

# COVID-19 Beyond Tomorrow Mitigation to Containment Dr Mark Cunningham-Hill Medical Director NEBGH

Monday May 11<sup>th</sup>

# **Containment Versus Mitigation**

#### Containment

- The goal of containment is to stop the spread from very specific areas and avoid a larger outbreak
- Accomplished by quick identification (testing), contact tracing, isolation and quarantining
- Plus social distancing, hygiene and other measures

#### Mitigation

- Increased social distancing,
- Limiting large gatherings
- Closing schools
- Lock downs
- Travel restrictions
- Protecting the healthcare system





## **Containment Versus Mitigation**



3-day rolling average of new tests per thousand





**USA Testing Versus Cases** 

www.nebgh.org

## **But for How Long?**









## **Mitigation Back to Containment**

#### Re-open plan

- 14(+) day fall in new cases
- Hospitalization and death rates
- Healthcare system that can cope
- Testing and contact tracing
- Gradual re-opening of businesses based on essentiality





### **NYS Re-Open Dashboard**

|                  | 14-Day Decline in<br>Hospitalizations<br>OR<br>Under 15 new<br>Hospitalizations<br>(3-day avg) | 14-Day Decline<br>in Hospital<br>Deaths<br>OR<br>Fewer than 5<br>deaths<br>(3-day avg) | New<br>Hospitalizations<br>(Under 2 per 100K<br>residents—<br>3 day rolling avg) | Share of total beds<br>available<br>(threshold of 30%) | Share of ICU<br>beds available<br>(threshold of<br>30%) | 30 per 1k<br>residents<br>tested<br>monthly<br>(7-day average<br>of new tests<br>per day) | At least 30<br>contact tracers<br>per 100K<br>residents | Metrics Met |
|------------------|--|--|--|--|---|---|---|-------------|
| Capital Region   | N  | Y  | 0.58   | 41%  | 44%   | N   | 325   | 4/7         |
| Central New York | Y  | Y  | 0.47   | 49%  | 51%   | N   | 233   | 5/7         |
| Finger Lakes     | Y  | Y  | 1.19   | 53%  | 64%   | N   | 361   | 5/7         |
| Long Island      | Y  | N  | 5.76   | 28%  | 26%   | Y   | 852   | 2/7         |
| Mid-Hudson       | Y  | N  | 4.74   | 31%  | 35%   | Y   | 697   | 4/7         |
| Mohawk Valley    | Y  | Y  | 1.17   | 58%  | 64%   | N   | 146   | 5/7         |
| New York City    | Y  | Y  | 5.41   | 26%  | 21%   | Y   | 2520  | 3/7         |
| North Country    | Y  | Y  | 0.08   | 53%  | 64%   | N   | 126   | 5/7         |
| Southern Tier    | Y  | Y  | 0.11   | 58%  | 52%   | N   | 190   | 5/7         |
| Western New York | N  | Y  | 2.20   | 46%  | 40%   | N   | 414   | 3/7         |

## The Road to a New Normalcy

#### **Diffusing Density**

- Social distancing
- Restricting gatherings

• Mask usage

#### **Testing Is Critical**

- Diagnostic PCR (or antigen)
- Serology community immunity
- Herd immunity starts to be effective at 50-66%
- Test → Isolate and quarantine

#### Addressing Vulnerable Populations

- Elderly and those with pre-existing conditions
- Social Determinants of Health and Health disparities

### Investing in public health

- Testing and contact tracing
- Investment in therapeutics and vaccines
- Research

### **States Planning to Reopen**





#### States Planning to reopen - number of Cases not falling





9

## **Testing and Re-opening**

| States where the rate of positive                       |       |       |       |          |       |         |      |       |   |       |  |  |
|---|-------|-------|-------|----------|-------|---------|------|-------|---|-------|--|--|
| tests is more than 10% (dashed line)                    |       |       |       |          |       |         |      |       |   |       |  |  |
| ✓ Daily share of tests that are positive, 7-day average |       |       |       |          |       |         |      |       |   |       |  |  |
|   |       |       |       |          |       |         |      |       |   |       |  |  |
|   |       |       |       |          |       |         |      |       |   | Maine |  |  |
|   |       |       |       |          |       |         |      |       |   |       |  |  |
|   |       |       |       |          |       |         |      |       |   | N.H.  |  |  |
|   |       |       |       |          |       |         |      |       |   |       |  |  |
|   |       |       |       |          |       |         |      |       |   |       |  |  |
|   |       |       |       |          | -     | Inco    |      | -     | - |       |  |  |
| Ore   | Nev   | Muro  | SD    | lowa     | Ind   | Ohio    | Pa   |       |   | RI    |  |  |
|   |       |       | 0.0.  | Iowa     | ind.  | -       | 1 0. |       | - | 13.1. |  |  |
| -   |       |       |       |          |       | <b></b> |      | ••••• |   |       |  |  |
|   |       | Colo. | Neb.  | Mo.      | Ky.   | W.Va.   | Va.  |       |   |       |  |  |
|   |       |       |       |          | These |         | Inne | -     |   |       |  |  |
|   | Ariz. | N.M.  | Kan.  |          | Tenn. | N.C.    | S.C. |       |   |       |  |  |
|   |       |       |       | <b>B</b> |       |         |      |       |   |       |  |  |
|   |       |       | Okla. | La.      | Miss. | Ala.    | Ga.  |       |   |       |  |  |
|   |       |       |       |          |       |         |      |       |   |       |  |  |
|   |       |       | Texas |          |       |         |      |       |   |       |  |  |
|   |       |       |       |          |       |         |      |       |   |       |  |  |

#### States where testing is below the recommended level (dashed line)

✓ Daily new tests per 100,000 people, 7-day average



#### Scenario 1





#### www.nebgh.org



BUSINESS GROUP ON HEALTH

www.nebgh.org

## **Polling Question**

#### Which scenario do you think is most likely for the US?

- A. Scenario 1 "Ideal"
- B. Scenario 2 "Seasonal variation"
- C. Scenario 3 "Premature Start"
- D. Scenario 4 "Rolling Thunder"
- E. Scenario 5 We just need to turn off 5G and it will go away
- F. Scenario 6 "Something else"



# Questions

0