MI COVID RESPONSE DATA AND MODELING UPDATE

January 11, 2022

Executive Summary

Current statistics and where we may be going

In 2021, more than 1 in 10 Michiganders were reported with COVID-19, and approximately 1 in 650 Michiganders died from COVID-19

Exponential growth and the highest case numbers of entire pandemic: 20–29-year-olds currently have the highest case rate of any age group

Omicron reported in 41 counties in Michigan; Models project cases & hospitalizations to peak by the end of Jan 2022 (latest end of Feb)

Preventing Death and Severe Outcomes

- Deaths rates have decreased over the last week for all age groups
- Cases in long term care facilities are increasing, crucial to get LTC residents and staff up to date on vaccination
- More than 200 Children have had Multiple Inflammatory Syndrome; Pediatric vaccination reduces risk of MIS-C

Protect Health Care Capacity

- COVID+ census in hospitals has set another pandemic record; Pediatric COVID+ census down slightly from last week's record high
- More hospitals in Michigan are reporting critical staff shortages than ever reported during the pandemic (n=59)
- Federal support teams and changes in healthcare work force guidance

Keep Vital Infrastructure Functioning

- Community transmission is impacting schools; Changes in School Guidance for Isolation and Quarantine
- Vaccination, Masking, Testing and Therapeutics are critical tools in our fight against the impact of COVID-19

Year in Review – Pandemic in Numbers

Data 1/1/2021 through 12/31/2021 (as of 1/10)

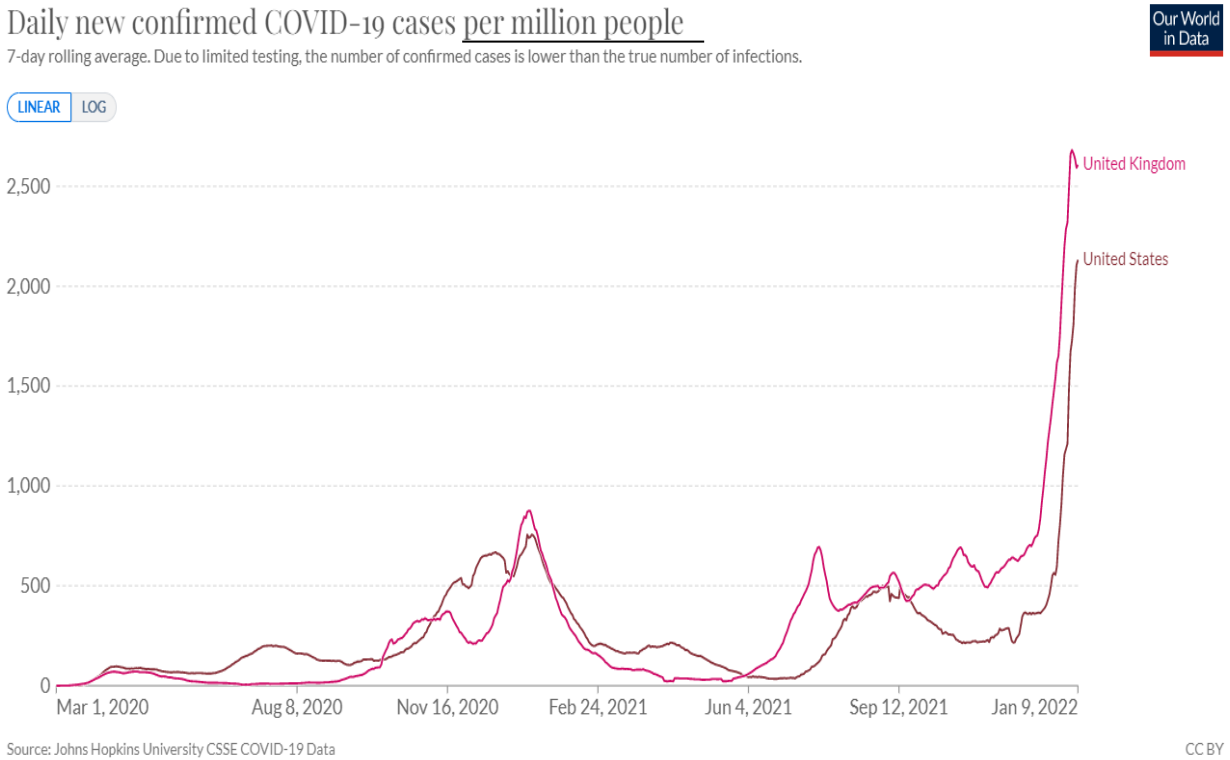
- *Approximately 1 in every 10 Michiganders (1.1) were reported with COVID-19 in 2021*
  - *More than 1 in every 10 people aged 30-39 (1.5) reported COVID-19 infection in 2021 which was the highest of any age group*
  - *5.1 times more children 0-9 were reported with COVID-19 in 2021 compared to 2020, the highest relative increase of any age group*
  - *Enough cases in 2021 to fill the Big House 9 times*

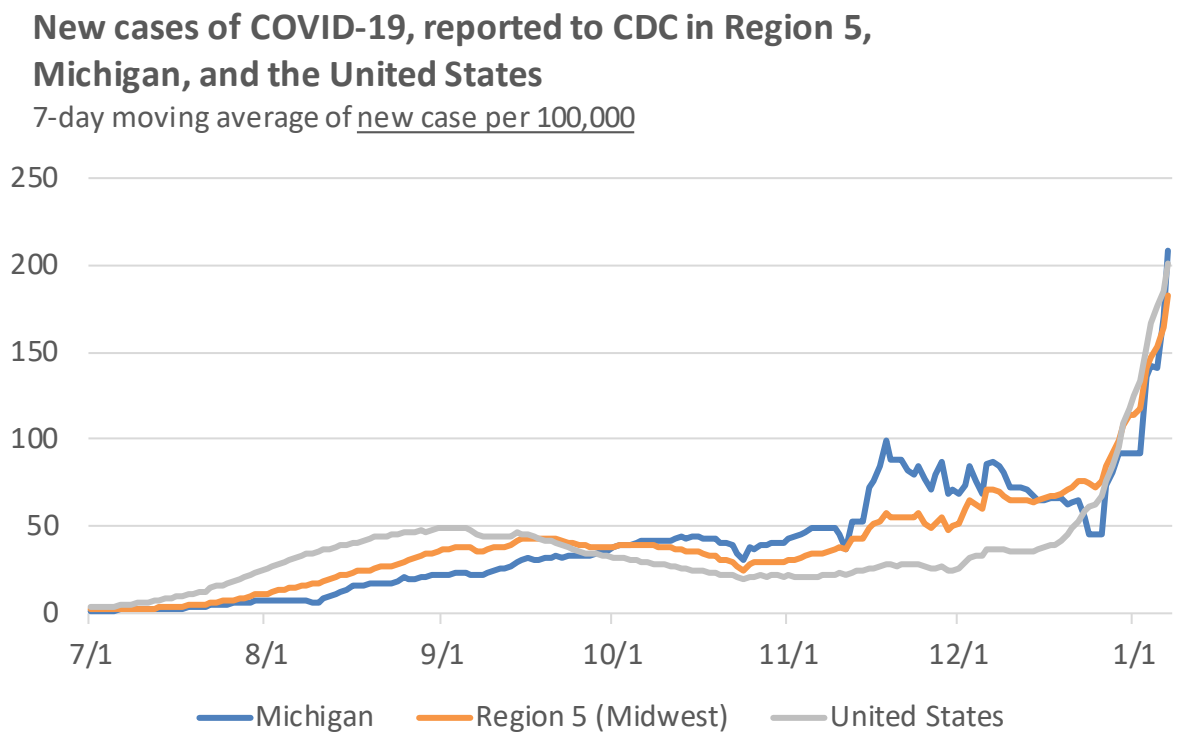
- *In 2021, nearly 1 in every 100 Michiganders (0.9) had been admitted to the hospital with COVID-19 positive test*

- *More than 1 in every 650 Michiganders died from COVID-19 in 2021*
  - *4.5 times more children 0-19 died from COVID-19 in 2021 compared to 2020, the highest relative increase of any age group*
  - *More than 1 in every 100 Michiganders over 80 years old (1.2) died from COVID-19 in 2021*

Source: Michigan Disease Surveillance System (MDSS); these number include confirmed and probable

Global and National Trends





Globally, 307,450,630 cases and 5,490,360 deaths (Data* through 1/10)

- Globally, the highest number of cases ever reported on a single day on 1/10 (3.26 million); & cases in many countries are increasing exponentially with Omicron variant

United States: 1.4% of Americans have been infected with COVID-19 in last week¶

- The U.S. is at High transmission level (**1,409.5** cases/100,000 in last 7 days) (666.9 cases/100,000 week prior)

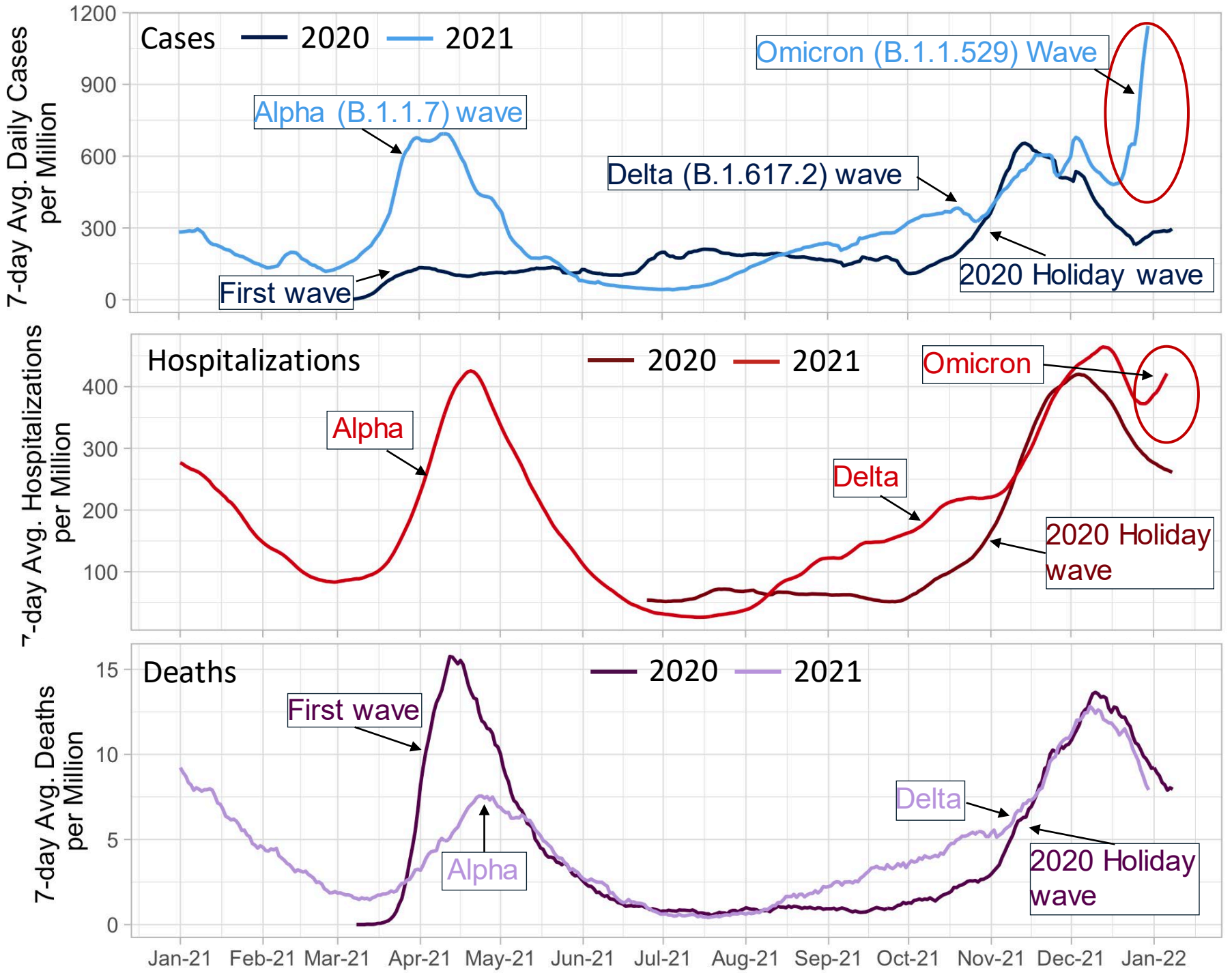
Midwest states are increasing exponentially

- Illinois and **Michigan** have the highest case rates *in Midwest;* New York City and Rhode Island have highest case rates in U.S.

Source: *Johns Hopkins Coronavirus Resource Center; ¶ CDC COVID Data Tracker Weekly Review; † CDC COVID Data Tracker – CDC recently updated their methodology for reporting case rates

Year-over-year comparisons: cases and hospitalizations are higher than last year

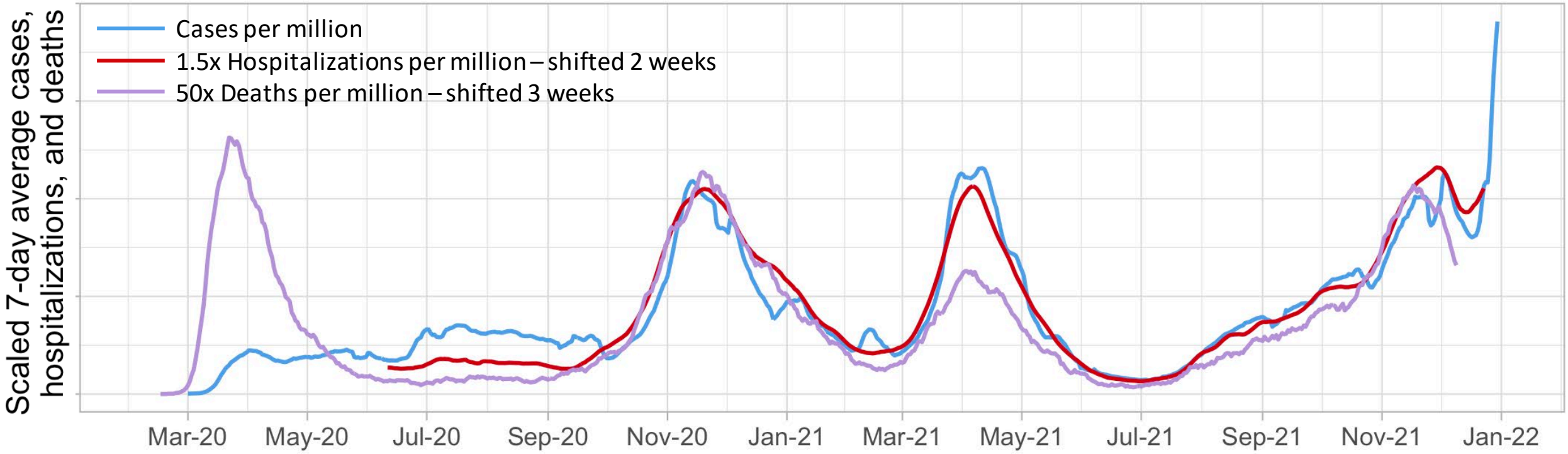
- Cases are showing a sharp increase compared to last year
- Hospitalizations are higher than last year
- Deaths are currently similar to last year



Source: MDSS and EM Resource data

Cases, hospitalizations and deaths change together—but lagged by up to 3 weeks

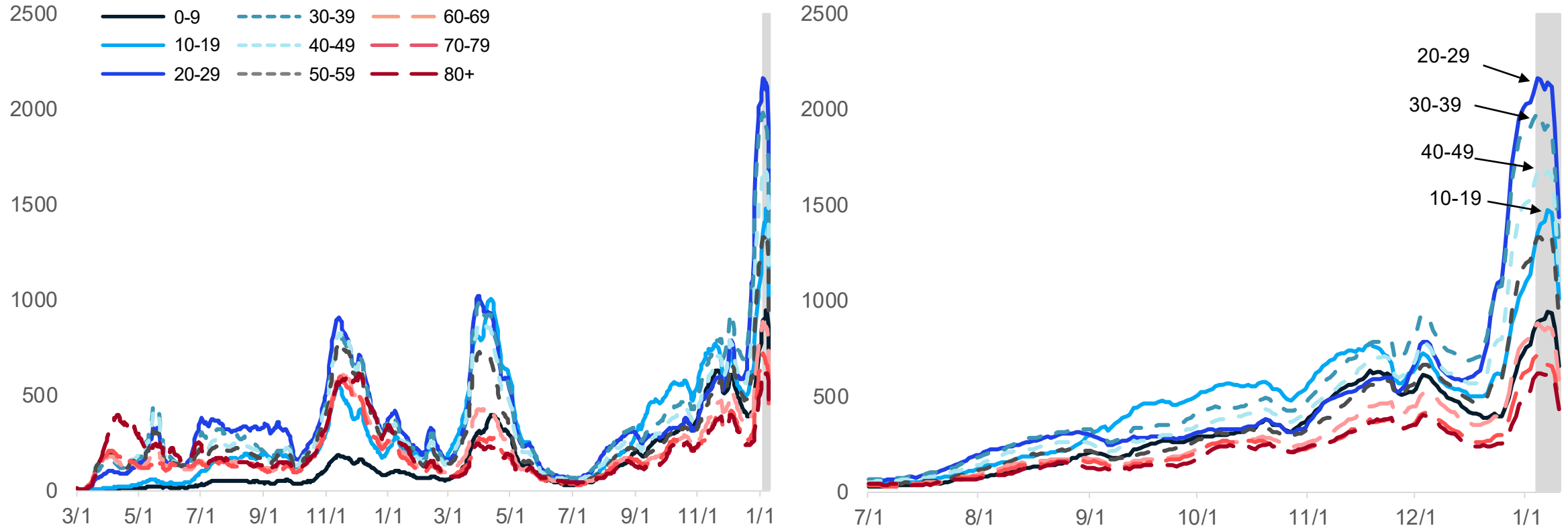
- Because deaths lag cases, we will not be able to tell whether deaths will follow the case trends for another couple of weeks
- Hospitalizations appear to be following case trends thus far but may be clearer in a week



Source: MDSS and EM Resource data

Case Rate Trends by Age Group

Daily new confirmed and probable cases per million by age group (7-day rolling average)

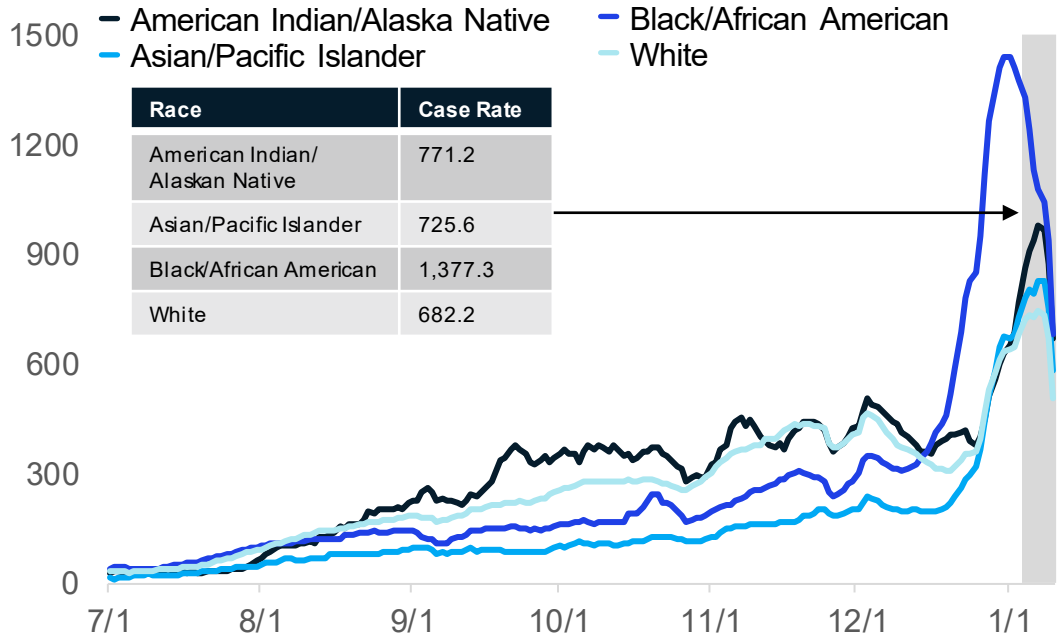


- Case rate trends for most age groups saw exponential increases over the past week and are expected to increase
- Case rates by onset date for all age groups are between 586 and 2,082 cases per million (through 1/3)
- Case counts and case rates are highest for 20-29-year-olds this week

Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

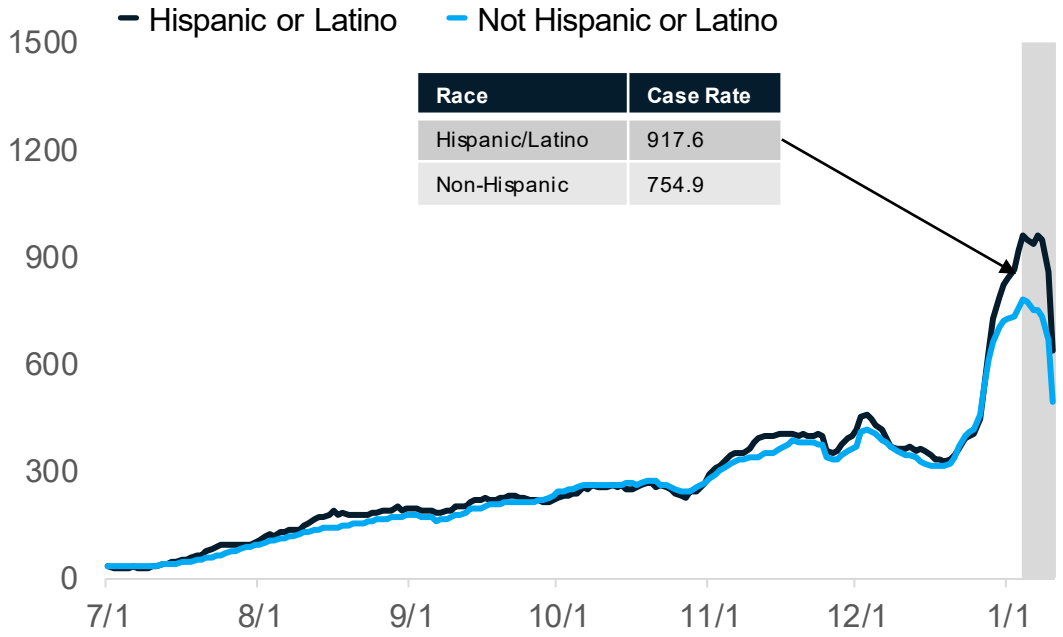
Case Rates by Reported Racial and Ethnic Group

Daily new confirmed and probable cases per million (7 day rolling average) by race category



Race	Case Rate
American Indian/ Alaskan Native	771.2
Asian/Pacific Islander	725.6
Black/African American	1,377.3
White	682.2

Daily new confirmed and probable cases per million (7 day rolling average) by ethnicity category



Race	Case Rate
Hispanic/Latino	917.6
Non-Hispanic	754.9

Updates since last week:

- Cases per million are exponentially increasing for all reported racial and ethnic groups and *are highest for Blacks/African Americans*
- The high number of cases with missing race/ethnicity data, and those multiracial or other are also impacting the case rates shown here
- In the past 30 days, 30% (↔) of race data and 41% (↑1%) ethnicity data was either missing or reported as unknown

Note: Case information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System

Identified COVID-19 Cases Caused by Variants of Concern (VOC) in US and Michigan

SARS-CoV-2 Variants Circulating in the United States, Dec 4 – Jan 8 (NOWCAST)

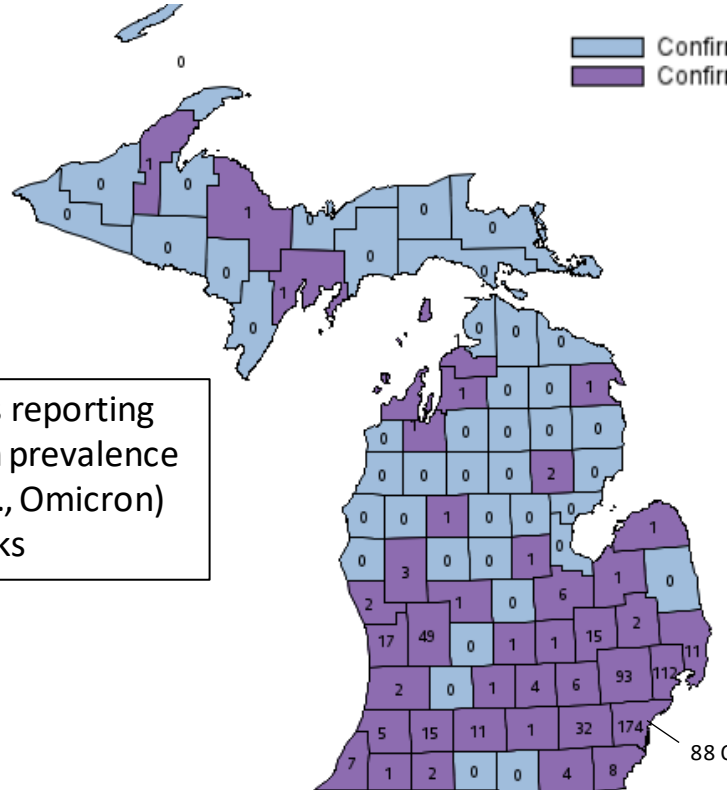
USA

WHO label	Lineage #	US Class	%Total	95%PI
Omicron	B.1.1.529	VOC	98.3%	96.9-99.1%
Delta	B.1.617.2	VOC	1.7%	0.9-3.0%
Other	Other*		0.0%	0.0-0.0%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.
** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates
# AY.1-AY.127 and their sublineages are aggregated with B.1.617.2. BA.1, BA.2 and BA.3 are aggregated with B.1.1.529.

Currently, CDC is reporting rapid increase in prevalence of B.1.1.529 (i.e., Omicron) over past 6 weeks

Variants of Concern in Michigan, Jan 10



88 Omicron cases in Wayne County attributed to Detroit City

- CDC reclassifies variants as epidemiology shifts
- Variants are downgraded when there has been a significant and sustained reduction in prevalence, or variant no longer poses significant risk to public health
- Cumulative numbers of Delta are no longer included in county counts; solely counts of Omicron cases are listed here

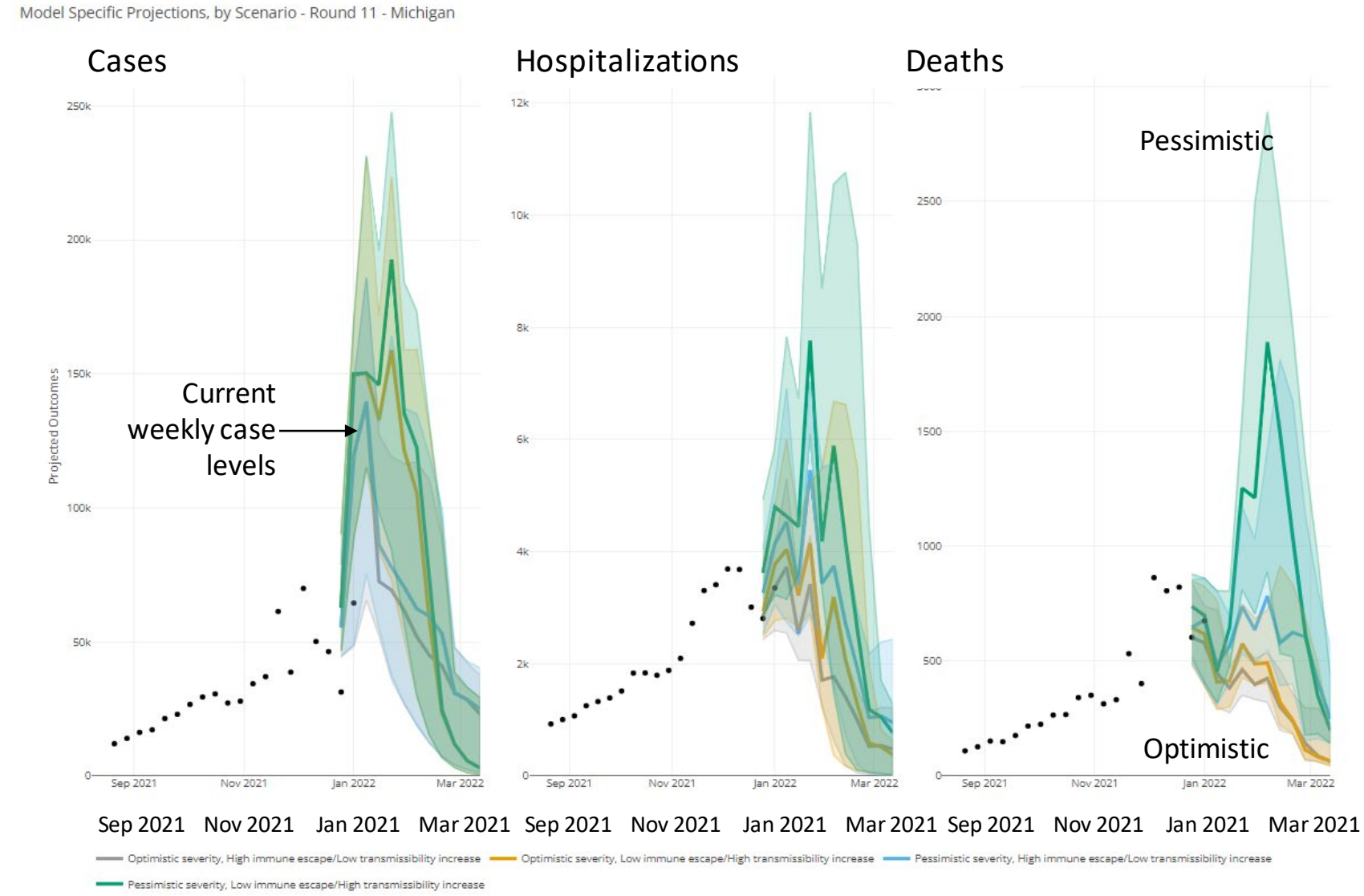
Variant	MI Reported Cases	# of Counties	MDHHS VOC Sequenced Prev. ¶
B.1.617.2 (delta)	30,295	83	30.3%
B.1.1.529 (omicron)	617	41	69.7%

Data last updated Jan 10, 2022
Source: MDSS
¶ Sequence specimens are from the most recent week by onset date which may change as more specimens are sent in

Where are we headed: models project further increases in cases, hospitalizations, and deaths for Michigan

The omicron surge is expected to hit us sharp and fast

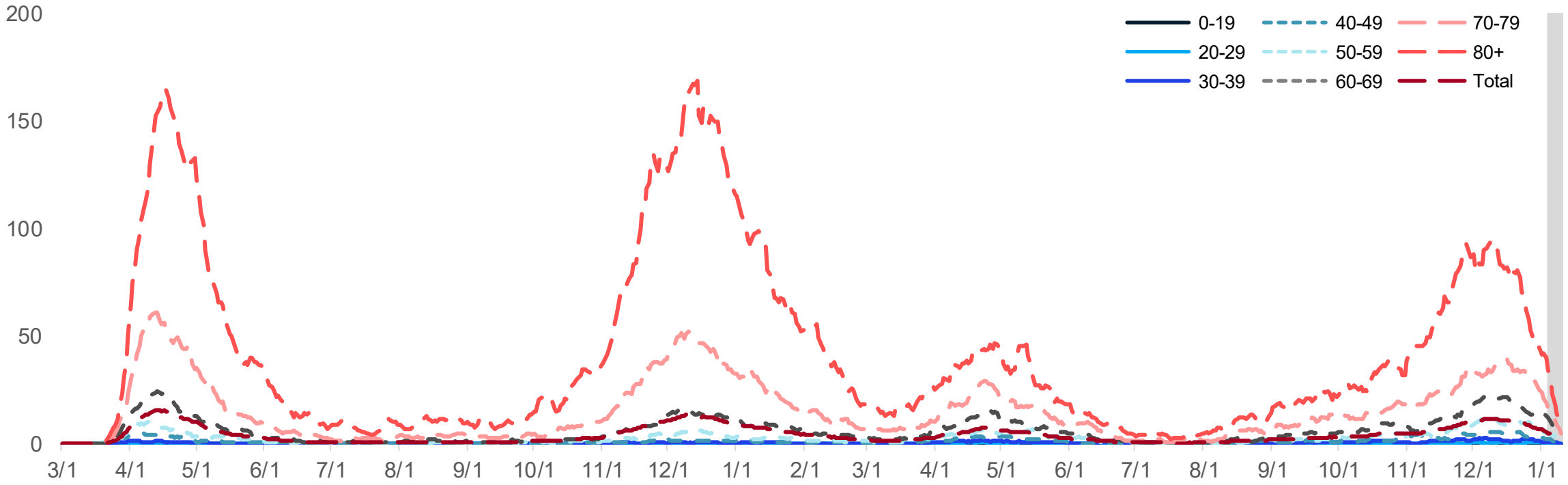
- Models project cases & hospitalizations to peak by the end of Jan 2022 (latest end of Feb) in every state
- The projected peaks represent the highest cases, hospitalizations, and deaths thus far over the entire pandemic
- The number of hospitalizations at the peak could put further strain on an already stressed healthcare system
- Actions taken swiftly and in the short term could prevent health system from becoming further overwhelmed



Source: COVID Modeling Scenario Hub. Uncertainty levels: 50%

Average and total new deaths, by age group

Daily COVID-19 deaths in confirmed and probable cases per million by age group (7 day rolling average)

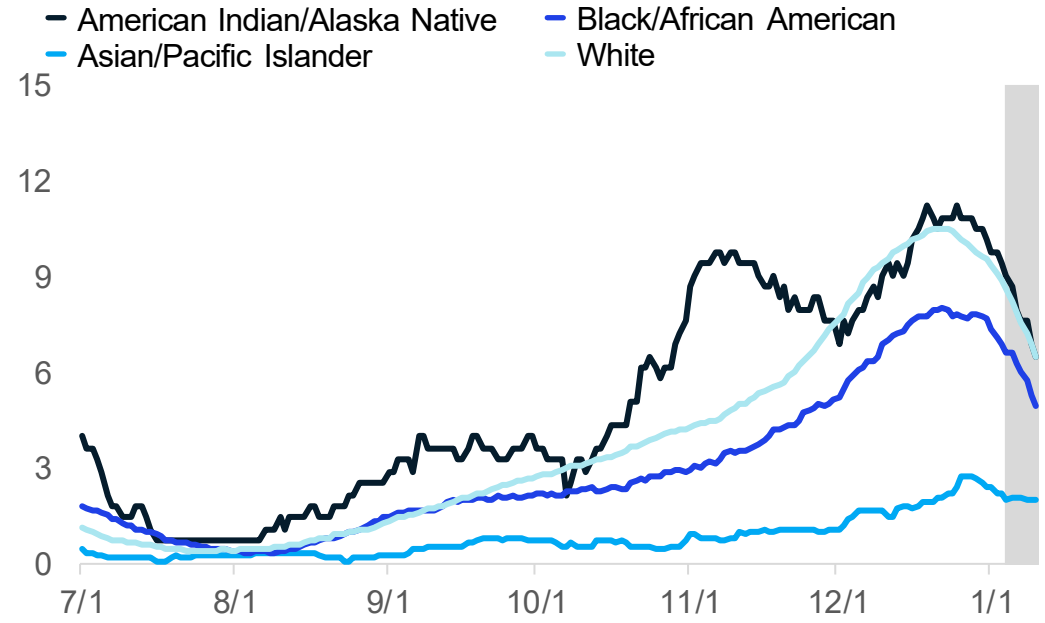


- Deaths are a lagging indicator
- Through 1/3, the 7-day avg. death rate is 40 daily deaths per million people for those over the age of 80
- Deaths rates have decreased over the last week for all age groups

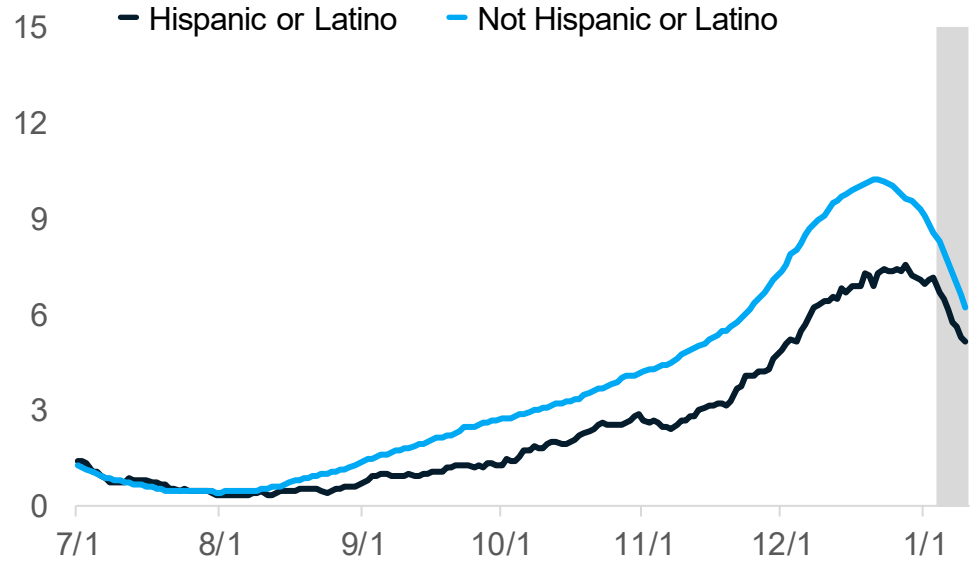
Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System (MDSS)

30-day rolling average daily deaths per million people by race and ethnicity

Average daily deaths per million people by race



Average daily deaths per million people by ethnicity



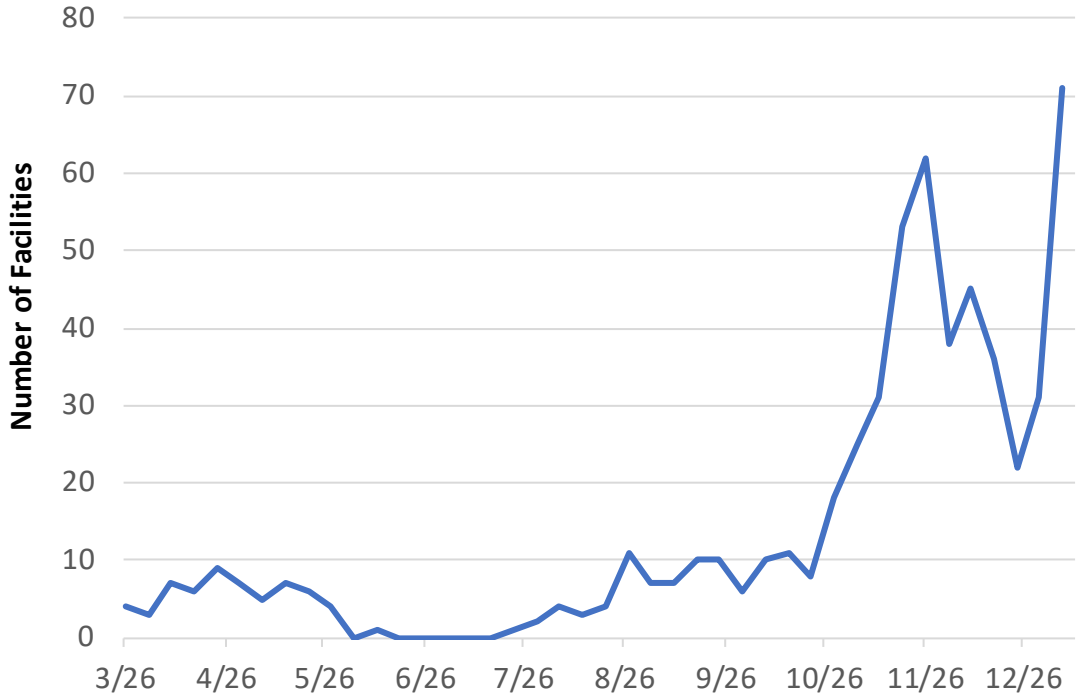
- Deaths are lagging indicator of other metrics
- Trends for daily average deaths are decreasing for all reported races and ethnicities
- Currently, American Indian/Alaskan Native have the highest death rate (9.4 deaths/million)

Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System

Reported Outbreaks within Long Term Care Facilities: Adult Foster Care, Homes for the Aged, and Skilled Nursing Cases

Number of AFC/HFAs with 3 or more Confirmed Cases

Number of SNFs with 3 or more Confirmed Cases



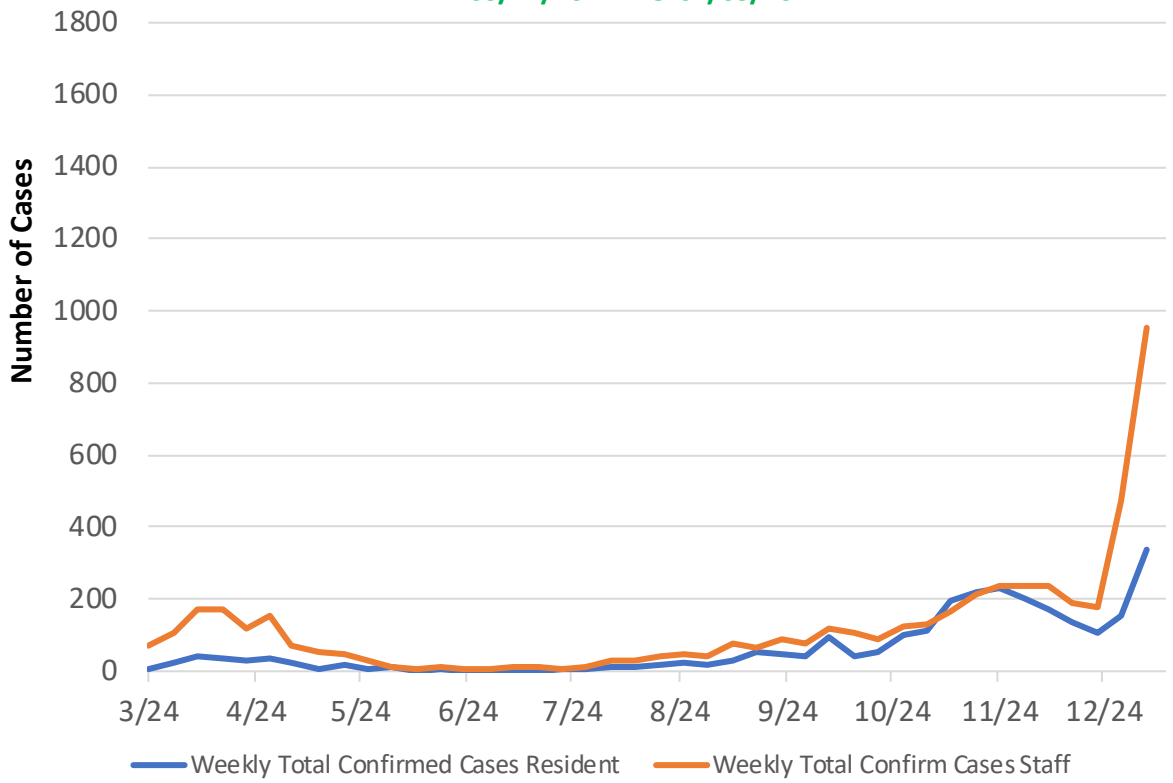
- The number of Long-Term Care Facilities reporting 3 or more cases within a single reporting period increased in both AFC/HFA (42, up from 20 last week) and SNF (71, up from 31 last week) in most recent data

COVID-19 outbreaks within Long-Term Care Facilities are defined as three or more cases with an epidemiological linkage by place and time indicating a shared exposure outside of a household (https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173_102057---,00.html and https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173-526911--,00.html)

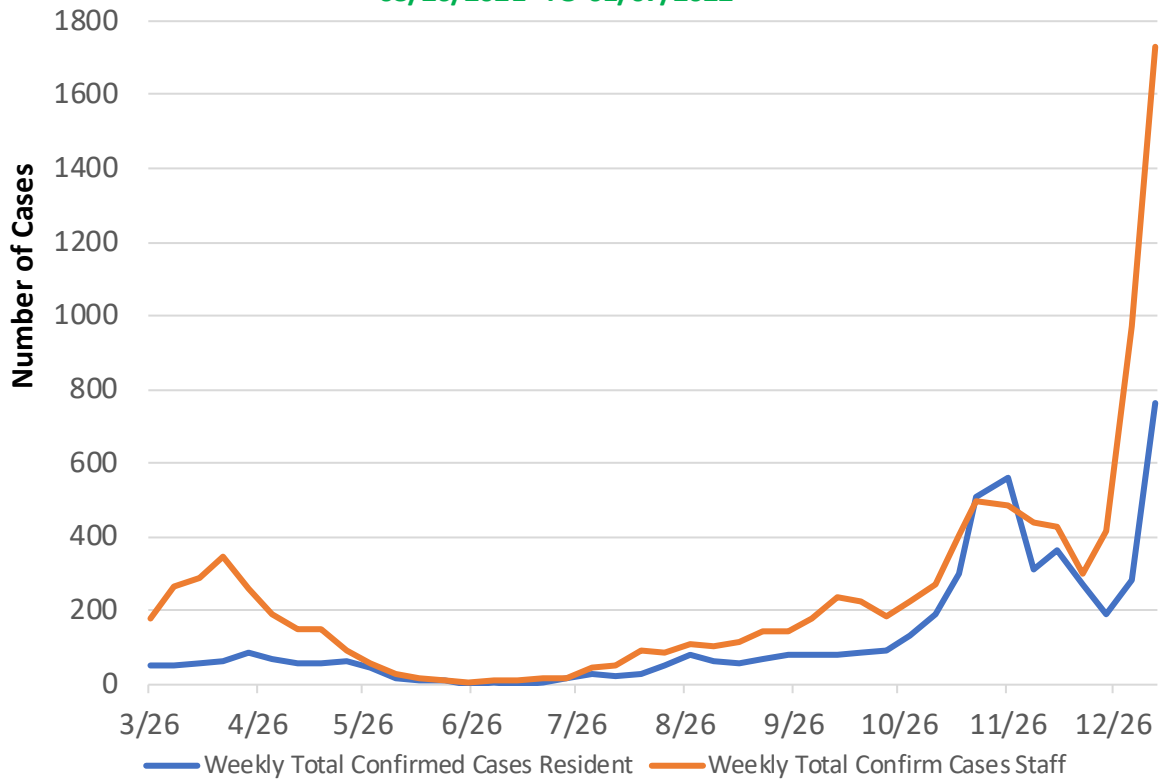
The data is from weekly reporting by facilities with bed occupancy of at least 13 beds.

Reported Cases within Long Term Care Facilities: Adult Foster Care, Homes for the Aged, and Skilled Nursing Cases for Residents and Staff

STATE OF MICHIGAN WEEKLY TOTAL CONFIRMED COVID-19 CASES IN AFC/HFA RESIDENTS AND STAFF
03/24/2021 TO 01/05/2022



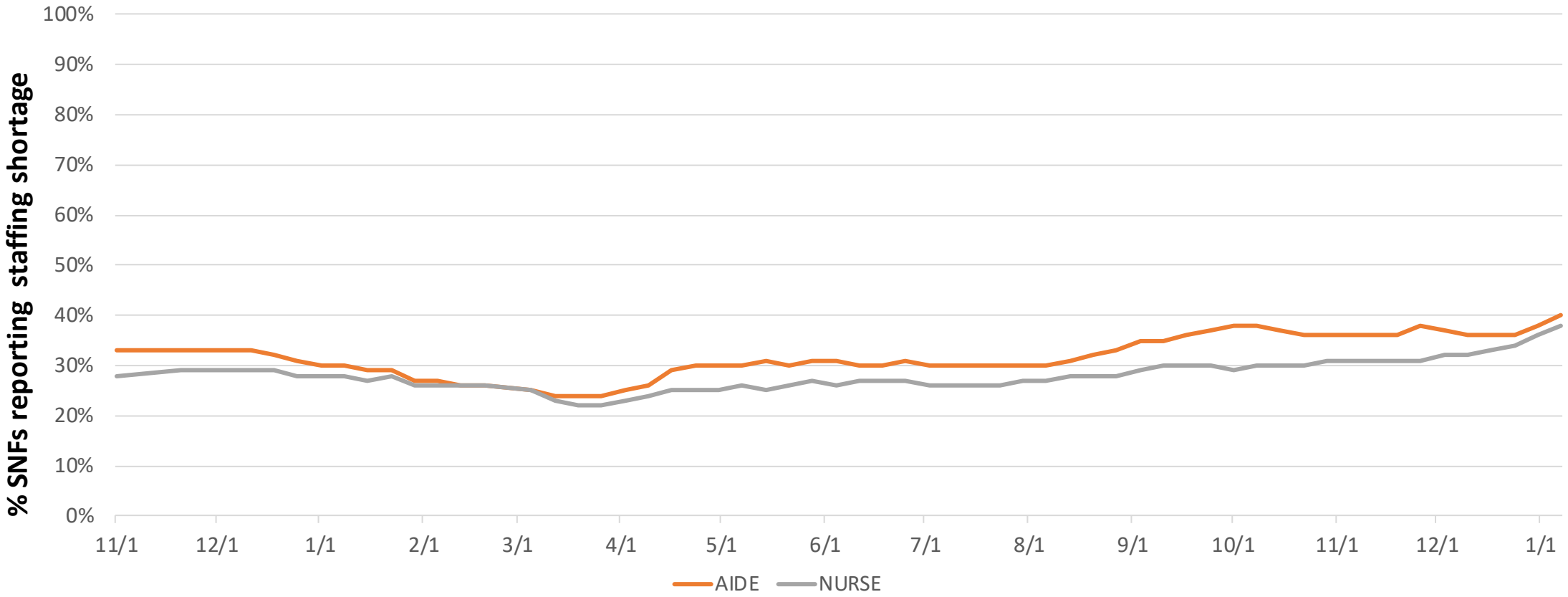
STATE OF MICHIGAN WEEKLY TOTAL CONFIRMED COVID-19 CASES IN SNF RESIDENTS AND STAFF
03/26/2021 TO 01/07/2022



- Case counts in residents and staff are increasing and have peaked to an annual high of 1,730 cases in SNF staff (971 last week) and 954 cases in AFC/HFA staff (471 last week)
- Case counts in LTCF continue record more cases among staff than residents

The data is from weekly reporting by facilities with bed occupancy of at least 13 beds.

Reported Staff Shortages within Skilled Nursing Facilities



- More Skilled Nursing Facilities (SNF) in Michigan are reporting staff shortages now than ever previously reported during the pandemic
- 40% of SNF report staffing shortages for aides
- 38% of SNF report staffing shortages for nurses

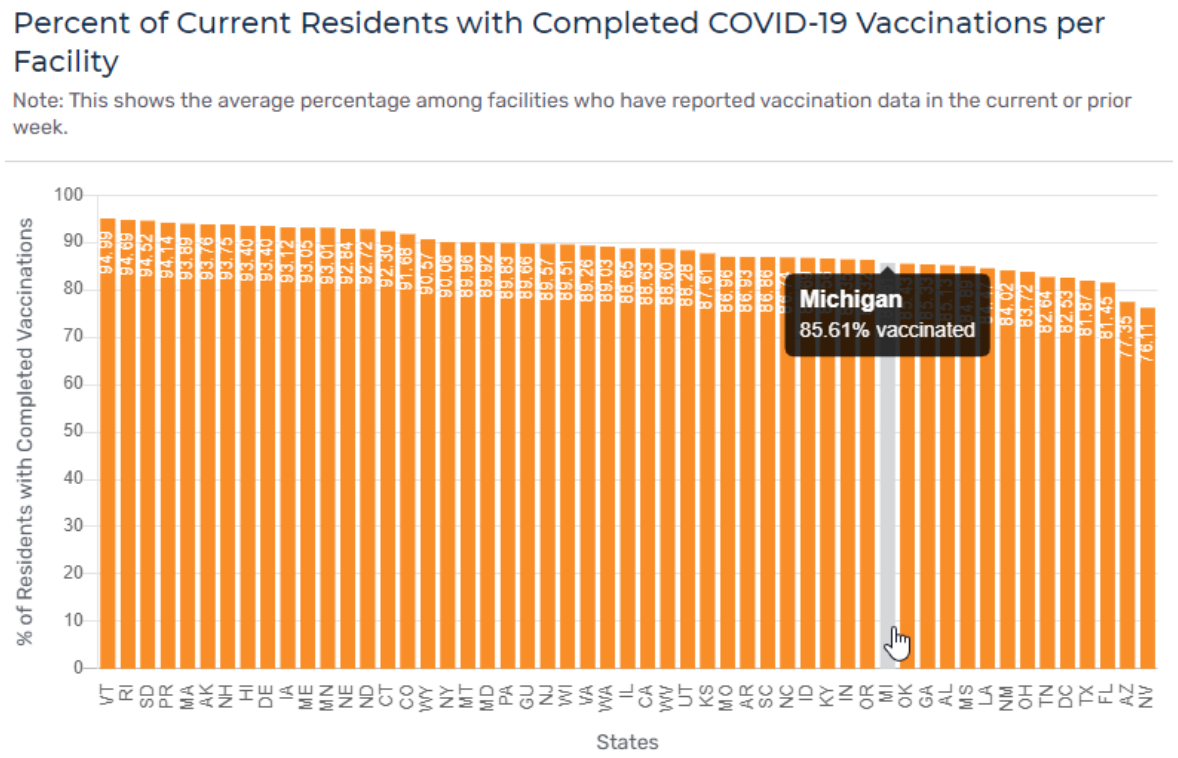
These data are from weekly reporting by facilities with bed occupancy of at least 13 beds.

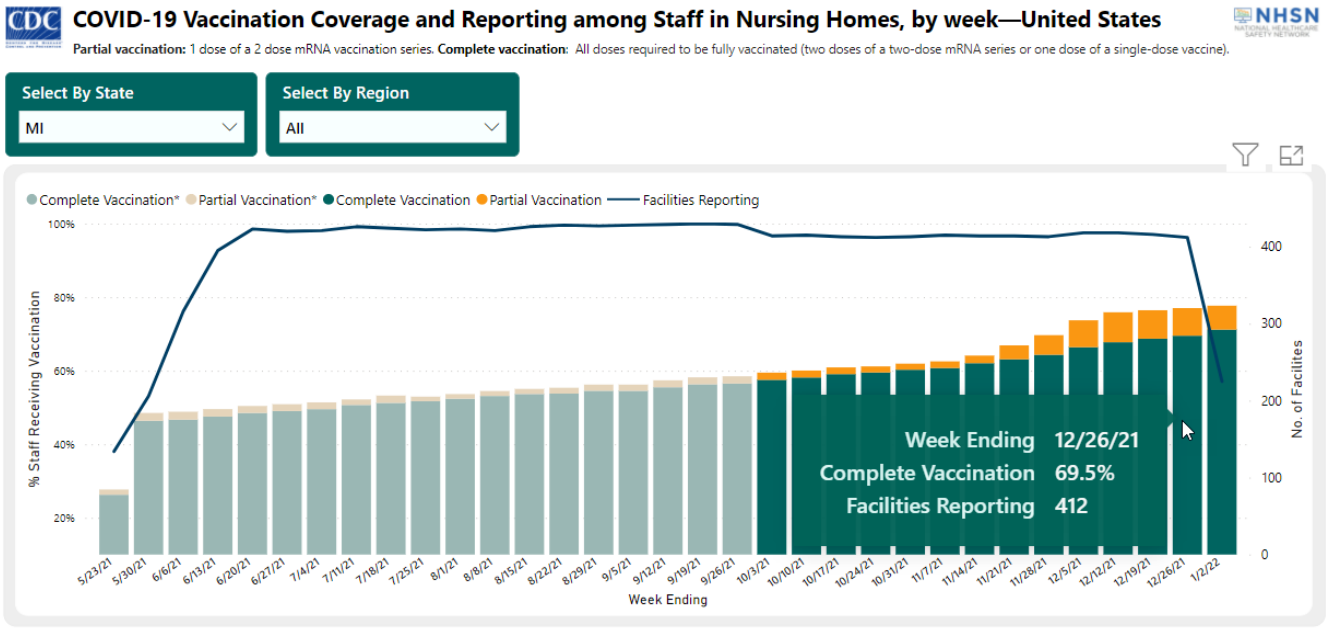
Completed vaccination among Skilled Nursing Cases for Residents and Staff

85.6% of SNF residents are fully vaccinated; 40 of 53 states/territories

69.5% of SNF staff are fully vaccinated, 49 of 53 states/territories

7.5% on SNF staff have initiated primary series



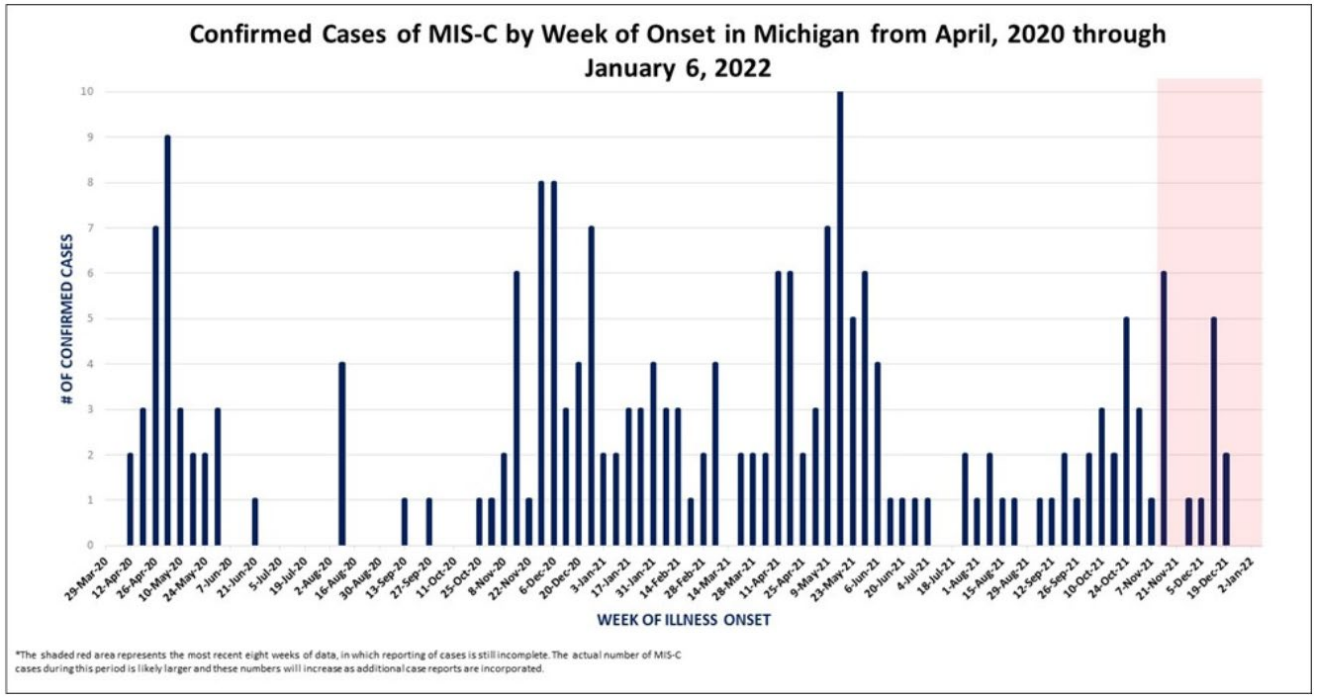


https://data.cms.gov/covid-19/covid-19-nursing-home-data
https://www.cdc.gov/nhsn/covid19/ltc-vaccination-dashboard.html

Multisystem Inflammatory Syndrome in Children (MIS-C) is Increasing

Michigan Surveillance

- Higher community transmissions is followed by higher incidence of MIS-C cases
- 208 cases identified in Michigan
- More than 60% of those children are elementary and pre-school aged
- Black/African American children are disproportionately impacted
- 70.7% children with MIS-C are treated in the ICU
- **Vaccines have been shown to prevent MIS-C, including MIS-C that results in ICU admission[1,2]**



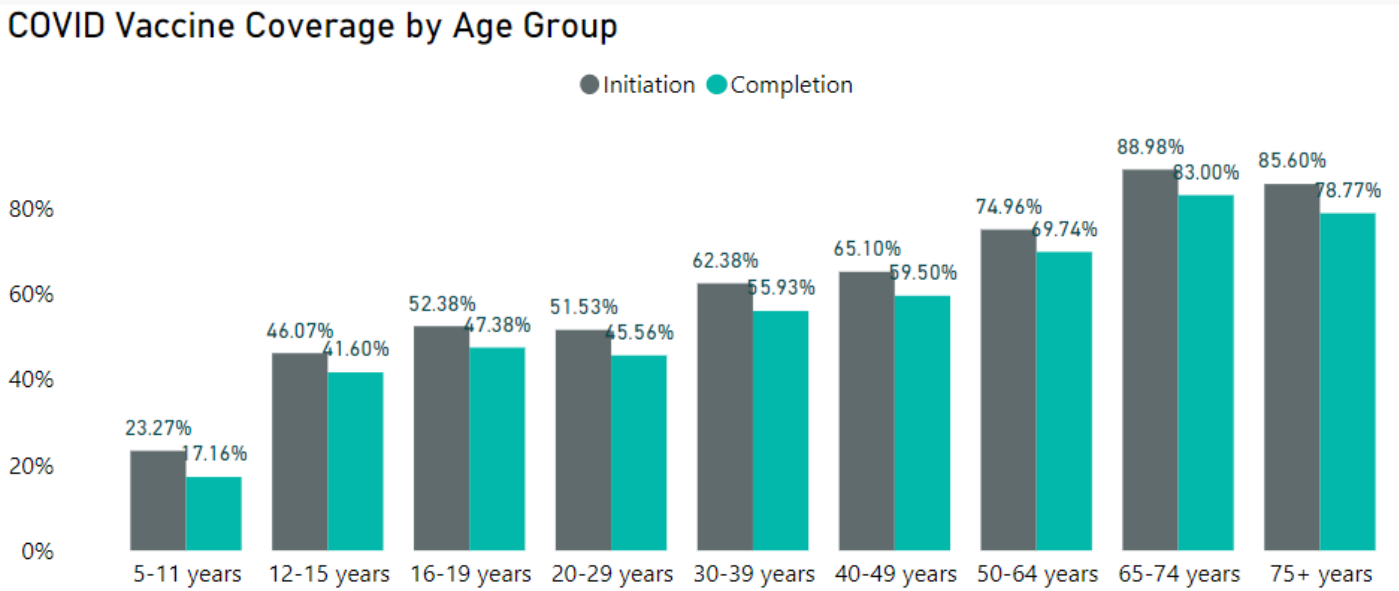
DEMOGRAPHIC INFORMATION (N=208)

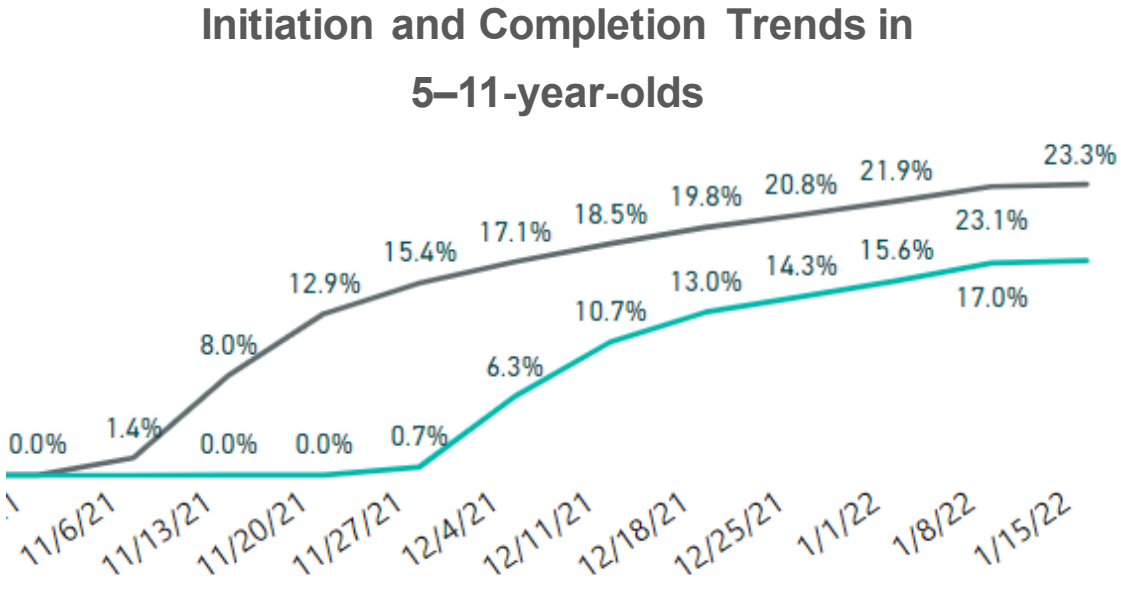
Age Group	Count	%	Race	Count	%
0-4 yrs	50	24.0%	Black/African American	82	39.4%
5-10 yrs	83	39.9%	Caucasian	91	43.8%
>10 yrs	75	36.1%	All Others / Unknown	35	16.8%
Gender	Counts	%	Ethnicity	Count	%
Male	126	60.6%	Not Hispanic or Latino	151	72.6%
Female	82	39.4%	Hispanic or Latino	18	8.6%
Unknown	0	0.0%	Unknown	39	18.8%

Sources: MDHHS and MIS-C Data and Reporting; Data through 1/6; 1. Levy et al. **Multisystem Inflammatory Syndrome in Children by COVID-19 Vaccination Status of Adolescents in France** 2021 JAMA doi:10.1001/jama.2021.23262; 2. Zambrano et al. Effectiveness of BNT162b2 (Pfizer-BioNTech) mRNA Vaccination Against Multisystem Inflammatory Syndrome in Children Among Persons Aged 12–18 Years — United States, July–December 2021. MMWR Morb Mortal Wkly Rep. ePub: 7 January 2022. DOI: http://dx.doi.org/10.15585/mmwr.mm7102e1

Vaccinations and Boosters

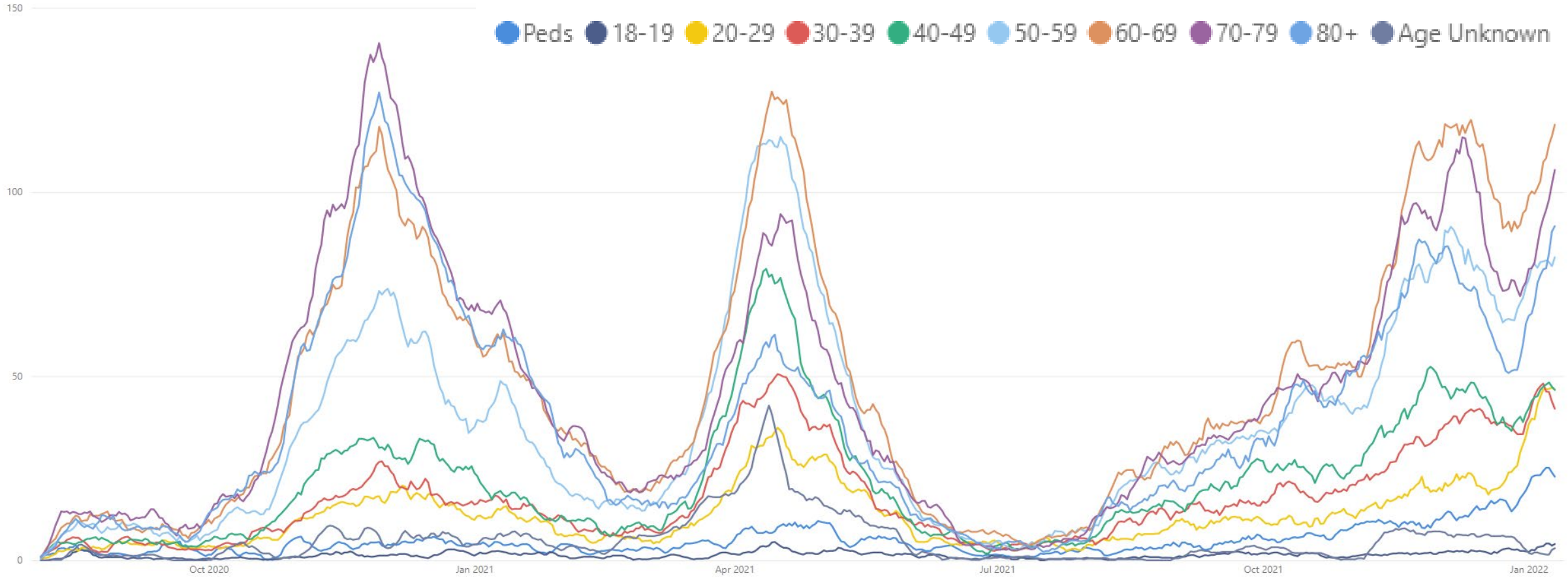
- Nearly 14.3 million COVID-19 vaccine doses have been administered in Michigan
  - Over 6.4 million Michiganders have received at least one dose (64.1%)
  - Over 5.7 million Michiganders have completed a primary series (57.3%)
  - Over 2.5 million additional/booster doses have been administered in Michigan
    - 44.6% of the fully vaccinated population has received a booster
    - 69.3% of the fully vaccinated population 65 years of age or older has received a booster





https://covid.cdc.gov/covid-data-tracker/#vaccinations
https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html

Average Hospital Admissions Are Increasing for all Age Groups



- Trends for daily average hospital admissions have increased 20% since last week (vs. 5% decrease prior week)
- Overall, many age groups saw increases this week following the holiday
- More than 70 daily hospital admissions was seen for each of the age groups of 50-59, 60-69, 70-79, and 80+

Source: CHECC & EM Resource

Hospital Admissions and Admission Rates by Age Group

Daily new hospital admission per million by age group (7 -day rolling average)

Age Group	Average† daily number of hospital admissions	Average† Daily Hospital Admission Rate*	One Week % Change (Δ #)
0-11	18.0	12.9	-2% (-<1)
12-17	5.6	7.4	+8% (+<1)
18-19	4.4	16.8	**+63% (+2)**
20-29	46.4	33.7	**+21% (+8)**
30-39	41.1	33.9	-8% (-4)
40-49	46.3	39.2	+5% (+2)
50-59	**82.3**	**60.9**	+2% (+2)
60-69	**118.3**	**92.7**	**+19% (+19)**
70-79	**106.0**	**138.2**	**+31% (+25)**
80+	**90.7**	**219.0**	**+30% (+21)**
Total¶	**562.4**	**56.3**	**+16% (+76)**

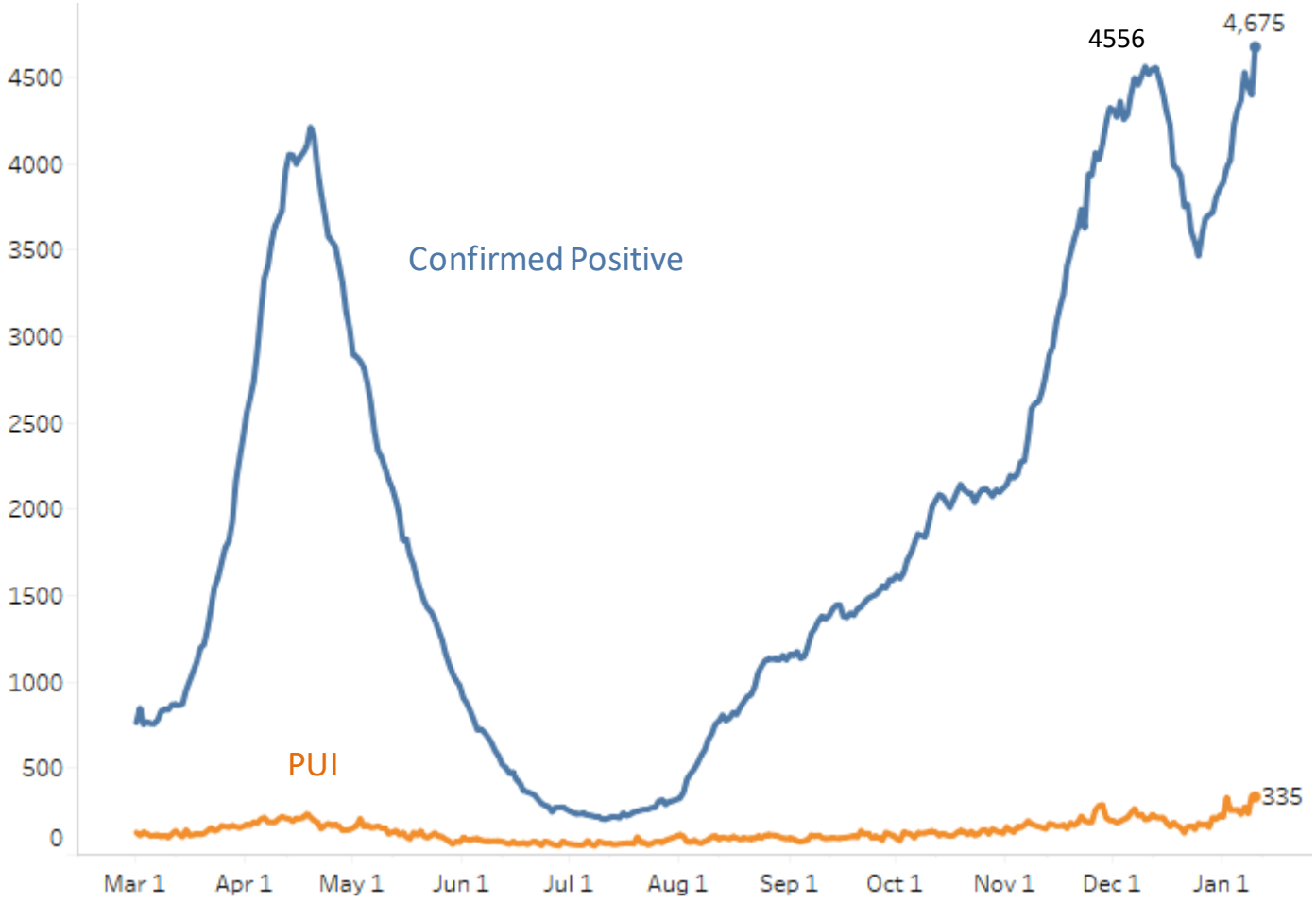
* Rate per 1 million residents; † Rolling 7-day average; ¶ Total may not reflect state due to missing age data
Note: Hospital Admission data reflects date data was submitted
Source: CHECC and EM Resource

- Through Jan 10, there were an average of 562.4 hospital admissions per day due to COVID-19; an increase from last week (+16%, +76)
- Most age groups saw increases this week
- The largest one-week count increase was among those 70-79 years (+25) which accounted for 106 hospital admission per day (+2)
- Average daily hospital admission count (118 hospital admissions per day) were highest among those 60-69
- Average daily hospital admission rate (219.0 hospital admissions/million) were highest for those aged 80+
- More than 80 daily hospital admissions were seen for those aged 50-59, 60-69, 70-79, and 80+

Note: for some age groups, small changes in number of hospitalization admissions can cause large change in One Week Percent Change

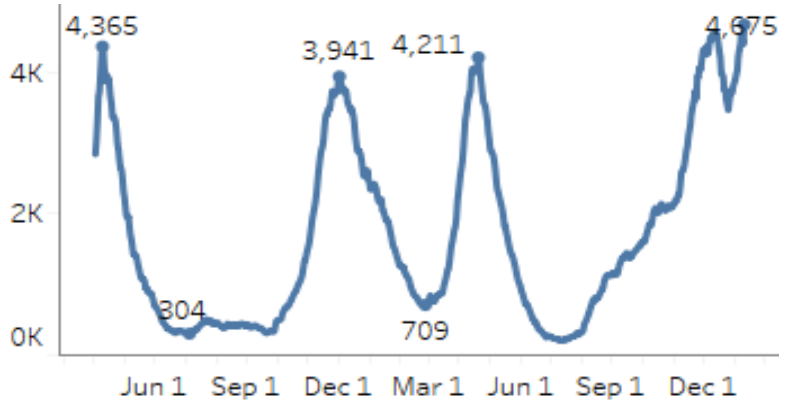
Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 3/1/2021 – 1/10/2022
Confirmed Positive & Persons Under Investigation (PUI)



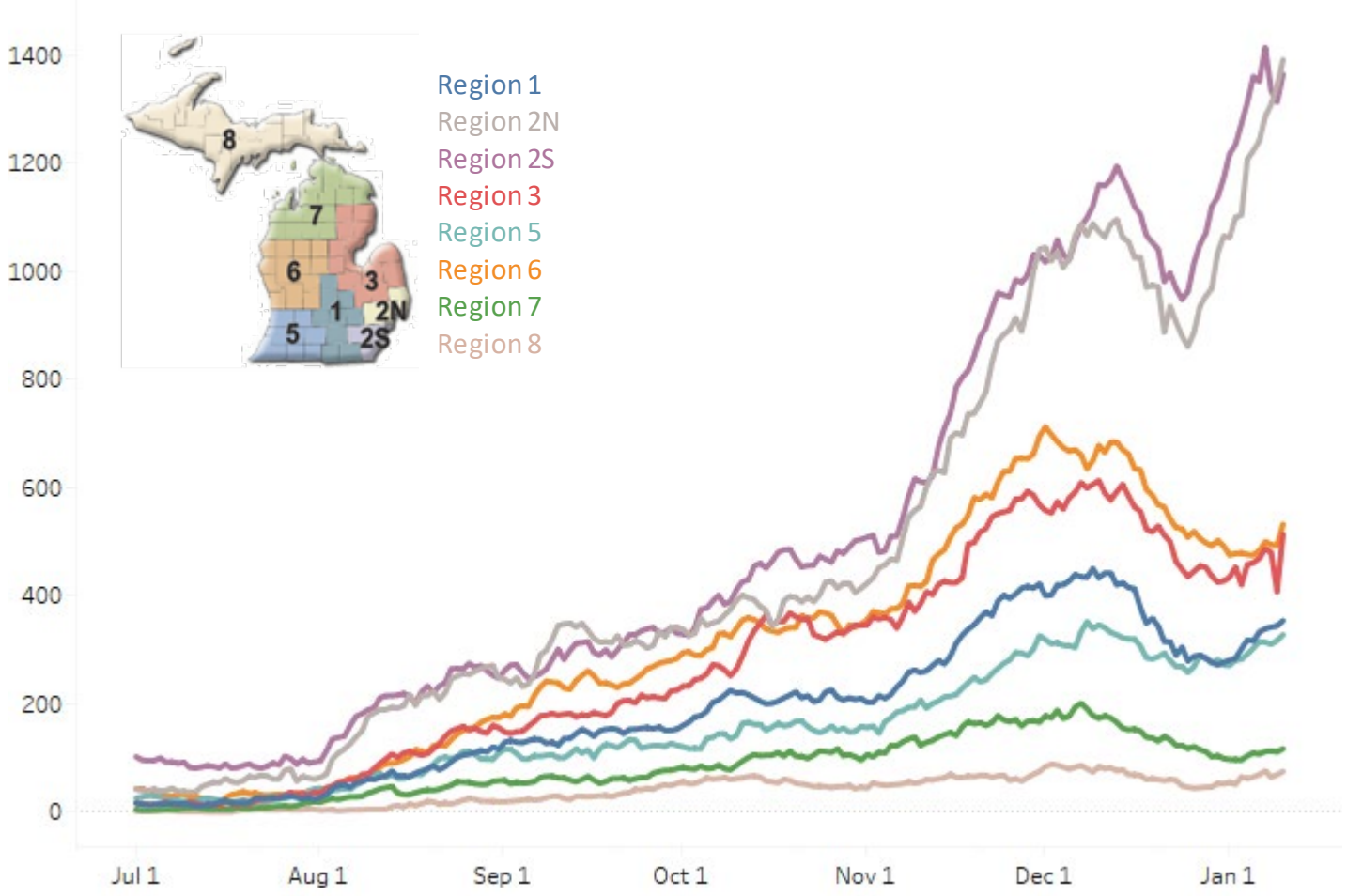
The COVID+ census in hospitals has increased by 16% over the past week and has set another pandemic record.

Hospitalized COVID Positive Long Term Trend (beginning March 2020)



Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 7/1/2021 – 1/10/2022
Confirmed Positive by Region



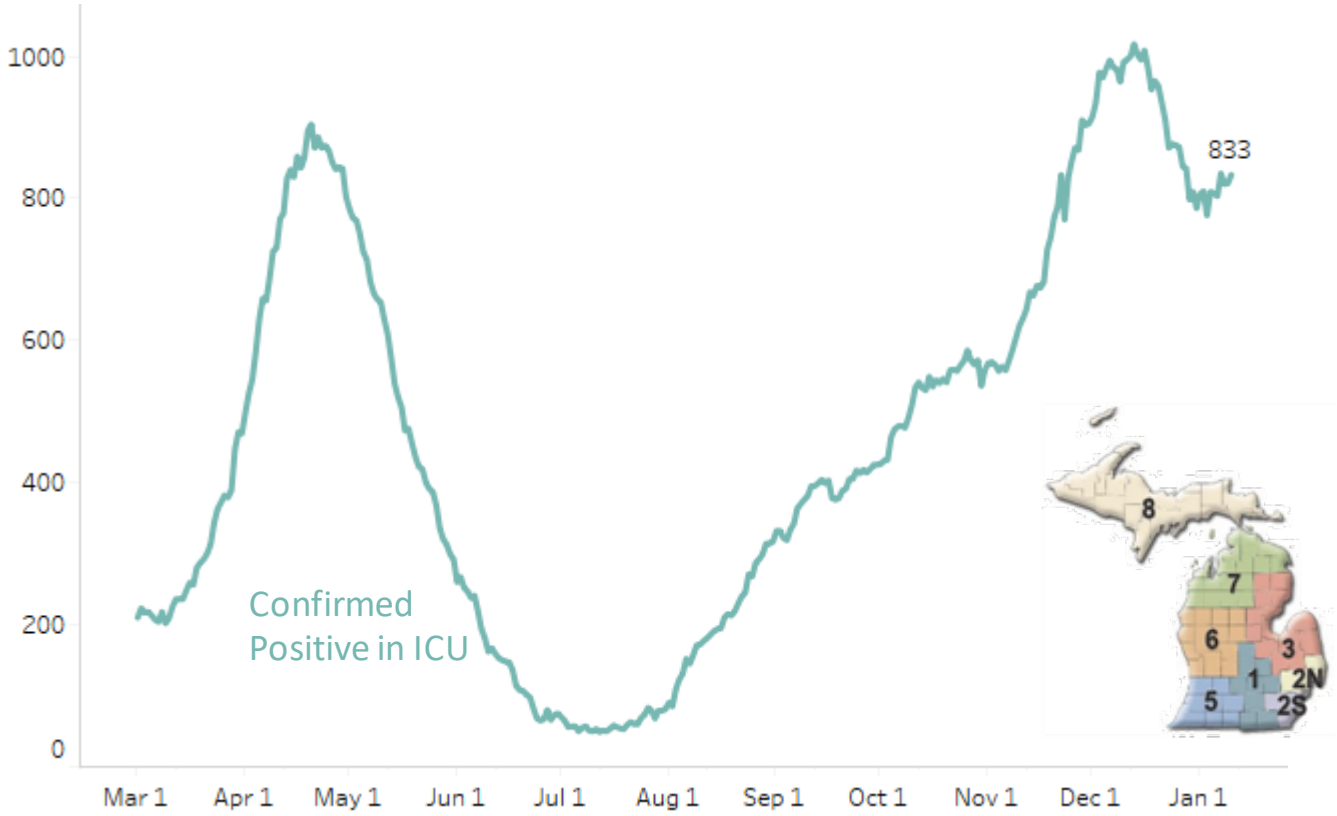
The COVID+ hospital census has increased in all regions since last week. The fastest growth was seen in Regions 2N, 3 and 7.

Regions 2N and 2S now have greater than 600 COVID+ patients hospitalized per Million Population.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	354 (17%)	327/M
Region 2N	1391 (26%)	628/M
Region 2S	1364 (3%)	612/M
Region 3	514 (22%)	453/M
Region 5	328 (16%)	344/M
Region 6	532 (11%)	363/M
Region 7	117 (22%)	234/M
Region 8	75 (15%)	241/M

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 1/10/2022
Confirmed Positive in ICUs



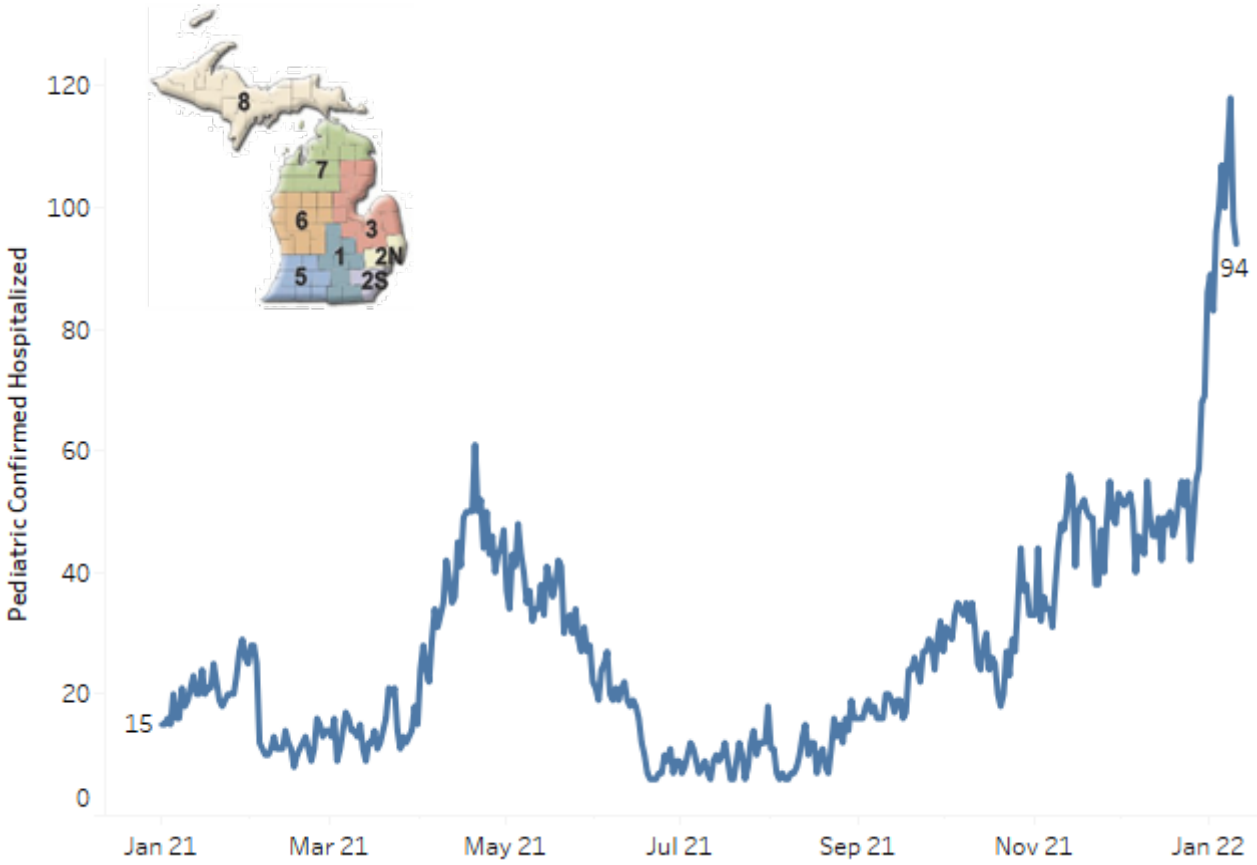
The census of COVID+ patients in ICUs has increased 7% from last week. Census in ICUs has increased in all regions except for Regions 3 and 6.

Regions 1, 2S, and 3 have ICU occupancy greater than 85%. All regions except for Regions 5 and 8 have 30% or more ICU beds filled with COVID+ patients.

Region	Adult COVID+ in ICU (% Δ from last week)	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	76 (12%)	86%	37%
Region 2N	174 (16%)	79%	31%
Region 2S	234 (5%)	87%	34%
Region 3	111 (-5%)	93%	34%
Region 5	48 (17%)	78%	28%
Region 6	128 (0%)	81%	43%
Region 7	45 (36%)	81%	34%
Region 8	17 (6%)	76%	27%

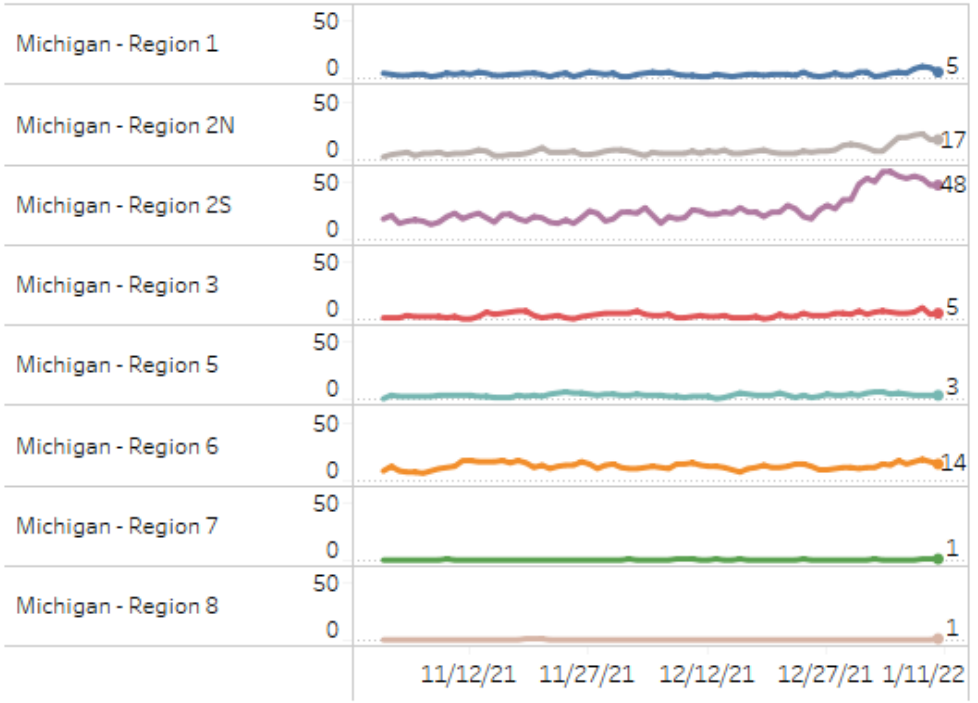
Statewide Hospitalization Trends: Pediatric COVID+ Census

Hospitalization Trends 1/1/2021 – 1/10/2022
Pediatric Hospitalizations, Confirmed

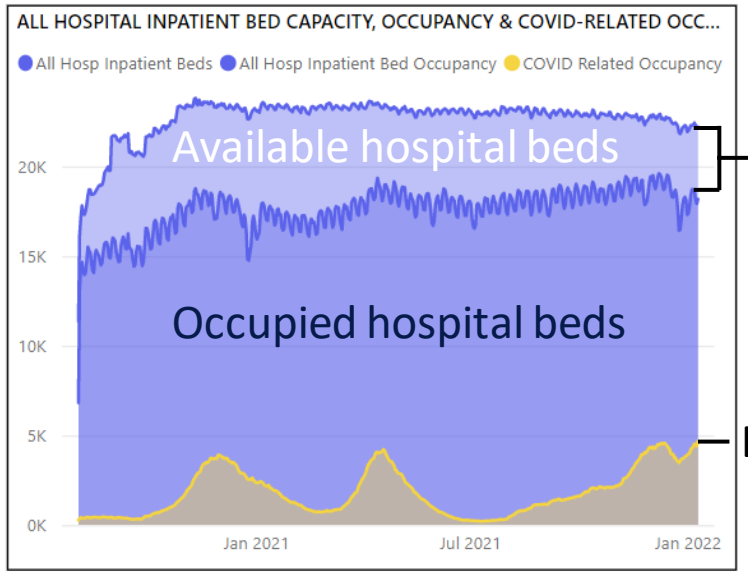


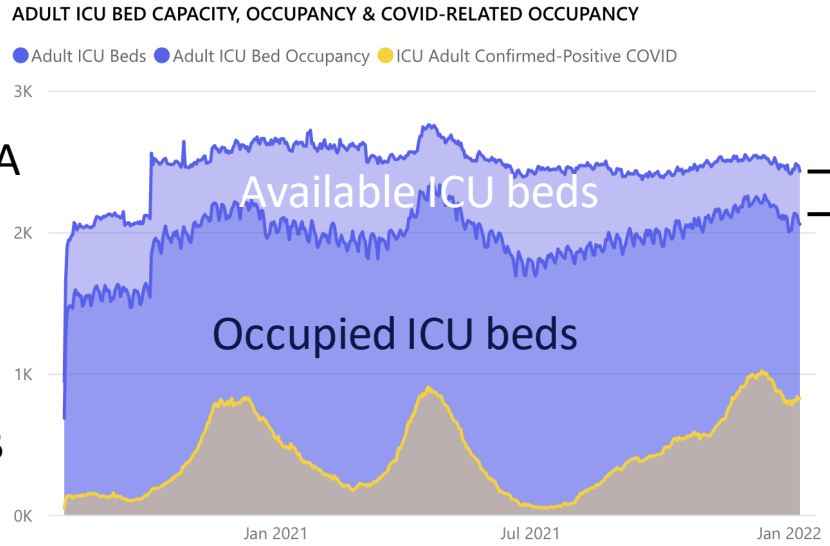
Pediatric COVID+ Hospital census remains high although it is down slightly from last week's record high.

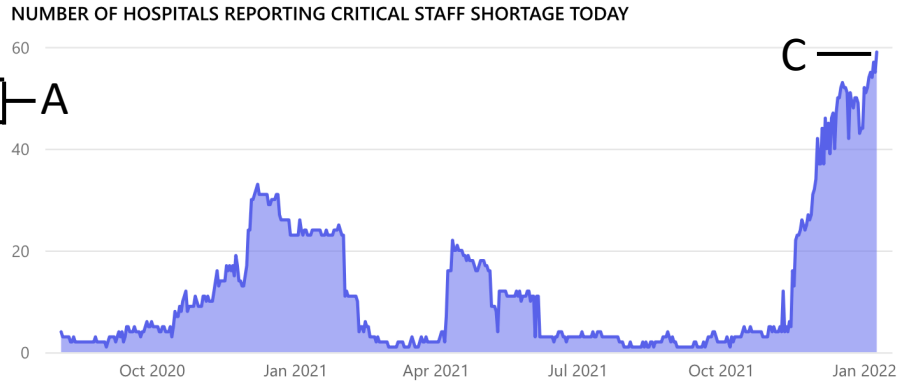
Pediatric Hospitalizations by Region
(Nov 2021-Jan 2022)



Hospital, ICU, Ventilator Utilization, and Staffing Trends







- Utilization for hospitals, ICUs, and mechanical ventilators are all increasing (Ventilators not shown)
- The number of available hospital and ICU beds is decreasing (shown in A)
  - Compared to this time last year, we currently have 1,091 less staffed beds this year (5% decrease)
  - Compared to this time last year, we currently have 151 fewer ICU staffed beds this year (6% decrease)
- At the *start* of the current Omicron surge, we have already peaked for COVID hospitalizations (shown in B) and near peak for ICU; these numbers are expected to rise
- Sufficient staffing remains the most critically limited resource within healthcare, and is at a pandemic high (shown at C)

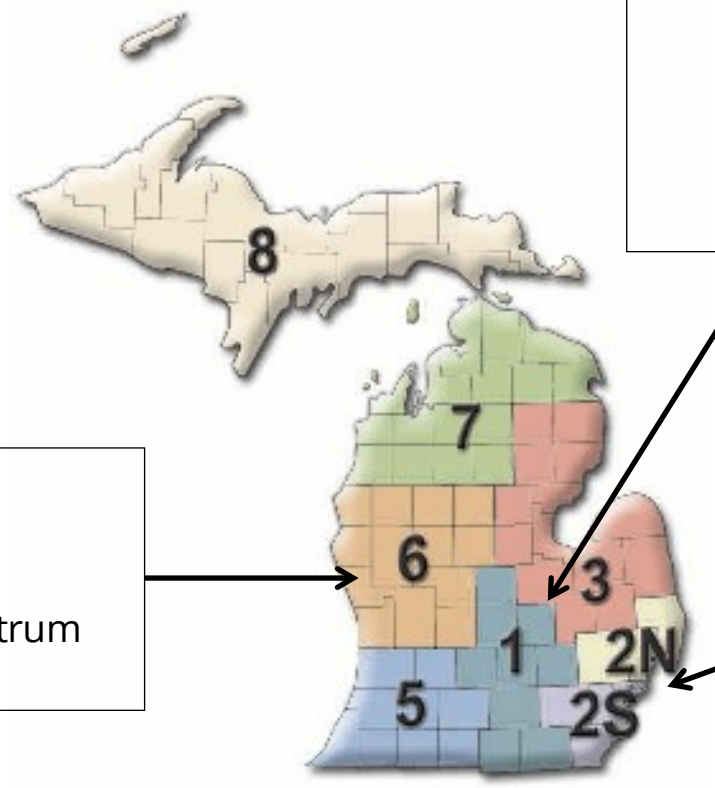
Source: EM Resource

Michigan Strategy to Allocate Federal Staffing Resources

The regional strategy addresses:

- COVID hotspots
- Challenges with increased admissions
- Facilitating regional decompression and patient transfers

- North Central has seen an elevated level of COVID cases and hospitalizations.
  - DoD team allocated to Covenant Saginaw in R3
  - Current request for Sparrow Hospital would support a second facility in R1
  - Both facilities provide for regional decompression allowing for transfers of patients from outlying areas to the appropriate level of care.



- The West side of the state saw the highest initial COVID burden in the current surge.
  - DoD teams allocated to Spectrum and Mercy Muskegon in R6

- SE Michigan increased hospitalizations in the current surge and is now experiencing the highest number of cases and positivity in the state.
  - DoD team allocated to Beaumont Dearborn in R2S
- Disaster Medical Assistance Team (DMAT) assigned to Henry Ford – Wyandotte in R2S

Source: Emergency Preparedness and Response

CDC Work Restrictions for Healthcare Providers Exposed to or Infected with COVID-19

Work Restrictions for HCP With SARS-CoV-2 Infection and Exposures

HCP are considered "boosted" if they have received all COVID-19 vaccine doses, including a booster dose, as recommended by CDC. HCP are considered "vaccinated" or "unvaccinated" if they have NOT received all COVID-19 vaccine doses, including a booster dose, as recommended by CDC.

For more details, including recommendations for healthcare personnel who are immunocompromised, refer to Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2 (conventional standards) and Strategies to Mitigate Healthcare Personnel Staffing Shortages (contingency and crisis standards).

Work Restrictions for HCP With SARS-CoV-2 Infection

Vaccination Status	Conventional	Contingency	Crisis
Boosted, Vaccinated, or Unvaccinated	10 days OR 7 days with negative test†, if asymptomatic or mildly symptomatic (with improving symptoms)	5 days with/without negative test, if asymptomatic or mildly symptomatic (with improving symptoms)	No work restriction, with prioritization considerations (e.g., asymptomatic or mildly symptomatic)

Work Restrictions for Asymptomatic HCP with Exposures

Vaccination Status	Conventional	Contingency	Crisis
Boosted	No work restrictions, with negative test on days 2‡ and 5–7	No work restrictions	No work restrictions
Vaccinated or Unvaccinated, even if within 90 days of prior infection	10 days OR 7 days with negative test	No work restriction with negative tests on days 1‡, 2, 3, & 5–7	No work restrictions (test if possible)

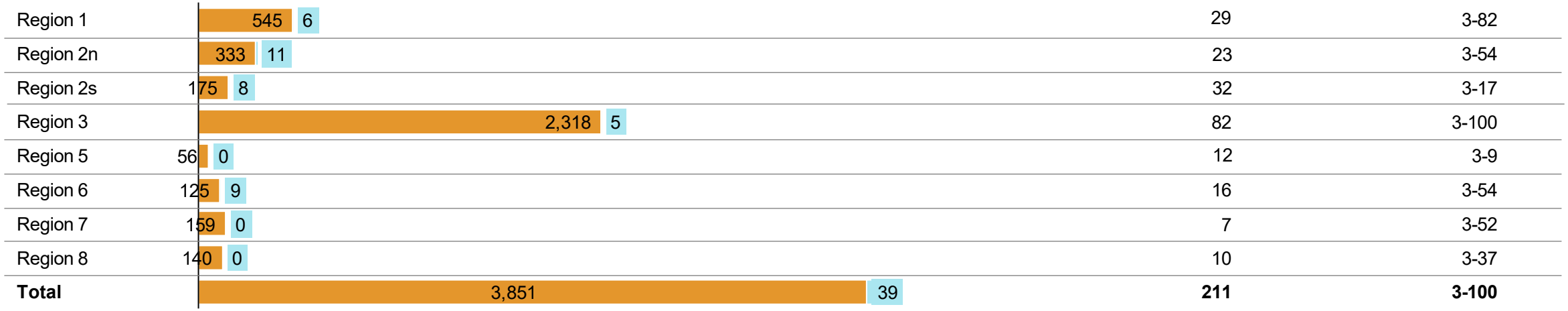
†Negative test result within 48 hours before returning to work

‡For calculating day of test: 1) for those with infection consider day of symptom onset (or first positive test if asymptomatic) as day 0; 2) for those with exposure consider day of exposure as day 0

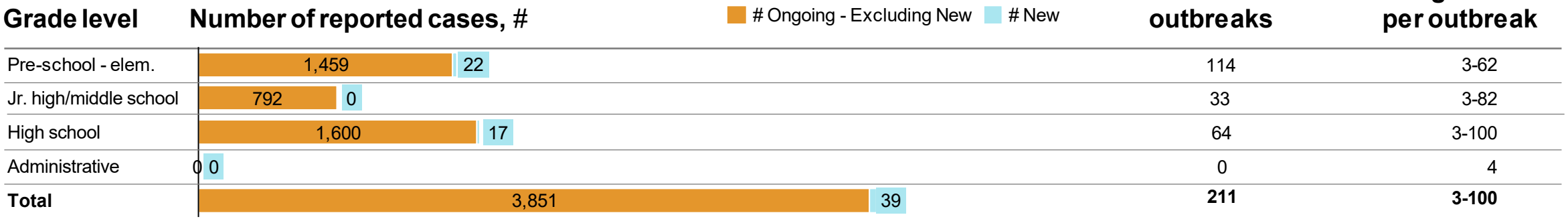
https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

Vital Infrastructure: K-12 school clusters and outbreaks, week ending Jan 6

Number of reported outbreaks/clusters decreased since last week (365 to 211), with decreases in Pre K-Elementary (195 to 114), and High Schools (102 to 64), and Middle/Jr High (68 to 33). Administration (0 to 0) remained the same.



Region	Number of reported cases, #		Number of outbreaks	Range of cases per outbreak
Region 1	545	6	29	3-82
Region 2n	333	11	23	3-54
Region 2s	175	8	32	3-17
Region 3	2,318	5	82	3-100
Region 5	56	0	12	3-9
Region 6	125	9	16	3-54
Region 7	159	0	7	3-52
Region 8	140	0	10	3-37
Total	3,851	39	**211**	**3-100**



Grade level	Number of reported cases, #		Number of outbreaks	Range of cases per outbreak
Pre-school - elem.	1,459	22	114	3-62
Jr. high/middle school	792	0	33	3-82
High school	1,600	17	64	3-100
Administrative	0	0	0	4
Total	3,851	39	**211**	**3-100**

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. Week of 12/16 98% LHDs reporting due to technical difficulties.
NOTE (10/4): MDHHS adopted the new CSTE school cluster and outbreak definition which impacts how transmissions within school-sponsored settings are reported to the health department

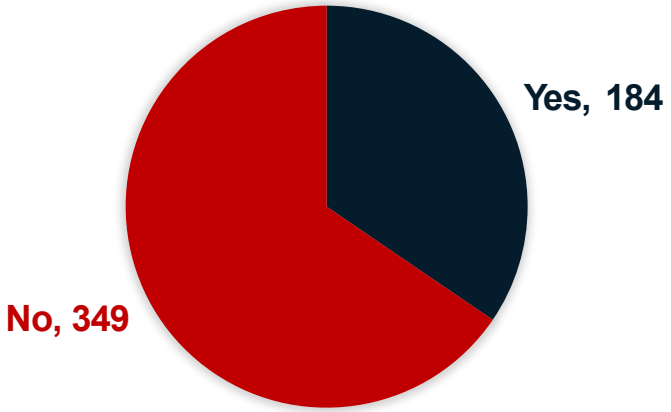
Source: LHD Weekly Sitreps

MI School Districts and Mask Policy as of Jan 10, 2023

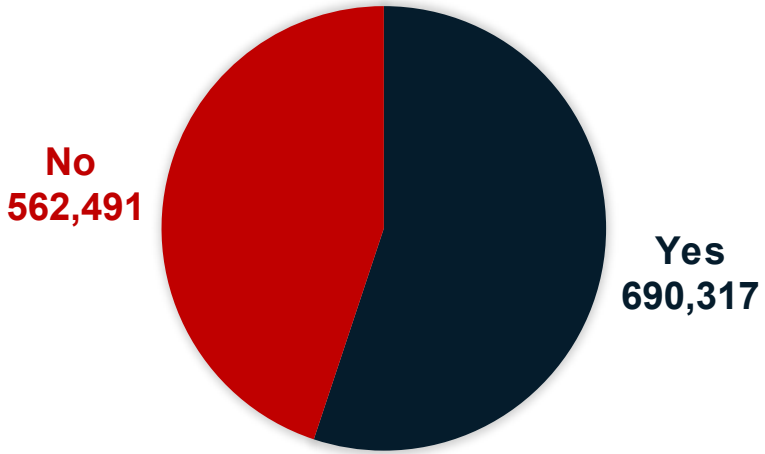
Yes – Any masking policy in some subset of school grades

No – No mask policies (includes unknown)

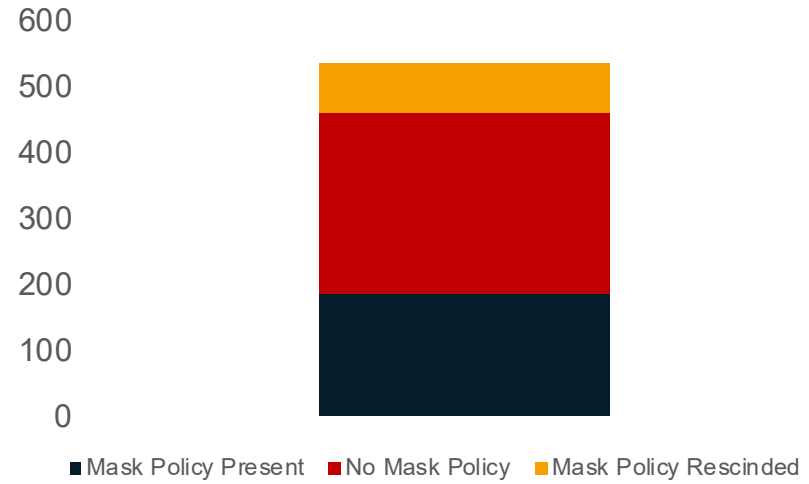
NUMBER OF SCHOOL DISTRICTS WITH MASK POLICIES IN K-12 SETTINGS



NUMBER OF STUDENTS* IN SCHOOL DISTRICTS WITH MASK POLICIES



NUMBER OF SCHOOL DISTRICTS WITH MASK POLICY REVERSAL



- 35% (184/533) of K-12 school districts have mandatory mask policies
- School districts with mandatory mask policies cover 55% (690,317/1,252,808) of K-12 students*
- Not all K-12 grades or students may be covered by mask policies; examples include policies for those through K-6, or only during higher levels of community transmission
- 14% of K-12 school districts have rescinded their mask policies

*** Student size based on school enrollment numbers; Buses and public transportation are federally required to enforce mask mandates**

Source: Executive Office of Governor School District Mask Policy Database

School Quarantine Guidance

What to do when students or staff are exposed to COVID-19 in a school setting, **but do not have symptoms**.

Students and staff experiencing symptoms should not attend school activities.

MDHHS
Michigan Department of Health & Human Services

Michigan.gov/Coronavirus

Students and staff should monitor for symptoms throughout quarantine period (days 1-10). If symptoms develop, test immediately. Day "0" is day of last close contact with a COVID-19 positive student, teacher or staff.

Up to Date on Vaccines
No Need to Quarantine

Actions to Take

Students and staff without symptoms do not need to quarantine. They should monitor for symptoms and wear a well-fitted mask for 10 days.

Not Up to Date on Vaccines
Need to Quarantine

Home quarantine for days 1–5 and test on day 5; and "Mask to Stay"* for days 6–10.

OR

"Test to Stay"** for days 1–6 AND "Mask to Stay"* for days 1–10.

OR

Home quarantine for days 1–10 if unable/unwilling to mask.

**Mask to Stay: The consistent and correct use of a well-fitting mask when around others in school and public places*
***Test to Stay: Test every other day for six days following the exposure and consistent and correct use of a mask*

Students and staff who test positive for COVID-19 should not attend school and should isolate at home for five full days after symptom onset (or five days after the positive test if they do not have symptoms). They may return to school on day six if they have no symptoms and can wear a mask for five additional days.

MDHHS continues to recommend universal masking in all K–12 school settings.

MDHHS COVID-19 testing Support to Schools

- MDHHS supplies rapid antigen tests to schools through the MI Safe Schools Testing program to support students testing to stay in the classroom after an exposure in the school setting.
- These tests are performed at the school
- Schools and individual school districts can request antigen test kits through the Mi Safer Schools: School Antigen COVID Test Ordering form
  - So far in calendar year 2022 MDHHS has distributed over 72,000 rapid antigen tests to schools
  - Throughout the pandemic, MDHHS has distributed over 2.7 million antigen test to schools
- The **MI Backpack Home Test** program supplements school-based testing by providing over the counter or at home tests to students
- These tests are intended to be taken home with the student and used in the household when there is an exposure or when someone in the household has symptoms
- Currently, 337 school districts have participated in the program with nearly 175,000 OTC tests distributed this school year
- School districts can indicate their interest in participating in this program by completing the following survey: https://forms.office.com/g/is9FYDMRzn

Nine K-12 Schools returning to virtual learning due to COVID-19

Schools can reduce in-school transmission, but community transmission impacts learning as well

Week of Jan 3:

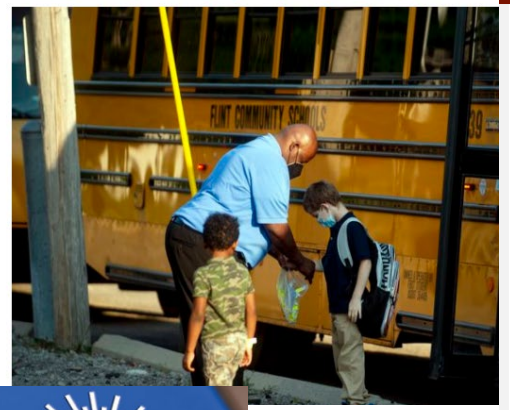
- 9 school districts with over 98,000 children enrolled
  - Genesee County: Flint
  - Ingham County: Lansing
  - Oakland County: Oak Park, Pontiac, Southfield
  - Washtenaw County: Ann Arbor
  - Wayne County: Detroit, Hamtramck, Romulus

Week of Jan. 10:

- Lansing and Ann Arbor districts returned to in person
- Remaining 7 school districts are still virtual

Flint schools to extend virtual learning for another week

Updated: Jan. 07, 2022, 8:32 a.m. | Published: Jan. 07, 2022, 8:22



HAMTRAMCK PUBLIC SCHOOL DISTRICT

You Fit In Here

Now Hiring

Departments | Schools | Students & Parents | Contact | Calendar | For Staff | News | COVID-19 Updates | Title IX | District Directory | Message from the Superintendent

Events

January 2022 — Print • Year Overview • Subscribe

JAN 3 MON — Virtual Instruction for All Students, 1/3/2022 – 1/7/2022, District Calendar

JAN 4 TUE — Virtual Instruction for All Students, 1/3/2022 – 1/7/2022, District Calendar

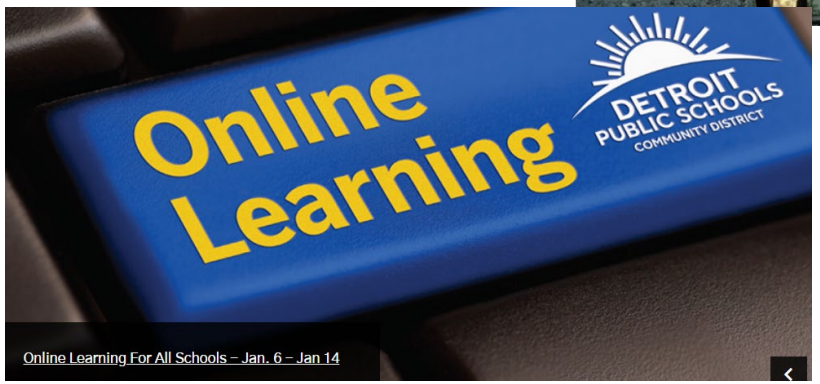
JAN 5 WED — Virtual Instruction for All Students, 1/3/2022 – 1/7/2022, District Calendar

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Today — Calendar View

Calendars

District Calendar



January 6, 2022

Return to In-Person Learning - Monday, Jan 10th, 2022

Dear Lansing Families,

I hope this email finds you well. I wanted to take time to thank you all for your incredible understanding as we made the difficult, but necessary decision to go virtual this week. I know this decision caused hardships on many and I am truly sorry.

However, even when we went virtual, we were able to test hundreds of our staff, provide on-line instruction to thousands of students, distribute laptops, and provide food to families. I want to thank the staff for all of the hard work in being able to start food and device distribution on Monday, less than 48 hours after the decision was made to go virtual.

By going virtual this week, we were able to avoid the spike in COVID that came from the holiday break. We were able to solidify our staff attendance as well as our testing and COVID preparations. Because of the incredible work by everyone, we feel

Guiding principles and tools

To prioritize equity in each of the objectives listed below

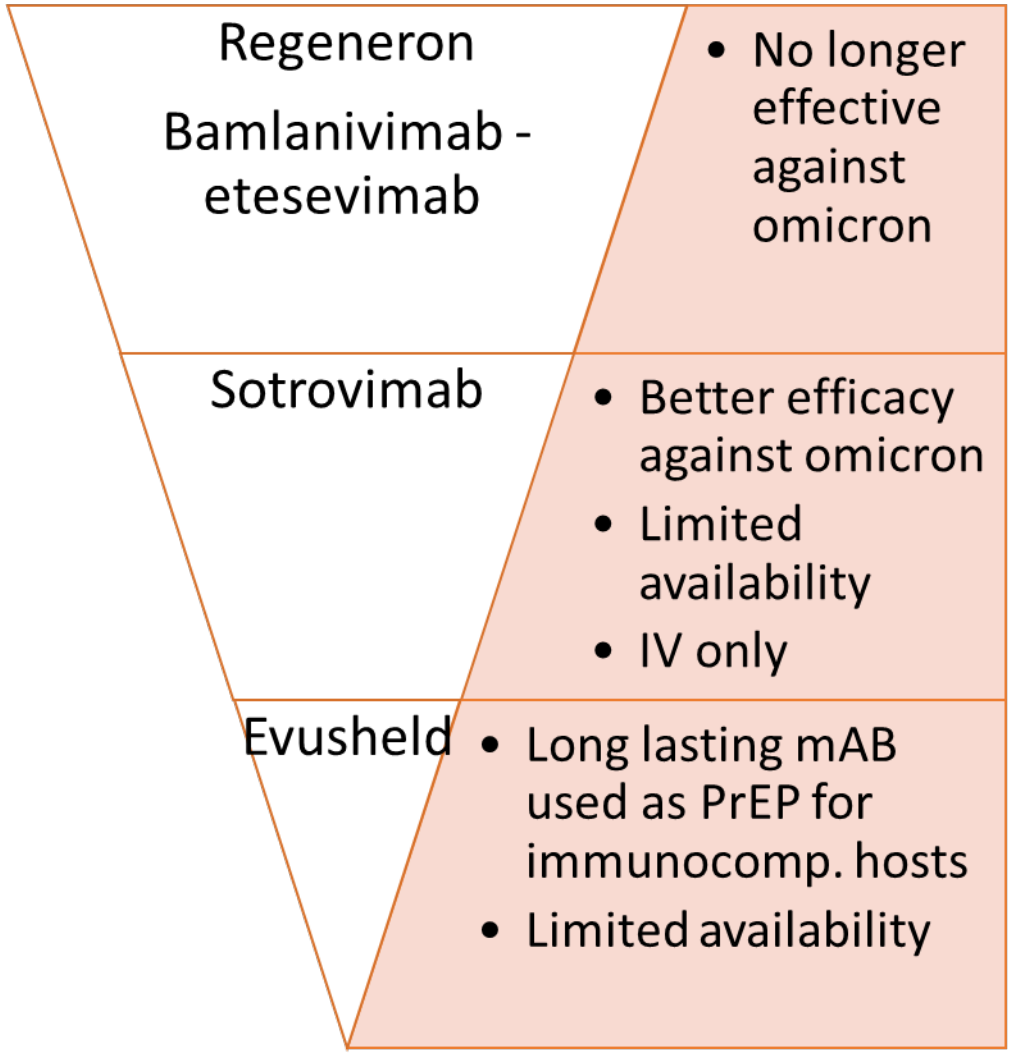
1. Prevent death and severe outcomes

2. Protect healthcare capacity (from first responders to hospitals to Long Term Care Systems)

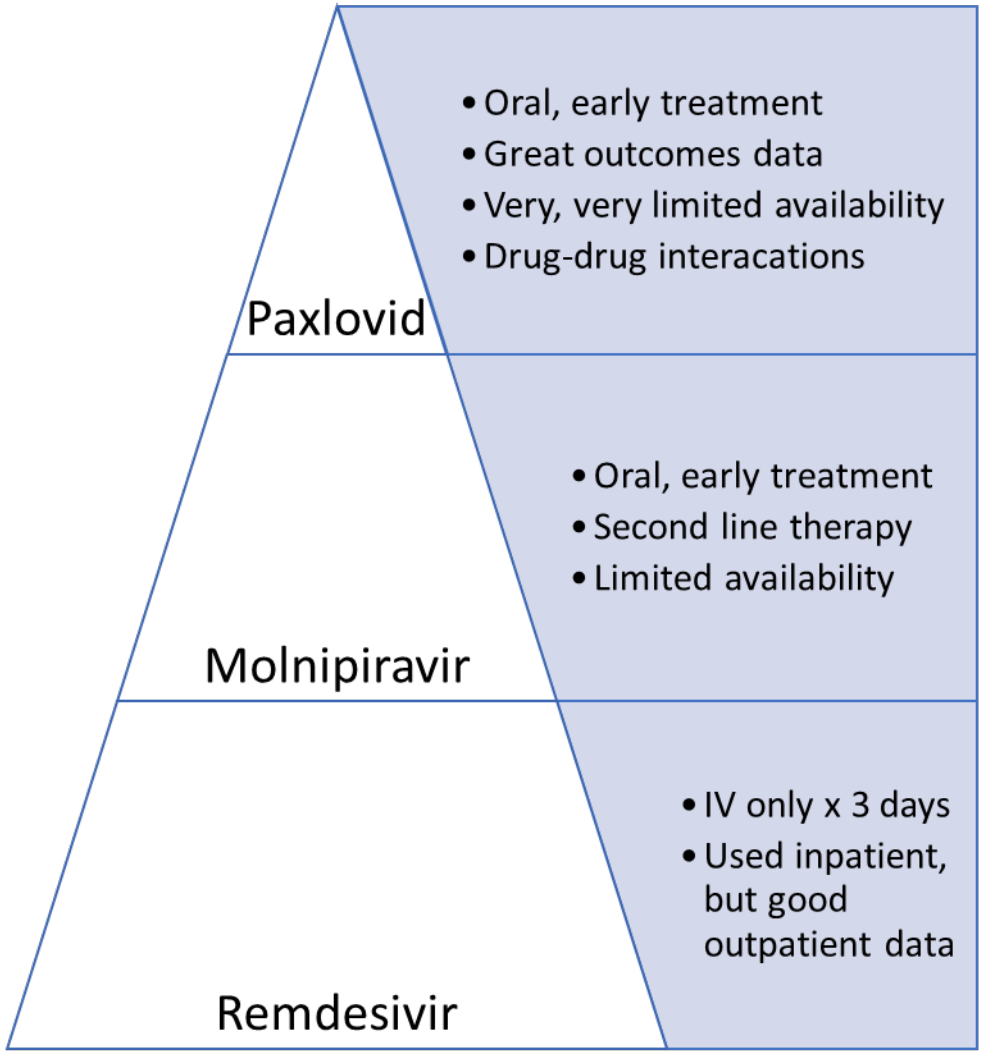
3. Keep vital infrastructure (schools, corrections) functioning, while planning for recovery

Therapeutics

Antibodies



Antivirals



Vaccines

Protect against severe outcomes

Boosters are more important than ever, and available for individuals 12+

Masks, Distancing & Ventilation

Prevent spread

Well-fitting, high-quality masks in all indoor public or crowded settings are more important than ever

Tests

Prevent spread

We encourage testing before gatherings, with symptoms, and after exposure

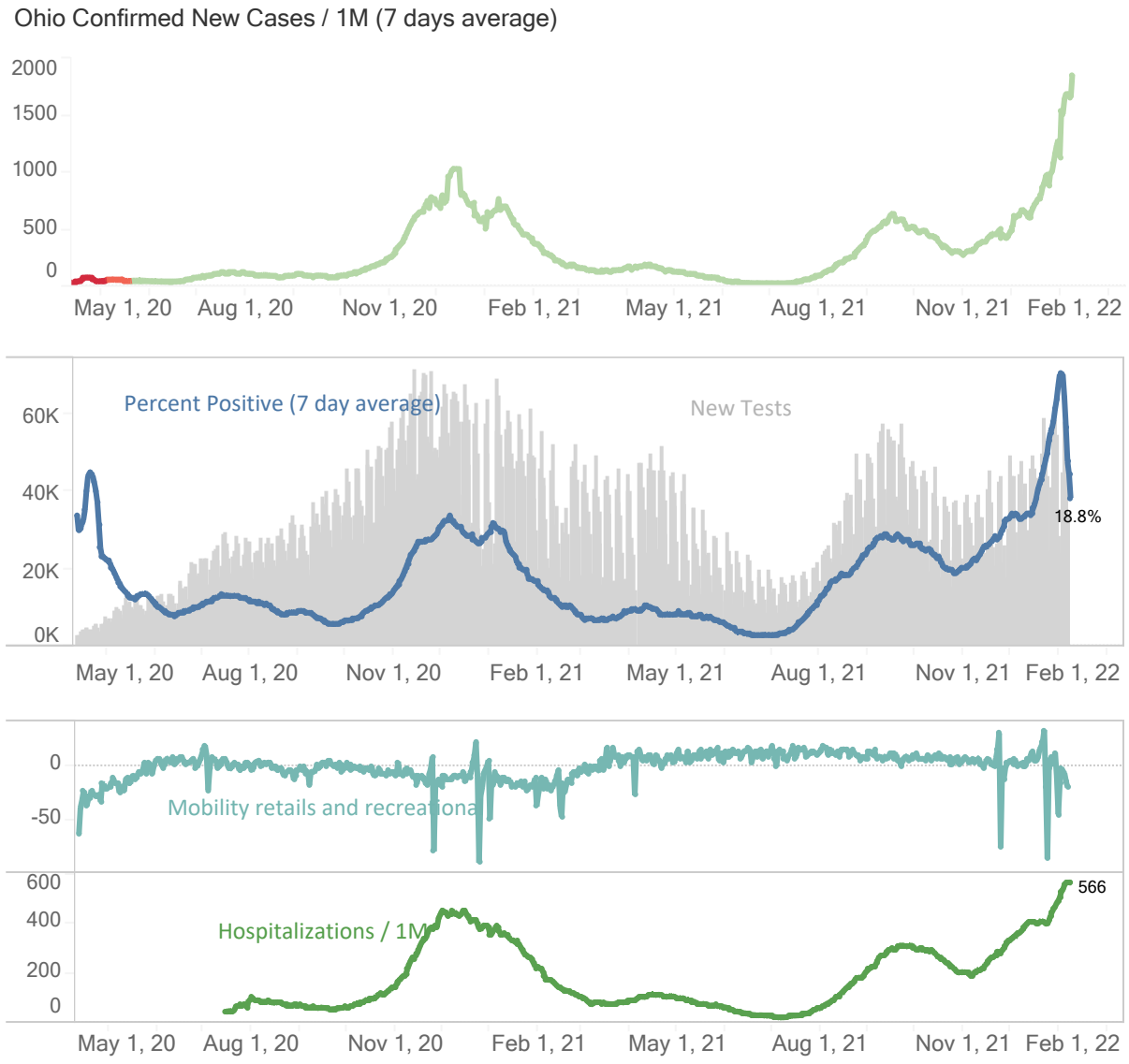
Treatment

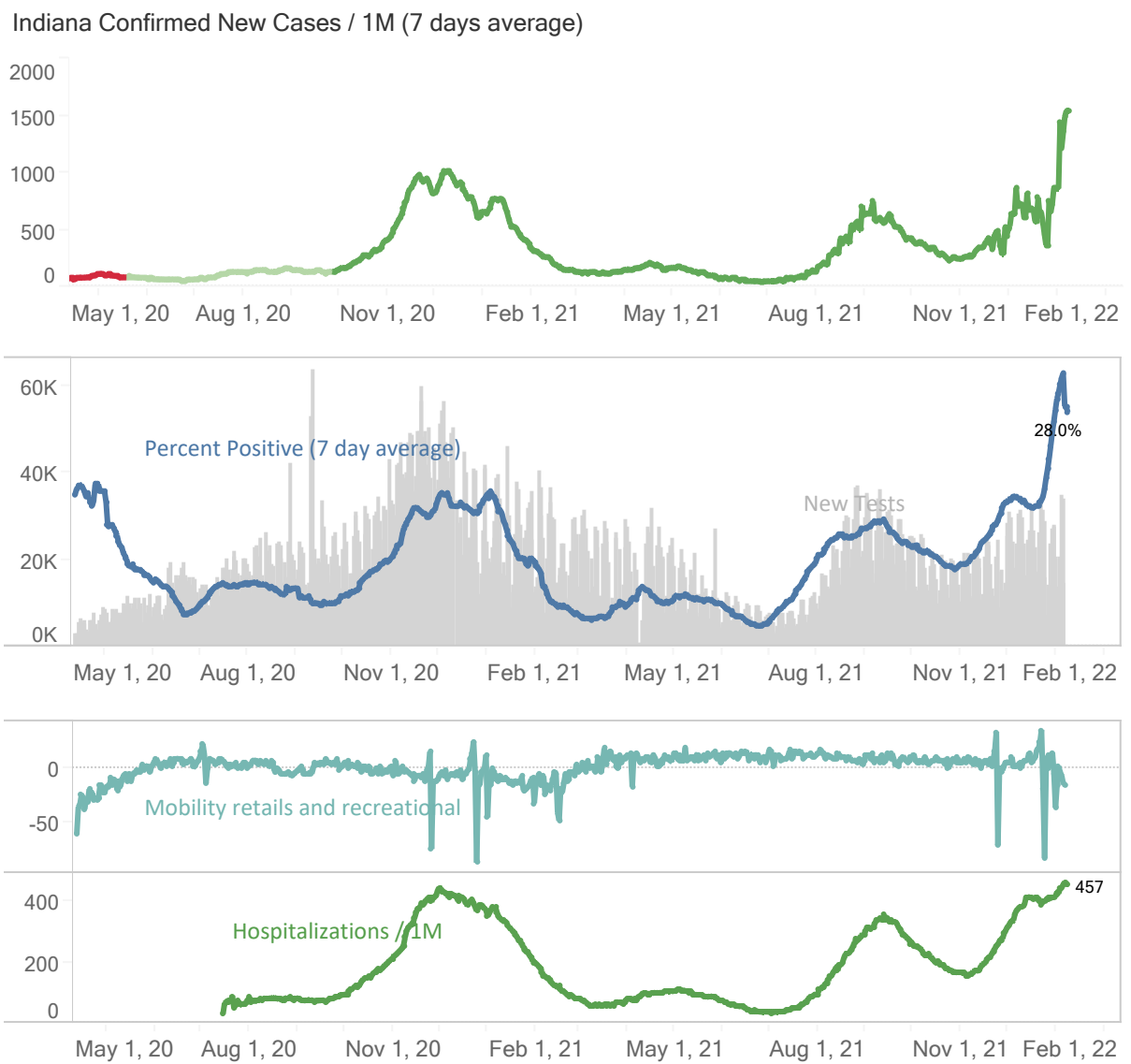
Protect against severe outcomes

Oral antivirals and monoclonal antibody infusions are available

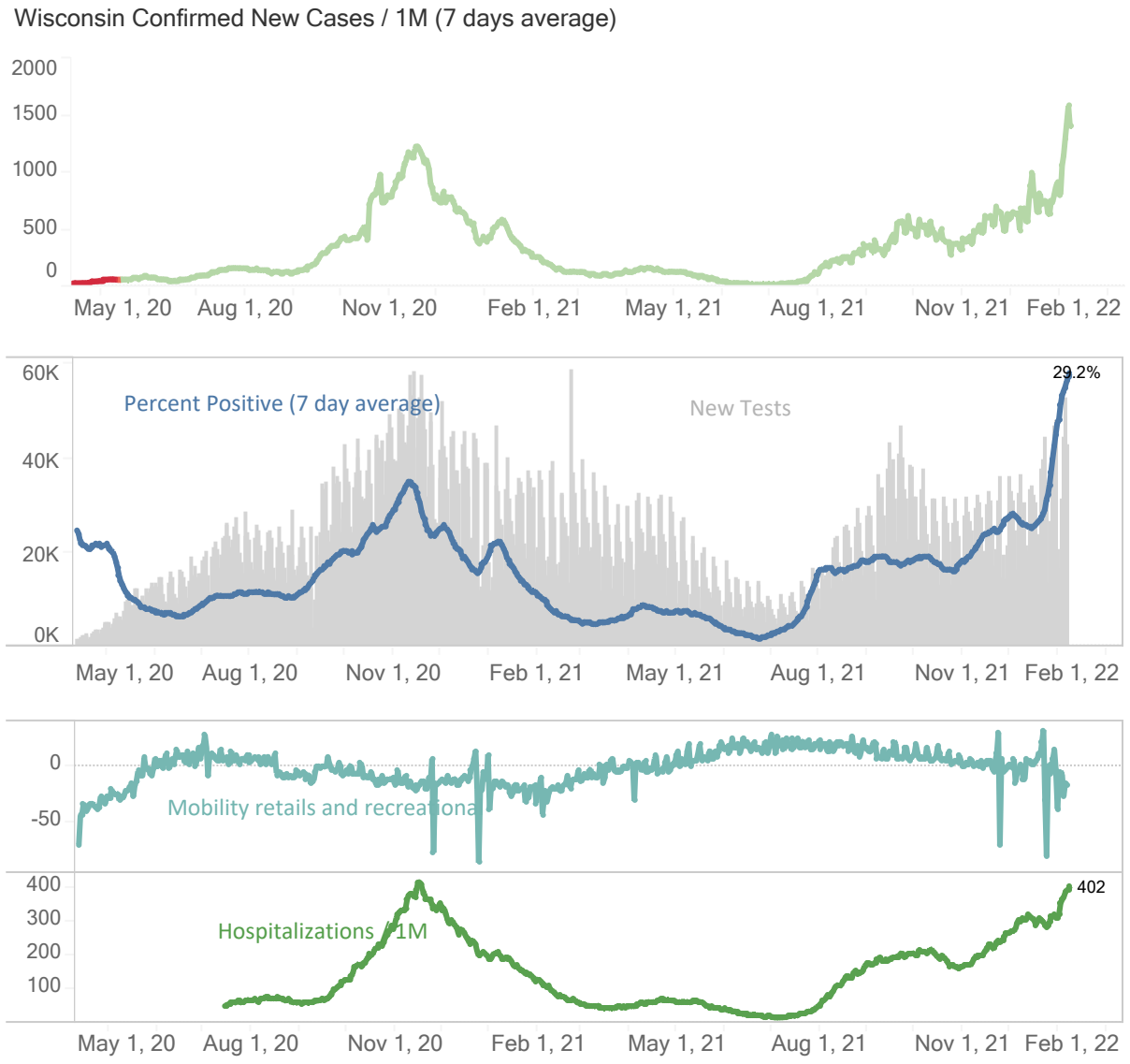
APPENDIX

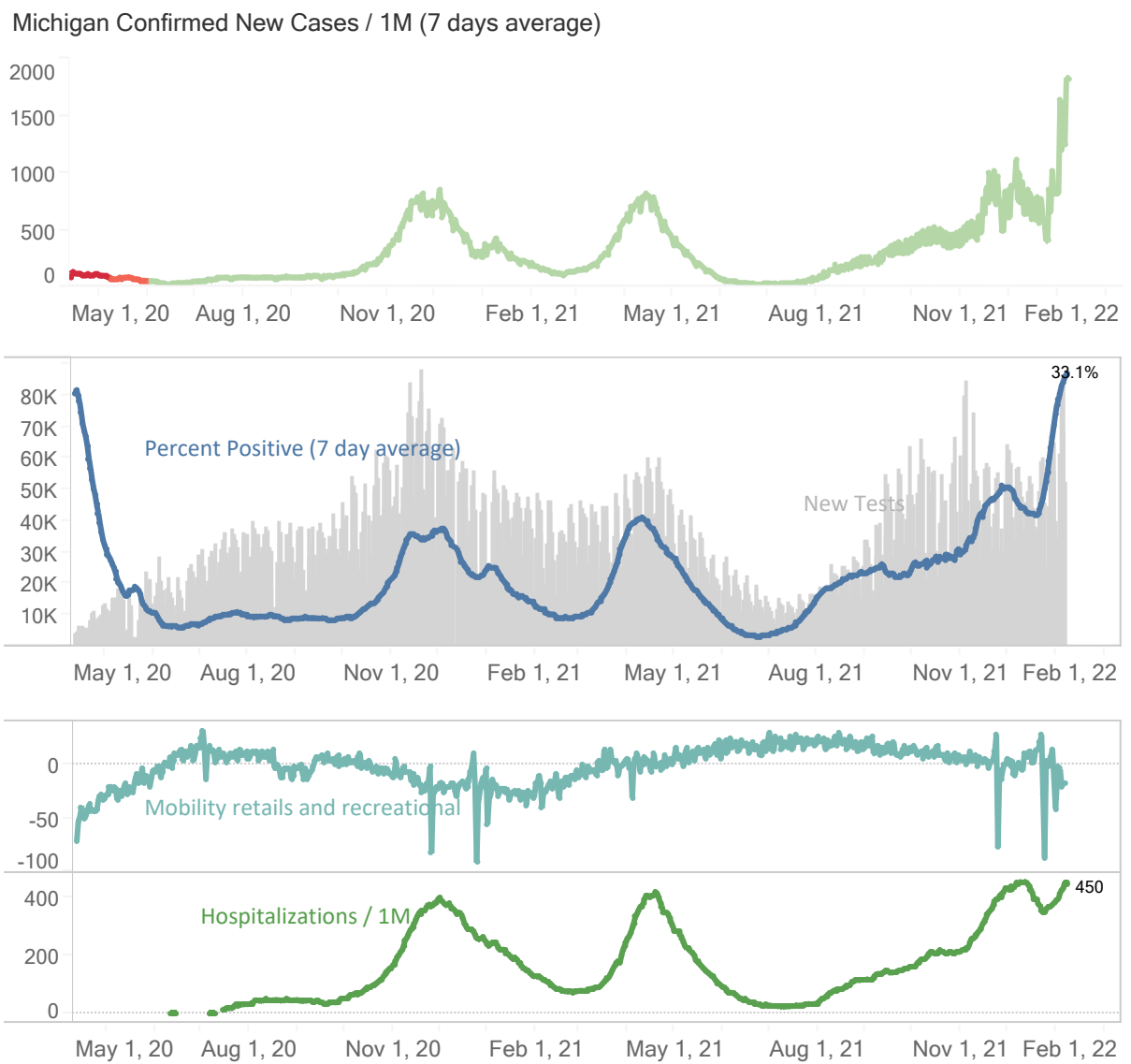
State Comparisons: Ohio and Indiana





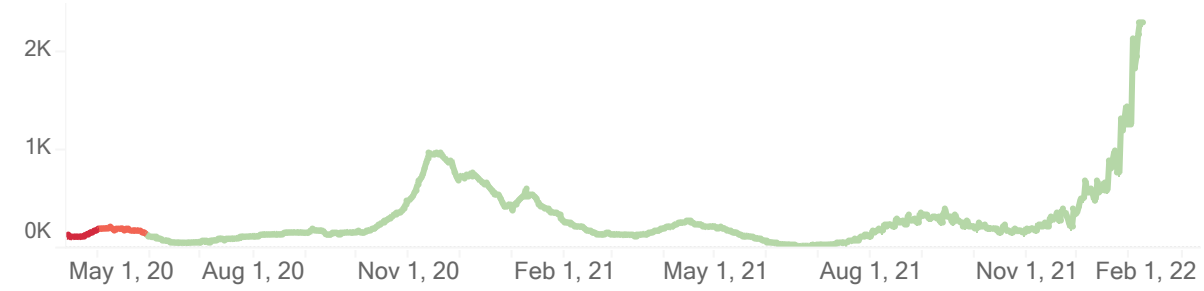
State Comparisons: Wisconsin and Michigan

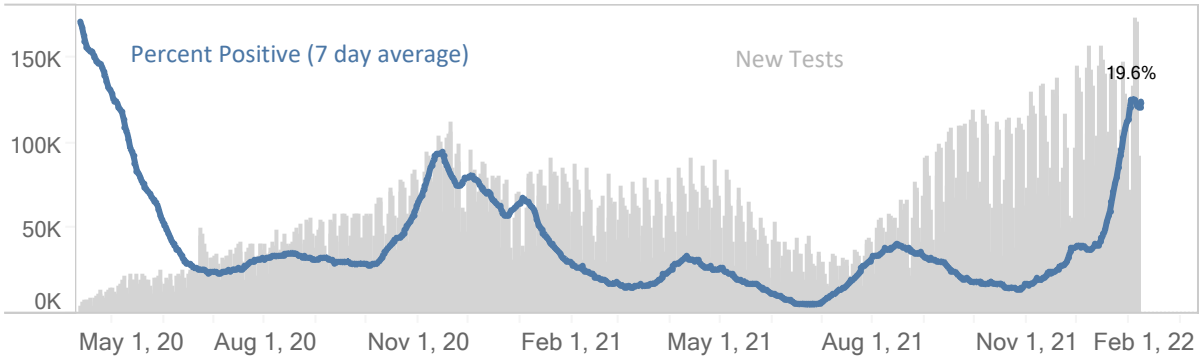


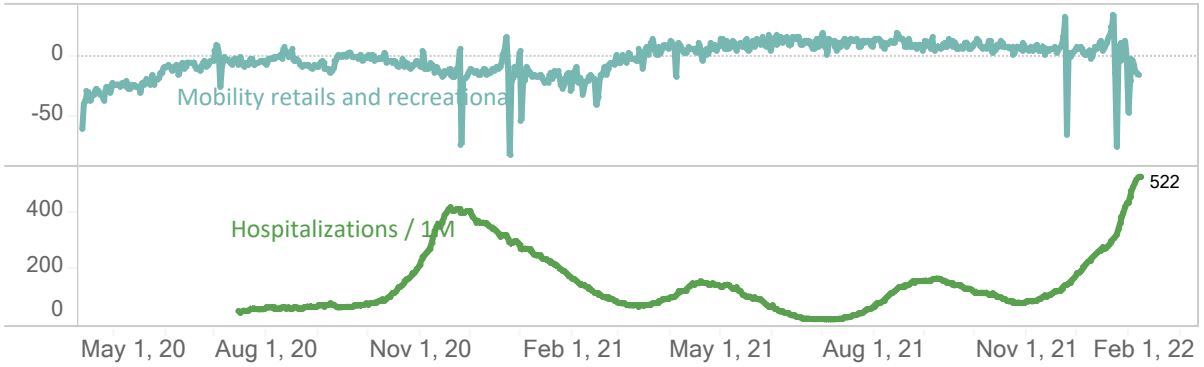


State Comparisons: Illinois and Minnesota

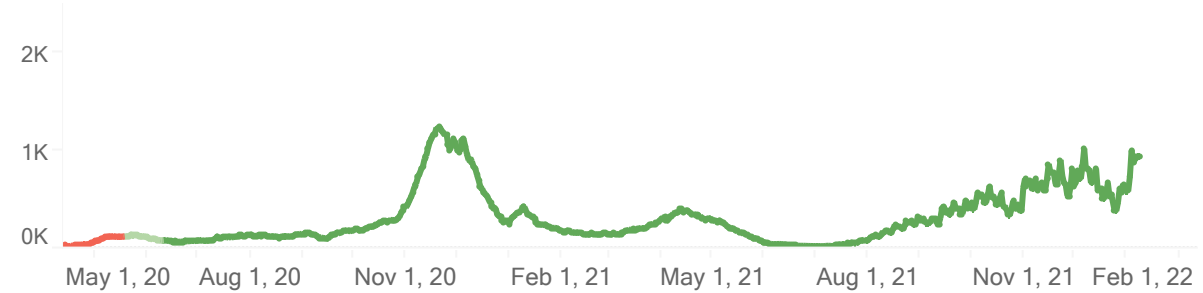
Illinois Confirmed New Cases / 1M (7 days average)

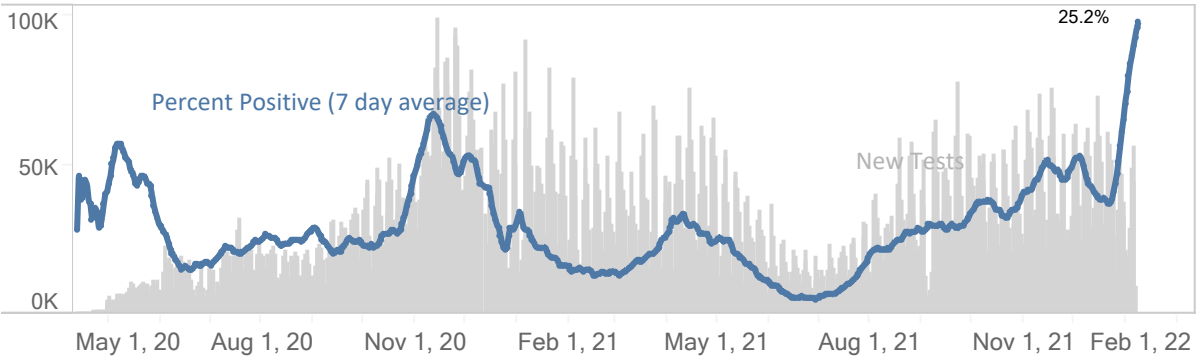


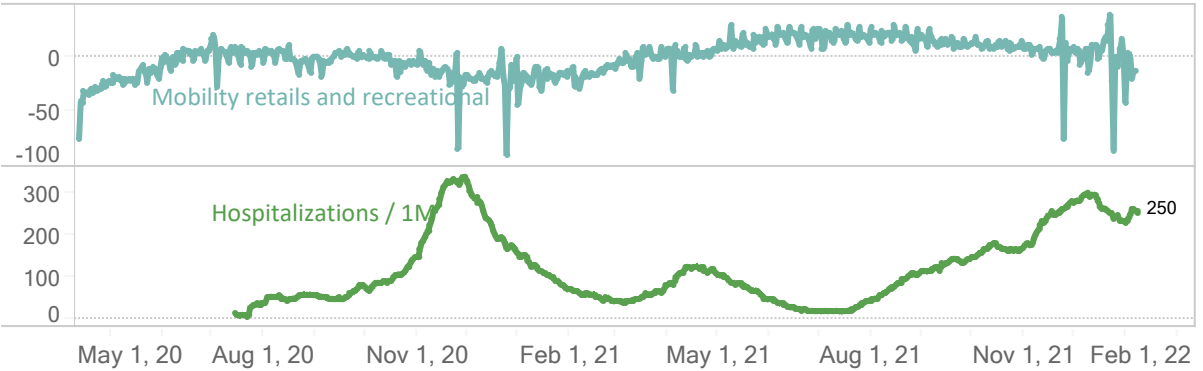




Minnesota Confirmed New Cases / 1M (7 days average)

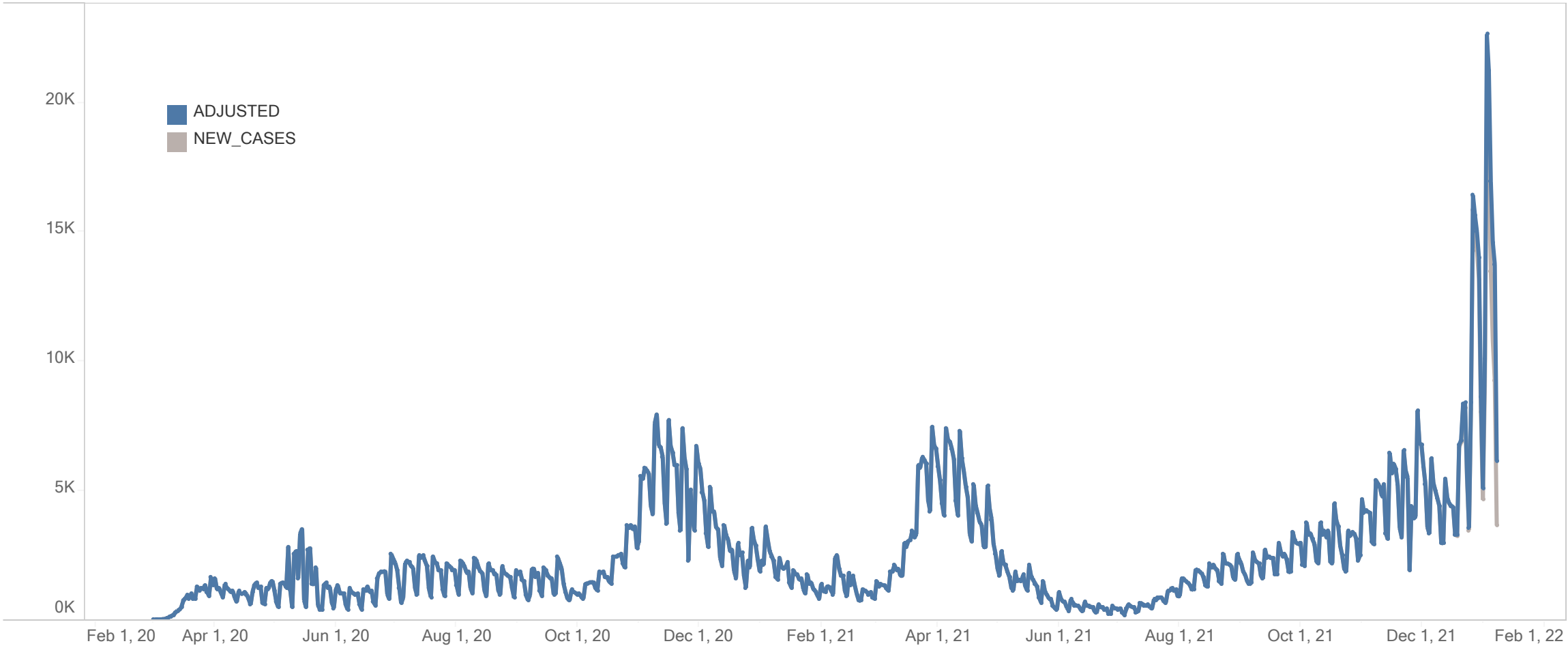






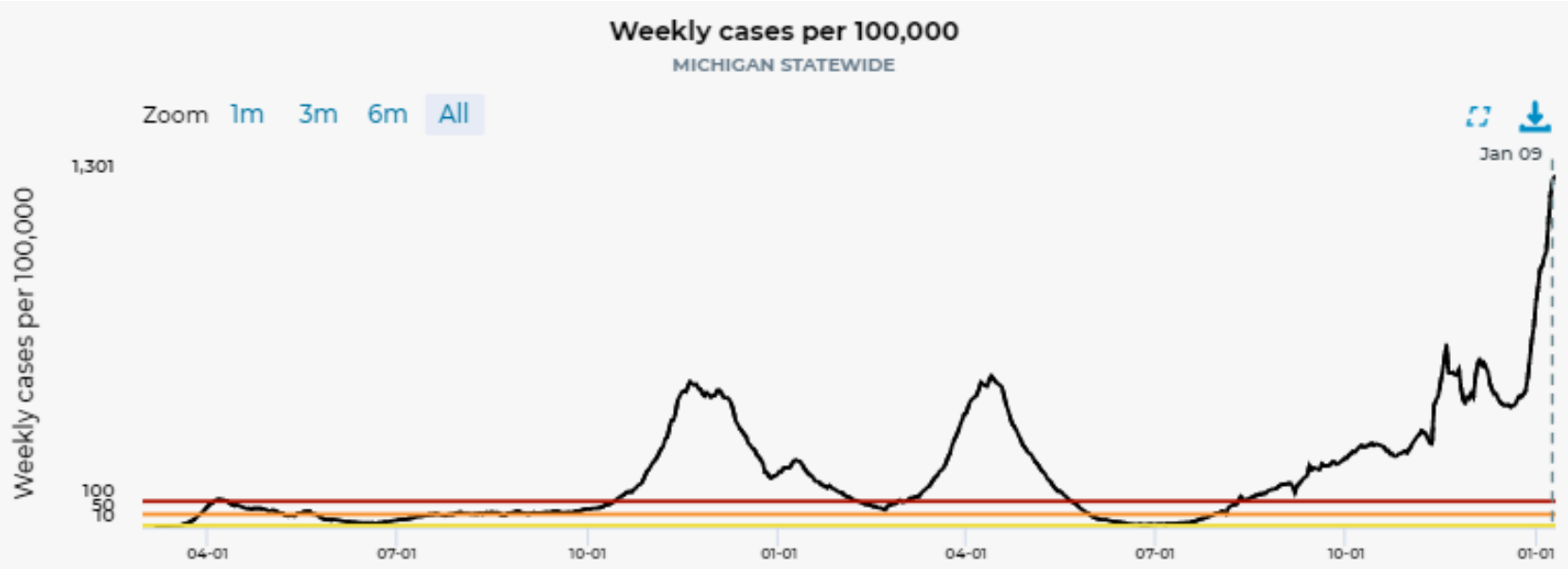
Michigan Lag-adjusted new COVID cases by onset date

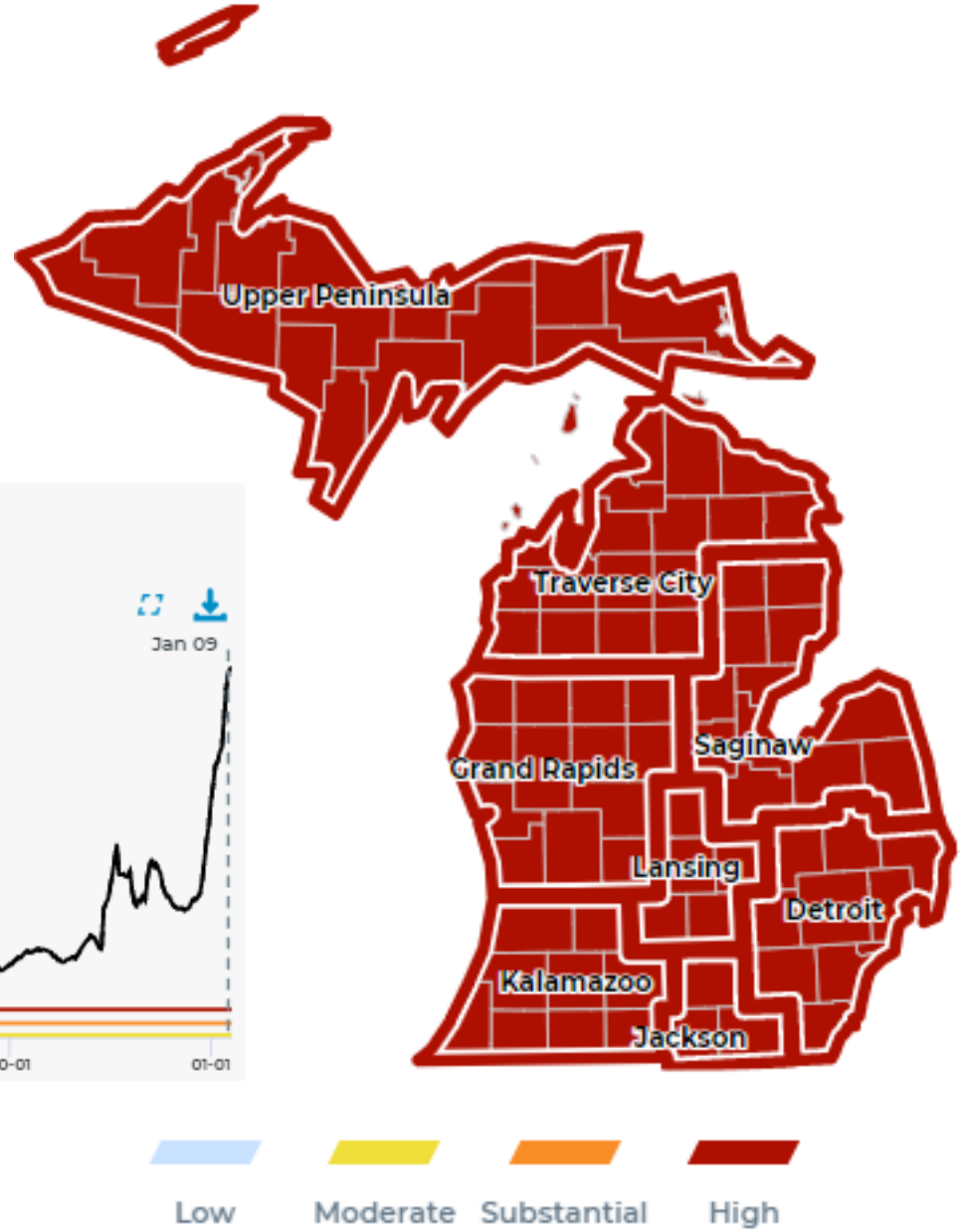
New confirmed cases by onset actual and adjusted as of January 10, 2022 (-2 days)



Michigan continuing to experience high daily case count during the pandemic

Dashboard | CDC | MI Start Map for most recent data by reporting date



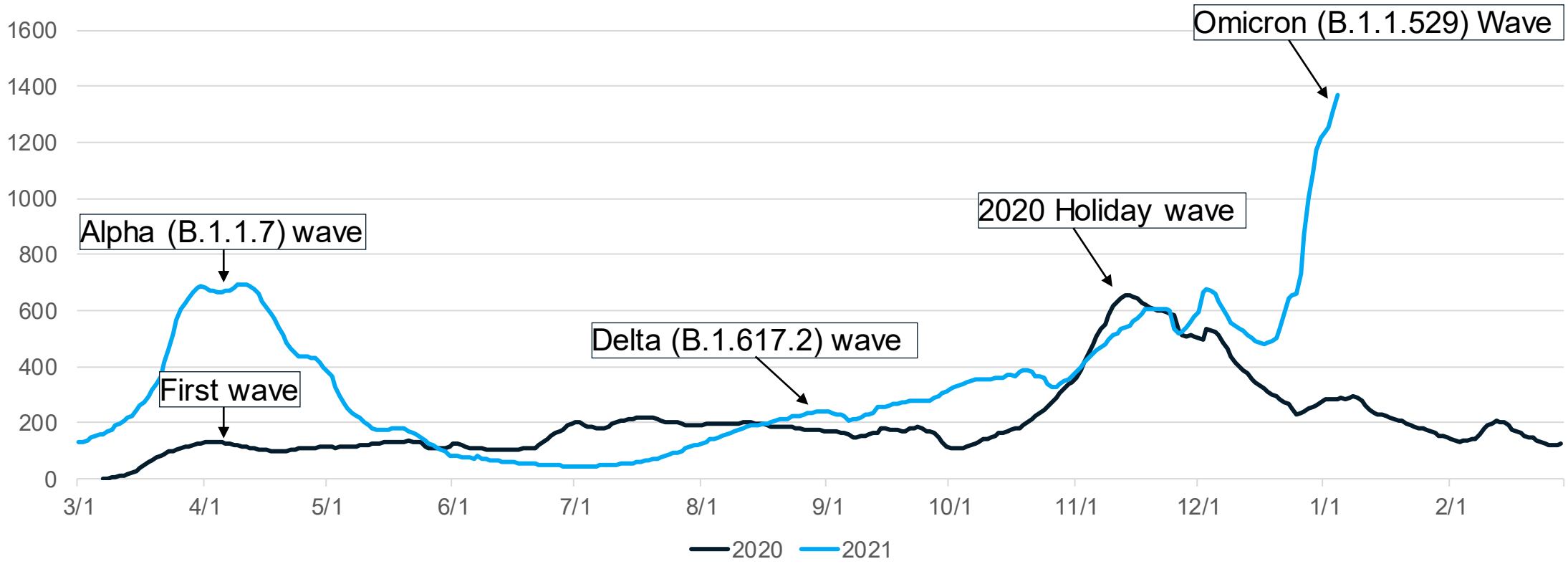


- All counties at High Transmission level
- Referrals sharply rose over New Year holiday weekend

Time Trends – Annual Comparison

- Case rates (by onset date) are the highest of the pandemic
- Current increases after holidays due to spread of the Delta and Omicron variants

7- day rolling average of Rates 2020 vs 2021



Confirmed and probable case indicators

Table Date: 1/10/2022 (7 days from date table was produced: 1/3/2022)

Risk levels: Low A B C D E

	CDC Transmission Risk Level	Absolute Cases (per million)	CDC Case Trend	Average Percent Positivity	Positivity Trend	Tests (per million)	% IP Beds Occupied by COVID-19 Cases	% Occupied IP Beds Trend	Absolute Deaths (per million)	Death Trend
Detroit	High	1654.7	elevated incidence growth	33.7	Increase - 3wk	7698.4	24.3	Increase - 2wk	6.3	Decrease - 3wk
Grand Rapids	High	981.7	elevated incidence growth	34.8	Increase - 2wk	4825.7	19.5	Decrease - 3wk	7.2	Decrease - 4wk
Kalamazoo	High	959.5	elevated incidence growth	34.2	Increase - 2wk	4483.1	23.8	Increase - 1wk	5.7	Decrease - 2wk
Saginaw	High	863.1	elevated incidence growth	31.9	Increase - 2wk	4733.0	15.7	Increase - 1wk	8.2	Decrease - 1wk
Lansing	High	1244.4	elevated incidence growth	30.4	Increase - 2wk	5996.7	24.8	Increase - 1wk	5.1	Decrease - 3wk
Traverse City	High	554.1	elevated incidence growth	21.1	Increase - 2wk	3210.5	14.1	Decrease - 4wk	8.4	Decrease - 1wk
Jackson	High	859.8	elevated incidence growth	31.1	Increase - 2wk	4638.4	22.7	Increase - 1wk	6.1	<20 wkly deaths
Upper Peninsula	High	839.4	elevated incidence growth	30.0	Increase - 2wk	3689.0	13.4	Increase - 1wk	9.4	<20 wkly deaths
Michigan	High	1315.0	elevated incidence growth	33.2	Increase - 3wk	6450.6	22.4	Increase - 1wk	6.6	Decrease - 3wk

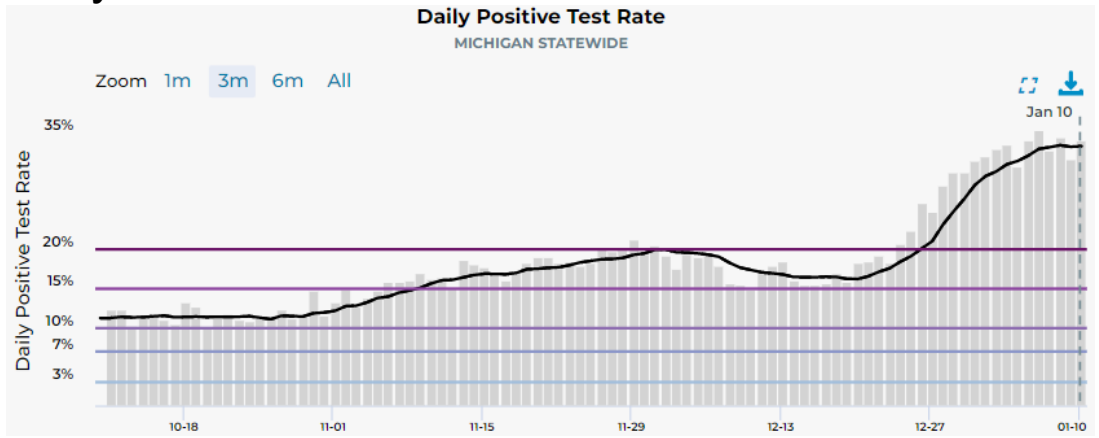
Cases Low: <7 | A: 7-20 | B: 20-40 | C: 40-70 | D: 70-150 | E: >=150

Positivity Low: <3% | A: 3-7% | B: 7-10% | C: 10-15% | D: 15-20% | E: >=20%

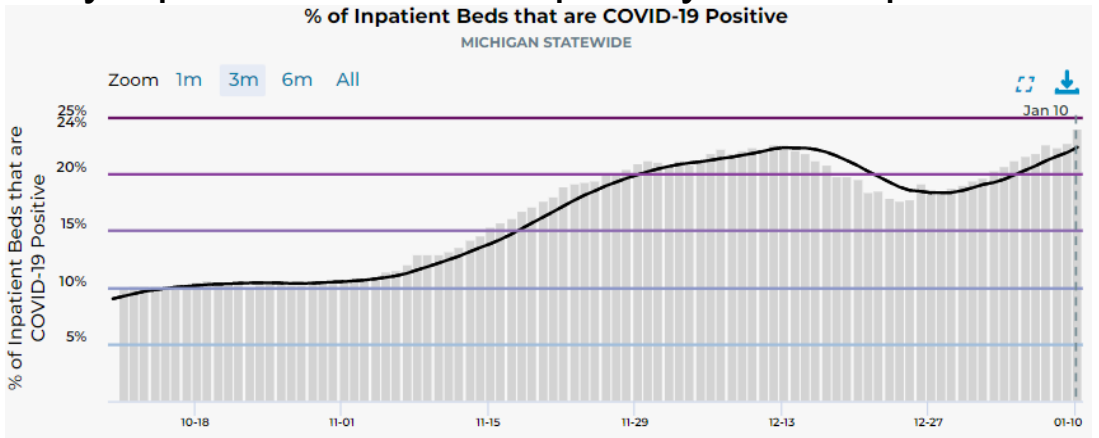
Time Trends – Positivity, Case Rates, Hospitalizations, Deaths

- Most COVID-19 indicators are at all-time highs, and burden remains high in MI

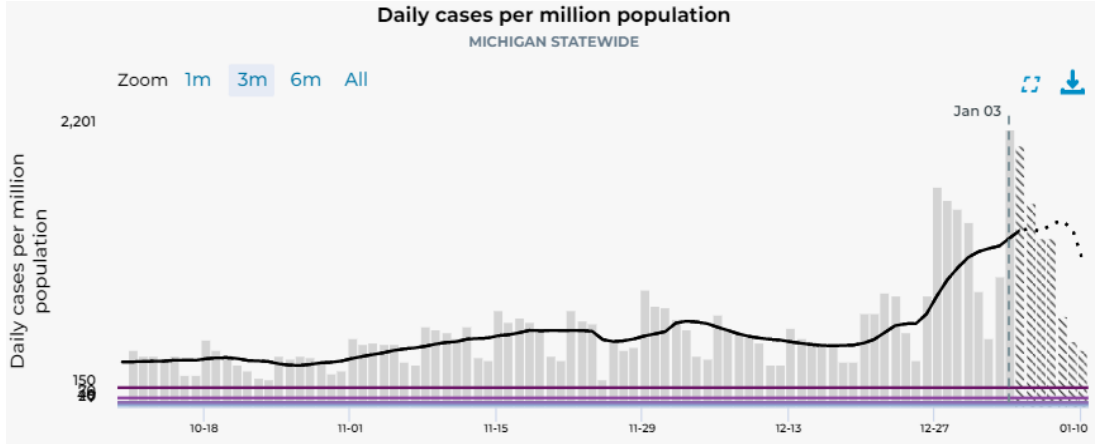
Daily Positive Test Rate



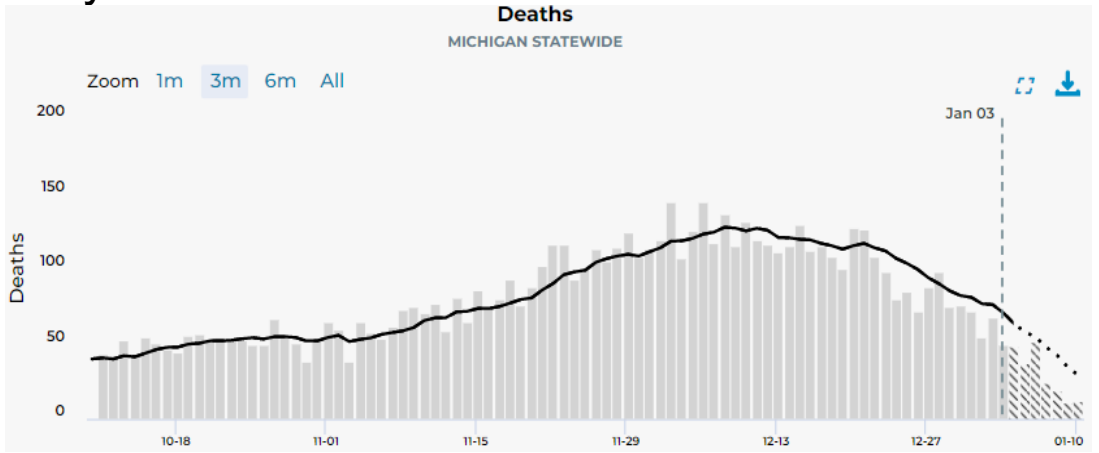
Daily Inpatient Beds Occupied by COVID patients



Daily Case Rate



Daily Deaths



Source: Michigan Disease Surveillance System and https://www.mistartmap.info/mism-indicators

Number of Cases and CaseRates by Age Group, data as of Jan 10

Daily new confirmed and probable cases per million by age group (7-day rolling average)

Age Group	Average† daily cases	Average† Daily Case Rate	One Week % Change (Δ #)*
0-9	**964.9**	837.0	+69% (+395)
10-19	**1,560.7**	1,243.7	+59% (+580)
20-29	**2,872.6**	**2,082.2**	+38% (+793)
30-39	**2,361.9**	**1,946.9**	+37% (+642)
40-49	**1,880.0**	**1,594.1**	+46% (+589)
50-59	**1,729.4**	1,280.8	+60% (+647)
60-69	**1,081.6**	847.8	+64% (+422)
70-79	532.0	693.8	+84% (+243)
80+	242.9	586.3	+93% (+117)
Total¶	**13,244.3**	**1,315.0**	**+50% (+4,434)**

† Rolling 7-day average; ¶ Total may not reflect state due to missing age data
Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

- **Trend numbers and comparisons are being impacted by longer backfill times – the data in this table are comparing the two time points from the most recent data file**
- Average daily number of cases (2,872.6) and average daily case rate (2,082 case/mil) are highest for those aged 20-29
- Case rates for all age groups have increased between the weeks of Dec 27 and Jan 3. These increases are continuing after Jan 3 for all age groups.

Overview of metrics for individuals < 12 and <18

Region	Population (<12 yrs)	Population (<18 yrs)	Cumulative Case Count (<12 yrs)	7-day Average Daily Case Count (<12 yrs)	7-day Average Daily Case Rate per Million (<12 yrs)	7-day Average Daily Pediatric Hospitalization Count (<18 yrs)*	7-day Average Daily Pediatric Hospitalization Rate per Million (<18 yrs) *	7-day Average Daily Death Count (<12 yrs)	30-day Average Daily Death Count (<12 yrs)
Detroit	735529	1134247	80865	825.4	1122.2	75.7	66.7	0	0
Grand Rapids	230120	350652	26215	131.4	571.0	15.4	43.9	0	0
Kalamazoo	140422	214801	13858	71.3	507.8	3.6	16.8	0	0
Saginaw	78759	122834	8635	43.0	546.0	2.1	17.1	0	0
Lansing	78140	119915	9076	62.1	794.7	5.7	47.5	0	0
Traverse City	53099	83462	4699	20.1	378.5	0.4	4.8	0	0
Jackson	41274	64091	4290	12.6	305.3	0.7	10.9	0	0
Upper Peninsula	34645	53875	4382	14.9	430.1	0.1	1.9	0	0
Michigan	1391988	2143877	152258	1191.4	855.9	103.9	48.5	0	0

- Each day, 1191 children under age 12 become infected with COVID-19, 559 more than last week
- Pediatric case rates increased to 855.9 cases/million (last week: 454.5 cases/million)
- Pediatric (<18) hospital census* is averaging approximately 103.9 per day (last week: 78.3 per day)

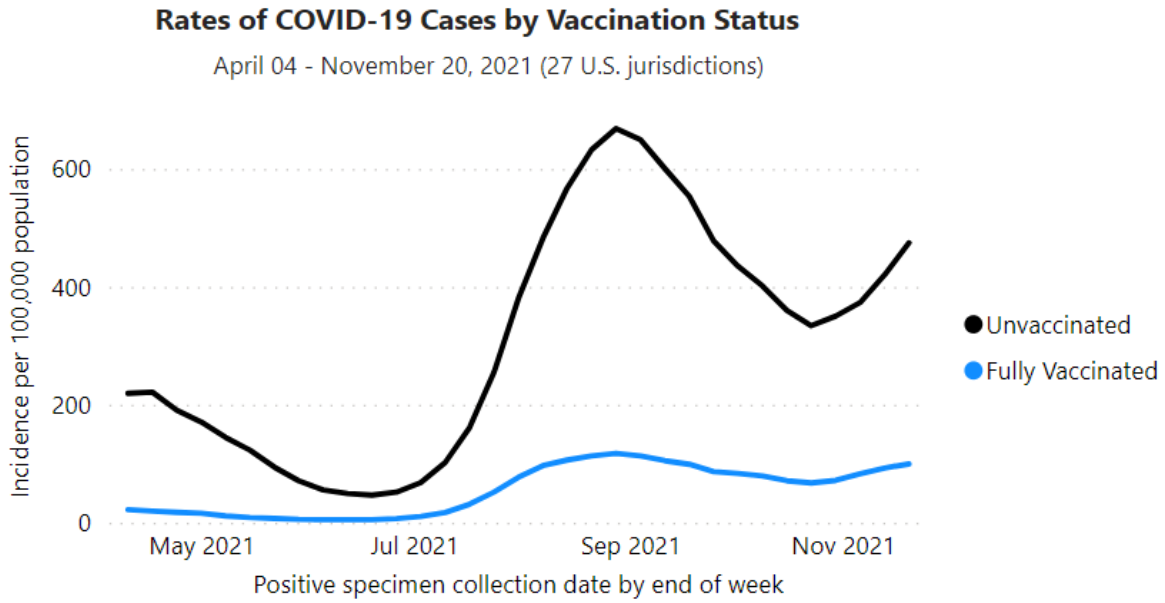
Note: Data as of 1/10; case data 1/3, hospitalization data 1/10. Hospitalization data is for pediatric patients (<18); * includes only confirmed COVID-19

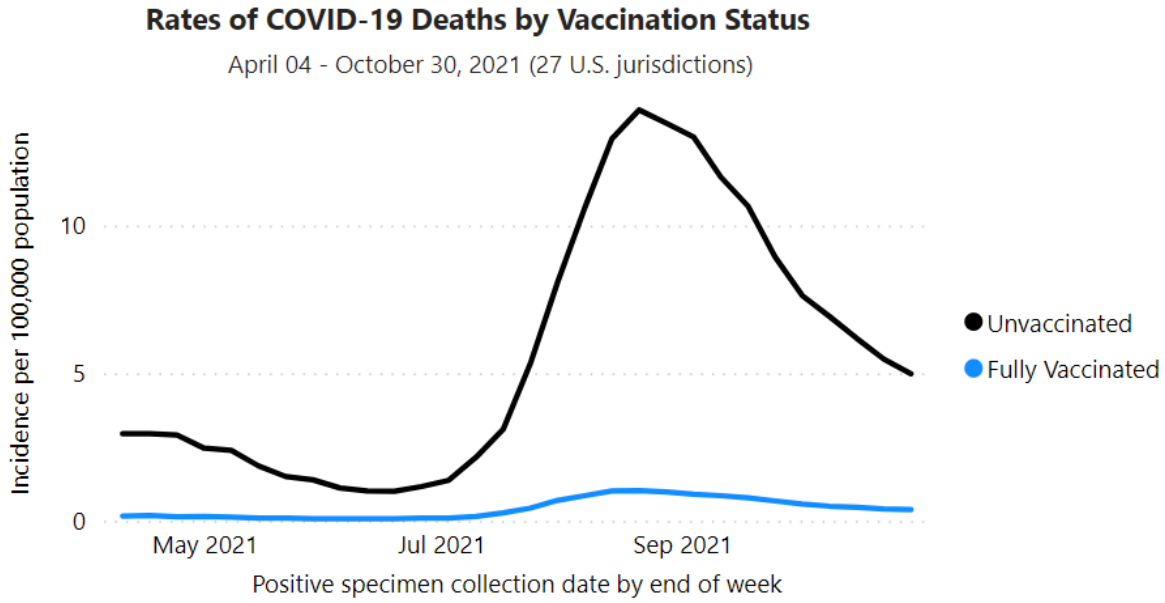
Cumulative COVID-19 Cases by Vaccination Status, Michigan, 1/15/21 – 1/3/22

Fully Vaccinated People (5,374,144)		
Cases	**Hospitalization**	**Deaths**
Percent of Cases In People Not Fully Vaccinated (856,449 / 1,077,856) **79.5%**	Percent of Hospitalizations In People Not Fully Vaccinated (19,659 / 22,862) **86.0%**	Percent of Deaths In People Not Fully Vaccinated (10,916 / 13,178) **82.8%**
856,449 Total Cases Not Fully Vaccinated	**19,659** Total Hospitalized Not Fully Vaccinated	**10,916** Total Deaths Not Fully Vaccinated
Total Breakthrough Cases **221,407**	Total Breakthrough Hospitalizations **3,203**	Total Breakthrough Deaths **2,262**
4.12% Percent of Fully Vaccinated People who Developed COVID-19 (221,407 / 5,374,144)	**0.060%** Percent of Fully Vaccinated People Who Were Hospitalized for COVID-19 (3,203 / 5,374,144)	**0.042%** Percent of Fully Vaccinated People Who Died of COVID-19 (2,262 / 5,374,144)
20.5% Percent of Cases Who Were Fully Vaccinated (221,407 /1,077,856)	**14.0%** Percent of Hospitalizations Who Were Fully Vaccinated (3,203 / 22,862)	**17.2%** Percent of Deaths Who Were Fully Vaccinated (2,262 /13,178)
Total Cases: **1,077,856**	Total Hospitalizations: **22,862**	Total Deaths: **13,178**

Michigan Disease Surveillance System may underestimate the frequency of COVID-19 hospitalizations:
- Case investigation and follow-up is more difficult for individuals who get hospitalized (e.g., they are too ill to speak to investigators, don't answer their phone, or otherwise).
- These hospitalizations include individuals who are hospitalized for issues other than COVID19 (the same as breakthrough COVID-19).
- Individuals who get hospitalization will lag after infection and may occur after case investigation.

National Age-Standardized Rates of COVID-19 Cases and Deaths by Vaccination Status





In October, unvaccinated persons had:

5X
Risk of Testing Positive for COVID-19

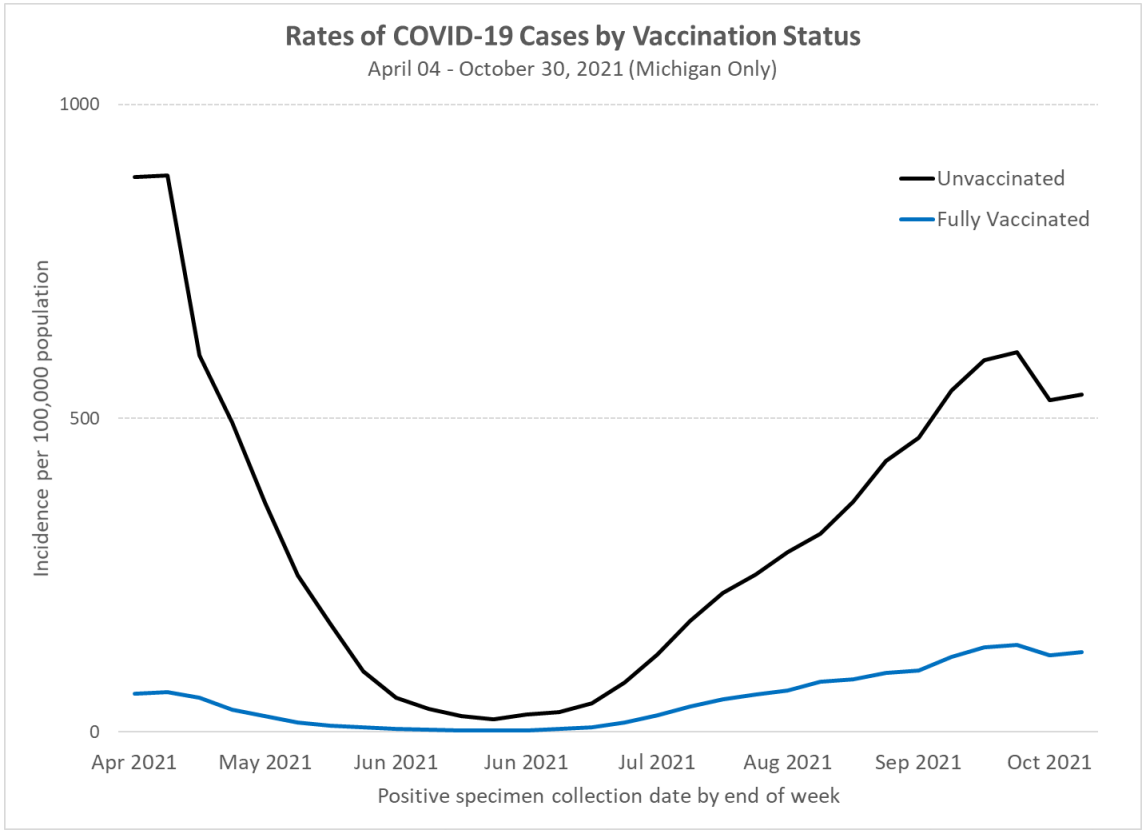
AND

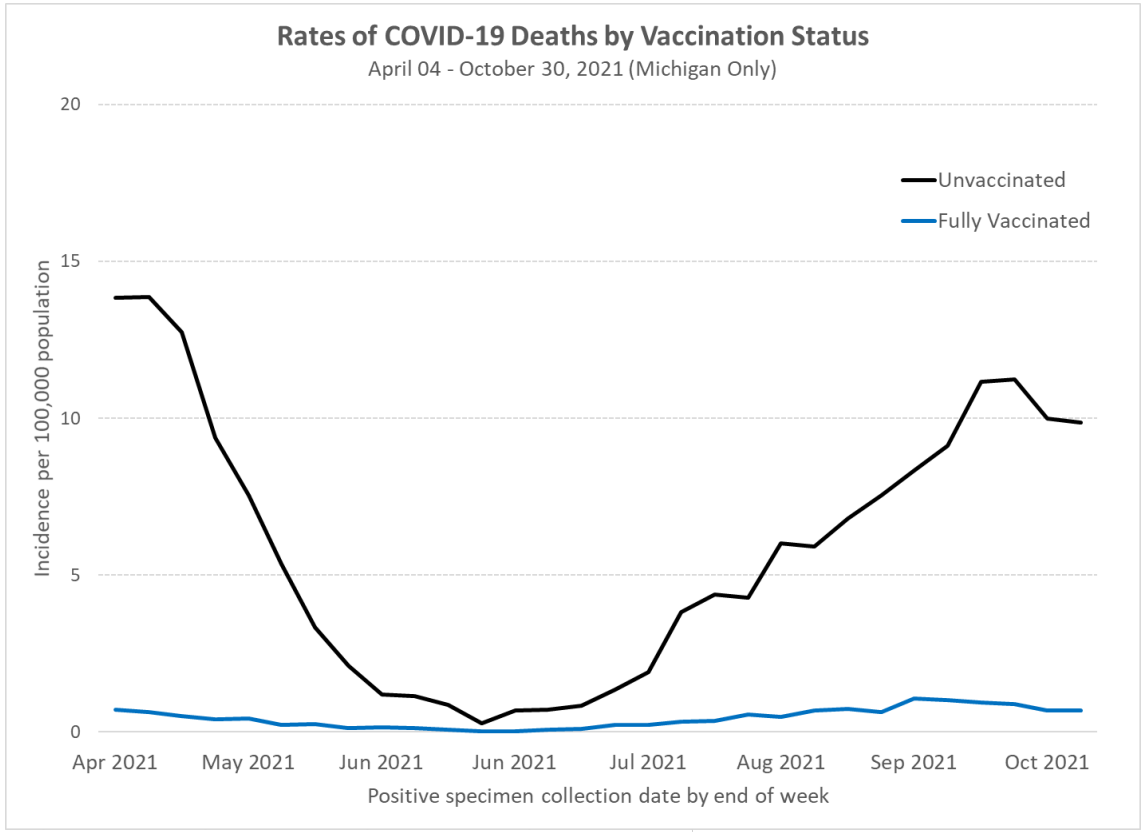
14X
Risk of Dying from COVID-19

compared to fully vaccinated persons

Footnotes: Incidence rates were age-standardized using the 2000 U.S. Census standard population; and rates are not adjusted for time since vaccination, underlying conditions, or other demographic factors besides age. | Incidence rate ratios for the past one month were calculated by dividing the average weekly incidence rates among unvaccinated people by that among fully vaccinated people.

Michigan Age-Standardized Rates of COVID-19 Cases and Deaths by Vaccination Status





In October, unvaccinated persons had:

4.3 X
Risk of Testing Positive for COVID-19

AND

13.2 X
Risk of Dying from COVID-19

compared to fully vaccinated persons

Footnotes: Incidence rates were age-standardized using the 2000 U.S. Census standard population; and rates are not adjusted for time since vaccination, underlying conditions, or other demographic factors besides age. Incidence rate ratios for the past one month were calculated by dividing the average weekly incidence rates among unvaccinated people by that among fully vaccinated people.

Risk of becoming ill or dying much higher in unvaccinated individuals

In October 2021:

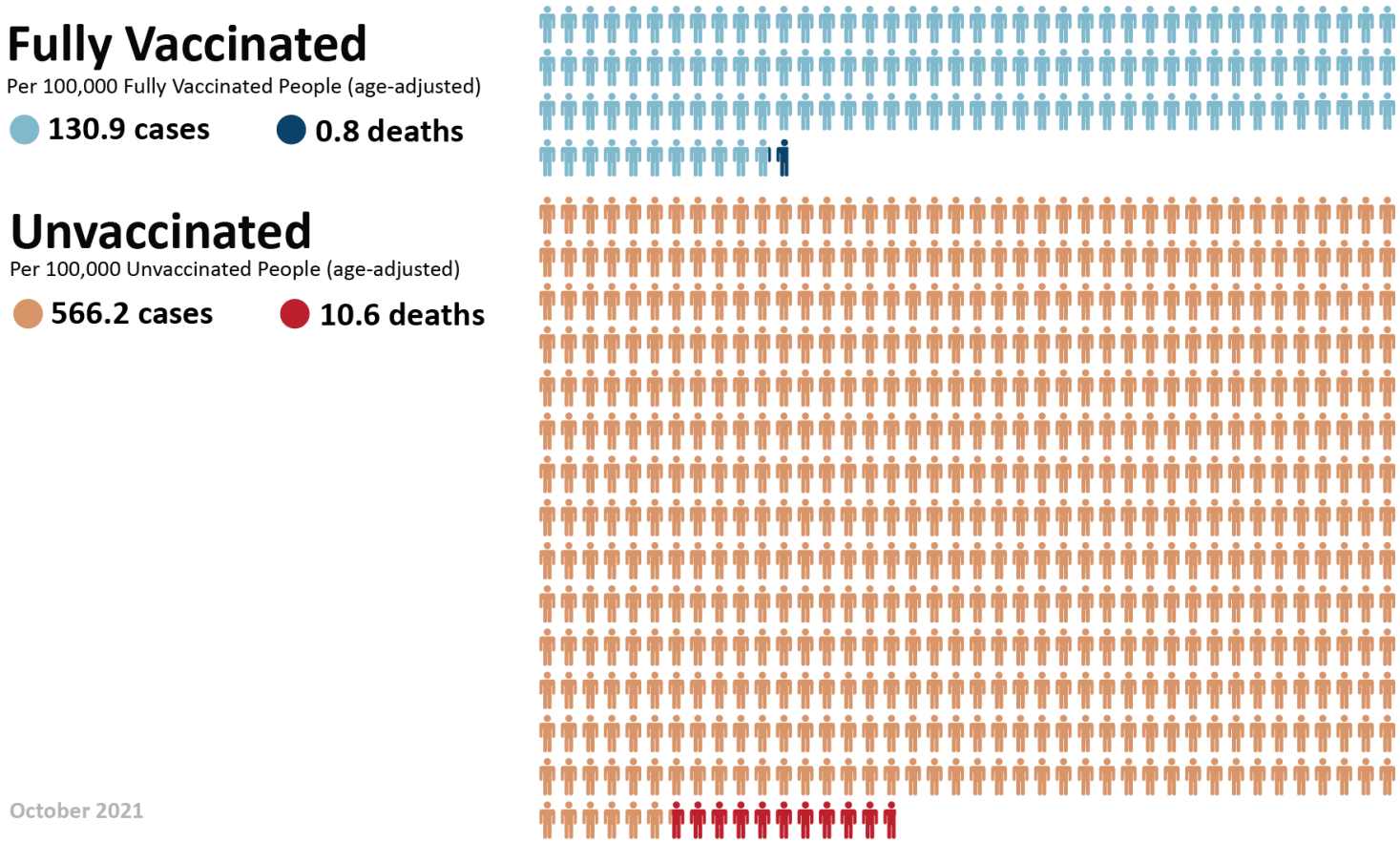
Unvaccinated persons in Michigan had **4.3 times** the risk of testing positive for COVID-19 compared to fully vaccinated persons

- 566.2 cases per 100,000 unvaccinated persons compared to 130.9 cases per 100,000 fully vaccinated persons

Unvaccinated persons in Michigan had **13.2 times** the risk of dying from COVID-19 compared to fully vaccinated persons

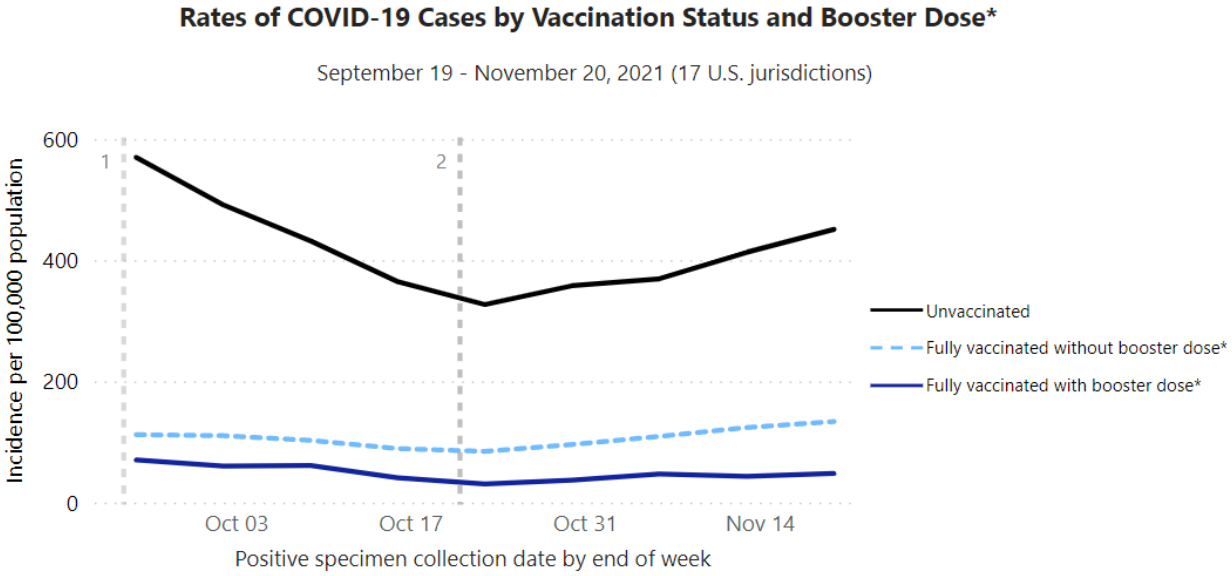
- 10.6 deaths per 100,000 unvaccinated persons compared to 0.8 deaths per 100,000 fully vaccinated persons

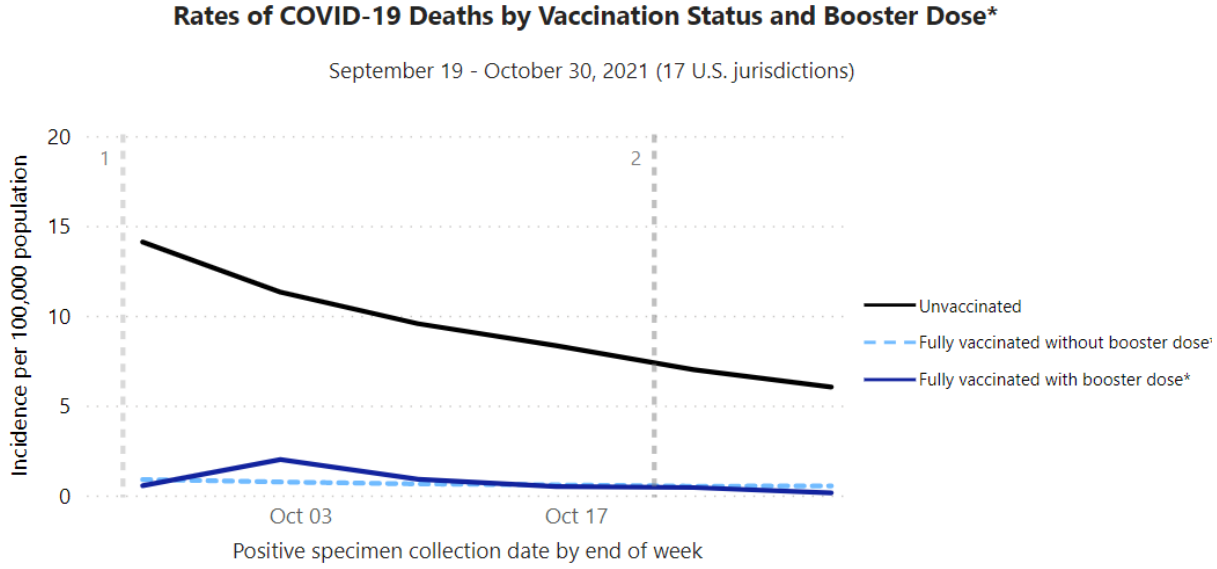
Age-Adjusted Case and Death Rates per 100,000 People by Vaccination Status, October 2021



Footnotes: Incidence rates were age-standardized using the 2000 U.S. Census standard population; and rates are not adjusted for time since vaccination, underlying conditions, or other demographic factors besides age. Incidence rate ratios for the past one month were calculated by dividing the average weekly incidence rates among unvaccinated people by that among fully vaccinated people.

National Age-Standardized Rates of COVID-19 Cases and Deaths by Vaccination + Booster Status





In October, unvaccinated persons had:

10X
Risk of Testing Positive for COVID-19

AND

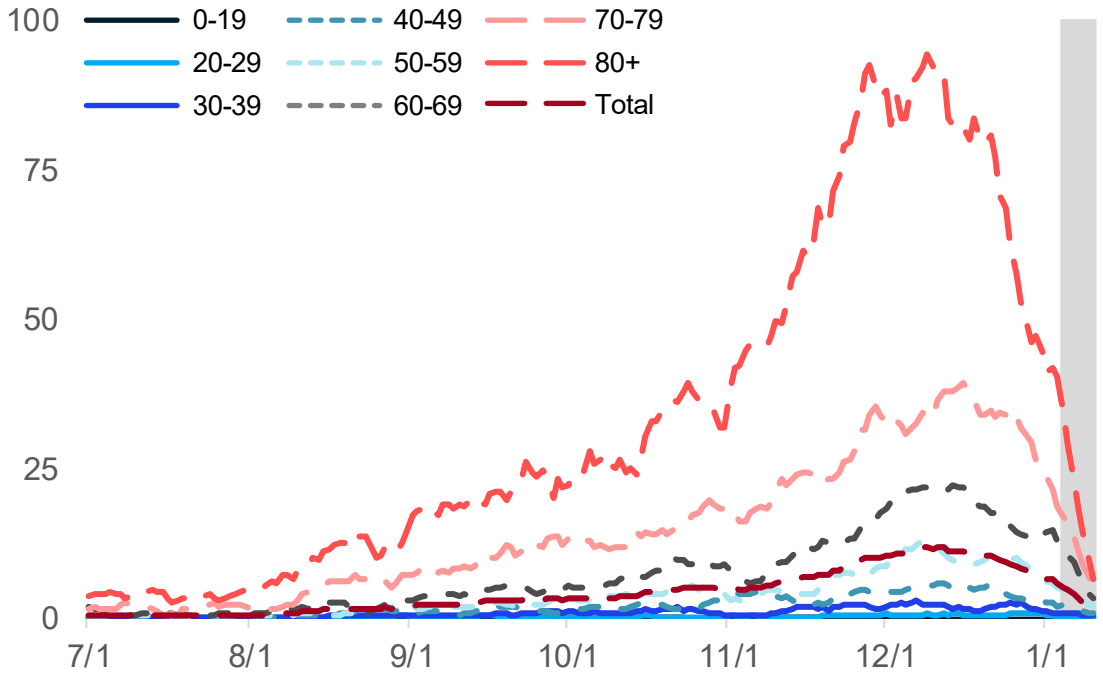
20X
Risk of Dying from COVID-19

compared to fully vaccinated persons with additional or booster doses

Footnotes: Incidence rates were age-standardized using the 2000 U.S. Census standard population; and rates are not adjusted for time since vaccination, underlying conditions, or other demographic factors besides age. | Incidence rate ratios for the past one month were calculated by dividing the average weekly incidence rates among unvaccinated people by that among fully vaccinated people.

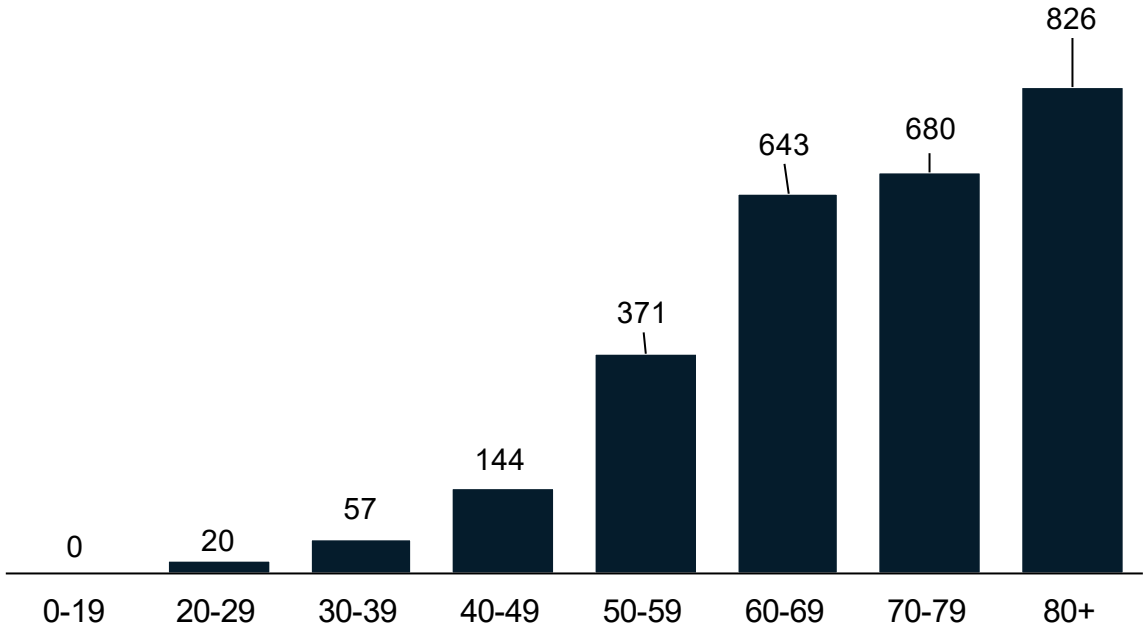
Average and total new deaths, by age group

Daily COVID-19 deaths in confirmed and probable cases per million by age group (7 day rolling average)



Total COVID-19 deaths in confirmed and probable cases by age group (past 30 days, ending 1/3/2022)

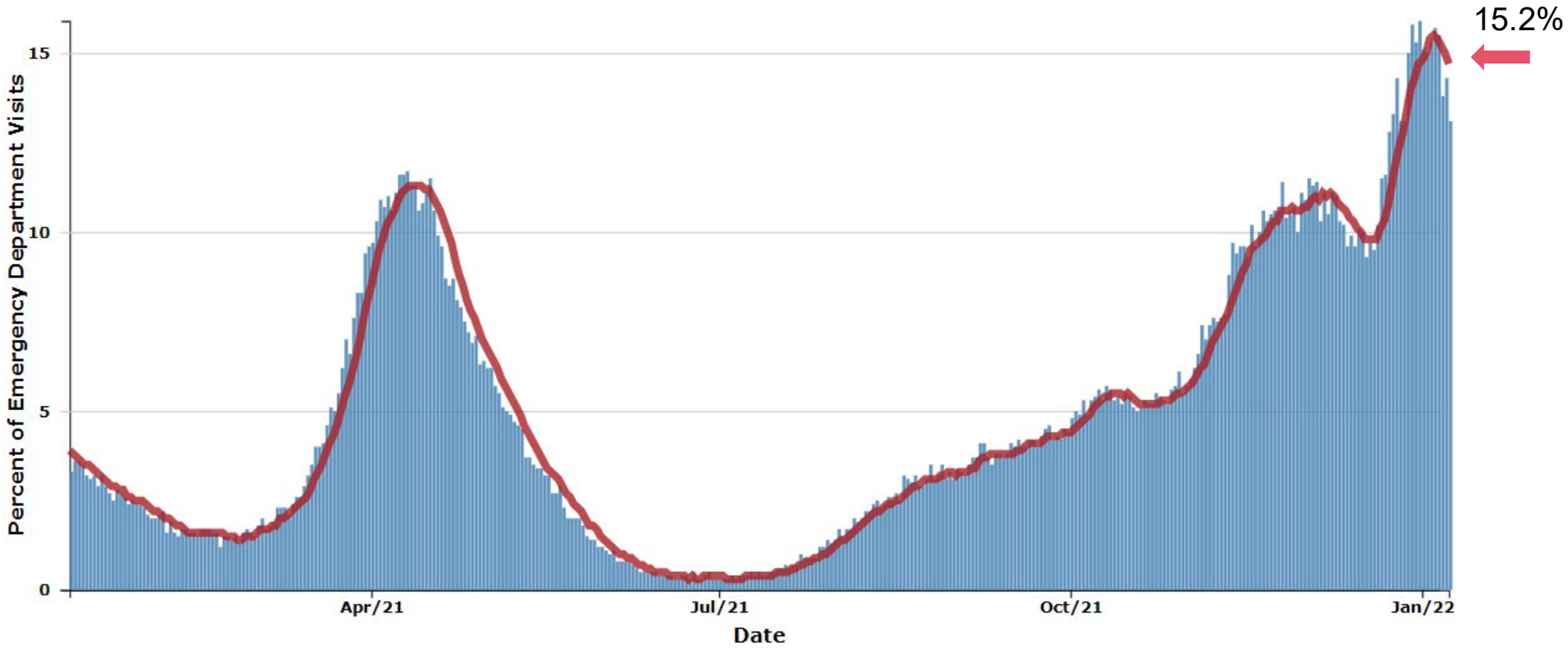
- 22% of deaths below age sixty



- Through 1/3, the 7-day avg. death rate is more than 40 daily deaths per million people for those over the age of 80
- In the past 30 days, the proportion of deaths among those over 60 is steady

Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System (MDSS)

Michigan Trends in Emergency Department (ED) Visits for Diagnosed COVID-19



- Trends for ED visits have increased to 15.2% since last week (last week: 11.7%) but are down from the recent peak of 15.5% (on Jan 4)
- Over past week, those 40-49 years saw highest number of avg. daily ED CLI visits (16.8%), but those between 25-64 all above state average

Source: https://covid.cdc.gov/covid-data-tracker/#ed-visits; data extracted on 10/18/2021