COVID-19 in New Mexico: Epidemiologic and Modeling Update

August 11, 2020
New Mexico has the 33rd highest prevalence in the United States.
COVID-19 prevalence per 100,000 population

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.

New cases (Last 7 days) – August 9*

- Northwest: 7.3
- Northeast: 4.8
- Metro: 5.6
- Southwest: 19.4
- New Mexico: 11.1

*Excludes cases in state and federal corrections and detention centers

Statewide R-effective has decreased to 0.7.
Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.11.2020, New Mexico Department of Health.
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>0.7</td>
<td>[0.3, 1.2]</td>
</tr>
<tr>
<td>Metro</td>
<td>0.6</td>
<td>[0.0, 1.4]</td>
</tr>
<tr>
<td>Northeast</td>
<td>0.7</td>
<td>[0.0, 2.6]</td>
</tr>
<tr>
<td>Northwest</td>
<td>0.2</td>
<td>[0.0, 0.9]</td>
</tr>
<tr>
<td>Southeast</td>
<td>1.0</td>
<td>[0.2, 1.9]</td>
</tr>
<tr>
<td>Southwest</td>
<td>0.8</td>
<td>[0.0, 1.7]</td>
</tr>
</tbody>
</table>

As of August 3, 2020

- **Northwest**: R_effective 0.2 ↓
- **Northwest**: R_effective 0.7 ↓
- **Southwest**: R_effective 0.8 ↑
- **Southeast**: R_effective 1.0 ↓
- **Metro**: R_effective 0.6 ↓

All regions have a relative growth rate less than 0.

14-day relative growth rate (%), Regions

↑ Increasing counts
↓ Decreasing case counts

Metro Region Case Count by Collection Date with 7 Day Moving Average
August 11, 2020

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.11.2020, New Mexico Department of Health.

Positive samples collected during this time may not yet be reported.
Northeast Region Case Count by Collection Date with 7 Day Moving Average
August 11, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.11.2020, New Mexico Department of Health.
Northwest Region Case Count by Collection Date with 7 Day Moving Average
August 11, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.11.2020, New Mexico Department of Health.
Southeast Region Case Count by Collection Date with 7 Day Moving Average
August 11, 2020

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.11.2020, New Mexico Department of Health.
Southwest Region Case Count by Collection Date with 7 Day Moving Average
August 11, 2020

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 8.11.2020, New Mexico Department of Health.
Currently the highest percentage of cases are between 25-34 years old (~19%).

Note: Excludes out-of-state cases and cases in state and federal corrections and detention centers

As of August 10, 2020
American Indian/Alaska Native have the highest case rates across all ages compared to other race/ethnicity groups. Excluding AI/AN, Black or African American and Hispanic or Latino groups are also disproportionately affected across most age groups.

Note: Excludes out-of-state cases and cases in state and federal corrections and detention centers
Hospitalizations have been steadily declining since mid-July. As of 8/10, 21% of patients are on ventilators.
The 45-59 and 60+ year old age groups make up the highest percentages of new hospital admissions each week.

As of August 7, 2020

Hospitalizations may not yet be reported.
New hospital admissions of patients who are Hispanic or Latino, or White are continuing to increase each week. Admissions of AI/AN patients have been steadily decreasing.
Spike in deaths from 7/19 to 8/1, but decreased last week.

COVID-19 Deaths by Week of Death, New Mexico

Number of Deaths

Reporting through 8/9/2020
The trend of increasing mortality with age remains unchanged.

COVID-19 Mortality Rate by Age Group, New Mexico

Deaths per 100,000 population

<18 18-24 25-34 35-44 45-54 55-64 65-74 75-84 85+

0.0 0.5 7.0 13.1 23.6 39.6 60.4 140.5 440.6

Reporting through 8/9/2020
Highest percentage of deaths in the 65+ age groups is observed across all race and ethnicity groups. In AI/AN, Black or African American, and Hispanic or Latino groups, 17-33% of deaths were 45-64 years old.

COVID-19 Deaths by Race/Ethnicity and Age Group, New Mexico

- **AIAN** (n=380):
  - 75+: 35%
  - 65-74: 20%
  - 45-64: 33%
  - 18-44: 13%

- **Asian/NHOPI** (n=2):
  - 75+: 100%
  - 65-74: 100%
  - 45-64: 33%
  - 18-44: 17%

- **Black/AfAm** (n=6):
  - 75+: 33%
  - 65-74: 24%
  - 45-64: 21%
  - 18-44: 5%

- **Hispanic** (n=132):
  - 75+: 51%
  - 65-74: 21%
  - 45-64: 24%
  - 18-44: 5%

- **White** (n=165):
  - 75+: 78%
  - 65-74: 13%
  - 45-64: 9%
  - 18-44: 9%

Reporting through 8/9/2020
Minimal changes in case fatality rates by region since last week.

COVID-19 Age-Adjusted* Case Fatality Rate by Region, New Mexico

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>6.3%</td>
</tr>
<tr>
<td>NE</td>
<td>1.7%</td>
</tr>
<tr>
<td>Metro</td>
<td>3.5%</td>
</tr>
<tr>
<td>SE</td>
<td>1.0%</td>
</tr>
<tr>
<td>SW</td>
<td>2.5%</td>
</tr>
<tr>
<td>NM</td>
<td>4.2%</td>
</tr>
<tr>
<td>U.S.</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Reporting through 8/9/2020; *Adjusted to U.S. COVID-19 cases.

Note: Age-adjusted case fatality rates are adjusted to the current distribution of U.S. COVID-19 cases on 8/9. 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 8.9.2020, New Mexico Department of Health.
New Mexico Status Updates

• **Case count:** Statewide, the increase in daily case counts continues to decline.

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

• **Deaths:** After two large spikes recently, deaths 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 1.2 days.
Supplementary Slides
## Modeling Assumptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measured Value</th>
<th>Value as of 8.31020</th>
</tr>
</thead>
<tbody>
<tr>
<td>R_Effective</td>
<td><strong>Actual Measured Daily Value by key county</strong></td>
<td><strong>R_eff=0.7</strong></td>
</tr>
<tr>
<td>Positive Test Multiplier</td>
<td><strong>Calculated by LANL</strong></td>
<td><strong>4.0</strong></td>
</tr>
<tr>
<td>Hospitalization and Mortality</td>
<td><strong>Actual rolling value / estimated number of total infected</strong></td>
<td><strong>Medical 0.18%</strong>&lt;br&gt;<strong>ICU 0.12%</strong>&lt;br&gt;<strong>Vent Rate 55% of ICU</strong>&lt;br&gt;<strong>Crude Case Fatality Rate 4.0%</strong></td>
</tr>
<tr>
<td>Length of Stay</td>
<td><strong>Actual rolling value / estimated number of total infected</strong></td>
<td><strong>Medical 5 days</strong>&lt;br&gt;<strong>ICU 14 days</strong>&lt;br&gt;<strong>ICU on Vent 14 days</strong></td>
</tr>
</tbody>
</table>