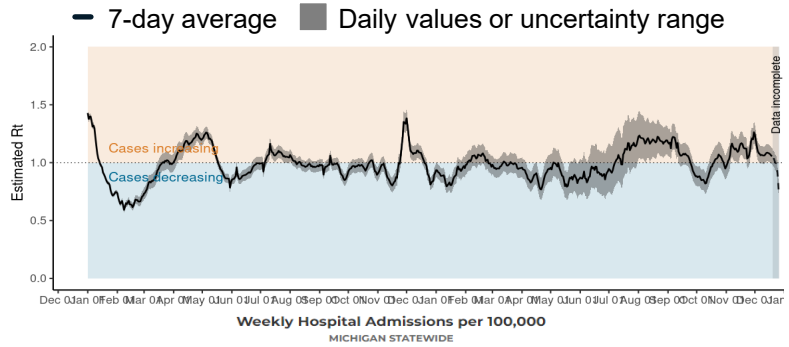
MI COVID RESPONSE DATA AND MODELING UPDATE

January 10, 2024

Recent statewide trends show COVID is elevated and increasing

Statewide trends

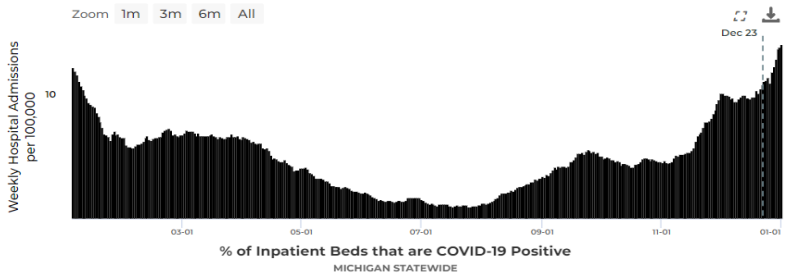
Reproductive Number, R_t



Current: 1.01

Last Week: 1.06

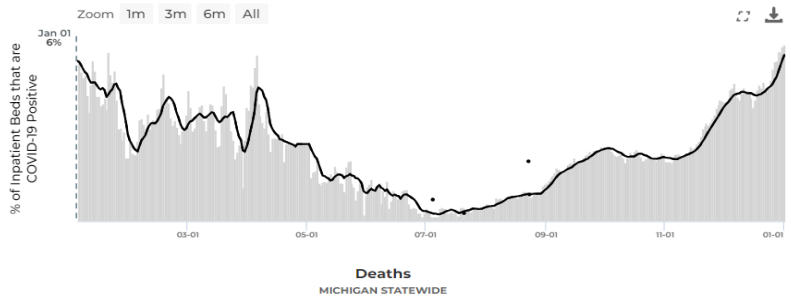
Hospital Admissions



Current: 14.6

Last Week: 11.8

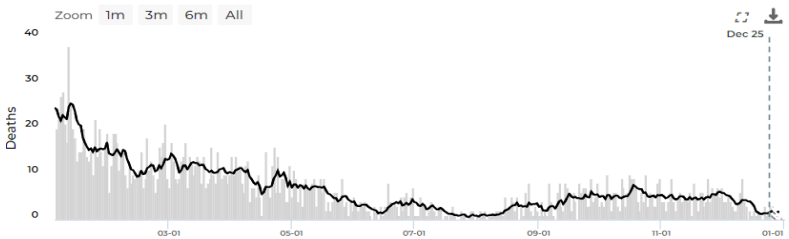
Daily hospitalization rate, %



Current: 5.7%

Last Week: 4.7%

Deaths



Current: 0.11

Last Week: 0.30

- The reproductive number (R_t) in Michigan is above 1.
- There has been a daily average of 14.6 hospital admissions per 100,000 Michiganders. This is an increase from last week.
- The percent of inpatient beds with COVID-19 positive patients (5.7%) are increasing from last week.
- Deaths are a lagging indicator but remain similar to rates from last week.

Source: https://mistartmap.info/

MI Safe Start Map will cease updating data through January 2024 once backfilled data has stabilized

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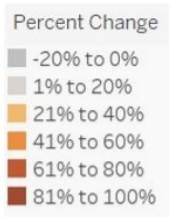
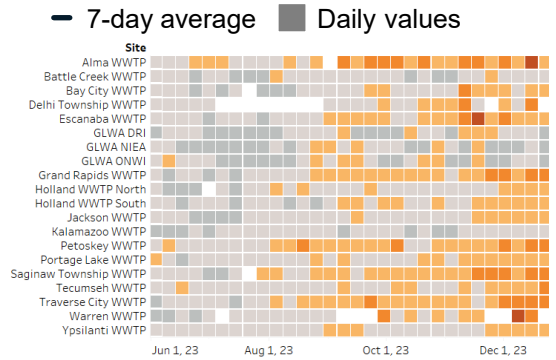
Wastewater



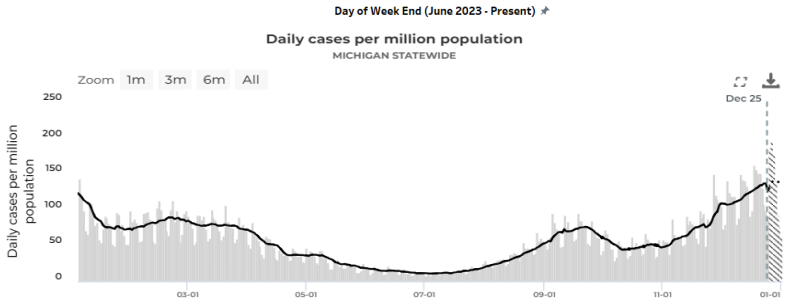


Current: 72% of sites are above 20% baseline threshold

Last Week: 74% of sites are above 20% baseline threshold

- 72% (13/18) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week.

Daily cases per million



Current: 125.9

Last Week: 98.4

- Reported case rates increased from last week.

Syndromic Surveillance

Coronavirus-Like-Illness (CLI)

Current: 1.3%

Last Week: 2.0%

COVID-19 Diagnosis

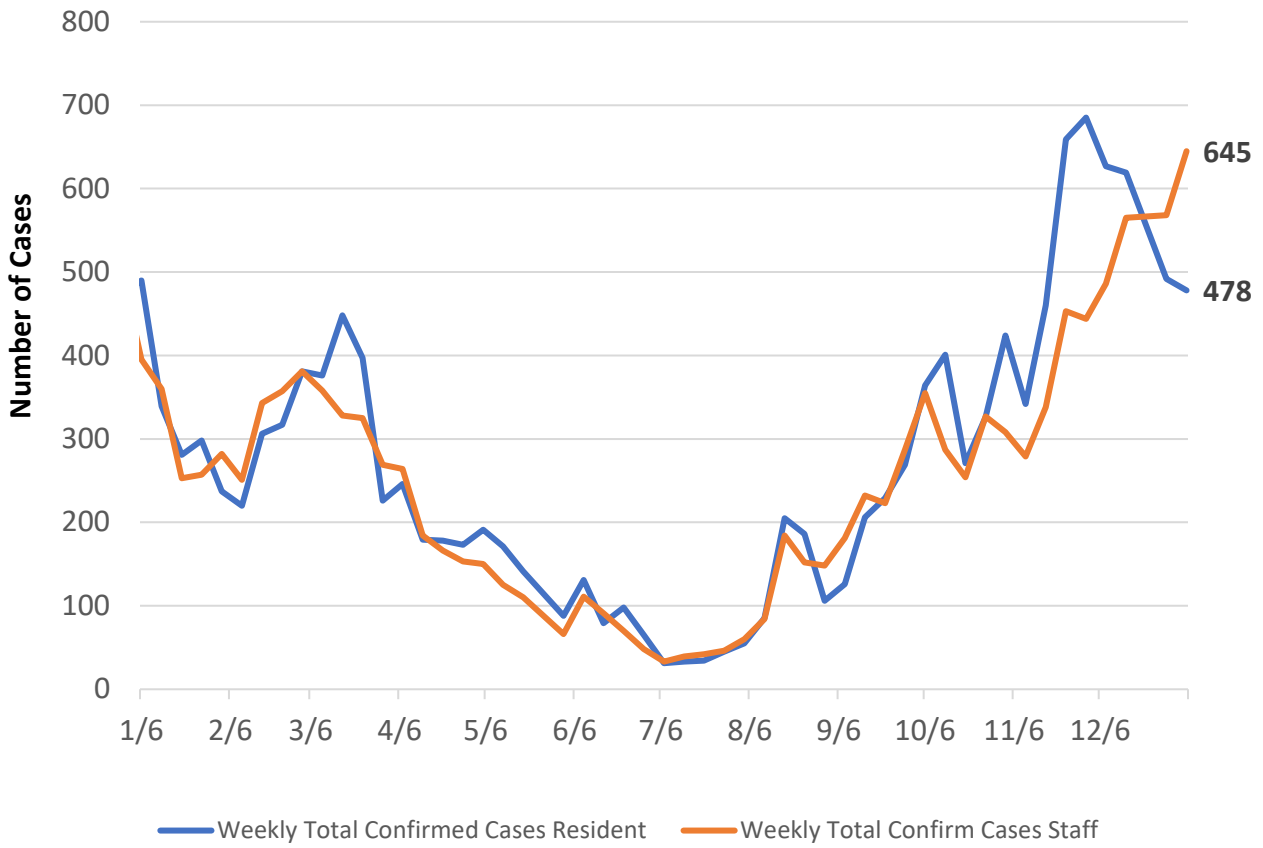
Current: 3.7%

Last Week: 4.3%

- COVID-19 diagnoses in emergency departments and urgent cares are elevated but decreased over the last 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 1/6/2023 to 1/5/2024



Number of SNFs with 3 or more Confirmed Cases 1/6/2023 to 1/5/2023

- Case counts decreased in SNF residents (618 to 478) but increased in SNF staff (565 to 645) since last week [left graphic]
- The number of SNF facilities reporting 3 or more cases is about the same compared to last week (56 to 55) [right graphic]

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

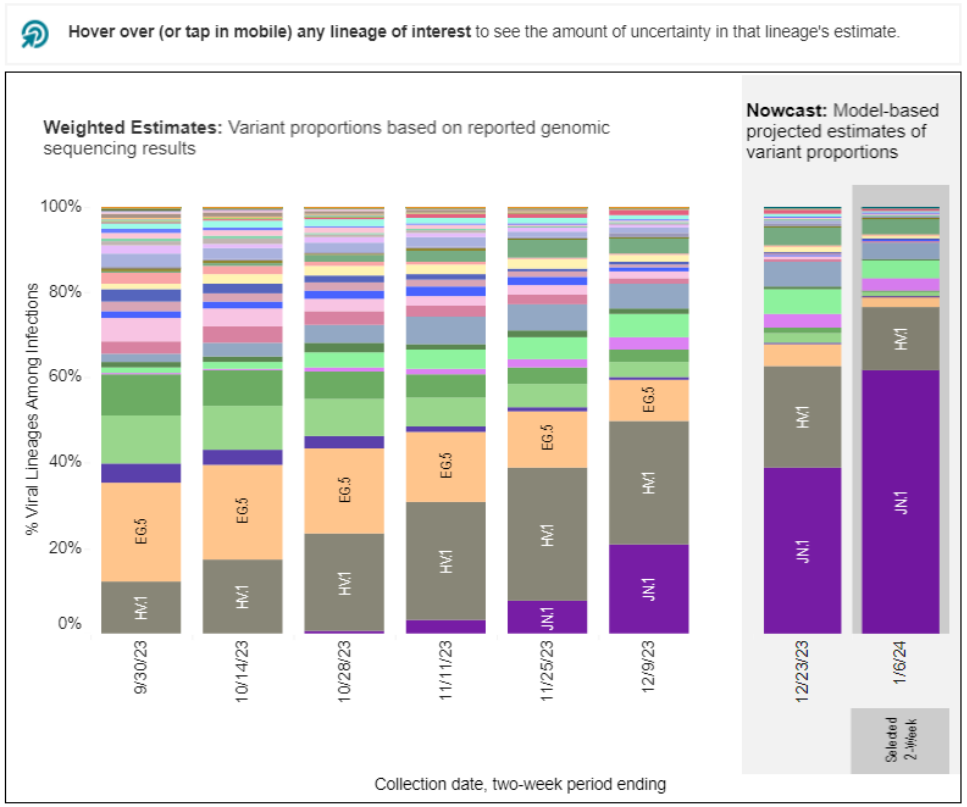
Update through October 30, 2023

Note: The data are from weekly reporting by facilities with bed occupancy of at least 13 beds.
Source: Data is now provided through NHSN, data prior to May 19 was from Michigan EM Resource

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, Sep 17 – Jan 6 (NOWCAST)

Weighted and Nowcast Estimates in United States for 2-Week Periods in 9/17/2023 – 1/6/2024



Nowcast Estimates in United States for 12/24/2023 – 1/6/2024

USA

WHO label	Lineage #	%Total	95%PI
Omicron	JN.1	61.6%	54.9-67.9%
	HV.1	14.8%	12.3-17.7%
	JD.1.1	4.1%	3.4-5.0%
	HK.3	4.0%	3.4-4.8%
	JG.3	3.7%	3.0-4.6%
	BA.2.86	2.8%	1.9-4.2%
	EG.5	2.4%	1.9-3.0%
	FL.1.5.1	1.0%	0.7-1.3%
	JF.1	0.8%	0.6-1.1%
	EG.5.1.8	0.7%	0.5-1.1%
	XBB.1.16.6	0.5%	0.4-0.8%
	GE.1	0.5%	0.1-1.9%
	XBB.1.16.17	0.4%	0.2-0.9%
	XBB.1.16.11	0.4%	0.2-0.5%
	XBB.1.5.70	0.3%	0.2-0.6%
	GK.1.1	0.3%	0.2-0.4%
	HF.1	0.3%	0.2-0.4%
	BA.2	0.3%	0.1-0.9%
	XBB	0.2%	0.1-0.3%
	XBB.1.16.15	0.2%	0.1-0.3%
	XBB.1.9.1	0.2%	0.1-0.3%
	XBB.2.3	0.2%	0.1-0.2%
	XBB.1.16	0.1%	0.0-0.1%
	GK.2	0.1%	0.0-0.1%
	CH.1.1	0.0%	0.0-0.1%
	XBB.1.5	0.0%	0.0-0.1%
	EG.6.1	0.0%	0.0-0.1%
	XBB.1.16.1	0.0%	0.0-0.0%
	XBB.1.9.2	0.0%	0.0-0.0%
	XBB.1.5.68	0.0%	0.0-0.0%
	XBB.2.3.8	0.0%	0.0-0.0%
	XBB.1.42.2	0.0%	0.0-0.0%
	XBB.1.5.72	0.0%	0.0-0.0%
	XBB.1.5.59	0.0%	0.0-0.0%
	XBB.1.5.10	0.0%	0.0-0.0%
	FD.1.1	0.0%	0.0-0.0%
Other	Other*	0.0%	0.0-0.1%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one 2-week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all 2-week periods displayed.
\# While all lineages are tracked by CDC, those named lineages not enumerated in this graphic are aggregated with their parent lineages, based on Pango lineage definitions, described in more detail here: https://www.pango.network/the-pango-nomenclature-system/statement-of-nomenclature-rules/.

National Distribution

- 100% of the VOCs currently circulating in the U.S. are Omicron
- Nowcast estimates project that JN.1 (61.6%, 95% P.I. 54.9-67.9%) is the most prevalent, while HV.1, a BA.2.86 sub-lineage, comprise of approximately 14.8% of infections (95% P.I. 12.3-17.7%), while all other lineages are estimated to comprise of less than 10% during the week ending on January 6.

Distribution in Michigan

- Since October 15, there have been 331 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
  - Since October 15, a majority of specimens sequenced and reported have been identified as XBB or one of the child lineages; currently 23.9% of specimens have been identified as HV.1, the highest of any of the XBB lineages in Michigan

95% P.I. = 95% prediction interval
Data last updated Jan 9, 2024
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

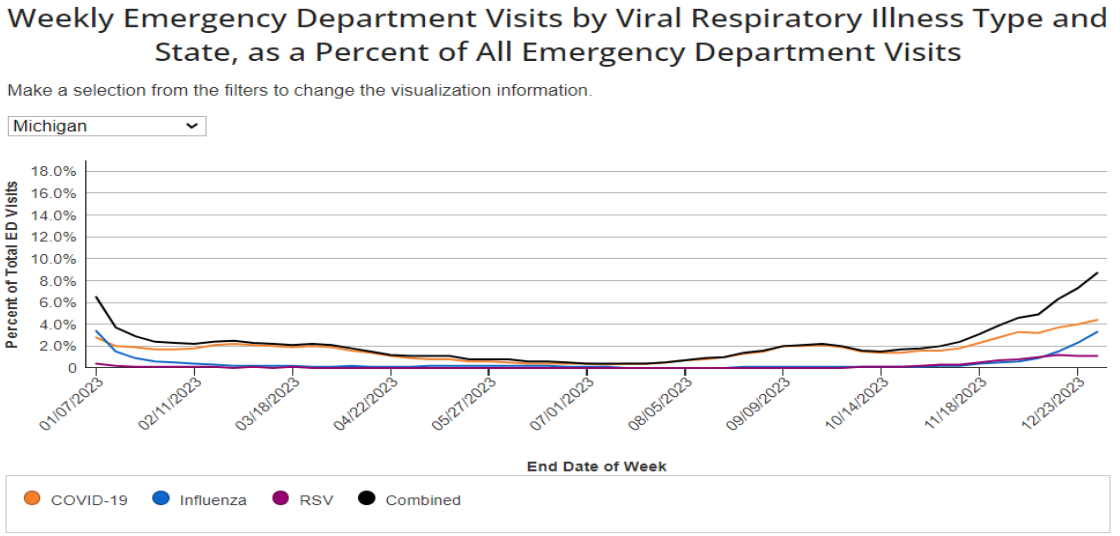
Surveillance for Respiratory Diseases: Important to Remain Vigilant

Michigan Emergency Department Visits for COVID-19, Influenza and RSV* (top graphic)

The most recent number of ED visits in Michigan for all three respiratory illnesses combined are higher than the previous week

The current number of ED visits for all three respiratory illness combined is higher that what we saw during the fall but about the same to this time last year (December 2022)

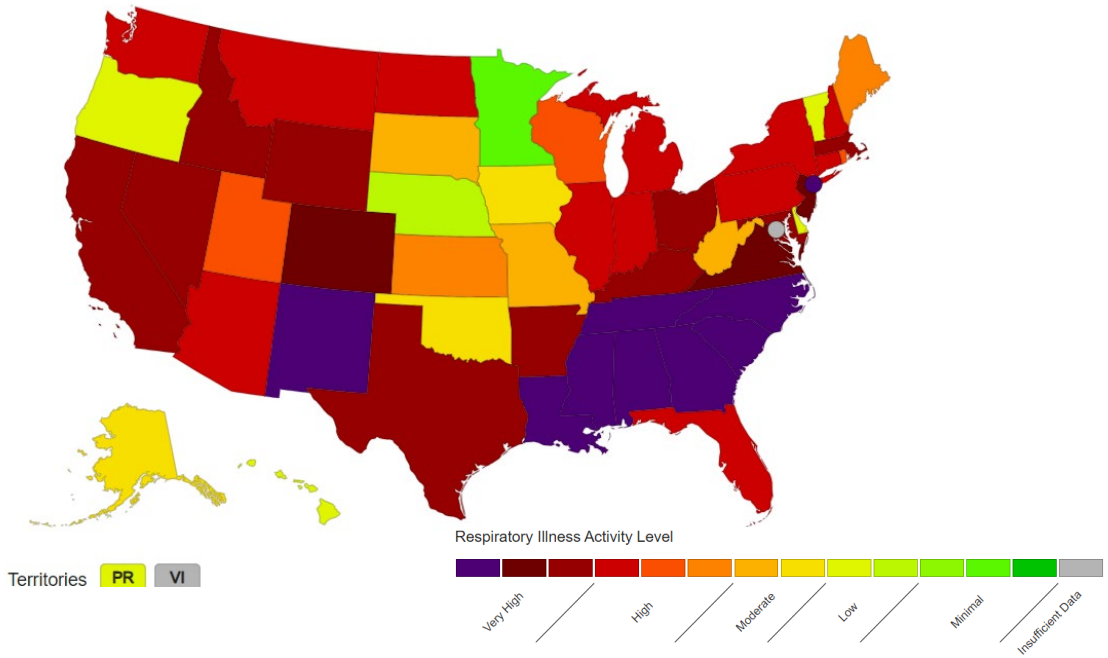
For most of 2023, COVID-19 contributed to the majority of ED visits compared to influenza and RSV; in Michigan, the past week has seen COVID consisting of around 51% of ED visits for these three respiratory illnesses (down from 54%).



National Respiratory Season Outlook¶ (bottom graphic)

The amount of respiratory illness (fever plus cough or sore throat) causing people to seek healthcare is elevated or increasing across most areas of the country. In Michigan, respiratory illness activity level is high.

The U.S. is experiencing elevated activity for seasonal influenza, RSV, and COVID-19. COVID-19 activity is increasing in many areas like the Midwest. Seasonal influenza activity is also increasing in most parts of the country. RSV, however, is starting to decrease in some parts of the U.S.



Source: *CDC NCIRD Surveillance: Emergency Department Visits; ¶CDC Viral Respiratory Illness Dashboard

Vaccination Coverage Against COVID-19 is Low but Increasing

Vaccination continues to remain the best way to protect yourself and your loved ones against serious outcomes from COVID-19

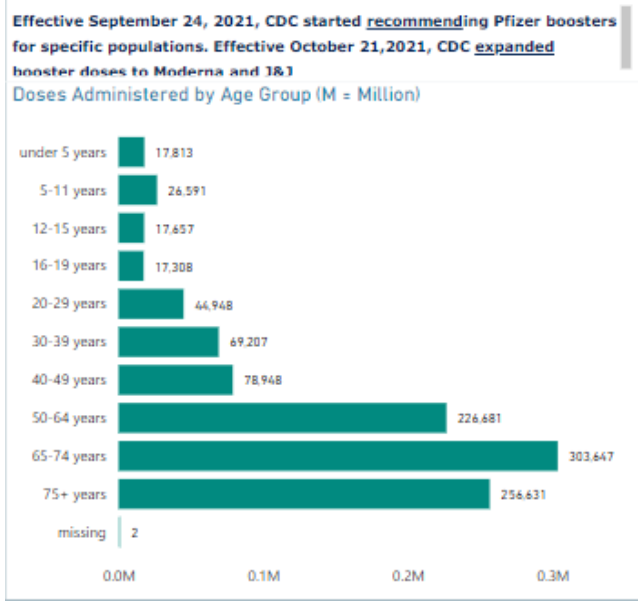
Vaccination Administration with 2023-2024 Bivalent Booster Formulation (upper right graphic)

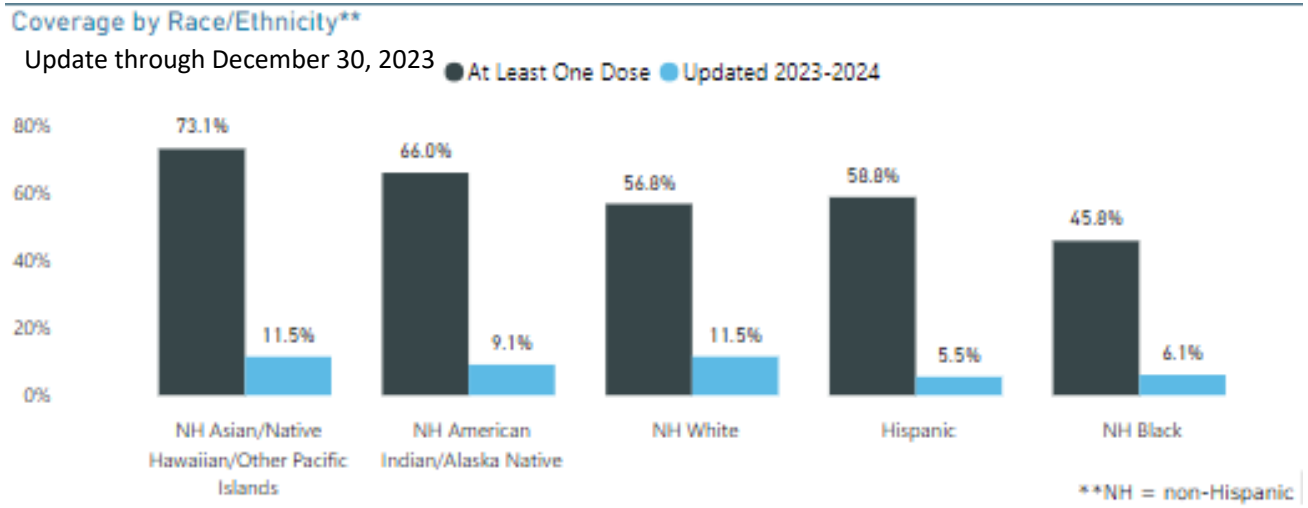
There have been 303,647 doses of Moderna, Novavax, and Pfizer 2023 formulation administered to Michiganders 65 to 74 years, the highest of any group. Followed by those 75 years and older (256K) and 50-64 years (226K). Less than 18,000 doses have been administered to those under 5.

Race/Ethnicity¶ for those 6 months and older with 2023-2024 Vaccine Formulation (lower right)

- Up-to-date coverage is highest among Non-Hispanic (NH) White (11.5%), and NH Asian, Native Hawaiian or Pacific Islander Race (11.5%), followed by NH American Indian (9.1%), and NH Black or African American races (6.1%).
- Up-to-date coverage is at 5.5% for Hispanics

COVID-19 Vaccine Administration - Fall 2023 Formulation for Moderna, Novavax, and Pfizer





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

MDHHS
Michigan Department of Health & Human Services

Fall and Winter Virus Season

Stop the spread of viruses by washing hands, covering coughs and sneezes, and staying home if feeling unwell.

	VACCINES	PROTECTIVE ANTIBODIES	TESTING	THERAPEUTICS
INFLUENZA 	Available for ages 6 months and up.	N/A	Available in clinical settings.	Available.
COVID-19 	Available for ages 6 months and up.	N/A	At-home tests or tests in clinical settings.*	Available.
RSV 	Available for ages 60 years and up or for pregnant people.	Available for infants.	Recommended for certain high-risk groups.	Limited; only for certain high-risk groups.

Speak to your health care provider or visit Michigan.gov/COVIDFluRSV for more information.

**Order free at-home tests at COVIDTests.org.*

MDHHS
Michigan Department of Health & Human Services

Fall 2023 Vaccines

	WHAT ARE THE OPTIONS?	WHO IS ELIGIBLE?	HOW WELL DO THEY WORK?	WHEN SHOULD I GET IT?
INFLUENZA 	Vaccine targets four strains of seasonal flu.	6 months and older.	Reduces the risk of going to the doctor by 53%.	October is ideal, as protection wanes over a season.
COVID-19 	Updated vaccine targets XBB, an omicron variant. *Multiple options available.*	6 months and older.	Last fall, the COVID-19 vaccine provided 40-60% effectiveness against severe disease.	**Protection against severe disease:** Get now. **Recently infected?** Consider delaying the vaccine for three months from symptom onset or positive test based on personal risk.
RSV 	*Multiple options available.*	60 years and older. Pregnant people.	82-86% efficacy against severe disease.	Now, based on consultation with health care provider. Approved for pregnant people 32-36 weeks gestation.
RSV PROTECTIVE ANTIBODY 	**Note:** This is not a vaccine, but a proactive medication that provides antibodies.	All infants younger than 8 months and high-risk infants 8-19 months.	Reduces risk of hospitalizations and health care visits by approximately 80%.	Will be available soon. Protection lasts at least 5 months.