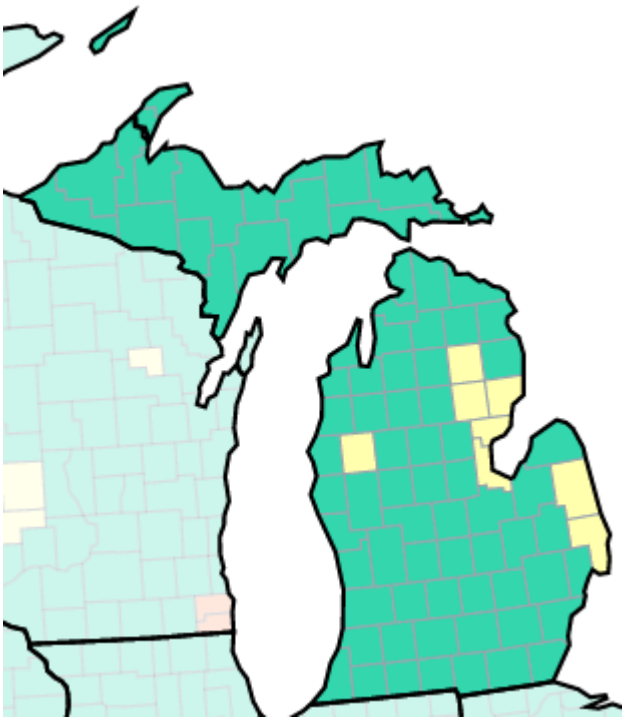




MI COVID RESPONSE DATA AND MODELING UPDATE

February 21, 2023

As of Feb 16, No Michigan Counties are at High COVID-19 Community Level



- In the US, 3% of counties have 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
- 8 Michigan county is currently at Medium level (10%). This represents 4% of the population
- 73 Michigan counties are currently at Low level (90%). This represents 96% of the population

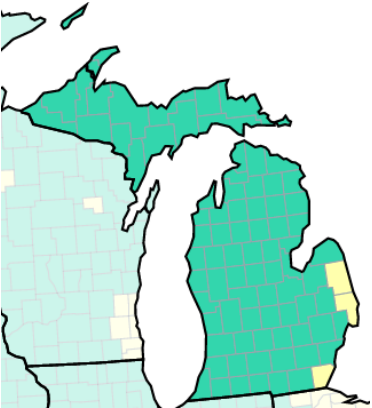
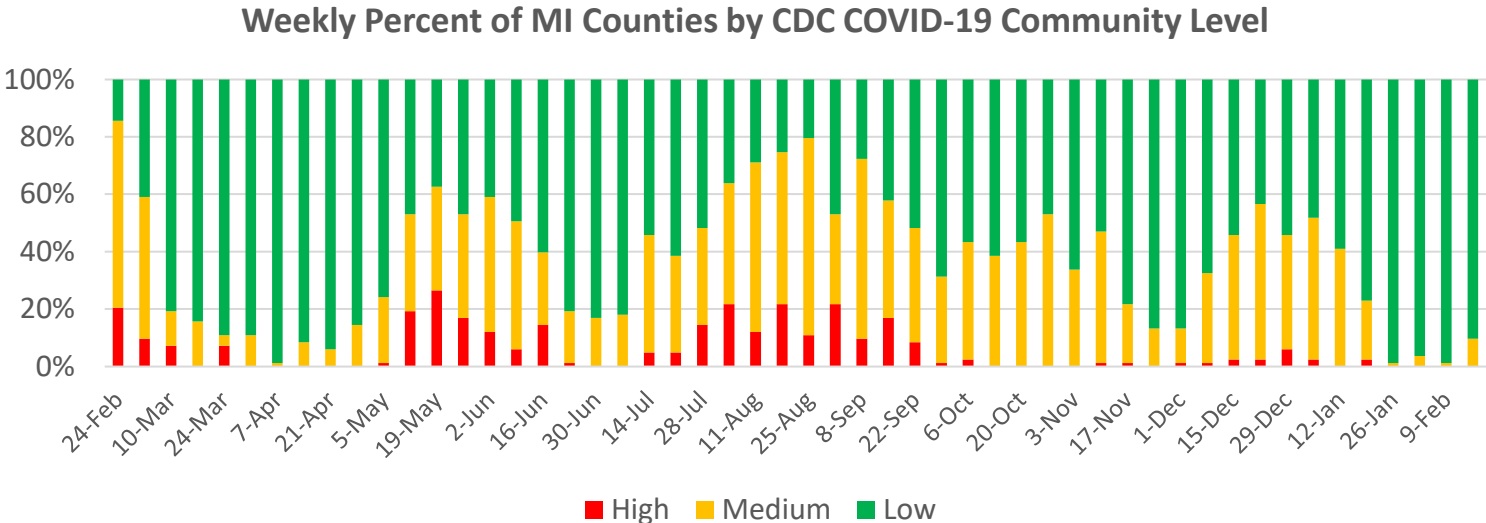
Percent of Counties This Week

	United States	Michigan	Percent of MI Population
Low	77%	90%	96%
Medium	20%	10%	4%
High	3%	0%	0%

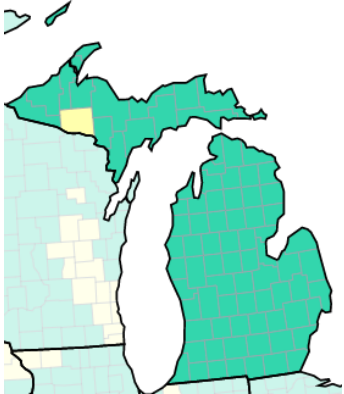
Low	Medium	High
<ul style="list-style-type: none">• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms	<ul style="list-style-type: none">• If you are at high risk for severe illness, talk to your healthcare provider about whether you need to wear a mask and take other precautions•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

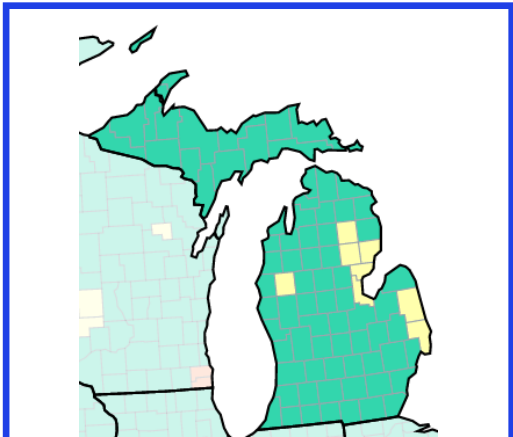
- As of Feb 16, no (0%) Michigan counties are at high COVID-19 community level and 8 Michigan county is currently at Medium level (10%). Together, these counties account for 4% of the population.
- The proportion of Michigan counties at medium and high is higher than last week
- The past 4 weeks have seen the longest streak of consecutive weeks with counties at low level over the past year



Feb 2 CDC Community Levels



Feb 9 CDC Community Levels



Feb 16 CDC Community Levels

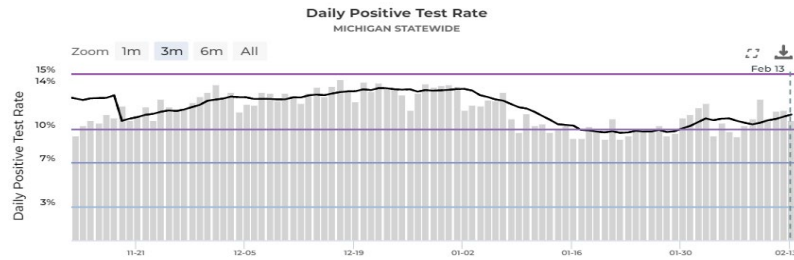
This metric uses three indicators for categorization: (1) new COVID-19 cases per 100,000 population in the last 7 days lagged 1 day behind the date the COVID-19 Community Level is calculated; (2) new COVID-19 hospital admissions per 100,000 population in the last 7 days; and (3) percent of staffed inpatient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

Recent statewide COVID trends are plateaued

Statewide trends

— 7-day average ■ Daily values

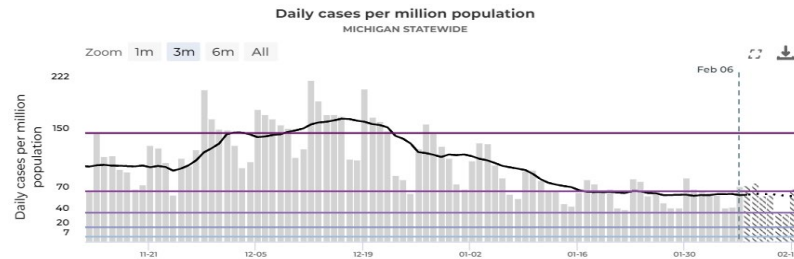
Positivity, %



Current: 11.3%

Last Week: 10.9%

Daily cases per million

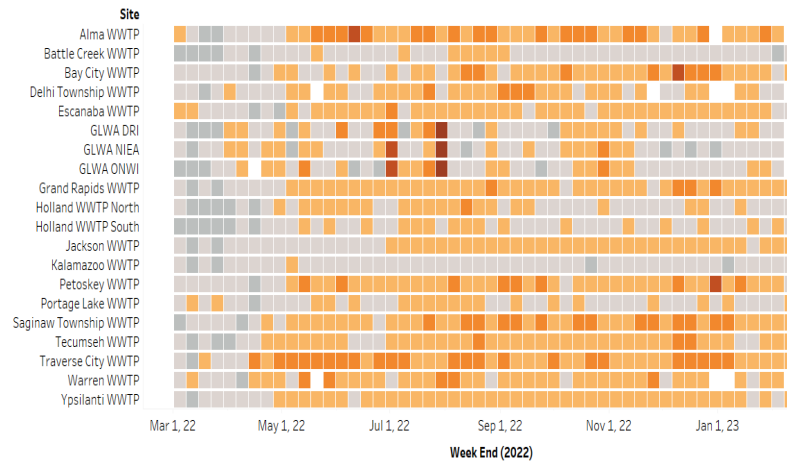
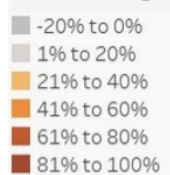


Current: 64.9

Last Week: 59.1

Wastewater

Percent Change



Current: 57% of sites are above 20% baseline threshold

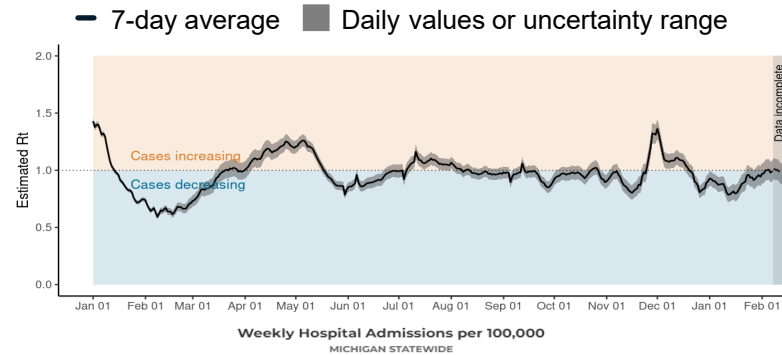
Last Week: 60% of sites are above 20% baseline threshold

- Test percent positivity, is slightly increasing compared to last week
- Case rates are slightly increasing since last week
- Eight counties are currently showing an increase in cases and an additional 23 reported an elevated incidence plateau in case rates (via mistartmap.info as of 2/16/23, data through 2/6/23)
- 57% (8/14) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week

Recent statewide COVID trends are plateaued

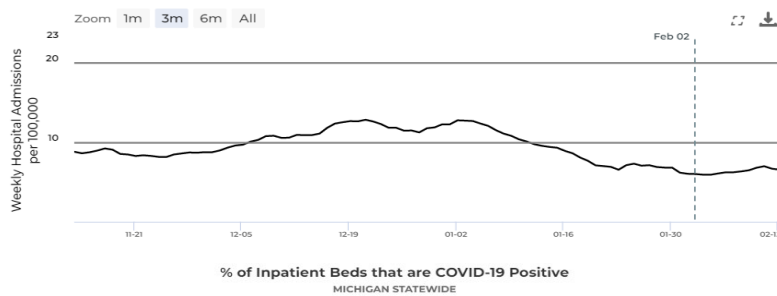
Statewide trends

Reproductive Number, R_t



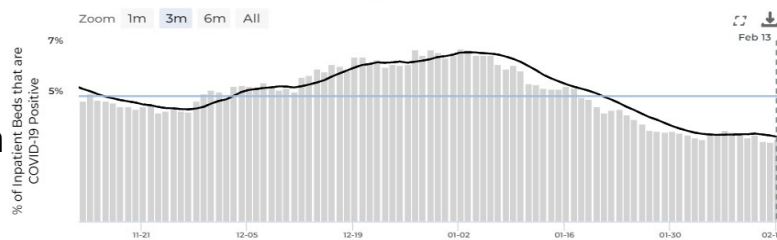
Current: 0.99
Last Week: 0.90

Hospital Admissions



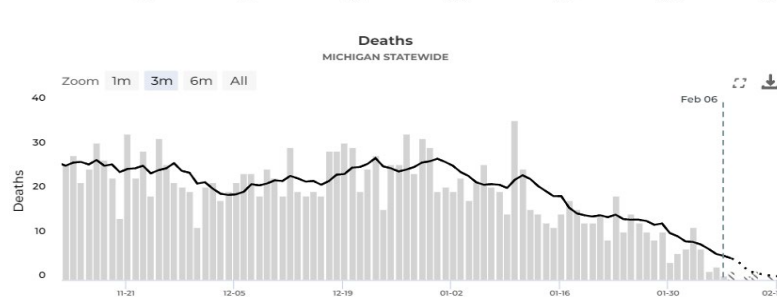
Current: 6.6
Last Week: 6.2

Daily hospitalization rate, %



Current: 3.3%
Last Week: 3.5%

Deaths

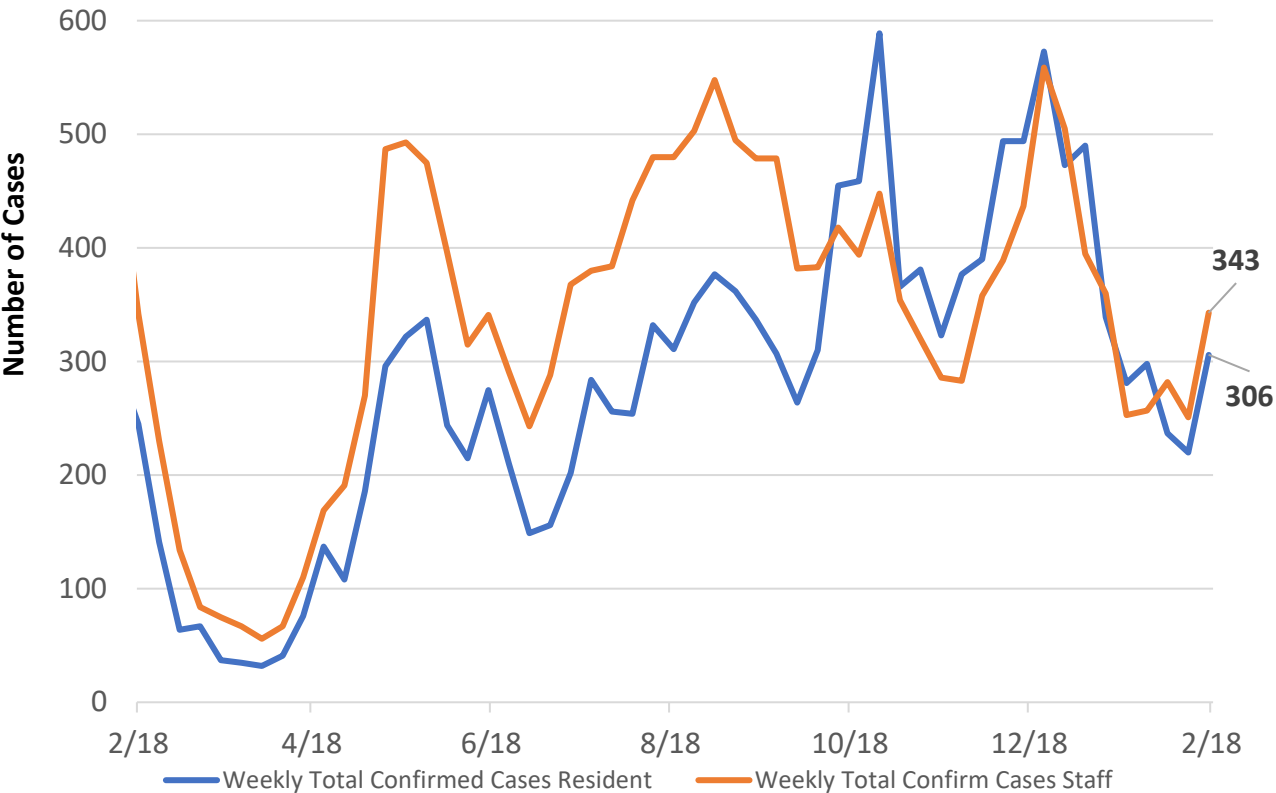


Current: 0.5
Last Week: 0.7

- The reproductive number (R_t) in Michigan is near 1 indicating plateau
- There are an average of 6.6 hospital admissions per 100,000 Michiganders day which is slightly increased from last week
- The percent of inpatient beds that have patients diagnosed with COVID-19 are slightly lower than 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
02/18/2022 TO 02/17/2023



Number of SNFs with 3 or more Confirmed Cases
02/18/2022 TO 02/17/2023



- Case counts have increased in SNF residents (237 to 306) and in SNF staff (282 to 343) since last week [left graph]
 - The number of SNF facilities reporting 3 or more cases increased since last week (27 to 31) [right graph]
 - Currently, **27%** of SNFs are reporting **nursing shortages** and **29%** 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

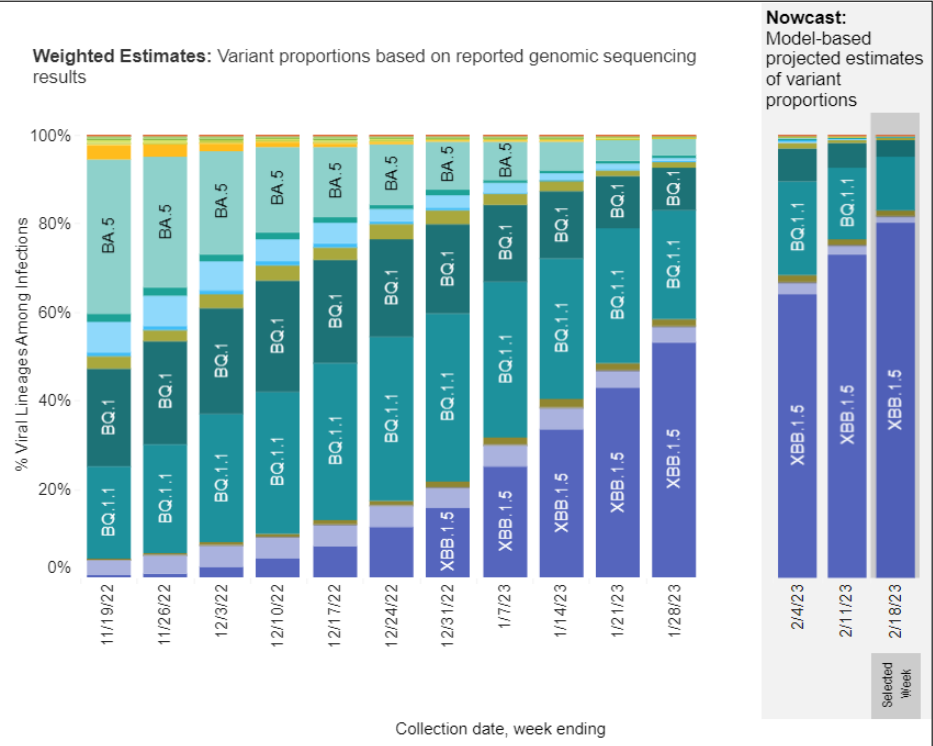
The data is from weekly reporting by facilities with bed occupancy of at least 13 beds.

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

SARS-CoV-2 Variants Circulating in the United States, Nov 13 – Feb 18 (NOWCAST)

Weighted and Nowcast Estimates in United States for Weeks of 11/13/2022 – 2/18/2023

Nowcast Estimates in United States for 2/12/2023 – 2/18/2023



* 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, sublineages of XBB are aggregated to XBB. For all the other lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, CH.1.1 was aggregated to BA.2.75. Lineages BA.2.75.2, XBB, XBB.1.5, 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	80.2%	74.2-85.2%	
	BQ.1.1	VOC	12.1%	9.1-15.9%	
	BQ.1	VOC	3.7%	2.7-5.0%	
	XBB	VOC	1.5%	1.2-2.0%	
	CH.1.1	VOC	1.2%	0.9-1.7%	
	BN.1	VOC	0.5%	0.4-0.8%	
	BA.5	VOC	0.2%	0.1-0.3%	
	BF.7	VOC	0.2%	0.1-0.3%	
	BA.5.2.6	VOC	0.1%	0.1-0.1%	
	BA.2	VOC	0.1%	0.0-0.1%	
	BF.11	VOC	0.0%	0.0-0.1%	
	BA.2.75	VOC	0.0%	0.0-0.0%	
	BA.2.75.2	VOC	0.0%	0.0-0.0%	
	BA.4.6	VOC	0.0%	0.0-0.0%	
	B.1.1.529	VOC	0.0%	0.0-0.0%	
Delta	BA.2.12.1	VOC	0.0%	0.0-0.0%	
	BA.4	VOC	0.0%	0.0-0.0%	
	BA.1.1	VOC	0.0%	0.0-0.0%	
	B.1.617.2	VBM	0.0%	0.0-0.0%	
	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 BA.2 recombinant sublineage XBB.1.5 (80.2%, 95% P.I. 74.2-85.2%), as well as the BA.5 sublineages of BQ.1.1 (12.1%, 95% P.I. 9.1-15.9%), and BQ.1 (3.7%, 95% P.I. 2.7-5.0%) are most prevalent during the week ending on February 18

Distribution in Michigan

- Since January 15, there have 594 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since January 15, 63.0% of specimens sequenced and reported (n=374) have been identified as BA.5; of which 19.8% have been identified as BQ.1 (n=74), and 66.8% as BQ.1.1 (n=250)
- 244 cases of XBB.1.5 have been identified in Michigan and has been detected in 7 of the 8 preparedness regions

Over 6.2 Million Michiganders have completed the primary series – 62.3% 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*

69.4% 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 those of Non-Hispanic (NH) White (15.5%), then NH Asian, Native Hawaiian or Pacific Islander Race (14.3%), then NH American Indian (11.8%), NH Black or African American Races (8.3%).
- Up-to-date coverage is at 9.8% 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

44.8% of the population 65 years of age or older has received an updated (bivalent) booster

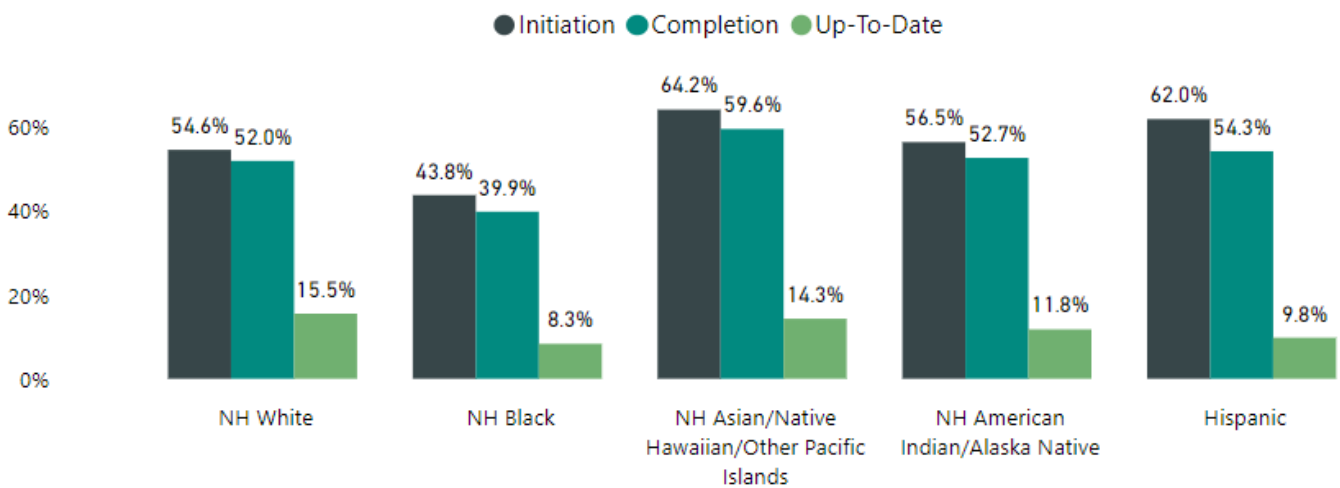
17.0% of all Michiganders have received their updated (bivalent) booster dose

Vaccination Coverage in Michigan as of 2/15/2023

Age Group	% At Least One Dose	% Completed Primary Series	% Updated Booster**	U.S. % Boosted**	Primary Series Total
Total Population	69.4%	62.3%	17.0%	16.0%	6,222,886
≥ 5 years	73.3%	65.9%	18.0%	16.9%	6,208,496
≥ 12 years	77.3%	69.5%	19.3%	18.2%	5,973,233
≥ 18 years	79.5%	71.5%	20.6%	19.3%	5,605,299
≥ 65 years	95.0%	91.4%	44.8%	41.0%	1,612,937

**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*

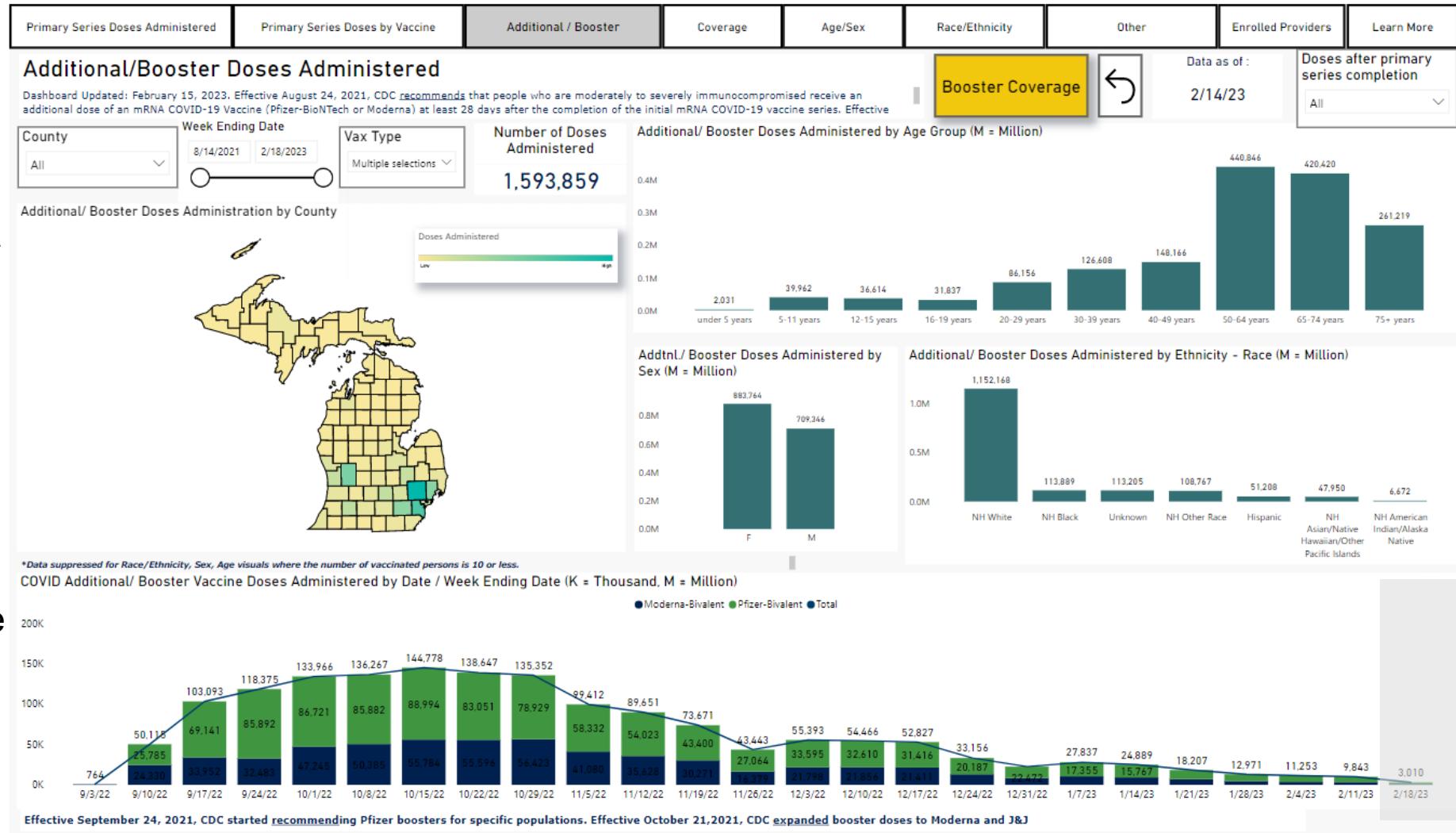


Source: *[CDC COVID Data Tracker > Vaccinations in the US](#), † [MCIR COVID-19 Vaccine Dashboard](#)

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 2/14[†], 1,593,859 Michiganders had received their bivalent booster
- Note: the data for the week ending 2/18 would have been incomplete on the date the dashboard was last refreshed (2/14)



● 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
 Sources: [Michigan Coronavirus Vaccine Dashboard](#)

Bivalent COVID-19 Booster Doses Protected Against Infection and Death During the BA.4 and BA.5 Waves

- Staying up-to-date COVID-19 vaccine can help save lives
- Bivalent COVID-19 booster doses protected against infection and death during BA.4/BA.5 waves
 - Bivalent booster recipients in 24 U.S. jurisdictions had slightly higher protection against infection and significantly higher protection against death than was observed for monovalent booster recipients or unvaccinated persons, especially among older adults
- All eligible persons should get 1 bivalent booster dose ≥ 2 months after their COVID-19 primary series or last monovalent booster dose.

