Central Iowa COVID19 Update

Wednesday, November 10, 2021

Aperio
Statistical Consulting

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Quick Stats[1]

	Polk County	Iowa
Percent of population with 1 dose	65.3%	60.5%
Percent of population with 2 doses	60.1%	56%
7d Lab Test Positivity	8.5%	9.4%
Total cases per 100,000 the last 7d	210	270
CDC County Transmission Level*	High	
Average daily cases the last 7d	147	1217

*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.

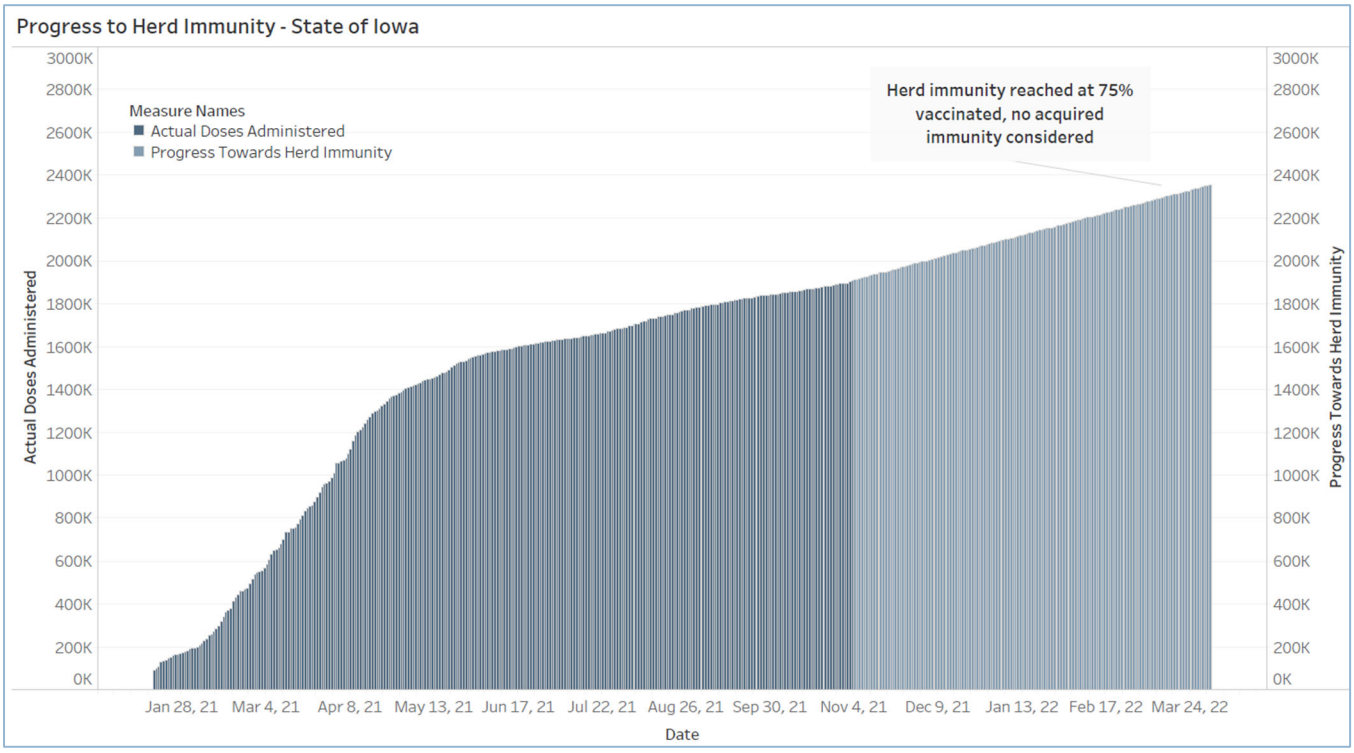
Critical Points, Media, and Research

- Cases are rising again statewide; Polk County case increases are not yet confirmed. Statewide hospitalizations are up as well. The US and international trends are rising as well.
- COVID-19 in Iowa: State reaches 500,000 total cases; new cases rising (desmoinesregister.com)
- Guaranteed Financial Incentives for COVID-19 Vaccination: A Pilot Program in North Carolina | Vaccination | JAMA Internal Medicine
- In-person schooling and associated COVID-19 risk in the United States over Spring Semester 2021
- Membrane fusion and immune evasion by the spike protein of SARS-CoV-2 Delta variant
- COVID-19 breakthrough infections and pre-infection neutralizing antibody
- Predictors of SARS-CoV-2 infection following high-risk exposure
- Impact of SARS-CoV-2 infection on longitudinal vaccine immune responses | medRxiv Among 517 healthcare workers in Sweden (April 2020–July 2021), vaccination (BNT162b2 or ChAdOx1) of persons with prior SARS-CoV-2 infection resulted in higher neutralizing antibodies for at least 3–7 months compared with SARS-CoV-2 naïve vaccinees (all timepoints $p<0.001$).
- The U.S. lifts the pandemic travel ban and opens the doors to international visitors: NPR

Vaccine Progress

Polk Co Vaccination Rates CDC Covid Data Tracker Data (*)	At Least One Dose	Difference prev week	Fully Vaccinated	Difference prev week
Total	322,083	3,393	295,011	1,592
% of Total Population	65.7%	0.7%	60.2%	0.3%
Population ≥ 12 Years of Age	320,669	1,994	295,009	1,591
% of Population ≥ 12 Years of Age	78.4%	0.4%	72.2%	0.4%
Population ≥ 18 Years of Age	295,173	1,854	272,140	1,433
% of Population ≥ 18 Years of Age	80.0%	0.5%	73.7%	0.4%
Population ≥ 65 Years of Age	65,837	589	61,677	291
% of Population ≥ 65 Years of Age	99.6%	0.9%	93.3%	0.4%
(*) 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



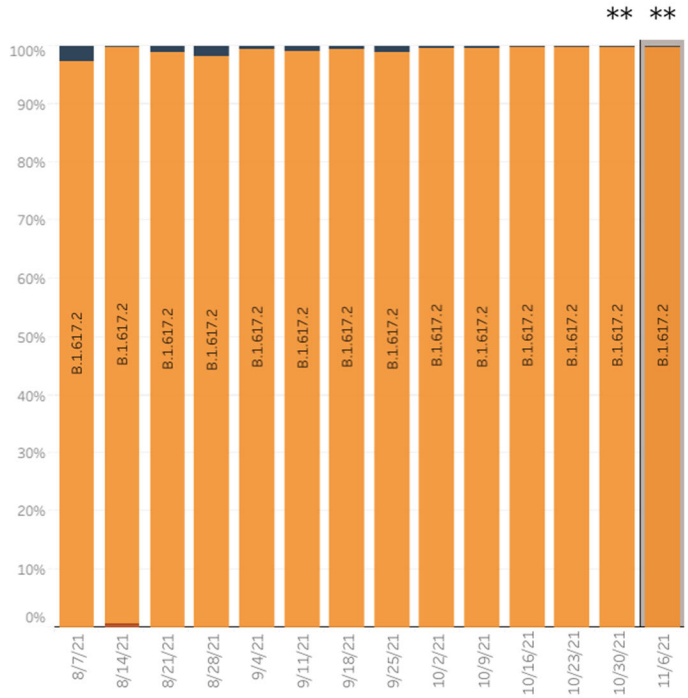
School Data

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**
DMPS*	3.39	6.18	5.76	6.21	6.52	4.42	3.27	2.30	2.1	0.9	2.48
Ankeny	0.00	0.00	8.50	5.42	5.42	3.92	4.83	3.75	2.8	2.1	2.75
Waukee	0.00	0.00	3.57	2.78	2.78	2.35	2.09	2.43	1.7	4.2	4.35
WDM	5.78	4.67	3.89	4.33	4.33	2.67	2.67	1.22	2.0	2.8	5.89
Johnston	0.00	0.00	2.57	4.71	4.71	3.57	2.29	2.29	2.4	2.1	2.71
SE Polk	0.00	0.00	16.14	4.71	4.71	5.43	4.00	1.71	1.9	1.1	1.29
Urbandale	0.00	0.00	3.75	1.75	1.75	5.25	3.00	1.25	1.3	1.3	1.00
Total	4.59	5.42	6.31	4.27	4.32	3.94	3.16	2.14	2.0	2.1	2.92

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**
DMPS*	112	204	190	205	215	146	108	76	68	31	82
Ankeny	0	0	102	65	65	47	58	45	34	25	33
Waukee	0	0	41	43	43	35	32	36	20	49	64
WDM	52	42	35	39	39	24	24	11	18	25	53
Johnston	0	0	18	33	33	25	16	16	17	15	19
SE Polk	0	0	113	33	33	38	28	12	13	8	9
Urbandale	0	0	15	8	8	21	12	5	5	5	4
Total	164	246	514	426	436	336	278	201	175	158	264
Polk Weekly Cases	1751	2009	2158	1885	1633	1368	1192	1137	1032	992	
Polk County Weekly Case Rate	357	410	440	385	333	279	243	232	211	202	

Variant Prevalence

HHS Region 7: 8/1/2021 – 11/6/2021



HHS Region 7: 10/31/2021 – 11/6/2021 NOWCAST

Region 7 - Iowa, Kansas, Missouri, and Nebraska

WHO label	Lineage #	US Class	%Total	95%PI
Delta	B.1.617.2	VOC	100.0%	99.9-100.0%
	AY.1	VOC	0.0%	0.0-0.1%
	AY.2	VOC	0.0%	0.0-0.0%
Other	Other*		0.0%	0.0-0.0%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.

** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

\# AY.3-AY.47 and their sublineages are aggregated with B.1.617.2.

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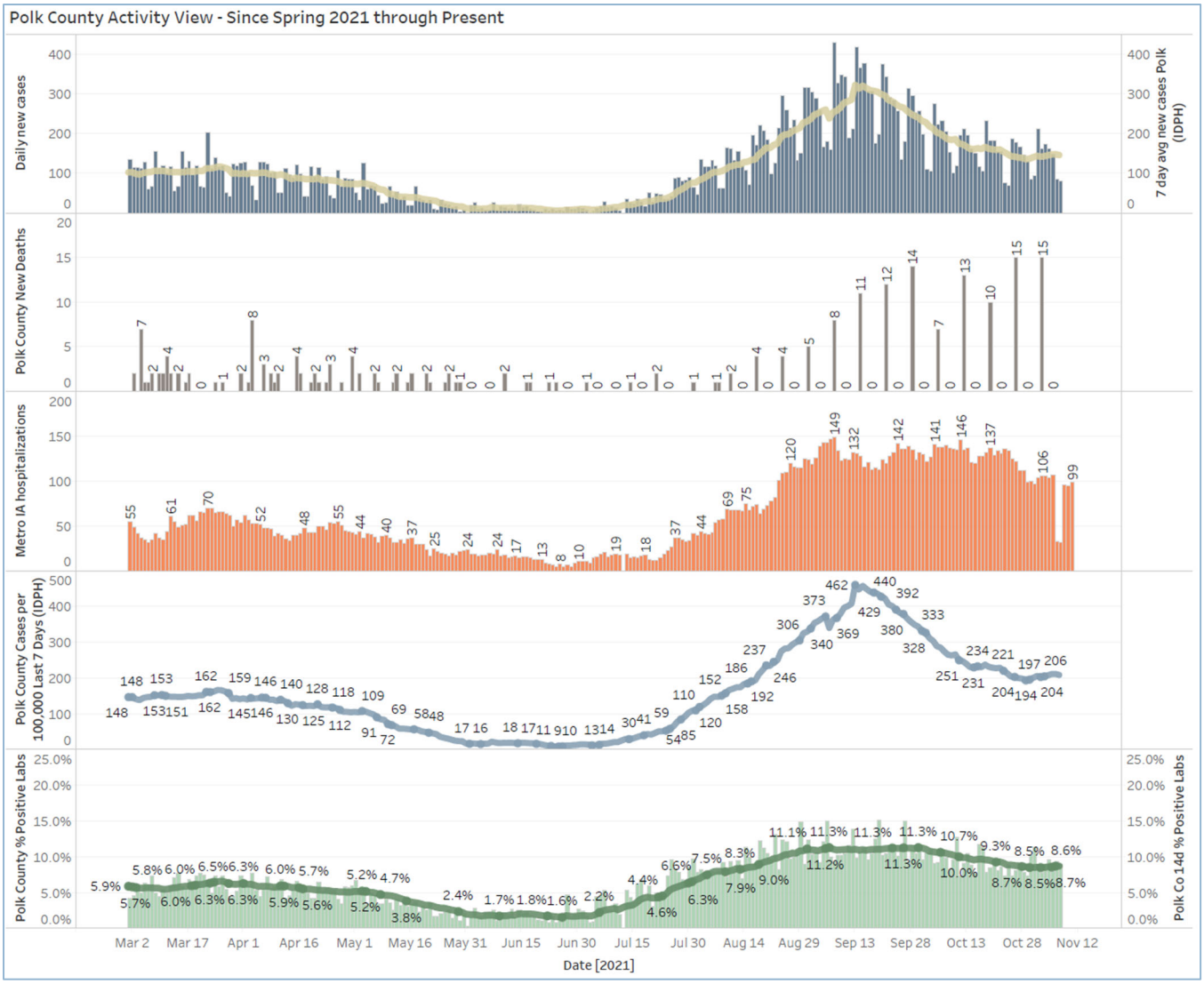

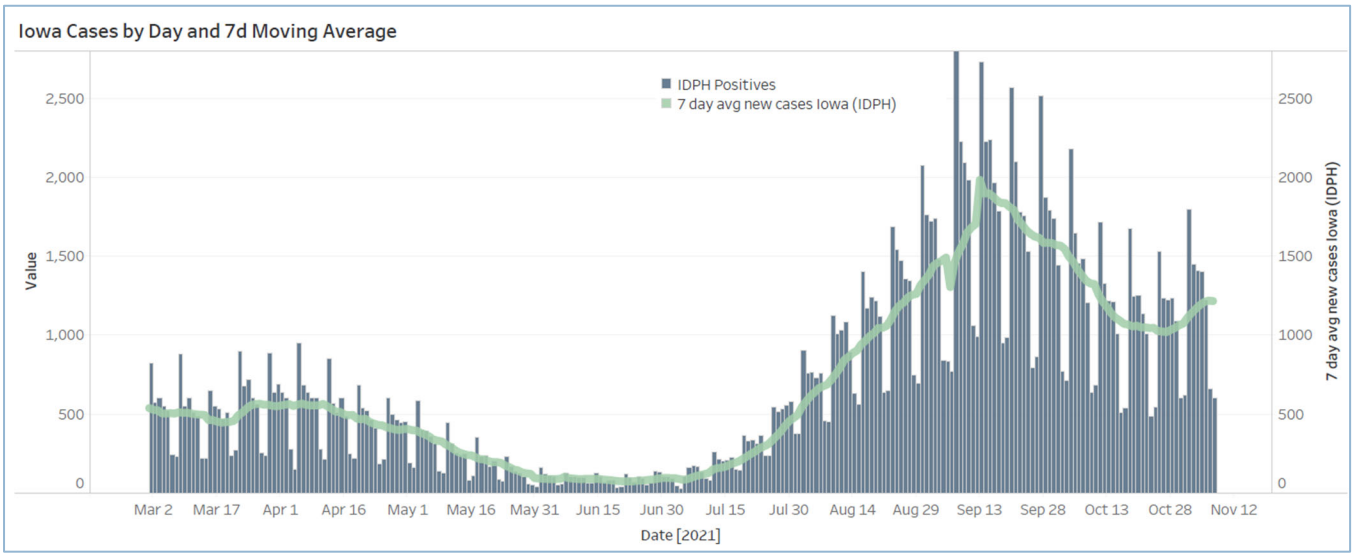

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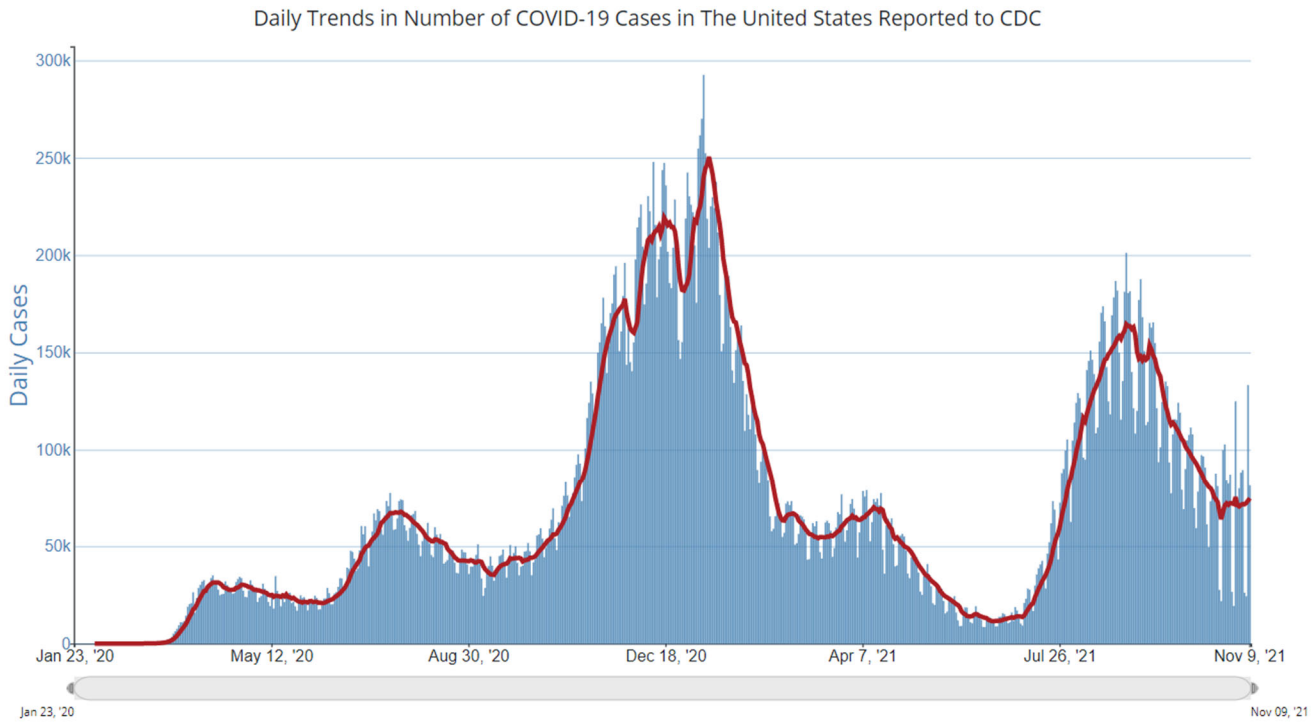

	CASES DAILY AVG.	PER 100,000	14-DAY CHANGE	HOSPITALIZED DAILY AVG.	PER 100,000	14-DAY CHANGE	DEATHS DAILY AVG.	PER 100,000	FULLY VACCINATED
United States	74,834	23	+6%	46,287	14	−12%	1,250.6	0.38	58%
Alaska ›	557	76	−23%	151	21	−36%	12.3	1.68	53%
North Dakota ›	511	67	+7%	261	34	+6%	3.1	0.41	48%
Colorado ›	3,499	61	+36%	1,445	25	+14%	33.3	0.58	62%
New Mexico ›	1,245	59	+52%	496	24	+22%	8.9	0.42	63%
Montana ›	622	58	−26%	378	35	−20%	8.0	0.75	51%
Wyoming ›	328	57	−20%	181	31	−27%	7.9	1.36	45%
Minnesota ›	3,056	54	+35%	1,158	21	+13%	23.4	0.42	62%
Utah ›	1,689	53	+11%	570	18	+43%	9.3	0.29	54%
Vermont ›	315	50	+55%	51	8	+4%	2.6	0.41	72%
Michigan ›	4,881	49	+29%	2,526	25	+14%	42.4	0.42	54%