



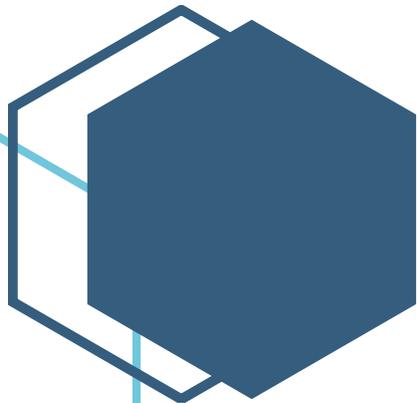
Central Iowa COVID19 Update

Monday, October 19, 2020



Statistical Consulting

Dr. Meg Schaeffer





Quick Stats¹

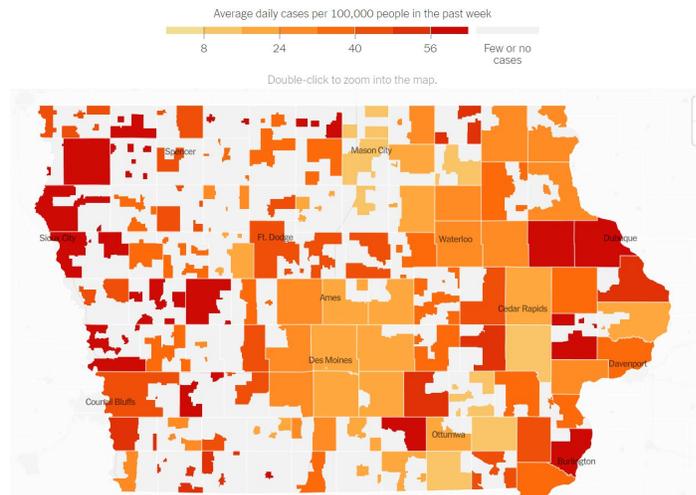
| | Polk County | Iowa |
|-------------------------------------|-------------|------|
| 7d Lab Test Positivity | 7% | 8% |
| 14d Lab Test Positivity | 7% | 10% |
| Total cases per 100,000 | 147 | 228 |
| Average daily cases the last 7d | 103 | 1029 |
| Average 7-day new cases per 100,000 | 21 | 33 |

¹All 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

- Covid-19 activity is increasing nationally. Iowa activity is still concentrated in the western half of the state, with pockets of hot spots throughout. At present, 18 counties have percent positivity above 15.
- Polk County is increasing with a rate per 100,000 of 147 for the past 7 days. Percent positivity is only slightly higher as testing continues to expand with the surge.
- Hospitalizations are the highest of any point in the outbreak at 501.

| | TOTAL CASES | PER 100,000 | CASES IN LAST 7 DAYS | PER 100,000 | WEEKLY CASES PER CAPITA |
|---|-------------|-------------|----------------------|-------------|-------------------------|
| | | | | | FEWER MORE |
| + North Dakota MAP > | 32,642 | 4,283 | 4,714 | 619 | |
| + South Dakota MAP > | 33,836 | 3,825 | 4,705 | 532 | |
| + Montana MAP > | 23,503 | 2,199 | 4,088 | 382 | |
| + Wisconsin MAP > | 183,177 | 3,146 | 17,226 | 296 | |
| + Nebraska MAP > | 58,068 | 3,002 | 5,686 | 294 | |
| + Idaho MAP > | 54,123 | 3,029 | 4,937 | 276 | |
| Guam | 4,725 | 2,804 | 460 | 273 | |
| + Utah MAP > | 95,562 | 2,981 | 8,550 | 267 | |
| + Wyoming MAP > | 9,311 | 1,609 | 1,414 | 244 | |
| + Iowa MAP > | 107,747 | 3,415 | 7,393 | 234 | |



NYT US Activity

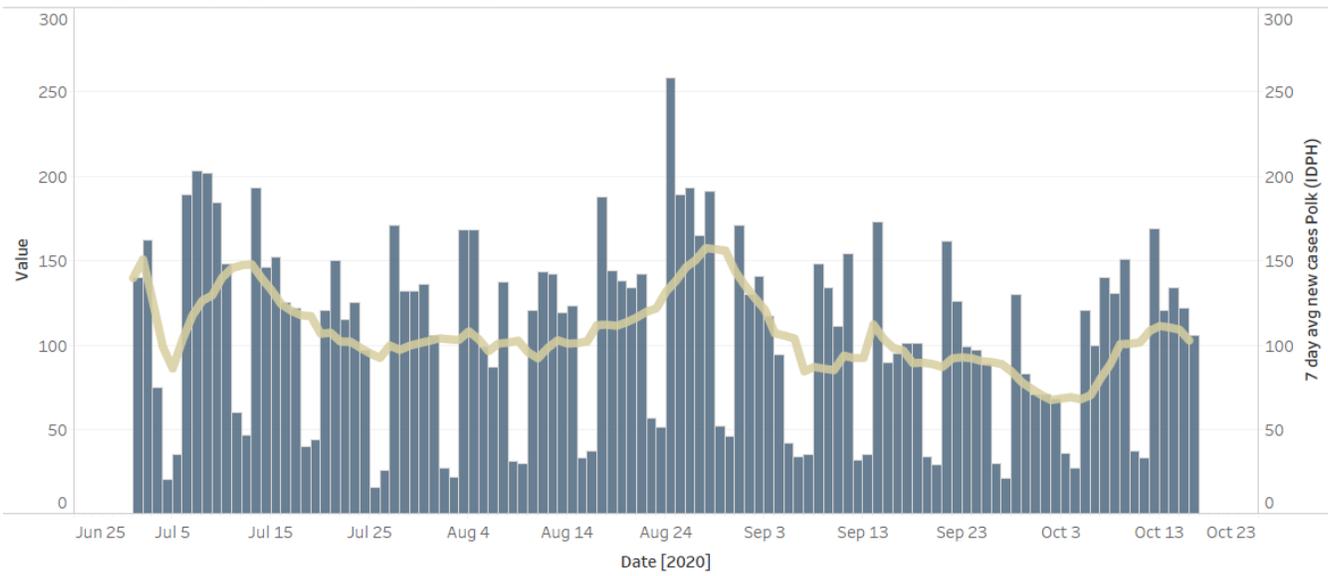
Research & Media

- School reopening in a Salt Lake City district resulted in more than 90 cases within two weeks. At the time of reopening, the county case rate was approximately 187 per 100,000.
- <https://www.nytimes.com/2020/10/18/us/coronavirus-schools-reopening-outbreak.html>
- The risk of contracting coronavirus disease 2019 (COVID-19) during air travel is lower than from an office building, classroom, supermarket, or commuter train.
- <https://jamanetwork.com/journals/jama/fullarticle/2771435>
- A recent study demonstrated universal reduction in COVID-19 spread in 46/51 US jurisdictions prior to relaxing stay at home and other mobility orders. After relaxation of social distancing, the rate of transmission began increasing reaching a mean of 1.16 eight weeks later in all but 9 jurisdictions.
- <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa1502/5917573>
- Median survival of COVID-19 on human skin is about 9-hours, but the virus completely inactivated with 15-second use of 80% ethanol-based hand sanitizer.
- <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa1517/5917611>
- <https://www.nature.com/articles/s41591-020-1083-1>

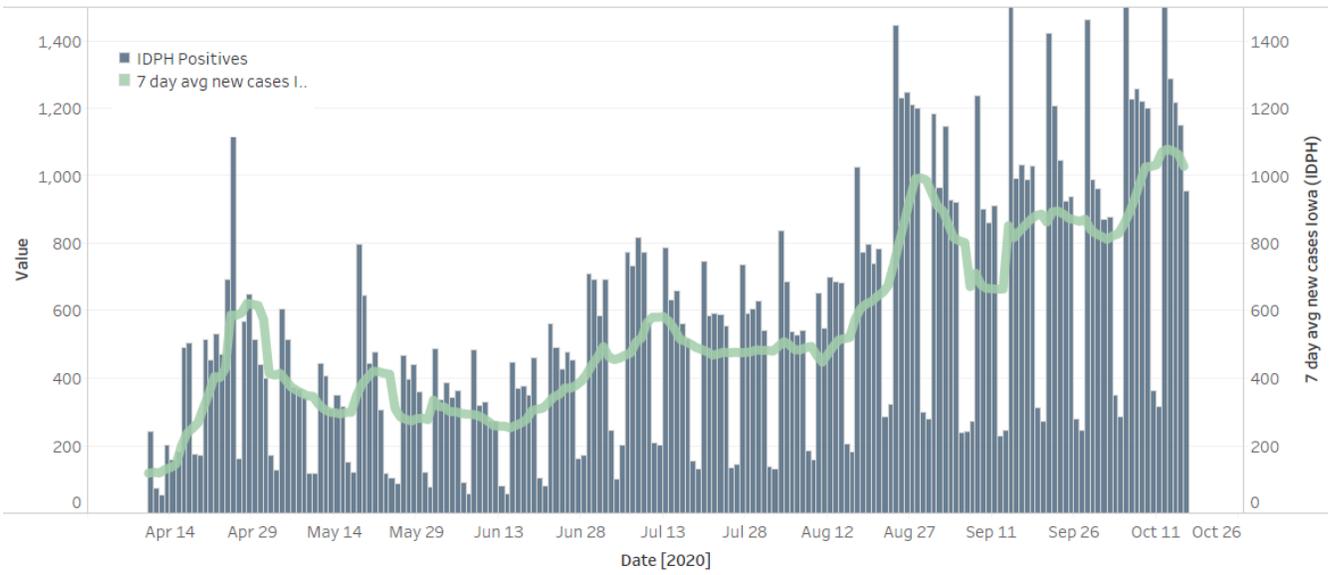
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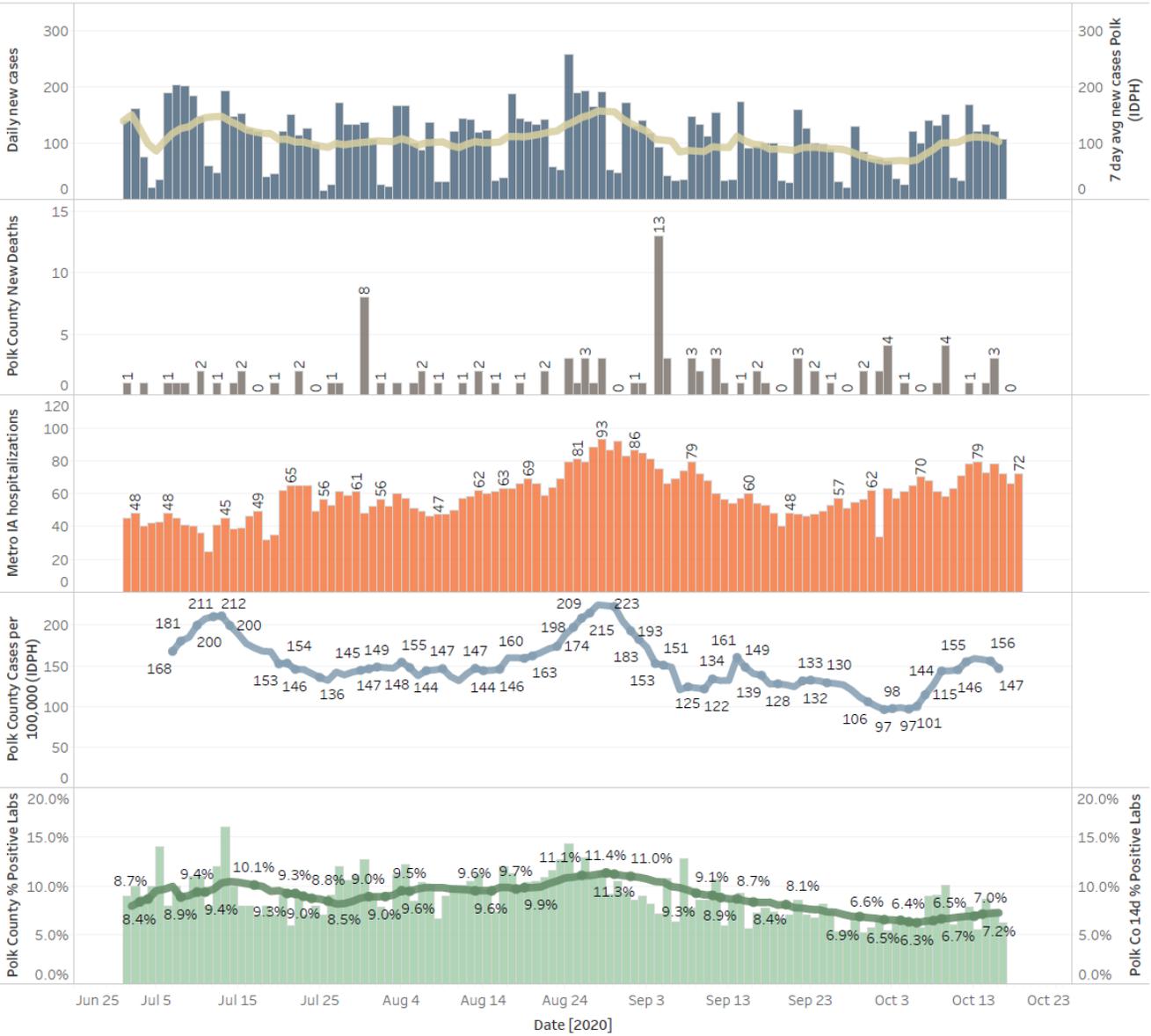
Polk County Cases by Day and 7d Moving Average



Iowa Cases by Day and 7d Moving Average



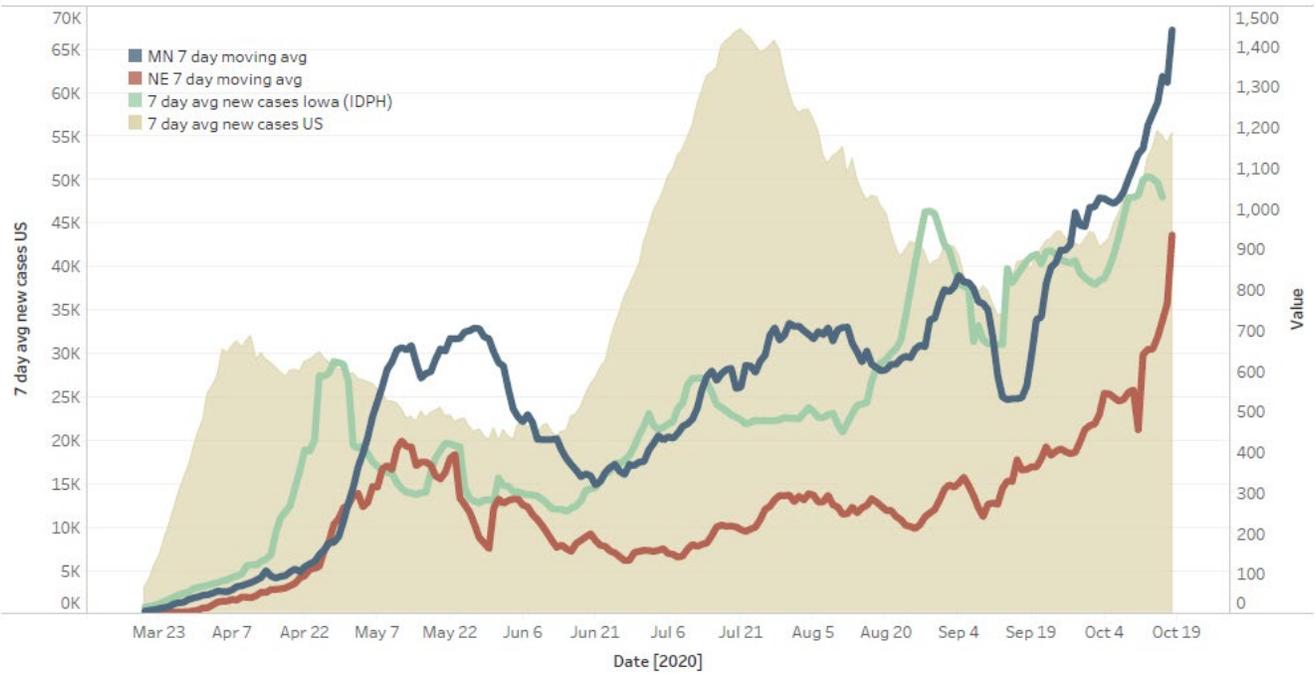
Polk County Activity View



Central Iowa COVID19 Update



US and Border State Cases



US, Iowa, MN, NE New Daily Cases

