Our Path Forward: Building Resiliency with Innovation and Optimism

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National Association of County and City Health Officials
The Local Public Health Landscape

Figure 2.2 | Percent of United States population served by LHDs

- Small (<50,000): 9%
- Medium (50,000-499,999): 33%
- Large (500,000+): 6%

N=2,459

RI was excluded from the study
N=2,459
Death Toll of past Pandemics

200M
Black Death (Bubonic Plague)
1347-1351

The plague originated in rats and spread to humans via infected fleas. It took more than 200 years for the continent's population to recover.

56M
Smallpox
1520

Smallpox killed an estimated 90% of Native Americans. In Europe during the 1800s, an estimated 400,000 people were being killed by smallpox annually. The first ever vaccine was created to ward off smallpox.

40-50M
Spanish Flu
1918-1919

The death toll of this plague is still under debate as new evidence is uncovered, but many think it may have helped hasten the fall of the Roman Empire.

30-50M
Plague of Justinian
541-542
7 Human Coronaviruses

- First identified in the mid-1960s.
- 229E (alpha coronavirus)
- NL63 (alpha coronavirus)
- OC43 (beta coronavirus)
- HKU1 (beta coronavirus)
- MERS-CoV (Middle East Respiratory Syndrome, or MERS)
- SARS-CoV (Severe Acute Respiratory Syndrome, or SARS)
- SARS-CoV-2 (novel coronavirus disease 2019, or COVID-19)
Percentage of US Population Receiving 1 or More Doses of COVID-19 Vaccine
Through February 08, 2021

*Total population count used as denominator. Currently, few persons under age 18 are being vaccinated; this group represents ~22% of the US population.

Last Updated: Feb 08, 2021

Source(s): Unified COVID-19 Vaccine Dataset
Daily Change in COVID-19 Cases, United States
January 22, 2020* - February 9, 2021

27,030,549
Total Cases Reported

91,034
New Cases Reported

107,632
Current 7-Day Average
Feb 3, 2021 - Feb 9, 2021

139,423
Prior 7-Day Average
Jan 27, 2021 - Feb 2, 2021

-22.8%
Change in 7-Day Average

-56.7%
Change Since Peak Average

Peaks in New Cases and Highest 7-Day Moving Average

<table>
<thead>
<tr>
<th>Date</th>
<th>Cases</th>
<th>Date</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>Jan 8, 2021</td>
<td>314,093</td>
<td>Jan 8, 2021</td>
</tr>
<tr>
<td>2nd Peak</td>
<td>Jul 24, 2020</td>
<td>75,122</td>
<td>Jul 24, 2020</td>
</tr>
<tr>
<td>1st Peak</td>
<td>Apr 6, 2020</td>
<td>42,594</td>
<td>Apr 12, 2020</td>
</tr>
</tbody>
</table>
466,465
Total Deaths Reported

2,806
New Deaths Reported

3,029
Current 7-Day Average
Jan 27, 2021 - Feb 2, 2021

3,106
Prior 7-Day Average
Jan 20, 2021 - Jan 26, 2021

-2.5%
Change in 7-Day Average

-9.8%
Change Since Peak Average

**Peaks in New Deaths and Highest 7-Day Moving Average**

<table>
<thead>
<tr>
<th>Highest Daily Number of New Deaths</th>
<th>Highest 7-Day Moving Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Current</td>
<td>Jan 20, 2021</td>
</tr>
<tr>
<td>2nd Peak</td>
<td>Aug 12, 2020</td>
</tr>
<tr>
<td>1st Peak</td>
<td>Apr 6, 2020</td>
</tr>
</tbody>
</table>

Submission Dates:
- New Deaths
- 7-Day Moving Average - New Deaths
Lab Positivity and Hospitalization Rates - last 7 days
Demographic Trends of COVID-19 Cases
January 21, 2020 - February 08, 2021

Race/Ethnicity

- American Indian / Alaska Native, Non-Hispanic: 10,782 (4.3%)
- Asian, Non-Hispanic: 373,790 (3.6%)
- Black, Non-Hispanic: 1,261,676 (12.2%)
- Hispanic/Latino: 2,147,496 (20.7%)
- Multiple/Other, Non-Hispanic: 615,829 (6.0%)
- Native Hawaiian / Other Pacific Islander, Non-Hispanic: 36,667 (0.4%)
- White, Non-Hispanic: 5,792,667 (55.9%)

Age Group

- 0 - 4 Years: 385,755 (1.9%)
- 5 - 17 Years: 1,863,999 (9.3%)
- 18 - 29 Years: 4,502,462 (22.5%)
- 30 - 39 Years: 3,278,614 (16.4%)
- 40 - 49 Years: 2,996,565 (15.0%)
- 50 - 64 Years: 4,114,505 (20.6%)
- 65 - 74 Years: 1,552,669 (7.8%)
- 75 - 84 Years: 820,493 (4.1%)
- 85+ Years: 492,711 (2.5%)

Data Source: CDC COVID Data Tracker; Visualization: CDC CPR DEO Public Health Science Team
<table>
<thead>
<tr>
<th>Rate ratios compared to White, Non-Hispanic persons</th>
<th>American Indian or Alaska Native, Non-Hispanic persons</th>
<th>Asian, Non-Hispanic persons</th>
<th>Black or African American, Non-Hispanic persons</th>
<th>Hispanic or Latino persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases¹</td>
<td>1.8x</td>
<td>0.6x</td>
<td>1.4x</td>
<td>1.7x</td>
</tr>
<tr>
<td>Hospitalization²</td>
<td>4.0x</td>
<td>1.2x</td>
<td>3.7x</td>
<td>4.1x</td>
</tr>
<tr>
<td>Death³</td>
<td>2.6x</td>
<td>1.1x</td>
<td>2.8x</td>
<td>2.8x</td>
</tr>
</tbody>
</table>

Race and ethnicity are risk markers for other underlying conditions that affect health, including socioeconomic status, access to health care, and exposure to the virus related to occupation, e.g., among frontline, essential, and critical infrastructure workers.
Variants in the News

• In the United Kingdom (UK), a new variant called B.1.1.7 has emerged with an unusually large number of mutations. This variant spreads more easily and quickly than other variants.

• This variant was first detected in September 2020 and is now highly prevalent in London and southeast England. It has since been detected in numerous countries around the world, including the United States and Canada.

• In South Africa, another variant called 1.351 has emerged independently of the variant detected in the UK. This variant, originally detected in early October, shares some mutations with the variant detected in the UK. There have been cases caused by this variant outside of South Africa,

• In Brazil, a variant called P.1 emerged. This variant contains a set of additional mutations that may affect its ability to be recognized by antibodies.
What it all Means

• Viruses constantly change through mutation, and new variants of a virus are expected to occur over time.

• Multiple variants of the COVID-19 virus have been documented in the United States and globally during this pandemic.

• Most variants do not change how the virus behaves and many disappear.

• Follow the recommendations of wearing masks, staying at least 6 feet apart from others, avoiding crowds, ventilating indoor spaces, and washing hands often— to prevent the spread of this variant.

• CDC has been sequencing over 50,000 viruses under the SARS-CoV-2 Strain Surveillance network to monitor for variants and other mutations.
Americans Want A Vaccine That Works Above All Else, Not One That’s Rushed

Other than safety, when thinking about a vaccine for COVID-19, is it MOST important to you that it is...

- Effective: 65%
- Well-researched: 42%
- Trusted: 39%
- Accessible: 26%
- Affordable: 15%
- Developed quickly: 13%

How new is mRNA vaccine?

• mRNA technology was discovered over 30 years ago and has been studied for vaccine purposes for nearly two decades.

• Scientists have been working on a coronavirus vaccine since the SARS and MERS outbreaks but funding dried up. (No funding, no scientific advancements)

• Early stage clinical trials using mRNA vaccines have been carried out for influenza, Zika, rabies and cytomegalovirus (CMV)

• Recent technological advancements in RNA biology and chemistry, as well as delivery systems have made improvement to vaccine stability, safety and effectiveness
A check on our Local Health Departments’ health status

- Workforce
- Capacity
- Legal & Policy Impacts
- Training
- Mental Health
- Supports & Services
Preparedness Profile – Administrative Preparedness

• 2018 Preparedness Profile Quantitative Survey
Preparedness Profile- Administrative Preparedness

• 2020 Preparedness Profile Qualitative Interviews
  • From Large, Midwestern LHD
    “I have a staff. There's some emergency preparedness departments that are one person. Sometimes I think I shouldn't complain. But then again, we're so much larger, and we're expected to be responsible for so much more. Not to mention, we have mutual aid agreements with the other local public health departments in the metro area... So we're kind of thought of as a backup system for a lot of these other counties, too.”

  • From a medium, Western LHD
    "...Our total funding that we get for preparedness per year that pays for my time and all of the resources and overhead and whatever else we might need to do preparedness anywhere in the county for a year is $61,000."
Most LHDs indicated they have at least one expedited procedure in place to address administrative needs during a public health emergency. Compared to 2016, more LHDs indicated having these procedures in place either informally or formally.

However, more than one-quarter of LHDs reported not having workforce surge procedures in 2018. In addition, approximately 20% were unsure whether they have these procedures in place.

Small LHDs were most likely to not have any procedures in place. The most common barrier to administrative preparedness reported was lack of dedicated resources, followed by lack of available tools and resources.

### Expedited Procedures for Administrative Preparedness

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Not in place</th>
<th>Informally in place</th>
<th>Formally in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving and using emergency funding</td>
<td>10%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Reducing the time required to contract for or procure necessary goods and services</td>
<td>18%</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Allocating financial resources to pay for staff during an emergency</td>
<td>19%</td>
<td>42%</td>
<td>39%</td>
</tr>
<tr>
<td>Reducing the time required to hire staff or reassign existing staff</td>
<td>27%</td>
<td>39%</td>
<td>33%</td>
</tr>
</tbody>
</table>

n=289–309

Administrative Preparedness is the process of ensuring that the fiscal, legal, and administrative authorities/practices that govern funding, procurement, contracting, and hiring are appropriately integrated into all stages of emergency preparedness/response.
LHDs conducted preparedness planning activities across a broad range of topic areas. Overall, LHDs reported conducting preparedness planning in the past year across many topic areas. The broadest range of activities conducted were focused on community preparedness, infectious disease, emergency risk communications, and medical countermeasure dispensing. Activities conducted included planning, training, drills/exercises, coordination with partners, and community outreach.

LHDs most often reported not conducting any activities in climate change/adaptation, cybersecurity, critical infrastructure protection issues, and terrorist threats. These findings have remained consistent since 2015.
Project Public Health Ready (PPHR)

- PPHR is a criteria-based recognition and training program that assesses local health department capacity and capability to plan for, respond to, and recover from public health emergencies.
- More than 520 agencies have been PPHR recognized.
- PPHR is jointly funded by CDC and NACCHO. CDC allots funds for staff time and NACCHO accepts applicant fees for reviewer meetings.
- PPHR-ORR reciprocity – PHEP provided guidance that agencies with active PPHR-recognition could be exempt from the planning elements of ORR assessment process (Note: the exemption is at the discretion of the state DOH)
- PHAB-PPHR alignment - NACCHO and PHAB agreed at the most recent PHAB expert panel meeting to some form of reciprocity and have agreed to work moving forward regarding the logistics
Our Future is NOW

Diversified Methods for Funding
Public Private Partnerships
    Academic, Business, Community
Enhanced Workforce Skills Development
    Strategic Negotiations, Conflict Resolution, Legislative Advocacy
    Budget, Policy, People & Project Management
Cross Jurisdiction Approaches
Technology Support
Local Acquired and Reported Data
COLLABORATION

- Teamwork
- Trust
- Inspiration
- Exchange
- Share
- Success
- Support
- Assist