PURPOSE To provide up-to-date weekly epidemiological data on COVID-19 in Oklahoma.

SNAPSHOT

<table>
<thead>
<tr>
<th></th>
<th>Aug 28–Sept 3</th>
<th>Change¹</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmed cases</td>
<td>5,477</td>
<td>12.2%</td>
<td>61,027</td>
</tr>
<tr>
<td>Recovered cases²</td>
<td>4,261</td>
<td>-5.1%</td>
<td>51,447</td>
</tr>
<tr>
<td>Deaths</td>
<td>57</td>
<td>-17.4%</td>
<td>835</td>
</tr>
</tbody>
</table>

2. Currently not hospitalized or deceased and 14 days after onset/report.

<table>
<thead>
<tr>
<th>Cases</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons aged 50 and over</td>
<td>31%</td>
<td>96%</td>
</tr>
<tr>
<td>Females</td>
<td>53%</td>
<td>55%</td>
</tr>
</tbody>
</table>

The average age of cases was **40 years**.

The youngest case was **less than a year old** and the oldest case was **100+ years**.

The average age of individuals who died was **75 years**.

The youngest individual to die from COVID-19 was **less than 15 years** and the oldest was **100+ years**.
**Testing** (reported through September 3)

- Total specimens tested: 926,188
- Total specimens positive: 72,158

**Hospitalizations**

- Confirmed Cases Ever Hospitalized*: 5013
- Currently Hospitalized (Confirmed Cases & Persons Under Investigation)**: 518

*Ever hospitalized includes discharged, deceased, currently hospitalized and recovered as of 9/3/2020.

KEY POINTS

- **5,477** confirmed cases were reported in the past week
  12.2% increase from the week before (Aug 21-27).
- **57** deaths were reported in the past week
  5.1% decrease from the week before (Aug 21-27).
- **5,013 (8.2%)** confirmed cases have been hospitalized

- **340** confirmed cases were reported to OSDH as
  hospitalized in the past week
  16.0% decrease from the week before (Aug 21-27)
- **926,188** specimens have been tested in total
- **77** counties (out of 77) have had at least one confirmed
  case of COVID-19

DISEASE TESTING

<table>
<thead>
<tr>
<th></th>
<th>Aug 28 – Sept 3</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens tested¹, count</td>
<td>60,003</td>
<td>926,188</td>
</tr>
<tr>
<td>Specimens positive, count (%)</td>
<td>7,085 (11.8%)</td>
<td>72,158 (7.8%)</td>
</tr>
<tr>
<td>Antibody tested, count</td>
<td>4,209</td>
<td>73,173</td>
</tr>
<tr>
<td>Antibody positive, count (%)</td>
<td>447 (10.6%)</td>
<td>3,453 (4.7%)</td>
</tr>
</tbody>
</table>

¹. Includes state and private laboratories.

Note: Specimen counts may not reflect unique individuals.
Positive tests as a percent of total tests

Oklahoma, September 3, 2020

Note: On July 24, 2020 fourteen labs began reporting to OSDH that had been testing since May 18, 2020.
Covid-19 Tests Daily Percent Positive with 7 Day Rolling Average

Oklahoma, September 3, 2020
### EPIDEMIOLOGICAL ESTIMATES

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Notes / Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative incidence*</td>
<td>1,547.7</td>
<td>From March 7 to September 3, there were about 1,547 per 100,000) new cases of COVID-19 in Oklahoma.</td>
</tr>
<tr>
<td></td>
<td>(per 100,000 persons)</td>
<td></td>
</tr>
<tr>
<td>Absolute change in cumulative incidence from previous week</td>
<td>15.1</td>
<td>Compared to August 21 – August 27 there were 15 (per 100,000) more cases of COVID-19 reported in Oklahoma during the past week (Aug 28 – Sep 3).</td>
</tr>
<tr>
<td></td>
<td>(per 100,000 persons)</td>
<td></td>
</tr>
<tr>
<td><strong>Disease Severity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case-fatality risk (crude)</td>
<td>1.4%</td>
<td>The estimate is not adjusted for the lag time from reporting to death (i.e., delay between the time someone dies and the time their death is reported). The fatality estimate could be lower due to cases that were undiagnosed or had milder symptoms.</td>
</tr>
<tr>
<td>Cumulative Hospitalization rate (overall)</td>
<td>127.1</td>
<td>About 127 people per 100,000 have ever been hospitalized for COVID-19 during this outbreak.</td>
</tr>
<tr>
<td></td>
<td>(per 100,000 persons)</td>
<td></td>
</tr>
</tbody>
</table>
CASES AND DEATHS

New cases (by date of onset) and new deaths (by date of death) of COVID-19 in Oklahoma, February–August 2020

Oklahoma COVID-19 Cases by Date of Onset

COVID-19 Deaths by Date of Death and Case Fatality Rate per 100 Cases

Data as of September 3, 2020.

Please note the different axes for new cases (top—from 0 to 1,200 for new cases) and new deaths (bottom—from 0 to 14 for new deaths). Additionally, a 7 day lag has been applied to the trend line based on information collected to-date for 7/19 and 7/25 where within 7 days of onset date approximately 80% of the cases had been reported.
Oklahoma Excess Death Analysis

Figure notes: Contains data up to the week-ending date of August 22, 2020. Data in recent weeks are incomplete. Only 60% of the death records are submitted to NCHS within 1-days of the date of death, and completeness varies by jurisdiction.

Source: CDC, National Center for Health Statistics, https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm#dashboard, Sep 3, 2020 11pm
PERCENT OF CASES EVER HOSPITALIZED (by date of report)

Source: OSDH Acute Disease Registry
TIME TO EVENT*

<table>
<thead>
<tr>
<th>Event</th>
<th>N</th>
<th>Median</th>
<th>10th to 90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time from Symptom Onset to Test (Specimen Collection)(^1,,^2)</td>
<td>27,590</td>
<td>3 days</td>
<td>0-10 days</td>
</tr>
<tr>
<td>Time from Symptom Onset to Hospitalization(^1,,^3)</td>
<td>3,052</td>
<td>6 days</td>
<td>0-14 days</td>
</tr>
<tr>
<td>Length of Hospitalization Discharged Alive(^4)</td>
<td>2,400</td>
<td>5 days</td>
<td>1-15 days</td>
</tr>
<tr>
<td>Length of Hospitalization Deceased(^4)</td>
<td>627</td>
<td>10 days</td>
<td>2-25 days</td>
</tr>
<tr>
<td>Time from Symptom Onset to Death(^1,,^5)</td>
<td>521</td>
<td>15 days</td>
<td>5-34 days</td>
</tr>
</tbody>
</table>

*Data as of September 3, 2020.
1. Limited to cases with a known date of symptom onset.
2. Limited to cases with a known date of a test (specimen collection) on or after the date of symptom onset.
3. Limited to cases with a known hospital admission date on or after the date of symptom onset.
4. Limited to cases with a known admission and discharge date from the hospital.
5. Limited to cases who are deceased.

CUMULATIVE CASES, PERCENT HOSPITALIZED, AVERAGE LENGTH OF STAY (LOS) FOR JULY CASES AND DEATHS BY AGE GROUP
## DEMOGRAPHIC INFORMATION as of September 3, 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Cases count (%)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Deaths count (%)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Cumulative Incidence Rate&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Cumulative Mortality Rate&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oklahoma</td>
<td>61,027</td>
<td>835</td>
<td>1,547.7</td>
<td>21.2</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28,793 (47.2)</td>
<td>456 (54.6)</td>
<td>1,474.3</td>
<td>23.3</td>
</tr>
<tr>
<td>Female</td>
<td>32,234 (52.8)</td>
<td>379 (45.4)</td>
<td>1,619.8</td>
<td>19.0</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 1-4</td>
<td>1,341 (2.2)</td>
<td>0 (0.0)</td>
<td>514.9</td>
<td>0.0</td>
</tr>
<tr>
<td>5-14</td>
<td>3,388 (5.6)</td>
<td>1 (0.1)</td>
<td>629.8</td>
<td>0.2</td>
</tr>
<tr>
<td>15-24</td>
<td>11,728 (19.2)</td>
<td>1 (0.1)</td>
<td>2,180.6</td>
<td>0.2</td>
</tr>
<tr>
<td>25-34</td>
<td>11,144 (18.3)</td>
<td>7 (0.8)</td>
<td>2,051.5</td>
<td>1.3</td>
</tr>
<tr>
<td>35-44</td>
<td>9,838 (16.1)</td>
<td>13 (1.6)</td>
<td>2,006.2</td>
<td>2.7</td>
</tr>
<tr>
<td>45-54</td>
<td>8,287 (13.6)</td>
<td>36 (4.3)</td>
<td>1,800.3</td>
<td>7.8</td>
</tr>
<tr>
<td>55-64</td>
<td>6,889 (11.3)</td>
<td>112 (13.4)</td>
<td>1,396.1</td>
<td>22.7</td>
</tr>
<tr>
<td>65-74</td>
<td>4,508 (7.4)</td>
<td>224 (26.8)</td>
<td>1,256.9</td>
<td>62.5</td>
</tr>
<tr>
<td>75-84</td>
<td>2,543 (4.2)</td>
<td>230 (27.5)</td>
<td>1,354.7</td>
<td>122.5</td>
</tr>
<tr>
<td>85+</td>
<td>1,360 (2.2)</td>
<td>211 (25.3)</td>
<td>1,858.0</td>
<td>288.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (0.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>5,871 (9.6)</td>
<td>80 (9.6)</td>
<td>1,911.2</td>
<td>26.0</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>2,265 (3.7)</td>
<td>20 (2.4)</td>
<td>2,557.8</td>
<td>22.6</td>
</tr>
<tr>
<td>Black or African American</td>
<td>4,303 (7.1)</td>
<td>49 (5.9)</td>
<td>1,495.8</td>
<td>17.0</td>
</tr>
<tr>
<td>Multiracial/Other</td>
<td>2,428 (4.0)</td>
<td>28 (3.4)</td>
<td>586.8</td>
<td>6.8</td>
</tr>
<tr>
<td>White</td>
<td>33,830 (55.4)</td>
<td>607 (72.7)</td>
<td>1,188.7</td>
<td>21.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>12,330 (20.2)</td>
<td>51 (6.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>11,620 (19.0)</td>
<td>59 (7.1)</td>
<td>2,708.1</td>
<td>13.8</td>
</tr>
<tr>
<td>Not Hispanic or Latino</td>
<td>35,897 (58.8)</td>
<td>685 (82.0)</td>
<td>1,021.5</td>
<td>19.5</td>
</tr>
<tr>
<td>Unknown</td>
<td>13,510 (22.1)</td>
<td>91 (10.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Percentages may not add up to 100 due to rounding.
2. Rate per 100,000 population
HEALTHCARE & NON-HEALTHCARE

<table>
<thead>
<tr>
<th>Status</th>
<th>Non-Healthcare Worker count (%)</th>
<th>Healthcare Worker count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>8,510 (14.7)</td>
<td>235 (7.2)</td>
</tr>
<tr>
<td>Deceased</td>
<td>825 (1.4)</td>
<td>10 (0.3)</td>
</tr>
<tr>
<td>Recovered</td>
<td>48,439 (83.8)</td>
<td>3,008 (92.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57,774</strong></td>
<td><strong>3,253</strong></td>
</tr>
</tbody>
</table>

* Percentages may not add up to 100 due to rounding.
1. Data as of September 3, 2020

CASES & DEATHS BY LONG-TERM CARE AND CORRECTIONAL FACILITIES

<table>
<thead>
<tr>
<th></th>
<th>Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTCF(^{1,2})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents</td>
<td>2,174</td>
<td>347</td>
</tr>
<tr>
<td>Staff</td>
<td>1,217</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,391</strong></td>
<td><strong>350</strong></td>
</tr>
<tr>
<td><strong>Correctional Facilities(^{2,3})</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inmates</td>
<td>1,168</td>
<td>6</td>
</tr>
<tr>
<td>Staff</td>
<td>266</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,434</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

1. Long term care facility or nursing home
3. Correctional facilities include prisons, jails, and juvenile detention centers.

AGE DISTRIBUTION OF NEW CASES/DEATHS CONFIRMED FROM AUGUST 28–September 3

<table>
<thead>
<tr>
<th>Age group</th>
<th>New Cases*</th>
<th>Percentage</th>
<th>New Deaths</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1-4</td>
<td>105</td>
<td>1.9%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>5-14</td>
<td>321</td>
<td>5.9%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>15-24</td>
<td>1335</td>
<td>24.4%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>25-34</td>
<td>989</td>
<td>18.1%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>35-44</td>
<td>893</td>
<td>16.3%</td>
<td>2</td>
<td>3.5%</td>
</tr>
<tr>
<td>45-54</td>
<td>650</td>
<td>11.9%</td>
<td>2</td>
<td>3.5%</td>
</tr>
<tr>
<td>55-64</td>
<td>530</td>
<td>9.7%</td>
<td>5</td>
<td>8.8%</td>
</tr>
<tr>
<td>65-74</td>
<td>353</td>
<td>6.4%</td>
<td>19</td>
<td>33.3%</td>
</tr>
<tr>
<td>75-84</td>
<td>204</td>
<td>3.7%</td>
<td>16</td>
<td>28.1%</td>
</tr>
<tr>
<td>85+</td>
<td>97</td>
<td>1.8%</td>
<td>13</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

*One case this week has an unknown age.
## COMORBIDITIES AMONG DECEASED CASES

<table>
<thead>
<tr>
<th>Comorbidities</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 1 chronic condition*</td>
<td>622 (74.5)</td>
</tr>
<tr>
<td>Chronic heart or circulatory disease</td>
<td>453 (54.3)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>304 (36.4)</td>
</tr>
<tr>
<td>Chronic renal failure</td>
<td>154 (18.4)</td>
</tr>
<tr>
<td>Chronic lung failure</td>
<td>186 (22.3)</td>
</tr>
<tr>
<td>Chronic liver failure</td>
<td>27 (3.2)</td>
</tr>
</tbody>
</table>

*Chronic conditions include: chronic heart or circulatory disease, diabetes, chronic lung failure, chronic liver failure and renal failure

![Comorbidities Among Deceased Cases](chart.png)
RECOVERED CASES

Distribution of recovered cases of COVID-19, March-September 2020, Oklahoma

Note: A recovered case is an individual currently not hospitalized or deceased AND 14 days after the onset of symptoms
Symptoms Criteria

Weekly percentage of Influenza-Like Illness (ILI) (%), Morbidity and Mortality Weekly Report, Oklahoma, Jan–Aug 2020

Interpretation: Data on Influenza-Like Illness has increased slightly in the daily number and weekly percentage of influenza-like illness cases in the past week.
Interpretation: Data from syndromic surveillance shows that the number of COVID-19 related emergency department visits has been in the expected range for in the past 2 weeks as indicated by the blue dots on the observed line.
OKLAHOMA IN COMPARISON

Total number of reported COVID-19 cases

Oklahoma ranks 28 (out of all States and DC) in the total number of reported COVID-19 cases in the US.

Data from CDC. Available at https://www.cdc.gov/covid-data-tracker/index.html
Data as of September 2, 2020
Cumulative incidence of reported COVID-19 cases

Oklahoma ranks **25** (out of all States and DC) in the cumulative incidence (per 100,000 persons) of reported COVID-19 cases in the US.

Data from CDC. Available at [https://www.cdc.gov/covid-data-tracker/index.html](https://www.cdc.gov/covid-data-tracker/index.html)
Data as of September 2, 2020
Total number of reported COVID-19 deaths

Oklahoma ranks 33 (out of all States and DC) in the total number of reported COVID-19 deaths in the US.

Data from CDC. Available at [https://www.cdc.gov/covid-data-tracker/index.html](https://www.cdc.gov/covid-data-tracker/index.html)
Data as of September 2, 2020
NOTE: CDC numbers include both Confirmed and Probable cases whereas the OSDH counts are limited to Confirmed cases.
Oklahoma ranks 36 (out of all States and DC) in the cumulative death rate (per 100,000 persons) of reported COVID-19 cases in the US.

Data from CDC. Available at https://www.cdc.gov/covid-data-tracker/index.html
Data as of September 2, 2020
Interpretation: Oklahoma has cumulative incidence that is above the median of the US and cumulative death rate below the median of the US.
ACKNOWLEDGEMENT

The weekly report is made possible through the efforts of county and city public health and healthcare professionals.

NOTES

Every effort is made to ensure accuracy and the data is up-to-date for the time period reported. For daily updates on COVID-19, please visit https://coronavirus.health.ok.gov/

DISCLAIMER

The purpose of publishing aggregated statistical COVID-19 data through the OSDH Dashboard, the Executive Order Report, and the Weekly Epidemiology and Surveillance Report is to support the needs of the general public in receiving important and necessary information regarding the state of the health and safety of the citizens of Oklahoma. These resources may be used only for statistical purposes and may not be used in any way that would determine the identity of any reported cases.