MI COVID RESPONSE DATA AND MODELING UPDATE

NOTE: All data as of July 13 unless otherwise noted

July 14, 2021

Executive summary

Percent Positivity (2.0%) is increasing for two weeks (up from 1.8% last week), and **Case Rate (**16.8 cases/million) have increased for the first time in three months (up from 12.4 last week)

Michigan has the **31st lowest number of cases (30th last week),** and **15th lowest case rate (8th last week)** in the last 7 days (source: CDC COVID Data Tracker)

Percent of inpatient beds occupied by individuals with COVID has decreased 9% since last week and is decreasing for eleven weeks. There are 1.3% inpatient beds occupied by COVID-19 patients.

Michigan has the **9th lowest inpatient bed utilization (13th last week),** and the **9th lowest adult ICU bed utilization (15th last week)** in the country (source: US HHS Protect)

Deaths have decreased 40% since last week. There were 27 COVID deaths between Jun 30 and Jul 6, and the **Death Rate** is 0.4 deaths per million residents.

Michigan has the **40th lowest number of deaths (T21st last week),** and **T21st lowest death rate (T7th last week)** in the last 7 days (source: CDC COVID Data Tracker)

The 7-day average **state testing rate** has decreased to 1,097.0 tests/million/day. **Daily diagnostic tests (PCR)** is 10.6K per day, and the **weekly average for PCR and antigen tests** conducted in Michigan is 19.4K.

9.58 million **COVID-19 vaccine** doses reported to CDC, 4.79 million people have completed their vaccine series

Agenda

Status of COVID-19 Epidemiological Risk

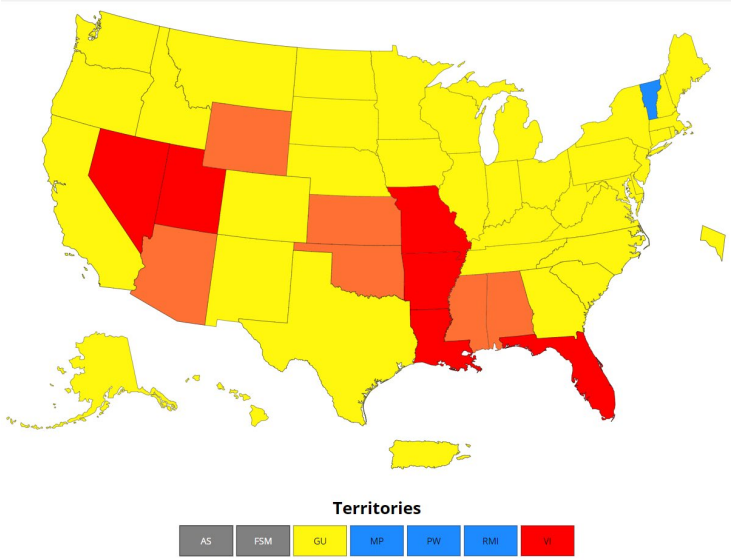
- **State-by-state comparison of epidemic spread**
- Michigan epidemic spread
- Public health response

Science round-up

Global and National Comparisons

What we see today (data through 7/13):

- Globally, 187,722,824 cases and 4,047,669 deaths
- Countries with the highest number of cases are U.S. (33,911,823), India (30,907,282), and Brazil (19,151,993)
- Within the U.S., California (3,733,743), Texas (3,007,562), & Florida (2,376,643) lead the nation in total cases
- CDC Data Tracker currently lists 4 states and territories at low transmission level which no longer includes MI
- Michigan currently has identified 13,464 variants of concern (VOC)*
  - Cumulatively, the vast majority are B.1.1.7 (13,023 which is 97%).
    - Other VOCs include B.1.351 (0.6%), P.1 (2.2%) and B.1.617.2(0.4%)
  - In the 4 most recent weeks,
    - 93.2% of specimens were Alpha (B.1.1.7)
    - 0.5% were Beta (B.1.351)
    - 3.8% were Gamma (P.1)
    - 1.7% were Delta (B.1.617.2)



* CDC removed Episilon (B.1.427/B.1.429) from the lists of VOCs

Key Messages: COVID-19 Spread

Statewide positivity has increased to 2.0% (last week: 1.8%)

- One week percent change is up 14% (vs. up 36% last week)
- Increasing for two weeks (up 63% since Jun 26 low)
- Positivity is increasing in all MERC regions, but remains <3% in all regions

Case rate (16.8 cases/million) is increasing across the state (last week: 12.4 cases/million)

- One week increase of 15% (vs. 12% decrease last week)
- Increasing for a week and half (26% increase since Jun 26 low)
- Cases per million are increasing or plateaued in most MERC regions
- Select variants in Michigan: 13,023 confirmed Alpha (B.1.1.7); 78 confirmed Beta (B.1.351); 309 confirmed Gamma (P.1); and 54 confirmed Delta (B.1.617.2)

Number of active outbreaks is down 14% from last week

- Twelve new outbreaks were identified in the past week

Confirmed and probable case indicators

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

Risk levels: Low | A | B | C | D | E

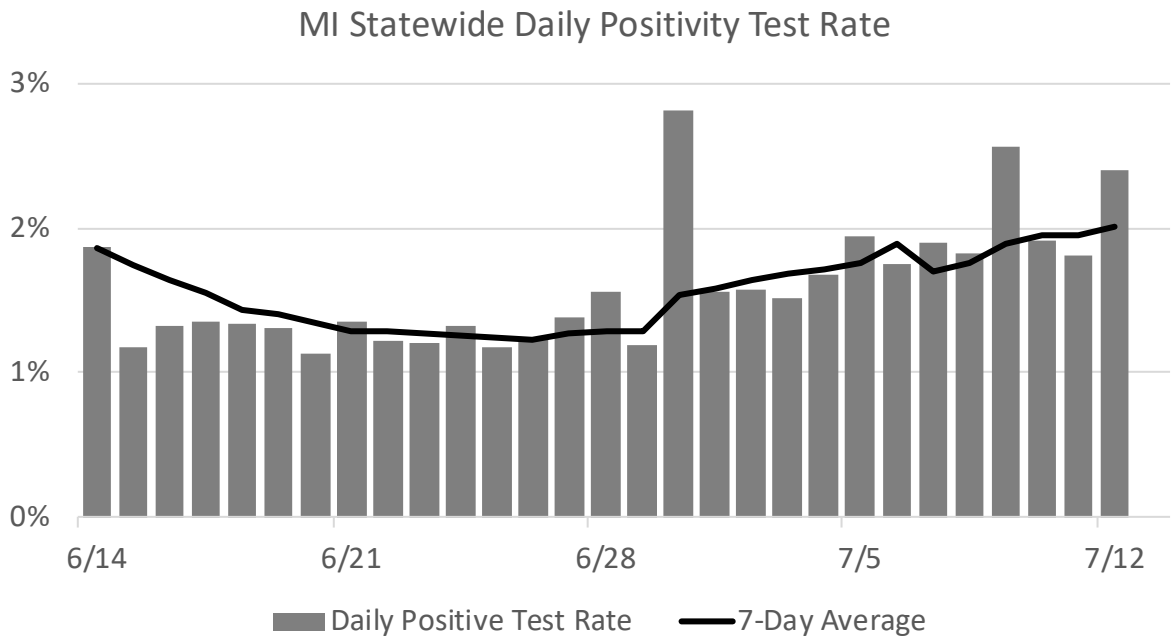
	Overall Risk Level	Absolute Cases (per million)	CDC Case Trend	Average Percent Positivity	Positivity Trend	Tests (per million)	% IP Beds Occupied by COVID-19 Cases	% Occupied IP Beds Trend	Absolute Deaths (per million)	Death Trend
Detroit	A	18.1	elevated incidence plateau	1.9	Increase - 2wk	1145.1	1.4	Decrease - 11wk	0.5	<20 wkly deaths
Grand Rapids	A	16.2	decline [87 days]	2.5	Increase - 1wk	1012.1	1.3	Decrease - 11wk	0.1	<20 wkly deaths
Kalamazoo	A	17.9	decline [88 days]	2.3	Increase - 1wk	993.8	1.7	Decrease - 11wk	0.4	<20 wkly deaths
Saginaw	A	15.2	elevated incidence plateau	2.0	Increase - 1wk	917.2	0.6	Decrease - 11wk	0.2	<20 wkly deaths
Lansing	A	14.1	elevated incidence plateau	1.6	Increase - 2wk	970.9	1.0	Decrease - 11wk	0.2	<20 wkly deaths
Traverse City	A	9.7	elevated incidence plateau	1.6	Increase - 2wk	971.4	0.6	Increase - 1wk	0.6	<20 wkly deaths
Jackson	A	13.7	elevated incidence plateau	2.6	Increase - 1wk	942.3	1.2	Increase - 1wk	0.5	<20 wkly deaths
Upper Peninsula	A	14.6	elevated incidence plateau	2.2	Increase - 2wk	1011.0	0.4	Decrease - 1wk	0.5	<20 wkly deaths
Michigan	A	16.8	elevated incidence plateau	2.0	Increase - 1wk	1097.0	1.3	Decrease - 11wk	0.4	Decrease - 10wk

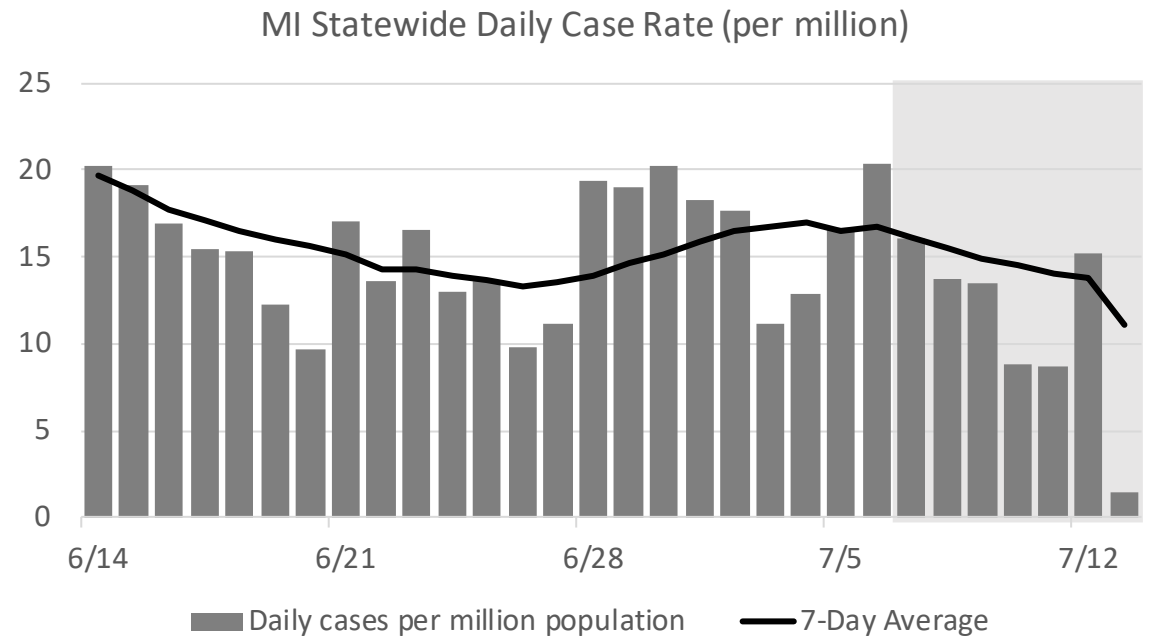
Cases Low: <7 | A: 7-20 | B: 20-40 | C: 40-70 | D: 70-150 | E: >=150

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

PUBLIC HEALTH

Percent Positivity and Case Rate Trends





- Positivity has been gradually increasing for the previous two weeks
- Case rates have been gradually increasing for the past week and half and backfill is expected in show future increases

*Source: MDSS and MiStartMap.info

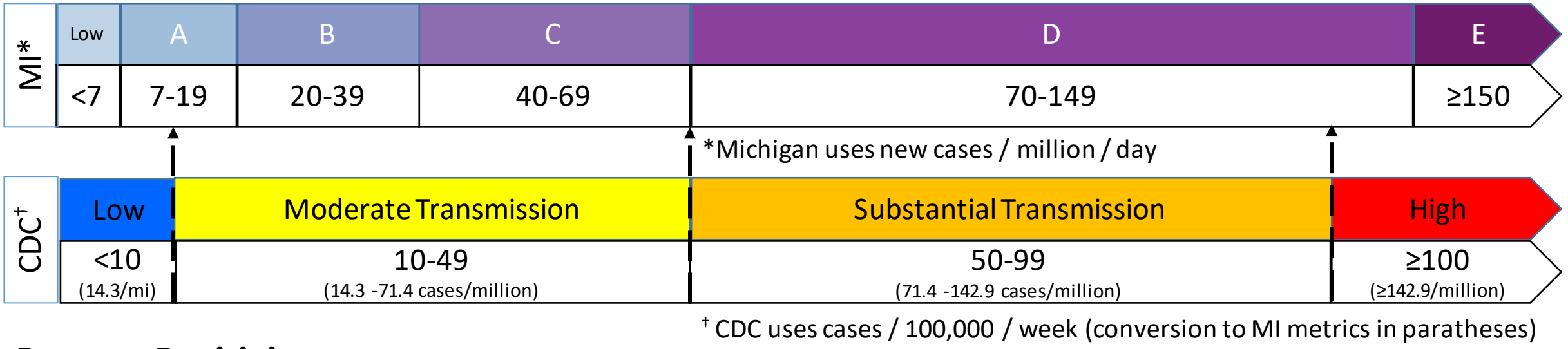
Overview of metrics for individuals <12 years

	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)
1	Detroit	735529	1134247	28719	9.1	12.4	12.9	11.4	0
2	Grand Rapids	230120	350652	9835	2.6	11.3	2.6	7.4	0
3	Kalamazoo	140422	214801	5322	1.7	12.1	3.1	14.4	0
4	Saginaw	78759	122834	3255	0.1	1.3	0.0	0.0	0
5	Lansing	78140	119915	3155	1.6	20.5	2.4	20.0	0
6	Traverse City	53099	83462	1551	0.4	7.5	0.3	3.6	0
7	Jackson	41274	64091	1496	0.0	0.0	0.1	1.6	0
8	Upper Peninsula	34645	53875	1405	0.4	11.5	0.6	11.1	0
99	Michigan	1391988	2143877	54782	16.3	11.7	22.0	10.3	0

Note: Data as of 7/13; case data 7/6, hospitalization data 7/13. Hospitalization data is for pediatric patients (<18)

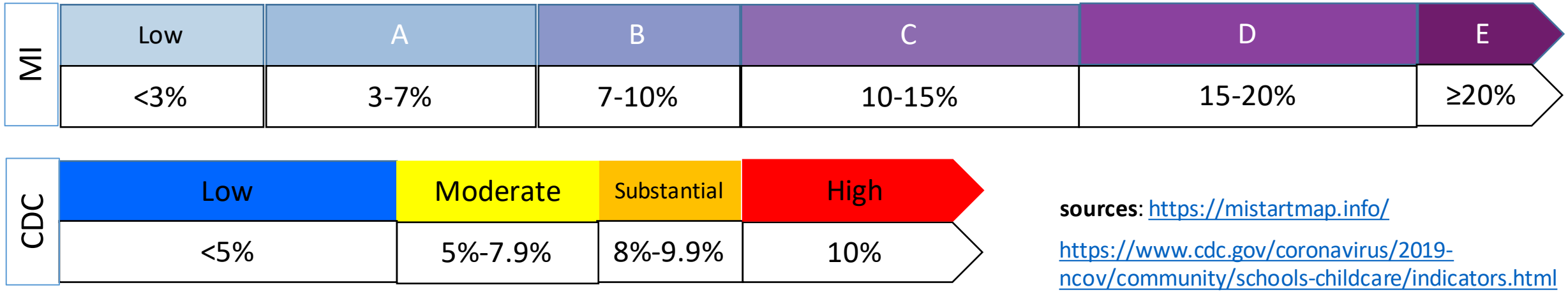
Comparing CDC community transmission thresholds to MI levels

Case Rate*†



† CDC uses cases / 100,000 / week (conversion to MI metrics in paratheses)

Percent Positivity

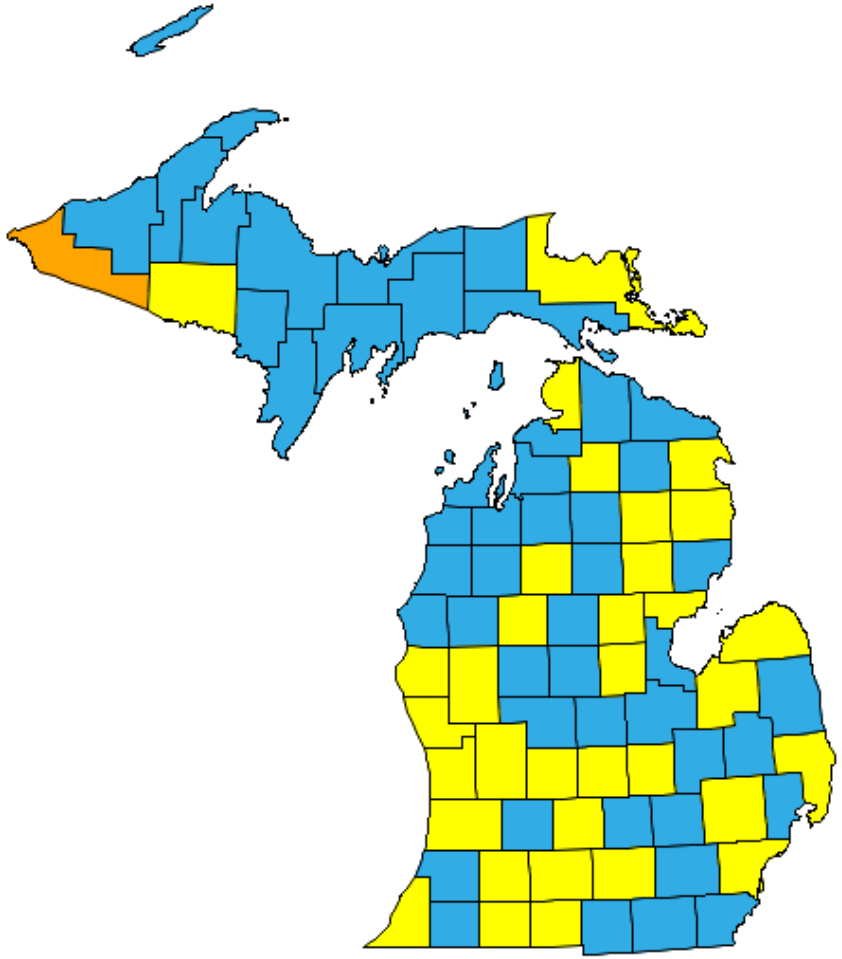


sources: https://mistartmap.info/

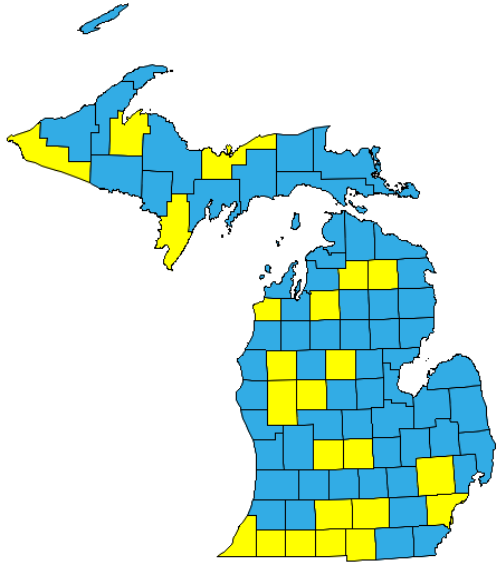
https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/indicators.html

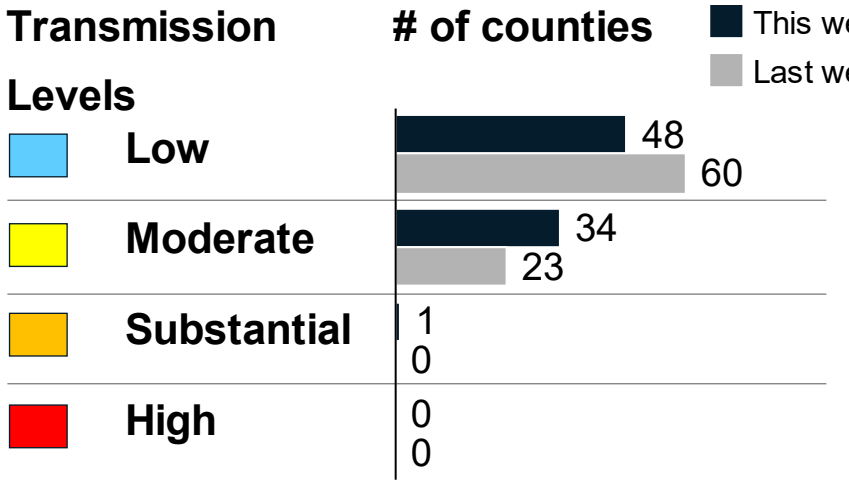
Adjusted* CDC Transmission Levels, 7/6-7/12

This Week, 7/6-7/12



Last week, 6/29-7/5





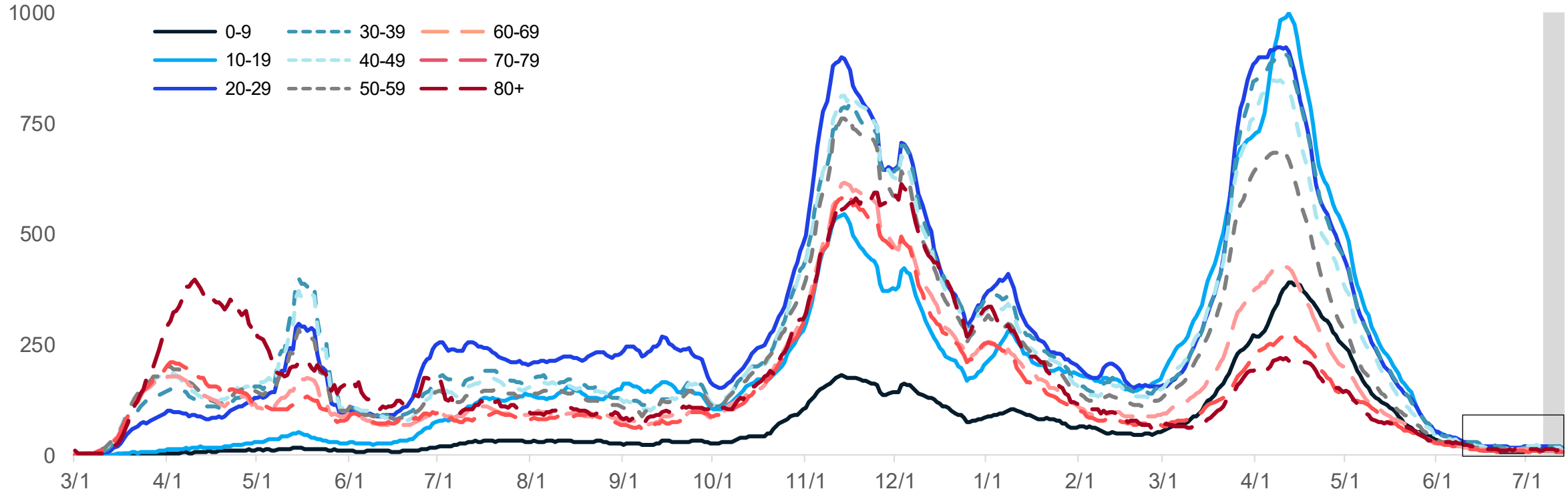
Updates since last week:

- 48 of 83 counties met low transmission level this week, a 12 county decrease
- 34 of 83 counties met moderate transmission classification, an 11 county increase from last week
- 1 of 83 counties met substantial transmission classification, a 1 county increase from last week

*Source: SEOC Testing Results – Excluding MDOC; MDSS – Cases by onset date incorporating 7-day reporting lag; CDC Levels of Community Transmission are described at https://covid.cdc.gov/covid-data-tracker/#county-view

Age group: average new daily cases

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

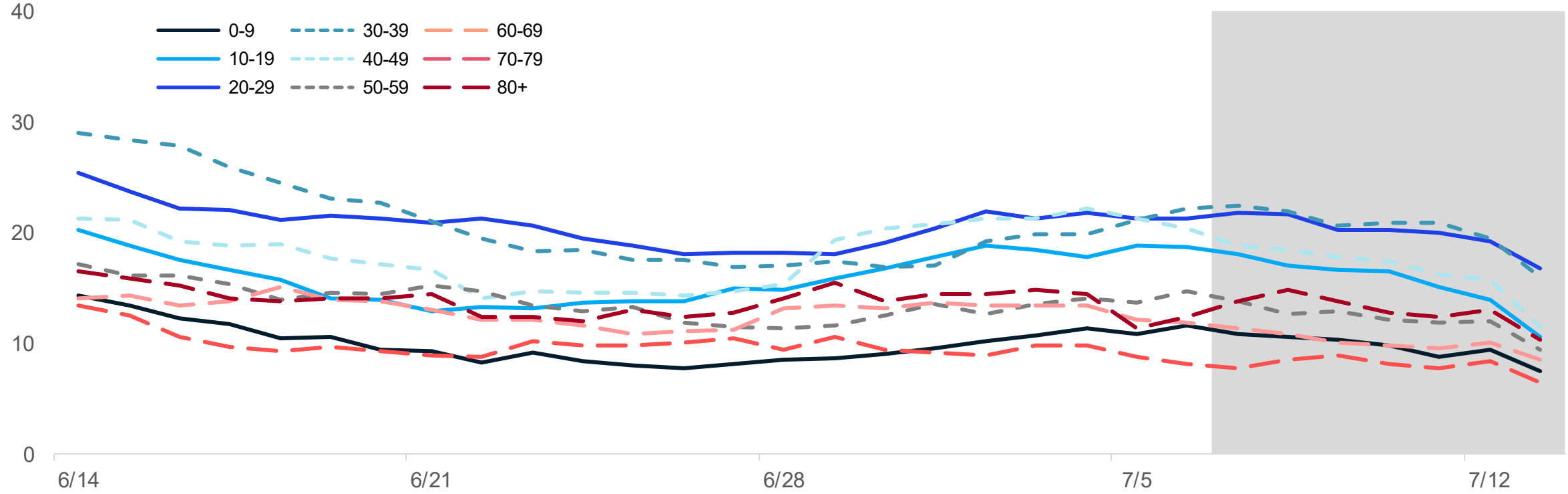


- Case rate trends for most age groups by decade are plateaued
- Case rates for all age groups are between 8 and 22 cases per million (through 7/6)

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

Age group: average new daily cases, last 30 days

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



- Case rate trends for most age groups by decade are plateaued
- Case rates for all age groups are between 8 and 22 cases per million (through 7/6)

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

Age group: average new daily cases and daily case rate

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	13.4	11.6	34% (+1-5)
10-19	23.4	18.7	18% (+1-5)
20-29	29.3	21.2	18% (+1-5)
30-39	26.9	22.1	27% (+6)
40-49	24.0	20.3	5% (+1-5)
50-59	19.9	14.7	26% (+1-5)
60-69	15.1	11.9	-12% (-1-5)
70-79	6.3	8.2	-23% (-1-5)
80+	5.1	12.4	-20% (-1-5)
Total¶	168.3	16.8	15% (21.1)

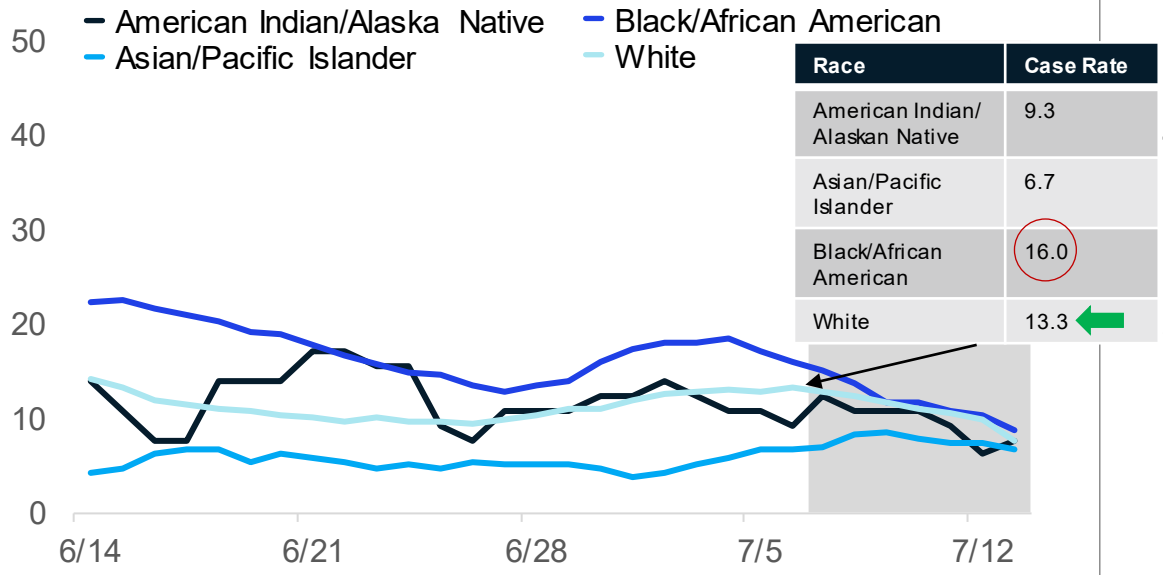
Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

- Average daily number of cases (29) is highest for those aged 20-29
- Avg. daily case rate (22.1 cases/mil) is currently highest for 30-39
- Case rates for all age groups are between 8 and 22 cases per million
- Case rate trends are no longer decreasing and have entered a low incidence plateau
- Case rates bottomed out on June 26, 2021

* Highest 7-day avg. following spring 2021 surge
¶ Total may not reflect state due to missing age data

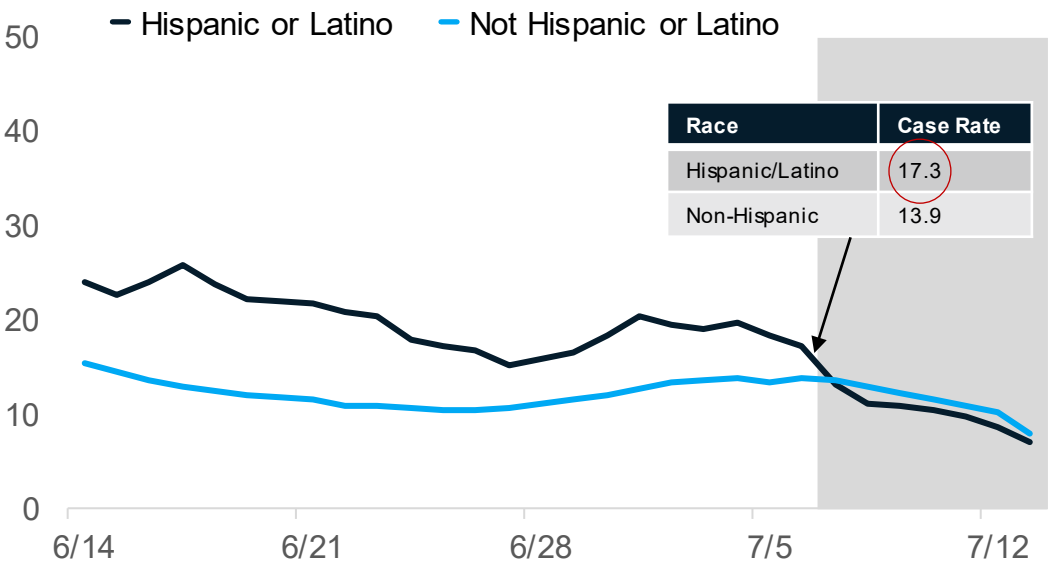
Average daily new cases per million people by race and ethnicity

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



Race	Case Rate
American Indian/ Alaskan Native	9.3
Asian/Pacific Islander	6.7
Black/African American	16.0
White	13.3

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



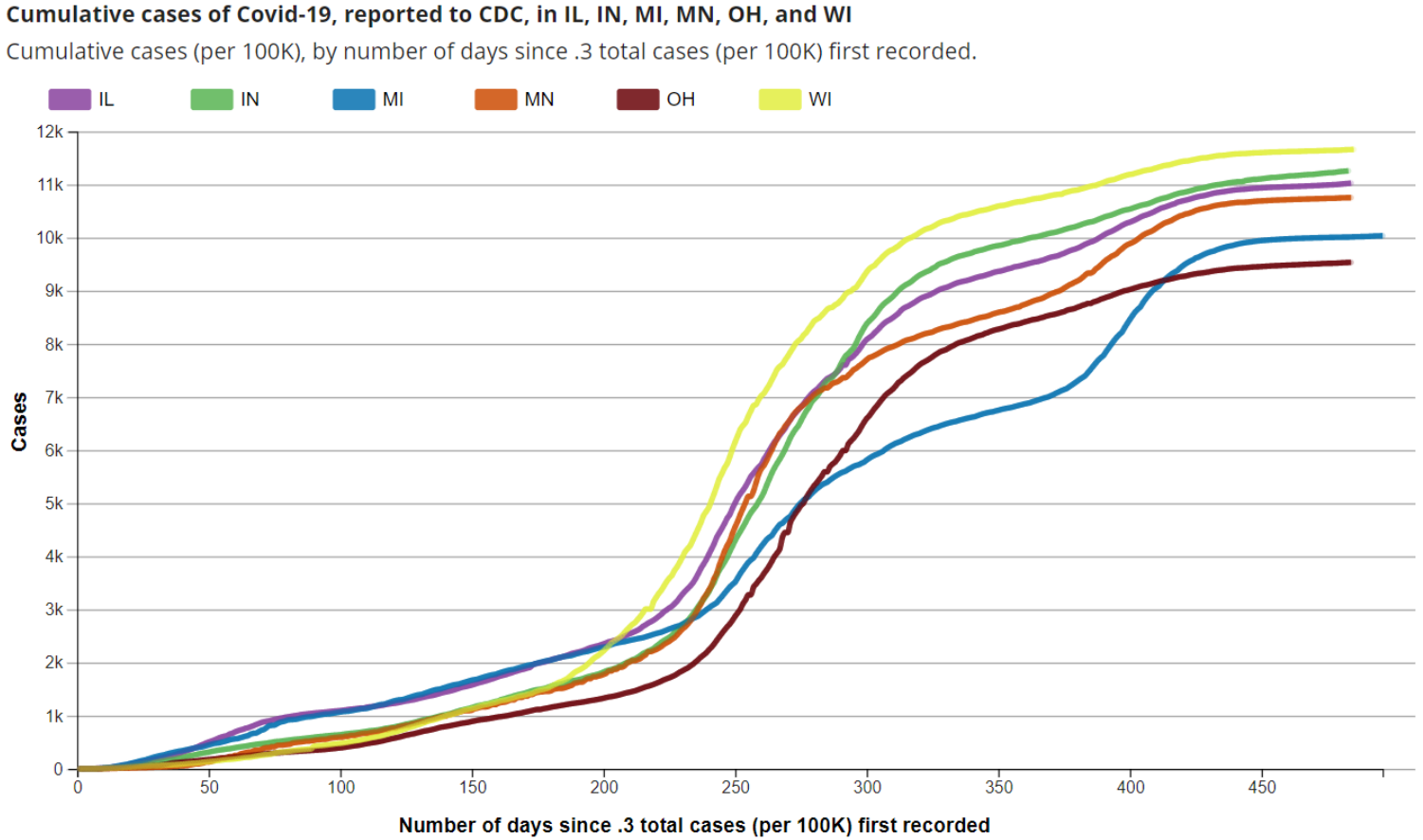
Race	Case Rate
Hispanic/Latino	17.3
Non-Hispanic	13.9

Updates since last week:

- Cases per million are plateaued for all races and ethnicities
- **Blacks/African Americans, and Hispanic/Latinos have the highest case rates**
- In the past 30 days, 16% (↔) of race data and 20% (↓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

Cumulative COVID-19 Case Rates: Midwest Comparison



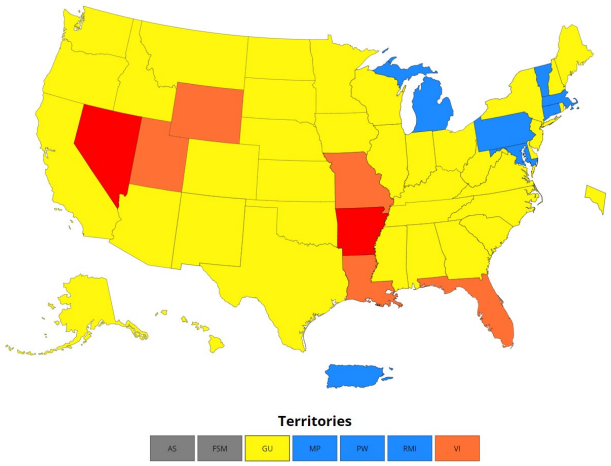
Michigan

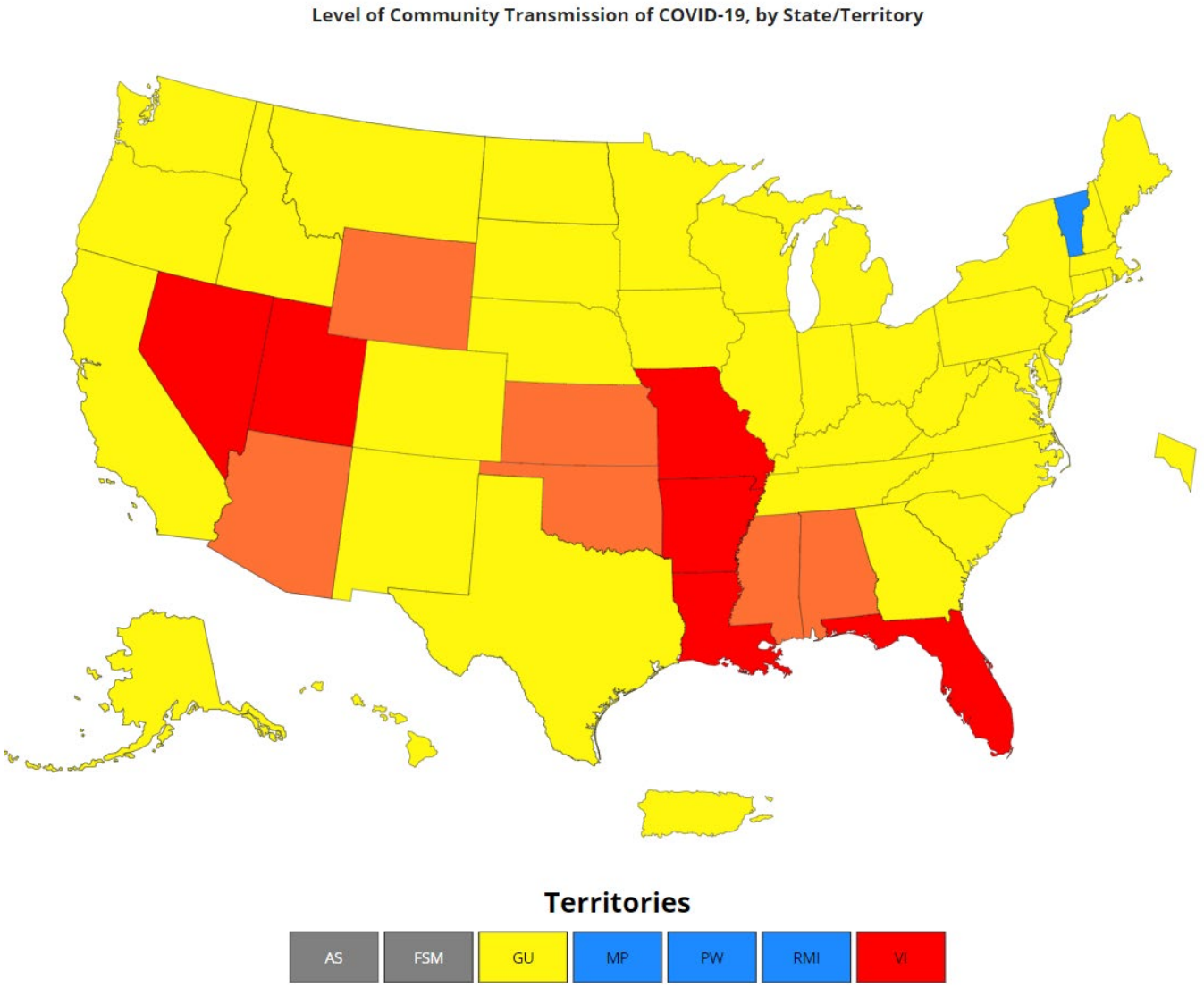
- Cumulative incidence per 100,000 cases in Michigan has been lower than other states in the Midwest following spring 2020 surge
- Michigan's mitigation policies helped control the spread of SARS-CoV-2 relative to other states in the Midwest, particular during surge in November and December
- The current trajectory in Michigan continues to be in the range of cumulative case rates of our Midwest neighbors

CDC Transmission Levels, U.S. state (data through 7/13/2020)

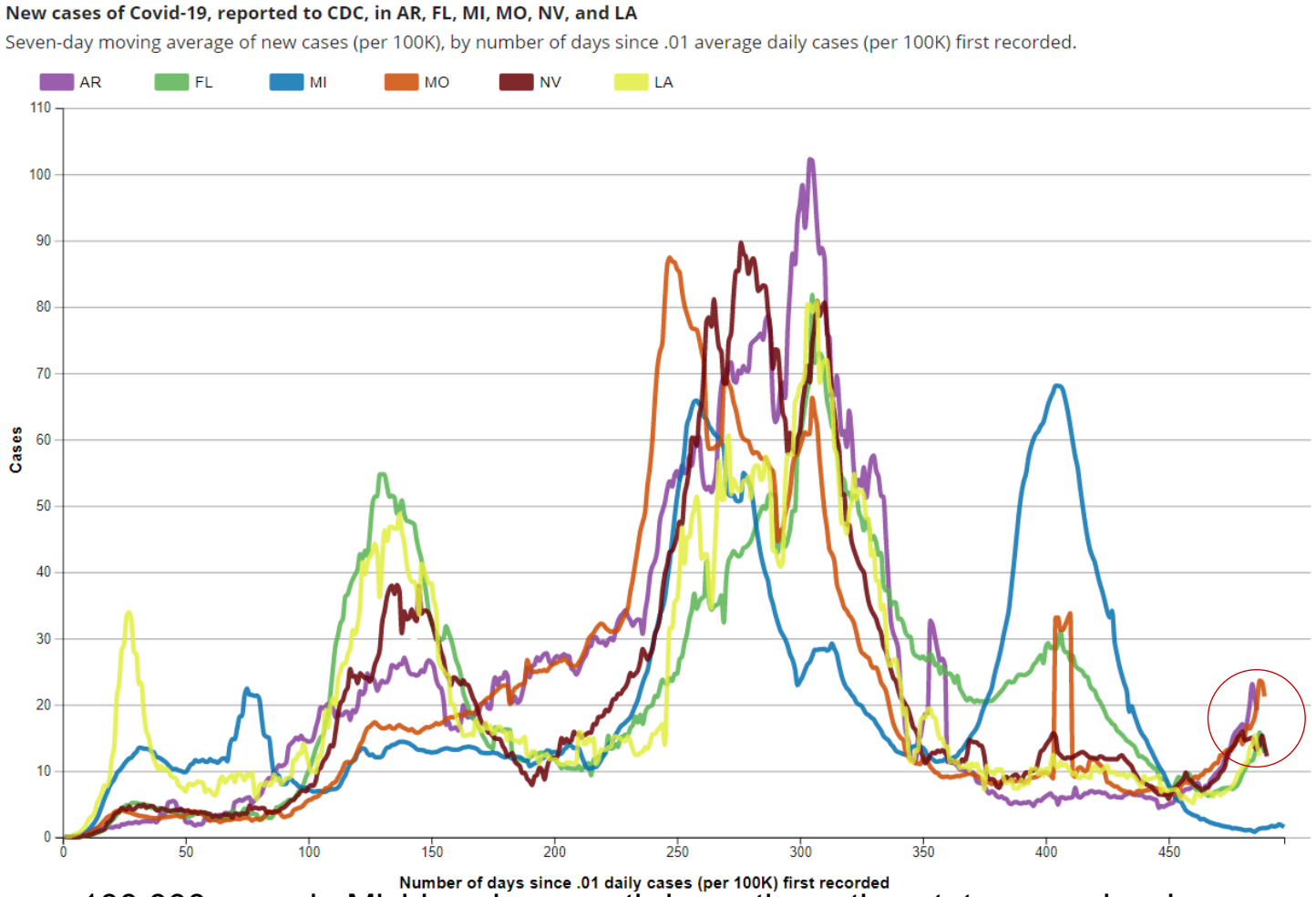
- Michigan is now at moderate transmission level
  - 14.7 Case/100,000 population
  - <3% positivity
- The number of jurisdictions at low transmission has declined (blue colored states)
- 6 jurisdictions have high transmission (red states); up 3 from 7 days ago

Last Week





Cumulative COVID-19 Case Rates: States with high Delta Comparison



Michigan

- Average daily incidence per 100,000 cases in Michigan is currently lower than other states experiencing a surge in delta cases

Source: CDC COVID Data Tracker – State Trend Comparison

Variants, transmissibility, severity, and vaccine effectiveness

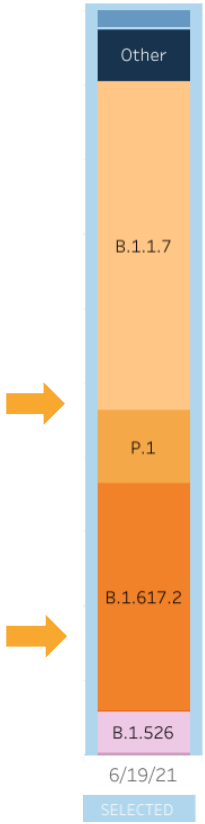
Strain	New WHO nomenclature	Transmissibility	Immune Invasiveness	Increased Severity	Vaccine effective at disease reduction?
Ancestral		-	-	-	✓
B.1.1.7	Alpha	~50% increased transmission	-	Increased hospitalizations and death	✓
B.1.351	Beta	~50% increased transmission	Reduced susceptibility to antibody treatment	-	✓
P.1	Gamma	-	Reduced susceptibility to antibody treatment	-	✓
B.1.427/B.1.429	Epsilon	~20% increased transmissibility	Modest decrease in susceptibility to monoclonal antibody treatment	-	✓
B.1.617.2	Delta	> 50% increased transmission	Reduced susceptibility to antibody treatment	Increased hospitalizations and death	✓

Source: CDC https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-info.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcases-updates%2Fvariant-surveillance%2Fvariant-info.html World Health Organization, accessed June 8, 2021. https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/

Certain mono-clonal antibody therapies are less effective in presence of some variants. Due to national increase in P.1 and B.1.315 variant infections, HHS has paused distribution of bamlanivimab and etesevimab together and etesevimab alone until further notice. FDA recommends health care providers use REGEN-COV.

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

SARS-CoV-2 Variants Circulating in the United States, Jun 6 – Jun 19



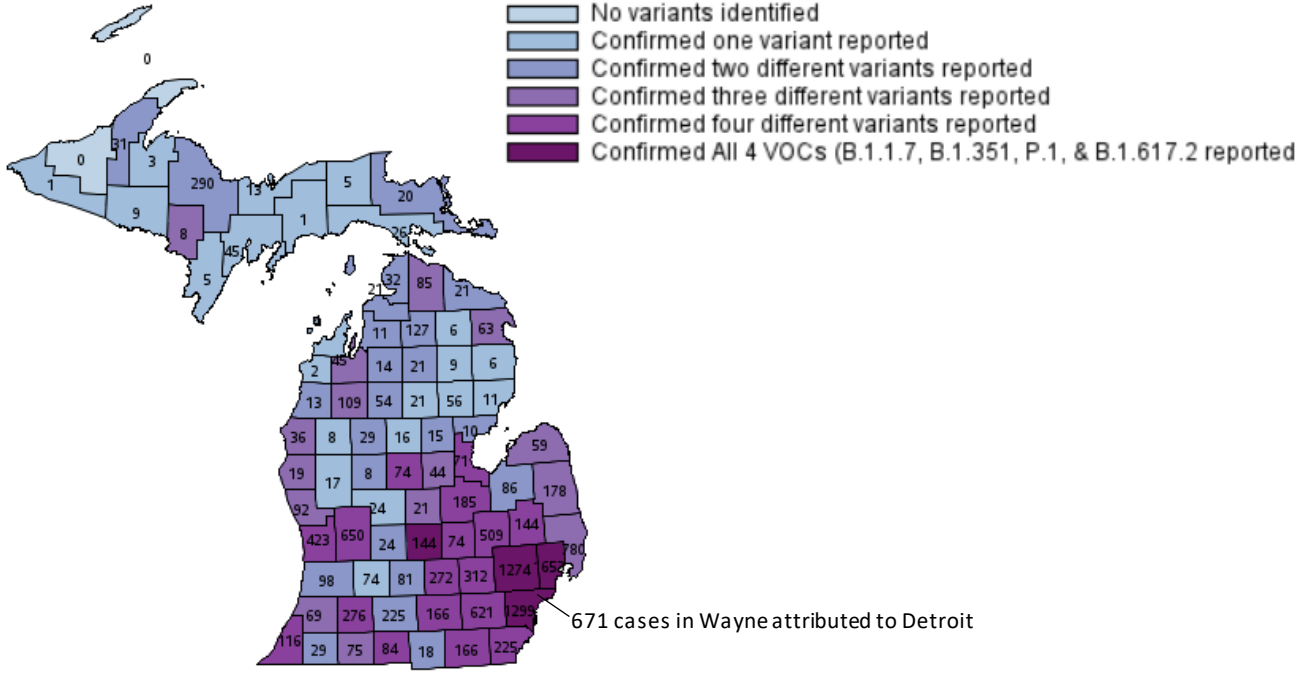
USA

	Lineage			Type	%Total	95%CI
Most common lineages #	B.1.1.7	Alpha		VOC	44.2%	39.8-48.8%
	B.1.617.2	Delta		VOC	30.4%	24.1-37.7%
	P.1	Gamma		VOC	9.9%	7.6-13.0%
	B.1.526	Iota		VOI	5.5%	4.3-6.9%
	B.1				2.2%	1.4-3.5%
	B.1.1.519				0.2%	0.1-0.4%
	B.1.2		†		0.0%	0.0-0.1%
Additional VOI/VOC lineages #	B.1.351	Beta		VOC	0.2%	0.1-0.5%
	B.1.429	Epsilon		VOI	0.1%	0.0-0.4%
	B.1.525	Eta	†	VOI	0.1%	0.0-0.4%
	B.1.427	Epsilon		VOI	0.1%	0.0-0.3%
	B.1.617.1	Kappa	†	VOI	0.0%	0.0-0.1%
	B.1.617.3		†	VOI	0.0%	NA
	P.2	Zeta	†	VOI	0.0%	NA
Other*	Other				6.9%	5.3-8.9%

* Other represents >200 additional lineages, which are each circulating at <1% of viruses
† Fewer than 10 observations of this variant during the selected time/location context
# Sublineages of P.1 and B.1.351 (P.1.1, P.1.2, B.1.351.2, B.1.351.3) are aggregated with the parent linteage and included in parent lineage's proportion. AY.1 and AY.2 are aggregated with B.1.617.2.

Data last updated July 13, 2021
Source: https://covid.cdc.gov/covid-data-tracker/#variant-proportions and MDSS

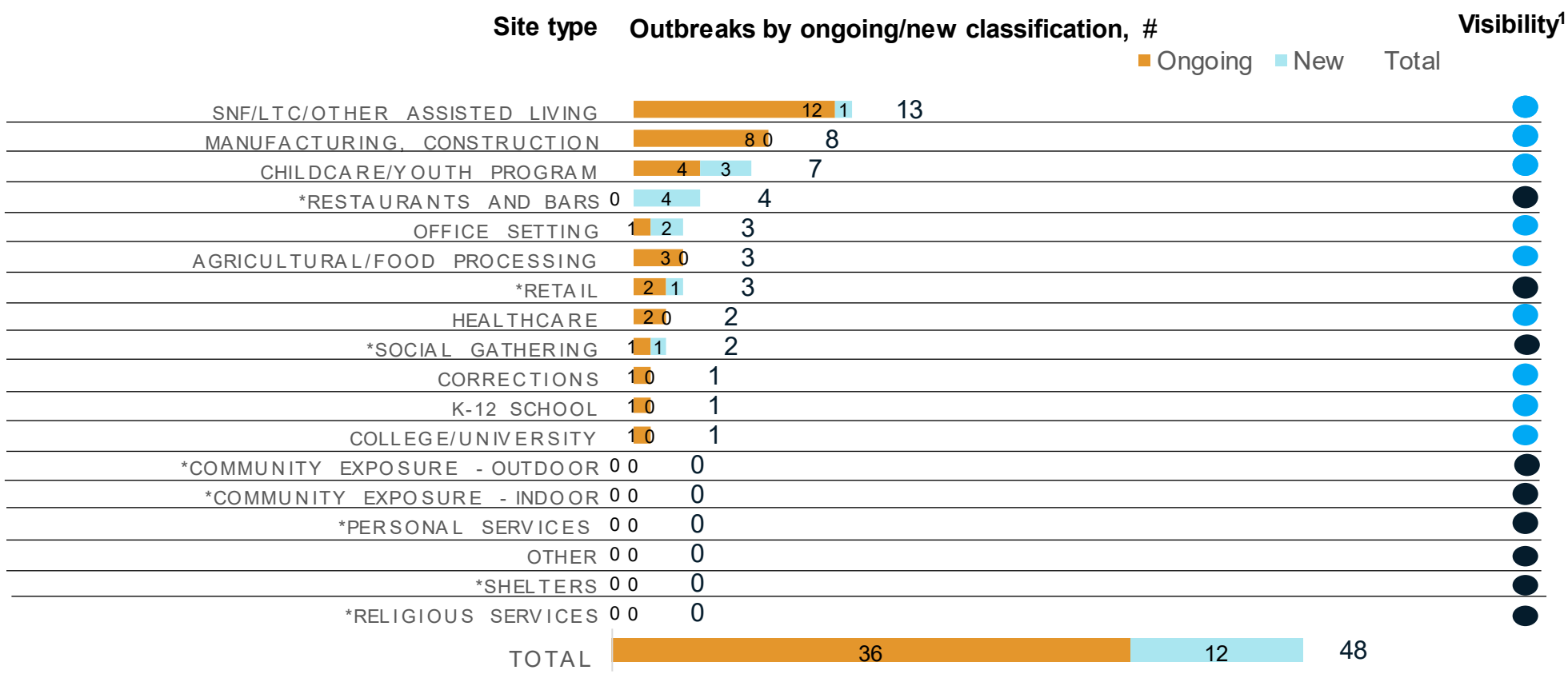
Variants of Concern in Michigan, Jul 13



Variant	MI Reported Cases¶	# of Counties	CDC est. prevalence for MI
B.1.1.7 (alpha)	13,023*	81	NA
B.1.351 (beta)	78	23	NA
P.1 (gamma)	309	35	NA
B.1.617.2 (delta)	54	16	NA

* 533 cases within MDOC; ¶ 318 cases with county not yet determined

Number of outbreak investigations by site type, week ending Jul 8



Total number of active outbreaks is **down 14%** from previous week, but 12 new outbreaks identified

Restaurants and bars reported the most number of new outbreaks (4), followed by childcare/youth programs (3),and office setting (2).

One new outbreak was reported in each of the following settings: LTCF/SNF, Retail, and social gatherings

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

Key Messages: COVID-19 and Healthcare Capacity and COVID Severity

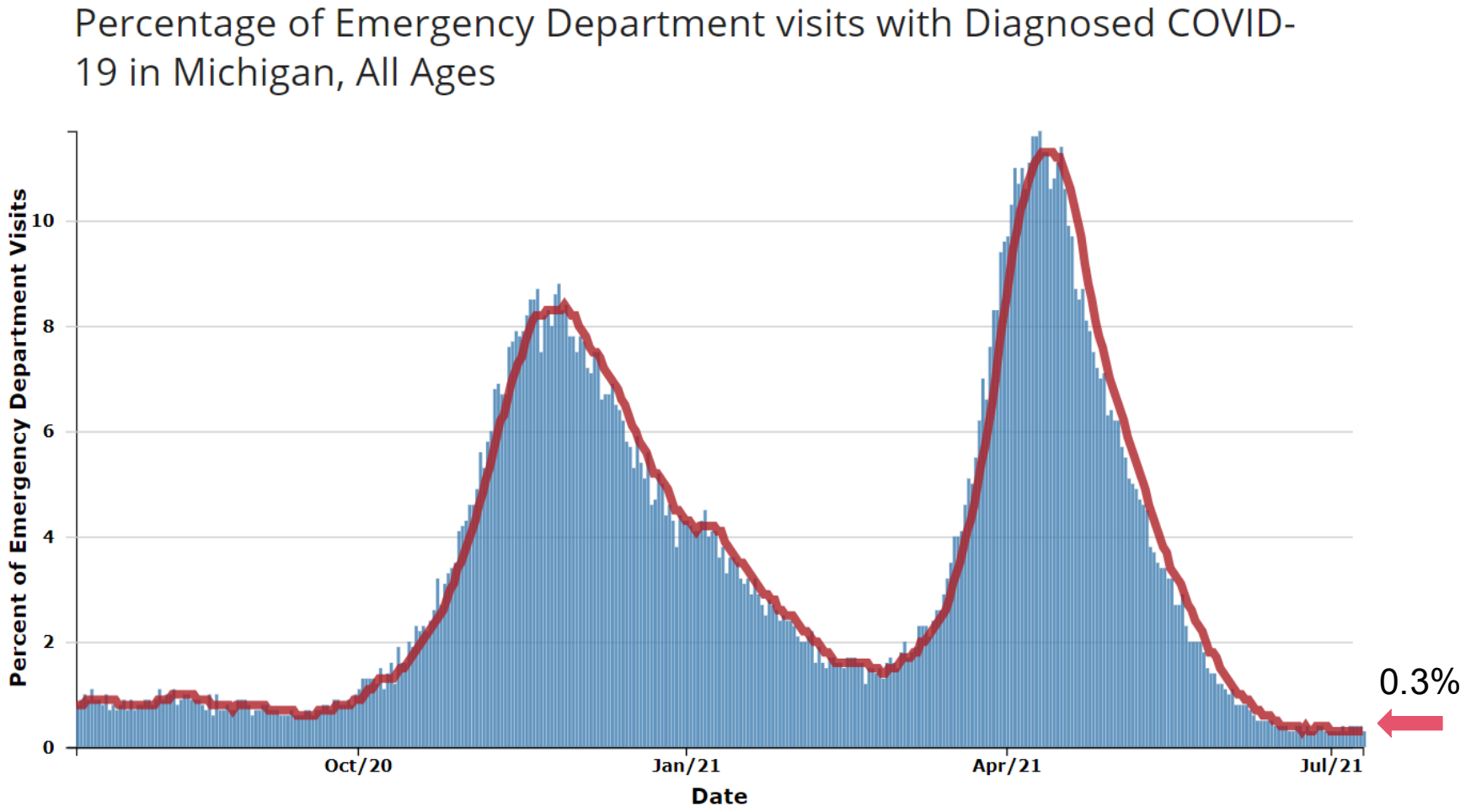
Hospitalizations and ICU utilization are plateaued

- COVID-like illness (CLI) is steady 0.3% (vs. 0.3% last week)
- Hospital admissions are plateaued statewide and for all age groups
- Hospitalizations down 3% since last week (vs. 17% decline week prior)
- Six regions are showing decreases or stable trends in hospitalization trends this week
  — Region 2N has shown an increase over the previous week, which will be closely monitored
- Volume of COVID-19 patients in intensive care has plateaued since last week (vs. 32% decline week prior)

Death rate has decreased to 0.4 daily deaths per million people

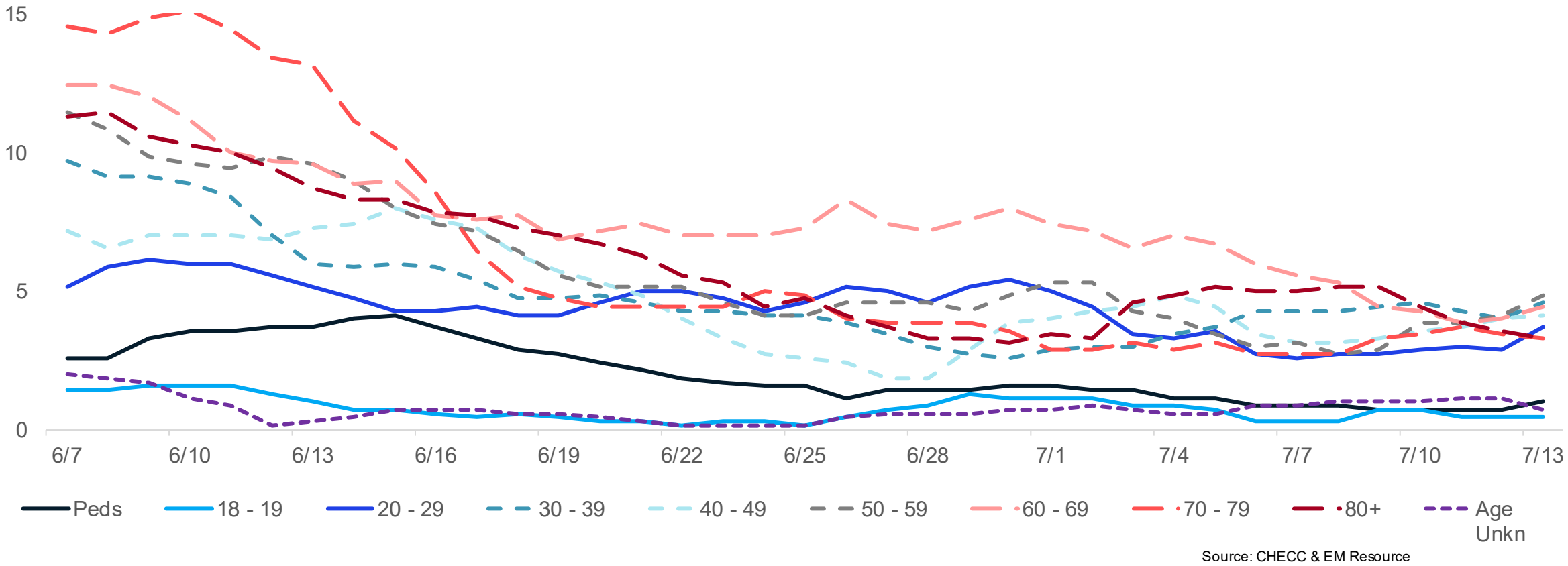
- 40% decrease since last week (vs. 51% decrease last week)
- 95% decrease since April 24 peak
- Proportion of deaths among those under 60 years of age is stable from the prior week

Michigan Trends in Emergency Department Visits for COVID-19-Like Illness (CLI)



Source: https://covid.cdc.gov/covid-data-tracker/#ed-visits

Average Hospital Admissions by Age

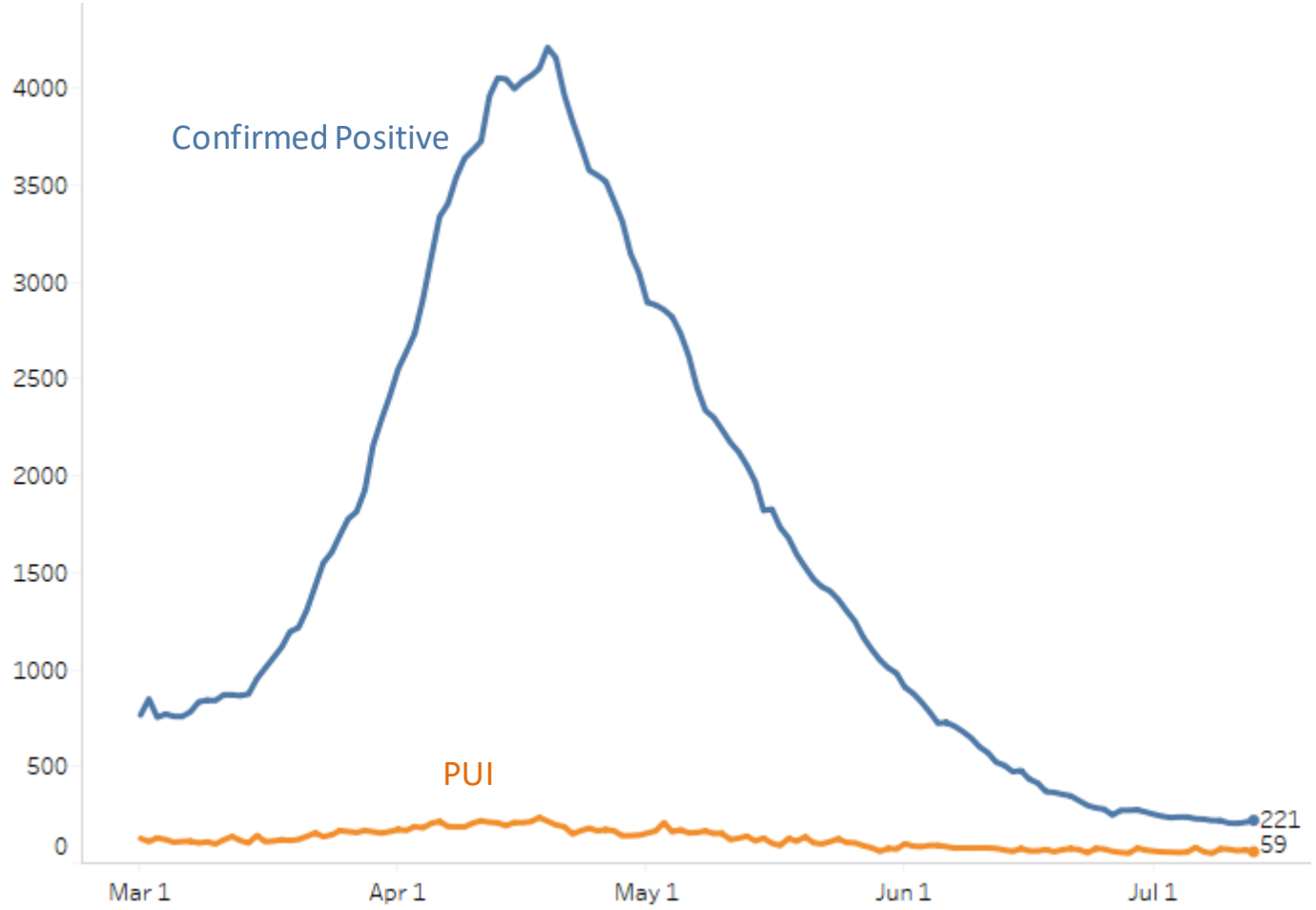


Source: CHECC & EM Resource

- Trends for daily average hospital admissions have increased 4% since last week
- Trends within all age groups have plateaued
- Over the past week, those 50-59 years have seen the highest number of avg. daily hospital admissions (5 admissions)

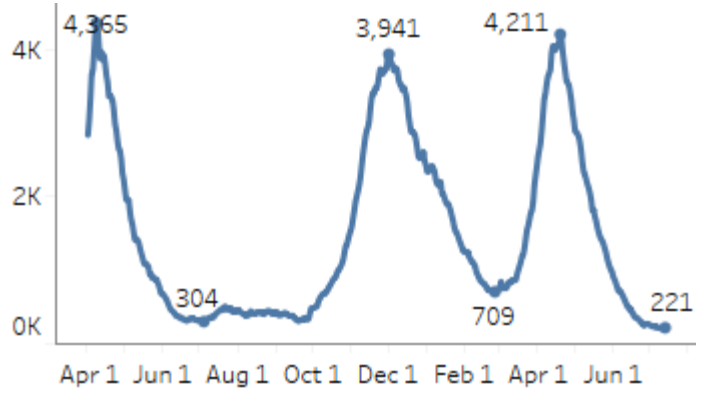
Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 3/1/2021 – 7/13/2021
Confirmed Positive & Persons Under Investigation (PUI)



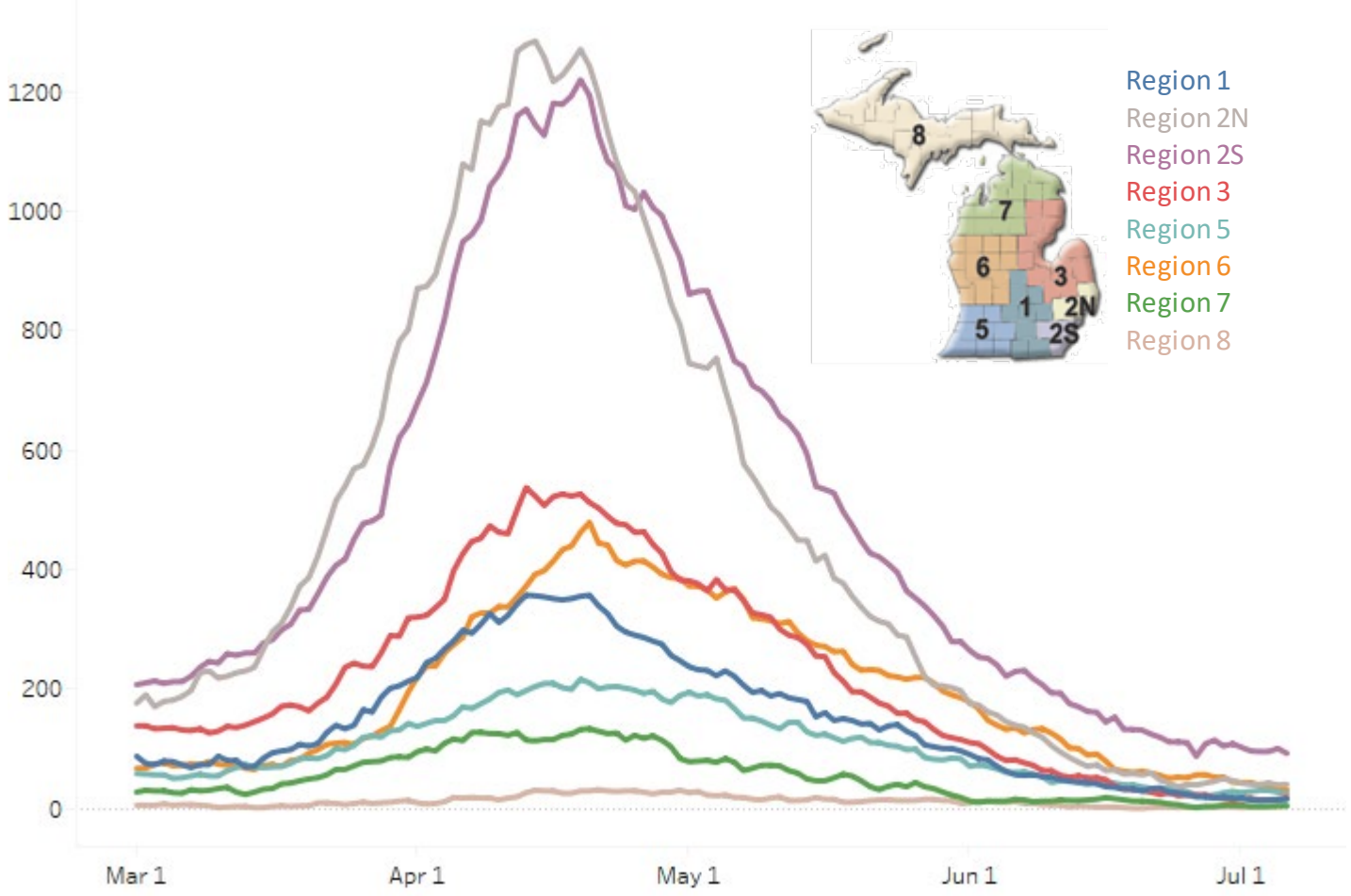
COVID+ census in hospitals continues to decline although at a slower pace than in prior weeks. This week is down only 3% from the previous week (previous week was down 17%).

Hospitalized COVID Positive Long Term Trend (beginning March 2020)



Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 3/1/2021 – 7/13/2021
Confirmed Positive by Region



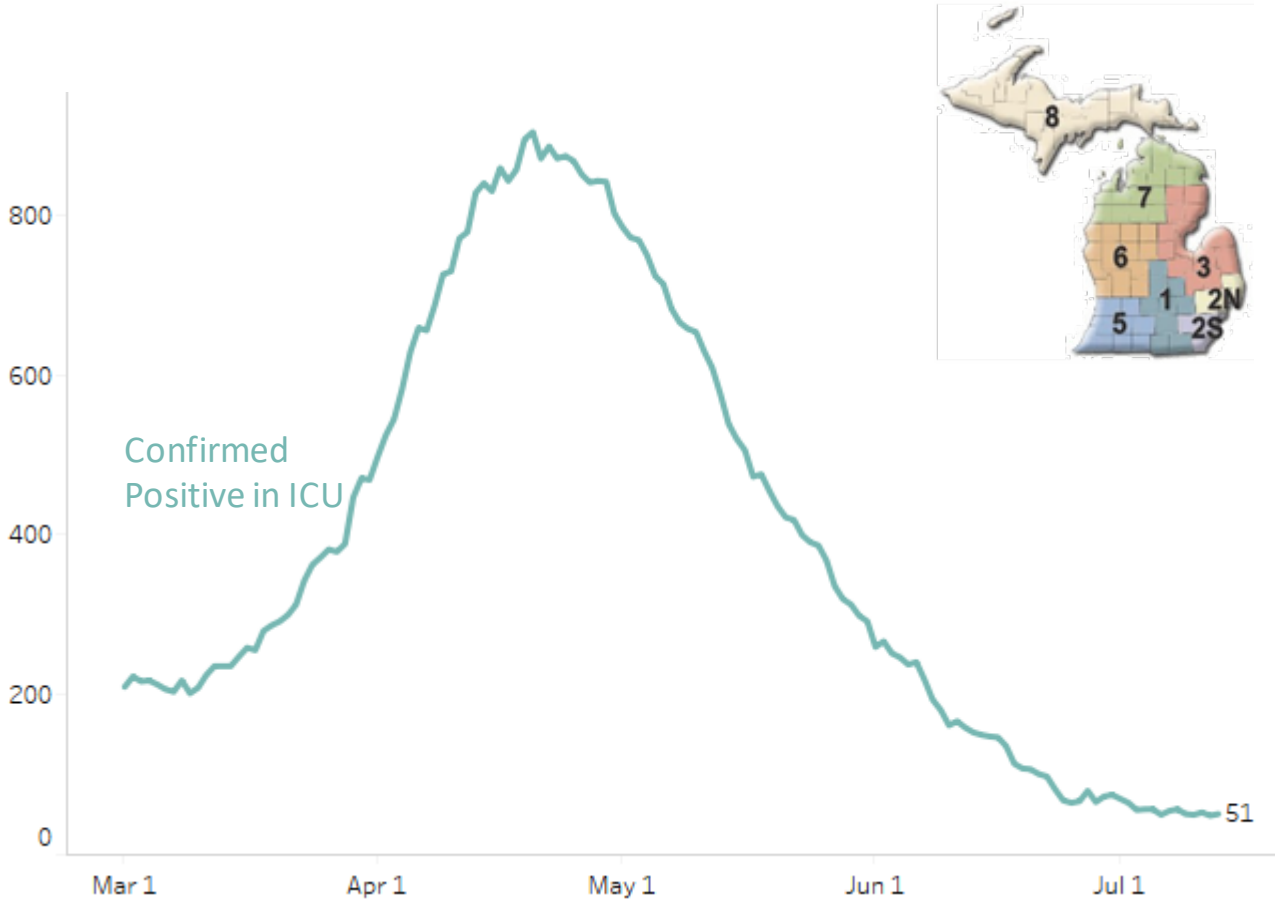
Six regions show decreasing or flat hospitalization trends this week. Two regions have increased from last week (Region 2N, Region 7) although Region 7's growth represents only 1 incremental patient.

Region 2N bears watching.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	14 (-7%)	13/M
Region 2N	52 (30%)	23/M
Region 2S	86 (-7%)	39/M
Region 3	14 (-22%)	12/M
Region 5	25 (0%)	26/M
Region 6	25 (-19%)	17/M
Region 7	5 (25%)	10/M
Region 8	0	0/M

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 7/13/2021
Confirmed Positive in ICUs



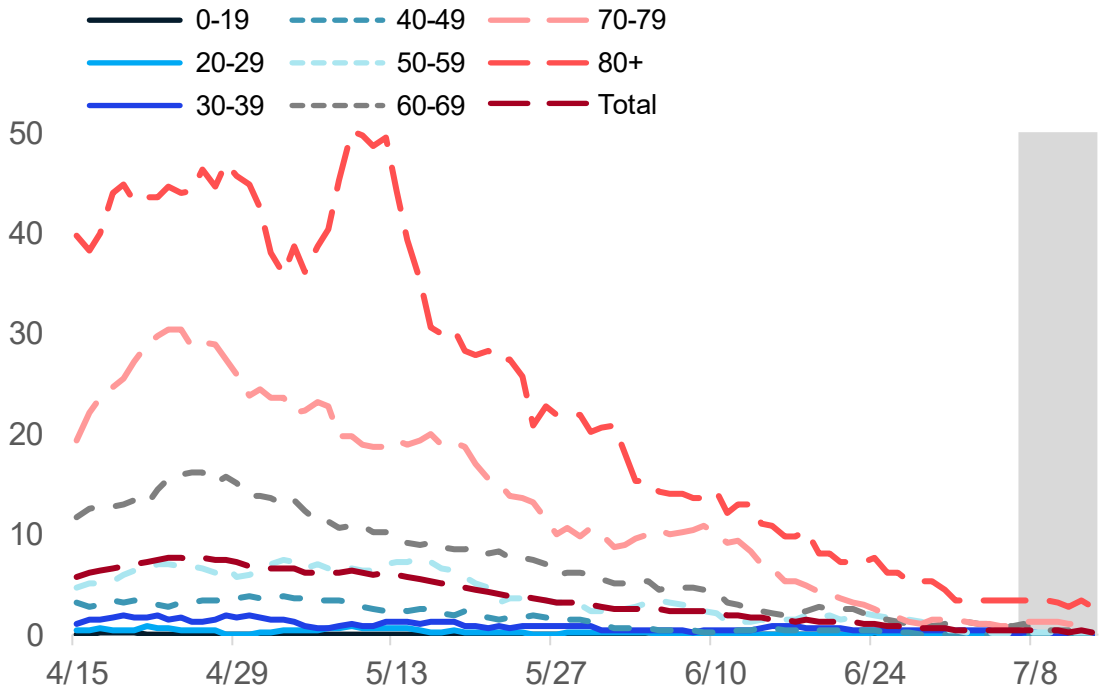
Overall, volume of COVID+ patients in ICUs has remained flat from last week, with 5 regions showing decreasing or flat trend. Regions 2N, 3, and 7 have increased in the number of COVID+ patients in ICUs since last week although numbers are very small in all regions.

All regions have <=3% of ICU beds occupied with COVID patients.

Region	Adult COVID+ in ICU (% Δ from last week)	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	2 (0%)	81%	1%
Region 2N	7 (17%)	68%	1%
Region 2S	23 (-12%)	78%	3%
Region 3	5 (67%)	83%	1%
Region 5	4 (-20%)	58%	2%
Region 6	7 (0%)	73%	3%
Region 7	3 (200%)	65%	2%
Region 8	0	63%	0%

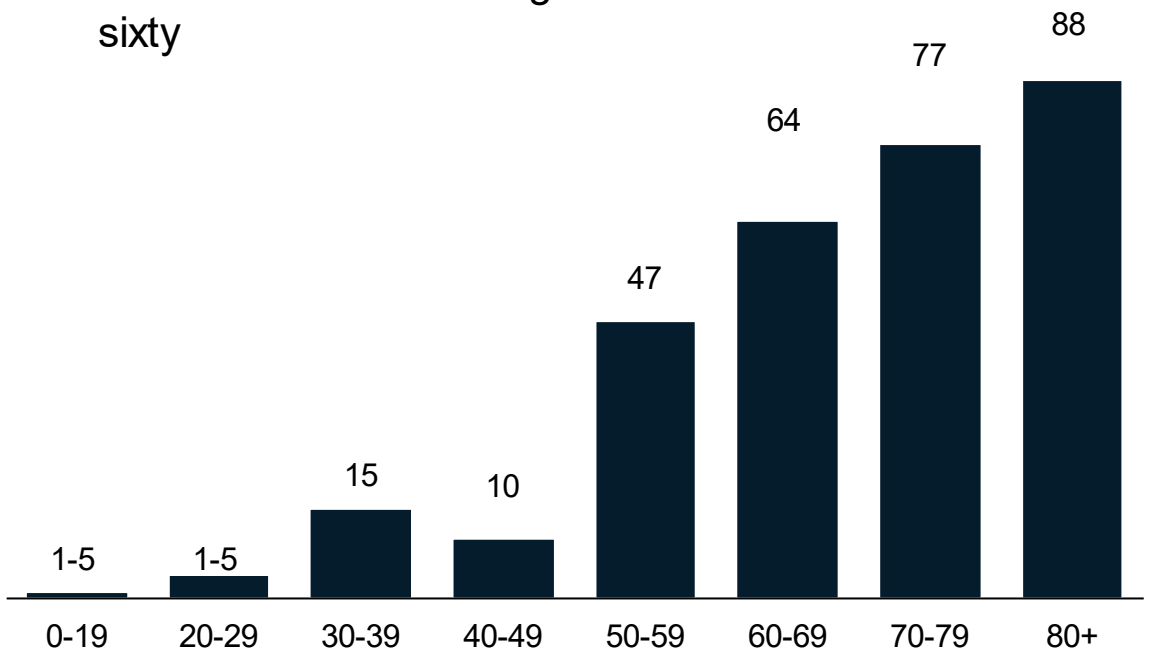
Average and total new deaths, by age group

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 7/6/2021)

- 25% of deaths below age sixty

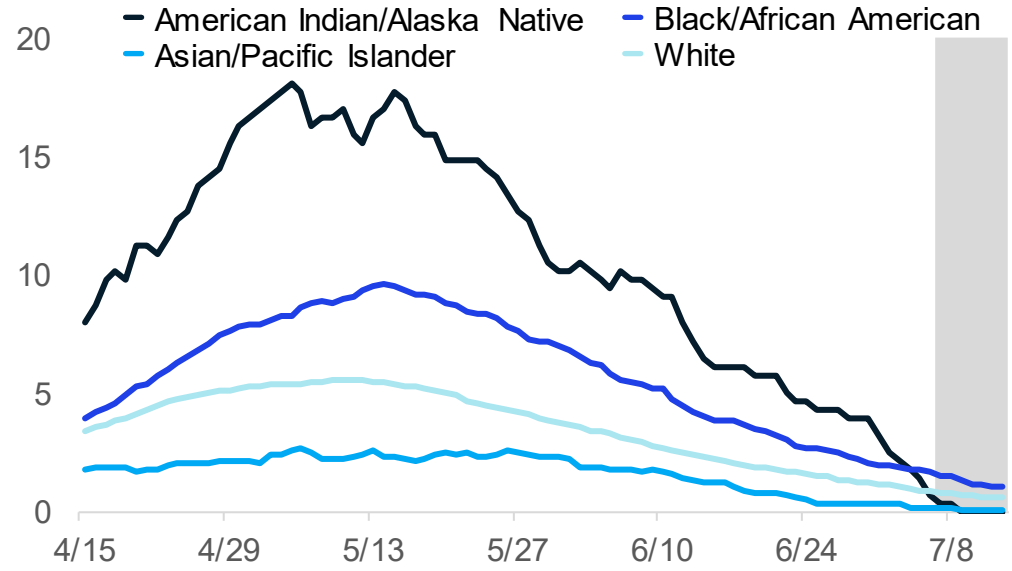


- Overall trends for daily average deaths have decreased 40% since last week
- Through 7/6, the 7-day avg. death rate is below 1.0 daily deaths per million people for those under the age of 80

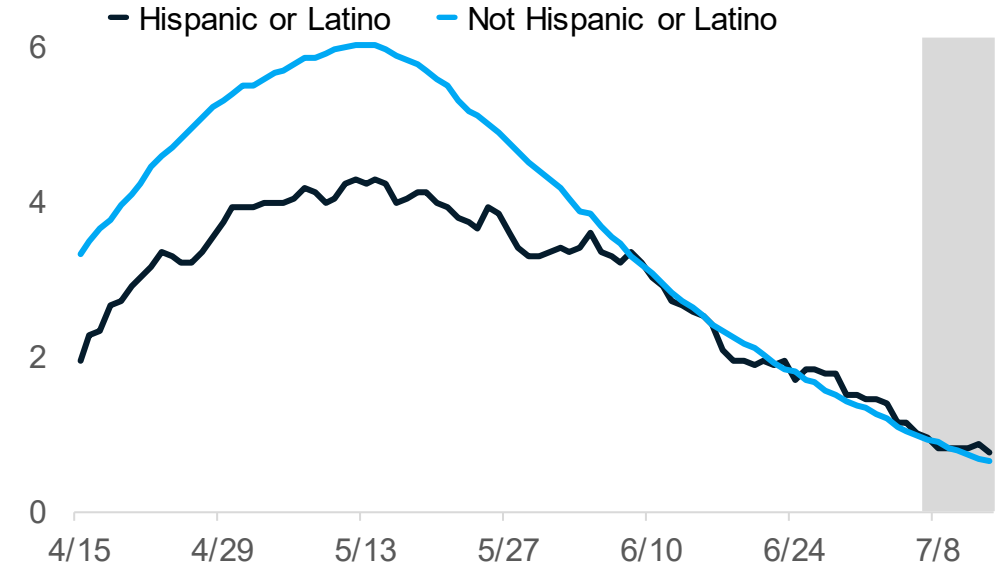
Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System

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:

- An additional review of vital records death data was performed the week of 6/30-7/6 to search for race and ethnicity
- This review has resulted in an adjustment of deaths for American Indian and Alaskan Natives from previous weeks
- **Currently, Blacks/African American have the highest death rate**

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

COVID-19 Vaccination

Administration (doses administered)

10th state in doses delivered; 9th in first doses provided and number of completed individuals (7/12/21)

82.1% adjusted administration ratio (excluding federal entities, CDC channel portfolio 7/8/2021)

28,435 first doses were administered week ending 7/10/21 (62,542 total): most administered frequently by pharmacies, local health departments, and hospitals (MCIR data only, will be undercount of all doses administered)

Coverage (people vaccinated)

63.1% of those 18+ have received first dose of vaccine

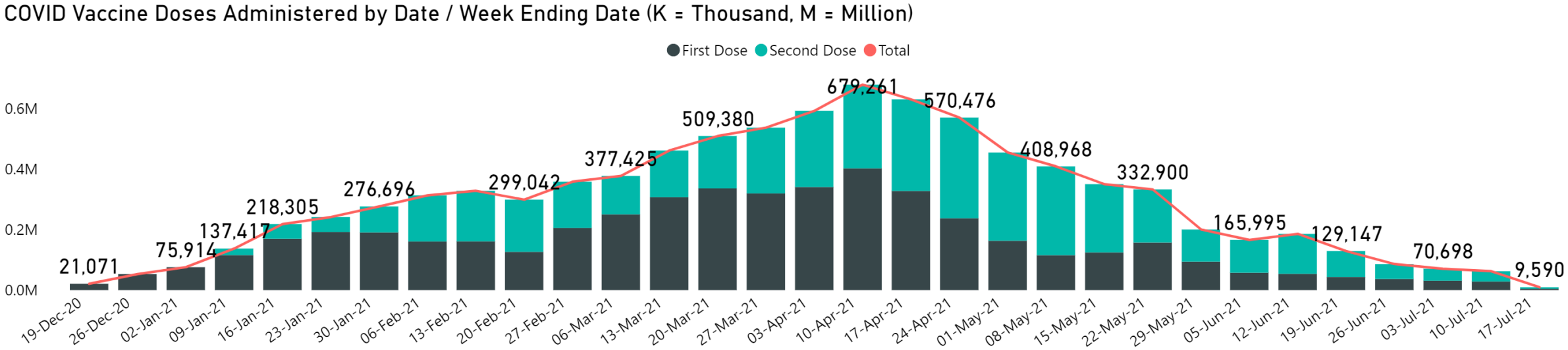
4,788,482 people in Michigan have completed vaccination series (4,728,832 last week)

85.1% of people aged 65 or older have had first dose; 63.1% of people over age 18

Initiation highest among Asian, Native Hawaiian or Pacific Islander and American Indian/Alaskan Native individuals (MI COVID Vaccine Dashboard 7/13/21)

Less than 1% of Vaccinated Individuals Later Tested Positive for COVID-19 (Number of cases who are fully vaccinated (n= 7,658)

Doses Administered as of 7/12/2021



11,712,540 doses delivered to providers and 9,582,679 doses administered (CDC tracker)

82.1% adjusted administration ratio (excluding federal entities, CDC channel portfolio 7/8/2021)

- 62,542 doses administered last week; on average 8.9K/day (884-12,041)
- 28,435 first doses administered last week; on average 4,062/day (374-5,758)

July 3-July 10 (inclusive), doses were most frequently administered by
- Pharmacies (51.9K) (MCIR data may undercount)
- LHD (5.6K) and hospitals (2.3K)
- Pediatricians (971), family practice (2.1K), and FQHCs (2.1K)

Nearly 4.8 Million Michiganders fully vaccinated

4.79 million people in the state are fully vaccinated

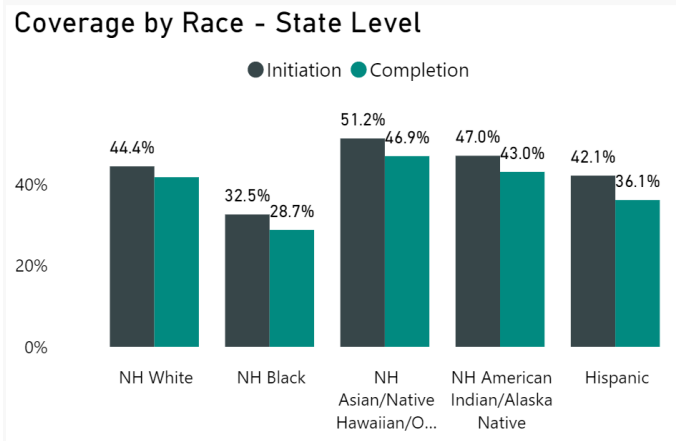
81% of people aged 65 and older have completed the series

Race/Ethnicity for those 12 years and older:

- Initiation coverage highest among those of Non-Hispanic (NH) Asian, Native Hawaiian or Pacific Islander Race (51.2%), then NH American Indian (47%), NH White (44.4%), NH Black or African American Races (32.5%).
- Initiation is at 42.1% for those of Hispanic ethnicity
- Completion follows the same pattern
- 21.6% data missing or unknown

Vaccination Coverage in Michigan as of 7/13/21

Age Group	% At Least One Dose	% Fully Vaccinated	Number Fully Vaccinated
Total Population	52.1	47.9	4,788,482
≥ 12 years	60.5	55.7	4,788,396
≥ 18 years	63.1	58.4	4,578,134
≥ 65 years	85.1	81.0	1,429,523



Potential COVID-19 Vaccination Breakthrough Cases

Michigan part of CDC's nationwide investigation (COVID-19 Breakthrough Case Investigations and Reporting | CDC)

Michigan Data (1/1/21 through 7/6/21):

- 7,658 cases met criteria based on a positive test 14 or more days after being fully vaccinated
- Less than 1% of people who were fully vaccinated met this case definition
  - Includes 205 deaths (185 persons age 65 years or older)
  - 518 cases were hospitalized

- Vaccine breakthrough cases are expected. COVID-19 vaccines are effective and are a critical tool to bring the pandemic under control. However, no vaccines are 100% effective at preventing illness in vaccinated people. There will be a small percentage of fully vaccinated people who still get sick, are hospitalized, or die from COVID-19.
- More than 150 million people in the United States have been fully vaccinated as of June 21, 2021. Like with other vaccines, vaccine breakthrough cases will occur, even though the vaccines are working as expected. Asymptomatic infections among vaccinated people will also occur.
- There is some evidence that vaccination may make illness less severe for those who are vaccinated and still get sick.
- Current data suggest that COVID-19 vaccines authorized for use in the United States offer protection against most SARS-CoV-2 variants currently circulating in the United States. However, variants will cause some vaccine breakthrough cases.

Science Round Up

CDC Updates K-12 COVID-19 Mitigation Guidance

- Transmission in schools depends on many factors including transmission in schools, variants, and vaccination coverage
- Safely returning to in-person instruction is a priority
- Vaccination is leading public health prevention strategy
- Other mitigation measures also continued to be recommended (e.g., masking, physical distancing, testing, etc.)

Acceptability of Adolescent COVID-19 Vaccination

- More than half of unvaccinated adolescents and their parents reported intent for adolescent COVID-19 vaccination
- Education material directed toward adolescents and their families can further improve intention to vaccinate

SARS-CoV-2 B.1.617.2 (Delta) Variant COVID-19 Outbreak Associated with a Gymnastics Facility

- The Delta variant is highly transmissible in indoor sports settings
- 23% of all cases were < 12 years of age (cases as young as 5)
- Multicomponent prevention strategies including vaccination remain important to reduce the spread of SARS-CoV-2

Recent Press Releases on Vaccine Boosters amid concerns over B.1.617.2 (Delta) variant

- Currently, CDC and FDA indicate that Americans do not need for a booster vaccine at this time

Global COVID-19 Surges

- Internationally, many countries are experiencing another surge in cases attributed to the spread of the Delta variant

CDC Update to science brief on schools and early childhood education

Transmission in schools depends on 1) local transmission rates; 2) types of variants circulating; 3) epidemiology of COVID-19 among children, adolescents, and staff; 4) vaccine coverage; and 5) mitigation measures in place.

Epidemiology of COVID-19 for pediatric population

- Estimated rates of COVID-19 infection and illness in children ages 5-17 years were comparable to rates for adults ages 18-49 and higher than rates in adults ages 50 and older.
- Children and adolescents more commonly asymptomatic or have mild symptoms.
- Youth who belong to some racial and ethnic minority groups are disproportionately affected by severe events, similar to adults.

Multiple studies have shown that transmission within school settings is typically lower than – or at least similar to – levels of community transmission, when prevention strategies are in place in schools.

Significant secondary transmission of SARS-CoV-2 infection has occurred in school settings when prevention strategies are not implemented or are not followed.

Science Brief: Transmission of SARS-CoV-2 in K-12 Schools and Early Care and Education Programs - Updated | CDC

Update to CDC Guidelines for K-12 Schools and Early Childhood Education programs: Take Aways

- Safely returning to in-person instruction is a priority.
- Vaccination is leading public health prevention strategy
- Masks should be worn indoors by individuals (age 2 and older) who are not fully vaccinated.
- Schools recommended to maintain at least 3 feet of physical distance between students in classrooms, combined with indoor mask wearing. When not possible to maintain physical distance, it is especially important to layer multiple other prevention strategies.
- Screening testing, ventilation, handwashing and respiratory etiquette, staying home when sick, contact tracing with quarantine and isolation, and cleaning and disinfection are also important layers of prevention to keep schools safe.
- Students, teachers, and staff should stay home when they have signs of any infectious illness and be referred to their healthcare provider for testing and care.
- Many schools serve children under the age of 12. Guidance emphasizes implementing layered prevention strategies to protect people who are not fully vaccinated.
- COVID-19 prevention strategies remain critical, especially in areas of moderate-to-high community transmission levels.
- Localities should monitor community transmission, vaccination coverage, screening testing, and occurrence of outbreaks to guide decisions on the level of layered prevention strategies.

Guidance for COVID-19 Prevention in K-12 Schools | CDC

Update to CDC Guidelines for K-12 Schools and Early Childhood Education programs

Guidance for COVID-19 Prevention in K-12 Schools | CDC

Schools and ECE programs can limit transmission by layering the following effective prevention strategies:

- Promoting COVID-19 vaccination for those eligible
- Consistent and correct use of masks by people who are not fully vaccinated
- Physical distancing among people who are not fully vaccinated
- Screening testing in K-12 schools
- Improving ventilation
- Handwashing and respiratory etiquette
- Staying home when sick and getting tested
- Testing and contact tracing in combination with isolation and quarantine
- Routine cleaning with disinfection under certain conditions.

Acceptability of Adolescent COVID-19 Vaccination

Surveys administered April 15–23 to U.S. adolescents aged 13–17 years and parents of U.S. adolescents aged 12–17 years using a nonprobability–based, independently recruited Internet panel.

52% of unvaccinated adolescents and 56% of parents reported intent for adolescent COVID-19 vaccination.

Receiving more information about adolescent COVID-19 vaccine safety and efficacy would increase vaccination intent.

53.1% of parents and 57.8% of adolescents reported government agencies including CDC and FDA as trusted sources of information, followed by primary care professionals (47.3% and 45.7%), and state or local health officials (46.6% and 49.4%, respectively)

Source: Scherer AM, Gedlinske AM, Parker AM, et al. Acceptability of Adolescent COVID-19 Vaccination Among Adolescents and Parents of Adolescents — United States, April 15–23, 2021. MMWR Morb Mortal Wkly Rep. ePub: 9 July 2021. DOI: http://dx.doi.org/10.15585/mmwr.mm7028e1external icon

MMWR Early Release: SARS-CoV-2 B.1.617.2 (Delta) Variant COVID-19 Outbreak Associated with a Gymnastics Facility — Oklahoma

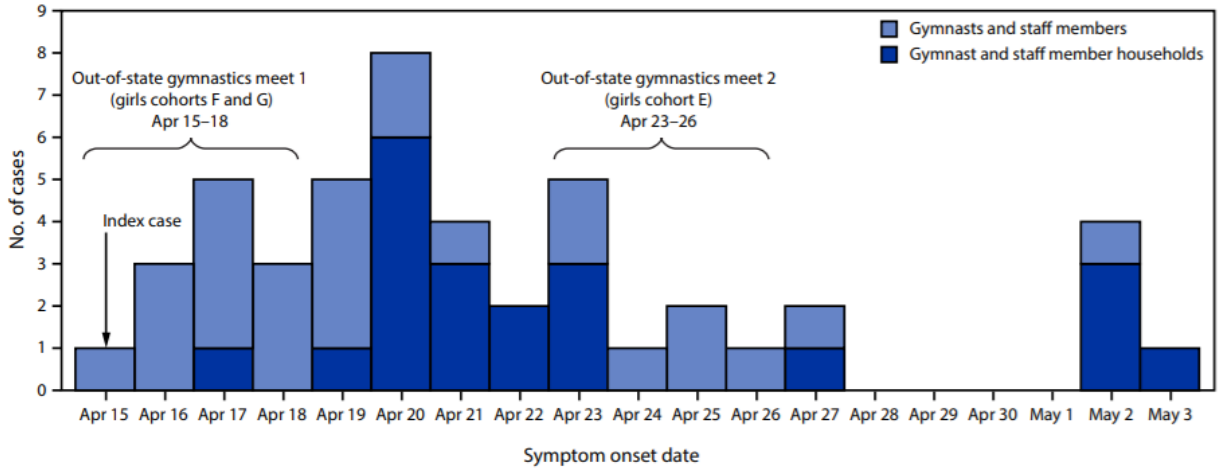
- Evidence suggests that the Delta (B.1.617.2) variant is potentially more transmissible than other variants
- The Delta variant is highly transmissible in indoor sports settings, including non-contact sports, and households
- Among those infected were children as young as 5
  - 23% of all cases were < 12 years of age (ineligible for vaccination)
- This outbreak required hospitalizations for two individuals (both unvaccinated)
- **Multicomponent prevention strategies** including vaccination remain important to reduce the spread of SARS-CoV-2

SARS-CoV-2 B.1.617.2 (Delta) Variant COVID-19 Outbreak Associated with a Gymnastics Facility — Oklahoma, April–May 2021

Early Release / July 9, 2021 / 70

Kendra Dougherty, MS[1]; Mike Mannell, MPH[1]; Ozair Naqvi, MS[1]; Dakota Matson, MS[1]; Jolianne Stone, MPH[1] (View author affiliations)

FIGURE. Symptom onset date* of COVID-19 cases associated with a SARS-CoV-2 B.1.617.2 (Delta) variant outbreak at gymnastics facility A (N = 47) — Oklahoma, April 15–May 3, 2021



* Or date of specimen collection, for asymptomatic or presymptomatic cases.

SARS-CoV-2 B.1.617.2 (Delta) Variant COVID-19 Outbreak Associated with a Gymnastics Facility — Oklahoma, April–May 2021. https://www.cdc.gov/mmwr/volumes/70/wr/mm7028e2.htm

Recent Press Releases on Vaccine Boosters amid concerns over B.1.617.2 (Delta) variant

- Only July 8, 2021 Pfizer/BioNTech announced that the company will be looking develop a booster for their SARS-CoV-2 mRNA vaccine
- The company reasons that antibody titers may improve after 6 months and were seen in ancestral (wild type) and B.1.351 (beta) variants
- **CDC and FDA, however, issued a joint statement on the very same day indicating that, given the current data, no booster vaccine is needed**
- To ensure messaging remains clear and consistent, public health leaders and industry will work to unify communications
- It is fortunate that pharmaceutical companies are prepared and ready to examine the need for a booster vaccine

Pfizer and BioNTech Provide Update on Booster Program in Light of the Delta-Variant

NEW YORK and MAINZ, GERMANY, July 8, 2021 — As part of Pfizer's and BioNTech's continued efforts to stay ahead of the virus causing COVID-19 and circulating mutations, the companies are providing an update on their comprehensive booster strategy.

Joint CDC and FDA Statement on Vaccine Boosters

The United States is fortunate to have highly effective vaccines that are widely available for those aged 12 and up. People who are fully vaccinated are protected from severe disease and death, including from the variants currently circulating in the country such as Delta. People who are not vaccinated remain at risk. Virtually all COVID-19 hospitalizations and deaths are among those who are unvaccinated. We encourage Americans who have not yet been vaccinated to get vaccinated as soon as possible to protect themselves and their community.

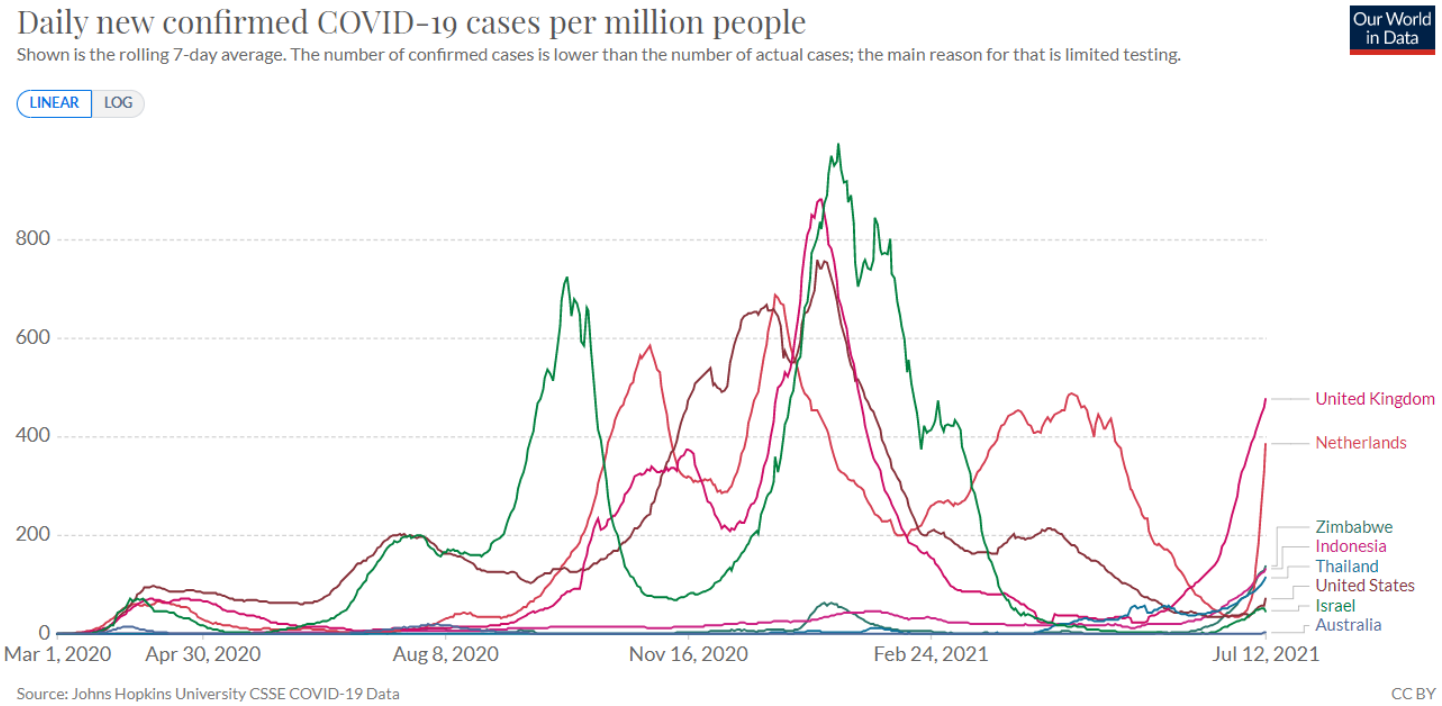
Americans who have been fully vaccinated do not need a booster shot at this time. FDA, CDC, and NIH are engaged in a science-based, rigorous process to consider whether or when a booster might be necessary. This process takes into account laboratory data, clinical trial data, and cohort data – which can include data from specific pharmaceutical companies, but does not rely on those data exclusively. We continue to review any new data as it becomes available and will keep the public informed. We are prepared for booster doses if and when the science demonstrates that they are needed.

###

Source: Pfizer and BioNTech Press Release and CDC/FDA Joint Statement

Next Wave of Global COVID-19 Surges

- Delta (B.1.617.2) is highly transmissible
- Internationally, many countries are experiencing another surge in cases, including countries that previously had been able to mitigate spread
- The surge in the United Kingdom and Netherlands is particularly concerning given the rapid rise in case rates over a short period of time
- Given the low population vaccination coverage throughout the United States, another surge is inevitable
- Multicomponent prevention strategies including vaccination remain important to reduce spread of SARS-CoV-2



Source: Pfizer and BioNTech Press Release and CDC/FDA Joint Statement