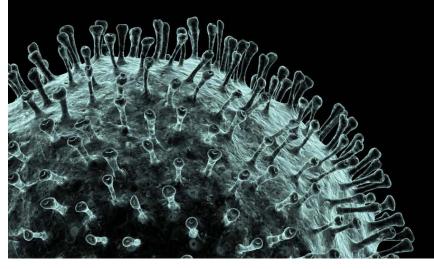
### **COVID-19 Conversations**



Jennifer Nuzzo, DrPH, SM

Senior Scholar, Johns Hopkins Center for Health Security



COVID19Conversations.org #COVID19Conversations





## What's Next After Social Distancing?

Jennifer B. Nuzzo, DrPH, SM



#### Worrisome Signs in Italy

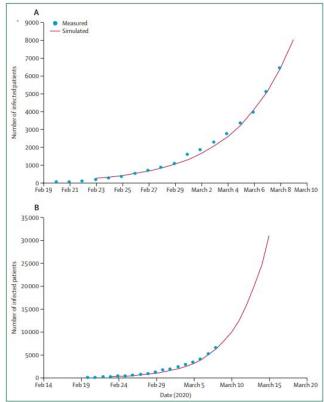


Figure 1: Measured and predicted number of patients reported to be infected in Italy using an exponential curve

 $Panel\ A\ shows\ number\ of\ infections\ in\ previous\ days\ and\ B\ shows\ projections\ for\ the\ coming\ days.$ 

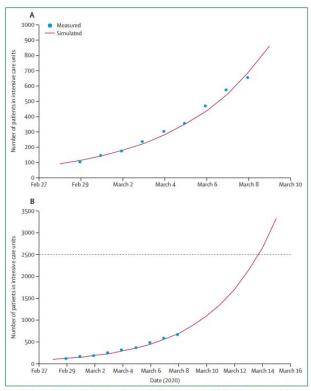
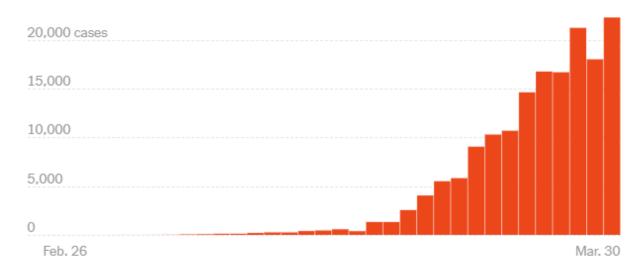


Figure 2: Measured and predicted number of patients in intensive care units in Italy using an exponential curve Panel A shows number of patients in intensive care units in previous days and B shows projections for the coming days. The dotted line represents the estimated capacity of intensive care beds in Italy.

#### COVID-19 in the US

#### New coronavirus cases announced in the U.S. each day



Source: C.D.C., state and local health agencies, hospitals.

#### How Long Will it Last?

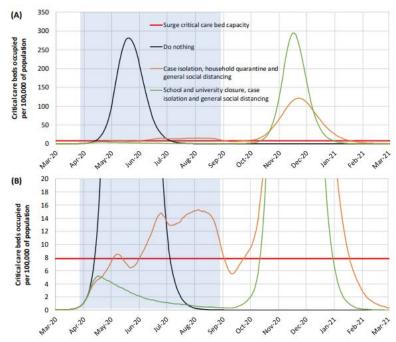
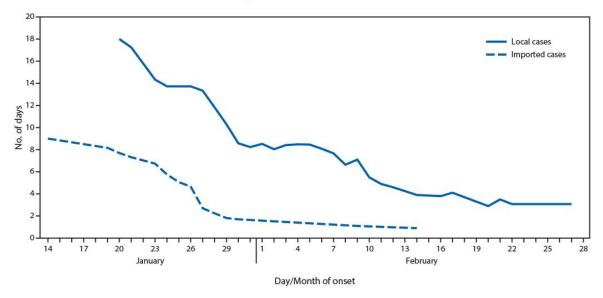


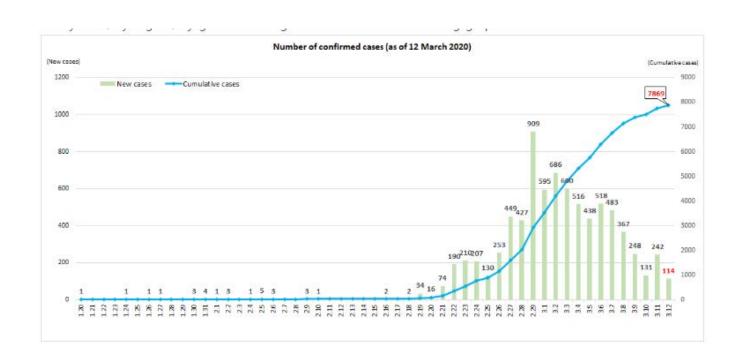
Figure 3: Suppression strategy scenarios for GB showing ICU bed requirements. The black line shows the unmitigated epidemic. Green shows a suppression strategy incorporating closure of schools and universities, case isolation and population-wide social distancing beginning in late March 2020. The orange line shows a containment strategy incorporating case isolation, household quarantine and population-wide social distancing. The red line is the estimated surge ICU bed capacity in GB. The blue shading shows the 5-month period in which these interventions are assumed to remain in place. (B) shows the same data as in panel (A) but zoomed in on the lower levels of the graph. An equivalent figure for the US is shown in the Appendix.

#### Singapore

FIGURE 2. Interval from symptom onset to isolation or hospitalization (7-day moving average), of coronavirus disease 2019 (COVID-19 cases) (N = 100), by importation status — Singapore, January 14–February 28, 2020



#### South Korea



#### **POLITICO**



If we're serious about controlling the crisis, here's what it will take—and who needs to step up, from the Pentagon to the Peace Corps.

https://www.politico.com/news/agenda/2020/03/30/social-distancing-game-plan-154915

#### Health System Weaknesses

- 4) SUFFICIENT & ROBUST HEALTH SECTOR TO TREAT THE SICK & PROTECT HEALTH WORKERS
- 4.1) Health capacity in clinics, hospitals and community care centres
- 4.2) Medical countermeasures and personnel deployment
- 4.3) Healthcare acces:
- 4.4) Communications with healthcare workers during a public health emergency
- 4.5) Infection control practices and availability of equipment
- 4.6) Capacity to test and approve new medical countermeasures





## Next Step: Measure and Motivate Health System Resilience

Altered Standards of Care Commitment to Quality Improvement Plans for Post-Event

Recovery

# Health System Resilience Capacities Communication Infection Prevention & Control Access to Financing Leadership & Command Structure Surge Capacity Healthcare Workforce Medical Supplies & Equipment Barriers to Healthcare Access Maintaining Critical Infrastructure & Transportation Overlap with WHO JEE Capacities Overlap with WHO JEE Capacities