

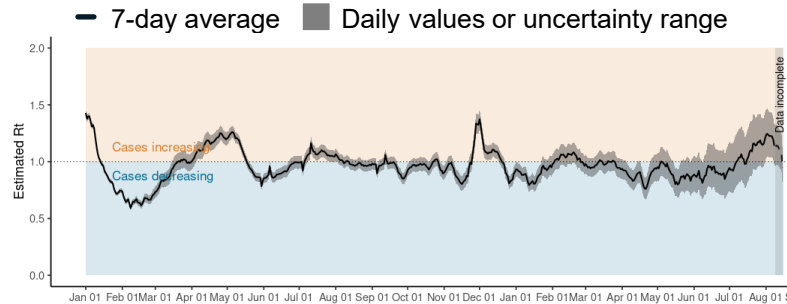
MI COVID RESPONSE DATA AND MODELING UPDATE

August 22, 2023

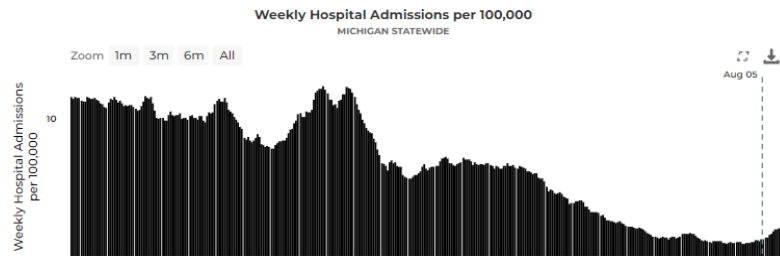
Recent statewide trends show COVID is increasing but remain relatively low

Statewide trends

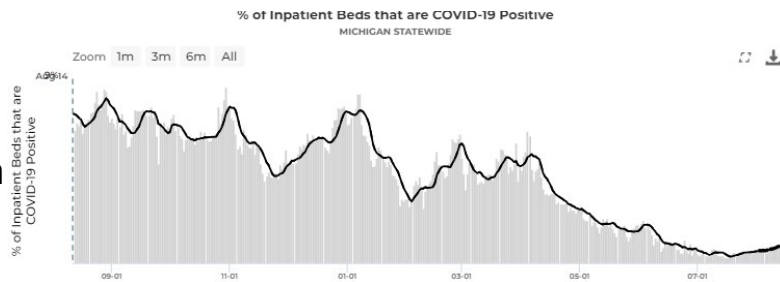
Reproductive Number, R_t



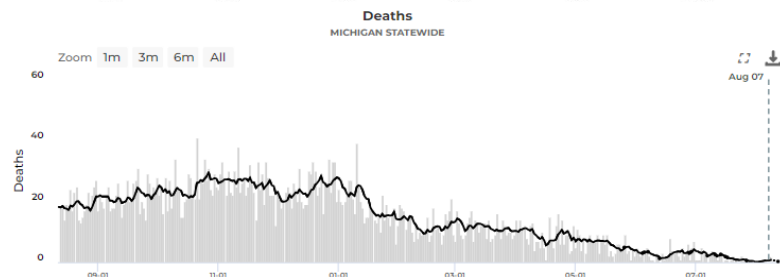
Hospital Admissions*



Daily hospitalization rate, %



Deaths



- The reproductive number (R_t) in Michigan is above 1 indicating cases are increasing
- There has been a daily average of 2.3 hospital admissions per 100,000 Michiganders which is an increase from the previous week
- The percent of inpatient beds with COVID-19 positive patients (0.9%) are increasing compared to the previous week
- Deaths saw a slight dip the previous week but are similar this week to levels two weeks ago

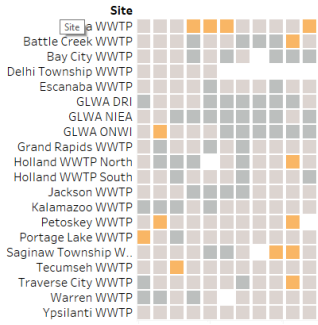
Recent statewide trends show COVID is increasing but remain relatively low

Statewide trends

Wastewater



7-day average Daily values

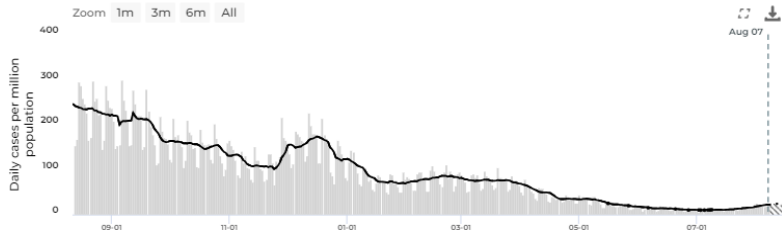


Current: 5% of sites are above 20% baseline threshold

Last Week: 26% of sites are above 20% baseline threshold

- 5% (1/19) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week

Daily cases per million

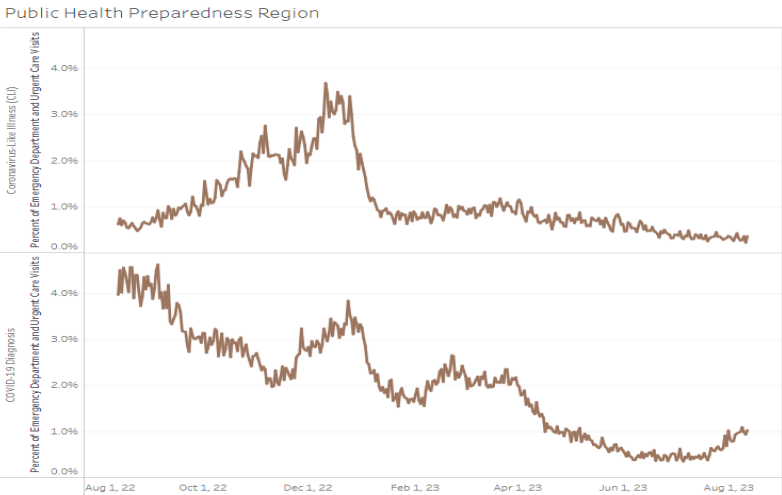


Current: 22.4

Last Week: 18.2

- Reported case rates have increased compared to last week

Syndromic Surveillance



Coronavirus-Like-Illness (CLI)

Current: 0.4%

Last Week: 0.3%

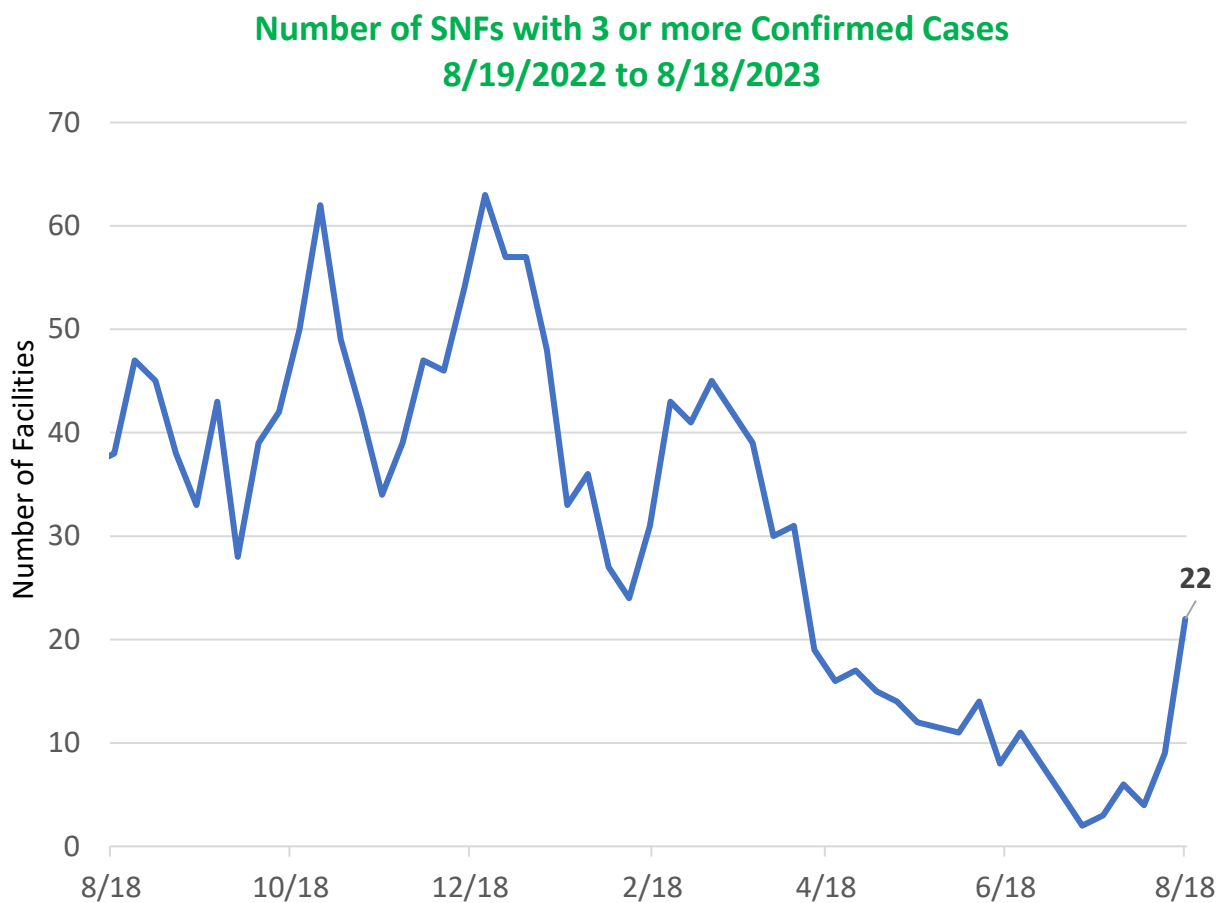
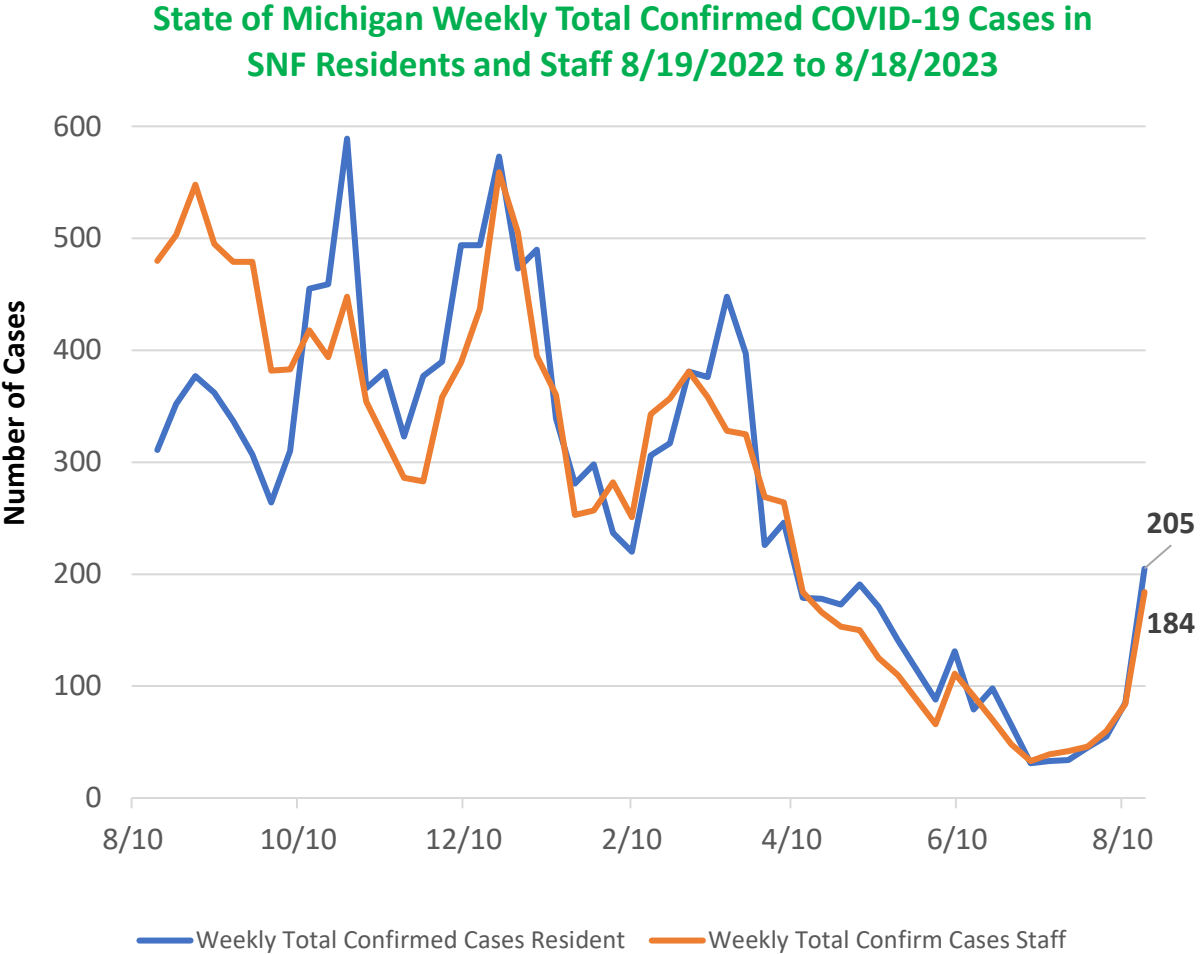
COVID-19 Diagnosis

Current: 1.0%

Last Week: 0.9%

- Syndromic trends in emergency departments and urgent cares both saw slight increases compared to last week

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



- Case counts increased in SNF residents (85 to 205) and in SNF staff (84 to 184) since last week [left graphic]
- The number of SNF facilities reporting 3 or more cases increased since last week (9 to 22) [right graphic]

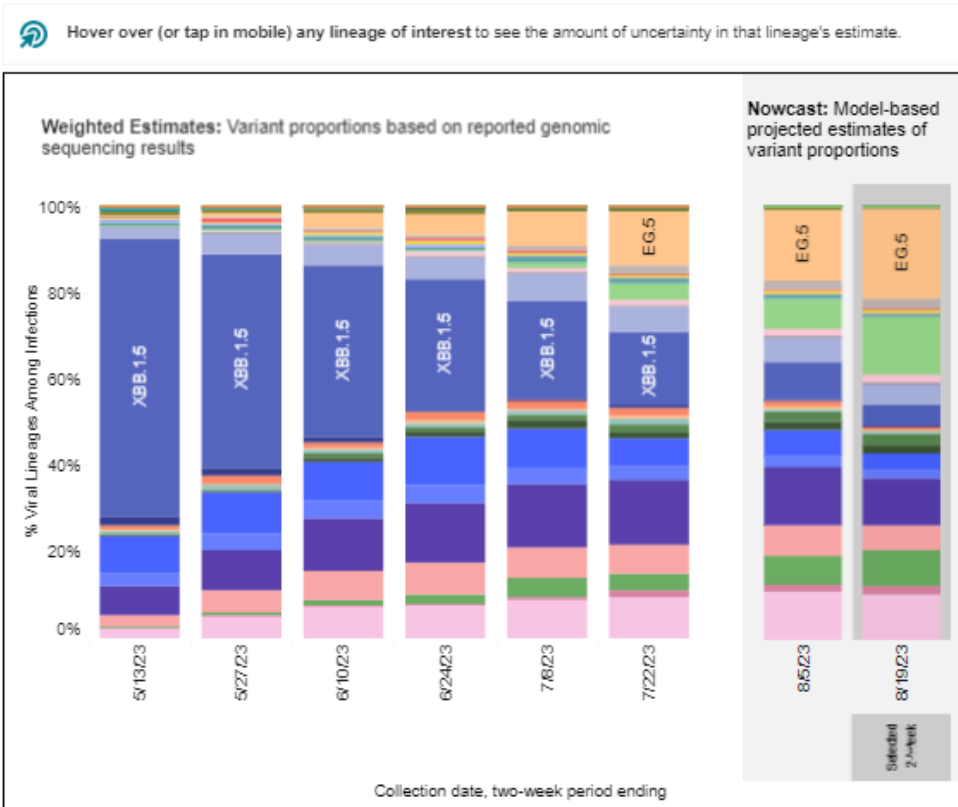
Abbreviations: AFC: Adult Foster Care; HFAs: Homes for the Aged; and SNF: Skilled Nursing Facilities

Identified COVID-19 Cases Caused by Variants of Concern (VOC) in US and Michigan: Omicron lineages continue to evolve; all competing for predominance

SARS-CoV-2 Variants Circulating in the United States, Apr 30 – Aug 19 (NOWCAST)

Weighted and Nowcast Estimates in United States for 2-Week Periods in 4/30/2023 – 8/19/2023

Nowcast Estimates in United States for 8/6/2023 – 8/19/2023



USA			
WHO label	Lineage #	%Total	95%PI
Omicron	EG.5	20.6%	17.8-23.8%
	FL.1.5.1	13.3%	9.4-18.4%
	XBB.1.16	10.7%	9.2-12.4%
	XBB.2.3	10.6%	8.6-13.0%
	XBB.1.16.6	8.0%	6.4-10.1%
	XBB.1.16.1	5.9%	5.1-6.9%
	XBB	5.1%	4.0-6.4%
	XBB.1.5	4.7%	4.0-5.6%
	XBB.1.9.1	4.1%	3.5-4.8%
	XBB.1.5.70	2.4%	1.7-3.4%
	EG.6.1	2.3%	1.6-3.3%
	XBB.1.16.11	1.9%	1.1-3.4%
	XBB.1.5.72	1.9%	1.5-2.4%
	XBB.1.9.2	1.8%	1.4-2.3%
	GE.1	1.8%	1.1-2.7%
	XBB.1.5.10	1.0%	0.7-1.4%
	FE.1.1	0.9%	0.5-1.5%
	FD.1.1	0.8%	0.5-1.4%
	CH.1.1	0.8%	0.5-1.2%
	XBB.1.5.68	0.6%	0.4-1.0%
	XBB.1.5.59	0.4%	0.3-0.8%
	EU.1.1	0.2%	0.1-0.3%
	XBB.1.5.1	0.1%	0.1-0.1%
	BA.2.12.1	0.0%	0.0-0.2%
Other	BA.2	0.0%	0.0-0.0%
	FD.2	0.0%	0.0-0.0%
	BA.5	0.0%	0.0-0.0%
	BQ.1	0.0%	0.0-0.0%
	BQ.1.1	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 EG.5 (20.6%, 95% P.I. 17.8-23.8%) is the most prevalent, while FL.1.5.1 comprise of approximately 13.3% of infections (95% P.I. 9.4-18.4%), XBB.1.16 comprise of 10.7% of infections (95% P.I. 9.2-12.4%), and XBB.2.3 comprise of 10.6% of infections (95% P.I. 8.6-13.0%), while all other lineages are estimated to comprise of less than 10% during the week ending on August 19.
- The BA.2.86 lineage, identified in Israel and Denmark, was recently identified in Michigan. This is likely a branch lineage of BA.2 and contains a number of new mutations

Distribution in Michigan

- Since June 1, there have been 176 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since May 1, a majority of specimens sequenced and reported have been identified as XBB or one of the child lineages; currently 33.5% of specimens have been identified as XBB.1.5, the highest of any of the XBB lineages in Michigan

95% P.I. = 95% prediction interval

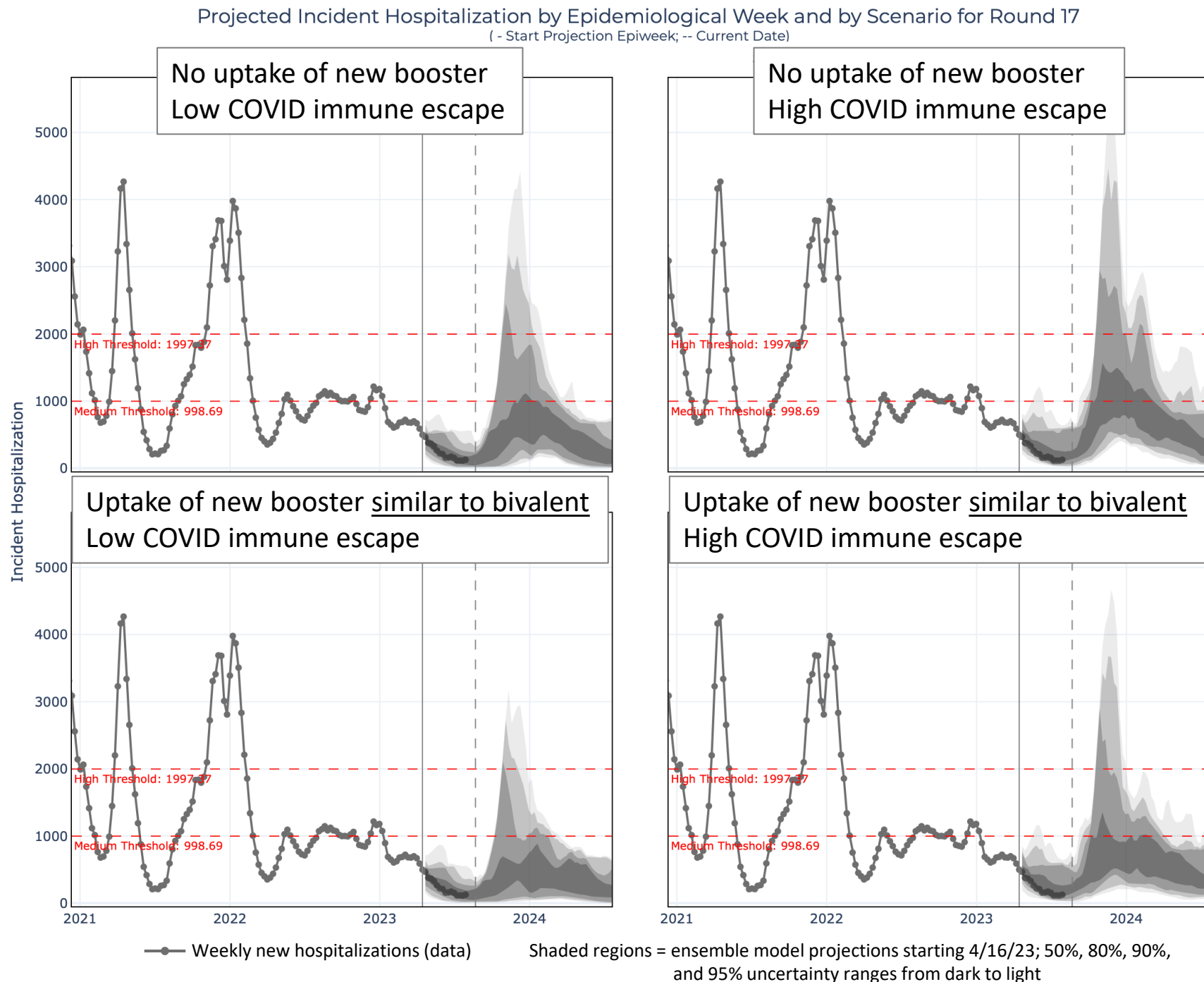
Data last updated Aug 23, 2023

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

Model projections: fall/winter increase in Michigan hospitalizations expected

- Most simulations suggest similar hospitalizations as last fall/winter (dark shaded region)
- However, the range of model simulations includes larger surges (similar to 2021-22 fall/winter surge)
- Increased booster uptake reduces the potential for higher surges

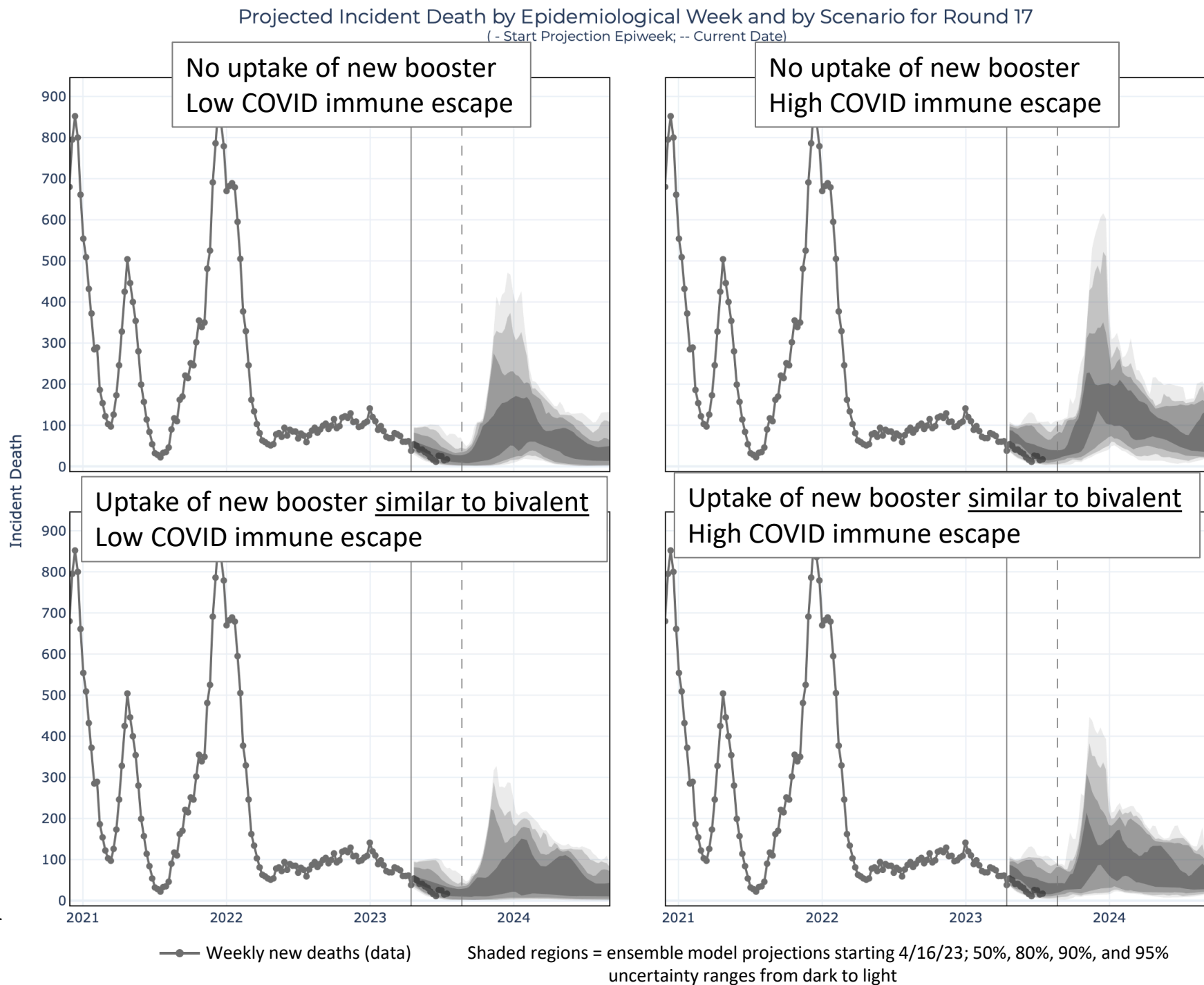
Source: [COVID-19 Scenario Modeling Hub](#). Scenarios shown range from no booster (top row) to moderate uptake (similar to first booster; bottom row), and low and high immune escape of new variants (left and right columns).



Models project that deaths will also increase over fall/winter, similar levels to last year

- Across all scenarios, deaths were projected to be lower than the 2021-22 fall/winter peak
- Increased booster uptake reduces the potential for larger surges in weekly deaths

Source: [COVID-19 Scenario Modeling Hub](#). Scenarios shown range from no booster (top row) to moderate uptake (similar to first booster; bottom row), and low and high immune escape of new variants (left and right columns).



Nearly 20% of Michiganders are Up to Date with COVID-19 Vaccines

Percent of the Total Population Who Are Up to Date with COVID-19 Vaccines
Administrations through July 31, 2023

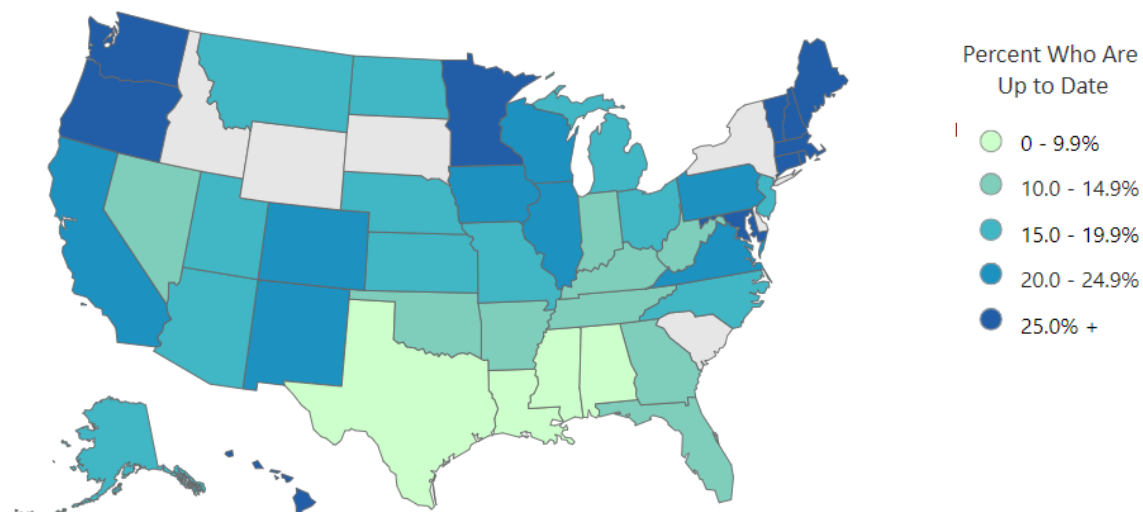
Vaccination Up-to-Date Coverage

The percentage of all Michiganders who are up to date with their COVID-19 vaccines is 19.3%

51.4% of the population 65 years of age or older are up to date with their COVID-19 vaccines

Race/Ethnicity[¶] for those 6 months and older:

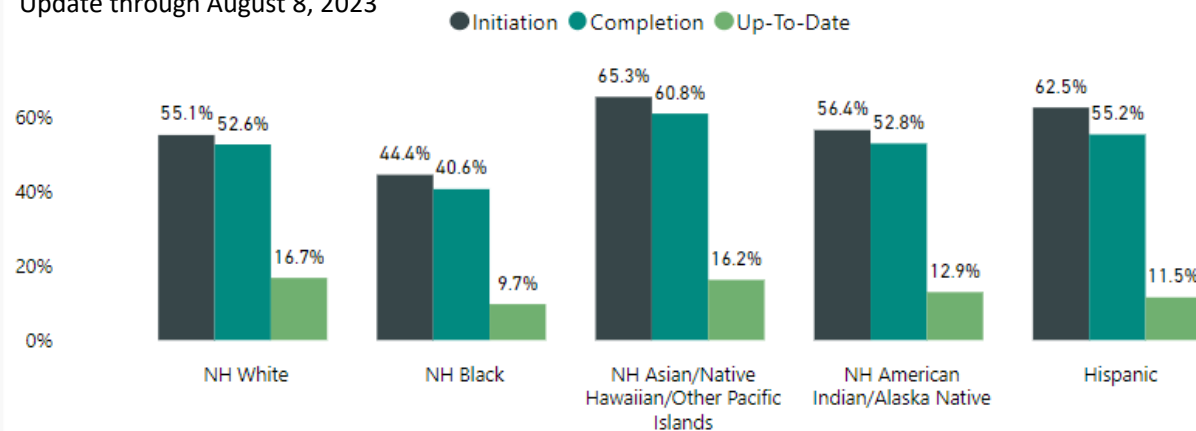
- Up-to-date coverage is highest among Non-Hispanic (NH) White (16.7%), followed by NH Asian, Native Hawaiian or Pacific Islander Race (16.2%), NH American Indian (12.9%), and NH Black or African American races (9.7%).
- Up-to-date coverage is at 11.5% for Hispanics



*This shows the percentage of all residents of all ages

Coverage by Race*

Update through August 8, 2023



COVID-19 Mitigation Recommendations

New COVID Vaccine Formulation coming this Fall

- **VRBPAC met [June 15th, 2023](#)** to discuss and make recommendation on the selection of strain(s) to be included in the updated COVID-19 vaccines for the 2023-2024 vaccination campaign. The discussion during the meeting centered around an updated monovalent COVID-19 vaccine for the fall of 2023, and what recommendations should be around the bivalent vaccine until that time.
 - Following the FDA meeting, COVID-19 manufacturers were advised by VRBPAC to focus on a monovalent (XBB 1.5) updated COVID-19 vaccine for the fall 2023.
 - It is anticipated that Pfizer, Moderna and Novavax will have products this fall.
- Vaccine commercialization is anticipated for fall (mid-to-late September) 2023 in conjunction with authorization of the updated COVID-19 monovalent (XBB 1.5) vaccine.
- We continue to encourage all Michiganders to remain [up to date](#) with all recommended COVID-19 vaccine doses.

[How to Protect Yourself and Others | CDC](#)

- In addition to basic health and hygiene practices, like [handwashing](#), CDC recommends some additional prevention actions to mitigate the spread of COVID-19, which include:
- [Staying Up to Date with COVID-19 Vaccines](#)
- [Improving Ventilation](#)
- [Getting Tested for COVID-19 If Needed](#)
- [Following Recommendations for What to Do If You Have Been Exposed](#)
- [Staying Home If You Have Suspected or Confirmed COVID-19](#)
- [Seeking Treatment If You Have COVID-19 and Are at High Risk of Getting Very Sick](#)
- [Avoiding Contact with People Who Have Suspected or Confirmed COVID-19](#)