Public Briefing on COVID-19 Unified Response Efforts: Mitigation Review, Trajectory Update, & Testing Goals

Governor and State Surgeon’s Physician Advisory Group

April 22, 2020
### Key Government-Mandated Social Distancing Measures

Most impactful mitigation efforts to reduce spread:

1. Educational facilities closed
2. Travel severely limited
3. Stay at home order
4. Non-essential services closed

### Critical Dates

- **March 15**: EO 2020-3 - Declaration of State of Emergency
- **March 16**: EO 2020-4 - First 3+ COVID Cases
- **March 17**: Travel Restrictions: 1st Flight Quarantined
- **March 18**: First Hospital Transfer for PUI with neg test
- **March 19**: Stay at Home Orders v1 & Closure of All Non-Essential Services
- **March 20**: Closure of schools & non-essential Gov Guam
- **March 21**: EO 2020-5 - C.U.R.E. Established
- **March 22**: EO 2020-6 - T.R. Docks
- **March 23**: EO 2020-7 - Stay at Home Orders v2: Closure of Parks/Beaches
- **March 24**: EO 2020-8 - Worst-Case Projections Presented to Public
- **April 10**: EO 2020-9 - Public Health Emergency Expiration until May 5
- **April 12**: Road Closures Begin

### Mitigation Effectiveness

- **Guam Pandemic Plan Review**
- **Guam Health Emergency Expiration**
- **Road Closures**

### Data Points

- **COVID-19 Cases**
  - **New + COVID**
  - **Total + COVID**
  - **Hospitalized COVID**

### Visual Representation

- **March 1** to **April 22**: Graph showing the relationship of mitigation efforts and COVID cases on Guam.
GUAM’S COVID-19 HOSPITAL CENSUS PROJECTIONS
IF CURRENT MITIGATION UNCHANGED FOR NEXT 6 MONTHS

As of April 22, 2020

We have significantly flattened the curve with our efforts. However, even this course it is not completely flat, thus a surge still looms in the distance. Albeit now a much slower surge than previous projections, the threat to overwhelm our hospital system could occur in the fall.

We must understand that short of an available and effective vaccine, a surge will continue to be a threat. As with other projections, this trajectory is not a forecast of our fate, but yet another recon report of our enemy.

The key to winning this war against COVID-19 is the expansion of testing capacity in a responsible and strategic fashion. By doing so, our targeted search-and-destroy strategy can become even more effective and of better quality. We have passed the initial phase of a conservative and blanketed approach, which was necessary at the time.

Additionally, we must take advantage of the time the enemy’s retreat has allotted us to improve on many other fronts. By doing so, we will not only flatten the curve even further, but we will also develop a method to safely peel back some of our current safety measures.

Created by the Guam State Surgeon Cell utilizing UPENN School of Medicine’s CHIME (COVID-19 Hospital Impact Model for Epidemics) SEIR calculator.

- Hospitalized Census
- ICU Census
- Ventilated Census
- Hospital Threshold

March 15
April 18
April 23
April 28
May 3
May 8
May 13
May 18
May 23
May 28
June 2
June 7
June 12
June 17
June 22
June 27
July 2
July 7
July 12
July 17
July 22
July 27
August 1
August 6
August 11
August 16
August 21
August 26
August 31
September 5
September 10
September 15
September 20
September 25
September 30
October 5
October 10
October 15
October 20
October 25
October 30
GUAM’S COVID-19 HOSPITAL CENSUS PROJECTIONS
WITH BEST-CASE MITIGATION OVER NEXT 6 MONTHS

As of April 22, 2020

With responsible and best-practice ramp-up of Guam’s SARS-CoV-2 testing capacity and Public Health’s strengthening of COVID-19 positive isolation and contact tracing techniques, we have the potential to keep this pandemic from exceeding our hospital system’s threshold. In doing so, we can slowly reopen parts of Guam in a coordinated fashion. This can only occur with a well-defined plan with clear checks and balances.
GUAM’S COVID-19 HOSPITAL CENSUS PROJECTIONS OF WORST-CASE (FULLY UNMITIGATED) & BEST-CASE (FULLY MITIGATED) OVER NEXT 6 MONTHS

A clear and present danger will continue to lie in our midst. COVID-19 has the potential to resurge if we are irresponsible and reckless in how we reopen Guam.

Adapted from FEMA’s most recent model in partnership with Johns Hopkins Applied Physics Lab, the CDC, and the Guam State Surgeon Cell.

- - Hospitalized Census
- - ICU Census
- - Ventilated Census
— Hospital Threshold
NEW TESTING MINDSET

EARLY PHASE
(before we had adequate testing)

If you have mild symptoms, are without chronic disease and not feeling super sick…

...don’t come in to be seen, just stay home and isolate.

NEW PHASE

If you have any COVID symptoms...

...you must get tested right away.

As of: 22 April 2020
Entering New Testing Phase

Priority for SARS-CoV-2 Local Testing Slots
i.e. Same-day Testing & Results

1. Acutely ill patients seen in emergency departments and hospitals are still first priority

2. All Symptomatic Patients:
   a) Any ill frontline health care workers and first responders
   b) Anyone with one of the following: fever, cough, shortness of breath, sore throat, or disruption of taste or smell should present for testing at Tier 2 clinics

Priority for Selected Asymptomatic Testing*

3. Asymptomatic close contacts of known positives

4. Very high-risk persons and their caregivers that are asymptomatic:
   As determined by PAG and Public Health, given definition and criteria will evolve over time

5. Asymptomatic frontline health care workers and first responders

6. Large family homes that house moderate to high-risk persons:
   Example: multi-generational or multi-family homes

Tier 2 Clinics
1. Public Health Clinics
2. AMC
3. FHP
4. SDA

*Samples will be included in daily local testing batches as capacity allows, otherwise may be tested off-island.

As of: 22 April 2020
PCR/NAAT (Molecular) Tests with US FDA Emergency Use Authorization is Our Minimum Standard for Clinical Practice

As of: 22 April 2020

Test Positivity Rate
(Not the same as Prevalence Rate)

Per WHO, countries should aim to have <10% test positivity rate. This would mean we are likely casting a wide enough net to identify all positives in the community.

<table>
<thead>
<tr>
<th>AREA</th>
<th>COVID TEST POSITIVITY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>55%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>50%</td>
</tr>
<tr>
<td>New York State</td>
<td>41%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>30%</td>
</tr>
<tr>
<td>Lombardy, Italy</td>
<td>28%</td>
</tr>
<tr>
<td>USA</td>
<td>20%</td>
</tr>
<tr>
<td>Guam</td>
<td>13.5%</td>
</tr>
<tr>
<td>Canada, Germany Denmark</td>
<td>6-8%</td>
</tr>
<tr>
<td>South Korea, Australia, New Zealand</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: The Atlantic. A New Statistic Reveals Why America's COVID-19 Numbers Are Flat
Testing Goal #2: Capacity to Test 152 per 100K in One Day

To Accomplish This We Need
2a) Machine Capacity
2b) Consistent Availability of Test Kits and Related Supplies

As of: 22 April 2020

Note: Estimated cases are five times the number of cases identified. The researchers estimate that at least 80 percent of people who have the virus have not been tested.
EXPANDING GUAM SARS-COV-2 MACHINE TESTING

For Guam, We Need the Capacity to Run as Many as 258 Test per Day

- ABI 7500
  - GPHL
  - Total Test Capacity per Day on Guam: 40

- Abbott ID NOW x2 & BIOFIRE
  - GPHL, GMH, GUNG
  - Total Test Capacity per Day on Guam: 134

- BD MAX
  - GRMC
  - Total Test Capacity per Day on Guam: 230

- BD MAX
  - DLS
  - Total Test Capacity per Day on Guam: 278

- Cepheid Xpert x2
  - GPHL & GRMC
  - Need capacity to run 258 test per day needed
  - Total Test Capacity per Day on Guam: 382

As of: 22 April 2020

Assuming Full Availability of Testing Kits/Supplies.
Overview of Potential Testing Capacity on Guam

<table>
<thead>
<tr>
<th>Test Modality and Location</th>
<th>TAT</th>
<th>Samples per Run</th>
<th>Max Runs per 24 hr</th>
<th>Max Results per 24 hr</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott ID NOW GMHA</td>
<td>15 min</td>
<td>1</td>
<td>60</td>
<td>60</td>
<td>Active</td>
</tr>
<tr>
<td>Abbott ID NOW GPHL</td>
<td>15 min</td>
<td>1</td>
<td>24</td>
<td>24</td>
<td>Active</td>
</tr>
<tr>
<td>ABI 7500 GPHL</td>
<td>6 hrs</td>
<td>20</td>
<td>2</td>
<td>40</td>
<td>Active</td>
</tr>
<tr>
<td>BioFire GUNG</td>
<td>45 min</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>Active</td>
</tr>
<tr>
<td>BD Max GRMC</td>
<td>6 hrs</td>
<td>24</td>
<td>4</td>
<td>96</td>
<td>Active later this week</td>
</tr>
<tr>
<td>BD Max DLS</td>
<td>6 hrs</td>
<td>24</td>
<td>1-2</td>
<td>48</td>
<td>Unknown Activation</td>
</tr>
<tr>
<td>Cepheid GeneXpert GRMC</td>
<td>45 min</td>
<td>2</td>
<td>20</td>
<td>40</td>
<td>?Activation later this week</td>
</tr>
<tr>
<td>Cepheid GeneXpert GPHL</td>
<td>45 min</td>
<td>16</td>
<td>4</td>
<td>64</td>
<td>?Activation later this week</td>
</tr>
</tbody>
</table>

**Current Potential Testing Capacity per Day** | 134 | **Daily Test per 100,000** | 79 |

**Potential Testing Capacity per Day When All Test Active** | 382 | **Daily Test per 100,000** | 225 |

Guam needs the capacity to run 258 tests per day (152 per 100,000 people) to maintain COVID-19 suppression and to consider first stages of safely reopening. The ability to locally run up to 382 test per day is only based on the testing instrument’s capability and standard hours of lab location. The greatest limiting factor will be the testing kits and other supply’s flow and burn rate. It will also depend on proper staffing patterns of both the lab personal and those collecting samples.

*NOT factoring limits on test kits and other consumables

As of: 22 April 2020