



COVID-19 AND OTHER EMERGING PUBLIC HEALTH TOPICS

BOARD OF COMMISSIONER UPDATE

JUNE 21, 2022

Data as of June 21, 2022

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EXECUTIVE SUMMARY

The following report contains COVID-19 related data from June 3, 2022, to June 21, 2022, on the 5 mitigation components Allegan County Health Department (ACHD) previously identified. Allegan County is currently in a low COVID-19 community level, and the Test Positivity Rate for Allegan County has been trending downward since the last reporting period, and cases have decreased as well since the last report. ACHD continues to monitor local, statewide, and global COVID-19 data, and continues to follow Michigan Department of Health and Human Services (MDHHS) and the Centers for Disease Control and Prevention (CDC) recommendations.

This report contains information on the availability of COVID-19 vaccinations for children under the age of 5, resources on mitigation tools community members can use during this period of low community level, and an overview of epidemiological surveillance of COVID-19 in Allegan County.

This report also contains epidemiological surveillance and health education on other ongoing and emerging public health topics including: monkeypox, avian influenza, heat related illness, adenovirus and acute hepatitis, vector-borne diseases, and foodborne illness, and formula feeding safety.

An overview of COVID-19 data in Allegan County from 6/3/22 to 6/16/22 can be found in the graphic below:



Cases, Hospitalizations, and deaths have all decreased since the previous two-week reporting period. The percentage next to the arrows indicates the percent decrease.

*The number of new outbreaks reported for all facility types decreased since the previous two-week reporting period, from 4 to 1.



FACILITY TYPE	NUMBER OF NEW OUTBREAKS *	NUMBER OF NEW CLUSTERS	NUMBER OF ONGOING OUTBREAKS	NUMBER OF ONGOING CLUSTERS
SCHOOL	0	0	0	1
BUSINESS	0	0	0	0
LONG TERM CARE FACILITY	1	0	5	0
CORRECTIONAL FACILITY	0	0	0	0

COVID-19 MITIGATION COMPONENTS



Allegan County currently is at a low community transmission level for COVID-19. ACHD continues to recommend the following:

- Staying up-to-date on your COVID-19 vaccines
- Getting tested if you have symptoms, before and after traveling, and before gathering with others.

Allegan County COVID-19 Community Level: Low

Allegan County Health Department recommends everyone to:

Stay up to date on your COVID-19 Vaccines

Get tested if you have symptoms

Actions including social distancing, frequent handwashing, wearing a well-fitted face mask, and isolation/quarantine help lessen the level of transmission

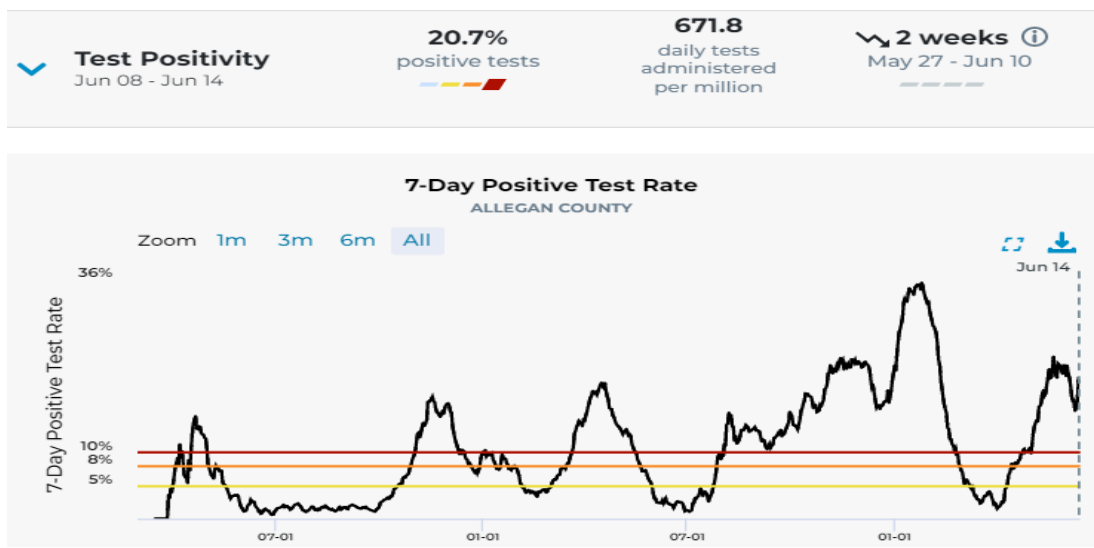
Learn more about CDC's COVID-19 Community Levels [here](#).

#DoYourPart

COVID-19 Community Levels are a tool to help communities decide what prevention steps to take based on the latest data. These Community Levels can be low, medium, or high and are determined by looking at hospital beds being used, hospital admissions, and the total number of new COVID-19 cases in an area. Find more about COVID-19 Community levels [here](#).

ENHANCED ABILITY TO TEST

COUNTY-LEVEL DATA AS OF JUNE 14, 2022



The Test Positivity Rate for Allegan County has been trending **downward** since the last report. **The 7-day positivity rate for Allegan County as of June 14 is 20.7% with 671.8 daily tests administered per million. This indicates a 2.4% decrease in the 7-day positivity compared to the 5/25/2022 to 5/31/2022 reporting period, which had 622.2 daily tests administered per million.**

TEST AVAILABILITY



Demand for testing has remained low since the Omicron surge. Daily tests administered in Allegan County have also remained low. Currently, there are multiple options in Allegan County where residents can obtain at-home testing kits or get tested for COVID-19. At this time, at-home tests are not reported in the Michigan Disease Surveillance System (MDSS) and therefore, are not included in the test positivity rates or case counts.

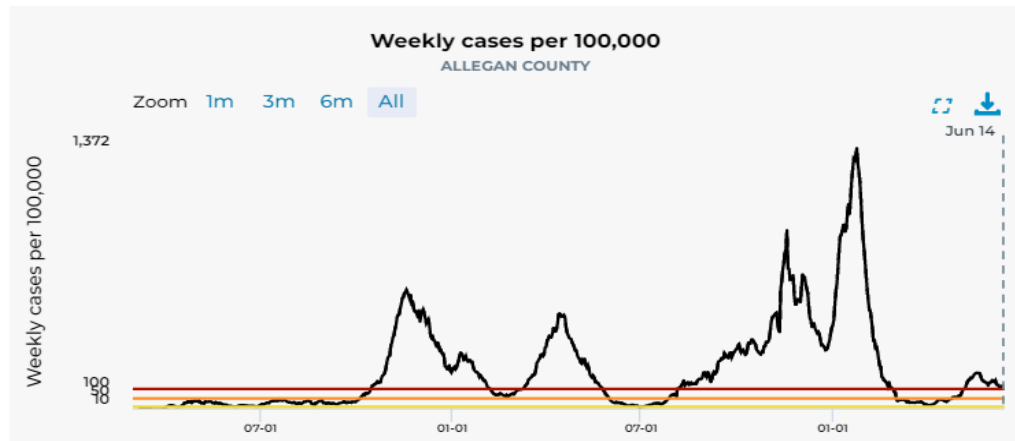
See Appendix below for a list of testing resources available to community members.

ROBUST CASE INVESTIGATION AND CONTACT TRACING

ALLEGAN COUNTY COVID-19 COMMUNITY LEVEL: LOW

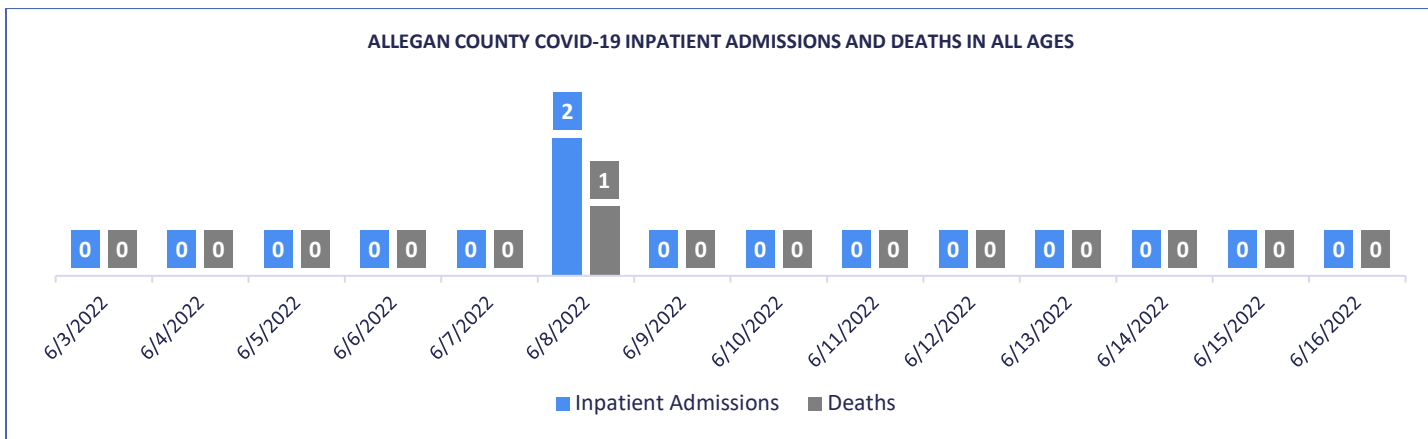
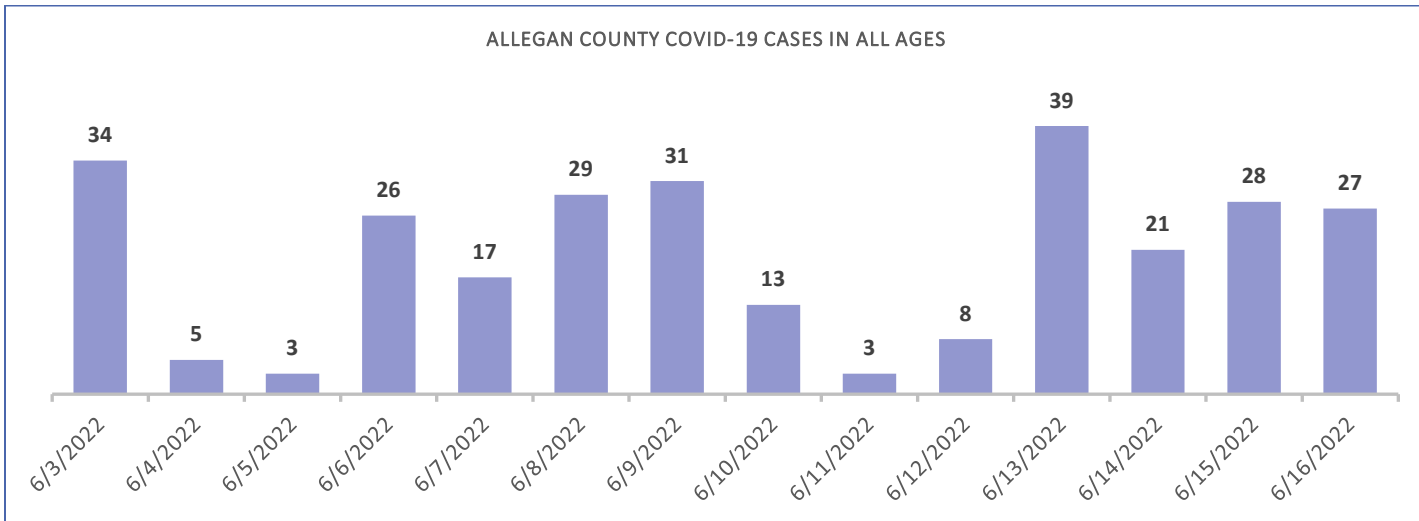


As of 6/14/2022, Allegan County remained at a low COVID-19 community level based on the CDC framework. **Models showed a moderate decrease in cases compared to the 5/25/2022 to 5/31/2022 reporting period. During the period 6/8/2022 to 6/14/2022, Allegan County's new weekly case rate was 119.4 per 100,000 population with 141 weekly cases.**



Weekly cases decreased by more than 9% since the 5/25/2022 to 5/31/2022 reporting period (129.6 per 100,000 and 153 weekly cases).

OVERVIEW OF COVID-19 CASES AND DEATHS IN THE LAST TWO WEEKS (6/3/2022 to 6/16/22)



DURING 6/3/2022 TO 6/16/2022:

- **284 total cases** were reported via the Michigan Disease Surveillance System (MDSS) for Allegan County
 - o 222 confirmed cases and 62 probable cases related to SARS-CoV2 infection as reported
- 19.7% of the cases were reported in the 30 to 39 age group, which had the highest number of cases during this timeframe
- **Two hospitalizations** related to SARS-CoV-2 infection that were reported for Allegan County
- **One death** related to SARS-CoV-2 infection that were reported for Allegan County
- Both hospitalizations and deaths associated with COVID-19 during this timeframe were reported in individuals who were 80+ years of age
- 10.9% of the cases were reported to be related to international, domestic, and/or in-state travel
- From 6/2/2022 to 6/15/2022 Allegan County had a reported¹ **positivity rate** of 19.04%, which is **down** from 21.7% that was reported for the previous 14-day time period of 5/19/2022 to 6/1/2022
- Cases, hospitalizations, and deaths related to SARS-CoV-2 infection have decreased for Allegan County since June 5, 2022. This is synonymous with the current statewide patterns for COVID-19 metrics

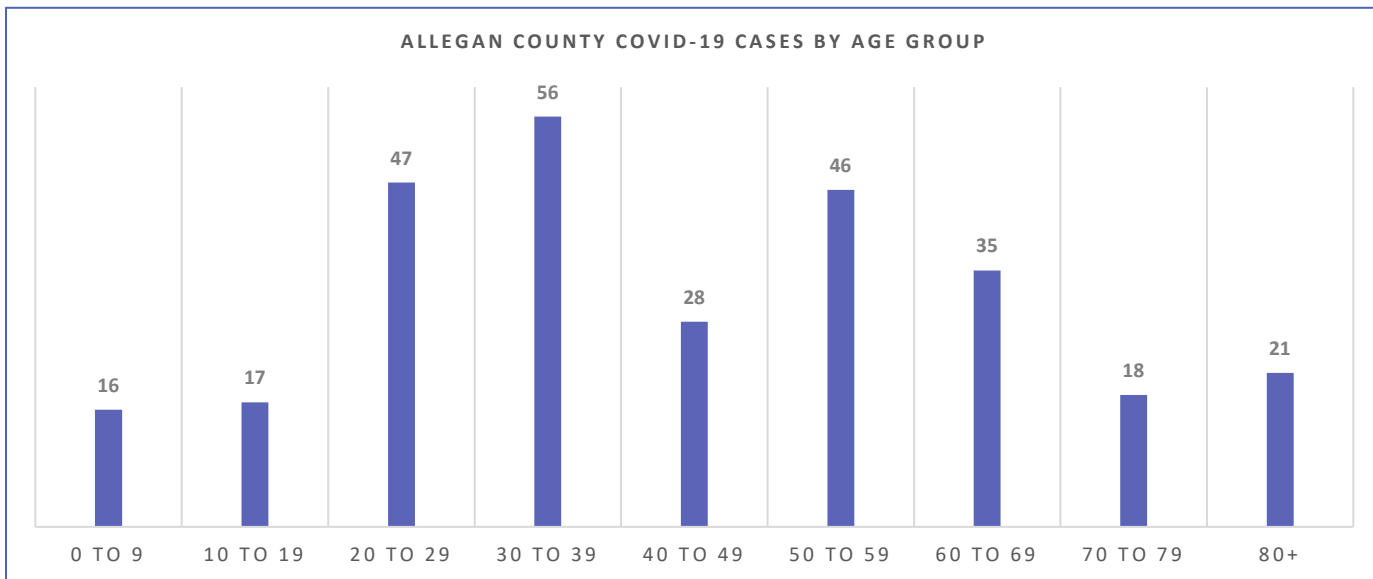
ACHD continues to monitor the COVID-19 metrics for hospitalizations and deaths as this can show the risk of a medically significant COVID-19 variant or healthcare system strain.

¹ As reported in the MI-HAN Regional Data File; Positivity Rate is calculated for percent positive persons for day and county, from 06/02/2022 to 06/15//2022

CASE INVESTIGATION²

ACHD is currently working to investigate all communicable disease cases. Prioritized groups for case investigation, when applicable, include individuals over the age of 65, school-aged individuals, and individuals that live or work in congregate care settings. During the case investigation process, ACHD works to ensure all basic needs are being met for individuals and their families. All cases receive a Patient Education Genius (PEG) notification that is provided via email or text messages for a case investigation form.

CASES IN THE LAST TWO WEEKS, BY AGE GROUP (6/3/2022 TO 6/16/2022)



From 5/20/2022 to 6/2/2022, 3.5% of cases were reported as asymptomatic in the Michigan Disease Surveillance System (MDSS). As displayed in the chart above, the school-age population continues to stay at a slower surge compared to other age groups, which is similar with the current statewide pattern of case rates. Overall, cases in all age groups are plateauing across Michigan.

- 17.6% of investigated cases were **household close contacts**³
- 2.5% of cases were reported as **community contacts**⁴
- 7% of cases were close contacts to those who work or live in a **high-risk/congregate facility** in Allegan County.

Notifying close contacts helps individuals know about exposure and allows close contacts to make decisions based on their own risk assessment

284 cases were reported in the MDSS from 6/3/2022 to 6/16/2022

EXPOSURE LETTERS AND CLOSE CONTACTS

ACHD sends potential Exposure Letters for COVID-19, similar to other communicable disease letters. Potential Exposure Letters are sent to school-aged individuals based on classroom and bus lists provided by schools. Quarantine might be required if there is an identified outbreak or ongoing spread in the facility. Recommendations regarding masking and quarantine may change as conditions evolve or if Allegan County moves to a high level of community transmission, based on the CDC framework.

6,990 exposure letters were sent out as of June 21, 2022

² Case investigation consists of contacting the individual and asking standard questions related to the disease and identifying those who might have been exposed.

³ Household contact: person lived with someone who tested positive and later tested positive themselves.

⁴ Community contact: person who was identified as a close contact in a setting other than a household

0 close contacts are currently being monitored as of June 21, 2022

OUTBREAKS & CLUSTERS

The following table shows the number of outbreaks⁵ that ACHD has identified for high-risk settings in Allegan County as of June 16, 2022. **ACHD has identified one new outbreak related to Long-Term Care Facilities⁶ since the last update.** No new outbreaks or clusters were identified for schools since the last report on May 24, 2022. ACHD has not identified any new outbreaks for businesses since February 17, 2022. ACHD reported six ongoing outbreaks and one ongoing⁷ cluster in MDHHS' Situation Report as of June 16, 2022.

ACHD has a Business Mitigation Strategies Survey for businesses and Long-Term Care Facilities to complete and provide us with information on what current mitigation strategies they have in place, if there has been an outbreak identified at their location. Agencies can access the survey [here](#).

Type of Setting	Total Number of Outbreaks*
School	18
Business	8
Long Term Care ^β	25
Other Congregate Facilities ^α	2

*Includes clusters per requirement indicated in MDSS' outbreak investigation fields to assign an outbreak code for 'clusters'

^βIncludes Skilled Nursing Facilities (SNF), Adult Foster Care (AFC), Home For the Aged (HFA), Assisted Living, and Independent Living facilities

^αIncludes jails, correctional facilities, and shelters

LONG TERM CARE & OTHER CONGREGATE CARE FACILITIES

An outbreak investigation is initiated when a resident at a Long-Term Care Facility (LTCF) is identified as a confirmed case of COVID-19. For correctional facilities, either a confirmed or a probable COVID-19 case will prompt an outbreak investigation. MDHHS offers further support for facilities via the Infection Prevention and Resource Assessment Team (IPRAT) when ACHD identifies facilities that are experiencing a large number of positive COVID-19 tests. As of June 16, 2022, ACHD has connected **nine** LTCFs in Allegan County with the IPRAT Team for additional mitigation assistance. During the month of May, ACHD saw a significant rise in potential outbreaks at Long-Term Care Facilities, as has been observed statewide; this trend is now decreasing. Despite the recent surge in cases related to SARS-CoV-2 infections, the **hospitalizations and deaths** at these facilities remain low. In Allegan County, a total of **59** resident probable and confirmed cases were reported in May, with **1 hospitalization** and **1 newly reported death**. In Michigan, the number of Long-Term Care Facilities reporting three or more cases in a single reporting period **decreased** in AFC/HFA from 29 to 20, and in Skilled Nursing Facilities (SNF) from 39 to 33 since the last Michigan Data and Modeling update on June 7, 2022.

Many of the Long-Term Care Facilities in Allegan County are experiencing staffing shortages. As of June 14, 2022, in Michigan 31% of SNFs reported **nursing shortages** and 34% of SNFs are reported **aide shortages**, which are slightly lower than the previous week.

494 resident cases and 53 resident deaths have been reported from January 1, 2020, to June 7, 2022⁸

⁵ Outbreak investigation codes are assigned by the first date of onset

⁶ Data from 10/21/2021

⁷ The period of 28 days prior to the occurrence of an outbreak resolution

⁸ The information above represents COVID-19 data reported directly to MDHHS by licensed and operating Skilled Nursing, Home for the Aged and Adult Foster Care facilities (licensed to serve 13 or more individuals) in Michigan from January 1, 2020, through June 7, 2022

According to statewide data⁹, the case counts reported in both residents and staff in both Adult Foster Care (AFC)/Home for the Aged (HFA) and Skilled Nursing Facilities (SNF) **increased** since the last report, two weeks prior. Cases within LTCFs continue to be higher among staff than among residents, which has been the case throughout the Delta and Omicron surges.

810 staff cases have been reported from January 1, 2020, to June 7, 2022

SUFFICIENT HEALTH CARE CAPACITY

HOSPITALIZATIONS

Allegan County falls in the Region 5 Health Care Coalition. Given the location of the county, some community members will also access hospitals in the Region 6 Health Care Coalition (Grand Rapids-Holland Region). The chart below lists the hospitals that Allegan County community members may access for COVID-19 and non-COVID-19-related health needs and their current capacity levels.

The following figures show the current percentage of inpatient beds treating COVID-19 patients, for the Grand Rapids Region (Region 6), and Kalamazoo Region (Region 5). The **Grand Rapids Region** had **3.8%** of inpatient beds that are COVID-19 positive, as of June 14, 2022, which is **1% lower** than the previous reporting period, May 25 to May 31. The **Kalamazoo Region** had **4.3%** of inpatient beds that are COVID-19 positive, as of June 14, 2022, which is **.3 % higher** than the previous reporting period, May 25 to May 31.

HOSPITALS IN THE ALLEGAN COUNTY AREA

Note: Some smaller hospitals might not have ICU beds for COVID-19 or non-COVID-19 patients

As of 6/13/2022

Hospital	COVID-19 Patients	COVID-19 Patients in ICU	Bed Occupancy %
Ascension Borgess Allegan Hospital	0	0	12%
Ascension Borgess Hospital	14	6	70%
Ascension Borgess-Pipp Hospital	0	0	41%
Bronson Methodist Hospital	20	2	86%
Bronson South Haven	0	0	50%
Holland Community Hospital	3	0	53%
Mercy Health Mercy Campus	16	3	72%
Mercy Health St. Mary's Main Campus	14	0	70%
Metro Health Hospital	5	0	73%
Spectrum Health - Blodgett Hospital	10	0	93%
Spectrum Health - Butterworth Hospital	29	4	89%
Spectrum Health Zeeland Hospital	1	0	40%
Spectrum Helen DeVos Children's Hospital	2	0	79%

⁹ The data is from weekly reporting by facilities with bed occupancy of at least 13 beds

Hospital Capacity
Jun 08 - Jun 14

3.8% beds with COVID ⓘ

69.5 beds per million with COVID

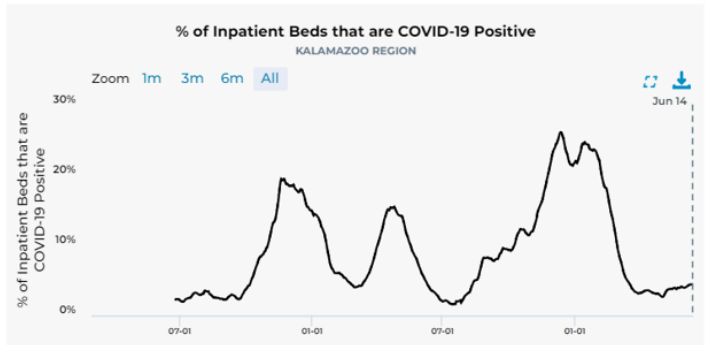
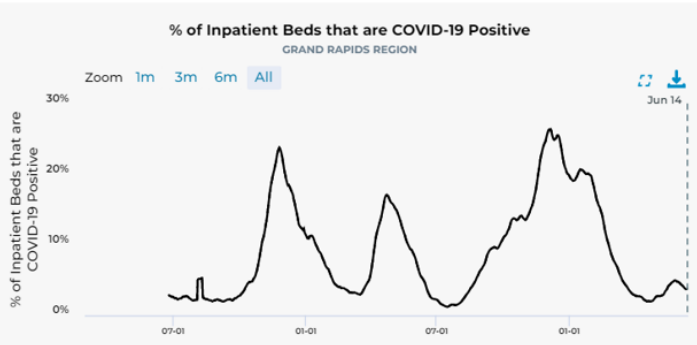
1.6k beds per million (COVID + non-COVID)

Hospital Capacity
Jun 08 - Jun 14

4.3% beds with COVID ⓘ

57.4 beds per million with COVID

1.4k beds per million (COVID + non-COVID)



DEATHS (7 DAY AVERAGE)

Deaths
Jun 08 - Jun 14

0 daily deaths



BEST PRACTICES

SCHOOLS

The Centers for Disease Control and Prevention (CDC) now [recommends everyone ages 6 months and older get vaccinated against COVID-19](#). Children under the age of 5 are now eligible to receive COVID-19 vaccines from both Pfizer and Moderna. The CDC also recommends children ages 5 and up receive COVID-19 booster doses at least 5 months after receiving their primary vaccine series. ACHD is encouraging parents to help protect their children from severe illness from COVID-19 this summer by keeping them up-to-date on their COVID-19 vaccines.

ACHD also encourages parents to keep children safe based on your [COVID-19 Community Level](#). Parents can learn more about COVID-19 Community levels, and about keeping their children COVID-19 safe in and out of school [here](#).

BUSINESSES

Businesses should continue to ensure increased ventilation, social distancing when possible, frequent handwashing, individuals staying home when sick and enhanced cleaning. These strategies help keep a healthy workplace.

COMMUNICATIONS

COVID-19 Health Education has been a mandated service in this response. The following are metrics related to COVID communication efforts from 6/3/2022 – 6/16/2022:

- 6 Social media posts
- 11 Education materials created/updated
- 1 Community Update created
- 1 Provider Update created

COMMUNITY VACCINATION/HERD IMMUNITY/TREATMENT

COVID-19 VACCINES NOW AVAILABLE FOR CHILDREN UNDER 5

On June 15, 2022, the Food and Drug Administration’s (FDA) Vaccines and Related Biological Products Advisory Committee (VRBAC), met to vote on the safety and effectiveness of two COVID-19 vaccines (Moderna and Pfizer). The committee voted in approval of both the Moderna and the Pfizer vaccines for children 6 months to 5 years old. Both vaccines have been found to be safe and effective for children following a thorough and extensive clinical trial process. The FDA presentation slides from this meeting can be found [here](#). The Centers for Disease Control and Prevention (CDC) has [updated its COVID-19 vaccine recommendations](#) to include this age group. The following primary series recommendations for children are as follows:

COVID-19 primary series vaccination for children and teens

Child's Age	Pfizer-BioNTech	Moderna	J&J/Janssen
6 months–4 years old	3 dose primary series	2 dose primary series	Not authorized
5 years old	2 dose primary series	2 dose primary series	Not authorized
6–17 years old	2 dose primary series	Not authorized	Not authorized

COVID-19 vaccine dosage is based on age on the day of vaccination, not on size or weight. The dosage for the Moderna and Pfizer under 5 age group COVID-19 vaccines is different, and the number of doses needed is different. For more information on COVID-19 vaccines and dosage for children and teens, visit:

- [Pfizer-BioNTech COVID-19 vaccine overview and safety](#)
- [Moderna COVID-19 Vaccine Overview and Safety](#)

The CDC recommends that children and teens who have already had COVID-19 still get vaccinated, as evidence indicates people can get added protection by getting vaccinated after having been infected with COVID-19.

Parents are encouraged to contact their child’s pediatrician or trusted health care provider for more information on vaccination or to get a vaccine. Your Local Epidemiologist, Katelyn Jetelina, also created a graphic aiming to answer questions: [COVID-19 Vaccine for Kids <5](#).

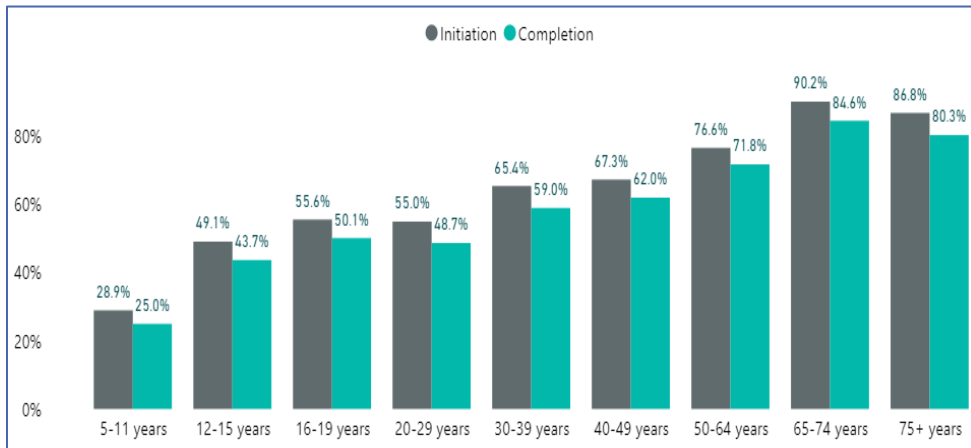
ACHD will be holding weekly vaccination clinics by appointment only at the Allegan County Health Department. Parents interested in getting the vaccine for their child can schedule a COVID-19 vaccine appointment by visiting our [online scheduler](#) or by calling 269-673-0205 if you have more than one person to schedule or if you need to make an appointment for a different day or time than offered online. A parent or guardian must be present for the child to receive the vaccination.

Data as of June 21, 2022

Parents are encouraged to keep their children up-to-date with COVID-19 vaccines, as they can help reduce infections and transmission in this age group, leading to less school disruptions and family disruptions

The Centers for Disease Control and Prevention (CDC) also released a [new tool](#) that lets you quickly see if and when you're eligible for a COVID-19 booster.

COVID-19 VACCINE COVERAGE BY AGE GROUP



As of 6/17/2022

Residents aged 50+ have the highest percentage of vaccination, with these individuals meeting the 70% vaccination goal. Low vaccine rates seen in young children and adolescents may be due to the fact that emergency use was not authorized for this cohort until later on. Vaccine rates for ages 5-49 have been relatively stagnant since March 2022; vaccination rates for this group only increased about 1% since then.

VACCINE AVAILABILITY

Vaccine availability remains high as pharmacies, doctor’s offices, and health care systems are administering vaccines. ACHD has vaccine appointments available on Thursdays each week for vulnerable populations or children in the Vaccine for Children program.

Now that children under the age of 5 are eligible for COVID-19 vaccines, parents can call ACHD to schedule an appointment for their child.

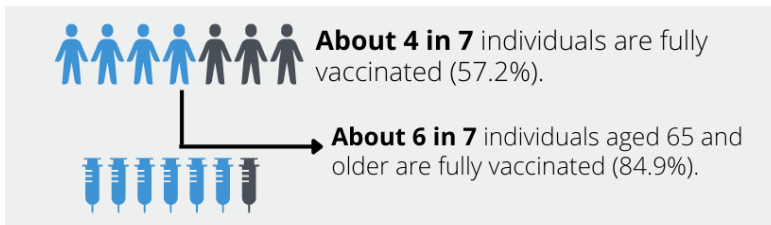
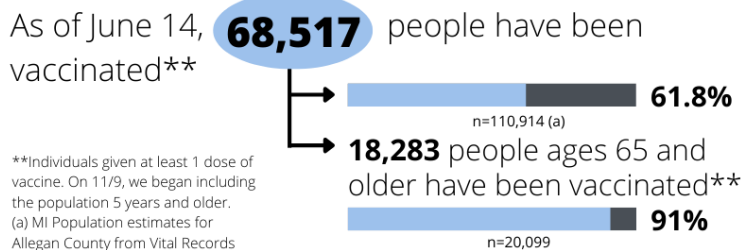
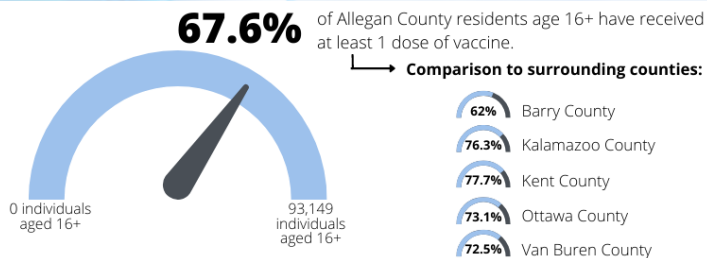
Residents are encouraged to visit www.vaccinefinder.org and www.vaccinatewestmi.com to find vaccination clinics near them, or call ACHD at 269-673-5411 to schedule an appointment.

ACHD works with businesses and organizations offering support and/or vaccination clinics if there is an outbreak detected and assistance needed.



Allegan County VACCINE DATA


Updated 6/16/22
Data as of 6/14/22



Fully Vaccinated: Individuals (5 years and older) receiving 2 doses of Pfizer or Moderna or 1 dose of J&J.

Note: Our goal of vaccinating 70% of the population accounted for the 16 and older population. With increasing the eligibility population, our vaccine coverage decreased. We are continuing to strive towards our goal of vaccinating 70% of residents 16 and older, which will reflect on the gauge at the top of this graphic.

6/1/2021 Update: Previous vaccine graphics included 96,451 as the population of Allegan County residents 12 years and older. After further review, 99,878 is a more accurate population estimation.



VACCINE EFFECTIVENESS

COVID-19 vaccines continue to be an imperative layer in reducing the severity of illness, and the burden of hospitalizations and deaths in both children and adolescents, and adults. Data and studies show that **being up to date on the COVID-19 vaccination schedule was effective even during the predominance of the Omicron variant.**

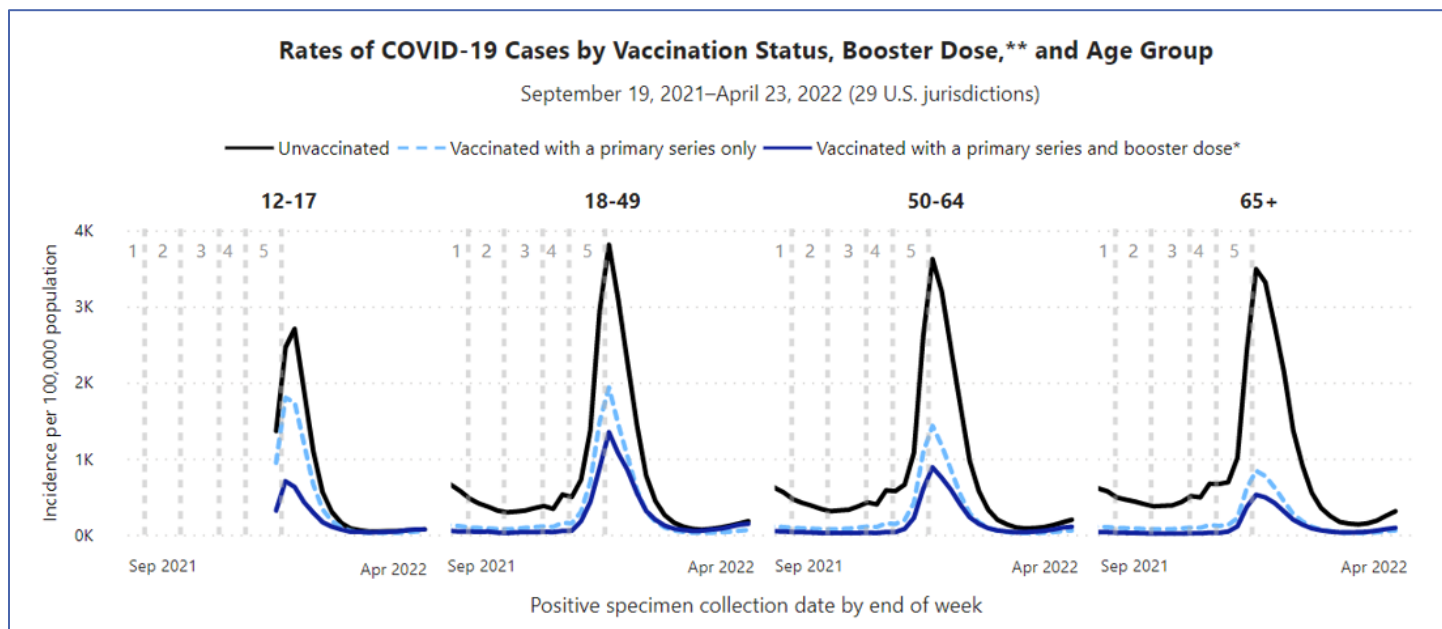
A collaborative study of COVID-19 vaccine effectiveness (VE) is conducted by the CDC and additional partners. These methods of the study follow various platforms for data collection and research design, and takes into account factors such as infection and hospitalizations that may affect the outcome of the study, population size, and method of the study. The evaluations from the [monthly CDC study](#) published in May 2022 on VE can be summarized as follows:

- **In adults:** The level of protection during the peak circulation of the Omicron variant was higher in individuals who received three COVID-19 mRNA vaccine doses (Pfizer/BioNTech or Moderna) or a Johnson and Johnson (Janssen) vaccine followed by an mRNA booster dose compared to those who received two Johnson and Johnson (Janssen) vaccine doses.
- **In children and adolescents:** During the dominance of the Omicron variant, “protection from getting symptomatic illness provided by the primary series (two doses) decreased among children (5 to 11 years of age) and even more among adolescents (12 to 15 years of age) within 2 months of the second dose.” Furthermore, an estimated VE rate of 71% was

Data as of June 21, 2022

found in adolescent individuals against developing a SARS-CoV-2 infection, in which the effectivity rate lasted for up to 6.5 weeks following receiving a booster, compared to a VE rate of only 17% after two months of receiving the second dose.

- **In nursing homes:** The level of VE was much greater against infection by the Omicron variant in residents who received additional primary or booster doses of COVID-19 vaccines than residents who had only received two doses of an mRNA vaccine (Pfizer-BioNTech or Moderna) or one dose of a Janssen (Johnson & Johnson) vaccine. The sample size for this study consisted of approximately 15,000 nursing homes.



The above chart is based on the data that was collected from September 19, 2021 through April 23, 2022 by CDC's COVID-19 Response, Epidemiology Task Force, Analytics and Surveillance: Vaccine Breakthrough Unit. The chart depicts COVID-19 case rates specific to age groups as it relates to vaccination status and booster dose per 100,000 population. As seen here, groups that are fully vaccinated (blue line) have a significantly lower likelihood to be infected with the SARS-CoV-2 virus; the level of protection against the virus increases with an additional booster dose (dotted blue line).

Furthermore, the CDC released the following [data](#) on June 17, 2022, which was developed by the breakthrough surveillance through April 2022, as it relates to the burden of hospitalizations and deaths [by vaccination status](#):

- **Hospitalizations:**
 - The monthly rates of hospitalizations that were associated with COVID-19 were 3.6 times higher in individuals that were unvaccinated in the age group of 18 and older
 - The risk of COVID-19 hospitalization was 1.8 times higher in unvaccinated children ages 5 to 11 years old, and 1.5 times higher in adolescents 12 to 17 years old that were unvaccinated
- **Deaths:**
 - Unvaccinated individuals in the age groups of 12 years and older showed 8 times higher risk of dying from COVID-19; the risk of COVID-19 associated death was 6 times higher in unvaccinated people 5 years and older
 - People ages 50 and older who were unvaccinated had 42 times the risk of dying from COVID-19, compared to individuals that had received a primary series of the vaccine and two or more booster doses

UPDATE: LOCAL HEALTH DEPARTMENT (LHD) BREAKTHROUGH DATA DISTRIBUTION

ACHD has consulted with the Regional Epidemiology Department and have extensively explored methods to provide breakthrough information (for individual cases on a local level) by exporting case data via MDSS. Accordingly, we have found that the following limitations are associated with this level of data export, which may affect the overall quality of local breakthrough case data:

- *Epidemiological rate calculations:* Due to the reduced sample sizes of Local Health Jurisdictions (LHJs), it has been determined that calculating Incidence Risk Ratios or vaccine effectiveness from individual-level case data is not recommended.
- *Under-reporting:* Data surrounding important metrics such as hospitalizations and deaths related to breakthrough cases carries the possibility of being under-reported during individual case investigations.
- *Missing data:* Breakthrough cases that are reported via MDSS is limited by factors such as data-backfilling and missing pertinent information when case investigations are not conducted.
- *Data insufficiency:* MDSS currently does not have a feature that can capture specific data around individual cases with a specimen collection date \geq 14 days after receipt of an additional or booster dose of any COVID-19 vaccine on or after August 13, 2021.

The aforementioned challenges can affect the optimal quality and reliability of data, thus, limiting the scope of local breakthrough case analysis. Hence, **ACHD will follow MDHHS' strong recommendation for accessing breakthrough surveillance data on COVID-19 Vaccine Effectivity and/or Cases by Vaccination Status via the [CDC COVID Data Tracker](#).**

Michigan continues to follow the recommendation of the CDC and investigate breakthrough COVID-19 cases on a population-level, rather than on an individual-level. This means that while MDHHS will continue to investigate trends and the overall incidence of COVID-19 breakthrough cases and deaths, however, will not regularly investigate the individual cases for specific identifiers¹⁰. Statewide trends will continue to be updated weekly for Michigan in the [data and modeling](#) slide decks.

The data surrounding the rates of breakthrough cases, and burden of hospitalizations and deaths related to the SARS-CoV-2 infection, is further captured by learning [How and Why CDC Monitors Vaccine Effectiveness](#). **Fully vaccinated individuals are less likely to develop serious infections, and are less likely to become hospitalized or die from a SARS-CoV-2 infection.**

The breakthrough analysis provided by the CDC is a robust picture of current statistics and data for breakthrough cases, and follows a rigorous assessment of overall trends rather than looking at individual cases. For more information and the latest data on rates of COVID-19 breakthrough cases, hospitalizations, and deaths, please refer to [CDC COVID Data Tracker: Rates of COVID-19 Cases and Deaths by Vaccination Status](#).

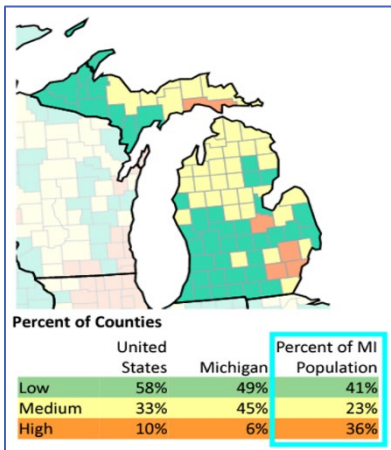
COVID-19 SURVEILLANCE

The main component of communicable disease investigation is surveillance, which is used to identify outbreaks or surges in cases regionally, statewide, nationally, and globally. ACHD has noted that there are increases related to COVID-19 activity from the BA.2 Omicron sub-variant in other areas of the world. In past data trends, the pattern indicating an increase in the case counts in other countries is also seen in the United States. ACHD continues to monitor these case surges.

STATEWIDE COVID-19 SURVEILLANCE

Statewide, as of **June 15, 2022**, [Michigan Coronavirus Data](#) reports a total of **2,581,397 cases** and **36,675 deaths** related to the SARS-CoV-2 infection.

¹⁰ Metrics for hospitalization and death



In the June 14, 2022 MDHHS’ data and modeling [update](#), **6%** of Michigan counties are at **High COVID-19 Community Levels**, which is a significant decrease from the last week of May, and **49%** are at **Low Community Levels** per data as of June 9, 2022. Currently, 36% of the residents in Michigan are living in a county categorized as a High COVID-19 community level. Michigan counties that are at Medium COVID-19 community levels are currently at 33% percent, which is a decrease from 36% during the week of May 23, 2022, and now includes 23% of the population in Michigan.

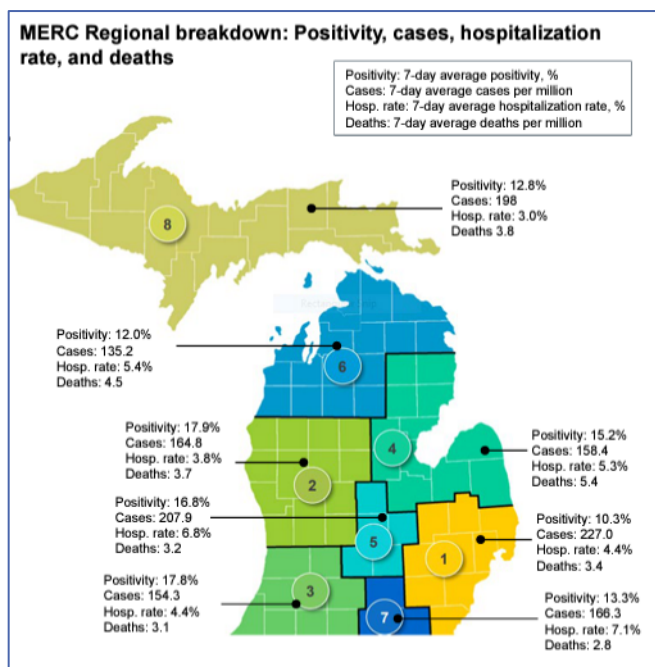
Case rates are currently observed as having plateaued across Michigan. The 7-day **case rates in all age groups are decreasing or plateauing** in both daily confirmed and probable cases per million by age group. Statewide, case rates have decreased in the school-aged population; data shows that case rates are currently lower in the 5 to 18 year old age group than the 19 to 50 age group as of June 13, 2022.

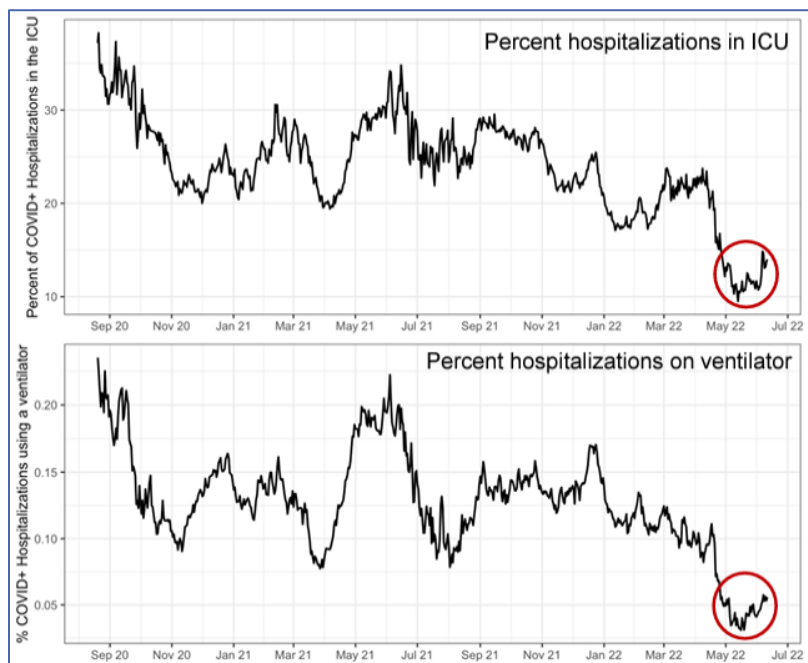
Nearly half of the age groups have seen a decrease in hospitalizations during the week of June 6, 2022. [Data and modeling](#) shows that trends for daily hospital admissions has slightly decreased (-4%) since last week (versus -12% in the prior week of May 30, 2022.) Data through May 20, 2022 shows that **the 7-day average death rate has decreased for individuals in the age group over 80 years.**

The adjacent map shows data distribution across the Michigan Economic Recovery Council (MERC) regions as of June 14, 2022. The data indicate that **MERC Region 3**, which includes Allegan County, has a **7-day hospitalization rate of 4.4%**. The statewide **COVID+ census in hospitals has decreased by 5%**, and the **COVID+ ICU census noted an overall increase by 10%** from the prior week of June 6, 2022. The COVID positive hospital census has increased in Preparedness Regions 5, 6, and 8, and decreased in Regions 1, 2N, 2S, 3, and 7. ICU occupancy is below 85% across all Preparedness Regions in Michigan.

Statewide, case rates across all age groups are seen to be decreasing or plateauing during the week of June 13, 2022. Data as of June 3, 2022 indicate that the case rates by onset date for all age groups are now between 124.5 and 262.4 per million persons (which is a decrease from 186.8 and 391.2 per million persons as of May 23, 2022). Case counts and rates continue to remain highest in the 30 to 39 age groups, followed by 20 to 29 and 80+ age groups.

Case rates by race or ethnicity data are decreasing or plateauing for all reported race and ethnic groups. Case counts are decreasing or plateaued for both residents and staff that work or live in Long Term Care Facilities (LTCFs). Case counts in both residents and staff, and the reported number of outbreaks in LTCFs are declining as of May 31, 2022. Furthermore, data shows that the COVID positive hospital admission rates have been decreasing in the 60 to 80 age group, and LTCFs reporting three or more cases in a single reporting period have seen a decrease in most facility types such as Adult Foster Care (AFC), Home For the Aged (HFA), and Skilled Nursing Facility (SNF).





The adjacent chart is a statewide depiction of trends related to metrics such as COVID-19 hospitalizations, and ICU occupancy or ventilator usage. Data is from EMResource based on information derived from September 2020 to June 10, 2022.

Currently, Michigan is seeing the lowest percentage of hospitalizations requiring ICU or ventilator since September 2020, which is indicated by the red circle (in the adjacent chart).

Both hospitalizations and ICU occupancy/ventilator use related to COVID-19 have seen a general decline in the proportion compared to the total adult patients hospitalized between September 2020 and May 2022. This decrease has been noted to be steeper in the last couple of months. Although these metrics are lagging indicators, the data shows that hospitalizations requiring ICU admissions or ventilator is not expected

to exceed that of the previous waves (Alpha and Delta.)

It is important to note that **vaccinations and therapeutics may have played a significant role in the decrease of severe disease burden**. Data observations from all prior surges (Alpha and Delta waves) showed a simultaneous increase in patients hospitalized with COVID-19 versus patients in Intensive Care Unit (ICU) and/or ventilators with COVID-19; however, the current surge (Omicron) is indicative of a dissociation in the aforementioned three metrics. Although the current surge indicates an uptick in patients hospitalized with COVID-19, there have not been an increase in ICU and ventilators usage related to COVID-19. This shows that most hospitalized patients are not experiencing severe illnesses related to the SARS-CoV-2 infection.

MICHIGAN 7-DAY METRICS/DATA SURVEILLANCE¹¹ AS OF JUNE 16, 2022

Cases	Percent Positivity	Deaths	New Hospital Admissions	% of Population ≥ 5 Years of Age Fully Vaccinated
15, 578	10-14.9	137	122.71	64.2

Michigan remains in the *recovery phase*¹² due to current case rates and hospitalizations and increased access to mitigation measures. **Administration of COVID-19 vaccinations and booster doses remain a critical component during the recovery phase.** Mask requirements continue to return to some schools and businesses located in counties with High COVID-19 Community Levels.

NATIONWIDE COVID-19 SURVEILLANCE

Total cases nationwide as of June 17, 2022, is **86,058,521 (up 1,508,129 from June 3, 2022)**. **1,012,647 total deaths (up 4,584 from June 3, 2022)** have been reported as of June 17, 2022; which accounts for more than 15% of total deaths worldwide

GAPS IN EQUITY AND DATA

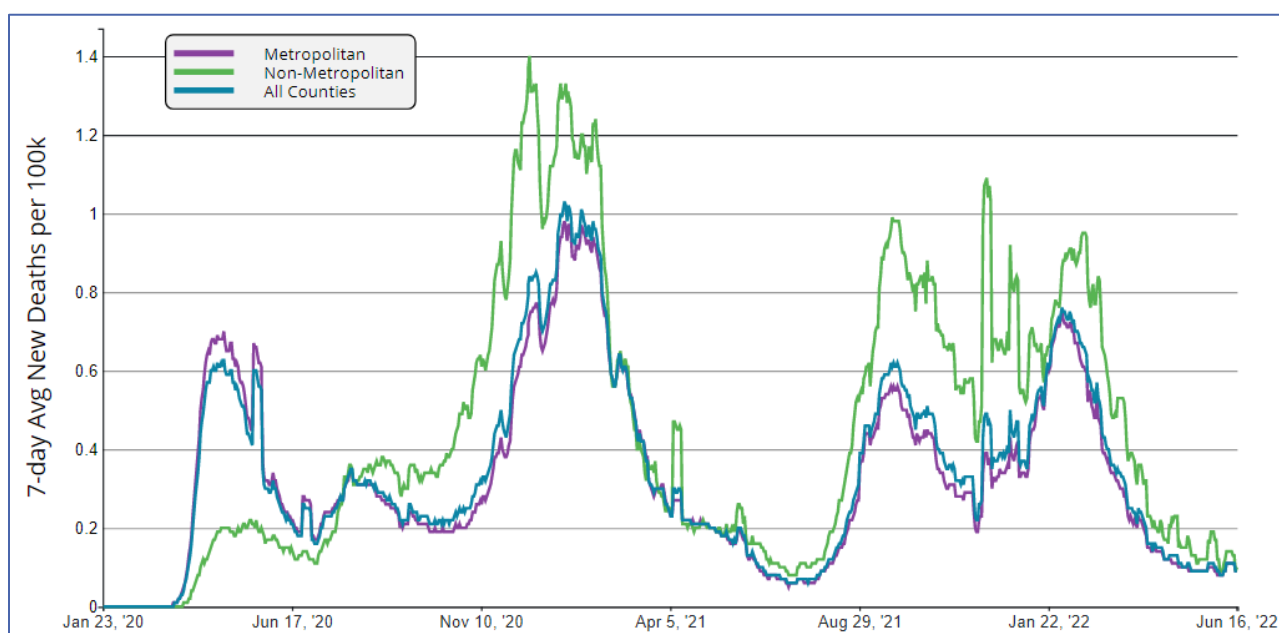
¹¹ [CDC COVID-19 Data Tracker](#)

¹² Recovery phase is the post-surge time period in which no immediate resurgence is predicted, and local and state public health will monitor conditions leading to future surges (MDHHS)

Over the course of the COVID-19 pandemic, inequities have been observed across the country. Each state has adopted their own mitigation strategies in order to respond to their own unique health landscape.

As of June 17, 2022, cases are going up in the South and Western parts of the United States. Florida has the most cases for the Eastern part of the US (346 cases per 100,000). Despite the rise in cases, total deaths are relatively low for the US. During this 7-day reporting period, **Michigan reported the highest rate of deaths per 100,000 population; 1.4 deaths per 100,000.**

Metropolitan areas have lower deaths from COVID-19 compared to non-metropolitan areas. Residents in rural areas are more vulnerable to severe illness or death from COVID-19 than metro' residents because of factors such as: older age, underlying health conditions, and lack of health insurance. According to the CDC, people who live in rural areas have more difficulty accessing medical care, measured as 'lacking health insurance or residing more than 32 miles from a hospital with an intensive care unit'. Of the 628 high-distance counties in the US, 46% are also high vulnerability for older age and 17 percent are high vulnerability for underlying medical conditions. Overall, 93% of high-distance counties in the US are rural. The following chart depicts Metropolitan and Non-Metropolitan Deaths in the US.



In the US, approximately 35% of cases and 15% deaths are missing race/ethnicity data. Out of the 98% of COVID-19 cases with "sex" defined, 53.3% of cases are female and 46.7% cases are male. For deaths however, out of the 99% of COVID-19 deaths where "sex" defined, 44.9% are female and 55.1% are male.

Region 5 Update

As of June 14, 2022, signs of plateaus and declines continue to be observed in Region 5 (Midwest) states, which includes Michigan; with Illinois and Wisconsin now having the highest case rates. In the U.S., **10%** of counties are at **High COVID-19 Community Levels**, a 3% increase from the June 7, 2022 [data modeling updates](#). California, Texas, Florida, New York and Illinois have the highest overall cases in the nation as of June 17, 2022. **Michigan is currently ranked number ten** for COVID-19 case counts. The U.S. has reported the 7-day COVID-19 case average has increased over **8%** since the prior week. The case rate as of June 14, 2022, is 229 cases/100,000 for the previous 7 days (last week: 206 cases per/100,000). For reference, Allegan County saw a case rate of 119.4 per 100,000 for this reporting period.

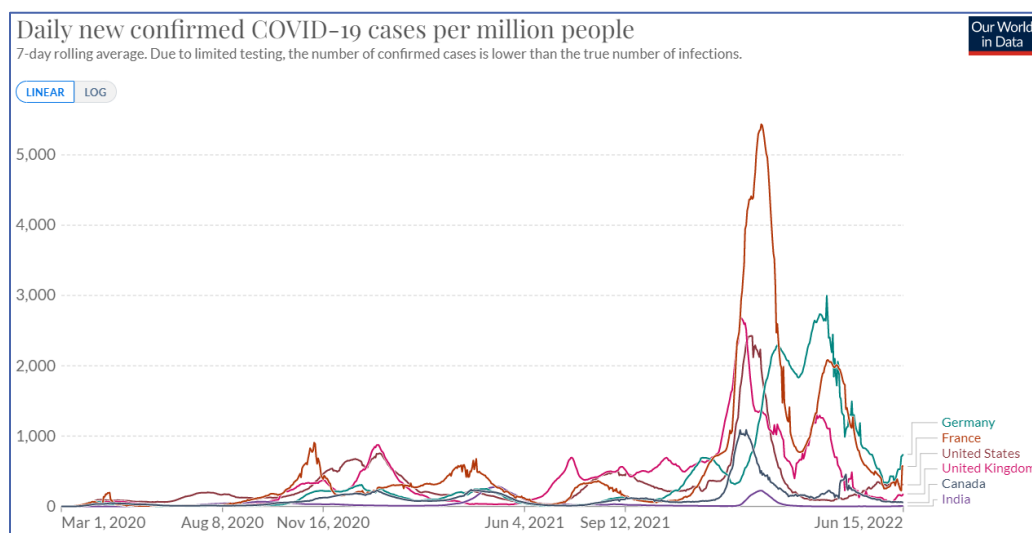
Data as of June 21, 2022

Region 5 States with the Highest COVID-19 Case Rates	Cases Reported in the Last 7 Days†	Deaths Reported in the Last 7 Days†
Illinois	28,720	86
Wisconsin	11,220	40

†Data reported by the [CDC COVID-19 Data Tracker](#) as of June 16, 2022

GLOBAL COVID-19 SURVEILLANCE

Globally, as of **June 16, 2022**, the World Health Organization (WHO) reports **535,248,141 confirmed cases (up 6,431,824 from June 3, 2022)** and **6,313,229 deaths (up 18,260 from June 3, 2022)** related to the SARS-CoV-2 infection. There is a regular and ongoing study of potential variants of concern (VOCs), variants of interest (VOIs), or variants under monitoring (VOIs) conducted by WHO in order to assess the risk posed to public health. The global epidemiological updates by WHO for the weeks of May 15 through May 28 of 2022 notes a 4% decline in the number of BA.2 (Omicron sublineage) sequences. Overall, many European countries are seeing steady case rates following the second Omicron wave.



The adjacent chart shows the 7-day rolling average of daily new confirmed COVID-19 cases per million people for Germany, France, United States, United Kingdom, Canada, and India. These countries relay data through June 15, 2022 and are depicted in this chart relative to population size.

Globally, the countries showing the highest increase in this chart as of June 15, 2022 are Germany (green line) with an average of 742.24 cases per million persons,

and France (red line) with an average of 569.41 cases per million persons. Of note, it is likely that cases are much higher than the number of reported cases in areas with limited testing capacity.

According to **WHO's weekly Epidemiological Situation Report** as of June 15, 2022, **the number of new weekly deaths is on the rise again, with more than 8700 fatalities reported globally, which is a 4% increase** compared to the previous week of June 6, 2022. This increase is noted to occur after five weeks of decline in cases. The highest numbers of new deaths in the European region were reported from the Russian Federation (500 new deaths), which included Italy (443 new deaths, +17%) and France (240 new deaths, -26%). The number of new deaths in the Region of the Americas (United States, Brazil, and Canada) increased by 21% compared to the week prior to June 15, 2022.

The [CDC](#) highlights the following imperative goals as part of the **Global Response to COVID-19 for the years 2020-2023**:

- Reduce transmission of SARS-CoV-2 and impact of COVID-19 globally
- Expand scientific knowledge of SARS-CoV-2 and strengthen global public health leadership
- Improve long-term health security in low and middle income countries

As of June 17, 2022, there are no countries indicated at COVID-19 risk level 4 with special circumstances and/or travel precautions. The Johns Hopkins University and Medicine Coronavirus Resource Center (JHU) has reported case surges in Taiwan, Germany and Brazil as of June 17, 2022.

Data as of June 21, 2022

COVID-19 Risk Level 3 (High)	Cases Reported in the Last 7 Days*	Deaths Reported in the Last 7 Days*
Taiwan	No data available	No data available
Germany	399,472	39
Brazil	275,316	1,006

*Data reported by the [World Health Organization Coronavirus Dashboard](#) as of June 17, 2022

COVID-19 Risk Level 3 (High)	Weekly New Hospital Admissions for COVID-19**	Closest Available Date of Data Point**
Taiwan	No data available	No data available
Germany	2,945	6/16/2022
Brazil	No data available	No data available

**Data reported by the [Our World in Data - Coronavirus \(COVID-19\) Hospitalizations](#)

The WHO has included a structured document that summarizes current public health surveillance of COVID-19, which includes key components such as case investigation, surveillance, and epidemiological protocols. These components focus on the “coronavirus disease 2019 (COVID-19) in humans resulting from the infection caused by the SARS-CoV-2 virus.” For more information, please visit: [WHO: Public Health Surveillance COVID-19: Interim Guidance](#).

As part of the CDC’s global response measures, over 1.2 billion COVID-19 Vaccines are donated by the United States to countries that are in need. CDC’s global vaccine priorities are carried out through the initiative for Global Vaccine Access (Global VAX), which is “a whole-of-United States government effort to turn vaccines in vials into vaccinations in arms for eligible populations around the world.” The Global VAX initiative aims at meeting the crucial need of following the COVID-19 vaccination goal in all countries. For more information, visit: [CDC Accelerates Global COVID-19 Vaccinations through Global VAX](#)

WASTEWATER SURVEILLANCE

UPDATE: MDHHS Wastewater Surveillance as of June 14, 2022

- 25% (5/20) of Sentinel Wastewater Epidemiology Evaluation Project (SWEET) sites had an increase in trends during this 15-day reporting period
- 20% (4/20) of sites saw a plateau in trends over the last 15 days
- 55% (11/20) of sentinel sites are showing declines in the last 15 days

ACHD has been working with Hope College as they sample wastewater for COVID-19 to determine future directions for its use. There are 20 sewer-shed sites that are reporting positive and negative test results to MDHHS every week. For more information, please

visit [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEET\) \(michigan.gov\)](#).

Hope College has collaborated with several local health departments to produce a dashboard, which displays the most recent wastewater readings and the case counts for participating counties. A shared wastewater dashboard configuration for sister counties Ottawa and Allegan was created to evaluate wastewater levels for both jurisdictions simultaneously. The colored circles of differing sizes represent the concentration of COVID-19 in the wastewater as of June 16, 2022 (TPA¹³, TPP¹⁴, TPDS¹⁵), that have existing data points for the most recent nine calendar days (). The red circles represent higher COVID-19 concentration levels, the yellow circle represents lower concentration levels and green circles indicate virtually no COVID-19 detection in the sample.

The following three sites have the most current and accurate data readings:

¹³ Allegan Water Resource Recovery Facility

¹⁴ Plainwell Wastewater Treatment Plant

¹⁵ Douglas/Saugatuck WWTP

Allegan Sewershed Sites	Trend Dates		Current Trend Patterns
TPA	6/16/2022		Decreasing
TPP	6/15/2022		Slightly Increasing
TPDS	6/14/2022		Decreasing

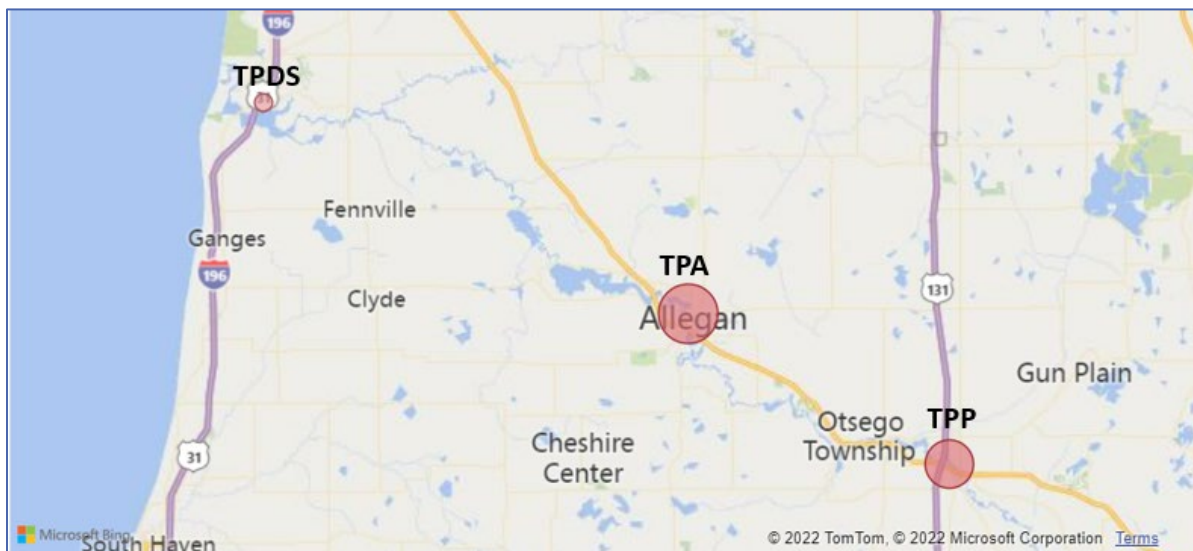
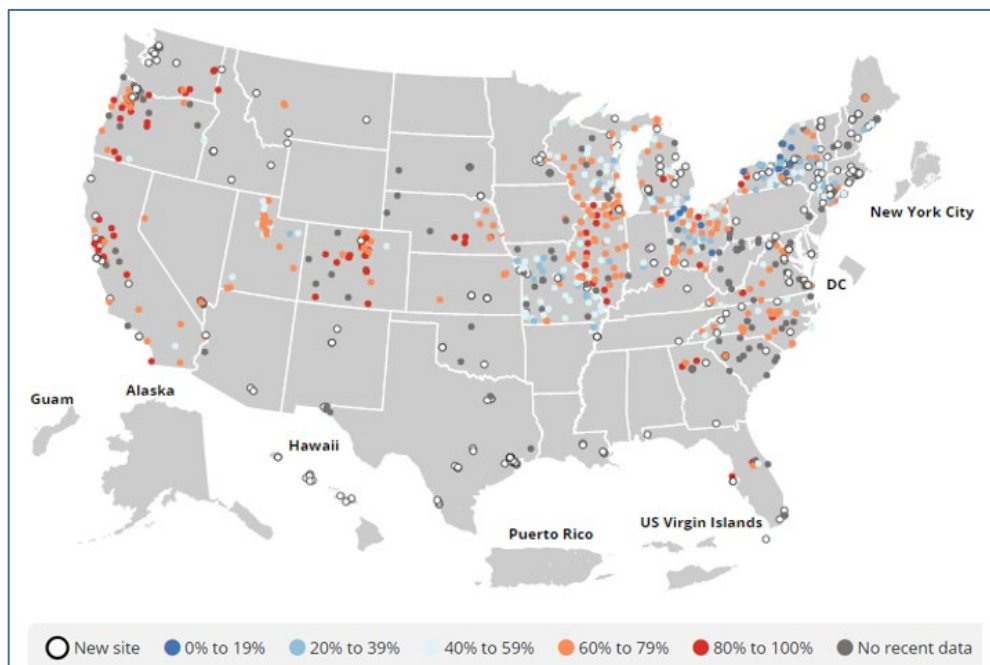


Figure 1 the current wastewater sewer shed sites that Hope College is monitoring in Allegan County.



Wastewater surveillance is rapidly increasing in the U.S.

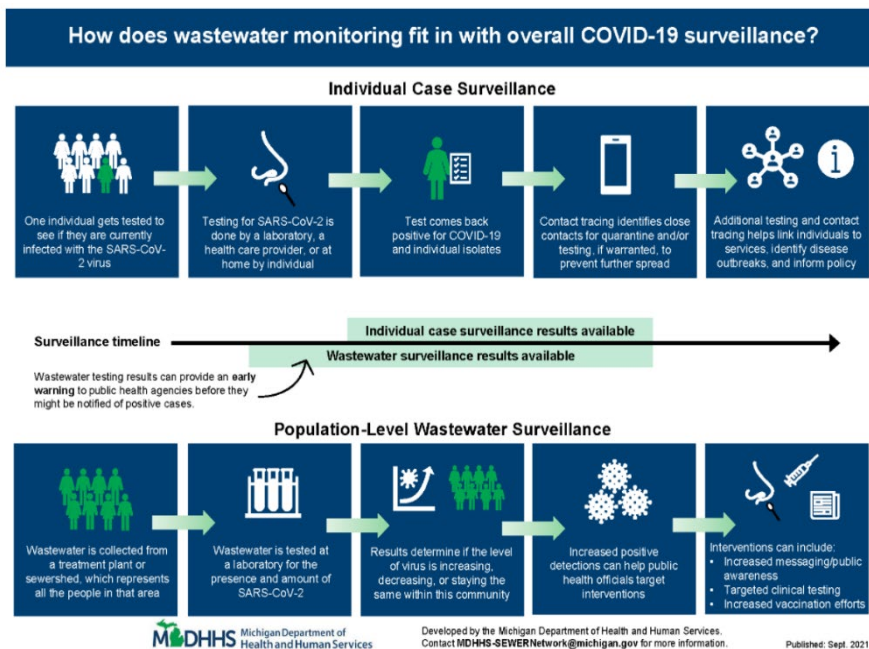
The adjacent map shows 996 wastewater-sampling sites in the US as of June 13, 2022. **Up 42 sites from June 3.**

251 new wastewater-sampling sites were being monitored during the timeframe, May 30, 2022 to June 13, 2022

A modest overall increase in wastewater levels, which may lead to a large percent change, does not necessarily mean we will see major increases in transmission in a community. More than half of sites in the U.S. are seeing "[modest increases](#)" in levels of virus, according to CDC, although the system does not cover the entire country and does not yet have the capacity to offer an ongoing estimate of the true number of cases beyond official counts. Access to at-home tests, comes at the expense of comprehensive data. As a result, **we have to infer that there are more cases than are actually reported.**

The figure to the right depicts the method of using wastewater surveillance data to monitor case patterns at individual and population levels as it relates to the SARS-CoV-2 infection.

ACHD will continue to monitor available dashboards for future case surges correlating to local wastewater signals. There will be more information regarding this level of data analysis in future updates. MDHHS is working toward including wastewater surveillance for Allegan County in the SWEEP dashboard.

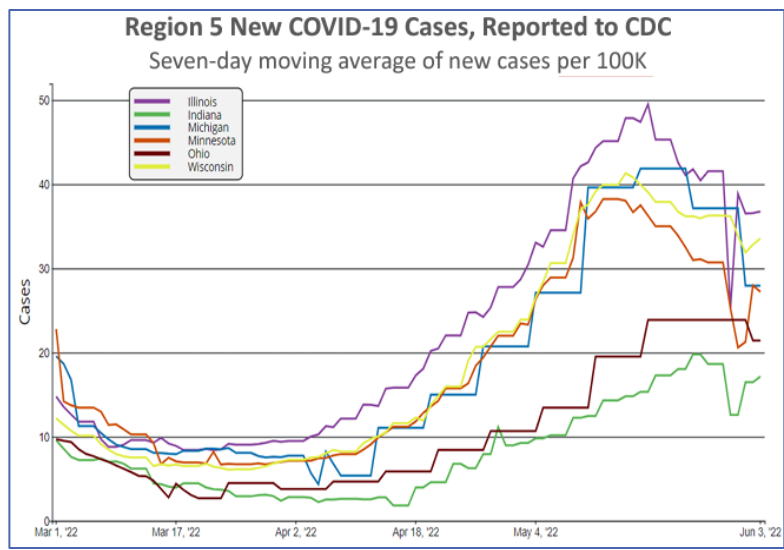


BA.2 OMICRON SUB-VARIANT

Global trends for BA.2 cases are slowing, however, showing overall case counts show differences by location. Many countries in Europe continue to have plateaued or show early signs of decline. Case rates in the U.S. have plateaued over the past two weeks and case counts appears to be have also plateaued in Midwestern states (Region 5). Current data continues to show that given the levels of vaccination/boosters and immunity from recent Omicron infection, a significant rise in hospitalization and mortality is not expected to occur.

BA.2.12.1 continues to be the common variant circulating in HHS Region 5, which includes Michigan, Illinois, Indiana, Minnesota, Ohio, and Wisconsin. Since May 1, 2022, there have been 2,044 variant of concern (VOC) specimens sequenced in Michigan in which 100% of specimens were sequenced as Omicron.

The adjacent chart shows the current increase in the 7-day moving average of new cases per 100,000 population in Michigan (blue line), and includes data as of June 3, 2022.



BA.2 is more resistant to some monoclonal treatments than BA.1 and BA.1.1 variants. The following antiviral therapies are still encouraged as treatments against the BA.2 variant: Paxlovid, Remdesivir, and Molnupiravir. For more information on these COVID-19 therapies, visit [COVID-19 Therapeutics Information Page](#).

As cases of this new variant continue to rise, the same preventive measures are recommended to curb its spread and reduce the virus' opportunities for mutation. ACHD continues to monitor this Omicron sub-lineage and deploy response measures accordingly. For more information, visit: [Nonhospitalized Adults: Therapeutic Management | COVID-19 Treatment Guidelines \(nih.gov\)](#)

Data as of June 21, 2022

STUDIES ON EMERGING VARIANT AS OF JUNE 14, 2022 DATA AND MODELING

Omicron continues to be the predominant variant of concern (VOC) with several sub-lineages, including BA.4, BA.5, BA.2.12.1, and recombinants of these.

The BA.2.12.1 sublineage is currently the most predominant variant in the U.S, however, the proportion of BA.2 is decreasing and noted to be less than 50% for the first time since May 2022.

The VOC Distribution in Michigan chart shows the Variant of Concern (VOC) distribution in Michigan as published by the [MDHHS data and modeling](#) on June 14, 2022. The chart depicts that **100% of the specimens sequenced were indicative of the Omicron BA.1.1.529 variant and sub-variant BA.2.**

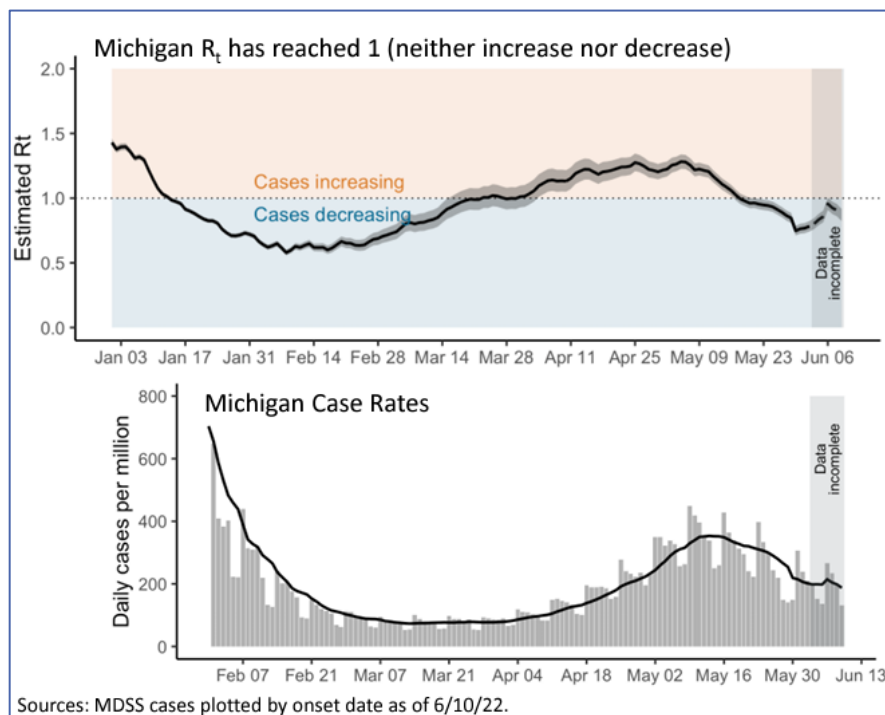
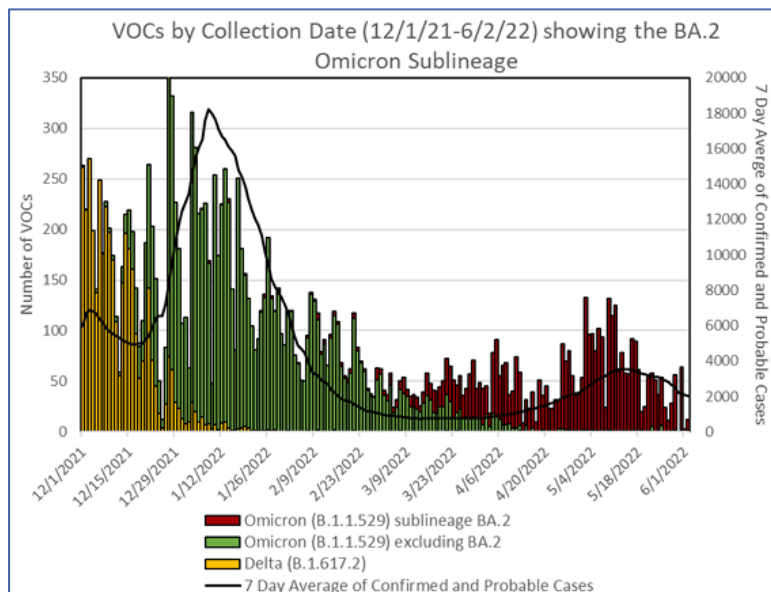
BA.4 and BA.5 are newer sublineages of the Omicron variant, which may spread more rapidly than current Omicron lineages that are circulating in the United States (U.S) and the United Kingdom (U.K). The available data related to the transmission of newer Omicron sublineages are still very preliminary; however, note that these variants are currently spreading in other countries such as South Africa (BA.4) and Portugal (BA.5). A small fraction of specimens has been identified as BA.4 (19) and BA.5 (8) in Michigan.

The adjacent chart depicts an update in the statewide Estimated Rt from the new data and modeling completed as of June 14, 2021.

Case rates increase when the Rt is greater than 1 and decrease when the Rt is less than 1.

As relayed in the previous update, **Michigan Rt continues to stay at 1**, which indicates neither an increase or decrease. This means that case rates in Michigan appear to have plateaued.

Data as of June 10, 2022 via [MIStartMap](#) shows that eight counties are currently seeing increases, which is a significant decrease from 39 counties in the week prior to June 1, 2022. There are three counties currently seen at elevated incidence plateaus, which has also significantly decreased since the previous update of 26 counties at that incidence.



Estimated-Rt study limitation: This modeling is subject to change as MDHHS continues to follow Michigan data closely.

Data as of June 21, 2022

EPIDEMIOLOGIC SURVEILLANCE

Epidemiologic surveillance is defined as “the ongoing and systematic collection, analysis, and interpretation of health data in the process of describing and monitoring a health event.” The information derived around epidemiologic surveillance adds great significance or value to one of the core goals of Public Health – to plan, implement, and evaluate interventions and programs. Furthermore, this level of disease surveillance initiates appropriate public health actions during a public health emergency. Such actions call for a prompt response to affected populations by forming an understanding of the nature of disease or exposure, and informing Infection and Prevention Control (IPC) activities. ACHD continues to monitor emerging health threats and conduct disease surveillance for Allegan County.

MONKEYPOX

Monkeypox is a rare disease caused by an infection with the monkeypox virus, which was initially discovered in 1958. The name ‘monkeypox’ was derived following two outbreaks of a pox-like disease in colonies of monkeys that were preserved for research purposes. The first human case of monkeypox was documented in 1970 in the Democratic Republic of Congo. For more information and key facts about this poxvirus, visit: [World Health Organization: Monkeypox](#) and [CDC | Monkeypox | Poxvirus](#).

Globally, a number of non-endemic countries have reported to the World Health Organization (WHO) of having identified the largest cluster of these cases. Epidemiological investigations are ongoing (internationally) and the route of transmission between individuals identified in these clusters are under further study. For a detailed list of the outbreaks reported in non-endemic countries, visit: [Multi-country monkeypox outbreak in non-endemic countries \(who.int\)](#)

CDC is urging U.S. healthcare providers to be alert for patients associating with rash-illnesses. For information regarding CDC’s clinician recommendations, visit [2022 United States Monkeypox Case | Monkeypox | Poxvirus | CDC](#).

As of June 14, 2022, MDHHS’ Regional Epidemiologist Report has released the following key resources and information related to the monkeypox disease:

- United States: 35 confirmed monkeypox/orthopoxvirus cases in 14 states and the District of Columbia ([CDC US Map](#))
- Global: 1,088 confirmed cases in 29 countries ([CDC Global Map](#))

MDHHS is actively working with the CDC to establish further action-steps and processes in place for state and local health response to the monkeypox virus. On May 20, 2022 the CDC and Michigan Health Alert Network (MI-HAN) issued that **suspicion for monkeypox should be heightened if the rash occurs in individuals who:**

- Traveled to countries with recently confirmed cases of monkeypox
- Reported as having had contact with a person or people who have a similar appearing rash or received a diagnosis of confirmed or suspected monkeypox, or is a man who regularly has close or intimate in-person contact with other men, including those met through an online website, digital application (“app”), or at a bar or party
 - Lesions may be disseminated or located on the genital or perianal area alone. Some patients may present with proctitis, and their illness could be clinically confused with a sexually transmitted infection (STI) like syphilis or herpes, or with varicella zoster virus infection
- Clinicians should consult their local health department if they suspect monkeypox; if the local health department cannot be reached, notify MDHHS Bureau of Infectious Disease Prevention for case evaluation and specimen testing coordination at 517-335-8165 or, if afterhours, at 517-335-9030

A summary of the first 17 cases in the US was released by the CDC in the June 3, 2022 Morbidity and Mortality Weekly Report (MMWR) [Monkeypox Outbreak — Nine States, May 2022](#)

- 14 patients reported international travel involving 11 countries during the 21 days preceding symptom onset
- 16 patients identified as men who have sex with men (MSM)
- All patients were adults (average age = 40 years; range = 28–61 years)

Data as of June 21, 2022

- The symptom onset for ‘rash’ was reported for the timeframe May 1, 2022 through May 27, 2022
- 12 patients reported prodromal symptoms before rash onset such as fatigue, fever, or headache.
- Among 8 patients, the rash started in the genital or perianal area. All but 1 patient developed a disseminated rash, occurring on the arms, trunk, legs, and face.

The COVID-19 pandemic led the current presidential administration to re-evaluate its biodefense strategies. The new Senior Director for Global Health Security and Biodefense on the United States National Security Council, Raj Panjabi, is in charge of overseeing the current monkeypox outbreak. The outbreak mirrors the difficulties experienced during the COVID-19 pandemic, for instance, challenges with global communication, limited supply of vaccines and overall inequities in healthcare access. This new role may present opportunities for funding additional public health resources and will ensure more coordinated responses to future pandemics.

MONKEYPOX: WHAT TO KNOW

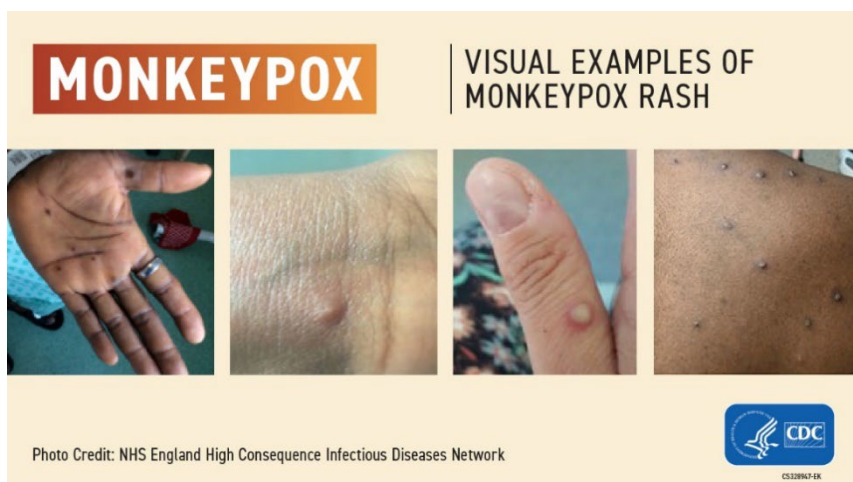
The risk for getting monkeypox in the United States is low, but it’s important to know the symptoms. Anyone who has a rash that looks like monkeypox and has had potential exposure to the virus should talk to their healthcare provider. A monkeypox rash may initially appear similar to pimples, blisters, or raised bumps, and it may be accompanied by fever and chills.

Monkeypox can spread to anyone through close, personal, often skin-to-skin contact including:

- Direct contact with monkeypox rash, sores, or scabs
- Contact with objects, fabrics (clothing, bedding, or towels), and surfaces that have been used by someone with monkeypox
- Through respiratory droplets or oral fluids from a person with monkeypox
- This contact can happen during intimate sexual contact

Early flu-like symptoms of monkeypox can include:

- Fever, headache, muscle aches and backache, swollen lymph nodes, chills, exhaustion
- Rash or sores, sometimes located on or near the genitals or anus, but sometimes in other areas like the hands, feet, chest, or face – sores will go through several stages before healing
- Monkeypox can be spread from the time symptoms start until all sores have healed and a fresh layer of skin has formed – this can take several weeks.



To know what to look for visit the [CDC Monkeypox Signs and Symptoms page](#) or click the image to the left.

People with symptoms of monkeypox, including unexplained lesions or rash, should contact their health care provider for an evaluation and should avoid close contact with others, including intimate or sexual contact until they are evaluated or tested. If you have monkeypox, follow the treatment and prevention recommendations of your healthcare provider.

HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI)

As of **June 11, 2022**, the statewide stop on poultry and waterfowl exhibitions has been lifted. According to the Centers for Disease Control and Prevention (CDC), detection remains low and no bird products infected with HPAI will enter the commercial food chain. HPAI can still be detected in wild birds throughout the state, it is important for owners and caretakers of domestic birds to take all precautions to protect their flock. More information on the lifting of the stop can be found in the [frequently asked questions](#) available at Michigan.gov/BirdFlu. Read [previous BOC updates on HPAI](#).

Biosecurity tips for HPAI flock owners should keep in mind:

- Prevent contact between domestic and wild birds by bringing them indoors or keeping them in fully enclosed outdoor areas
- Wash your hands and gear before and after handling birds as well as moving between different coops
- Discard equipment if it cannot be disinfected
- Do not share equipment or other supplies between coops and other farms
- Using well or municipal water as drinking water for birds
- Keeping poultry feed secure to ensure there is no contact between the feed/feed ingredients and wild birds or rodents

Even though the statewide stop had been lifted and we have not seen further cases of the disease in Michigan’s domestic birds, it is important to take all the necessary precautions if signs of HPAI are present.

- If avian influenza is **suspected in domestic birds**, contact MDARD **immediately** at 800-292-3939 (daytime) or 517-373-0440 (after-hours).

If anyone notices what appears to be unusual or unexplained deaths among wild bird populations, please report these cases to the DNR by:

- [Eyes in the Field app](#). Choose the “Diseased Wildlife” option among the selections for “Observation Forms.”
- Calling the DNR Wildlife Disease Laboratory at 517-336-5030

Resources on HPAI

- [May 10 – MDARD’s director stops bird exhibitions to protect health of Michigan’s domestic flocks](#)
- [USDA APHIS | 2022 Detections of Highly Pathogenic Avian Influenza in Wild Birds](#)
- CDC, Feb 14, 2022: [Recent Bird Flu Infections in U.S. Wild Birds and Poultry Pose a Low Risk to the Public | Avian Influenza \(Flu\) \(cdc.gov\)](#)
- USDA Statistics:
 - [2022 Confirmations of Highly Pathogenic Avian Influenza in Commercial and Backyard Flocks](#)
 - [2022 Detections of Highly Pathogenic Avian Influenza in Wild Birds](#)
- [Additional information for Michigan can be found at www.mi.gov/birdflu](#)

ACHD continues to monitor and share information related to HPAI to alert people who own or work with birds, including poultry, or hunt wild birds to the possibility of infection and the need to take recommended precautions.

HEAT-RELATED ILLNESSES (HRI)

Heat-related illness occurs when the body cannot effectively acclimate to high temperatures, causing physical illness including cardiovascular and respiratory complications, renal failure, kidney stones, preterm birth and death. As global temperatures warm, HRIs are becoming more common in areas where they have not been as prevalent in the past. During the week of June 13, over one third of the United States population was under [heat advisories](#), including most of Michigan.

[The National Weather Service \(NWS\)](#) issued an excessive heat warning for parts of southern Michigan, from Wednesday, June 15 through Thursday, June 16. The rest of the Lower Peninsula was under a heat advisory during the same time period. Throughout the

Data as of June 21, 2022

lower peninsula, temperatures were near or exceeded 100 degrees Fahrenheit. That, coupled with humidity levels made it feel as high as 110 degrees Fahrenheit in some areas. Counties that were under excessive heat warning include: Berrien, Branch, Cass, Hillsdale, St. Joseph and southeastern counties of Lenawee, Livingston, Macomb, Monroe, Oakland, Washtenaw, and Wayne. On Tuesday, June 14, following a spike in mid-May, 15 additional HRI ED visits were reported to The National Syndromic Surveillance Program (NSSP) from Region 5 facilities. The age group with the most HRI ED visits was 18-44 (40%).

Specific groups of [individuals](#) are more sensitive to the effects of high temperatures and may be at greater risk for heat illness. For more information on how to protect individuals from these vulnerable populations, visit:

<https://www.cdc.gov/disasters/extremeheat/specificgroups.html>

The CDC has a series of resources related to heat-related illness:

- [CDC Heat & Health Tracker](#)
- [Protecting Vulnerable Groups from Extreme Heat](#)
- [Tips for Preventing Heat-Related Illness](#)
- [Warning Signs and Symptoms of Heat-Related Illness](#)

MDHHS HRI Resources and Guidance:

- [Michigan Heat Awareness and Safety Fact Sheet](#)
- [Michigan Prepares - Extreme Heat](#)
- For those in need of air conditioning, you can apply for State Emergency Relief (SER) by visiting [MI Bridges](#).
- Text or call [Michigan 211](#)
- Use a buddy system - check on a friend or neighbor and have someone do the same for you
- Spend some time at a shopping mall, public library, or other public buildings - even a few hours spent in air conditioning can make a difference

STAYING SAFE IN HIGH TEMPERATURES THROUGHOUT THE SUMMER

SIGNS OF HEAT-RELATED ILLNESS:



HEAT EXHAUSTION	HEAT STROKE
<ul style="list-style-type: none"> • Rapid, weak pulse • Nausea or vomiting • Dizziness • Weakness • Fainting • Thirst • Heavy sweating • Elevated body temperature • Decreased urine output • Cool, pale, clammy skin • Muscle Cramps 	<ul style="list-style-type: none"> • Rapid, strong pulse • Nausea or vomiting • NO sweating • Throbbing headache • Confusion, altered mental status, slurred speech • Loss of consciousness (coma) • Red, hot, dry skin • Seizures • Very high body temperature (above 103 degrees)
<p>WHAT YOU SHOULD DO:</p> <ul style="list-style-type: none"> • Get to a cooler or air-conditioned place • Drink water if fully conscious • Take a cool shower or use a cold compress 	<p>WHAT YOU SHOULD DO:</p> <p>CALL 9-1-1 immediately</p> <ul style="list-style-type: none"> • Take action to cool the person down until help arrives by moving into a cooler place and applying cold compresses

(Information adapted from CDC: www.cdc.gov/disasters/extremeheat/warnings)

Last week, on June 14 – June 16, Allegan County and places throughout Michigan were experiencing extreme heat. As the summer is just getting started, ACHD is encouraging residents to take precautions in extremely warm weather to avoid heat-related illness.

Even a short amount of time in extreme heat can lead to heat-related illness. Heat-related illnesses are preventable conditions caused by your body overheating, usually in high temperatures, high humidity, and during strenuous activity. It's important to know the signs of heat-related illnesses, such as heat exhaustion and heat stroke, so you can look out for yourself and others who may have a sensitivity to heat such as the elderly and small children.

If you notice any of the signs of heat-related illness, seek medical assistance immediately and try to cool down yourself or the person overheating.

Tips for beating the heat and protecting yourself, loved ones, and pets include:

- Dressing in loose-fitting, lightweight, light-colored clothing
- Staying hydrated with plenty of water
- Keeping strenuous activity to a minimum during the hottest parts of the day (11 am – 2 pm)
- Staying indoors and in the shade
- Preparing for potential loss of power due to weather and high demand for electricity
- Going to a public location nearby with air conditioning if you do not have air conditioning*

*Residents who may have mobility issues may contact the Allegan County Transportation Office at 269-673-4229 and schedule a ride, Monday through Friday 8 am – 4 pm. All fees for transportation to these facilities still apply. Volunteer drivers are available for seniors and veterans by calling 269-686-5164.

For more information and tips on beating the heat and keeping healthy in high temperatures, visit: <https://bit.ly/3mMQhhr>.

ADENOVIRUS AND ACUTE HEPATITIS

In October 2021, five pediatric patients with hepatitis (inflammation of the liver) of unknown cause were identified in children at a hospital in Alabama. The children had significant liver illness, including liver failure, with no known cause. All five children tested positive for [adenovirus](#), a common virus that typically causes cold- or flu-like symptoms, and more rarely, stomach or intestine problems. An additional review of hospital records later identified four additional patients, all of whom had hepatitis and adenovirus infection.

On May 27, 2022, the [World Health Organization](#) reported at least 650 probable cases of acute pediatric hepatitis with unknown etiology in 33 countries, more than double the amount since April. More than 200 cases have been detected in the U.S. and Puerto Rico (including Michigan). Worldwide, the children's ages range from 1 month to 16 years old; however, more than 75% of cases are among children under 5 years of age. Approximately 6% of cases required transplant and 1% of cases have died.

Adenovirus infection has been seen in about 35% of U.S. pediatric cases of acute hepatitis. On its own, an adenovirus is relatively harmless, but in the presence of a weakened immune system, it can cause severe infection. Investigators are looking into a potential link to COVID-19. Prior COVID-19 infection may have primed the immune systems of these children to being more susceptible to the adenovirus, which has a strong correlation to the hepatitis¹⁶ outbreak. Another contributing factor to consider; social distancing measures enacted during the COVID-19 pandemic may have reduced the population's ability to build up immunity against adenoviruses. Researchers are looking into several theories as they work to determine the actual source(s) of this outbreak.

Symptoms of hepatitis can include jaundice or a yellowing of the skin and/or eyes, dark urine, fever, fatigue, nausea, vomiting and joint pain. Most of the children infected are not eligible for the COVID vaccine, so there is no evidence that it played a role in the spread of this illness. Hand hygiene, respiratory hygiene, and cough etiquette should be followed to reduce spread. Use of disposable gloves when caring for infected patients is recommended.

Acute Hepatitis Updates:

- As of June 8, 2022, CDC and state partners are investigating 274 children with hepatitis of unknown origin across 39 states and territories which is an increase of 165 from the 109 cases reported on May 5
- More than half of the cases have tested positive for adenovirus.
- More than 90% hospitalized, 9% with liver transplants, and 5 deaths are under investigation
- 90% were hospitalized
- To date, 3 children from east Michigan have been diagnosed with acute hepatitis

The World Health Organization has declared a **moderate** risk level for acute pediatric hepatitis.

¹⁶ The most common causes of acute hepatitis are the viral hepatitis infections A and E, less commonly hepatitis B and C

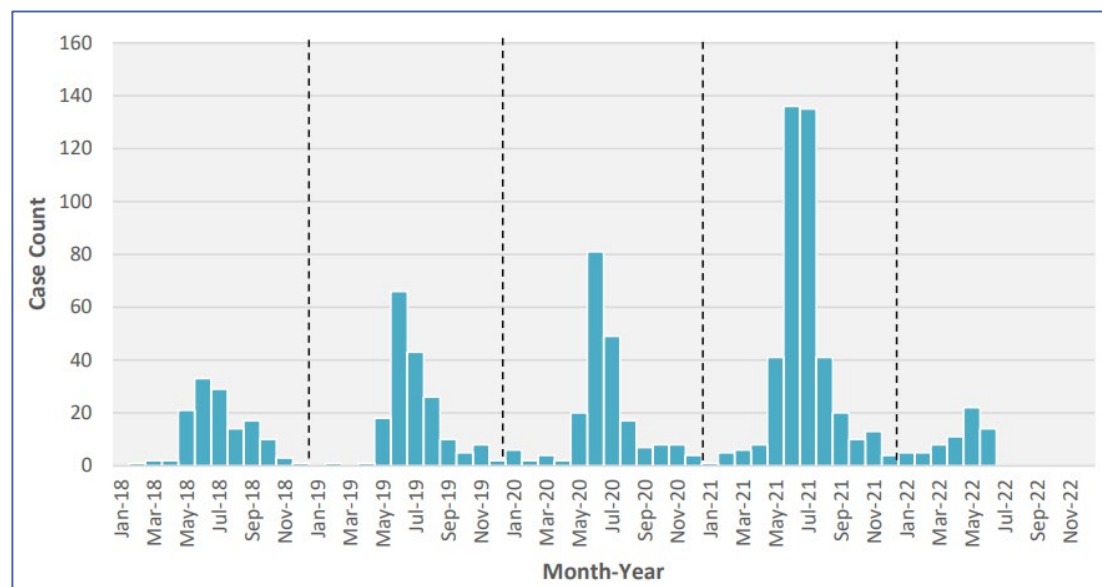
The CDC issued an updated HAN on May 11: [Updated Recommendations for Adenovirus Testing and Reporting of Children with Acute Hepatitis of Unknown Etiology](#). Additional HAN updates will be distributed when more information is available.

VECTOR-BORNE DISEASES

Vectors are living organisms (ticks, mosquitos, etc.) that can transmit infectious pathogens between humans, or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later transmit it into a new host, after the pathogen has replicated in their bodies. Once a vector becomes infectious, it is very likely that they will be capable of transmitting the pathogen for the rest of their life during each subsequent bite or blood meal. The World Health Organization reports, vector-borne diseases account for more than 17% of all infectious disease, causing more than 700 000 deaths annually. A warmer climate provides **more geographical area** for vectors to expand their habitats as well as **more time** to reproduce

Over the last five years, vector-borne disease prevalence has increased for Region 5 in Michigan. ACHD continues to monitor vector-borne diseases as we enter the summer months. For more information, visit: [Division of Vector-Borne Diseases \(DVBD\) | Division of Vector-Borne Diseases | NCEZID | CDC](#)

Five-Year Summary of Vector-Borne Cases for Region 5



On May 25, MDHHS released [updated Guidance](#) for Tick bites

Lyme disease, caused by the bacterium *Borrelia burgdorferi*, is the most common tick-borne disease in Michigan and the US. Tick-borne disease include: Lyme disease, Anaplasmosis, Babesiosis, Ehrlichiosis, Powassan Virus Disease, *Borrelia miyamotoi* Disease, *Borrelia mayonii* Disease, Rocky Mountain Spotted Fever (RMSF), and

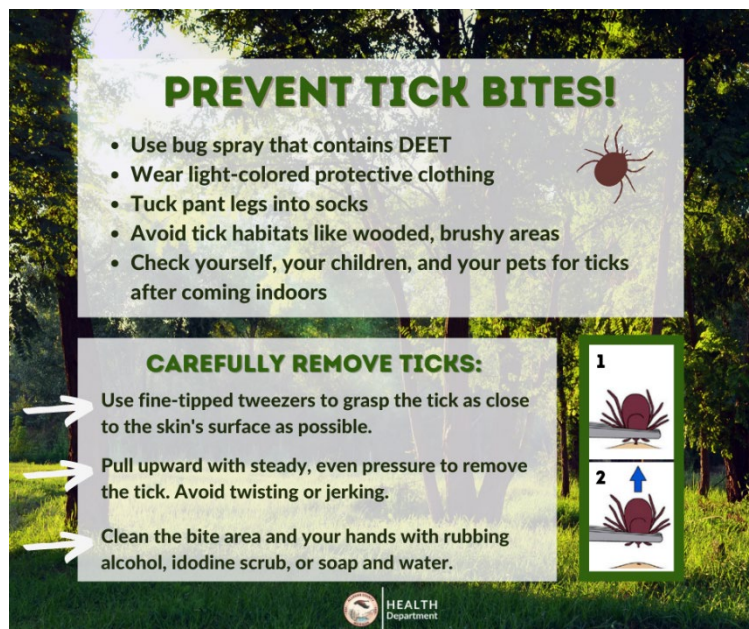
Tularemia. In 2021, there were 878 confirmed and probable reported cases of Lyme disease, nearly double the 451 cases reported in 2020. Early symptoms can be non-specific and include fever or chills, rash, headache, fatigue and muscle aches. Early treatment with appropriate antibiotics can decrease the risk of serious complications. Visit [Ticks | Ticks | CDC](#) for more information.

Protect yourself and your family against tick-borne diseases by following these tips:

- Avoid areas where ticks live such as grassy, brushy and wooded spaces
- Use insect repellent
- Perform daily tick checks
- Bathe or shower as soon as possible after coming indoors

Vector-Borne Disease Quick Stats:

- Approximately 476,000 people are diagnosed with Lyme disease in the US each year
- A new vaccine for being evaluated for ages 5+ with availability projected for 2025 now undergoing phase 2 clinical trials in Europe and the US
- After arriving in the New York in 1999, West Nile virus is the leading cause of mosquito-borne illness in the US
- The largest outbreak of West Nile Virus to date was recorded last summer in Arizona
- Singapore is currently experiencing dengue emergency



RECENT OUTBREAKS RELATED TO FOODBORNE ILLNESS

Foodborne illnesses are caused by consumption of a contaminated food or drink. The CDC has a program called the Foodborne Diseases Outbreak Surveillance System (FDOSS), which aims at collecting and reporting foodborne disease outbreak in the U.S. The information collected via FDOSS provide data around the following key elements of foodborne illnesses:

- Foods associated with outbreaks
- Germs associated with outbreaks
- Where germs contaminate food
- Places outbreaks happen (including where food is prepared and consumed)

An estimation provided by the CDC based on the FDOSS data collection is that approximately **9.4 million individuals develop foodborne illnesses from 31 foodborne germs in the U.S. and 56,000 hospitalizations and 1,350 deaths associated with these illnesses**. A foodborne disease outbreak occurs when an illness is reported in two or more individuals resulting from consuming the same contaminated food or drink. Overall, more than 250 agents are found to cause outbreaks related to foodborne illnesses. For more information on current foodborne outbreaks, visit [FDA: Investigations of Foodborne Illness Outbreaks](#)

The Regional Epidemiologist Update Report released on June 14, 2022 highlighted the following information related to outbreaks caused by food consumption:

[Salmonella Senftenberg Outbreak Linked to Peanut Butter](#)

- As of June 1, 2022: 14 cases from 12 states (none in Michigan)
- 2 hospitalizations, 0 deaths
- Illness onset date range: Feb 17, 2022 through May 2, 2022
- On May 20, 2022, J.M. Smucker Company recalled [Jif brand peanut butter](#)

[Hepatitis A Outbreak linked to Strawberries](#)

- The FDA, along with CDC, and state and local partners, is investigating a multistate outbreak of hepatitis A infection in the US linked to fresh organic strawberries.

Data as of June 21, 2022

- As of 6/1/2022: 17 cases from California (15), Minnesota (1), North Dakota (1)
- 12 hospitalizations, 0 deaths
- Potentially contaminated strawberries were imported from Baja California and branded as FreshKampo and HEB; they were purchased between March 5, 2022, and April 25, 2022.

FOOD SAFETY TIPS FOR THE SUMMER

This summer when shopping for fresh fruits and vegetables at the grocery store and when preparing foods at home, it's important that individuals follow food safety tips to prevent themselves and loved ones from food borne illnesses.

When at the store or market, make sure to:

- Choose produce that isn't bruised or damaged.
- Choose fruits and vegetables that are refrigerated or kept on ice if they are pre-cut.
- Separate fruits and vegetables from raw meat, poultry, and seafood in your shopping cart and grocery bags.

When preparing foods at home, make sure to:

- Wash your hands, kitchen utensils, and food preparation surfaces, including chopping boards and countertops, before and after preparing fruits and vegetables.
- Clean fruits and vegetables before eating, cutting, or cooking, unless the package says the contents have been washed.
 - Wash or scrub fruits and vegetables under running water—even if you do not plan to eat the peel. Germs on the peel or skin can get inside fruits and vegetables when you cut them.
 - Washing fruits and vegetables with soap, detergent, or commercial produce wash is not recommended. Do not use bleach or other disinfecting products on fruits and vegetables.
 - Cut away any damaged or bruised areas before preparing or eating.
 - Dry fruit or vegetables with a clean paper towel.
- Keep fruits and vegetables separate from raw foods that come from animals, such as meat, poultry, and seafood.
- Refrigerate fruits and vegetables within 2 hours after you cut, peel, or cook them (or 1 hour if exposed to temperatures above 90°, like a hot car or picnic). Chill them at 40°F or colder in a clean container.

FRUIT AND VEGETABLE SAFETY

For more information on fruit and vegetable safety click the image to the left.

At the Store



Choose produce that is not bruised or damaged.



Select precut produce that is refrigerated or kept on ice.



Separate produce from raw meat, poultry, and seafood in your shopping cart and grocery bags.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

www.cdc.gov/foodsafety

CS302879E

FORMULA FEEDING TIPS AND RESOURCES

With the recent shortage of baby formula, many parents are trying to find different ways and/or resources to feed their children. It is important while finding outside resources that you consider the safety of some products. According to WIC Michigan, here are some [temporary choices for powder formula](#).

Some tips to keep in mind during this Infant Formula Shortage:

- Buy only the formula needed soon (10-14 days) and avoid stockpiling. This helps other families have access to formula and gives stores time to restock their shelves.
- Talk with your pediatrician and/or other health care provider about substitutes
- Check food pantries, charitable organizations, and with others that may be able to help. Call 211 or your local WIC clinic to learn more about local food pantries.
- If you cannot find formula, you can also call your health care provider. They may have samples or ideas about other local agencies that can help.
- **Do not** buy formula from sources that are not trustworthy, as it may be a scam.
- **Do not** buy or use recalled formula.

For more information about finding formula and the formula shortage visit, [US Department of Health and Human Services: Find Formula During Infant Formula Shortage website](#).

Some formula-feeding tips from the American Academy of Pediatrics:

If you feed your baby formula, make sure to always:

- Choose a formula product that has been reviewed by and meets FDA minimum nutritional and safety requirements
- Prepare it according to directions on the label, unless you are given different instructions by your pediatrician because of a special medical need your baby has.

What's important NOT to do:

- Do not make a homemade formula from ingredients at the store, such as powdered cow milk or raw milk and sugar.
- Do not feed your infant under 1 year old cow milk or other milk **substitutes** from the dairy section of the grocery store, such as almond or soy beverages (sometimes labeled as milk).
- Do not use imported formulas from other countries that are not reviewed by the FDA.
- Do not water down formulas by adding more water when mixing powdered formula or adding extra water to ready-to-serve, non-concentrated liquid formula.

SOURCES

- Allegan County Health Department Facebook page
- [American Academy of Pediatrics: Hepatitis Cases Possibly Associated with Adenoviral Infection](#)
- [Centers for Disease Control and Prevention](#)
- [CDC COVID-19 Data Tracker](#)
- [CDC COVID-19 Travel Guidance](#)
- [CDC Extreme Heat Safety](#)
- [CDC Frequently Asked COVID-19 Questions for K-12 Settings and ECE](#)
- [CDC Fruit and Vegetable Food Safety](#)
- [CDC Health Alert Network](#)
- [CDC Monkeypox Signs and Symptoms](#)
- [CDC Provisional COVID-19 Deaths: Focus on Ages 0-18 Years](#)
- [CDC Stay Up-to-date on Vaccinations](#)
- [COVID Data Tracker Weekly Review](#)
- [COVID-19 Vaccine Dashboard](#)
- CHN Associates, Student, and Family Assistance Program Monthly Report
- [Division of Vector-Borne Diseases \(DVBD\) | Division of Vector-Borne Diseases | NCEZID | CDC](#)
- [FDA: Investigations of Foodborne Illness Outbreaks](#)
- [Find a COVID-19 Vaccine Near You](#)
- HONU
- [Long Term Care Data](#)
- [MDHHS – Booster Doses available for Children 5-11](#)
- [MDHHS Quarantine and Isolation Guidance](#)
- [MDHHS School Outbreak Reporting](#)
- [MI Bridges](#)
- [MI COVID response Data and Modeling](#)
- [Michigan Coronavirus: COVID-19 Vaccine](#)
- [Michigan COVID-19 Wastewater Testing and SWEEP Dashboard](#)
- [Michigan Coronavirus Data](#)
- Michigan Department of Health and Human Services (MDHHS) Breakthrough Cases Data File
- Michigan Disease Surveillance System (MDSS)
- [Michigan DNR Eyes in the Field](#)


Data as of June 21, 2022

- Michigan Health Alert Network (MIHAN)
- [MI Safe Start Map and CDC Indicators](#)
- [National Weather Service](#)
- [New COVID-19 Cases Worldwide - Johns Hopkins Coronavirus Resource Center \(jhu.edu\)](#)
- [Office of International Health and Biodefense - United States Department of State](#)
- [Our World in Data - Coronavirus \(COVID-19\) Hospitalizations](#)
- [Ticks | Ticks | CDC](#)
- [US Food and Drug Administration](#)
- [US Department of Health and Human Services: Find Formula During Infant Formula Shortage website](#)
- [Vaccinate West Michigan](#)
- [Vector-borne diseases \(who.int\)](#)
- [VRBAC June 15, 2022 Meeting Presentation: Under 5 Vaccinations](#)
- [World Health Organization Coronavirus Dashboard](#)
- [WHO: Weekly epidemiological update on COVID-19 - 15 June 2022](#)
- [WIC temporary choices for powder formula](#)
- [Your Local Epidemiologist: FDA Meeting for <5 COVID Vaccine: Q&A](#)
- [Your Local Epidemiologist: Long COVID Mini Series: Kids](#)
- [Your Local Epidemiologist: COVID-19 Vaccine For Kids <5](#)


APPENDICES

Allegan County COVID-19 Community Level: LOW

Allegan County Health Department recommends everyone to:




Stay up to date on your COVID-19 Vaccines



Get tested if you have symptoms, before and after traveling, and before gathering with others.

Actions including social distancing, frequent handwashing, wearing a well-fitted face mask, and isolation/quarantine help lessen the level of transmission. People may choose to mask at any time.

People with symptoms, a positive test, or exposure to someone with COVID-19 should wear a mask.



Learn more about CDC's COVID-19 Community Levels by visiting www.covid.cdc.gov

#DoYourPart

Allegan County COVID-19 Community Level: LOW

Pick-up Free Masks

- Monday-Friday 8:30am to 4:30pm at the Allegan County Health Department (3255 122nd Ave, Allegan)
- At select local units of government and libraries.
 - Visit allegancounty.org/covid to view the list of agencies under our Mask Information page.

Get Tested:

- Order free at-home test kits online at:
 - www.covidtests.gov
 - www.accesscovidtests.org
- Pick-up test kits locally:
 - Visit www.allegancounty.org/covid to view pick-up locations under our Testing page.
- Find a community testing site near you at:
 - Allegan County Transportation Building (750 Airway Dr, Allegan) on Wednesdays and Fridays from 12 pm to 5 pm.
 - Visit www.solvehealth.com for more locations near you.

Find COVID-19 Treatments

- Find information and options near you: michigan.gov/covid19therapy
- View a test to treat location near you: aspr.hhs.gov/TestToTreat
- Talk to your doctor about treatment options if you test positive for COVID-19.

Stay up-to-date on COVID-19 Vaccines

- Find vaccine clinics near you at:
 - vaccinatewestmi.com
 - vaccines.gov
- Or call ACHD at 269-673-5411 to schedule an appointment



#DoYourPart

COVID-19 VACCINE FOR KIDS <5

Top 6 parental concerns answered

June 2022

- For children **under 5 years old**, parents have two options for a COVID-19 vaccine:
 - **Moderna:** 2-dose series taken 4 weeks apart. Each dose is 25 µg, which is 1/4 the dosage of the adult vaccine.
 - **Pfizer:** 3-dose series. Dose 2 is 3 weeks after Dose 1. Dose 3 is 8 weeks after Dose 2. Each dose is 3 µg.

The vaccines are effective

- Moderna's** clinical trial included 6,300 children.
- Antibodies after Dose 2 were the same or exceeded those in adults.
 - Efficacy against infection was 51% for 6–23 month olds and 37% for 2–5 year olds.
 - Efficacy was consistent with vaccine effectiveness for adults during Omicron.
 - A booster will likely be needed. Studies are underway and results are expected at end of summer.
- Pfizer's** clinical trial included 1,400 children.
- Antibodies after Dose 3 exceeded adults.
 - Efficacy against infection after Dose 3 was 75% for 6–23 month olds and 82% for 2-4 year olds.
 - There were extremely few cases during the trial, so there is significant uncertainty around these efficacy numbers.
 - Note: Efficacy for these two vaccines cannot be directly compared due to varying length of follow-up, months the study was conducted (and thus, circulating virus), and different number of doses.
 - Vaccines can prevent infection and transmission, especially in the first few months. Unfortunately, as the virus continues to mutate, this timeline can be shortened. The **vaccines' primary purpose is to prevent severe disease and death.** Both vaccines are expected to decrease hospitalizations and ICU stays among this age group.

The vaccines are safe

- During both clinical trials:
- Temporary pain at injection site was common.
 - Fevers were more common after vaccine than placebo.
 - Fatigue and headache was most common in children ages 2–5 years; irritability and sleepiness was more common in children ages 6–23 months.
 - Side effects were more common with Moderna compared to Pfizer.
 - Serious adverse events were rare. No deaths occurred.
 - A child in each trial had a high fever which led to seizure or hospitalization.

Myocarditis is rare

- Myocarditis (heart inflammation) has been linked to mRNA vaccines in *adolescents*, but remains rare. Risk of myocarditis after mRNA COVID-19 vaccination, if any, in young children is unknown.
- No cases of myocarditis were reported in clinical trials. But the clinical trials were not large enough to capture such rare events.
 - Based on the epidemiology of classic myocarditis and safety monitoring in children ages 5–11 years, myocarditis after mRNA COVID-19 vaccination in young children is expected to be rare due to smaller doses and myocarditis being fundamentally different in young children.
 - Kids can get myocarditis from the virus, and it can be more severe.

There is a need

- COVID-19 disease in kids can range from asymptomatic to severe illness.
- The majority of children have mild-to-moderate disease.
 - COVID-19 can cause severe disease, even among healthy children.
 - **Deaths:** Since 2020, 442 children aged 0–4 years old have died from COVID-19. While this is lower than adults, COVID-19 is a top 10 leading cause of death for kids.
 - **Hospitalizations:** During the first Omicron wave, COVID-19 hospitalization among kids under 5 were higher than for any other child age group.
 - 86% of hospitalizations were *for* COVID-19 (as opposed to *with* COVID-19)
 - Hospitalizations passed previous flu peaks and previous COVID-19 peaks.
 - Of toddlers hospitalized for COVID-19, 1 in 4 went to the ICU.
 - 30–50% of hospitalized children had **no** underlying medical condition
 - Long COVID-19 occurs among kids. Vaccines reduce the risk of long COVID-19.

Previously recovered still need the vaccine

- As of February 2022, 75% of children had been infected with SARS-CoV-2 in the U.S.
- Getting a vaccine, even for people who have already recovered from COVID-19, strengthens their immune response. CDC states vaccinations **can** be delayed up to 3 months after infection.
 - Protection from infections can be effective, but a recent study showed some children *failed* to make antibodies after infection (the immune system's first line of defense) and had mediocre T-cell responses (the immune system's second line of defense).
 - Reinfection should be expected. SARS-CoV-2 is changing quickly.
 - Omicron infections do not elicit antibodies against *other* variants of concern. While Omicron may be the dominant variant right now, this could change in the future.

Long-term side effects, like infertility, are highly unlikely

- We do not know the long-term effects of mRNA COVID19 vaccines. However, based on our knowledge of mRNA and the human body, we do not expect them:
- It's biologically impossible for mRNA to alter DNA.
 - Previous research on other mRNA vaccines show no long term effects. mRNA research started in 1961. The first clinical trial with mRNA was in 2001.
 - Vaccine ingredients are cleared from the body very quickly. mRNA is very fragile and degrades within 72 hours of injection. Fat bubbles that carry the mRNA degrade within 4 days. Ingredients do not linger in the body.
 - mRNA vaccines are not made of the actual pathogen. This means that they don't contain weakened, dead, or noninfectious parts of a virus.
 - In the history of vaccines, serious adverse side effects only occur within the first 2 months of rollout. We have more than 24 months of vaccine follow-up data by now.
 - Thousands of people have gotten pregnant after vaccination.
 - There are reports that menstrual cycles change after a COVID19 vaccine. The body is mounting an immune response, and this is likely a temporary side effect, like a fever.

FREE AT-HOME TEST KITS TO ORDER ONLINE:

- www.Covidtests.gov - order 3 sets of 4 free at-home test kits from the federal government. (If you already ordered your first set, order a second or third today)
 - If you have health insurance through an employer or Marketplace, your insurance will pay you back for 8 at-home tests each month for each person on your plan. View more information [here](#).
- www.AccessCovidtests.org - order free at-home test kits through Project ACT (enter zip code to check eligibility)

FREE AT-HOME TEST KITS FROM MDHHS AVAILABLE AT 2 LIBRARIES IN ALLEGAN COUNTY:

- Allegan District Library (331 Hubbard St, Allegan)
- Fennville District Library (400 W Main St, Fennville)

FREE COMMUNITY TESTING EVENTS ARE HELD EVERY WEDNESDAY AND FRIDAY AT THE ALLEGAN COUNTY TRANSPORTATION BUILDING FROM 12 PM – 5 PM. THESE EVENTS OFFER PCR AND RAPID TESTING OPTIONS.

VISIT THE [MDHHS COMMUNITY BASED POP-UP TESTING PAGE](#) TO SIGN UP FOR THE TESTING EVENTS AT ALLEGAN TRANSPORTATION BUILDING AND TO FIND OTHER TESTING SITES NEAR YOU.

Visit <https://www.solvehealth.com/covid-testing> to find additional COVID-19 sites near you.

COVID-19 testing location finder: [Coronavirus - Test](#)

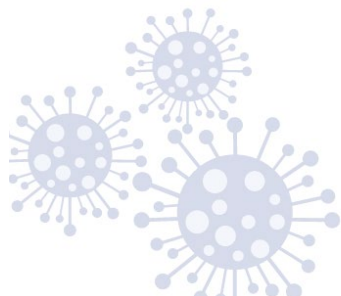


HEALTH
Department



COVID-19 BOOSTERS AVAILABLE FOR AGES 5-11

VACCINES ARE AVAILABLE AT ACHD BY APPOINTMENT ONLY. CALL 269-673-5411 TO SCHEDULE AN APPOINTMENT!



TO FIND OTHER VACCINATION LOCATIONS NEAR YOU VISIT:
VACCINATEWESTMI.COM &
VACCINES.GOV