Overview of COVID-19 and CDC's Response to the Pandemic with a Highlight of Federal COVID-19 Resources

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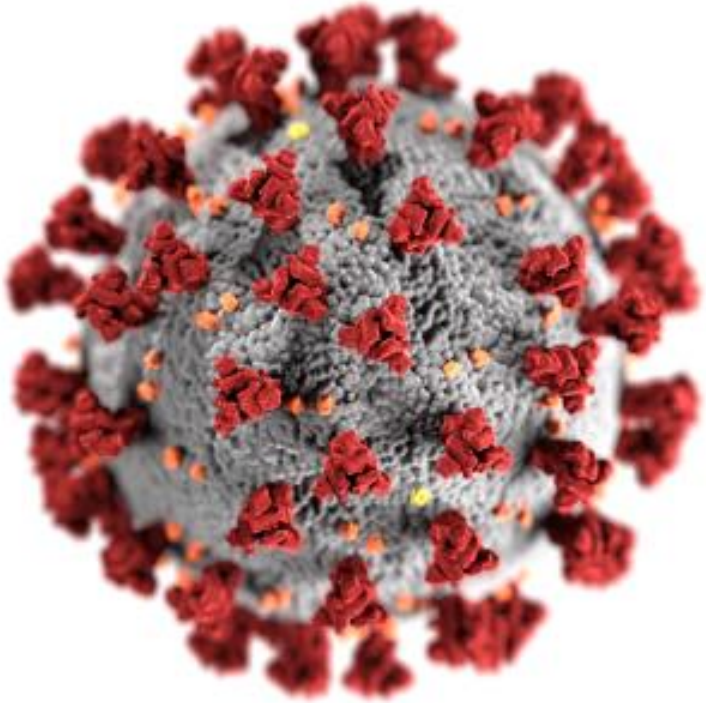
Office of Science, Centers for Disease Control and Prevention

May 5, 2020

Coronavirus 101 & CDC Public Health Emergency Response

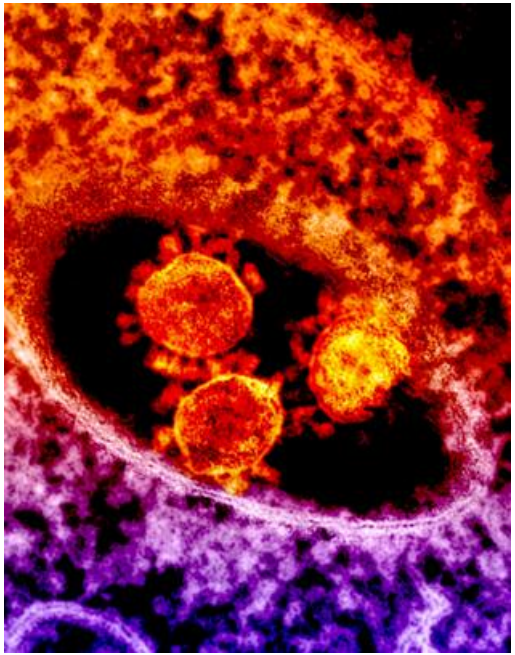
Joanne Cono, MD, ScM



cdc.gov/coronavirus

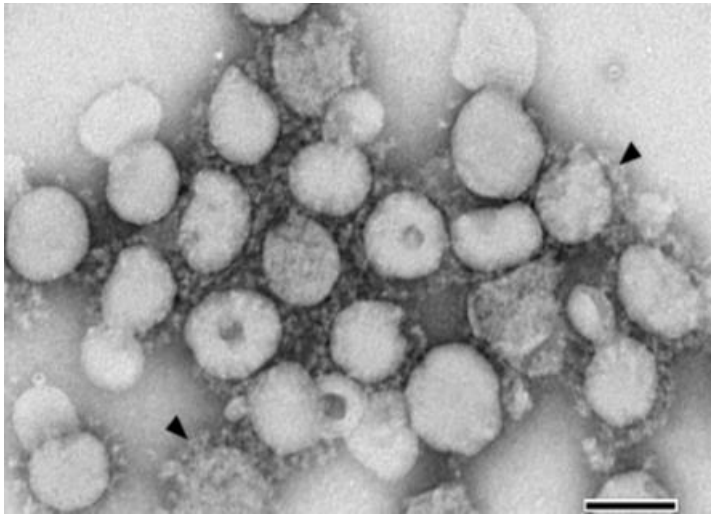
Coronavirus (CoV) Background

- Large family of viruses that cause respiratory illness
  - Belongs to *Coronaviridae* family
- First isolated in the 1960s
- Named for the crown-like spikes on surface
  - 4 subgroupings (alpha, beta, gamma, delta)
- Some can spread between among animals and people (zoonotic)



Severe Acute Respiratory Syndrome (SARS-CoV)

- November 2002 - Guangdong, China
- Countries: 29
- Cases worldwide: 8,000+ , (2002–03)
- Deaths: 774 deaths
- Significant person-to-person spread
- No known human cases since 2004



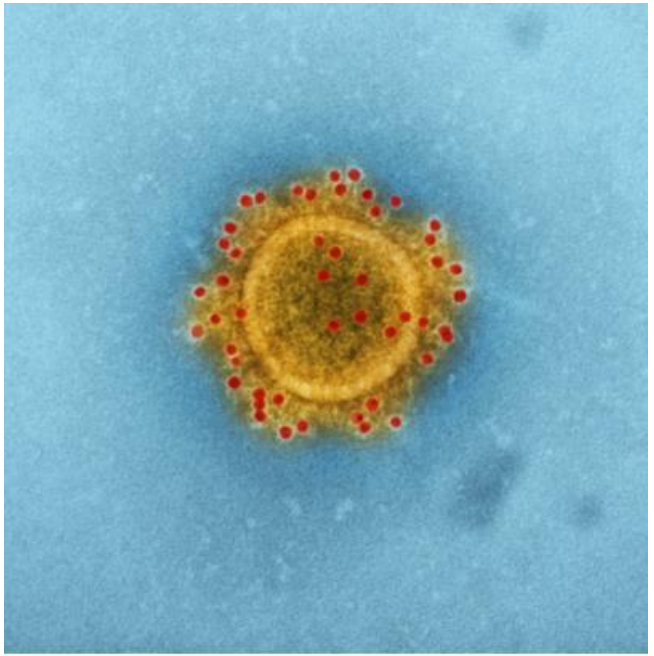
CDC Public Health Image Library; C.D. Humphrey and T.G. Ksiazek.

Robert Verso, Creative Commons

Middle East Respiratory Syndrome (MERS-CoV)

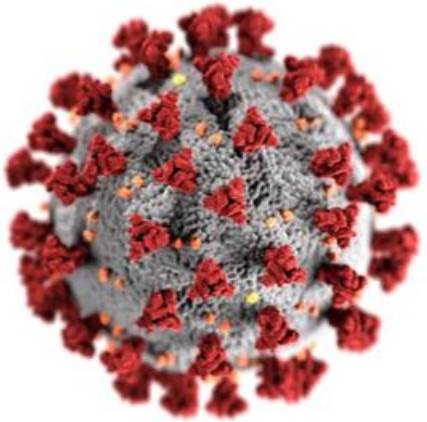
- November 2012 – Saudi Arabia
- Countries: 27
- Cases worldwide: 2,400+, (10/2019)
- Deaths: 850+
- Limited person-to-person spread
- 2 US cases in 2014 among healthcare professionals

Sandra Cohen-Rose and Colin Rose, Creative Commons



CDC Public Health Image Library; National Institute of Allergy and Infectious Diseases (NIAID)

COVID-19: Emergence

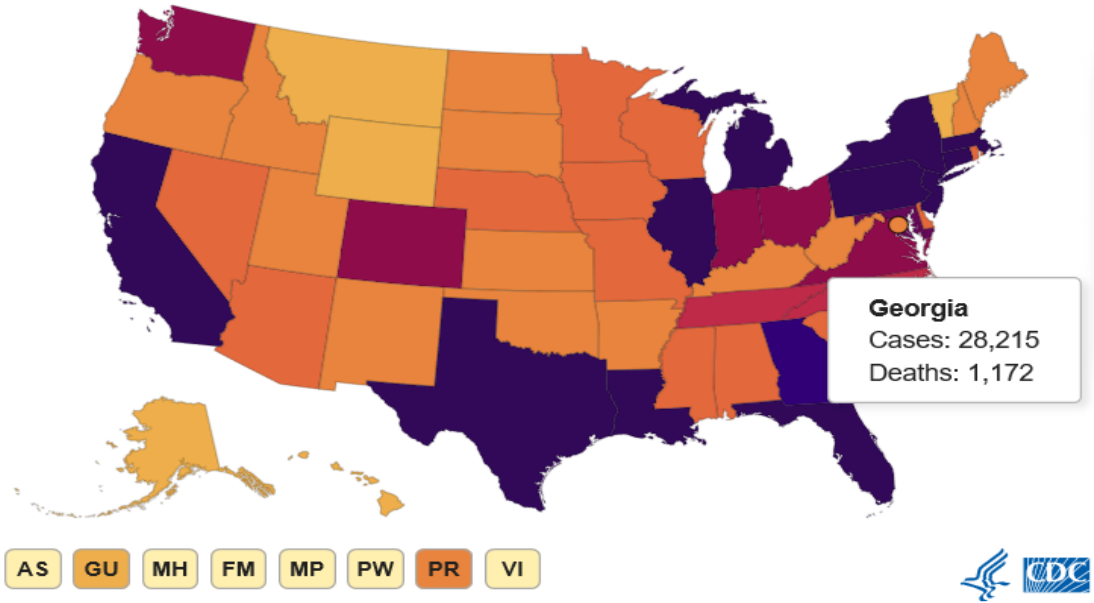


- Identified in Wuhan, China in December 2019
- Caused by the virus SARS-CoV-2
- Early on, many patients were reported to have a link to a large seafood and live animal market
- Later patients did not have exposure to animal markets
  - Indicated person-to-person spread
- Travel-related exportation of cases reported
  - First U.S. case: January 21, 2020
- CDC is reporting confirmed COVID-19 cases in the U.S. online at www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html

Cases & Deaths by State

This map shows COVID-19 cases and deaths reported by U.S. states, the District of Columbia, and other U.S.-affiliated jurisdictions. Each jurisdiction's health department reports how much the virus has spread in their community.

20 states report more than 10,000 cases of COVID-19.



Reported Cases

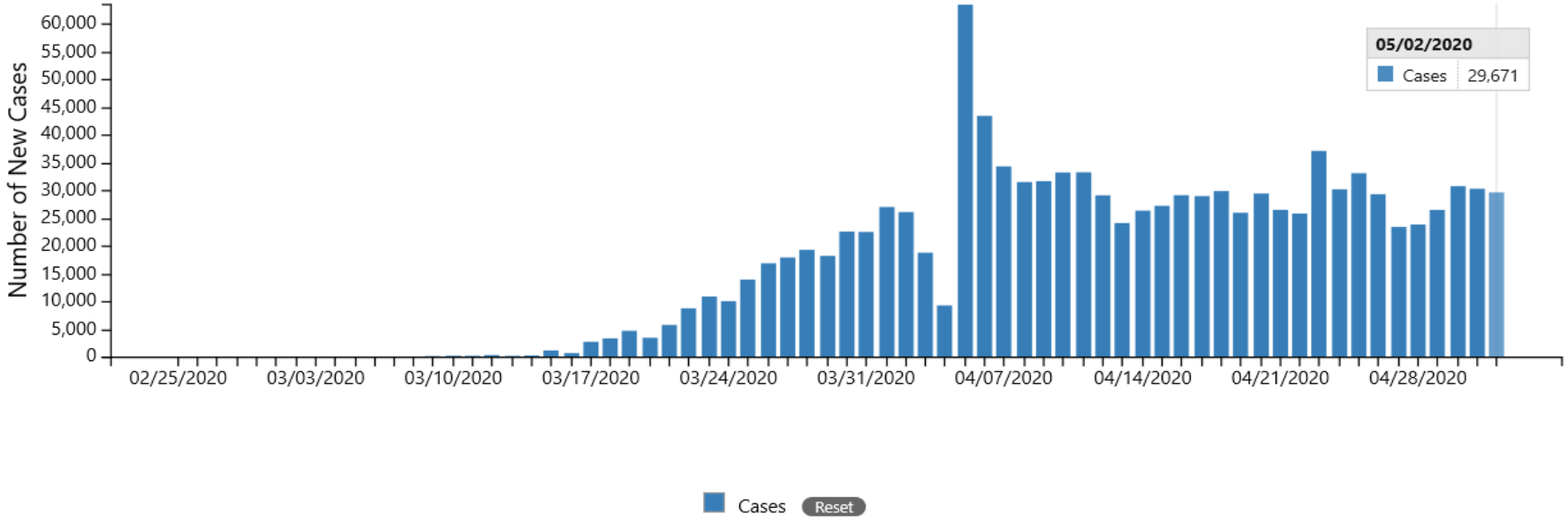
- 0 to 100
- 101 to 1,000
- 1,001 to 5,000
- 5,001 to 10,000
- 10,001 to 15,000
- 15,001 to 20,000
- 20,001 to 25,000
- 25,001 or more

May 2, 2020

www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html

New Cases by Day

The following chart shows the number of new cases of COVID-19 reported by day in the U.S. since the beginning of the outbreak.



www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html

COVID-19: How It Spreads

- Mainly from person to person
  - Between people who are in close contact with one another (within about 6 feet)
  - By respiratory droplets an infected person coughs or sneezes
- May be spread by people who are not showing symptoms
  - Asymptomatic
  - Presymptomatic (48-72 hours)

How long can SARS-CoV-2 survive in the environment?

- Under controlled conditions...
  - Air < 3 hours
  - Copper 4 hours
  - Cardboard 24 hours
  - Plastic 2-3 days
  - Stainless Steel 2-3 days

- Exposure to sunlight, heat, or cold may affect these survival times.

N. van Doremalen et al., N Engl J Med 2020; 382:1564-1567; DOI: 10.1056/NEJMc2004973

COVID-19: Symptoms & Complications

Symptoms may include

- Fever
- Cough
- Shortness of breath
- Shaking chills
- Muscle ache
- Headache
- Sore throat
- Loss of taste or smell

Estimated incubation period

- 2 to 14 days

Wide range of illness severity

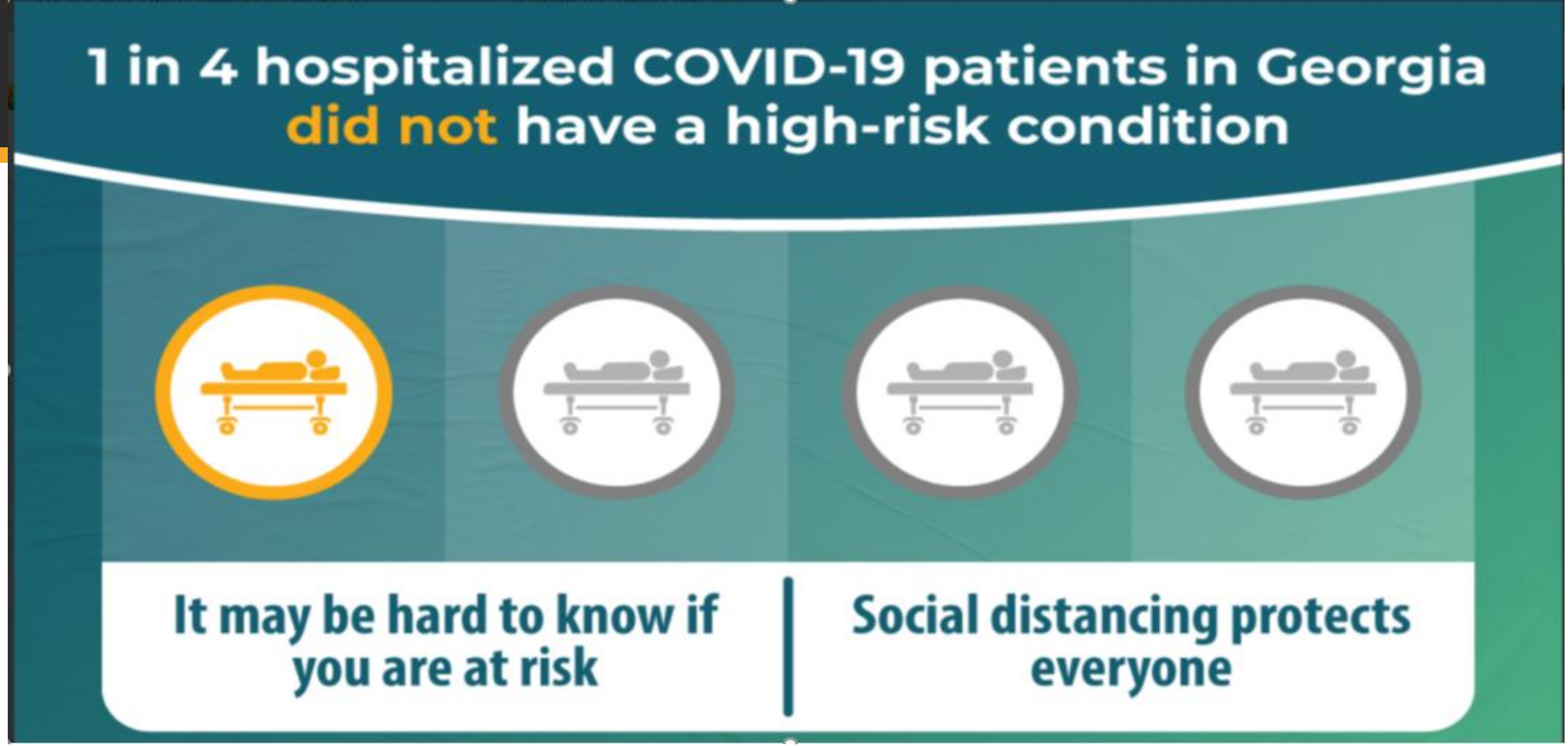
- Mild to severe illness
- Can result in death

Complications may include

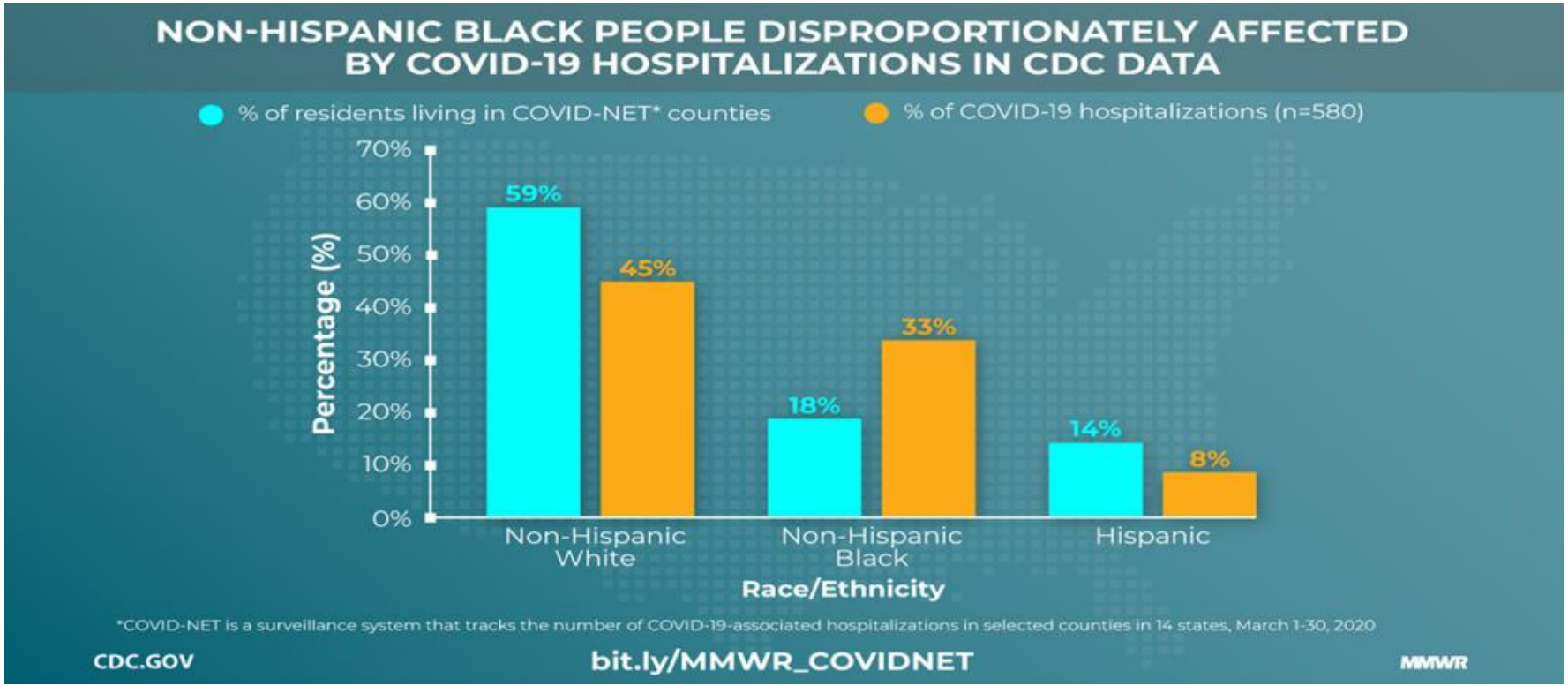
- Pneumonia
- Respiratory failure
- Multisystem organ failure

People at Higher Risk for Severe Illness

- People 65 years and older
- People who live in a nursing home or long-term care facility
- People of all ages with underlying medical conditions, particularly if not well controlled, including:
  - chronic lung disease or moderate to severe asthma
  - serious heart conditions
  - immunocompromise
  - severe obesity (body mass index [BMI] of 40 or higher)
  - diabetes
  - chronic kidney disease undergoing dialysis
  - liver disease

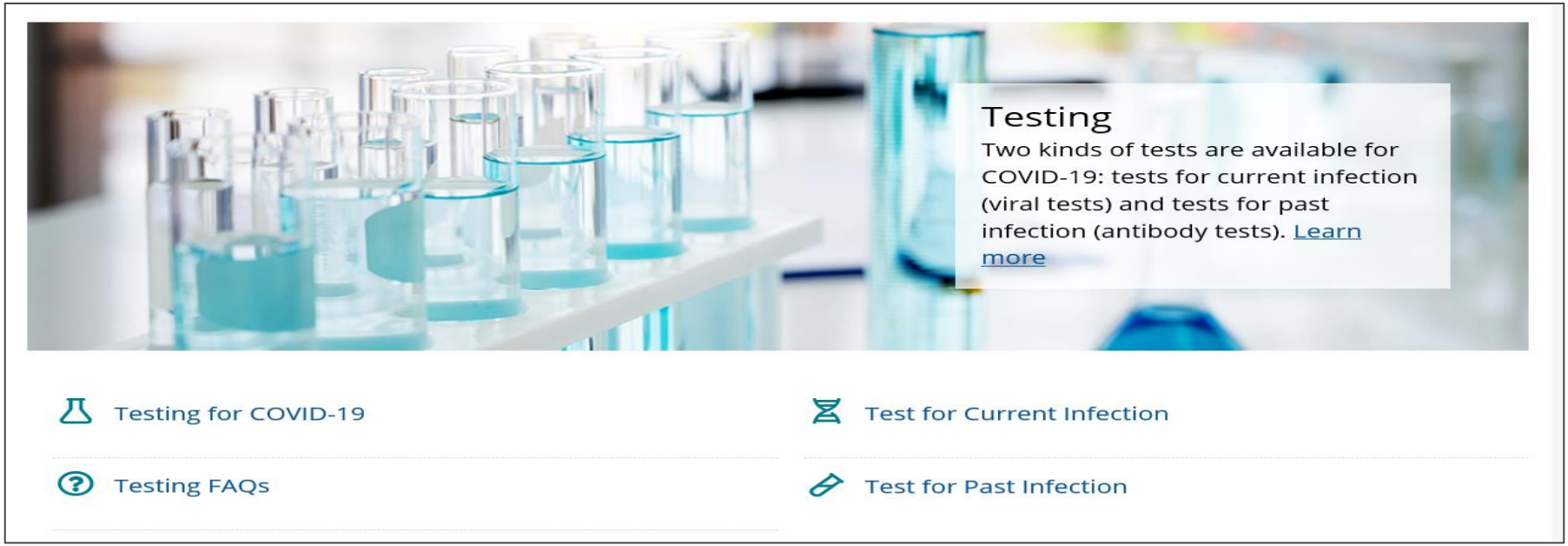


CDC Twitter, April 29, 2020



- 1,482 laboratory-confirmed COVID-19–associated hospitalizations reported through COVID-NET.
- Race/ethnicity data was available for 580 patients.

https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e3.htm?s_cid=mm6915e3_e



https://www.cdc.gov/coronavirus/2019-ncov/testing/

- Consult local public health authorities' websites for local testing information

COVID-19: Prevention & Treatment

Everyday preventive actions for respiratory illnesses

- Avoid touching your eyes, nose, and mouth.
- Avoid close contact with people who are sick.
- Stay home when you are sick.
- Cover your cough or sneeze.
- Clean and disinfect frequently touched objects and surfaces.
- Wash your hands often with soap and water for at least 20 seconds.
  - Use an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not readily available.

Treatment

- No specific antiviral treatment *licensed* for COVID-19
- May, 1, 2020: Remdesivir, antiviral, to treat adults and children hospitalized with severe disease.
- Supportive care
  - Relieve symptoms
  - Manage pneumonia and respiratory failure

COVID-19: Social Distancing

- Also called “physical distancing”; keep space between yourself and others
- Can help slow ongoing spread of respiratory illnesses, like COVID-19
- This can include:
  - Personal protective measures
    - Maintain 6 ft. from others in public
    - Stay home if exposed or sick
  - Community measures
    - Postpone or cancel mass gatherings
    - Dismissal of schools
    - Encourage telework

CORONAVIRUS DISEASE 2019
(COVID-19)
Your cloth face covering protects them.
Their cloth face covering protects you.
CDC
cdc.gov/coronavirus

COVID-19: What To Do if You Are Sick

- Stay home. Most people recover at home without needing medical care.
- Stay away from people as much as possible.
- Keep your distance and cover your coughs and sneezes if you must be around other people.
- Clean your hands often.
- Avoid sharing personal household items.
- Clean and disinfect frequently touched objects and surfaces.
- Monitor your symptoms for emergency warning signs, including trouble breathing.
- Get medical care quickly, but call ahead.

Discontinue home isolation

New, May 4, 2020

For most people:

- 10 days after illness onset and at least 3 days (72 hours) after recovery
- Recovery is resolution of fever without the use of fever-reducing medications with progressive improvement or resolution of other symptoms.
- Some special circumstances; see https://www.cdc.gov/coronavirus/2019-ncov/community/strategy-discontinue-isolation.html

CDC Emergency Operations Center, before social distancing. Photo credit: James Gathany, CDC

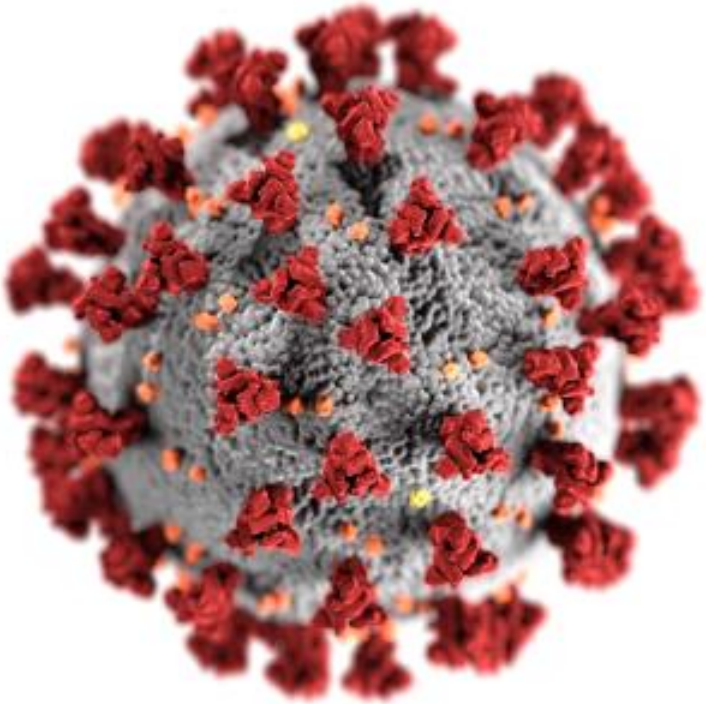
National Center for Immunization and Respiratory Diseases, CDC

Information about the COVID-19 pandemic and CDC's public health emergency response changes rapidly. Please check the CDC website frequently for new information and updates.

National Center for Immunization and Respiratory Diseases, CDC

Overview of Federal COVID-19 Resources

Martha Knuth, MLIS

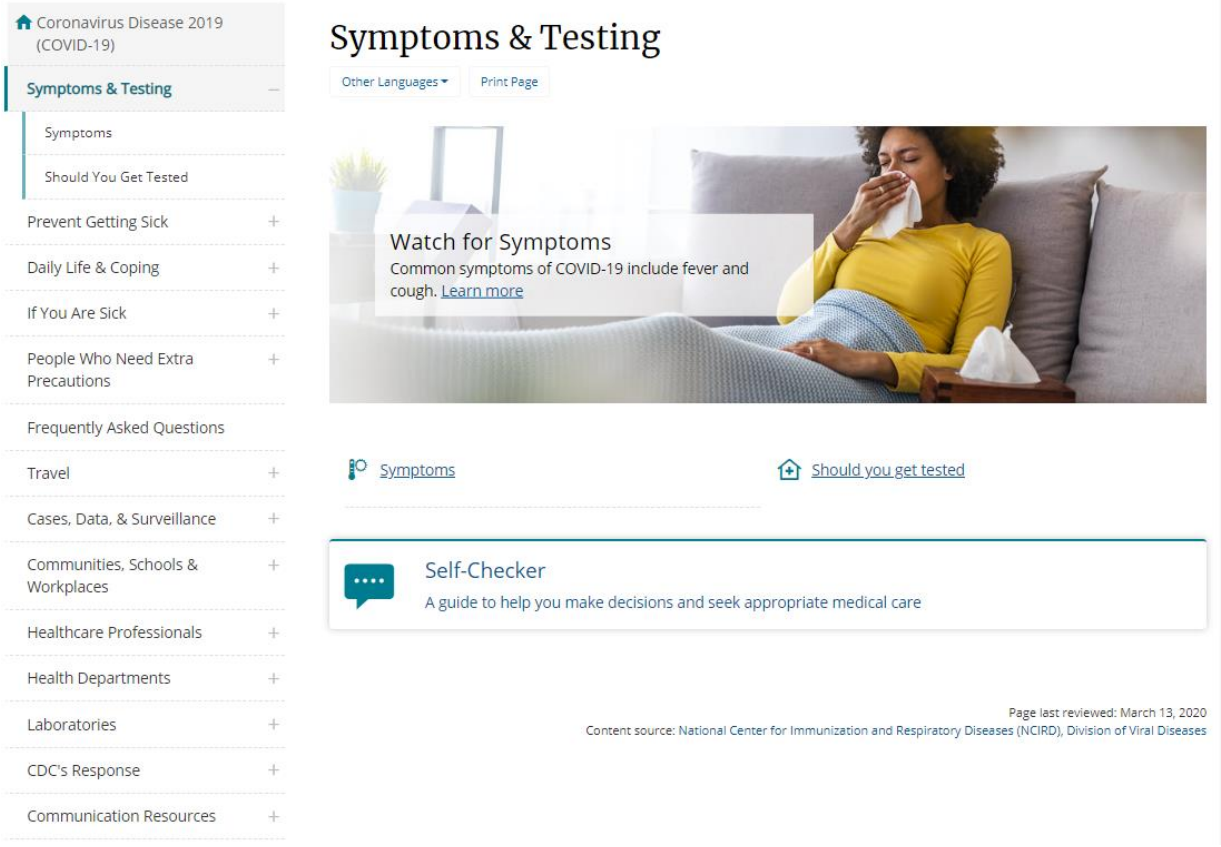


cdc.gov/coronavirus

Tidal Wave of Information

- **Plethora of new information being created and updated daily**
- **How do we find:**
  - The best information
  - The latest information

CDC's COVID-19 Website



CDC's Frequently Asked Questions

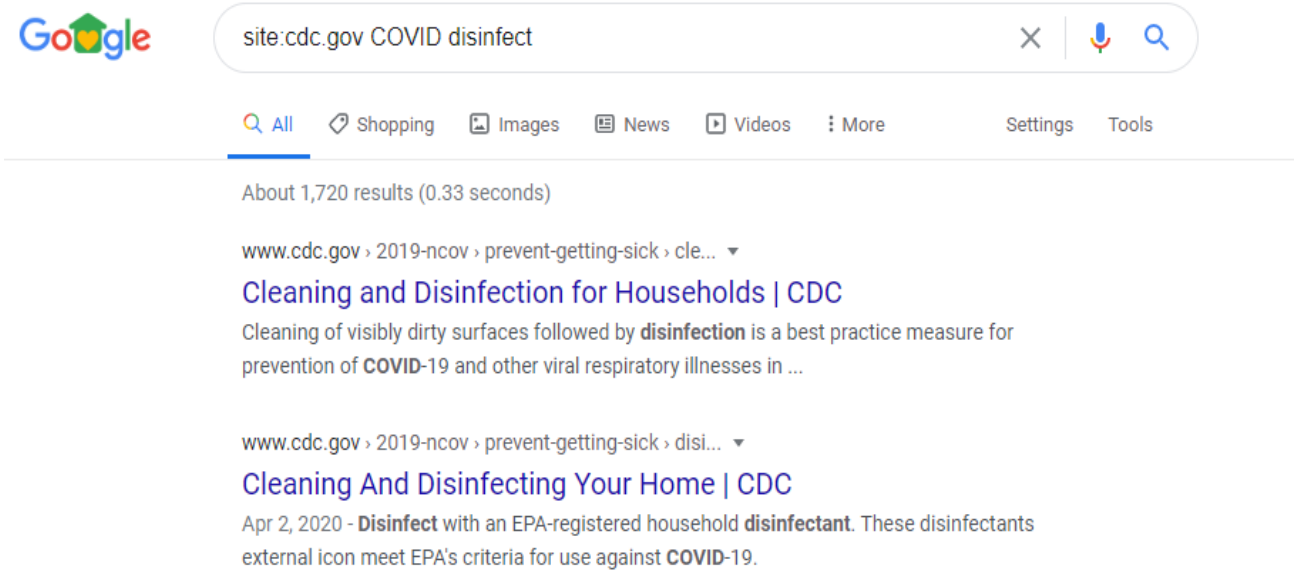
- Coronavirus Disease 2019 Basics
- How COVID-19 Spreads
- How to Protect Yourself
- COVID-19 and Children
- School Dismissals and Children
- Children and Youth with Special Healthcare Needs
- Preparing Your Home and Family for COVID-19
- Warning Signs
- In Case of an Outbreak in Your Community
- Symptoms & Testing
- Higher Risk
- Healthcare Professionals and Health Departments
- COVID-19 and Funerals
- What CDC is Doing
- COVID-19 and Animals

Other Frequently Asked Questions and Answers About:

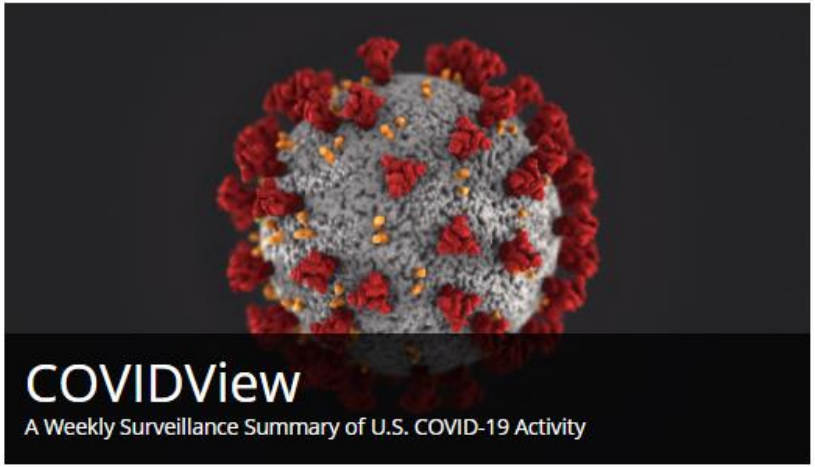
- Travel
- Pregnant Women and COVID-19
- Water Transmission
- Healthcare Professionals
- Healthcare Infection
- Laboratory Diagnostic Panels
- Laboratory Biosafety
- General Business
- Personal Protective Equipment
- K-12 Schools and Child Care Program Administrators
- Community events: for administrators and individuals
- Retirement Communities and Independent Living Facilities
- Correctional and Detention Facilities
- Event Organizers & Individuals
- Cloth Face Coverings

Lost on a website?

- **Google Search command site:**



CDC's Cases, Data, and Surveillance



CDC reports daily COVID-19 confirmed and probable infections and deaths in the U.S.

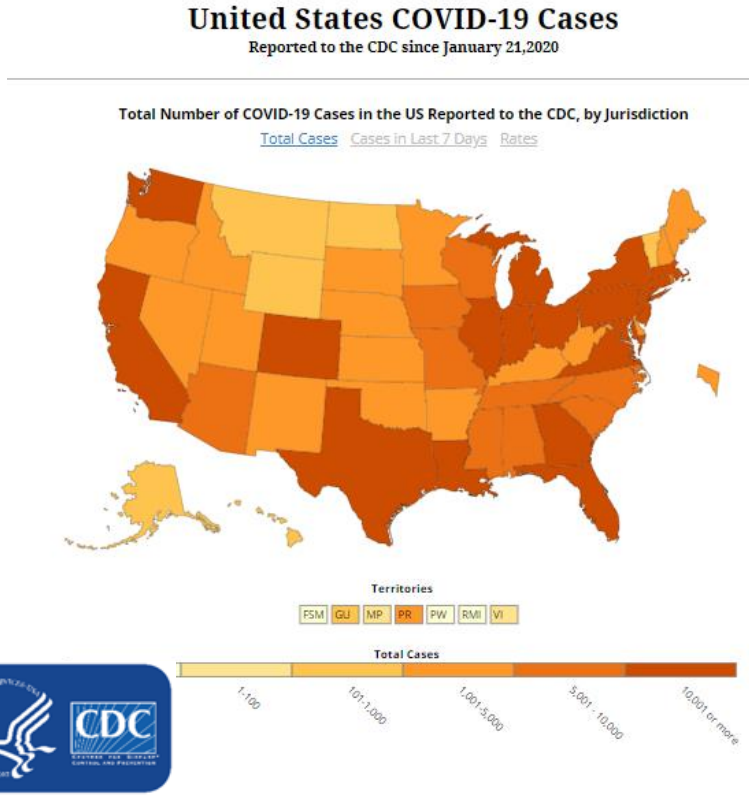
CDC provides provisional death counts for COVID-19 and pneumonia based on death certificates with updates Monday – Friday.

CDC monitors lab-confirmed COVID-19 hospitalizations, risk factors, and outcomes of those hospitalized each week.

CDC enables hospitals to report current use and availability of hospital beds and mechanical ventilators, healthcare worker staffing, and PPE supplies.

Forecasts

CDC's COVID Data Tracker

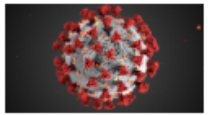


CDC's Communication Resources

CDC offers free resources including video, fact sheets, and posters. Below are links to current communication tools and resources available for use and distribution.

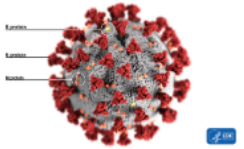
- Guidance Documents
- Resources for Travelers
- Print Resources
- Public Service Announcements (PSAs)
- Videos

Public Health Image Library (PHIL)



Public Health Image Library (PHIL) – The Public Health Image Library, or PHIL, was designed to share CDC public health images. CDC welcomes public health professionals, the media, laboratory scientists, educators, students, and the public to use this material for reference, teaching, presentations, and public health messages.

COVID-19 Microsite



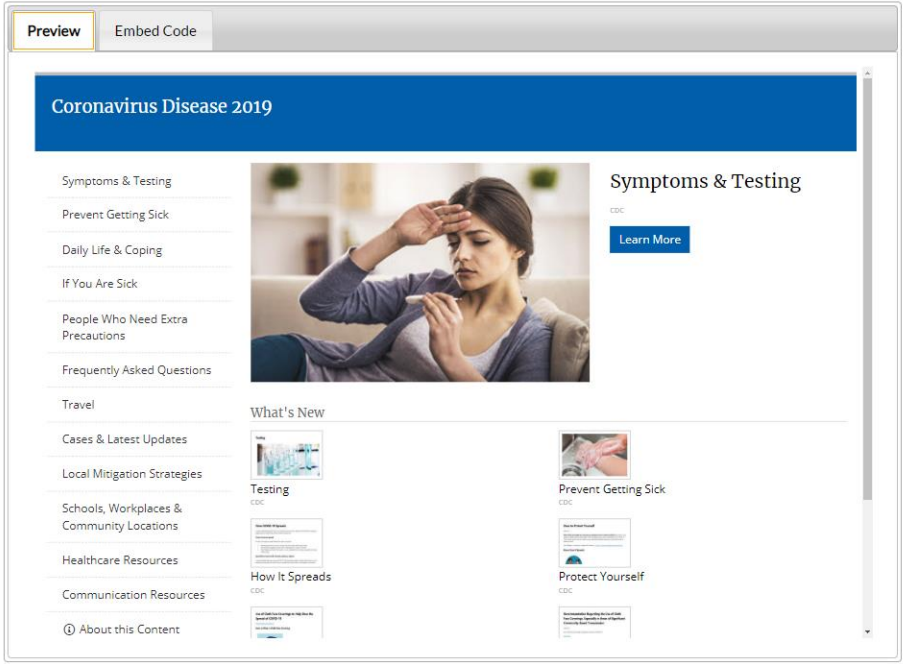
Add real-time COVID-19 information to your web site!
Español

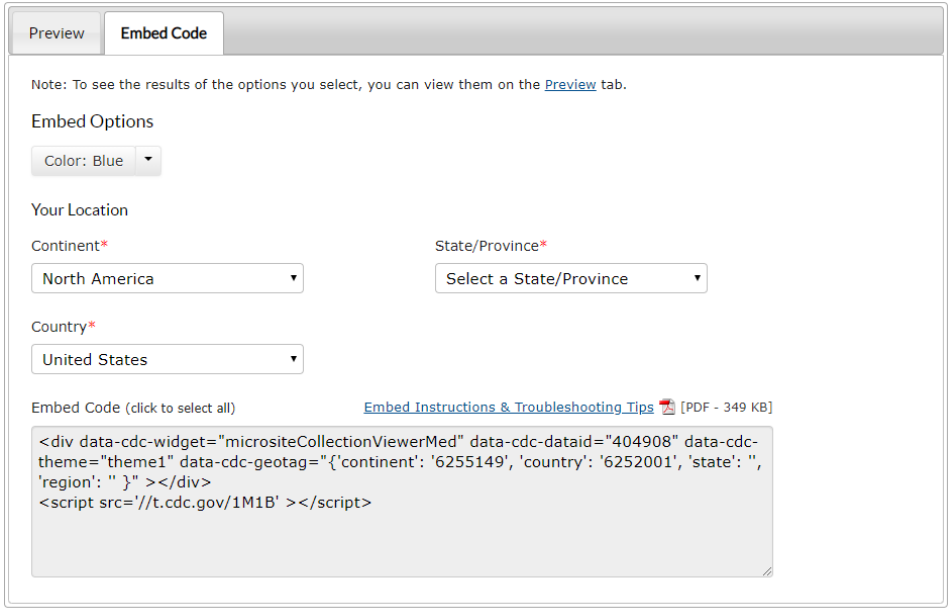
Social Media Toolkit

Digital Press Kit

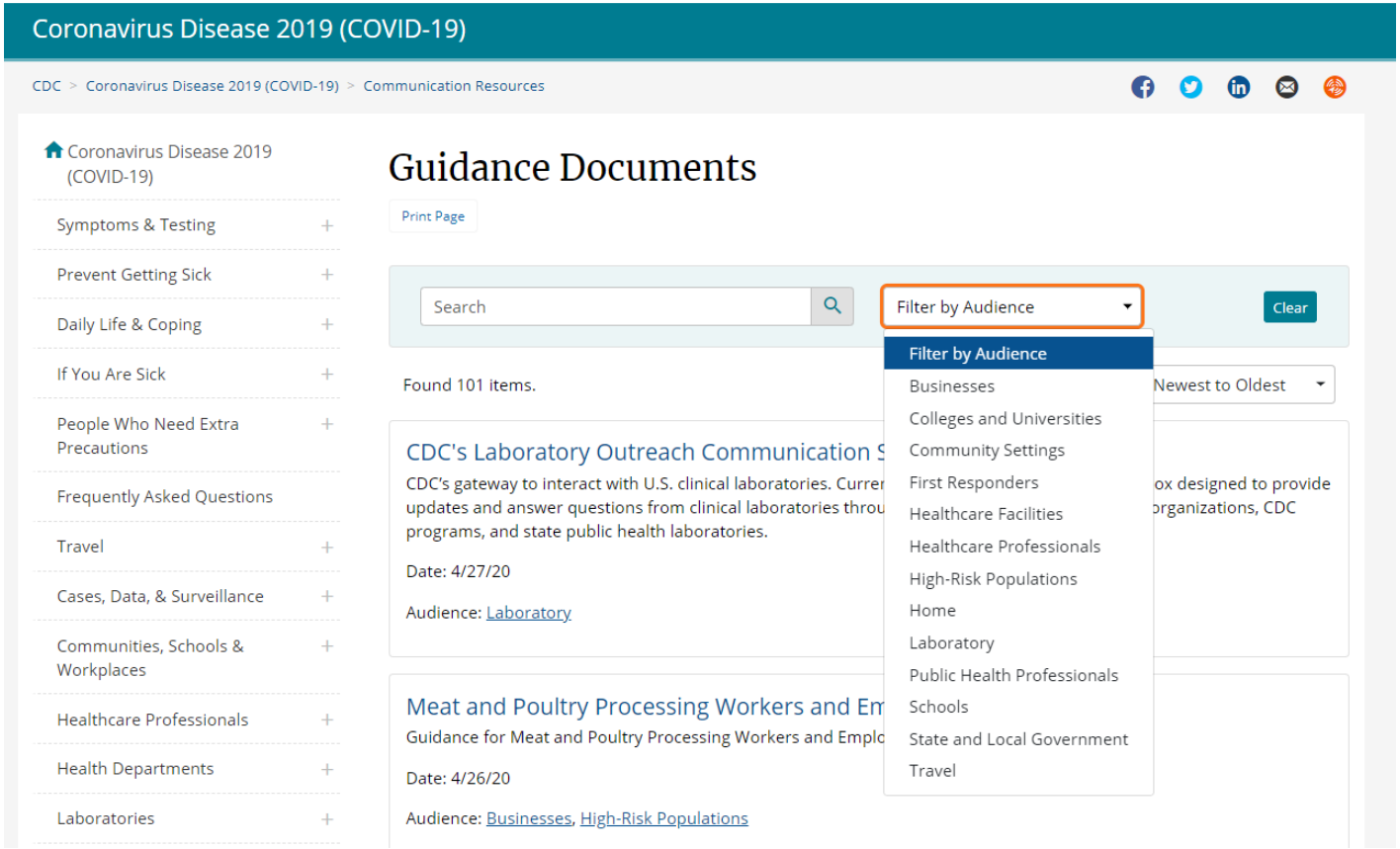
The CDC has a collection of media resources on COVID-19 response, published online.

CDC's Microsite

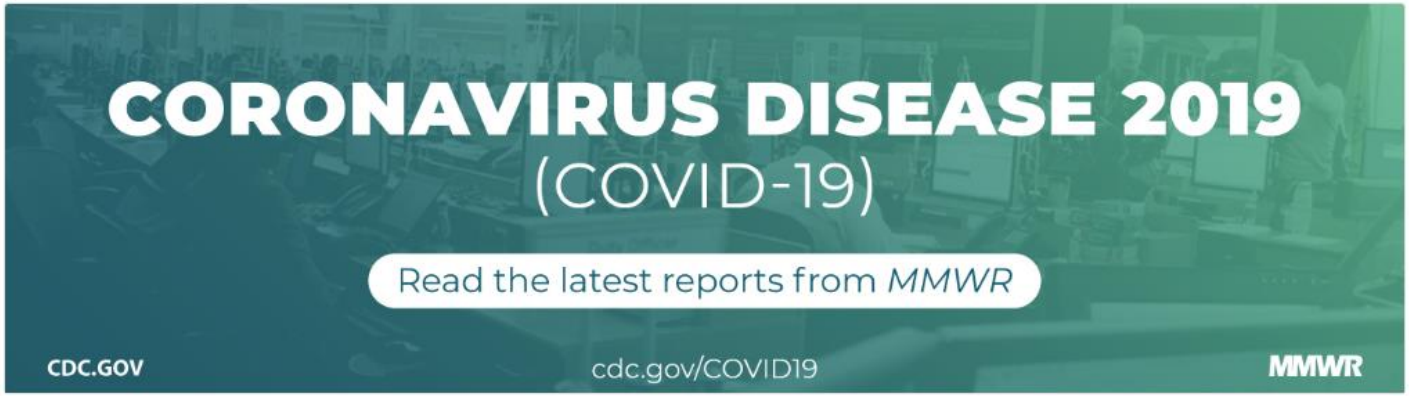




Filter by Audience



CDC's Morbidity and Mortality Weekly Report (MMWR)



COVID-19 Reports

- Public Health Response to the Initiation and Spread of Pandemic COVID-19 in the United States, February 24–April 21, 2020
- COVID-19 Among Workers in Meat and Poultry Processing Facilities — 19 States, April 2020
- Characteristics and Clinical Outcomes of Adult Patients Hospitalized with COVID-19 — Georgia, March 2020

More>

CDC-INFO

Call CDC-INFO

800-CDC-INFO
(800-232-4636)
TTY 888-232-6348

Regular Business Hours

Monday – Friday
8:00 a.m. – 8:00 p.m. ET
In English or Spanish

Coronavirus Disease 2019 Questions
Open 24 hours, 7 days a week
In English only

Email CDC-INFO

Send us your questions 24/7 using our email form.

Order CDC Publications

Order or download free books, fact sheets, pamphlets, and educational materials at CDC-INFO On Demand.

CDC-INFO is experiencing a very high number of calls and emails. Wait times for inquiries on all topics are longer than usual.

If you are a healthcare provider with an urgent inquiry, or a member of the general public with an urgent information need, please call instead of sending your inquiry through the webform.

Due to the extremely high volume of inquiries, CDC is working to assist those with the most urgent information needs. Many general public inquiries submitted via the webform may not receive a reply from CDC-INFO, including inquiries submitted before April 9, 2020. If you submitted an inquiry and still need a response, please resubmit your inquiry through the webform or call CDC-INFO. CDC is working to increase our capacity to respond to inquiries. We appreciate your patience.

- If you have general questions about COVID-19, please see the CDC's Coronavirus Disease 2019 FAQ page for timely information instead of submitting an email. This is an evolving situation, and CDC will provide information on our website as it becomes available.
- Try CDC's online Coronavirus Self-Checker tool by clicking on the Self-Checker icon. This tool can help you make decisions about seeking appropriate medical care if you or someone you're caring for may be sick with COVID-19.
- You can also visit the CDC website for answers to questions on several other health topics.

Contact Form

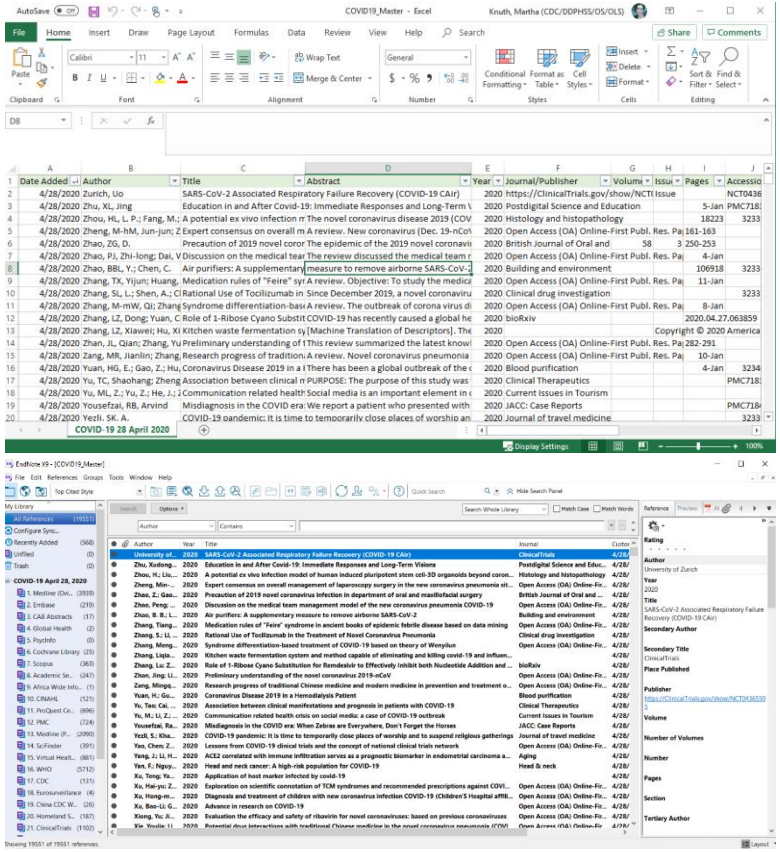
CDC's COVID-19 Research Guide

This guide provides resources for researching COVID-19. In this guide you can find the following:

- **NEW:** Research articles downloadable database
  - The Stephen B. Thacker CDC Library is systematically searching the literature and compiling a downloadable database of research articles and grey literature on COVID-19 for researchers. Updates are posted daily Monday through Friday.
- Databases and journals
  - Selected scholarly literature databases and journals available to help you find research about COVID-19.
- Search Alerts
  - Search alerts notify you when new research is published on COVID-19.
  - Search alerts available for Ovid, PubMed, Scopus, and News sources.
- Secondary Data and Statistics
  - Selected sources for secondary data and statistics on COVID-19.
- Websites
  - Selected websites and organizations where you can find more information on COVID-19.

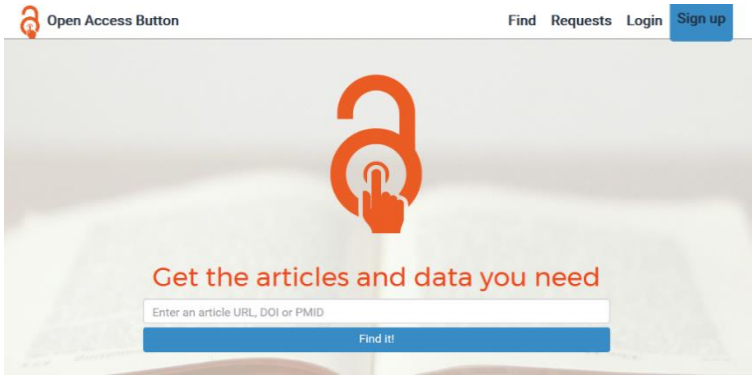
CDC's Research Article Downloadable Database

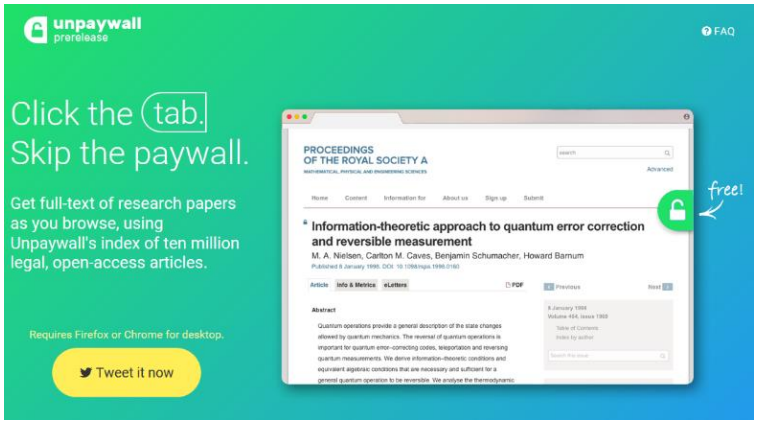
- Searchable database of over 20,000 COVID-19 research articles
- Updates daily, Monday through Friday
- Posted in Excel and citation management software compatible file format (ris)
  - Free citation management software
    - https://www.mendeley.com/
    - https://www.zotero.org/
- Search strategy included



Need Access to the Scholarly Literature?

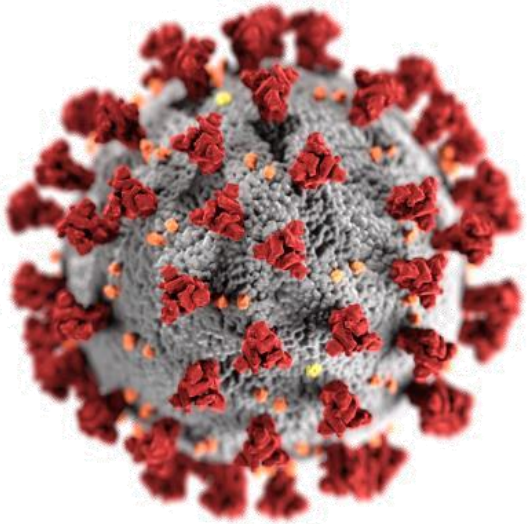
- **Most publishers are making COVID-19 materials Open Access**
- **Don’t have access?**
  - Interlibrary loan
  - Consortium sharing
  - Bookmarklets
    - https://openaccessbutton.org/
    - http://unpaywall.org/
  - Google command filetype:pdf





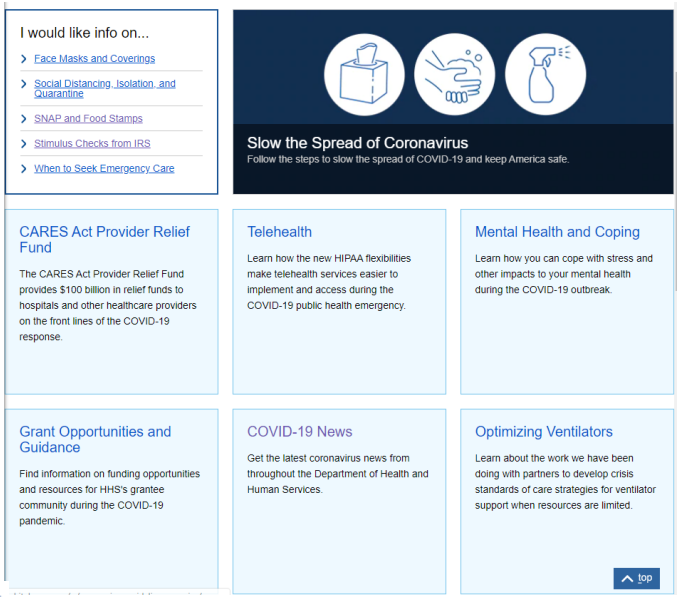
Overview of Other Federal Resources

- To check out even more, please visit https://www.usa.gov/coronavirus and https://www.coronavirus.gov/



Health and Safety

- **Health and Human Services**



FDA

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

NIH
National Institutes of Health

ADMINISTRATION FOR CHILDREN & FAMILIES

ACL
Administration for Community Living

HRSA
Health Resources & Services Administration

INDIAN HEALTH SERVICE · PHS · 1955 ·

SAMHSA
Substance Abuse and Mental Health Services Administration

CDC

Health and Safety

- **Many of these sites have unique toolkits and/or custom resources associated with their focus areas**
- **Remember the site: Google trick!**

Coronavirus (COVID-19) Partner Toolkit

The Centers for Medicare & Medicaid Services (CMS) is taking action to protect the health and safety of our nation's patients and providers in the wake of the 2019 Coronavirus (COVID-19) outbreak.

CMS has developed this toolkit to help you stay informed on CMS and HHS materials available on the COVID-19. Please share these materials, bookmark the page, and check back often for the most up-to-date information.

To listen to the audio files and read the transcripts for the COVID-19 Stakeholder calls, visit the Podcast and Transcripts page.

To keep up with the important work CMS is doing in response to COVID-19, please visit the Current Emergencies Website.

CDC Homepage

Coronavirus.gov

USA.gov

USA.gov (Spanish)

FEMA.gov

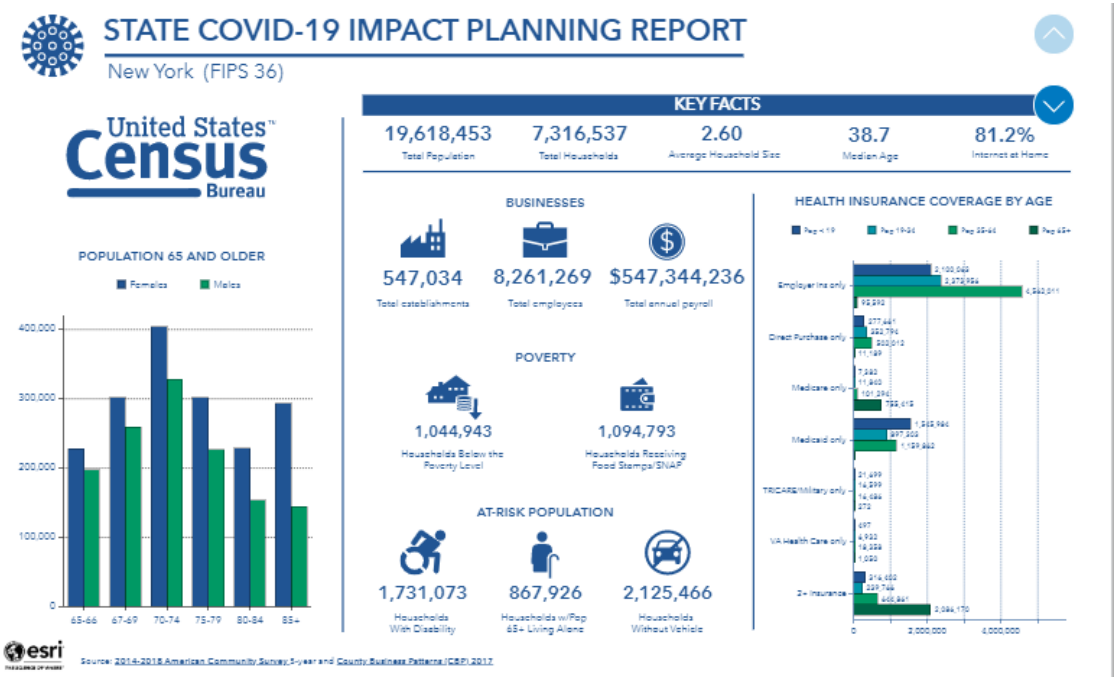
White House Coronavirus Task Force: Keeping Workplaces, Homes, Schools, or Commercial Establishments Safe.

- Families First Coronavirus Response Act
- Workplace, School and Home Guidance
- A Framework for Mitigation

Health and Safety

Health and Safety

- **United States Census Bureau**
  - COVID-19 Data Hub
  - Assistance for completing the 2020 Census



Health and Safety

- [Homeland Security Digital Library]

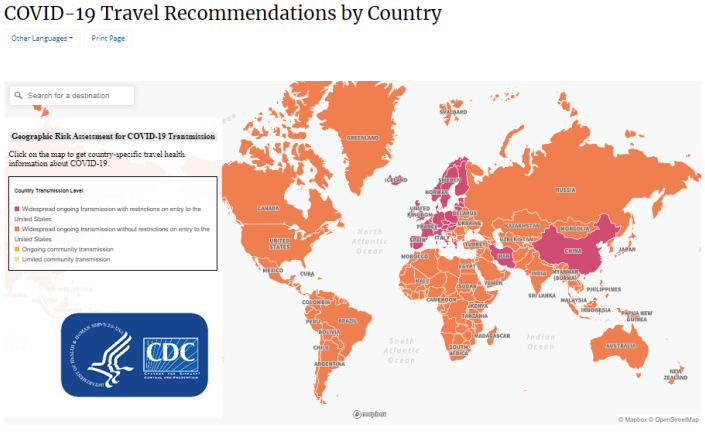
National Library of Medicine

- SARS COV2 data hub
- LitCovid
- ClinicalTrials.gov
- Disaster Information Management Research Center

Financial Relief, Benefits, and Grants

Travel, Immigration, and Transportation

- [CDC COVID-19 Travel Information]
- [US Citizenship and Immigration Services]
- [Federal Aviation Administration]
- [Federal Transit Administration]



Scams and Fraud

Federal Trade Commission

Protecting America's Consumers

DEPARTMENT OF JUSTICE FEDERAL BUREAU OF INVESTIGATION

OFFICE OF INSPECTOR GENERAL OIG U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

usa gov

CDC

Law Librarians of Congress

- **Resource Guide**
  - Legislation
  - Presidential Actions
  - Congressional Research Service Reports
  - Global Law Library Articles

Freedom of Information Act (FOIA) Requests

- **FOIA Resources Blog Post**
  - The Reporters Committee for Freedom of the Press' Public Records and Open Meetings Measures Related to COVID-19
- **CDC FOIA Requests**

During the COVID-19 response, the CDC FOIA Office cannot receive any FOIA-related correspondence by USPS, FedEx or UPS.

Starting May 1, we will no longer be accepting requests via E-mail or fax. Requesters can submit a FOIA request using one of the options below:

1. FOIA Public Access Link (PAL)
2. Submit a request via FOIA.gov

To learn more about Coronavirus Disease 2019 (COVID-19) visit CDC's COVID-19 website.

Institute of Museum and Library Services

- COVID-19 Updates
- Grant Information
- Resources for libraries and museums
  - Long list of associations and their resource guides

Institute of Museum and Library Services

- [Mitigating COVID-19 When Managing Paper-Based, Circulating, and Other Types of Collections]
- More videos: https://www.ncptt.nps.gov/blog/category/videos/

FDLP Toolkit

COVID-19 Toolkit: Federal Depository Library Program

Details
Last Updated: April 20 2020
Published: April 13 2020

As Federal depository library staff and patrons are dealing with library closures, virtual work environments, and virtual service environments related to the COVID-19 pandemic, finding all of the information you need, and finding reliable information can be daunting.

From this toolkit, you can access:

- Information for Federal depository library staff on FDLP operations during the pandemic.
- Reliable U.S. Government information resources for FDLP patrons.
- Downloadable images you can use for your library website to link patrons to your COVID-19 information pages or research guides.

COVID-19 Guidance for Federal Depository Library Staff

- FDLP Claims: Materials Being Held at GPO Distribution Facility
- FDLP Shipments: Suspension Extended
- FDLP Academy Continuing Education During COVID-19 Pandemic
- FDLP eXchange Review Periods Increased
- Temporary Closures and Changing Library Operations
- FDLP Shipments Temporarily Suspended
- Additional Guidance for FDLs
- Guidance for FDLs
- Mitigating COVID-19 When Managing Paper-Based, Circulating, and Other Types of Collections (IMLS/CDC webinar)

Links mentioned

- **Note: COVID-19 is a rapidly evolving situation and resources may change.** Please check https://www.cdc.gov/coronavirus/2019-nCoV/index.html and https://www.usa.gov/coronavirus for the latest information.
- **Disclaimer:** Materials listed in these slides are selected to provide awareness of quality public health literature and resources. A material's inclusion does not necessarily represent the views of the U.S. Department of Health and Human Services (HHS), the Public Health Service (PHS), or the Centers for Disease Control and Prevention (CDC), nor does it imply endorsement of the material's methods or findings. HHS, PHS, and CDC assume no responsibility for the factual accuracy of the items presented. The selection, omission, or content of items does not imply any endorsement or other position taken by HHS, PHS, and CDC. Opinion, findings, and conclusions expressed by the original authors of items included in these materials, or persons quoted therein, are strictly their own and are in no way meant to represent the opinion or views of HHS, PHS, or CDC. References to publications, news sources, and non-CDC Websites are provided solely for informational purposes and do not imply endorsement by HHS, PHS, or CDC.

Links mentioned

- Centers for Disease Control and Prevention
  - https://www.cdc.gov/coronavirus/2019-nCoV/index.html
  - https://www.cdc.gov/coronavirus/2019-ncov/faq.html
  - https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/index.html
    - https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html
    - https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/testing-in-us.html
    - https://www.cdc.gov/covid-data-tracker/index.html
  - https://www.cdc.gov/coronavirus/2019-ncov/communication/index.html
    - https://tools.cdc.gov/medialibrary/index.aspx
  - https://www.cdc.gov/mmwr/index.html
  - https://www.cdc.gov/cdc-info/index.html
  - https://www.cdc.gov/library/researchguides/2019NovelCoronavirus.html
    - https://www.cdc.gov/library/researchguides/2019novelcoronavirus/researcharticles.html

Links mentioned

- Other Federal resources
  - General
    - https://www.usa.gov/coronavirus
    - https://www.coronavirus.gov/
  - Health and Safety
    - https://www.hhs.gov/coronavirus/index.html
    - https://www.fda.gov/emergency-preparedness-and-response/counterterrorism-and-emerging-threats/coronavirus-disease-2019-covid-19
    - https://www.nih.gov/health-information/coronavirus
    - https://www.hrsa.gov/
    - https://www.samhsa.gov/coronavirus
    - https://www.acf.hhs.gov/blog/2020/04/stay-safe-and-be-informed-about-covid-19
    - https://acl.gov/COVID-19
    - https://www.ihs.gov/coronavirus/?CFID=179184448&CFTOKEN=13541830
    - https://www.cms.gov/About-CMS/Agency-Information/Emergency/EPRO/Current-Emergencies/Current-Emergencies-page
      - https://www.cms.gov/outreach-education/partner-resources/coronavirus-covid-19-partner-toolkit

Links mentioned

- Other Federal resources
  - Health and Safety (continued)
    - https://www.epa.gov/coronavirus
    - https://www.usda.gov/coronavirus
    - https://www.osha.gov/SLTC/covid-19/
    - https://www.cpsc.gov/Safety-Education/Safety-Education-Centers/covid-19-home-
    - Safety
    - https://www.fema.gov/
    - https://www.publichealth.va.gov/n-coronavirus/
    - https://covid19.census.gov/?
    - https://www.census.gov/programs-surveys/surveyhelp.html
    - https://www.hsdl.org/c/
    - https://www.ncbi.nlm.nih.gov/labs/virus/vssi/#/virus?SeqType_s=Nucleotide&VirusLineage_ss=Wuhan%20seafood%20market%20pneumonia%20virus,%20taxid:2697049
    - https://www.ncbi.nlm.nih.gov/research/coronavirus/
    - https://clinicaltrials.gov/ct2/results?cond=COVID-19
    - https://disasterinfo.nlm.nih.gov/

Links mentioned

- Other Federal resources
  - Financial Relief, Benefits, and Grants
    - https://www.irs.gov/coronavirus/economic-impact-payments
    - https://www.sba.gov/funding-programs/loans/coronavirus-relief-options
    - https://www.fns.usda.gov/disaster/pandemic/covid-19
    - https://www.dol.gov/coronavirus
    - https://studentaid.gov/announcements-events/coronavirus
    - https://www.usajobs.gov/
    - https://www.imls.gov/coronavirus-covid-19-updates/information-imls-grant-applicants-and-awardees
    - https://www.arts.gov/covid-19-resources-for-artists-and-arts-organizations
    - https://www.grants.gov/
  - Travel, Immigration, and Transportation
    - https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html
    - https://www.uscis.gov/about-us/uscis-response-covid-19
    - https://www.faa.gov/coronavirus/
    - https://www.transit.dot.gov/coronavirus

Links mentioned

- Other Federal resources
  - https://www.transit.dot.gov/coronavirus
  - Scams and Fraud
    - https://www.ftc.gov/coronavirus/scams-consumer-advice
    - https://oig.hhs.gov/coronavirus/fraud-alert-covid19.asp?utm_source=web&utm_medium=web&utm_campaign=covid19-fraud-alert
    - https://www.fbi.gov/coronavirus
    - https://www.usa.gov/coronavirus
  - Legislation
    - https://blogs.loc.gov/law/2020/03/coronavirus-resource-guide/
  - Freedom of Information Act Requests
    - https://foia.blogs.archives.gov/2020/04/07/covid-19-and-foia-observations-and-useful-links
    - https://docs.google.com/spreadsheets/d/e/2PACX-1vTyXoIXl2whyI9akO7WT5tL9dzUdwOfFJZC9K-DHu1C7JhmD-R5QM4EMe2k9gmBrY5c3-P08qhs8ijW/pubhtml?urp=gmail_link
    - https://www.cdc.gov/od/foia/index.htm/

Links mentioned

- Other Federal resources
  - Institute of Museum and Library Services
    - https://www.imls.gov/coronavirus-covid-19-updates
    - https://www.imls.gov/coronavirus-covid-19-updates/information-imls-grant-applicants-and-awardees
    - https://www.imls.gov/coronavirus-covid-19-updates/covid-19-resources-libraries-and-museums
    - https://www.imls.gov/webinars/mitigating-covid-19-when-managing-paper-based-circulating-and-other-types-collections
    - https://www.ncptt.nps.gov/blog/category/videos/
  - Federal Depository Library Program toolkit
    - https://www.fdlp.gov/promotion/covid-19-fdlp-toolkit

Questions?

Thank you for attending this presentation and for everything that you do!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.