



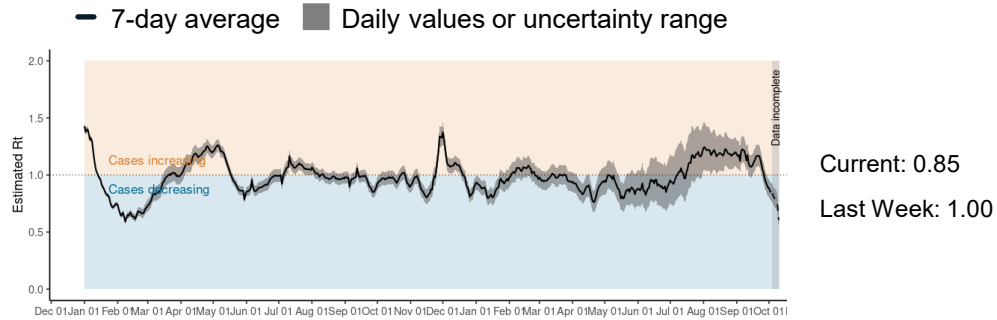
MI COVID RESPONSE DATA AND MODELING UPDATE

October 17, 2023

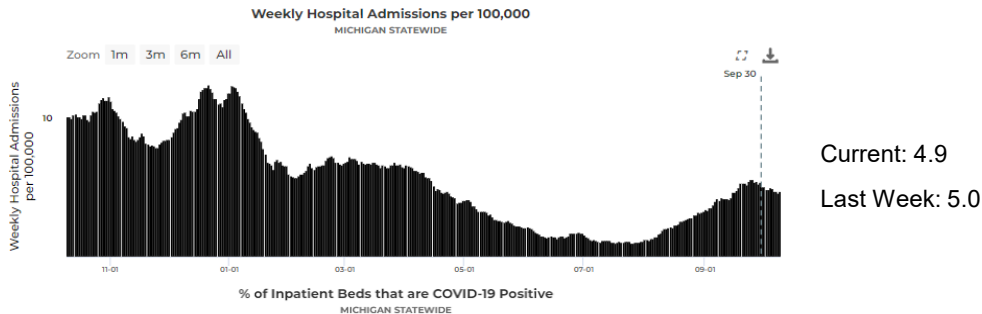
Recent statewide trends show COVID is decreasing

Statewide trends

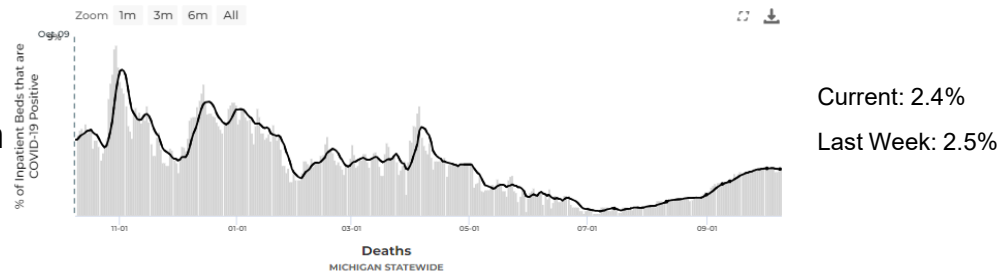
Reproductive Number, R_t



Hospital Admissions



Daily hospitalization rate, %



Deaths

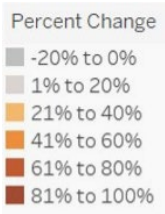


- The reproductive number (R_t) in Michigan is at 1 indicating cases are decreasing.
- There has been a daily average of 4.9 hospital admissions per 100,000 Michiganders. This is the second consecutive week of decreases.
- The percent of inpatient beds with COVID-19 positive patients (2.4%) are decreasing for the first time since mid-July.
- Deaths are a lagging indicator but remain similar to rates from last week.

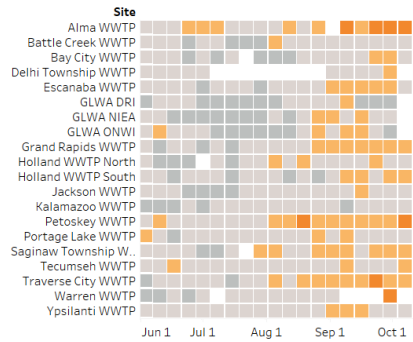
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Wastewater



— 7-day average ■ Daily values

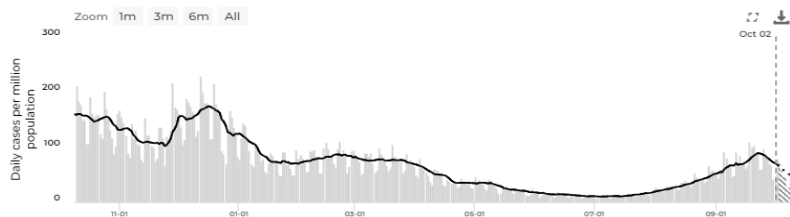


Current: 47% of sites are above 20% baseline threshold

Last Week: 50% of sites are above 20% baseline threshold

- 47% (7/15) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week.

Daily cases per million

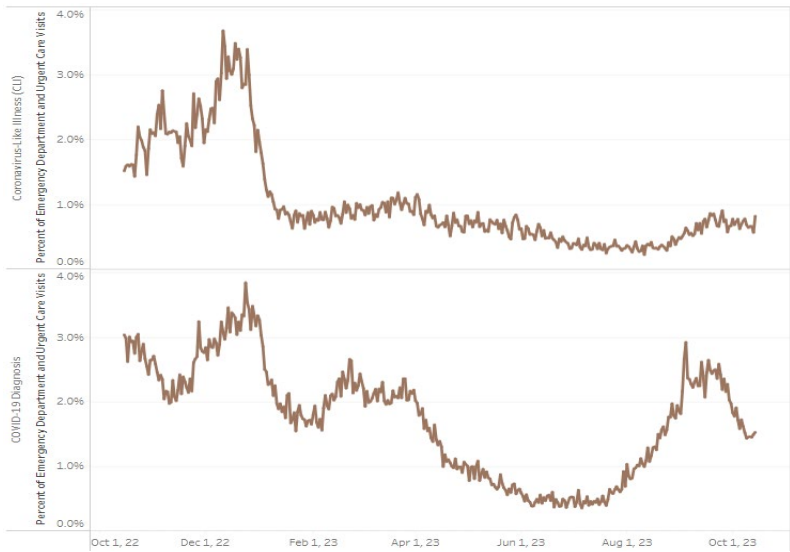


Current: 67.7

Last Week: 83.4

- Reported case rates have decreased compared to last week. Case rate decreased for the first time since early July.

Syndromic Surveillance



Coronavirus-Like-Illness (CLI)

Current: 0.8%

Last Week: 0.7%

COVID-19 Diagnosis

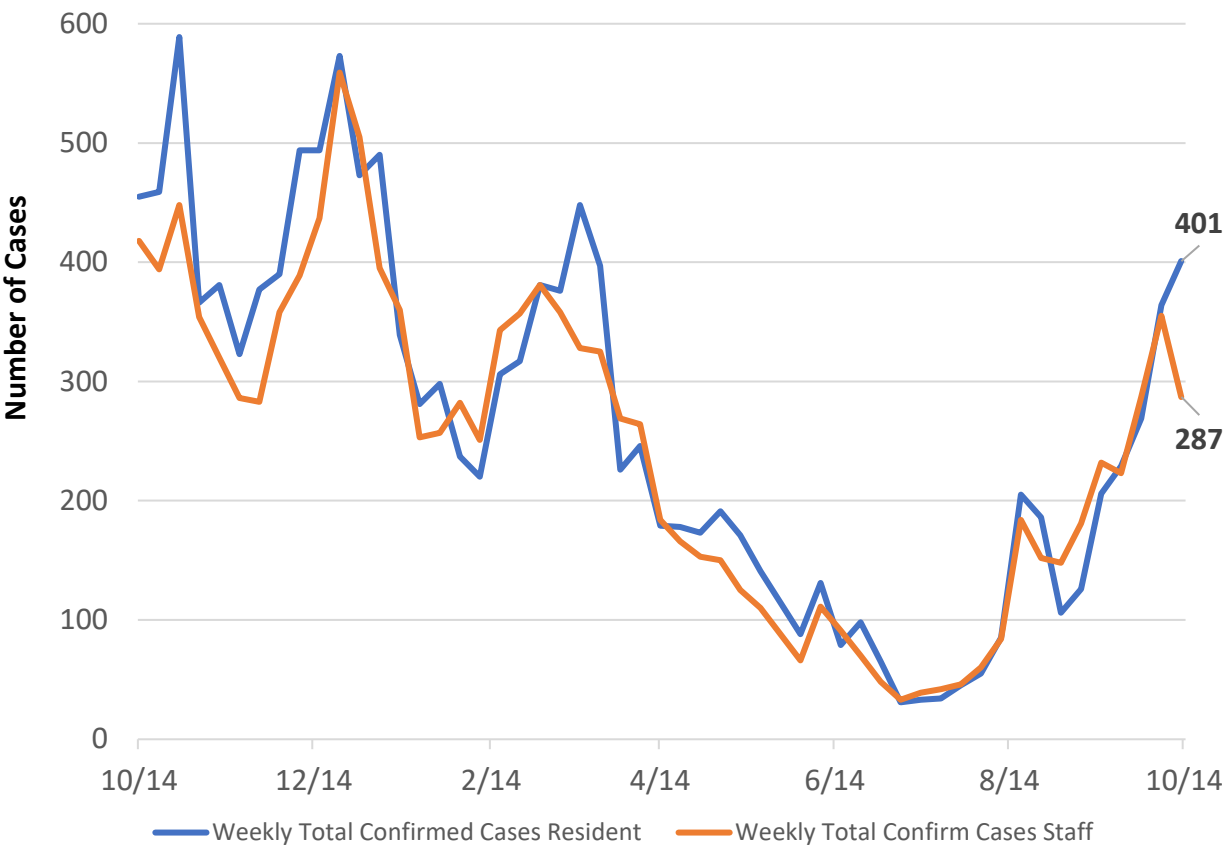
Current: 1.5%

Last Week: 1.6%

- COVID-19 diagnoses in emergency departments and urgent cares are decreasing compared to last week. Current COVID-19 syndromic indicators remain below what was reported at this time last year.

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 10/14/2022 to 10/13/2023



Number of SNFs with 3 or more Confirmed Cases
10/14/2022 to 10/13/2023



- Case counts increased in SNF residents (364 to 401) but decreased in SNF staff (355 to 287) since last week [left graphic]
- The number of SNF facilities reporting 3 or more cases is similar this week compared to last week (40 to 39) [right graphic]

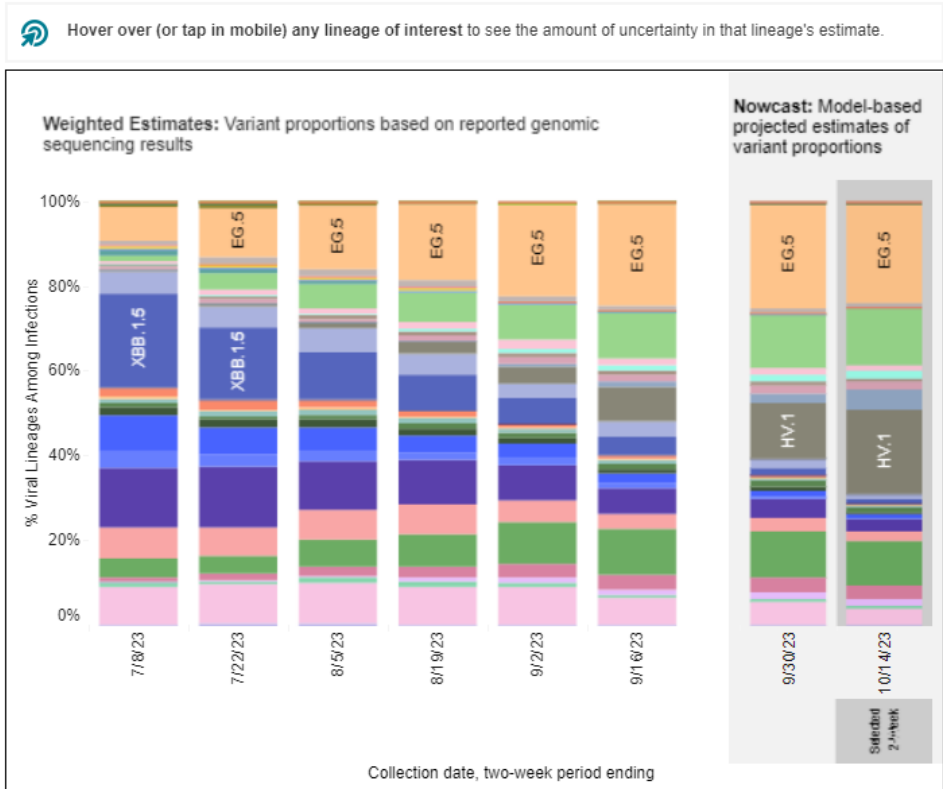
Abbreviations: AFC: Adult Foster Care; HFAs: Homes for the Aged; and SNF: Skilled Nursing Facilities

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, Jun 25 – Oct 14 (NOWCAST)

Weighted and Nowcast Estimates in United States for 2-Week Periods in 6/25/2023 – 10/14/2023

Nowcast Estimates in United States for 10/1/2023 – 10/14/2023



USA			
WHO label	Lineage #	%Total	95%PI
Omicron	EG.5	23.6%	21.2-26.3%
	HV.1	19.5%	16.8-22.6%
	FL.1.5.1	13.5%	10.8-16.7%
	XBB.1.16.6	10.3%	9.1-11.8%
	HK.3	4.9%	3.6-6.7%
	XBB.2.3	4.1%	3.4-4.9%
	XBB.1.16.11	3.1%	2.5-3.9%
	XBB.1.16	2.8%	2.4-3.3%
	XBB.1.16.1	2.2%	1.7-2.7%
	XBB.1.16.15	1.8%	1.3-2.4%
	HF.1	1.7%	1.2-2.4%
	GK.1.1	1.6%	1.3-2.1%
	XBB	1.4%	1.2-1.7%
	GE.1	1.4%	1.0-1.9%
	XBB.1.5.70	1.2%	0.8-1.8%
	GK.2	0.9%	0.7-1.2%
	XBB.1.5	0.9%	0.7-1.0%
	EG.6.1	0.8%	0.6-1.2%
	XBB.1.9.1	0.8%	0.6-1.0%
	XBB.1.5.72	0.6%	0.4-0.8%
	XBB.1.5.68	0.5%	0.3-0.8%
	XBB.1.9.2	0.5%	0.4-0.7%
	XBB.1.42.2	0.5%	0.3-0.8%
	BA.2	0.3%	0.1-0.8%
	XBB.1.5.10	0.3%	0.2-0.4%
	CH.1.1	0.2%	0.1-0.3%
	XBB.2.3.8	0.2%	0.1-0.3%
	XBB.1.5.59	0.1%	0.1-0.2%
	FD.1.1	0.1%	0.1-0.1%
	FE.1.1	0.1%	0.0-0.1%
	XBB.1.5.1	0.0%	0.0-0.0%
Other	EU.1.1	0.0%	0.0-0.0%
	B.1.1.529	0.0%	0.0-0.0%
	BQ.1	0.0%	0.0-0.0%
	FD.2	0.0%	0.0-0.0%
	Other*	0.0%	0.0-0.1%
	Other*	0.0%	0.0-0.1%
	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 EG.5 (23.6%, 95% P.I. 21.2-26.3%) is the most prevalent, while HV.1 comprise of approximately 19.5% of infections (95% P.I. 16.8-22.6%), FL.1.5.1 comprise of approximately 13.5% of infections (95% P.I. 10.8-16.7%), and XBB.1.16.6 comprise of 10.3% of infections (95% P.I. 9.1-11.8%) while all other lineages are estimated to comprise of less than 10% during the week ending on October 14.

Distribution in Michigan

- Since August 15, there have been 251 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since August 15, a majority of specimens sequenced and reported have been identified as XBB or one of the child lineages; currently 27.5% of specimens have been identified as EG.5, the highest of any of the XBB lineages in Michigan

95% P.I. = 95% prediction interval

Data last updated Oct 17, 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

National Surveillance for Respiratory Diseases: Important to Remain Vigilant

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

The most recent number of national ED visits for all three respiratory illnesses combined are 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 summer but similar to this time last year (September 2022)

For most of 2023, COVID-19 has contributed to the majority of ED visits compared to influenza and RSV; the past month has seen COVID consisting of over 85% of ED visits for these three respiratory illnesses

Respiratory Disease Season Outlook† (bottom graphic)

This season is likely to bring a moderate COVID-19 wave, causing around as many hospitalizations at the peak as occurred at last winter's peak

However, the number of hospitalizations this year is expected to be higher than experienced prior to the pandemic with only influenza and RSV (example shown in the lowest dashed line)

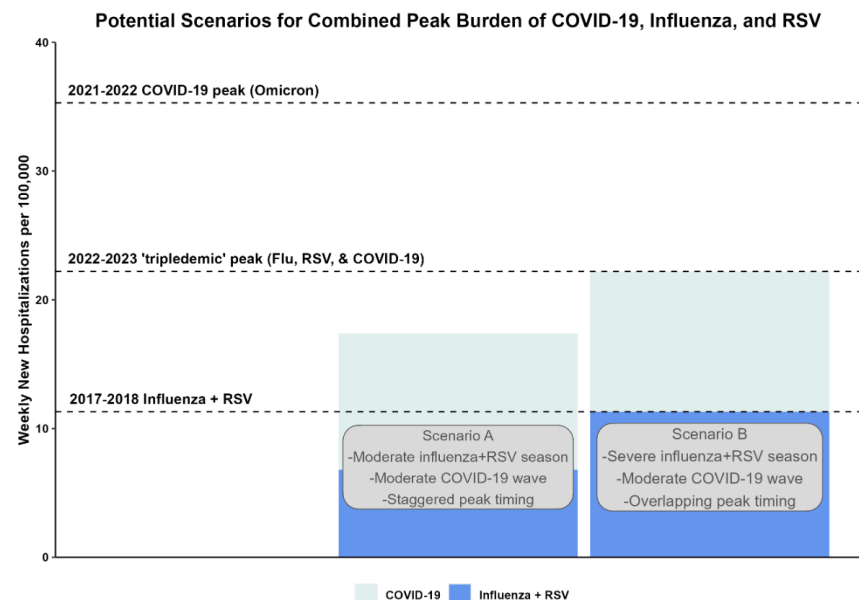
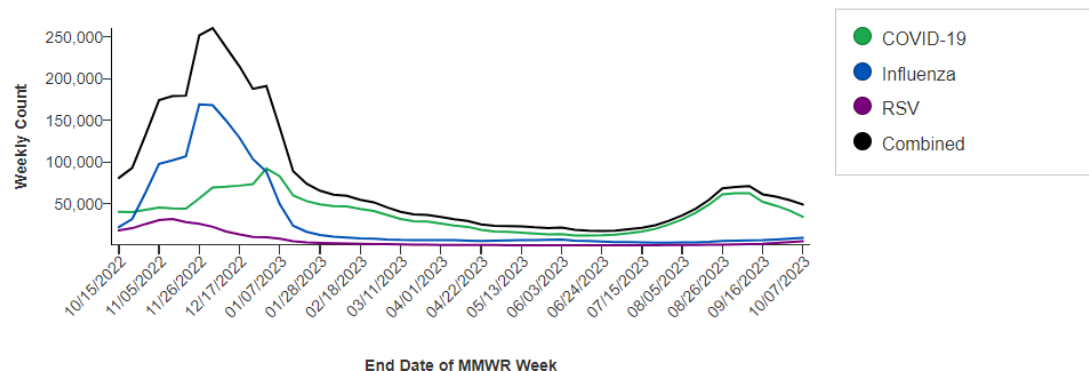
Two hypothetical scenarios for peak hospital burden from these three respiratory illnesses illustrate how the additional burden of a moderate COVID-19 wave during a moderate respiratory disease season (left bar) or a severe influenza/RSV season (right bar) may strain hospital capacity

Weekly Emergency Department Visits by Age Group

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

Age Group

All Ages



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

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

Vaccination Up-to-Date Coverage

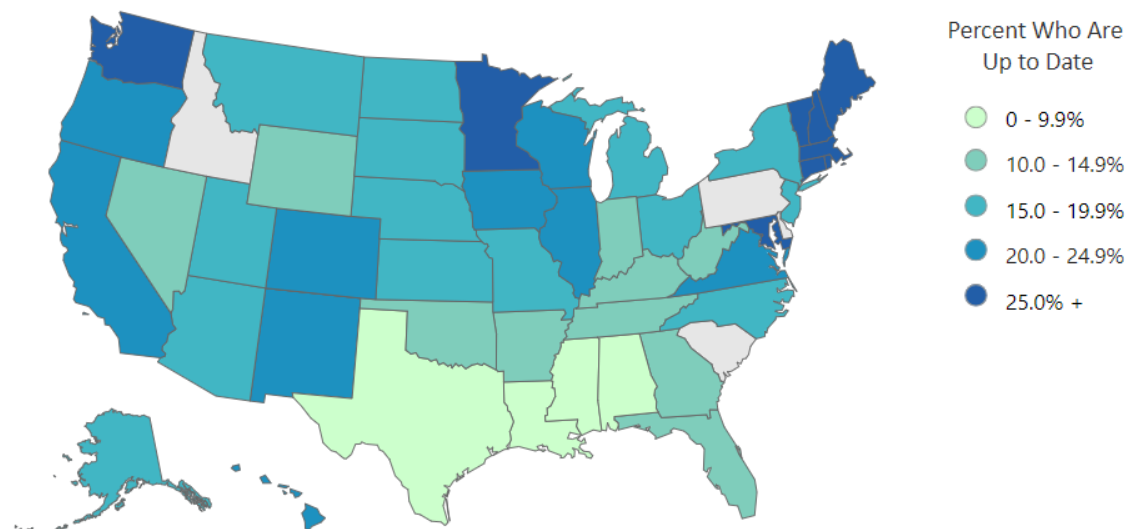
The percentage of all Michiganders who are up to date with their COVID-19 vaccines is 18.6%

47.5% 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 (17.4%), followed by NH Asian, Native Hawaiian or Pacific Islander Race (16.9%), NH American Indian (15.9%), and NH Black or African American races (10.3%).
- Up-to-date coverage is at 11.7% for Hispanics

Percent of the Total Population Who Are Up to Date with COVID-19 Vaccines
Administrations through September 12, 2023

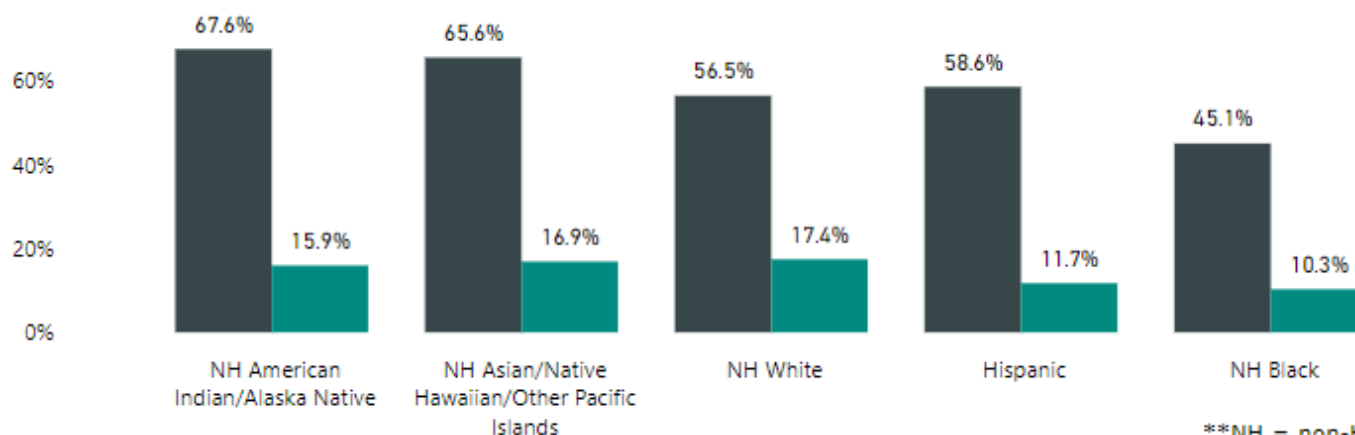


*This shows the percentage of all residents of all ages

Coverage by Race/Ethnicity**

Update through September 16, 2023

● At Least One Dose ● Up-To-Date






**NH = non-Hispanic

Note: Now include all those 6 months and older in calculations



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.