Establishing Thresholds for COVID-19 Community Levels

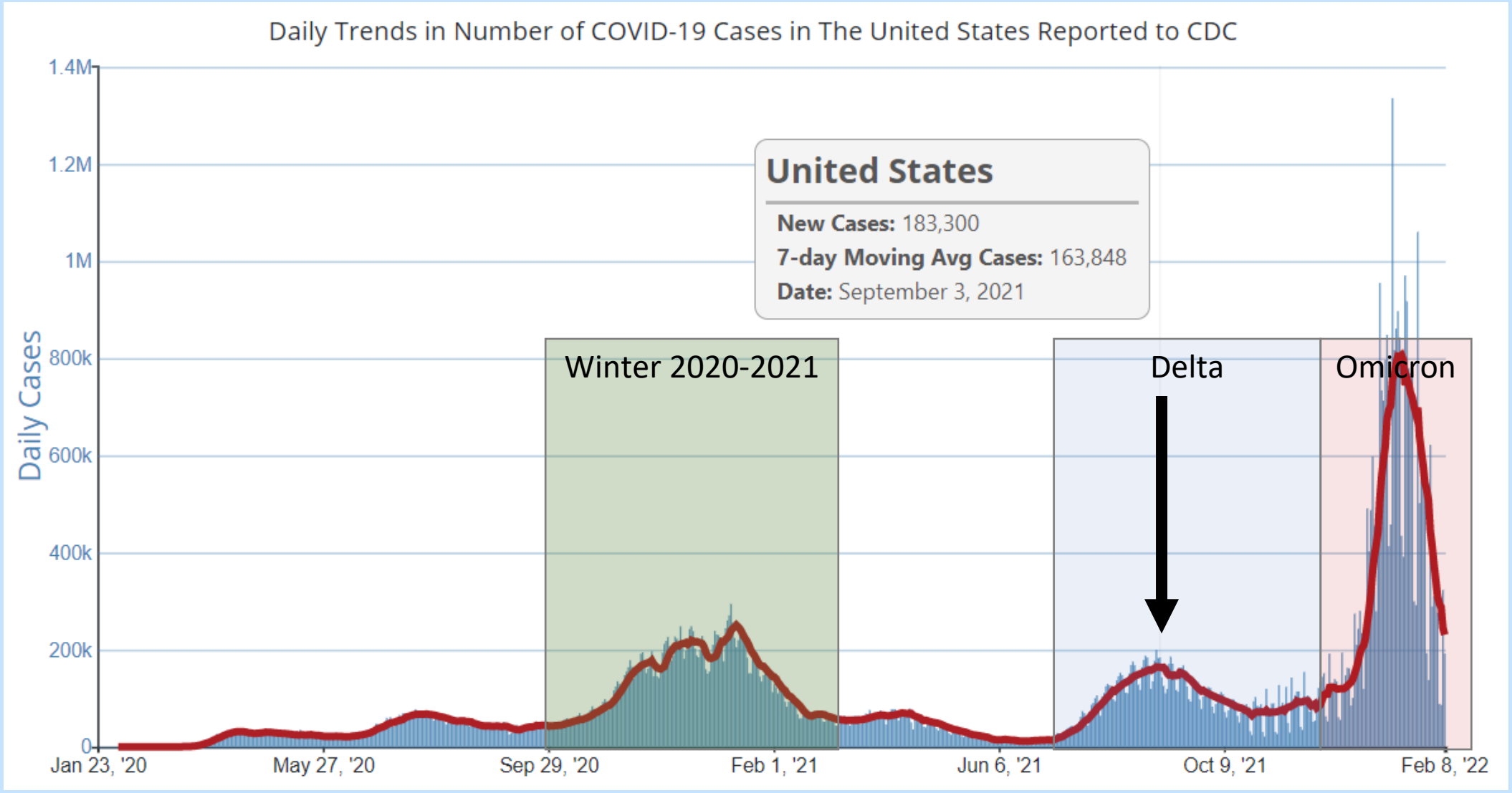
- Used correlation analyses and thresholds from Community Profile Reports and State Profile Reports to assess potential thresholds
- Correlations indicate:
  - 100 cases/100,000 population per week corresponds to about 3-4% of COVID-19 inpatient bed utilization, 6-10 new admissions/100,000 population
  - Inpatient bed occupancy is about half that of ICU occupancy
  - Fewer new admissions, fewer admissions per case, and lower inpatient bed utilization in areas with higher vaccination coverage
- Established candidate thresholds, then tested to calibrate levels

CDC's COVID-19 Community Levels and Indicators

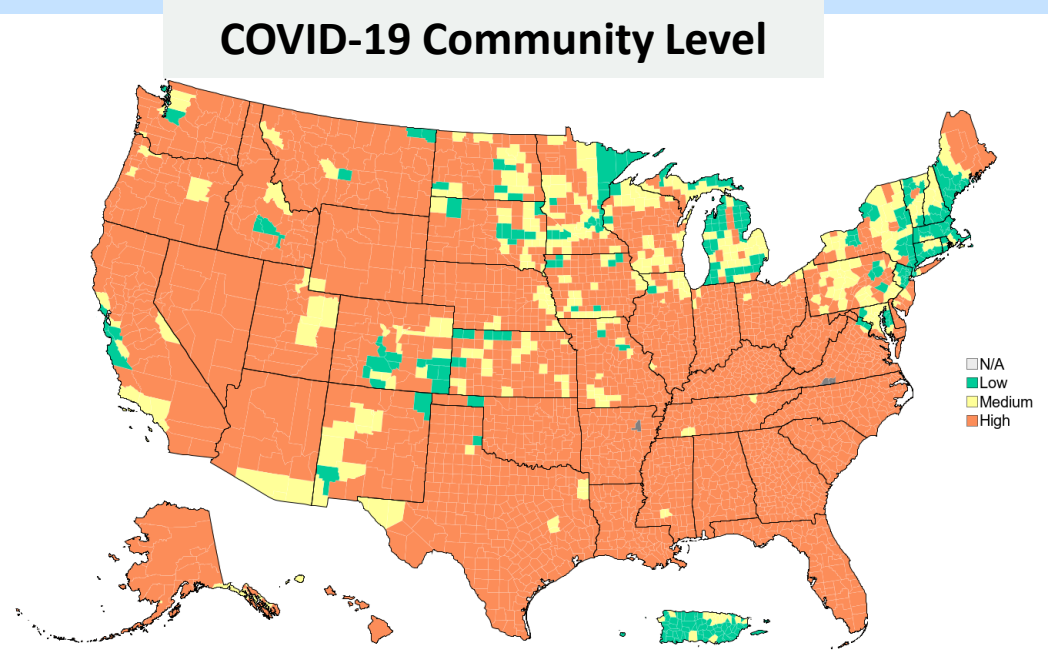
New Cases (per 100,000 population in the last 7 days)	Indicators	Low	Medium	High
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New COVID-19 admissions per 100,000 population (7-day total)	NA	<10.0	≥10.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	NA	<10.0%	≥10.0%

The COVID-19 community level is determined by the higher of the inpatient beds and new admissions indicators, based on the current level of new cases per 100,000 population in the past 7 days

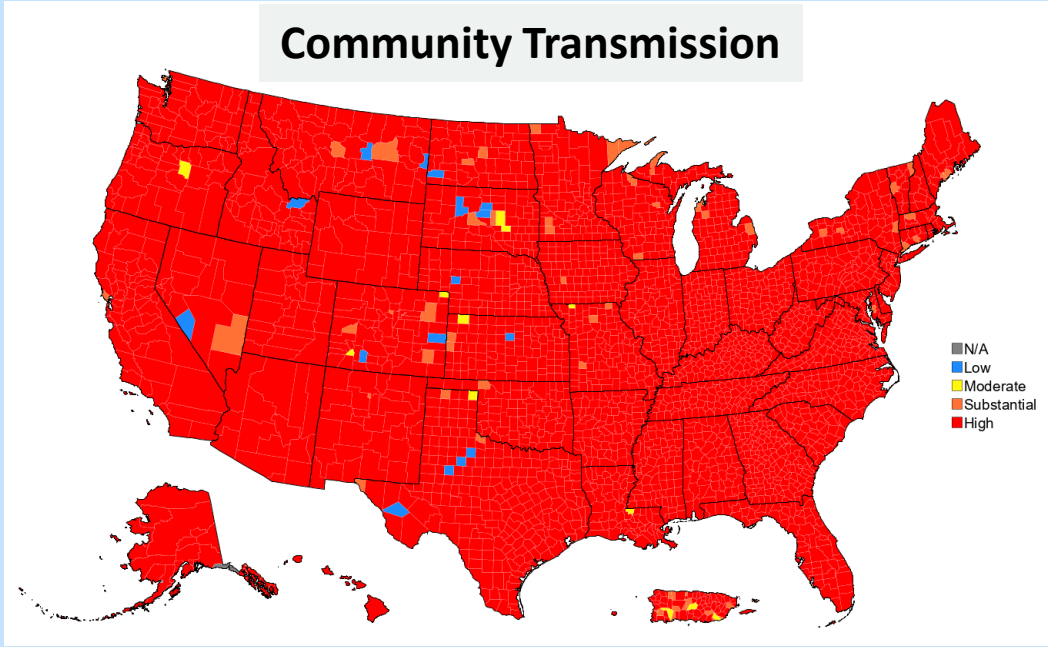
COVID-19 community levels on September 3, 2021 (peak of Delta)



COVID-19 Community Levels on September 3, 2021

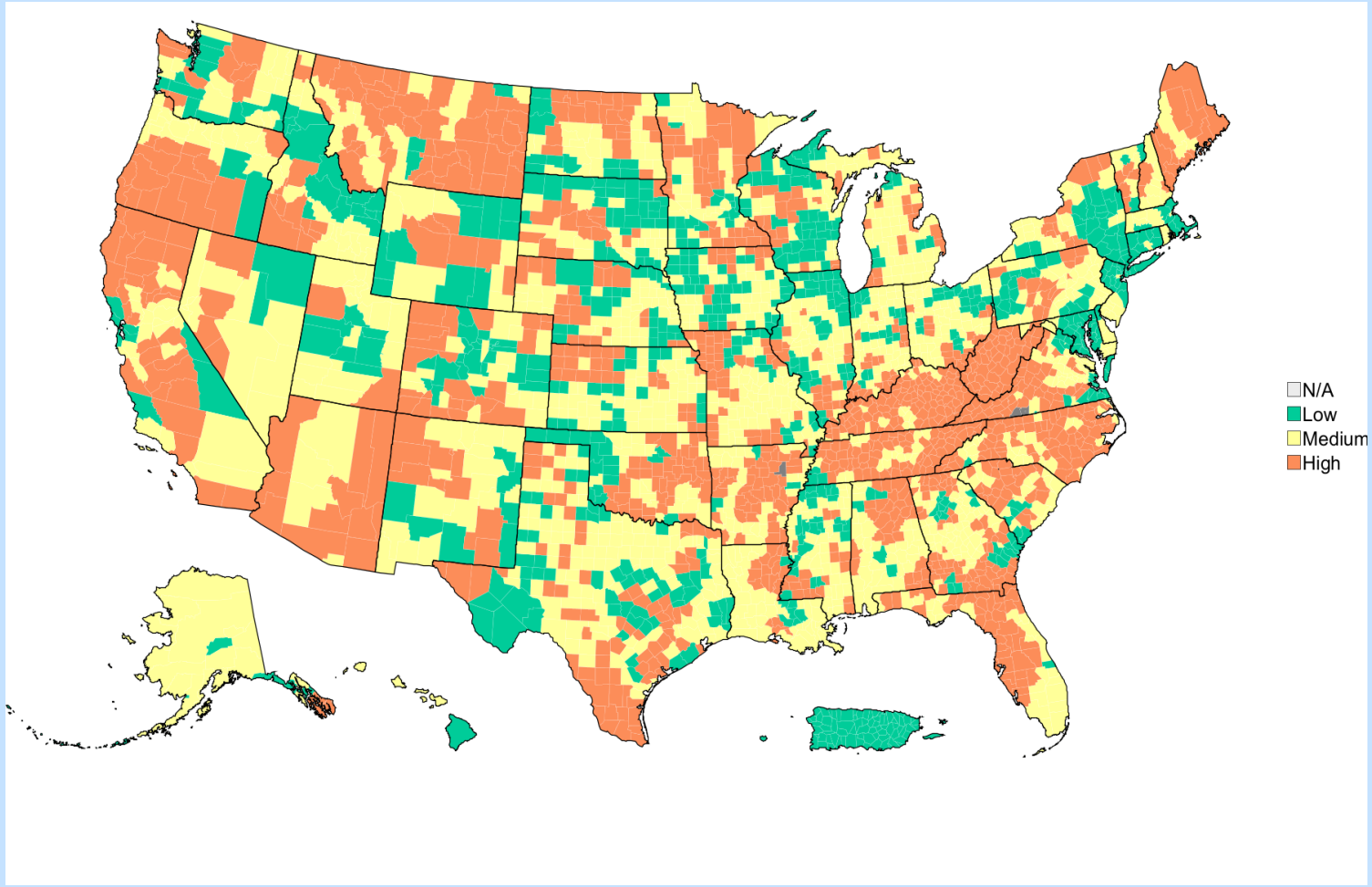


	% of Counties	% of Pop.
Low	8.1%	14.9%
Medium	12.2%	20.5%
High	79.6%	64.7%



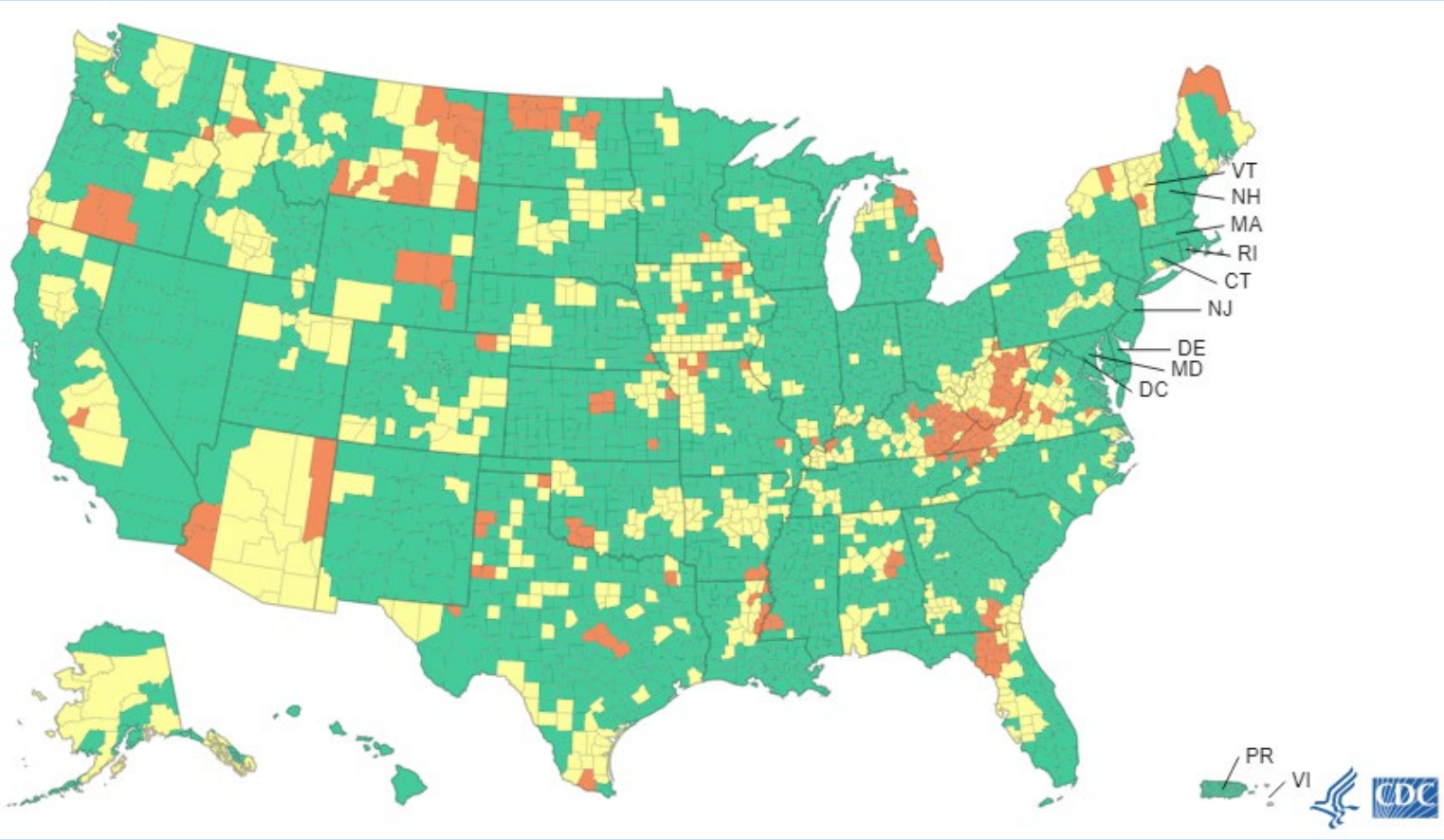
	% of Counties	% of Pop.
Low	0.5%	0.0%
Moderate	0.4%	0.0%
Subst.	2.0%	1.2%
High	97.0%	98.8%

COVID-19 community levels on February 24, 2022



	% of Counties	% of Pop.
Low	23.0%	29.5%
Medium	39.6%	42.2%
High	37.3%	28.2%

COVID-19 community levels on March 14, 2022



High	• Wear a well-fitting mask[1] indoors in public, regardless of vaccination status (including in K-12 schools and other indoor community settings)
	• If you are immunocompromised or high risk for severe disease
	  – Wear a mask or respirator that provides you with greater protection
	  – Consider avoiding non-essential indoor activities in public where you could be exposed
	• If you are immunocompromised or high risk for severe disease
	  – Talk to your healthcare provider about whether you need to wear a mask and take other precautions (e.g., testing)
	• If you have household or social contact with someone at high risk for severe disease
	  – consider self-testing to detect infection before contact
	  – consider wearing a mask when indoors with them
	• Stay up to date with COVID-19 vaccines and boosters
	• Maintain improved ventilation throughout indoor spaces when possible
	• Follow CDC recommendations for isolation and quarantine, including getting tested if you are exposed to COVID-19 or have symptoms of COVID-19
	• If you are immunocompromised or high risk for severe disease
		• Consider setting-specific recommendations for prevention strategies based on local factors
		• Implement healthcare surge support as needed
		• Protect people at high risk for severe illness or death by ensuring equitable access to vaccination, testing, treatment, support services, and information
		• Consider implementing screening testing or other testing strategies for people who are exposed to COVID-19 in workplaces, schools, or other community settings as appropriate
		• Implement enhanced prevention measures in high-risk congregate settings (see guidance for correctional facilities and homeless shelters)
		• Distribute and administer vaccines to achieve high community vaccination coverage and ensure health equity
		• Maintain improved ventilation in public indoor spaces
		• Ensure access to testing, including through point-of-care and at-home tests for all people
		  – Communicate with organizations and places that serve people who are

Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

CDC's new COVID-19 Community Levels recommendations do not apply in healthcare settings, such as hospitals and nursing homes. Instead, healthcare settings should continue to use community transmission rates and continue to follow CDC's infection prevention and control recommendations for healthcare settings.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html

LONG COVID

- We are 4 and 6 weeks from the pediatric case spikes
- Beginning of the time long COVID starts to appear
- Studies found 2%-50%, most likely about 10%, of youth who had COVID will experience long COVID
- The symptoms vary widely, but some of the most common are fatigue, shortness of breath, cognitive dysfunction (also called brain fog) and post-exertional malaise, in which even minor physical activity leads to lasting exhaustion.
- https://www.nature.com/articles/d41586-022-00334-w
- https://www.aamc.org/news-insights/scary-and-confusing-when-kids-suffer-long-covid-19
- https://www.statnews.com/2022/02/14/controlled-studies-ease-worries-widespread-long-covid-kids/#:~:text=Initial%20reports%20suggested%20that%20some,last%20for%20days%20or%20weeks.

Vaccine effectiveness in 5–11-year-olds

STAY SAFE MN

- Conclusions and Relevance:
  - In the Omicron era, the effectiveness against cases of BNT162b2 declined rapidly for children, particularly those 5-11 years.
  - However, vaccination of children 5-11 years was protective against severe disease and is recommended.
  - These results highlight the potential need to study alternative vaccine dosing for children and the continued importance layered protections, including mask wearing, to prevent infection and transmission.

Effectiveness of the BNT162b2 vaccine among children 5-11 and 12-17 years in New York after the Emergence of the Omicron Variant | medRxiv

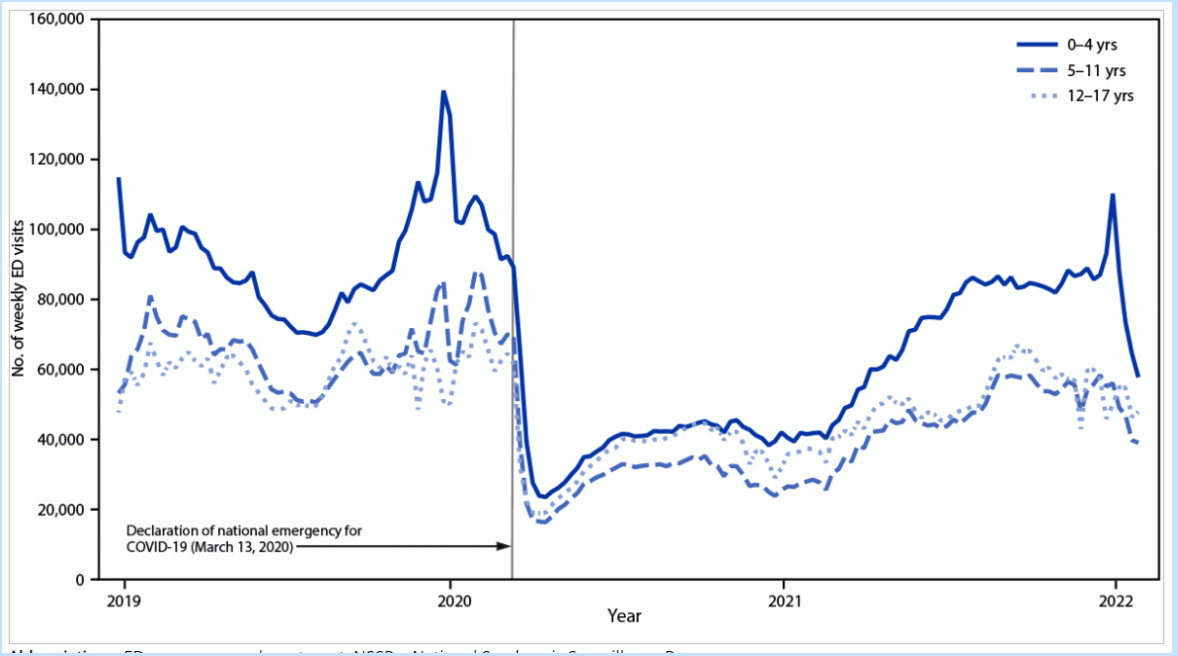
Vaccine effectiveness in preventing ED and UC visits and Hospitalizations in 5-17 –year-olds

- All eligible children and adolescents should remain up to date with recommended COVID-19 vaccinations, including a booster dose for those aged 12–17 years.
- Two doses protect against COVID-19–associated emergency department and urgent care encounters among children and adolescents. However, vaccine effectiveness (VE) was lower during Omicron predominance and decreased with time since vaccination; a booster dose restored VE to 81% among adolescents aged 16–17 years. Overall, 2-dose VE against COVID-19–associated hospitalization was 73%–94%.

Effectiveness of COVID-19 Pfizer-BioNTech BNT162b2 mRNA Vaccination in Preventing COVID-19–Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Nonimmunocompromised Children and Adolescents Aged 5–17 Years — VISION Network, 10 States, April 2021–January 2022

Pediatric ED Visits

Health care providers and families should remain vigilant for potential indirect impacts of the COVID-19 pandemic, including health conditions resulting from delayed care, and increasing emotional distress and behavioral health concerns among children and adolescents.



- Compared with 2019, overall pediatric emergency department visits decreased by:
  - 51% in 2020,
  - 22% in 2021, and
  - 23% during January 2022.
  - COVID-19 visits predominated across all pediatric ages; visits for other respiratory illnesses mostly declined.
  - Number and proportion of visits increased for certain injuries (e.g., firearm injuries, self-harm, and drug poisonings), some chronic diseases, and behavioral health concerns, with variations by age group.
- https://www.cdc.gov/mmwr/volumes/71/wr/mm7108e1.htm?s_cid=mm7108e1_w

Pediatric ED visits related to Mental Health

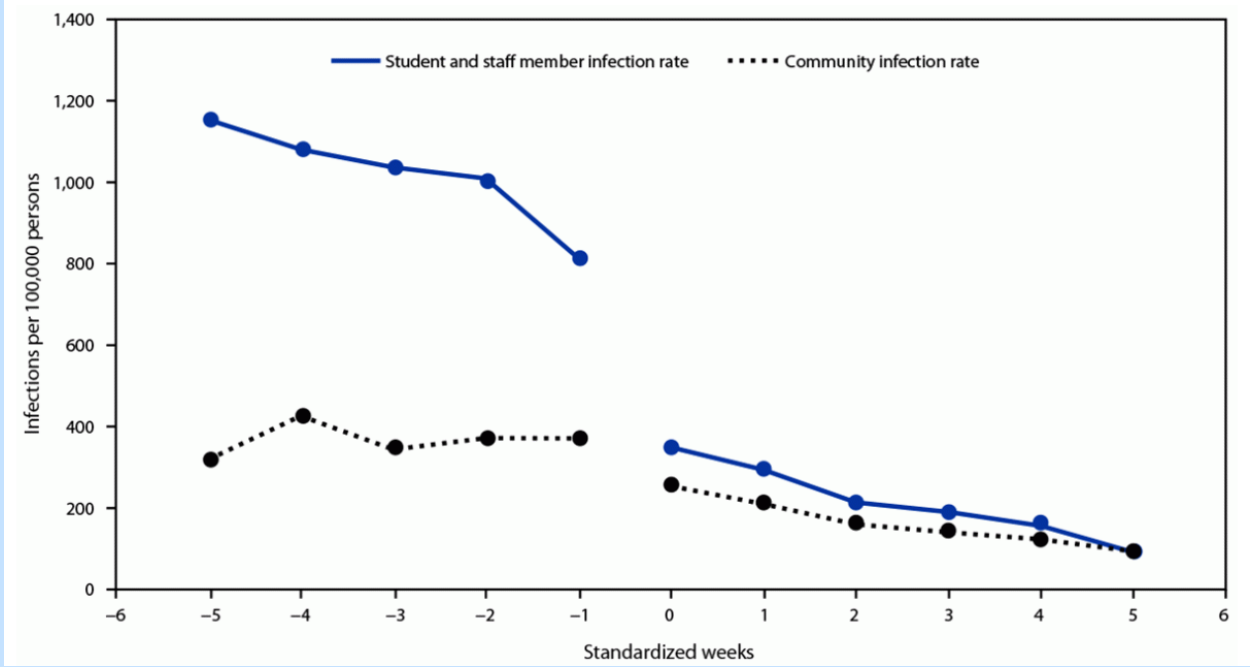
Early identification and expanded evidence-based prevention and intervention strategies are critical to improving pediatric mental health, especially among adolescent females, who might have increased need.

- Compared to 2019, weekly ED visits among adolescent females (aged 12–17 years) increased for:
  - two MHCs (eating and tic disorders) during 2020,
  - four (depression, eating, tic, and obsessive-compulsive disorders) during 2021, and
  - five (anxiety; trauma and stressor-related; eating; tic; and obsessive-compulsive disorders) and overall MHC visits during January 2022,
  - The proportion of ED visits with eating disorders doubled among adolescent females; those for tic disorders approximately tripled during the pandemic.

- https://www.cdc.gov/mmwr/volumes/71/wr/mm7108e2.htm?s_cid=mm7108e2_w

K-12 School Mask Policies

Just wanted to confirm all of your efforts have made a difference in the health of Winona County students. Though you faced unhappy people in many mediums when masking or unmasking, your commitment to mitigation and following the numbers was worth it.



- In Arkansas during August–October 2021, districts with universal mask requirements had a 23% lower incidence of COVID-19 among staff members and students compared with districts without mask requirements.
- Masks remain an important part of a multicomponent approach to prevent COVID-19 in K–12 settings, especially in communities with high levels of COVID-19.

- https://www.cdc.gov/mmwr/volumes/71/wr/mm7110e1.htm?s_cid=mm7110e1_w

Youngest kids struggling to read because of pandemic

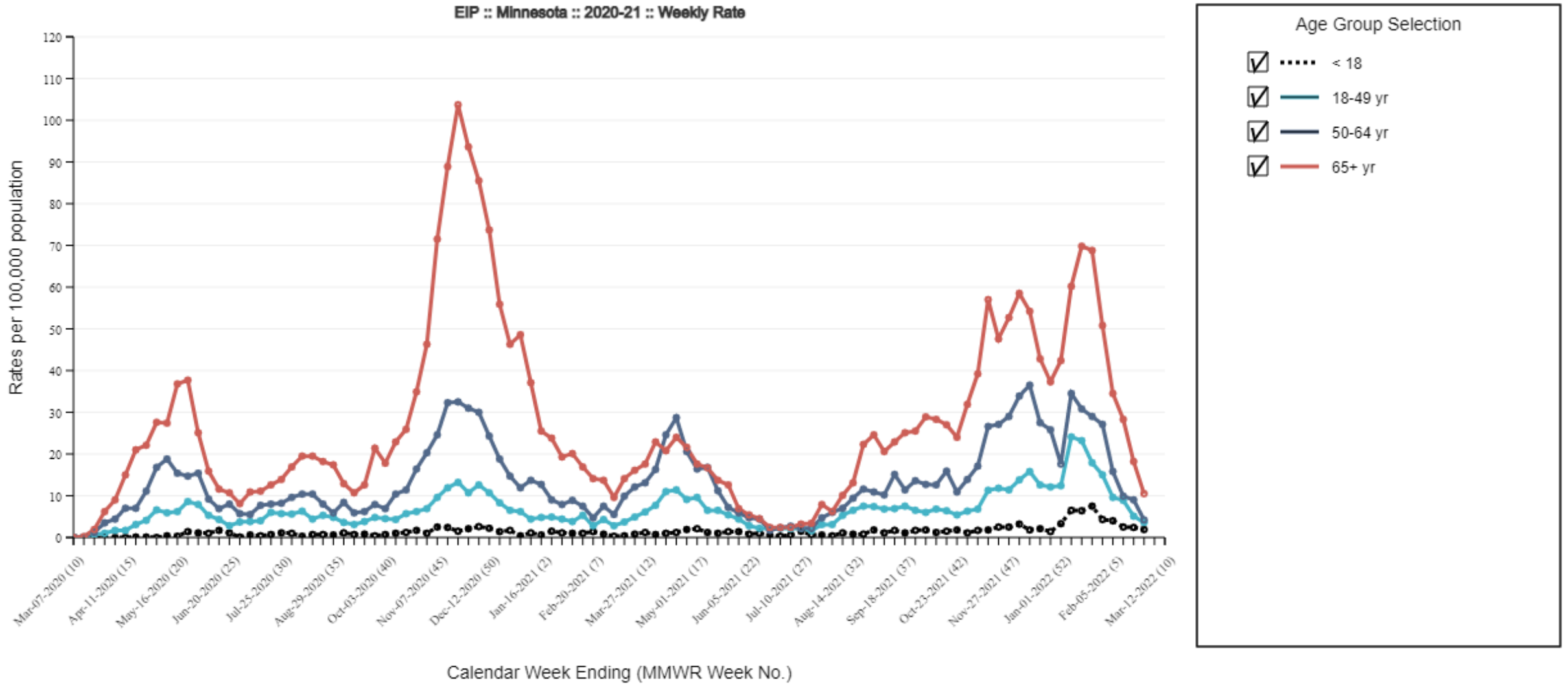
Amplify, a publisher of next-generation curriculum and assessment programs, released a research brief on middle-of-school-year reading data.

- Good news that K–5 students are recovering from the loss of literacy instruction caused by COVID-19.
- However - in every elementary grade, there are still more students at risk of not learning to read than there were before the pandemic.
- Students currently in kindergarten, grade1, and grade 2 are furthest behind
- Black and Hispanic students currently in those three early grades are still suffering disproportionately from COVID-related instructional loss.

- https://amplify.com/news/new-report-because-of-the-pandemic-more-of-the-nations-youngest-students-are-still-struggling-to-learn-to-read/
- https://www.edweek.org/teaching-learning/more-than-1-in-3-children-who-started-school-in-the-pandemic-need-intensive-reading-help/2022/02

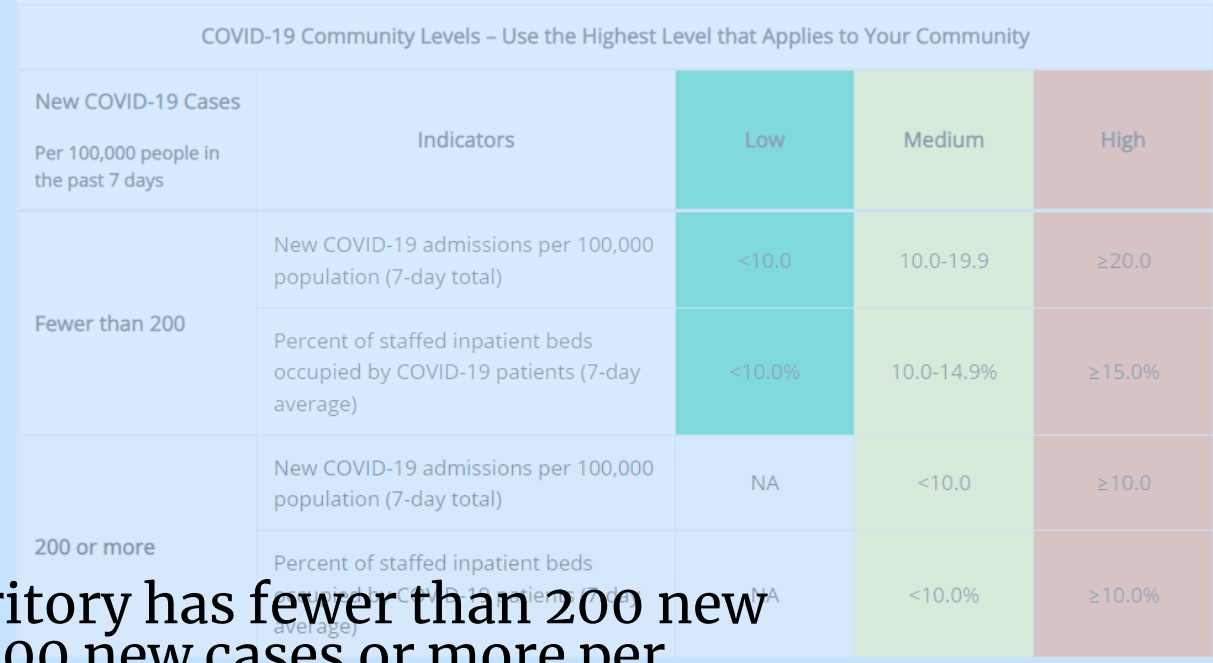
Laboratory-Confirmed COVID-19-Associated Hospitalizations

Preliminary weekly rates as of Feb 26, 2022



Community Level

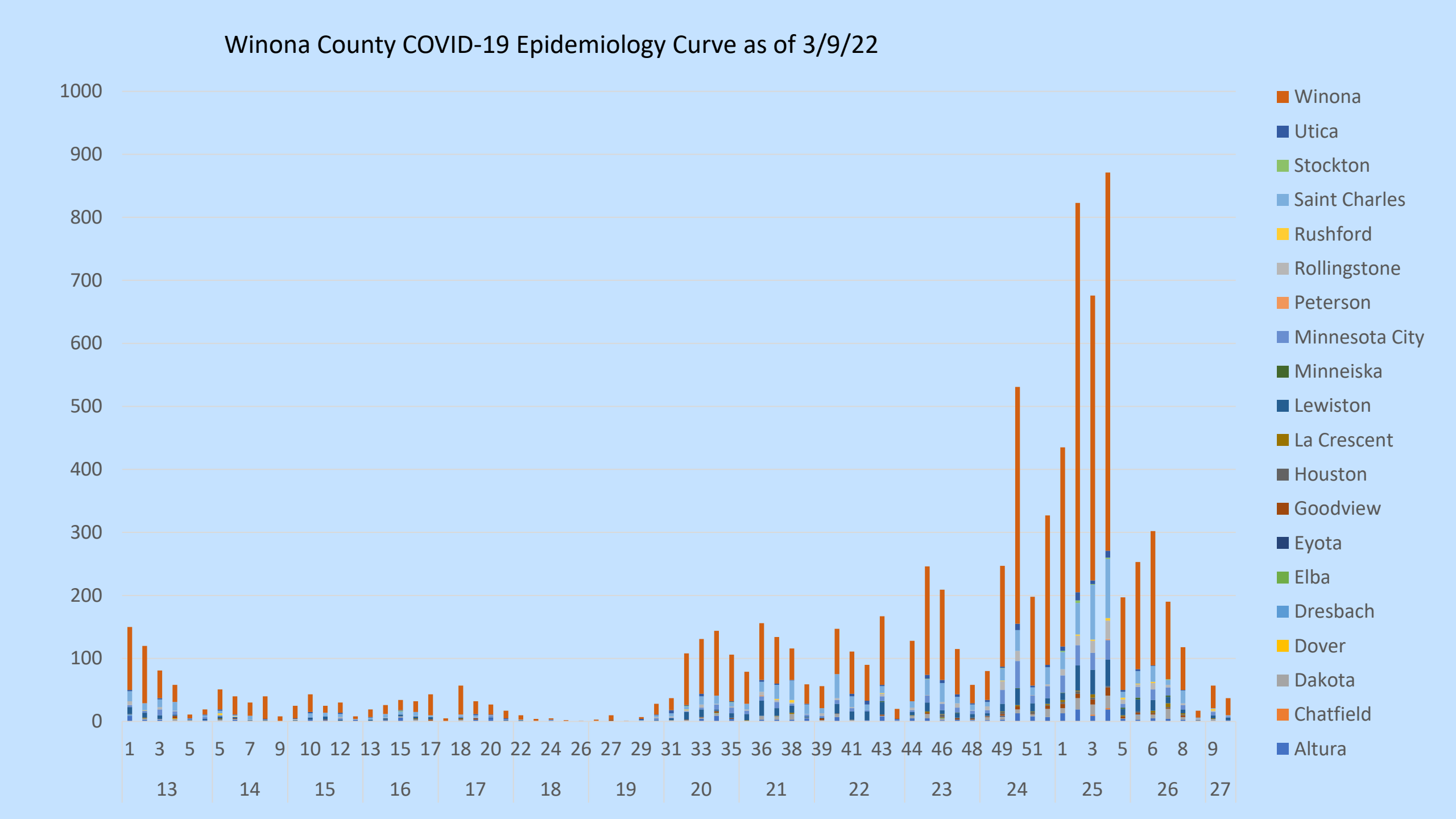
(estimate based on CDC data available 3/10/22 10:00am)

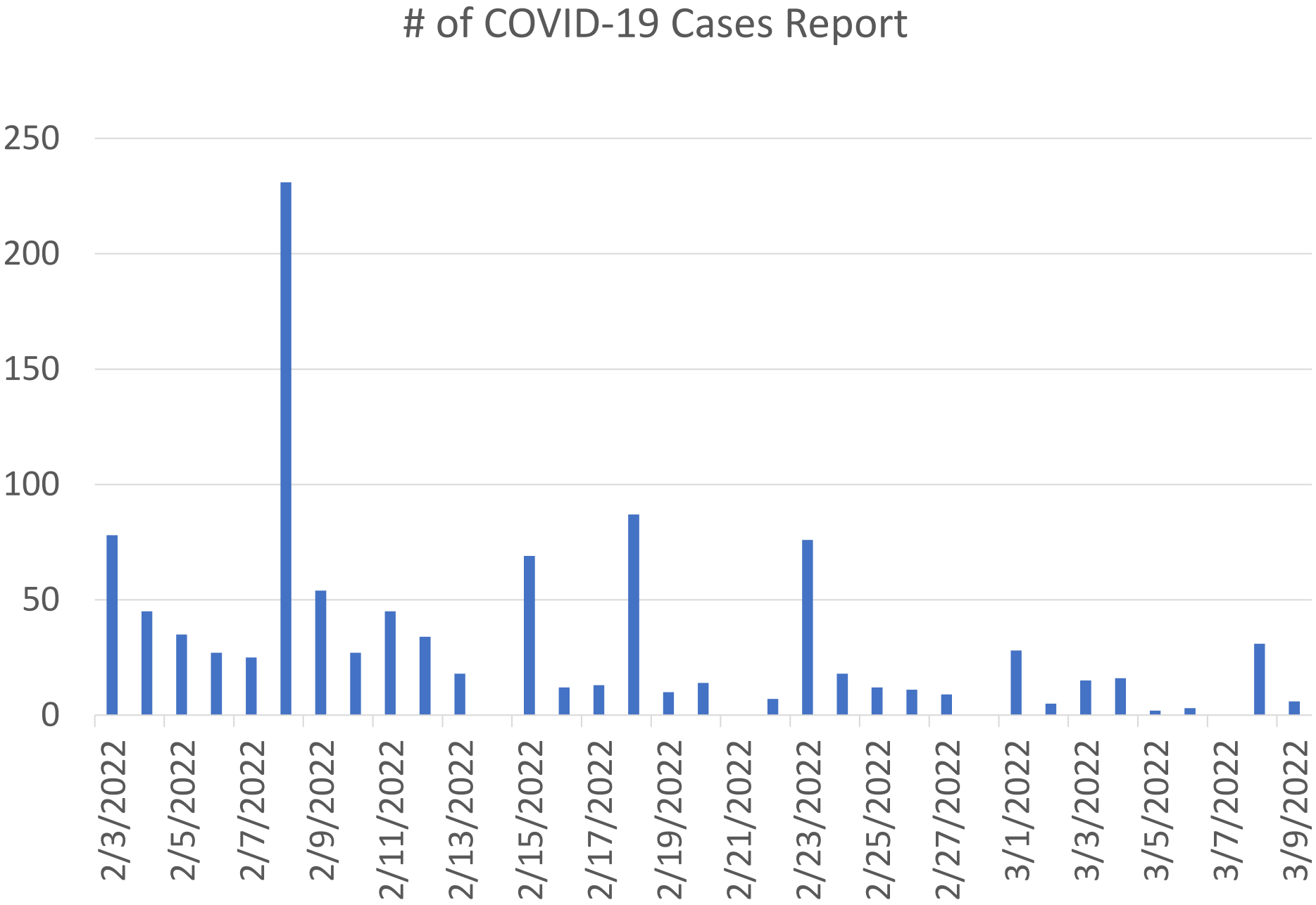


COVID-19 Community Levels – Use the Highest Level that Applies to Your Community

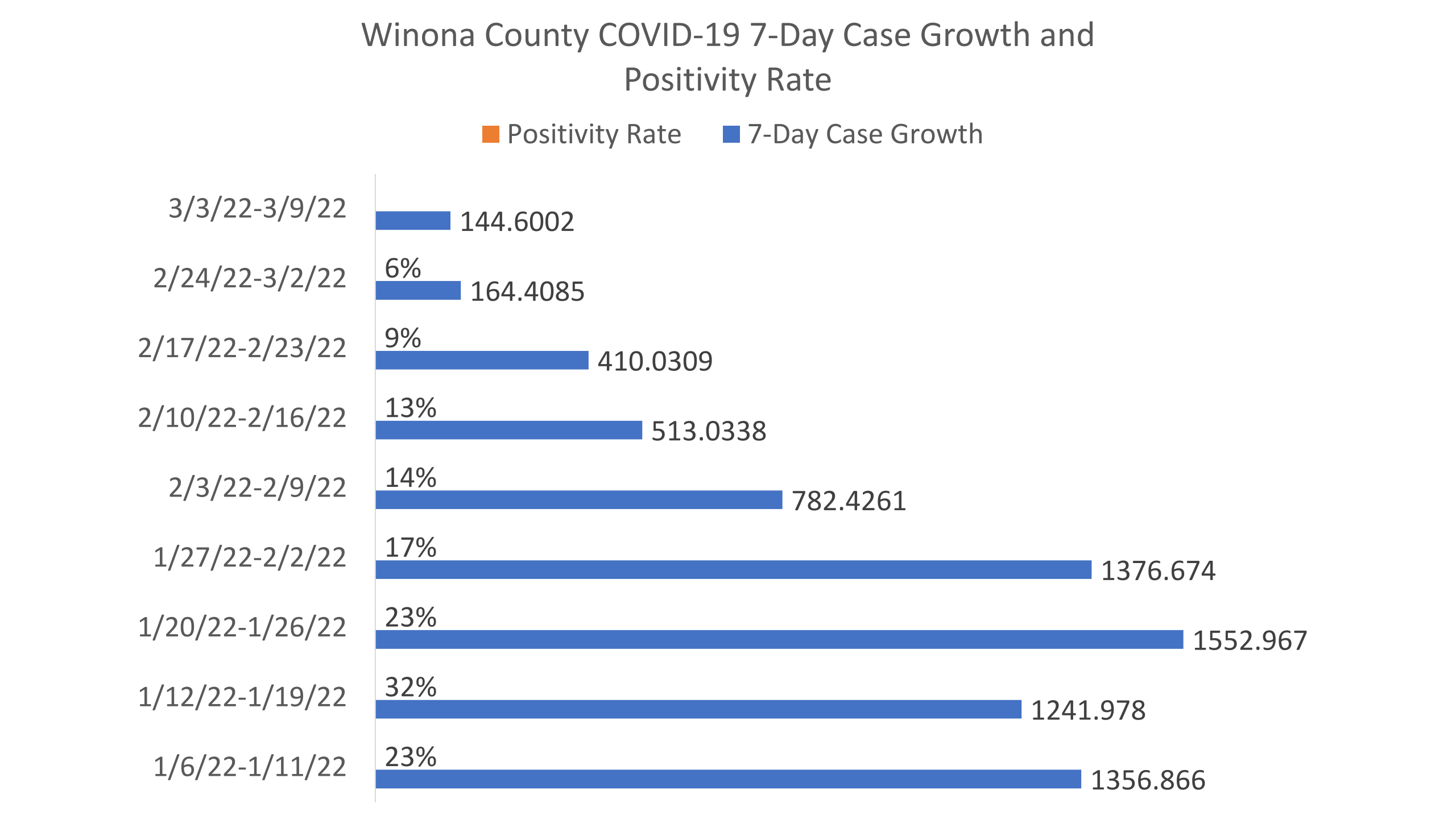
New COVID-19 Cases Per 100,000 people in the past 7 days	Indicators	Low	Medium	High
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New COVID-19 admissions per 100,000 population (7-day total)	NA	<10.0	≥10.0
	Percent of staffed inpatient beds [illegible] average)	NA	<10.0%	≥10.0%

- To find out the COVID-19 community level:
- First determine whether a county, state, or territory has fewer than 200 new cases per 100,000 people in the past 7 days or 200 new cases or more per 100,000 people in the past 7 days.
  - Data through Tuesday March 8
  - Case Rate per 100k : 142.62
- Then, determine the level (low, medium, or high) for the new admissions and inpatient beds and indicators using the scale for the area's number for new cases.
  - Data through Monday March 7
  - New Admissions of confirmed COVID-19 per 100k (7-day total): 9.2
  - % of staffed inpatient beds occupied by COVID-19 patients (7-day average): 2
- The COVID-19 Community Level is based on the higher of the new admissions and inpatient beds metrics.


Winona County COVID-19 Epidemiology Curve as of 3/9/22
1000
900
800
700
600
500
400
300
200
100
0
1 3 5 5 7 9 10 12 13 15 17 18 20 22 24 26 27 29 31 33 35 36 38 39 41 43 44 46 48 49 51 1 3 5 6 8 9
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Winona
Utica
Stockton
Saint Charles
Rushford
Rollingstone
Peterson
Minnesota City
Minneiska
Lewiston
La Crescent
Houston
Goodview
Eyota
Elba
Dresbach
Dover
Dakota
Chatfield
Altura

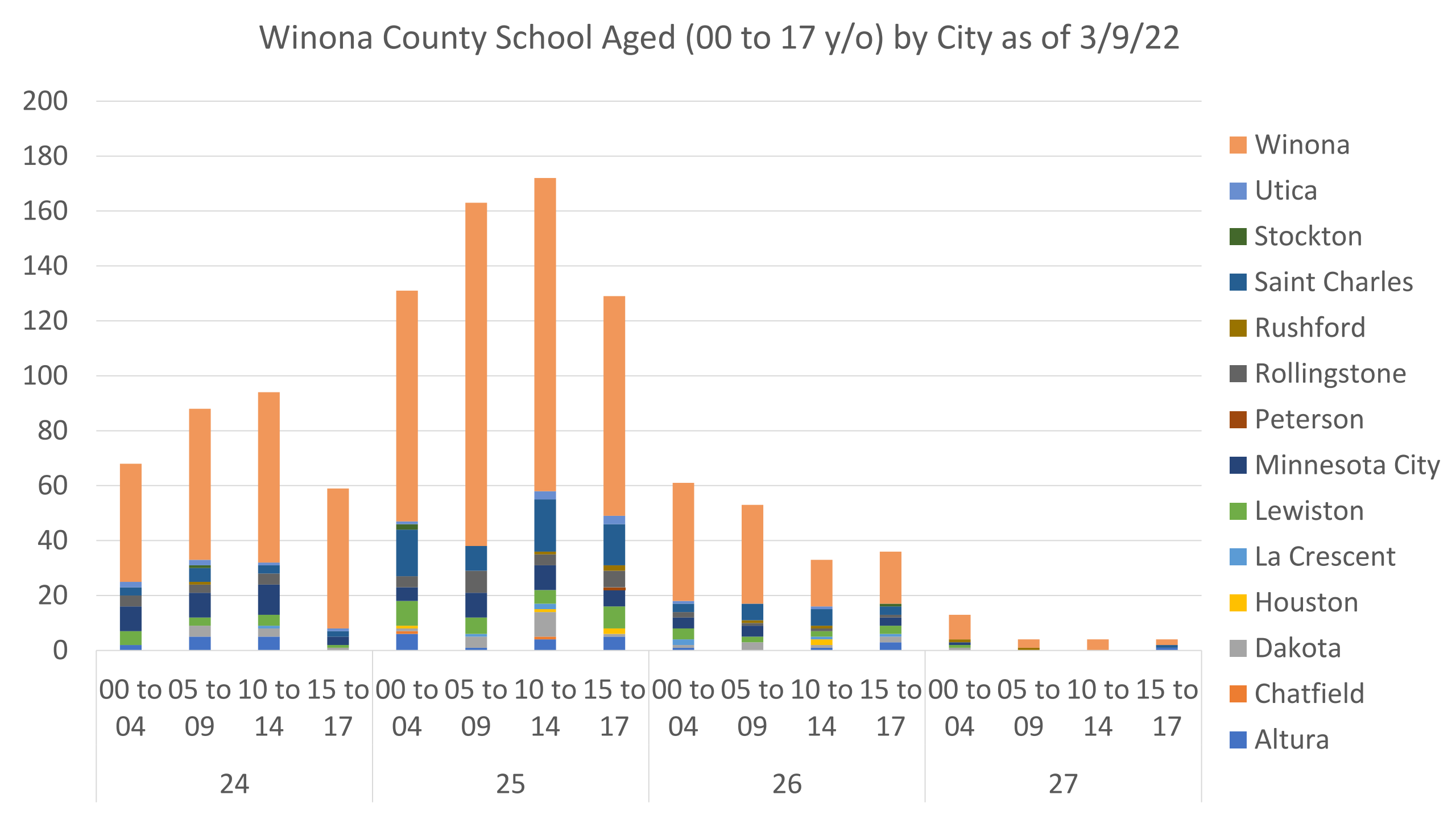


	Daily Average of COVID-19 Cases
2/2/22-2/9/22	70.71 cases/day
2/10/22-2/16/22	29.29 cases/day
2/17/22-2/23/22	29.57 cases/day
2/24/22-3/2/22	11.86 cases/day
3/3/22-3/9/22	10.43 cases/day


Winona County COVID-19 7-Day Case Growth and Positivity Rate
Positivity Rate
7-Day Case Growth
3/3/22-3/9/22
144.6002
2/24/22-3/2/22
6%
164.4085
2/17/22-2/23/22
9%
410.0309
2/10/22-2/16/22
13%
513.0338
2/3/22-2/9/22
14%
782.4261
1/27/22-2/2/22
17%
1376.674
1/20/22-1/26/22
23%
1552.967
1/12/22-1/19/22
32%
1241.978
1/6/22-1/11/22
23%
1356.866

Current Winona County COVID-19 Statistics

- As of 3/10/22
  - 1 new COVID-19 case
    - Total Winona County COVID-19 Cases 12,
    - 14-Day Case Rate is 27.5335 cases per 10,000 Winona County Residents.
      - 139 COVID-19 cases reported in the past 14-days
    - 7-Day Case Growth Rate is 116.8687 COVID-19 cases per 100,000 Winona County residents.
      - 59 COVID-19 cases reported in the past 7-days

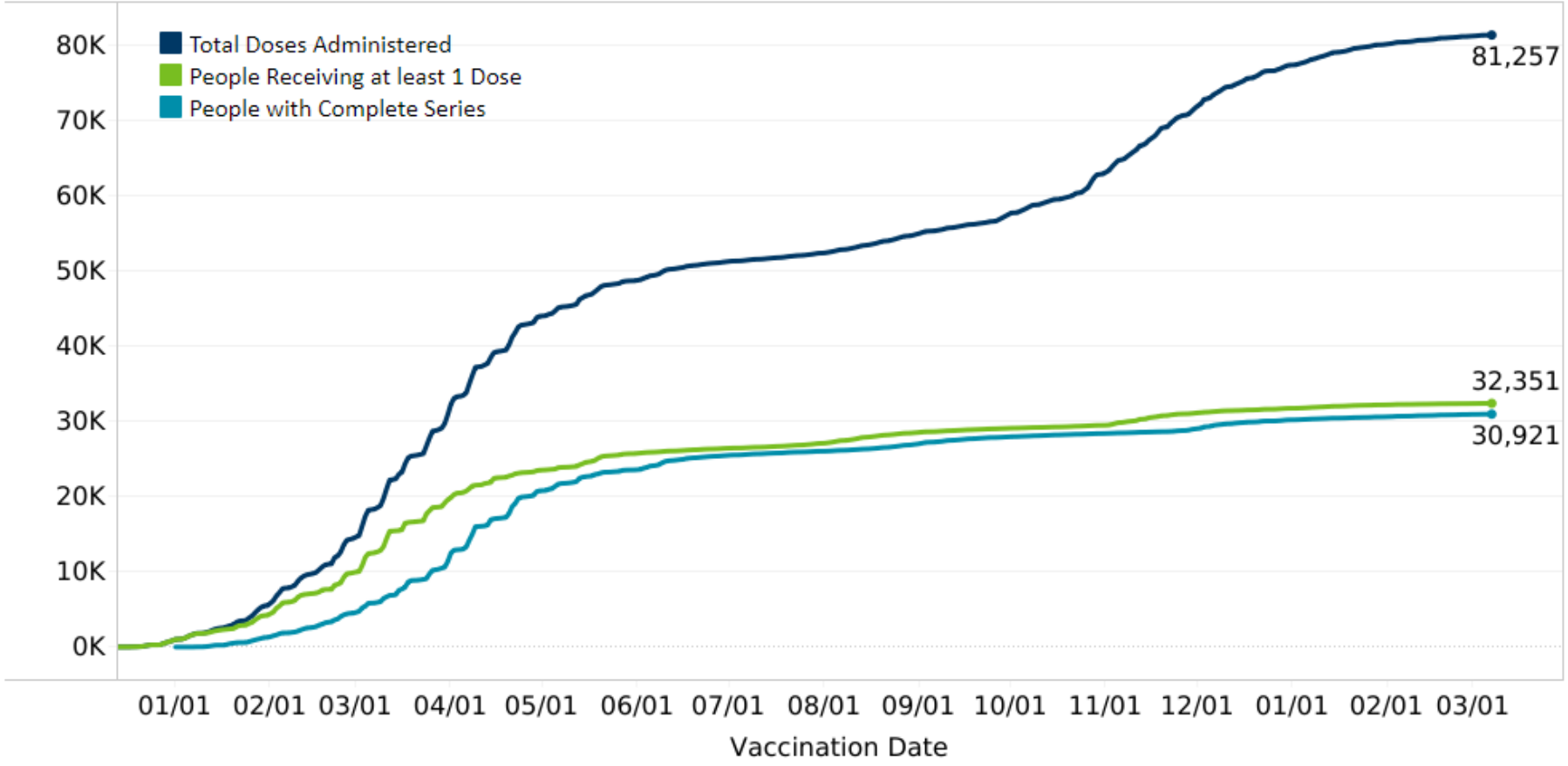

Winona County School Aged (00 to 17 y/o) by City as of 3/9/22
200
180
160
140
120
100
80
60
40
20
0
00 to 04
05 to 09
10 to 14
15 to 17
24
25
26
27
Winona
Utica
Stockton
Saint Charles
Rushford
Rollingstone
Peterson
Minnesota City
Lewiston
La Crescent
Houston
Dakota
Chatfield
Altura

Cities	Un-Official 14-day Case Rate 2/24/22-3/9/22	# Of reported School-Aged COVID-19 cases between 3/3/22-3/9/22	7-Day Case growth per 100,000 (cumulative weekly rate) 3/3/22-3/9/22
Lewiston-Altura	**8.3211ᵛ**COVID-19 cases per 1,000 Lewiston and Altura residents	1ᵛ	8ᵛ cases 391.581ᵛ cases per 100,000
Saint Charles and Utica	**1.4826ᵛ** COVID-19 cases per 1,000 Saint Charles and Utica residents.	1=	2ᵛ cases 49.4193ᵛ cases per 100,000
Winona, Goodview, Dakota, and Rollingstone	**3.5742ᵛ** COVID-19 cases per 1,000 Winona, Goodview, Dakota, and Rollingstone residents.	18^	58^ cases 181.8467^ cases per 100,000

Winona County COVID-19 Vaccination data

Selection
County: **WINONA** | CHB: **All** | Region: **All** | RHPC: **All**

Total Doses Administered	Number of People with Complete Series
81,257	**30,921**



This dashboard will be updated Monday-Friday by 11am. Update schedule may vary around holidays. The data in this dashboard may not match what is displayed on the public Vaccine Data dashboard. Dashboard last updated: **3/9/2022 10:01:20 AM**

Population	Percent Vaccinated w/ one dose
5+	67.0% (32,361 out of 48,282)
12+	69.0% (30,871 out of 44,769)
16+	68.9% (29,406 out of 42,667)
65+	98.0% (8,215 out of 8,331)
Total Population	63.8% (32,364 out of 50,725)

Winona County COVID-19 Vaccine Data

Age Range	People with at least one dose
5-11	1,490 (+8)
12-15	1,464 (+5)
16-17	761 (=)
18-49	13,185 (+5)
50-64	7,239 (+4)
65+	8,209 (-2)

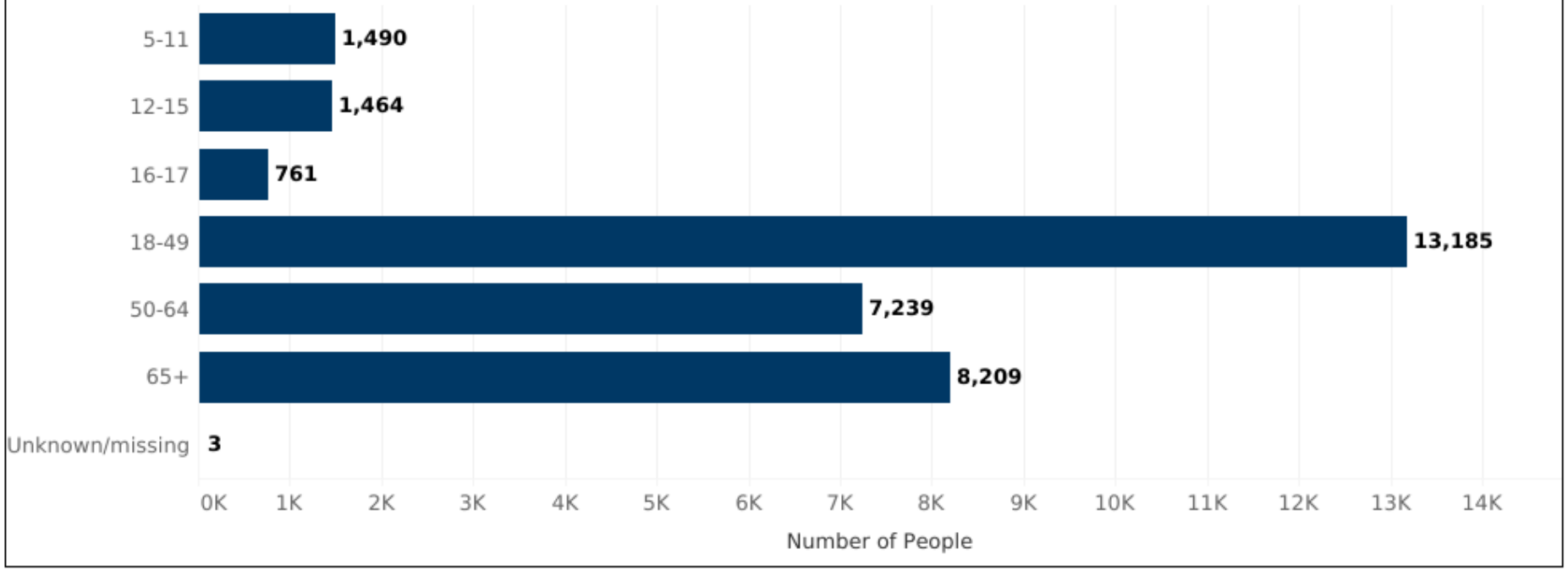
Selection

County: **WINONA** | CHB: **All** | Region: **All** | RHPC: **All**

People with at least one dose by Gender

Male	15,287
Female	17,033
Missing/Unknown	31

People with at least one dose by Age Group



This dashboard will be updated Monday-Friday by 11am. Update schedule may vary around holidays. The data in this dashboard may not match what is displayed on the public Vaccine Data dashboard. Dashboard last updated: **3/9/2022 10:01:20 AM**

Winona County Vaccination Rates by Zip Code as of 3/9/22

Zip code	People with 1 + Dose of a COVID-19 Vaccine	People with Completed COVID-19 Vaccine Series	Total Population of zip code	% of population with 1 dose of a COVID-19 vaccine	% of population with complete series of a COVID-19 vaccine
55910 (Altura)	879	833	1,423	61.8	58.54
55925 (Dakota)	682	656	1,113	61.28	58.94
55952 (Lewiston)	1,449	1,377	2,529	57.3	54.48
55969 (Rollingstone)	740	712	1,117	66.25	63.74
55972 (Saint Charles)	3,553	3,403	4,995	71.13	68.13
55979 (Utica)	449	431	1,143	39.28	37.71
55987 (Goodview and Winona)	22,150	21,154	35,629	62.17	59.37

Wastewater SARS-CoV2 Surveillance Study

Based on earlier UofMN research, increasing virus copies/liter are predictive of clinical cases of COVID one to two weeks later.