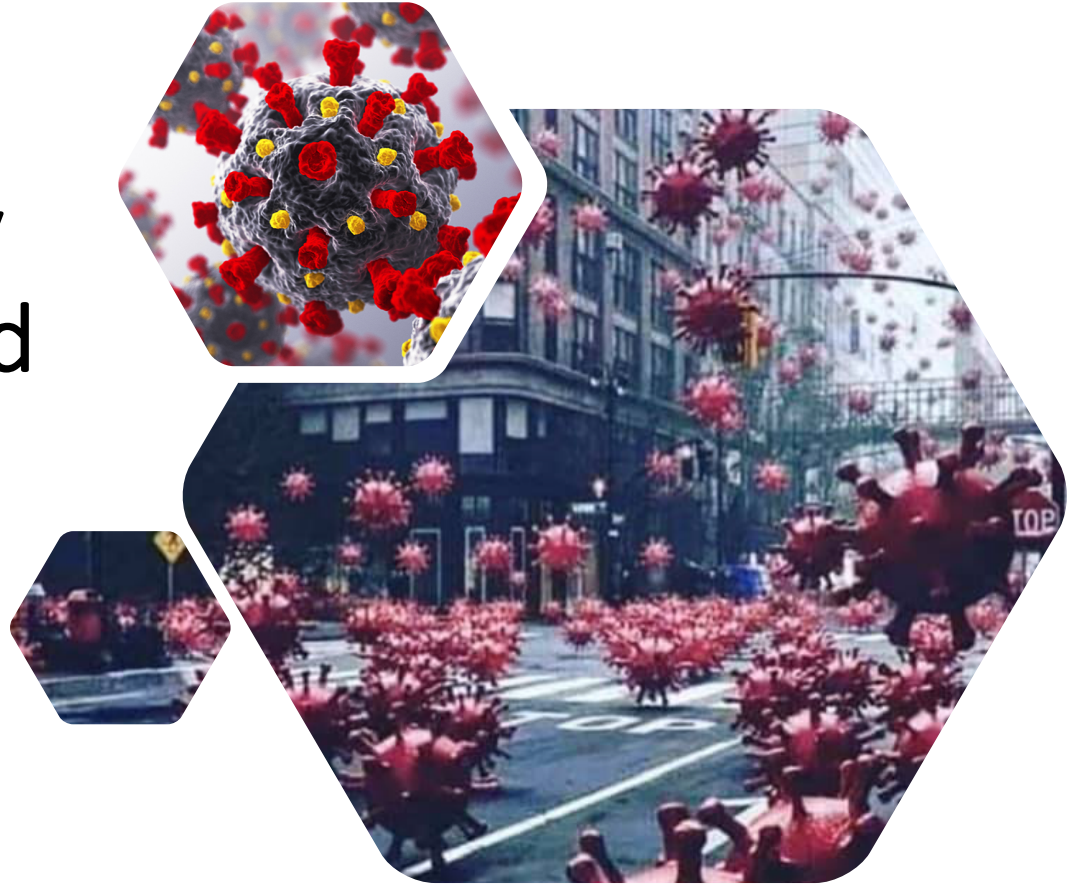


Our Path Forward: Building Resiliency with Innovation and Optimism

Dr. Oscar Alleyne

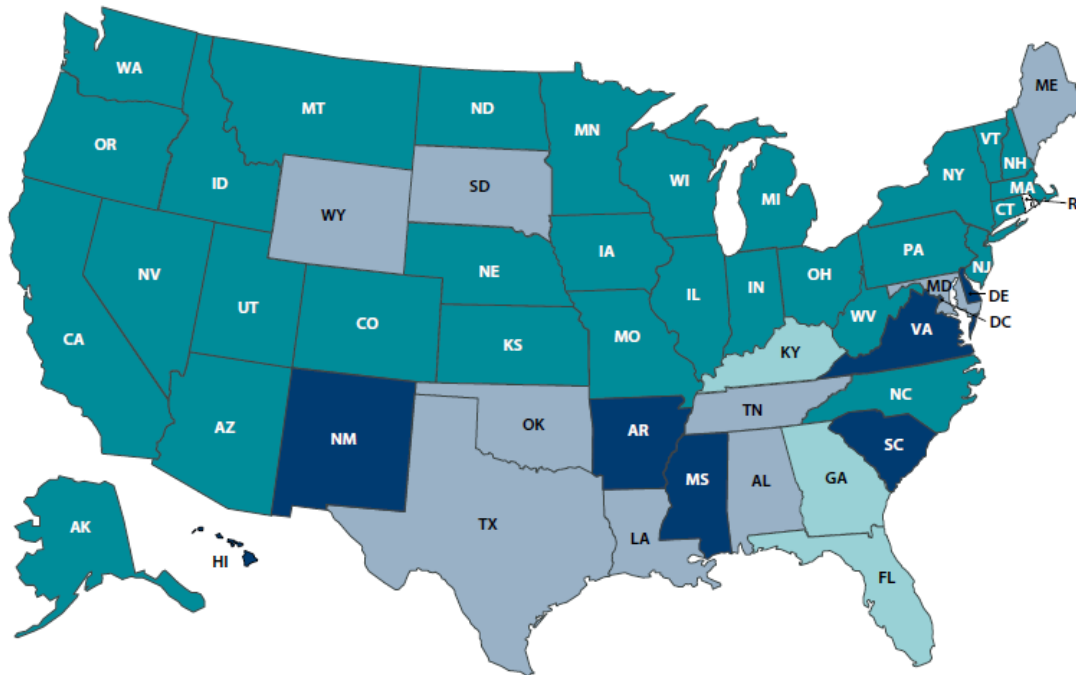
**National Association of
County and City Health Officials**



The Local Public Health Landscape

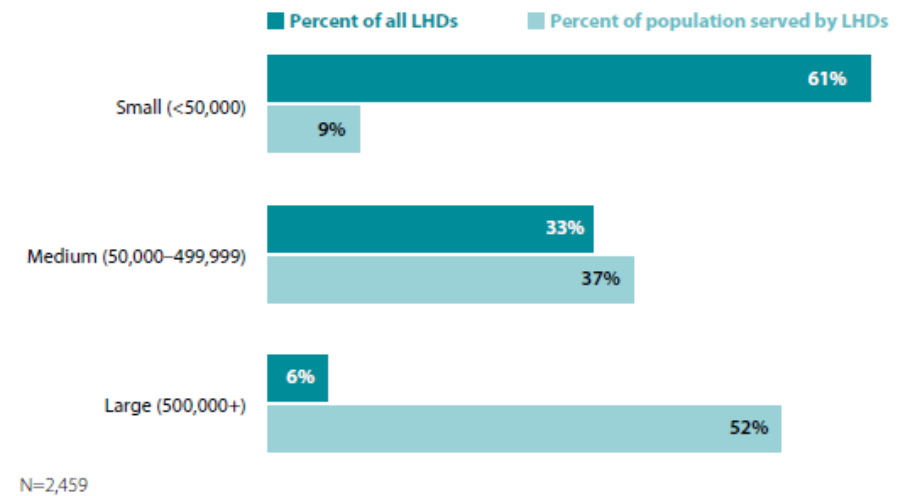
NACCHO
National Association of County & City Health Officials

- Local (all LHDs in state are units of local government)
- State (all LHDs in state are units of state government)
- Shared (all LHDs in state governed by both state and local authorities)
- Mixed (LHDs in state have more than one governance type)



RI was excluded from the study
N=2,459

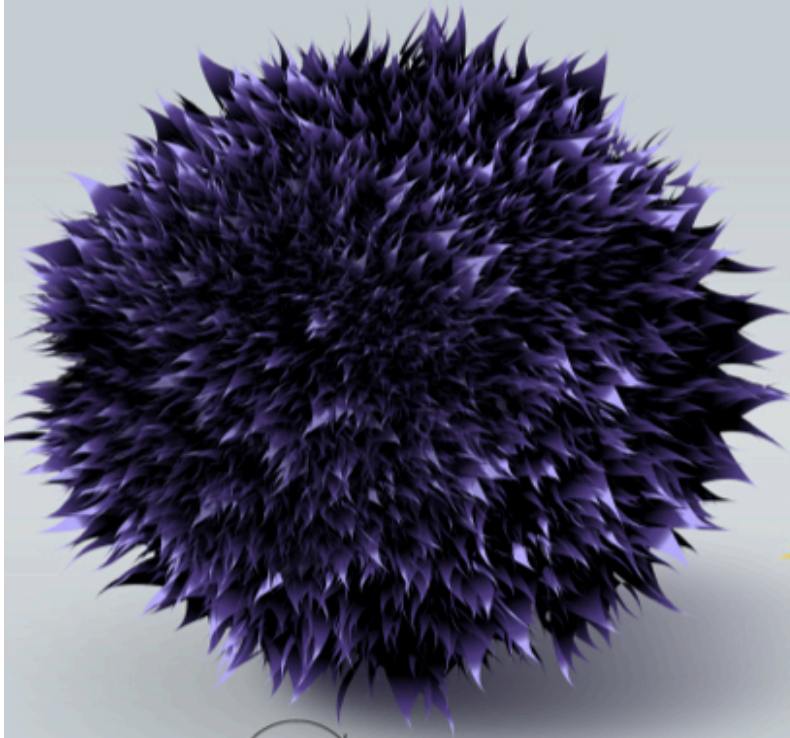
Figure 2.2 | Percent of United States population served by LHDs



Death Toll of past Pandemics

200M

Black Death (Bubonic Plague)
1347-1351

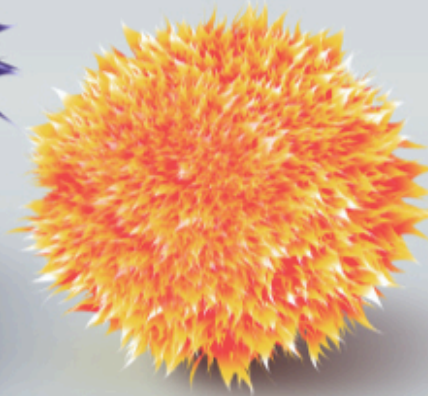


The plague originated in rats and spread to humans via infected fleas.

↑ The outbreak wiped out 30-50% of Europe's population. It took more than 200 years for the continent's population to recover.

56M

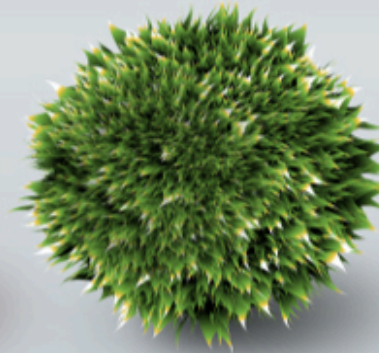
Smallpox
1520



↑ **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



30-50M

Plague of Justinian
541-542

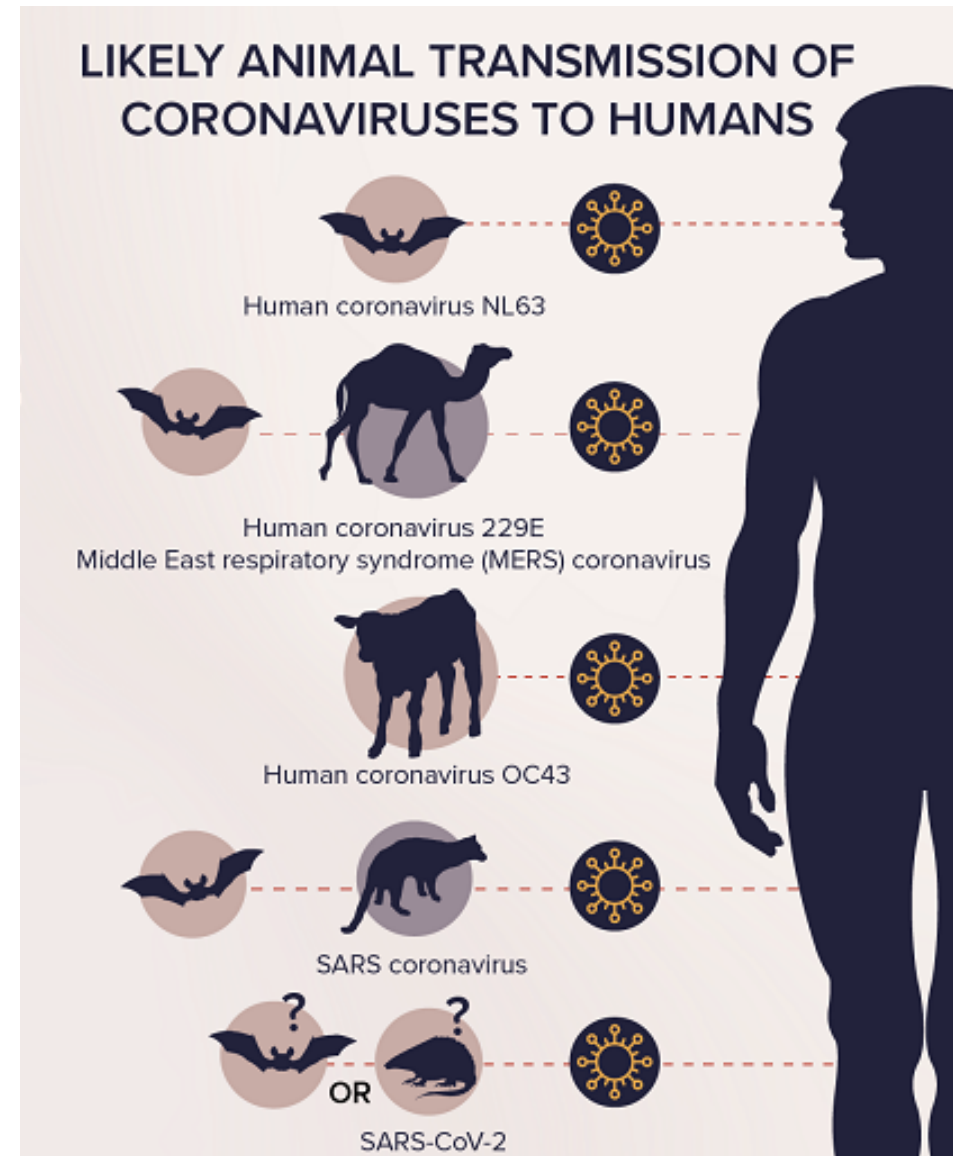


↑ The death toll of this plague is still under debate as new evidence is uncovered, but many think it may have helped hasten the fall of the Roman Empire.

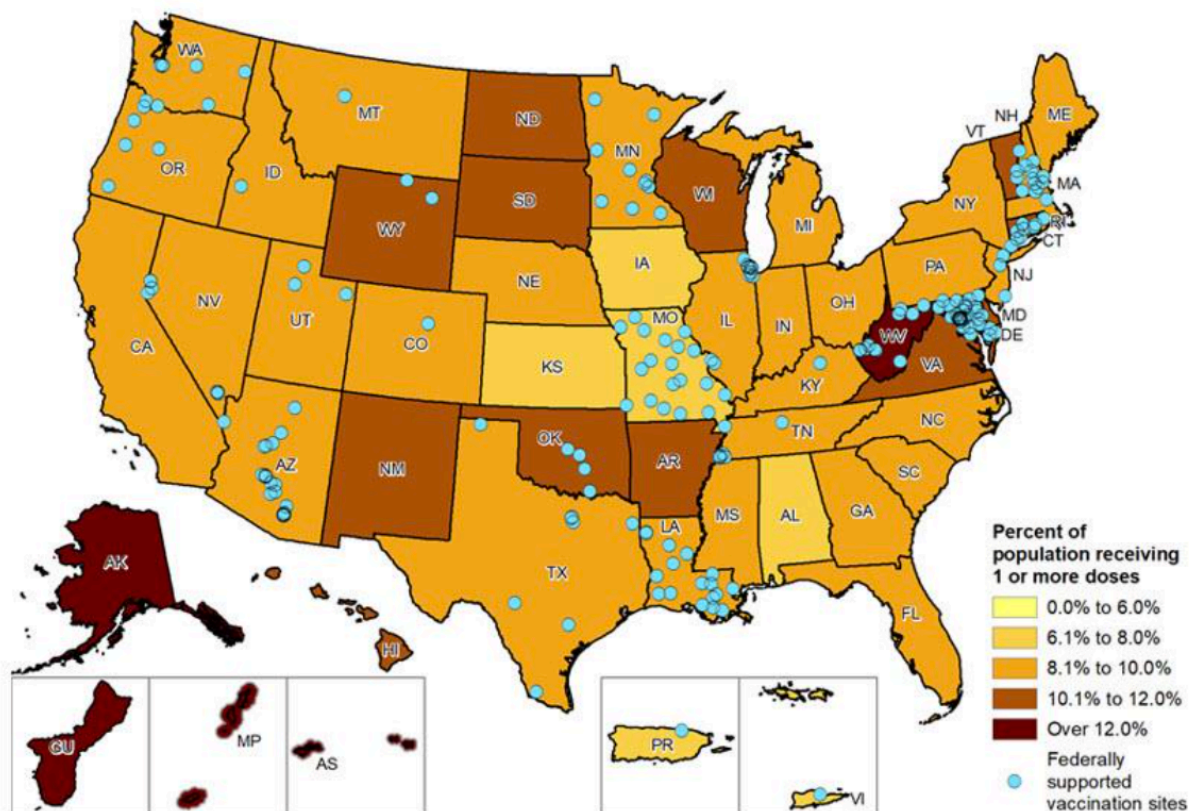


7 Human Coronaviruses

- 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

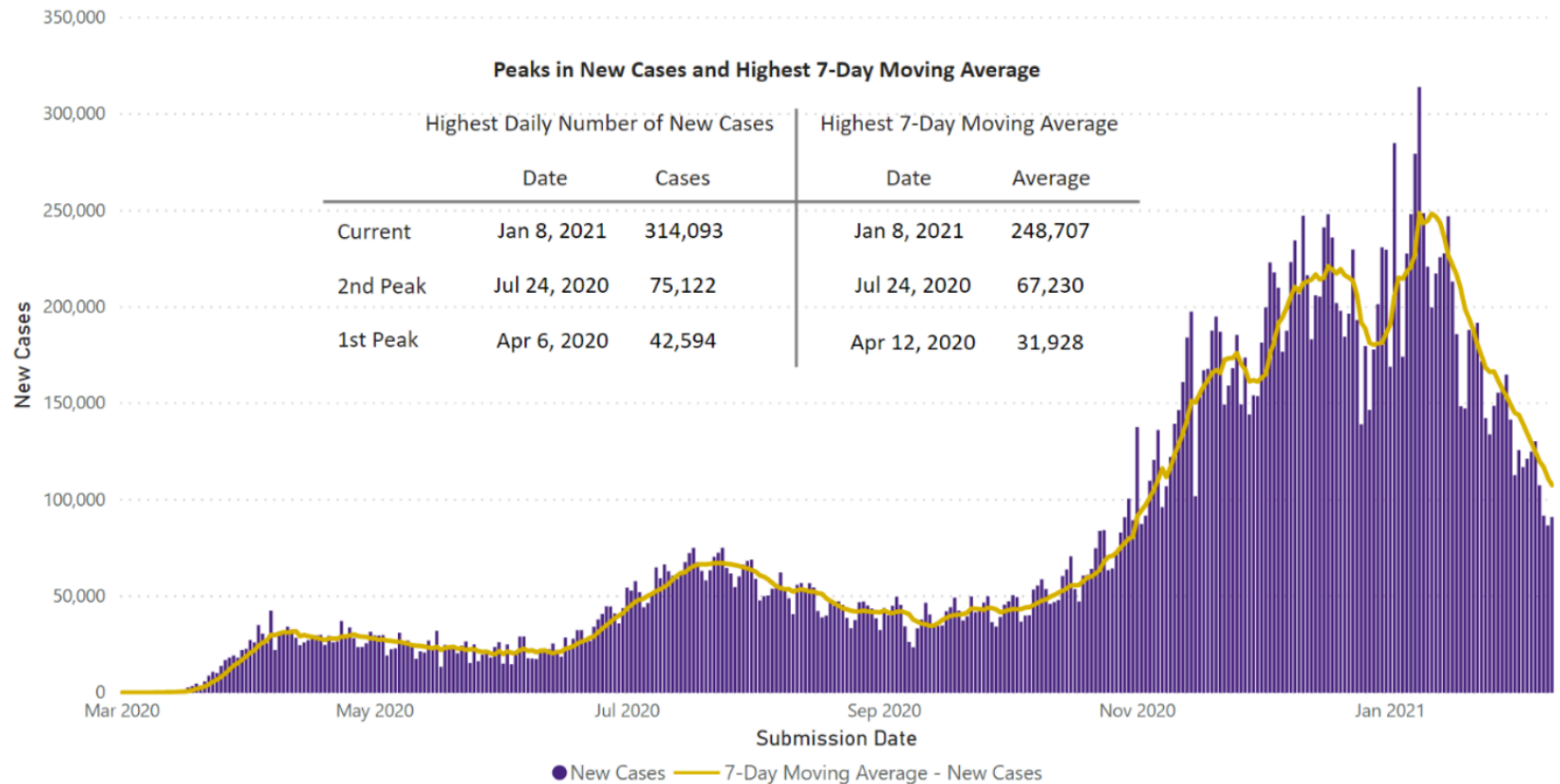
Jan 27, 2021 - Feb 2, 2021

-22.8%

Change in 7-Day Average

-56.7%

Change Since Peak Average



Daily Change in COVID-19 Deaths, United States

January 22, 2020* - February 9, 2021



466,465

Total Deaths Reported

2,806

New Deaths Reported

3,029

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

3,106

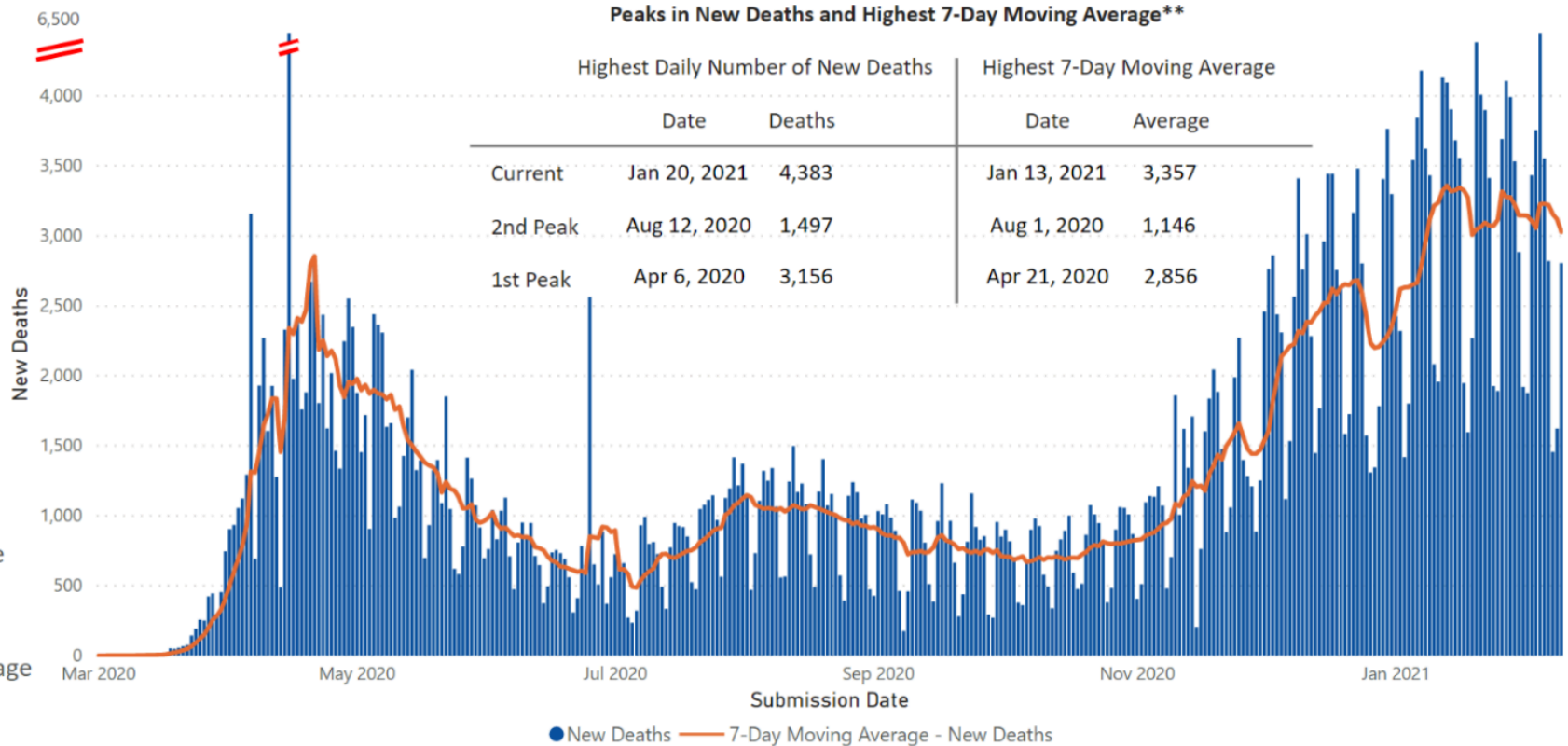
Prior 7-Day Average
Jan 27, 2021 - Feb 2, 2021

-2.5%

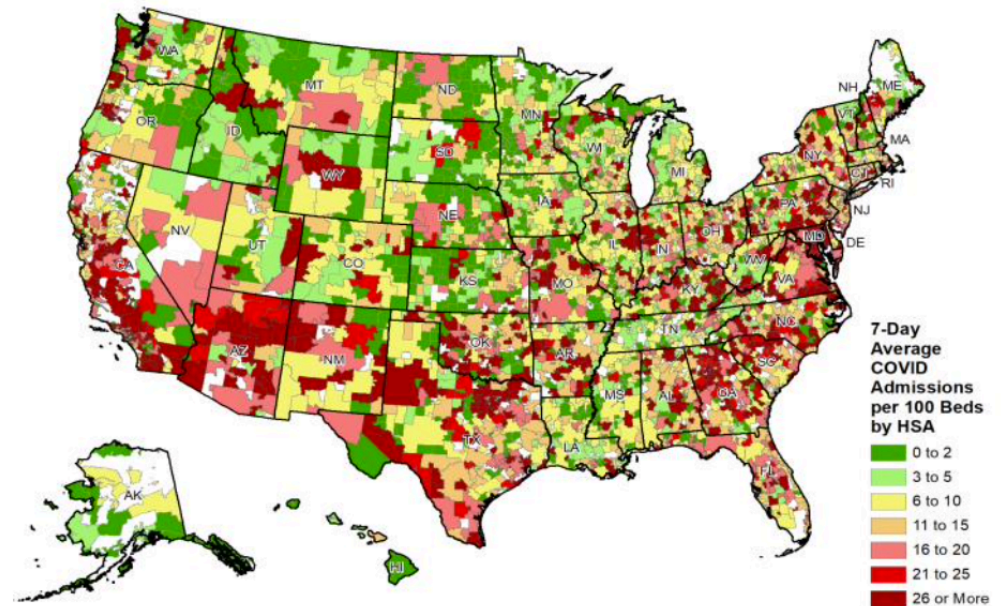
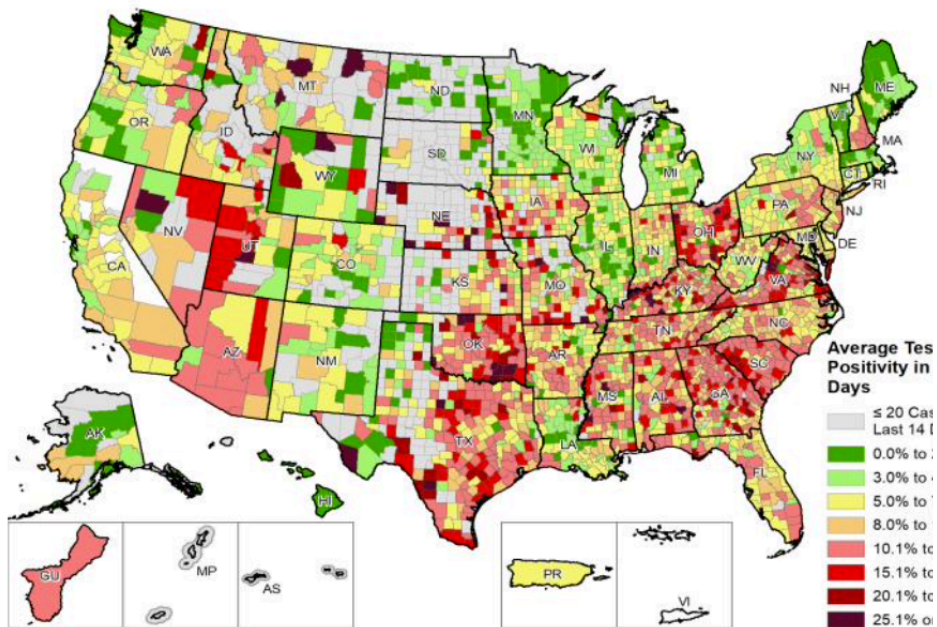
Change in 7-Day Average

-9.8%

Change Since Peak Average

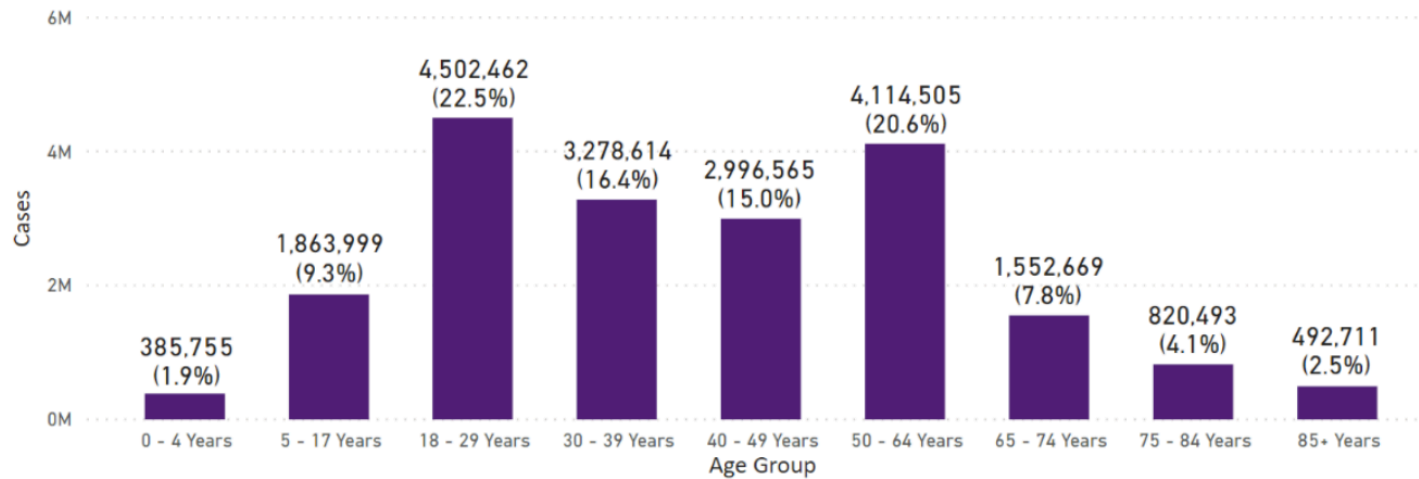
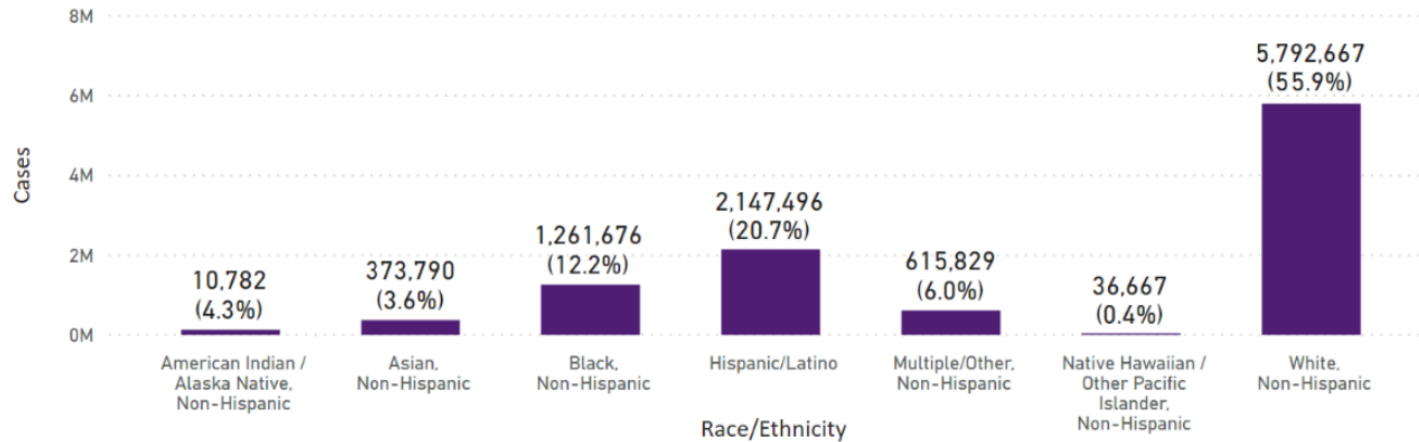


Lab Positivity and Hospitalization Rates -last 7 days



Demographic Trends of COVID-19 Cases

January 21, 2020 - February 08, 2021



Data Source: CDC COVID Data Tracker; Visualization: CDC CPR DEO Public Health Science Team

COVID-19 Cases, Hospitalizations, and Deaths, by Race/Ethnicity

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases ¹	1.8x	0.6x	1.4x	1.7x
Hospitalization ²	4.0x	1.2x	3.7x	4.1x
Death ³	2.6x	1.1x	2.8x	2.8x

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

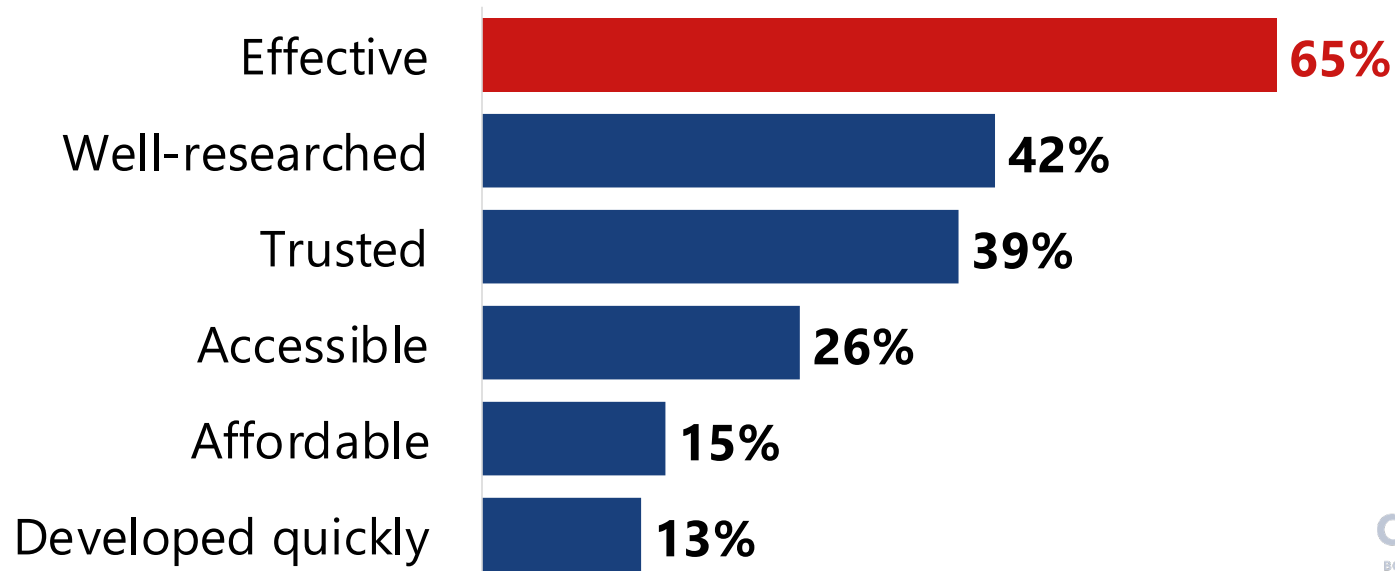
- In the United Kingdom (UK), a new variant called **B.1.1.7** has emerged with an unusually large number of mutations. This variant spreads more easily and quickly than other variants.
- This variant was first detected in September 2020 and is now highly prevalent in London and southeast England. It 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...?



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BOLD SOLUTIONS FOR HEALTHIER COMMUNITIES.

<https://www.debeaumont.org/news/2020/poll-reveals-covid19-language-to-overcome-political-divide-and-save-lives/>

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

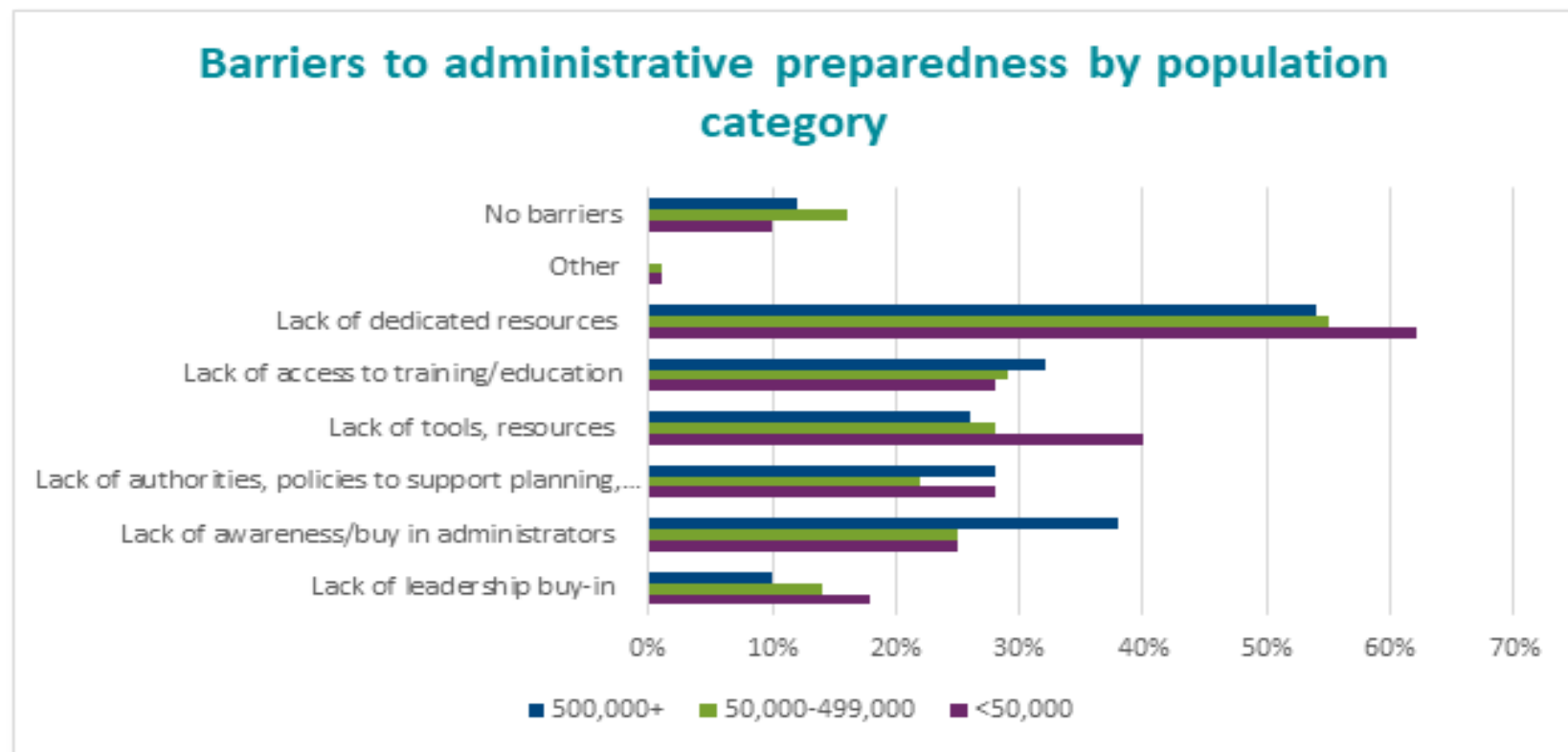
Mental Health

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 reported having procedures in place for administrative preparedness

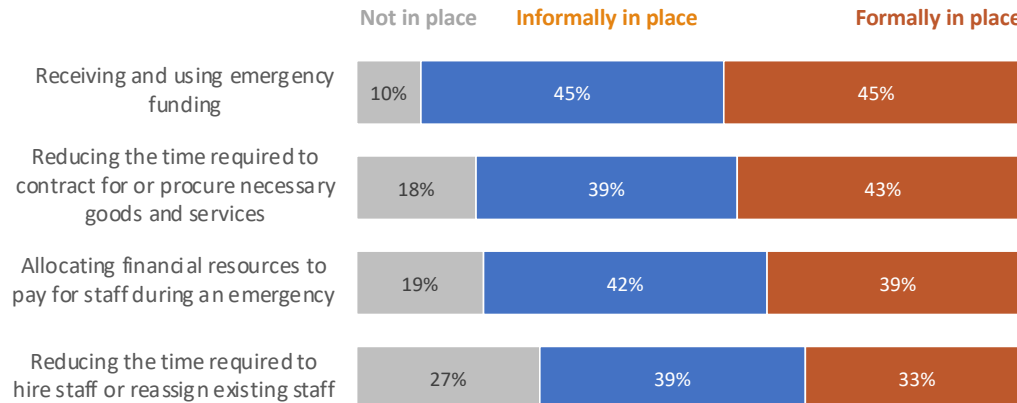
Most LHDs indicated they have at least one expedited procedure in place to address administrative needs during a public health emergency. Compared to 2016, more LHDs indicated having these procedures in place either informally or formally.

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

Percent of respondents (excluding those reporting not sure)



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.

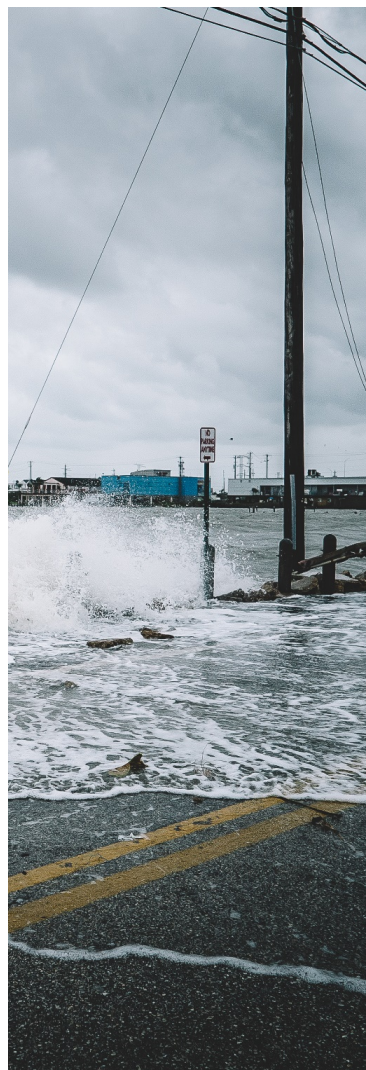
LHDs conducted preparedness planning activities across a broad range of topic areas

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.

Top and Bottom Four LHD Preparedness Activities by Topic Area
Percent of respondents

	Preparedness Planning	Training	Drills/ Exercises	Coordinating with Partners	Community Outreach
Medical countermeasure dispensing	76%	61%	57%	59%	28%
At-risk/vulnerable populations	74%	37%	33%	46%	43%
Healthcare preparedness	73%	49%	46%	61%	25%
Infectious disease	72%	56%	44%	60%	33%
Terrorist threats	47%	23%	16%	21%	7%
Critical infrastructure protection	44%	15%	11%	27%	12%
Cybersecurity	33%	23%	8%	11%	3%
Climate change/adaptation	32%	15%	11%	18%	13%



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

