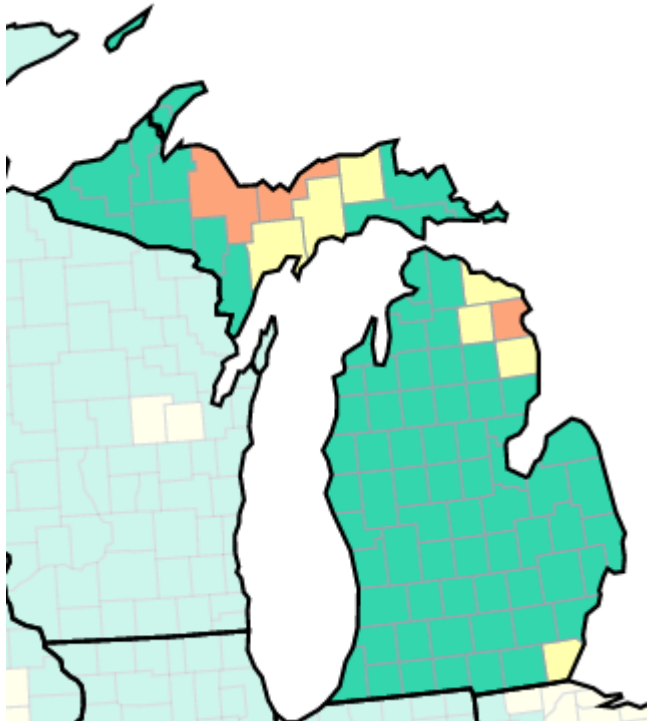
MI COVID RESPONSE DATA AND MODELING UPDATE

March 21, 2023

As of Mar 16, 3 Michigan Counties are at High COVID-19 Community Level



- In the US, less than 1% of counties have high risk for medically significant disease and healthcare strain
- In Michigan, 4% (3/83) of counties are at high risk. This represents 1% of the population
- 7 Michigan counties are currently at Medium level (8%). This represents 2% of the population
- 73 Michigan counties are currently at Low level (88%). This represents 97% of the population

Percent of Counties This Week

	United States	Michigan	Percent of MI Population
Low	90%	88%	97%
Medium	9%	8%	2%
High	1%	4%	1%

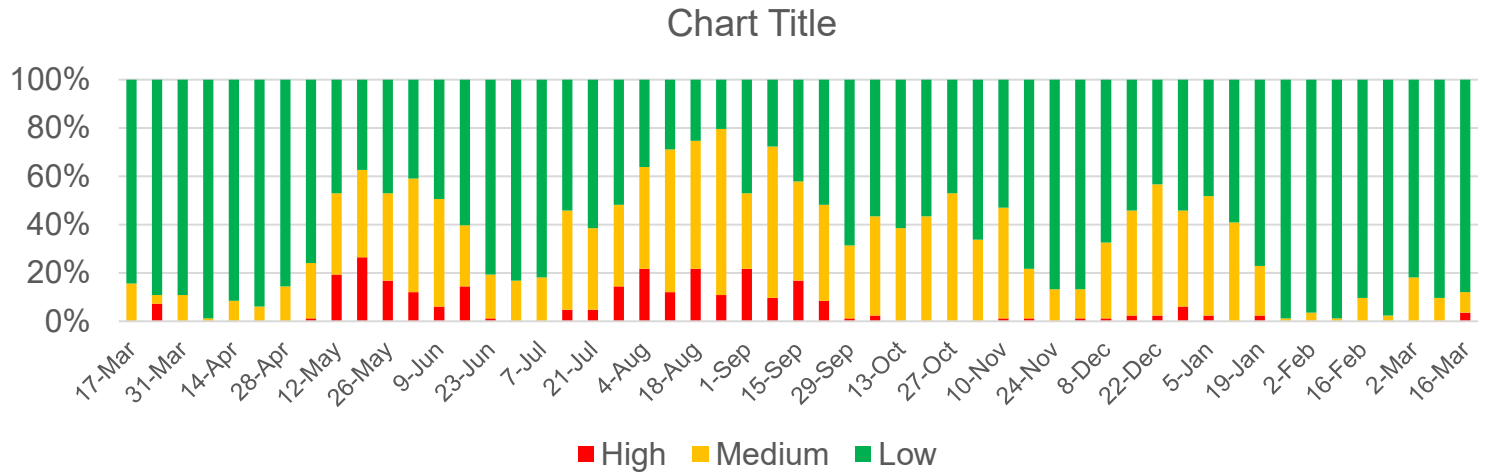
Low	Medium	High
• Stay up to date with COVID-19 vaccines • Get tested if you have symptoms	• If you are at high risk for severe illness, talk to your healthcare provider about whether you need to wear a mask and take other precautions • Stay up to date with COVID-19 vaccines • Get tested if you have symptoms	• 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

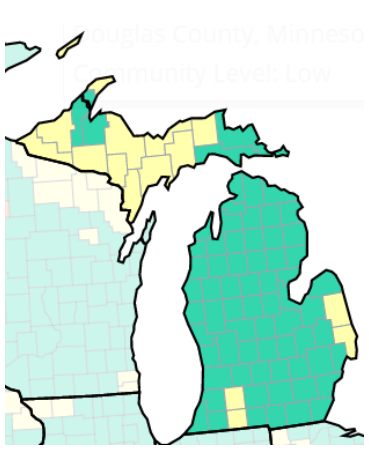
Source: CDC COVID-19 Community Levels https://covid.cdc.gov/covid-data-tracker/#county-view?list_select_state=all_states&list_select_county=all_counties&data-type=CommunityLevels

Michigan Trends of COVID-19 Community Levels

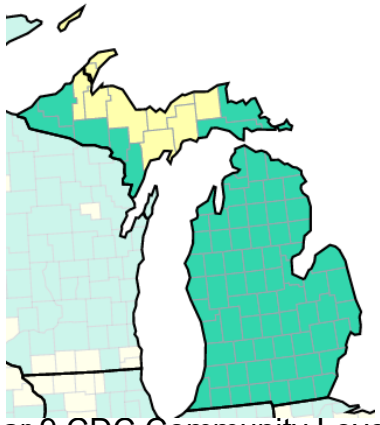
- As of March 16, 3 (4%) Michigan counties are at high COVID-19 community level and 7 Michigan county are currently at Medium level (8%). Together, these counties account for 3% of the population.

- This is the first time in 8 weeks where there have been any counties in Michigan classified as High

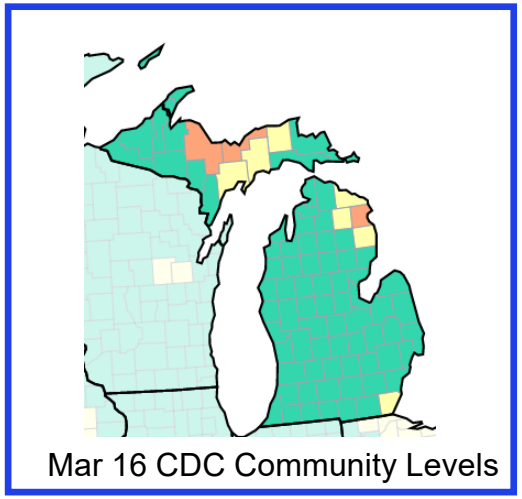




Mar 2 CDC Community Levels



Mar 9 CDC Community Levels



Mar 16 CDC Community Levels

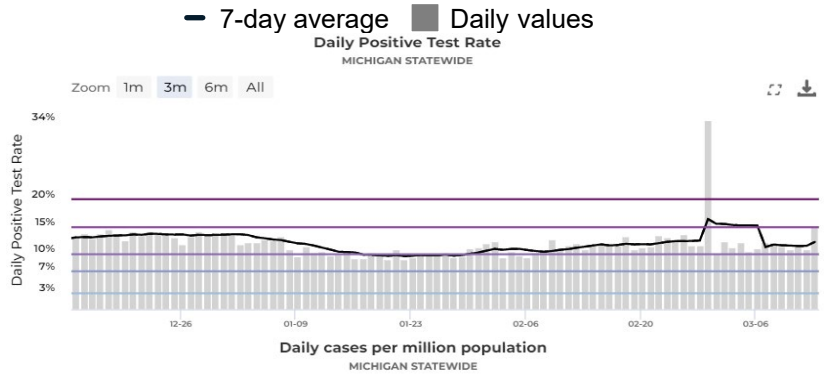
This metric uses three indicators for categorization: (1) new COVID-19 cases per 100,000 population in the last 7 days lagged 1 day behind the date the COVID-19 Community Level is calculated; (2) new COVID-19 hospital admissions per 100,000 population in the last 7 days; and (3) percent of staffed inpatient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

Source: CDC COVID-19 Community Levels https://covid.cdc.gov/covid-data-tracker/#county-view?list_select_state=all_states&list_select_county=all_counties&data-type=CommunityLevels

Recent statewide COVID trends are plateaued

Statewide trends

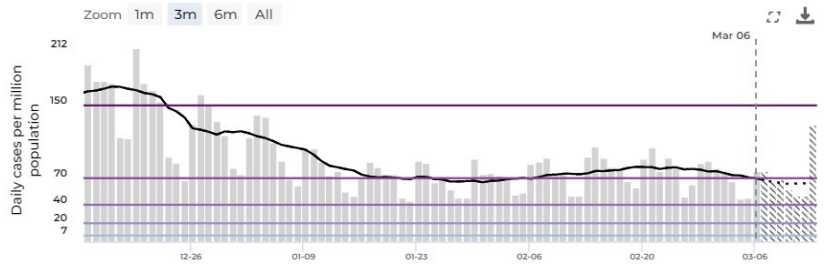
Positivity, %



Current: 12.2%

Last Week: 15.2%

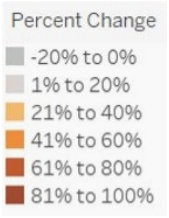
Daily cases per million

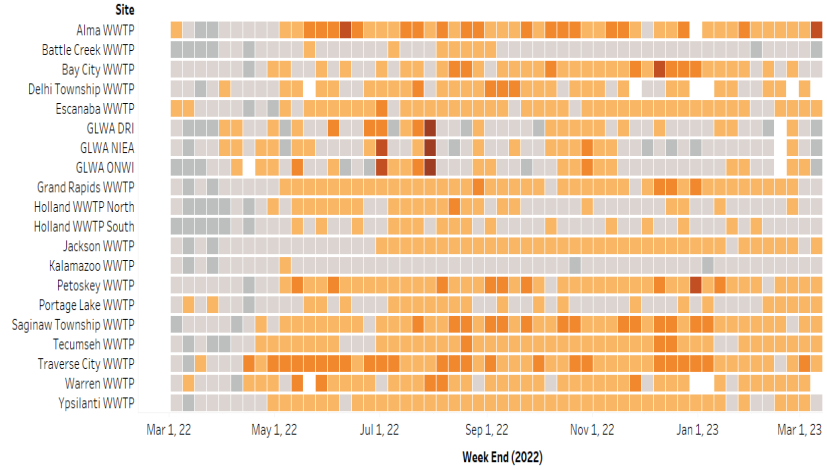


Current: 67.7

Last Week: 71.7

Wastewater





Current: 44% of sites are above 20% baseline threshold

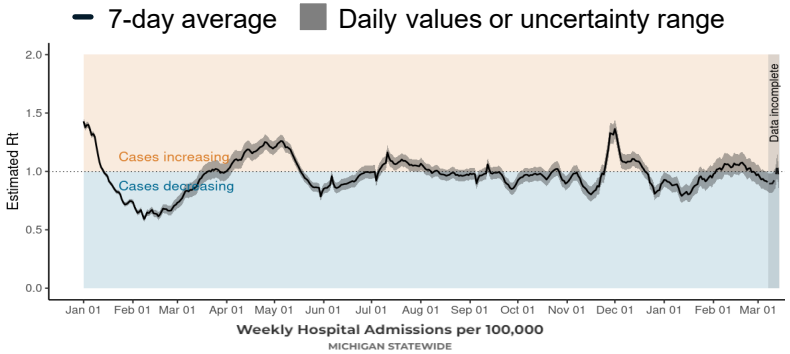
Last Week: 50% of sites are above 20% baseline threshold

- Test percent positivity is decreasing compared to last week. This is due in part to receipt of a backlog of test results on 2/28/23
- Case rates are slightly decreased since last week
- Seven counties are currently showing an increase in cases and an additional 15 reported an elevated incidence plateau in case rates (via mistartmap.info as of 3/15/23, data through 3/6/23)
- 44% (8/18) 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

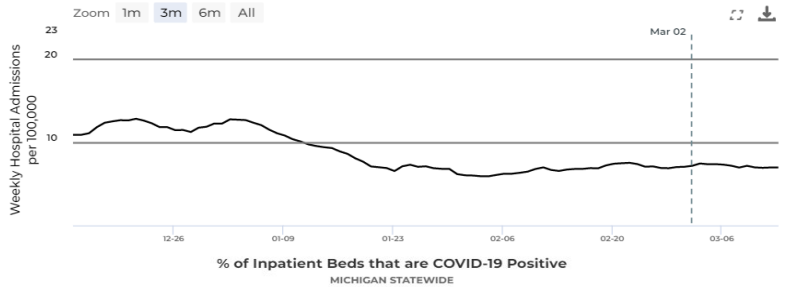
Reproductive Number, R_t



Current: 0.91

Last Week: 0.72

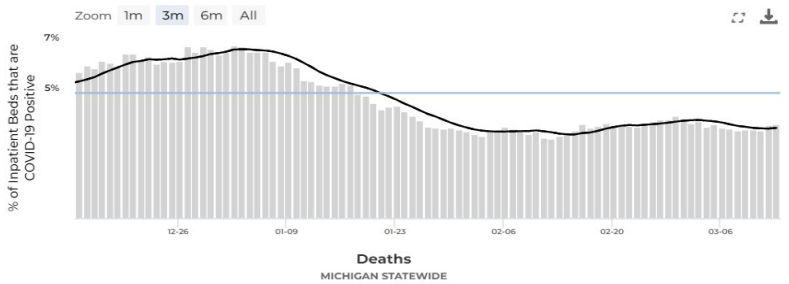
Hospital Admissions



Current: 7.0

Last Week: 7.4

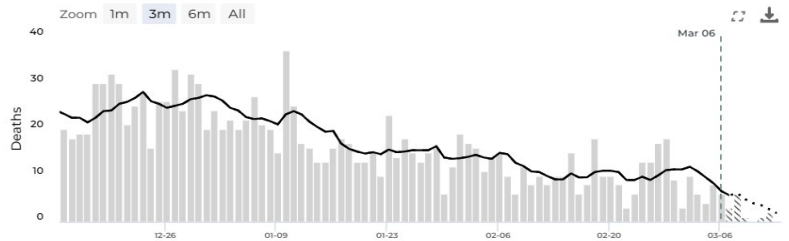
Daily hospitalization rate, %



Current: 3.6%

Last Week: 3.7%

Deaths



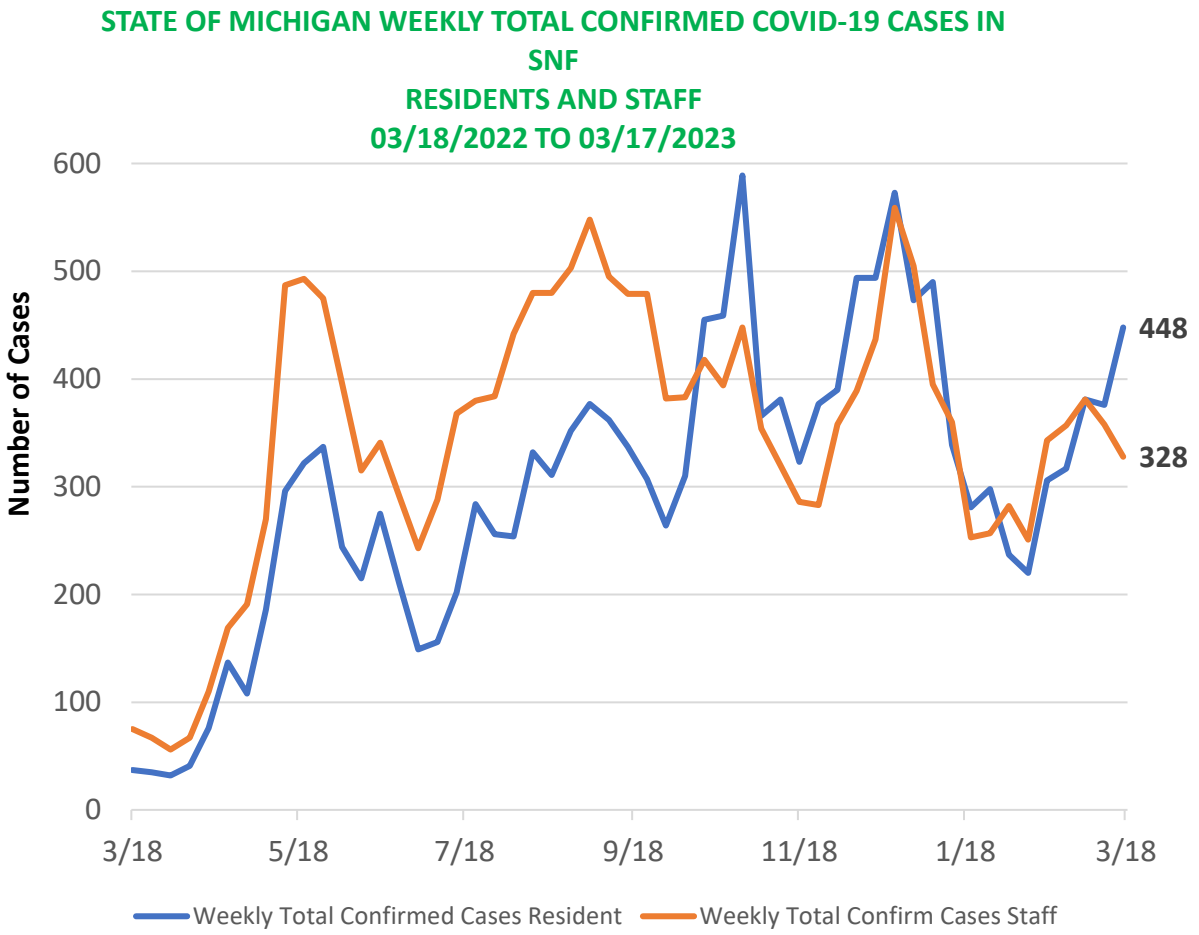
Current: 0.6

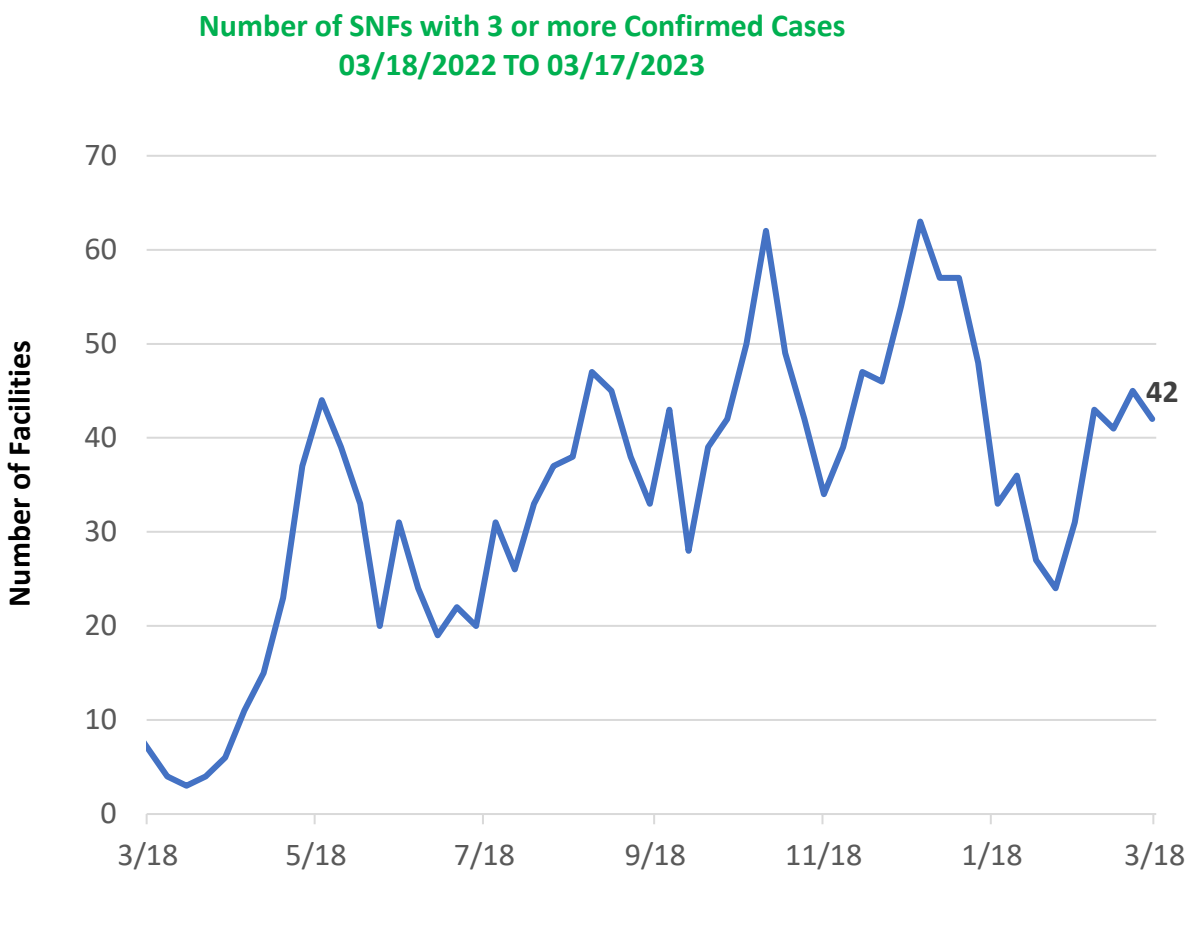
Last Week: 0.8

- The reproductive number (R_t) in Michigan is close to 1 indicating near plateau
- There is a daily average of 7.0 hospital admissions per 100,000 Michiganders which is decreased from last week
- The percent of inpatient beds with COVID-19 positive patients (3.6%) are plateaued compared to last week
- Deaths are a lagging indicator but are plateaued some over the past week

Source: https://mistartmap.info/

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





- Case counts have increased in SNF residents (376 to 448) but decreased in SNF staff (358 to 328) since last week.
- The number of SNF facilities reporting 3 or more cases decreased slightly since last week (45 to 42)
- Currently, **26%** of SNFs are reporting **nursing shortages** and **28%** 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

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

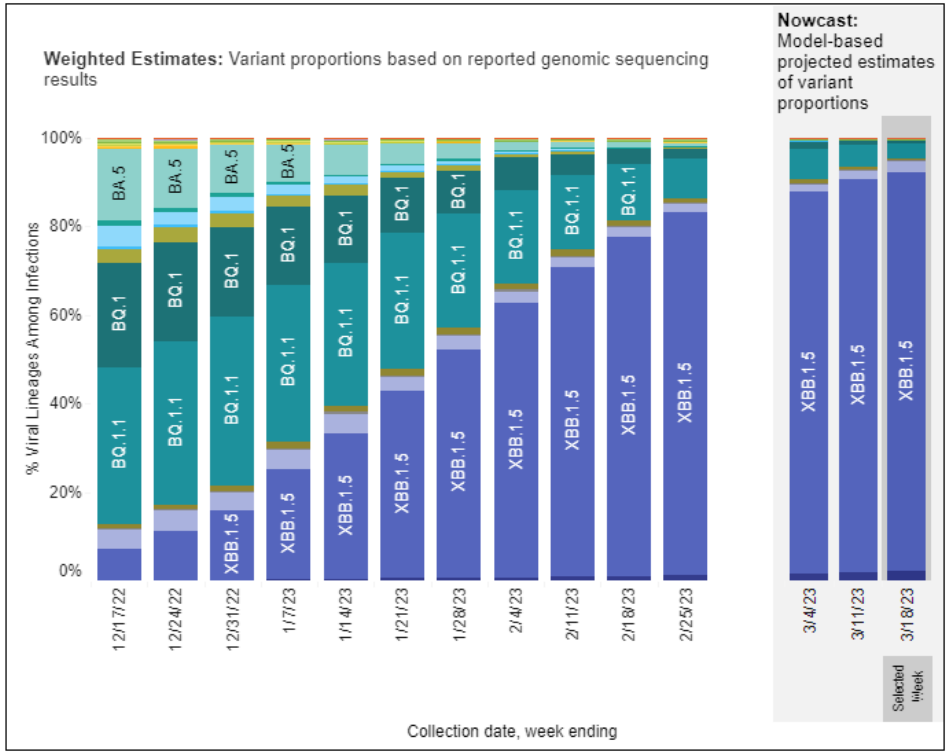
Identified COVID-19 Cases Caused by Variants of Concern (VOC) in US and Michigan: XBB.1.5 sublineage remains predominant

SARS-CoV-2 Variants Circulating in the United States, Dec 11 – Mar 18 (NOWCAST)

Weighted and Nowcast Estimates in United States for Weeks of 12/11/2022 – 3/18/2023

Nowcast Estimates in United States for 3/12/2023 – 3/18/2023

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



USA

WHO label	Lineage #	US Class	%Total	95%PI
Omicron	XBB.1.5	VOC	90.2%	87.4-92.4%
	BQ.1.1	VOC	3.5%	2.5-4.9%
	XBB	VOC	2.5%	1.5-4.1%
	XBB.1.5.1	VOC	2.2%	1.6-2.9%
	BQ.1	VOC	0.7%	0.5-1.0%
	CH.1.1	VOC	0.5%	0.4-0.8%
	BA.2	VOC	0.2%	0.0-1.4%
	BN.1	VOC	0.1%	0.1-0.2%
	BA.5	VOC	0.0%	0.0-0.1%
	BF.7	VOC	0.0%	0.0-0.0%
	BA.5.2.6	VOC	0.0%	0.0-0.0%
	BA.2.75	VOC	0.0%	0.0-0.0%
	BF.11	VOC	0.0%	0.0-0.0%
	BA.2.75.2	VOC	0.0%	0.0-0.0%
	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
	BA.4.6	VOC	0.0%	0.0-0.0%
	BA.2.12.1	VOC	0.0%	0.0-0.0%
	BA.4	VOC	0.0%	0.0-0.0%
Delta	B.1.617.2	VBM	0.0%	0.0-0.0%
Other	Other*		0.1%	0.0-0.1%

* 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 XBB.1.5 and its sublineages, sublineages of XBB are aggregated to XBB. Except XBB.1.5.1, 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.1.5.1 was aggregated to XBB.1.5. Lineages BA.2.75.2, XBB, XBB.1.5, XBB.1.5.1, BN.1, BA.4.6, BF.7, BF.11, BA.5.2.6 and BQ.1.1 contain the spike substitution R346T.

National Distribution

- 100% of the VOCs currently circulating in the U.S. are Omicron
- Nowcast estimates project that XBB.1.5 (90.2%, 95% P.I. 87.4-92.4%) is the most prevalent, while BQ.1.1 comprise of approximately 3.5% of infections (95% P.I. 2.5-4.9%) during the week ending on March 18

Distribution in Michigan

- Since February 15, there have been 631 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
  - Since February 15, 16.3% of specimens sequenced and reported (n=103) have been identified as BA.5; of which 68.0% of those specimens are BQ.1.1 (n=70)
  - A total of 997 cases of XBB.1.5 have been identified in Michigan with the earliest specimen identified on November 30, 2022

95% P.I. = 95% prediction interval
Data last updated March 20, 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 – 62.4% 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*

69.5% 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 (15.8%), followed by NH Asian, Native Hawaiian or Pacific Islander Race (14.7%), NH American Indian (12.0%), and NH Black or African American races (8.6%).
- Up-to-date coverage is at 10.2% 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

45.4% of the population 65 years of age or older has received an updated (bivalent) booster

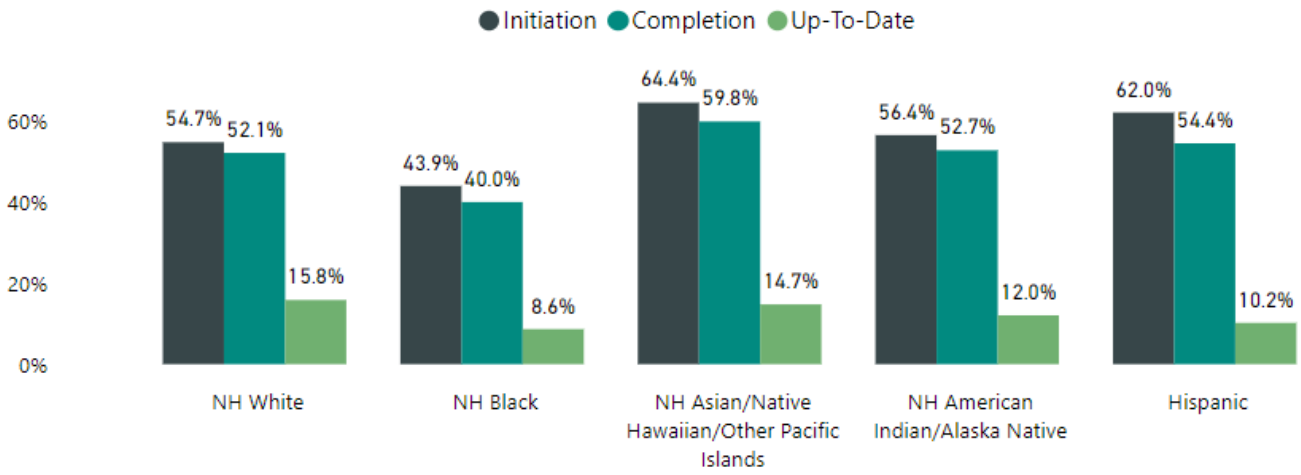
17.3% of all Michiganders have received their updated (bivalent) booster dose

Vaccination Coverage in Michigan as of 3/15/2023

Age Group	% At Least One Dose	% Completed Primary Series	% Updated Booster**	U.S. % Boosted**	Primary Series Total
Total Population	69.5%	62.4%	17.3%	16.4%	6,227,911
≥ 5 years	73.4%	66.0%	18.4%	17.4%	6,213,047
≥ 12 years	77.3%	69.5%	19.7%	18.7%	5,977,155
≥ 18 years	79.5%	71.5%	20.9%	19.8%	5,608,878
≥ 65 years	95.0%	91.4%	45.4%	41.8%	1,613,559

**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

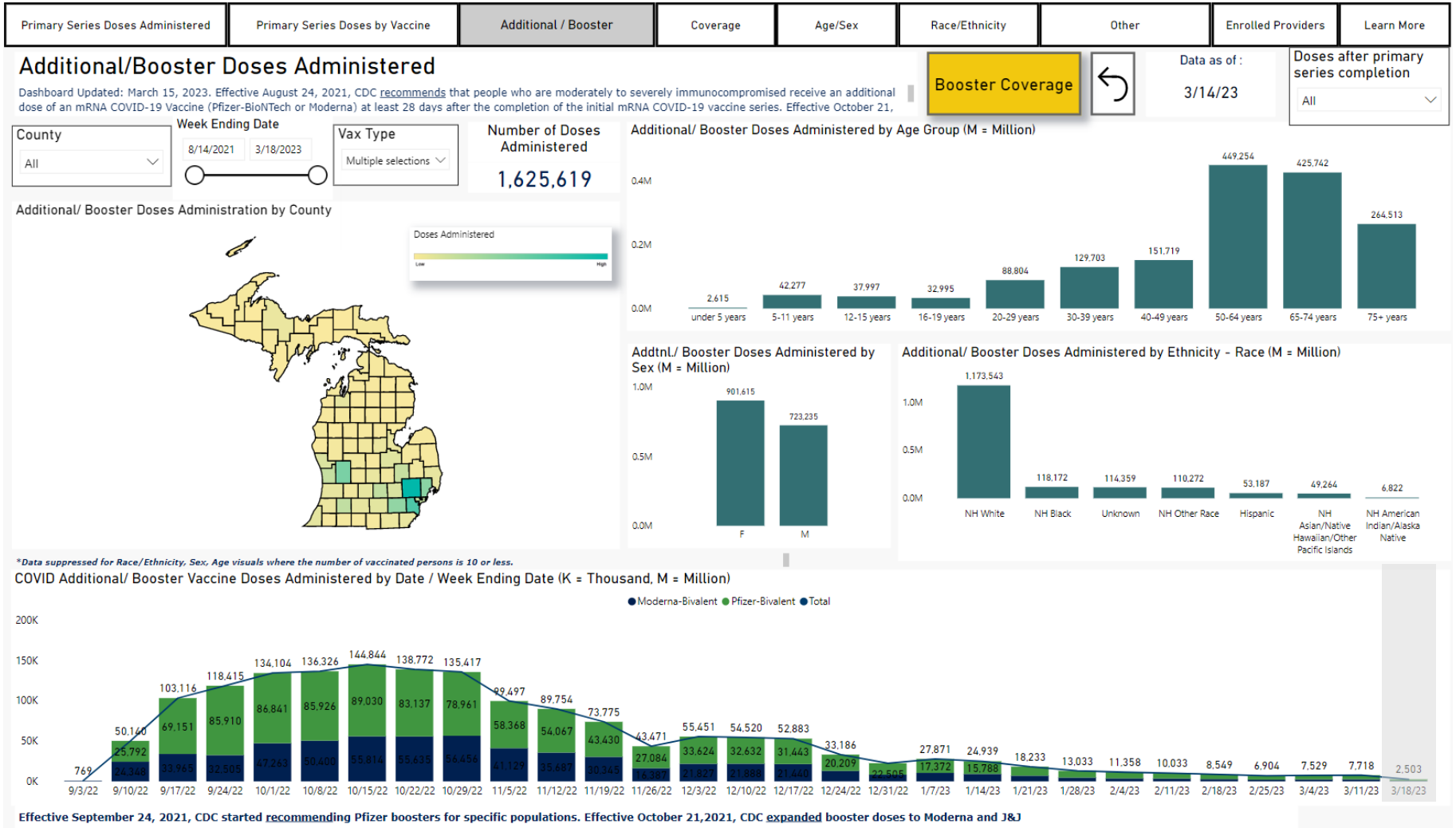
Note: Now include all those 6 months and older in calculations

Bivalent Administration

- **FDA has authorized and CDC now recommends expanding the use of the updated bivalent COVID-19 vaccines to everyone over the age of 6 months.***

- As of March 14¶, 1,625,619 Michiganders have received their bivalent booster

- Note: the data for the week ending 3/18 would have been incomplete on the date the dashboard was last refreshed (3/14)



Moderna Bivalent

Pfizer Bivalent

* CDC Expands Updated COVID-19 Vaccines to Include Children Ages 6 Months through 5 Years

¶ 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 9

Sources: Michigan Coronavirus Vaccine Dashboard