COVID-19 in New Mexico: Epidemiologic and Modeling Update

August 4, 2020
New Mexico has the 31st highest prevalence in the United States
COVID-19 prevalence per 100,000 population

New cases (Last 7 days) – July 28

- Northwest: 17.2
- Northeast: 9.7
- Metro: 12.2
- Southeast: 19.7
- Southwest: 15.8
- New Mexico: 14.1

New cases (Last 7 days) – August 3

- Northwest: 31.4
- Northeast: 7.1
- Metro: 9.5
- Southeast: 20.0
- Southwest: 12.0
- New Mexico: 13.4

The NW Region 7-day rate includes the recent outbreak in Cibola County Correctional Center.

Statewide R-effective has decreased to 0.9.
New Mexico COVID-19 Cases by Date of Specimen Collection – 8/4/20

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.4.2020, New Mexico Department of Health.
As of July 28, 2020

<table>
<thead>
<tr>
<th>Region</th>
<th>R-effective</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>0.9</td>
<td>[0.5, 1.3]</td>
</tr>
<tr>
<td>Metro</td>
<td>0.8</td>
<td>[0.2, 1.4]</td>
</tr>
<tr>
<td>Northeast</td>
<td>0.8</td>
<td>[0.0, 2.5]</td>
</tr>
<tr>
<td>Northwest</td>
<td>1.0</td>
<td>[0.2, 2.0]</td>
</tr>
<tr>
<td>Southeast</td>
<td>1.1</td>
<td>[0.2, 1.9]</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.7</td>
<td>[0.0, 1.6]</td>
</tr>
</tbody>
</table>

Key

Low Level Endemic
<1.0

Approaching Low Level Endemic
1.0-1.05

Requiring further mitigation >1.05
The Northwest, Metro, Northeast, and Southwest relative growth rate have dropped below 0.

↑ Increasing case counts
↓ Decreasing case counts

Positive samples collected during this time may not yet be reported.
Northeast Region Case Count by Collection Date with 7 Day Moving Average
August 4, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.4.2020, New Mexico Department of Health.
Northwest Region Case Count by Collection Date with 7 Day Moving Average
August 4, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.4.2020, New Mexico Department of Health.
Southeast Region Case Count by Collection Date with 7 Day Moving Average
August 4, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.4.2020, New Mexico Department of Health.
Southwest Region Case Count by Collection Date with 7 Day Moving Average
August 4, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.21.2020, New Mexico Department of Health.
Visits to restaurants and community gatherings has decreased among cases. Travel remains high.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.4.2020, New Mexico Department of Health.
Hospitalizations are beginning to decrease. As of 8/3, ventilator use is at 22%.
Weekly hospitalizations may be beginning to increase in the NW region, decrease in the Metro region, and plateau in the NE region.

Hospitalizations may not yet be reported.
Sharp increase in deaths two weeks ago, but decreased last week

COVID-19 Deaths by Week of Death, New Mexico

Reporting through 7/31/2020
Since last week, COVID-19 age-adjusted case fatality rates have decreased in the NW, Metro, and SE regions, but increased in the SW region.

Note: Age-adjusted case fatality rates are adjusted to the current distribution of U.S. COVID-19 cases on 8/2. [https://www.cdc.gov/covid-data-tracker/index.html#demographics](https://www.cdc.gov/covid-data-tracker/index.html#demographics)

CDC age group categories differ from those previously reported, so the age-adjusted rates for NM are not comparable to previously produced rates.

Source: Bureau of Vital Records and Health Statistics and Infectious Disease Epidemiology Bureau, Epidemiology and Response Division, reporting through 8.2.2020, New Mexico Department of Health.
New Mexico Status Updates

- **Case count**: Statewide, the increase in daily case counts are declining.

- **Hospitalizations**: After a period of increase in July, hospitalizations are decreasing.

- **Deaths**: There was a spike in deaths two weeks ago, but decreased last week.

- **Social distancing**: Cell phone data suggests the mobility of New Mexico residents has been stable, but this varies by region.

- **Contact tracing**: The median time to quarantine for contacts identified last week was 2 days.
Supplementary Slides
## Modeling Assumptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measured Value</th>
<th>Value as of 8.3.20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R_Effective</strong></td>
<td>Actual Measured Daily Value by key county</td>
<td>R_eff=0.9</td>
</tr>
<tr>
<td><strong>Positive Test Multiplier</strong></td>
<td>Calculated by LANL</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Hospitalization and Mortality</strong></td>
<td>Actual rolling value / estimated number of total infected</td>
<td>Medical 0.22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICU 0.15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vent Rate 54% of ICU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crude Case Fatality Rate 4.4%</td>
</tr>
<tr>
<td><strong>Length of Stay</strong></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>
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