





COVID-19 DAY 87 JUNE 5, 2020

SECRETARY DAVID R. SCRASE, M.D.

INVESTING FOR TOMORROW, DELIVERING TODAY.

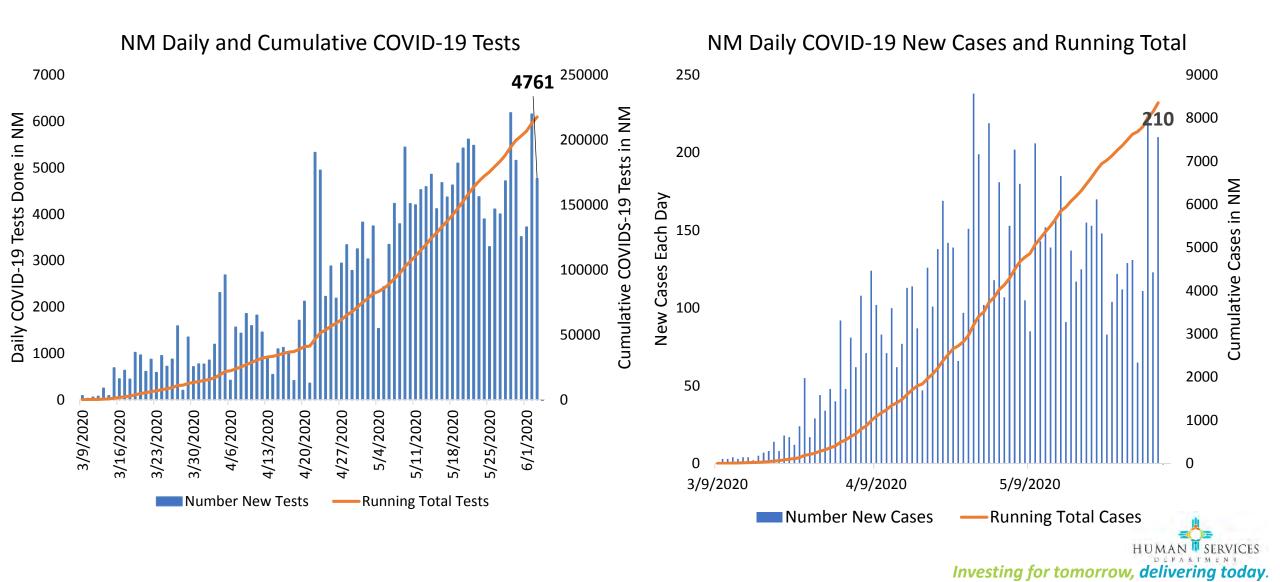
#### AGENDA FOR TODAY'S PRESS BRIEFING

- COVID-19 in NM Update (with Q&A)
- Medical Advisory Team (MAT) and Science Update
  - MAT Website (with Q&A)
  - Research on Mask Effectiveness (with Q&A)
  - The Herd Immunity "Experiment" in Sweden (with Q&A)
- •Reopening:
  - Gating Criteria Update/Current Delivery System Status (with Q&A)
- General Questions and Answers

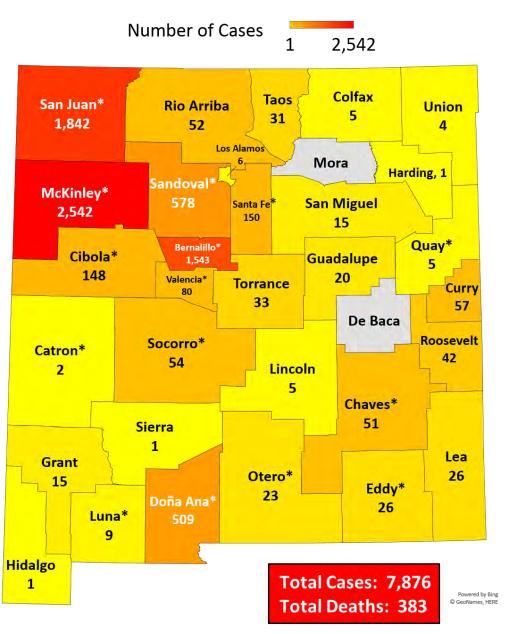


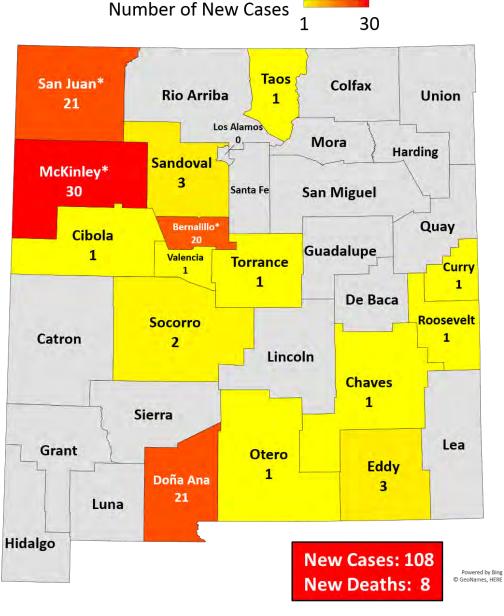
## COVID-19 IN NM UPDATE

## NM COVID-19 DAILY & CUMULATIVE TESTS/CASES



#### Total COVID-19 Positive Cases (6/4/2020) New COVID-19 Positive Cases (6/4/2020)<sup>5</sup>

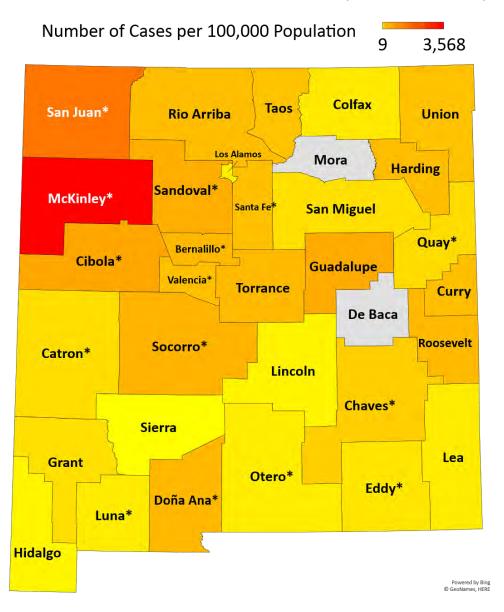


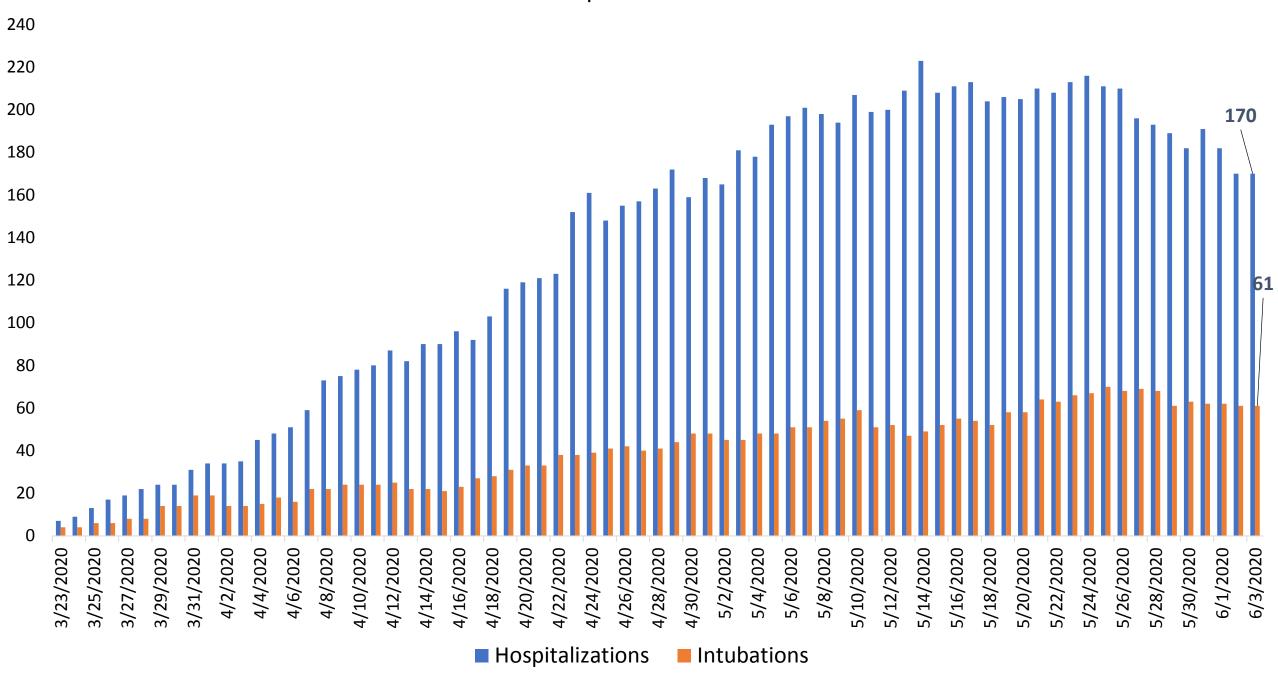


Source: NM Department of Health. \* denotes death occurred in county. Excludes cases in federal and state detention facilties.

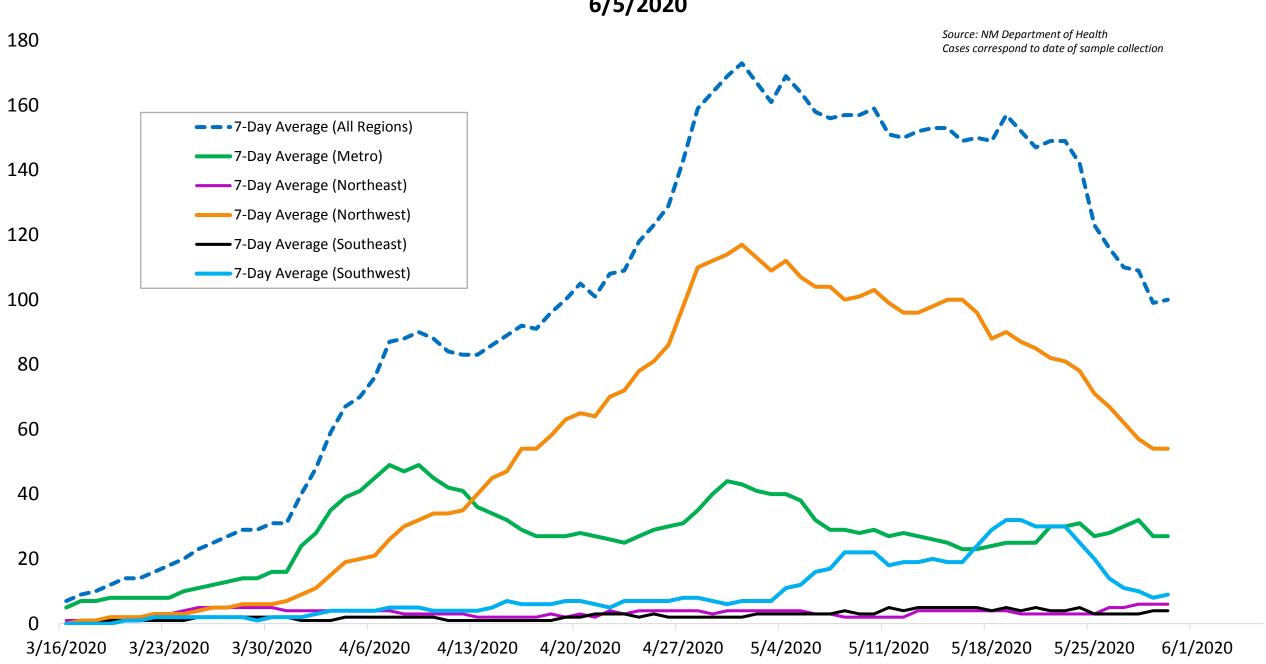
Source: NM Department of Health. \* denotes new death occurred in county. Excludes cases in federal and state detention facilties.

#### COVID-19 Prevalence Rate (6/4/2020)

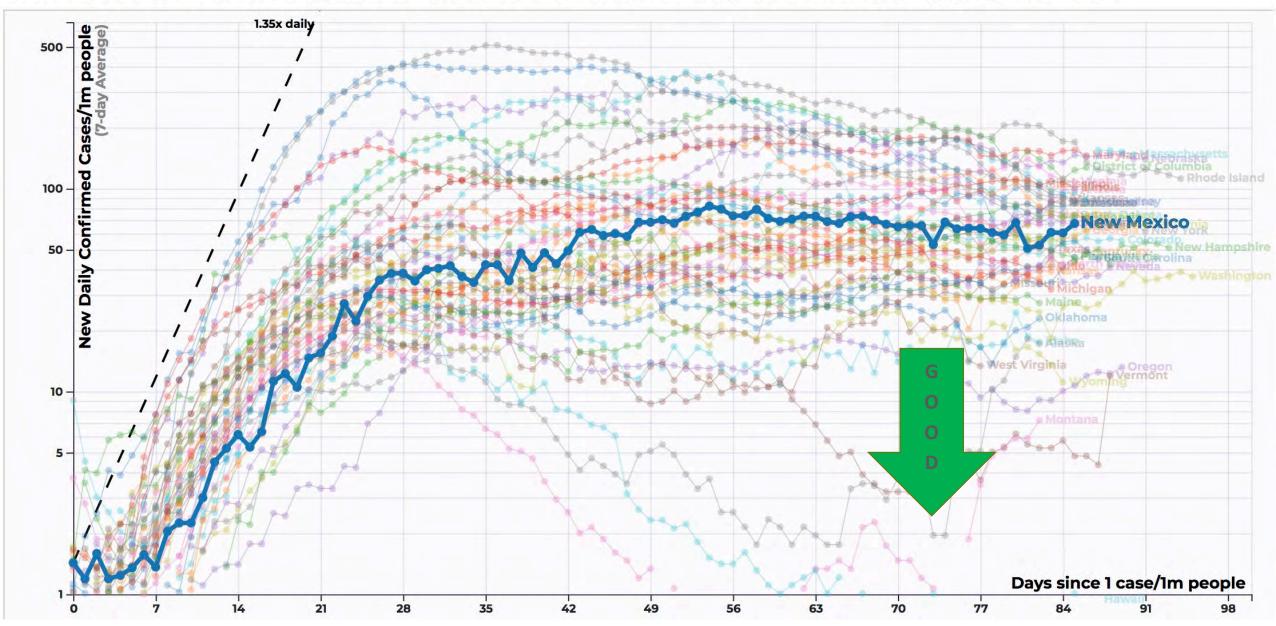




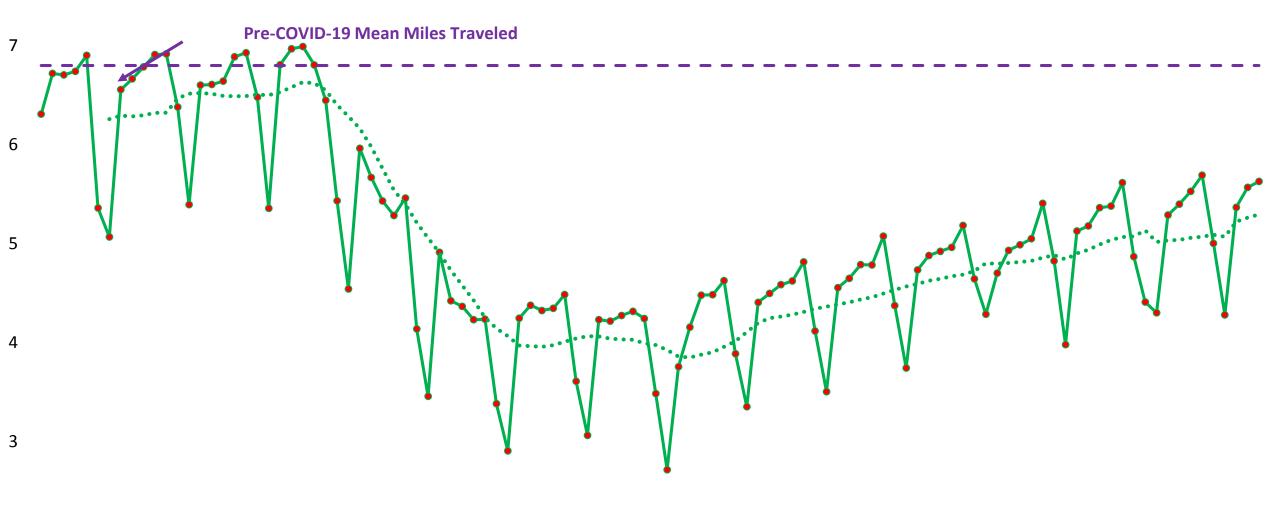
7-Day Average of Daily COVID-19 Positive Cases, NMDOH Regions 6/5/2020



#### New COVID-19 Cases by US States/Territories per Day, normalized by population

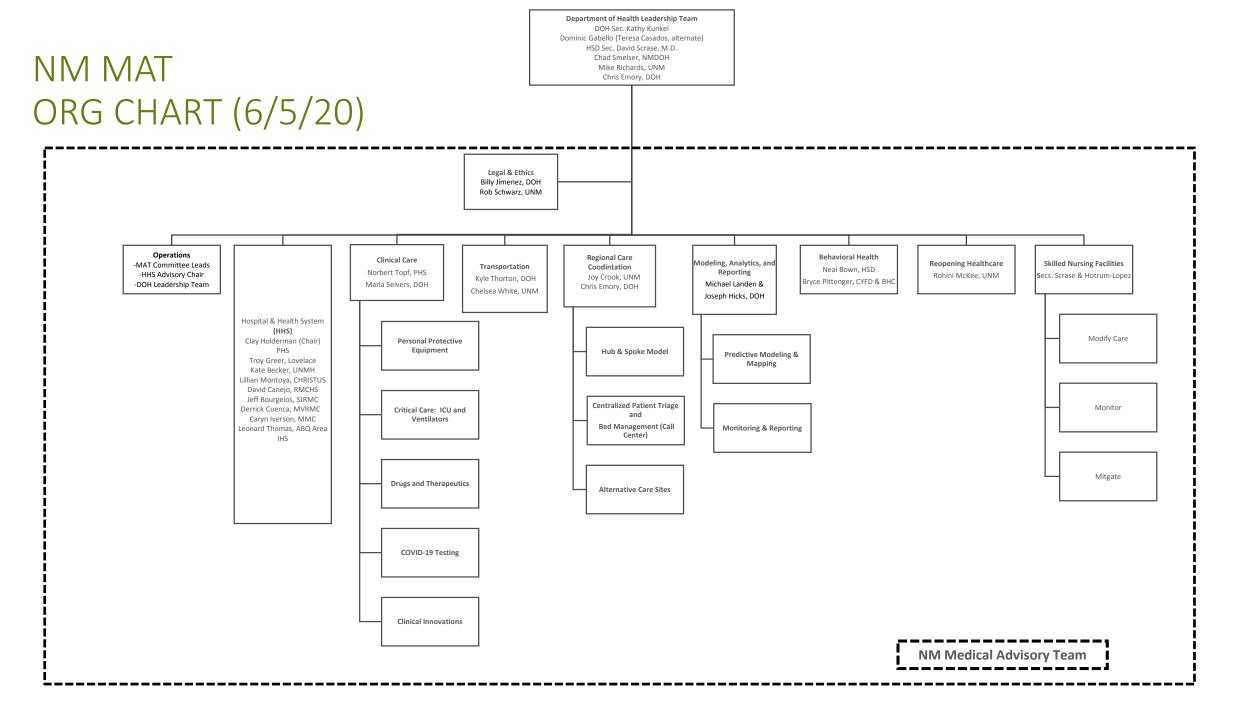


Source: <a href="https://91-divoc.com/pages/covid-visualization/">https://91-divoc.com/pages/covid-visualization/</a>



Source: Descartes Labs

2/23/2020 4/11/2020 \$ 5/25/2020 3/2/2020 3/6/2020 3/8/2020 3/16/2020 3/18/2020 3/22/2020 3/24/2020 3/28/2020 3/30/2020 4/1/2020 4/3/2020 4/5/2020 4/7/2020 4/9/2020 4/15/2020 4/21/2020 4/23/2020 4/27/2020 5/1/2020 5/3/2020 5/5/2020 5/7/2020 5/9/2020 5/15/2020 5/21/2020 = 2/25/2020 ≤ 2/19/2020 ₹ 3/10/2020 \$ 3/14/2020 → 3/20/2020 ₹ 3/26/2020 ₹ 4/13/2020 ¥/19/2020 ≪ 4/25/2020 ≤ 5/13/2020 ₹ 5/19/2020



## NEW MEDICAL ADVISORY TEAM RESOURCES

- 1. <u>Defining a COVID-19 Recovered Case</u>
- 2. Promising practices NM nursing facilities utilizing to prevent and/or mitigate COVID-19 infection
- 3. <u>Interventions to support long-term care residents who are experiencing social isolation, failure to thrive, and/or cognitive impairment</u>
- 4. COVID-19 Children & Youth Frequently Asked Questions
- 5. Strategies the State of NM, individual healthcare facilities and providers, businesses, and individuals can consider to ensure adequate supply of Personal Protective Equipment until COVID-19 vaccine or treatment is widely available
- 6. Mask-Related ADA Reasonable Accommodation Guidance for Employers
- 7. Abbott ID NOW Assessment
- 8. Remdesivir distribution to NM hospitals

## ARE MASKS REALLY EFFECTIVE AGAINST COVID-19?

Type of Mask	Effective For Healthcare Workers?	Effective For the General Public?
Multilayer Cloth Masks and Face Coverings	No. Excellent Evidence	Probably. Good Evidence. Protects wearer from spreading infection to others.
N95 Respirators	Yes. Required for caring for COVID-19 patients. Protects wearer from acquiring infection from others.	Yes, but not recommended. PPE being reserved for healthcare workers.

The following slides present a summary of selected mask-related research and COVID-19, going back to April 2020. COVID-19 research is evolving rapidly and not all mask-related research will be included in this resource. Please note many research studies are not peer-reviewed.

# EFFICACY OF FACE MASK IN PREVENTING RESPIRATORY VIRUS TRANSMISSION

- Total of 21 studies met inclusion criteria.
- Meta-analyses suggest mask use provided a significant protective effect.
- Use of masks by healthcare workers (HCWs) and non-healthcare workers (Non-HCWs) can reduce the risk of respiratory virus infection by 80% and 47%.
- Protective effect of wearing masks in Asia appeared to be higher than Western countries.
- Masks had a protective effect against influenza viruses, SARS, and SARS-CoV-2.
- In the subgroups based on different study designs, protective effects of wearing mask were significant in cluster randomized trials and observational studies



## **EFFECTIVENESS OF CLOTH MASKS: A SYSTEMATIC REVIEW**

In this systematic review of 10 studies, cloth masks are not as effective as medical masks but may be better than no masks at all.

- Recommendations are to standardize masks with use of materials proven to have high filtration efficacy.
- Leakage needs to be minimized as much as possible.
- Use of cloth masks should not lead to a neglect of other infection control measures and are not recommended for healthcare workers.



# PHYSICAL DISTANCING, FACE MASKS, AND EYE PROTECTION TO PREVENT TRANSMISSION OF SARS-COV-2 AND COVID-19: SYSTEMATIC REVIEW AND META-ANALYSIS

- Researchers identified 172 observational studies across 16 countries and six continents, with no randomized controlled trials and 44 relevant comparative studies (n=25 697 patients).
- Transmission of viruses was lower with physical distancing of 1 meter or more, compared with a distance of less than 1 meter (n=10 736); protection was increased as distance lengthened.
- Face mask use could result in a large reduction in risk of infection (n=2647), with stronger associations with N95 or similar respirators compared with disposable surgical masks or similar (e.g., reusable 12–16-layer cotton masks).
- Eye protection also was associated with less infection (n=3713).
- Optimum use of face masks, respirators, and eye protection in public and health-care settings should be informed by these findings and contextual factors. Robust randomized trials are needed to better inform the evidence for these interventions.

Citation: Chu, D. K., Akl, E. A., Duda, S., Solo, K., Yaacoub, S., Schünemann, H. J., ... & Hajizadeh, A. (2020). Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *The Lancet*.

# GUIDELINES ON HOW TO PROPERLY WEAR A CLOTH MASK IN PUBLIC

- Many citizens are concerned that people are wearing masks incorrectly.
- According to the WHO, the mask should fit snugly without any gaps. Masks should also cover all of the nose and below the chin.
- Hands should also be washed prior to putting the mask on.

# FACE MASK USE BY PUBLIC OFFERS SIGNIFICANT BENEFIT WHEN USED CONSISTENTLY

- •Use of face masks in general population offers significant benefit in preventing spread of respiratory viruses, but utility is limited by inconsistent adherence to mask usage.
- Early initiation of mask usage was more effective.
- Masks were more effective in viruses that transmit easily from asymptomatic individuals, an issue with the current pandemic.

Citation: Gupta, M., Gupta, K., & Gupta, S. (2020). The use of facemasks by the general population to prevent transmission of Covid 19 infection: A systematic review. *medRxiv*.

## COMMUNITY-WIDE IMPACT OF FACE MASK USE BY PUBLIC

- Face masks are found to be useful with respect to both preventing illness in healthy persons and preventing asymptomatic transmission.
- •80% adoption of moderately (50%) effective masks could prevent 17–45% of projected deaths over 2 months in New York, while decreasing peak daily death rate by 34–58% absent other changes in epidemic dynamics.



# ADDING NYLON LAYER TO FABRIC MASKS INCREASES PARTICLE FILTRATION EFFICIENCY

- Using a modified method of mask fit testing, researchers compared particle filtration efficiency of 10 community-produced fabric mask designs to commercially produced surgical masks.
- A nylon stocking over layer improved particle filtration efficiency for all masks, and brought the efficiency for 5 of the 10 fabric mask designs above the 3M surgical mask baseline.
- Use of this testing method on a wider range of mask material/designs could optimize PPE given available resources.



# OF 25 COUNTRIES WITH HIGHEST NUMBER OF CASES, 16 RECOMMEND AGAINST PUBLIC USE OF MASKS

- Quantitative content analysis of health agency mask guidelines performed in late March among 25 countries with highest number of cases.
- Nine countries recommended masks in public/poorly ventilated places
- Sixteen recommended against it due to masks creating a false sense of security.
- Twelve did not offer recommendations.



## CLOTH MASKS CREATE A FALSE SENSE OF SECURITY

- •This study, not yet peer-reviewed, shows evidence masks enable disinhibition behavior and Americans spend less time at home and more time in moderate to high-risk locations following orders to wear masks.
- Mask orders provide a sense of protection, leading people to substitute face mask wearing for other nonpharmaceutical interventions like avoiding time in public.

## SWEDEN'S HERD IMMUNITY EXPERIMENT

- Unlike its neighbors, Sweden decided against a strict lockdown, enforcing social distancing but keeping most bars, restaurants, schools, and retail open.
- Swedish officials hoped residents would develop herd immunity, occurring when enough people are immune to an infectious disease (either because they have been infected and recovered or they have been vaccinated against it).



## SWEDEN'S HERD IMMUNITY EXPERIMENT

- Sweden's mortality rate is higher than the U.S. and much higher than its neighbors Norway and Finland
- Even without a lockdown,
   Sweden's economy has suffered.
- Herd immunity is reached when 70%-90% of a population is immune.

	Sweden	Norway	Finland	US	NM
Population (M)	10.23	5.37	5.52	328.2	2.1
Cases/100,000	414.71 <sup>a</sup>	156.98 <sup>a</sup>	125.27 <sup>a</sup>	562 <sup>b</sup>	335 <sup>c</sup>
Case Fatality	10.89%	2.80%	4.64%	5.8%	4.6%
Unemployment rate	10.1% <sup>d</sup>	13% <sup>d</sup>	8.3% <sup>d</sup>	10.4% <sup>d</sup>	11.4% <sup>e</sup>
"Herd Immunity"	7.3% <sup>f</sup>	Unknown	Unknown	Unknown	2.6% <sup>g</sup>

#### References

a: https://coronavirus.jhu.edu/map.html

b: https://www.cdc.gov/covid-data-tracker/index.html

c: NM Department of Health

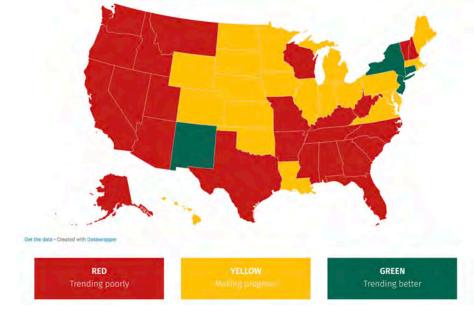
d: https://www.imf.org/external/datamapper/LUR@WEO/OEMDC/ADVEC/WEOWORLD

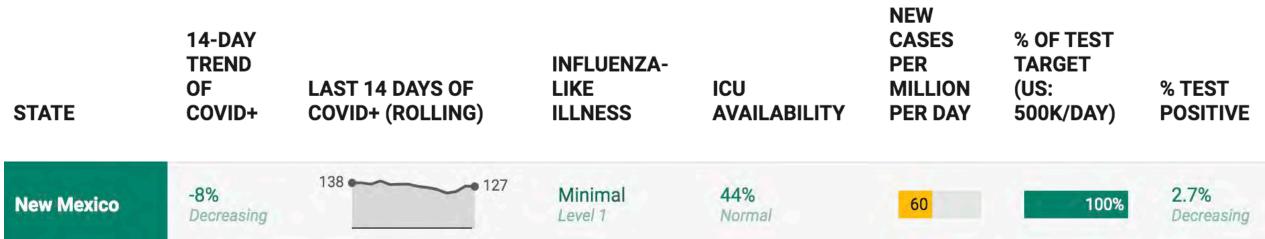
e: https://www.dws.state.nm.us/en-us/Researchers/Data/Labor-Force-Unemployment

f: https://cvmodeling.nmhealth.org/wp-content/uploads/sites/4/2020/05/2020-05-21-COVID19-Report-23.pdf

## GATING CRITERIA UPDATE

## HOW WE REOPEN SAFELY





**Source:** <a href="https://www.covidexitstrategy.org/">https://www.covidexitstrategy.org/</a>

# ARIZONA'S HIGHEST SINGLE-DAY RISE IN CASES - STATE EXPERTS BLAME ENDING LOCKDOWN

- •State reported 1,127 new infections of COVD-19, the highest number reported in a single day since the outbreak began, according to the dashboard updated by the Arizona Department of Health Services.
- •State also reached a new record of more than 1,000 hospitalizations due to COVID-19 on Monday, suggesting state is seeing an increase in more serious infections likely due to not following the CDC guidelines.

# PUBLIC HEALTH GATING CRITERIA FOR REOPENING NM WEBSITE

- Part of DOH COVID site (https://cvmodeling.nmhealth.org/ /public-health-gating-criteria-for-reopening-nm/)
- Gating criteria overview landing page
- Subpages for each category, including graphs
- Updated regularly

Category	Measure	Phase 1 Target	Current Status	Status Updated each:
Spread of COVID-19	1. Rate of Spread	1.15 or less	1.09	Mon, Wed, Fr
Testing Capacity (general and vulnerable populations)*	2. Number of COVID-19 tests per day (7-day rolling average)	5,000	4,888	Mon, Wed, Fr
Contact Tracing and Isolation Capacity	3. Time from COVID-19 positive test result to case isolation	24 hours or less	23 hours	Tues
Contact Tracing and Isolation Capacity	4. Time from COVID-19 positive test result to quarantine of case contacts	36 hours or less	50 hours	Tues
Statewide Healthcare System Capacity	5. Adult ICU Beds occupied across 7 NM Hub Hospitals**	less than 460	273	Tues
Statewide Healthcare System Capacity	6. 7-day supply of personal protective equipment (PPE) across 7 NM Hub Hospitals**	7-day supply in at least 6 out of 7 Hub Hospitals	7 out of 7 hospitals	Tues

# ONGOING NEED FOR SOCIAL DISTANCING AND CONTROL MEASURES AFTER A "LOCKDOWN"

- Most countries with significant outbreaks have introduced social distancing or "lockdown" measures to reduce viral transmission but the key question is when, how, and to what extent these measures can be lifted.
- Data on daily numbers of newly confirmed cases and mortality were used to fit regression models estimating trajectories, doubling times and the reproduction number (R0) of the disease before and under the control measures.
- Estimates of R0 before lockdown (2.0 3.7 for USA, Italy, Spain, France and UK) were broadly consistent with those previously published. There was little evidence to suggest that the restrictions had reduced R far below 1 in many places.
- Data are more consistent with a need to adopt a "new normal" that can provide the optimal balance between allowing economic activity while ensuring very substantial reductions (at least 80%) in prior social contacts.

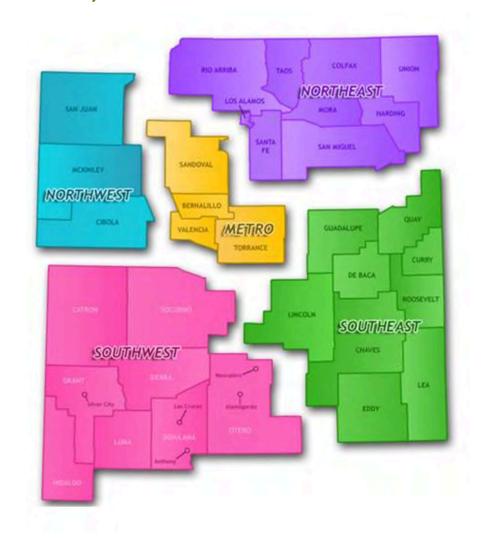
#### STATEWIDE PUBLIC HEALTH GATING CRITERIA FOR REOPENING

Criterion	Measure	Initial Gating Value	Current Status
Spread of COVID-19	Rate of COVID-19 Transmission	1.15 or less	1.09 on 6/4/2020
Testing Capacity: general and targeted populations*	Number of tests per day (7-day rolling average)	5,000 / day	4,888 on 6/4/2020
Contact Tracing and Isolation Capacity	Time from positive test result to: -isolation recommendation for case -quarantine rec. for case contacts	80% at 24 hrs 80% at 36 hrs	Week of 5/23 = 23 Week of 5/23 = 50
Statewide Health Care System Capacity	Availability of scarce resources in 7 Hub Hospitals:		
	-Adult ICU beds occupied	<460	273 on 6/5/2020
	-PPE	7-day supply	7 hub hospitals have 7-day supply

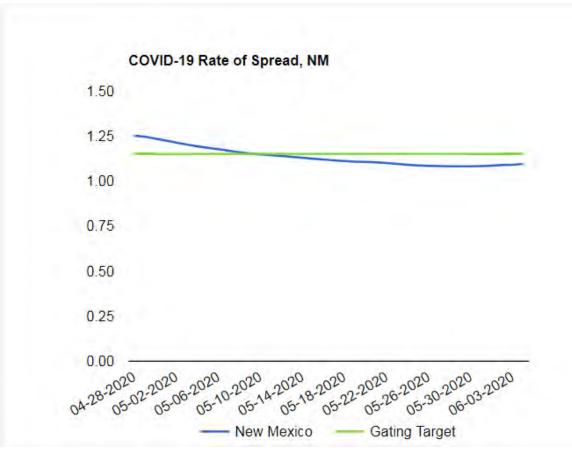
#### ALL 4 CRITERIA DRIVEN BY SOCIAL DISTANCING BEHAVIORS OF NEW MEXICANS

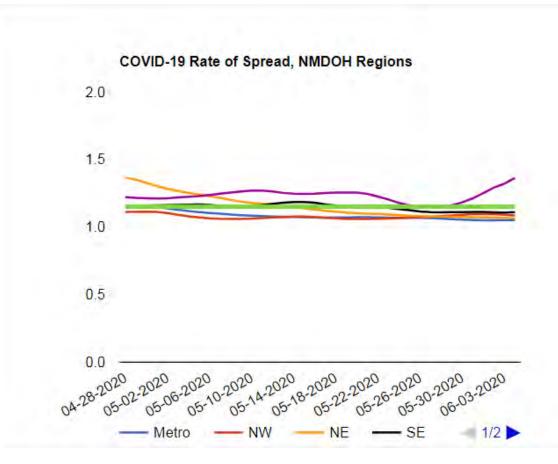
# COVID-19 RATE OF SPREAD, AS OF 6/5/2020 NMDOH REGIONS (TARGET = 1.15)

- •Metro = 1.05
- ■NE = 1.08
- -SE = 1.11
- •SW = 1.36
- -NW = 1.06



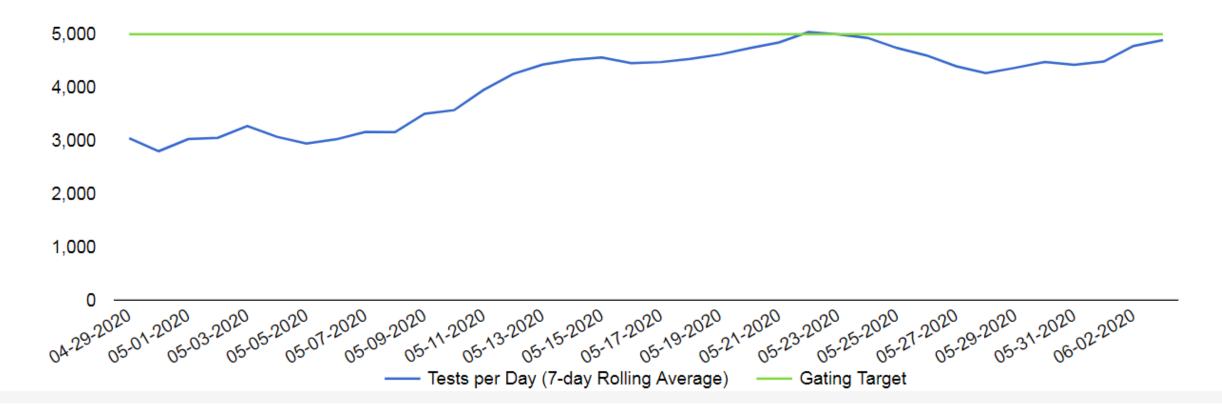
## RATE OF SPREAD (GATING TARGET: 1.15 OR BELOW)





## TESTING (GATING TARGET: 5,000 TESTS/DAY)

#### COVID-19 Tests per Day, NM (7-day Rolling Average)

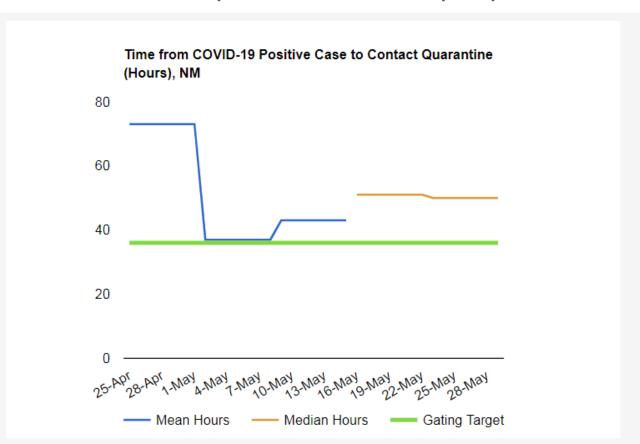


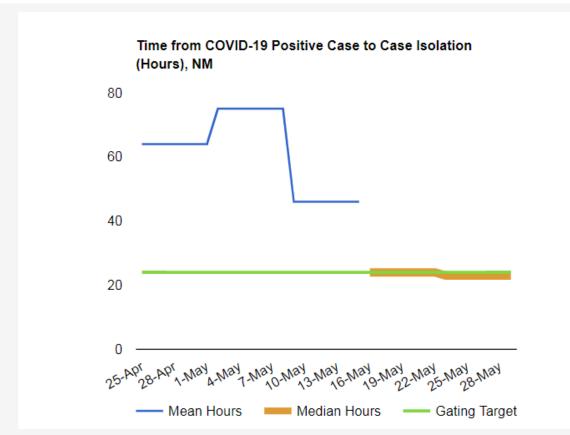
### CONTACT TRACING & ISOLATION CAPACITY

#### **Gating Criteria Targets:**

Time from COVID-19 positive test result to:

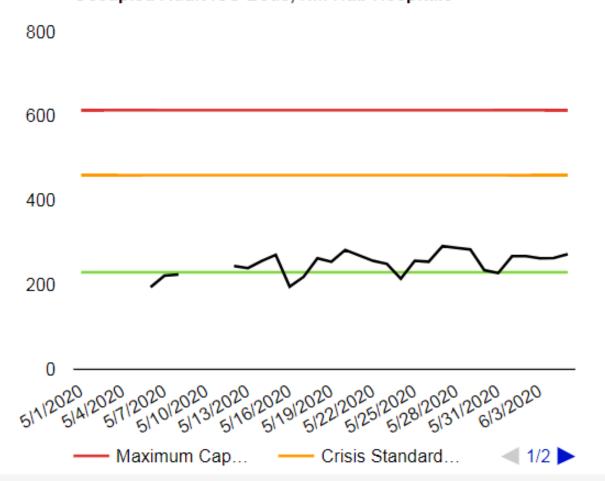
- isolation of the person who tested positive (24 hours or less)
- quarantine of the people who they may have exposed (36 or less)





### HEALTHCARE SYSTEM CAPACITY

#### Occupied Adult ICU Beds, NM Hub Hospitals



#### NM Hub Hospitals:

35

- 1.University of NM (ABQ)
- 2.Presbyterian (ABQ)
- 3.Lovelace Medical Center (ABQ)
- 4.CHRISTUS St. Vincent (Santa Fe)
- 5.San Juan Regional Medical Center (Farmington)
- 6.Memorial Medical Center (Las Cruces)
- 7. Eastern NM Medical Center (Roswell)

#### **Gating Criteria Target:**

Adult Intensive Care Unit (ICU) beds occupied: 460 beds or less.

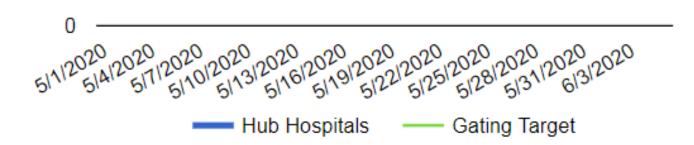
### HEALTHCARE SYSTEM CAPACITY

#### NM Hub Hospitals with 7-Day PPE Supply



4

2



#### NM Hub Hospitals:

- 1.University of NM (ABQ)
- 2.Presbyterian (ABQ)
- 3.Lovelace Medical Center (ABQ)
- 4.CHRISTUS St. Vincent (Santa Fe)
- 5.San Juan Regional Medical

Center (Farmington)

- 6.Memorial Medical Center (Las Cruces)
- 7.Eastern NM Medical Center (Roswell)

#### **Gating Criteria Target:**

7-day supply of Personal Protective Equipment (PPE): minimum of 6 Hub Hospitals have 7-day supply.

#### COVID-19 REGIONAL TRIAGE CALL CENTER DATA: 422 TOTAL TRANSFERS IN 43 DAYS

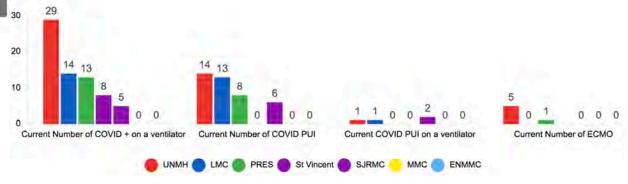
#### Referring Facility (admitted)

Referring Facility	Destination	ICU	Prog Care	COVID Pos	Total
Acoma Canoncito-Laguna Hospital	Lovelace	0	1	0	1
Crownpoint Hospital	PHS	0	1	1	1
Chiana de (NINIMO)	Hub-CSV	1	0	0	1
Shiprock (NNMC)	Lovelace	1	1	1	2
Total		2	3	2	5

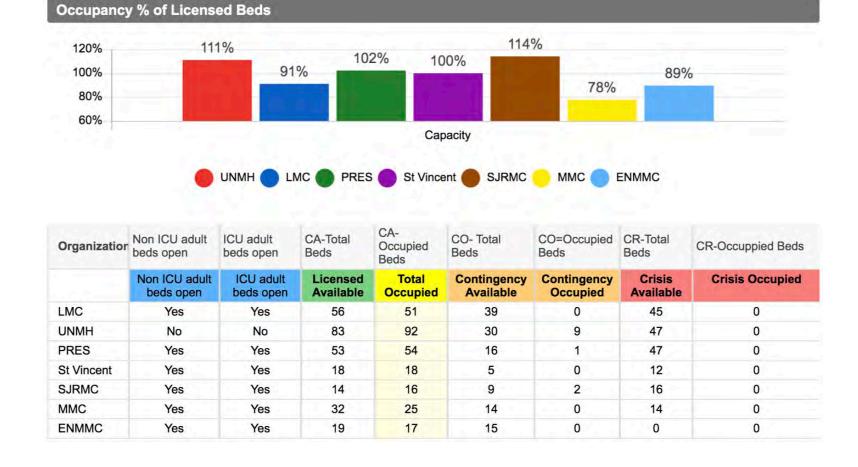
#### **Rolling Case Volume**







# HUB HOSPITAL CAPACITY (06/05/20 9:00AM) \*MMC LAST UPDATED 6/04



# THE CURVE HAS FLATTENED BUT WE CANNOT FULLY REOPEN YET

# EVEN THOUGH NM IS IMPROVING, WE MUST REMAIN VIGILANT.

- Stay at home as much as possible, especially if you are in a high-risk group
- STAY HOME WHEN SICK
- Wash hands, clean surfaces, cough into tissue/elbow
- Wear face coverings in public
- Maintain social distancing (minimum 6 feet)



**NEW MEXICO HEALTHCARE WORKER AND FIRST RESPONDER**