NEW MEXICO DEPARTMENT OF HEALTH

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COVID-19 in New Mexico: Epidemiologic Update

A NMDOH, Presbyterian, LANL, and SNL Partnership

May 12, 2020

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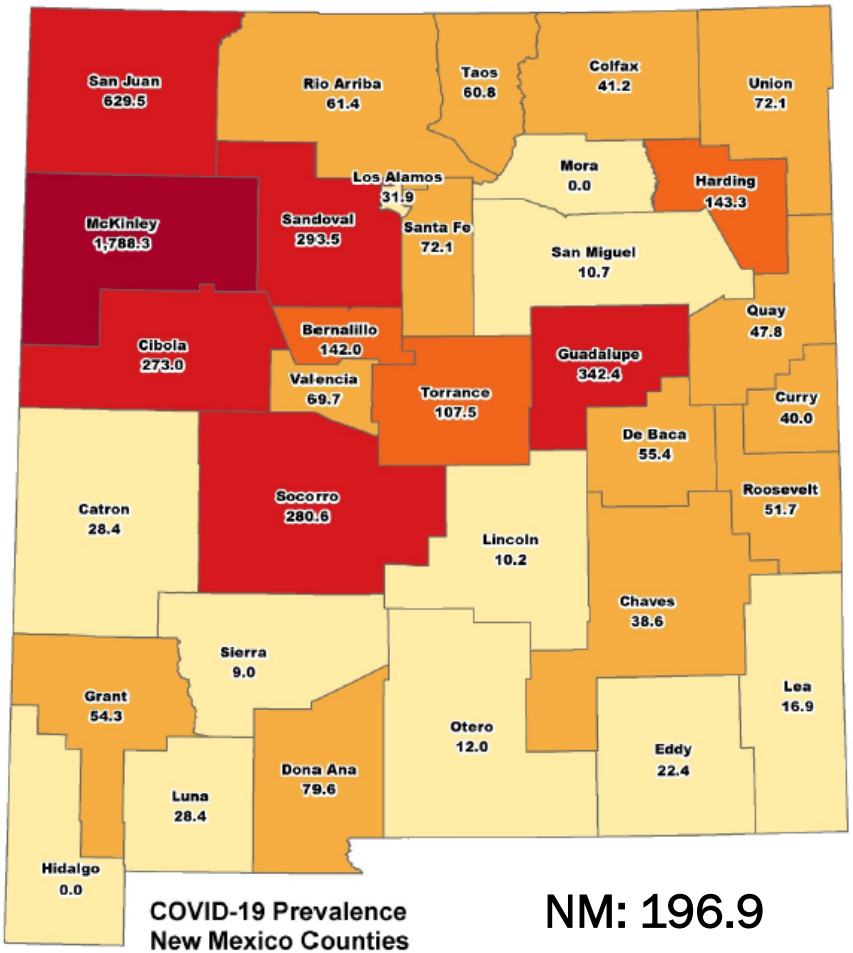
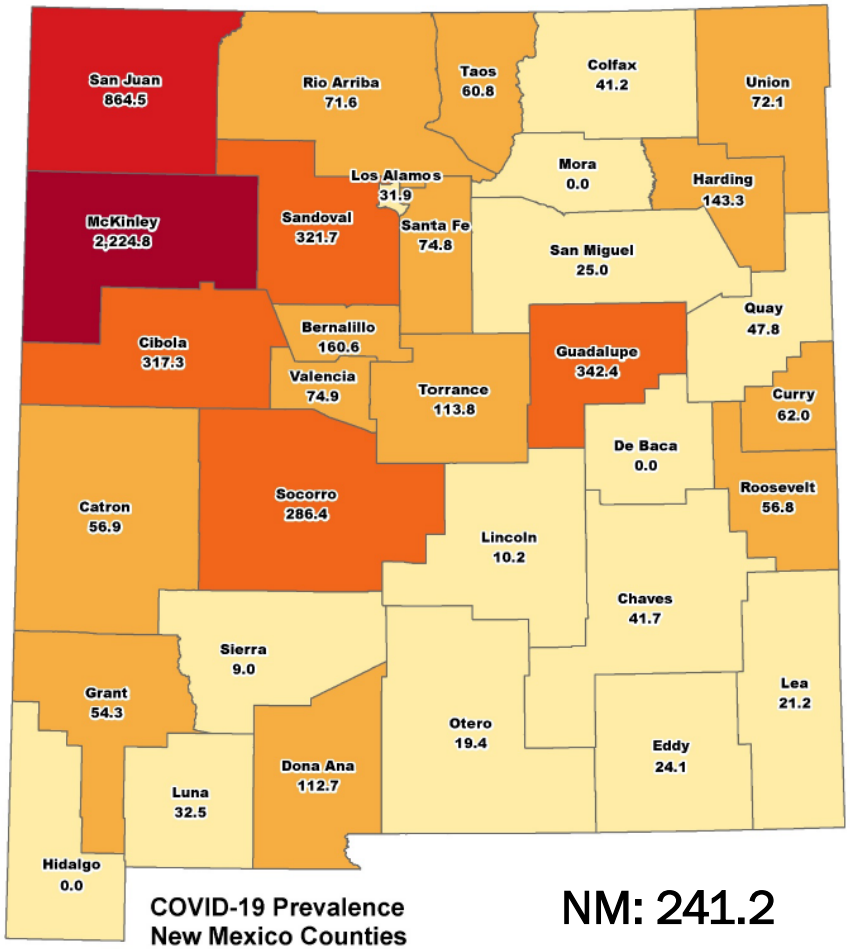
Prevalence: COVID-19 cases per 100,000 by NM county



COVID-19 Prevalence
New Mexico Counties
Rate per 100,000 population
May 5, 2020

NM: 196.9



COVID-19 Prevalence
New Mexico Counties
Rate per 100,000 population
May 11, 2020

NM: 241.2

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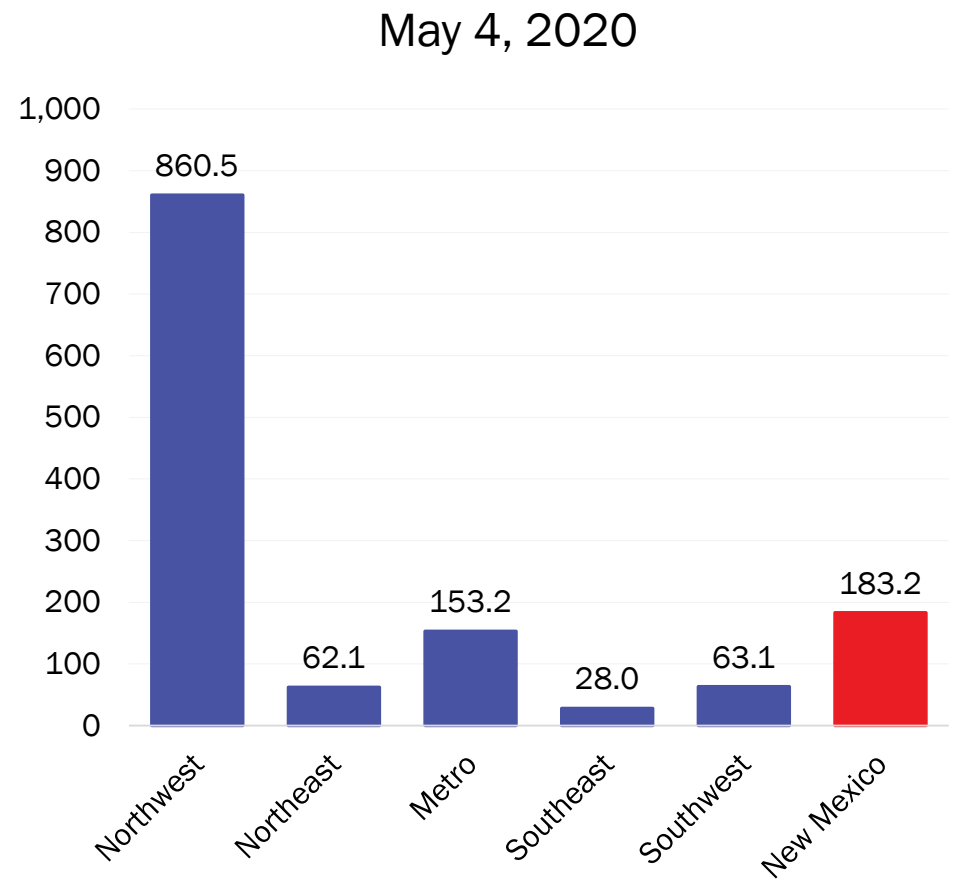
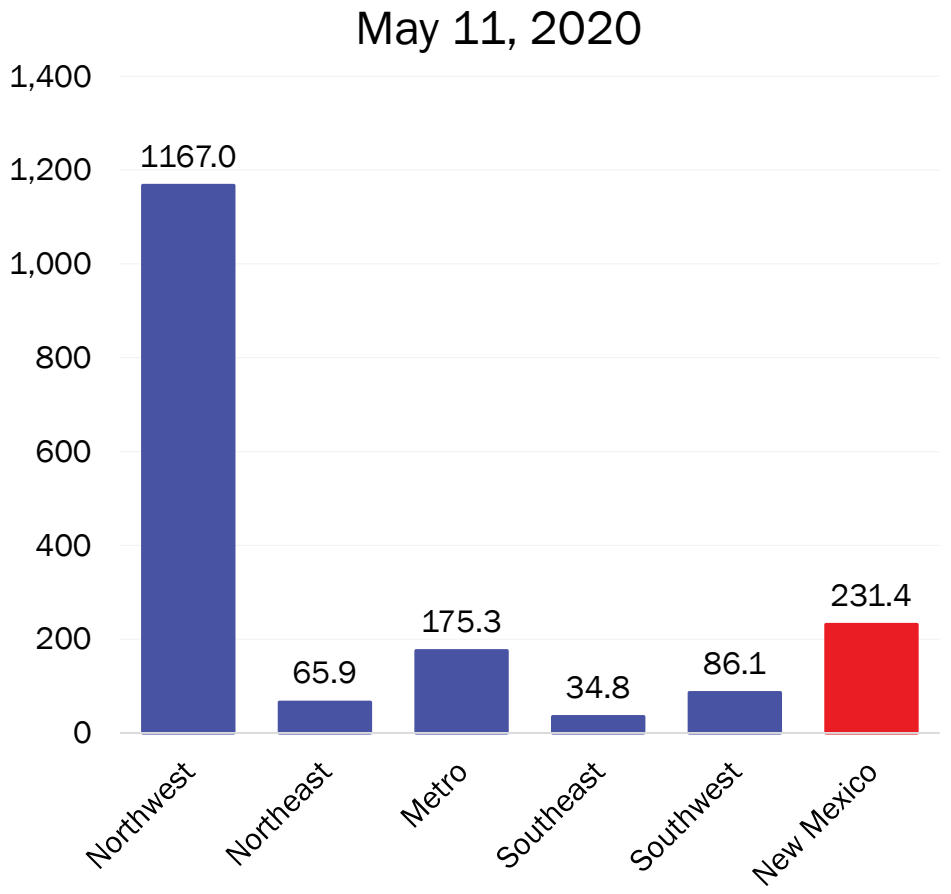
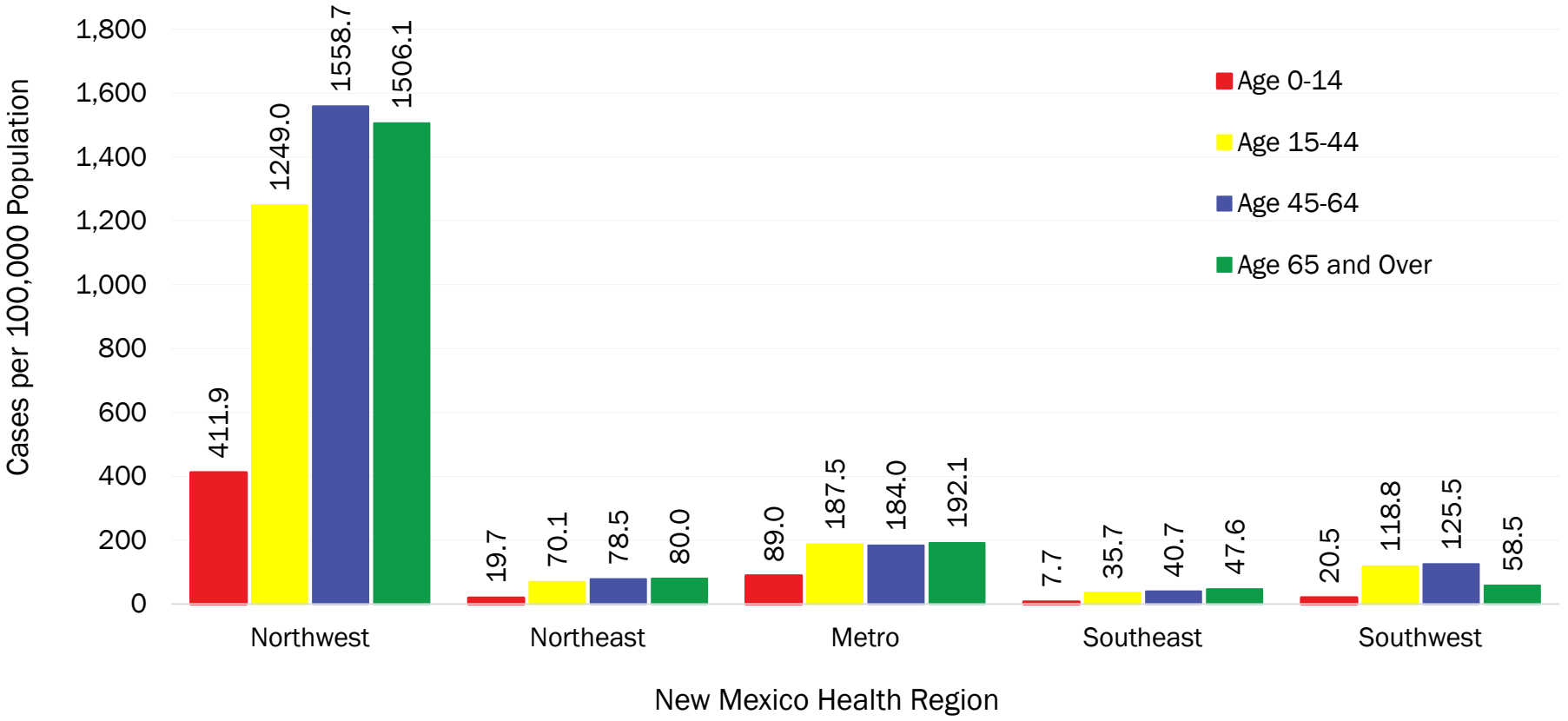
Prevalence Rate: Number of COVID-19 cases per 100,000 population





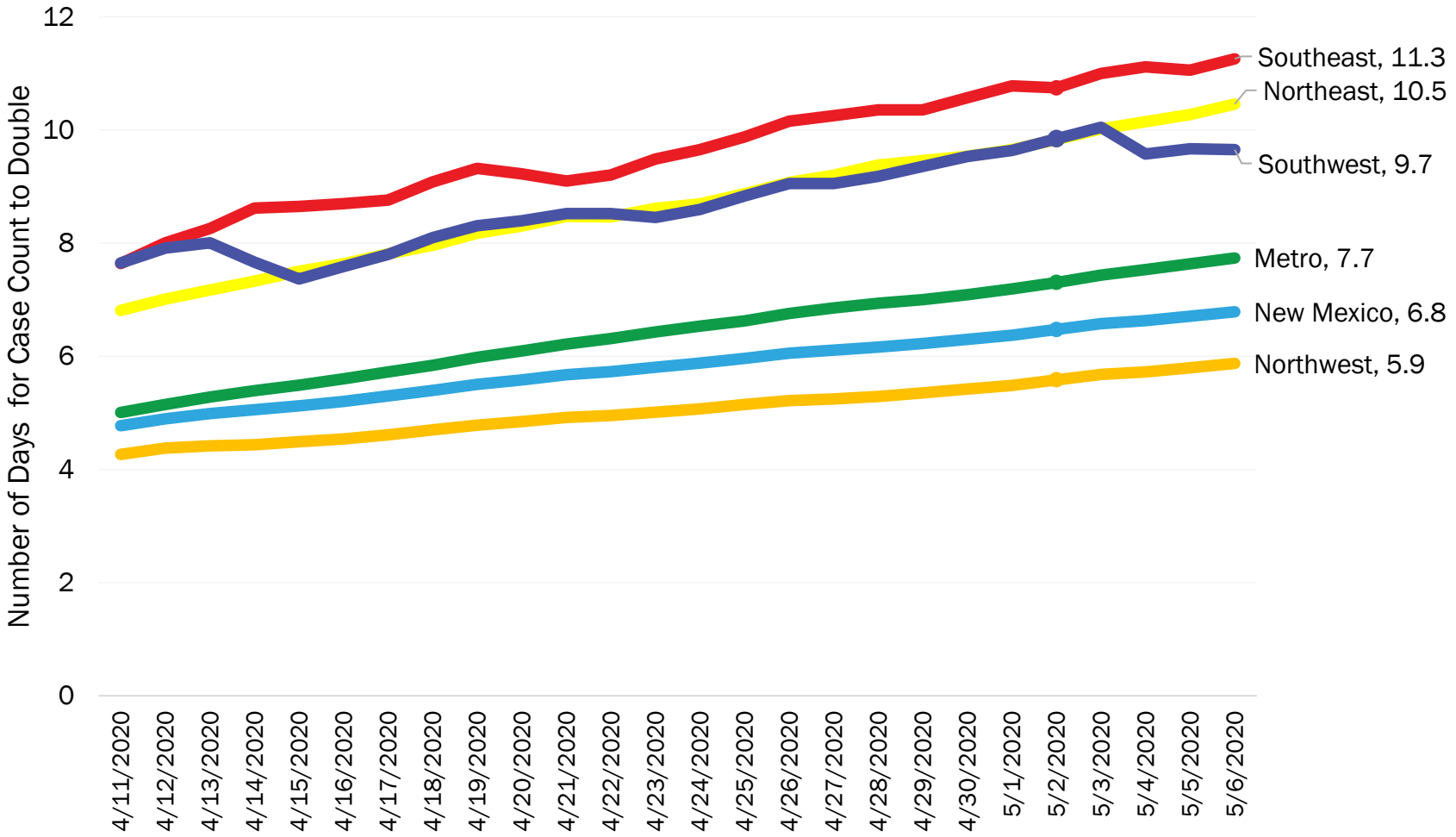
Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 5.10.2020, New Mexico Department of Health. Population estimates, UNM Geospatial and Population Studies Program.

Prevalence Rate: Number of COVID-19 cases per 100,000 population by age group



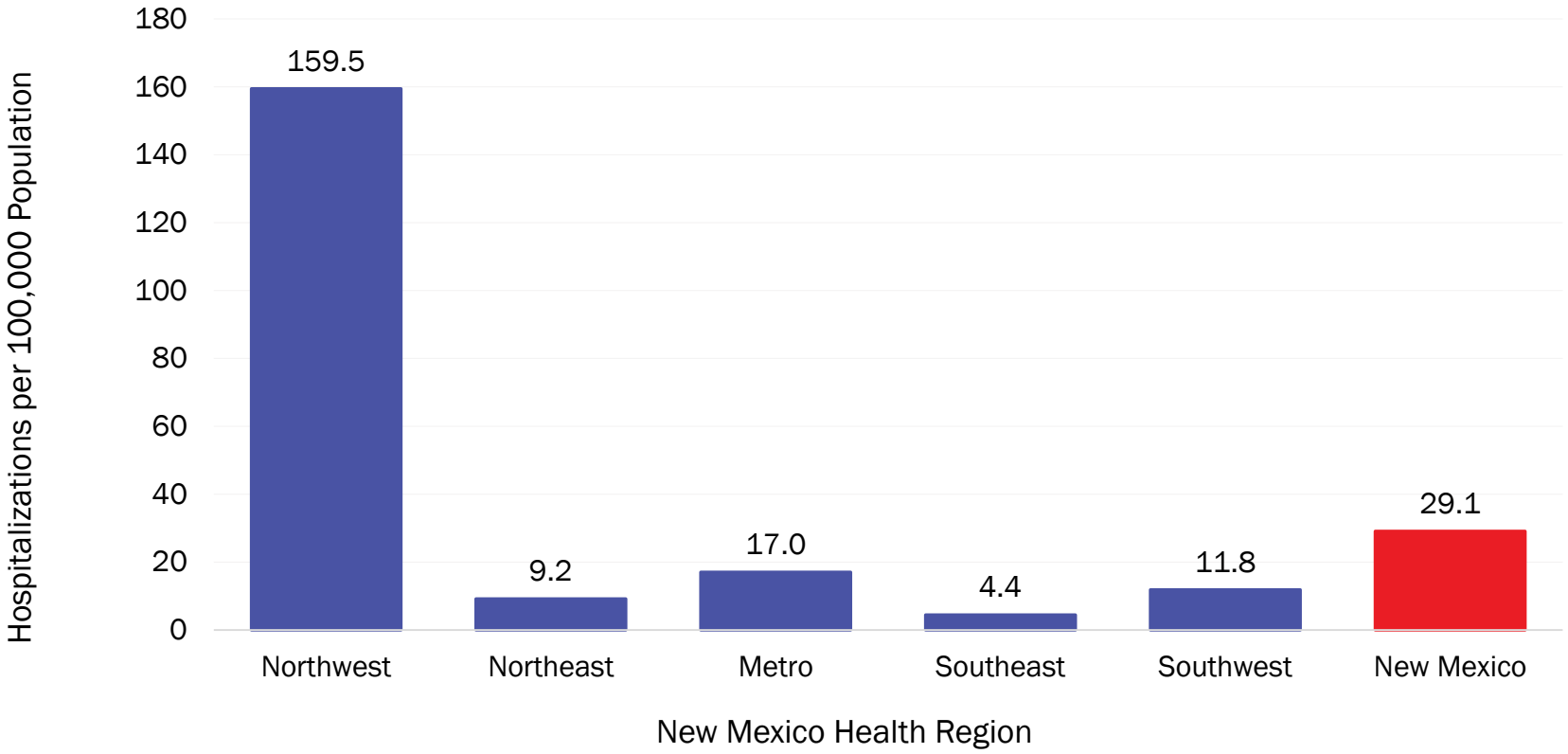
Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 5.11.2020 at 8:38 AM, New Mexico Department of Health. Population estimates, UNM Geospatial and Population Studies Program.

Projected doubling time



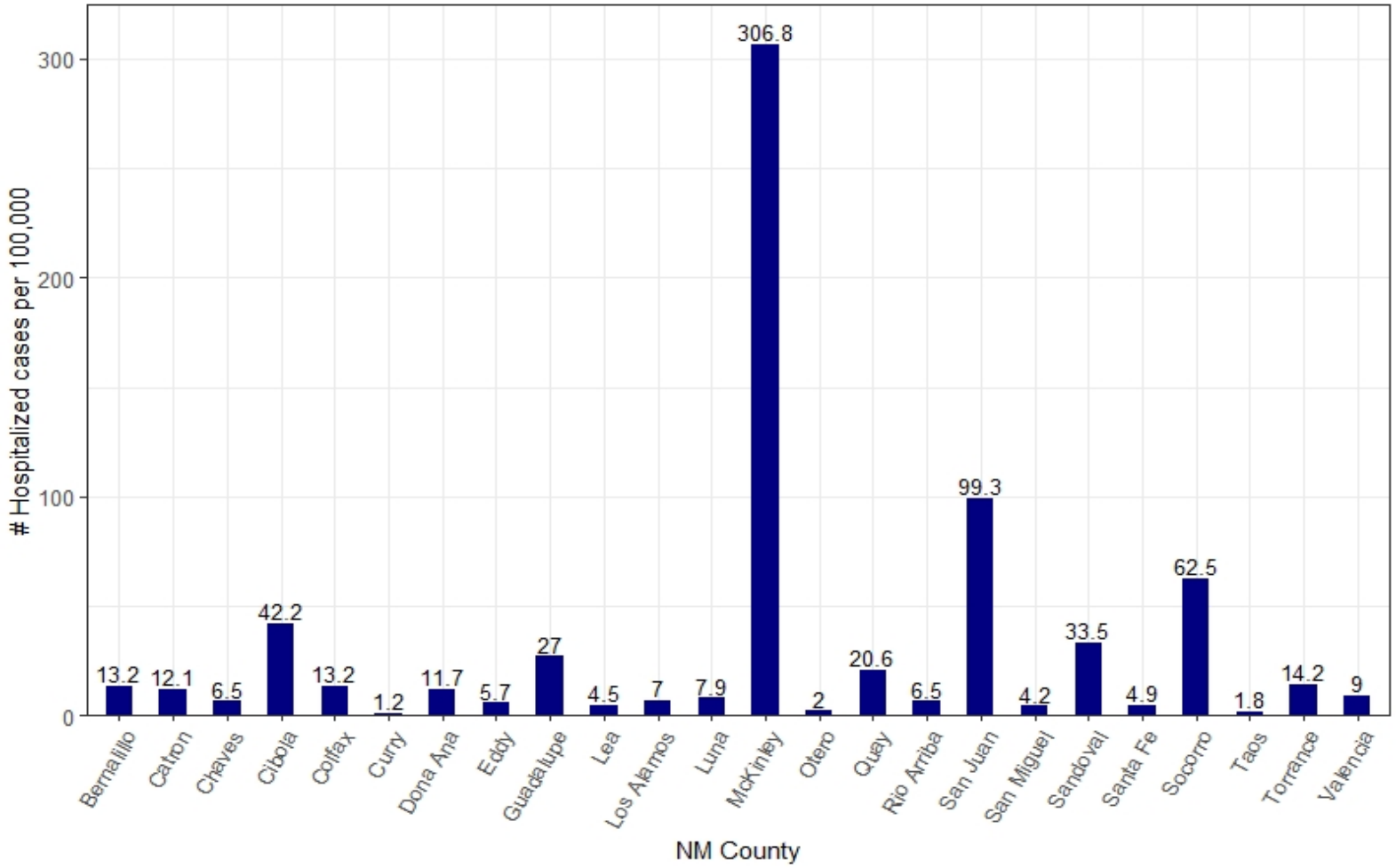
Projected Doubling Time Based on Date of Test Specimen Collection and Cumulative Average Rate of Increase.
Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 5.11.2020, New Mexico Department of Health.

Hospitalization Rate: Number of COVID-19 cases per 100,000 population



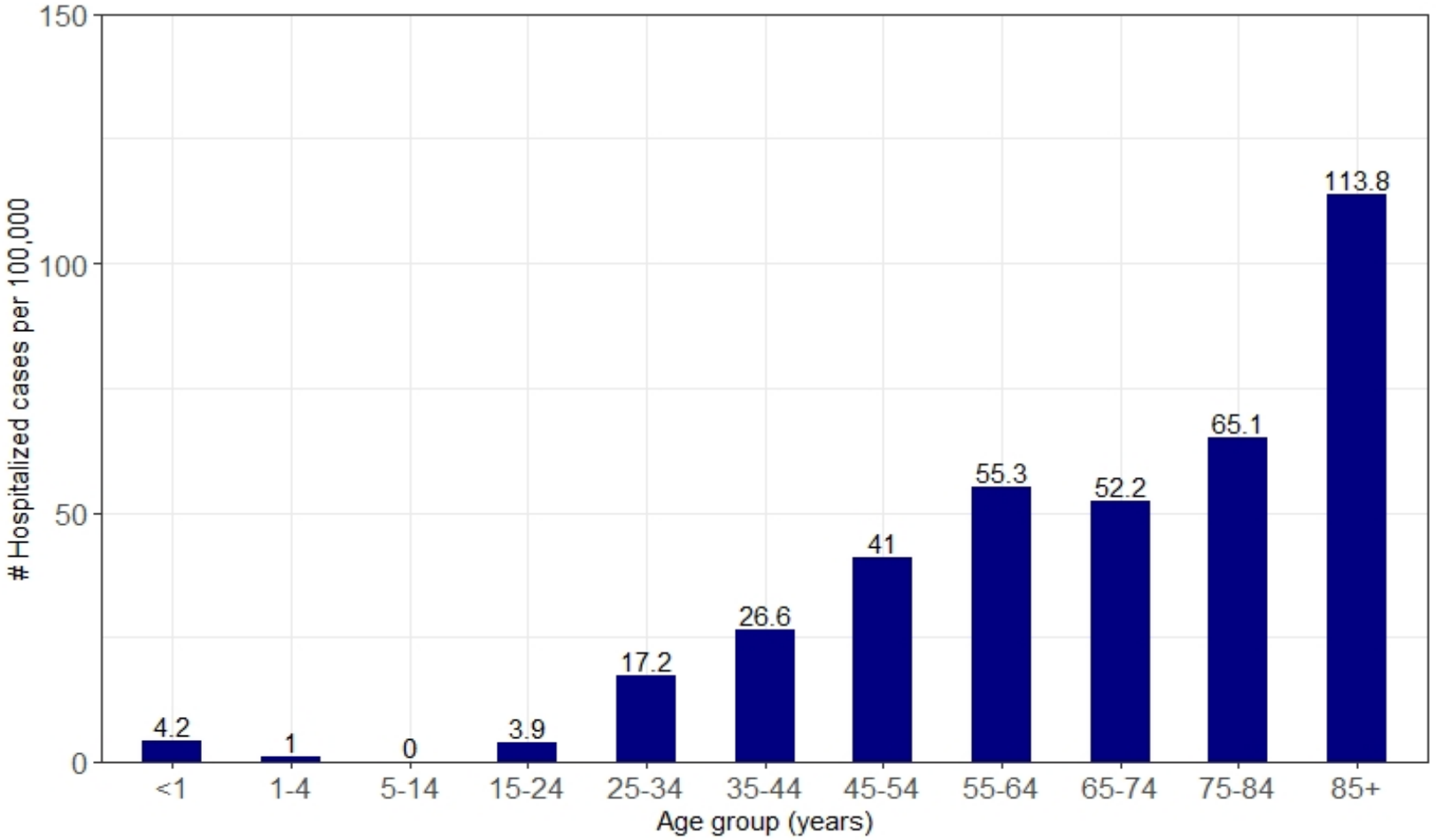
Source: Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 5.11.2020 at 8:38 AM, New Mexico Department of Health. Population estimates, UNM Geospatial and Population Studies Program.

COVID-19 age-adjusted hospitalized cases by county per 100,000 population



Note: 2 cases excluded due to missing county information

COVID-19 age-specific hospitalization rates per 100,000 population



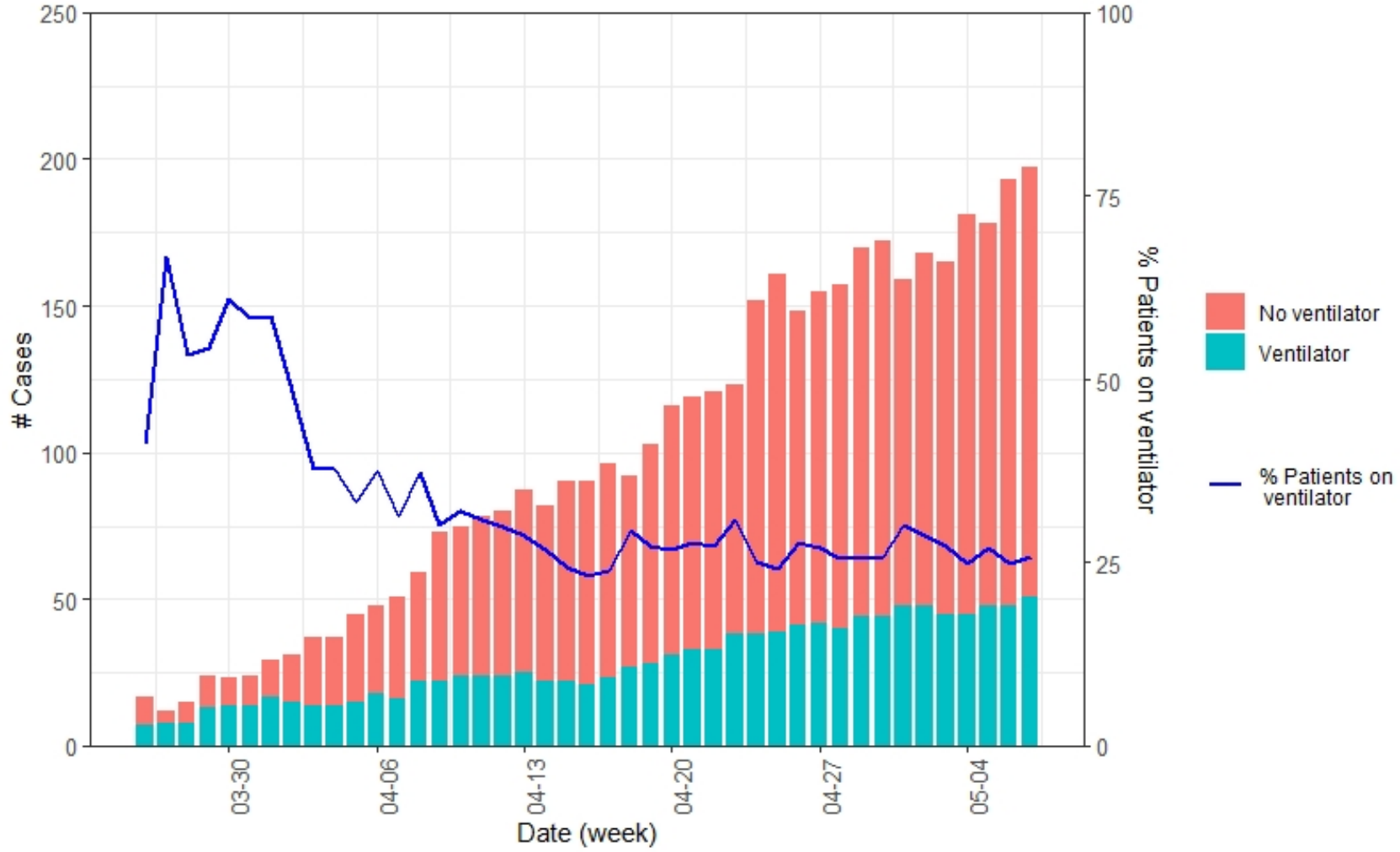
Source: NM Indicator-Based Information System (IBIS) was used for 2018 population estimates for each age group

COVID-19 age-adjusted hospitalization rate by race/ethnicity per 100,000 population

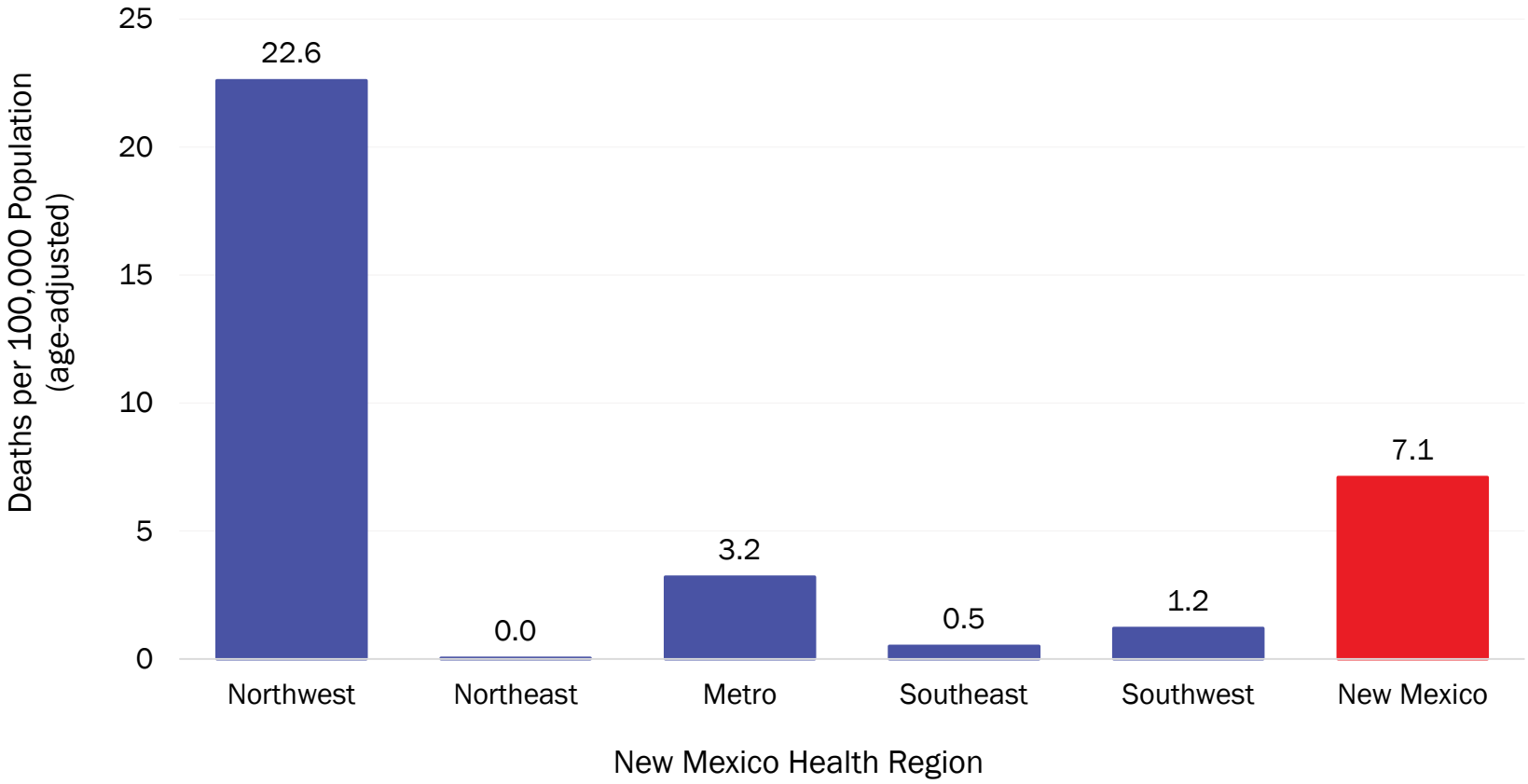
Race/ethnicity	Age-adjusted rate per 100,000 population
American Indian or Alaska Native	213.8
Asian	5.4
Black or African American	29.1
Hispanic or Latino	10.2
White	7.1

Note:
17 hospitalized cases excluded due to missing race information
1 hospitalized case was excluded because it was “Other Race” and there is no population estimate for “Other Race” in NM-IBIS

COVID-19 hospitalizations and ventilator use

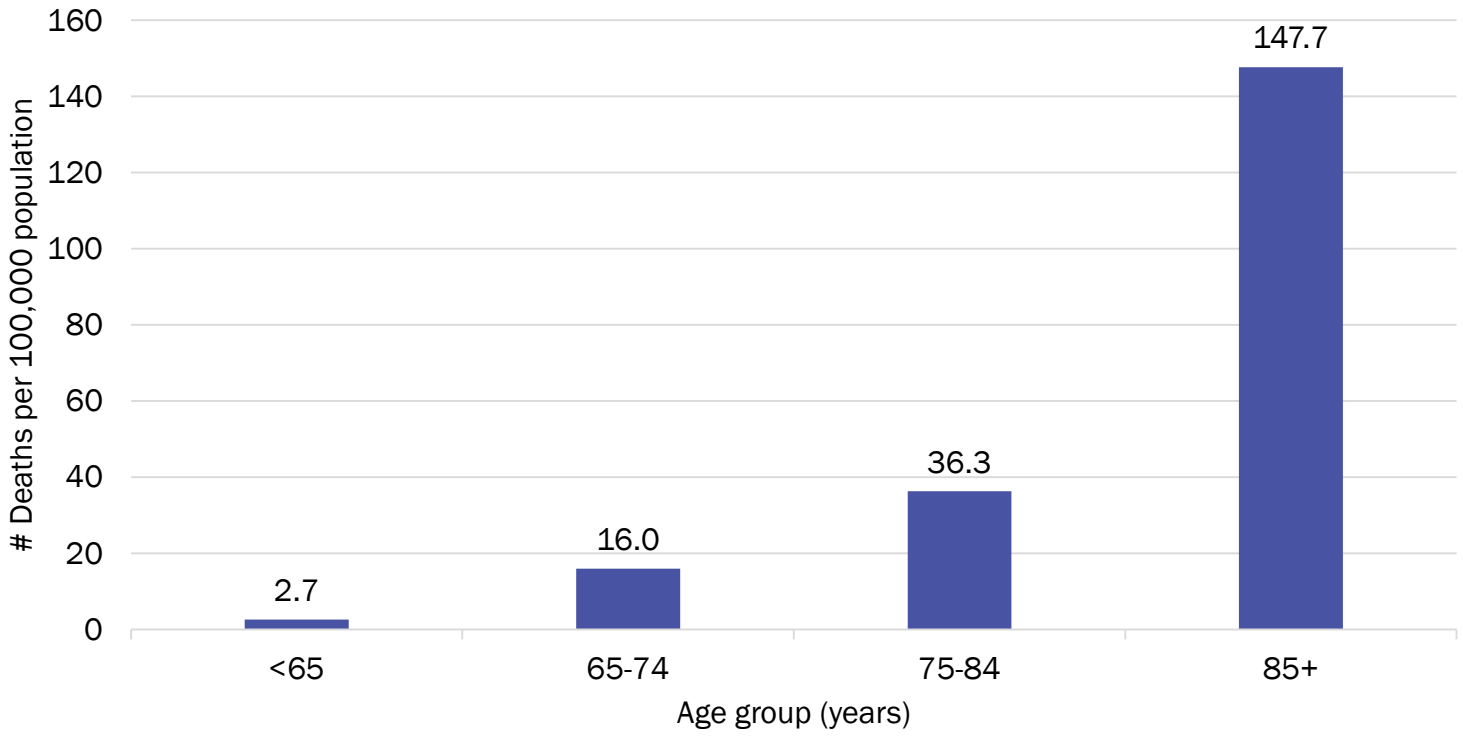


Mortality Rate: Number of COVID-19 deaths per 100,000 population

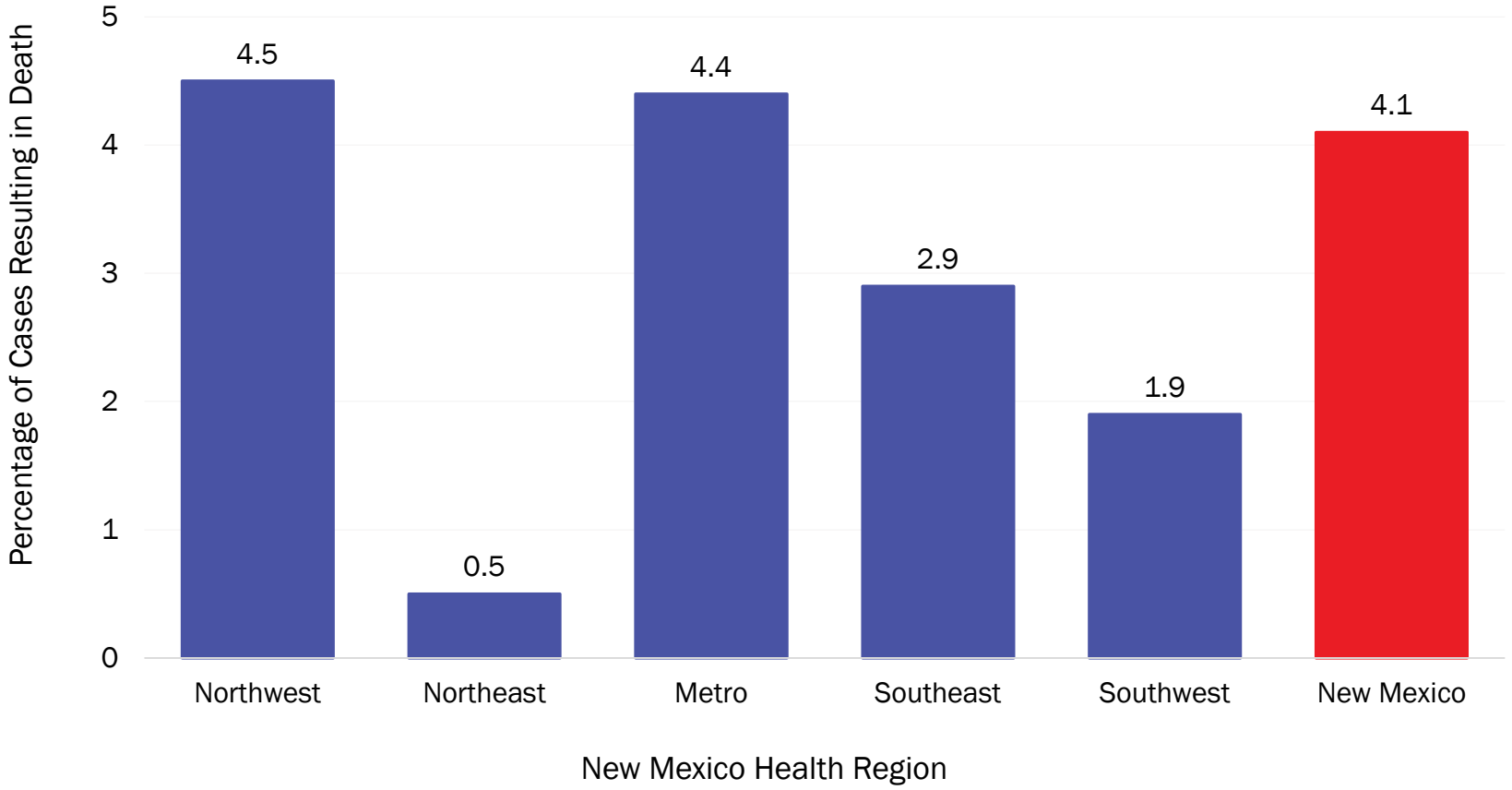


Rates have been age-adjusted to the U.S. 2000 standard population.
Source: Bureau of Vital Records and Health Statistics and Infectious Disease Epidemiology Bureau, Epidemiology and Response Division 5.10.2020, New Mexico Department of Health. Population estimates, UNM Geospatial and Population Studies Program.

Number of COVID-19 crude mortality rate by age group

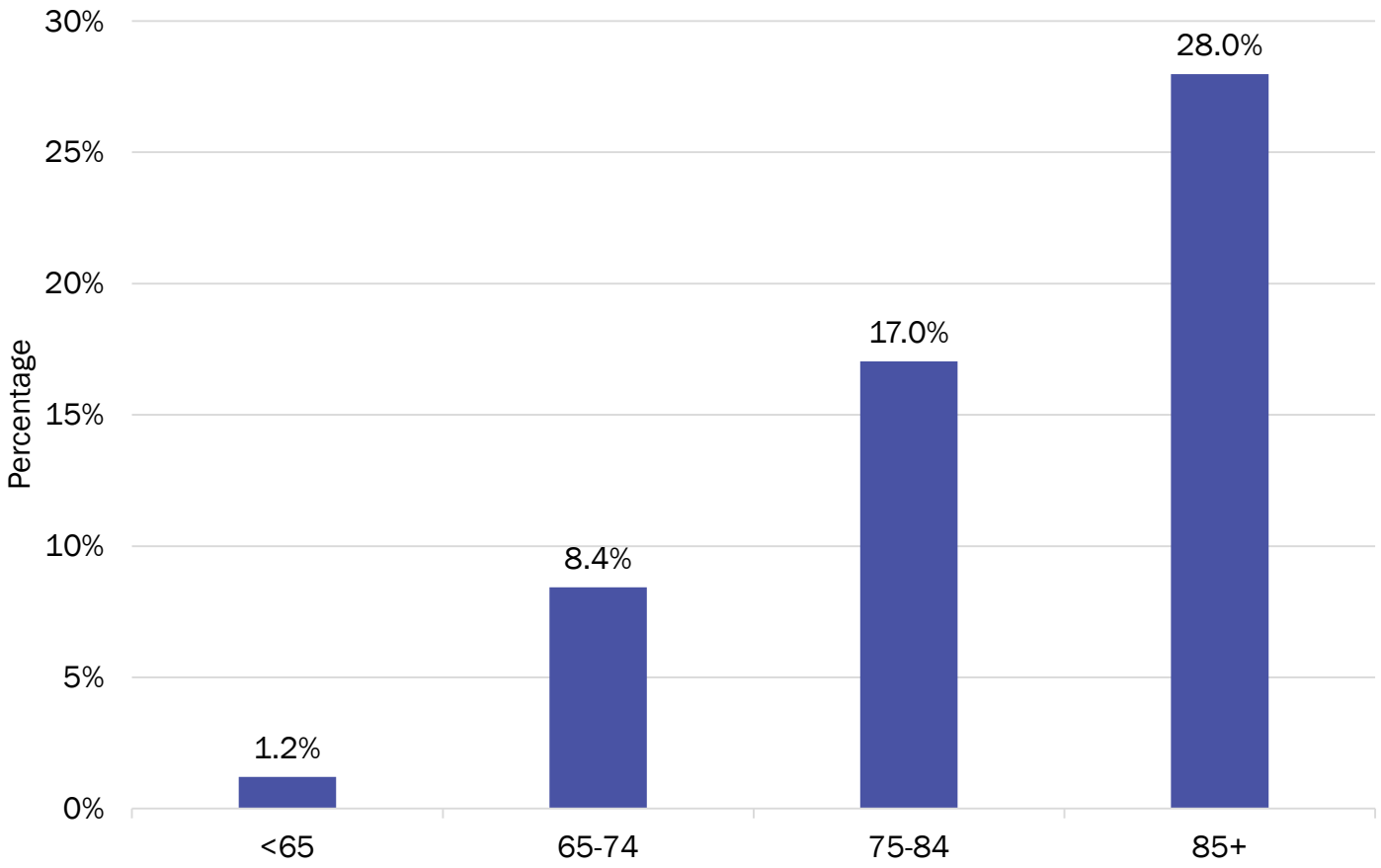


Case Fatality Rate: Percentage of COVID-19 cases resulting in death

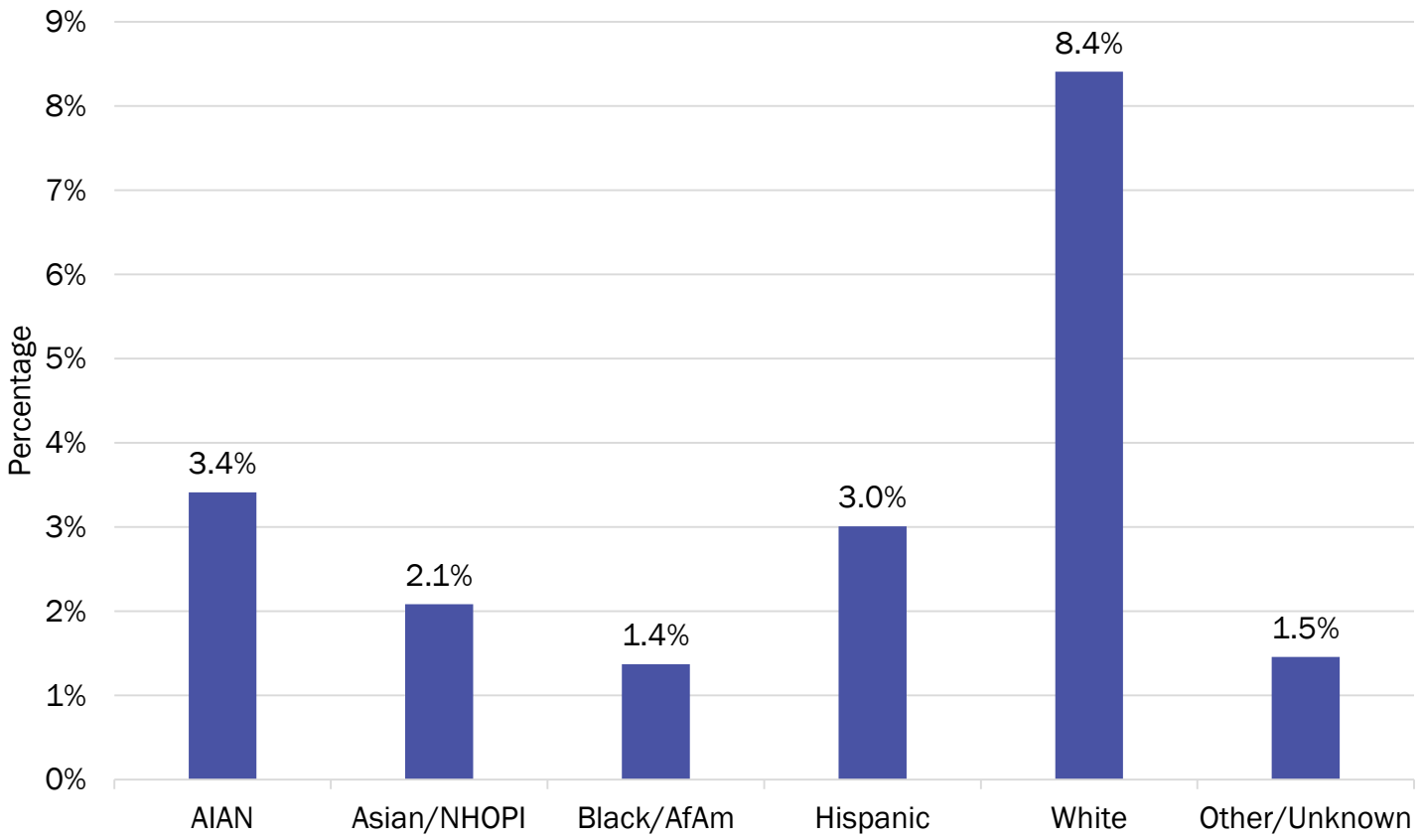


Source: Bureau of Vital Records and Health Statistics and Infectious Disease Epidemiology Bureau, Epidemiology and Response Division, reporting through 5.10.2020, New Mexico Department of Health.

COVID-19 Case-fatality rates (CFR) by age group



COVID-19 Case-fatality rates (CFR) by race/ethnicity



Key points

- Prevalence rates have increased across all regions since last week
  - Closely monitor the SW region in the coming weeks

- Regionally, NW's prevalence rates are the highest followed by Metro and SW
  - With exception of NW region, the prevalence rates are similar from 15-44+ age groups, but the 15-44 age group may need to be further sub-grouped

- Shortest doubling times reflect high prevalence rates in the NW and Metro regions and longest doubling times are in the SE and NE regions

- Hospitalization rate is highest in NW region
  - Counties in the NW region have the highest number of hospitalized cases per 100,000 population
  - Hospitalized case rates >50 per 100,000 in age groups >55 years old
  - AI/AN have highest rate of hospitalized cases followed by Black or African American and Hispanic or Latino
  - Ventilator use rate has been steady at ~25% of hospitalized cases since mid-April

- Mortality rate is highest in NW region
  - Overall, age group 85+ is highest

- Case fatality rate (CFR)
  - NW and Metro regions have the highest and similar CFRs
  - Highest in age group 85+
  - Highest in White race/ethnicity group followed by AI/AN

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COVID-19 in New Mexico: modeling update

As of May 5 and May 12, 2020
Epidemiology & Response Division

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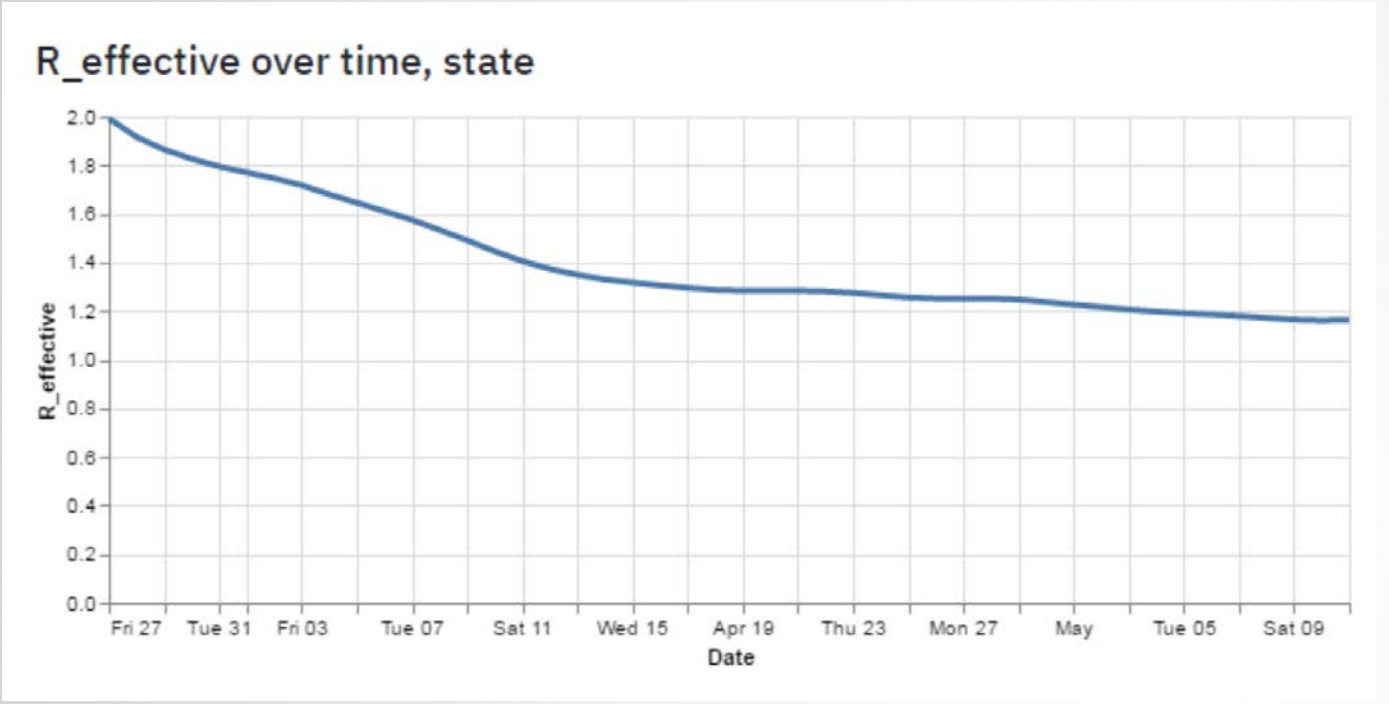
Improvements in the reduction of COVID has plateaued



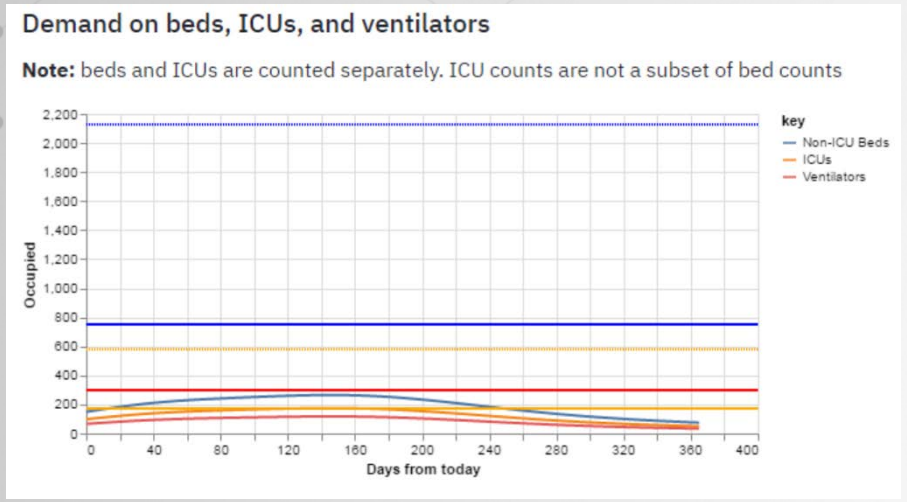
Updated calculation in R_effective pushed back to retrospective graphing

- Statewide R_effective improvements have now plateaued.
- Additional actions will be necessary to reduce transmission of COVID-19.

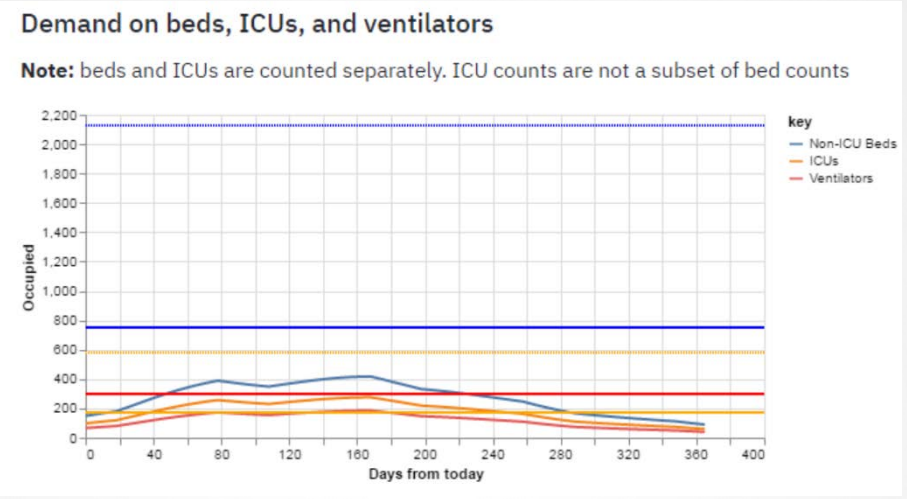
Courtesy of Presbyterian Healthcare Services - May 12, 2020.

Simulating reductions in social distancing

Continue Current Social Distancing



Reduction In Social Distancing



Scenario 1

- No relaxation in social distancing
- Current R_effective remain constant with no further improvements

Scenario 2

- Social distancing begins May 20th causing NM to lose 20% of the improvements gained since April 1st in control over COVID
- Relaxation stays for 60 days then we reinstitute current social distancing
- NOTE: the 20% loss is an illustration, actual changes will be measured to understand effect

Implications

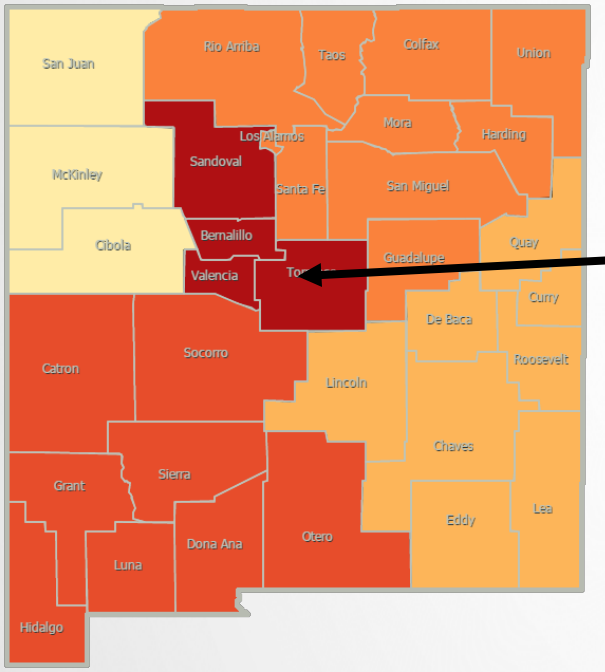
- Peak in simultaneous patients in ICUs increases by 50% and duration of surge more than doubles
- This estimate is illustrative only. We will observe any actual changes in the effective rate of to determine impact changing social distancing policies and practices.

Courtesy of Presbyterian Healthcare Services - May 12, 2020.

Regional Transmission above target

Northwest
R_effective 1.20

Northeast
R_effective 1.05



Central
R_effective 1.09

Key

Low Level Endemic 1-1.1

Approaching Low Level Endemic 1.11-1.15

Requiring further mitigation >1.15

Southwest
R_effective 1.33

Southeast
R_effective 1.12