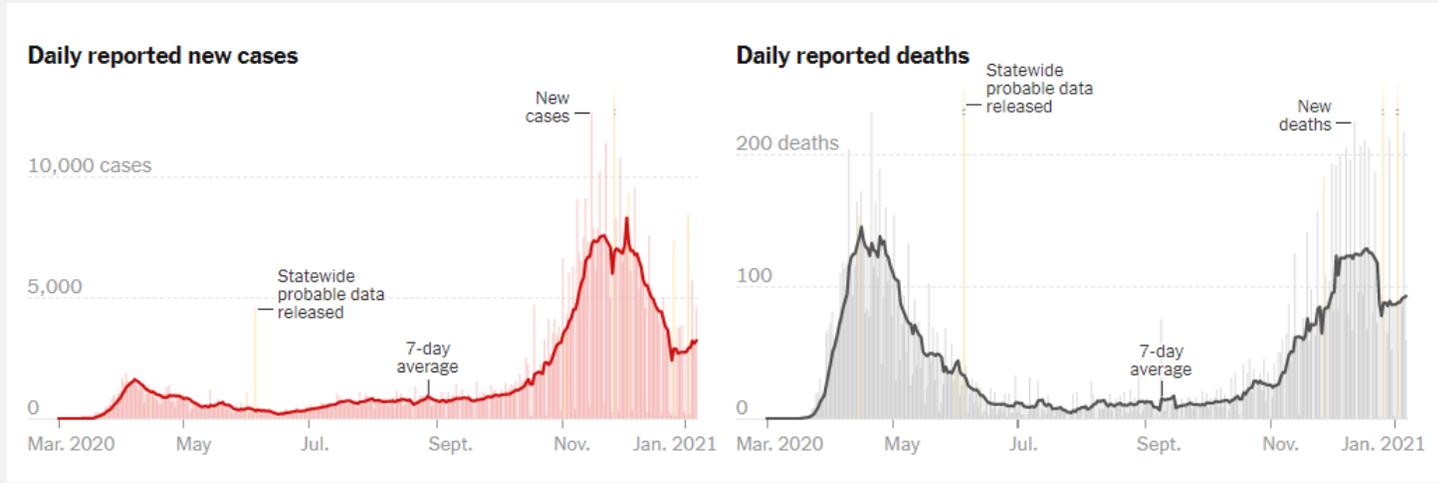
# Confirmed COVID-19 cases by report date: State of Michigan

Confirmed cases reported on prior day (7-day rolling average)

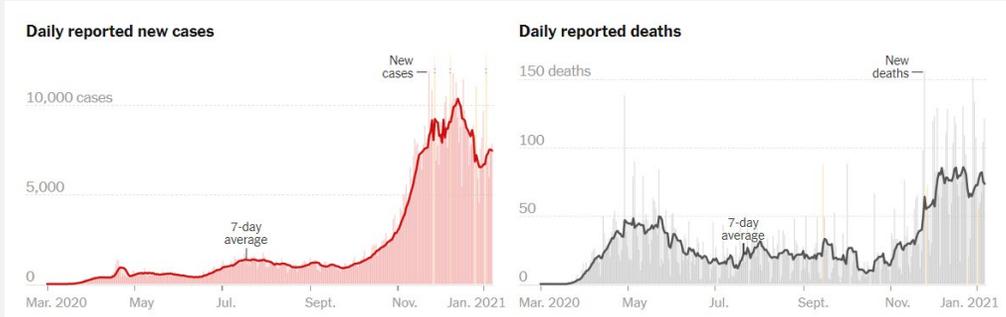


Source: MDHHS – Michigan Disease Surveillance System

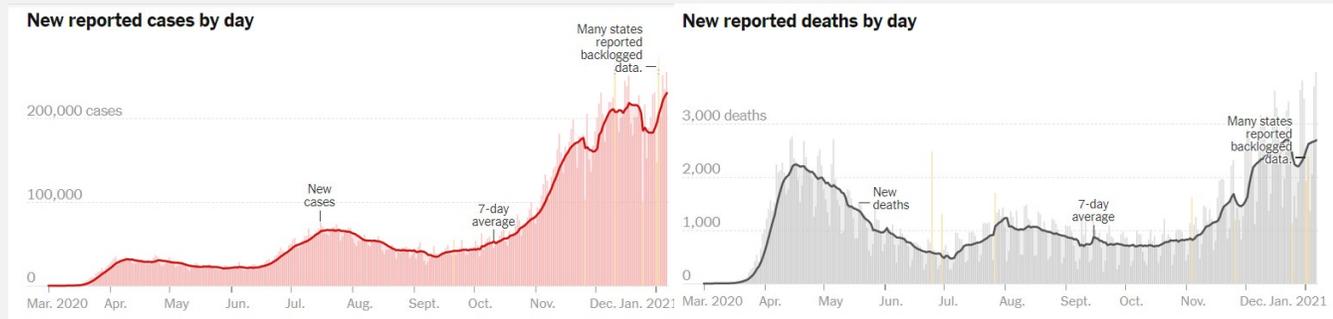
# Michigan



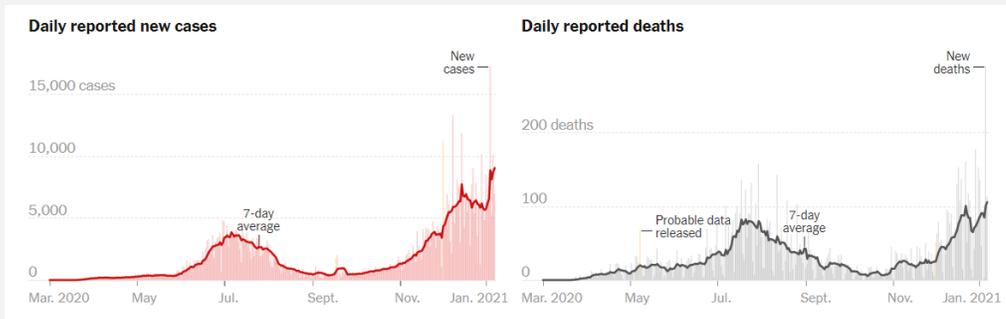
# Ohio



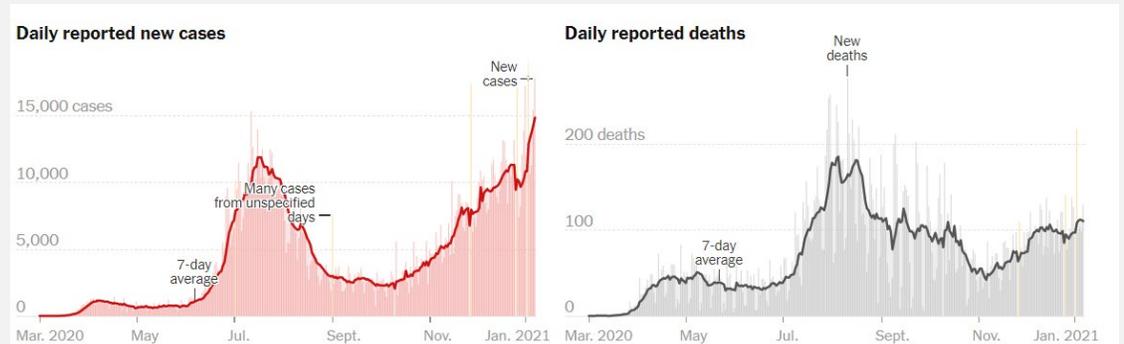
# Entire US



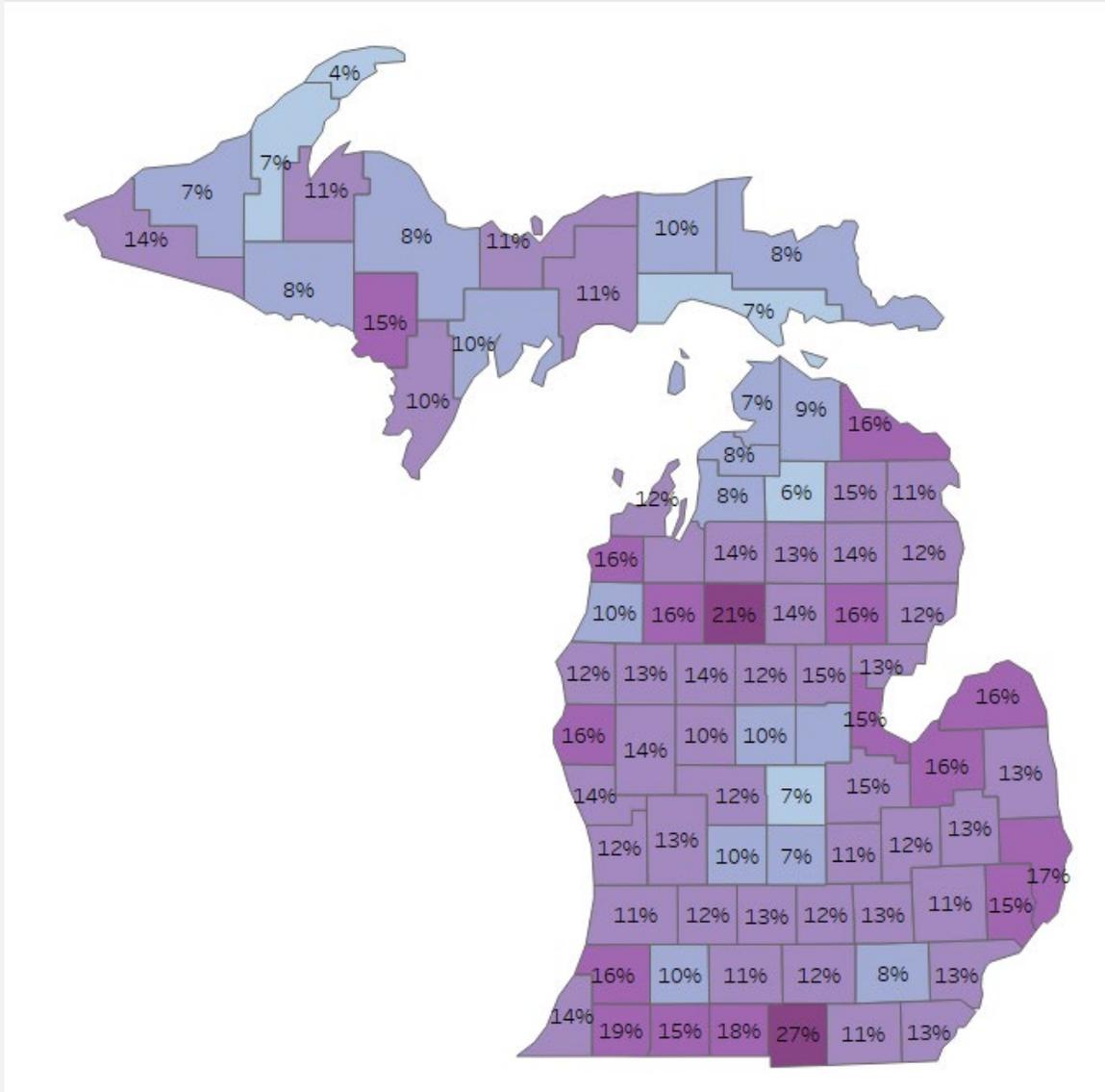
# Arizona



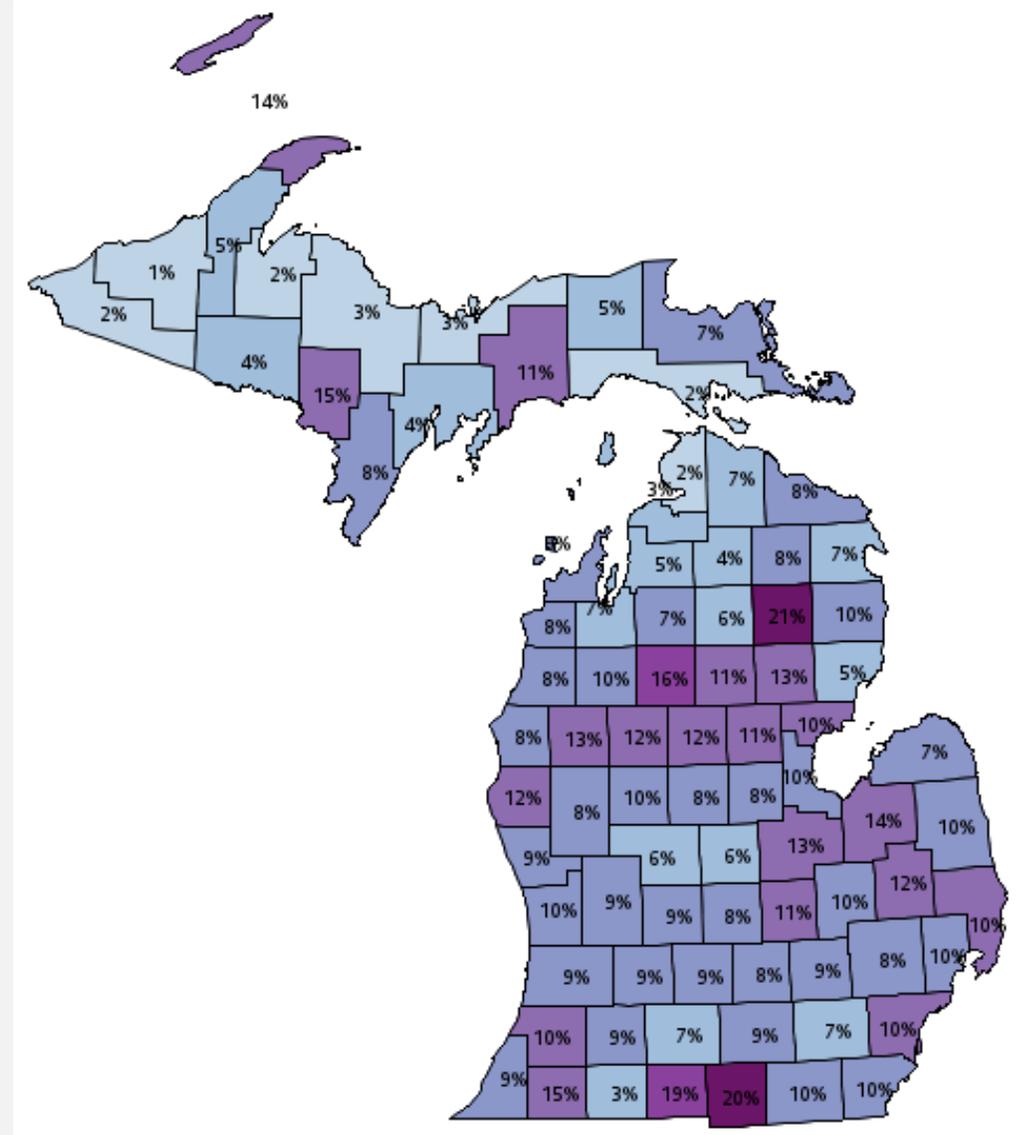
# Florida



12/1-12/5



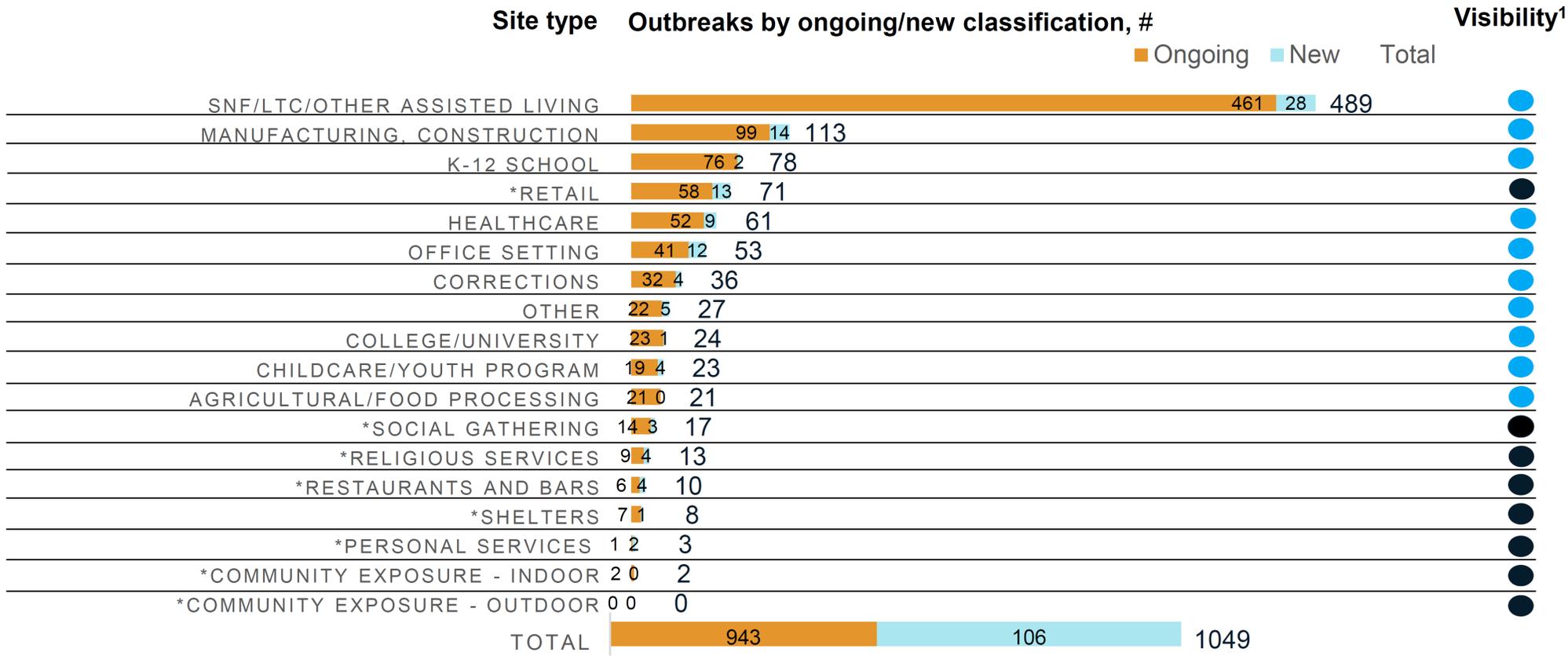
12/23-12/29



# Number of outbreak investigations by site type, week ending Dec 30

Pre-decisional, for discussion only      Draft

● Easier to identify outbreak  
● Harder to identify outbreak



Total number of active outbreaks is down 9% from previous week

Following LTCs, the greatest number of new outbreaks were reported in manufacturing/construction (14), retail (13), office setting (12), and healthcare (9).

LHDs reported new outbreaks in all settings except agriculture/food processing/migrant labor housing, and community exposure

1. Based on a setting's level of control and the extent of time patrons/residents spend in the particular setting, different settings have differing levels of ability to ascertain whether a case derived from that setting

NOTE: Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.

Source: LHD Weekly Sitreps

# K-12 school outbreaks, recent and ongoing, week ending Dec 30

Number of reported outbreaks decreased since last week (119 to 78) including reductions in High School (40 to 15), Middle/Jr High (19 to 17), Pre K-Elementary (49 to 36), and Administrative (11 to 10)

Region	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Region 1	50	3		10	6-10
Region 2n	47	0		14	2-9
Region 2s	16	2		3	4-8
Region 3	174	0		27	2-18
Region 5	8	6		4	2-6
Region 6	121	6		13	2-16
Region 7	16	0		4	2-2
Region 8	18	0		3	2-8
<b>Total</b>	<b>450</b>	<b>17</b>		<b>78</b>	<b>2-18</b>

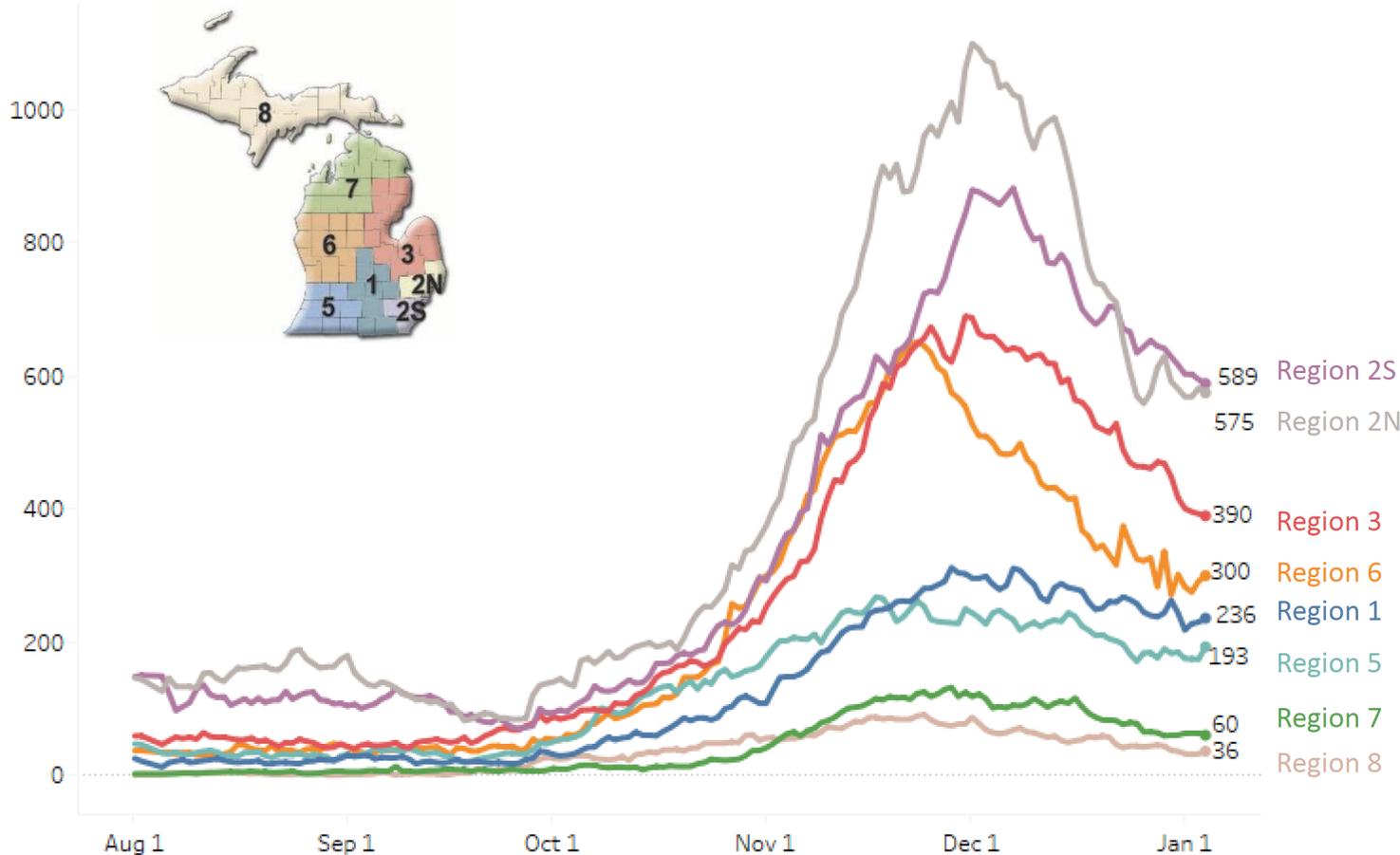
Grade level	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Pre-school - elem.	202	14		36	2-18
Jr. high/middle school	114	0		17	2-16
High school	98	0		15	2-17
Administrative	36	1		10	2-7
<b>Total</b>	<b>450</b>	<b>15</b>		<b>78</b>	<b>2-18</b>

Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.

Source: LHD Weekly Sitreps

# Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 8/1/2020 – 1/4/2021  
Confirmed Positive by Region



Most regions are showing decreasing trends in COVID+ hospital census this week vs. last week

Regions 5 and 6 have increased slightly from last week although the absolute increases are very small

Region	Trend from Last Week	COVID+ Hospitalizations / MM
Region 1	-1%	219/M
Region 2N	-6%	260/M
Region 2S	-9%	264/M
Region 3	-17%	344/M
Region 5	10%	202/M
Region 6	6%	205/M
Region 7	-6%	120/M
Region 8	-20%	116/M

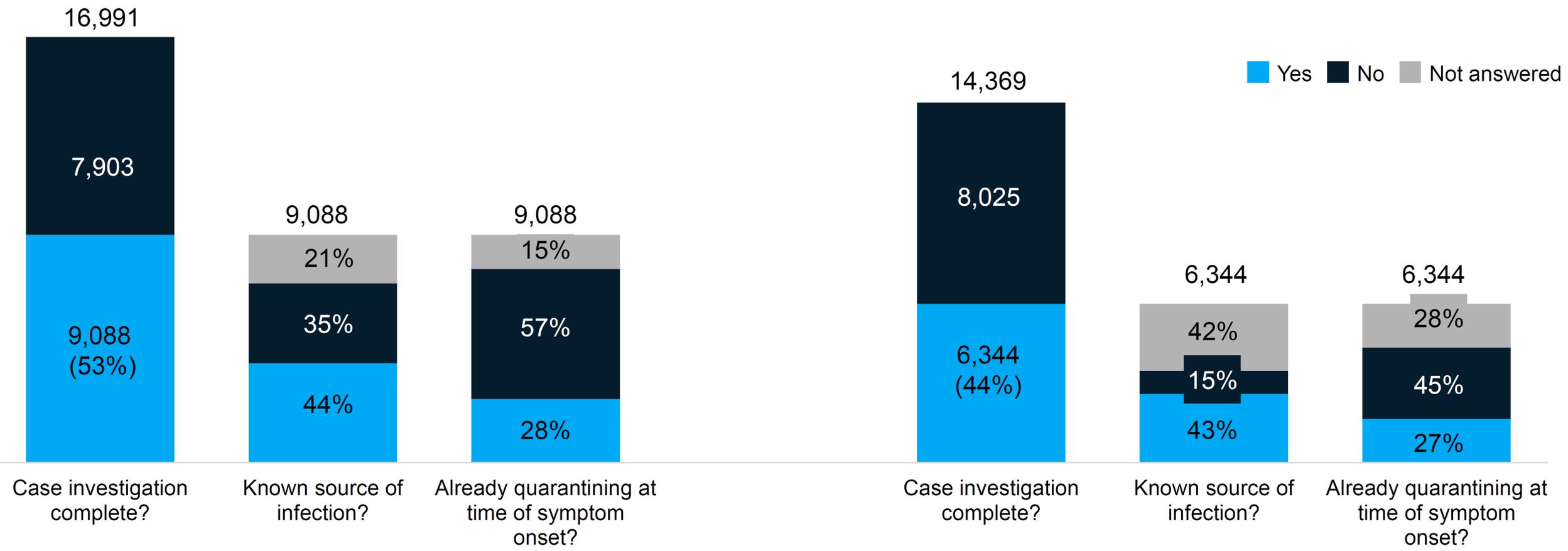
# New Case Investigation Metrics

New Communicable Disease metrics slightly increased since last week:

- 44% of investigated cases having a known source (44% last week, 41% week prior)
- 27% of investigated cases noting that they were quarantining before symptoms (28% last week)

Case report form information, 12/19-12/25

Case report form information, 12/20-01/04



**Estimated Turnaround Times for COVID-19 Diagnostic Testing Results Received at MDHHS During Last 14 Calendar Days (through 01/01/2021)**

<b>Lab Type</b>	<b>Test Count</b>	<b>Transport Time (Days)</b>	<b>Total Turn Around Time (Days)</b>
Commercial	358,402	0.99	3.13
Hospital	165,761	0.30	1.23
Public Health	8,041	0.28	3.65
SNF	47	-	10.19
State Total	532,251	0.66	2.50

[https://www.michigan.gov/coronavirus/0,9753,7-406-98163\\_98173-545615--,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173-545615--,00.html)

# Review of Data

# Questions

**Q:** If a person tested positive for COVID in the fall and has recently started having a running nose and "sniffles," does the person need to get tested again and quarantine until test results come back or can the person work?

**A:** If a previously infected person experiences new symptoms consistent with COVID-19 **3 months or more after the date of the previous illness onset** (or date of last positive viral diagnostic test [RT-PCR or antigen test] if the person never experienced symptoms), the person should undergo repeat viral diagnostic testing. NOTE: Rapid antigen testing is less likely to be persistently positive than PCR testing (if available). Also: the employee screener includes the following symptoms:

*One of the following: Feverish, Cough, Shortness of breath **OR** Two of the following: Muscle aches without another explanation. Chills, Sore throat, Headache, Vomiting or Diarrhea, Loss of taste or smell*

(No runny/stuffy nose listed...)

# Questions

**Q:** I heard from someone at another health department that the recommendation is that if people have tested positive for COVID in the last 90 days that they shouldn't sign up for a COVID vaccine right now but wait so others who haven't had COVID can be vaccinated first. Is this what is recommended?

**A:** Not really- Because reinfection is uncommon in the 90 days after initial infection, persons with confirmed COVID-19 infection in the preceding 90 days **may delay** vaccination until near the end of this period, **if desired**. If you are currently infected, you should wait until you have recovered from the acute illness and your isolation period is over.

# Questions

**Q:** If an employee displays a principal symptom of COVID19, the amended statute (PA 238) says that the employee shall not report to work until 1 of the following conditions are met (whichever is later):

1. The employee receives a negative test result. OR
2. The isolation period has passed since symptom onset and the symptoms have improved and the employee has been fever-free for 24 hours without the use of medication.

Is this consistent with and/or now supported by DHD10?

**A:** This is legally allowable, and schools/employers may follow this guidance. The recommendation of the CDC is: “Sick employees should follow CDC-recommended steps to help prevent the spread of COVID-19. Employees should not return to work until they have met the criteria to discontinue home isolation and have consulted with a healthcare provider.” (see <https://www.cdc.gov/coronavirus/2019-ncov/community/general-business-faq.html> )

# Questions?

Contact:

Jen Morse, MD, MPH, FAAFP

[jmorse@cmdhd.org](mailto:jmorse@cmdhd.org)

Cell: 989-802-2590

For Roscommon, Osceola, Clare,  
Gladwin, Arenac, Isabella Counties:

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