MI COVID RESPONSE DATA AND MODELING UPDATE

NOTE: All data as of June 12 unless otherwise noted

June 15, 2021

Executive summary

Percent Positivity is down 35% and **Case Rate** is down 49% since last week. Positivity (2.2%, ↓1.2%) and case rates 30.2, ↓21.9) have decreased for nine weeks

Michigan has the **13th highest number of cases (↑3),** and **35th highest case rate (↑1)** in the last 7 days (source: CDC COVID Data Tracker)

Percent of inpatient beds occupied by individuals with COVID has decreased 26% since last week and is decreasing for seven weeks. There are 3.3% (↓1.1%) inpatient beds occupied by COVID-19 patients.

Michigan has the **20th highest inpatient bed utilization (↓13),** and the **17th highest adult ICU bed utilization (↓12)** in the country (source: US HHS Protect)

Deaths have decreased 22% since last week. There were 167 COVID deaths between May 29 and June 5, and the **Death Rate** is 2.4 deaths per million residents (↓0.2)

Michigan has the **8th highest number of deaths (↑6)**, and **T15th highest death rate (↓4)** in the last 7 days (source: CDC COVID Data Tracker)

The 7-day average **state testing rate** has increased to 1,649.3 tests/million/day (↑98.1). **Daily diagnostic tests (PCR)** is 16.4K per day (↑1.0), and the **weekly average for PCR and antigen tests** conducted in Michigan is 27.5K (↓2.1K).

9.1 million **COVID-19 vaccine** doses reported to CDC, 4.48 million people have completed their vaccine series

Comparison across states: Summary

What we see today (data through 6/12):

- 8 states are seeing increasing 1 week case trends (>=10%) (up vs. 2 last week) but note very low baseline rates in many states
- 6 states are seeing 1 week increases (>=10%) in new COVID hospital admissions (up vs. 3 last week) but all have very low baselines
- DC, Missouri, Florida, West Virginia and Indiana have highest per capita hospitalized patient numbers.
- Midwest (case data from CDC as of 6/12):
  - Wisconsin with decrease in hospitalizations (27/M) and slight decrease in cases (12/100k last 7d)
  - Indiana with decrease in hospitalizations (79/M), and stable cases (34/100k last 7d)
  - Illinois showing decrease in hospitalizations (54/M), and decrease in cases (18/100k last 7d)
  - Ohio with decrease in hospitalizations (75/M) and slight decrease in cases (21/100k last 7d)
  - Michigan showing decrease in hospitalizations (59/M) and decrease in cases (18/100k last 7d)

Key Messages: COVID-19 Spread

Statewide positivity has decreased to 2.2%

- One week decrease of 35% (vs. 36% decrease last week)
- Decreasing for nine weeks (88% decrease since April 8 high)
- Positivity is declining in all MERC regions, and is at or below 3% in all regions

Case rate (30.2 cases/million) is decreasing in the state (last week 52.1 cases/million)

- One week decrease of 49% (vs. 48% decrease last week)
- Decreasing for two months (96% decrease since April 11 high)
- Cases per million are declining in all MERC regions
- Select variants in Michigan: 11,305 confirmed α (B.1.1.7); 69 confirmed β (B.1.351); 302 confirmed ε (B.1.427/ B.1.429); 247 confirmed (γ) P.1; and 25 confirmed δ/κ (B.1.617.2/ B.1.617.1)

Number of active outbreaks is down 35% from last week

- Reported school outbreaks have decreased 49% since last week (150 to 77)
- High schools continue to experience the highest number of outbreaks (39) among K-12 settings
- In the past week, the highest number of new clusters have been identified in track and field, and baseball/softball

Confirmed and probable case indicators

Table Date: 6/12/2021 (7 days from date table was produced: 6/5/2021)

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

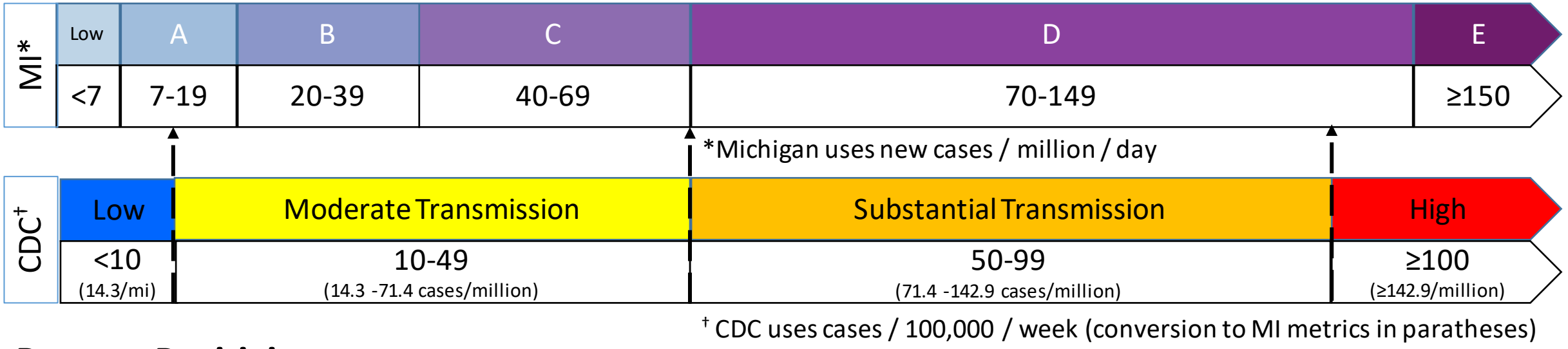
	Overall Risk Level	Absolute Cases (per million)	CDC Case Trend	Average Percent Positivity	Positivity Trend	Tests (per million)	% IP Beds Occupied by COVID-19 Cases	% Occupied IP Beds Trend	Absolute Deaths (per million)	Death Trend
Detroit	C	27.2	decline [62 days]	1.9	Decrease - 9wk	1648.5	3.1	Decrease - 7wk	2.6	Decrease - 5wk
Grand Rapids	C	39.8	decline [56 days]	3.0	Decrease - 8wk	1726.8	5.2	Decrease - 7wk	1.9	Decrease - 4wk
Kalamazoo	C	39.5	decline [57 days]	2.9	Decrease - 8wk	1622.4	4.1	Decrease - 7wk	2.2	<20 wkly deaths
Saginaw	B	38.5	decline [59 days]	2.9	Decrease - 8wk	1354.9	2.1	Decrease - 7wk	4.0	<20 wkly deaths
Lansing	C	21.9	decline [63 days]	1.9	Decrease - 8wk	1371.4	4.5	Decrease - 7wk	1.2	<20 wkly deaths
Traverse City	C	24.6	decline [60 days]	2.0	Decrease - 5wk	1193.0	1.4	Decrease - 8wk	2.3	<20 wkly deaths
Jackson	B	23.1	decline [59 days]	2.0	Decrease - 8wk	1770.5	2.7	Decrease - 7wk	2.4	<20 wkly deaths
Upper Peninsula	C	19.7	decline [57 days]	0.8	Decrease - 8wk	1742.2	1.4	Decrease - 1wk	0.5	<20 wkly deaths
Michigan	C	30.2	decline [60 days]	2.2	Decrease - 9wk	1649.3	3.3	Decrease - 7wk	2.4	Decrease - 5wk

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%

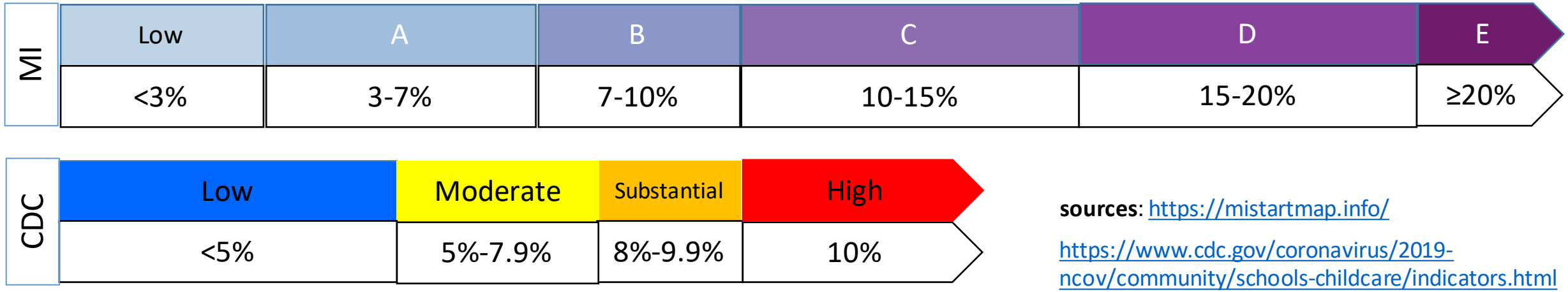
Comparing new CDC school thresholds to MI levels

Case Rate*†



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

Percent Positivity



sources: https://mistartmap.info/

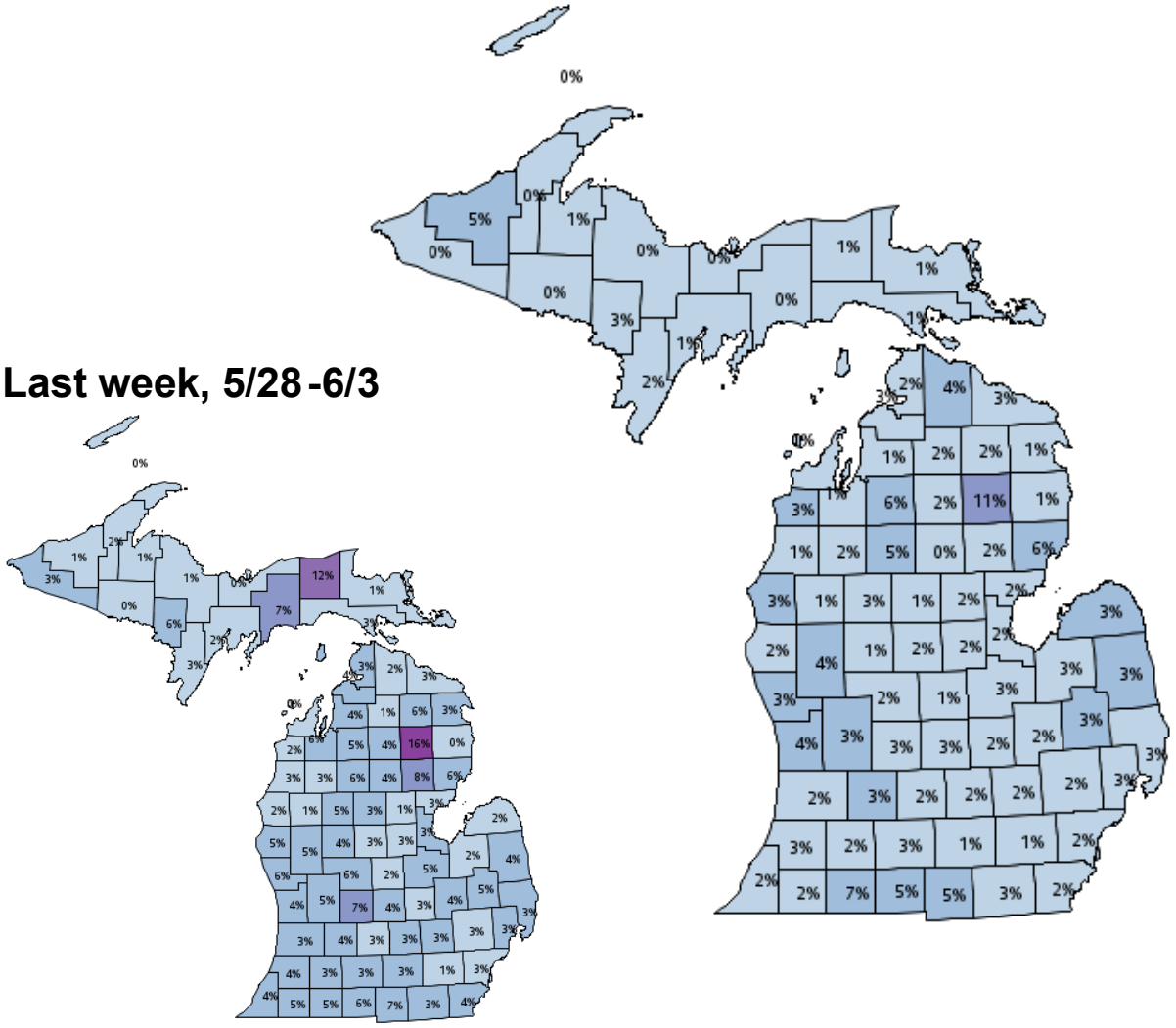
https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/indicators.html

Overview of metrics for individuals <12 years

	Region	Population (<12 yrs)	Population (0-19 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 (Estimate)
1	Detroit	735529	1263275	28420	18.4	25.0	30.9	24.5
2	Grand Rapids	230120	397424	9719	6.4	27.8	4.6	11.6
3	Kalamazoo	140422	240272	5259	3.6	25.6	3.1	12.9
4	Saginaw	78759	136621	3243	2.7	34.3	0.3	2.2
5	Lansing	78140	143152	3114	2.1	26.9	4.3	30.0
6	Traverse City	53099	92054	1542	0.6	11.3	0.0	0.0
7	Jackson	41274	71966	1483	0.4	9.7	0.3	4.2
8	Upper Peninsula	34645	62922	1397	0.3	8.7	0.1	1.6
99	Michigan	1391988	2407686	54226	34.6	24.9	43.6	18.1

Note: Data as of 6/7; case data 5/31, hospitalization data 6/7. Hospitalization data is for pediatric patients (<18)

Positivity by county, 6/4-6/10



Average positivity per day	# of counties	This week	Last week
<3%		64	33
3-7%		18	45
7-10%		0	3
10-15%		1	1
15-20%		0	1
>=20%		0	0

Updates since last week:

1 of 83 counties saw double digit positivity in the last week (1 county decrease)

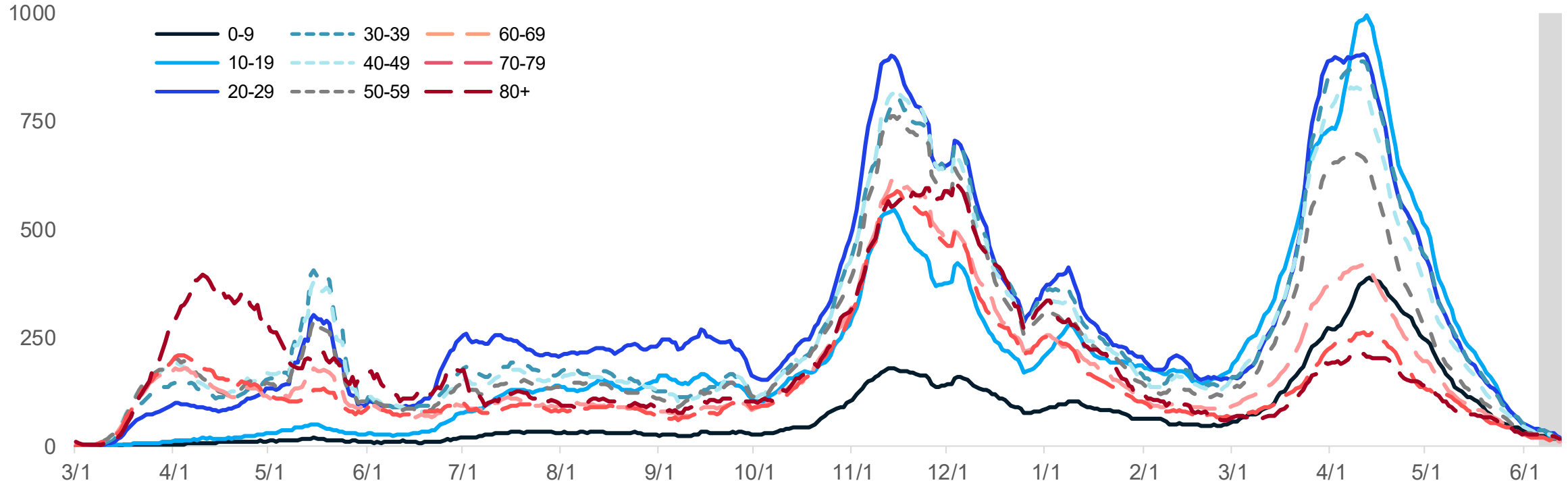
82 of 83 counties saw positivity < 7% in the last week (4 county increase)

64 of 83 counties saw positivity < 3% in the last week (31 county increase)

Source: SEOC Testing Results– Excluding MDOC

Age group: average new daily cases

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



- Case rates for all age groups by decade are decreasing
- Case rates for all age groups are between 20 and 40 cases per million

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 #)	% Change since 4/11/21* (Δ #)
0-9	26.1	22.7	-48% (-25)	-94% (-411)
10-19	47.3	37.7	-46% (-40)	-96% (-1,186)
20-29	55.0	39.9	-42% (-40)	-96% (-1,191)
30-39	45.1	37.2	-48% (-41)	-96% (-1,033)
40-49	37.9	32.1	-48% (-36)	-96% (-925)
50-59	36.4	27.0	-40% (-24)	-96% (-863)
60-69	26.6	20.8	-40% (-17)	-95% (-507)
70-79	16.0	20.9	-39% (-10)	-92% (-185)
80+	11.3	27.2	-19% (-3)	-87% (-78)
Total¶	303.1	52.1	-49% (-219)	-96% (-6,415)

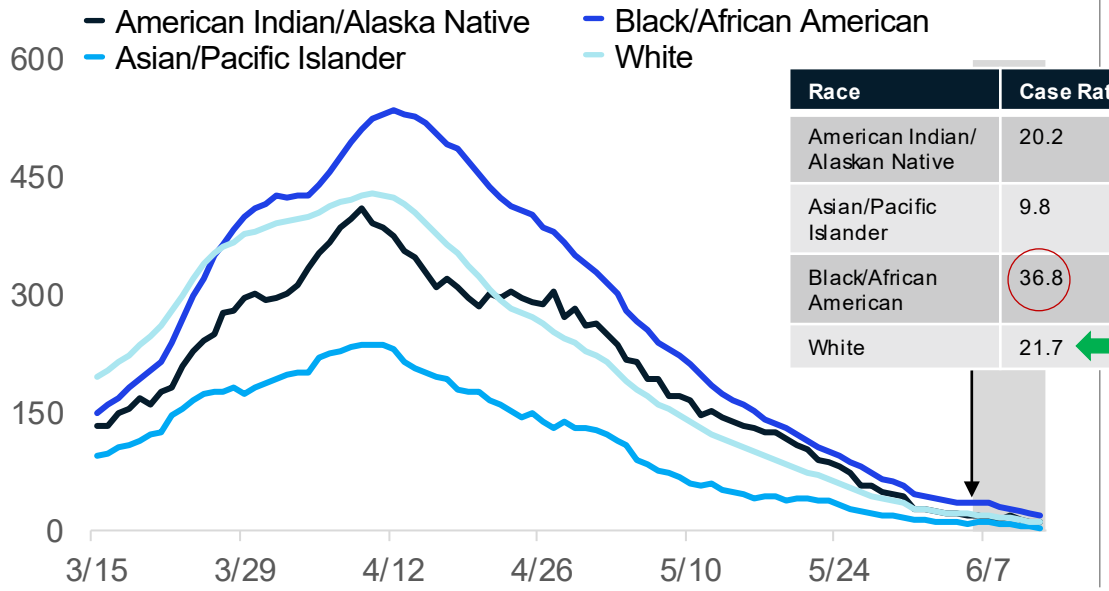
- Avg. daily number of cases (55) and avg. daily case rate (39.9 cases/mil) are currently highest for 20-29
- Case rates for all age groups are between 20 and 40 cases per million
- Since April 11, case rates have decreased more than 87% for all age groups, with state overall down 96%

* Highest 7-day avg. following spring 2021 surge
¶ 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

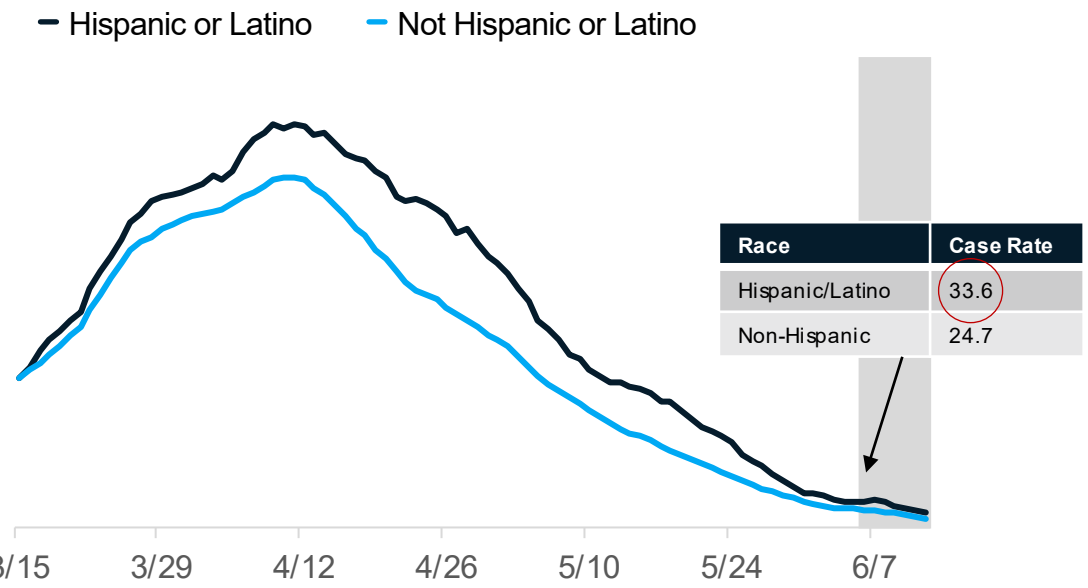
Average daily new cases per million people by race and ethnicity

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



Race	Case Rate
American Indian/ Alaskan Native	20.2
Asian/Pacific Islander	9.8
Black/African American	36.8
White	21.7

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



Race	Case Rate
Hispanic/Latino	33.6
Non-Hispanic	24.7

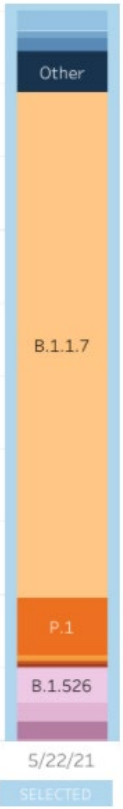
Updates since last week:

- Cases per million are decreasing for all races and ethnicities
- **Blacks/African Americans, and Hispanic/Latinos have the highest case rates**
- In the past 30 days, 24% of all cases represent unknown, multiple, or other races (16% of race is unknown, ↓1%)
- In the past 30 days, 19% of all cases have an unknown ethnicity reported (↓2%)

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 All Variants of Concern (VOC) in US and Michigan

SARS-CoV-2 Variants Circulating in the United States, May 9 – May 22



USA

	Lineage		Type	%Total	95%CI
Most common lineages	B.1.1.7		VOC	69.2%	66.4-71.9%
	P.1		VOC	8.1%	6.2-10.3%
	B.1.526		VOI	4.7%	3.4-6.4%
	B.1.526.2			2.7%	2.1-3.4%
	B.1.526.1		VOI	2.5%	1.9-3.4%
	B.1.617.2		VOI	2.5%	1.9-3.4%
	B.1			1.8%	1.4-2.3%
	B.1.1.519			0.9%	0.5-1.4%
	B.1.2			0.1%	0.1-0.2%
Additional VOI/VOC lineages	B.1.429		VOC	0.7%	0.4-1.1%
	B.1.351		VOC	0.6%	0.4-0.9%
	B.1.427		VOC	0.4%	0.2-0.8%
	B.1.525		VOI	0.1%	0.1-0.3%
	B.1.617.1		VOI	0.1%	0.0-0.2%
	B.1.617	†	VOI	0.0%	NA
	B.1.617.3	†	VOI	0.0%	NA
	P.2	†	VOI	0.0%	NA
Other*	Other			5.6%	4.7-6.7%

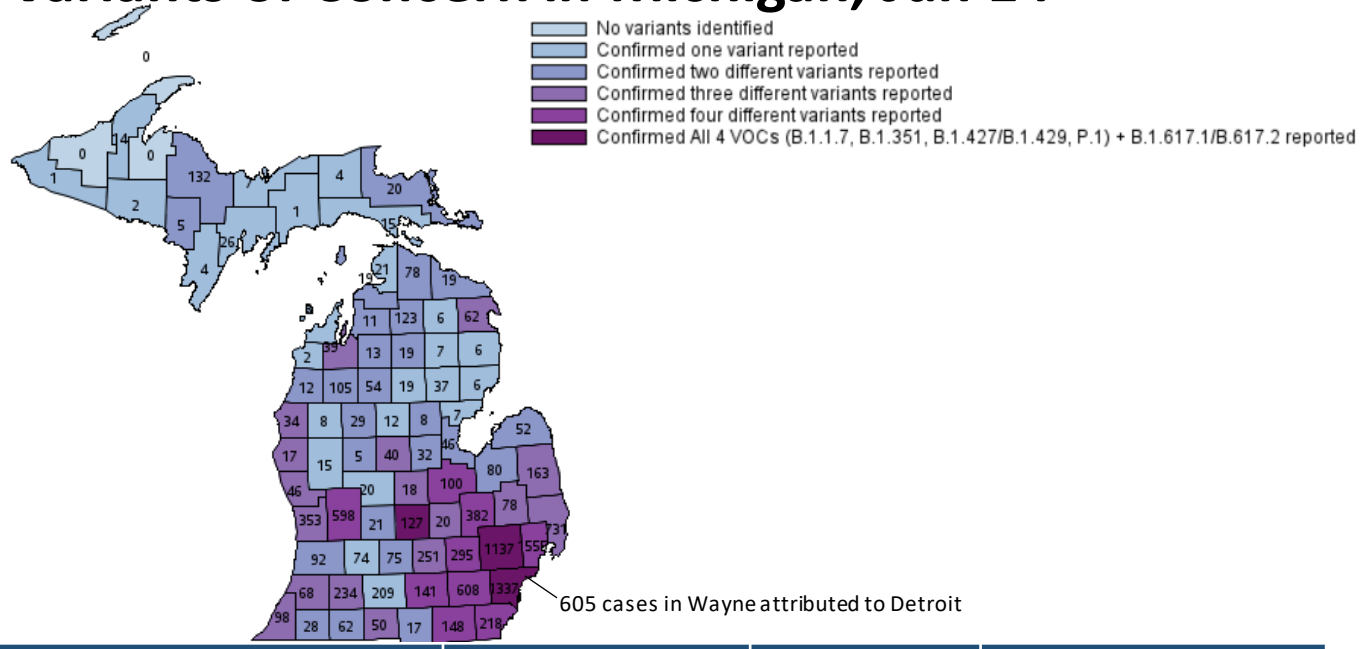
* Other represents >200 additional lineages, which are each circulating at <1% of viruses

† Fewer than 10 observations of this variant during the selected time/location context

Data last updated June 14, 2021

Source: https://covid.cdc.gov/covid-data-tracker/#variant-proportions and MDSS

Variants of Concern in Michigan, Jun 14



Variant	MI Reported Cases¶	# of Counties	CDC est. prevalence
B.1.1.7 (alpha)	11,305*	80	81.5%
B.1.351 (beta)	69	21	0.5%
B.1.427/B.1.429 (epsilon)	302	43	1.0%
P.1 (gamma)	247	29	3.0%
B.1.617.1/B.1.617.2 (kappa/delta)	25	6	N/A

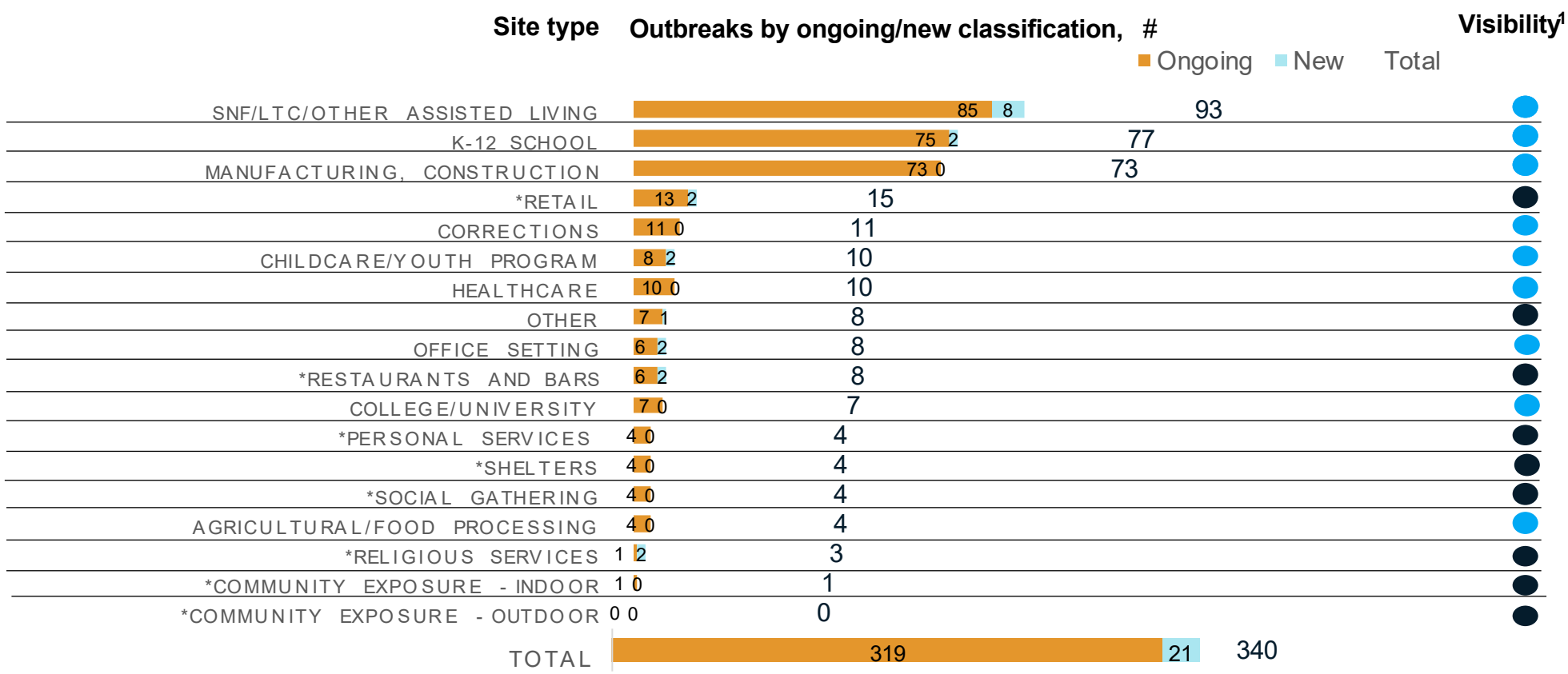
* 533 cases within MDOC; ¶ 155 cases with county not yet determined

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	α	~50% increased transmission	-	Increased hospitalizations and death	✓
B.1.351	β	~50% increased transmission	Reduced susceptibility to antibody treatment	-	✓
P.1	γ	-	Reduced susceptibility to antibody treatment	-	✓
B.1.427/B.1.429	ε	~20% increased transmissibility	Modest decrease in susceptibility to monoclonal antibody treatment	-	✓
B.1.617.1/B.1.617.2	κ / δ	> 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/

Number of outbreak investigations by site type, week ending Jun 10



Total number of active outbreaks is **down 35%** from previous week

Following LTCF (8), new outbreaks were reported in K-12 (2), retail (2), childcare/ youth (2), office settings (2), bars/ restaurants (2), religious services (2), and other setting types (1).

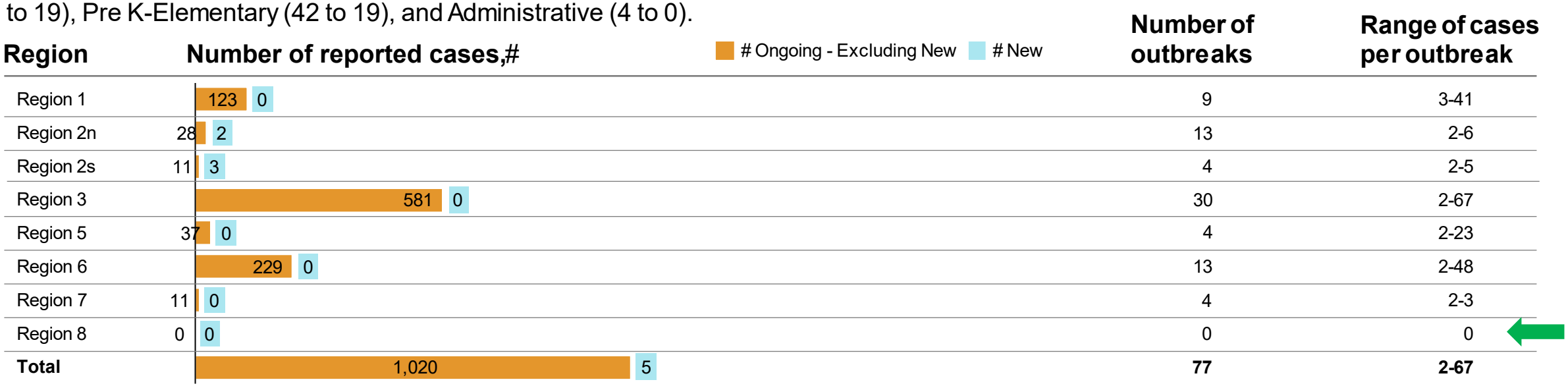
1. Based on a setting's level of control and the extent of time patrons/residents spend in the particular setting, different settings have differing levels of ability to ascertain whether a case derived from that setting

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

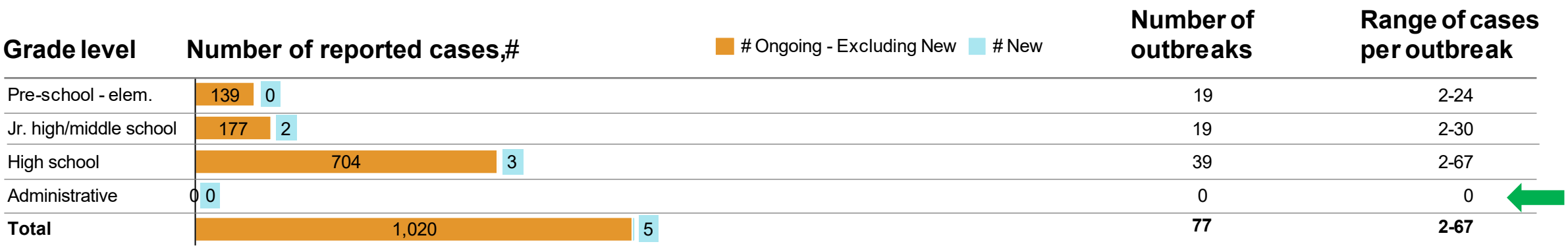
Source: LHD Weekly Sitreps

K-12 school outbreaks, recent and ongoing, week ending Jun 10

Number of reported outbreaks decreased since last week (150 to 77) including decreases in High Schools (66 to 39), Middle/Jr High (38 to 19), Pre K-Elementary (42 to 19), and Administrative (4 to 0).



Region	Number of reported cases,#		Number of outbreaks	Range of cases per outbreak
Region 1	123	0	9	3-41
Region 2n	28	2	13	2-6
Region 2s	11	3	4	2-5
Region 3	581	0	30	2-67
Region 5	37	0	4	2-23
Region 6	229	0	13	2-48
Region 7	11	0	4	2-3
Region 8	0	0	0	0
Total	1,020	5	**77**	**2-67**



Grade level	Number of reported cases,#		Number of outbreaks	Range of cases per outbreak
Pre-school - elem.	139	0	19	2-24
Jr. high/middle school	177	2	19	2-30
High school	704	3	39	2-67
Administrative	0	0	0	0
Total	1,020	5	**77**	**2-67**

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 K-12 Sports Related Clusters and Cases

Cumulative Since Jan 2021 through May 2021

491 cases
126 clusters

368 cases
61 clusters

283 cases
73 clusters

108 cases
23 clusters

90 cases
44 clusters

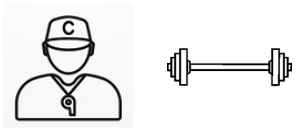
59 cases
25 clusters

55 cases
16 clusters

41 cases
11 clusters

44 cases
4 clusters

41 cases
18 clusters



32 cases
13 clusters

22 cases
12 clusters

14 cases
3 clusters

38 cases
23 clusters

- Cases identified by local public health which include school-affiliated and club/travel/regional sports (spectators, collegiate, and professional sports as well as secondary cases to collegiate/professional sports are excluded)
- Largest number of new cases and clusters identified in past week are track and field, and baseball/softball
- Cases and clusters have occurred in 25 different sport settings

Source: MDHHS – Michigan Disease Surveillance System

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

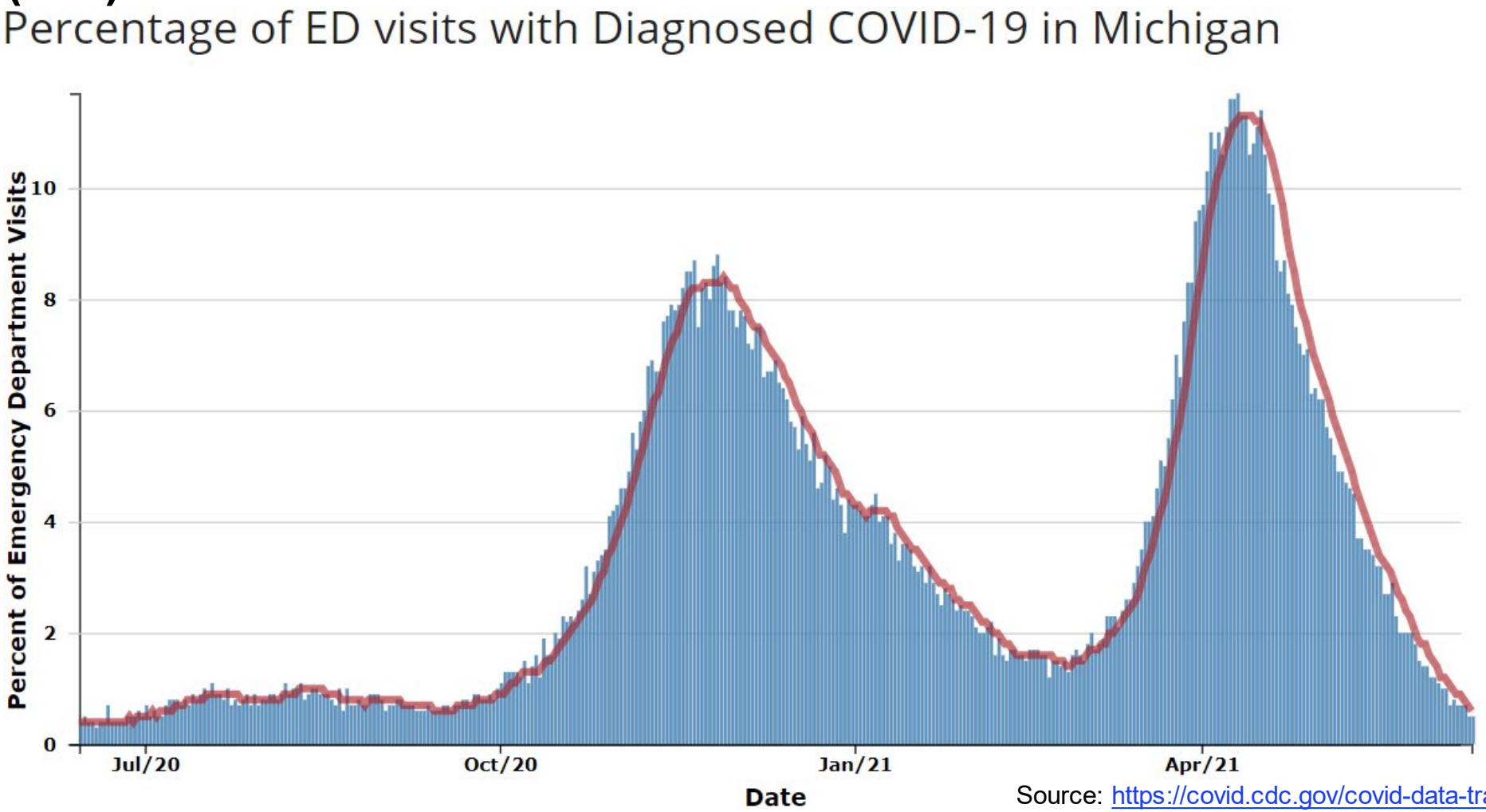
Hospitalizations and ICU utilization are decreasing

- COVID-like illness (CLI) has fallen to 0.7% (vs. 1.1% last week)
- Hospital admissions are decreasing statewide and for most age groups
  - Those under 30 years have seen an increase in hospital admissions over the prior week but baseline is lower compared to older age groups
- Hospitalizations down 33% since last week (vs. 22% decline week prior)
- All regions are showing decreases or flat trends in hospitalization trends this week
- Volume of COVID-19 patients in intensive care has decreased 25% since last week (vs. 25% decline week prior)

Death rate has decreased to 2.4 daily deaths per million people

- 22% decrease since last week (vs. 31% decrease last week)
- 69% decrease since April 24 peak
- Proportion of deaths among those under 60 years of age is steady to prior week

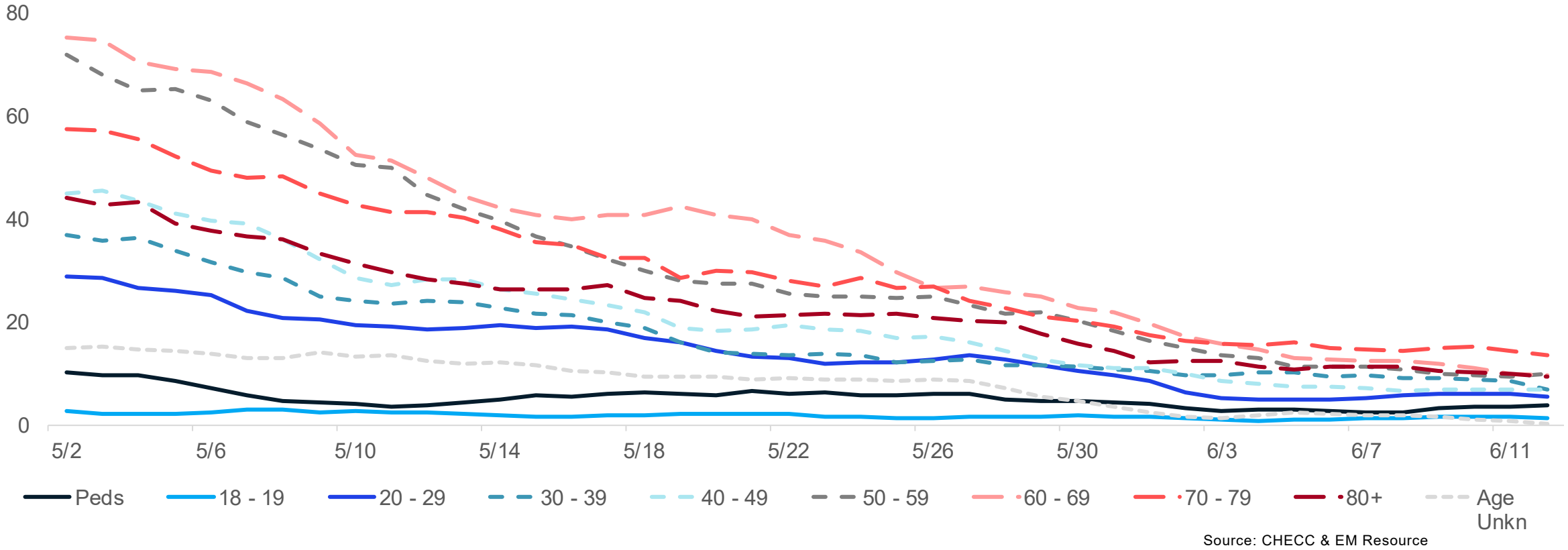
Michigan Trends in Emergency Department Visits for COVID-19-Like Illness (CLI)



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

Average Hospital Admissions by Age

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



Source: CHECC & EM Resource

- Trends for daily average hospital admissions have decreased 17% since last week
- Trends within most age groups are decreasing
- Over the past week, those 70-79 have seen the highest number of avg. daily hospital admissions (13 admissions)

Average Hospital Admissions by Age

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

Age Group	Daily Avg Admissions	Average Daily Adm. Rate†	One Week % Change (#)	% Change since 4/14* (#)
Peds	1-5	1.7	24% (+1-5)	-50% (-1-5)
18-19	1-5	4.9	29% (+1-5)	-74% (-1-5)
20-29	5.6	4.0	11% (+1-5)	-83% (-28)
30-39	7.0	5.8	-31% (-1-5)	-86% (-41)
40-49	6.9	5.8	-8% (-1-5)	-91% (-71)
50-59	9.9	7.3	-14% (-1-5)	-91% (-105)
60-69	9.7	7.6	-26% (-1-5)	-92% (-119)
70-79	13.4	17.5	-17% (-1-5)	-84% (-72)
80+	9.4	22.8	-12% (-1-5)	-84% (-51)
Total¶	67.0	6.7	-17% (-13)	-89% (-534)

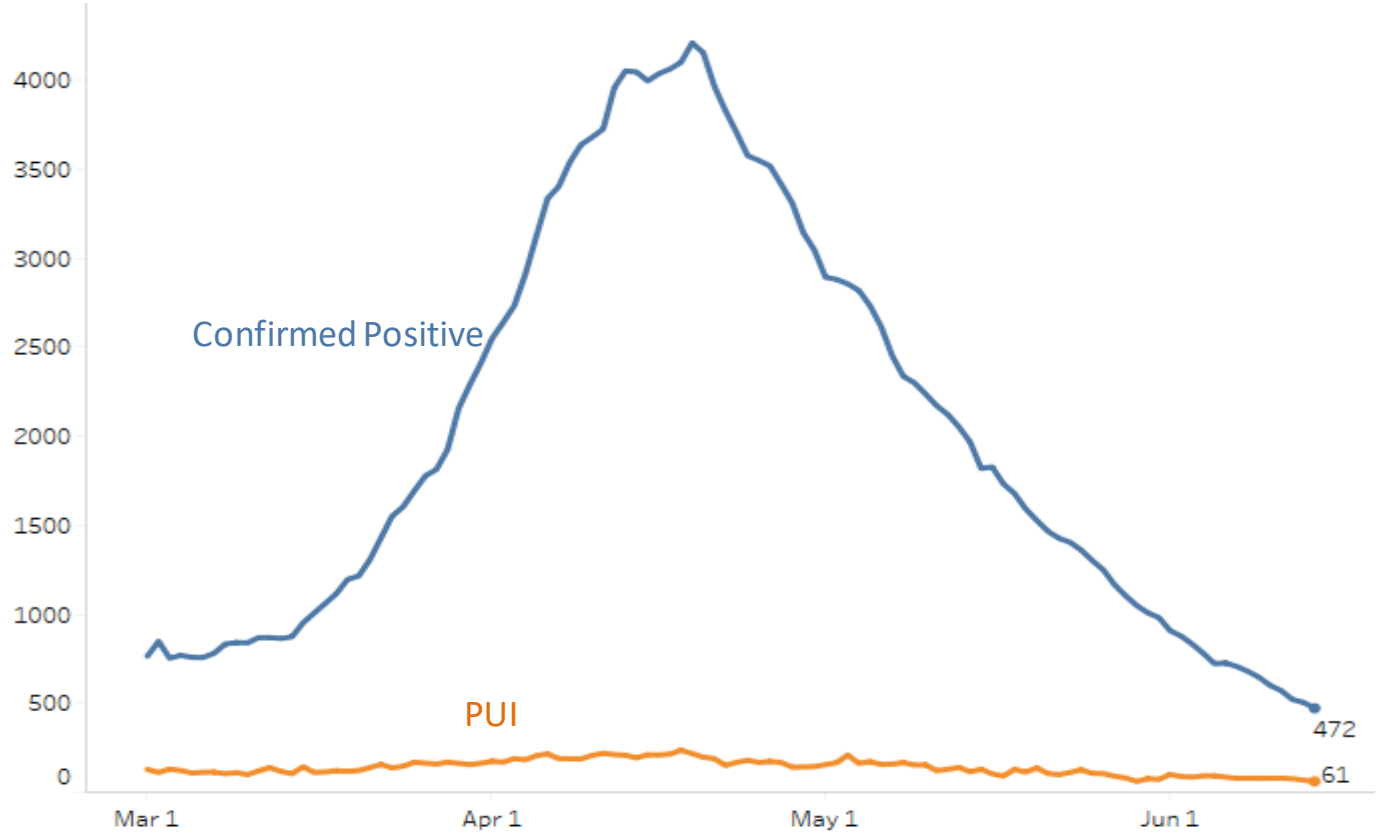
Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

- Over the past week, those under 30 years have seen increases in hospital admissions for COVID-19 although there are fewer number of admissions compared to other age groups
- Currently, there are approximately 67 daily hospital admissions for COVID-19
- Since the Apr 14 high, overall avg. daily hospital admissions for COVID-19 have decrease 89%

† Rate per 1,000,000 MI residents
* Highest 7-day avg. hosp. adm. following Spring 2021 surge
¶ Total may not reflect state due to missing age data

Statewide Hospitalization Trends: Total COVID+ Census

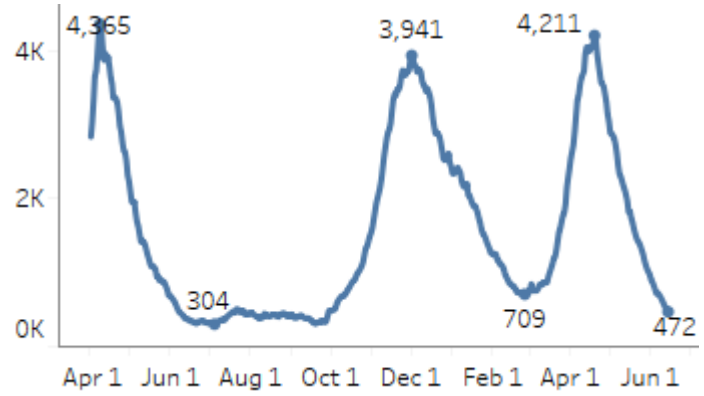
Hospitalization Trends 3/1/2021 – 6/14/2021
Confirmed Positive & Persons Under Investigation (PUI)



COVID+ census in hospitals continues to decline from the April 19th peak. This week is down 33% from the previous week (previous week was down 22%).

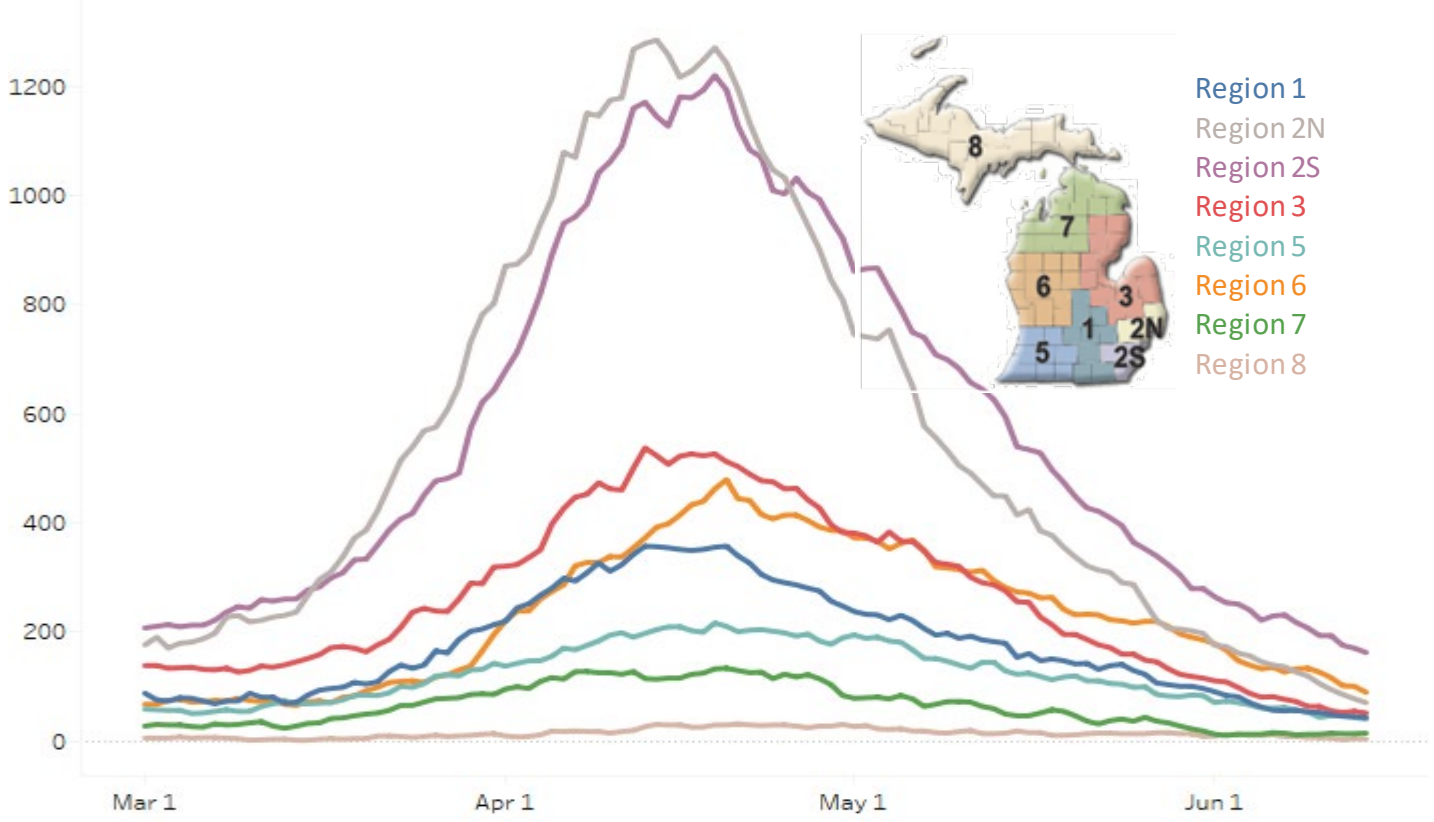
Hospitalizations are now approaching the levels seen during the summer of 2020.

Hospitalized COVID Positive Long Term Trend (beginning March 2020)



Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 3/1/2021 – 6/14/2021
Confirmed Positive by Region

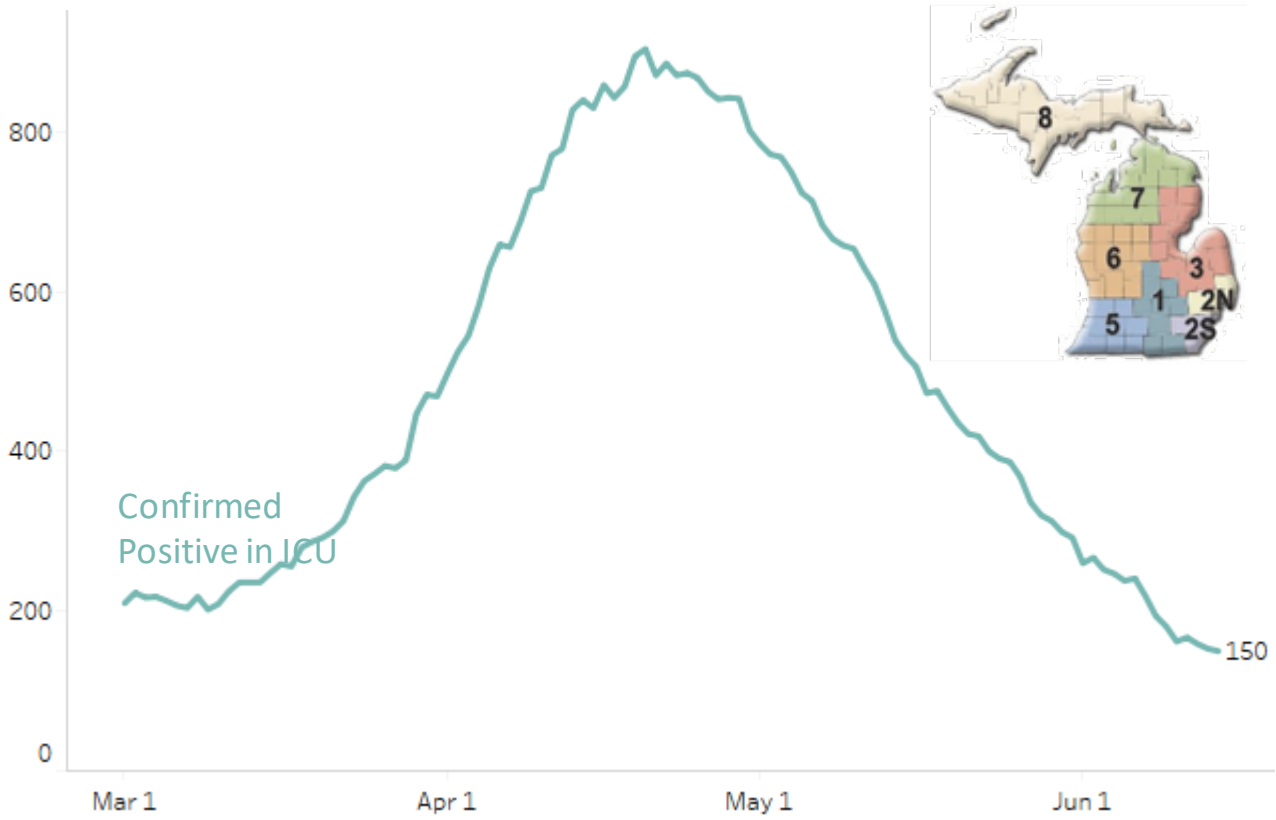


All regions show decreasing or flat hospitalization trends this week.

All regions are now below 75/M hospitalized.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	43 (-22%)	40/M
Region 2N	70 (-49%)	32/M
Region 2S	162 (-30%)	73/M
Region 3	51 (-33%)	45/M
Region 5	40 (-34%)	42/M
Region 6	89 (-29%)	61/M
Region 7	14 (0%)	28/M
Region 8	3 (-63%)	10/M

Statewide Hospitalization Trends: ICU COVID+ Census



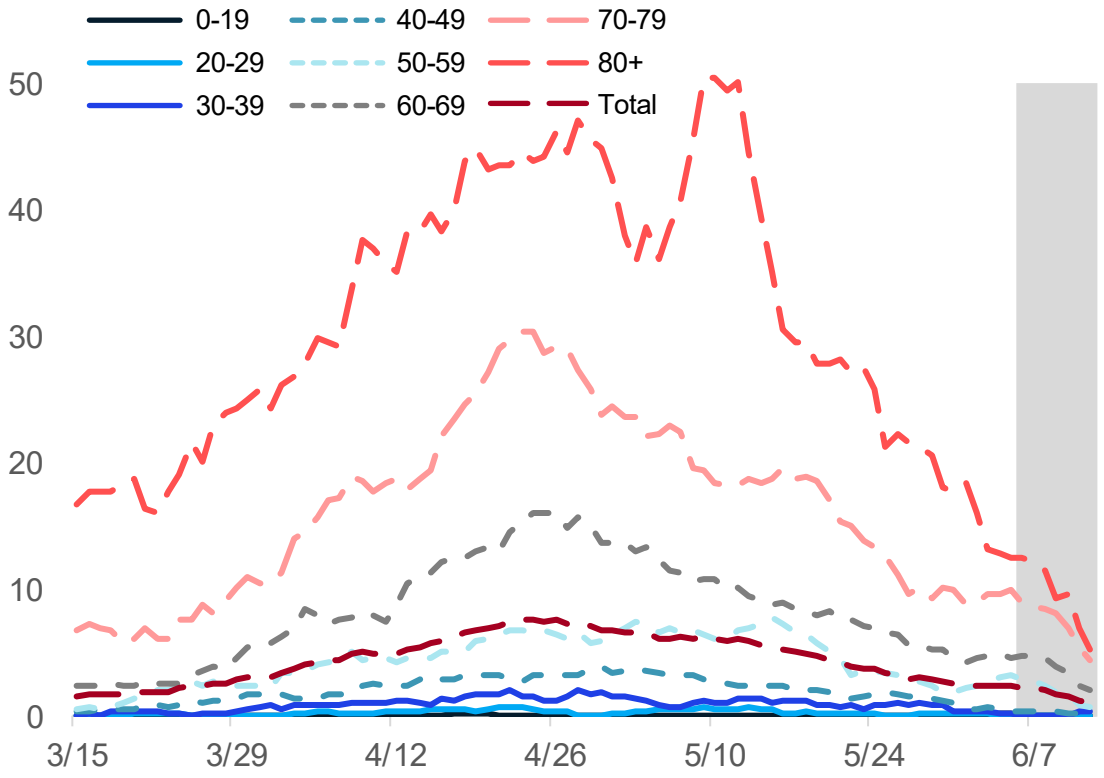
Overall, volume of COVID+ patients in ICUs has decreased 25% from last week, with 7/8 regions showing decreasing ICU census.

All regions have <15% 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	9 (-47%)	88%	5%
Region 2N	22 (-35%)	78%	4%
Region 2S	51 (-26%)	83%	7%
Region 3	14 (-48%)	87%	4%
Region 5	7 (-59%)	67%	4%
Region 6	37 (-12%)	79%	14%
Region 7	8 (33%)	65%	4%
Region 8	2 (-67%)	64%	3%

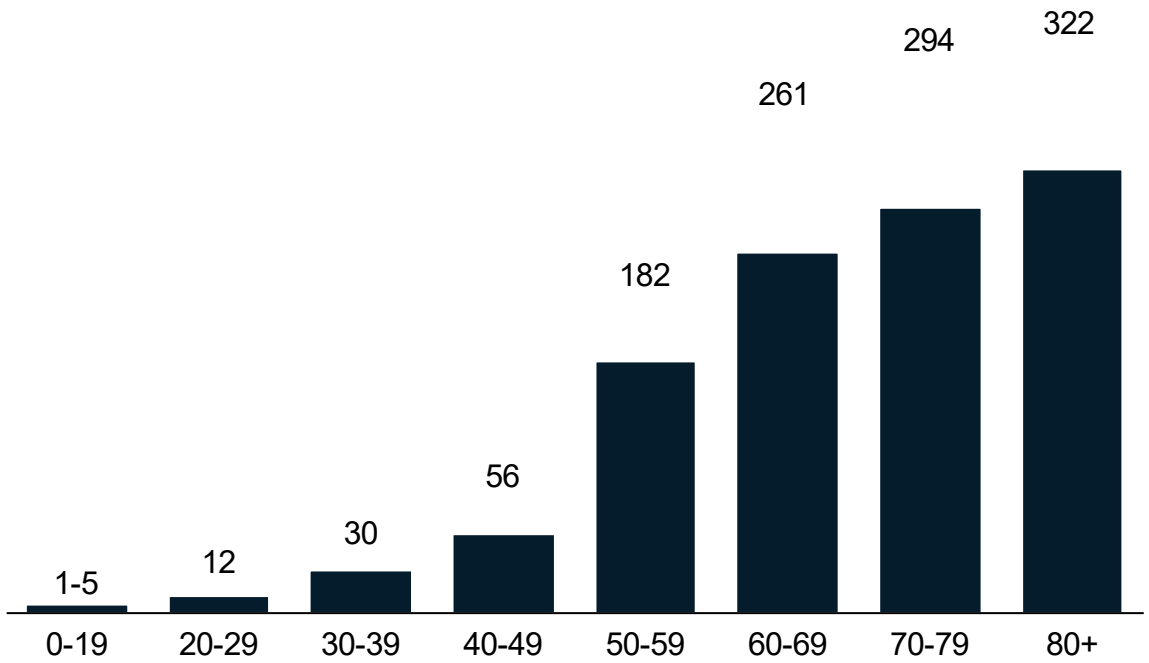
Average and total new deaths, by age group

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 6/5/2021)

- 25% of deaths below age sixty

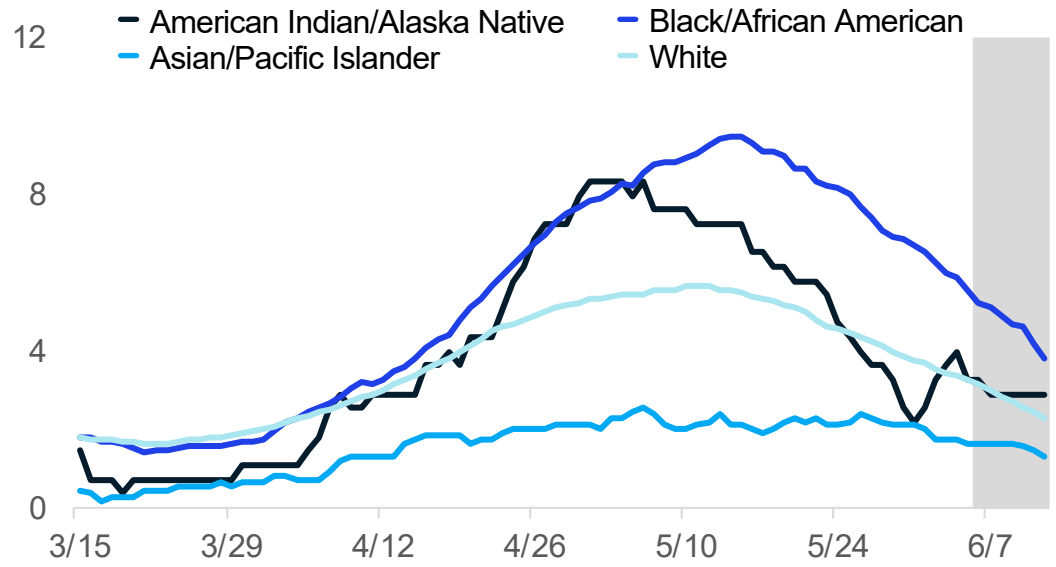


Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.

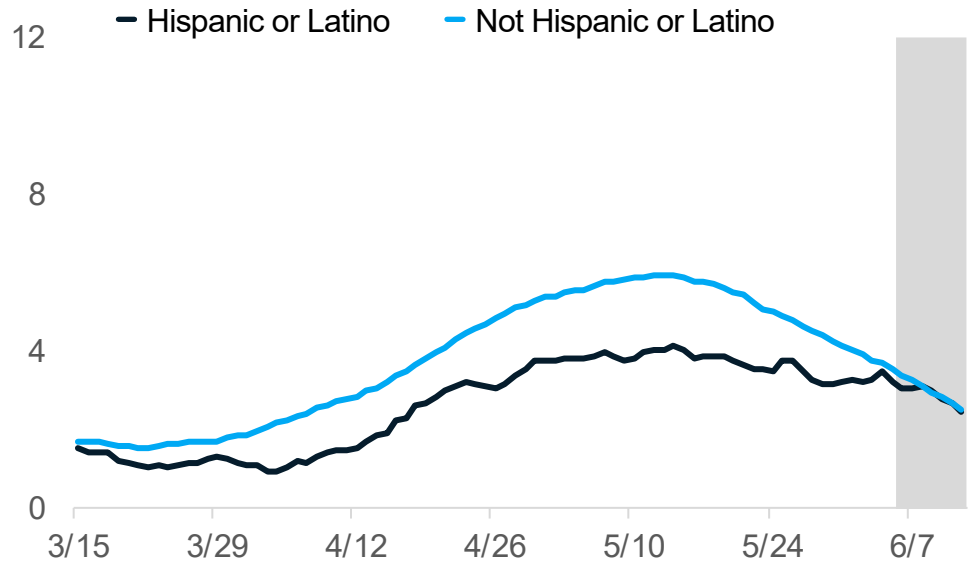
Source: MDHHS – Michigan Disease Surveillance System

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:

- All racial and ethnic groups are seeing a decrease in COVID deaths
- **Blacks/African Americans have the most reported deaths per capita**
- Deaths 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

Key Messages: How is public health capacity?

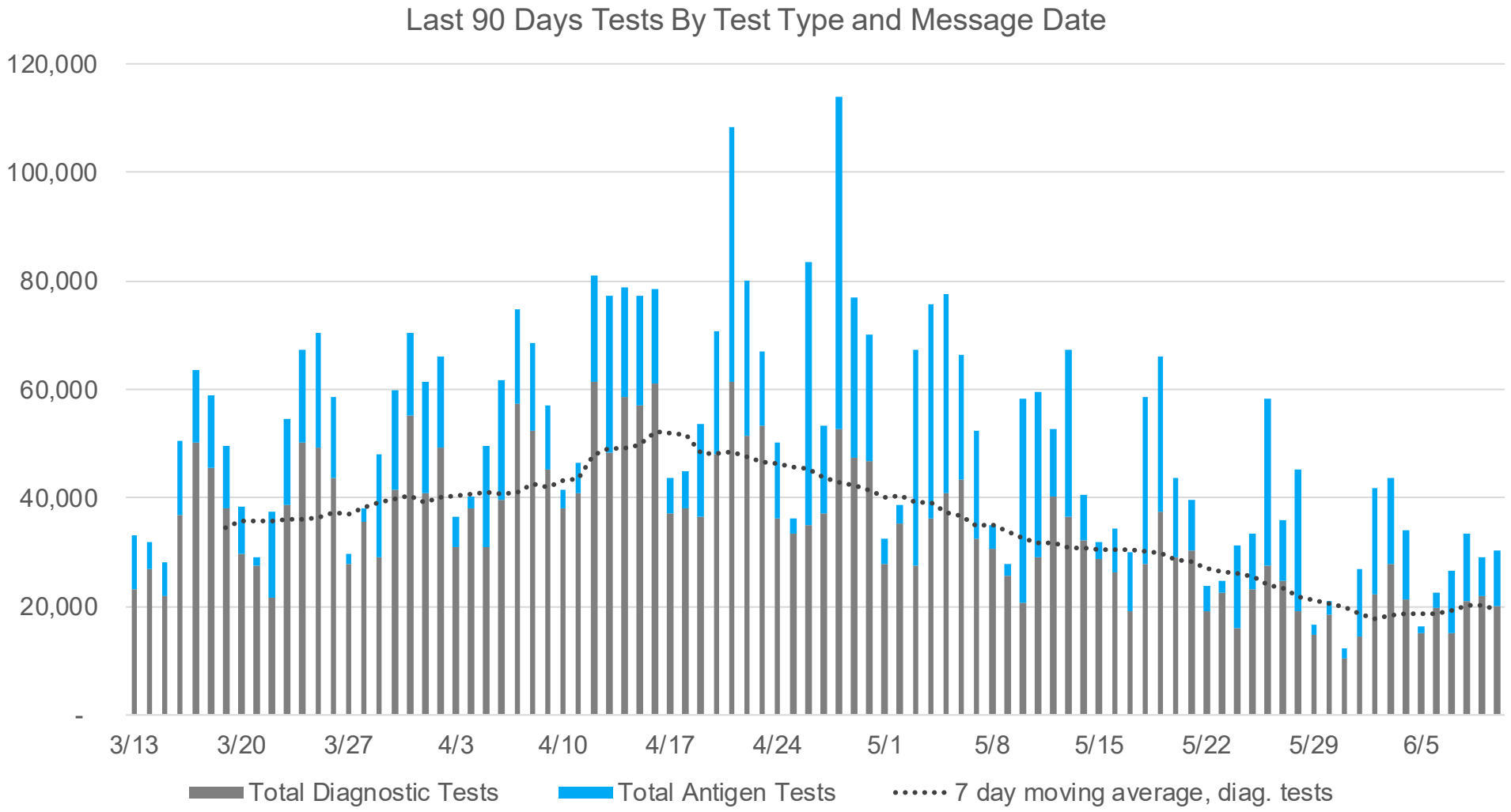
Diagnostic testing volume (PCR and antigen) has decreased from last week

- PCR testing increased since last week
- Percent of antigen tests has decreased since last week
- Not all antigen tests may be reported to health agencies as more at home testing becomes available

Cases identified for investigations has declined

- Case burden directly impact the feasibility to perform case investigation on everyone
- Over 90% of identified cases have received outreach from public health services
  - However, only approximately 65% of case investigations are completed
  - Reasons for lower completion rate is inability to reach cases and cases refusal to participate in case investigation

Daily diagnostic tests, by message date

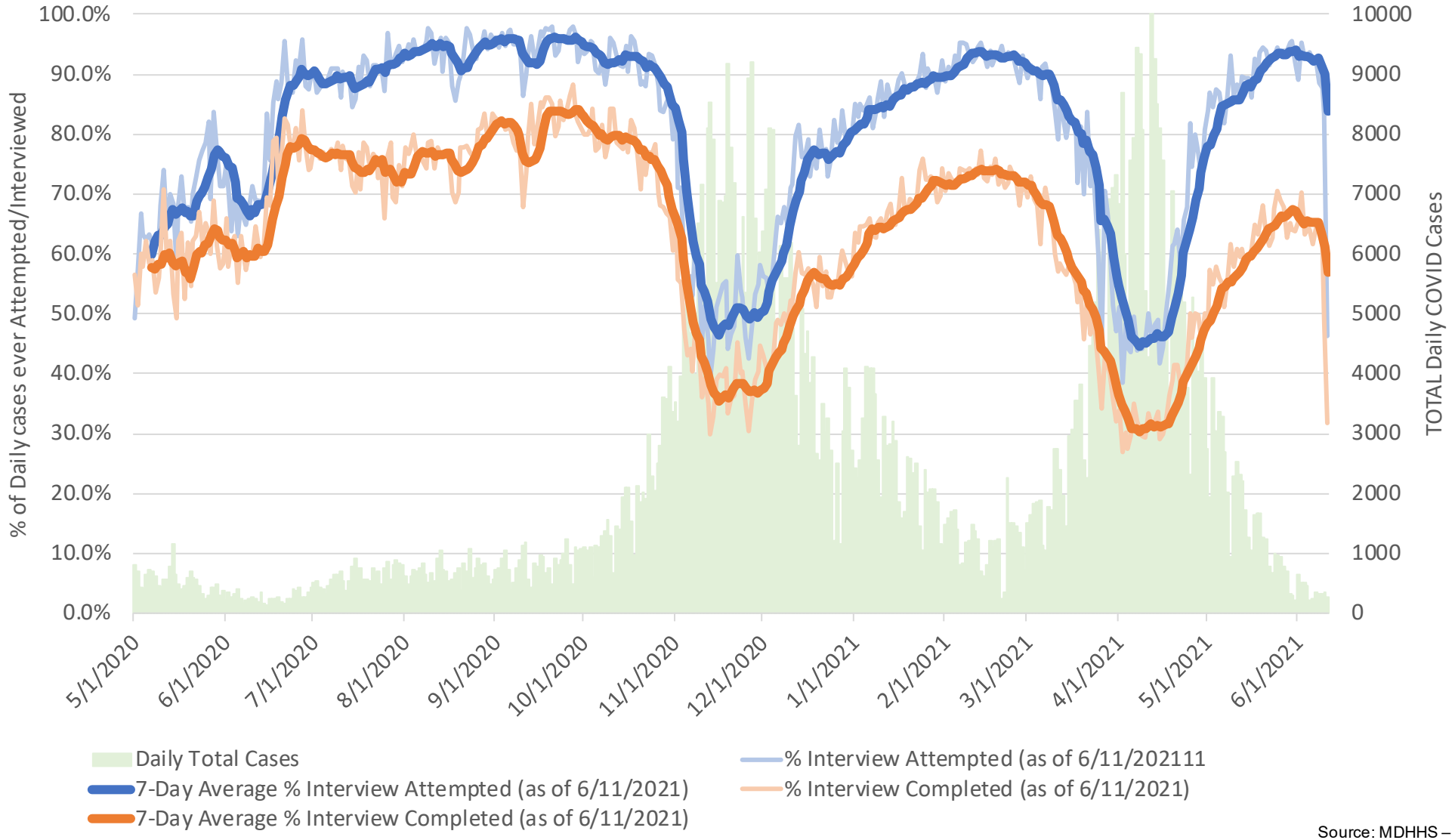


Source: MDSS/Michigan Medical Advantage Group, MDHHS, testing labs

Weekly Update

- 27,494 rolling 7-day average daily diagnostic tests reported to MDHHS (PCR + Ag) (↓)
- 19,111 average daily PCR tests (↑)
- 30.0% are antigen tests over the past week (↓)
- 2.2% positivity in PCR tests (↓)
- **Not all antigen tests may be reported to health agencies as more at home testing become available**

New Case Investigation Trends (Statewide)



Weekly Update

- Case burden directly impact the feasibility to perform case investigation on everyone
- Recently, case investigators attempt to contact over 90% of COVID-19 cases
- However, only ~65% of case investigations are completed

Source: MDHHS – Michigan Disease Surveillance System; TraceForce

COVID-19 Vaccination

Administration

9th state in doses delivered, first doses provided and number of completed individuals (6/7/21)

78.8% adjusted administration ratio (excluding federal entities, CDC channel portfolio 6/10/2021)

179K doses last week: most frequently by pharmacies, local health departments, and hospitals

Coverage

60.4% of those 18+ have received first dose of vaccine

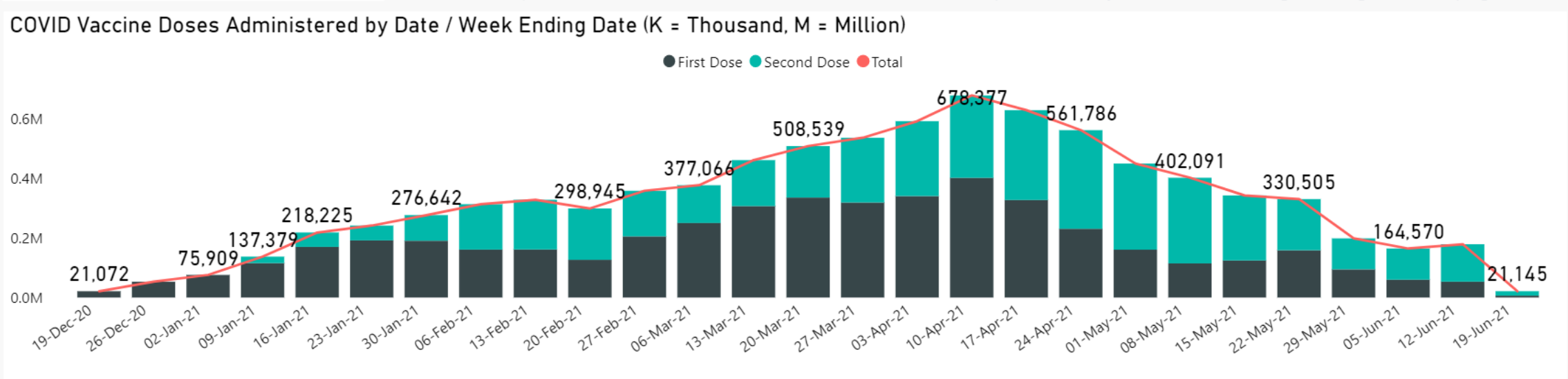
4,220,924 people in Michigan have completed series

70.7% of people aged 50 or older have had first dose; 41.6% of people aged 12-49 (up 1% last week)

Initiation highest among Asian, Native Hawaiian or Pacific Islander and American Indian/Alaskan Native individuals (MI Covid Vaccine Dashboard 6/8/21)

Less than 1% of Vaccinated Individuals Later Tested Positive for COVID -19 (Number of cases who are fully vaccinated (n= 6,187))

Doses Delivered and Administered, and Coverage as of 6/15/21



11,374,440 doses delivered to providers in Michigan
9.1M doses Administered (CDC tracker) – MI has detail on 8,755,222

78.8% adjusted administration ratio (excluding federal entities, CDC channel portfolio 6/10/2021) – up 0.4% from last week

- 179K doses administered last week (up from 155K)

In 7 days, doses most frequently provided by
- Pharmacies (131K (increase)),
- LHD (26K (small increase)), and hospitals (18K (steady)),
- FQHCs, family practice and pediatricians (5000 or less (stable))

Coverage Demographics as of 6/15/2021

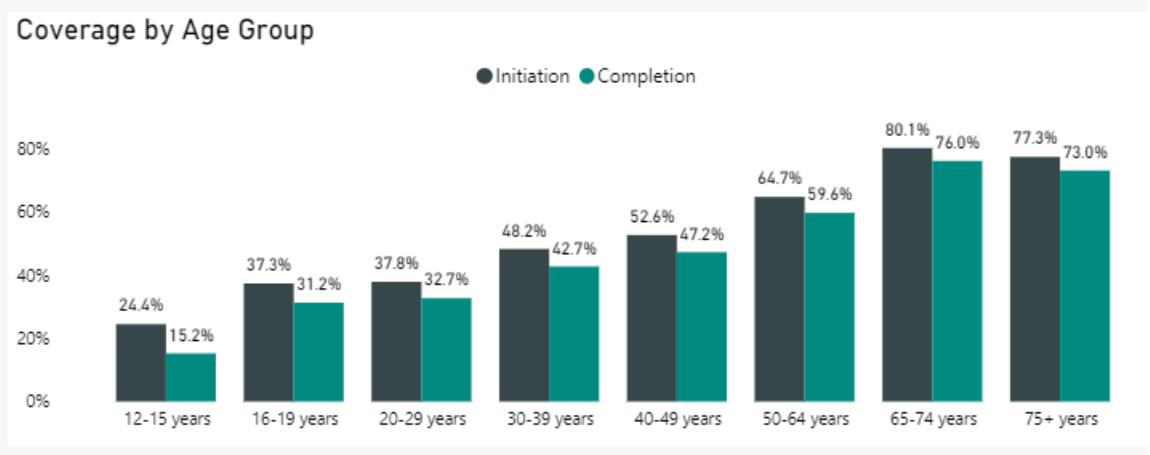
4,485,169 people completed series (CDC) (28K+ people)

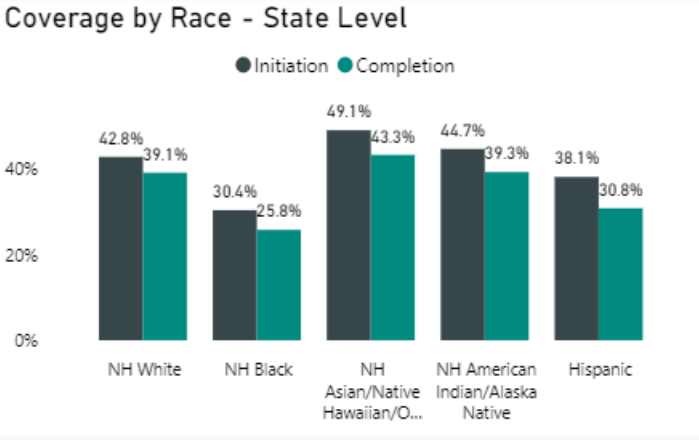
Age Group (Michigan dashboard)

- 42.7% people age 12-49 initiated vaccination (up 1.1% from last week)
- 71.3% people aged 50 or older have initiated their vaccine series;

Race/Ethnicity for 12 and older:

- Initiation coverage highest among those of Non-Hispanic (NH) Asian, Native Hawaiian or Pacific Islander Race, then NH American Indian, NH White, NH Black or African American Races.
- Initiation is at 38.1% for those of Hispanic ethnicity
- 22.5% data missing or unknown





Source: Michigan Coronavirus Dashboard https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214-547150--,00.html

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 6/8/21):

- 6,868 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 163 deaths (148 persons age 65 years or older)
  - 396 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.
- There is some evidence that vaccination may make illness less severe for those who are vaccinated and still get sick.
- To date, no unexpected patterns have been identified in the case demographics or vaccine characteristics among people with reported vaccine breakthrough infections.

Excess Mortality – State of Michigan

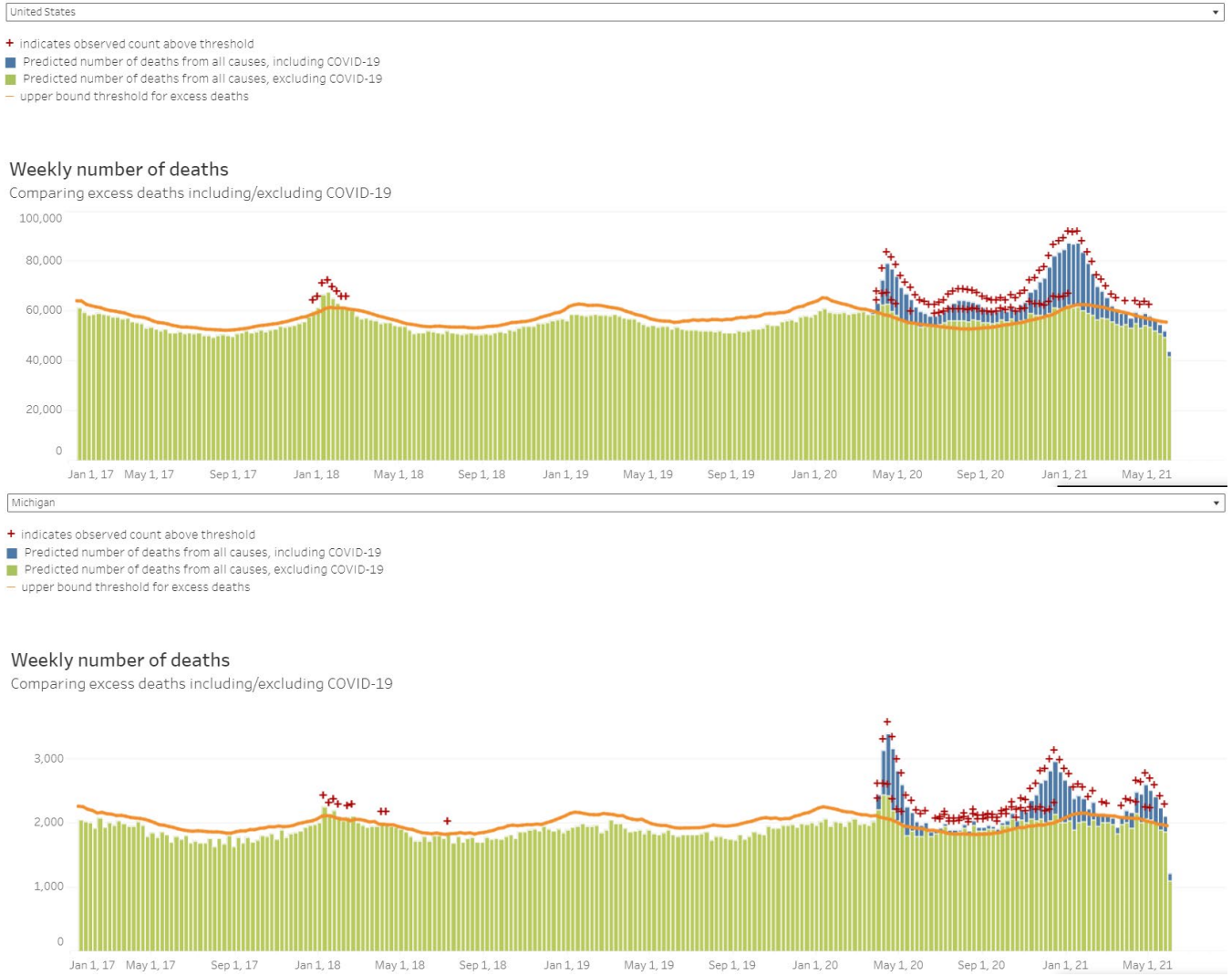
Orange line: upper threshold for excess deaths

Week ending 05/29

- **Nationally: ~ 0% excess deaths**
- **Michigan: ~ 4% excess deaths**
- **1,212 deaths, 119 COVID-19 deaths**

Data are provisional. Only 60% of death records are submitted to NCHS within 10 days of the date of death, and completeness varies by jurisdiction.

COVID-19 deaths are those deaths coded as ICD-10 U07.1 or U07.2 as an underlying or related cause of death.



Source: Excess Deaths Associated with COVID-19: Provisional Death Counts for Coronavirus Disease (COVID-19), Extracted June 8, 2021. National Center for Health Statistics, Centers for Disease Control and Prevention.

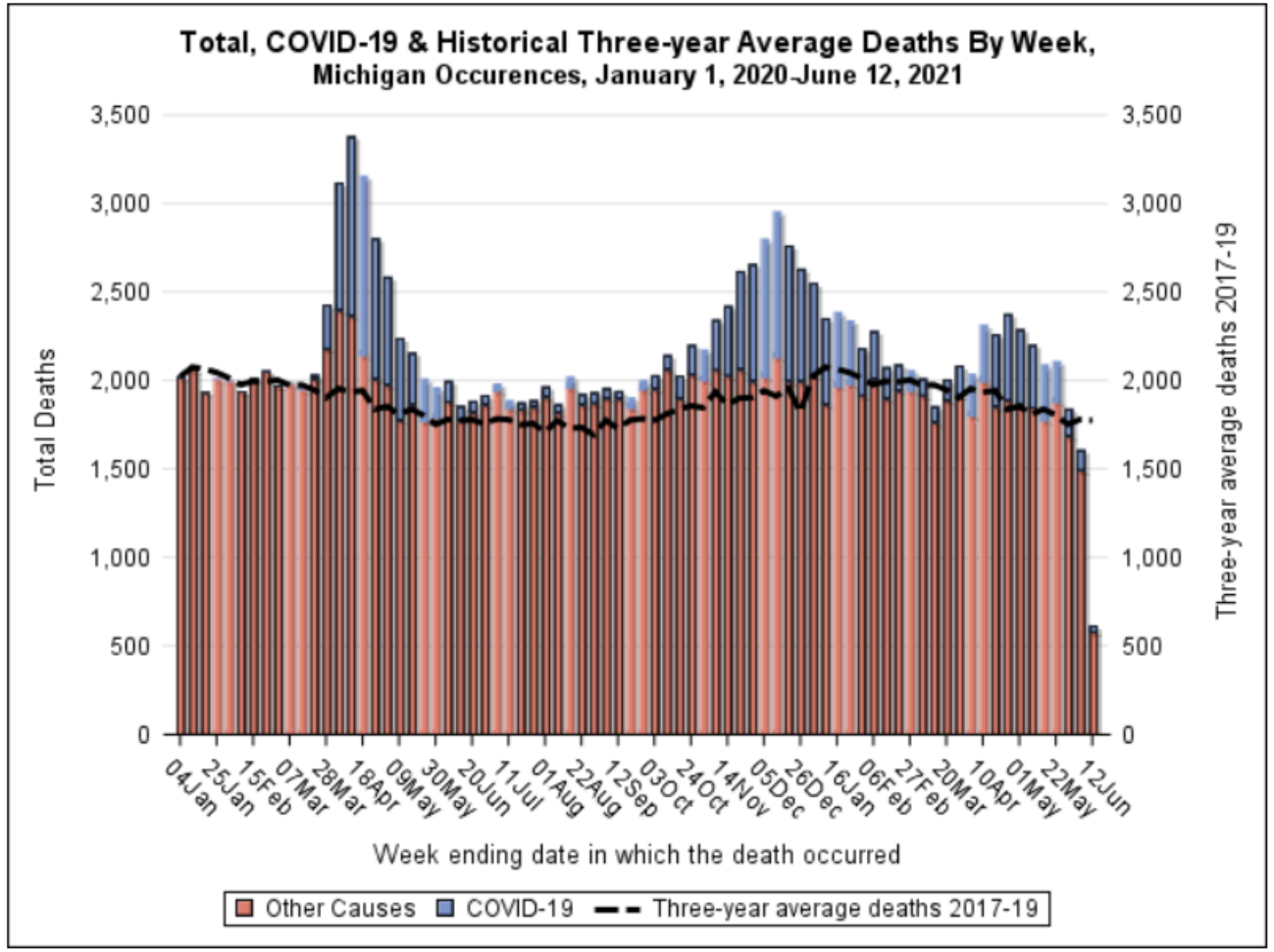
Excess Mortality – State of Michigan

Black line: expected number

Week of 06/05
- 1,610 deaths, 114 COVID-19 deaths

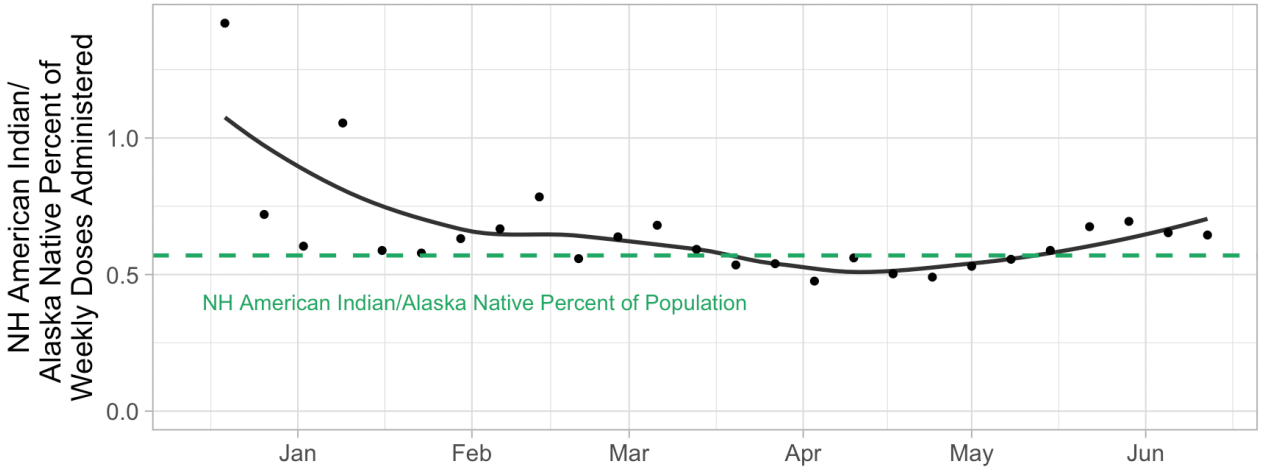
Data is provisional. Death reporting may be delayed by 7 days. Verifying the cause of death and processing administrative records further delay reports for statistical purposes. Will be lower than the actual year-to-date total.

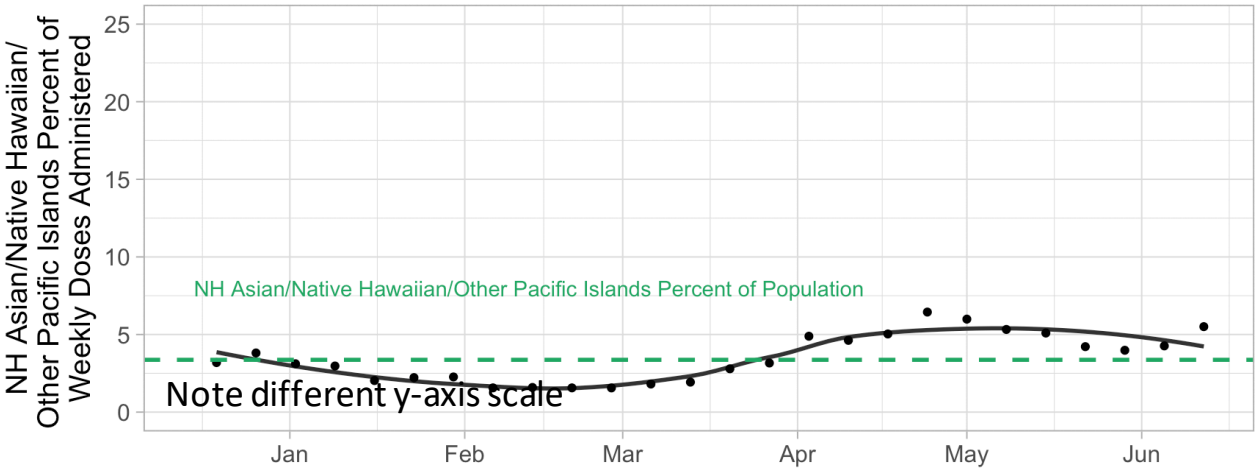
COVID-19 deaths are those deaths coded as ICD-10 U07.1 or U07.2 as an underlying or related cause of death.

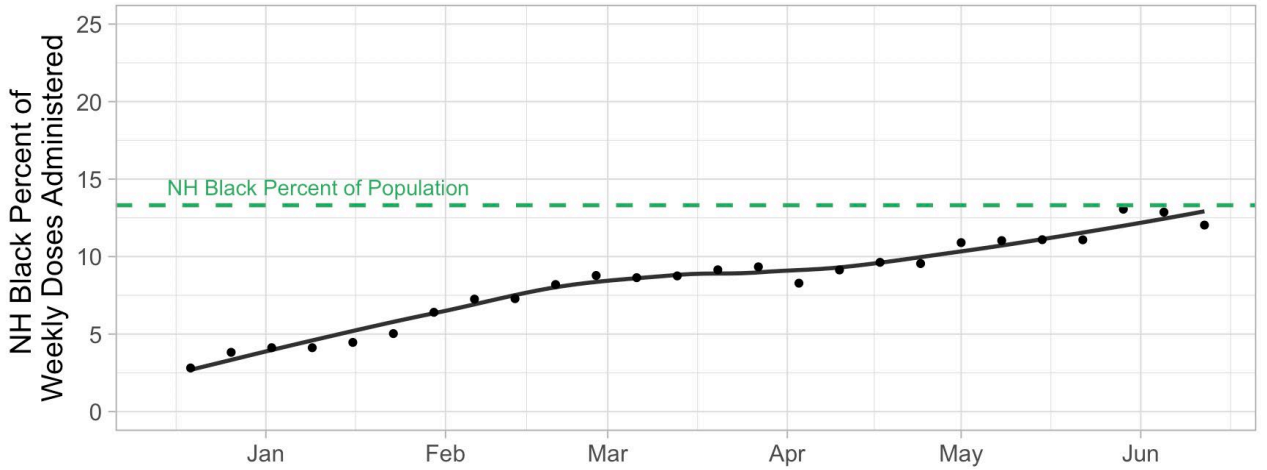


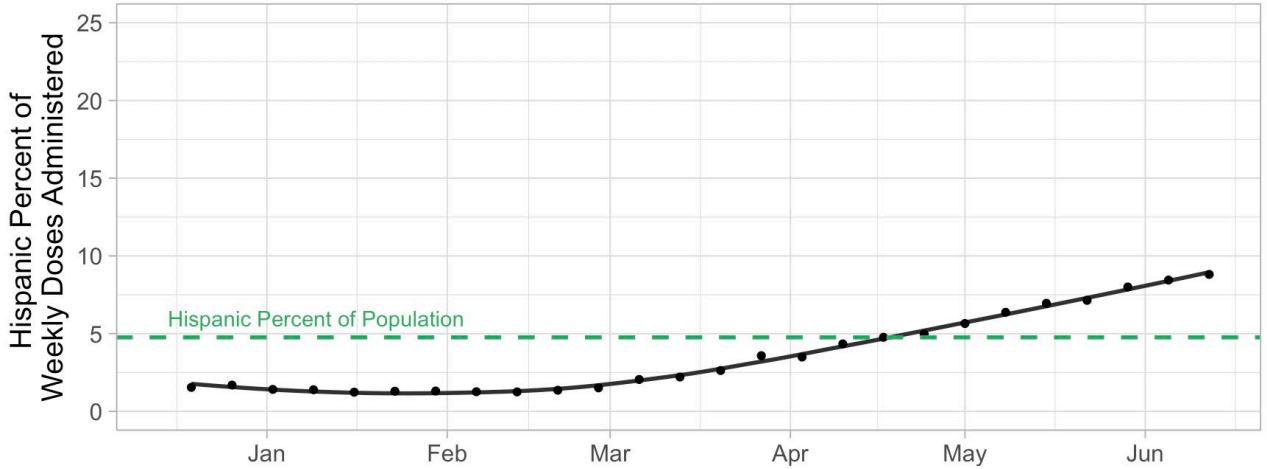
Source: Michigan 2020 Death File, Extracted June 8, 2021. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services. https://www.mdch.state.mi.us/osr/Provisional/CvdChart_1.asp

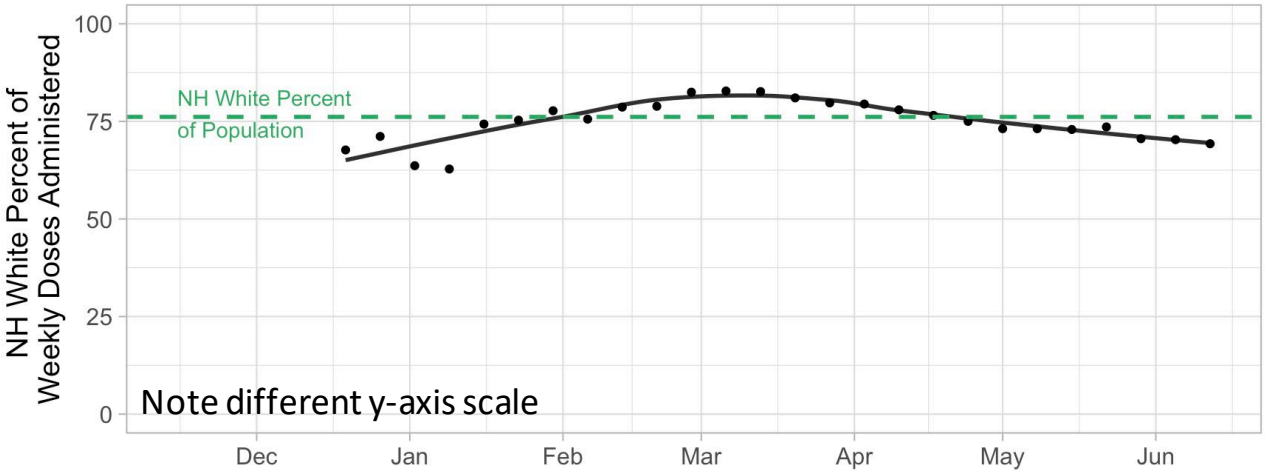
Weekly doses administered have become more evenly distributed by race/ethnicity









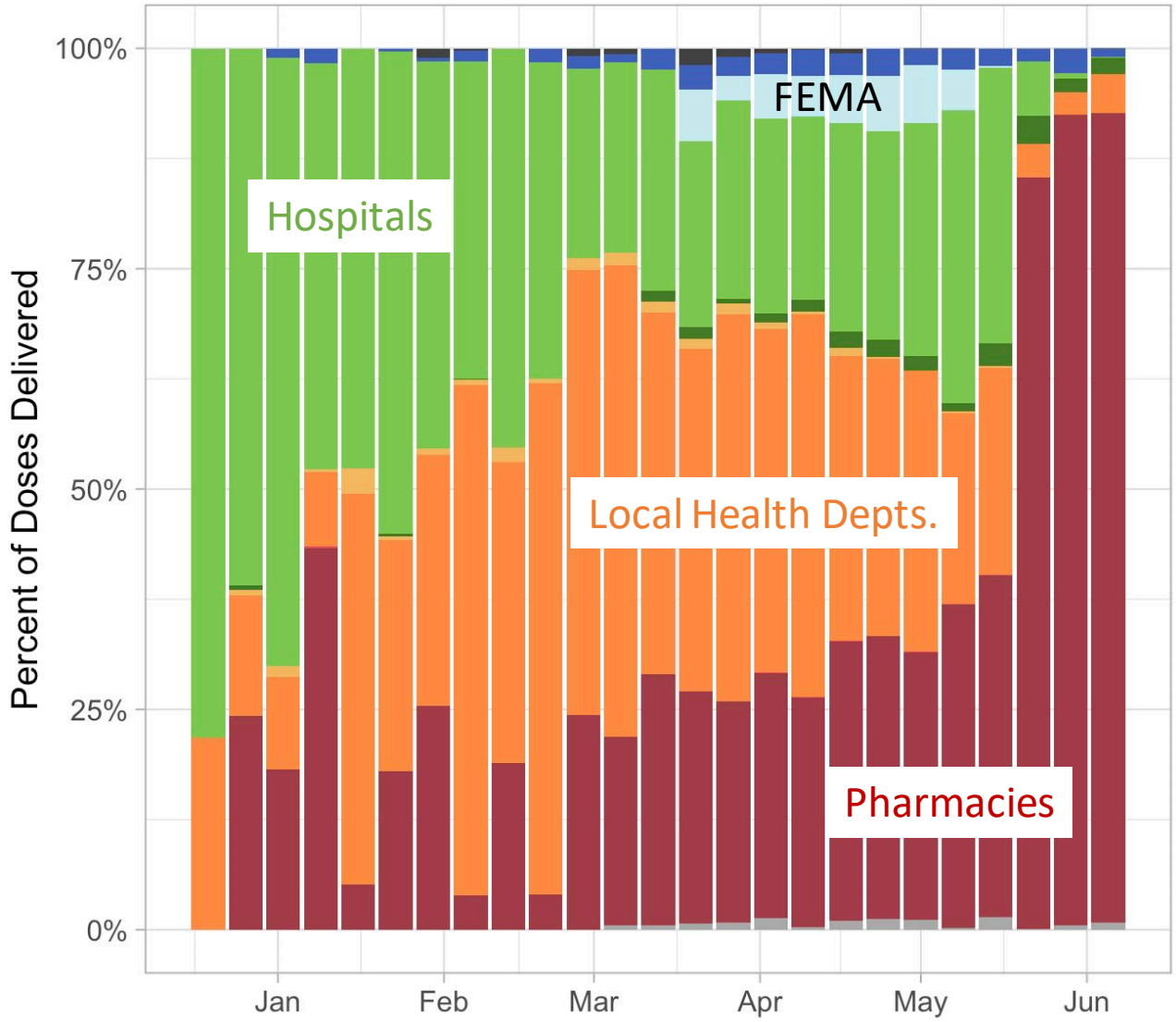


Source: MDHHS Vaccine Dashboard

Note that percentages are among those with known race/ethnicity

Changes in percent of doses delivered to different facility types

- Patterns in doses delivered to different facility types have changed over time
- Initially primarily hospitals, then increases in local health departments, FEMA, and most recently primarily pharmacies



PUBLIC HEALTH

Source: MDHHS Vaccine Dashboard

Corrections
Federally Qualified Health Center
Health Center
Rural Health Clinic
FEMA - Ford Field
FEMA - Mobile Clinic

Home Health Provider
Hospital
Family Practice
Internal Medicine
Med practice - Specialty

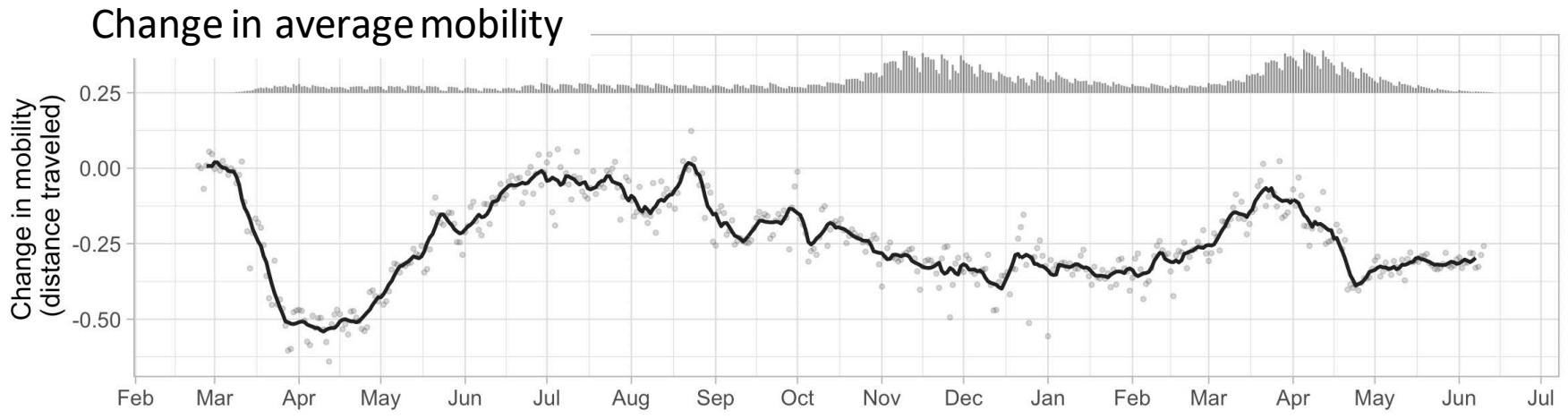
OB/GYN
Pediatrics
Specialty Provider
Urgent Care
Indian Health service
Tribal Health

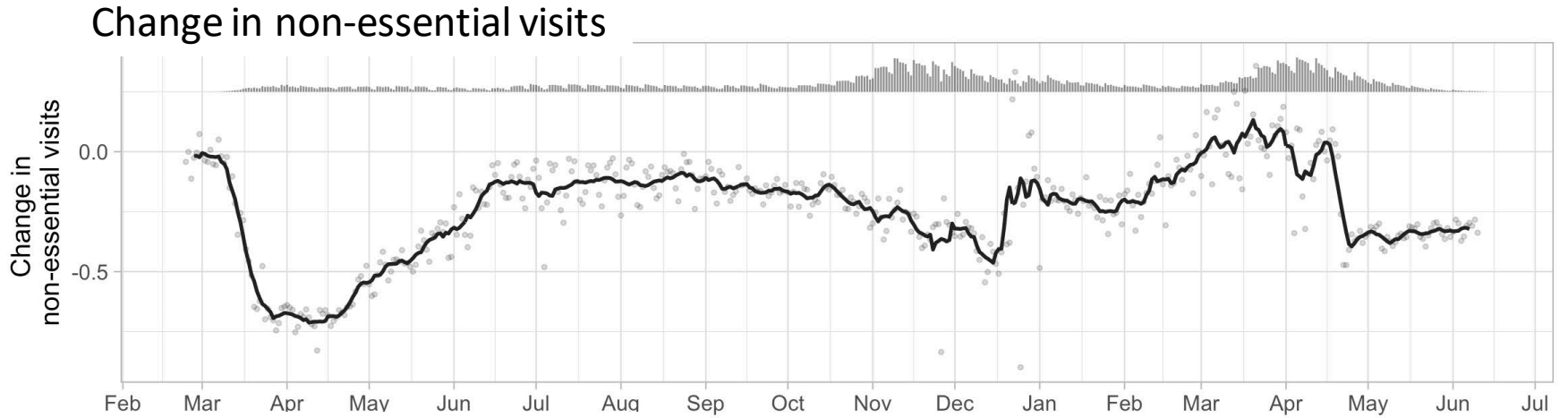
Local Health Department
Long Term Care
Pharmacy
Other

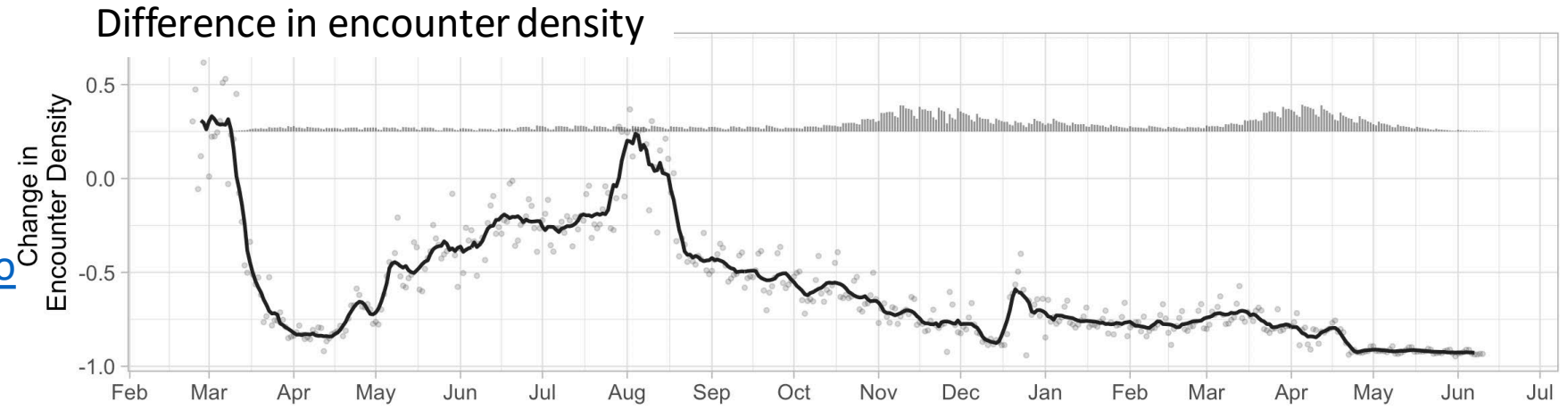
Unacast mobility patterns in MI

- All metrics recently decreased preceding case decreases
- Most recent data appears to be more plateaued at levels similar to winter
- Cases shown as bars at top of each chart
- Data through 6/10/21 (data as of 6/14/21)

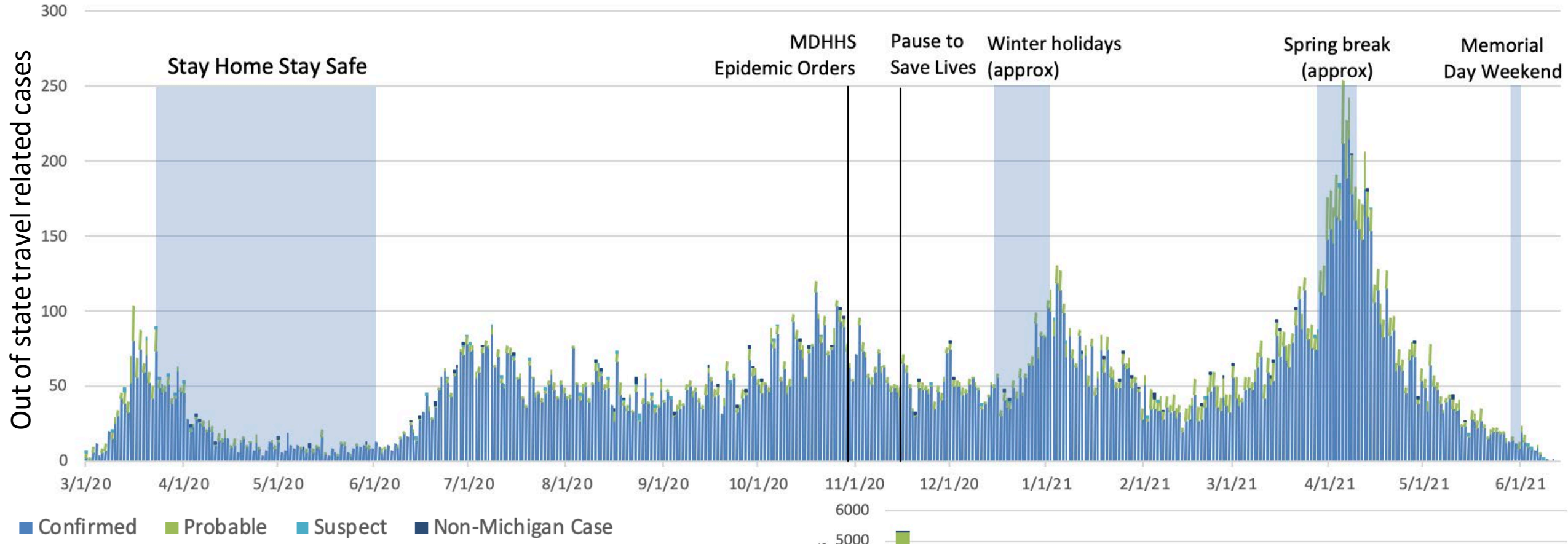
Unacast social distancing scoreboard https://www.unacast.com/covid19/social-distancing-scoreboard







No surge detected in travel-related cases among Michiganders following memorial day weekend



Source: MDSS
Cases plotted by onset date if available, otherwise by referral date

Over the entire pandemic, most travel related cases have been associated with travel to Florida or neighboring states