COVID-19 in New Mexico: Epidemiologic and Modeling Update

July 14, 2020
New Mexico has the 32nd highest prevalence in the United States as of July 14, 2020.

Source: Cases, Johns Hopkins University Coronavirus Resource Center. Population estimates, National Center for Health Statistics, CDC.

As of July 14, 2020
COVID-19 prevalence per 100,000 population

Year-to-Date

- Northwest: 2914.0
- Northeast: 206.7
- Metro: 458.8
- Southeast: 325.0
- Southwest: 716.8
- New Mexico: 715.0

Last 7 days

- Northwest: 140.0
- Northeast: 40.4
- Metro: 79.1
- Southeast: 88.4
- Southwest: 94.7
- New Mexico: 84.3

The highest percentage of total cases are in the 20-29 years old age group, followed by the 30-39 years old age group. (excludes out-of-state, federal and state detention and correctional facilities)
The 20-29 year old age group has made up the largest percentage of new cases each week starting in mid-June followed by age groups 30-39 and 40-49 years old. The 20-29 years old age group made up a little over 25% of new cases investigated last week.

*Excludes out-of-state, federal and state detention and correctional facilities
New Mexico COVID-19 Cases by Date of Specimen Collection – 7/14/20

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.14.2020, New Mexico Department of Health.
Statewide R-effective has decreased to 1.1.
As of July 7, 2020

**Region** | **R-effective** | **95% Confidence Interval**
--- | --- | ---
State | 1.1 | [0.7, 1.5]
Metro | 1.1 | [0.5, 1.8]
Northeast | 1.1 | [0.0, 3.1]
Northwest | 0.9 | [0.0, 1.9]
Southeast | 1.0 | [0.0, 2.2]
Southwest | 1.1 | [0.4, 2.1]
Northwest continues to have the lowest relative growth rate, but has been increasing.
Positive samples collected during this time may not yet be reported.

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.14.2020, New Mexico Department of Health.
Northeast Region Case Count by Collection Date with 7 Day Moving Average
July 14, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.14.2020, New Mexico Department of Health.
Northwest Region Case Count by Collection Date with 7 Day Moving Average
July 14, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.14.2020, New Mexico Department of Health.
Southwest Region Case Count by Collection Date with 7 Day Moving Average
July 14, 2020

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

Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 7.14.2020, New Mexico Department of Health.
Hospitalizations have increased since early July. Ventilator use has decreased and is about 20% currently.
The 50-59 and 60-69 years old age groups each make up about 20% of the total hospitalized cases as of July 13, 2020.
COVID-19 deaths have been decreasing since May, but the number of deaths may increase in the next few weeks due to the recent rise in case counts and hospitalizations.
Case fatality rates (CFR) across regions have changed decreased slightly since last week.

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 7.12.2020, New Mexico Department of Health.
As age increases, the case fatality rate also increases. Age groups 75-84 and 85+ continue to have the highest case fatality rates.
New Mexico Status Updates

• **Case count**: Statewide, daily case counts are increasing.

• **Hospitalizations**: After a period of decline, current hospitalizations have been increasing over the past week.

• **Deaths**: Deaths have been steadily 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 3.5 days.
Supplementary Slides
# Modeling Assumptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measured Value</th>
<th>Value as of 7.13.20</th>
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</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>5.1</td>
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<tr>
<td>Hospitalization and Mortality</td>
<td>Actual rolling value / estimated number of total infected</td>
<td>Medical 0.3%</td>
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<td></td>
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<td>ICU 0.2%</td>
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<tr>
<td></td>
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<td>Vent Rate 49% of ICU</td>
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<td></td>
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<td>Crude Case Fatality Rate 5.1%</td>
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<tr>
<td>Length of Stay</td>
<td>Actual rolling value / estimated number of total infected</td>
<td>Medical 5 days</td>
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<td></td>
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<td>ICU 14 days</td>
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<td>ICU on Vent 14 days</td>
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