

MI COVID RESPONSE DATA AND MODELING UPDATE

NOTE: All data as of March 20 unless otherwise noted

March 23, 2021



Executive summary

Case rates (201.8, ↑58.2) and **percent positivity 7.4%**, (↑2.3%) have increased since the previous week

Michigan has the **6th highest number of cases** (↑3), and **5th highest case rate** (↑5) in the last 7 days (source: CDC COVID Data Tracker)

5.5% of available inpatient beds are filled with COVID patients (↑ 1.1%) and trends for COVID hospitalizations are increasing

Michigan has the **11th highest inpatient bed utilization** (↑9), and the **8th highest adult ICU bed utilization** (↑16) (source: US HHS Protect)

There were **97 deaths** (↔) between Mar 7 and Mar 13, and **death rate** is 1.4 deaths per million residents (↔)

Michigan has the **14th highest number of deaths** (↑10), and **T27th highest death rate** (↑15) in the last 7 days (source: CDC COVID Data Tracker)

The 7-day average **state testing rate** has increased slightly to 3,123.7 tests/million/day (↑34.5). **Daily diagnostic tests (PCR)** is 31.4K per day (↑0.6K), and the **weekly average for PCR and antigen tests** conducted in Michigan is 43.8K (↑0.9K).

3.7 million **COVID-19 vaccine** doses reported to MDHHS, 29% of Michigan population 16+ has at least one dose

Comparison across states: Summary 3/22/21

What we see today:

- 18 states are seeing increasing 1 week case trends ($\geq 10\%$) (up vs. 11 last week)
- 10 states are seeing weekly increases ($\geq 10\%$) in new COVID hospital admissions (up vs. 7)
- New York, New Jersey, Maryland, Florida and Pennsylvania have highest per capita hospitalized patient numbers.
- Midwest (case data from CDC):
 - Wisconsin showing decline in hospitalizations (40/M) and small increase in cases (70/M)
 - Indiana with stable hospitalizations (80/M), and stable cases (79/M)
 - Illinois showing stable hospitalizations (95/M), increase in cases (99/M)
 - Ohio with slight decrease in hospitalizations (74/M) and stable cases (90/M)
 - Michigan showing increase in hospitalizations (145/M) and significant increase in cases (210/M)

COVID-19 Spread

Statewide positivity has increased to 7.4%, and is increasing in all MERC regions

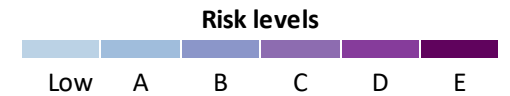
- Five MERC regions are now above 7% (Risk Level B)
- One region, Upper Peninsula, remains below 3% (Risk Level Low)
- Increasing trends at the state and regional levels are also seen at the county level

Case rates (201.8 cases/million) have also increased throughout the state

- 103% increase from mid-February low
- All eight MERC regions showing an increase in case rates
- Increases are seen among most age groups, races, and ethnicities
- Variants are in Michigan: increased vigilance in use of masks and social distancing and increase testing
 - 6,390 cases with the B.1.1.7 variant have been identified in the US (↑1,700), 984 in Michigan (↑259)
- Number of active outbreaks is up 19% from previous week
 - Reported school outbreaks have increased since last week (162 to 207) and all settings

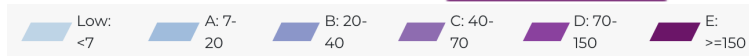
Confirmed and probable case indicators

Table Date: 3/13/2021 (7 days from date table was produced: 3/6/2021)



	Overall 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	E	221.8	elevated incidence growth	8.1	Increase - 4wk	3137.7	6.2	Increase - 3wk	1.4	Decrease - 12wk
Grand Rapids	D	136.0	elevated incidence growth	5.9	Increase - 3wk	2904.2	3.3	Decrease - 1wk	1.0	<20 wkly deaths
Kalamazoo	E	207.9	elevated incidence growth	8.2	Increase - 2wk	2817.5	5.8	Increase - 2wk	1.0	<20 wkly deaths
Saginaw	E	207.6	elevated incidence growth	8.2	Increase - 3wk	2675.7	4.8	Decrease - 2wk	3.3	<20 wkly deaths
Lansing	E	218.6	elevated incidence growth	8.0	Increase - 2wk	2670.1	6.9	Decrease - 7wk	0.7	<20 wkly deaths
Traverse City	E	232.6	elevated incidence growth	8.3	Increase - 4wk	2390.1	4.0	Increase - 3wk	2.3	<20 wkly deaths
Jackson	E	187.0	elevated incidence growth	5.3	Increase - 1wk	4203.0	6.4	Increase - 1wk	0.5	<20 wkly deaths
Upper Peninsula	D	90.3	elevated incidence growth	1.9	Increase - 2wk	3001.0	0.6	Decrease - 2wk	1.4	<20 wkly deaths
Michigan	E	201.8	elevated incidence growth	7.4	Increase - 4wk	3123.7	5.5	Increase - 2wk	1.4	Decrease - 13wk

Cases

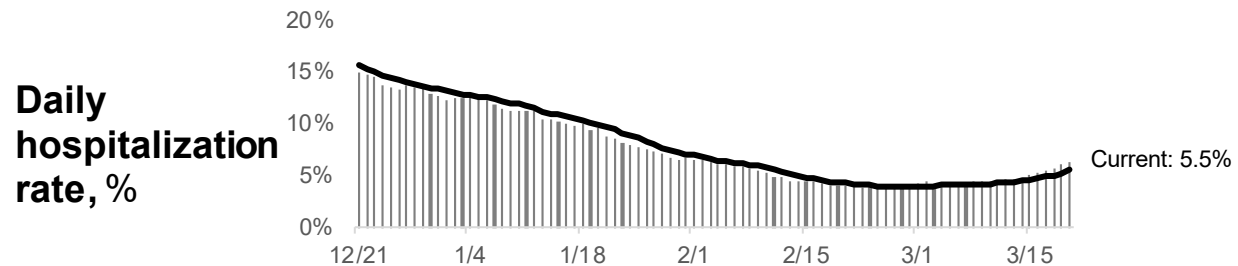
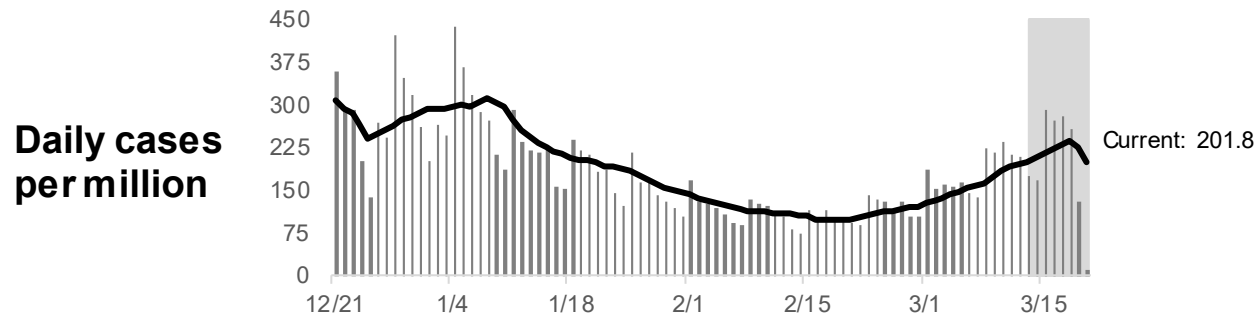
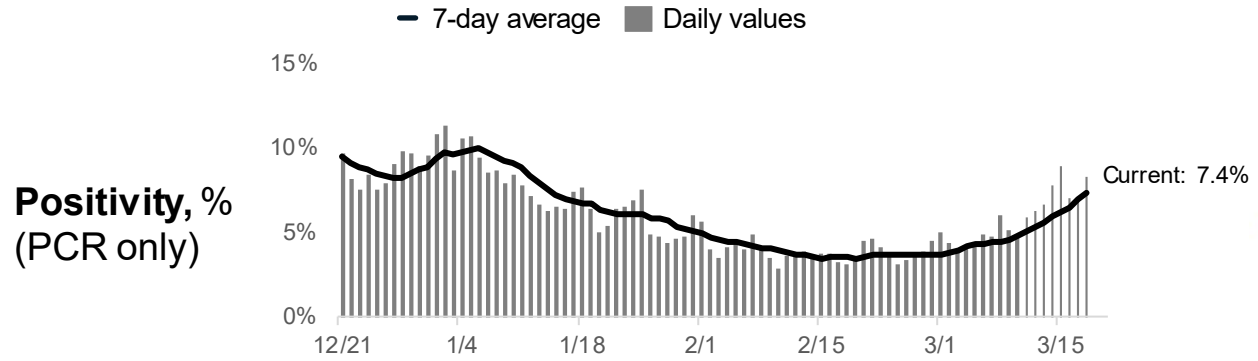


Positivity

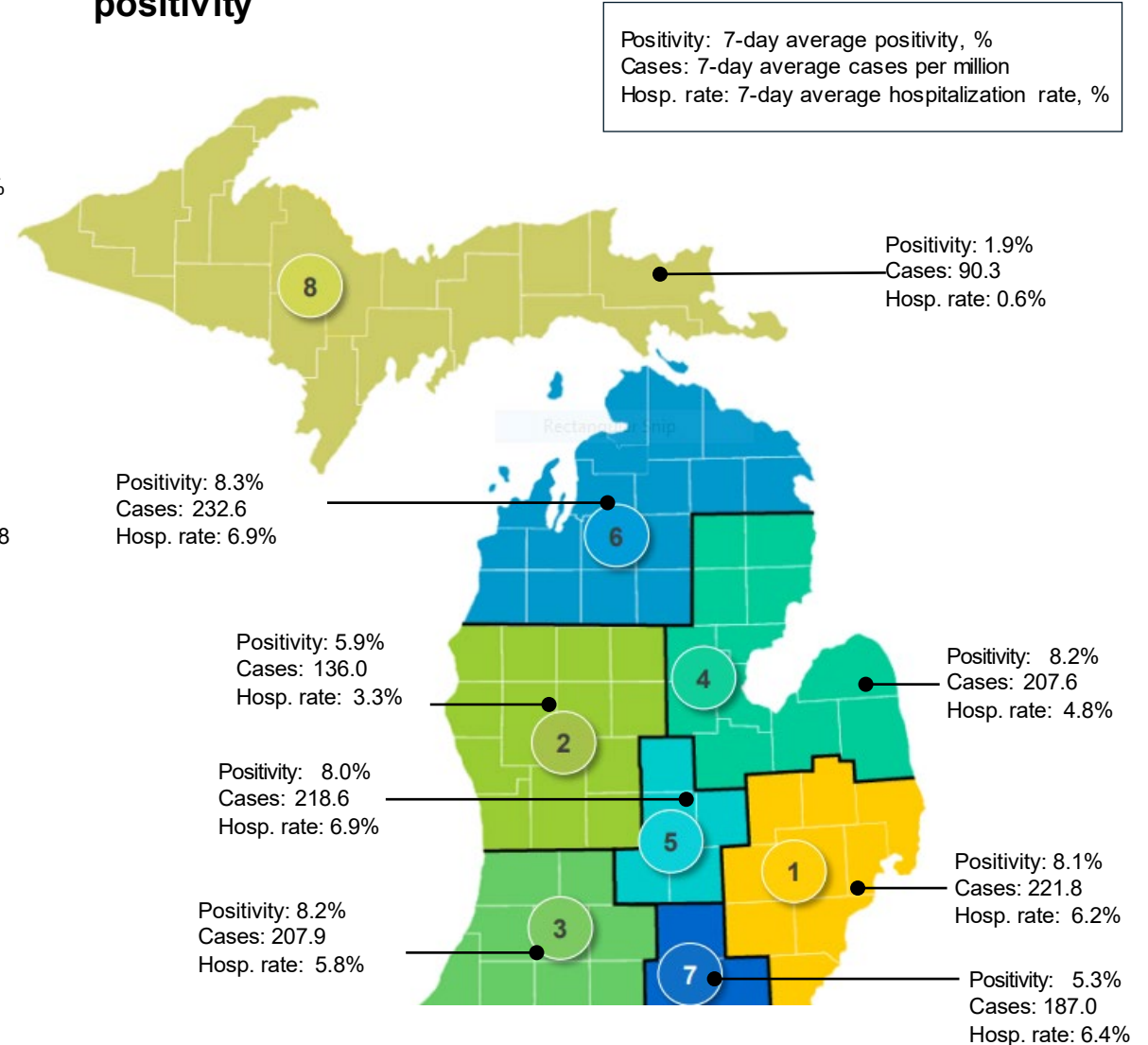


Recent statewide trends

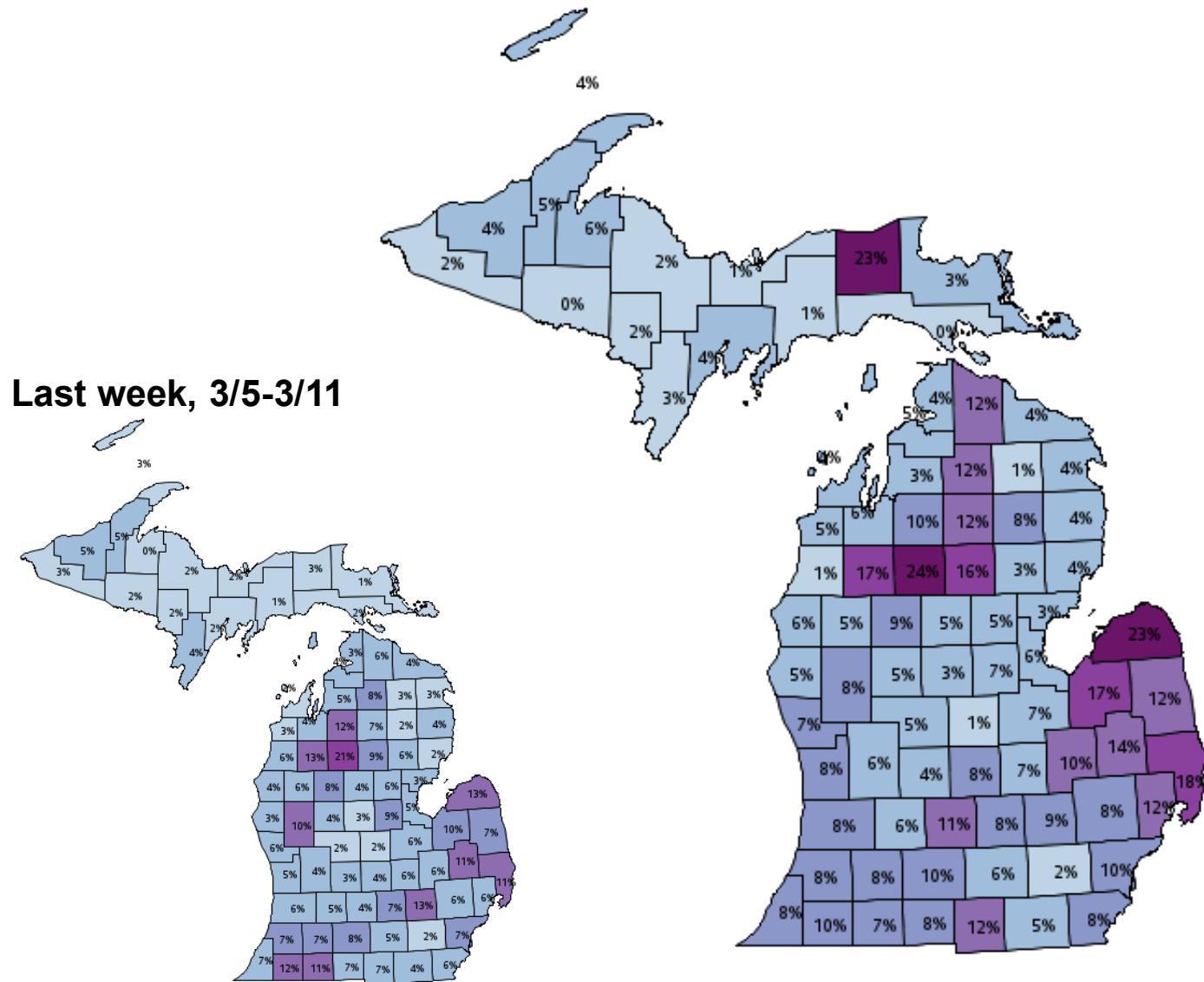
Statewide trends



Regional breakdown: Cases, hospitalization rate, and positivity



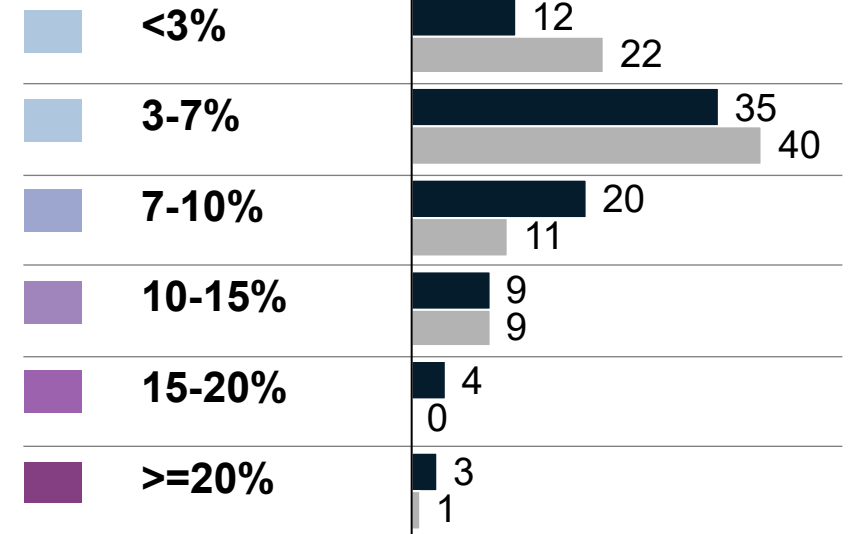
Positivity by county, 3/12-3/18



Average positivity per day

of counties

■ This week
■ Last week



Updates since last week:

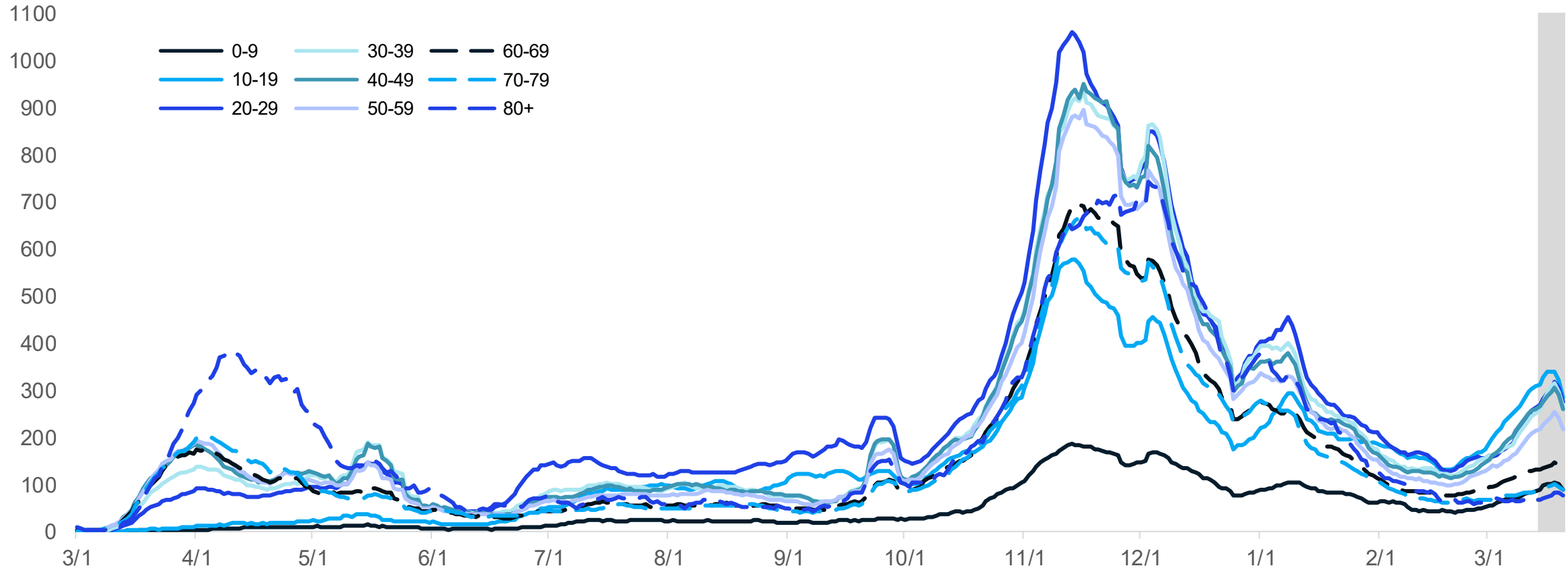
16 of 83 counties saw double digit positivity in the last week (6 county increase)

36 of 83 counties saw positivity > 7% in the last week (15 county increase)

71 of 83 counties saw positivity > 3% in the last week (10 county increase)

Age group: average new daily cases

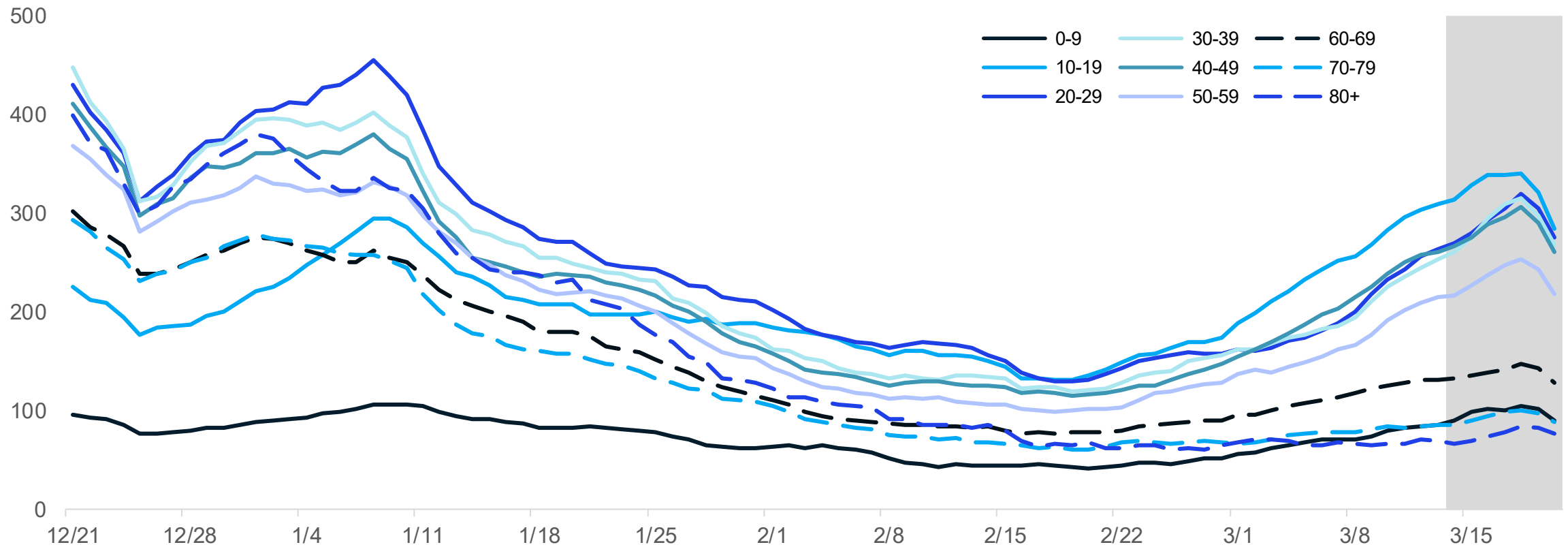
Daily new confirmed and probable cases per million by age group (7-day rolling average)



- Most age groups by decade are also increasing
- Those aged 10-19 have the highest case rate and are increasing faster than other age groups
- Other ages groups with notable increases over the past week are 20-29, 30-39, 40-49, and 50-59

Age group: average new daily cases

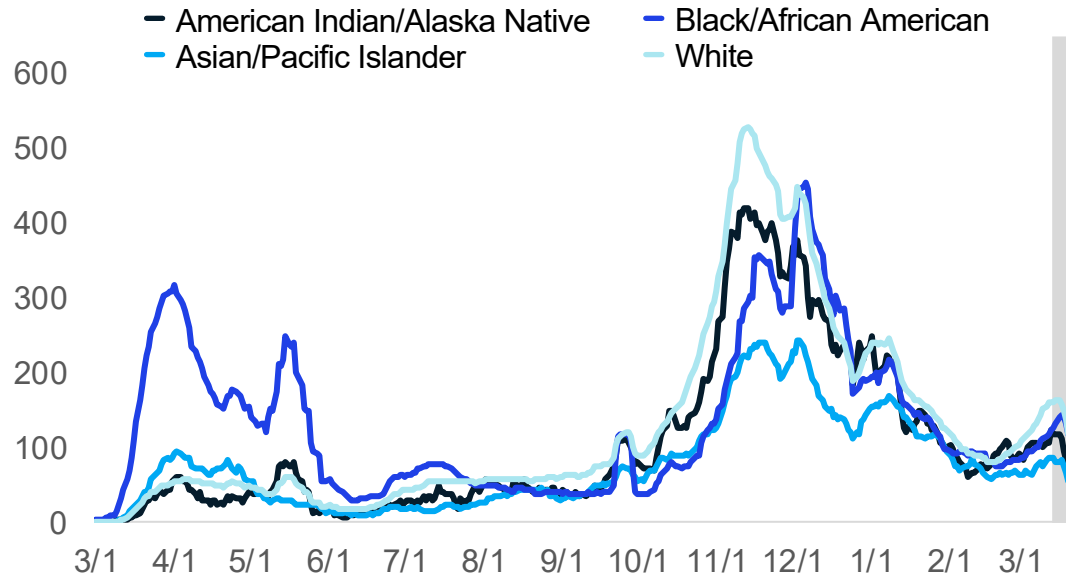
Daily new confirmed and probable cases per million by age group (7-day rolling average)



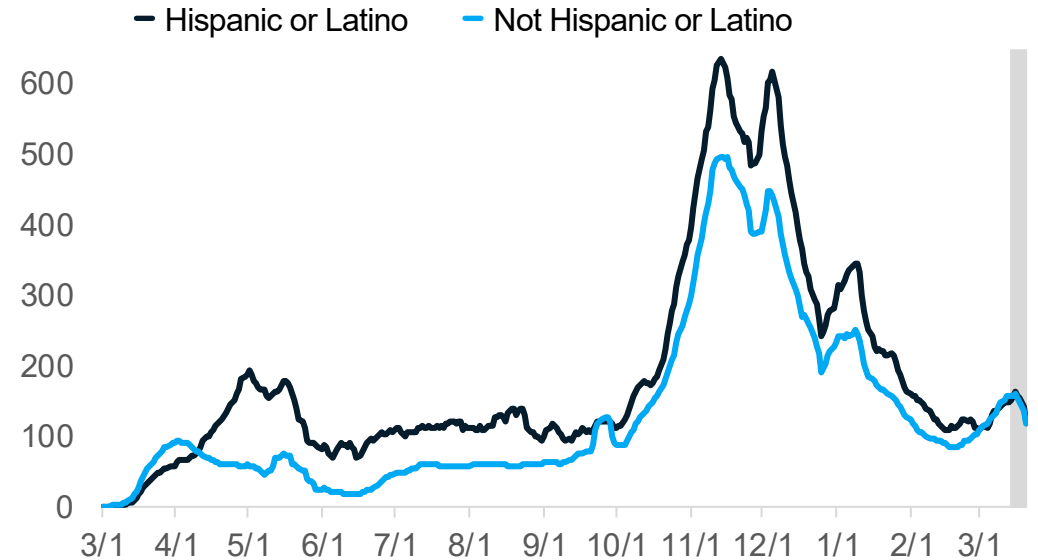
- Most age groups by decade are also increasing
- Those aged 10-19 have the highest case rate and are increasing faster than other age groups
- Other ages groups with notable increases over the past week are 20-29, 30-39, 40-49, and 50-59

Average daily new cases per million people by race and ethnicity

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



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



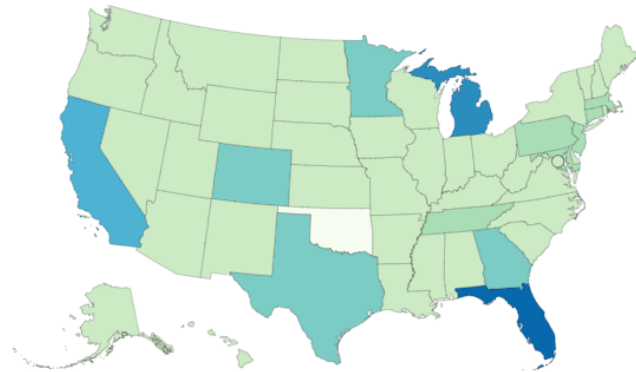
Updates since last week:

- Cases per million are now increasing for all races and ethnicities presented
- In the past 30 days, 28% of all cases represent unknown, multiple, or other races (22% of race is unknown, ↑4%)
- In the past 30 days, 26% of all cases have an unknown ethnicity reported (↑4%)

Identified COVID-19 Cases Caused by All Variants of Concern in US and Michigan

Emergent B.1.1.7 Variant Cases in the United States

Cases of Variants of Concern in the United States*†



Number of Cases

- 0 to 0
- 1 to 150
- 151 to 300
- 301 to 450
- 451 to 600
- 601 to 750
- 751+

Filters

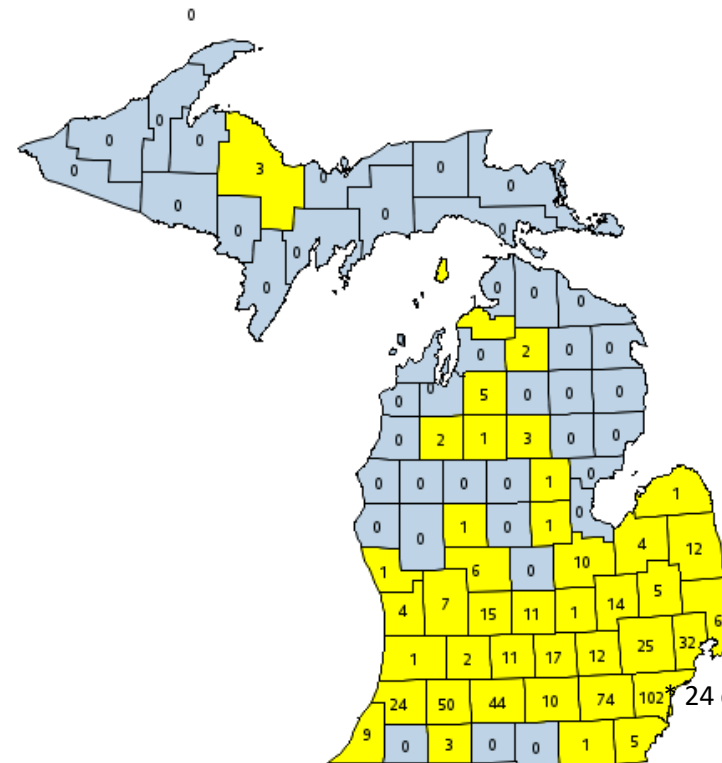
Variant B.1.1.7

Territories AS GU MH FM MP PW PR VI



Variant	Reported Cases in US	Number of Jurisdictions Reporting
B.1.1.7	6390	51
B.1.351	194	27
P.1	54	18

Emergent Variants of Cases in Michigan



24 cases within Wayne are in Detroit

- 984 confirmed B.1.1.7 reported cases (15% of all cases nationally)
 - 32 counties
 - 445 cases within MDOC (45% of all cases in MI)
- 2 confirmed B.1.351 reported cases

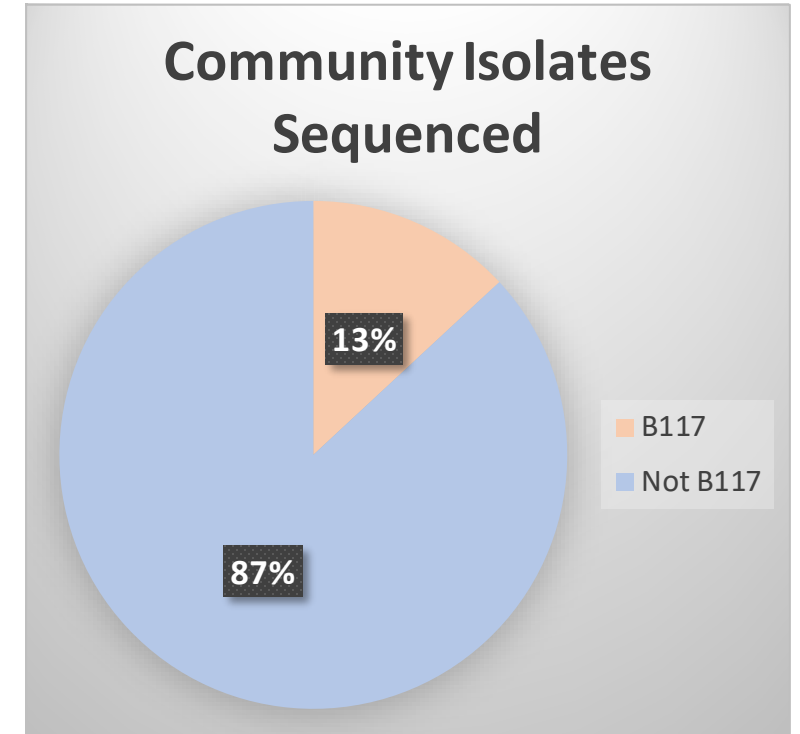
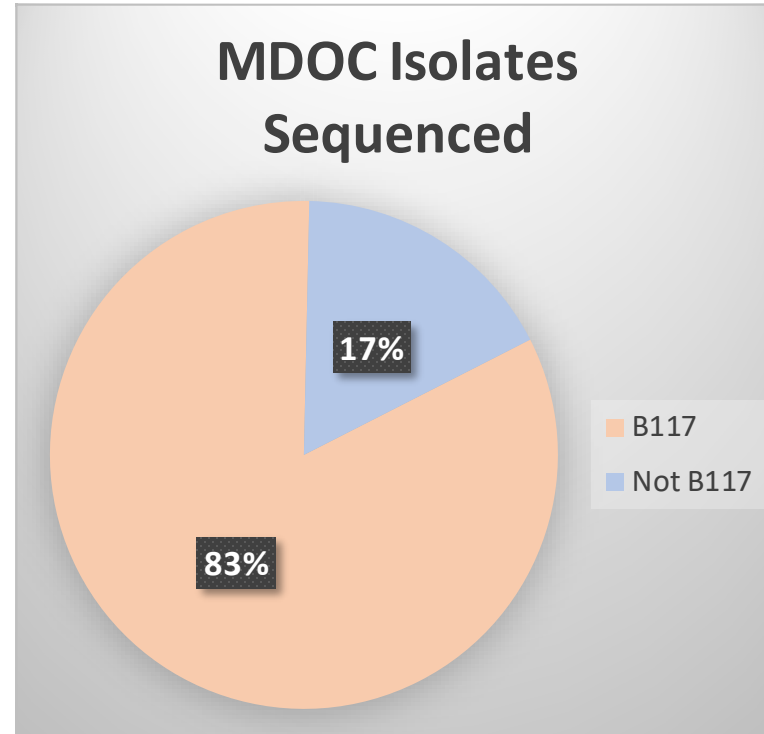
Data last updated March 21, 2021

Source: <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html> and Michigan Disease Surveillance System (MDSS)

B.1.1.7 Isolated in Michigan

MDHHS Bureau of Laboratories sequencing data for two purposes:

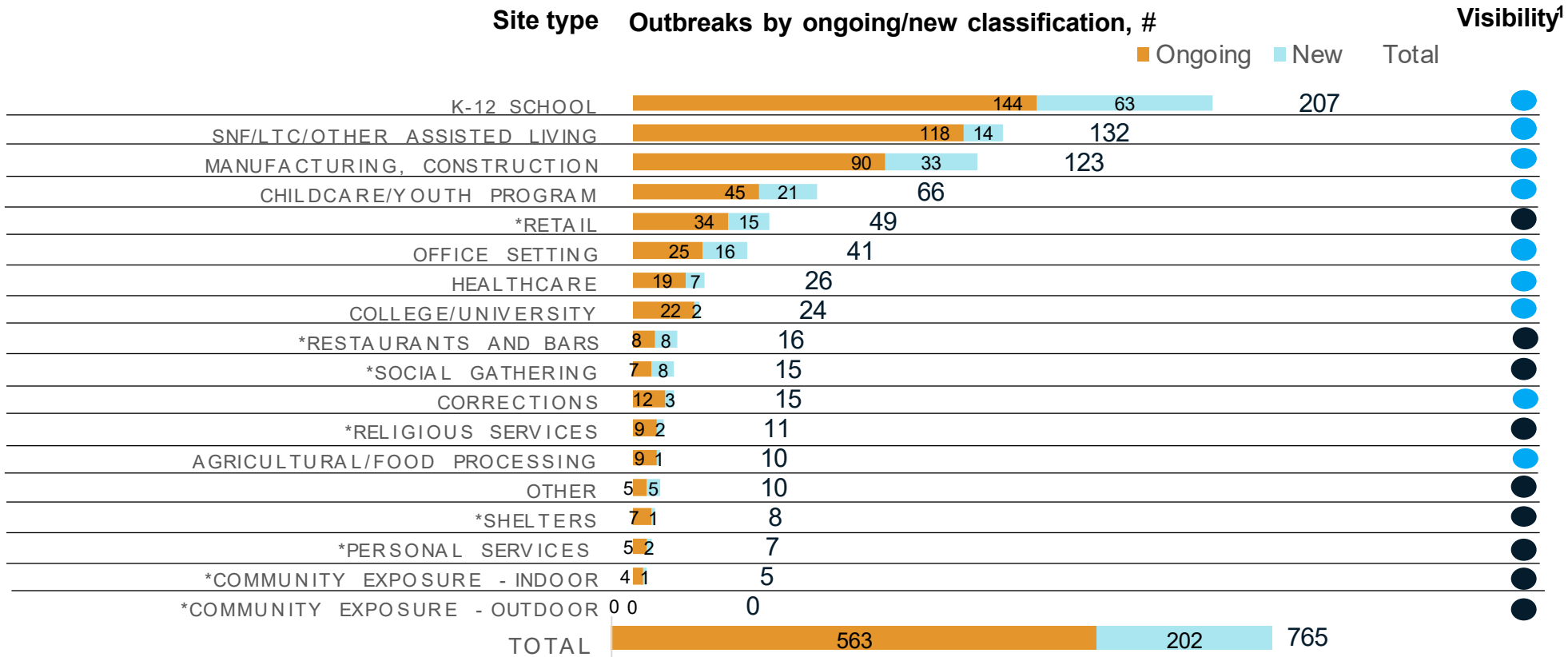
- Community surveillance 13% of samples had B.1.1.7 variant
- Outbreak response



Number of outbreak investigations by site type, week ending Mar 18

Pre-decisional, for discussion only Draft

- Easier to identify outbreak
- Harder to identify outbreak



Total number of active outbreaks is up 19% from previous week

Following K-12 (63), the greatest number of new outbreaks were reported in manufacturing/ construction (33), childcare/youth programs (21), office setting (16), retail (15), and SNF/LTC (14).

LHDs reported new outbreaks in all settings except outdoor community exposures.

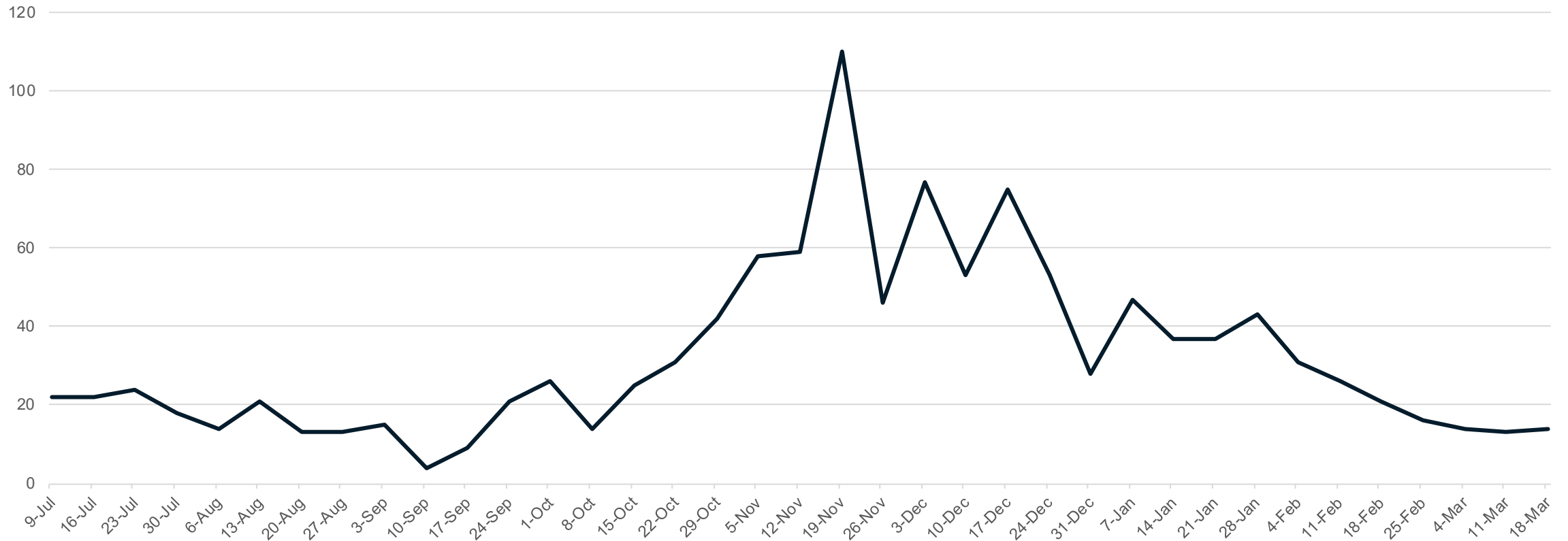
1. Based on a setting's level of control and the extent of time patrons/residents spend in the particular setting, different settings have differing levels of ability to ascertain whether a case derived from that setting

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

Long-Term Care Facilities: Number of Outbreak Investigations by Week

Weekly new outbreaks in LTC/SNF through March 18



- The number of outbreaks in long term care facilities had been reflecting case trends in the community
- Outbreaks peaked in mid-November
- Following vaccine EUA, outbreaks in LTCF have fallen faster than in other setting types

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 Mar 18

Number of reported outbreaks increased since last week (162 to 207) including increases in High Schools (105 to 126), Middle/Jr High (28 to 39), Pre K-Elementary (24 to 36) and Administrative (5 to 6).

Region	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Region 1	236	90		41	2-54
Region 2n	157	86		47	2-28
Region 2s	129	44		31	2-19
Region 3	265	123		30	2-51
Region 5	110	36		22	2-24
Region 6	118	20		11	2-41
Region 7	94	74		24	2-23
Region 8	0	2		1	2-2
Total		1,109	475	207	2-54

Grade level	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Pre-school - elem.	102	67		36	2-27
Jr. high/middle school	183	116		39	2-54
High school	815	288		126	2-51
Administrative	9	4		6	2-3
Total		1,109	475	207	2-54

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

COVID-19 and Healthcare Capacity and COVID Severity

Hospitalizations and ICU utilization are increasing

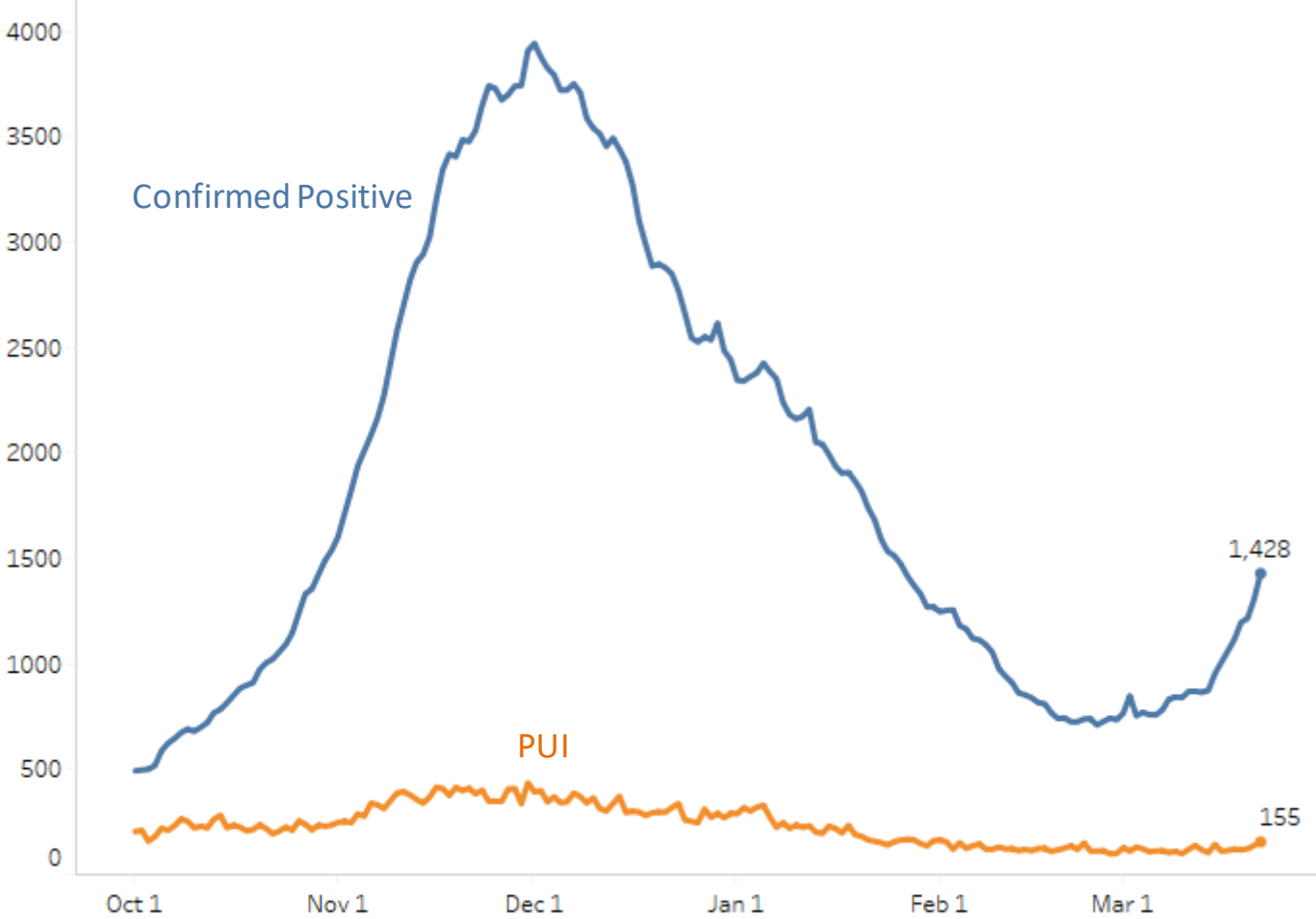
- COVID-like illness (CLI) has increased to 4.1% (graph in appendix)
- Hospitalizations up ~50% since last week (fourth consecutive week)
- Hospital admissions increasing in most age groups but 50-59 greatest increase over past three weeks
- All regions are showing increasing hospitalization trends this week
- The census of COVID+ patients in ICUs have risen in 7 regions this week (regions 1, 2N, 2S, 3, 5, 7, 8)

Deaths have declined for 13 weeks to 1.4 deaths per million

- Deaths are a lagging indicator of cases and hospitalization
- The rate of decline is slowing
- 90% decrease from the peak on December 10
- Current death rate is nearly the death rate in early October
- Proportion of deaths among those 60+ is slowly declining

Statewide Hospitalization Trends: Total COVID+ Census

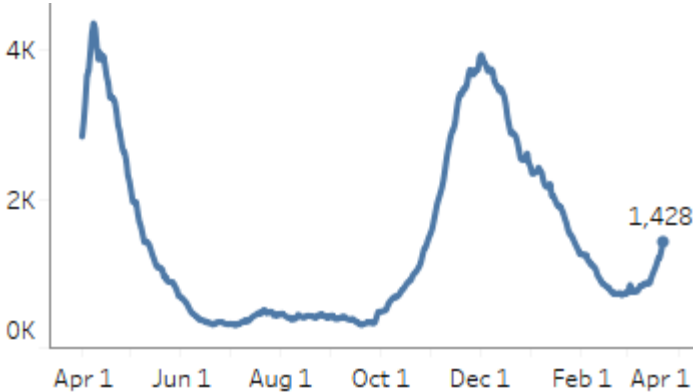
Hospitalization Trends 10/1/2020– 3/22/2021
Confirmed Positive & Persons Under Investigation (PUI)



COVID+ census in hospitals continues to increase. **This week is up ~50% from the previous week** (vs. 14% increase last week over previous week).

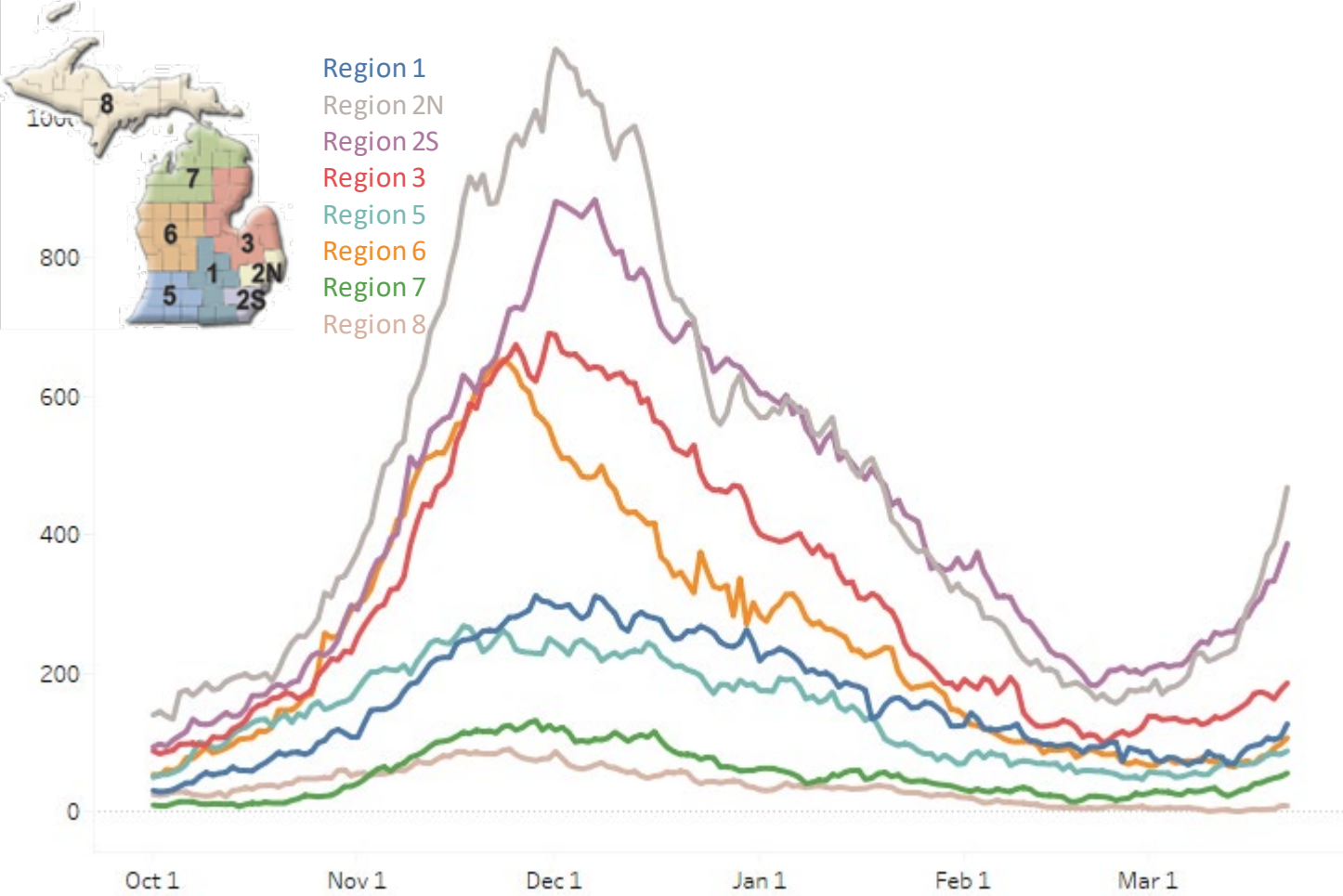
The current doubling time is less than 2 weeks. This growth rate matches or exceeds the peak growth rates we saw during the winter surge.

Hospitalized COVID Positive Long Term Trend (beginning March 2020)



Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 10/1/2020– 3/22/2021
Confirmed Positive by Region



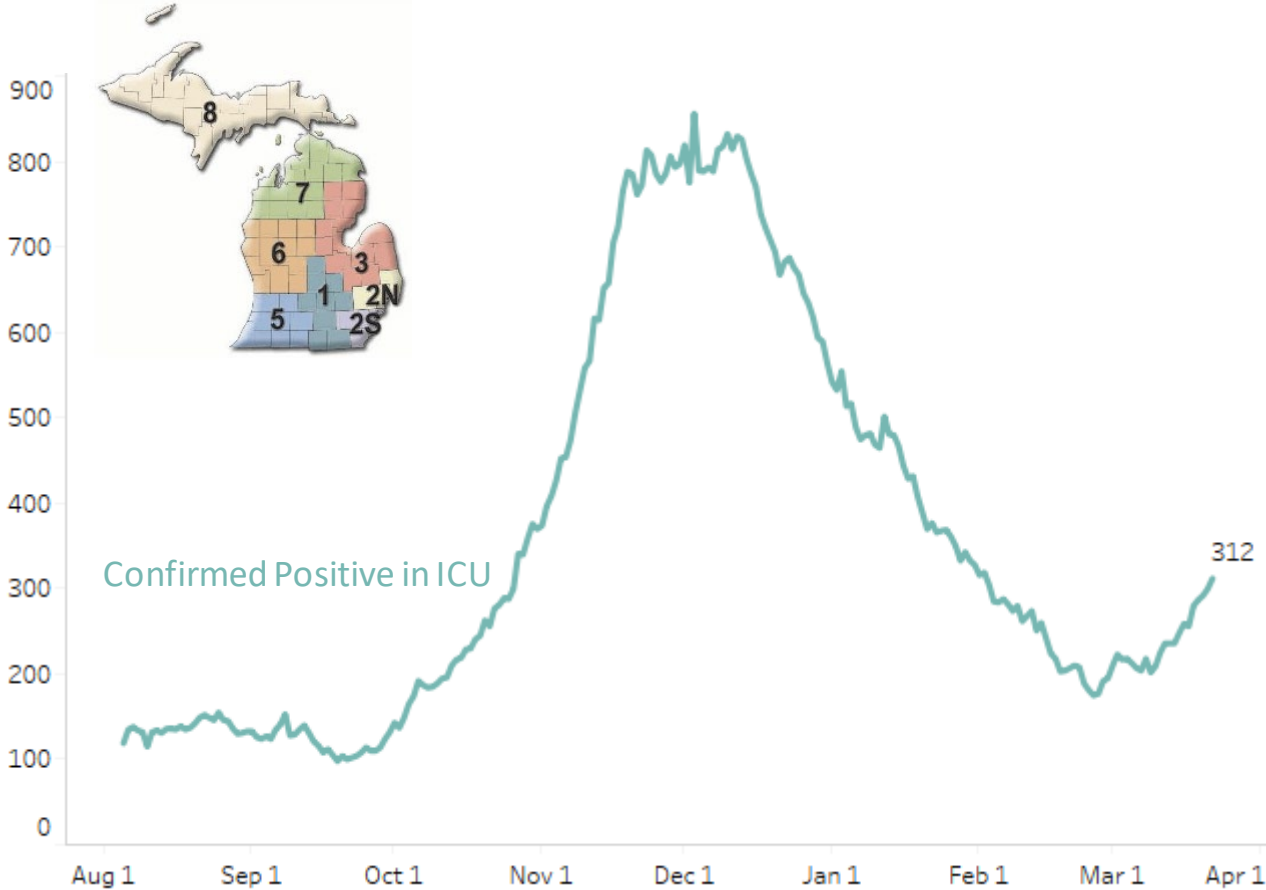
All regions are showing increasing hospitalization trends this week. **Region 2N, 7 and 8 are showing the fastest growth this week.**

Five regions are above 100 hospitalized per million of the population. Region 2N is above 200/Million hospitalized.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	127 (+51%)	117/M
Region 2N	468 (+75%)	211/M
Region 2S	387 (+42%)	173/M
Region 3	186 (+23%)	164/M
Region 5	88 (+29%)	92/M
Region 6	107 (+49%)	73/M
Region 7	56 (+75%)	112/M
Region 8	9 (+800%)	29/M

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 8/1/2020 – 3/22/2021
Confirmed Positive in ICUs



Overall census of COVID+ patients in ICUs has increased 25% from last week.

The growth of ICU cases so far has been slower than in the winter surge although growth is accelerating.

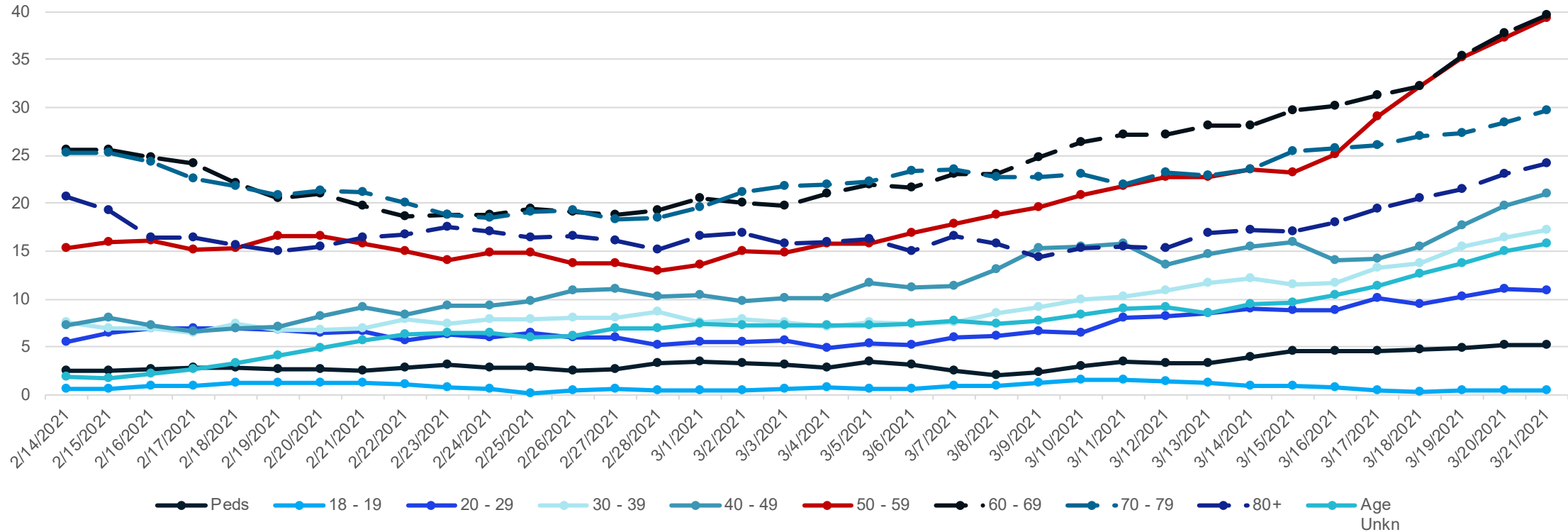
7 regions show growth, and 3 regions now exceed 15% of ICU beds occupied with COVID+ patients.

Region	Adult COVID+ in ICU	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	21 (+40%)	87%	11%
Region 2N	94 (+30%)	75%	16%
Region 2S	75 (+14%)	81%	10%
Region 3	55 (+37%)	87%	16%
Region 5	22 (+16%)	81%	16%
Region 6	24 (-12%)	65%	10%
Region 7	17 (+113%)	66%	9%
Region 8	4 (*0->4 census)	64%	7%

Hospital bed capacity updated as of 3/19

Average Hospital Admissions by Age

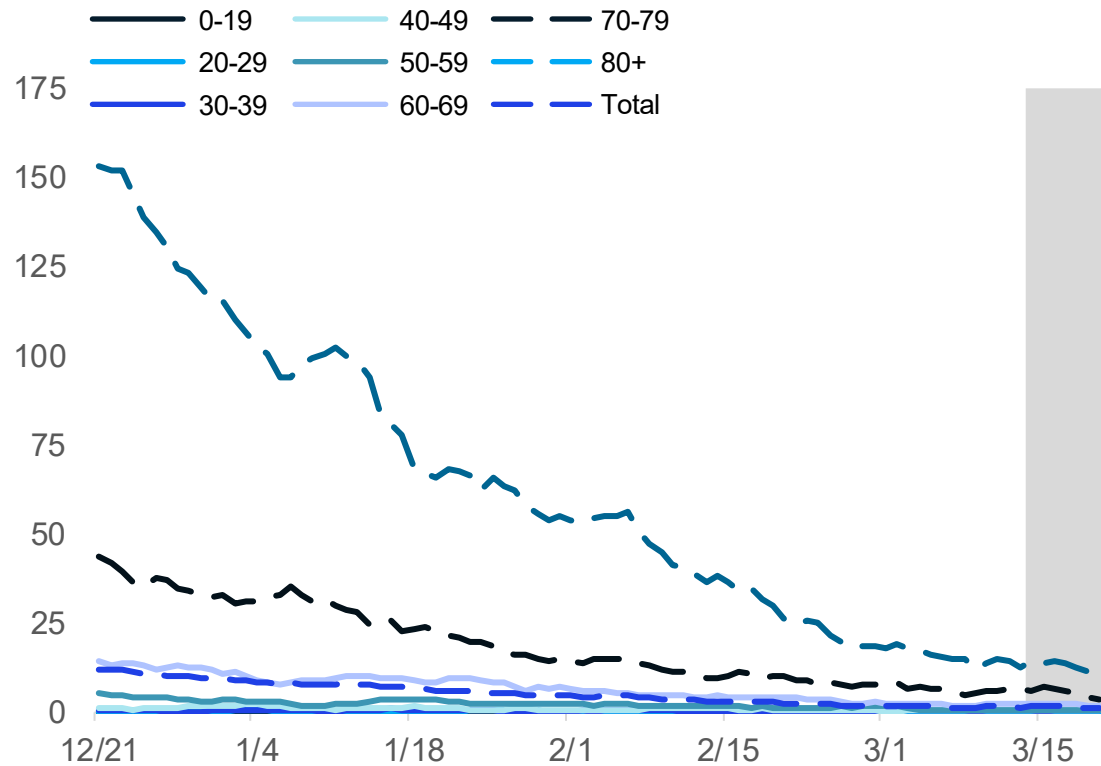
Confirmed COVID-19 Hospital Admissions by Age Group - Statewide Rolling Weekly Average



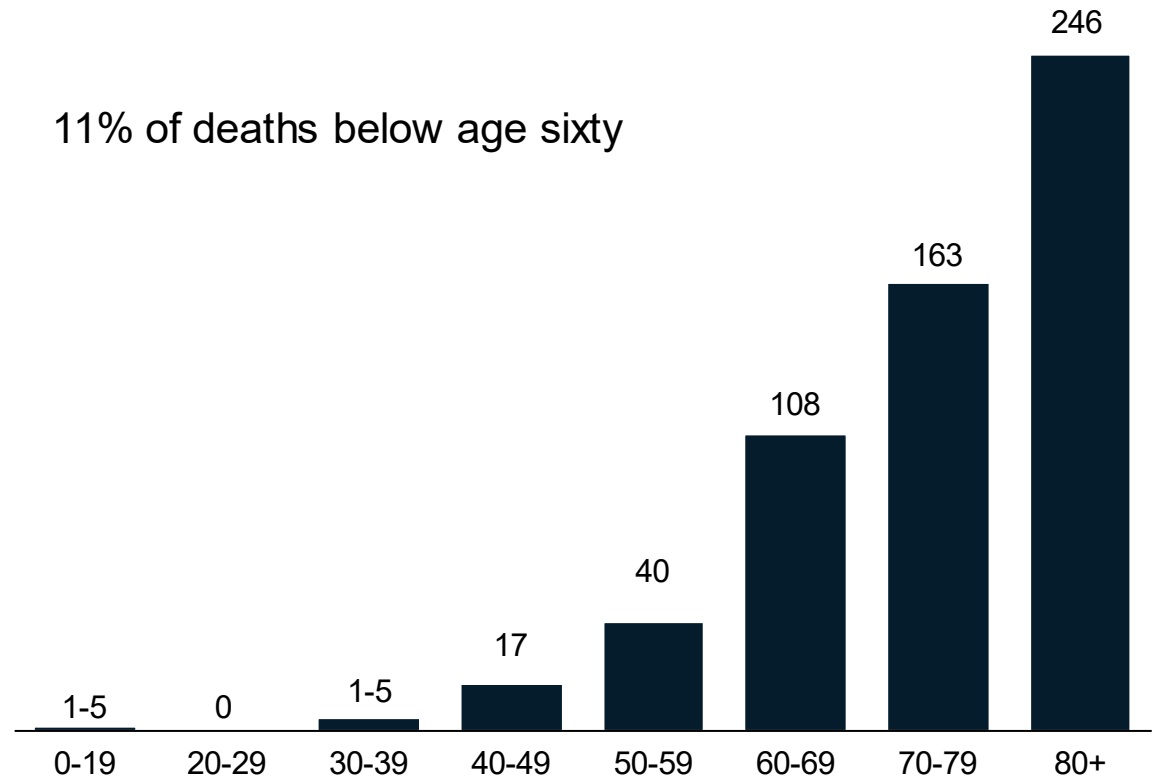
- The number of hospital admissions is increasing in most age groups
- Those 50-59 have seen the greatest increase over the past three weeks (red line)
- Vaccine has helped reduce the number of hospital admissions for 70+ but we have not yet achieved herd immunity in these age groups (data in appendix)

Average and total new deaths, by age group

Daily confirmed and probable deaths per million by age group (7 day rolling average)



Total confirmed and probable deaths by age group (past 30 days, ending 3/13/2021)



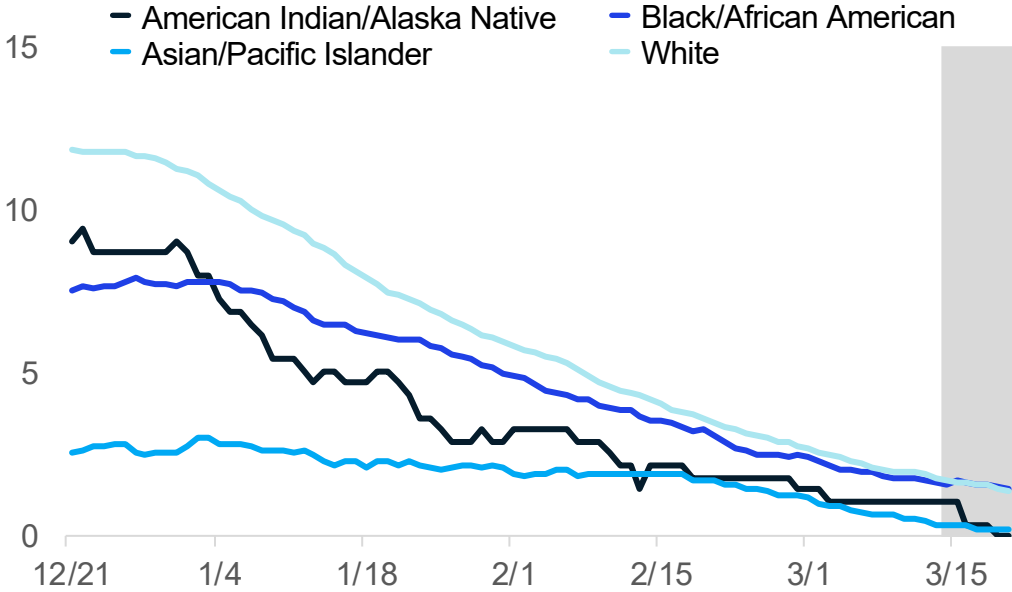
Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.

Source: MDHHS – Michigan Disease Surveillance System

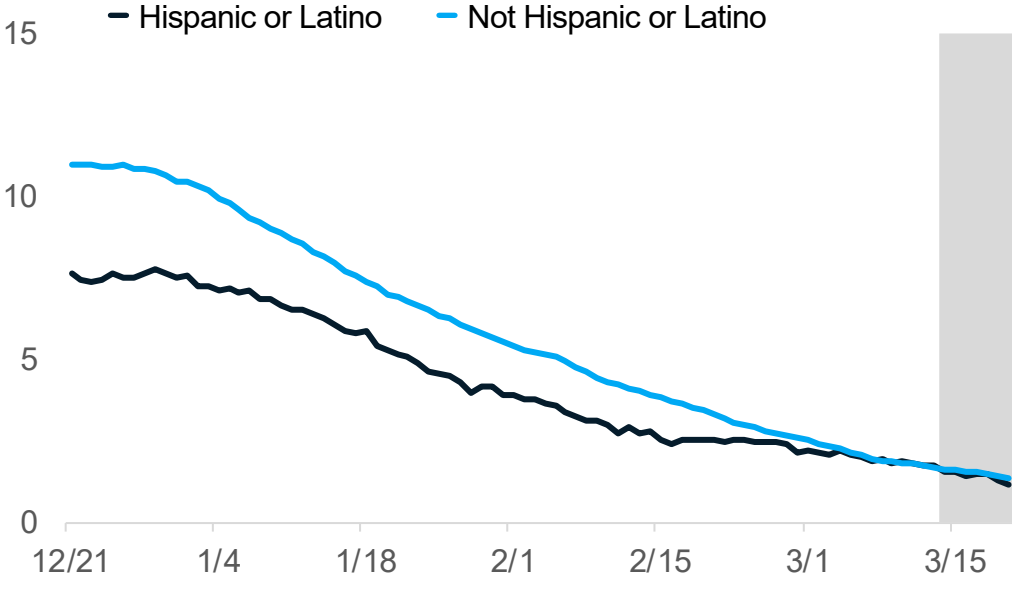


30-day rolling average daily deaths per million people by race and ethnicity

Average daily deaths per million people by race



Average daily deaths per million people by ethnicity



Updates since last week:

- Deaths are a lagging indicator of cases, and death rates are decreasing among racial and ethnic groups
- Whites and Blacks have the most reported deaths per capita while Hispanic/Latinos and Non-Hispanic Latino are about the same
- Death rates presented here are not adjusted for confounders (e.g., age, sex, comorbidities)

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

How is public health capacity?

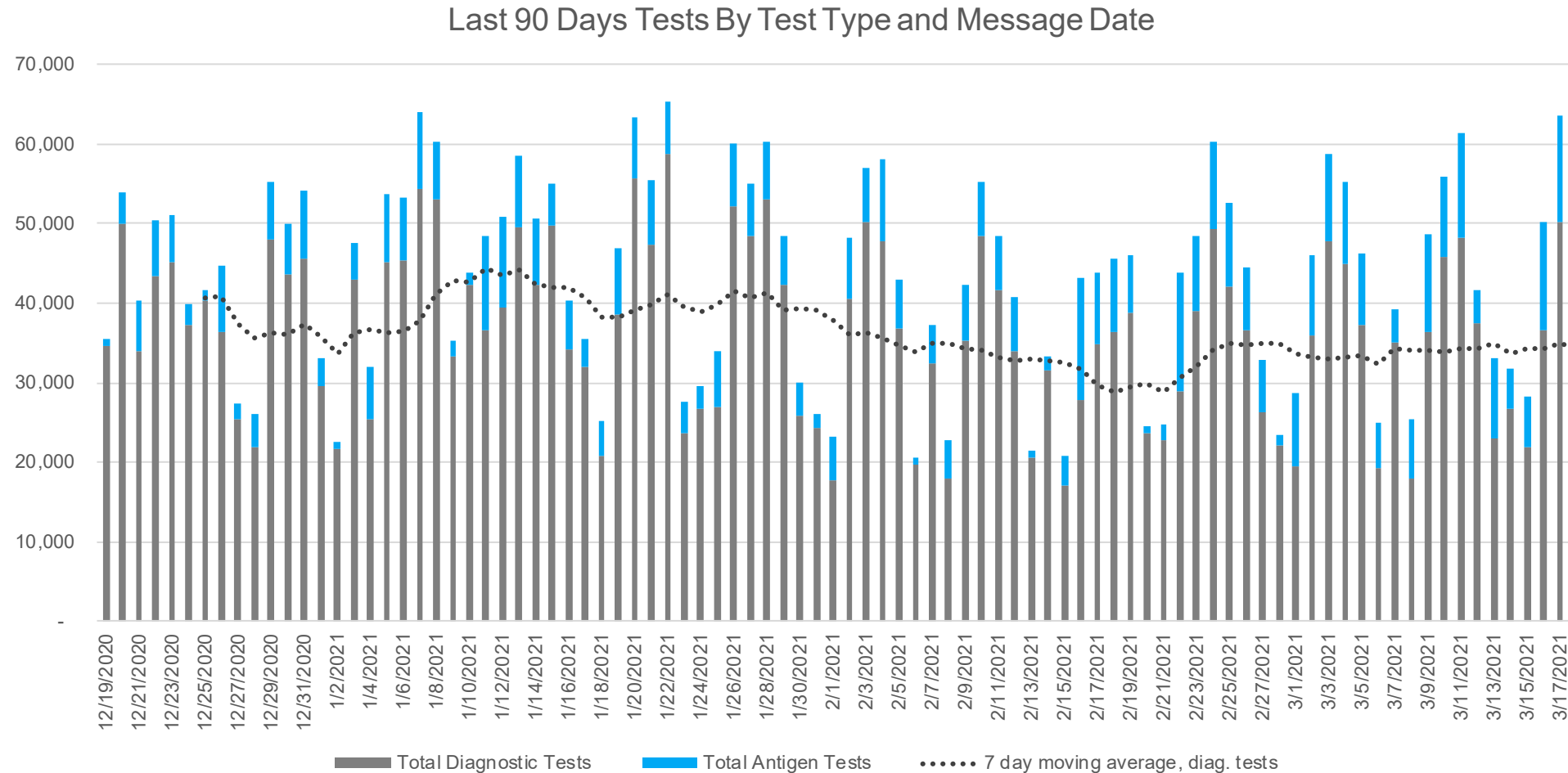
Diagnostic testing volume (PCR and antigen) has increased slowly from last week

- PCR testing increased slightly since last week
- Percent of antigen tests have increased

Cases identified for investigations has sharply increased

- Proportion of completed interviews decreased from prior week (although number of investigations has increased)
- Consistent low proportion of cases interviewed with a source of known infection (indicating community acquisition)
 - As cases have increased, the percent of interviews attempted has declined
- Consistent low proportion of those quarantining when their symptoms begin (indicating no effective halt in community transmission)
- The number of contacts per case is steadily increasing to numbers prior to the second surge

Daily diagnostic tests, by message date



Weekly Update

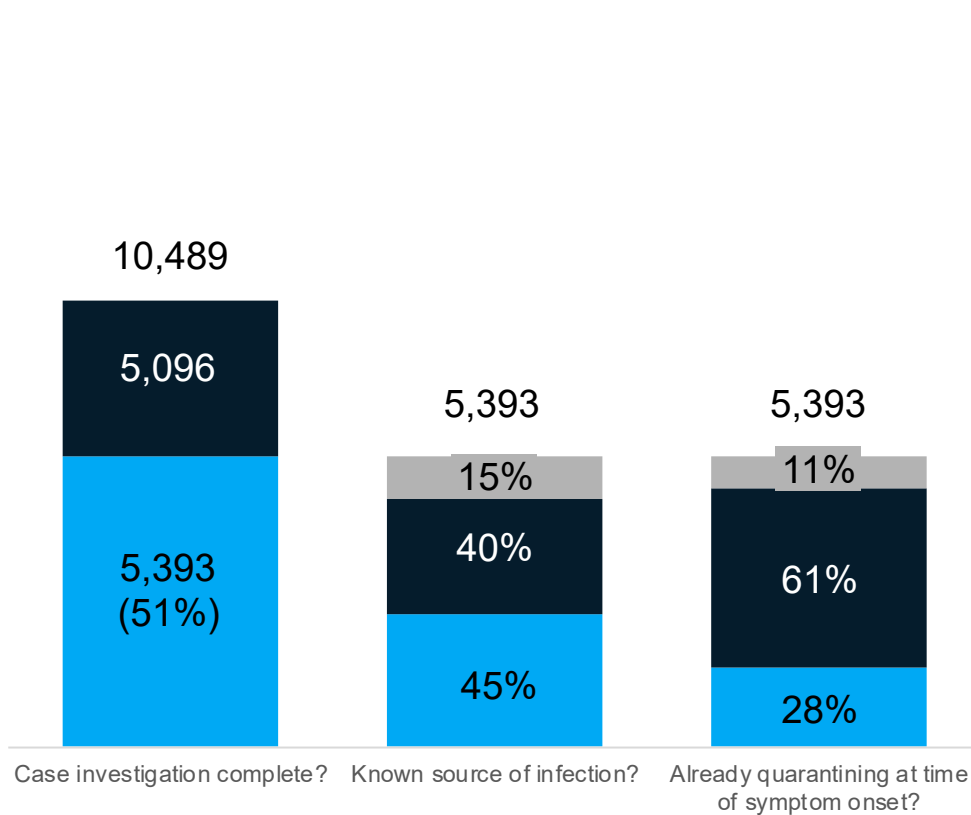
- 43,822 rolling 7-day average daily diagnostic tests reported to MDHHS (PCR + Ag) (↑)
- 34,367 average daily PCR tests (↑)
- 21.6% are antigen tests over the past week (↑)
- 7.4% positivity in PCR tests (↑)
- 4.1% positivity in antigen tests (↑)

New Case Investigation Metrics (Statewide)

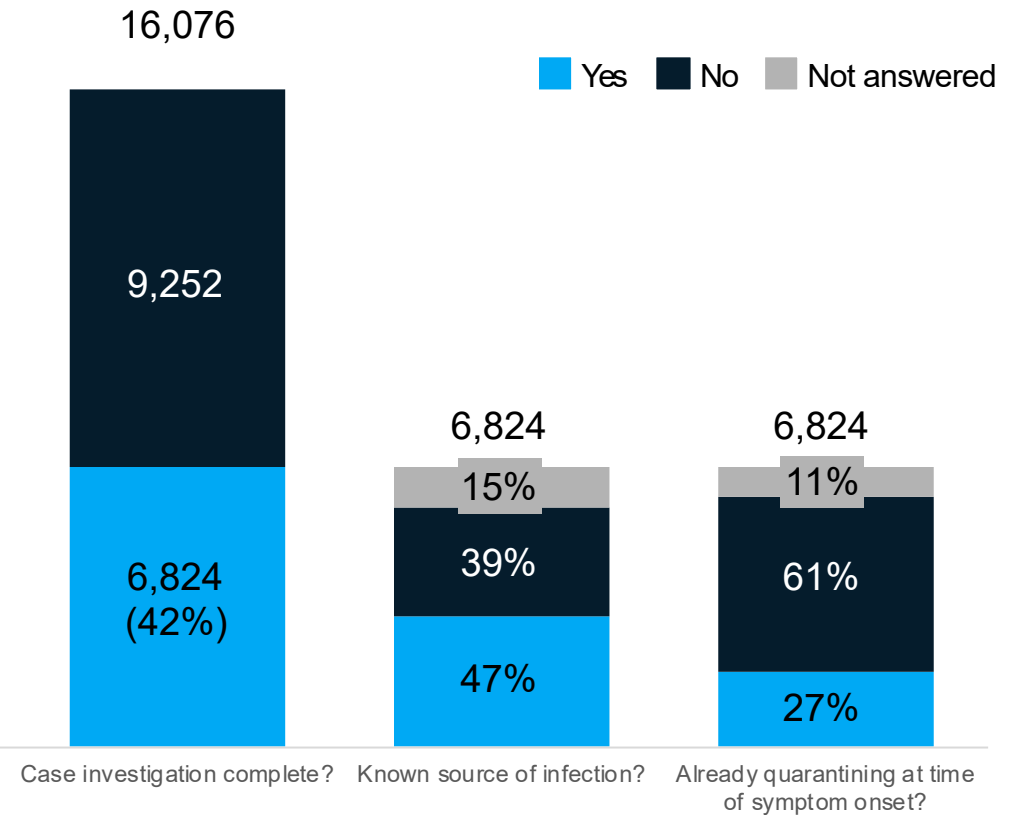
New Communicable Disease metrics decreased since last week:

- 47% of investigated cases having a known source (45% last week, 42% week prior)
- 27% of investigated cases noting that they were quarantining before symptoms (28% last week)

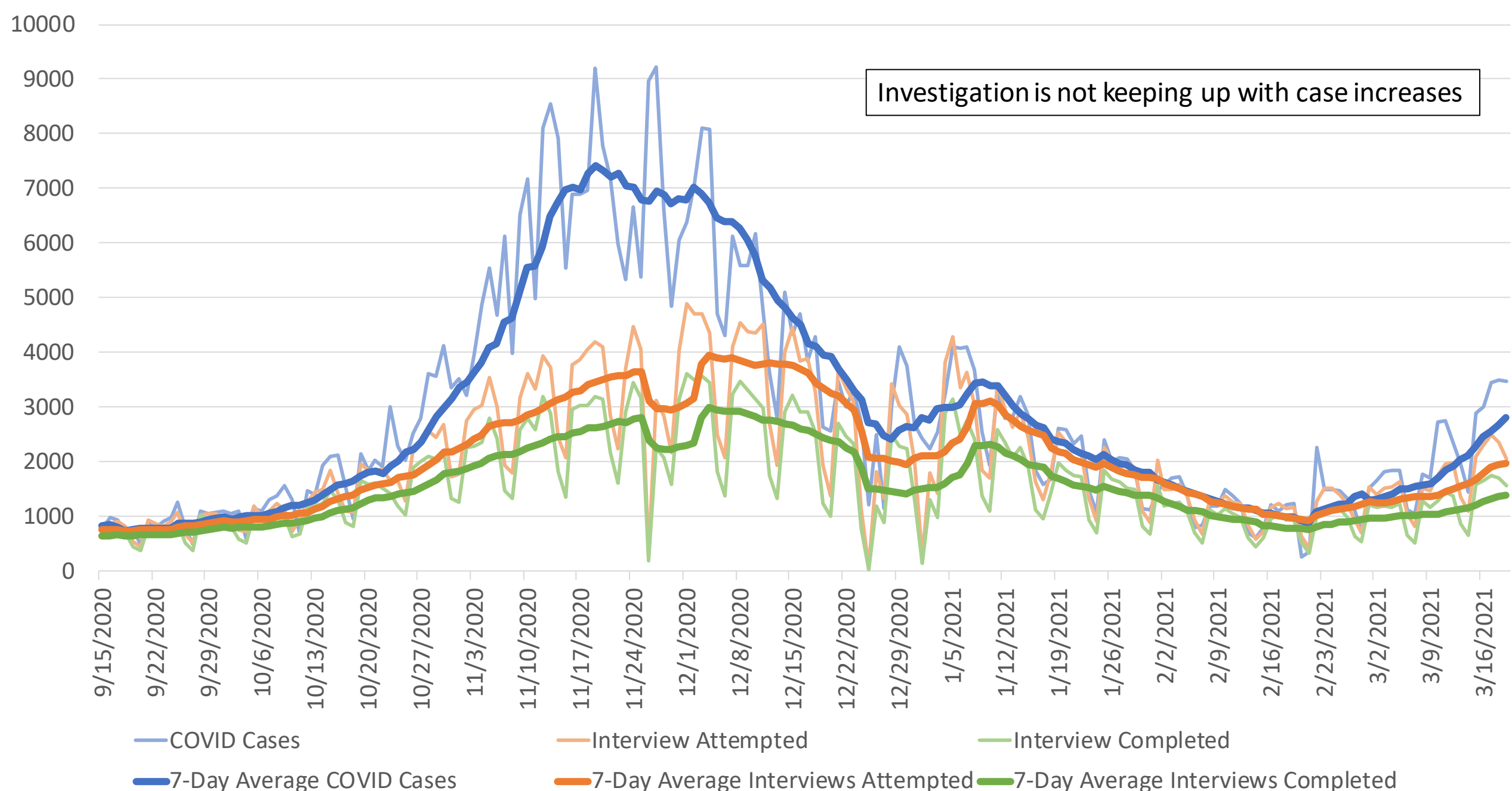
03/06-03/12 Case report form information



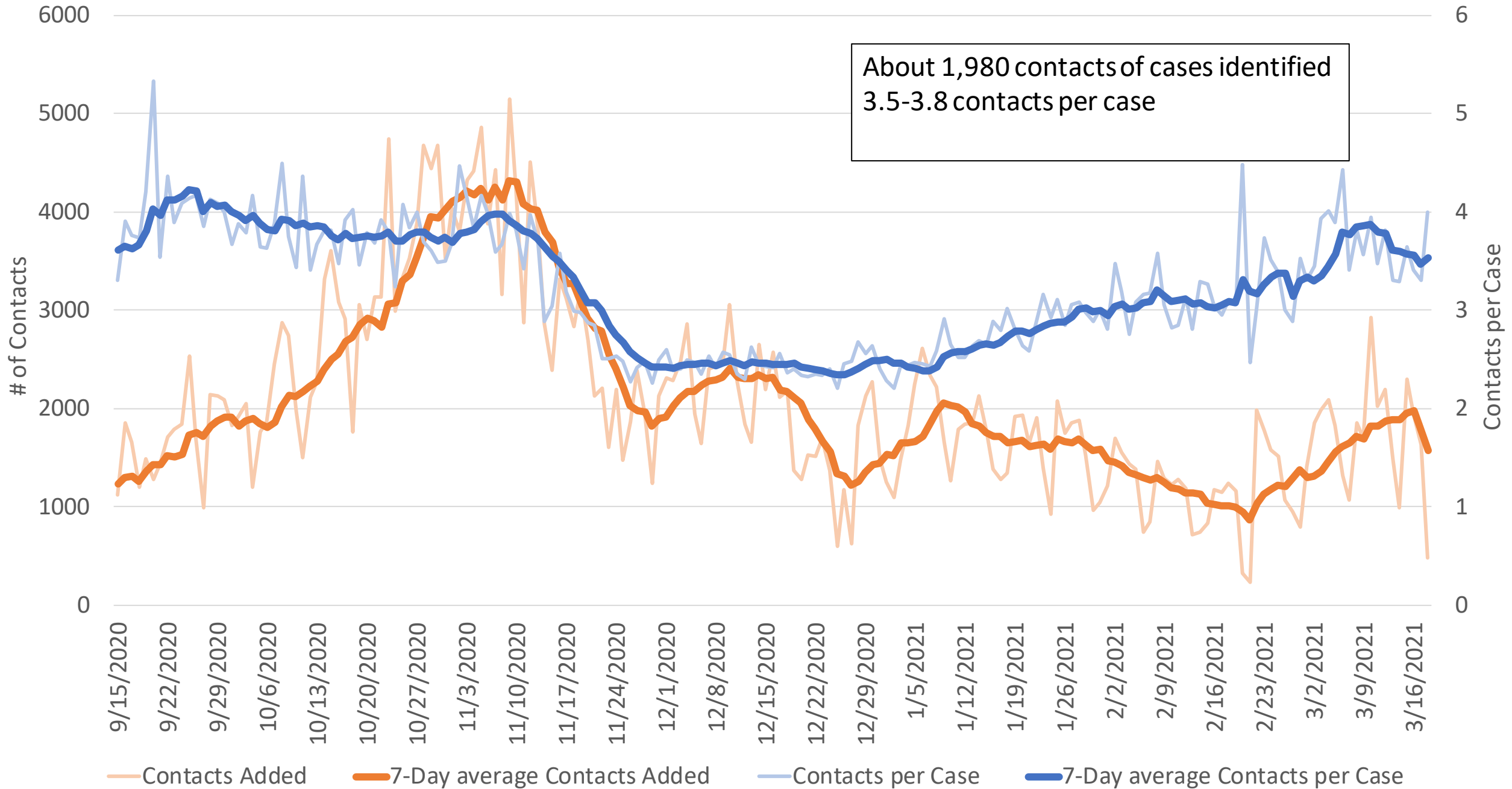
03/13-03/19 Case report form information



Daily COVID Confirmed + Probable Case, Interview Attempt, and Interview Completion Volume



Daily COVID-19 Contacts Added to the MDSS



COVID-19 Vaccination

National Comparisons

- MI ranks 14th of 20 most populous states and 36th of all states for % of all residents with one or more doses.
- MI ranks 12th of 20 most populous states and 34th of all states for percent of all residents fully vaccinated

Vaccine Administration and Coverage

- More than 3.6 million doses reported to MDHHS
- 29.0% people aged 16+ years have first dose of vaccine (2,350,186)
- 16.5% people fully vaccinated (1,334,627)
- 64.0% of people over 65 years have had one dose; 40.6% have completed series

Addressing vaccine disparities

- Coverage was highest among Non-Hispanic Asian, Native Hawaiian or Other Pacific Islander individuals, followed by Non-Hispanic White, Native American, Black and Hispanic individuals
- 31% of individuals missing race data

Vaccine Distribution & Administration 20 Most Populous States (3/20/21)

MI is 10th or 9th in nation for number of doses delivered, number of people with at least one dose, and number of people fully vaccinated (9th)

For percent of all people with one or more doses, MI ranks 14th among 20 most populous states and 36th of all states.

- MI: 23.4%; Range 18.1-32.3%

For percent of all people fully vaccinated, MI ranks 12th among 20 most populous states and 34th among all states

- MI: 13.3%; Range: 9-19.6%

	Population	Total Doses Delivered	Number with 1+ Dose	% with 1+ Dose	Number Fully Vaccinated	% Fully Vaccinated
1	California	California	California	Massachusetts	California	Wisconsin
2	Texas	Texas	Texas	New Jersey	Texas	Massachusetts
3	Florida	Florida	Florida	Wisconsin	Florida	New Jersey
4	New York	New York	New York	New York	New York	Washington
5	Pennsylvania	Pennsylvania	Illinois	Illinois	Illinois	Arizona
6	Illinois	Illinois	Pennsylvania	Maryland	Ohio	Indiana
7	Ohio	Ohio	Ohio	Virginia	Pennsylvania	Virginia
8	Georgia	Georgia	North Carolina	Washington	North Carolina	Illinois
9	North Carolina	North Carolina	New Jersey	California	Michigan	Ohio
10	Michigan	Michigan	Michigan	North Carolina	New Jersey	Maryland
11	New Jersey	New Jersey	Virginia	Arizona	Virginia	North Carolina
12	Virginia	Virginia	Georgia	Pennsylvania	Georgia	Michigan (34)
13	Washington	Washington	Massachusetts	Ohio	Washington	Florida
14	Arizona	Arizona	Washington	Michigan (36)	Massachusetts	California
15	Massachusetts	Massachusetts	Arizona	Florida	Arizona	Pennsylvania
16	Tennessee	Tennessee	Wisconsin	Missouri	Indiana	New York
17	Indiana	Indiana	Maryland	Indiana	Wisconsin	Missouri
18	Missouri	Missouri	Indiana	Texas	Maryland	Tennessee
19	Maryland	Maryland	Tennessee	Tennessee	Tennessee	Texas
20	Wisconsin	Wisconsin	Missouri	Georgia	Missouri	Georgia

Doses Shipped and Administered

29.0% of Michigan residents have initiated COVID vaccination series and 16.5% have completed their series.

	Enrolled Providers	Doses Shipped	Total Doses Administered			1 st Dose Coverage, 16+	2 nd Dose Coverage, 16+
Data as of	3/21/21	3/23/21	3/22/21	1 st Dose	2 nd Dose	3/22/21	3/22/21
Michigan Distributed	2,887	3,919,165	3,652,762	2,364,471	1,288,291	29.0	16.5
Federal Programs		425,260					
Total Distribution		4,344,425					

6 weeks administering more than 300,000 doses/week, 2 weeks over 450K/week
 Over 98,000 doses administered in a single day.

Vaccination by Age Group (3/22/21 data)

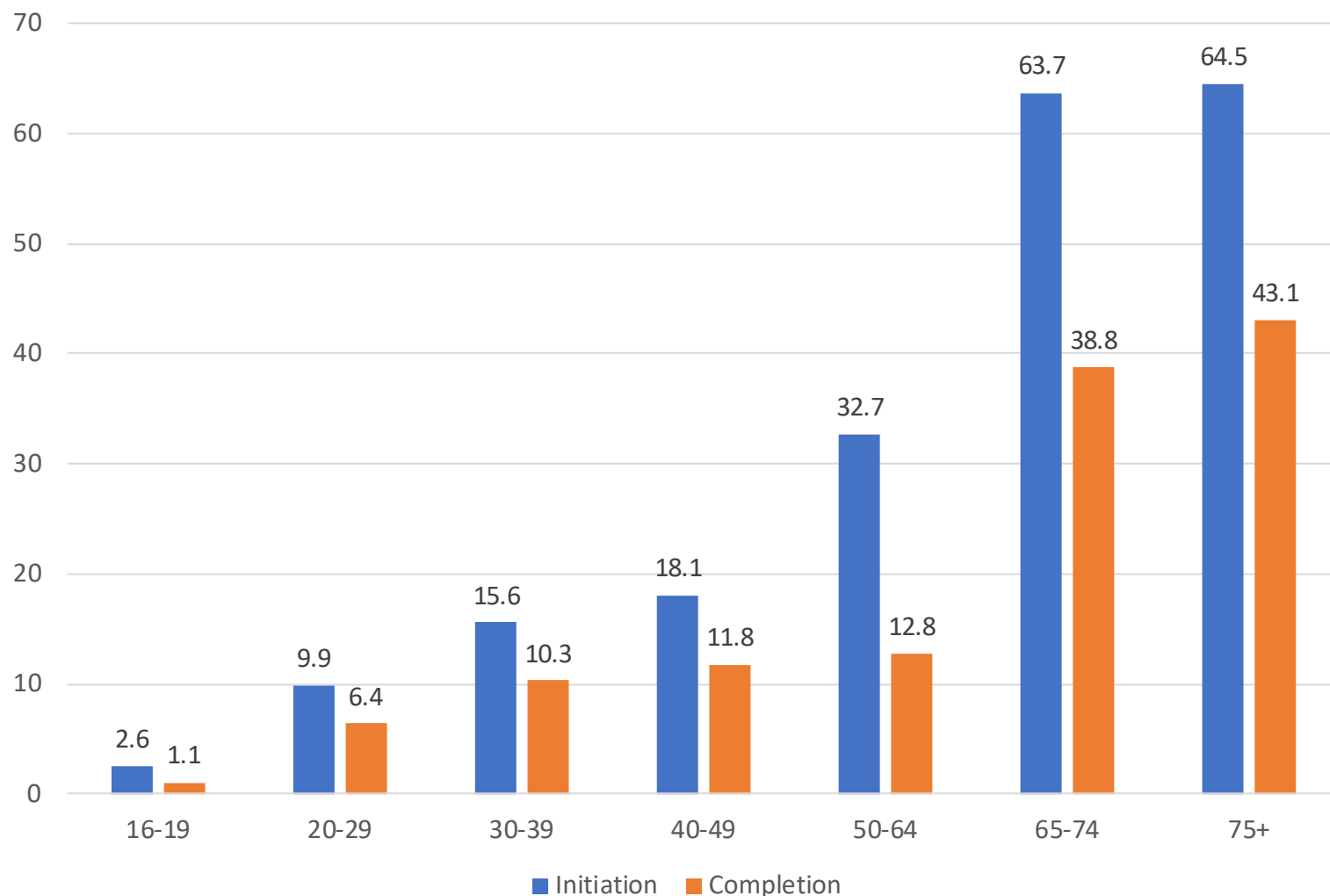
More than 1.1M people aged 65 years or older have received one or more doses of vaccine (640%).

716K people age 65 or older have completed vaccination series (40.6%)

Persons 75 years of age and older have the highest initiation coverage (48.6% up from 40.8% last week)

Initiation in those 50-64 has doubled in a month

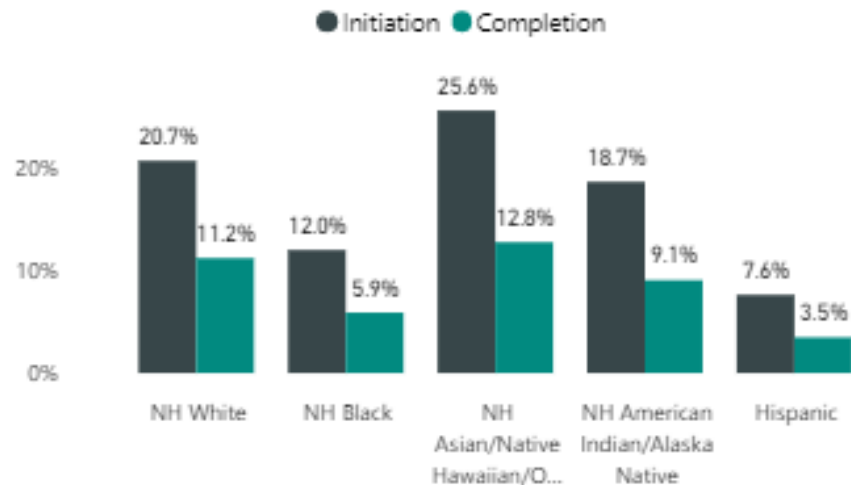
Vaccine Coverage by Age Group



Coverage by Race and Ethnicity: State Level

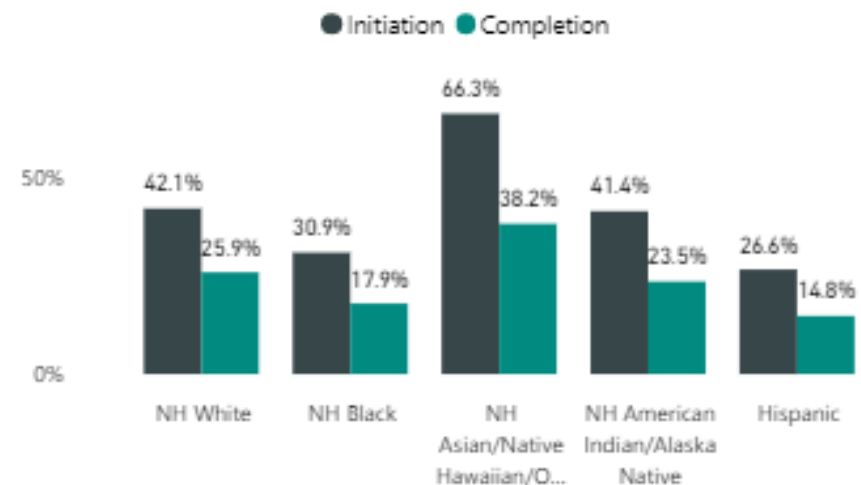
16 and older

Coverage by Race - State Level



65 and older

Coverage by Race - State Level



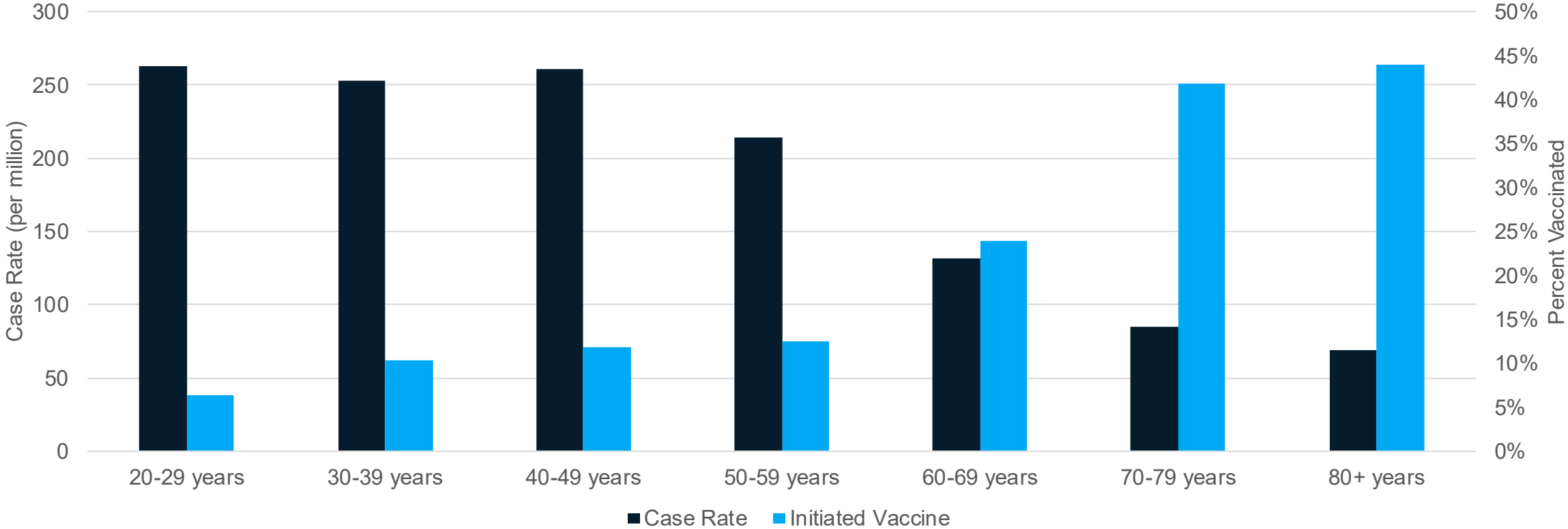
31% data missing or unknown

Initial Dose Coverage was highest among those of Asian, Native Hawaiian or Pacific Islander (25.6%), White Race (20.7%), American Indian (18.7%), Black or African American (12%), and Hispanic (7.6%) background

Initial Coverage disparities are seen in 65+ age group as well: 66.3% Asian, Native Hawaiian or Pacific Islander, 42.1% White, 41.1% American Indian or Alaskan Native, 30.9% Black or African American, and 26.6% Hispanic

Comparing Recent Case Rates and Vaccine Coverage

Most Recent 7-day Case Rate Average and Percent of Those Who Have Completed Vaccine



- Case rates per million are higher for those younger age groups
- Vaccine Initiation increases with increasing age
- Vaccination has helped prevent cases, but we have not yet achieved herd immunity in most age groups

Source: CHECC & EM Resource

Science Round Up

CDC updated Operational Strategy for K -12 Schools: Multilayered prevention strategy based on community transmission

- Universal and correct use of masks (required and prioritized for in person instruction)
- Physical distancing (maximized to the greatest extent possible for in person instruction)
- Handwashing and respiratory etiquette
- Cleaning and maintaining healthy facilities
- Contact tracing in combination with isolation and quarantine (6-foot definition unchanged)

Children can still experience severe symptoms due to COVID -19

- Although rare, children may still experience Multi-System Inflammatory Syndrome in Children (MIS-C)

The race between vaccines and variants: vaccinating before widespread variant exposure

- Uncontrolled variants necessitate higher vaccine coverage
- Forecasting trends in Michigan

Prevention Strategies to Reduce Transmission of SARS-CoV-2 in Schools

Use and Layer Prevention Strategies

1. Universal and correct use of masks
2. Physical distancing
3. Handwashing and respiratory etiquette
4. Cleaning and maintaining healthy facilities
5. Contact tracing in combination with isolation and quarantine

Schools providing in-person instruction should prioritize:

1. Universal and correct use of masks required
2. Physical distancing maximized to the greatest extent possible.

Close Contact Definition Unchanged

- Close contact: someone who was within 6 feet of a person diagnosed with COVID-19 for a total of 15 minutes or more over a 24-hour period. Applies regardless of whether either person was wearing a mask.
- For schools that use less than 6 feet between students in classrooms, the definition of close contacts should not change.
- Students sitting less than 6 feet next to another student or person diagnosed with COVID-19 for a total of 15 minutes or more should quarantine at home and be referred for testing.

Update to School Guidance from CDC

The higher the level of community transmission, the more likely that SARS-CoV-2 will be introduced into the school facility from the community, which could lead to in-school transmission **if layered prevention strategies are not in use**

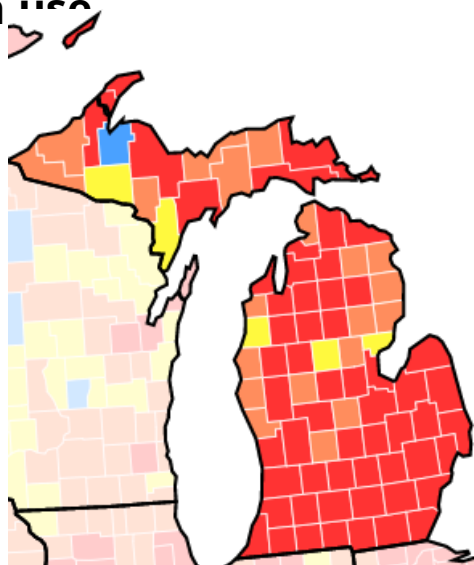


Table 1. CDC Indicators and Thresholds for Community Transmission of COVID-19¹

Indicator	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days ²	0-9	10-49	50-99	≥100
Percentage of NAATs that are positive during the past 7 days ³	<5.0%	5.0%-7.9%	8.0%-9.9%	≥10.0%

Two measures determine level of risk of transmission: total number of new cases per 100,000 persons in past 7 days, and percentage of tests that are positive during the last 7 days. If the two indicators suggest different levels, the higher (more restrictive) threshold should be chosen.

The transmission level for any given location will change over time and should be reassessed weekly for situational awareness and to continuously inform planning and decision-making.

County-level data on total new cases in the past 7 days and test percent positivity are available on the County View tab in the [CDC COVID Data Tracker](#).

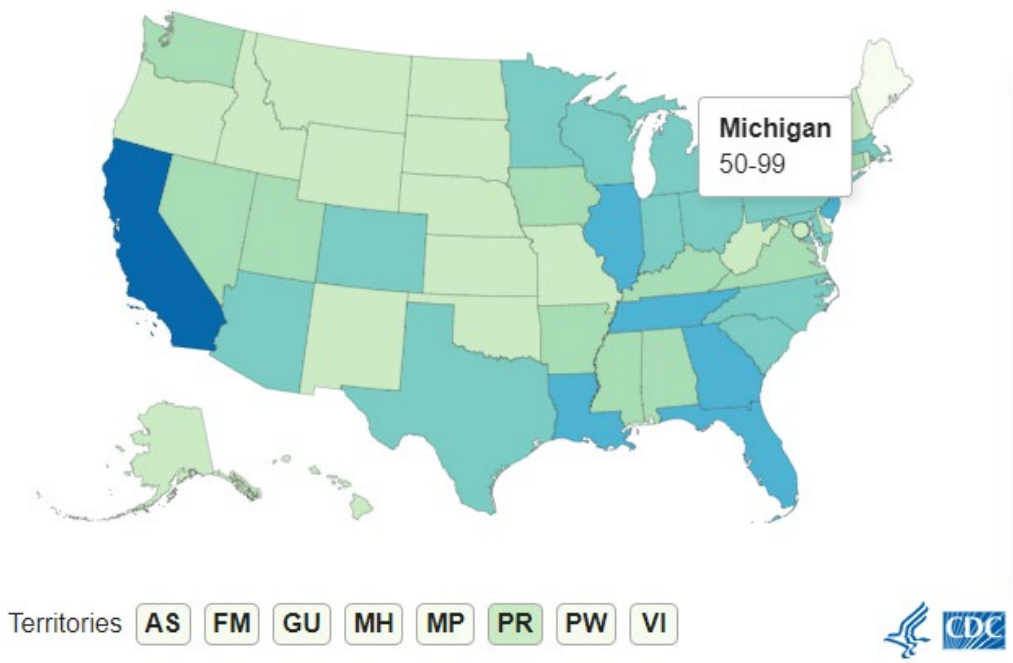
Distance in classrooms

- Between students in classrooms
 - In elementary schools, students should be at least 3 feet apart.
 - In middle schools and high schools, students should be at least 3 feet apart in areas of low, moderate, or substantial community transmission.
 - In areas of high community transmission, middle and high school students should be 6 feet apart, if cohorting is not possible.
- Maintain 6 feet of distance in the following settings:
 - Between adults and students, at all times in the school building.
 - When masks cannot be worn, such as when eating.
 - During activities when increased exhalation occurs, such as singing, shouting, band, or sports and exercise. Move these activities outdoors or to large, well-ventilated space, when possible.
 - In common areas such as school lobbies and auditoriums.

What is MIS-C?


Multi-System Inflammatory Syndrome in Children

- Inflammatory condition that impacts a child's organs (heart, digestive system, skin (rashes), brain, eyes, blood vessels) after SARS-CoV-2.
- Most severe in children older than 6 years old.



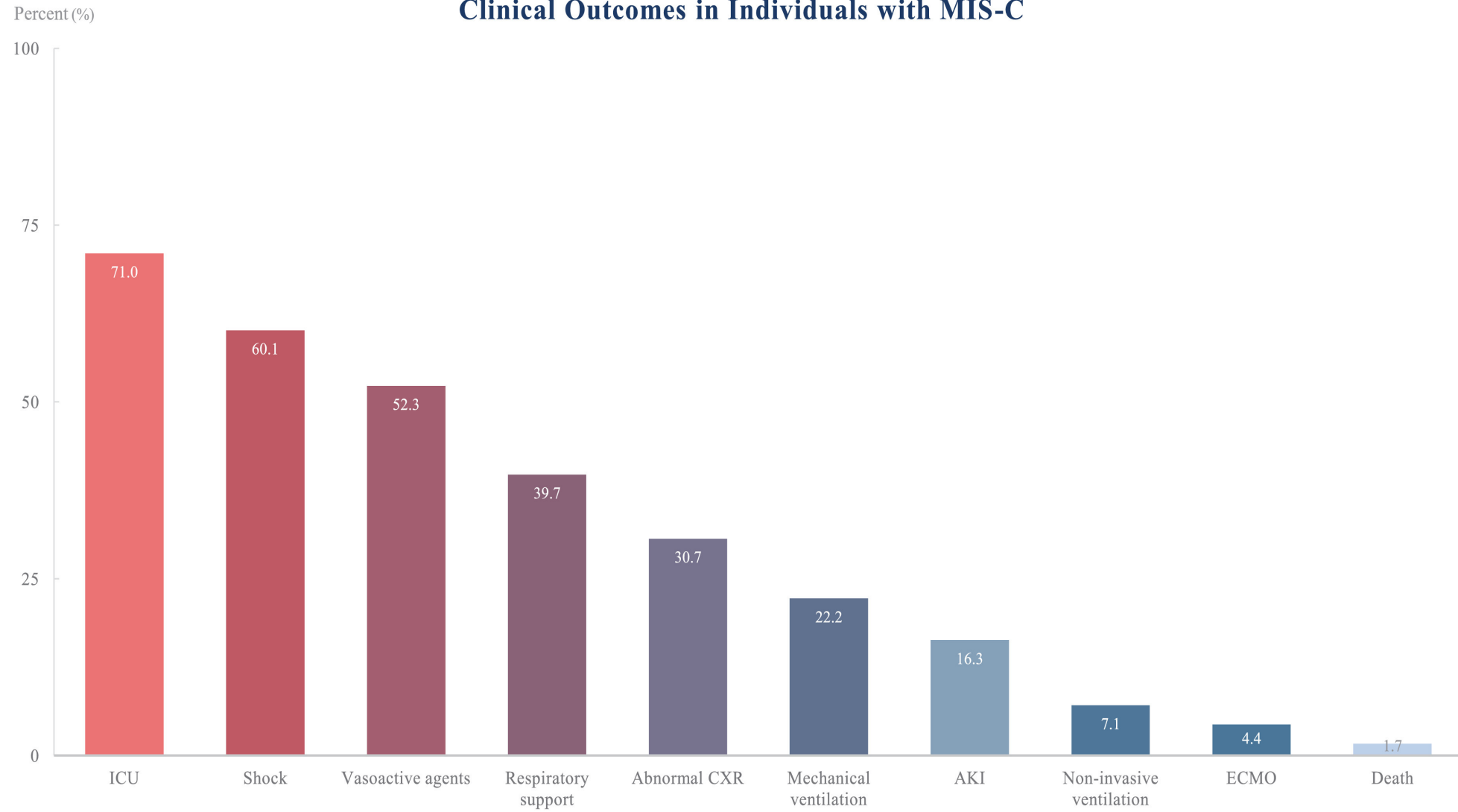
National Totals:	
Total MIS-C Cases:	Total MIS-C Deaths:
2617	33

Michigan Totals:	
Total MIS-C Cases:	Total MIS-C Deaths:
95	<5
	Total ICU Cases:
	65

 **WOOD TV8** @WOODTV

10-year-old West Michigan boy undergoes four amputations after developing MIS-C, a rare illness that can emerge after kids catch coronavirus:

Clinical Outcomes in Individuals with MIS-C





The race between vaccines and variants: vaccinating before widespread variant exposure

Two example scenarios:

Strong vaccine coverage & social distancing

- Overall case declines
- Easier to control variant spread

- Lower case fatality rate (due to fewer cases and less variant spread)
- Prevents opportunities for new variants/vaccine escape

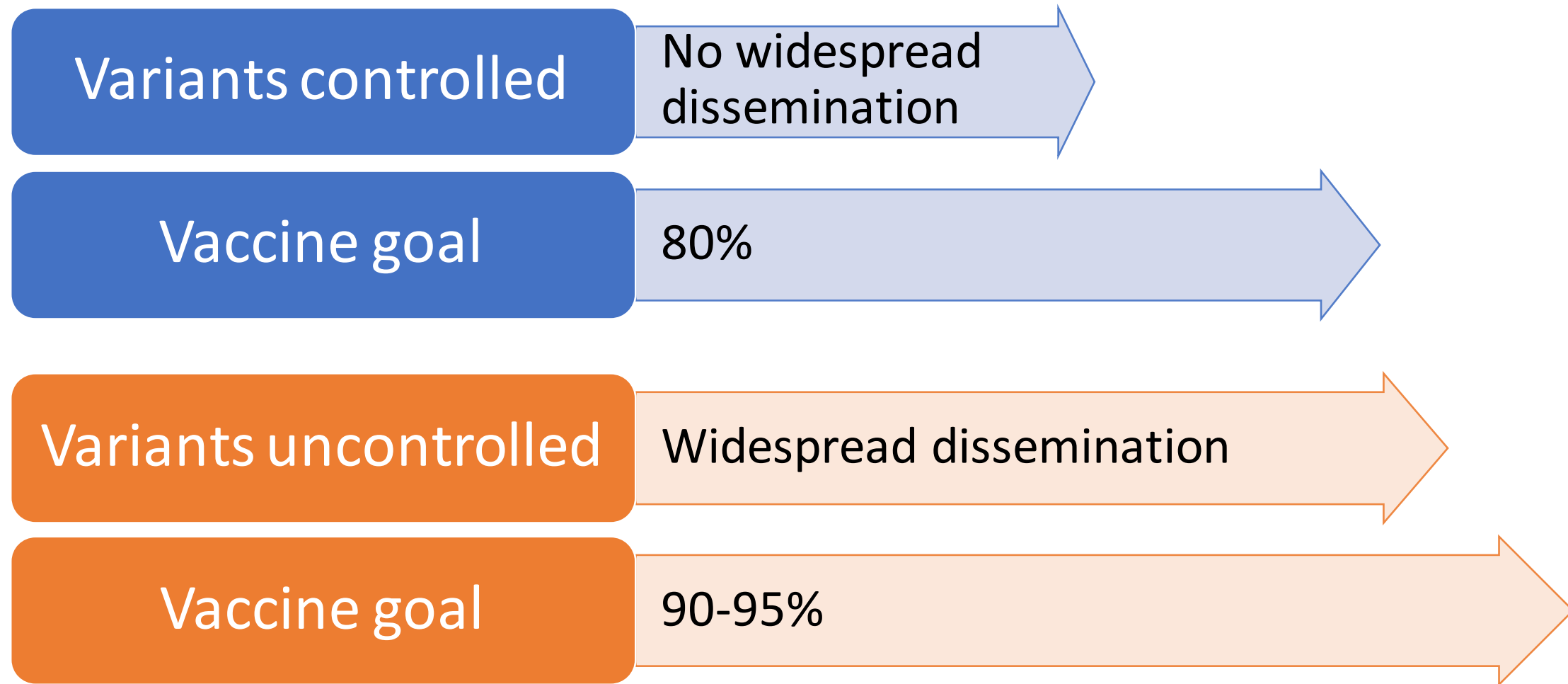
Less vaccine coverage & social distancing

- Case increases
- Variants uncontrolled

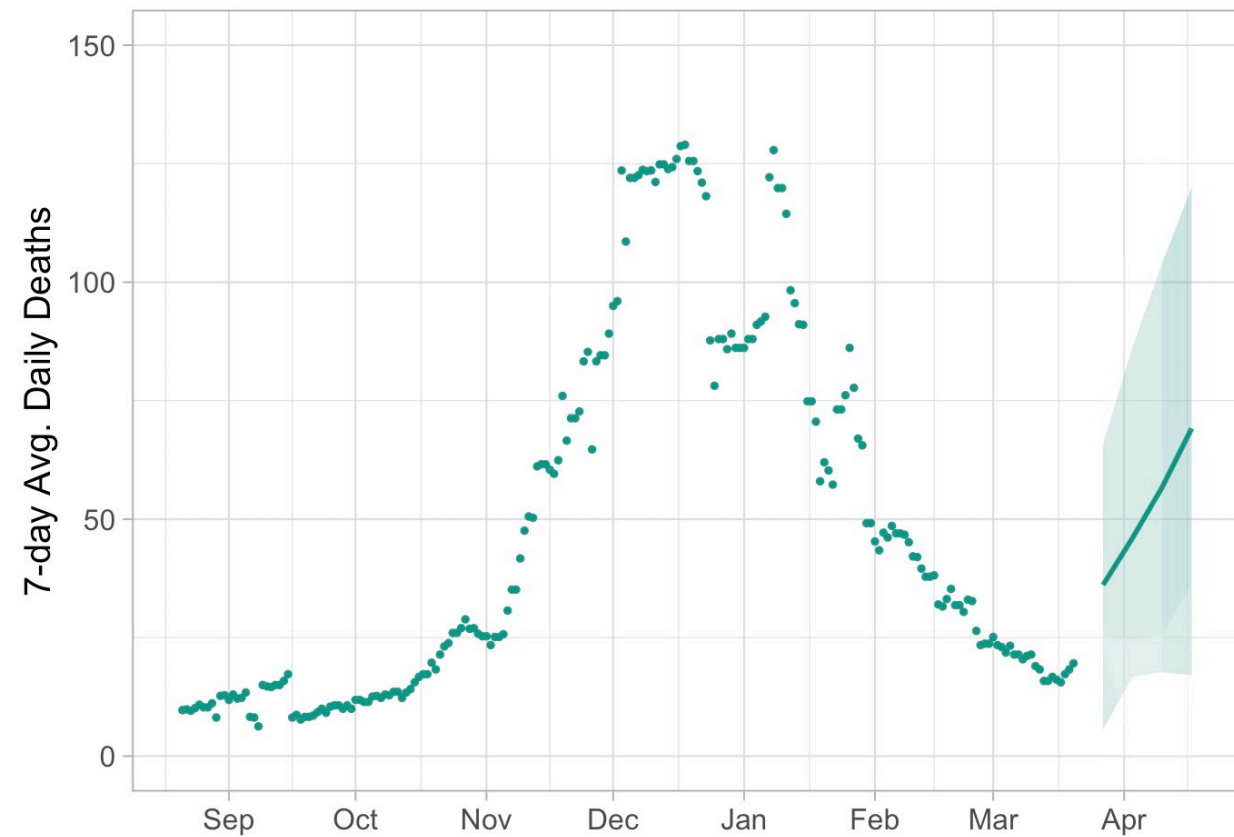
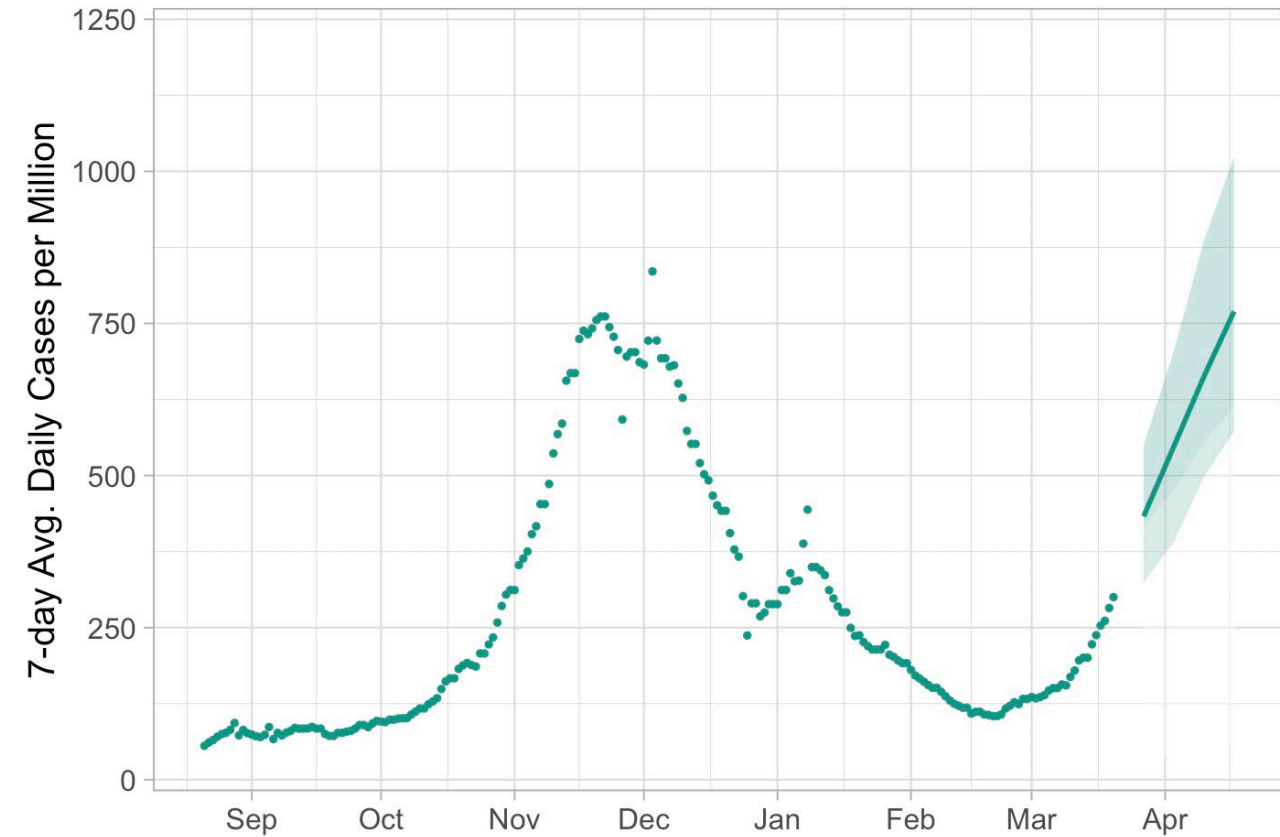
- Higher case fatality rate (more cases, more variant spread)
- More opportunities for variants/vaccine escape



The race between vaccines and variants: uncontrolled variants necessitate higher vaccine goals



Based on current increase rates, Michigan cases and deaths could return to winter surge levels

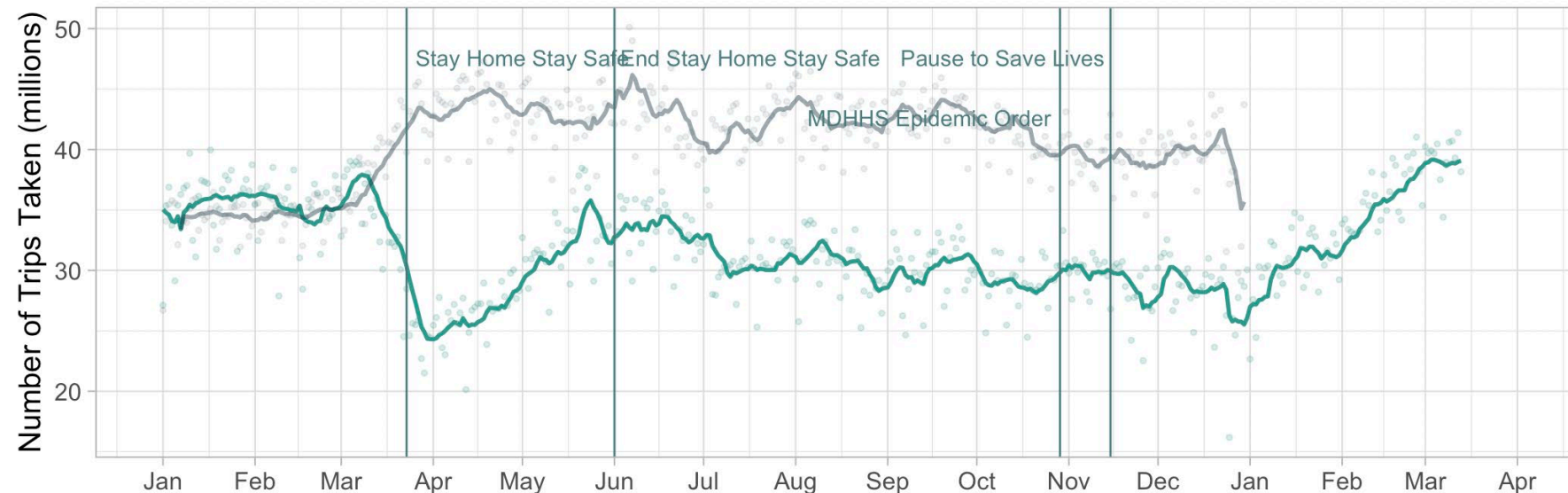
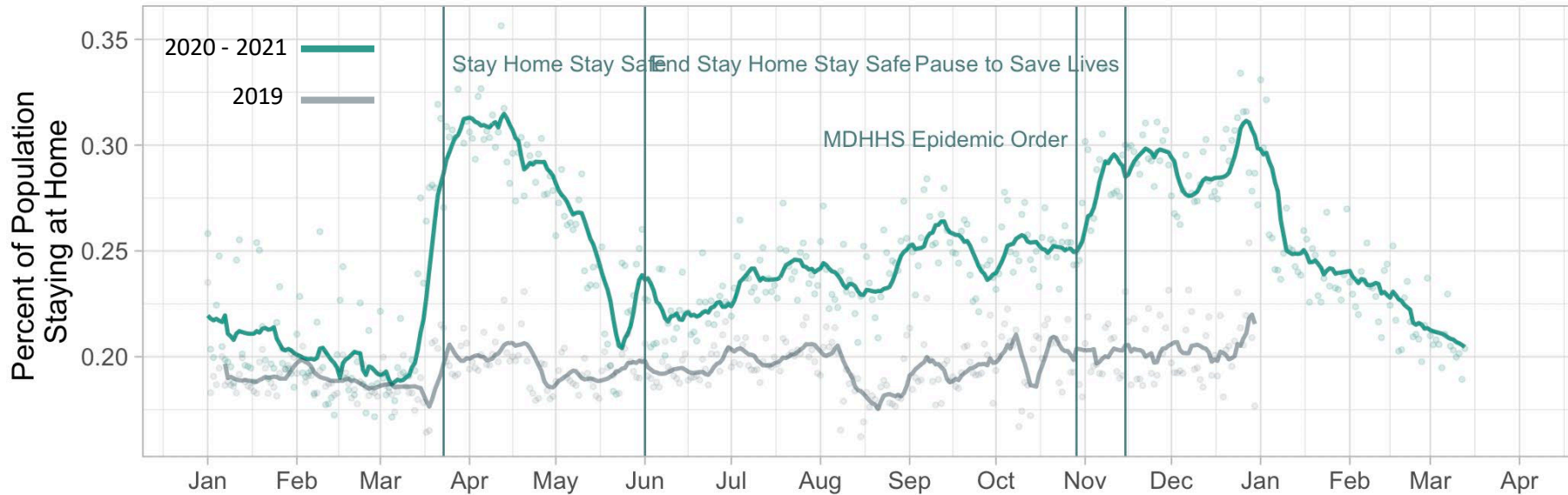


Line is the ridge regression model projection, and the shaded region represents the 95% confidence region (2.5% and 97.5% quantiles). Cases are plotted by report date.

Sources: Data from MDHHS/JHU,
[UM Ridge Regression Model](#)



How many people are staying at home in Michigan?



- % Stay-at-home levels have recently declined to 2019-2020 levels
- Number of trips taken/day has recently increased to 2019-2020 levels
- Most recent data is 3/13/21 (data as of 3/23/21)

Data Source: [Bureau of Transportation Statistics](#)

Unacast mobility patterns in MI

- Most recent data shows a return toward baseline mobility patterns, particularly for non-essential visits.
- Encounter density has stayed relatively low.
- Data through 3/18/21 (data as of 3/22/21)

unacast social distancing scoreboard

<https://www.unacast.com/COVID19/social-distancing-scoreboard>

