

The new disease is spreading throughout population

# STOP COVID-19 IN ITS TRACKS

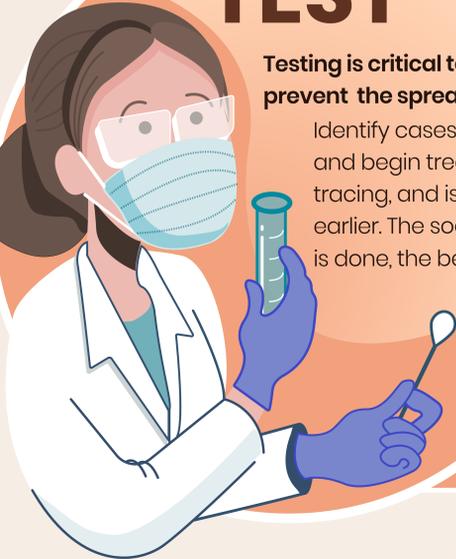
(AS OF 16.JUN.20)

During a pandemic, as new treatments and vaccines are developed and equipment is manufactured, **containing the virus spread is critical.** The World Health Organization (WHO) recommends a comprehensive approach of testing, treating, and tracing as a critical backbone to response.

## TEST

**Testing is critical to prevent the spread.**

Identify cases quickly and begin treatment, tracing, and isolation earlier. The sooner testing is done, the better.



### Consult

When a patient has symptoms, clinicians use diagnostic guidelines to determine if a test is necessary.

### Collect

A healthcare provider takes a sample from a patient and sends it to a designated lab approved by FDA. (Clinical labs, public health labs and commercial labs.)

### Report

The result is reported back to the medical provider, local public health department, and patient.

### Notify

A positive result is reported as a presumptive case. Once confirmed, contact tracing begins.

**Increase testing capacity** to encompass everyone with symptoms and their close contacts, and **repeat testing over time.**

In the U.S., a lack of testing is a problem and has been since the beginning of the crisis.<sup>4</sup>



#### How much testing does the U.S. need?

The WHO advises a **benchmark of 10% positive tests or lower.** The lower the percentage of tests that come back positive, the better.



**Current Nationwide** (average in May 2020)

**300,000**<sup>15</sup> tests per day

**Recommended** by Harvard's Global Health Institute

**900,000**<sup>2</sup> tests per day

**Increase supply, decrease demand.**

Expand health care capacity, while flattening the curve.

### Hospitalization

Patients with critical symptoms or risk factors for severe illness should be monitored and hospitalized.

### Care at home

Patients with mild to moderate symptoms can isolate and recover at home.

### Isolate

All confirmed and suspected cases should isolate away from other people and animals.

### Monitor

Measure your temperature twice per day and stay in touch with doctors.

## TREAT

Treatment involves care for the infected and isolation to prevent further spread.



### Symptoms can range from mild to critical

Numbers are based on the largest cohort done in China

#### Critical

**5%**<sup>3</sup>

Respiratory failure, shock, or multiorgan system dysfunction

#### Severe

**14%**<sup>3</sup>

Dyspnea, hypoxia, or >50% lung involvement on imaging

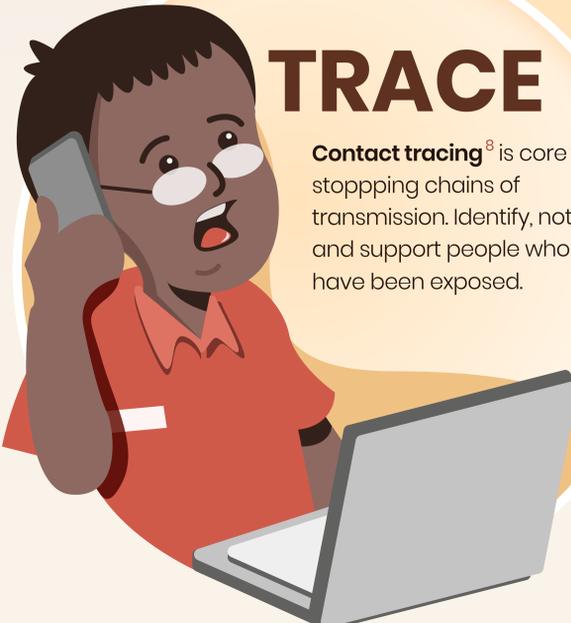
#### Mild to Moderate

**81%**<sup>3</sup>

Fever, cough, fatigue, or mild pneumonia

## TRACE

**Contact tracing<sup>8</sup>** is core to stopping chains of transmission. Identify, notify, and support people who have been exposed.



### Identify contact

Interview patient and determine who has been in contact since onset of illness.

### List

Notify every contact listed. Inform them of their exposure. For high risk cases, quarantine or isolation can be required.

### Follow-up

Monitor all contacts who are at risk. If asymptomatic, stay home for 14 days and watch for symptoms. If symptomatic, isolate and get tested.



#### How many contact tracers do we need?

NACCHO recommended **30 contact tracers per 100,000 people during a pandemic.**<sup>6,7</sup>

#### Existing disease detectives

in the US, before the outbreak

**2,200**

#### Expected

during a pandemic<sup>7</sup>

**100,000+**

This is 46 times more than normal!

### Diversity, diversity, diversity

Developing trust is crucial, particularly in minority or distressed communities, which are often the worst hit.

The goal is to **erase the disease.**

