

COVID-19 BOARD OF COMMISSIONER UPDATE

APRIL 26, 2022 Data as of April 25, 2022

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EXECUTIVE SUMMARY

The following report contains COVID-19 related data from April 8, 2022, to April 21, 2022, on the 5 mitigation components Allegan County Health Department (ACHD) previously identified. Allegan County has remained at a low COVID-19 community level. Based on recent data collected, the Michigan Department of Health and Human Services (MDHHS) is expecting a slight increase in COVID-19 cases in late April and early May throughout Michigan. While our case numbers may double, it is not expected to be a sharp spike as previously experienced.

In preparation for this increase in cases, ACHD is recommending that residents <u>assess their personal and household risks</u> and take proper precautions to protect themselves and their loved ones. Residents are encouraged to <u>make a COVID-19 plan</u> for their household. This includes making sure they have access to well-fitted face masks and at-home test kits, talking to their doctor ahead of time about COVID-19 treatments, staying up-to-date with COVID-19 vaccines, getting tested when they develop symptoms or have been exposed to someone with COVID-19, and staying home when they are sick.

As of April 18, 2022, as a result of a court order, the <u>CDC's January 29, 2021 Order</u> requiring masks on public transportation conveyances and at transportation hubs is no longer in effect. CDC continues to recommend that individuals consider wearing masks on indoor public transportation. ACHD will continue to provide updated information to the community regarding current orders and recommendations for travel.

April is National Volunteer Month, and ACHD has taken the time to recognize over 200 volunteers that have helped with our COVID-19 response since March 2020. These volunteers served the Allegan County community in multiple different ways including working testing events, signing up community members for vaccination, and working at vaccination clinics throughout the County. In 2021, these volunteers assisted with the largest vaccination deployment in ACHD's history, with over 190 vaccination clinics held, and over 38,000 individuals vaccinated. This accomplishment could not have happened without the support and effort put in by volunteers. ACHD is thankful for the time these volunteers have spent providing services to their community to improve health outcomes. A special newsletter was sent to all Allegan County Volunteers and recognition was shared through ACHD's social media channels (@AlleganCountyHD).

On April 14, the Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) for the InspectIR COVID-19 Breathalyzer test. The test is for individuals who are 18 and older and can provide COVID-19 results within three minutes. The test can be administered by doctor's offices, hospitals, mobile testing units, and other health care providers who have been trained and legally authorized to administer the test. In a study of 2,409 people, with and without COVID-19 symptoms, the results showed that 91.2% percent of COVID-19 positive samples were correctly identified. Additionally, 99.3% percent of negative samples were correctly identified. ACHD will provide updates to the community when these tests become available in Allegan County.

COVID-19 MITIGATION COMPONENTS



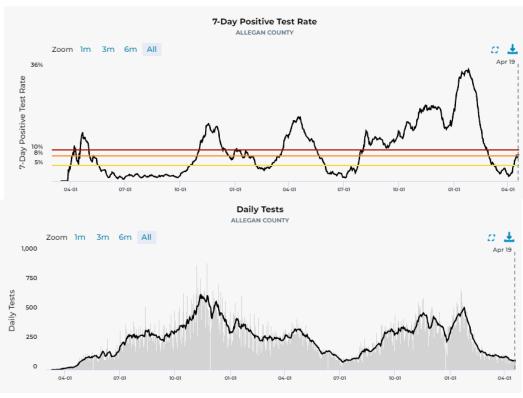
Allegan County currently is at a low community transmission level for COVID-19. At this time, ACHD is encouraging residents to stay <u>up-to-date</u> with their COVID-19 vaccines, be tested if they develop symptoms, and consider wearing a mask when needed.



ENHANCED ABILITY TO TEST

COUNTY-LEVEL DATA





The Test Positivity Rate for Allegan County is showing a slight upward trend for the last two weeks. Allegan County is currently at 8.3% 7-day positivity, with 659.4 daily administered tests per million. This is a 6.3% increase since the last update, with a lower number of tests administered (911.1 daily tests administered in the two weeks prior).

TEST AVAILABILITY

Daily tests administered have decreased since the Omicron surge. If/when cases rise in our community, leading to an increase in the need for testing, ACHD has worked with partners to expand testing access. Currently, there are multiple options in Allegan County where residents can obtain at-home testing kits or go get tested for COVID-19. Currently, at-home tests are not reported in the Michigan Disease Surveillance and majority of people are testing at home.

FREE AT-HOME TEST KITS TO ORDER ONLINE:

- www.Covidtests.gov order 2 sets of 4 free at-home test kits from the federal government. (If you already ordered your first set, order a second 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.solvhealth.com/covid-testing to find additional COVID-19 sites near you.
- COVID-19 testing location finder: Coronavirus Test

If residents are struggling to find accessible testing, they can call ACHD at 269-673-5411 option 2 and we can help them navigate the systems

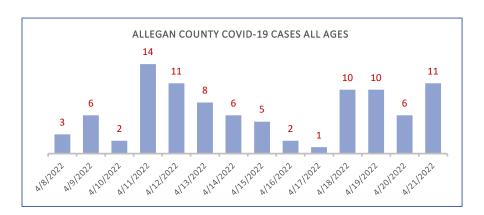
ROBUST CASE INVESTIGATION AND CONTACT TRACING

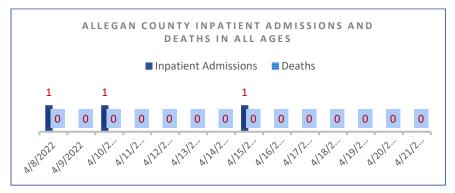
ALLEGAN COUNTY COVID-19 COMMUNITY LEVEL: LOW



Allegan County is in a low COVID-19 community level based on the new CDC framework, since February 24, 2022. Models are now showing an increase in actual cases for the last two weeks. During the period 4/13/2022-4/19/2022, Allegan County's case rate was 34.7 per 100,000.

OVERVIEW OF COVID-19 CASES AND DEATHS IN THE LAST TWO WEEKS (04/08/2022 - 04/21/2022)





During 04/08/2022 to 04/21/2022:

95 total cases were reported via the Michigan Disease Surveillance System (MDSS) for Allegan County.

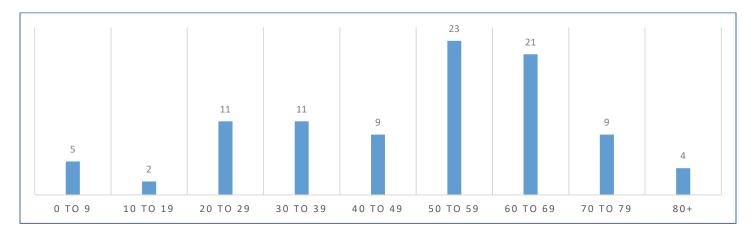
24.2% of the cases were reported in 50 to 59 years of age, which is the highest reporting age group during this timeframe.

The youngest inpatient admission was reported in 50 to 59 years of age.

There were **no deaths** related to SARS CoV-2 infection that were reported during this timeframe.

CASE INVESTIGATION

ACHD is currently working to investigate all communicable disease cases. Prioritized groups including individuals over the age of 65, school-aged individuals, and individuals that live or work in congregate care settings are being investigated. 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 given via email or text messages for a case investigation form. This makes it more convenient and efficient for the cases. Case investigation consists of contacting the individual and asking standard questions related to that disease and identify those who might have been exposed.



From 04/08/2022 to 04/21/2022, nearly 3% of cases were reported as asymptomatic in the Michigan Disease Surveillance System (MDSS). **10.5**% of investigated cases were **household close contacts** – meaning they lived with someone who tested positive and later tested positive themselves. Notifying close contacts helps individuals know about exposure and allows close contacts to make decisions that are more informed on their day-to-day lives. During the same timeframe, **1.1**% of cases were reported as **community contacts** (meaning close contacts who were in a setting other than a household), and **9.5**% of cases were **close contacts to those who work or live in a high-risk/congregate facility** in Allegan County.

From 04/07/2022 to 04/20/2022, Allegan County had a reported positivity rate of 7.5%, which is up from 2.6% in the previous 14-day time period of 03/24/2022 to 04/06/2022.

95 cases were reported in the MDSS from 4/8/2022 to 4/21/2022

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 Allegan County moves to a high level of community transmission, based on the CDC framework. During future times of surge, additional access to testing resources, vaccination clinics, and therapeutic treatment might be made available as the situation warrants.

609 exposure letters were sent out as of 04/25/2022

0 close contacts are currently being monitored as of 04/25/2022

OUTBREAKS & CLUSTERS

The following table shows the number of outbreaks that ACHD has identified for high-risk settings in Allegan County as of April 22, 2022. ACHD has not identified any new outbreaks related to schools since February 3, 2022. ACHD has not identified any new outbreaks in businesses since February 17, 2022. One new outbreak was identified at a congregate-care** facility during this reporting period. No additional outbreaks were reported for Long Term Care settings. ACHD reported two ongoing outbreaks and one new outbreak in the state's Situation Report as of April 21, 2022.

Type of Setting	Total Number of Outbreaks (10/21/21-4/22/22)
School	14
Business	8
Long Term Care*	18
Other Congregate Facilities**	2

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 outbreak. As of April 25, 2022, ACHD has connected three LTCFs in Allegan County with the iPRAT-Team for additional mitigation assistance.

439 resident cases and 52 resident deaths have been reported from January 1, 2020, to April 12, 2022

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 April 12, 2022.

According to statewide data¹, the case counts reported in both residents and staff are trending downwards in both Adult Foster Care (AFC)/Home for the Aged (HFA) and Skilled Nursing Facilities (SNF). Cases within LTCFs continue to be higher among staff than among residents, as has been the case throughout the Delta and Omicron surges.

751 staff cases have been reported from January 1, 2020, to April 12, 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 and non-COVID-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** has **2%** of inpatient beds that are COVID-19 positive, and the **Kalamazoo Region** has **3.3%** of inpatient beds that are COVID-19 positive, as of April 19, 2022.

HOSPITALS IN THE ALLEGAN COUNTY AREA

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

As of 4/18/2022

Hospital	COVID-19 Patients	COVID-19 Patients in ICU	Bed Occupancy %
Ascension Borgess Allegan Hospital	0	0	20%
Ascension Borgess Hospital	6	1	95%
Ascension Borgess-Pipp Hospital	1	0	59%
Bronson Methodist Hospital	17	2	92%
Bronson South Haven	0	0	75%
Holland Community Hospital	2	0	72%
Mercy Health Mercy Campus	6	0	75%
Mercy Health St. Mary's Main Campus	6	0	65%

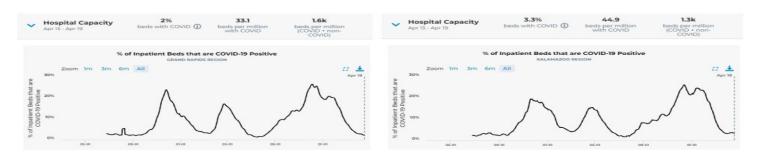
¹ The data is from weekly reporting by facilities with bed occupancy of at least 13 beds.

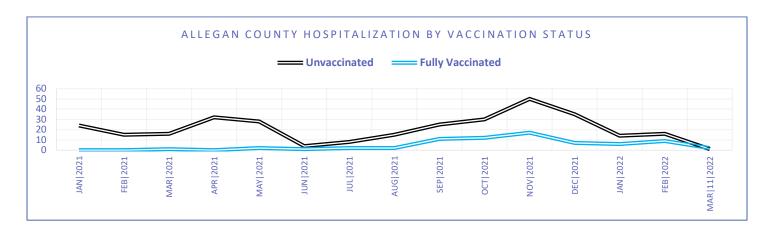
^{*}An increase noted in the total number of outbreaks for the Long Term Care setting is due to an outbreak coding update made in MDSS. This update allows staying in compliance with an epidemiological procedure that distinguishes outbreak identifiers specific to different building licensures, which are operating under the same facility name.

^{**}Includes jails, correctional facilities, and shelters

Metro Health Hospital	1	0	73%
Spectrum Health - Blodgett Hospital	5	0	85%
Spectrum Health - Butterworth Hospital	23	5	84%
Spectrum Health Zeeland Hospital	1	0	39%
Spectrum Helen DeVos Children's Hospital	1	0	74%

Vaccinations are effective at reducing hospitalizations from COVID-19. In Allegan County, **81.3%** of the **hospitalizations** from 01/01/2021 to 03/11/2022 have been in those that are **unvaccinated**.

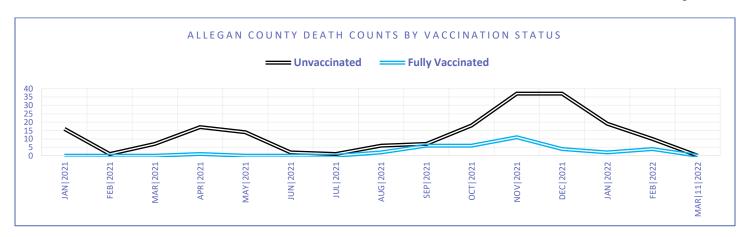




DEATHS



Similarly, vaccinations are effective at preventing deaths from COVID-19. There were **84.8%** of **COVID-19 deaths** identified in **unvaccinated** individuals in Allegan County from 01/01/2021 to 03/11/2022.



BEST PRACTICES

SCHOOLS

The Allegan County Health Department (ACHD) is working on several things to mitigate future outbreaks, including creating a Communicable Disease Template for school-district leadership. This template will include evidence-based procedures that each school district could modify to meet their individual needs to include as an addendum in their Emergency Operation Plans (EOPs). Illness is considered a risk in the school setting and having procedures identified in the future for any communicable disease will help speed up the response to mitigate any communicable disease illness. Our goal is to have this completed with all Allegan County School Districts before the end of the year.

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.

ACHD has created a Business Mitigation Strategies Survey for businesses to fill out and provide us with information on what current mitigation strategies they have in place. Businesses can access the survey <u>here</u>. If there is an outbreak determined at a business, we ask that they complete this form so we can best address improvements for mitigation strategies.

ACHD has updated our COVID-19 Workplace Toolkit, to reflect quarantine and isolation changes as well as COVID-19 community-level changes made by the CDC. These changes have been posted and can be found on the COVID-19 Business webpage.

FDA AUTHORIZES FIRST COVID-19 BREATHALYZER TESTS

On April 14, 2022, the Food and Drug Administration (FDA) issued an Emergency Use Authorization for InspectIR's COVID-19 Breathalyzer test. The test is for individuals who are 18 years and older and can provide COVID-19 results within three minutes. The test can be administered by doctor's offices, hospitals, mobile testing units, and other health care providers who have been trained and legally authorized to administer the test. Read more about the FDA's EUA for these tests here.

The InspectIR COVID-19 Breathalyzer uses a technique called "gas chromatography gas mass-spectrometry" (GC-MS) to separate and identify chemical mixtures and rapidly detect five Volatile Organic Compounds (VOCs) associated with SARS-CoV-2 infection in exhaled breath. In a study of 2,409 people, with and without COVID-19 symptoms, the results showed that 91.2% percent of COVID-19 positive samples were correctly identified. Additionally, 99.3% percent of negative samples were correctly identified. Furthermore, the study showed that in a population with only 4.2% of individuals who are positive for the virus, the test had a negative predictive value of 99.6%. This means that people who received a negative test result are likely truly negative in areas of low disease prevalence.

InspectIR expects to produce 100 testing units a month. Each test can analyze 160 samples per day, allowing up to 64,000 samples to be tested a month. Allegan County Health Department will share additional information about breathalyzer COVID-19 testing as it becomes available. More information about how the science behind breathalyzer testing works is available here.

CDC TRANSPORTATION MASK ORDER IS NO LONGER IN EFFECT

As of April 18, 2022, as a result of a court order, the CDC's January 29, 2021 Order requiring masks on public transportation conveyances and at transportation hubs is no longer in effect. The CDC will no longer be enforcing the order but continues to recommend that people wear masks in indoor public transportation settings at this time. Older adults and anyone with an underlying health condition that would make COVID-19 infection more serious should continue to wear a mask as a precaution. The CDC will be providing additional information about recommendations and the decision to appeal this ruling.

ACHD continues to recommend that individuals consider personal and household risks to make informed mask choices. ACHD also recommends that individuals look at the COVID-19 community level for the area they are traveling to determine what precautions for COVID-19 they should take.

COVID-19 CASES EXPECTED TO RISE IN THE UPCOMING WEEKS

MDHHS is expecting an increase in COVID-19 cases throughout the state of Michigan during the upcoming weeks. Based on recent data, the BA.2 sub-variant of Omicron is expected to cause cases to rise. The BA.2 sub-variant of Omicron has been found to be more transmissible, but hospitalizations and mortality are not expected to significantly rise. Allegan County is still in a post-surge recovery phase, but ACHD continues to monitor the situation and will notify residents of changes.

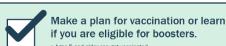
Even as mandates have lifted across the country, ACHD continues to recommend that residents assess their personal and household risks and take proper precautions to protect themselves and their loved ones. Make a COVID-19 plan for yourself and your household by:

- Making sure you have face masks and at-home test kits available for use,
- Talking to your doctor about COVID-19 treatments ahead of time,
- Staying up-to-date with your COVID-19 vaccines,
- Getting tested if you develop symptoms or have been exposed to someone with COVID-19, and
- Staying home when you are sick.

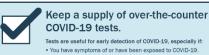
Make a COVID-19 Plan

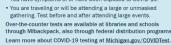






- Ages 5 and older can get vaccinated.
- Ages 12 and older can get the booster
- Ages 50 and older, or 12 and older and moderately to severely immunocompromised, can schedule a second booster. Learn more about vaccines and whether you're up to date at Michigan.gov/COVIDVaccine







Learn if you are eligible for COVID-19 therapeutics.

Learn more about COVID-19 therapeutics at Michigan.gov/COVIDTherapy

If you are traveling make sure to take safety precautions, and look at the COVID-19 Community Level of the area you are traveling to.

There are KN95 masks available for pick-up in the lobby of the Human Services Building (3255 122nd Ave, Allegan) Monday-Friday from 8:30 am to 4:30 pm and at local units of government and libraries throughout Allegan County. For more information, visit our COVID-19 Mask page. Residents can order free at-home COVID-19 test kits online through covidtests.gov and

AccessCovidTests.org, or they can pick up free testing kits from Allegan District Library and Fennville District Library. For more information, visit our COVID-19 testing page.

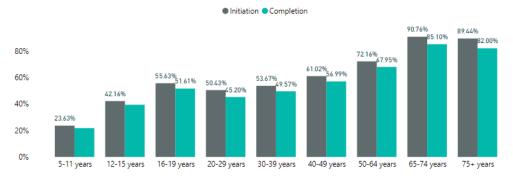
COMMUNICATIONS

COVID-19 Health Education has been a mandated service in this response. The following are metrics related to COVID communication efforts from 4/8/2022 - 4/21/2022:

- 8 social media posts
- 1 Community Newsletter sent out
- 7 Education materials created/updated
- 2 Guidance Documents updated

COMMUNITY VACCINATION/HERD IMMUNITY/TREATMENT

COVID-19 VACCINE COVERAGE BY AGE GROUP



As of 4/16/2022

Residents aged 65+ 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 attributed to the fact that emergency use was not authorized for

this cohort until later on.

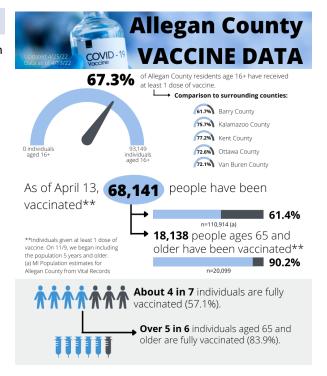
VACCINE AVAILABILITY

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

Residents are encouraged to visit www.vaccinefinder.org and www.vaccinatewestmi.com to find vaccination clinics near them.

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

Second booster doses are available for immunocompromised individuals over the age of 12 and adults over the age of 50. The Second booster dose can be given at least 4 months after their first booster (whether they received a Pfizer, Moderna, or Johnson & Johnson booster). For more information about second booster dose authorization, visit <a href="https://example.com/heteral/news/meteral/news



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

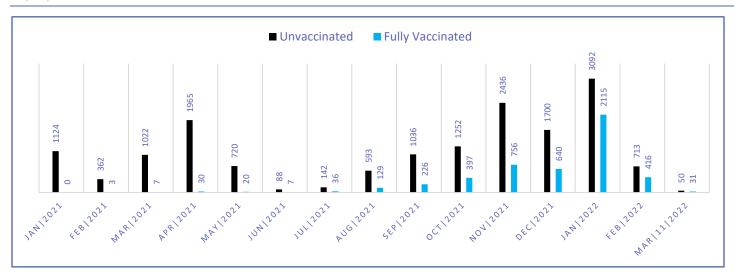
Note: Our goal of vaccinating 70% of the population accounted for the 16 and older population. With increasing the eligibility population, our vaccine coverage decreased. We are continuing to strive towards our goal of vaccinating 70% of residents 16 and older, which will reflect on the gauge at the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

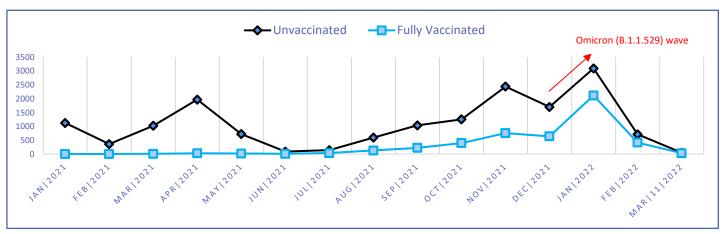
6/1/2021 Update: Previous vaccine graphics included 96.451 as the population of Allegan County residents 12 years and older. After further review, 99.878 is a more accurate population estimation.



EFFECTIVENESS

ALLEGAN COUNTY UNVACCINATED AND FULLY VACCINATED COVID-19 CASES BY REFERRAL DATES 01/01/2021 TO 03/11/2022²



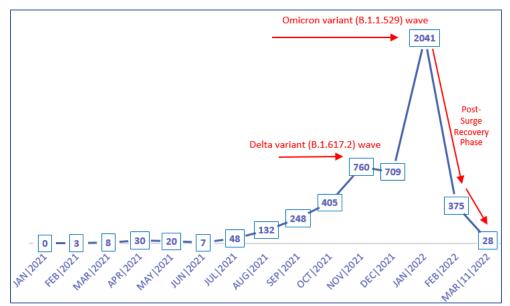


When comparing fully vaccinated cases to unvaccinated cases, it is important to note that unvaccinated cases are more likely to occur even though fully vaccinated cases have increased since July 2021. As seen in the charts, the unvaccinated (black line) has more cases compared to the fully vaccinated (blue line).

AS OF MARCH 11, 2022:

- 365 cases in the 0 to 18 age group were persons that met the CDC definition of being 'fully vaccinated' or 'breakthrough case' related to SARS-CoV-2 infection.
- 7.6% of cases (including all ages) were reported as breakthrough cases.
- 5.4% of cases in the 0 to 19 age group were reported as breakthrough cases.
- All pediatric breakthrough cases were reported in ages 5 years old or over.
- There have been no hospitalizations or deaths related to SARS-CoV-2 infection reported in the 5 to 11 age group.
- There were 963 cases (including all ages) with a specimen collection date ≥ 14 days after receipt of an additional or booster dose of any COVID-19 vaccine on or after August 13, 2021.

² Did not receive updated data from MDHHS in time for this report.



AS OF MARCH 11, 20224:

There were 22.8% (4,814) fully vaccinated cases identified⁵.

311 cases in the 0-17 school-age group were persons that met the CDC definition of being 'fully vaccinated' or 'breakthrough case'.

2.8% of the cases in the latest vaccine eligible group of age 5-11 were reported as breakthrough cases.

18.2% of cases were reported in the 50 to 59 age group, which is the group with the highest number of COVID-19 breakthrough cases.

The youngest fully vaccinated individual hospitalized related to SARS-CoV-2 infection was reported in the 20 to 29 age group. All deaths related to SARS-CoV-2 infection were reported in ages 50 and above. The youngest breakthrough death was reported in the 50 to 59 age group.

UNDERSTANDING BREAKTHROUGH CASES

Breakthrough cases are those persons who contract COVID-19 despite being fully vaccinated for the disease. Breakthrough cases are more likely to occur in those who are older, those who have compromised immune systems, and those who are exposed more to COVID-19 (such as at work or school). It is important to understand that the chances that an unvaccinated person and a vaccinated person catching COVID-19 from exposure are not the same. Vaccinated people are less likely to contract the disease, and are less infectious if they do contract it. Among breakthrough cases, vaccines ensure fewer infectious viral particles for a shorter period.

Allegan County
COVID - 19
Covid -

Since January 2021, there have been:

21,108 Total COVID-19 Cases	385 Total COVID-19 Hospitalizations	237 Total COVID-19 Related Deaths	
Total COVID-19 cases not fully vaccinated	Total COVID-19 hospitalizations not fully vaccinated	Total COVID-19 deaths not fully vaccinated	
16,295	313	201	
% of not fully vaccinated COVID-19 cases	% of not fully vaccinated COVID-19 hospitalizations	% of not fully vaccinated COVID-19 deaths	
Total COVID-19 cases fully vaccinated	Total COVID-19 hospitalizations fully vaccinated	Total COVID-19 deaths fully vaccinated	
4,813 % of fully vaccinated COVID-19 cases	% of fully vaccinated COVID-19 hospitalizations Data from January 1, 2021 to March 11, 2022	% of fully vaccinated COVID-19 deaths	

COVID-19 CAN MAKE SOME CHILDREN SICK

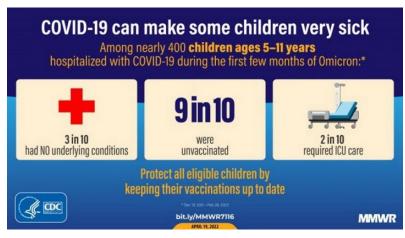
³ Did not receive updated data from MDHHS in time for this report.

⁴ Did not receive updated data from MDHHS in time for this report.

⁵ Identified via the MDSS-MCIR match criteria by referral, onset, diagnosis, or specimen collection dates.

The CDC released new data that showed hospitalization of children aged 5-11 from the virus. Out of 400 children who were hospitalized for COVID-19 during the Omicron period (December 19, 2021–February 28, 2022), studies have found:

- 9 of 10 children were unvaccinated
- 3 of 10 children had no underlying conditions
- 2 of 10 children required ICU care
- 7 of 10 children had COVID-19 as the main cause of hospitalization



Keeping children up-to-date with their COVID-19

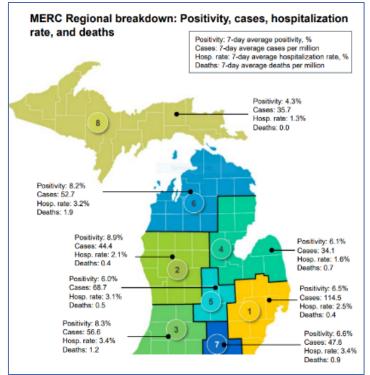
<u>vaccinations</u> will help decrease their odds of becoming sick. ACHD continues to recommend parents keep their children up-to-date on COVID-19 vaccines when eligible and take mitigation measures in areas of the High COVID-19 community level.

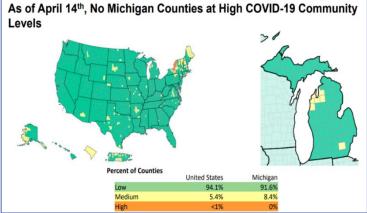
COVID-19 SURVEILLANCE

The main component of communicable disease investigation is surveillance, which is used to identify outbreaks or increases 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 data trends that have been observed in the past, the pattern indicating an increase in the case counts in other countries also tends to be seen in the United States. We will continue to monitor these case surges.

STATEWIDE COVID-19 SURVEILLANCE

In the April 19 MDHHS' data and modeling <u>update</u>, **0%** of Michigan counties are at **High COVID-19 Community Levels** and **92%** are at **Low Community Levels** as of April 14, 2022.





Overall, all Michigan counties have plateaued with case rates; however, 16 counties are currently showing increases and 28 counties are at an elevated incidence plateau as of April 18, 2022.

Overall, case rates in all age groups are plateauing, however, a slow surge in cases is noted for the school-aged population, and is expected to occur in long-term care settings. Case rates by onset date for all age groups are between 57.1 and 119.5 cases per million persons.

The COVID-19 positive census in hospitals, new admissions, ICU utilization, and the pediatric census is plateaued; however, we are starting to see an uptick in some areas. Hospitalization metrics in Michigan are showing increases in two-thirds of age groups for

COVID-19 hospital admissions during the week of April 18, 2022. The adjacent map shows data as of April 17, 2022, and indicates that **Region 5**, which includes Allegan County, has a **7-day hospitalization rate of 3.1%.** The COVID positive hospital census has shown a slight increase but the ICU census continues to decline.

Michigan remains in the Post-Surge Recovery phase due to current case rates and hospitalizations and increased access to mitigation measures.

UPDATE: MDHHS COMMUNICABLE DISEASE (CD) CONFERENCE ON APRIL 19, 2022 AND APRIL 20, 2022

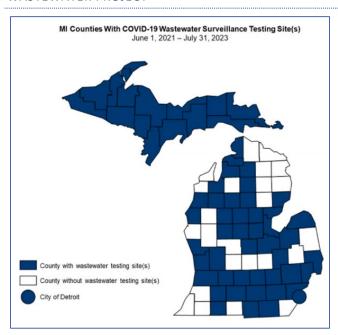
BREAKTHROUGH CASES SURVEILLANCE

Given the limitations of MDSS-MICR match criteria and challenges with data collection and larger case volumes, MDHHS is anticipating delays in the distribution cadence of breakthrough data files to local health departments (LHDs). The challenges are due to the smaller sample sizes and factors related to epidemiological calculations. In the near future, breakthrough surveillance would occur by taking on a population rather than an individual-based approach. MDHHS continues to provide Michigan breakthrough data to the CDC and examine trends over time. Future alternatives and statuses of countywide distribution of breakthrough surveillance will be discussed further with LHD partners.

CASE STUDY: A major limitation to data collection was observed in a case study on 'Missingness' for the county "M." The study showed a large number of breakthrough cases were unaccounted for due to various factors such as home tests, discrepancies in individual information between MCIR and MDSS, errors in referral/onset/diagnosis dates, and other resources. County "M" found that MDHHS was missing 1,390 breakthrough cases from the list they identified, which made up more than 13% of cases. This led to the MDHHS team having to reformat the coding system to capture more breakthrough cases that would have been missed otherwise. The 'Missingness' study concluded that there were potentially 8.3% missed breakthrough cases (approximately 37,350) statewide since January 2021.

Breakthrough cases are no longer a rare occurrence and are expected to occur among all ages, sex, and ethnicity groups.

WASTEWATER PROJECT



In the fall of 2020, a pilot project was formed to determine the feasibility of wastewater testing, standardizing methods, tracking trends, and informing local responses to the pandemic. 270 sample sites in 37 counties and the City of Detroit were included in this preliminary study from October 1, 2020, to December 31, 2020.

Following this pilot study, the Michigan Department of Environment, Great Lakes and Energy (EGLE) project was granted additional funding for the projects that participated in the pilot program to continue and expand COVID-19 wastewater surveillance in Michigan for the funding period June 1, 2021- July 31, 2023. Currently, most surveillance projects are conducting trend analysis for the data collected and comparing that to case averages for a given time period.

The CDC has secured funding for wastewater testing projects in Michigan through 2025. The goal is to bring in enhanced data analytics and regular sequencing of wastewater samples to confirm preliminary results from PCR variant testing, with the potential for monitoring other pathogens.

MIS-C is a severe complication of COVID-19 in children and adolescents under 21 years of age where multiple organ systems become inflamed or dysfunctional. Symptoms usually present 2-6 weeks after the infection. The causes for MIS-C are still unknown.

In a 2021 (July-December) CDC study that evaluated the effectiveness of the Pfizer-BioNTech vaccine against MIS-C, vaccine effectiveness for two doses was 91%. 97/102 (95%) of hospitalized children with MIS-C were unvaccinated. None of the 5 fully vaccinated MIS-C patients required respiratory or cardiovascular life support, compared to 39% of the unvaccinated MIS-C patients. The sample was comprised of a predominantly healthy population of cases.

MIS-C is separated into three classes:

- Class 1 "typical" MIS-C cases exhibit 100% cardiovascular and 98% gastrointestinal symptoms with 84% ICU admission
- Class 2 "acute COVID-19/MIS-C Combo" has a more severe respiratory involvement with 62% of ICU admissions
- Class 3 is the milder illness characterized by a higher frequency of rash and mucocutaneous lesions with 44% of ICU admissions

Class 1 MIS-C is most common in Michigan. The following table shows the rates of MIS-C in Michigan from April 2020 through April 7, 2022. Children of color are overrepresented with cases being predominantly male. Cases of MIS-C associated with the Omicron variant were less than cases of MIS-C associated with the Delta variant in Michigan. In 2021, Allegan County has two confirmed MIS-C cases. Currently, Allegan County has zero confirmed MIS-C cases in 2022.

Age Group	Count	%	Race	Count	%
<1 yrs	10	3.5%	Black/African American	104	36.2%
1-4 yrs	66	23.0%	Caucasian	136	47.4%
5-11 yrs	141	49.1%	All Others / Unknown	47	16.4%
12-15 yrs	51	17.8%			
16-20 yrs	19	6.6%			
Gender	Counts	%	Ethnicity	Count	%
Male	178	62.0%	Not Hispanic or Latino	215	74.9%
Female	109	38.0%	Hispanic or Latino	23	8.0%
Unknown	0	0.0%	Unknown	49	17.1%

DEMOGRAPHIC INFORMATION (N=287)

NATIONWIDE COVID-19 SURVEILLANCE

Overall, cases, hospitalizations, and deaths are on a downward trend nationwide as other parts of the world are seeing increases. Hospitalizations continue to be lower than they were around this time in the previous year (2021). Michigan is currently ranked number ten for COVID-19 case counts. Vermont, the District of Columbia, Wyoming, South Dakota, and North Dakota have the lowest overall cases in the Nation as of April 25, 2022.

987,601 total **deaths** have been reported as of April 22, 2022; this accounts for more than 15% of total deaths worldwide. Total **cases** nationwide as of April 22, 2022, is **80,648,481**.

As of April 19, 2022, Region 5 (Midwest) states, which includes Michigan, are either plateaued or increasing with Illinois and Wisconsin having the highest case rates. The 7-day case average has been reported to increase by over 23.4% since the week before April 19, 2022. Approximately 94% of the States are at low community levels.

Region 5 States with the Highest COVID-19	Cases Reported in the Last 7 Days*	Deaths Reported in the Last 7 Days*
Case Rates		
Illinois	17,807	53
Wisconsin	5,552	46

^{**}Data reported by the CDC COVID-19 Data Tracker as of April 19, 2022

GLOBAL COVID-19 SURVEILLANCE

Globally, as of **April 22, 2022**, the World Health Organization (WHO) reports **505,817,953** confirmed cases and **6,213,876** deaths related to the SARS CoV-2 infection. Case rates appear to be declining or plateauing in most European countries following the second Omicron wave.

As of April 18, 2022, there are no countries indicated at COVID-19 risk level 4 with special circumstances and/or travel precautions. As of April 22, 2022, Johns Hopkins University and Medicine Coronavirus Resource Center reported seeing case surges in South Korea, Germany, and France. This continues to be indicative of a continued increase in the incidence of the Omicron variant BA.2 cases.

COVID-19 Risk Level 3 (High)	Cases Reported in the Last 7 Days*	Deaths Reported in the Last 7 Days*
South Korea	No data available	No data available
Germany	609,898	104
France	610,325	877

^{*}Data reported by the World Health Organization Coronavirus Dashboard as of April 8, 2022

COVID-19 Risk Level 3 (High)	Weekly New Hospital Admissions for COVID-19**	Closest Available Date of Data Point**
South Korea	5,307	April 22, 2022
Germany	3,761	April 22, 2022
France	9,944	April 22, 2022

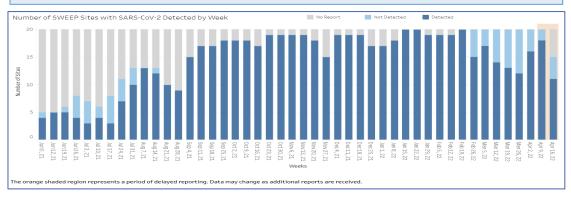
^{**}Data reported by the Our World in Data - Coronavirus (COVID-19) Hospitalizations

Effective April 7, 2022, the CDC released information that the Division of Global Migration and Quarantine will discontinue applying <u>public health travel restrictions</u> to most COVID-19 cases and contacts with reported air travel. However, the CDC may consider COVID-19 public health travel restrictions in specific situations and can discuss them on a case-by-case basis (e.g., a traveler who may have documented high rates of persistent viral shedding, or to manage a large outbreak with multiple travelers).

WASTEWATER SURVEILLANCE

UPDATE: MDHHS Wastewater Surveillance as of April 16, 2022

- 65% of Sentinel Wastewater Epidemiology Evaluation Project (SWEEP) sites saw an
 increase in the most recent week ending on April 16, 2022 and another 20% of sites saw
 a plateau in trends.
- 5% of sentinel sites are showing declines in the previous 15- days. The remaining 20% of sites have plateaued over the last 15 days.



ACHD has been working with Hope College over the last year as they sample wastewater for COVID-19. There are municipal water supply systems, as well as one large business participating in wastewater sampling. ACHD, Hope College, and Ottawa County Department of Public Health are meeting regularly to discuss how wastewater data can be used in surveillance. Anticipatory wastewater data would be particularly useful during this current reporting period where we

saw an increase in case positivity with lower testing rates. In the last year, sampling was reduced from 7 days a week to 2-3 days a week. According to the CDC, the median incubation period for Omicron is about three days, which will make it more challenging to rely on this preliminary data without the appropriate resources. For more information, please visit Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project (SWEEP) (michigan.gov). The graph above is from the MDHHS SWEEP dashboard, which shows the presence or absence of SARS-CoV-2 at the 20 sites in Michigan over time. Detection of the virus indicates that at least one person in the sampled community is shedding the virus. If the virus is not detected, this indicates that there is either no virus in the sampled community, or the concentration of the virus in the sample is below the level that can be detected by the test. These 20 sites are reporting positive and negative test results to MDHHS every week.

There may be some changes in COVID-19 case levels as prevention measures are eased. 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. The figure to the right depicts the method of utilizing wastewater surveillance data to monitor case patterns at individual and population levels as it relates to the SARS-CoV-2 infection.

ACHD continues to monitor for future case surges correlating to local wastewater signals. There will be more information regarding this level of data analysis in future updates. Additional information on the statewide wastewater

Individual Case Surveillance

Testing for SARS-CoV-2 is done by a laboratory, a health rare provider, or at home by individual case surveillance results available

Individual case surveillance results available

Wastewater is collected from a reashment plant or sewershed which represent all the people in that area

Wastewater is collected from a reashment plant or sewershed which represent all the people in that area

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Wastewater feeling results can provide an early warring to public heath agencies before they might be notified of postive cases.

Population-Level Wastewater Surveillance

Wastewater is collected from a reashment plant or sewershed, which represents and amount of SARS-CoV-2 is done by a laboratory for the presence and amount of SARS-CoV-2 is leastly designed and the same within this community

Developed by the hichigan Department of Health and Human Services.

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surveillance timeline can be found on <u>Michigan COVID-19 Wastewater Testing and SWEEP Dashboard</u>. MDHHS is working toward including wastewater surveillance for Allegan County in the SWEEP dashboard.

EPIDEMIOLOGIC SURVEILLANCE: BA.2 OMICRON SUB-VARIANT

UPDATE: MDHHS Communicable Disease Division as of April 19 and 20, 2022

- The proportion of BA.2 in the U.S. and Michigan continues to rise
- · Cases are slowly increasing, with increases being currently observed more in Southeast Michigan
- A slower rise and fall is predicted with BA.2 cases with a peak that is likely to double Michigan's current case rate in early May
- Given the levels of vaccination/boosters and immunity from recent Omicron infection, a significant rise in hospitalization and mortality is not expected to occur
- Current predictions are not indicative of moving into the Readiness or Response phase of the pandemic cycle

Currently, many countries in Europe are showing early signs of decline; however, cases in the US are increasing at a faster rate. The CDC has released data as of April 15, 2022, to support that BA.2 is the predominant Omicron lineage in the United States, and the national proportion of the BA.2 variant is projected to be 85.9%. Cumulatively, 785 Omicron BA.2 specimens were identified from 50 counties and the City of Detroit (3 in Allegan County).

BA.2 has been shown to be more resistant to some monoclonal treatments than BA.1 and BA.1.1 variants. The following therapies are still encouraged as treatments against the BA.2 variant: Paxlovid, Remdesivir, and Molnupiravir. For more information about

where to obtain these COVID-19 therapies, please visit https://www.michigan.gov/covidtherapy. As cases of this new variant continue to rise, the same preventive measures are recommended to curb its spread and reduce the virus's opportunities for mutation. ACHD will continue to monitor this Omicron sub-lineage and deploy response measures accordingly.

STUDIES ON EMERGING VARIANT AS OF APRIL 19, 2022 DATA AND MODELING

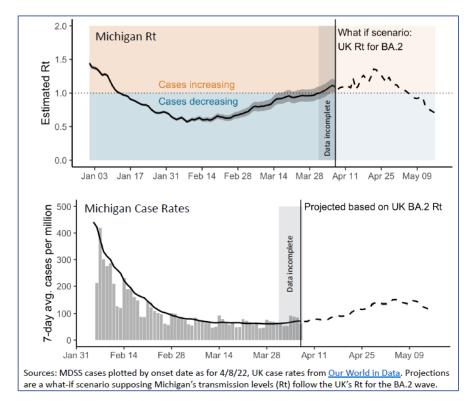
- Omicron continues to be the predominant variant of concern (VOC) with several sub-lineages, including BA.4, BA.5, BA.2.12.1, and recombinants of BA.1 and BA.2, most notable XE recombinant.
- The United States is currently seeing the proportion of BA.2.12.1 increasing at a faster rate than the other lineages, which has the highest frequency of circulation in Northeastern U.S.
- The XE recombinant is growing at a slightly faster rate compared to BA.2 in the UK; however, it still comprises less than 1% of all cases.
- Globally, around 200 specimens underwent sequencing for BA.4 and BA.5 in a few countries.

Current data does not specifically indicate any increases in transmissibility, change in hospital epidemiology, or additional evasion of current countermeasures to the predominant Omicron variant.

The adjacent figure shows the increasing and decreasing case rates based on the BA.2 variant as of April 19, 2022.

Case rates increase when the Rt[†] is greater than 1 and decrease when the Rt is less than 1. As shown in the figure on the right, the Rt is greater than 1 in Michigan and is projected to increase if these patterns are similar to what was observed in the U.K.

Of note, this modeling suggests in a case acceleration to occur through late April/early May, however, this is subject to change as MDHHS continues to follow Michigan data closely.



†Rt is a unit of epidemiological unit of measurement to indicate the production number of a virus over a particular time

SOURCES

- Allegan County Health Department Facebook page
- Centers for Disease Control and Prevention
- CDC Stay Up-to-date on Vaccinations
- COVID-19 Travel Recommendations by Destination | CDC
- COVID-19 Vaccine Dashboard
- CHN Associates, Student, and Family Assistance Program Monthly Report
- FDA Authorizes Breathalyzer COVID-19 Testing
- FDA Emergency Use Authorization for COVID-19 Breathalyzer Tests
- Find a COVID-19 Vaccine Near You
- HONU
- Long Term Care Data
- MDHHS Communicable Disease Presenters: Kate Busen, MPH, COVID-19 Epidemiologist; Kelly Geith, MPH, Wastewater Epidemiologist; Cole Burkholder, MPH, Infection Disease Epidemiologist
- MDHHS Quarantine and Isolation Guidance
- MI COVID response Data and Modeling
- MI Safe Start Map and CDC Indicators
- Michigan Coronavirus: COVID-19 Vaccine
- Michigan COVID-19 Wastewater Testing and SWEEP Dashboard
- Michigan Disease Surveillance System (MDSS)
- Michigan Health Alert Network (MIHAN)
- Michigan Department of Health and Human Services (MDHHS) Breakthrough Cases Data File
- New COVID-19 Cases Worldwide Johns Hopkins Coronavirus Resource Center (jhu.edu)
- National Public Radio (NPR)
- Our World in Data Coronavirus (COVID-19) Hospitalizations
- US Food and Drug Administration
- Vaccinate West Michigan
- World Health Organization Coronavirus Dashboard