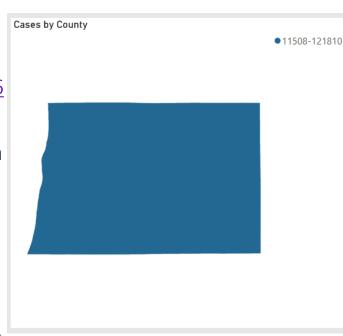


Allegan County COVID-19 Dashboard

updated weekly on Fridays at 3pm.

- https://alleganco.maps.arcgis.c om/apps/opsdashboard/index. html#/792287b41e3f485c97f96 8335b45ca6c
- Allegan County's COVID-19 data is still updated Tuesdays and Fridays on the MDHHS COVID-19 website. Find the state's dashboard for COVID-19 cases and trends by visiting www.michigan.gov/coronavirus



Allegan

Monday, August 9, 2021

Michigan	(Statewide)	Case	Fatality	Rate	

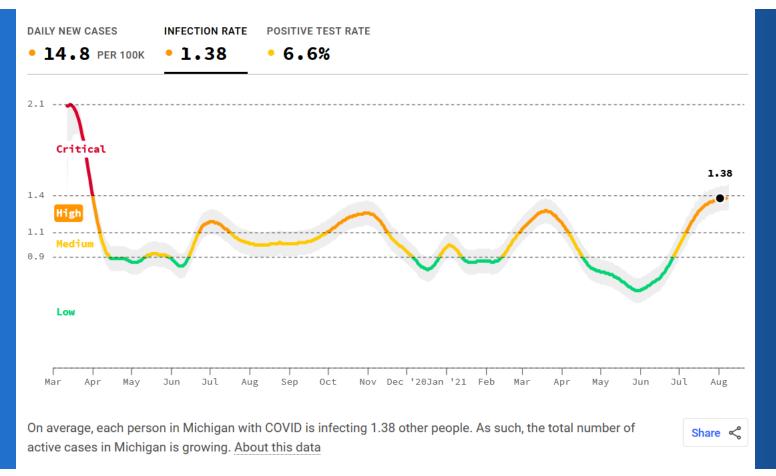
2.2%

Current Totals		
Case Status	Cases	Deaths
Confirmed	10,325	139
Probable	1,183	24
Total	11,508	163

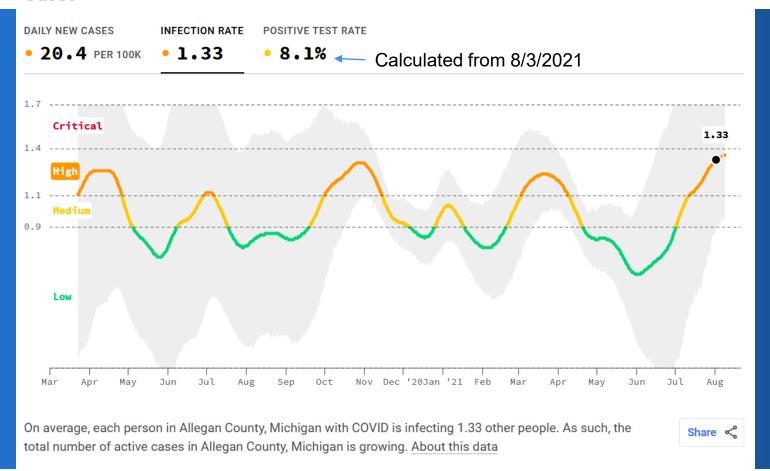
aboratory lesting					
Test Type	Tests Performed				
Diagnostic		129,144			
Serology		3,205			
Total		132.349			

.

Cases



Cases



TOOLS THAT HELP PREVENT COVID-19 IN SCHOOLS/BUSINESSES



What we are trying to do is to get the virus transmission level so low in the community that it can't continue to spread.

- These tools by themselves are helpful, but when paired together, we can get to our intended outcome (low to no virus transmission) quicker.
 - As community transmission increases, we need more tools to help provide protection
 - As vaccination rate within a community increases, fewer tools need to be practiced since there is a layer of protection

Comparing CDC community transmission thresholds to MI levels

Case Rate*†

<u>*_</u>	Low	А	В	С	D		E		
Σ	<7	7-19	20-39	40-69	70-149		≥150	\geq	
					*Michigan uses new cases / million / day	<u> </u>			
نِ	Lo	w	/ Moderate Transmission		Moderate Transmission Substantial Transmission		High		
CDC	<1 (14.3)						100 9/million)		

[†] CDC uses cases / 100,000 / week (conversion to MI metrics in paratheses)

Percent Positivity

=	Low	А	В	С	D	E	
2	<3%	3-7%	7-10%	10-15%	15-20%	≥20%	\geq

SC	Low	Moderate	Substantial	High	
C	<5%	5%-7.9%	8%-9.9%	10%	

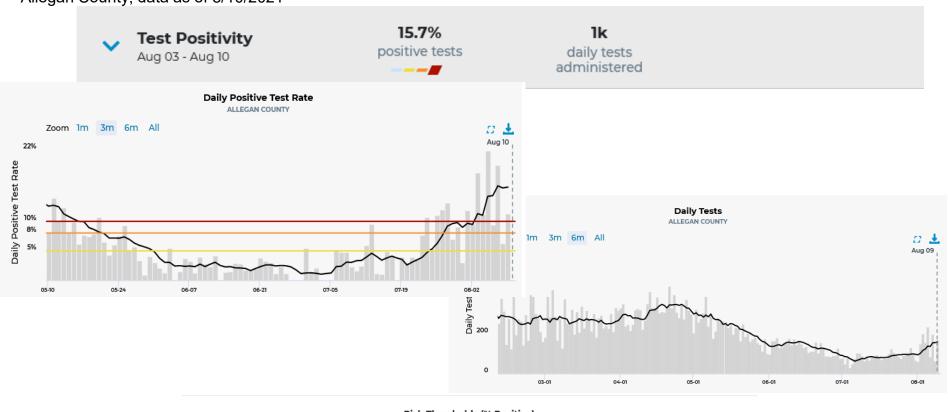
sources: https://mistartmap.info/

https://www.cdc.gov/coronavirus/2019-

 $\underline{\mathsf{ncov/community/schools\text{-}childcare/indicators.html}}$

Enhanced Ability to Test, https://mistartmap.info/

Allegan County, data as of 8/10/2021







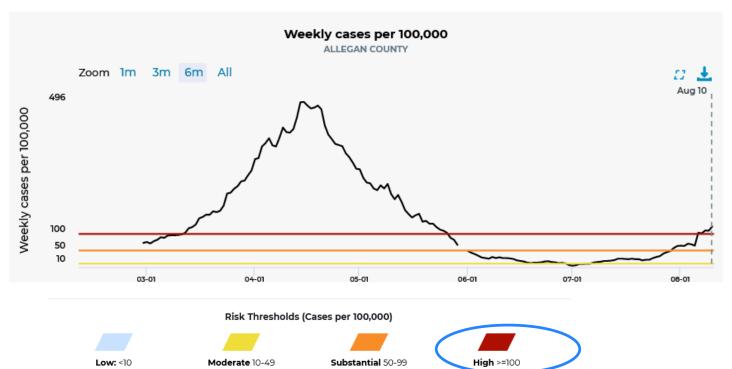






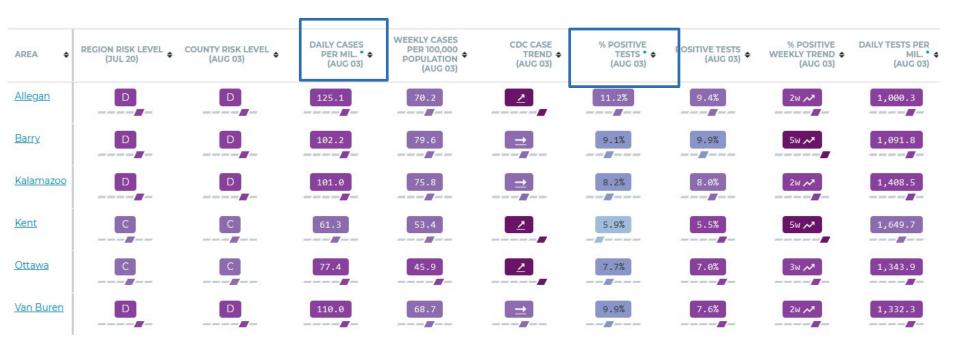
New Cases, https://mistartmap.info/, Allegan County, data as of 8/10/2021





Comparison with Neighboring Counties, https://mistartmap.info/

Allegan County, data as of 8/3/2021



Epidemiologic Information, Allegan County

Overall	Percent	Cases Reported in Past two weeks	Percent	
Healthcare Worker	6.2%	In quarantine at time of onset/positive test	14.3%	
Live or work in high-risk/congregate		Associated with known cluster/outbreak	5.0%	
facility	8.8%	Any Contact to confirmed case	29.3%	
First Responder	0.9%	Healthcare contact to confirmed case	0.7%	
Other Essential Worker/Critical Infrastructure	15.8%	Community contact to confirmed case	12.1%	
Healthcare Contact to confirmed car	re 0.6%	Household contact to confirmed case	17.9%	
nealthcare contact to committee car	0.6%	Attended Community Event/Mass Gathering	2.9%	
Community Contact to confirmed ca	se 10.1%	Any Travel (international, domestic, in state)	22.1%	
Household Contact to confirmed cas	se 17.0%	Source of Infection is unknown	25.0%	
Total Cases: 11,397	Asymptomatic Cases: 13.0%	Number of cases reported in past 2 weeks: 140		

Data as of 8/4/2021. Source: Michigan Disease Surveillance System

Breakdown of Cases by School Age Categories **Total Case Count** 11397 Data as of 8/4/2021. Number of Cases <18 years 1665 Source: Michigan Disease Surveillance System % cases <18 years 14.6% Approximate Grade Level % total cases Case Count* % cases <18 years <u>Age</u> 0-2 years 128 1.1% 7.7% 5.0% Pre-K age 3-4 years 83 0.7% K-5th grade age 5-10 years 424 3.7% 25.5% 6-8th grade age 19.3% 11-13 years 321 2.8% 9-12th grade age 14-17 years 709 6.2% 42.6%

*Case counts are based on case ages, which have been grouped into approximate grade levels.

These counts may not reflect the actual grade level of cases.

То

Case count by age, data from 7/23/21-8/4/21 (2 week	prevent double-counting o	f cases, the age brackets do not overlap.
		Case count by age, data from 7/23/21-8/4/21 (2 wee

1

Case count by a	ge, data from 7/	23/21-8/4/21 (2
0-2 years	3-4 years	5-10 years

11

11-13 years

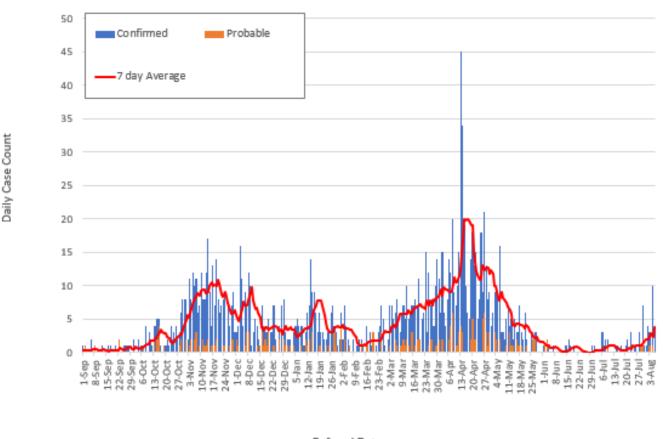
0

eks)

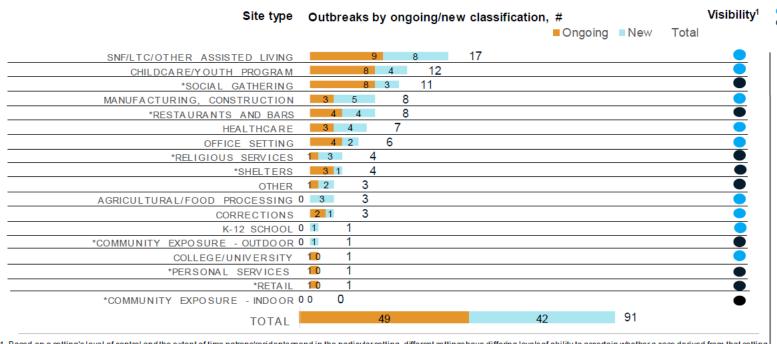
14-17 years

15

Allegan County School Aged (3-17) Cases by Referral Date



Number of outbreak investigations by site type, week ending Jul 29



Easier to identify outbreakHarder to identify outbreak

Total number of active outbreaks is **up 112**% from previous week, with 42 new outbreaks identified (21 more than last week)

SNF/LTC reported the greatest number of new outbreaks (8), followed by manufacturing/ construction (5), childcare/ youth programs, restaurants/ bars, and healthcare (4 each), and nine other settings with at least 1 new outbreak in the last week.

NOTE: Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.

Source: LHD Weekly Sitreps

^{1.} Based on a setting's level of control and the extent of time patrons/residents spend in the particular setting, different settings have differing levels of ability to ascertain whether a case derived from that setting

Sufficient Health Care Capacity

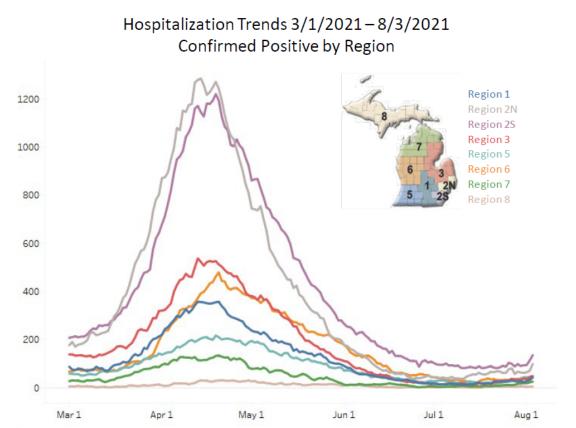
Statewide Hospital Capacity Report for COVID-19 08/09/2021**

Region -	All Hospital Beds	All Adult Hospital Beds	All Hospital Inpatient Reds	All Hospital Inpatient Bed Occupancy	Adult Hospital Inpatient Beds	Adult Hosp Inpatient Bed Occupancy	ICU Beds	ICU Bed Occupancy	Adult ICU Beds	Adult ICU Bed Occupancy
Region 5	1680	1663	1426	1047	1386	1028	222	118	187	112
Region 6	3208	2803	2896	2170	2473	1896	390	296	237	177

	HCC Region	Region 5	Region 6
	Total Hospitalized Adult Suspected/Confirmed	66	74
	Adult Confirmed-Positive COVID	63	66
COVID-19 Metrics	Hospitalized Peds Confirmed/Suspected	1	1
8/9/21, by HCC Region	Hospitalized Ped Confirmed-Positive	0	1
	Hospitalized and Ventilated COVID	2	15
	Adult ICU Confirmed/Suspected COVID	17	24
	ICU Adult Confirmed- Positive COVID	15	24
14	Prev Day COVID Related ED Visits	85	56

Region 5	Region 6
1	1
1	1
1	⇔
1	⇔
(*)	1
1	1
1	1
1	1

Statewide Hospitalization Trends: Regional COVID+ Census



All regions except for Region 8 show increasing hospitalization trends this week. Region 7 showed a very large increase this week.

2 regions (Regions 2S and 7) are now at or above 50/M population hospitalized

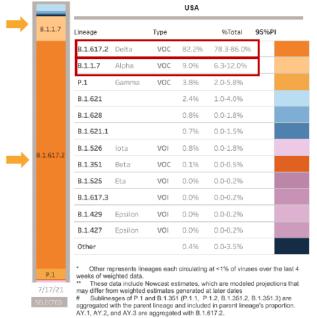
Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	44 (52%)	41/M
Region 2N	98 (23%)	44/M
Region 2S	135 (36%)	61/M
Region 3	48 (33%)	42/M
Region 5	41 (41%)	43/M
Region 6	43 (43%)	29/M
Region 7	25 (150%)	50/M
Region 8	4 (0%)	13/M

Vaccine Works

- Majority of those hospitalized are not vaccinated
- There will be a small percentage of fully vaccinated people who still get sick, are hospitalized, or die from COVID-19.
 - As of August 4, there are 0.2% (98/49,928) reported vaccine breakthrough cases in Allegan County.
- Since January—
 - There have been 132 total hospitalizations
 - 5 fully vaccinated individuals were hospitalized
 - There's been 1 death in Allegan County from a fully vaccinated individual

Identified COVID-19 Cases Caused by All Variants of Concern (VOC) in US and Michigan

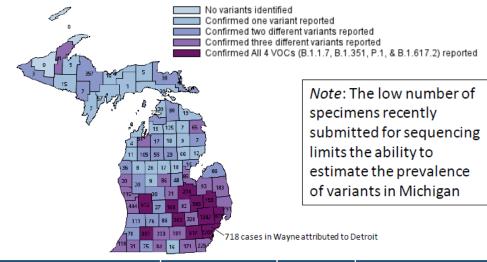
SARS-CoV-2 Variants Circulating in the United States, Jul 4 – Jul 17 (NOWCAST)



Data last updated Aug 3, 2021

Source: https://covid.cdc.gov/covid-data-tracker/#variant-proportions and MDSS

Variants of Concern in Michigan, Aug 3



Variant	MI Reported Cases ¹	# of Counties	CDC est. prevalence for MI
B.1.1.7 (alpha)	13,645*	81	NA
B.1.351 (beta)	85	24	NA
P.1 (gamma)	328	35	NA
B.1.617.2 (delta)	233(个145)	39 (个13)	NA

^{* 534} cases within MDOC; ¶ 37 cases with county not yet determined

Variants, transmissibility, severity, and vaccine effectiveness

Strain	New WHO nomenclature	Transmissibility	lmmune Invasiveness	Increased Severity	Vaccine effective at disease reduction?
Ancestral		-	-	-	✓
B.1.1.7	Alpha	~50% increased transmission	-	Increased hospitalizations and death	✓
B.1.351	Beta	~50% increased transmission	Reduced susceptibility to antibody treatment	-	✓
P.1	Gamma	-	Reduced susceptibility to antibody treatment	-	✓
B.1.427/B.1.429	Epsilon	~20% increased transmissibility	Modest decrease in susceptibility to monoclonal antibody treatment	-	✓
B.1.617.2	Delta	> 50% increased transmission	Reduced susceptibility to antibody treatment	Increased hospitalizations and death	✓

Source: CDC https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-info.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcases-updates%2Fvariant-surveillance%2Fvariant-info.html World Health Organization, accessed June 8, 2021. https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/

Delta Variant (B. 1.617.2)

- Delta is 200% more transmissible than original strain
- Delta also has a 1000% higher viral load, so more shedding of virus will happen
- Natural immunity not as strong as vaccine immunity against variant
 - <u>Reinfection</u> was 2 times more likely among unvaccinated compared to vaccinated.
- Recent data shows fully vaccinated can also transmit virus, so fully vaccinated individuals are encouraged to wear a mask in public spaces

Mitigation Strategies are important to keep in place

ACHD wilhot longer provide modified quarantine (related to business continuity of operations or individual financial hardships) for businesses who do not have strict mitigation strategies (mask wearing, social distancing, frequent handwashing, health screening/testing) in place.

Public Health COVID-19 Advisory

Level of Community Transmission: High

Allegan County Health Department strongly recommends everyone to:



Wear a mask in public

In settings with a lot of people (restaurants, festivals, fairs, events, stores, etc.), wearing a mask provides you extra protection



Get a COVID-19 vaccine

This helps lessen the impact of severe illness, resulting in hospitalization or death

Actions including **social distancing**, **frequent handwashing**, **screening and testing**, and **isolation/quarantine** help lessen the level of transmission



#DoYourPart

CDC Levels of Community Transmission

Allegan County Level of Community Transmission: Higl

Indicator - If the two indicators suggest different transmission levels, the higher level is selected	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs ¹ that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

Footnote:

Level of Community Transmission: This metric ** uses two indicators for categorization (1. Total number of new cases per 100,000 persons within the last 7 days and 2. Percentage of positive diagnostic and screening nucleic acid amplification tests (NAAT) during the last 7 days). 1NAAT remains the "gold standard" for clinical diagnostic detection of SARS-CoV-2 and includes viral testing such as Nucleic Acid Amplification Tests (NAATs), which include reverse transcriptase-polymerase chain reaction (RT-PCR) tests. Total number of new cases pe 100,000 persons within the last 7 days is calculated by adding the number of new cases in the county (or other administrative level) in the last 7 days divided by the population in the county (or other administrative level) and multiplying by 100,000. Percentage of positive diagnostic and screening NAAT during the last 7 days is calculated by dividing the number of positive tests in the county (or other administrative level) during the last 7 days by the total number of tests resulted over the last 7 days. If the two indicators suggest different transmission levels, the higher level is selected. Transmission categories include Blue (Low Transmission): Control is achieved largely through individual prevention behaviors and the public health response to identify and isolate cases or clusters. Threshold: Counties with fewer than 10 cumulative cases per 100,000 population in the past 7 days, and a cumulative NAAT percent test positivity result below 5% in the past 7 days. Yellow (Moderate Transmission): Adherence to individual and selected community level prevention strategies are needed. Threshold: Counties with 10-49 cumulative cases per 100,000 population or a cumulative NAAT test positivity result between 5.0-7.9% in the past 7 days. Orange (Substantial Transmission): Everyday activities should be limited to reduce spread and protect the health care system Threshold: Counties with 50-99 cumulative cases per 100,000 population or a cumulative NAAT test positivity result between 8.0-9.9% in the past 7 days. Red (High Transmission): Significant measures are needed to limit contact between persons, with priority given to maintaining essential community activities and services (e.g., health care, transportation, food and agriculture, schools). Threshold: Counties with cumulative cases =100 per 100,000 population or a cumulative NAAT test positivity result =10.0% in the past 7 days. The Level of Community Transmission table display the number of counties in each level and the change from the prior week.

Metrics/Risk Factors considered for Local Public Health Orders

NOTE: There is no "magic metric" when issuing local public health orders. There may also be additional items to evaluate when considering orders.





CDC Levels of Community
Transmission



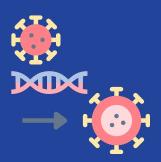
Vaccine percentage rate



Increase in Morbidity/
Mortality



Outbreaks present



Variant present that is vaccine resistant



Ongoing spread present

Addressing Dr. Stock's presentation to Indiana School Board



- He starts off by saying "It's hard to believe we are 18 months into this and still have a problem".
 - The amount of disinformation being spread from people like himself has directly impacted public health's ability to effectively and efficiently respond to the pandemic. In 2020, the WHO coined this an <u>infodemic</u>- the overabundance of information and disinformation- that has caused confusion, anxiety, and an anti-science rhetoric.
- He describes himself as a "functional family medicine physician" which, according to him "means [he] is specially trained in immunology and inflammation regulation."
 - That is not what a functional family medicine physician does and misrepresents his training and expertise. The Cleveland Clinic Center for Functional Medicine defines functional medicine as a personalized, systems-oriented model that empowers patients and practitioners to achieve the highest expression of health by working in collaboration to address the underlying causes of disease. Also functional medicine is not a specialty recognized by the <u>American Board of Medical Specialties</u> nor the <u>American Medical Association</u>.
- He argues that masks don't work because viruses are small enough to pass through them.
 - The problem with this reasoning is viruses do not travel as individual viral particles- they are inside the aerosols and droplets. That's what the masks block. The Infectious Diseases Society of America (IDSA) has compiled the multitudinous, surfeit evidence demonstrating the effectiveness of masking here
- He states that all respiratory viruses wait for the "immune system to get sick in the winter".
 - The <u>seasonality of respiratory viruses</u> is a complex matter dependent on many factors, many of which have nothing to do directly with immunity. People tend to get sick more in the winter, not because of their immune system, but since they are driven indoors where there is less humidity and potentially poorer ventilation.

Addressing Dr. Stock's presentation to Indiana School Board, cont.



- Stock states the vaccines make your immune system become "deranged."
 - We have near real-time safety data on vaccines and the risks (which are themselves exceptionally rare) are: anaphylaxis 2.5-4.7 per million doses, thrombosis with thrombocytopenia syndrome (TTS) with the JJJ vaccine at 3 per million doses, Guillain-Barre syndrome at 7.8 per million doses of JJJ, and the rare cases of myocarditis whose rate is hard to define generally but goes up to ~7 per 100,000 second doses of the vaccine in younger males and is far lower for everyone else. COVID-19 patients on the other hand may have substantial immunological challenges.
- Stock says the virus can't ever go away because it has animal reservoirs (zoonotic virus).
 - This is not the whole truth. Certainly, barring a universal coronavirus vaccine that can be given to animals and ideally one that is itself transmissible, SARS-CoV-2 is not a viable <u>candidate for eradication</u> because it has animal reservoirs that can keep introducing it into the population. This does not mean that vaccination cannot alleviate the public health burden of COVID-19.
- Stock describes breakthrough cases during the summer and claims that this is proof the vaccine doesn't work.
 - Firstly, <u>multiple respiratory viruses</u> are having out of season resurgence (e.g. <u>RSV</u>) which significantly weakens the argument. Also, many public health mandates have been lifted.

Addressing Dr. Stock's presentation to Indiana School Board, cont.



- Stock raises the matter of antibody-dependent enhancement, except he calls it "antibody-mediated viral enhancement."
 - This is disinformation. Firstly, he defines ADE incorrectly by suggesting it is exclusive to vaccines. ADE does not have to be caused by a vaccine to be ADE- in Dengue which is the major infection for which it's relevant it is almost always because of infection. We also have data on hundreds of thousands of people at this point who got convalescent plasma and it didn't make them worse. On top of that <u>animal studies</u> of the vaccines demonstrated protectiveness.
- Stock brings up the <u>Barnstable County outbreak</u>
 - He has ignored context and misrepresented data. We have no idea what the denominator here was. This is a classic example of <u>base rate bias</u>. Provincetown has a <u>95% vaccination rate</u>. If 74% of the cases were in vaccinated people, that gives vaccines 84% effectiveness.

Addressing Dr. Stock's presentation to Indiana School Board, cont.



- Stock references a mumps outbreak and claims that the outbreak was caused by vaccinated people <u>shedding</u> the mumps virus on the unvaccinated.
 - There has never been a well-documented case of secondary transmission of vaccine strain mumps in the history of its use (referring to the Jeryl-Lynn strain used in the US).
- Stock claims the trifecta of vitamin D, <u>ivermectin</u>, and zinc to treat 15 COVID patients.
 - The issue is that given any representative sample of 15 people in the US population the most probable outcome of COVID-19 is recovery so this data is not meaningful (beyond the fact that this is anecdote). Furthermore recent data has emerged to indicate that much of the positive data regarding ivermectin may be the result of <u>fraud</u>. Stock also says that vaccination is appropriate only if there is no treatment. **Vaccination is a preventive measure, not a treatment.**
- Stock asserts that patients who recovery from COVID-19 have no benefit from vaccination at all.
 - This was explicitly demonstrated to be false in the <u>recent CDC MMWR</u> then which found the exact opposite- a significantly reduced risk of reinfection among those who got 2 doses after recovery by 2.34 times.

COVID-19 Vaccine Updates

Demand for Vaccine has decreased

Allegan County is focusing on Vaccine
 Convenient using Mobile Clinic. For
 interested organizations, complete this
 interest form.





Allegan County VACCINE DATA



individuals aged 16+

As of August 10, vaccinated**

54,604 people have been

0 individuals aged 16+

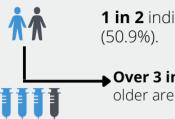
54.7%

n=99,878 (a)

16,169 people ages 65 and older have been vaccinated**

80.4%

**Individuals given at least 1 dose of vaccine. On 5/18, we began including the population 12 years and older. a): 2019 American Community Survey (ACS) population estimates for 12+ in Allegan County



1 in 2 individuals are fully vaccinated

◆ Over 3 in 4 individuals aged 65 and older are fully vaccinated (77.2%).

Fully Vaccinated: Individuals (12 years and older) receiving 2 doses of Pfizer or Moderna or 1 dose of J&J.

Total Doses Distributed*

83,510

*includes 1st and 2nd doses. Based on allocation process established by MDHHS to each county.

Total Doses Administered*

100,378

*includes 1st and 2nd doses and based on person's residence.

PLANNED CLINICS

August 8, 2021 to August 14, 2021

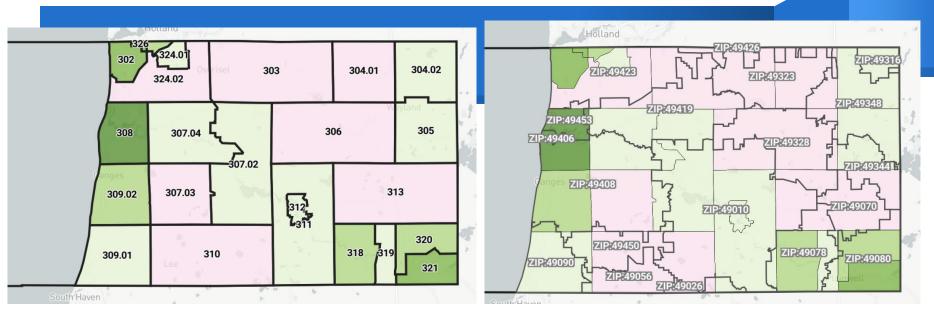


First and second doses

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.

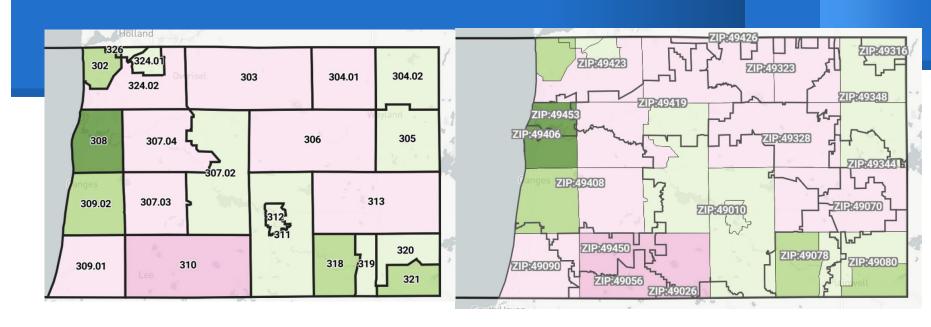
6/1/2021 Update: Previous vaccine graphics included 96,451 as the population of Allegan County residents 12 years and older. After further review, 99,878 is a more accurate population estimation.





Color coded by: Received 1 or More Dose (% Ages 16+)

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% >90% <150 Population



Color coded by: Fully Vaccinated (% Ages 16+)

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% >90% <150 Population

Upcoming COVID-19 Vaccine Clinics* for anyone 12 years and older



AUGUST VACCINE CLINICS



Make an appointment ahead of time by visiting www.allegancounty.org/covid

Friday, August 13 | 3:00pm-6:00pm
Ladders of Hope, 717 E. Main St., Fennville (mobile)

Saturday, August 14 | 9:00am-12:00pm Allegan High School

Wednesday, August 18 | 10:00am-1:00pm Saugatuck Center for the Arts (mobile)

Wednesday, August 18 | 4:30pm-6:30pm

Martin High School (mobile)

Friday, August 20 | 6:00pm-9:00pm 1 Riverfront Plaza Allegan (mobile) Saturday, August 21 | 9:00am-12:00pm Allegan High School

Thursday, August 26 | 11:00am-2:30pm Saugatuck High School (mobile)

Thursday, August 26 | 5:30pm-7:00pm ACATEC, 2891 116th St., Allegan (mobile)

Friday, August 27 | 11:00am-3:00pm Love INC Pullman, 943 56th St. (mobile)

Saturday, August 28 | 9:00am-12:00pm Allegan High School



People can make an appointment ahead of time by visiting www.allegancounty.org/covid

ACHD COVID-19 Updates are held on the 2nd and 4th Wednesday of every month.

Questions?