

Central Iowa COVID19 Update

Wednesday, February 2, 2022



Aperio

Statistical Consulting

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Quick Stats¹

| | Polk County | Iowa |
|-------------------------------------|-------------|-------|
| Percent of population with 1 dose | 72.9% | 66.7% |
| Percent of population with 2 doses | 65.9% | 60.4% |
| 7d Lab Test Positivity | 21.3% | 18.5% |
| Total cases per 100,000 the last 7d | 903 | 828 |
| CDC County Transmission Level* | High | |
| Average daily cases the last 7d | 632 | 3731 |

*[VaccineInformation | Iowa COVID-19 Information](#)

All data are sourced from <https://coronavirus.iowa.gov/pages/case-counts> with previous days refreshed daily. When recent data are unavailable, data from <https://github.com/nytimes/covid-19-data> may be used. Population of Polk County used is 490,161.

Population of Iowa used is 3.155 million. Averages and percent positivity are subject to change with retrospectively refreshed data.

Critical Points, Media, and Research

All indicators support continued decline including cases and hospitalizations. Even with a strong deceleration, it may take at least two months until Polk County reaches a daily case average less than 100.

News & Research

- SARS-CoV-2 Infection and Hospitalization Among Adults Aged ≥18 Years, by Vaccination Status, Before and During SARS-CoV-2 B.1.1.529 (Omicron) Variant Predominance — Los Angeles County, California, November 7, 2021–January 8, 2022. Link [here](#).
- Effectiveness of a Third Dose of Pfizer-BioNTech and Moderna Vaccines in Preventing COVID-19 Hospitalization Among Immunocompetent and Immunocompromised Adults — United States, August–December 2021. Link [here](#).
- [Why Nasal Covid Vaccines May Make Better Boosters - The New York Times \(nytimes.com\)](#)
- [Boosted Americans 97 times less likely to die of COVID than unvaxxed \(usatoday.com\)](#)
- *Notes from the Field*: Early Evidence of the SARS-CoV-2 B.1.1.529 (Omicron) Variant in Community Wastewater — United States, November–December 2021. Link [here](#).
- COVID-19 Cases and Hospitalizations by COVID-19 Vaccination Status and Previous COVID-19 Diagnosis — California and New York, May–November 2021. Link [here](#). CDC statement [here](#).
- Effectiveness of a Third Dose of mRNA Vaccines Against COVID-19–Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Adults During Periods of Delta and Omicron Variant Predominance — VISION Network, 10 States, August 2021–January 2022. Link [here](#).
- COVID-19 Incidence and Death Rates Among Unvaccinated and Fully Vaccinated Adults with and Without Booster Doses During Periods of Delta and Omicron Variant Emergence — 25 U.S. Jurisdictions, April 4–December 25, 2021. Link [here](#).
- [Waning mRNA-1273 Vaccine Effectiveness against SARS-CoV-2 Infection in Qatar | NEJM](#)
- [Homologous and Heterologous Covid-19 Booster Vaccinations | NEJM](#)
- [Efficacy of Antibodies and Antiviral Drugs against Covid-19 Omicron Variant | NEJM](#)



Vaccine Progress

| Polk Co Vaccination Rates CDC Covid Data Tracker Data (*) | At Least One Dose | Difference prev week | Fully Vaccinated | Difference prev week |
|-----------------------------------------------------------|-------------------|----------------------|------------------|----------------------|
| Total | 357,566 | 1,373 | 323,126 | 1,444 |
| % of Total Population | 72.9% | 0.2% | 65.9% | 0.3% |
| Population ≥ 5 Years of Age | 357,534 | 1,367 | 323,126 | 1,444 |
| % of Population ≥ 5 Years of Age | 78.4% | 0.3% | 70.9% | 0.3% |
| Population ≥ 12 Years of Age | 341,486 | 985 | 309,986 | 876 |
| % of Population ≥ 12 Years of Age | 83.5% | 0.2% | 75.8% | 0.2% |
| Population ≥ 18 Years of Age | 313,951 | 831 | 285,190 | 734 |
| % of Population ≥ 18 Years of Age | 85.0% | 0.2% | 77.3% | 0.2% |
| Population ≥ 65 Years of Age | 68,277 | 66 | 63,311 | 45 |
| % of Population ≥ 65 Years of Age | 95.0% | 0.0% | 95.0% | 0.0% |

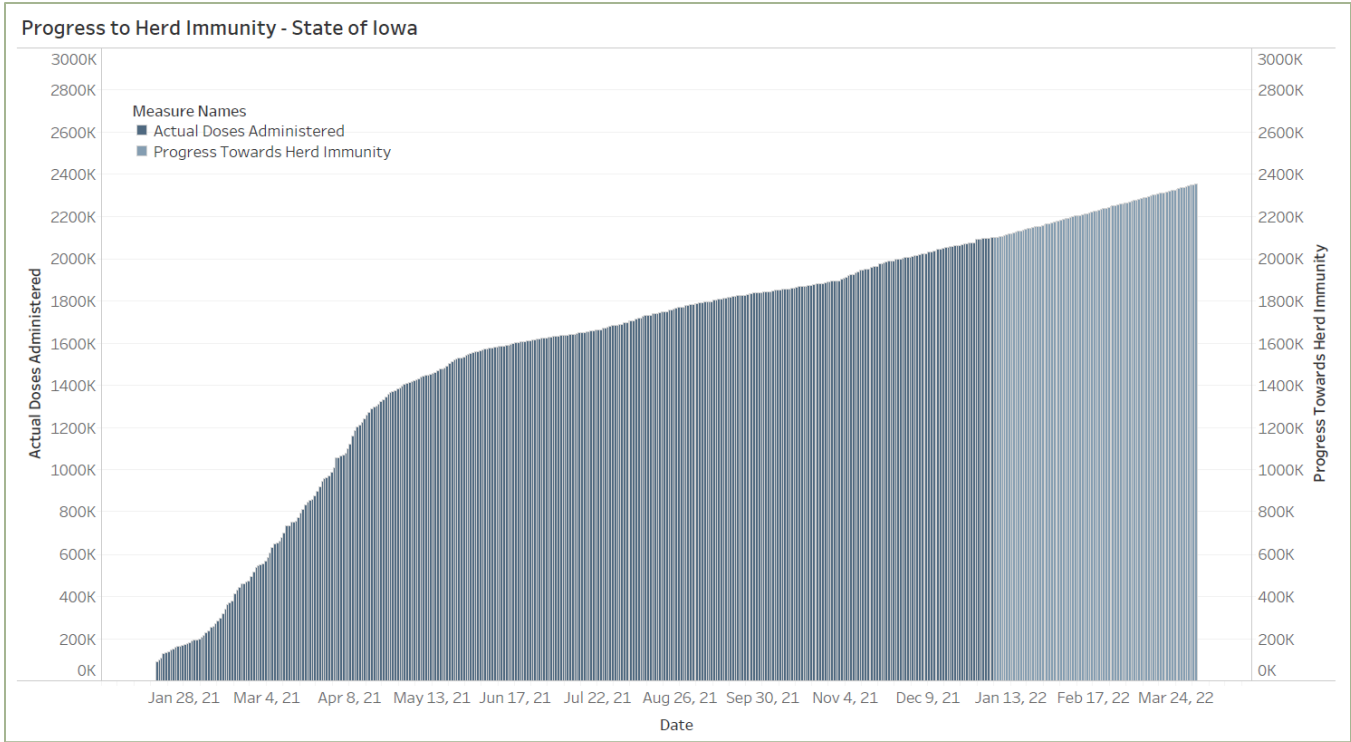
(*) CDC COVID Data Tracker Data: CDC data includes vaccine administration data from all sources, including IRIS*, other state immunization registries, and federal entities (Bureau of Prisons, Veterans Health Administration, Department of Defense, and Federal Long-Term Care program). These doses may not have been reported to IRIS.

Link to Zip Code-Level Vaccination Rates - <https://arcg.is/1nTry4>

| Polk Co People Fully Vaccinated with a Booster (*) | Data | Difference prev week |
|------------------------------------------------------------------------|----------------|----------------------|
| Total | 161,931 | 3,372 |
| % of Fully Vaccinated Population with a Booster Dose | 50.1% | 0.8% |
| Fully Vaccinated Population ≥ 18 Years of Age with a Booster Dose | 157,207 | 2,862 |
| % of Fully Vaccinated Population ≥ 18 Years of Age with a Booster Dose | 55.1% | 0.8% |
| Fully Vaccinated Population ≥ 50 Years of Age with a Booster Dose | 94,386 | 1,205 |
| % of Fully Vaccinated Population ≥ 50 Years of Age with a Booster Dose | 69.3% | 0.8% |
| Fully Vaccinated Population ≥ 65 Years of Age with a Booster Dose | 49,737 | 362 |
| % of Fully Vaccinated Population ≥ 65 Years of Age with a Booster Dose | 78.6% | 0.6% |

(*)The count of people who received a booster dose includes anyone who is fully vaccinated and has received another dose of COVID-19 vaccine since August 13, 2021. This includes people who received booster doses and people who received additional doses.

Central Iowa COVID19 Update



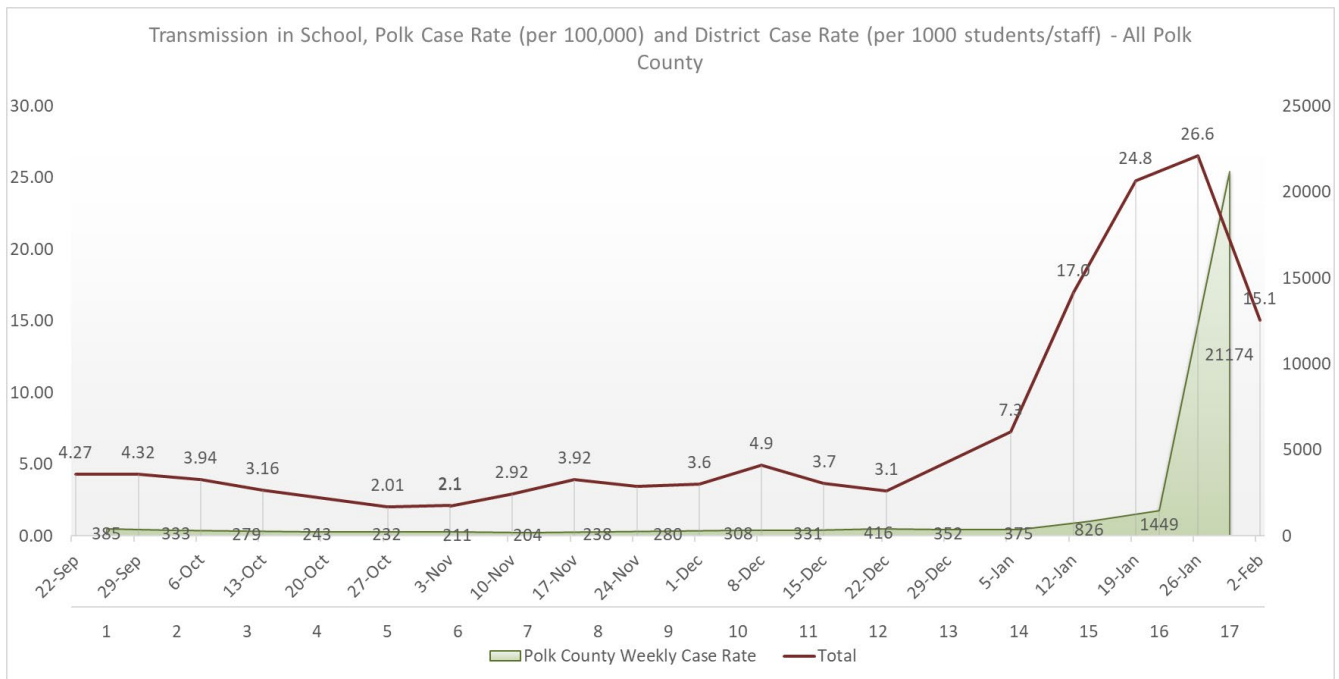
Central Iowa COVID19 Update



School Data

| New Student/Staff Case Rates per 1000 | Week Ending | 22-Sep | 29-Sep | 6-Oct | 13-Oct | 3-Nov | 27-Oct | 3-Nov | 10-Nov | 17-Nov | 24-Nov | 1-Dec | 8-Dec | 15-Dec | 22-Dec | 5-Jan | 12-Jan | 19-Jan | 26-Jan | 2-Feb |
|---------------------------------------|-------------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|--------|-------|
| | DMPs* | 6.21 | 6.52 | 4.42 | 3.27 | 2.30 | 2.1 | 0.9 | 2.48 | 2.12 | 2.24 | 3.58 | 5.06 | 3.79 | 3.03 | 7.91 | 14.79 | 11.45 | 19.45 | 8.45 |
| Ankeny | 5.42 | 5.42 | 3.92 | 4.83 | 3.75 | 2.8 | 2.1 | 2.75 | 4.00 | 3.33 | 3.25 | 5.83 | 5.00 | 4.67 | NA | 18.42 | 32.08 | 40.58 | 24.83 | |
| Waukee | 2.78 | 2.78 | 2.35 | 2.09 | 2.43 | 1.7 | 4.2 | 4.35 | 6.70 | 8.09 | 4.43 | 4.52 | 3.57 | 3.04 | 8.26 | 15.74 | 13.22 | 13.04 | 6.96 | |
| WDM | 4.33 | 4.33 | 2.67 | 2.67 | 1.22 | 2.0 | 2.8 | 5.89 | 5.67 | 5.00 | 5.00 | 7.67 | 5.11 | 3.78 | NA | 19.67 | 31.67 | 33.44 | 26.11 | |
| Johnston | 4.71 | 4.71 | 3.57 | 2.29 | 2.29 | 2.4 | 2.1 | 2.71 | 3.43 | 0.86 | 2.00 | 3.43 | 2.86 | 3.43 | NA | 8.29 | 24.57 | 36.29 | 8.71 | |
| SE Polk | 4.71 | 4.71 | 5.43 | 4.00 | 1.71 | 1.9 | 1.1 | 1.29 | 2.29 | 3.14 | 4.14 | 5.29 | 2.86 | 1.71 | 1.86 | 13.29 | 14.71 | 11.57 | 10.29 | |
| Urbandale | 1.75 | 1.75 | 5.25 | 3.00 | 1.25 | 1.3 | 1.3 | 1.00 | 3.25 | 4.25 | 3.00 | 3.75 | 1.75 | 2.75 | 11.00 | 29.00 | 46.00 | 31.50 | 20.00 | |
| Total | 4.27 | 4.32 | 3.94 | 3.16 | 2.14 | 2.0 | 2.1 | 2.92 | 3.92 | 3.5 | 3.6 | 4.9 | 3.7 | 3.1 | 7.3 | 17.0 | 24.8 | 26.6 | 15.1 | |

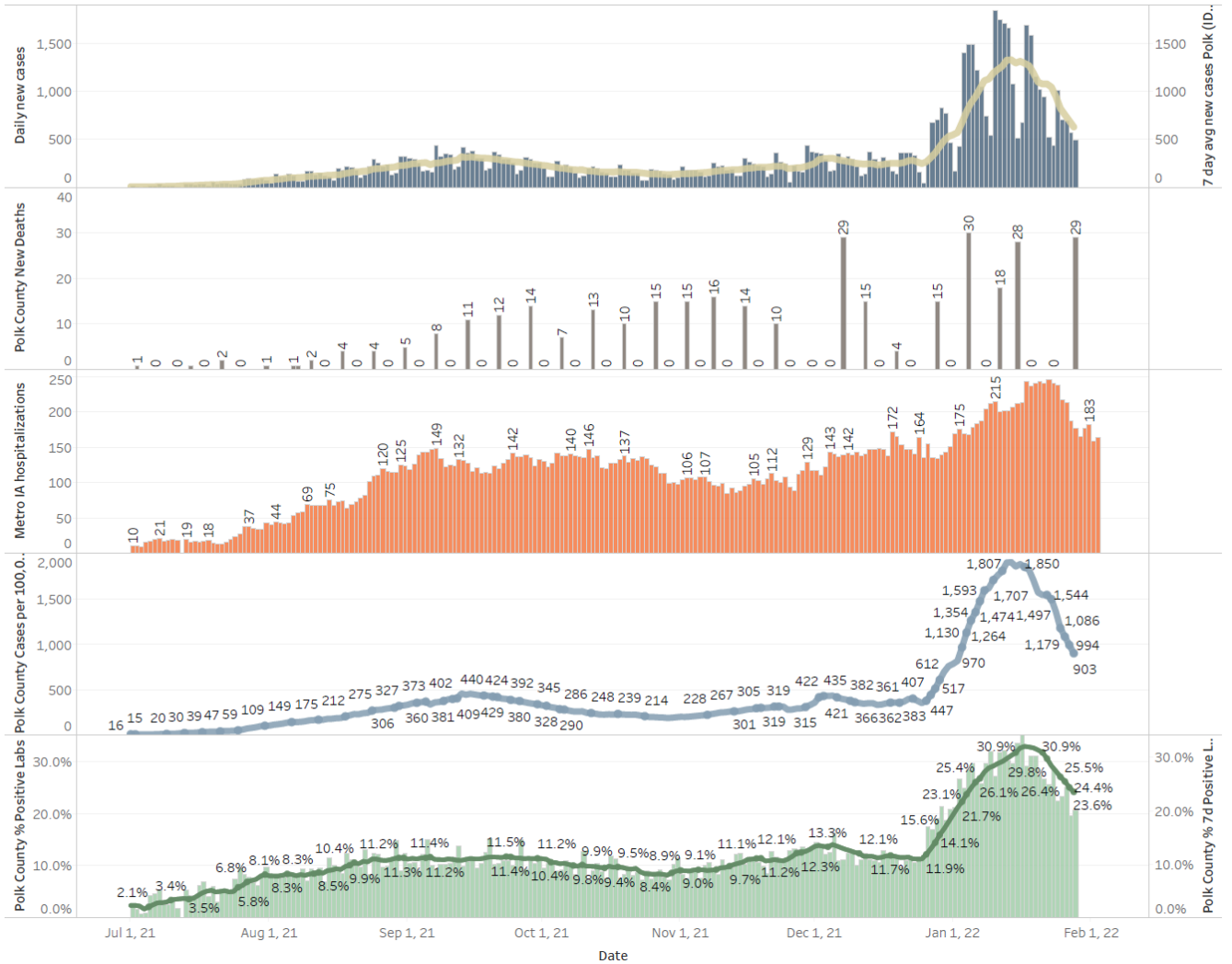
| New Student/Staff Cases | Week Ending | 22-Sep | 29-Sep | 6-Oct | 13-Oct | 20-Oct | 27-Oct | 3-Nov | 10-Nov | 17-Nov | 24-Nov | 1-Dec | 8-Dec | 15-Dec | 22-Dec | 5-Jan | 12-Jan | 19-Jan | 26-Jan | 2-Feb |
|------------------------------|-------------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|--------|-------|
| | DMPs* | 205 | 215 | 146 | 108 | 76 | 68 | 31 | 82 | 70 | 74 | 118 | 167 | 125 | 100 | 261 | 488 | 378 | 642 | 279 |
| Ankeny | 65 | 65 | 47 | 58 | 45 | 34 | 25 | 33 | 48 | 40 | 39 | 70 | 60 | 56 | NA | 221 | 385 | 487 | 298 | |
| Waukee | 43 | 43 | 35 | 32 | 36 | 20 | 49 | 64 | 90 | 105 | 63 | 65 | 48 | 36 | 120 | 210 | 186 | 150 | 80 | |
| WDM | 39 | 39 | 24 | 24 | 11 | 18 | 25 | 53 | 51 | 45 | 45 | 69 | 46 | 34 | NA | 177 | 285 | 301 | 235 | |
| Johnston | 33 | 33 | 25 | 16 | 16 | 17 | 15 | 19 | 24 | 6 | 14 | 24 | 20 | 24 | NA | 72 | 208 | 254 | 61 | |
| SE Polk | 33 | 33 | 38 | 28 | 12 | 13 | 8 | 9 | 16 | 22 | 29 | 37 | 20 | 12 | 13 | 93 | 103 | 81 | 72 | |
| Urbandale | 8 | 8 | 21 | 12 | 5 | 5 | 5 | 4 | 13 | 17 | 12 | 15 | 7 | 11 | 44 | 116 | 184 | 126 | 80 | |
| Total | 426 | 436 | 336 | 278 | 201 | 175 | 158 | 264 | 312 | 309 | 320 | 447 | 326 | 273 | 438 | 1377 | 1729 | 2041 | 1105 | |
| Polk Weekly Cases | 1885 | 1633 | 1368 | 1192 | 1137 | 1032 | 999 | 1164 | 1370 | 1511 | 1621 | 2039 | 1726 | 1836 | 4050 | 7098 | 103753 | 8333 | | |
| Polk County Weekly Case Rate | 385 | 333 | 279 | 243 | 232 | 211 | 204 | 238 | 280 | 308 | 331 | 416 | 352 | 375 | 826 | 1449 | 21174 | 1701 | | |



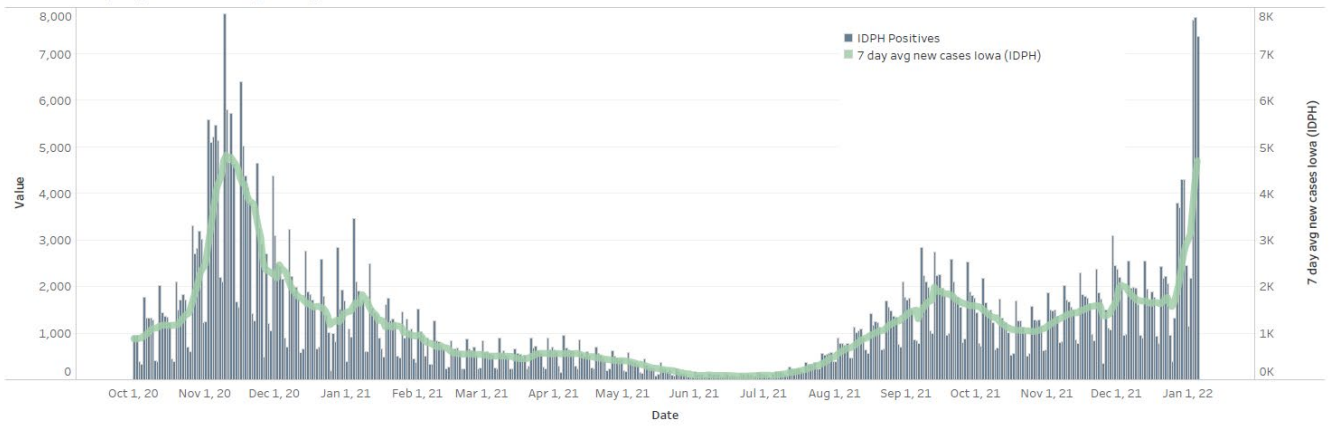
Central Iowa COVID19 Update



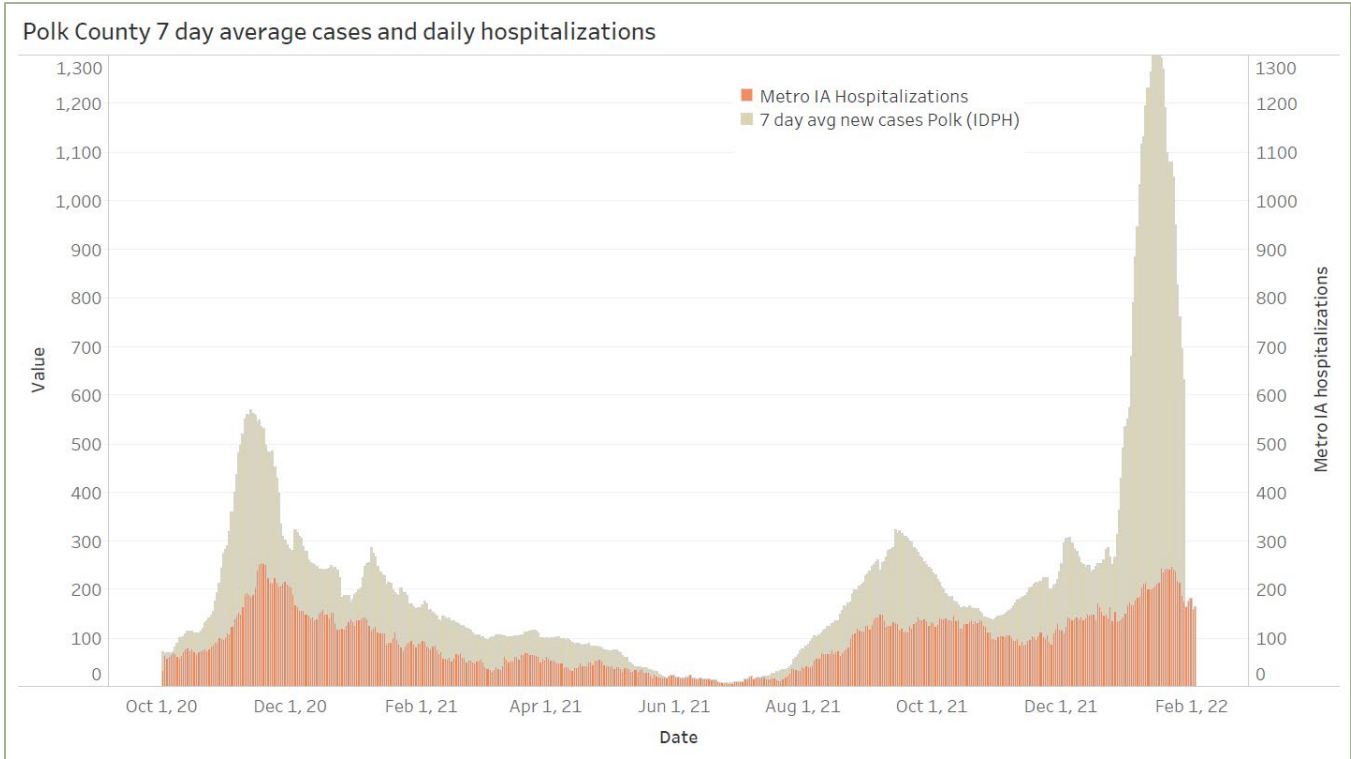
Polk County Activity View - Since July 2021 through Present



Iowa Cases by Day and 7d Moving Average



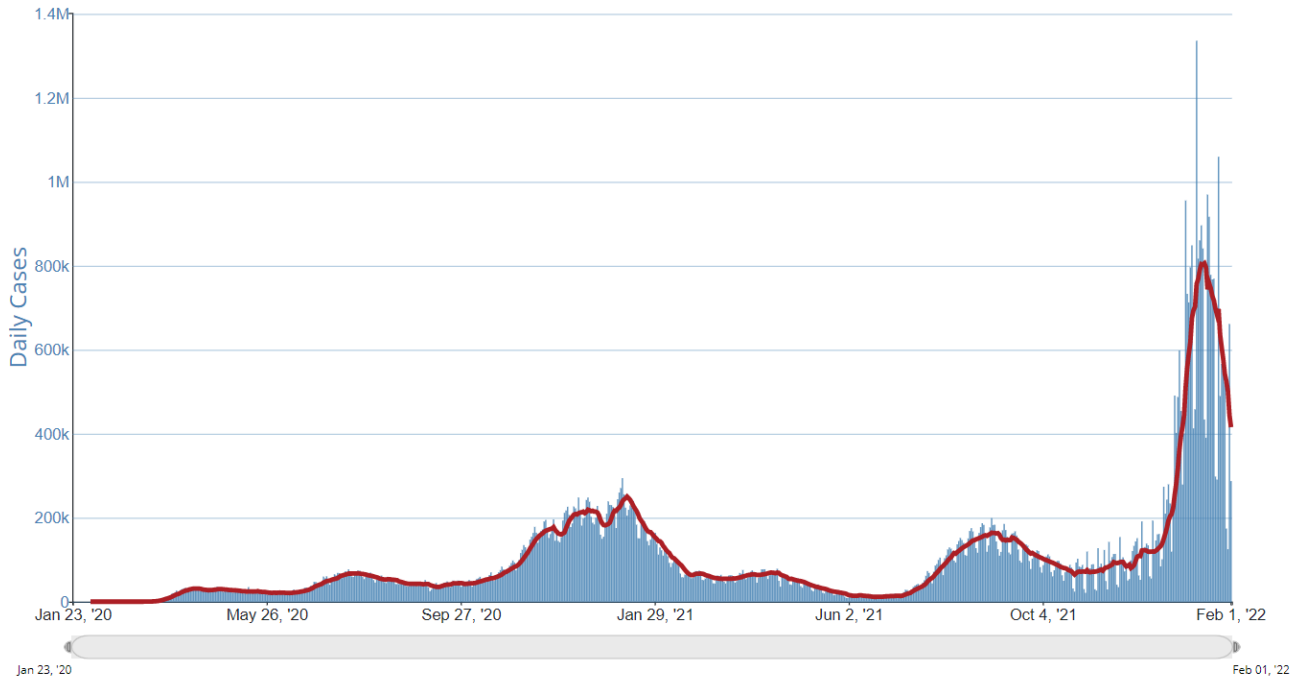
Central Iowa COVID19 Update



Central Iowa COVID19 Update



Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC



| | CASES DAILY AVG. | PER 100,000 | 14-DAY CHANGE | HOSPITALIZED DAILY AVG. | PER 100,000 | 14-DAY CHANGE | DEATHS DAILY AVG. | PER 100,000 | FULLY VACCINATED |
|----------------------------|---------------------|----------------|------------------|----------------------------|----------------|------------------|----------------------|----------------|---------------------|
| United States | 385,425 | 116 | -49% | 134,793 | 41 | -15% | 2,657.9 | 0.80 | 64% |
| Guam > | 616 | 365 | +66% | — | — | — | 1.9 | 1.10 | 78% |
| Alaska > | 2,075 | 284 | -7% | 177 | 24 | +50% | 1.6 | 0.21 | 58% |
| Northern Mariana Islands > | 125 | 232 | +177% | — | — | — | 0.3 | 0.53 | 78% |
| Kentucky > | 9,207 | 206 | -16% | 2,654 | 59 | +12% | 28.6 | 0.64 | 56% |
| Oklahoma > | 7,558 | 191 | -32% | 2,180 | 55 | +16% | 21.3 | 0.54 | 55% |
| North Dakota > | 1,412 | 185 | -33% | 327 | 43 | +17% | 3.9 | 0.51 | 54% |
| South Carolina > | 9,457 | 184 | -46% | 2,515 | 49 | +7% | 64.9 | 1.26 | 55% |
| West Virginia > | 3,271 | 182 | -21% | 1,257 | 70 | +29% | 20.0 | 1.12 | 56% |
| Wyoming > | 1,042 | 180 | -13% | 173 | 30 | +43% | 3.6 | 0.62 | 50% |
| Washington > | 13,196 | 173 | -16% | 2,279 | 30 | -5% | 54.6 | 0.72 | 70% |