SARS-CoV-2 (COVID-19) Pandemic in the US and Oklahoma, Mid First Wave, 04/24/20
Global COVID-19 Cases and Deaths 4-23

COVID-19 by Country Share

2,752,541

USA (32.25%) 877,002

29,497

USA (4%) 1,180

COVID-19 by Country Share

https://clustrmaps.com/coronavirus/
Global COVID-19 Cases and Deaths 4-23

https://clustrmaps.com/coronavirus/
Total COVID-19 cases and deaths in Oklahoma (April 23, 2020)

Positive

3,017

Deaths

179

Death Rate: 5.93%

*Updated at 11:00 on April 23, 2020*

https://experience.arcgis.com/experience/0e8ccb659c804924b72ddc862ec0eadf
Oklahoma COVID-19 Cases Forecast

OK is presently tracking 65% higher cases than these projections.

6-week-ahead Confirmed Cases Forecast for Oklahoma Based on Data as of 2020-04-19

<table>
<thead>
<tr>
<th>Week</th>
<th>Best Case (5th Percentile)</th>
<th>Best Guess (50th Percentile)</th>
<th>Worst Case (95th Percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020-04-19</td>
<td>2,567*</td>
<td>2,979</td>
<td>4,541</td>
</tr>
<tr>
<td>2020-04-26</td>
<td>2,647</td>
<td>2,979</td>
<td>4,541</td>
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<td>2020-05-03</td>
<td>2,707</td>
<td>3,335</td>
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<td>2020-05-10</td>
<td>2,747</td>
<td>3,622</td>
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<td>2020-05-17</td>
<td>2,775</td>
<td>3,854</td>
<td>9,929</td>
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<td>2020-05-24</td>
<td>2,797</td>
<td>4,022</td>
<td>11,640</td>
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<td>2020-05-31</td>
<td>2,813</td>
<td>4,161</td>
<td>12,939</td>
</tr>
</tbody>
</table>

*Last reported confirmed cases count

https://covid-19.bsvgateway.org/#team
Oklahoma COVID-19 Deaths Forecast

Deaths were 179 on 2020-04-23, above and before the Best Guess of 167 on 2020-04-26.

OK is presently tracking 85% higher deaths than these projections.

https://covid-19.bsrgateway.org/#team
Oklahoma COVID-19 Peak Projections

Assuming the peak has not yet occurred, the model predicts it is likely to happen in May.

https://covid-19.bsvgateway.org/#team
COVID-19 in Oklahoma

Data source: OK State Department of Health; charts by author
COVID-19 in Oklahoma

COVID-19 Fatality Rate by Sex

- Male: 4.93%
- Female: 7.23%

COVID-19 Deaths by Sex

- Female: 95,53%
- Male: 84,47%

Data source: OK State Department of Health; charts by author
COVID-19 in Oklahoma

- COVID-19 Deaths by Age Groups:
  - 0-4: 0%
  - 5-17: 2%
  - 18-35: 15%
  - 36-49: 3%
  - 50-64: 3%
  - 65+: 12%

- COVID-19 Deaths/Confirmed Case, Age Groups:
  - 0-4: 0%
  - 5-17: 2%
  - 18-35: 4%
  - 36-49: 6%
  - 50-64: 8%
  - 65+: 10%

Data source: OK State Department of Health; charts by author
COVID-19 in Oklahoma

Data source: OK State Department of Health; charts by author
COVID-19 in Oklahoma

Data source: OK State Department of Health; charts by author
Are some races/ethnicities more vulnerable to severe COVID-19?

- **Illinois**
  - Blacks/African Americans represented 24.7% of all COVID-19 cases—1.74 times their population proportion (14.23%)—and 39.7% of all COVID-19 deaths (2.79x). *These latest statistics represent a small decrease in the ratio between cases and deaths versus population representation.*
  - AIANs represented 0.15% of all COVID-19 cases—3/5ths of their population proportion (0.25%)—and 0.08% of all COVID-19 deaths (3/10ths).

- **Michigan**
  - Blacks/African Americans represented 33% of all COVID-19 cases, 1.96 times their population proportion (13.81%), and 40% of all COVID-19 deaths.
  - AIANs represented less than 1% of all COVID-19 cases—their population proportion is 0.53%—and less than 1% of all COVID-19 deaths.

- **California**
  - Blacks/African Americans represented 7% of all COVID-19 cases—slightly more than their population proportion (6%)—and 12% of all COVID-19 deaths (2.00x).
  - AIANs represented 0.2% of all COVID-19 cases—2/5 of their population proportion (0.5%)—and 0.5% of all COVID-19 deaths (equal).

**Summary:** While it is early in the pandemic, race/ethnicity *alone* does not appear to be a factor with COVID-19 cases, severity or deaths, but it is a factor where Non-Whites experience higher rates of obesity, diabetes, cardiovascular and pulmonary diseases, smoking/vaping, poverty, and being un- or under-insured, and having less access to healthcare, inadequate housing, living in rural areas with fewer healthcare facilities, and other socioeconomic factors that result in greater vulnerability to diseases and illnesses.
Pre- and post-exposure prophylaxis (a drug or action that prevents disease)

- **Post-exposure Prophylaxis / Preemptive Therapy for SARS-Coronavirus-2 (COVID-19 PEP) in Canada**
  - Hydroxychloroquine, possible results late April 2020
  - Trials also being conducted in the US
    - California, Utah, Texas, Pennsylvania, New Jersey
  - **!!! Update (04/22/2020):** COVID-19 Veterans Administration Hospital patients (N=368) in the US with Hydroxychloroquine (HCQ) alone (n=97), HCQ + Azithromycin (n=113), or standard care (n=158), retrospective analysis found 2.61x higher fatality among HCQ patients than standard care patients

- And worldwide
  - S. Korea, Germany, France, Spain, Brazil, and others
  - **!!! Update (04/19/2020):** High-dose chloroquine (600mg twice daily for 10 days) for severe COVID-19 patients in Brazil halted due to higher fatality and heart rhythm irregularities

- Many medical centers in the US are using these for in-hospital patients with severe COVID-19