



Ask Dr. Arwady

10/12/21

Chicago COVID-19 Community Transmission and Risk Matrix

	VERY HIGH TRANSMISSION	HIGH TRANSMISSION	SUBSTANTIAL TRANSMISSION	LOWER TRANSMISSION	LOW TRANSMISSION
COVID-19 CASES DIAGNOSED PER DAY Chicago residents - 7-day rolling daily average	800+	400 - 799	200 - 399 Current: 352 Decreasing	20 - 199	<20
COVID-19 TEST POSITIVITY Chicago residents - 7-day rolling daily average	10%+	6.6 - 9.9%	5.0 - 6.5%	2 - 4.9% Current: 2.2% Decreasing	<2%
HOSPITAL BEDS (NON-ICU) OCCUPIED BY COVID PATIENTS Chicago hospitals - 7-day rolling daily average	1250+	750 - 1249	250 - 749	100 - 249 Current: 184 Decreasing	<100
ICU BEDS OCCUPIED BY COVID PATIENTS Chicago hospitals - 7-day rolling daily average	400+	300 - 399	100 - 299	20 - 99 Current: 88 Decreasing	<20

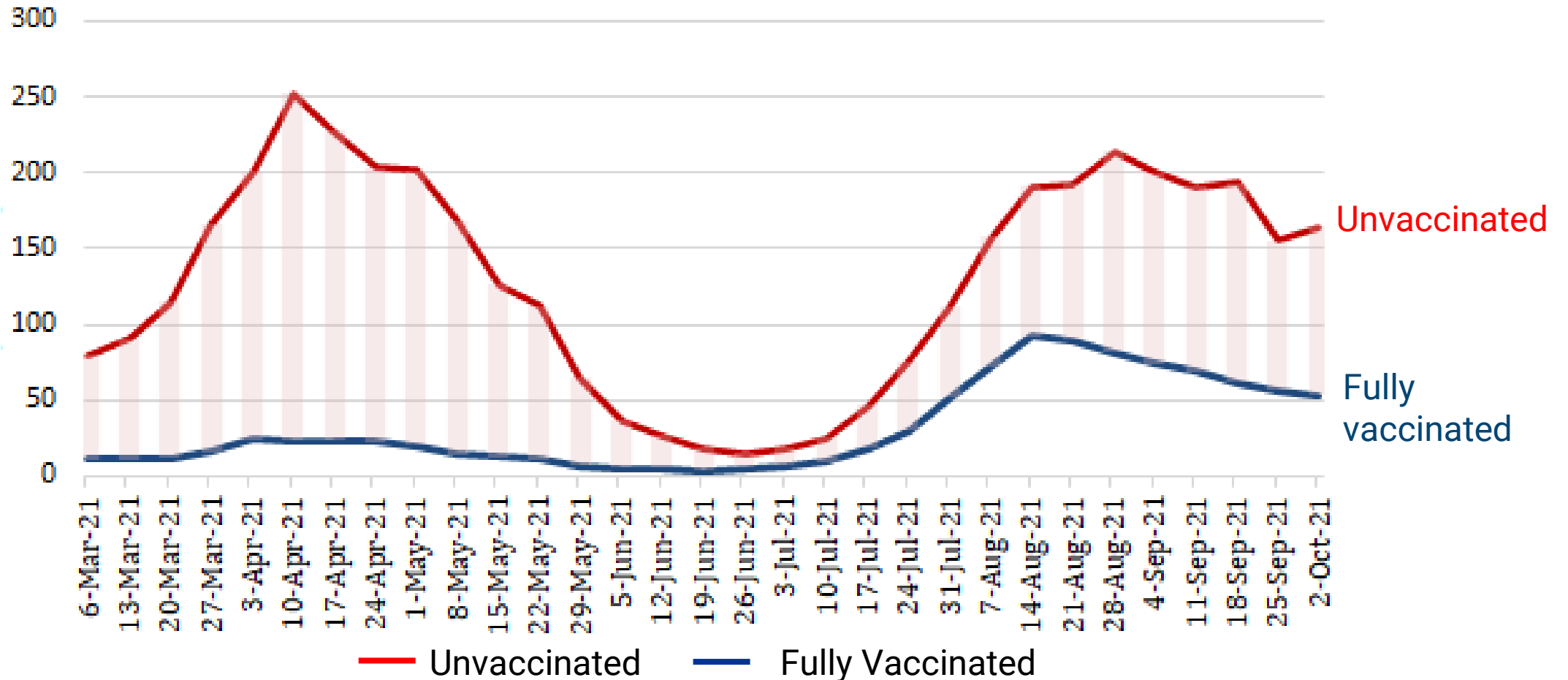
Source: Chicago Department of Public Health, data current as of October 12, 2021. These metrics represent general community COVID transmission and should not be applied to individual settings that have mitigation practices in place.

COVID CASE rates remain higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.



Even in Delta surge alone, unvaccinated Chicagoans have been **MORE THAN TWICE** as likely as vaccinated Chicagoans to be diagnosed with COVID-19.

Chicago Residents' Weekly COVID Case Rate per 100,000 by vaccination status



Notes:

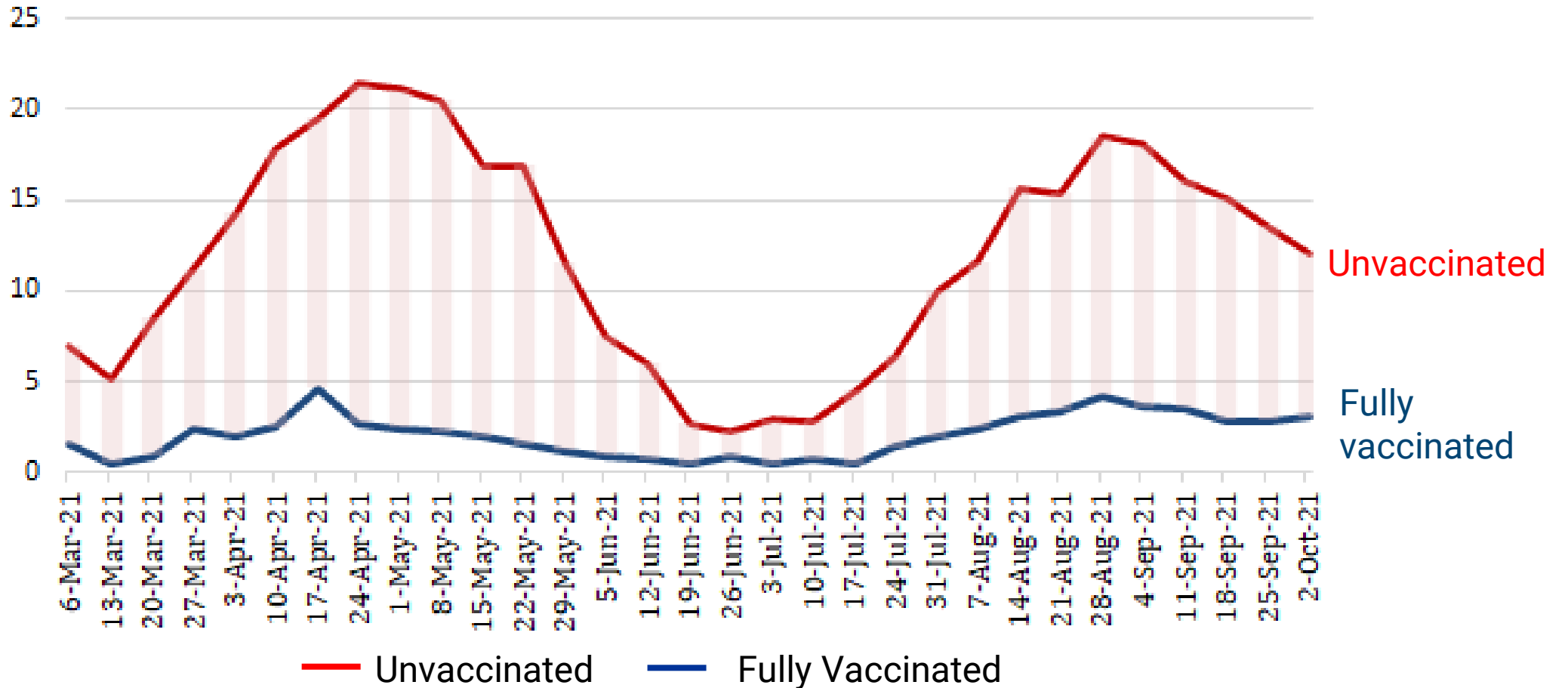
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-10/2/2021, pulled 10/6/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). Rate for vaccinated calculated as total cases divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total cases divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.

COVID HOSPITALIZATION rates remain higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.

Even in Delta surge alone, unvaccinated Chicagoans have been **more than FIVE TIMES** as likely as vaccinated Chicagoans to be hospitalized with COVID-19.



Chicago Residents' Weekly COVID Hospitalization Rate per 100,000 by vaccination status



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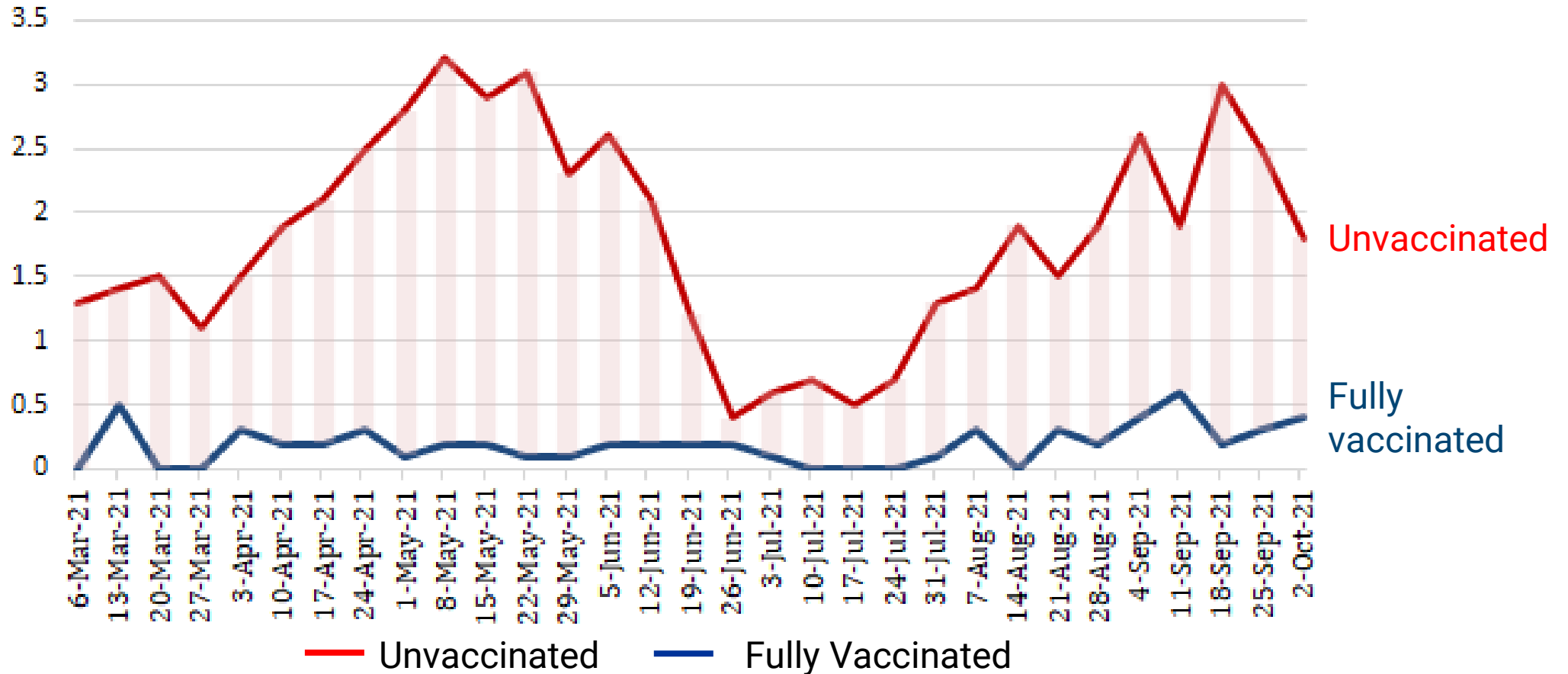
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of hospital admission 2/28/2021-10/2/2021, pulled 10/6/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). Rate for vaccinated calculated as total hospitalized cases divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total hospitalized cases divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.

COVID DEATH rates remain much higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.



Even in Delta surge alone, unvaccinated Chicagoans have been **more than EIGHT TIMES** as likely as vaccinated Chicagoans to die from COVID-19.

Chicago Residents' Weekly COVID Death Rate per 100,000 by vaccination status



Notes:

Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of death 2/28/2021-10/2/2021, pulled 10/6/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). Rate for vaccinated calculated as total case deaths divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total case deaths divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.

Reminder: CDC Booster guidance (Pfizer only)

SHOULD RECEIVE BOOSTER

- **People 65+ and long-term-care facility residents** SHOULD receive... a Pfizer booster at least 6 months after their Pfizer primary vaccine series. Benefit/risk balance is most favorable for adults >65 years.
- **People 50-64 with underlying medical conditions** SHOULD receive...

MAY RECEIVE BOOSTER

- People 18-49 with **underlying medical conditions** MAY receive...
- People 18-64 who are at increased risk for COVID-19 exposure and transmission because of **occupational or institutional setting** MAY receive...

Moderna and J and J boosters expected be evaluated “in the coming weeks, to swiftly make additional recommendations”

For public health purposes (e.g. vaccination employment requirements, quarantine, etc), at this point people continue to be considered fully vaccinated when they have completed the *primary* series



Looking ahead: More booster data and potential vaccines for children 5-11 years old in early November

October 14: FDA's advisory committee to begin considering Moderna booster

October 15: FDA's advisory committee to begin considering J and J booster

October 26: FDA's advisory committee to begin considering Pfizer for 5-11 year-olds

★ Visit [Chicago.gov/flu](https://chicago.gov/flu) to find out where you can get your FLU and COVID vaccine



THE
COMBO
YOU DON'T WANT

**GET BOTH
VACCINES.**

Chicago.gov/flu



Date	Time	Flu/COVID Clinic Location	Address	Registration Information
10/12/2021	10:00a-2:00p	48 th Ward St Ita Catholic Church	5500 N Broadway St	Register Here + walk-ins welcome
10/13/2021	11:00a-3:00p	3rd Ward City Service Office	5046 S State St	Register Here + walk-ins welcome
10/13/2021	10:00a-2:00p	42 nd Ward Chicago Temple	77 W Washington St	Register Here + walk-ins welcome
10/14/2021	9:00a-2:00p	City Hall	121 N LaSalle St	Register Here + walk-ins welcome
10/15/2021	9:00a-1:00p	25th Ward Aldermanic Office	2100 W Cermak Rd	Register Here + walk-ins welcome
10/15/2021	11:00a-3:00p	33 rd Ward Roosevelt High School	3436 W Wilson Ave	Register Here + walk-ins welcome
10/15/2021	11:00a-3:00p	40th Ward Aldermanic Office	5620 N Western Ave	Register Here + walk-ins welcome

FLU Clinics happening TODAY

Pfizer Booster shots also available

City Hall clinics also scheduled for 11/9 and 12/7



CDPH/large City College sites will be offering **Pfizer booster doses** in addition to **FLU** and **COVID primary series vaccines**

Saturday, October 16, 2021

- Wright College – Family Flu/COVID (4300 N Narragansett Ave)
- Arturo Velasquez Institute – Family Flu/COVID (2800 S Western Ave)
- Kennedy King College – Family Flu/COVID (6301 S Halsted St)

Saturday, October 23, 2021

- Daley College – Family Flu/COVID (7500 S Pulaski Rd)
- Truman College – Family Flu/COVID (1145 W Wilson Ave)

Neighbors for Life: Mr. Taylor & Kamren





Keep an eye out for more of these stories

ABC (WLS)

- Weekdays 7a-9a Good Morning America
- Friday 7p-8p Shark Tank
- Saturday 5:58p-6:58p Jeopardy and Wheel of Fortune
- Sunday 7-8p Celebrity Wheel of Fortune

CBS (WBBM):

- Tuesday 7-8p FBI
- Wednesday 9-10p CSI
- Friday 8-10p Magnum PI and Blue Bloods
- Sunday 6-7p 60 Minutes

FOX (WFLD):

- Thursday 6:30-7p NFL Thursday Night Football Pre

NBC (WMAQ):

- Weekdays 7-9a Today Show
- Sunday 8-9a News

WGN:

- Weekdays 4-5p and 6-7p News

Telemundo (WSNS):

- Weekdays 4-6p Early News
- Sunday 7-9p As Se Baila

Univision (WBGO):

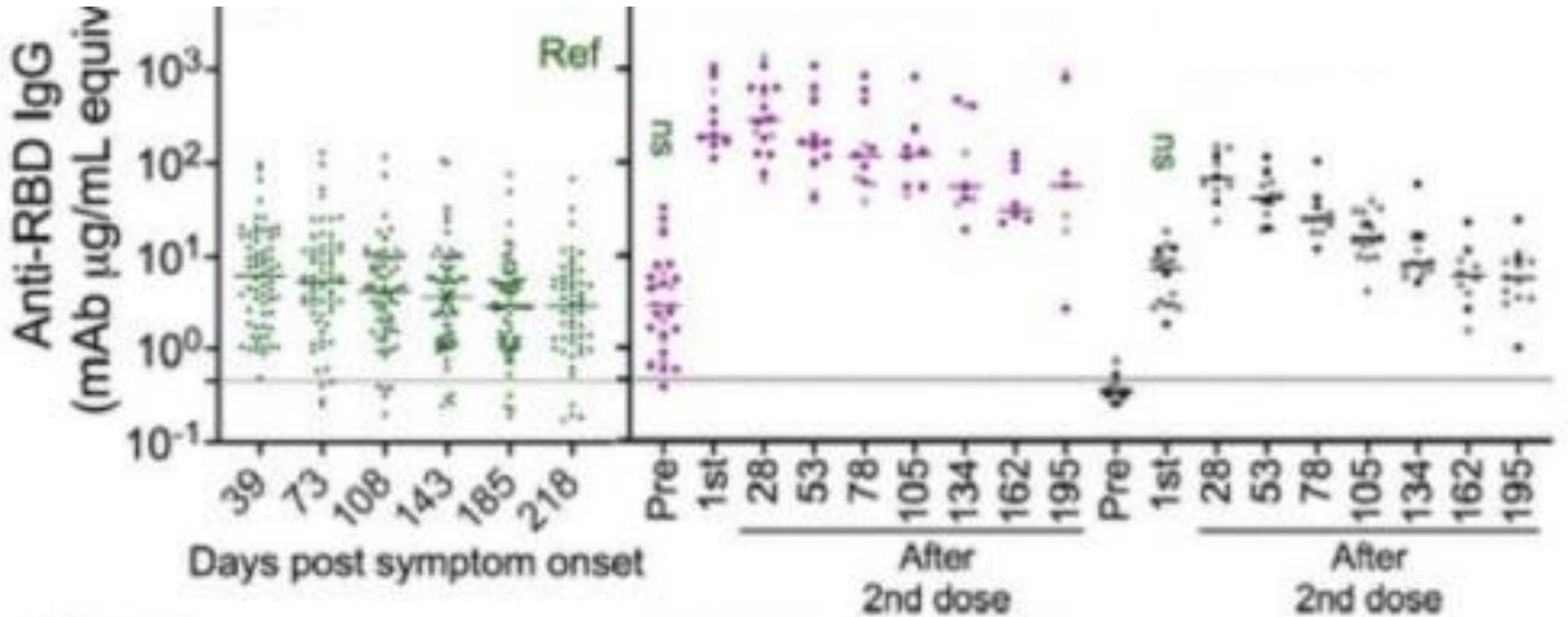
- Weekdays 5-5:30p Noticias Chicago
- Sunday 6-7p Aqui Y Ahora
- Sunday 7-9p Sunday Movie

★
Antibody level
(higher is more protective)

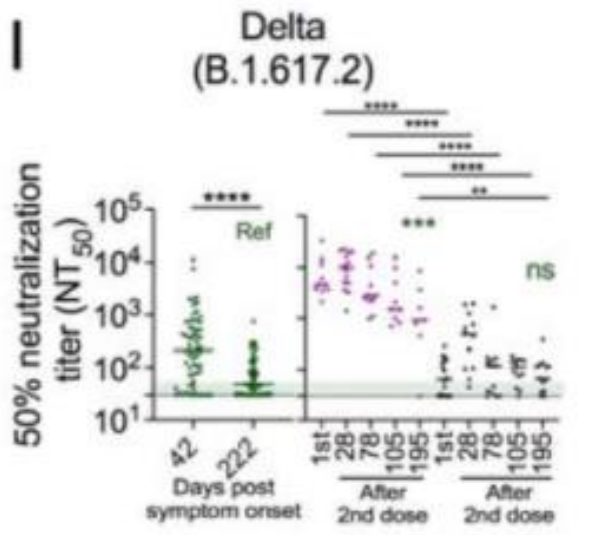
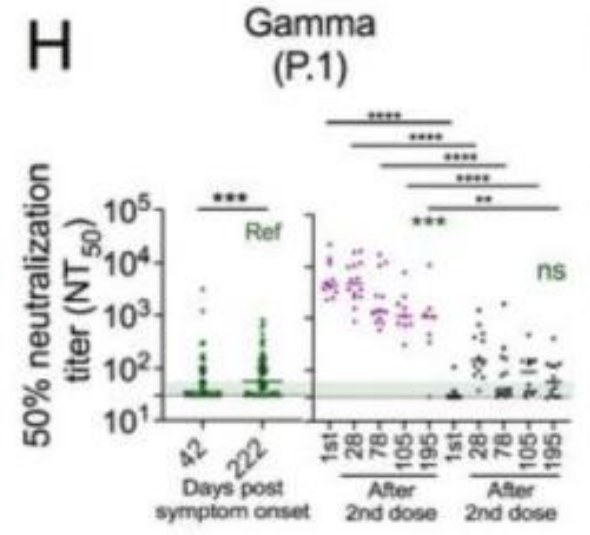
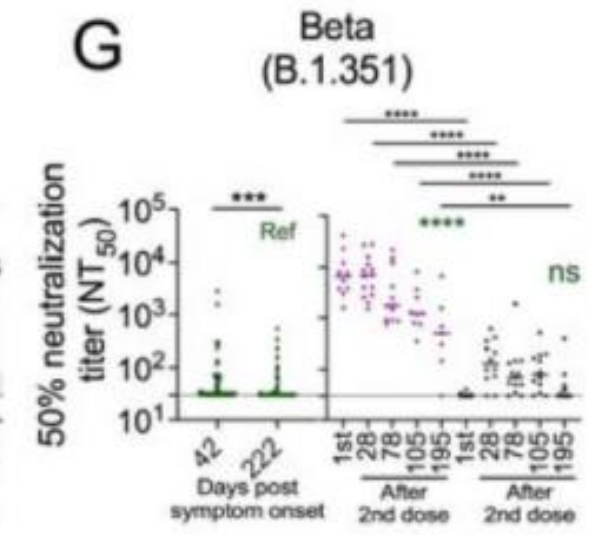
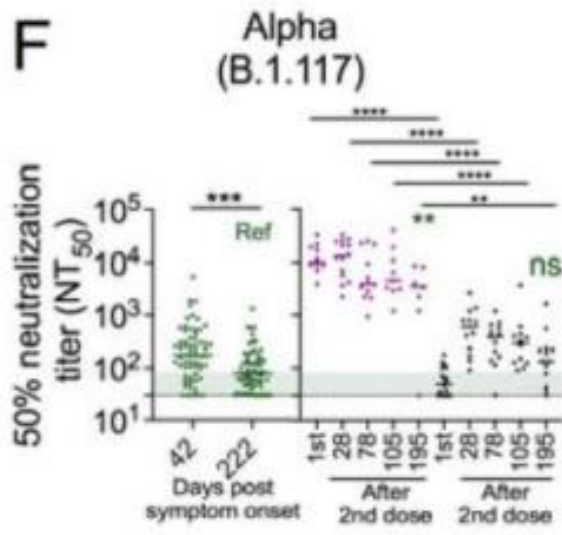
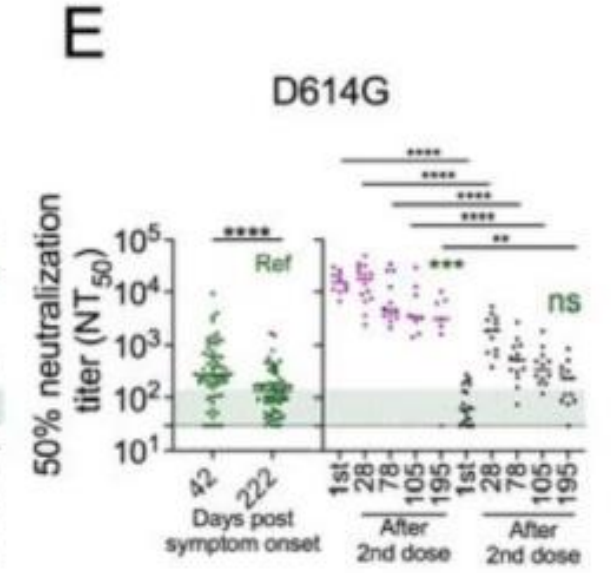
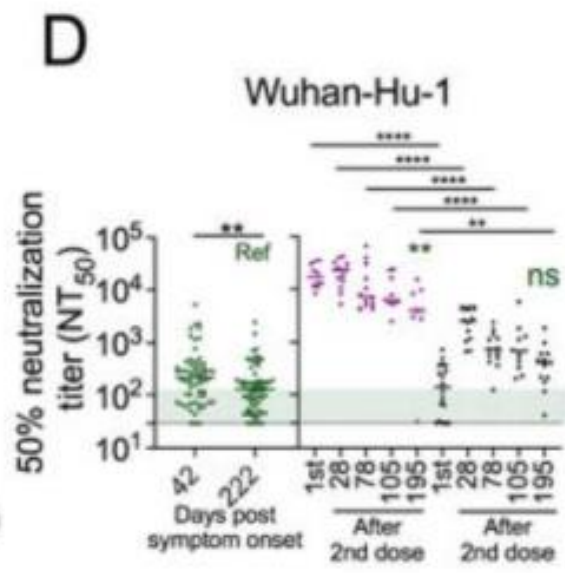
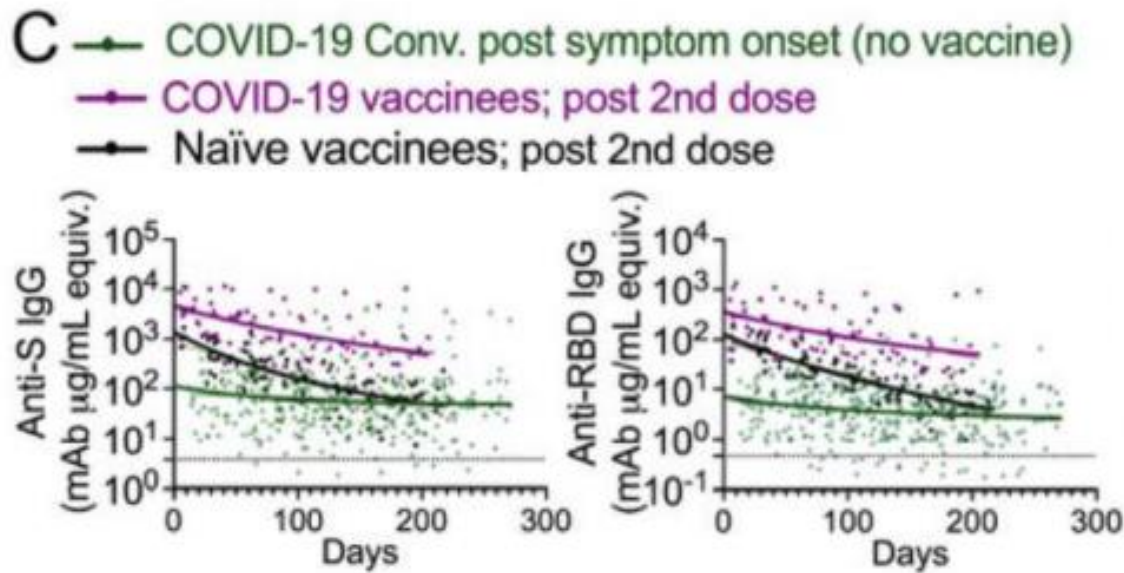
Recovered from COVID
(no vaccine)

Recovered from COVID
AND vaccine

Vaccine and
never had COVID



- COVID-19 Conv. post symptom onset (no vaccine)
- COVID-19 vaccinees; post 2nd dose
- Naïve vaccinees; post 2nd dose



Chicago estimated COVID-susceptible (no vaccination or recovery from COVID)



<u>Age group</u>	<u>Seroprevalence</u>	<u>Fraction immune from vaccination (completed series + two weeks)</u>	<u>Fraction immune</u>	<u>Fraction immune from infection only</u>	<u>Fraction susceptible</u>
0-11	45%	0%	45%	45%	55%
12-17	45%	52%	73%	22%	27%
18-29	39%	57%	74%	17%	26%
30-39	39%	65%	79%	14%	21%
40-49	39%	71%	82%	11%	18%
50-59	35%	78%	86%	8%	14%
60-69	29%	75%	82%	7%	18%
70-79	22%	70%	77%	7%	23%
80+	22%	62%	70%	8%	30%
All ages	35%	57%	72%	15%	28%

Central simplifications

Seroprevalence is the portion of the population with evidence of prior infection from chemical analysis of blood (see: <https://covid.cdc.gov/covid-data-tracker/#national-lab>)

Vaccination data updated through September 28.

Seroprevalence (last updated on 8/26) in mid-July for Illinois applies to Chicago today. Peak seroprevalence for age group is best estimate.

Seroprevalence is equally distributed by age within each age stratum (so 60-69 is average)

Likelihood/risk of getting vaccinated is independent of prior infection status

[Proportion immune using seroprevalence and vaccination.xlsx](#)

Chicago estimated COVID-susceptible (no vaccination or recovery from COVID)



<u>Age group</u>	<u>Seroprevalence</u>	<u>Fraction immune from vaccination (completed series + two weeks)</u>	<u>Number immune</u>	<u>Number immune from infection only</u>	<u>Number susceptible</u>
0-11	168,929	0	168,929	168,929	205,636
12-17	81,567	93,504	132,901	39,397	47,958
18-29	204,921	298,689	387,419	88,731	139,369
30-39	182,558	305,984	369,514	63,530	99,786
40-49	132,345	242,236	280,351	38,115	59,868
50-59	104,382	229,404	252,577	23,173	42,287
60-69	74,910	196,279	214,856	18,578	46,153
70-79	34,714	110,437	120,855	10,418	36,935
80+	19,484	54,467	61,969	7,501	26,596
All ages	953,661	1,530,169	1,942,150	411,982	751,809

Central simplifications

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[Proportion immune using seroprevalence and vaccination.xlsx](#)

Note: small discrepancy between summing age groups and all ages row attributable to using Illinois not Chicago age structure for seroprevalence estimate