COVID-19 in New Mexico: Epidemiologic and Modeling Update

July 21, 2020
New Mexico has the 32nd highest prevalence in the United States
COVID-19 prevalence per 100,000 population

Year-to-Date

Cases per 100,000 Population

- Northwest: 3027.1
- Northeast: 266.5
- Metro: 553.1
- Southeast: 411.4
- Southwest: 822.8
- New Mexico: 807.5

New Mexico COVID-19 Cases by Date of Specimen Collection – 7/21/20

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.
Statewide R-effective has decreased to 1.0.

As of July 13, 2020

**Key**

- **Low Level Endemic** < 1.0
- **Approaching Low Level Endemic** 1.0-1.05
- **Requiring further mitigation** > 1.05

<table>
<thead>
<tr>
<th>Region</th>
<th>R_effective</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>1.0</td>
<td>[0.7, 1.4]</td>
</tr>
<tr>
<td>Metro</td>
<td>1.1</td>
<td>[0.6, 1.7]</td>
</tr>
<tr>
<td>Northeast</td>
<td>1.2</td>
<td>[0.0, 2.7]</td>
</tr>
<tr>
<td>Northwest</td>
<td>0.8</td>
<td>[0.0, 1.8]</td>
</tr>
<tr>
<td>Southeast</td>
<td>1.0</td>
<td>[0.0, 2.2]</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.9</td>
<td>[0.2, 1.7]</td>
</tr>
</tbody>
</table>

The Northeast and Metro regions continue to have increasing daily case counts.
Metro Region Case Count by Collection Date with 7 Day Moving Average – July 21, 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.
Northeast Region Case Count by Collection Date with 7 Day Moving Average
July 21, 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.
Northwest Region Case Count by Collection Date with 7 Day Moving Average
July 21, 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.
Southeast Region Case Count by Collection Date with 7 Day Moving Average
July 21, 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.
Southwest Region Case Count by Collection Date with 7 Day Moving Average
July 21, 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.
The number of tests performed has increased across all age groups, particularly the 20-29 year old age group in the last 3 weeks.
The 20-29 and 30-39 year old age groups continue to make up the highest percentages of total cases
(excludes out-of-state, federal and state detention and correctional facilities)

As of July 20, 2020
The 20-29 year old age group has made up the largest percentage of new cases each week starting in mid-June and made up a little over 25% of new cases investigated last week.

*Excludes out-of-state, federal and state detention and correctional facilities

As of July 15, 2020
Since the beginning of June, there has been an increase in Hispanic or Latino cases and decline in American Indian or Alaska Native cases in the 20-29 year old and 30-39 year old age groups.
Hospitalizations have increased since early July. Ventilator use has decreased and is currently at 22%.

As of July 17, 2020
The 55-64 year old age group makes up the highest percentage of hospitalizations. There has not been much change in hospitalizations in each age group from week-to-week.
Hospitalizations are declining in the NW Regions, but increasing in the Metro, SW, SE, and NE Regions.
COVID-19 deaths have been decreasing since May. Deaths may begin to increase due to the recent spikes in cases across New Mexico.
Case fatality rates (CFR) across regions have slightly decreased since last week. The 75-84 and 85+ age groups continue to have the highest CFRs (21% and 39% respectively).

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 7.19.2020, New Mexico Department of Health.
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.

• **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 4.5 days.
Supplementary Slides
# Modeling Assumptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measured Value</th>
<th>Value as of 7.20.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_Effective</td>
<td>Actual Measured Daily Value by key county</td>
<td>R_eff=1.0</td>
</tr>
<tr>
<td>Positive Test Multiplier</td>
<td>Calculated by LANL</td>
<td>4.8</td>
</tr>
</tbody>
</table>
| Hospitalization and Mortality  | Actual rolling value / estimated number of total infected                      | Medical 0.3%  
ICU 0.2%  
Vent Rate 50% of ICU  
Crude Case Fatality Rate 4.8% |
| Length of Stay                 | Actual rolling value / estimated number of total infected                      | Medical 5 days  
ICU 14 days  
ICU on Vent 14 days                                                 |