

Key Dates

- January 2020: Department of Health began monitoring the situation and providing weekly situation updates to the Governor.
- January 22, 2020: Department of Health began regular internal planning meetings.
- January 27, 2020: Department of Health launched its COVID-19 website.
- February 10, 2020: Department of Health activated its internal Emergency Operations Center.
- March 7, 2020: Department of Health briefed members of the legislature regarding preparations.
- March 10, 2020: First positive cases in South Dakota announced.

Testing Plan to Combat COVID-19

Guiding Principles

- All persons with COVID symptoms can receive a test upon recommendation from their provider
- Persons with symptoms can receive a test without charge
- Testing plan will evolve as antibody and community-based testing becomes available (eg., pharmacies and small clinics)

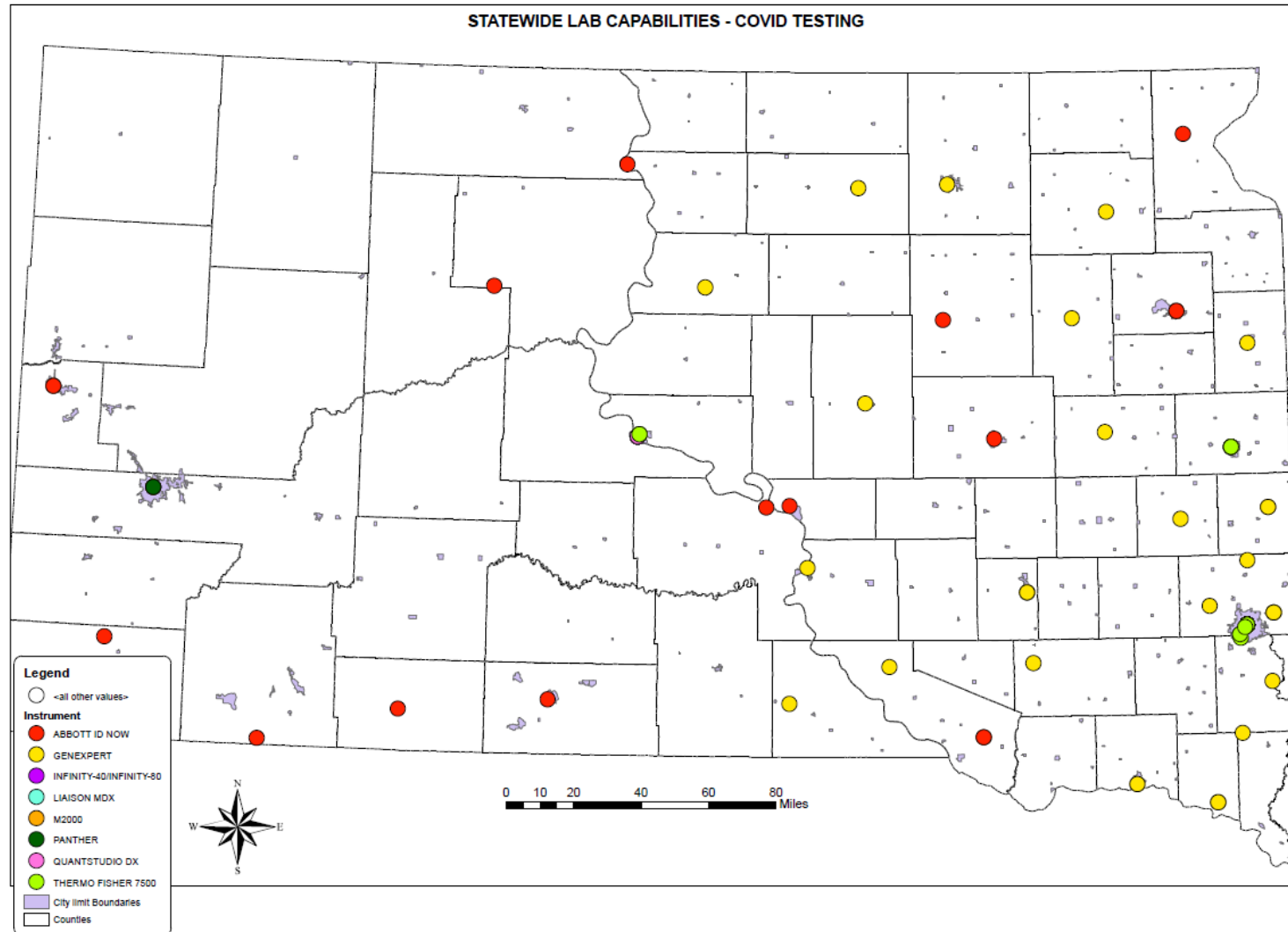
Testing Plan to Combat COVID-19

3 Tiers

1. Develop diversified testing capabilities in public health and clinical labs; advocate for supplies; includes PCR and antibody testing
2. Support smaller facilities with Abbott ID Now instruments; leverage commercial laboratories to fill unmet needs or gaps
3. Support mass testing events that target at-risk, vulnerable populations including use of public health mobile laboratory

***Capacity=** 3000/day now to 5000/day

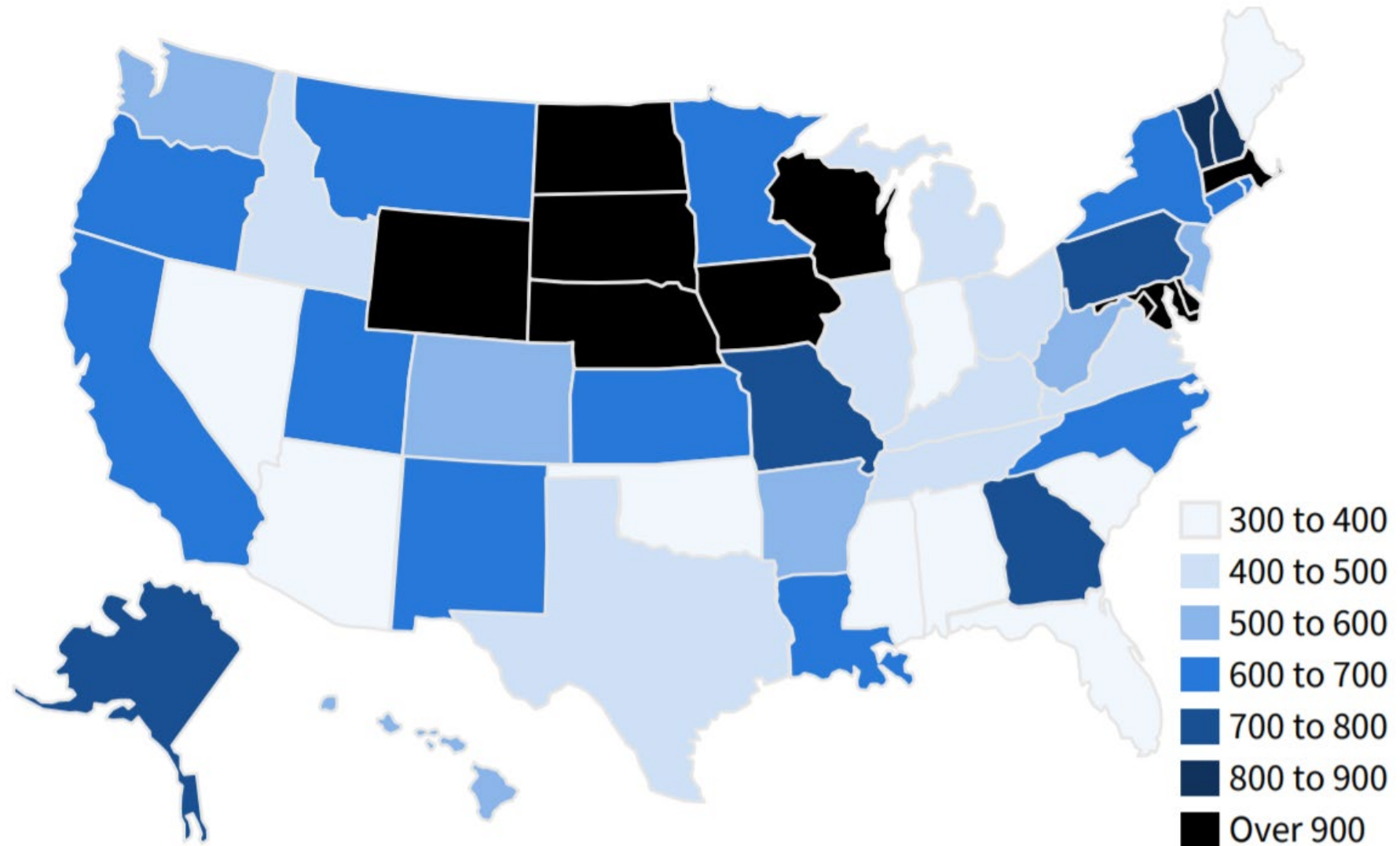
Testing Plan to Combat COVID-19



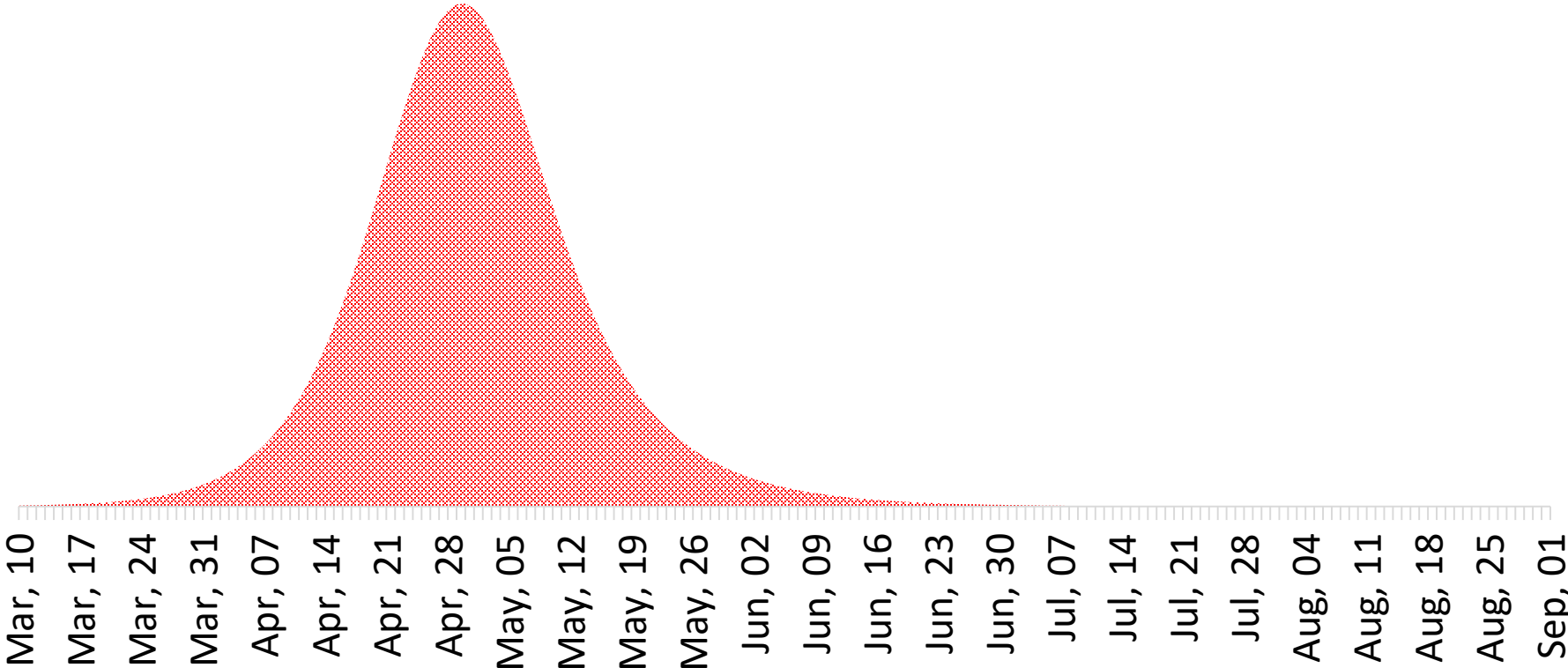
Current Capability:

- 108 Instruments
- 40 Communities

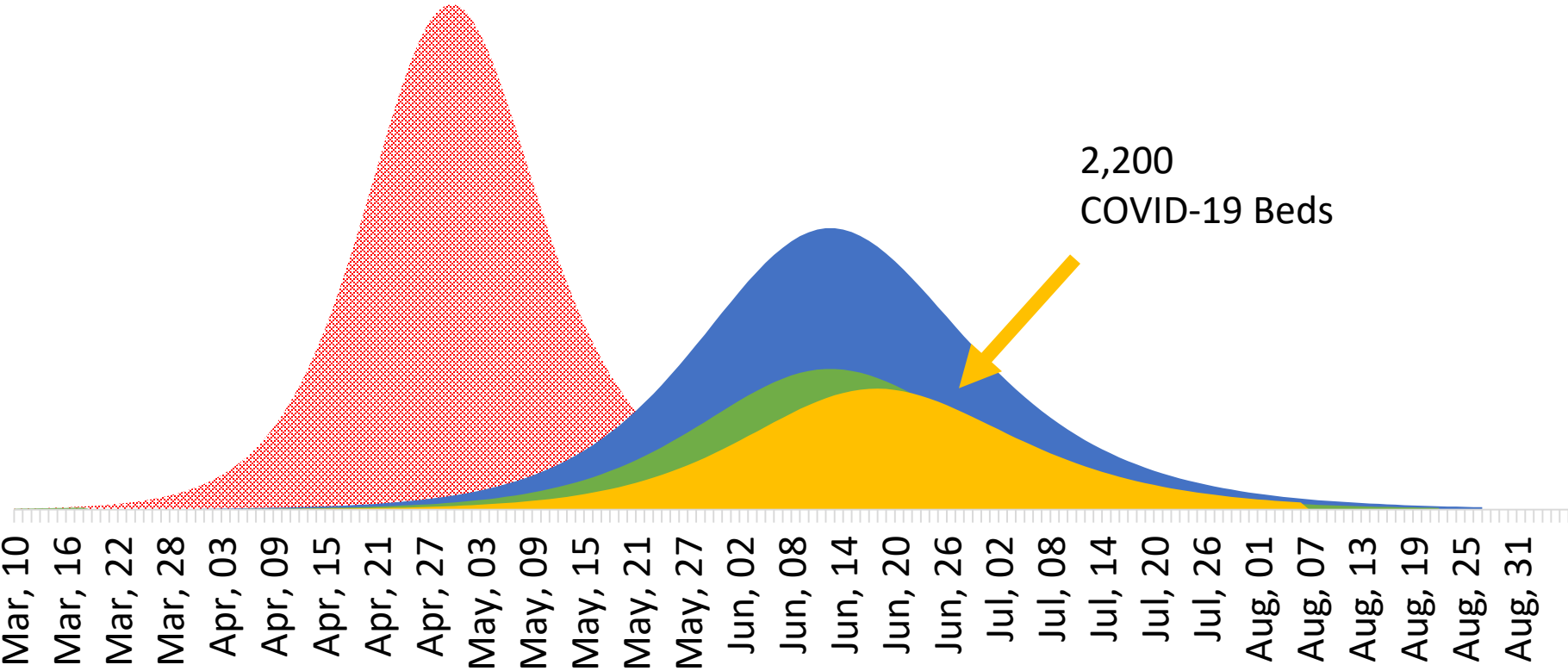
Monthly Testing Capacity Per 1000 People



Source: Based on data provided to HHS from select diagnostics companies



■ Projected Peak Hospitalizations with No Containment or Social Distancing



- Projected Peak Hospitalizations with No Containment or Social Distancing
- Projected Peak Hospitalizations Based on Current Action/Strategy
- Apr 15 Projected Peak Hospitalizations Based on Current Action/Strategy
- Apr 28 Projected Peak Hospitalizations Based on Current Action/Strategy

Updated Projections for South Dakota

	Original Peak Need	Updated* Peak Need	Assumption Updates
Hospital Beds	5,000	2,500	Reduced rate from 5% down to 2.5%
Hospital Length of Stay	2,500	2,200	Reduced stay from 7 days down to 6 days
Ventilator need	1,300	600	Reduced ventilator needed

- As additional information is learned from other states, we are modifying the assumptions in our models.

* Based on Current Mitigation Measures

Projections for South Dakota

	Impact Numbers	Assumptions
Hospital Beds	5,000 needed at peak	5% of infections

- As additional information is learned from other states, we are modifying the assumptions in our models.
- We currently believe the hospitalization rate is trending lower than 5%.
 - Range of hospitalization rates are approximately 1% to 3%.

* Maintain Current Mitigation Measures Through August

Additional Details:

- This is a novel coronavirus never seen in the human population before so all of South Dakota's population is considered susceptible in our projections.
- Beta value, infection rate not accounting for reduction due to social distancing, was estimated using an R-naught of 2.3. Details: <https://annals.org/aim/fullarticle/2760912/reporting-epidemic-growth-reproduction-numbers-2019-novel-coronavirus-2019-ncov>
- Gamma value, recovery rate, was estimated using an infectious period of 7 days. This is informed by CDC's release from isolation guidance which considers someone non-infectious 7 days after their symptom onset (assuming they are afebrile for 72 hours and have a general improvement in symptoms). Details: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html>
- Uncertainty is anticipated in the model with increasing distance from present day, which is why the model has primarily been used to inform our bed capacity planning assumptions.
- Time series data can be calculated with the data provided.

Models Evaluated

Harvard Model

U-Washington Model

COVID Act Now

Penn Medicine Model

U-Columbia Model

Other Models