So what?

Our model suggests that the number of daily cases is expected to range between 10 and 260 in the next few weeks.
UNCLASSIFIED

Short- & Long-Term Forecast for NM: Deaths

So what?

Our model suggests that the number of daily deaths is expected to range between 1 and 15 in the next few weeks.
Harding, San Miguel, Los Alamos, and Guadalupe counties have the highest cumulative growth rates.

*Growth rate is in cumulative cases
So what?

- Most people in New Mexico are living in a county that has medium per-capita case counts and decelerating growth rates.

Number of New Mexicans living in regions with particular combinations of per capita case counts and 7-day growth rates:

- Low: <10 cases/100k per week
- Med: 10-99 cases/100k per week
- High: >100 cases/100k per week
The CDC ForecastHub is predicting a 12% decrease in one week incident cases to 656 (from April 2 at 745).

COVIDhub-4_week_ensemble prediction, COVID 19 ForecastHub
https://viz.covid19forecasthub.org/
Additional Regional Forecasts
Central & North Regions Daily Cases Forecast

Northwest

Northeast

Central

So what?
The Central region is expected to see the most number of cases. Cases appear to be plateauing.
South Regions Daily Cases Forecast

So what?
Both regions have a predicted plateau. The Southwest region is expected to see higher number of cases.
5 Apr 2022: Epigrid modeling

- NM daily incidence continues a modest, but slower decline. About 100 cases/day predicted for next week.
- Drop in the death rate to 1/2x is highly notable (not only the number of deaths).
- Omicron is about as infectious as Delta variant. Virus evolution/immune evasion causative of Omicron wave.
- No clear evidence for substantially more immune evasion by BA.2 than by BA.1.
- Immunological diversity from updated vaccines will further improve the situation.
- Situational awareness remained good as of January 2022, possibly to the present time.
- Bernalillo County data highlight the slower decline in daily incidence. Seen in other counties too.
A look at the raw incidence data

- Sunday, Monday
- Tuesday
- Wednesday/Thursday
- Friday
- Saturday

- The reported incidence continues to fall.
- Within-weekly variation in NM data is showing larger by-day variation. Significance unknown.
- Color-coded by-day-of-week incidence is declining, but has slowed.

The 190 cases in the Lea county correctional facility are removed from data reported on March 26th. The 1/3 of reported cases that were > 2 weeks prior were removed from March 24th. Case reported for weekends starting April 10-12th are each divided by 3 to estimate individual day counts.
8 April 2022 Vaccine Analysis (NM): Vaccinate before the next epidemic/wave

- 1688k first doses are used in modeling (3/22/22).
- 1688k first doses have been administered, +1k/2, +1k/2, +7k/2.
- 1439k completed initial vaccine series, +4k/2, +4k/2, +13k/2.
- 781k boosters completed, +10k/2, +11k/2, +22k/2.
- ~80.5% of all persons in New Mexico are base-line vaccinated.
- ~94.5% of all New Mexicans are eligible (~1981k).
- 78.0/94.5=85.2% of eligible New Mexicans vaccinated.
- 5-11 year old vaccinations continue to be slow.

- Vaccination is slow. Expect waning immunity in May 2022.
- By-county 3rd-dose variation is large.

- Vaccines with updated antigens and more diverse antigen presentation are progressing (pre-phase I).

- Crucial to understand the level of immune evasion against neutralizing antibodies well before the peak of the next SARS-2 epidemic.

- Monitor low-vaccination & congregated environments (i.e. age cohorts with lower vaccination rates).
Variant Monitoring: Omicron is the current variant

https://www.cdc.gov/covid-data-tracker/#variant-proportions

- NM data on BA.2 inconclusive for future events, but compatible with no large BA.2 wave.
- Only a modest rise in some US locales even though BA.2 claimed to be a majority of cases: possibly insufficient immune evasion relative to BA.1 to drive a large number of cases. Hospitalizations similarly not climbing rapidly.
- New variants have appeared without evident intermediates. Global and wastewater monitoring.
- Approximately 6-12 months is the longest variant-interval: D614G (~3 months), Alpha (~6-9 months), Delta (~6 months), Omicron (~6 months).
Recent By-State Trends: Most Populous 10 States


<table>
<thead>
<tr>
<th>State</th>
<th>Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>15.31</td>
<td>0.048</td>
</tr>
<tr>
<td>Michigan</td>
<td>7.7</td>
<td>0.192</td>
</tr>
<tr>
<td>Ohio</td>
<td>3.78</td>
<td>0.304</td>
</tr>
<tr>
<td>Florida</td>
<td>7.62</td>
<td>0.171</td>
</tr>
<tr>
<td>New Mexico</td>
<td>4.93</td>
<td>0.495</td>
</tr>
<tr>
<td>Illinois</td>
<td>9.55</td>
<td>0.108</td>
</tr>
<tr>
<td>Texas</td>
<td>8.92</td>
<td>0.128</td>
</tr>
<tr>
<td>California</td>
<td>7.04</td>
<td>0.133</td>
</tr>
<tr>
<td>North Carolina</td>
<td>7.96</td>
<td>0.055</td>
</tr>
<tr>
<td>Georgia</td>
<td>19.09</td>
<td>0.359</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>4.22</td>
<td>0.116</td>
</tr>
</tbody>
</table>

Daily rates per 100,000 residents averaged March 23rd 2022 thru April 7th 2022.