COVID-19 Update
State and Local Issues

Tom Frieden MD, MPH
President and Chief Executive Officer
COVID-19 is more severe for older people and those with underlying health conditions.

Best estimate of severity of COVID-19, based on what is known about spread and severity compared to historic seasonal and pandemic influenza.

The Cost of Epidemics and Pandemics

SARS  $40 billion (2003)
H5N1  $40 billion (2006)
H1N1  $45 billion (2006)
Ebola  $55 billion (2006)

COVID-19  
$8.8 trillion (2020)

Persistent Inequality in Health Outcomes

• Racial disparities in health and health care in the US are stark, persistent, and unacceptable
• Health disparities are a symptom of broader structural, systemic social and economic inequities
• More exposure, more underlying disease, less access to care
• Disproportionate burden requires disproportionate response

Native, Black, and Hispanic/Latinx people have 5x the COVID-19 hospitalization rates of Whites

COVID-NET: Age-adjusted COVID-19-associated hospitalization rates, by race and ethnicity

March 1 to August 8, 2020

Source: CDC COVID-NET; data as of Aug 8.
Transcend false dichotomies!

• Not “closed vs. open”
  • We were never fully closed, and likely won’t be fully open even when there is a safe, effective, accessible vaccine
  • Dimmer dial, not on/off switch

• Not “health vs. economy”
  • Economic downturn is deadly
  • We can only protect livelihoods by protecting lives

• Not “overblown” vs. “catastrophic” pandemic
  • Severe pandemic, esp. for older, medically vulnerable, and some others
  • Mild or no illness for most children and many others

Two arms of response

- **Start safer** with the 3 W’s:
  - Wear a mask
  - Watch your distance
  - Wash your hands

- **Box the virus in** with a comprehensive test, trace, isolate strategy
COVID-19 Vaccine: Bottom line

• We don’t yet know whether there will be a safe and effective vaccine
• There are grounds for being guardedly optimistic that vaccination may be possible
• We can begin – now – engaging with communities to share information, listen to perceptions and concerns, develop linkages
• Even with a vaccine, the pandemic will continue for some time and comprehensive prevention and control measures will likely be needed
Cities play an important role in pandemic growth and remission

**ROLE OF CITIES**

- Large numbers of people living in a smaller geographic area
- More frequent and closer contact with others means disease spread is more likely
- Centers of commerce and culture have more people visiting from other places
- Disease will spread from cities to suburbs and rural areas

**Density is a driver of the pandemic**

**Public health response**

- Cities have more resources and capacity for local action in many government sectors to protect health
- Most public health measures need to be implemented locally
- Cities can be pathfinders for their regions and countries
- Cities can often act more quickly than national governments
Isolation of cases and quarantine of contacts
Prevents confirmed or suspected cases from infecting others

Bans of indoor public gatherings
Reduces possibility of large outbreaks of disease

School and work closures and adaptations
May be useful based on patterns of disease transmission, but need to limit social harms

Sheltering-in-place orders
When required, all people to remain at home except for essential workers (health care, public safety, food supply) or essential tasks (food shopping, medical care, care for vulnerable populations)
3 W’s to reduce risk of COVID-19

Wear a mask

Watch your distance
6 ft (~2 meters)

Wash your hands
Know **WHEN AND WHERE** to Wear a Mask

- **Indoors in public place**  
  *For example: in a market, on a bus*
- **Outdoors when you can't stay 6 feet from others**  
  *For example: a crowded park or sidewalk*
- **At home if you're not feeling well and others are near**

**You do not need to wear a mask outside** when physically distanced from others, or **in your home** if you don’t feel sick.
Some Masks Are Better... But Any Is Better than None

- **N95 masks** filter out at least 95% of virus-carrying droplets when worn properly – masks with valves are **not** recommended.

- **Standard surgical masks** are ~3x more effective than cloth masks – which are far better than nothing.

- **Cloth masks** come in many varieties – the type of fabric, number of layers, and (if applicable) filter insert are important factors.

- **Proper fit is key** – improper fit greatly reduces effectiveness.

Masks are a simple, cheap, and effective way to get more control over the pandemic.
Masks Reduce Cases

- Between April 8 and May 15, 15 states and DC mandated face masks by all people when in public
- States that mandated universal mask wearing experienced statistically significant declines in case rates for every five days the mandate was in place
- 20 additional states with employee-only mandates didn’t have decreases in cases any more than states with no mask mandates at all

1. **TEST WIDELY**
   - Create places for *community testing*
   - Publicly track time from symptoms to test result

2. **ISOLATE ALL INFECTED PEOPLE**
   - Ensure safe housing, working with businesses and community organizations to open hotels, dorms
   - Engage with disenfranchised populations by with community organizations and leaders

3. **FIND EVERYONE WHO HAS BEEN IN CONTACT WITH INFECTED PATIENTS**
   - Help public health experts recruit a *corps of tracers* from throughout community from social service workers to new college grads
   - Publicly track percent of cases arising from quarantined contacts

4. **QUARANTINE ALL CONTACTS FOR 14 DAYS**
   - Create incentives to manage isolation and quarantine: provide care packages, remote resources, and financial support to those quarantined
Contact Tracing Optimization

- How can we reduce time from infectivity to isolation?
- How can we warn contacts promptly so they are quarantined before they become infectious?
- How can we provide safe, acceptable temporary housing to cases and contacts to prevent household spread?
**RESOURCES FOR ISOLATED CASES AND QUARANTINED CONTACTS**

Need incentives to manage isolation and quarantine with strong wraparound services

### EXAMPLES AND IDEAS

**Care packages could include**
- Masks
- Thermometers
- Food, laundry, pharmacy services
- Health education materials
- Passwords for on-demand movies, e-books, learning channels
- Access to high-speed internet & laptops
- Hand sanitizer & alcohol-based cleansers
- Encouraging notes from government leaders

**Core resources such as**
- Daily check-in phone calls
- Instructions of how to keep space clean for those sharing space
- A hotline for counseling, information, social services, and medical support
- Garbage removal
- Access to telehealth and care if ill
- Relocation to safe and desirable place, if requested

**Financial support could include**
- Stipend from government to those without sick leave or who need to take care of child or elderly dependents
- Work with employers to provide support, with possible tax credits

**Core resources** could include:
- Financial support
- Work with employers to provide support, with possible tax credits
Children and COVID-19

• Much less likely to experience severe illness
• May be less likely to become infected
• May be less likely to spread infection
• Science is still evolving – we have more to learn
Safer Reopening of Schools

Schools are essential to the educational and social development of children and the functioning of the economy.

It’s important to reopen schools this fall, but we must do it carefully, prioritizing the safety of students and their families, teachers and staff, and the broader community.

Community control of the virus will be key.

Reopening America’s Schools: A Public Health Approach

8 BASIC SAFETY MEASURES FOR SCHOOLS

We can reduce the risk with careful planning and precautions

1. **Shield the most vulnerable** Anyone with underlying health conditions should participate remotely and not return to school in person unless there is little or no community transmission.

2. **Reduce risk whenever possible** Reduce number of surfaces touched (e.g., keep hallway doors open). No choirs, large assemblies. Cafeterias may need to close and students instead eat in classrooms.

3. **Keep the virus out** Forbid non-essential visits and require everyone who enters to wash their hands (or apply hand sanitizer) and mask up. No one should not come to school when sick. Every person who works at the school must have paid sick leave – this reduces risk of spread of viruses.

4. **Reduce occupancy, especially indoors** Classrooms may need to operate at reduced capacity to provide increased physical distance. Split-shift schedules can alleviate overcrowding. Rearrange schools and classrooms can be rearranged (e.g., place desks the same direction instead of facing each other). If conditions allow, it’s safer to hold class outdoors.
8 BASIC SAFETY MEASURES FOR SCHOOLS

We can reduce the risk with careful planning and precautions

5 Reduce mixing among students and staff Divide students in smaller cohorts, or pods, which stay together throughout the day. Close staff break rooms.

6 Mask up Students, teachers, and staff should all mask up throughout the school day. Consider reward systems to encourage mask-wearing and hand-washing.

7 Implement new health and safety protocols Handwashing and sanitizing stations. More cleaning during and at the end of the school day, and of buses. Limit sharing of supplies.

8 Prepare for cases Despite precautions, there will inevitably Covid cases. Schools must function as if virus could arrive at any moment and be ready to respond and provide ongoing education when it does. Responding well can prevent large outbreaks.
Alert-Level Systems

- Empower the public
- Increase accountability
- Accelerate progress

### COVID-19 risk alert levels

<table>
<thead>
<tr>
<th>Alert Level</th>
<th>Risk Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alert Level 4</td>
<td>Very High Risk</td>
<td>Widespread outbreak that is growing with many undetected cases. Take strong measures to limit all contact.</td>
</tr>
<tr>
<td>Alert Level 3</td>
<td>High Risk</td>
<td>Many cases including community spread, with undetected cases likely. Limit everyday activities to increase safety.</td>
</tr>
<tr>
<td>Alert Level 2</td>
<td>Moderate Risk</td>
<td>Moderate number of cases with most cases from a known source. Increase efforts to limit personal exposure.</td>
</tr>
<tr>
<td>Alert Level 1</td>
<td>New normal</td>
<td>Cases are rare and contact tracing can be used to control the virus. Take everyday precautions.</td>
</tr>
</tbody>
</table>
## California Risk Alert System

<table>
<thead>
<tr>
<th>Measure</th>
<th>Widespread Tier 1</th>
<th>Substantial Tier 2</th>
<th>Moderate Tier 3</th>
<th>Minimal Tier 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Case Rate for Tier Assignment**</td>
<td>&gt;7</td>
<td>4-7</td>
<td>1-3.9</td>
<td>&lt;1</td>
</tr>
<tr>
<td>(Rate per 100,000 population* excluding prison cases^, 7 day average with 7 day lag)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing Positivity^</td>
<td>&gt;8%</td>
<td>5-8%</td>
<td>2.4.9%</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>(Excluding prison cases^, 7 day average with 7 day lag)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Population* includes total population for the county, excluding federal facilities, mental health facilities, and prison cases.

[^]: Data from the previous 7 days.

[^^]: Data from the previous 7 days, excluding the previous 7 days.

[^^]: Data from the previous 7 days, adjusted for the previous 7 days.

[https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID19CountyMonitoringOverview.aspx](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID19CountyMonitoringOverview.aspx)
Utah’s Moderate Level of Restriction
What does it mean and what can you do?

Moving to orange
Utah’s social distancing efforts to slow the spread of COVID-19 have been working. Forward progress won’t be instant like flipping a switch. It’ll be more like gradually moving a dial.

A color-coded health guidance system has been developed by the State of Utah to guide health behaviors for individuals and businesses. Each level of the dial is guided by a rigorous measurement system which can be different by each region, county, city, or community.

In every phase, high-risk individuals operate under stricter instructions because they are more likely to suffer severe illness from COVID-19.

Ohio Risk-Alert System

Lucas County | Red
High Incidence

Indicator 1 - New Cases per Capita | Met
Cases over past two weeks: 481
County Population: 428,348
Cases per 100k: 112.29

Indicator 2 - New Cases Increase | Not Met

Indicator 3 - Non-Congregate Cases | Met

Indicator 4 - ED Visits | Not Met

Indicator 5 - Outpatient Visits | Not Met

Indicator 6 - Hospital Admissions | Not Met

Indicator 7 - ICU Bed Occupancy | Not Met

Level 1 Public Emergency: active exposure and spread.
Level 2 Public Emergency: increased exposure and spread. Exercise high degree of caution.
Level 3 Public Emergency: very high exposure and spread. Limit activities as much as possible.
Level 4 Public Emergency: severe exposure and spread. Only leave home for supplies and services.

# COVID-19: Risk-Based Guidelines

<table>
<thead>
<tr>
<th>Stage</th>
<th>Practice Good Hygiene</th>
<th>Maintain Social Distancing</th>
<th>Wear Facial Coverings</th>
<th>Higher Risk Individuals</th>
<th>Avoid Gatherings</th>
<th>Avoid Non-Essential Travel</th>
<th>Avoid Dining/Shopping</th>
<th>Avoid Gatherings</th>
<th>Avoid Non-Essential Travel</th>
<th>Avoid Dining/Shopping</th>
<th>Workplaces Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Greater than 25</td>
<td>Except with precautions</td>
<td>Gathering size TBD</td>
<td>All businesses</td>
<td>Stage 1</td>
<td>Stage 1</td>
<td>Stage 1</td>
<td>Stage 1</td>
</tr>
<tr>
<td>Stage 2</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Greater than 10</td>
<td>Except as essential</td>
<td>Greater than 25</td>
<td>Essential and reopened businesses</td>
<td>Stage 2</td>
<td>Stage 2</td>
<td>Stage 2</td>
<td>Stage 2</td>
</tr>
<tr>
<td>Stage 3</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Social and greater than 10</td>
<td>Except as essential</td>
<td>Social and greater than 10</td>
<td>Essential and reopened businesses</td>
<td>Stage 3</td>
<td>Stage 3</td>
<td>Stage 3</td>
<td>Stage 3</td>
</tr>
<tr>
<td>Stage 4</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Social and greater than 2</td>
<td>Except as essential</td>
<td>Social and greater than 10</td>
<td>Expanded essential businesses</td>
<td>Stage 4</td>
<td>Stage 4</td>
<td>Stage 4</td>
<td>Stage 4</td>
</tr>
<tr>
<td>Stage 5</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Outside of household</td>
<td>Except as essential</td>
<td>Outside of household</td>
<td>Essential businesses only</td>
<td>Stage 5</td>
<td>Stage 5</td>
<td>Stage 5</td>
<td>Stage 5</td>
</tr>
</tbody>
</table>

Use this color-coded alert system to understand the stages of risk. This chart provides recommendations on what people should do to stay safe during the pandemic. Individual risk categories identified pertain to known risks of complication and death from COVID-19. This chart is subject to change as the situation evolves.

AustinTexas.gov/COVID19  Published: August 10, 2020
DETERMINING WHAT IS SAFE: ASSESSING RISK

Risk of infection =

- prevalence in community
- proportion without masks
- ventilation (outdoors best)
- number of people exposed to
- duration of exposure

Outdoors in low-prevalence community =

almost no risk

Indoors, for a long time, with lots of people, in a high-prevalence community, without masks =

Highest risk
Clear Risk Communication

- Information easily understood and communicated through trusted, accessible channels is most likely to be accepted and followed

“Be First. Be Right. Be Credible.”

<table>
<thead>
<tr>
<th>Features of clear risk communication</th>
<th>Fundamental questions risk communication should answer for the public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency</td>
<td>What is my level of risk?</td>
</tr>
<tr>
<td>Competence</td>
<td>How can I act to protect myself and my loved ones?</td>
</tr>
<tr>
<td>Objectivity</td>
<td>Is the situation being well controlled/addressed?</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
</tr>
<tr>
<td>Sincerity</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
</tr>
</tbody>
</table>
Address Needs of COVID-19 and Beyond

• Infection prevention and control in health care settings
• Broadband internet is an essential service and should be freely available to all
• Reorienting health care to primary care, including scaling up telemedicine, team-based care, and financial incentives for prevention will preserve and improve health
• Sustained funding for global health security will help tamp down the spread of COVID-19 and protect America’s health defenses against future disease threats
• CDC and state and local public health departments need sustained support
Keeping America Safe – Now and in the Future

• US public health system has suffered from years of underfunding

• Creative solutions needed to strengthen and sustain core capabilities of our public health system
  • Prevent and reduce likelihood of outbreaks – natural, accidental, or intentional
  • Detect threats early to slow or stop spread of outbreaks
  • Respond rapidly and effectively, including whole-of-government and public-private sector partnerships

• We can’t afford another multi-trillion dollar pandemic – but we can afford health security to prevent it
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AN INITIATIVE OF VITAL STRATEGIES

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