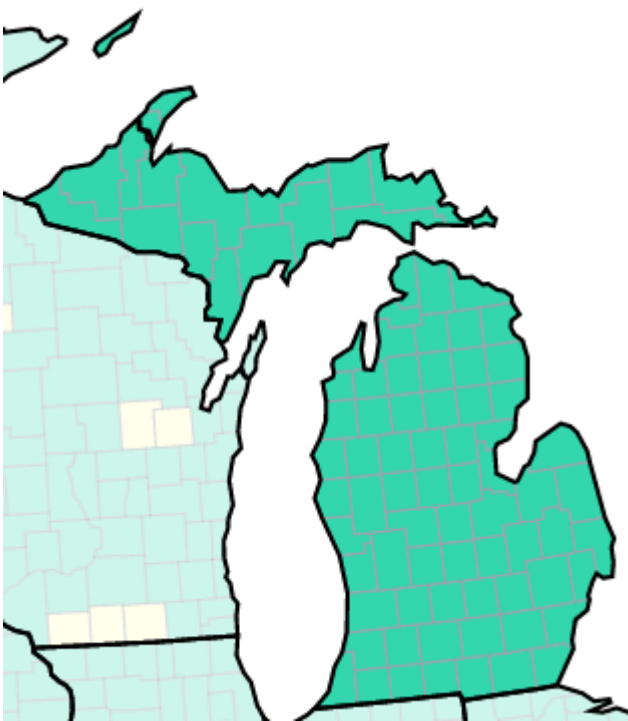


MI COVID RESPONSE DATA AND MODELING UPDATE

April 25, 2023

As of Apr 20, No Michigan Counties are at High COVID-19 Community Level



- In the US, less than 1% of counties are at high risk for medically significant disease and healthcare strain
- In Michigan, 0% (0/83) of counties are at high risk. This represents 0% of the population
- No Michigan counties are currently at Medium level (0%). This represents 0% of the population
- 83 Michigan counties are currently at Low level (100%). This represents 100% of the population

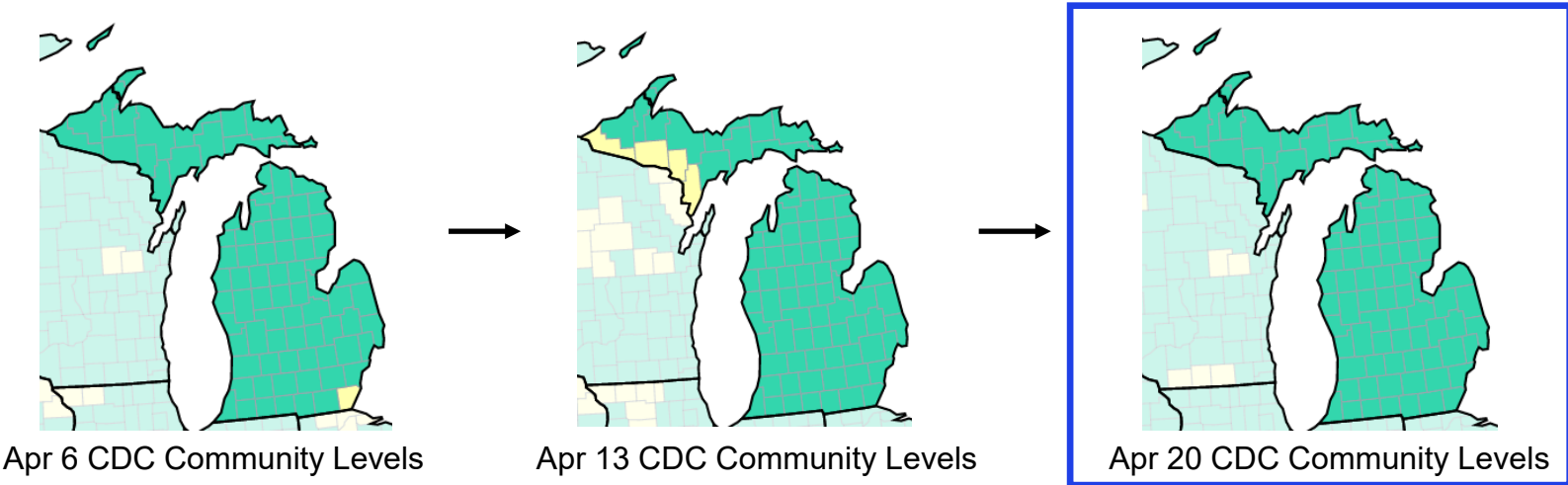
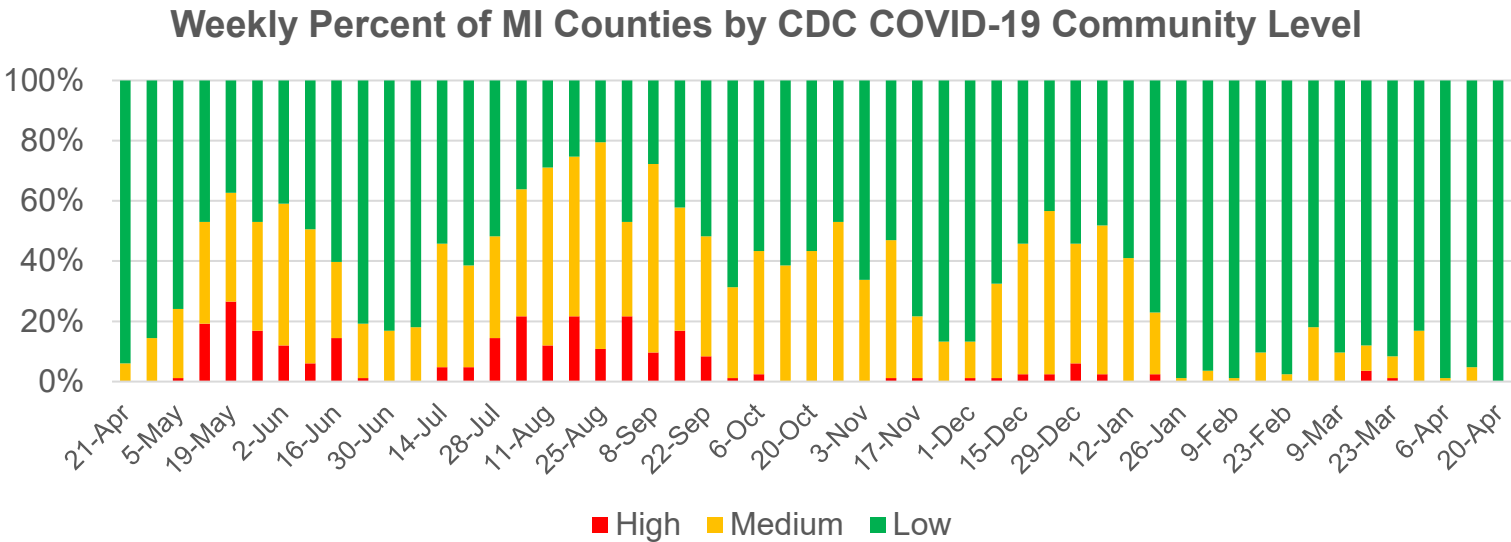
Percent of Counties This Week

	United States	Michigan	Percent of MI Population
Low	98%	100%	100%
Medium	2%	0%	0%
High	<1%	0%	0%

Low	Medium	High
<ul style="list-style-type: none">• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms	<ul style="list-style-type: none">• If you are at high risk for severe illness, talk to your healthcare provider about whether you need to wear a mask and take other precautions• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms	<ul style="list-style-type: none">• Wear a mask indoors in public• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms• Additional precautions may be needed for people at high risk for severe illness

Michigan Trends of COVID-19 Community Levels

- As of April 20, no (0%) Michigan counties are at high or medium COVID-19 community level.
- The number of counties at medium or high community level remains relatively low over the past 13 weeks
- This is the first time all 83 counties were classified as low in the same week

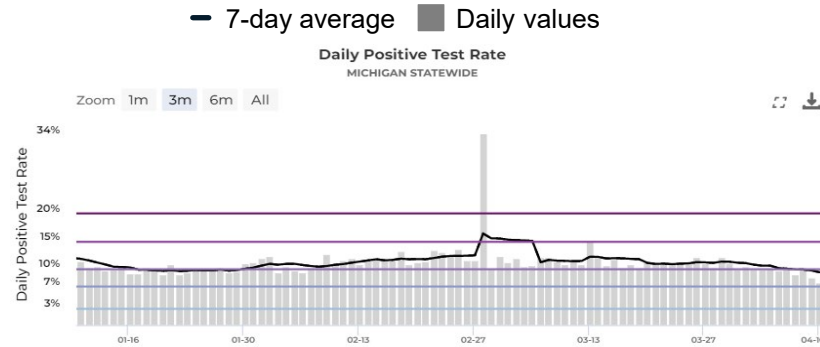


This metric uses three indicators for categorization: (1) new COVID-19 cases per 100,000 population in the last 7 days lagged 1 day behind the date the COVID-19 Community Level is calculated; (2) new COVID-19 hospital admissions per 100,000 population in the last 7 days; and (3) percent of staffed inpatient beds occupied by patients with confirmed COVID-19 (7-day average) lagged 1 day behind the 7-day case rate .

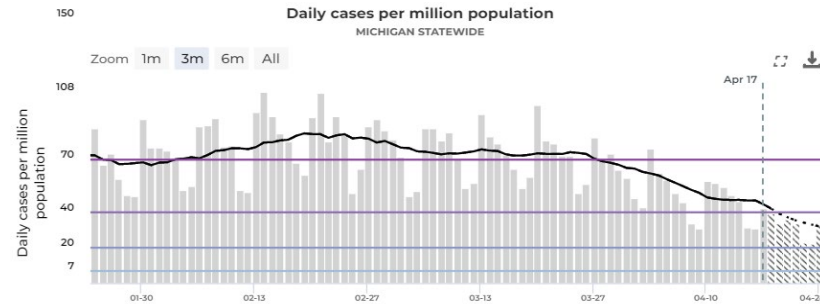
Recent statewide COVID trends are plateaued

Statewide trends

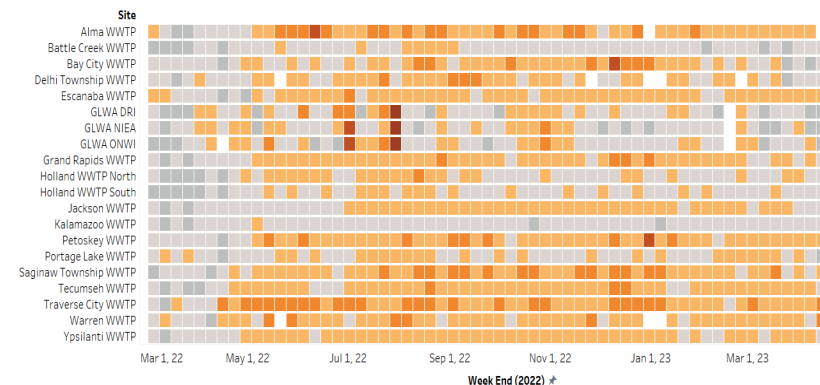
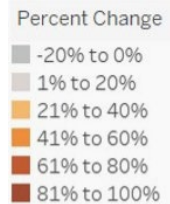
Positivity, %



Daily cases per million



Wastewater



Current: 26% of sites
are above 20%
baseline threshold

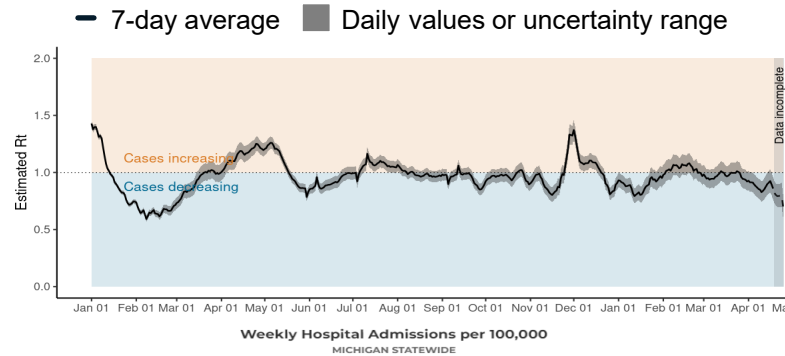
Last Week: 40% of
sites are above 20%
baseline threshold

- Test percent positivity and case rates are decreasing compared to last week
- One county is currently showing an increase in cases and an additional 7 reported an elevated incidence plateau in case rates (via mystartmap.info as of 4/27/23, data through 4/17/23)
- 26% (5/20) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week

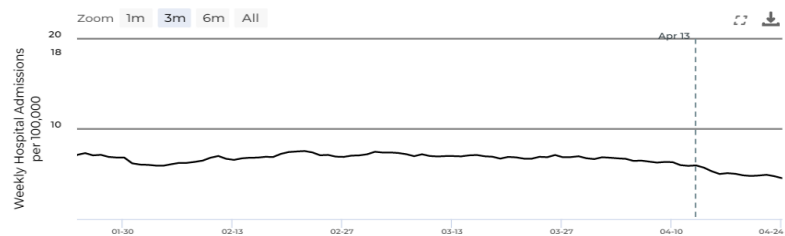
Recent statewide COVID trends are plateaued

Statewide trends

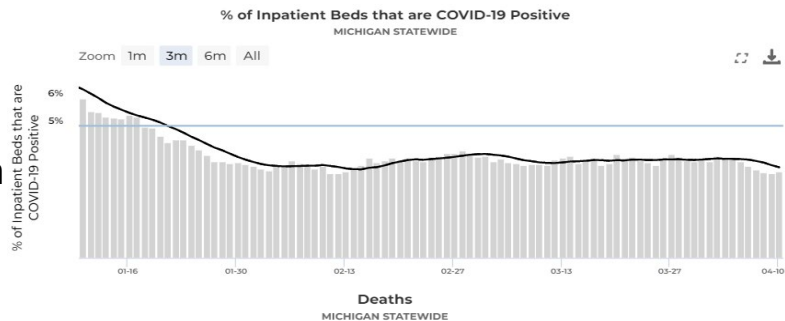
Reproductive Number, R_t



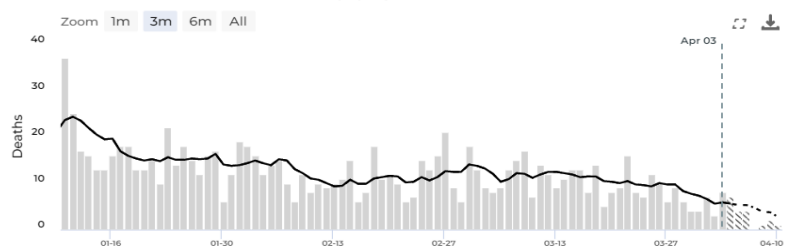
Hospital Admissions



Daily hospitalization rate, %



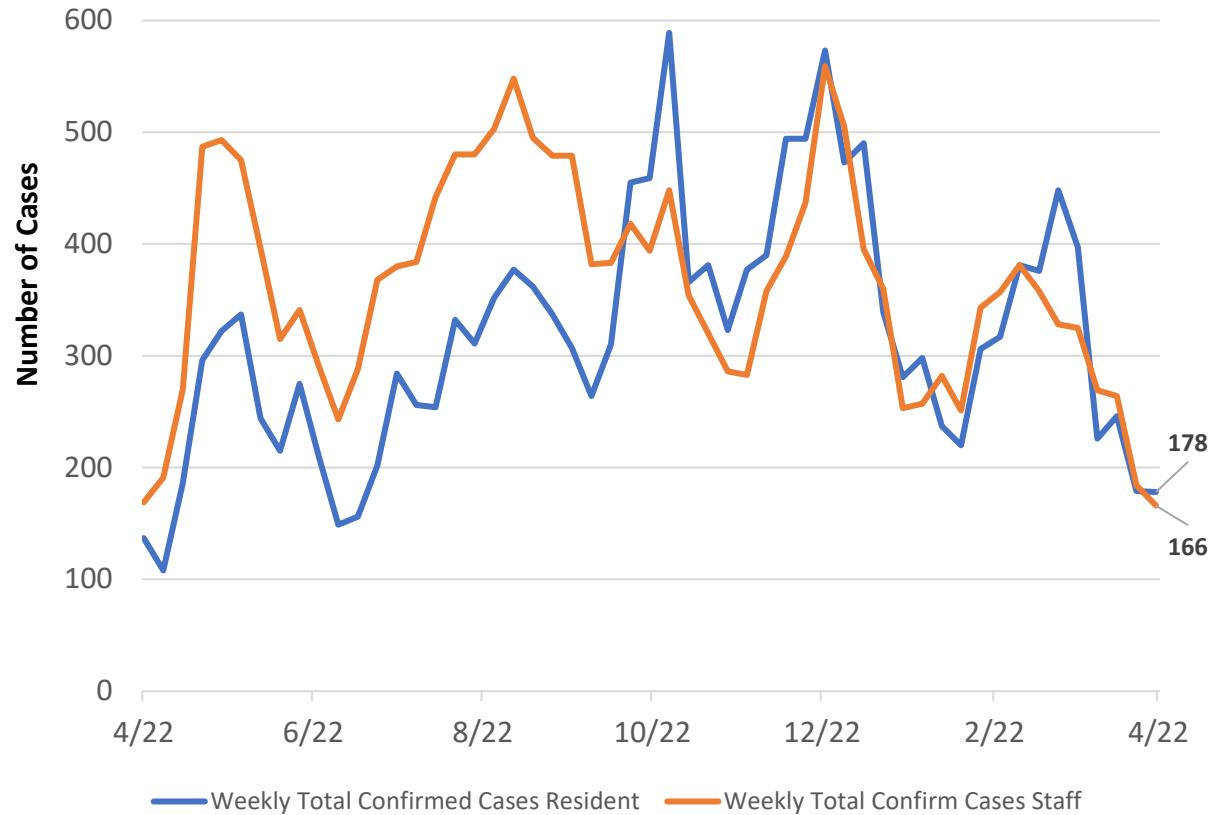
Deaths



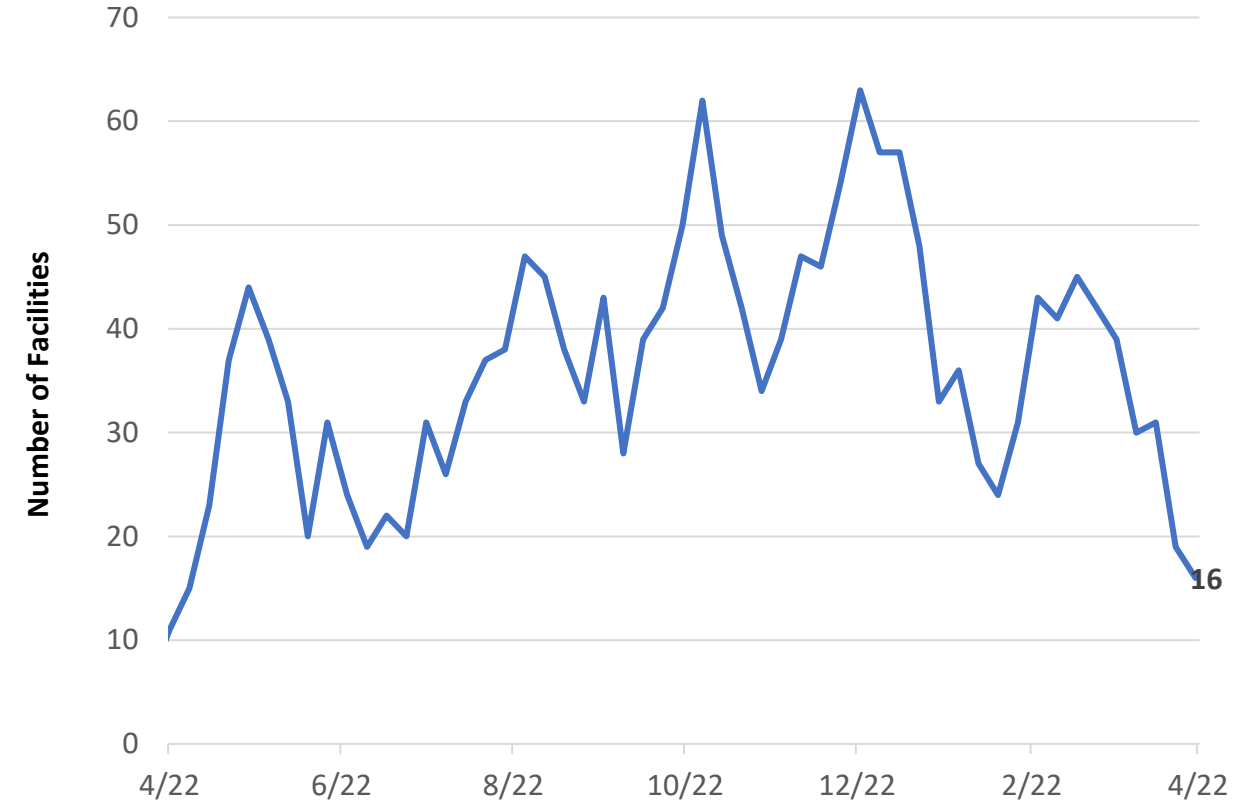
- The reproductive number (R_t) in Michigan is close to 1 indicating near plateau
- There is a daily average of 5.1 hospital admissions per 100,000 Michiganders which is plateaued compared to last week
- The percent of inpatient beds with COVID-19 positive patients (2.9%) have declined from last week
- Deaths are a lagging indicator but are plateaued some over the past week

COVID-19 Cases Among Staff and Residents in Long Term Care Facilities

State of Michigan Weekly Total Confirmed COVID-19 Cases in
SNF Residents and Staff
04/22/2022 to 04/21/2023



Number of SNFs with 3 or more Confirmed Cases
04/22/2022 to 04/21/2023



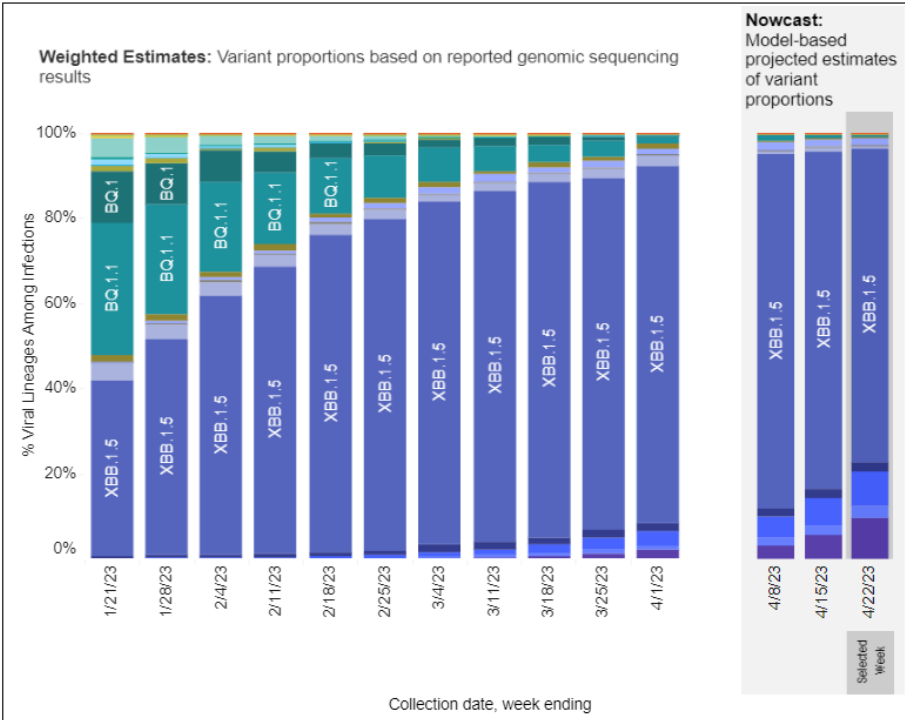
- Case counts are plateaued in SNF residents (179 to 179) but decreased in SNF staff (184 to 166) since last week [left graphic]
 - The number of SNF facilities reporting 3 or more cases decreased since last week (19 to 16) [right graphic]
 - Currently, **25%** of SNFs are reporting **nursing shortages** and **27%** of SNFs are reporting **aide shortages**, which is plateaued since end of July
- Abbreviations: AFC: Adult Foster Care; HFAs: Homes for the Aged; and SNF: Skilled Nursing Facilities

Identified COVID-19 Cases Caused by Variants of Concern (VOC) in US and Michigan: XBB.1.5 sublineage remains predominant SARS-CoV-2 Variants Circulating in the United States, Jan 15 – Apr 22 (NOWCAST)

Weighted and Nowcast Estimates in United States for Weeks of 1/15/2023 – 4/22/2023

Nowcast Estimates in United States for 4/16/2023 – 4/22/2023

Hover over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.



* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.

BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75, XBB and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.2.75.2, CH.1.1 and BN.1, BA.2.75 sublineages are aggregated with BA.2.75. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, BF.11, BA.5.2.6, BQ.1 and BQ.1.1, sublineages of BA.5 are aggregated to BA.5. Except the lineages shown and their sublineages, sublineages of XBB are aggregated to XBB. Except XBB.1.5.1 and FD.2, sublineages of XBB.1.5 are aggregated to XBB.1.5. For all the other lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, XBB.1.9.2 and XBB.1.16 were aggregated to XBB; FD.2 was aggregated to XBB.1.5. Lineages BA.2.75.2, XBB, XBB.1.5, XBB.1.5.1, FD.2, XBB.1.9.1, XBB.1.9.2, XBB.1.16, BN.1, BA.4.6, BF.7, BF.11, BA.5.2.6 and BQ.1.1 contain the spike substitution R346T.

USA				
WHO label	Lineage #	US Class	%Total	95%PI
Omicron	XBB.1.5	VOC	73.6%	69.6-77.3%
	XBB.1.16	VOC	9.6%	6.7-13.6%
	XBB.1.9.1	VOC	7.9%	6.1-10.1%
	XBB.1.9.2	VOC	2.9%	2.1-4.0%
	XBB.1.5.1	VOC	2.2%	1.7-2.8%
	FD.2	VOC	1.6%	0.7-3.2%
	XBB	VOC	1.0%	0.6-1.8%
	BQ.1.1	VOC	0.7%	0.4-1.1%
	CH.1.1	VOC	0.4%	0.2-0.5%
	BQ.1	VOC	0.1%	0.0-0.1%
	BN.1	VOC	0.0%	0.0-0.0%
	BA.5	VOC	0.0%	0.0-0.0%
	BA.2.75	VOC	0.0%	0.0-0.0%
	BA.2	VOC	0.0%	0.0-0.0%
	BF.7	VOC	0.0%	0.0-0.0%
	BA.2.75.2	VOC	0.0%	0.0-0.0%
	BA.5.2.6	VOC	0.0%	0.0-0.0%
	BF.11	VOC	0.0%	0.0-0.0%
	BA.4.6	VOC	0.0%	0.0-0.0%
Other	Other*		0.1%	0.0-0.1%

National Distribution

- 100% of the VOCs currently circulating in the U.S. are Omicron
- Nowcast estimates project that XBB.1.5 (73.6%, 95% P.I. 69.6-77.3%) is the most prevalent, while XBB.1.16 comprise of 9.6% of infections (95% P.I. 6.7-13.6%), and XBB.1.9.1 comprise of approximately 7.9% of infections (95% P.I. 6.1-10.1%), while all other lineages comprise of less than 5% during the week ending on April 22

Distribution in Michigan

- Since March 1, there have been 955 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since March 1, 73.9% of specimens sequenced and reported (n=706) have been identified as XBB.1.5
 - Since March 1, 8.9% of specimens sequenced and reported (n=85) have been identified as BA.5; of which 77.7% of those specimens are BQ.1.1 (n=66)
 - In Michigan, a total of 19 cases of XBB.1.5.1, 13 cases of XBB.1.9.1, 7 cases of XBB.1.9.2, and 1 case of XBB.1.16 have been identified

95% P.I. = 95% prediction interval

Data last updated April 25, 2023

Source: CDC COVID Data Tracker: Genomic Surveillance and Michigan's MDSS; sequence data may take up to four weeks to process and get reported back to health departments

Over 6.2 Million Michiganders have completed the primary series – 62.6% of the total population

Vaccination Coverage

Over 6.2 million people in MI have completed the primary series*

91.4% of people aged 65 and older in MI have completed the primary series*

69.8% of the total MI population have initiated the primary series*

Race/Ethnicity¶ for those 6 months and older:

- Up-to-date coverage is highest among Non-Hispanic (NH) White (16.1%), followed by NH Asian, Native Hawaiian or Pacific Islander Race (15.2%), NH American Indian (12.3%), and NH Black or African American races (9.0%).
- Up-to-date coverage is at 10.6% for Hispanics

Updated Booster Coverage

The percentage of Michiganders who have received the updated (bivalent) booster is higher than national percentages overall and for all reported age groups

46.1% of the population 65 years of age or older has received an updated (bivalent) booster

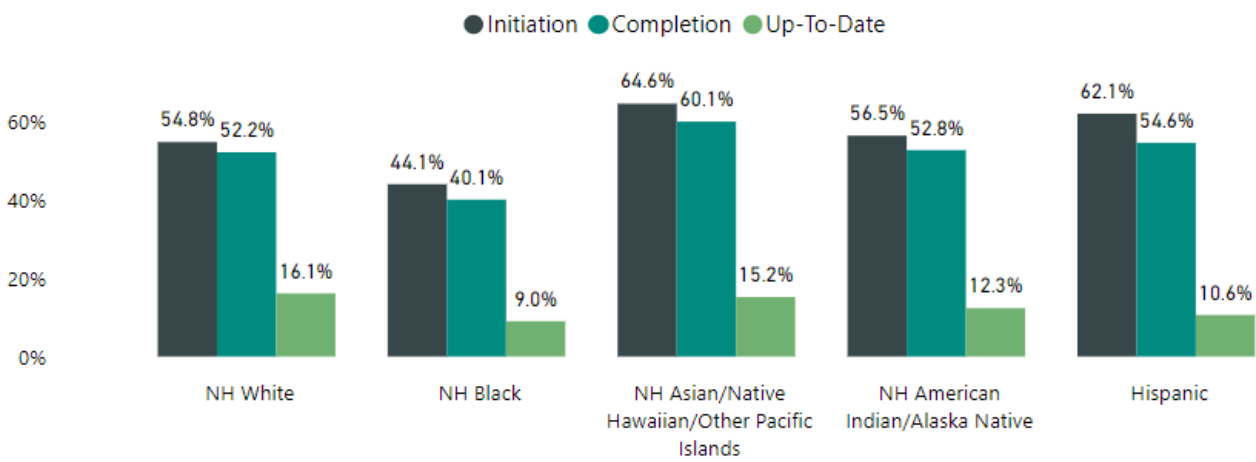
17.7% of all Michiganders have received their updated (bivalent) booster dose

Vaccination Coverage in Michigan as of 4/19/2023

Age Group	% At Least One Dose	% Completed Primary Series	% Updated Booster**	U.S. % Boosted**	Primary Series Total
Total Population	69.8%	62.6%	17.7%	16.7%	6,250,888
≥ 5 years	73.4%	66.0%	18.8%	17.7%	6,218,346
≥ 12 years	77.4%	69.6%	20.1%	19.1%	5,981,776
≥ 18 years	79.6%	71.6%	21.3%	20.2%	5,613,128
≥ 65 years	95.0%	91.4%	46.1%	42.4%	1,614,284

**This shows the percentage of all residents ages 5 years and older in a jurisdiction (state, territory, national) with an updated (bivalent) booster dose. Non-residents who received vaccine are attributed to their jurisdiction of residence.

Coverage by Race*

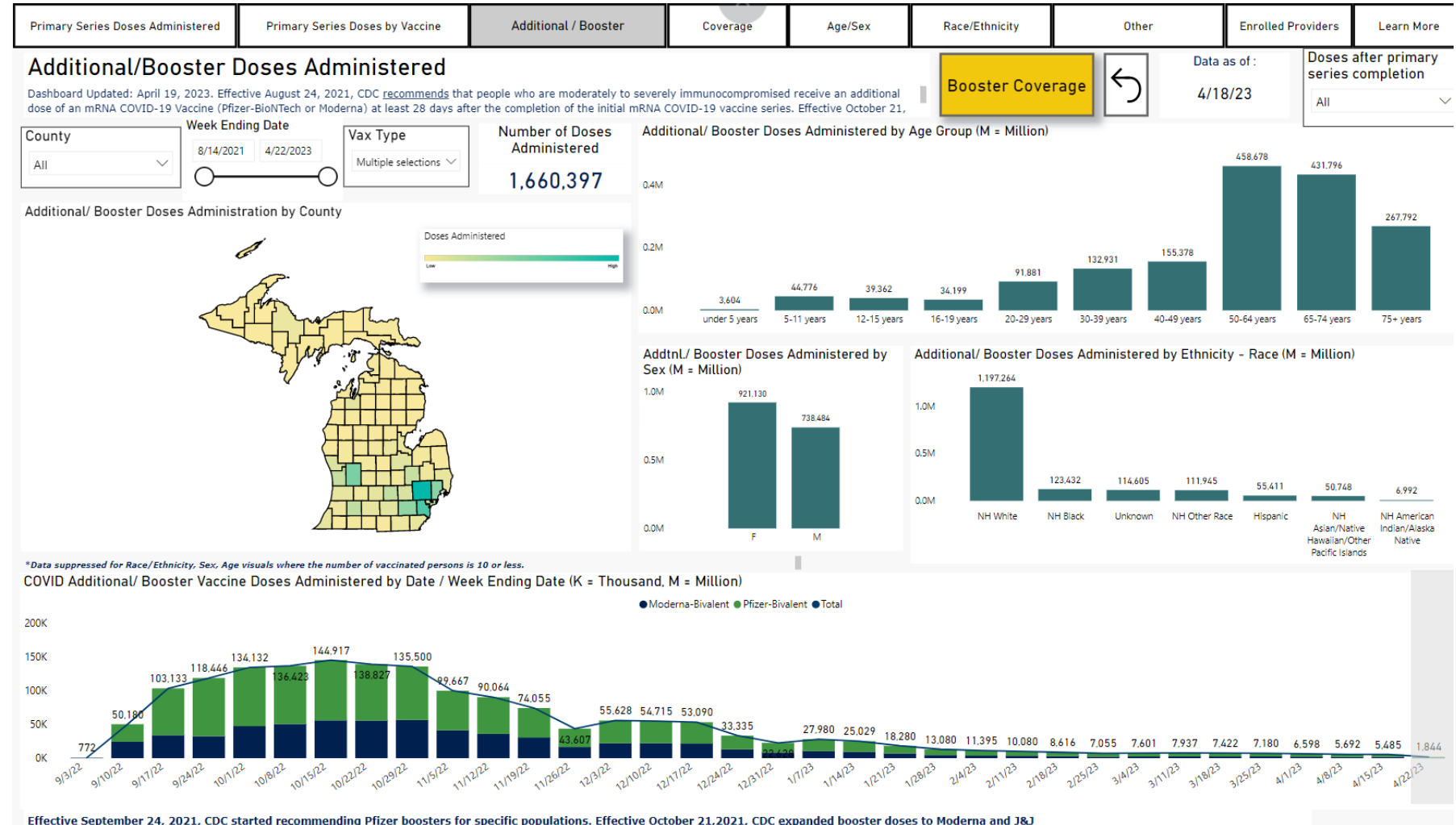


Source: *[CDC COVID Data Tracker > Vaccinations in the US](#), ¶ [MCIR COVID-19 Vaccine Dashboard](#)

Note: Now include all those 6 months and older in calculations

Bivalent Administration

- FDA has authorized and CDC recommends the updated bivalent COVID-19 vaccines to everyone over the age of 6 months. FDA has authorized a second bivalent booster for certain individuals.*
- As of April 18[†], 1,660,397 Michiganders have received their bivalent booster
- Note: the data for the week ending 4/22 would have been incomplete on the date the dashboard was last refreshed (4/18)



● Moderna Bivalent

● Pfizer Bivalent

* [CDC Expands Updated COVID-19 Vaccines to Include Children Ages 6 Months through 5 Years](#); [Updated FDA authorization](#)

[†] These data are updated every Wednesday on our COVID-19 vaccination Dashboard under Additional/Booster Administration Trends and then restricting the view to just Moderna and Pfizer bivalent doses

Sources: [Michigan Coronavirus Vaccine Dashboard](#)