



MMAC
METROPOLITAN MILWAUKEE
ASSOCIATION OF COMMERCE


MEDICAL
COLLEGE
OF WISCONSIN

MMAC
COVID-19 Update
07.13.2021

PRESENTED BY:
John R. Raymond Sr., MD

PRESENTED BY:



John R. Raymond Sr., MD

President and CEO

Medical College of Wisconsin

Analytics by Ali Nemati

MCW Institute for Health and Equity

117

CONFIRMED NEW CASES
WISCONSIN 7-DAY AVERAGE
(114) TRENDING UNFAVORABLY

WISCONSIN

11.1%

POSITIVITY BY PERSON
WISCONSIN 7-DAY TREND IS
UNFAVORABLE (1.6%)

1.25

R
WISCONSIN

80

CONFIRMED NEW CASES
MILWAUKEE
7-DAY AVERAGE
TRENDING UNFAVORABLY

MILWAUKEE

26.5%

POSITIVITY BY PERSON
MILWAUKEE TREND IS
UNFAVORABLE (12.4%)

1.43

R
MILWAUKEE

613,895
TOTAL CASES IN WI

107,839
TOTAL CASES IN
MILWAUKEE COUNTY

7,989
PREVIOUS HIGHEST
DAILY POSITIVE CASES IN
WISCONSIN
11.18.2020

1,649
PREVIOUS HIGHEST
DAILY POSITIVE CASES IN
MILWAUKEE
11.09.2020

WISCONSIN

0

DEATHS

WISCONSIN 7-DAY AVERAGE
(1) TRENDING STABLE

100

HOSPITALIZATIONS

WISCONSIN
TRENDING UNFAVORABLY?

32

ICU CENSUS

WISCONSIN
TRENDING STABLE

MILWAUKEE

0

DEATHS

MILWAUKEE
7-DAY AVERAGE
TRENDING STABLE

31

HOSPITALIZATIONS

HERC-7
TRENDING STABLE

11

ICU CENSUS

HERC-7
TRENDING STABLE

7,357

TOTAL WI COVID-19
DEATHS AS OF
07.12.2021

2,277

PEAK WI COVID-19
HOSPITAL CENSUS
11.17.2020

456

PEAK WI ICU CENSUS
11.16.2020

104

PREVIOUS HIGHEST
DAILY COVID-19 DEATHS
WISCONSIN
11.23.2020

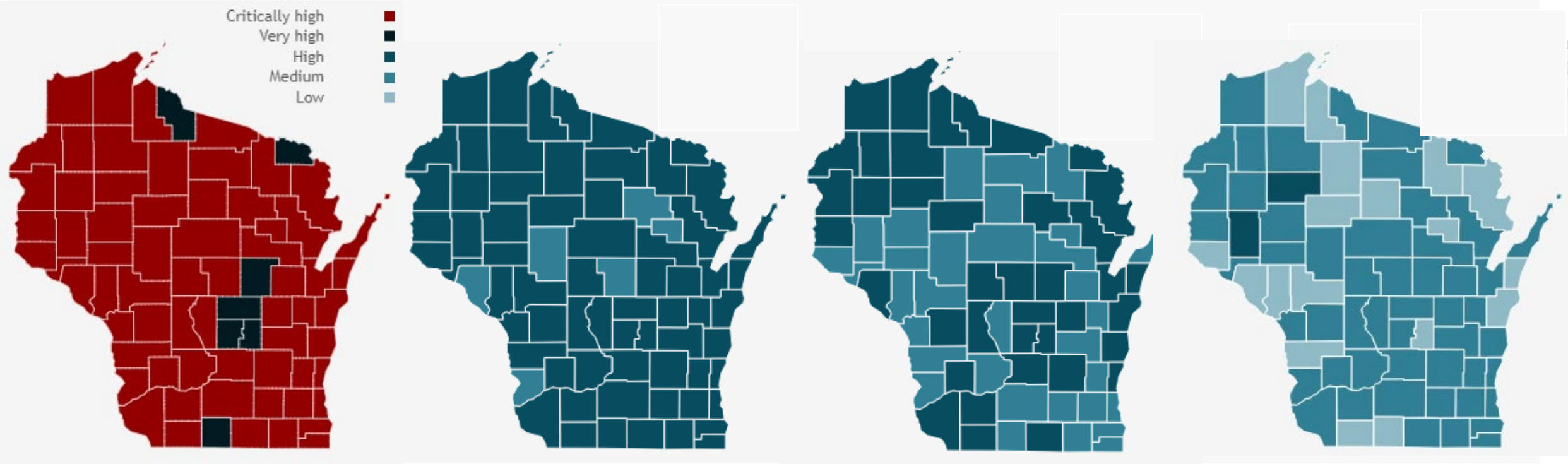
11.12.2020 – 11.25.2020

03.03.2021 – 03.16.2021

05.19.2021 – 06.01.2021

06.23.2021 – 07.06.2021

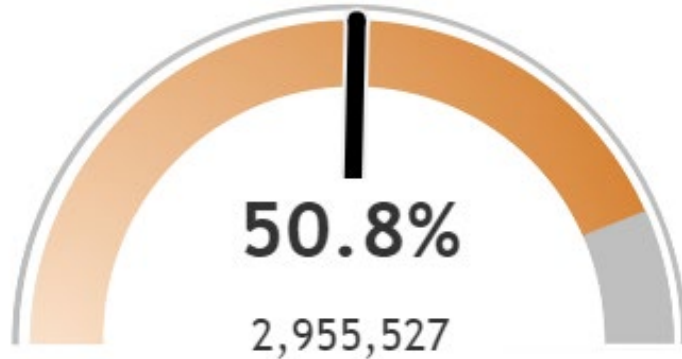
Critically high
Very high
High
Medium
Low



WISCONSIN'S SHRINKING COVID-19 CASE BURDEN OVER LAST NINE MONTHS

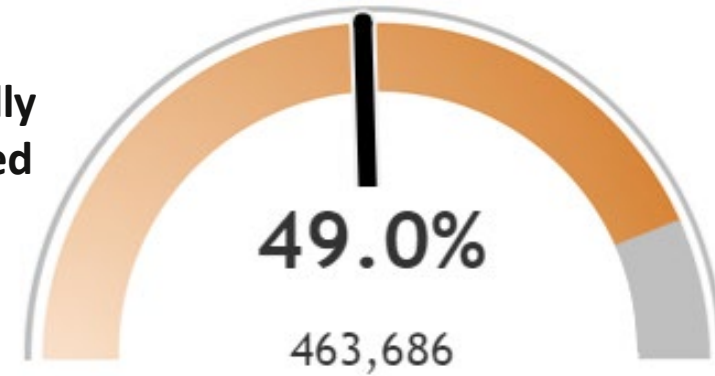
WISCONSIN POPULATION WHICH HAS RECEIVED AT LEAST ONE VACCINATION

48.0% fully vaccinated



MILWAUKEE POPULATION WHICH HAS RECEIVED AT LEAST ONE VACCINATION

45.2% fully vaccinated



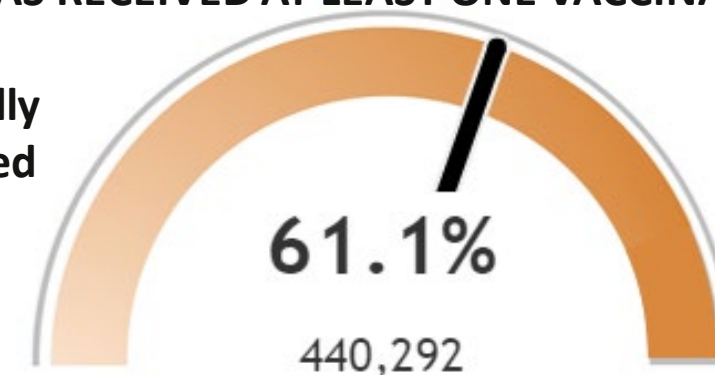
WISCONSIN 18+ YEAR OLD POPULATION WHICH HAS RECEIVED AT LEAST ONE VACCINATION

58.7% fully vaccinated



MILWAUKEE 18+ YEAR OLD POPULATION WHICH HAS RECEIVED AT LEAST ONE VACCINATION

56.7% fully vaccinated



<https://www.dhs.wisconsin.gov/covid-19/vaccine-data.htm#day>

- More than 3.44B COVID-19 vaccine doses have been administered worldwide.
- US is 2nd in world to People's Republic of China for total vaccinations (333M vs 1.4B). The US has a higher percentage of individuals who have completed the series (48%) than most of the rest of the world. We are behind Malta (70%); UAE (67%); Iceland (66%); Bahrain (62%); Chile (60%); Aruba (58%); Israel (57%); Mongolia (56%); Uruguay and Qatar (55%); Hungary (53%); UK (52%); and Curaçao (51%). Relatively speaking US vaccinations are lagging significantly.
- Wisconsin is 24th of 56 states and territories.

US

#2

total doses given

184M

vaccinated

#14

% fully
vaccinated

159M

fully vaccinated

- We have made significant progress against COVID-19, but progress has stalled due to Delta variant, and appears to be reversing. US 7-day average of new cases is 19,032 (+60% over last two weeks). US hospitalizations = 18,529 (+11% over last two weeks). US 7-day average of daily deaths is averaging 223 (-27% last two weeks).
- The unfavorable trends are most apparent in counties and states with relatively low vaccination rates.
- The US is at 48% of population fully vaccinated (159M; 55.9% of 12 and older). 184M (64.7% of 12+; 67.4% of 18+ individuals) have received at least one dose. Vaccinations are declining, but we are inching forward.
- Vaccine supply exceeds demand, and we fell short of the hopeful target of vaccinating 70% of 18+ by July 4. Daily vaccinations (0.59M per day) are down 82% since peak (3.38M on 04.13.2021).

LAST 2 WEEKS IN THE US

+60%
daily cases

+11%
Hospitalizations

-27%
daily deaths

-82%
daily
vaccinations

New World Health Organization Nomenclature

- **Alpha**: B1.1.7 UK variant spotted in September 2020.
- **Beta**: B1.351 spotted in South Africa in May 2020.
- **Gamma**: P.1 first spotted in Brazil in November 2020.
- **Delta**: B1.617.2 spotted in India.
- **Epsilon***: B1.427/B1.429 California variants in March 2020.
- **Zeta**: P.2 variant spotted in Brazil in April 2020.
- **Eta***: B1.525 found widely distributed in December 2020; UK, Nigeria.
- **Theta***: P.3 spotted in Philippines in January 2021.
- **Iota**: B.1.526 spotted in USA/NY in November 2020.
- **Kappa***: B1.617.1 spotted in India.
- **Lambda**: C.37 originally detected in Peru

<https://www.ecdc.europa.eu/en/covid-19/variants-concern>

Presented on 7/13/2021

CDC classifies
variants by 3 levels

VARIANTS OF INTEREST

Specific markers predicted
to impact biology

VARIANTS OF CONCERN

Evidence of increased
transmission or virulence
or escape from immunity

VARIANTS OF CONSEQUENCE

Clear evidence that
prevention or treatment
measures are ineffective

DELTA VARIANT

- Most transmissible strain thus far. Twice as infectious as alpha or beta. Can be spread by asymptomatic individuals.
- *R* value is estimated to be 40-80% higher than COVID-19 strains circulating in 2020.
- Primary symptoms are headache, sneezing, runny nose, and sore throat – different from earlier variants.
- Appears to cause more severe disease with more rapid onset than earlier variants. Likelihood of hospitalization is increased.
- Infects younger people (unvaccinated) than other strains.
- Has partial escape from vaccine immunity. Must complete FULL course of mRNA vaccines to achieve 90% protection.
- > Half of US cases now. 83 cases detected in WI.

CDC classifies
variants by 3 levels

VARIANTS OF INTEREST

Specific markers predicted
to impact biology

VARIANTS OF CONCERN

Evidence of increased
transmission or virulence
or escape from immunity

VARIANTS OF CONSEQUENCE

Clear evidence that
prevention or treatment
measures are ineffective

- *Should fully vaccinated individuals continue to wear masks?* WHO and CDC have given different recommendations.
- *Should children wear masks when returning to school this autumn?* CDC guidance says that vaccinated students and teachers do not need to wear masks. There are many potential problems with this bifurcated approach, especially in middle school.
- *Will Delta cause another surge in the USA?* 99%+ of COVID-19 deaths in the USA since January have been in unvaccinated individuals.
- *What do we know about the Lambda variant first detected in Peru?* There is insufficient data to designate Lambda as variant of concern, but increased community transmission in the Americas and Europe is troubling.

CDC classifies
variants by 3 levels

VARIANTS OF INTEREST

Specific markers predicted
to impact biology

VARIANTS OF CONCERN

Evidence of increased
transmission or virulence
or escape from immunity

VARIANTS OF CONSEQUENCE

Clear evidence that
prevention or treatment
measures are ineffective

- *Will the USA recommend a booster for people who have been fully vaccinated against COVID-19 with Moderna, Pfizer and/or J&J vaccines?* Pfizer will apply for EUA for third dose, but there is not sufficient data at this time to make an objective assessment.
- *Will other countries recommend a booster dose?* 53 countries have ordered Chinese jabs. Chinese vaccines based on inactivated virus particles (Sinovac, Sinopharm) have been shown to be weaker than other COVID-19 vaccines. Some countries already have decided to administer a third dose of the same vaccine, or to cross-vaccinate with viral vector (AstraZeneca) or mRNA vaccines (Moderna, Pfizer). Examples include Peoples Republic of China, UAE and Bahrain. Indonesia and Thailand are expected to follow suit soon.

CDC classifies
variants by 3 levels

VARIANTS OF INTEREST

Specific markers predicted
to impact biology

VARIANTS OF CONCERN

Evidence of increased
transmission or virulence
or escape from immunity

VARIANTS OF CONSEQUENCE

Clear evidence that
prevention or treatment
measures are ineffective

What will the impact of Delta be in Wisconsin?

- Currently, there is relatively low penetration of Delta in Wisconsin.
- But Delta will be the predominant COVID-19 variant in Wisconsin by summer's end.
- If vaccinations continue to be stalled, worst case scenario would be that we would have a surge similar Missouri, which now has hospitals and ICUs full of severely ill young people with COVID-19.
- If we continue to make some progress with vaccinations, best case scenario would be what is happening now in Israel, where fully vaccinated teachers are being infected by unvaccinated students, and where younger unvaccinated people are becoming symptomatically infected but without full hospitals and ICUs.
- Personal mitigation measures will impact COVID-19 in Wisconsin.

CDC classifies
variants by 3 levels

VARIANTS OF INTEREST

Specific markers predicted
to impact biology

VARIANTS OF CONCERN

Evidence of increased
transmission or virulence
or escape from immunity

VARIANTS OF CONSEQUENCE

Clear evidence that
prevention or treatment
measures are ineffective

COMPARISON OF COVID-19 VACCINES

LEARN MORE AT
Covid19.MCW.com

COVID-19 VACCINES

All seven marketed vaccines give some degree of protection from COVID-19

mRNA and viral vector vaccines are superior to inactivated COVID-19 virus vaccines for symptomatic disease and for Delta variant protection

	CoronaVac (Sinovac) 	AstraZeneca 	Pfizer 	Moderna 	Johnson & Johnson 	Sputnik V 	Sinopharm
Preventing symptomatic Covid	56.50%	79%	95%	94%	67%	92%	73%
Preventing serious illness/death	84%	100%	100%	100%	100%	100%	100%
How it works	Two dose inactivated Covid virus	Two dose viral vector (weakened cold virus)	Two shot mRNA	Two shot mRNA	Single shot viral vector	Two dose viral vector	Two dose inactivated Covid virus

Sinovac and Sinopharm vaccines appear to be even less effective against severe disease caused by the Delta variant.

<https://www.dailymail.co.uk/news/article-9461219/Why-nations-relying-Chinas-Covid-vaccines-risk-waves.html>

Relative risks and benefits of COVID-19 vaccines.

FOR EVERY 1 MILLION 2ND DOSES IN 12-17 YEAR OLDS

FEMALES	MALES
8,500 Covid-19 cases prevented	5,700 Covid-19 cases prevented
183 hospitalizations prevented	215 hospitalizations prevented
1 death prevented	2 deaths prevented
8-10 myocarditis cases	56-69 myocarditis cases

CORONAVIRUS PANDEMIC
 FDA EXPECTED TO ADD NEW WARNINGS TO PFIZER, MODERNA VACCINES AFTER CASES OF HEART INFLAMMATION AMONG TEENS

SOON
 BIDEN TO ADDRESS CRIME SURGE

LIVE
 CNN
 S&P -4.60

VACCINE ACCESS," ONE EXPERT TELLS CNN
 CNN.com PRES. BIDEN SET THE LEAD

29:39 / 31:37

THERE ARE RARE SERIOUS SIDE EFFECTS FROM COVID-19 VACCINES

MYOCARDITIS

1 in 15,000 to 1 in 100,000 doses of Pfizer or Moderna mRNA vaccines

THROMBOSIS WITH THROMBOCYTOPENIA

1 in 100,000 or less of J&J

ANAPHYLAXIS

1 in 100,000 or less of Pfizer or Moderna doses

GUILLAIN-BARRE

1 in 100,000 J&J doses

Screenshot from CNN on 23 June 2021

Presented on 7/13/2021

WE USE MULTIPLE EXTERNAL DATA SOURCES FOR THESE PRESENTATIONS

- Wisconsin Hospital Association: wha.org/COVID-19Update
- Wisconsin Department of Health Services: <https://www.dhs.wisconsin.gov/covid-19/index.htm>
- Milwaukee County: <https://county.milwaukee.gov/EN/COVID-19>
- <https://covidtracking.com/>
- New York Times: <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>
- and <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html>
- Wisconsin Electronic Disease Surveillance System (secure access required)
- Milwaukee County Unified Emergency Operations Center (secure access required)
- Centers for Disease Control and Prevention: <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html>
- Worldometers: <https://www.worldometers.info/coronavirus/>
- Johns Hopkins: <https://coronavirus.jhu.edu/vaccines>

MEDICAL COLLEGE OF WISCONSIN ANALYTICS

- Institute for Health and Equity
- Division of Epidemiology
- Epidemiology Data Resource Center and Geographic Information System