



Central Iowa COVID19 Update

Wednesday, December 8, 2021



Statistical Consulting

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Quick Stats¹

	Polk County	Iowa
Percent of population with 1 dose	68.8%	63%
Percent of population with 2 doses	67.1%	57.2%
7d Lab Test Positivity	12.3%	13.1%
Total cases per 100,000 the last 7d	416	410
CDC County Transmission Level*	High	
Average daily cases the last 7d	291	1850

*[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

- Hospitalizations have surged aggressively the last week in the metro and across the state from 110 the previous week to 142. Schools are also seeing substantial spread.

Omicron resources

- Map of Confirmed Cases of Omicron Variant: https://newsnodes.com/nu_tracker
- Preliminary research and epidemiologic data are showing the following regarding Omicron:
 - Vaccine immunity with a booster dose or natural immunity + 2 doses of vaccine
 - Appears to be more transmissible than Delta
 - Hospitalizations are rising faster than Delta, but more data is needed

Other news & research

- In this study, mRNA COVID-19 vaccine boosters augmented immune responses to SARS-CoV-2 among individuals already vaccinated against and/or exposed to SARS-CoV-2. CDC now recommends that everyone ages ≥18 years should receive a COVID-19 vaccine booster. [Antibody titers before and after booster doses of SARS-CoV-2 mRNA vaccines in healthy adults](#)
- COVID-19 vaccination during pregnancy resulted in a higher proportion of infants with detectable antibodies for at least 6 months. Findings support COVID-19 vaccination recommendations for people who are pregnant and suggest that protection might extend to their unvaccinated infants. [Durability of anti-Spike antibodies in the infant after maternal COVID-19 vaccination](#)
- COVID-19 vaccination, when administered before or shortly after a COVID-19 diagnosis, might protect against symptoms of long COVID. [Reduced Incidence of Long-COVID Symptoms Related to Administration of COVID-19 Vaccines Both Before COVID-19 Diagnosis and Up to 12 Weeks After](#)
- Control strategies that reduce SARS-CoV-2 viral load and minimize transmission to and from persons at increased risk of long-term infections (for example, immunocompromised persons) could slow the emergence and spread of new variants. [Controlling long-term SARS-CoV-2 infections can slow viral evolution and reduce the risk of treatment failure | Scientific Reports](#)
- [Age and product dependent vaccine effectiveness against SARS-CoV-2 infection and hospitalisation among adults in Norway: a national cohort study, January – September 2021](#)
- Implementing evidence-based COVID-19 prevention strategies, including vaccination before or during pregnancy, is critical to reduce the impact of COVID-19 stillbirths. [Risk for Stillbirth Among Women With and Without COVID-19 at Delivery Hospitalization — United States, March 2020–September 2021 | MMWR](#)
- [COVID-19–Associated Deaths After SARS-CoV-2 Infection During Pregnancy — Mississippi, March 1, 2020–October 6, 2021 | MMWR](#)
- [Iowa COVID surge sends hospitalizations to highest in a year | Iowa news](#)
- [Virus concentration count in Iowa wastewater continues to increase | SiouxlandProud](#)
- [Pfizer, BioNTech vaccine neutralises Omicron with three shots | Reuters](#)



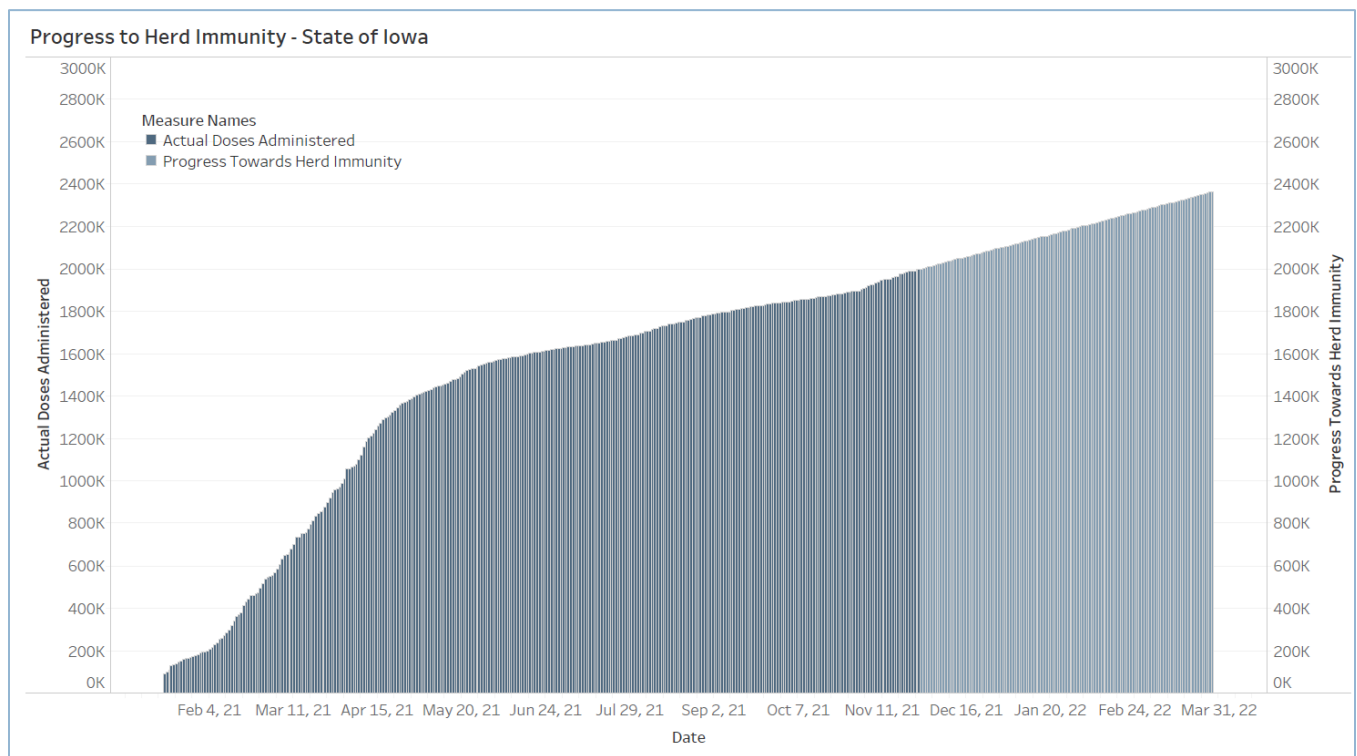
Vaccine Progress

Polk Co Vaccination Rates CDC Covid Data Tracker Data (*)	At Least One Dose	Difference prev week	Fully Vaccinated	Difference prev week
Total	338,052	3,031	304,755	5,254
% of Total Population	69.0%	0.7%	62.2%	1.1%
Population ≥ 12 Years of Age	327,777	1,893	300,479	1,481
% of Population ≥ 12 Years of Age	80.2%	0.5%	73.5%	0.4%
Population ≥ 18 Years of Age	301,673	1,754	277,040	1,298
% of Population ≥ 18 Years of Age	81.7%	0.5%	75.0%	0.3%
Population ≥ 65 Years of Age	67,076	236	62,576	181
% of Population ≥ 65 Years of Age	99.9%	0.0%	94.7%	0.3%

(*) 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>



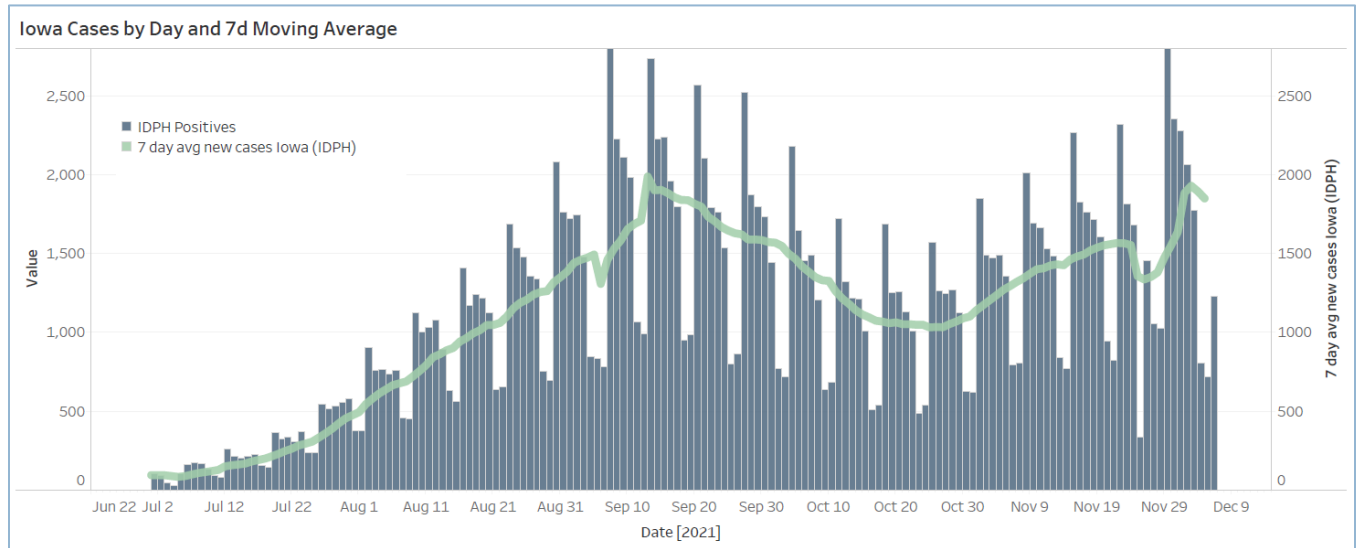
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School Data

New Student/Staff Case Rates per 1000															
Week Ending	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep	6-Oct	13-Oct	3-Nov	27-Oct	3-Nov	10-Nov	17-Nov	24-Nov	1-Dec	8-Dec
DMPs*	3.39	6.18	5.76	6.21	6.52	4.42	3.27	2.30	2.1	0.9	2.48	2.12	2.24	3.58	5.06
Ankeny	0.00	0.00	8.50	5.42	5.42	3.92	4.83	3.75	2.8	2.1	2.75	4.00	3.33	3.25	5.83
Waukee	0.00	0.00	3.57	2.78	2.78	2.35	2.09	2.43	1.7	4.2	4.35	6.70	8.09	4.43	4.52
WDM	5.78	4.67	3.89	4.33	4.33	2.67	2.67	1.22	2.0	2.8	5.89	5.67	5.00	5.00	7.67
Johnston	0.00	0.00	2.57	4.71	4.71	3.57	2.29	2.29	2.4	2.1	2.71	3.43	0.86	2.00	3.43
SE Polk	0.00	0.00	16.14	4.71	4.71	5.43	4.00	1.71	1.9	1.1	1.29	2.29	3.14	4.14	5.29
Urbandale	0.00	0.00	3.75	1.75	1.75	5.25	3.00	1.25	1.3	1.3	1.00	3.25	4.25	3.00	3.75
Total	4.59	5.42	6.31	4.27	4.32	3.94	3.16	2.14	2.0	2.1	2.92	3.92	3.5	3.6	4.9

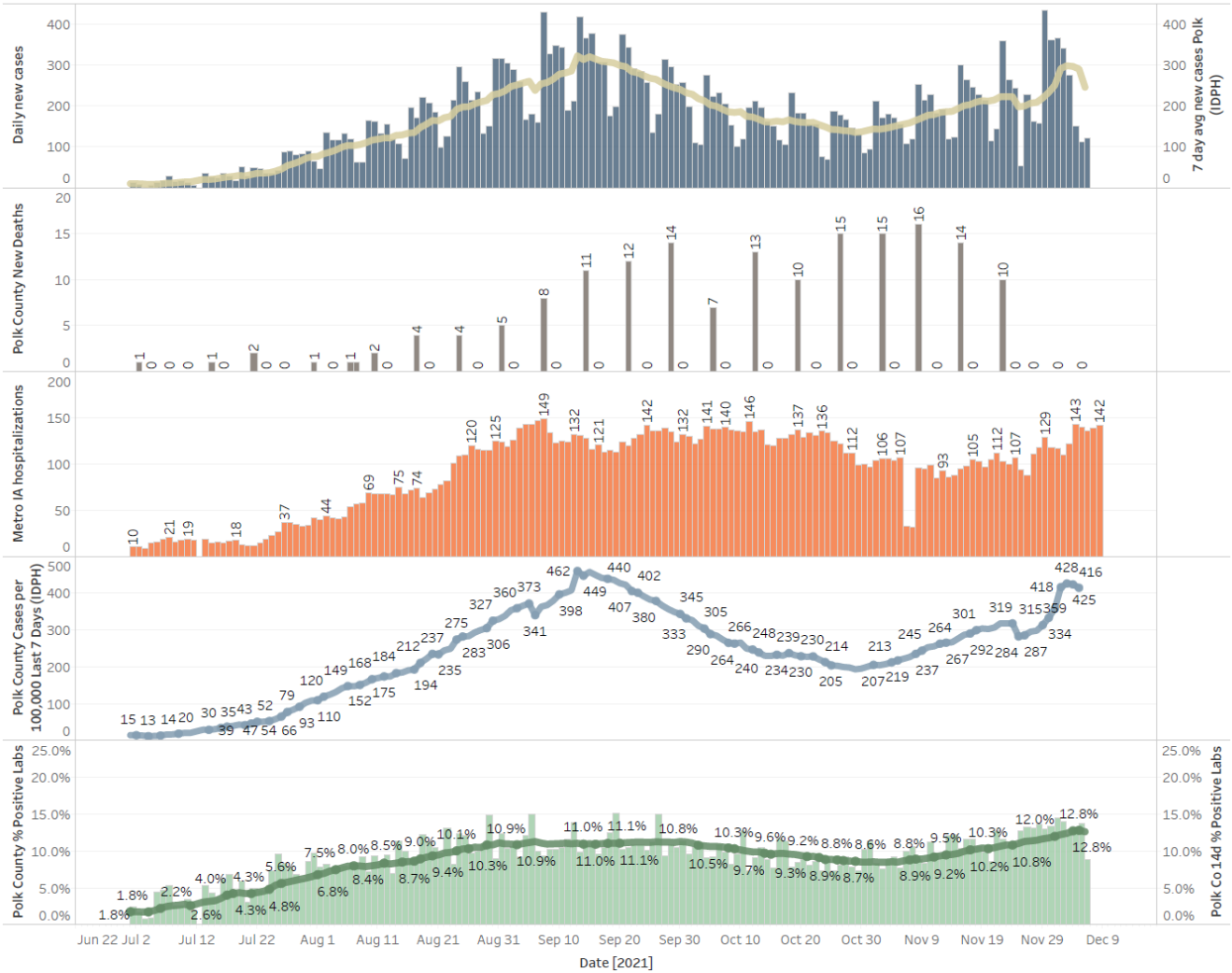
New Student/Staff Cases															
Week Ending	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep	6-Oct	13-Oct	20-Oct	27-Oct	3-Nov	10-Nov	17-Nov	24-Nov	1-Dec	8-Dec
DMPs*	112	204	190	205	215	146	108	76	68	31	82	70	74	118	167
Ankeny	0	0	102	65	65	47	58	45	34	25	33	48	40	39	70
Waukee	0	0	41	43	43	35	32	36	20	49	64	90	105	63	65
WDM	52	42	35	39	39	24	24	11	18	25	53	51	45	45	69
Johnston	0	0	18	33	33	25	16	16	17	15	19	24	6	14	24
SE Polk	0	0	113	33	33	38	28	12	13	8	9	16	22	29	37
Urbandale	0	0	15	8	8	21	12	5	5	5	4	13	17	12	15
Total	164	246	514	426	436	336	278	201	175	158	264	312	309	320	447
Polk Weekly Cases	1751	2009	2158	1885	1633	1368	1192	1137	1032	999	1164	1370	1511	1616	
Polk County Weekly Case Rate	357	410	440	385	333	279	243	232	211	204	238	280	308	330	



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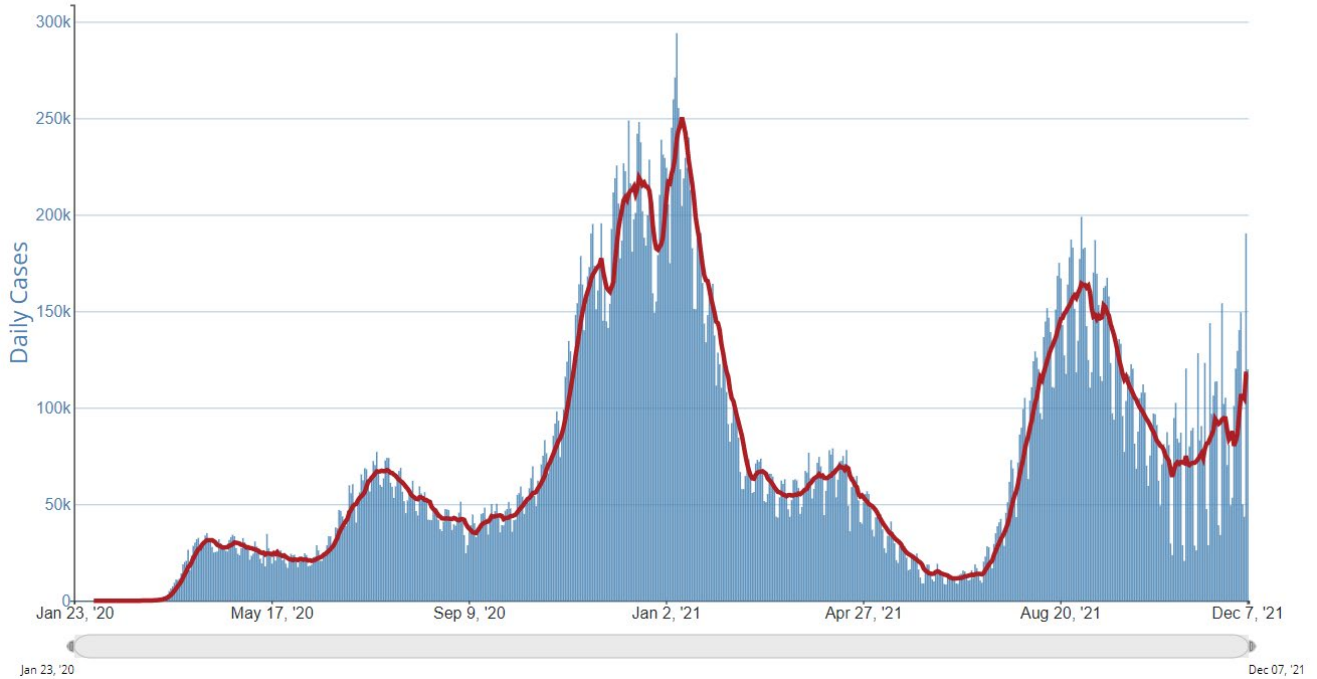
Polk County Activity View - Since Spring 2021 through Present



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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	120,071	36	+27%	60,747	18	+19%	1,298.2	0.39	60%
Northern Mariana Islands ›	51	95	+292%	—	—	—	0	—	69%
New Hampshire ›	1,262	93	+28%	419	31	+23%	5.9	0.43	65%
Michigan ›	8,566	86	+5%	4,547	46	+21%	119.7	1.20	55%
Rhode Island ›	896	85	+87%	179	17	+65%	2.4	0.23	74%
Minnesota ›	4,725	84	+12%	1,738	31	+12%	39.6	0.70	63%
Vermont ›	488	78	+32%	80	13	+30%	1.1	0.18	74%
New Mexico ›	1,573	75	+11%	737	35	+13%	9.0	0.43	64%
Indiana ›	4,819	72	+52%	2,457	36	+49%	38.9	0.58	51%
Massachusetts ›	4,696	68	+67%	947	14	+50%	23.3	0.34	72%
Ohio ›	7,655	65	+36%	4,452	38	+29%	60.6	0.52	54%