



**BLOOMBERG  
HARVARD**

| City  
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Initiative



# COVID-19

## SITUATION REPORT

MAY 7, 2020 | JOSHUA SHARFSTEIN, MD



World Map



NEW



U.S. Map



Critical Trends



# COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins Univer...



Total Confirmed

# 1,228,609

Confirmed Cases by Country/Region/Sovereignty

1,228,609 US

220,325 Spain

214,457 Italy

202,359 United Kingdom

177,160 Russia

174,224 France

168,276 Germany

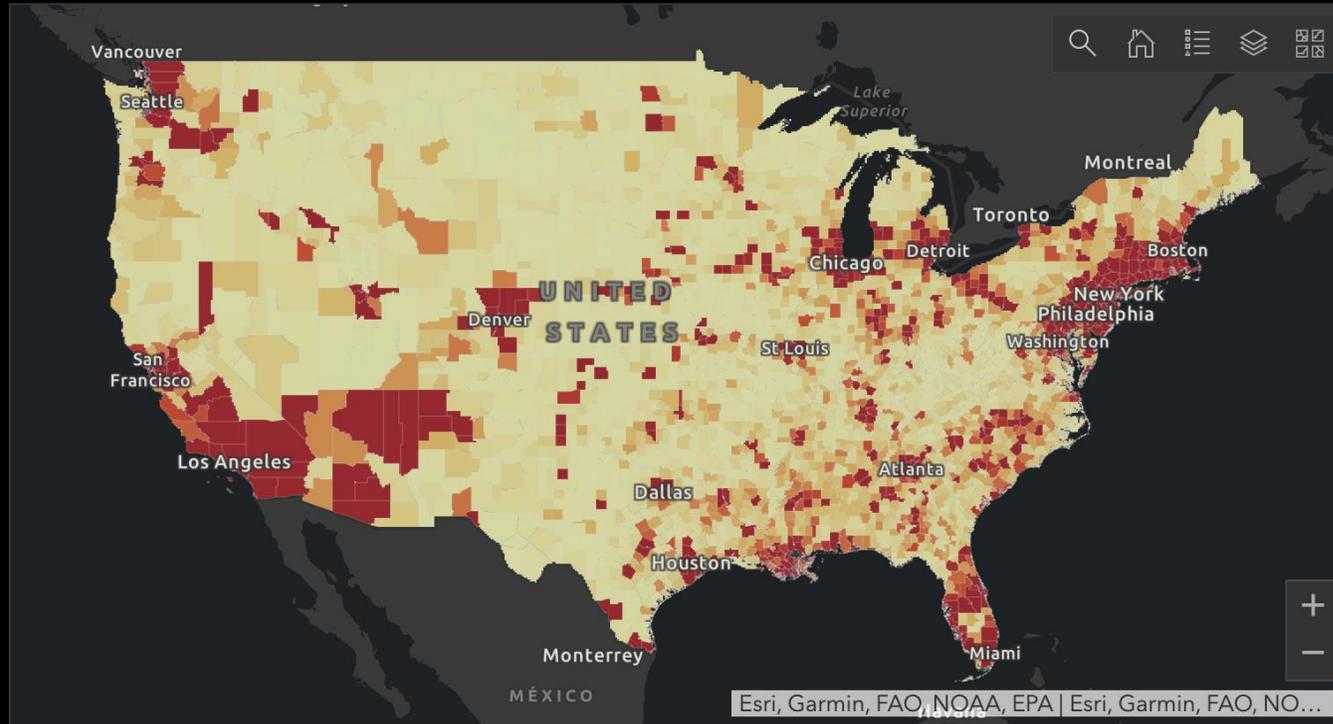
131,744 Turkey

126,611 Brazil

Admin0

Last Updated at (M/D/YYYY)

5/7/2020, 8:32:30 AM



Confirmed by Population | Confirmed | Deaths | Fatality Rate

187 countries/regions

Lancet Inf Dis Article: [Here](#). Mobile Version: [Here](#).  
Lead by JHU CSSE. Automation Support: [Esri Living Atlas team](#) and [JHU APL](#). [Contact US](#). [FAQ](#).

Global Deaths

# 73,431

73,431 deaths US

US State Level

## Deaths, Recovered

25,623 deaths, **54,597** recovered  
New York US

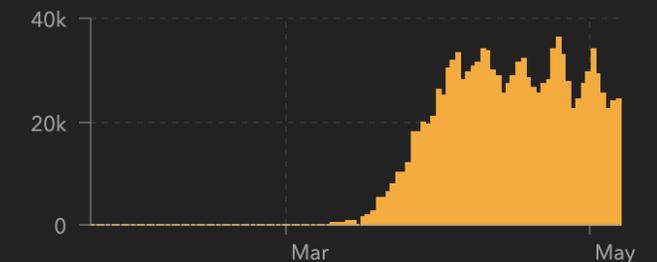
8,549 deaths, **15,642** recovered  
New Jersey US

4,420 deaths, **recovered**  
Massachusetts US

4,256 deaths, **15,659** recovered

Global Deaths

US Deaths, ...

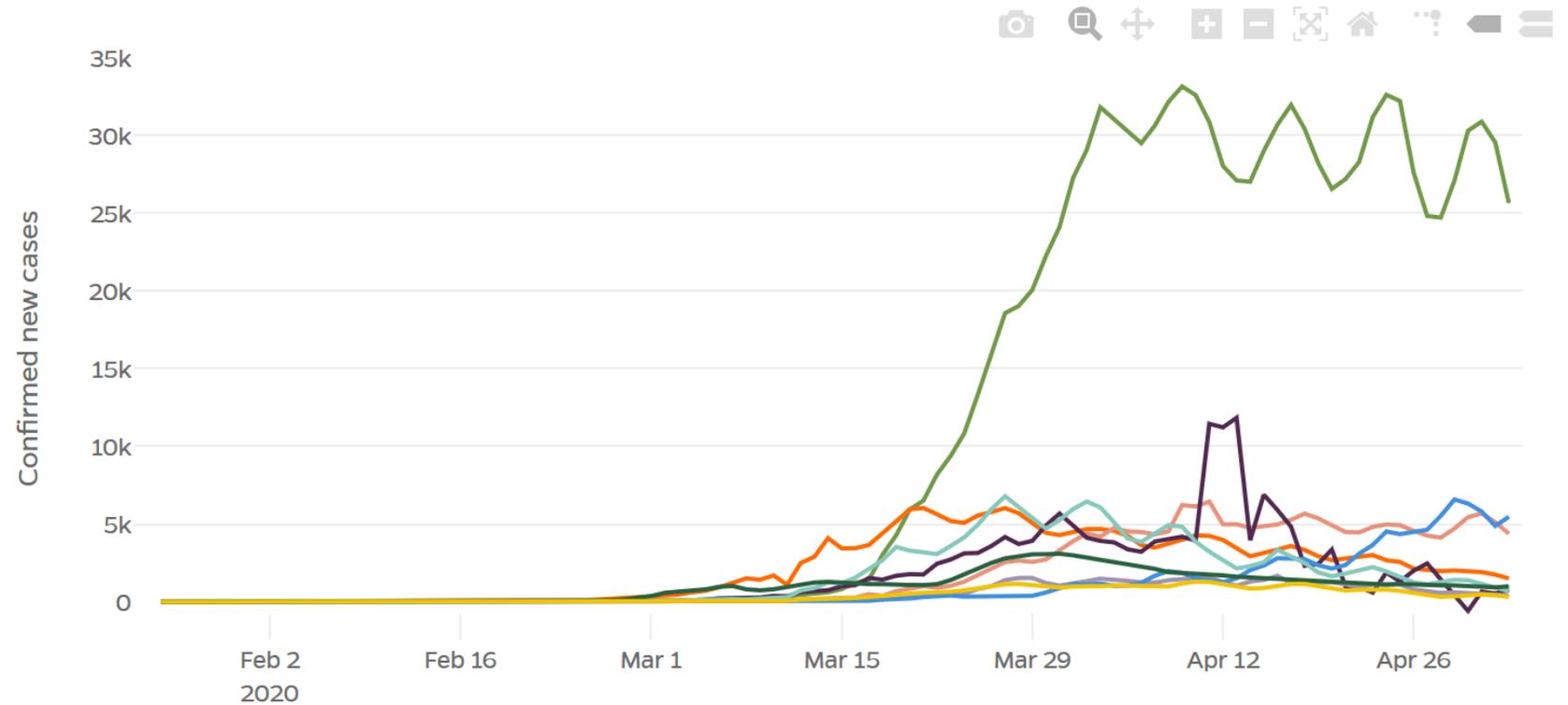


Confirmed | Logarithmic | Daily Cases

**U.S.  
Deaths  
Climb  
Toward  
75,000**

## Daily confirmed new cases (5-day moving average)

Outbreak evolution for the current 10 most affected countries



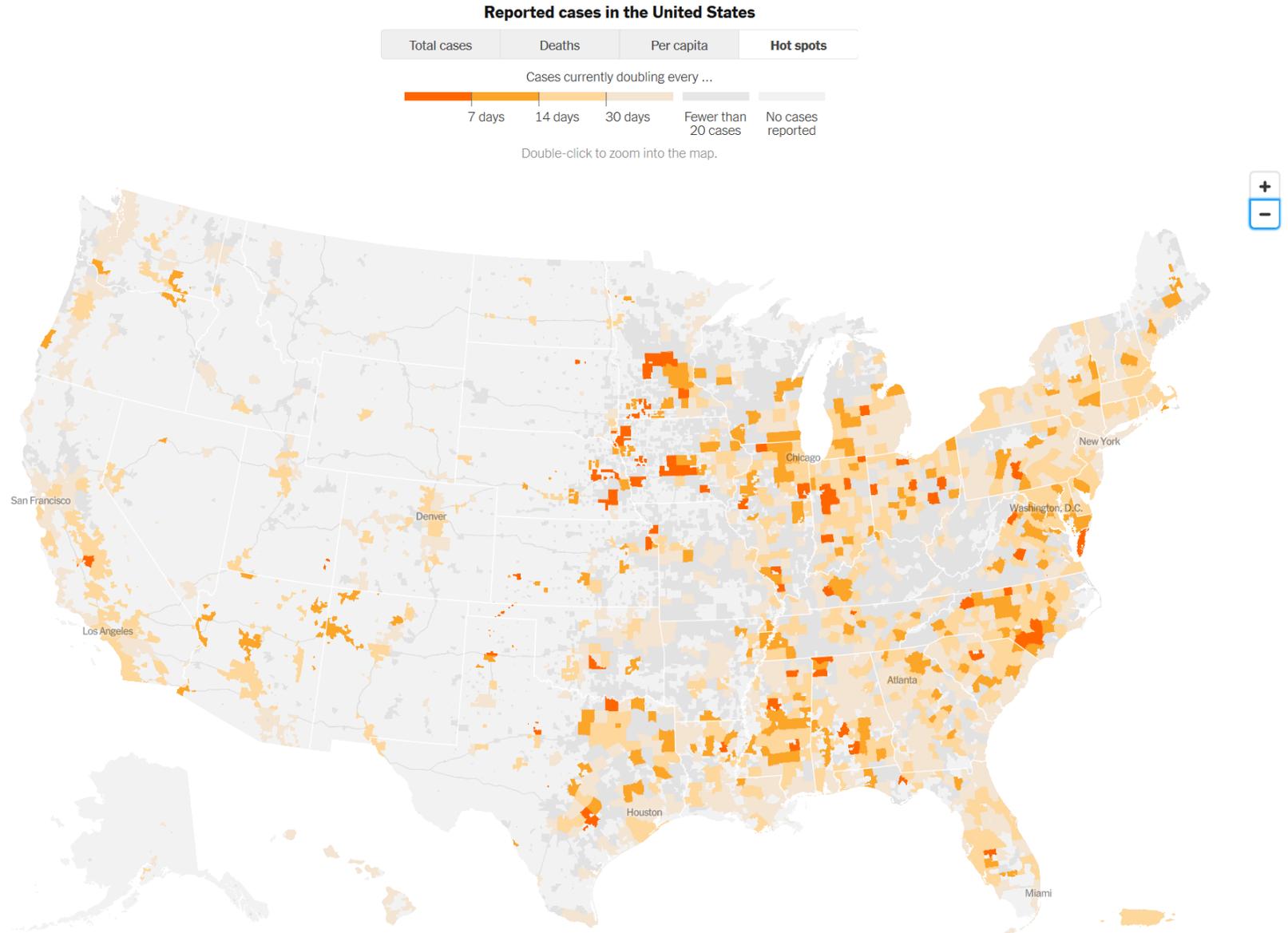
Click any country below to hide/show from the graph:

- US
- Italy
- United Kingdom
- Spain
- France
- Belgium
- Brazil
- Germany
- Iran
- Netherlands

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# Many re-opening areas have rising cases

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# What's New This Week



## What's Next for U.S.?

Models show a large range of projections for cases and deaths, because of uncertainty resulting from premature re-opening and relaxation of social distancing.



## For Mayors

Back to the basics. Social distancing worked to avert calamity. Inspire people to take actions to protect themselves and others.



# What's New This Week



## Contact Tracing Revs Up

New York prepares to hire as many as 17,000 contract tracers.



## For Mayors

Get a head start: Everyone who tests positive needs to isolate and advise household and other close contacts to quarantine.





# COVID-19

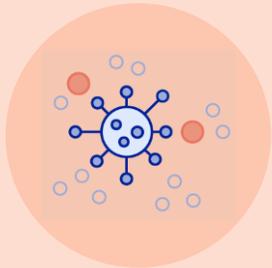
Criteria and Metrics for  
Reopening and Staying Open

MAY 7, 2020 | JENNIFER B. NUZZO, DRPH, SM

# Pressure is Mounting to Reopen, But Have to Follow the Data

## WHEN

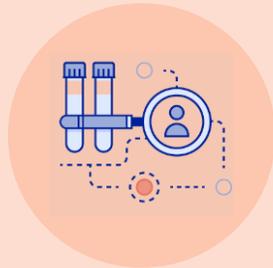
Is It Safe To Come Out Again?



CASES NO  
LONGER  
SPREADING  
WIDELY



STRONGER  
HEALTH  
CARE  
SYSTEM



ROBUST  
PUBLIC  
HEALTH  
CAPACITY

## HOW

Do We Lift Physical Distancing Restrictions?



MEDICALLY  
VULNERABLE  
CONTINUE TO  
SHELTER



PRIORITIZE  
SOCIAL  
BENEFIT



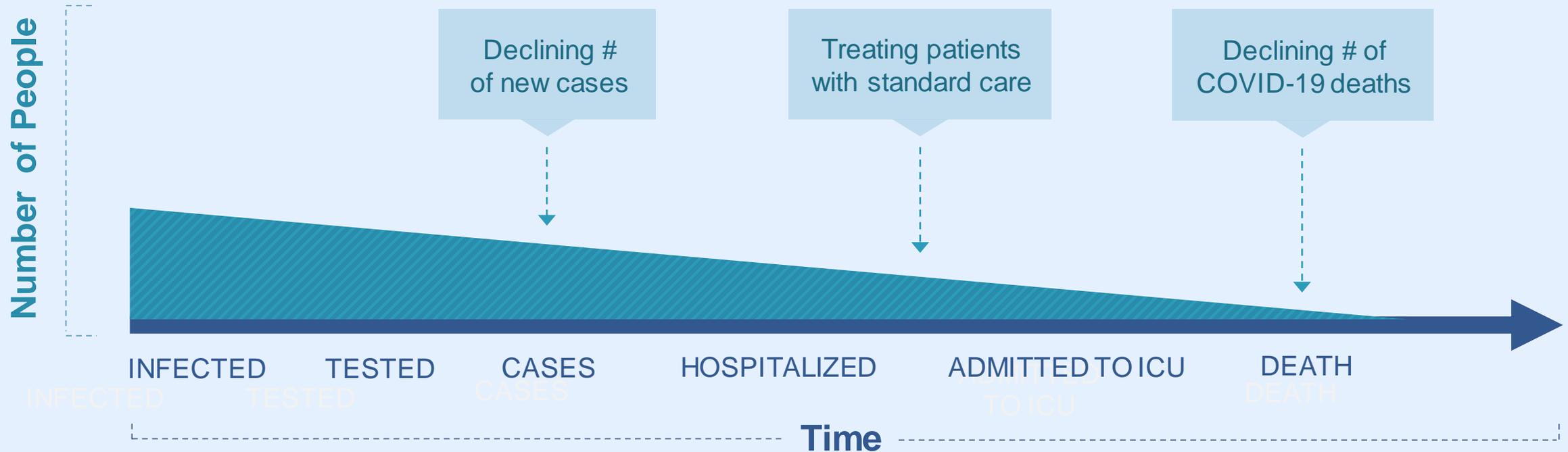
PREPARE TO  
TIGHTEN THE  
FAUCET IF  
CASES SPIKE

# REOPENING METRICS ARE NOT ENOUGH

Tend to be later indicators of disease spread

May miss mild illnesses and transmissions occurring in the community

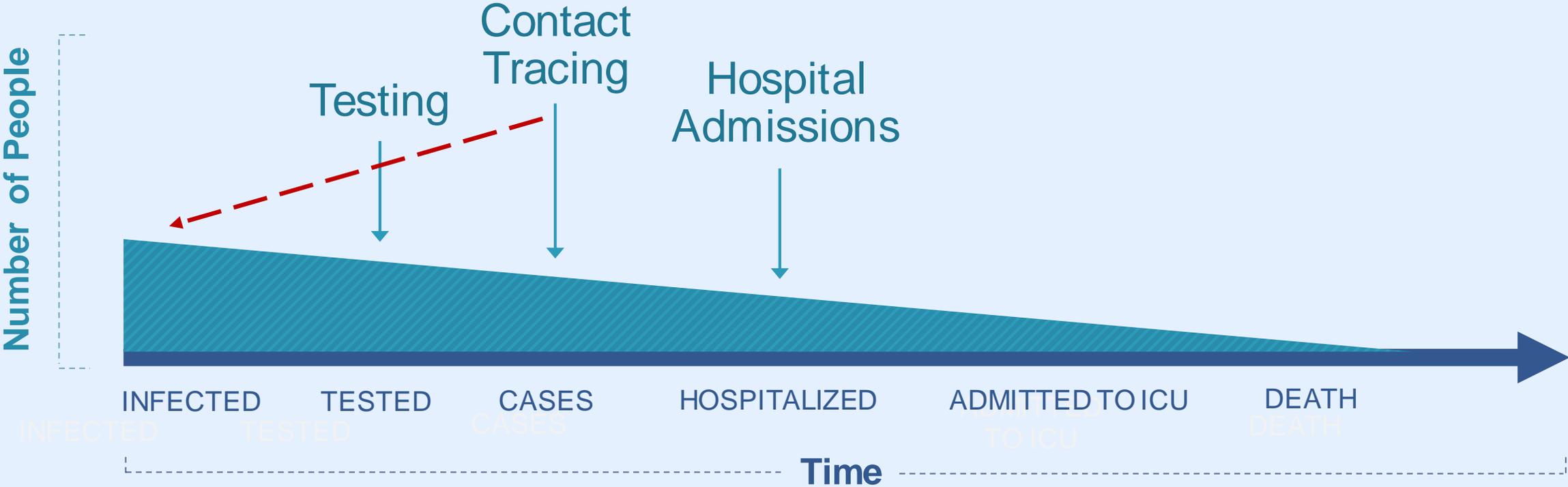
Provide only indirect assessment of how effective response has been and whether corrections are needed



# TO STAY OPEN THERE NEEDS TO BE AN **EARLY WARNING SYSTEM**

Goal

Use **earlier indicators** of disease spread and impact to take action before cases accelerate



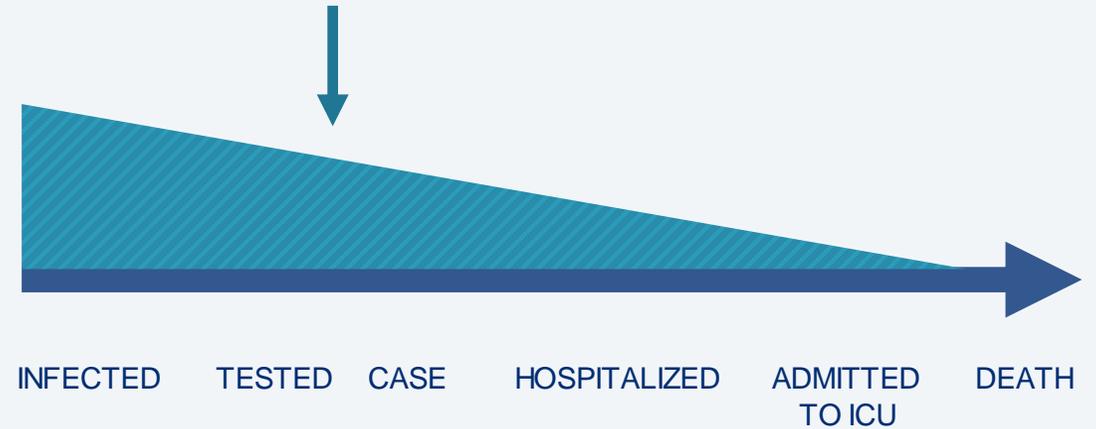
# 1. Testing and Cases

## WHY

- Tests indicate who is infected, even if they don't have symptoms.
- Unlike cases or deaths, testing is an *early* indicator of case growth, hospitalizations, deaths.

## TESTING IS ADEQUATE IF

- Majority of tests have results in less 1-2 days
- Access to testing is well-distributed
- Testing capacity is suitable to cover priority groups (frontline and most vulnerable)
- Percentage positive does not exceed 12%



## Metric Example:

Percentage of tests that are positive is stable or declining



# 2. Contact Tracing

## WHY

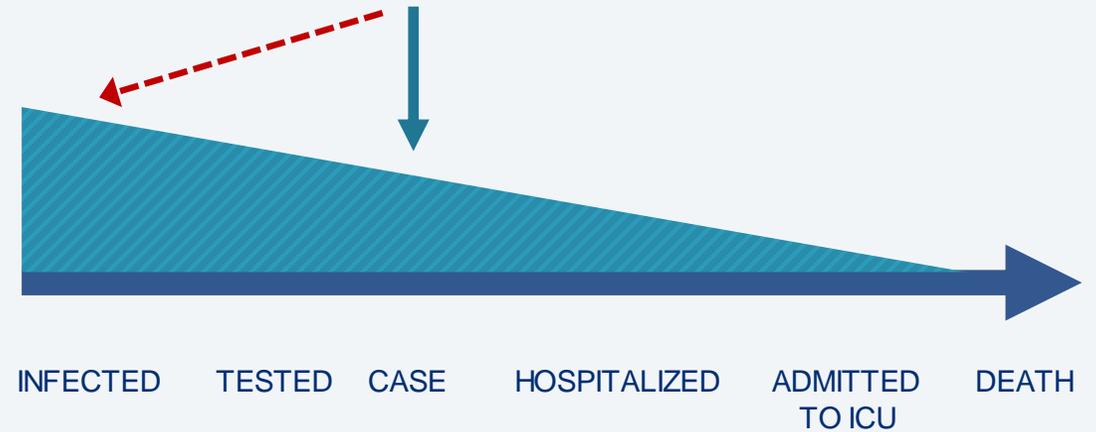
Contact tracing helps identify those exposed to cases so they can be quarantined before they infect others.

## REQUIREMENTS

Requires contact tracing program is in place that is capable of rapid identification of cases and their contacts following exposure.

### Should include:

- Symptom tracking and testing of people under quarantine
- Social support for isolation and quarantine orders



## Metric Example:

Increasing percentage of new cases already under quarantine when identified:

- Percentage of cases where contacts have been found
- Percentage of contacts with symptoms tested within 24 hours



# 3. Hospital Admissions

## WHY

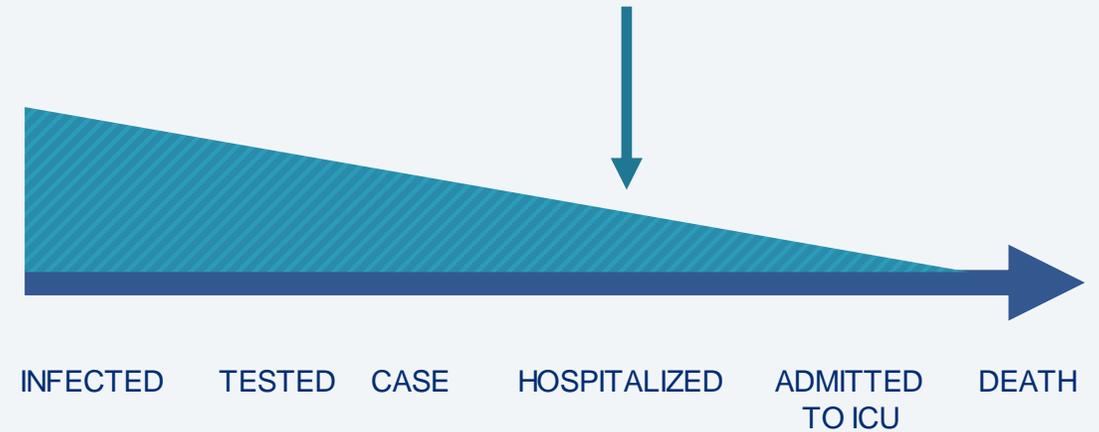
Hospital admissions is a mid-range indicator of declining hospital capacity and potentially accelerating case growth.

## REQUIREMENTS

Maintaining hospital capacity is necessary to reduce deaths and prevent disease amplifications.

### Must ensure:

- Hospitalizations not going to exceed available beds
- Health care worker absenteeism is manageable
- Supplies of personal protective equipment, ventilators, and essential medical supplies



## Metric Example:

Stable or declining number of people hospitalized for COVID-19\*

*\*May need to adjust to accommodate flu season or other surges*



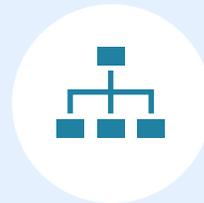
# Future Support to Help Cities Make Metrics-Driven COVID-19 Response Decisions

These example metrics for staying open or tightening back up are one important part of a **broader framework that cities should use to support their COVID-19 decision-making, advocacy and communication.**

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**With support from Bloomberg Philanthropies, we are working with national experts to:**

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Refine a comprehensive framework with suggested metrics that you can use for a wide range of response and recovery decisions.



Support cities directly to help you use the framework to guide the actions you are taking over the next weeks and months.



MAY 7, 2020

# QUESTIONS?

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Joshua Sharfstein, MD

Jennifer B. Nuzzo, DrPH, SM



JOHNS HOPKINS  
BLOOMBERG SCHOOL  
*of* PUBLIC HEALTH



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