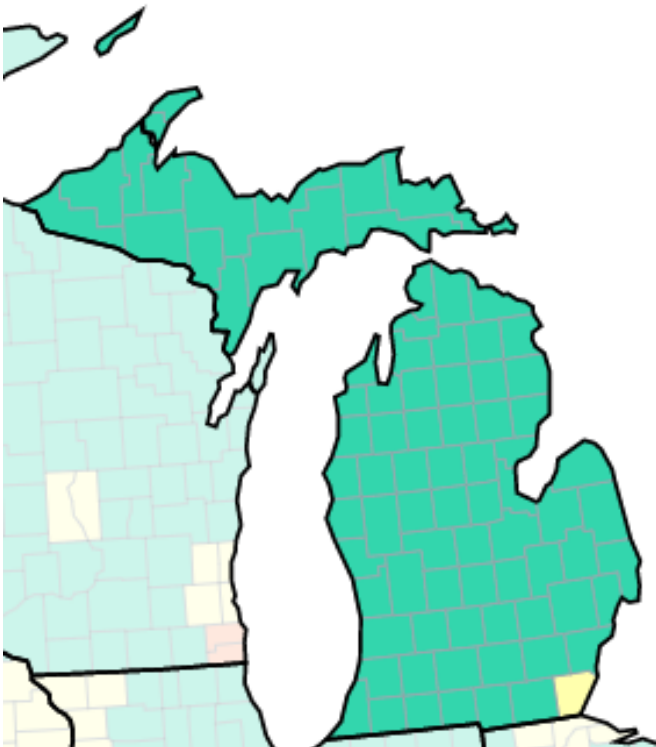


MI COVID RESPONSE DATA AND MODELING UPDATE

January 31, 2023

As of Jan 26, No Michigan Counties are at High COVID-19 Community Level



- In the US, 4% 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
- 1 Michigan county is currently at Medium level (1%). This represents 1% of the population
- 82 Michigan counties are currently at Low level (99%). This represents 98% of the population

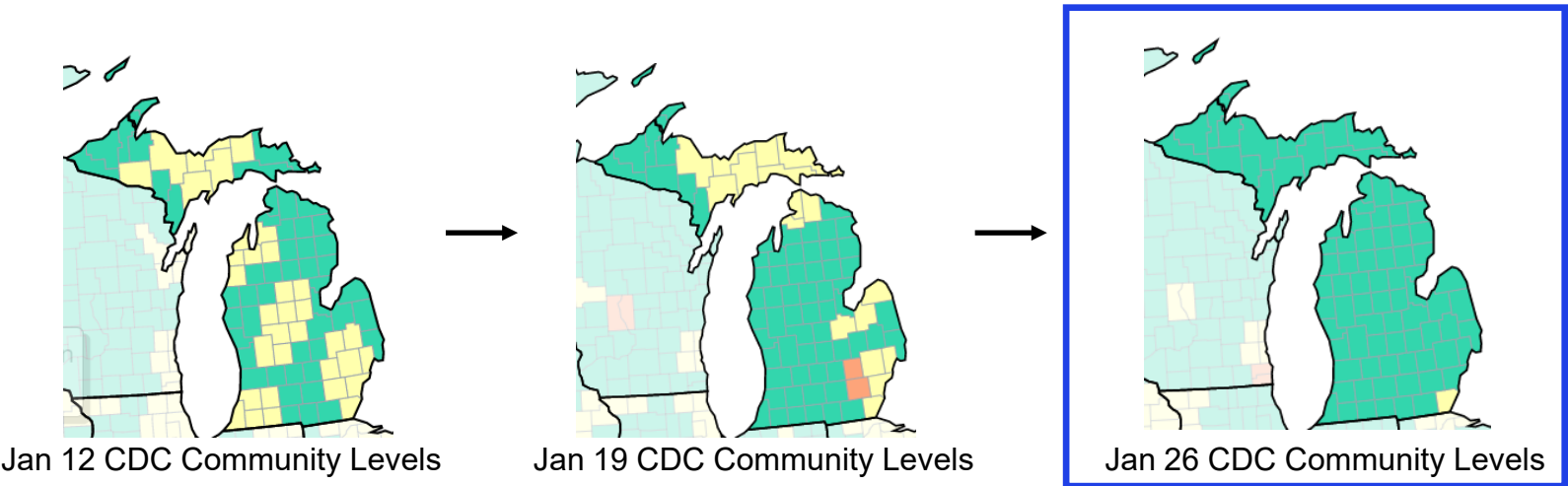
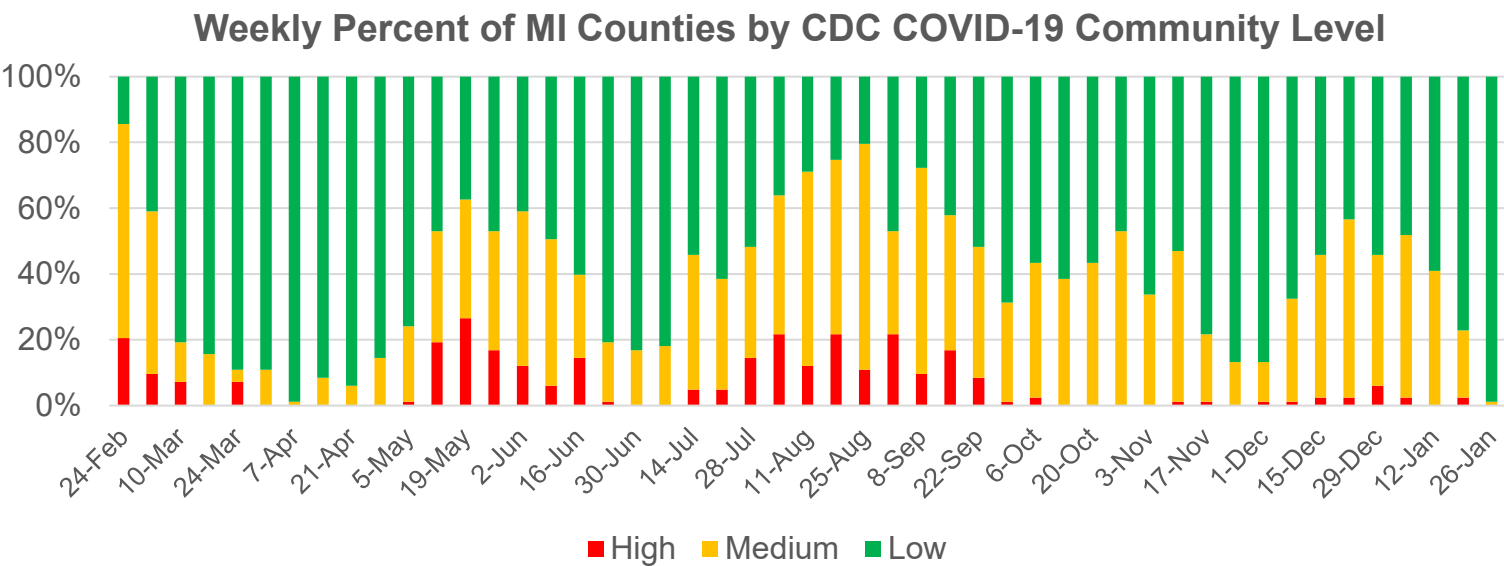
Percent of Counties This Week

	United States	Michigan	Percent of MI Population
Low	69%	99%	98%
Medium	27%	1%	2%
High	4%	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 Jan 26, no (0%) Michigan counties are at high COVID-19 community level and another 1 Michigan county is currently at Medium level (1%)
- The proportion of Michigan counties at medium and high is lower than last week
- The currently levels are tied for the best since the levels were first released in February 2022
 - Last time this many counties at low level was April 7, 2022

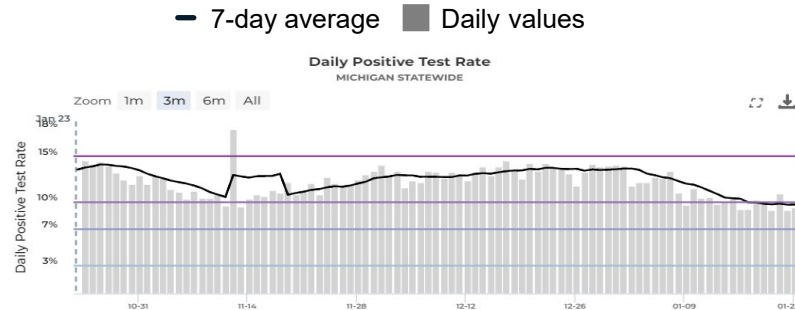


This metric uses three indicators for categorization: (1) new COVID-19 cases per 100,000 population in the last 7 days lagged 1 day behind the date the COVID-19 Community Level is calculated; (2) new COVID-19 hospital admissions per 100,000 population in the last 7 days; and (3) percent of staffed inpatient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

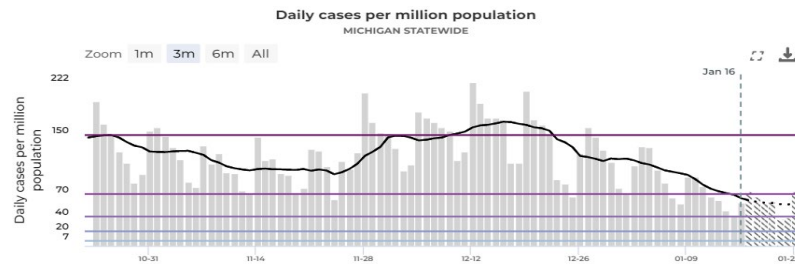
Recent statewide COVID trends are slightly decreasing

Statewide trends

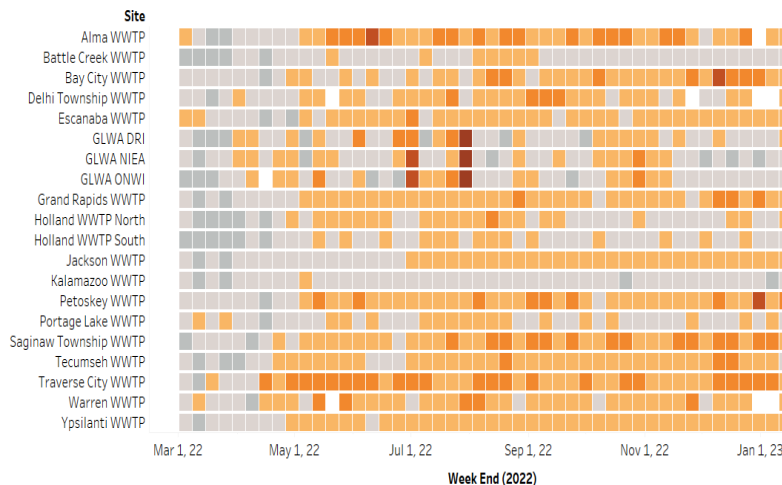
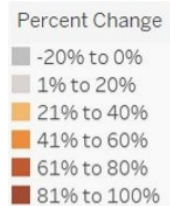
Positivity, %



Daily cases per million



Wastewater



Current: 65% of sites are above 20% baseline threshold

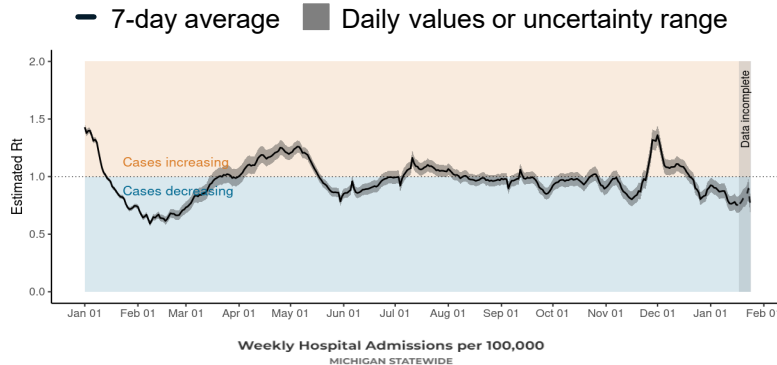
Last Week: 62% of sites are above 20% baseline threshold

- Test percent positivity, is down compared to last week
- Case rates have decreased since last week, and the general trend the past several weeks is declining
- 1 county is currently showing an increase in cases and an additional 2 reported an elevated incidence plateau in case rates (via mstartmap.info as of 1/24/23, data through 1/16/23)
- 65% (13/20) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week

Recent statewide COVID trends are slightly declining

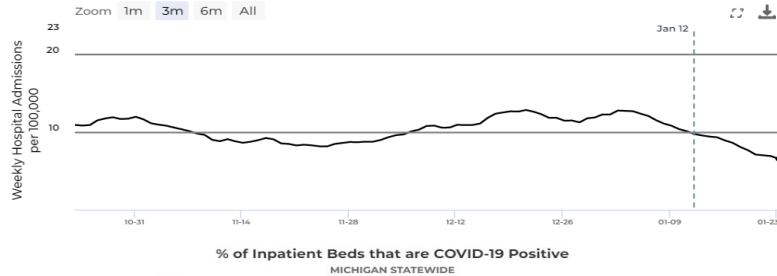
Statewide trends

Reproductive Number, R_t



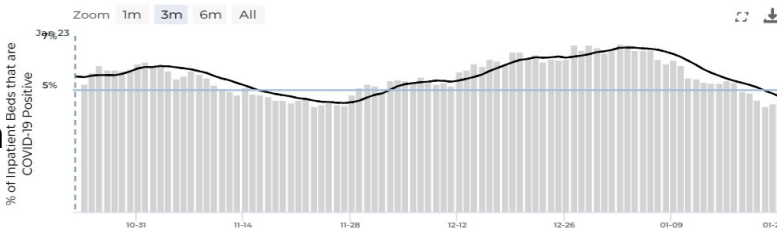
Current: 0.75
Last Week: 0.80

Hospital Admissions



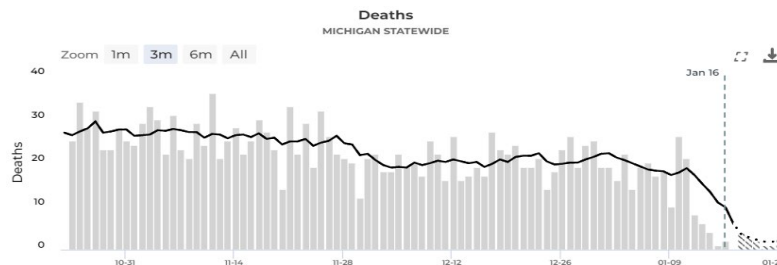
Current: 6.6
Last Week: 8.9

Daily hospitalization rate, %



Current: 4.6%
Last Week: 5.4%

Deaths

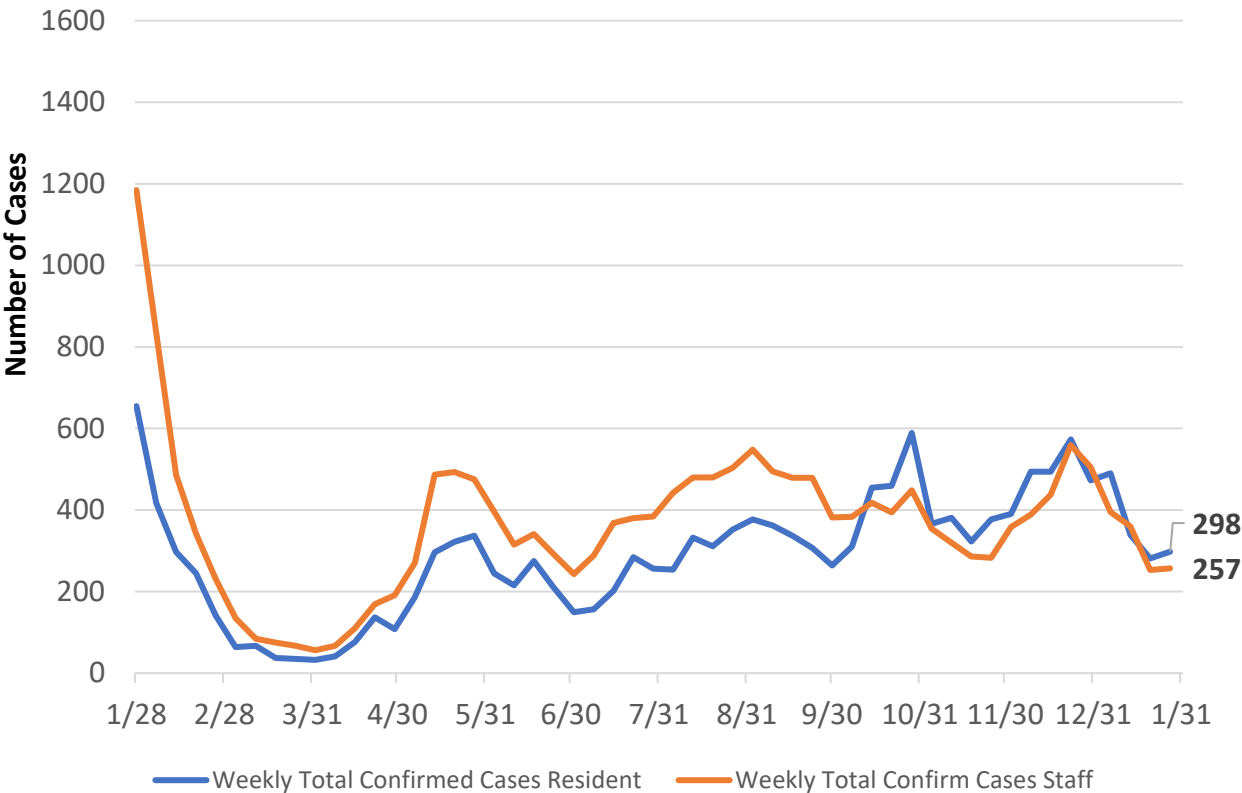


Current: 0.6
Last Week: 0.7

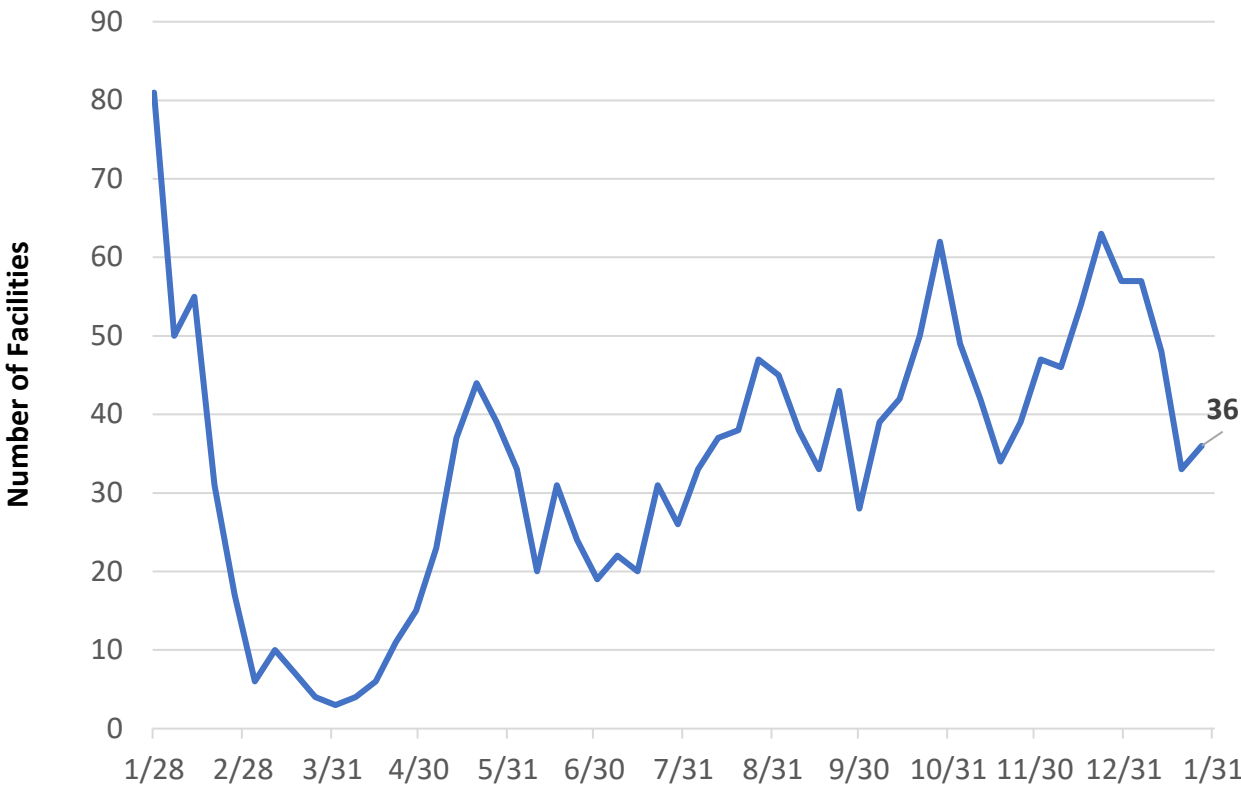
- The reproductive number (R_t) in Michigan is below 1 indicating decline
- There are an average of 6.6 hospital admissions per 100,000 Michiganders day which is a decrease from last week
- The percent of inpatient beds that have patients diagnosed with COVID-19 have seen a decrease from the past week
- 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
01/28/2022 TO 01/27/2023



Number of SNFs with 3 or more Confirmed Cases
01/28/2022 TO 01/27/2023



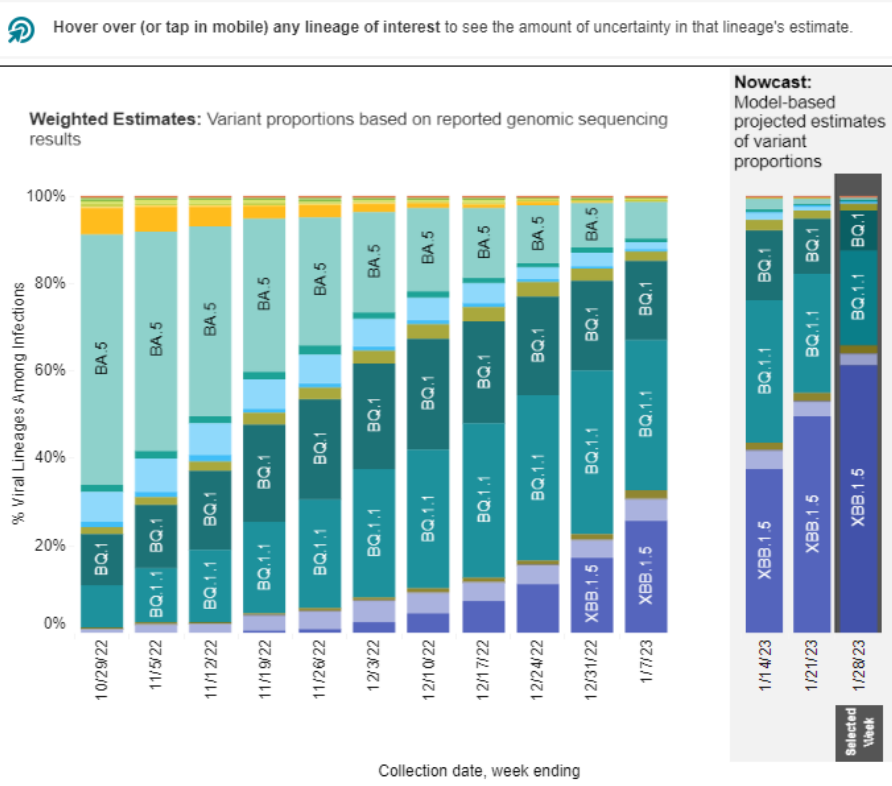
- Case counts have slightly increased in SNF residents (281 to 298) and in SNF staff (253 to 257) since last week [left graph]
 - The number of SNF facilities reporting 3 or more cases slightly increased since last week (33 to 36) [right graph]
 - Currently, **27%** of SNFs are reporting **nursing shortages** 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, Oct 23 – Jan 28 (NOWCAST)

Weighted and Nowcast Estimates in United States for Weeks of 10/23/2022 – 1/28/2023

Nowcast Estimates in United States for 1/22/2023 – 1/28/2023



USA				
WHO label	Lineage #	US Class	%Total	95%PI
Omicron	XBB.1.5	VOC	61.3%	51.5-70.3%
	BQ.1.1	VOC	21.8%	16.6-27.9%
	BQ.1	VOC	9.3%	6.9-12.3%
	XBB	VOC	2.8%	2.2-3.5%
	CH.1.1	VOC	1.5%	1.1-2.1%
	BN.1	VOC	1.4%	1.0-1.8%
	BA.5	VOC	0.7%	0.5-1.0%
	BF.7	VOC	0.6%	0.5-0.9%
	BA.5.2.6	VOC	0.2%	0.2-0.3%
	BA.2	VOC	0.1%	0.1-0.2%
	BF.11	VOC	0.1%	0.1-0.2%
	BA.2.75	VOC	0.1%	0.0-0.1%
	BA.4.6	VOC	0.0%	0.0-0.0%
	BA.2.75.2	VOC	0.0%	0.0-0.1%
	B.1.1.529	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*		0.0%	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 (49.1%, 95% P.I. 37.5-60.8%), as well as the BA.5 sublineages of BQ.1.1 (26.9%, 95% P.I. 20.9-33.9%), and BQ.1 (13.3%, 95% P.I. 10.1-17.4%) are most prevalent during the week ending on January 21

Distribution in Michigan

- Since December 15, there have 1,639 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since December 15, 89.6% of specimens sequenced and reported (n=1,398) have been identified as BA.5; of which 8.4% of those specimens are BF.7 (n=118), 21.9% have been identified as BQ.1 (n=306), and 49.2% as BQ.1.1 (n=688)
- Seventy-six cases of XBB.1.5 have been identified in Michigan and has been detected in 6 of the 8 preparedness regions

* 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.

** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

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.

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*

91.3% 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 (15.0%), then NH Asian, Native Hawaiian or Pacific Islander Race (13.7%), then NH American Indian (11.3%), NH Black or African American Races (7.9%).
- Initiation is at 9.2% for those of Hispanic ethnicity

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

44.1% of the population 65 years of age or older has received an updated (bivalent) booster

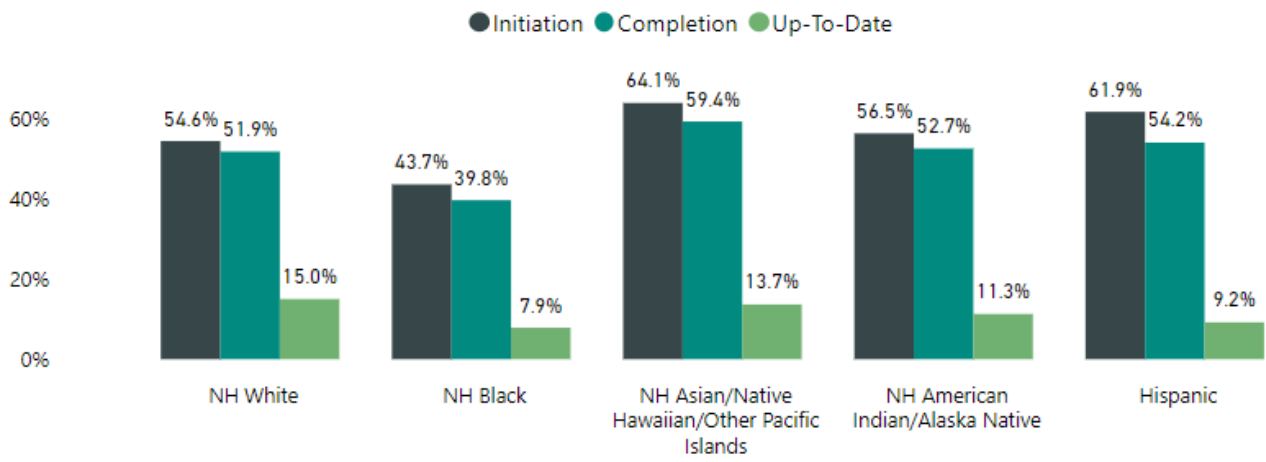
16.6% of all Michiganders have received their updated (bivalent) booster dose

Vaccination Coverage in Michigan as of 1/26/2023

Age Group	% At Least One Dose	% Completed Primary Series	% Updated Booster**	U.S. % Boosted**	Primary Series Total
Total Population	69.4%	62.3%	16.6%	15.5%	6,218,243
≥ 5 years	73.2%	65.9%	17.6%	16.5%	6,204,357
≥ 12 years	77.2%	69.5%	18.9%	17.7%	5,969,715
≥ 18 years	79.4%	71.4%	20.1%	18.8%	5,602,105
≥ 65 years	95.0%	91.3%	44.1%	40.1%	1,612,313

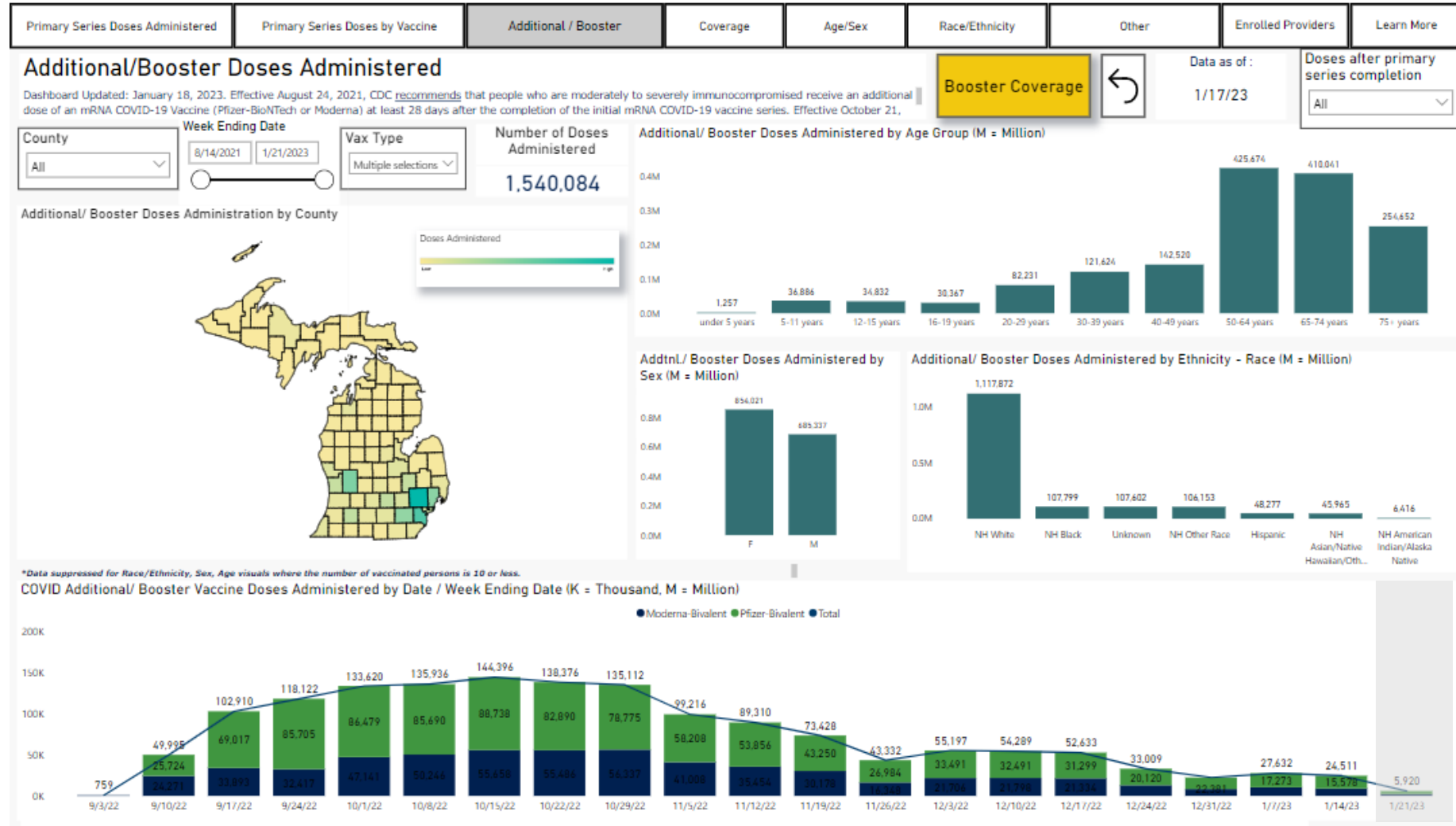
**This shows the percentage of all residents ages 5 years and older in a jurisdiction (state, territory, national) with an updated (bivalent) booster dose. Non-residents who received vaccine are attributed to their jurisdiction of residence.

Coverage by Race*



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 1/17[†], 1,540,084 Michiganders had received their bivalent booster
- Note: the data for the week ending 1/21 would have been incomplete on the date the dashboard was last refreshed (1/17)



● Moderna Bivalent

● Pfizer Bivalent

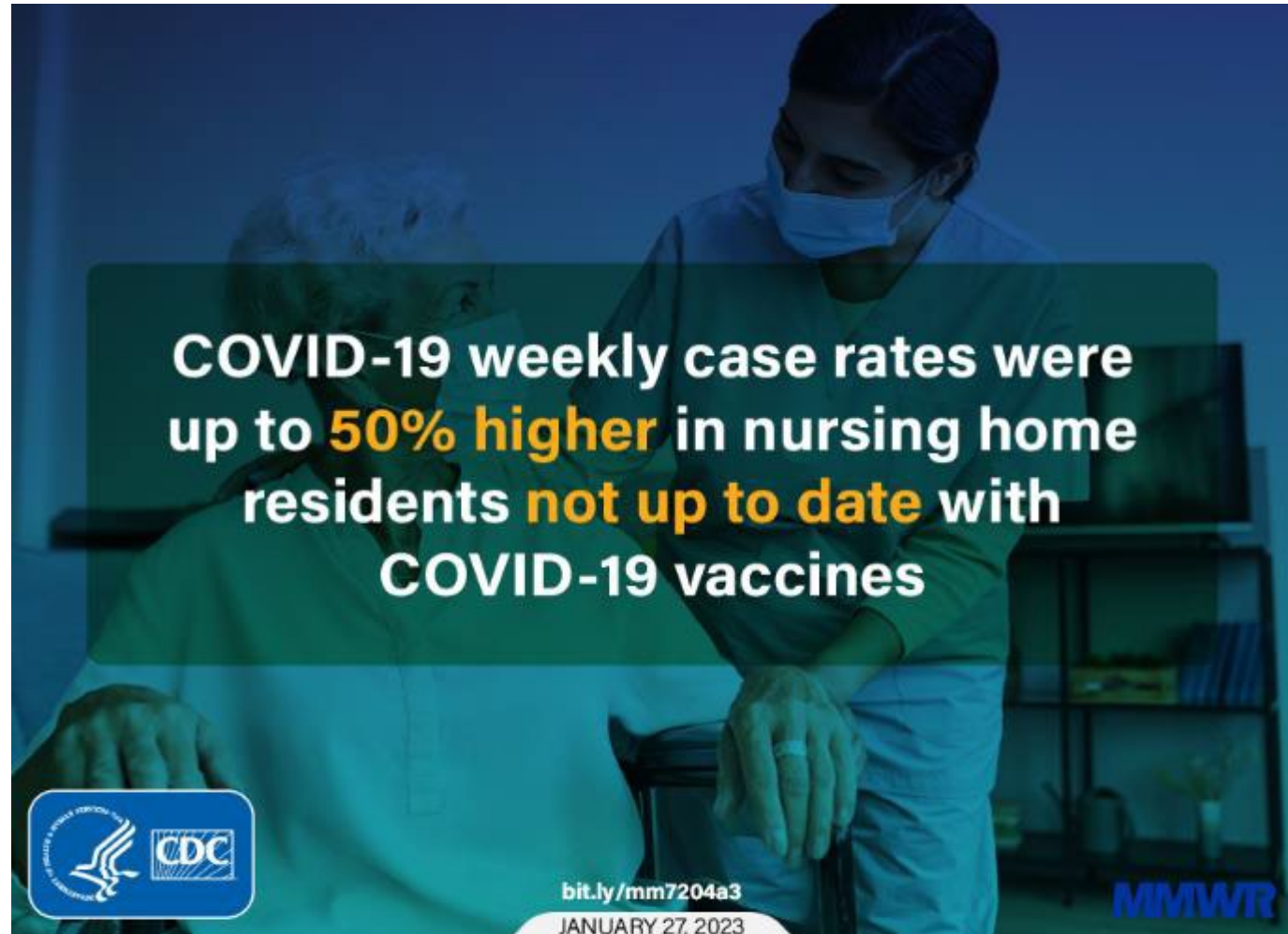
* [CDC Expands Updated COVID-19 Vaccines to Include Children Ages 6 Months through 5 Years](#)

[†] 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](#)

Laboratory-Confirmed COVID-19 Case Incidence Rates Among Residents in Nursing Homes Were Lower Among Those Who Were Up-To-Date on Their COVID Vaccines

- COVID-19 vaccines are effective against SARS-CoV-2 infection including for nursing home residents
- Nursing home residents who were not up to date with recommended COVID-19 vaccines had a 30%–50% higher risk for acquiring SARS-CoV-2 infection compared with residents who were up to date with COVID-19 vaccines
- The bivalent booster dose offers additional protection in persons who previously received monovalent vaccines
- Nursing home residents can maximize protection against COVID-19 by receiving bivalent COVID-19 booster doses to stay up to date with recommended COVID-19 vaccinations



Source: Dubendris H, Reses HE, Wong E, et al. Laboratory-Confirmed COVID-19 Case Incidence Rates Among Residents in Nursing Homes by Up-to-Date Vaccination Status — United States, October 10, 2022–January 8, 2023. MMWR Morb Mortal Wkly Rep 2023;72:95–99. DOI: <http://dx.doi.org/10.15585/mmwr.mm7204a3>