



# Ask Dr. Arwady

11/16/2021

# Chicago COVID-19 Community Transmission and Risk Matrix

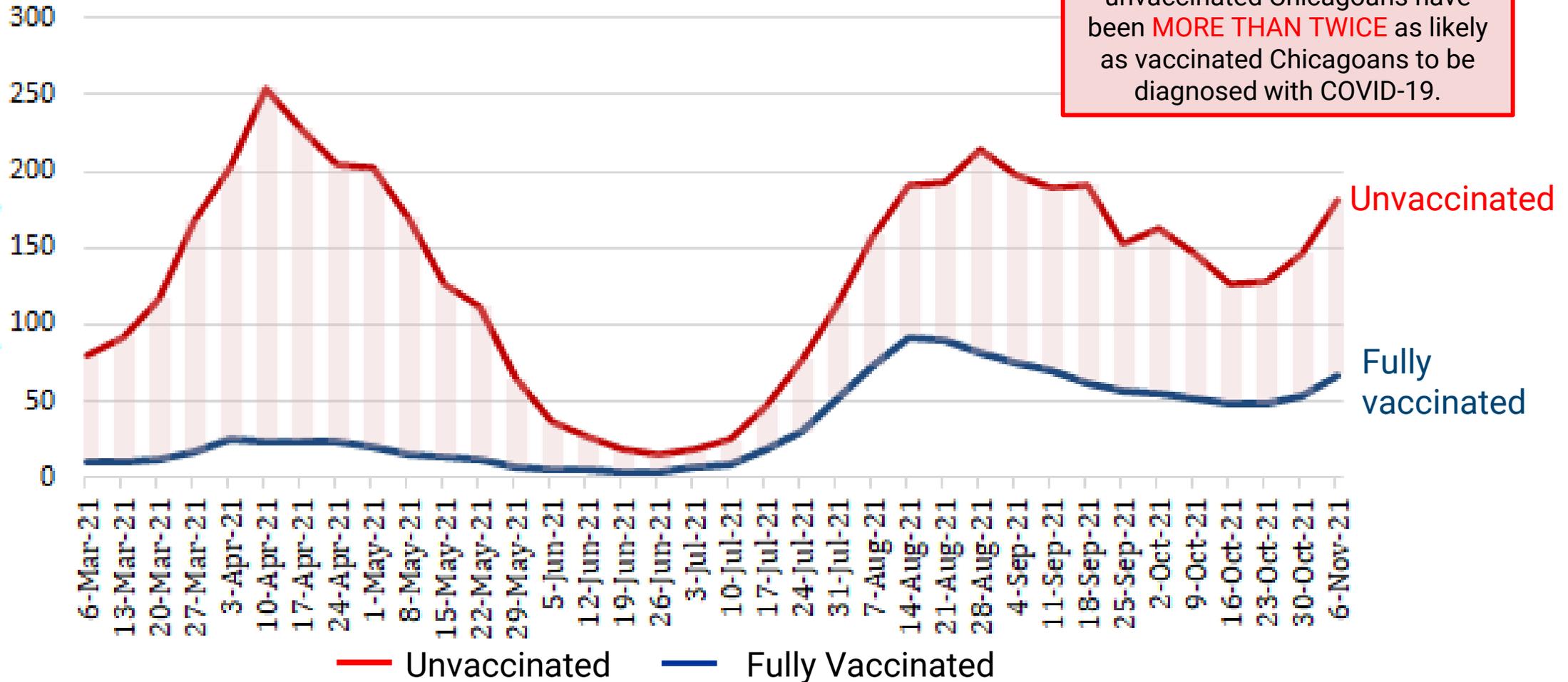
|   | VERY HIGH TRANSMISSION | HIGH TRANSMISSION                              | SUBSTANTIAL TRANSMISSION | LOWER TRANSMISSION                             | LOW TRANSMISSION |
|---|------------------------|--|--------------------------|--|------------------|
| <b>COVID-19 CASES DIAGNOSED PER DAY</b><br>Chicago residents -<br>7-day rolling daily average                   | 800+                   | 400 - 799<br><b>Current: 445</b><br>Increasing | 200 - 399                | 20 - 199                                       | <20              |
| <b>COVID-19 TEST POSITIVITY</b><br>Chicago residents -<br>7-day rolling daily average                           | 10%+                   | 6.6 - 9.9%                                     | 5.0 - 6.5%               | 2 - 4.9%<br><b>Current: 2.5%</b><br>Increasing | <2%              |
| <b>HOSPITAL BEDS (NON-ICU) OCCUPIED BY COVID PATIENTS</b><br>Chicago hospitals -<br>7-day rolling daily average | 1250+                  | 750 - 1249                                     | 250 - 749                | 100 - 249<br><b>Current: 235</b><br>Increasing | <100             |
| <b>ICU BEDS OCCUPIED BY COVID PATIENTS</b><br>Chicago hospitals -<br>7-day rolling daily average                | 400+                   | 300 - 399                                      | 100 - 299                | 20 - 99<br><b>Current: 60</b><br>Stable        | <20              |

Source: Chicago Department of Public Health, data current as of November 16, 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.



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



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

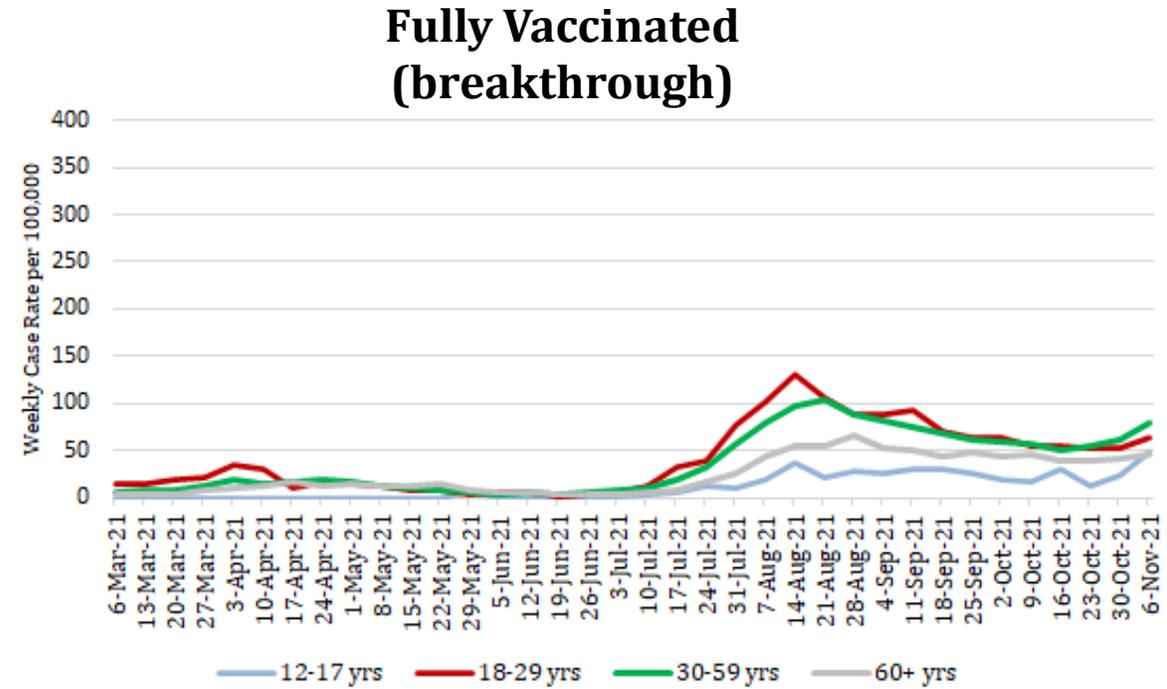
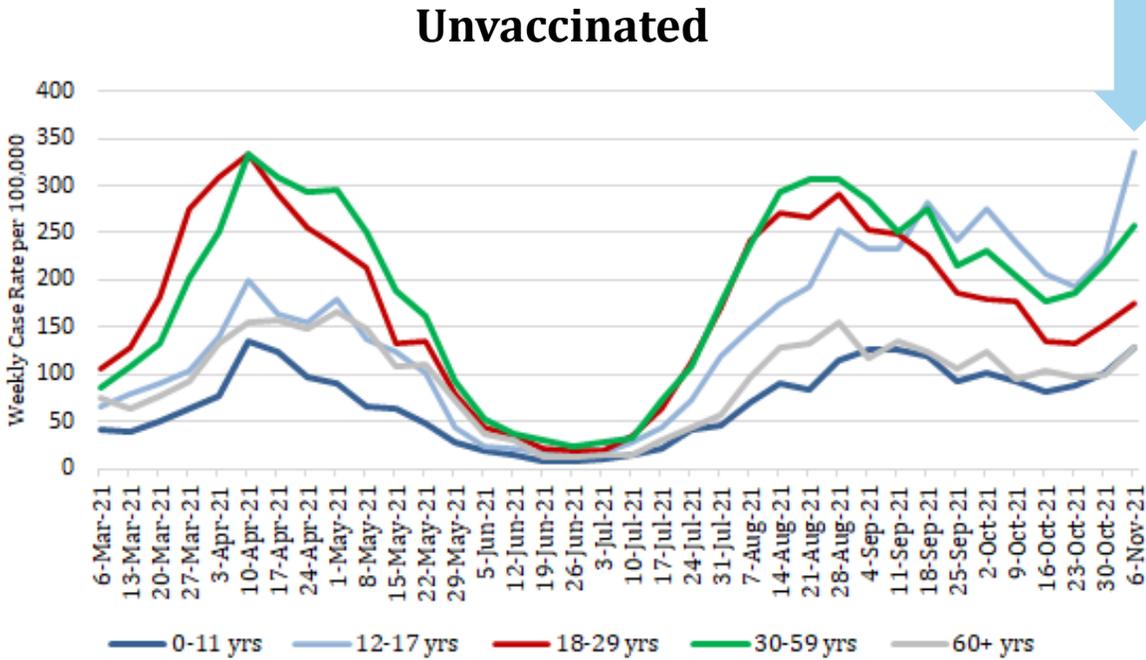
**Notes:**

Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-11/6/2021, pulled 11/10/2021. 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.

# Unvaccinated Chicagoans continue to drive our COVID outbreak



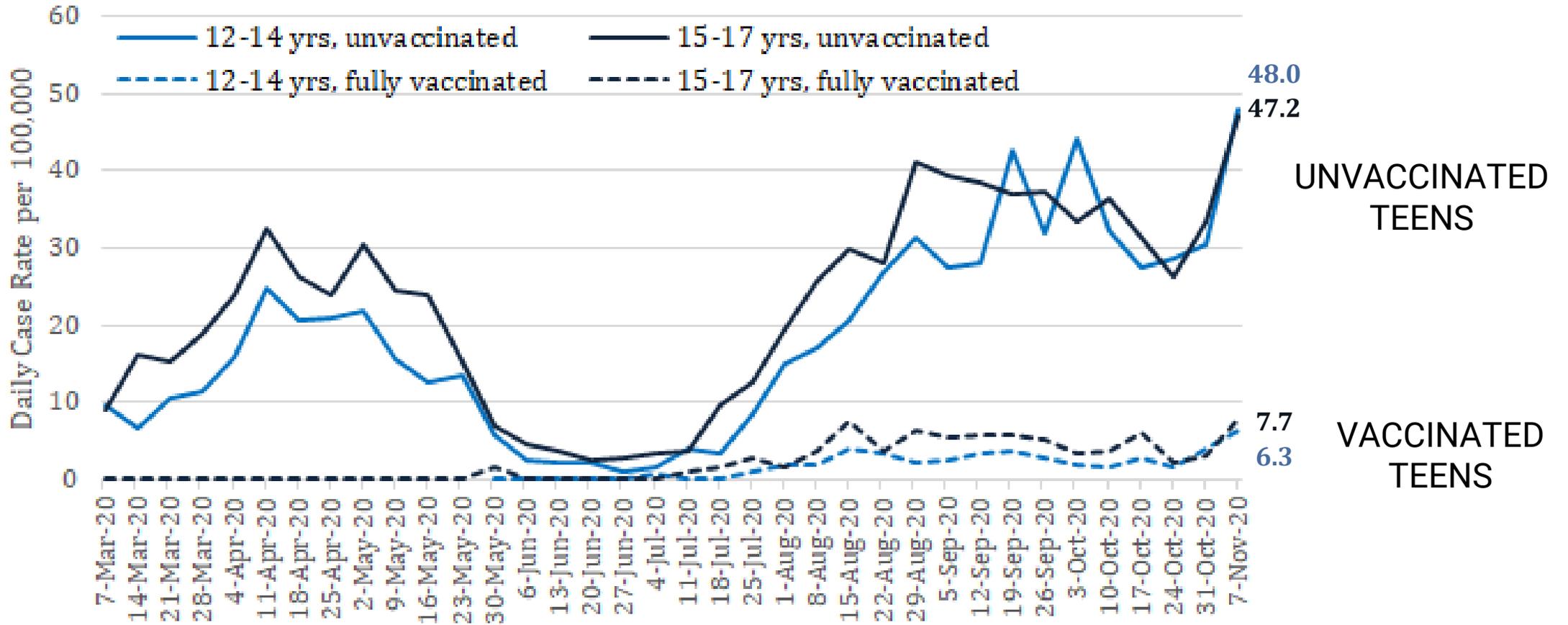
Highest case rate in Chicago now in *unvaccinated* 12-17 y/o



**Weekly COVID Case Rate per 100,000 by Age Category** Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-11/6/2021, pulled 11/10/2021. 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.



# Chicago COVID case rates are **7X** higher in unvaccinated 15-17 year olds and **over 10X** higher in unvaccinated 12-14 year olds compared to their fully vaccinated counterparts during the Delta surge



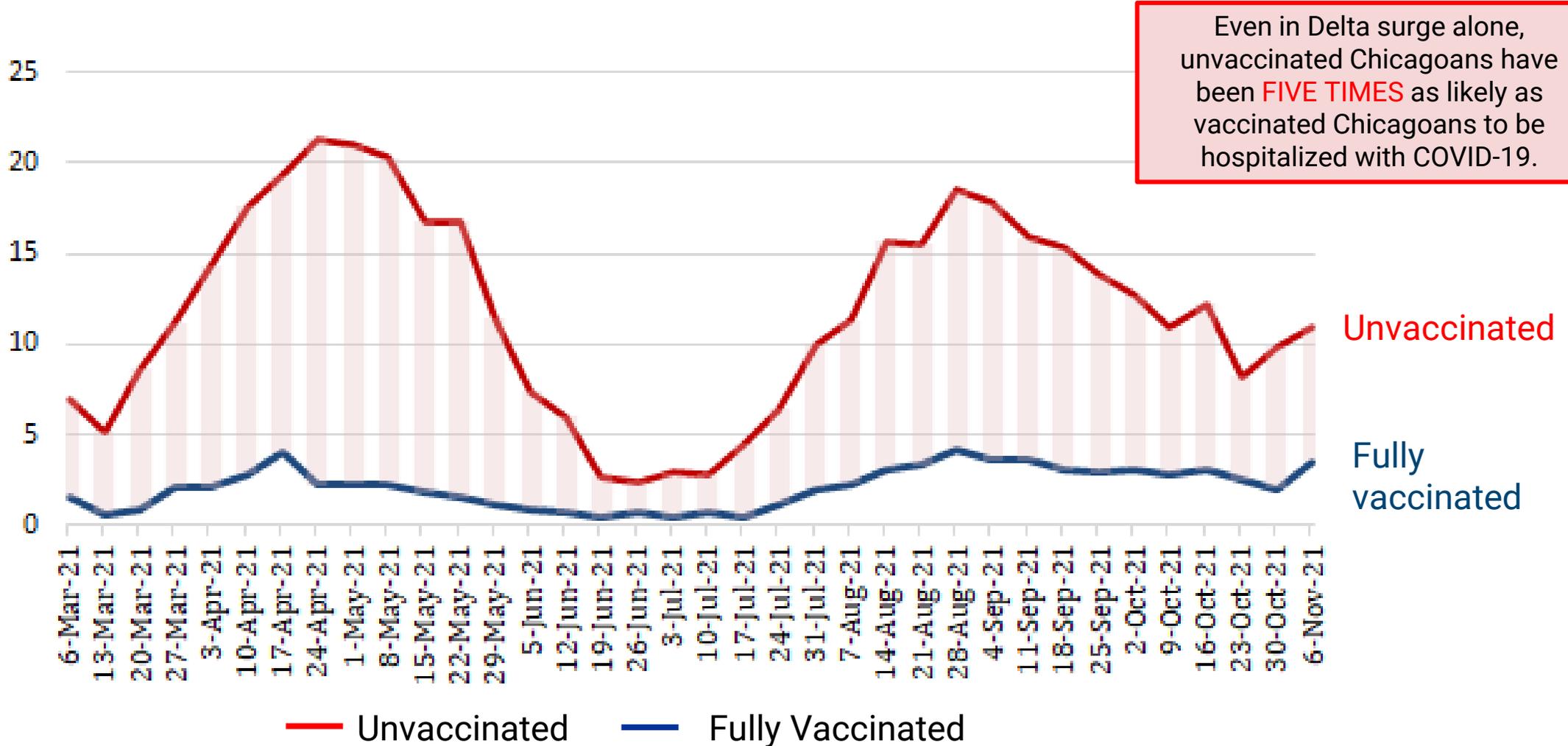
**Notes:**

Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-11/6/2021, pulled 11/10/2021. Rate calculated using the U.S. Census Bureau's American Community Survey 2019 1-year estimates for non-institutional population of children age 0-17 residing in Chicago, IL.

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



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



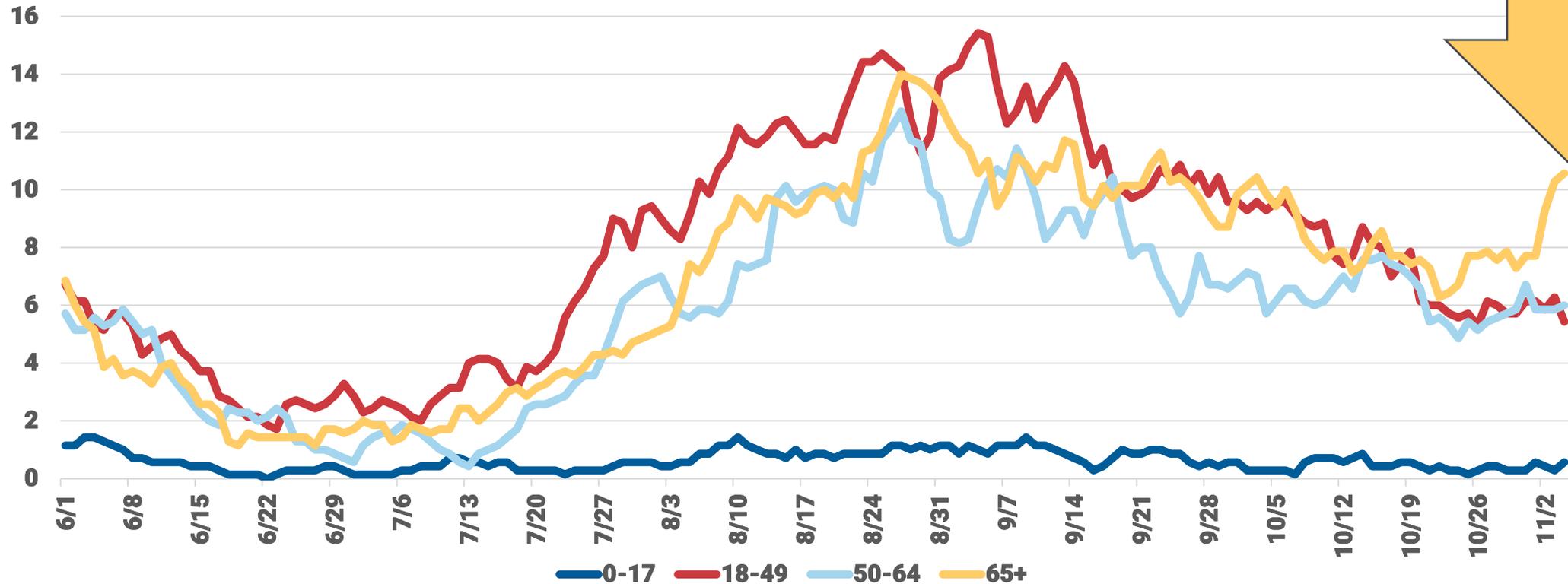
**Notes:**

Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of hospital admission 2/28/2021-11/6/2021, pulled 11/10/2021. 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.

# Chicago: Sharp increase in age 65+ COVID hospital admissions since 11/1/21



COVID-19 Hospital admits, on Admission Date, by Age Group, rolling 7-day average, from 6/1/2021

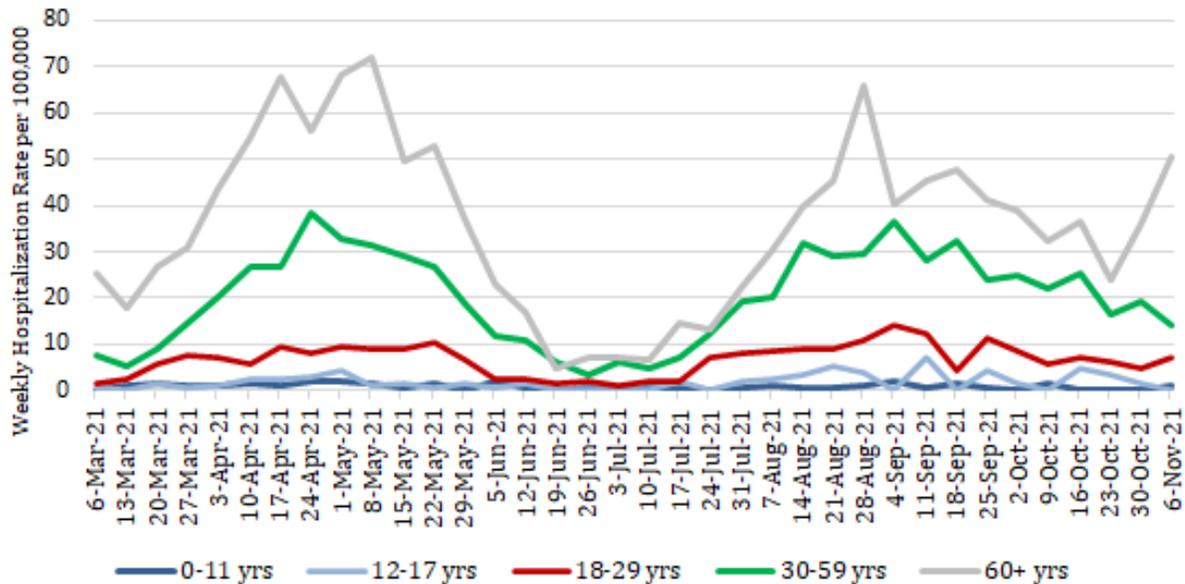


# Older (60y+) unvaccinated Chicagoans *by far* most likely to be hospitalized with COVID

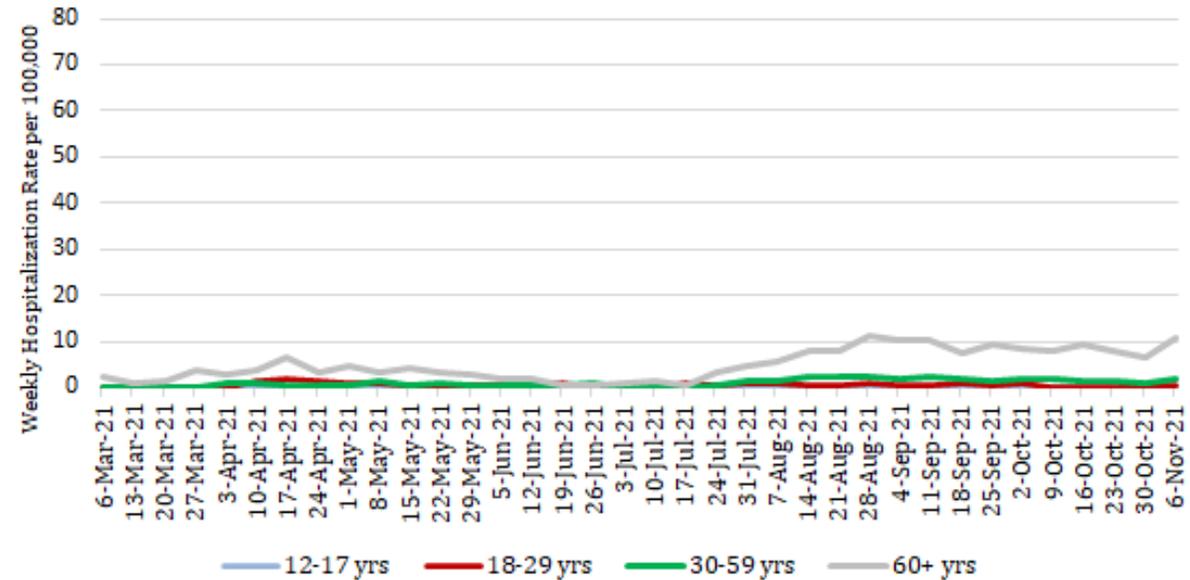
Breakthrough hospitalizations remain rare but seen most often in age 60y+



### Unvaccinated



### Fully Vaccinated (breakthrough)

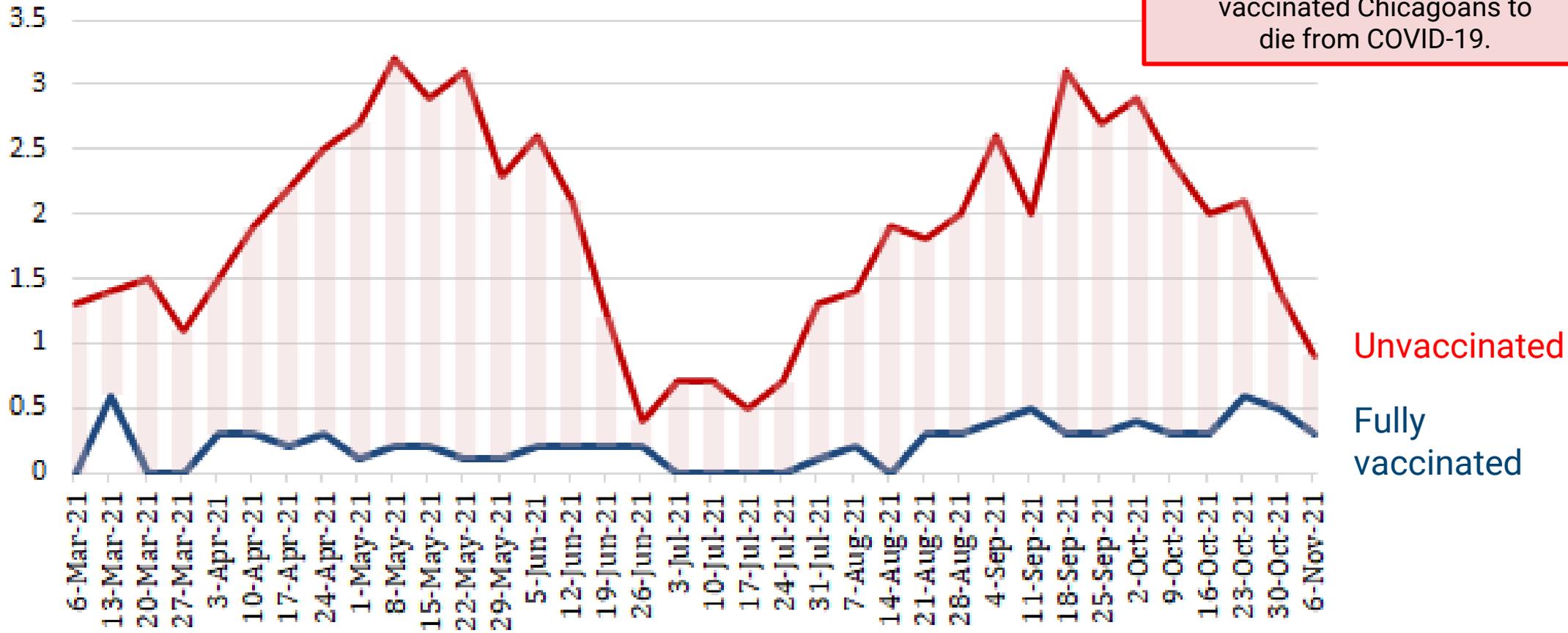


Weekly Hospitalization Rate per 100,000 by Age Category. Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of hospital admission 2/28/2021-11/6/2021, pulled 11/10/2021. Vaccination status obtained from the Illinois Comprehensive 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 higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.

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

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



— Unvaccinated — Fully Vaccinated

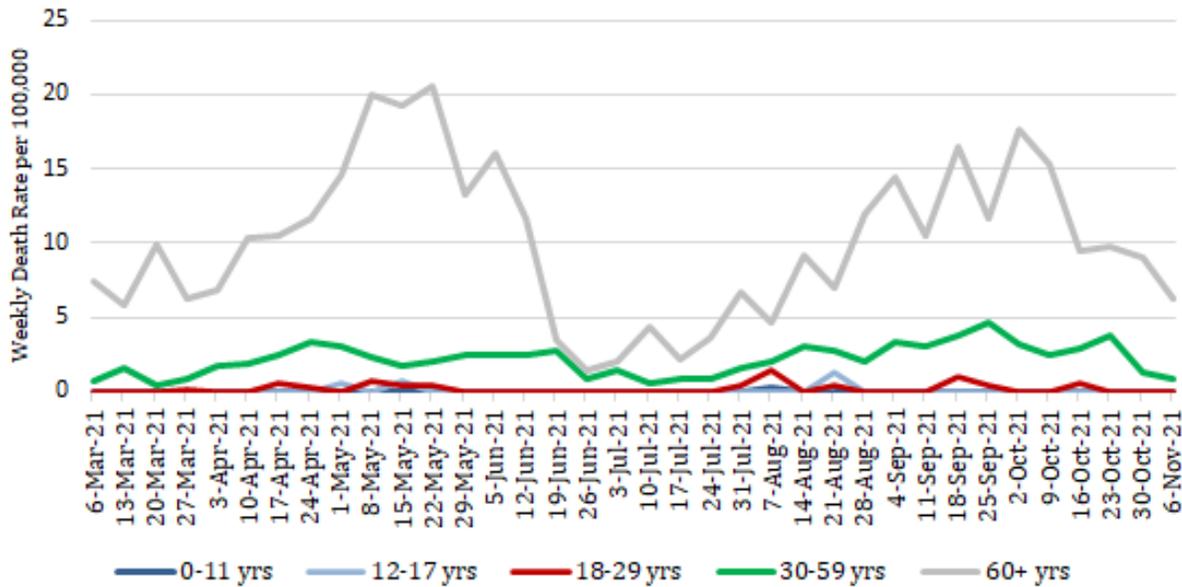
**Notes:** Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of death 2/28/2021-11/6/2021, pulled 11/10/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully 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.



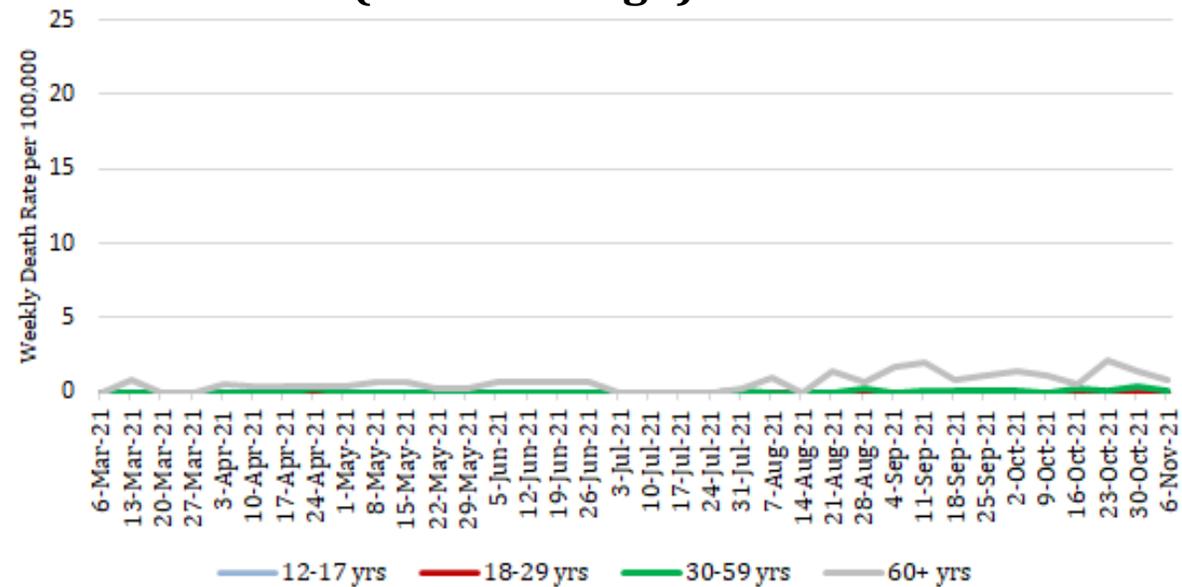
# Older (60y+) unvaccinated Chicagoans remain *by far* the most likely to die from COVID-18

## Breakthrough deaths remain very rare (seen occasionally in age 60y+)

### Unvaccinated



### Fully Vaccinated (breakthrough)



#### Notes:

Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of death 2/28/2021-11/6/2021, pulled 11/10/2021.

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.



# Breakthrough Cases: Vaccines Continue to Work VERY Well

- 98.9% of fully vaccinated Chicagoans have **not** tested positive for COVID-19
- 99.97% have **not** been hospitalized for COVID-19
  - Median age of breakthrough hospitalizations in Chicago is 67 years
- 99.994% have **not** died due to COVID-19
  - Median age of breakthrough deaths in Chicago is 77 years; nearly half are immunocompromised (#1 diagnosis: active cancer treatment)



# CPS data review

11/16/2021 0900

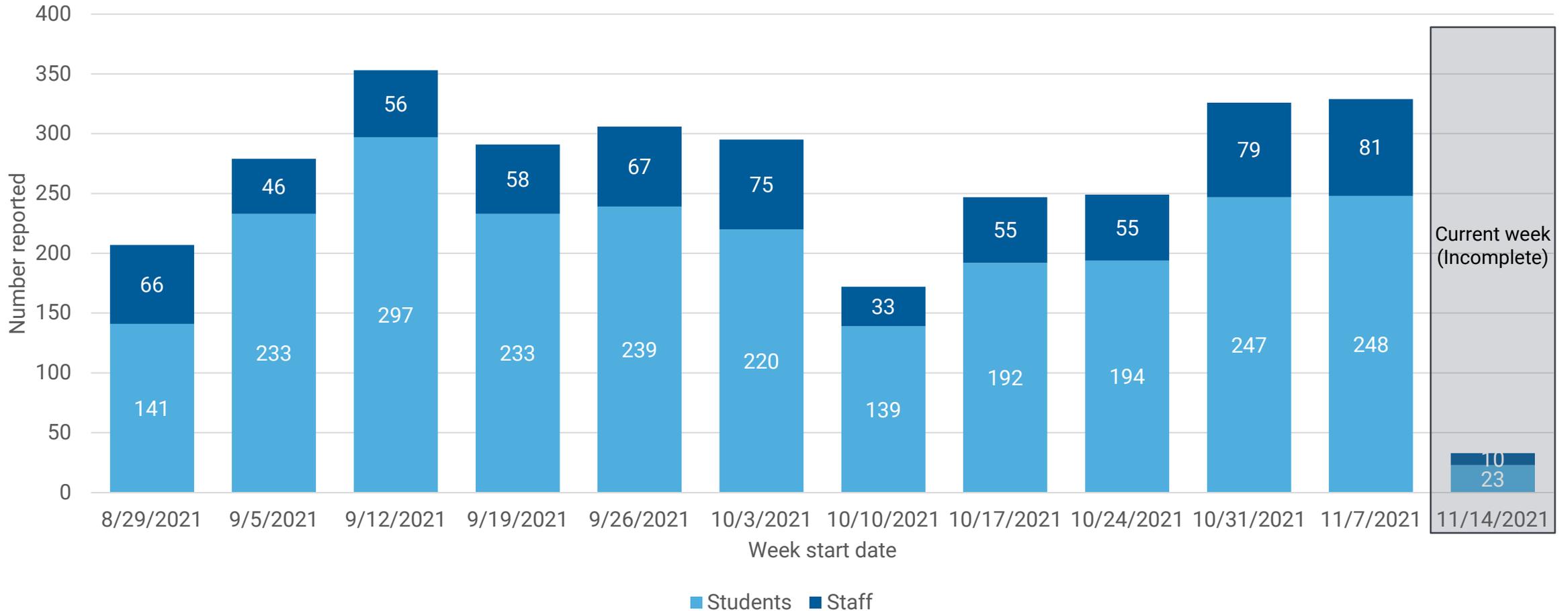
# ★ COVID-19 case rate has increased over the past two weeks

- Since the start of the school year:
  - Total of 0.99% (about 1 in 100) CPS staff and students have:
    - A) had a positive COVID-19 test and
    - B) been present at a CPS facility during the time they may have been infectious (starting two days before their symptom onset or positive test)
- Last week:
  - Total of 0.11% (about 1 out of every 1,000 staff and students)
  - Steady from previous week
  - Increase of 30% from week of Oct 24

|          | Total   | Overall<br>(August 29-Nov 14) |                 | Last week<br>(Nov 7-13) |                 |
|----------|---------|-------------------------------|-----------------|-------------------------|-----------------|
|          |         | Cases                         | Cases per 1,000 | Cases                   | Cases per 1,000 |
| Students | 270,458 | 2,400                         | 8.9             | 248                     | 0.9             |
| Staff    | 39,228  | 679                           | 17.3            | 81                      | 2.1             |
| Total    | 309,686 | 3,079                         | 9.9             | 329                     | 1.1             |

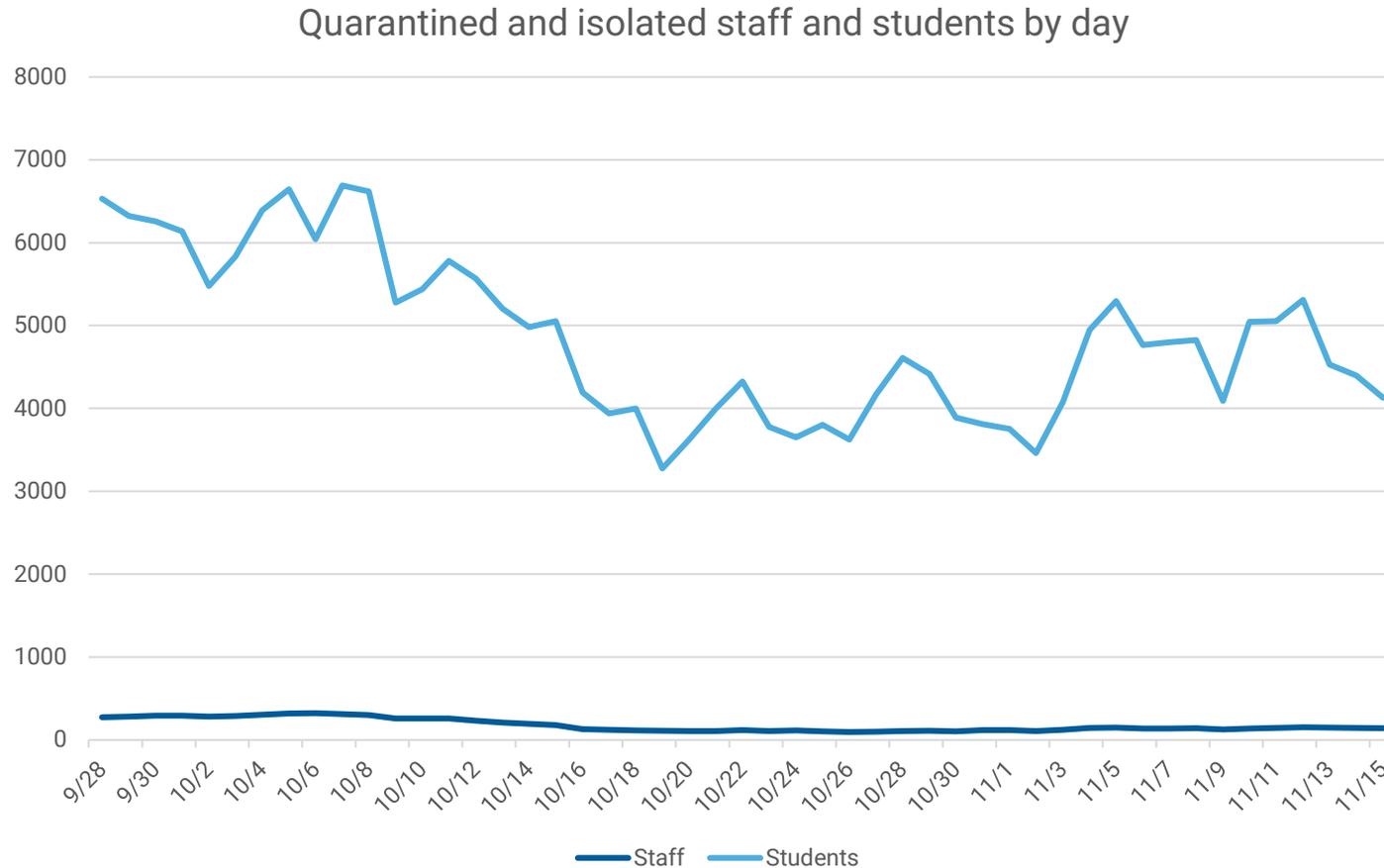
Students include only students in district-run schools (excluding charter and contract schools). All staff, including citywide, network, and central staff, are included. Actionable cases include individuals who were in a CPS building during their infectious period. Non-actionable cases are not included in this calculation. Cases are self-reported and assigned to the date they were reported. Data from school year 2021-22 are included. Data from CPS public dashboard, November 16, 2021, 0800.

# ★ COVID-19 case rate increased slightly in CPS last week



Cases include individuals who were in a CPS building during their potentially infectious period. Cases include those that are self-reported and are assigned to the date they were reported. Data from school year 2021-22 are included. Data from CPS public dashboard, November 16, 2021, 0830. Data for the current week were available through November 14, 2021, at the time of this report.

# ★ Quarantined and isolated staff and students



- Total number of students in quarantine and isolation has increased recently as cases increase
  - Still reduced compared to 14-day quarantine period
- Staff in quarantine/isolation remains steady
- CPS discussing pilots of test-to-stay and test-to-return strategies for classroom close contacts

# ★ Screening testing (for people WITHOUT symptoms)

## • Results

### • Last week:

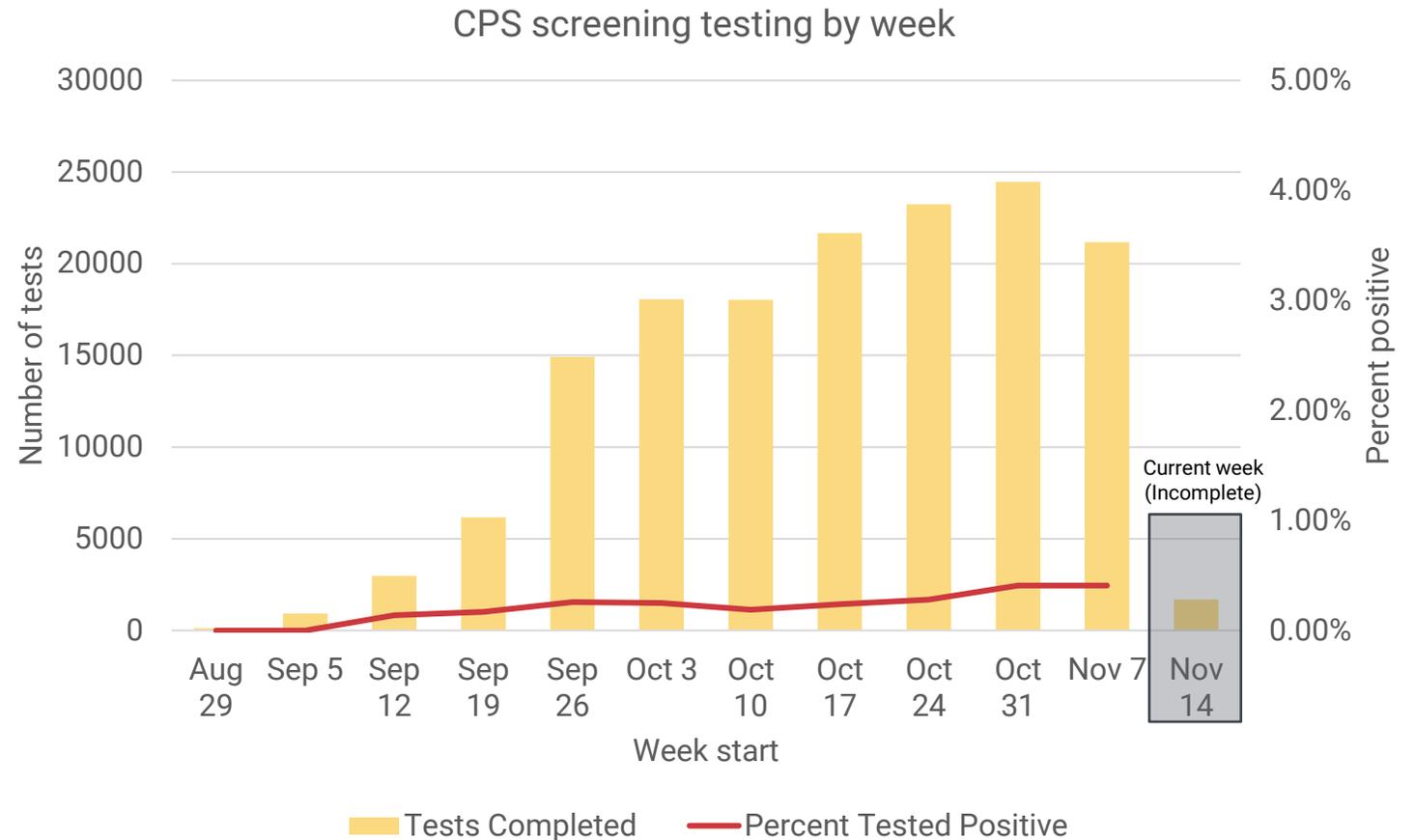
- 86 positives out of 21,177 valid tests
- 0.41% positive
- About 4 out of every 1,000 valid tests

### • Cumulative:

- 431 positives out of 153,460 tests
- 0.29% positive
- About 3 out of every 1,000 valid tests

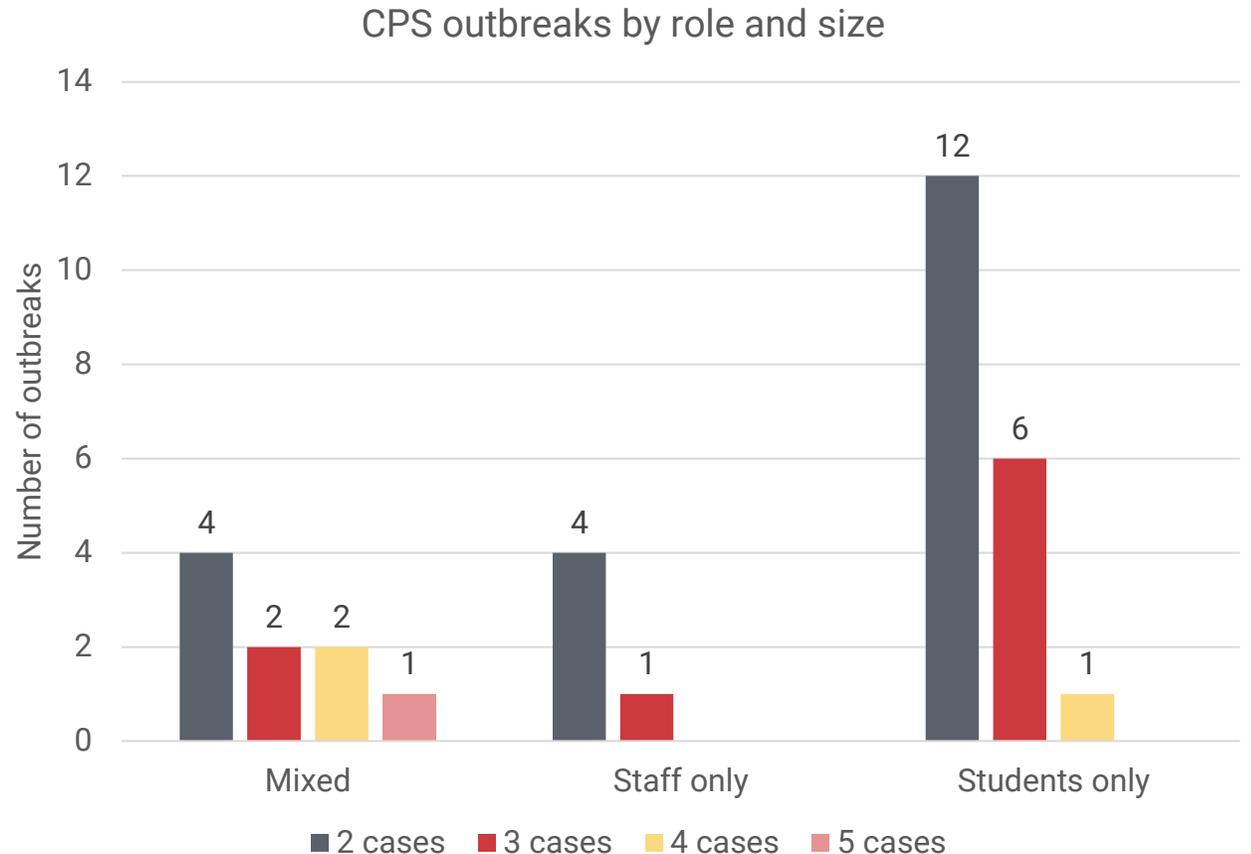
## • Comparison

- LA: 0.12% positive in last 7 days
- NYC: 0.24% positive in last 7 days



# ★ Clusters and outbreaks at CPS

- 33 clusters/outbreaks have been detected, investigated, and reported in CPS schools in this school year
- Cluster/outbreak size remains small:
  - 20 (61%) include 2 people
  - 12 (36%) outbreaks include 3-4 people
  - 1 (3%) outbreak includes 5 people
- Cluster/outbreak roles:
  - 19 (58%) involve students only
  - 5 (15%) involve staff only
  - 9 (27%) involve staff and students



As of 11/16/21. As of 10/1, a school-associated cluster/outbreak is defined as 3 or more epi-linked, lab-confirmed cases with onset within 14 days AND cases are not close contacts of each other in another setting (i.e. household) outside of the school setting or have a more likely known common exposure. Prior to 10/1, a school-associated outbreak only included 2 or more epi-linked, lab-confirmed cases. IDPH requires all outbreaks to be reported. 3 reports are currently under investigation.

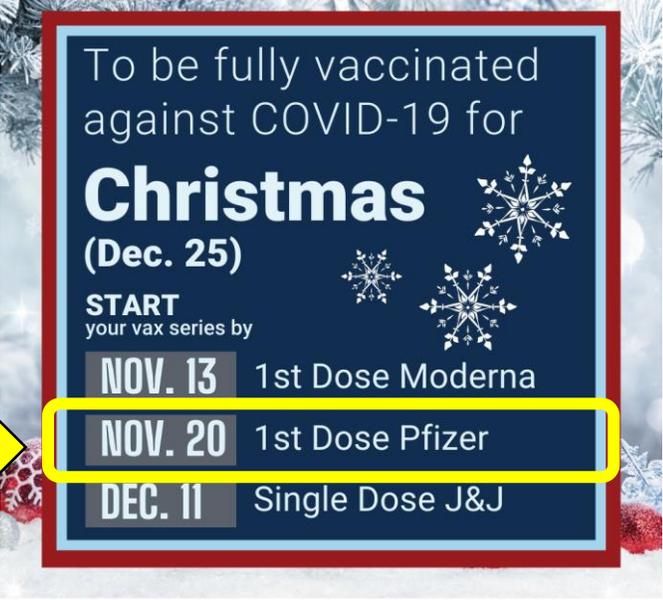
# Get vaccinated *now* in time for the holidays:

★ Even one dose before Thanksgiving starts to build protection.

Children need a first vaccine dose by this Saturday to be fully vaccinated by Christmas!

## Deadlines for New Year's/ City employees:

Nov. 19 – 1<sup>st</sup> dose Moderna  
Nov. 26 – 1<sup>st</sup> dose Pfizer  
Dec. 17 – Single dose J&J



To be fully vaccinated against COVID-19 for **Christmas** (Dec. 25)

START your vax series by

|         |                  |
|---------|------------------|
| NOV. 13 | 1st Dose Moderna |
| NOV. 20 | 1st Dose Pfizer  |
| DEC. 11 | Single Dose J&J  |

★ CDPH

A yellow arrow points to the 'NOV. 20 1st Dose Pfizer' row in the table.



To be fully vaccinated against COVID-19 for **Kwanzaa** (Starts Dec. 26)

START your vax series by

|         |                  |
|---------|------------------|
| NOV. 14 | 1st Dose Moderna |
| NOV. 21 | 1st Dose Pfizer  |
| DEC. 12 | Single Dose J&J  |

★ CDPH

# ★ Get Covered Illinois! Open Enrollment began November 1st and goes through January 15<sup>th</sup>, 2022

- Enroll by December 15<sup>th</sup> to have your coverage start on January 1<sup>st</sup>
- Sign up for a free visit with a patient navigator to help you understand how to pick a plan!
  - [Widget.GetCoveredAmerica.org](http://Widget.GetCoveredAmerica.org)

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COVERAGE  
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