

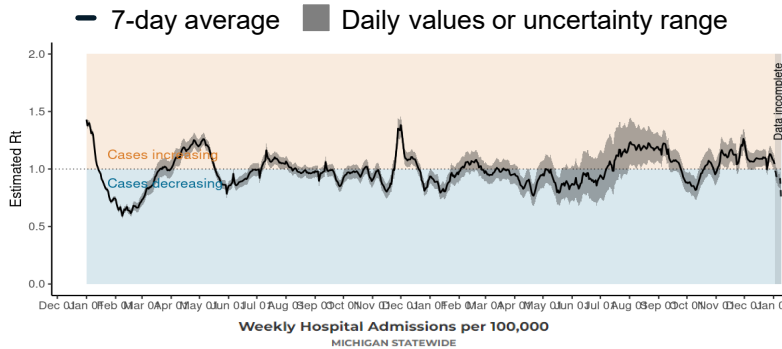
MI COVID RESPONSE DATA AND MODELING UPDATE

January 17, 2024

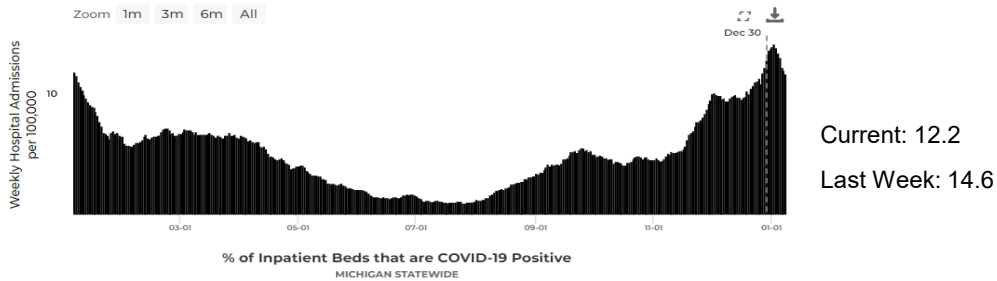
Recent statewide trends show COVID is elevated

Statewide trends

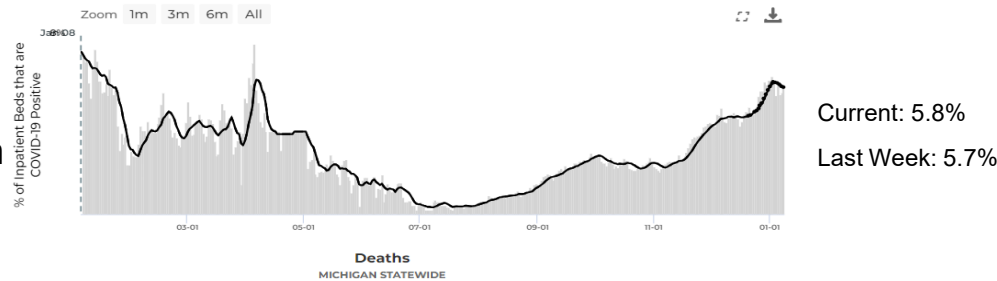
Reproductive Number, R_t



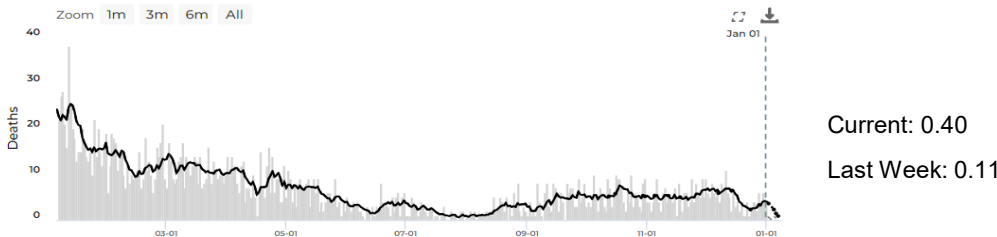
Hospital Admissions



Daily hospitalization rate, %



Deaths

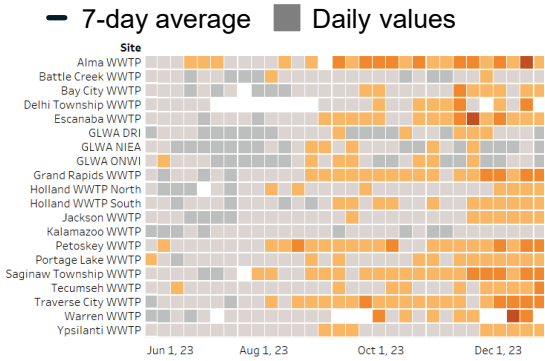
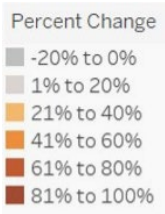


- The reproductive number (R_t) in Michigan is just above 1 indicating cases moderately increased from the previous week.
- There has been a daily average of 12.2 hospital admissions per 100,000 Michiganders. This is a decrease from last week which was a 12-month high.
- The percent of inpatient beds with COVID-19 positive patients (5.8%) are higher than last week but declining from the recent peak (6.0%) on January 3.
- Deaths are a lagging indicator but are slightly up from last week.

Recent statewide trends show COVID is elevated

Statewide trends

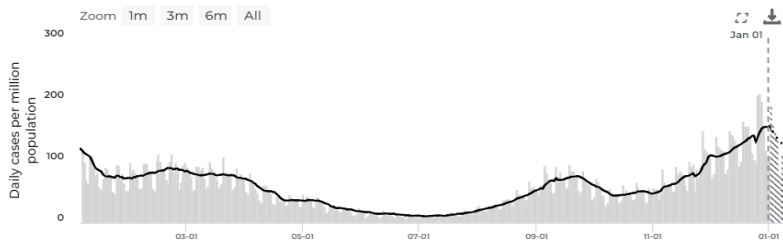
Wastewater



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

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

Daily cases per million



Current: 156.8

Last Week: 125.9

Syndromic Surveillance



Coronavirus-Like-Illness (CLI)

Current: 1.1%

Last Week: 1.3%

COVID-19 Diagnosis

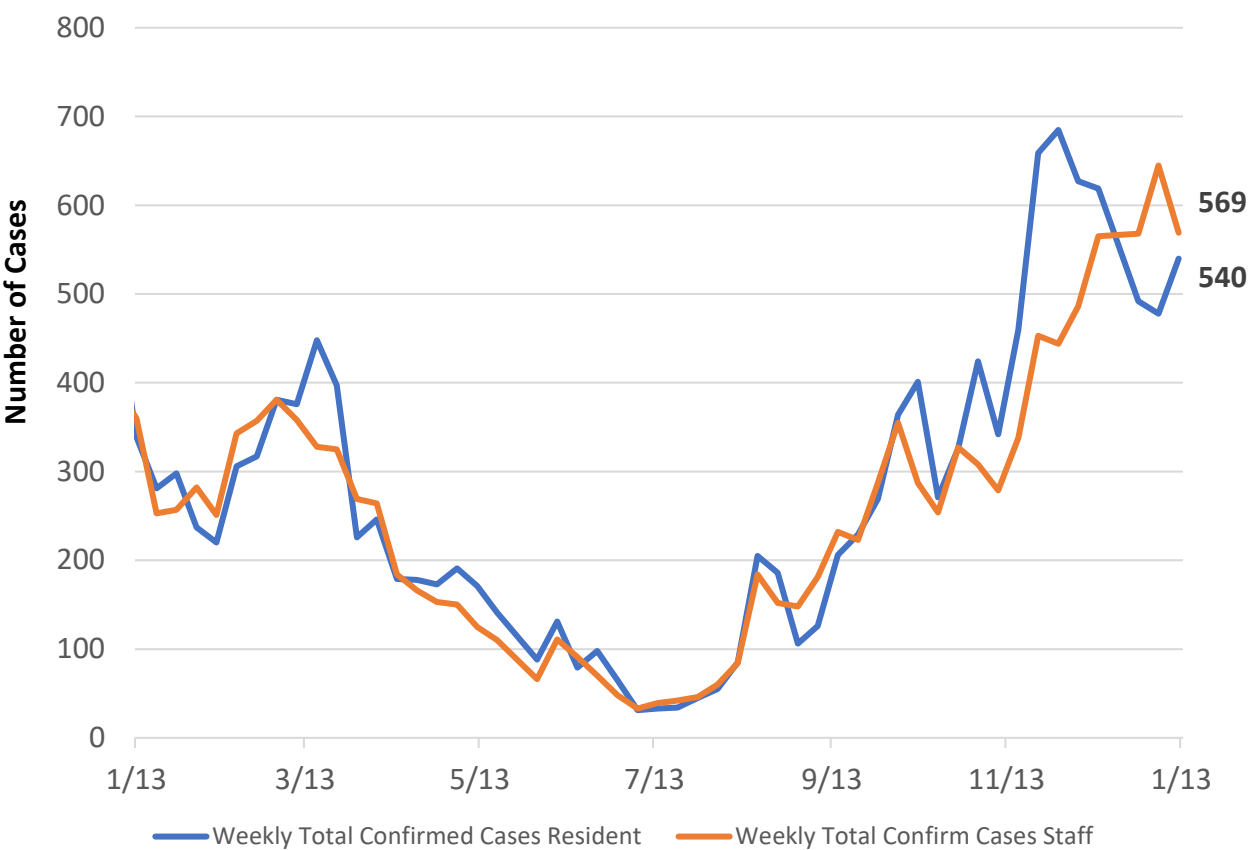
Current: 2.7%

Last Week: 3.7%

- 72% (13/18) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week.
- Reported case rates increased from last week.
- COVID-19 diagnoses in emergency departments and urgent cares are elevated but decreased over the last week. This is the second week of decreases in syndromic surveillance.

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 1/13/2023 to 01/12/2024



Number of SNFs with 3 or more Confirmed Cases
1/13/2023 to 01/12/2023



- Case counts increased in SNF residents (478 to 540) but decreased in SNF staff (645 to 569) since last week [left graphic]
- The number of SNF facilities reporting 3 or more cases increased since last week (55 to 62) [right graphic]

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

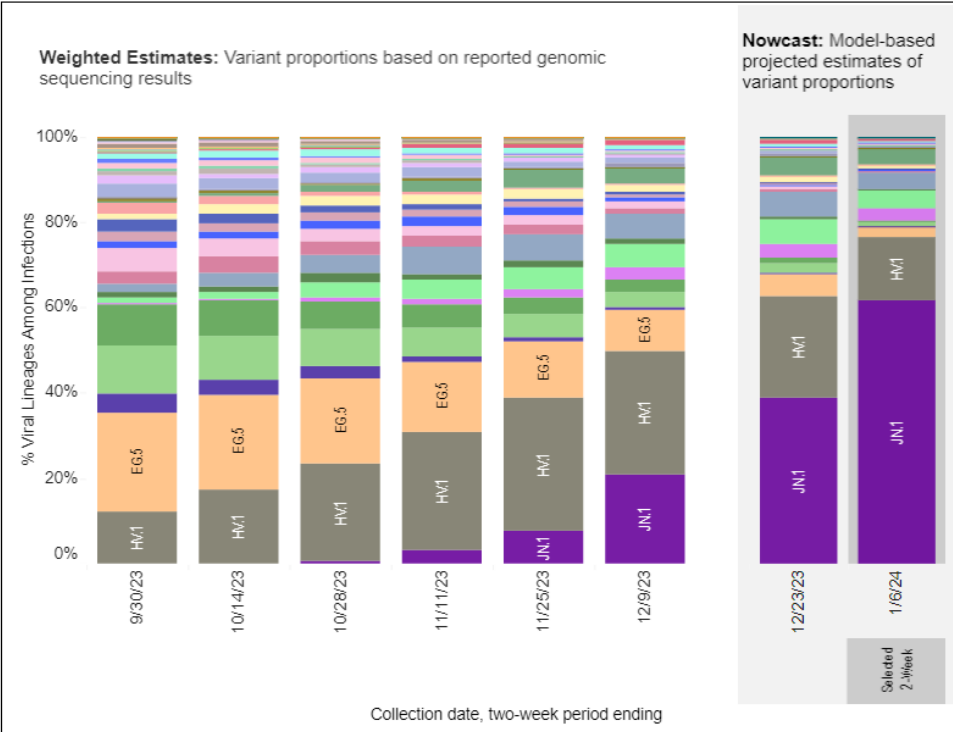
Identified COVID-19 Cases Caused by Variants of Concern (VOC) in US and Michigan: Omicron lineages continue to evolve; all competing for predominance

SARS-CoV-2 Variants Circulating in the United States, 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

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



* 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/>.

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%

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 December 1, there have been 133 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since December 1, a majority of specimens sequenced and reported have been identified as XBB or one of the child lineages; currently 29.3% of specimens have been identified as JN.1, the highest of any of the Omicron lineages in Michigan

95% P.I. = 95% prediction interval

Data last updated Jan 17, 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 elevated but lower than the previous week

The current number of ED visits for all three respiratory illness combined is higher than what we saw during the fall but about the same to this time last year (January 2023)

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 52% of ED visits for these three respiratory illnesses.

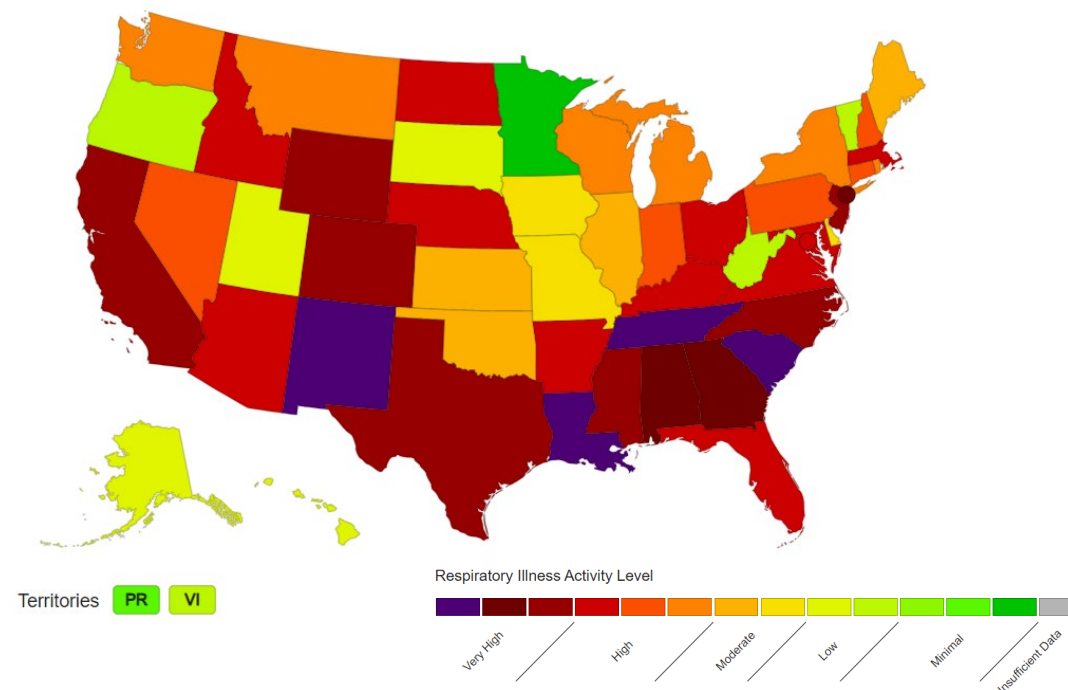
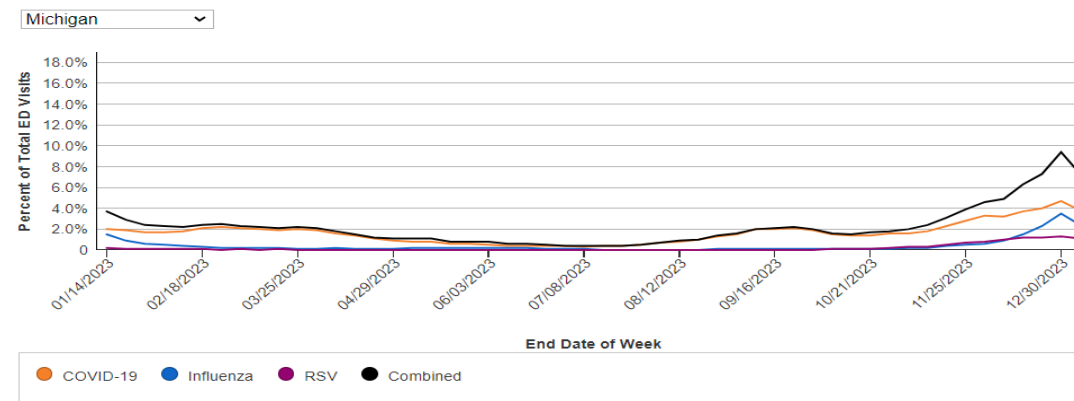
National Respiratory Season Outlook† (bottom graphic)

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.

In the U.S., seasonal influenza and COVID-19 activity remain elevated in most parts of the country; however, the rapid increases seen over the past several weeks appear to be slowing. The U.S. continues to experience elevated RSV activity, particularly among young children. Some jurisdictions are reporting strain on hospitals locally, driven, in part, by recent increases in respiratory illness.

Weekly Emergency Department Visits by Viral Respiratory Illness Type and State, as a Percent of All Emergency Department Visits

Make a selection from the filters to change the visualization information.



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.

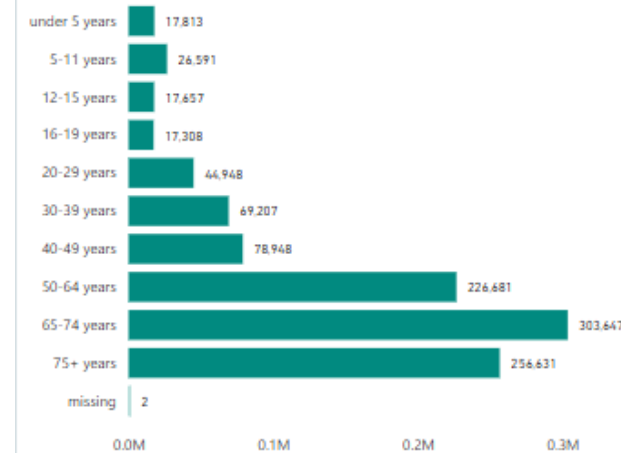
Race/Ethnicity[¶] for those 6 months and older with 2023-2024 Vaccine Formulation (lower right)

- 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

Effective September 24, 2021, CDC started recommending Pfizer boosters for specific populations. Effective October 21, 2021, CDC expanded booster doses to Moderna and J&J

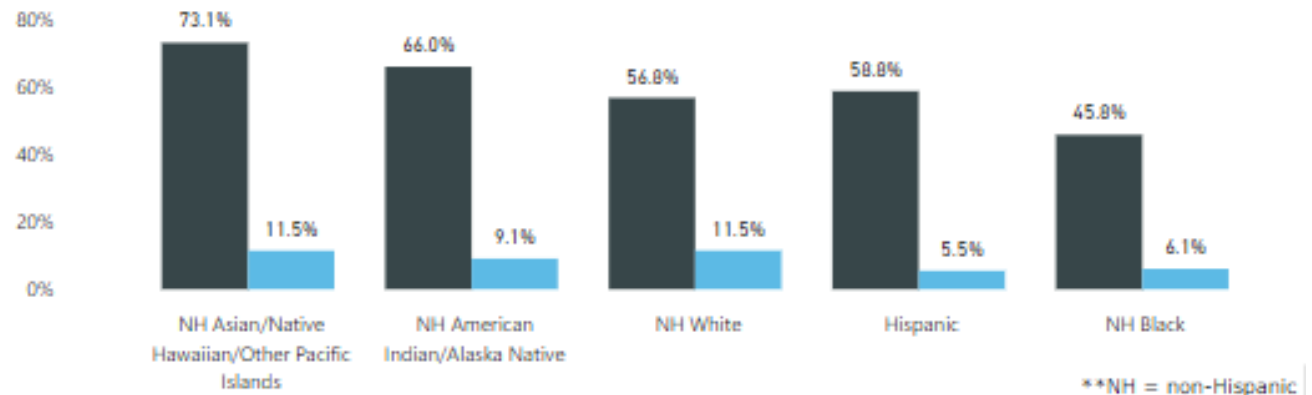
Doses Administered by Age Group (M = Million)



Coverage by Race/Ethnicity^{**}

Update through December 30, 2023




● At Least One Dose ● Updated 2023-2024





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.

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. <i>Multiple options available.</i>	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 	<i>Multiple options available.</i>	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.