COVID-19 in New Mexico: Epidemiologic and Modeling Update

July 28, 2020
New Mexico has the 30th highest prevalence in the United States
COVID-19 prevalence per 100,000 population

Year-to-Date

<table>
<thead>
<tr>
<th>Region</th>
<th>Cases per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>3147.2</td>
</tr>
<tr>
<td>Northeast</td>
<td>334.0</td>
</tr>
<tr>
<td>Metro</td>
<td>638.7</td>
</tr>
<tr>
<td>Southeast</td>
<td>549.0</td>
</tr>
<tr>
<td>Southwest</td>
<td>933.7</td>
</tr>
<tr>
<td>New Mexico</td>
<td>906.0</td>
</tr>
</tbody>
</table>

New cases (Last 7 days)

<table>
<thead>
<tr>
<th>Region</th>
<th>Cases per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>17.2</td>
</tr>
<tr>
<td>Northeast</td>
<td>9.7</td>
</tr>
<tr>
<td>Metro</td>
<td>12.2</td>
</tr>
<tr>
<td>Southeast</td>
<td>19.7</td>
</tr>
<tr>
<td>Southwest</td>
<td>15.8</td>
</tr>
<tr>
<td>New Mexico</td>
<td>14.1</td>
</tr>
</tbody>
</table>

Statewide R-effective has increased to 1.1.
7 day moving average

Positive samples collected during this time may not yet be reported.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
New Mexico COVID-19 Cases by Date of Specimen Collection – 7/28/20

Positive samples collected during this time may not yet be reported.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
As of July 20, 2020

Region | R-effective | 95% Confidence Interval
--- | --- | ---
State | 1.1 | [0.7, 1.5]
Metro | 0.9 | [0.3, 1.5]
Northeast | 0.9 | [0.0, 2.4]
Northwest | 1.6 | [0.7, 2.5]
Southeast | 1.2 | [0.4, 2.1]
Southwest | 1.2 | [0.5, 2.0]
The Northwest has had a steep increase in daily case counts.

↑ Increasing case counts
↓ Decreasing case counts

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
Northeast Region Case Count by Collection Date with 7 Day Moving Average
July 28, 2020

Positive samples collected during this time may not yet be reported.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
Southeast Region Case Count by Collection Date with 7 Day Moving Average
July 28, 2020

Positive samples collected during this time may not yet be reported.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
Southwest Region Case Count by Collection Date with 7 Day Moving Average
July 28, 2020

Positive samples collected during this time may not yet be reported.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.28.2020, New Mexico Department of Health.
Between the weeks of July 8 and July 15, all exposures in the two weeks before symptoms decreased except in houses of worship.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.24.2020, New Mexico Department of Health.
Hospitalizations have increased since early July. Ventilator use has been steady over the last couple of weeks and is currently at 23% (7/27).
The 55-64 year old age group continues to make up the highest percentage of hospitalizations and has a hospitalization rate of 189.1 per 100,000 population.
The median age of hospitalized cases is between 50-60 years old across all race/ethnicity groups except for Whites which is older (68 years old).
Weekly hospitalizations are increasing across all regions except for the NW which has had a steady decline since mid-May.
COVID-19 deaths have been decreasing since May, but may be beginning to increase

COVID-19 Deaths by Week of Death, New Mexico

Number of Deaths

0 10 20 30 40 50 60 70 80


Reporting through 7/24/2020
COVID-19 age-adjusted case fatality rates

Rates have been age-adjusted to U.S. COVID-19 cases.
Source: Bureau of Vital Records and Health Statistics and Infectious Disease Epidemiology Bureau, Epidemiology and Response Division, reporting through 7.26.2020, New Mexico Department of Health.
Higher rate of mortality due to COVID-19 in males compared to females across most race/ethnicity groups

COVID-19 Age-Adjusted* Case Fatality Rate by Race/Ethnicity and Gender, New Mexico

[Bar chart showing percentage rates for various race/ethnicity and gender groups, with rates ranging from 0.0% to 9.1%.]

Reporting through 7/24/2020; *Adjusted to U.S. COVID-19 cases.
New Mexico Status Updates

• **Case count**: Statewide, the increase in daily case counts may be slowing down.

• **Hospitalizations**: After a period of decline, hospitalizations are increasing

• **Deaths**: Deaths have been declining since mid-May, but may be beginning to rise.

• **Social distancing**: Cell phone data suggests the rise in mobility of New Mexico residents may be slowing down.

• **Contact tracing**: The median time to quarantine for contacts identified last week was 2.3 days.
Supplementary Slides
## Modeling Assumptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measured Value</th>
<th>Value as of 7.2820</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_Effective</td>
<td>Actual Measured Daily Value by key county</td>
<td>$R_{eff}=1.1$</td>
</tr>
<tr>
<td>Positive Test Multiplier</td>
<td>Calculated by LANL</td>
<td>4.6</td>
</tr>
<tr>
<td>Hospitalization and Mortality</td>
<td>Actual rolling value / estimated number of total infected</td>
<td>Medical 0.24%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICU 0.19%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vent Rate 47% of ICU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crude Case Fatality Rate 4.6%</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>Actual rolling value / estimated number of total infected</td>
<td>Medical 5 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICU 14 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICU on Vent 14 days</td>
</tr>
</tbody>
</table>