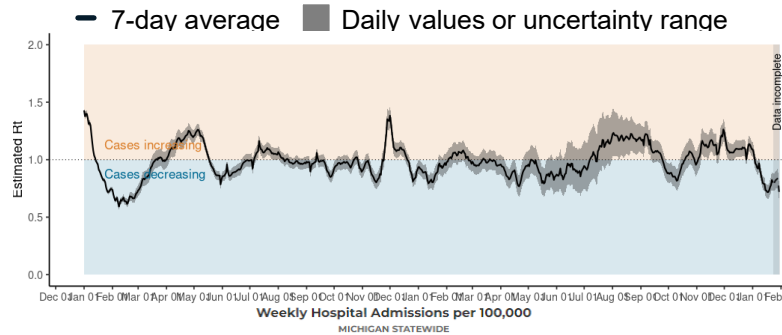


# **MI COVID RESPONSE DATA AND MODELING UPDATE**

January 31, 2024

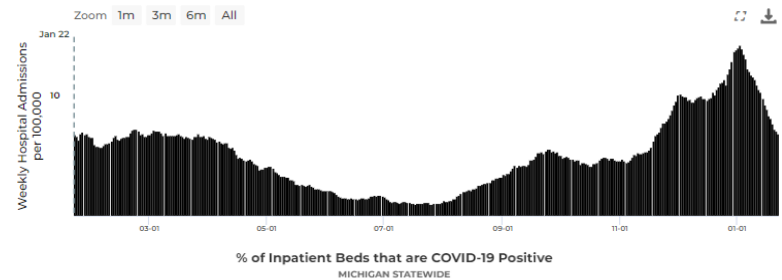
# Recent statewide trends show COVID is elevated but decreasing

## Statewide trends



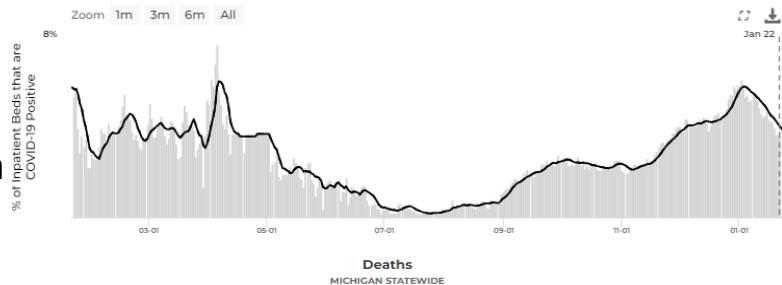
Reproductive Number,  $R_t$

- The reproductive number ( $R_t$ ) in Michigan is below 1 indicating transmission is declining.



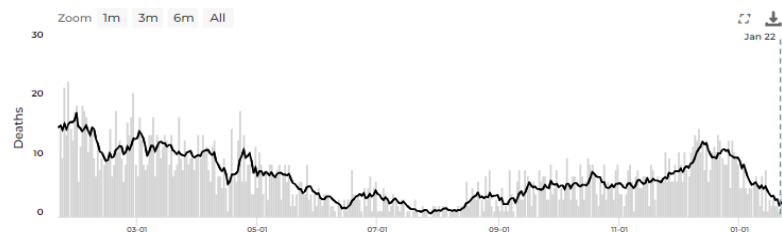
Hospital Admissions

- There has been a daily average of 7.1 hospital admissions per 100,000 Michiganders. This is a decrease from last week and the third consecutive week of declines.



Daily hospitalization rate, %

- The percent of inpatient beds with COVID-19 positive patients (4.1%) are lower than last week.



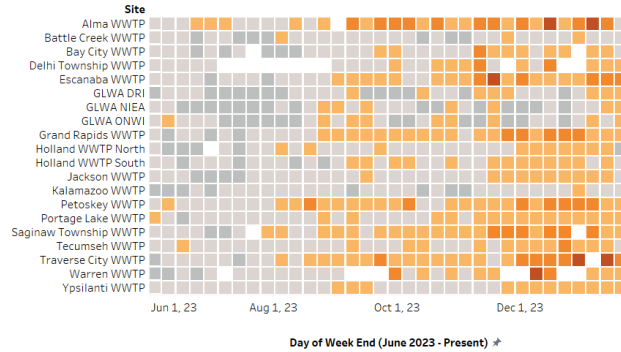
Deaths

- Deaths are a lagging indicator but are plateaued from last week.

# Recent statewide trends show COVID is elevated but decreasing

## Statewide trends

— 7-day average ■ Daily values



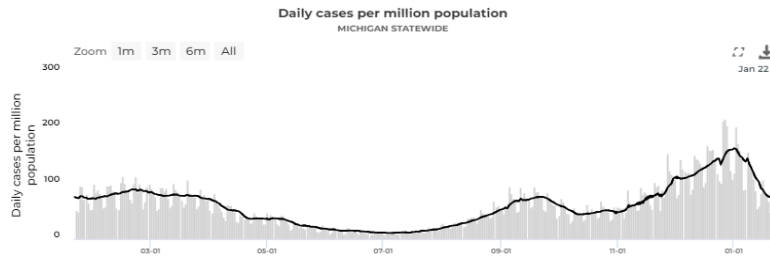
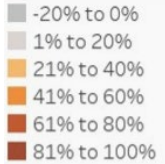
Current: 60% of sites are above 20% baseline threshold

Last Week: 85% of sites are above 20% baseline threshold

- 60% (12/20) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week.

## Wastewater

Percent Change



Current: 91.3

Last Week: 141.2

- Reported case rates decreased from last week.

## Daily cases per million



Coronavirus-Like-Illness (CLI)

Current: 1.2%

Last Week: 0.9%

COVID-19 Diagnosis

Current: 2.0%

Last Week: 2.2%

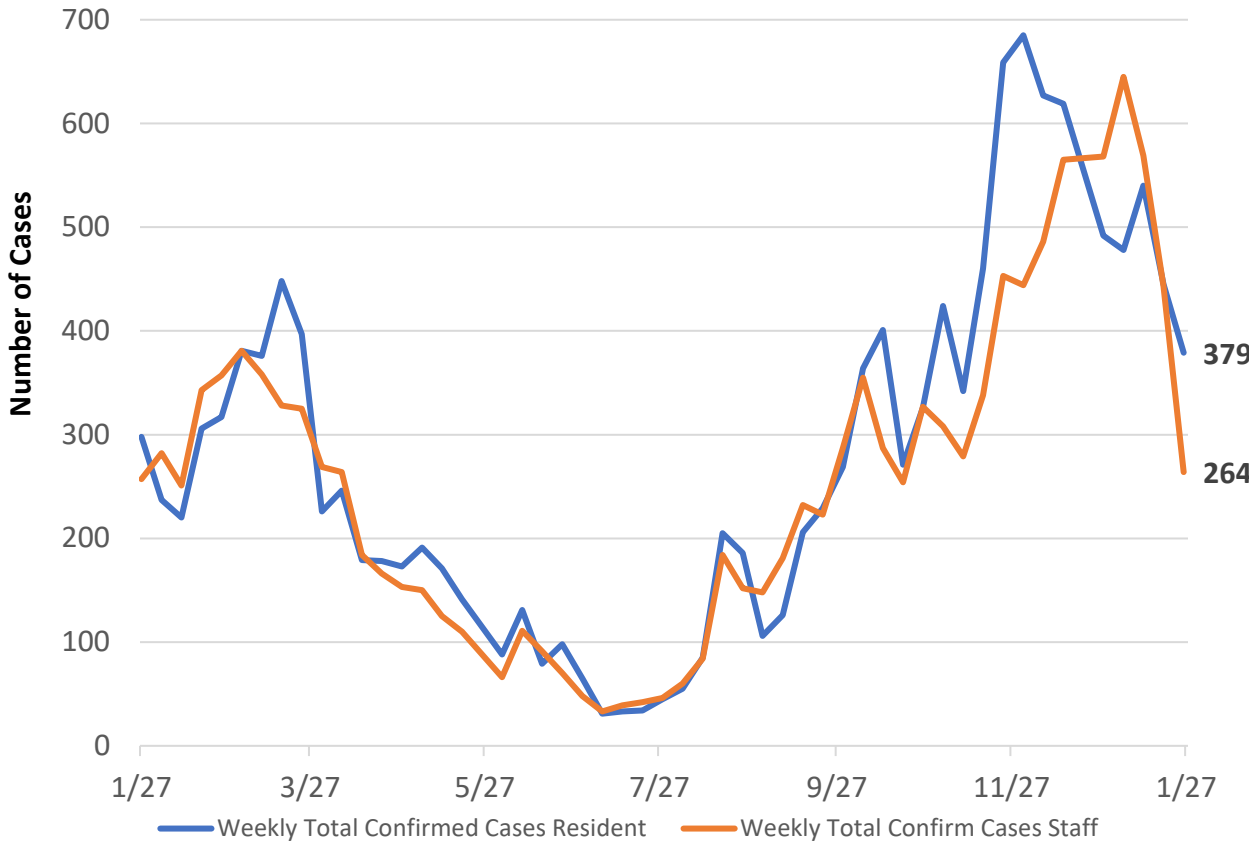
- COVID-19 diagnoses in emergency departments and urgent cares decreased over the last week. There have been 5 consecutive weeks of declines.

## 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 1/27/2023 to 1/26/2024

Number of SNFs with 3 or more Confirmed Cases 1/20/2023 to 01/26/2023



- Case counts decreased in SNF residents (445 to 379) and in SNF staff (443 to 264) since last week [left graphic]
- The number of SNF facilities reporting 3 or more cases decreased since last week (52 to 44) [right graphic]

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

Update through January 27, 2023

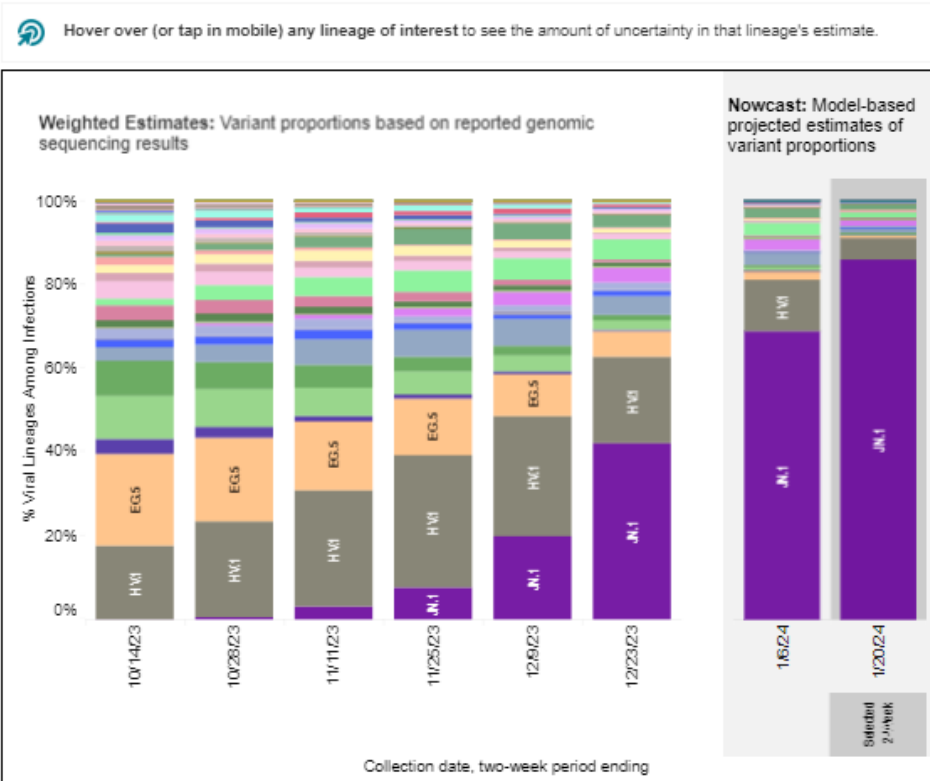
Note: The data are from weekly reporting by facilities with bed occupancy of at least 13 beds.  
Source: Data is now provided through NHSN, data prior to May 19 was from Michigan EM Resource

# 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, Oct 1 – Jan 20 (NOWCAST)

Weighted and Nowcast Estimates in United States for 2-Week Periods in 10/1/2023 – 1/20/2024

Nowcast Estimates in United States for 1/7/2024 – 1/20/2024



USA			
WHO label	Lineage #	%Total	95%PI
Omicron	JN.1	85.7%	82.9-88.2%
	HV.1	5.3%	4.4-6.4%
	JD.1.1	1.6%	1.4-2.0%
	BA.2.86	1.5%	1.1-2.1%
	JG.3	1.5%	1.2-1.9%
	HK.3	1.5%	1.2-1.8%
	EG.5	0.6%	0.5-0.8%
	GE.1	0.4%	0.1-1.5%
	JF.1	0.2%	0.2-0.3%
	FL.1.5.1	0.2%	0.2-0.3%
	EG.5.1.8	0.2%	0.2-0.3%
	BA.2	0.1%	0.0-0.6%
	XBB.1.16.6	0.1%	0.1-0.2%
	XBB.1.16.17	0.1%	0.1-0.3%
	XBB.1.5.70	0.1%	0.1-0.2%
	XBB.1.16.11	0.1%	0.1-0.1%
	GK.1.1	0.1%	0.1-0.1%
	XBB	0.1%	0.0-0.1%
	XBB.1.9.1	0.1%	0.0-0.1%
	HF.1	0.1%	0.0-0.1%
	XBB.1.16.15	0.1%	0.0-0.1%
	XBB.2.3	0.0%	0.0-0.1%
	XBB.1.16	0.0%	0.0-0.0%
	GK.2	0.0%	0.0-0.0%
	CH.1.1	0.0%	0.0-0.0%
	XBB.1.5	0.0%	0.0-0.0%
	EG.6.1	0.0%	0.0-0.0%
	XBB.1.16.1	0.0%	0.0-0.0%
	XBB.1.5.68	0.0%	0.0-0.0%
	XBB.1.9.2	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%
Other	Other*	0.0%	0.0-0.0%

### National Distribution

- 100% of the VOCs currently circulating in the U.S. are Omicron
- Nowcast estimates project that JN.1 (85.7%, 95% P.I. 82.9-88.2%) is the most prevalent, while all other lineages are estimated to comprise of less than 10% during the week ending on January 20.

### 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

\* 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>.

# Surveillance for Respiratory Diseases: National Outlook Improving

## 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 illnesses combined is about the same as what we saw during this same 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 and influenza both contributing to equal burden of ED visits for these three respiratory illnesses

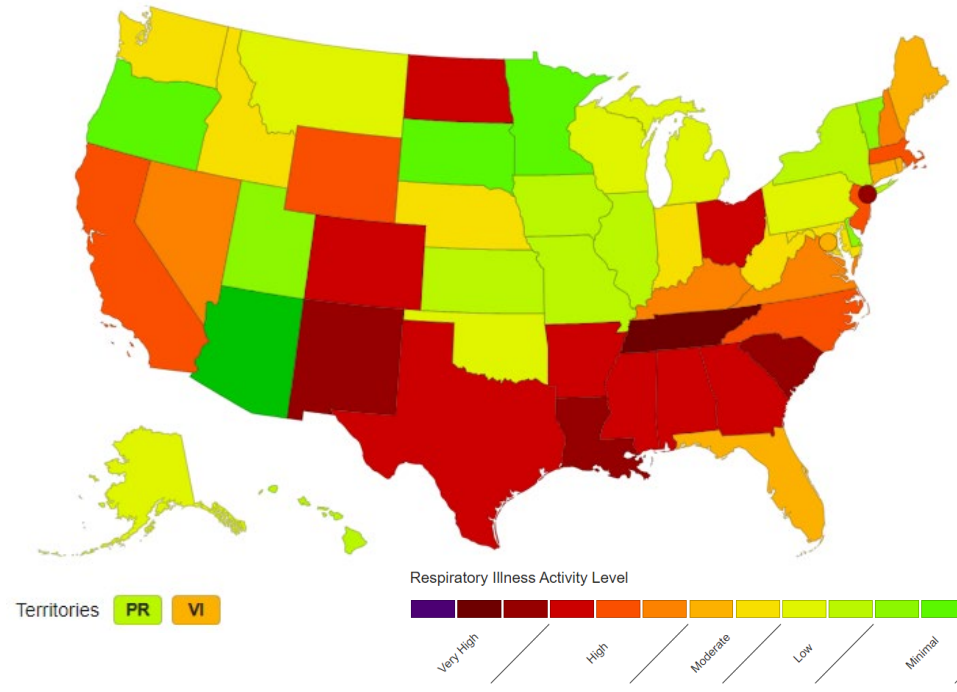
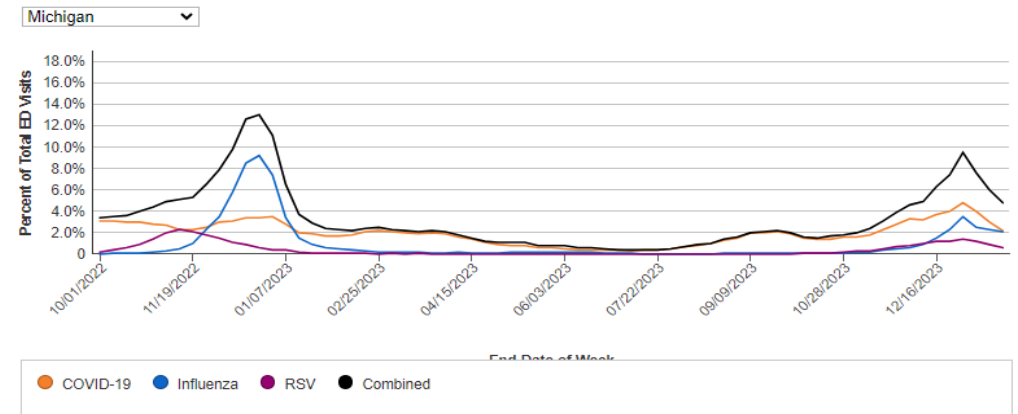
## National Respiratory Season Outlook† (bottom graphic)

The amount of respiratory illness (fever plus cough or sore throat) causing people to seek healthcare is elevated but decreasing across most areas of the country. In Michigan, respiratory illness activity level is low (downgraded from “moderate” last week).

In the U.S., seasonal influenza and COVID-19 activity remain elevated in most parts of the country; however, key indicators are showing decreasing or stabilizing levels of activity. The U.S. is experiencing decreasing RSV activity, particularly among young children. Hospital bed occupancy for all patients, including within intensive care units, remains stable nationally.

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)

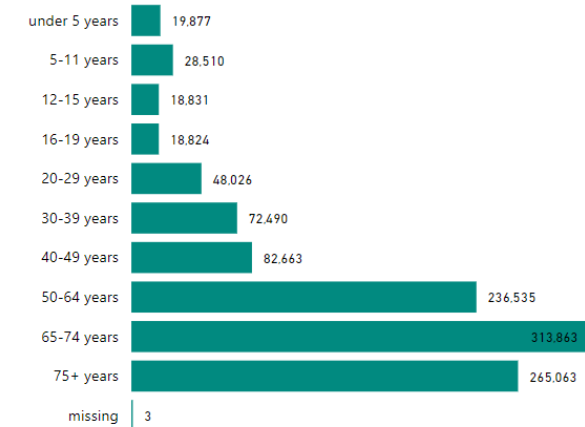
There have been 313863 doses of Moderna, Novavax, and Pfizer 2023 formulation administered to Michiganders 65 to 74 years, the highest of any group. Followed by those 75 years and older (265K) and 50-64 years (236K). Less than 20,000 doses have been administered to those under 5.

## Race/Ethnicity<sup>†</sup> for those 6 months and older with 2023-2024 Vaccine Formulation (lower right)

- Up-to-date coverage is highest among Non-Hispanic (NH) Asian, Native Hawaiian or Pacific Islander Race (12.1%), followed NH White (11.9%), by NH American Indian (9.6%), and NH Black or African American races (6.4%).
- Up-to-date coverage is at 5.9% for Hispanics

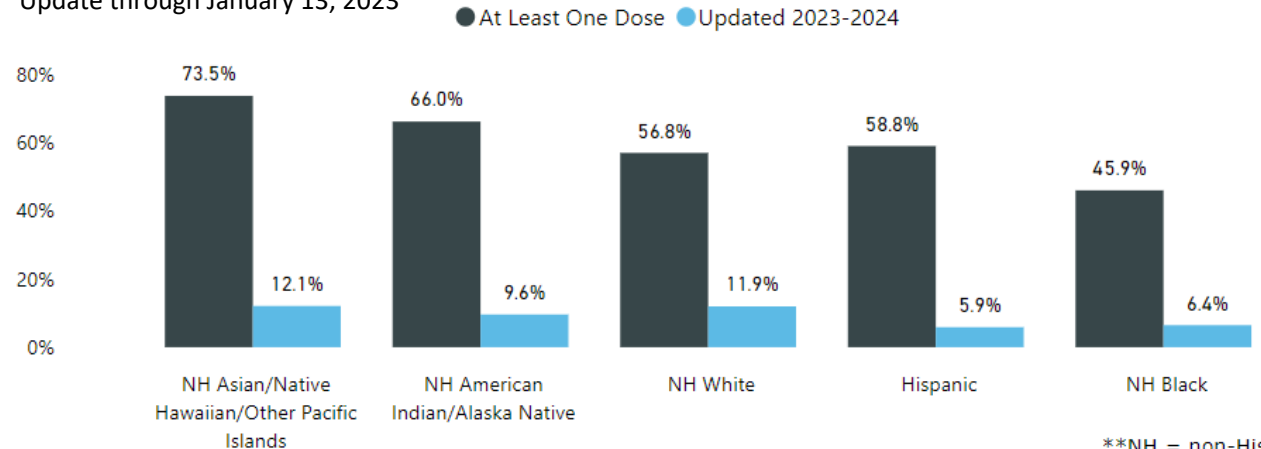
## COVID-19 Vaccine Administration - Fall 2023 Formulation for Moderna, Novavax, and Pfizer

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 January 13, 2023






\*\*NH = non-Hispanic



# 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
<b>INFLUENZA</b> 	Available for ages 6 months and up.	N/A	Available in clinical settings.	Available.
<b>COVID-19</b> 	Available for ages 6 months and up.	N/A	At-home tests or tests in clinical settings.*	Available.
<b>RSV</b> 	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](https://Michigan.gov/COVIDFluRSV) for more information.

\*Order free at-home tests at [COVIDTests.org](https://COVIDTests.org).



# Fall 2023 Vaccines

	WHAT ARE THE OPTIONS?	WHO IS ELIGIBLE?	HOW WELL DO THEY WORK?	WHEN SHOULD I GET IT?
<b>INFLUENZA</b> 	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.
<b>COVID-19</b> 	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.	<b>Protection against severe disease:</b> Get now. <b>Recently infected?</b> Consider delaying the vaccine for three months from symptom onset or positive test based on personal risk.
<b>RSV</b> 	<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.
<b>RSV PROTECTIVE ANTIBODY</b> 	<b>Note:</b> 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.