



**SUPPORTING GREATNESS.
DEVELOPING OPPORTUNITIES.**



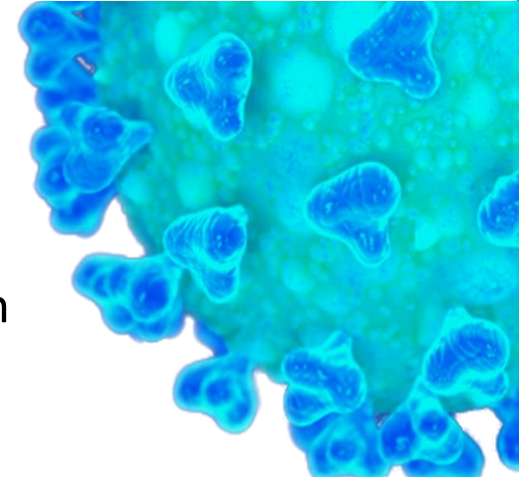
COVID-19

What is it, and what do
we know about it?



Coronavirus

- Coronaviruses are a large family of viruses that can cause illnesses ranging widely in severity. The first known severe illness caused by a coronavirus emerged with the 2003 Severe Acute Respiratory Syndrome (SARS) epidemic in China.
 - A second outbreak of severe illness began in 2012 in Saudi Arabia with the Middle East Respiratory Syndrome (MERS).
- On December 31 of last year, Chinese authorities alerted the World Health Organization of an outbreak of a novel strain of coronavirus causing severe illness, which was subsequently named SARS-CoV-2. As of February 20, 2020, nearly 167,500 COVID-19 cases had been documented, although many more mild cases had likely gone undiagnosed. The virus killed over 6,600 people to that date.



COVID-19????

In COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease. Formerly, this disease was referred to as “2019 novel coronavirus” or “2019-nCoV”.

There are many types of human coronaviruses including some that commonly cause mild upper-respiratory tract illnesses.




How does it Spread???



People

This disease can spread from person to person through small droplets from the nose or the mouth when the infected person coughs or exhales



Surfaces

These small droplets land on surfaces, which means any person that touches these surfaces and then their eyes, nose or mouth can become infected

STATS ABOUT COVID-19

<https://infection2020.com/>

The CDC- People Who Are At High Risk

- **65 AND OVER**
- LUNG DISEASE OR ASTHMA
- IMMUNE COMPROMISED:
 - CANCER, SMOKING, BONE MARROW, IMMUNE DEFICIENCIES & ORGAN TRANSPLANTS!
- SEVERE OBESITY (BMI 40 OR HIGHER)
- DIABETES
- CHRONIC KIDNEY DISEASE (DIALYSIS)
- LIVER DISEASE
- HEART CONDITION

TABLE 1. Reported outcomes among COVID-19 patients of all ages, by hospitalization status, underlying health condition, and risk factor for severe outcome from respiratory infection — United States, February 12–March 28, 2020



Underlying health condition/Risk factor for severe outcomes from respiratory infection (no., % with condition)	No. (%)			
	Not hospitalized	Hospitalized, non-ICU	ICU admission	Hospitalization status unknown
Total with case report form (N = 74,439)	12,217	5,285	1,069	55,868
Missing or unknown status for all conditions (67,277)	7,074	4,248	612	55,343
Total with completed information (7,162)	5,143	1,037	457	525
One or more conditions (2,692, 37.6%)	1,388 (27)	732 (71)	358 (78)	214 (41)
Diabetes mellitus (784, 10.9%)	331 (6)	251 (24)	148 (32)	54 (10)
Chronic lung disease* (656, 9.2%)	363 (7)	152 (15)	94 (21)	47 (9)
Cardiovascular disease (647, 9.0%)	239 (5)	242 (23)	132 (29)	34 (6)
Immunocompromised condition (264, 3.7%)	141 (3)	63 (6)	41 (9)	19 (4)
Chronic renal disease (213, 3.0%)	51 (1)	95 (9)	56 (12)	11 (2)
Pregnancy (143, 2.0%)	72 (1)	31 (3)	4 (1)	36 (7)
Neurologic disorder, neurodevelopmental, intellectual disability (52, 0.7%)*	17 (0.3)	25 (2)	7 (2)	3 (1)
Chronic liver disease (41, 0.6%)	24 (1)	9 (1)	7 (2)	1 (0.2)
Other chronic disease (1,182, 16.5%)*	583 (11)	359 (35)	170 (37)	70 (13)
Former smoker (165, 2.3%)	80 (2)	45 (4)	33 (7)	7 (1)
Current smoker (96, 1.3%)	61 (1)	22 (2)	5 (1)	8 (2)
None of the above conditions† (4,470, 62.4%)	3,755 (73)	305 (29)	99 (22)	311 (59)



8 out of 10 deaths reported in the U.S. have been in adults 65 years old and older
Among adults with confirmed COVID-19 reported in the U.S.:

Estimated percent requiring hospitalization

31-70% of adults 85 years old and older

31-59% of adults 65-84 years old

Estimated percent requiring admission to intensive care unit

6-29% of adults 85 years old and older

11-31% of adults 65-84 years old

Estimated percent who died

10-27% of adults 85 years old and older

4-11% of adults 65-84 years old

ASYMPTOMATIC PEOPLE



Many people infected with COVID-19 show mild symptoms, especially during the first stages of the disease. Thus, you can still catch the disease from an infected person who only has a mere cough and does not feel ill



Symptoms

The body feels completely tired, without energy

TIREDNESS

DRY COUGH

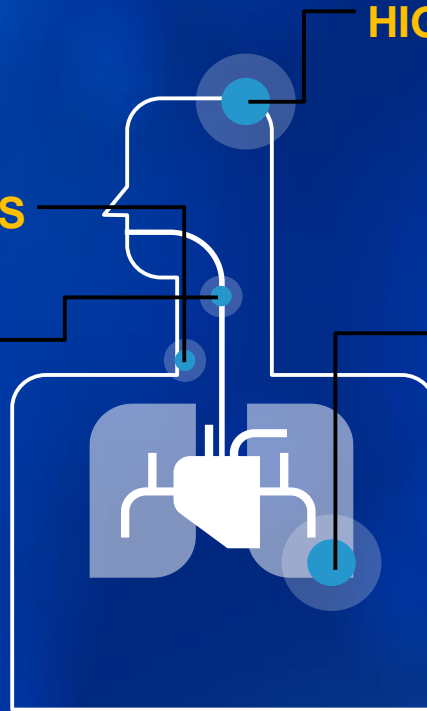
Constant coughing without expelling any mucus

HIGH FEVER

The body temperature can exceed 100.4 ° F

DIFFICULTY BREATHING

Breathing actually feels more difficult



WHAT TO DO IF YOU HAVE SYMPTOMS!

STEP ONE

You have symptoms or have been in an infected area

STEP TWO

Call the designated phone number for your region

STEP THREE

You will be given a home test over the phone (Then if the situation calls for it an actual test)



STEP 4

Patiently wait for the results of the test

STEP 5

Follow the instructions provided by the doctor

ABOUT 80% OF
PEOPLE RECOVER
FROM THIS
DISEASE WITHOUT
NEEDING SPECIAL
TREATMENT



Psychological Effects



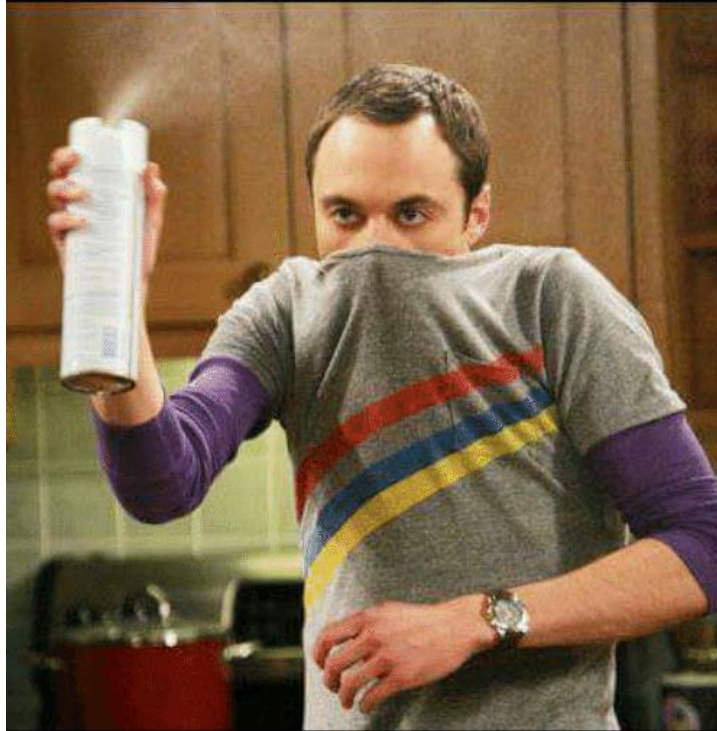
Changing The Way We Act!

DEFENSE MODE- STAY AWAY FROM ME!!!

- KEEP YOUR HANDS TO YOURSELF!
- INVESTIGATIVE REPORTING ON HYGIENE!
- OCD DISORDER FOR EVERYONE! (HOWIE MANDELL)
- SOCIAL PHOBIA DISORDER (FEAR OF EATING OUT OR PUBLIC PLACES)
- HANDWASHING DISORDER! (IT IS ACTUALLY A DISORDER)

If you're sick - stay at home

When you find out



a coworker is sick

Blame mode

- Avoid bashing people for being sick.
- Follow specific CDC guidelines.



If An Employee Tests Positive

If an employee tests positive for COVID-19, consider:

- Tracing the individual's steps to determine who that individual worked with in close proximity, as defined by the CDC:
<https://www.cdc.gov/coronavirus/2019ncov/prepare/transmission.html>
- Notify the employees who came in contact with the individual.
- Clean and disinfect the area where the individual works and consider options for notifying, monitoring, and potentially quarantining workers who had been in close contact as each situation dictates using CDC guidance:
<https://www.cdc.gov/coronavirus/2019-ncov/prepare/disinfectingbuilding-facility.html>

Cleaning

To disinfect:

Most common EPA-registered household disinfectants will work. Use disinfectants appropriate for the surface.

Diluting your household bleach.

To make a bleach solution, mix:

- 5 tablespoons (1/3rd cup) bleach per gallon of water
OR
- 4 teaspoons bleach per quart of water

Follow manufacturer's instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.

Alcohol solutions.

Ensure solution has at least 70% alcohol.



<https://www.cdc.gov/coronavirus/2019-ncov/prepare/disinfecting-building-facility.html>

What Can We Do?

- Wash your hands as often as possible
- Sanitize!
 - Gloves, Hard hats, & safety glasses, trucks, cooler, cell phones.
 - Disinfect areas such as doors and door knobs, time clocks and surrounding areas, restrooms, and other common areas where employees will touch common surfaces.
- Social distance or limit crew numbers
- Cover mouth in elbow not your hand
- If you are sick stay home
- If contacted by someone sick - quarantine
- **DON'T PANIC!**



Actions for Infrastructure Protection



Essential Critical Infrastructure Workers



CISA
CYBER+INFRASTRUCTURE

Considerations For Govt. & Business

This list was developed in consultation with federal agency partners, industry experts, and State and local officials, and is based on several key principles:

1. Response efforts to the COVID-19 pandemic are locally executed, state managed, and federally supported.
2. Everyone should follow guidance from the CDC, as well as State and local government officials, regarding strategies to limit disease spread.
3. Workers should be encouraged to work remotely when possible and focus on core business activities. In- person, non-mandatory activities should be delayed until the resumption of normal operations.
4. When continuous remote work is not possible, businesses should enlist strategies to reduce the likelihood of spreading the disease. This includes, but is not necessarily limited to, separating staff by off-setting shift hours or days and/or social distancing. These steps can preserve the workforce and allow operations to continue.
5. All organizations should implement their business continuity and pandemic plans or put plans in place if they do not exist. Delaying implementation is not advised and puts at risk the viability of the business and the health and safety of employees.

OSHA Is Involved

OSHA has divided job tasks into four risk exposure levels:

- VERY HIGH, HIGH, MEDIUM, AND LOWER RISK.
 - The higher risk categories (medium and above) include healthcare, laboratory, mortuary, EMT's and similar jobs for this type job classification.
 - Lineworkers should fall into the lower risk exposure category.

Lower Exposure Risk

Lower Exposure Risk (Caution) jobs are those that do not require contact with people known to be, or suspected of being, infected with COVID-19 nor frequent close contact with (i.e., within 6 feet of) the general public.

Workers in this category have minimal occupational contact with the public and other coworkers.

- You should not be entering customer homes to maintain your 6 foot distance from others.

Actions for Infrastructure Protection

Planning and Preparedness are critical to reducing the impact of COVID-19 on the Critical Infrastructure community, and CISA recommends organizations take the following precautions to prepare for possible impacts from COVID-19: Designate a response coordinator and assign team members with specific responsibilities.

- **Implement a formal worker and workplace protection strategy.**
- **Train workers on personal and worksite protection strategies.**
- **Establish and test flexible worksite (e.g., telework) and work hour policies.**
- **Identify essential functions, goods, and services your organization requires to sustain its own operations and mission.**

Actions for Infrastructure Protection

- Determine how long your organization can expect to continue providing essential functions and services in potentially reduced material stock.
- Identify and prioritize suppliers of critical products and services for your organization.
- Continuously assess ongoing preparedness activities to adjust objectives, effects, and actions based on changes in the business and greater economic and social environments.
- Monitor federal, state, and local COVID-19 information sites for up-to-date information on containment and mitigation strategies.

Preparation

Assuming there are no confirmed cases of coronavirus among employees or within the service area, public power utilities should consider:

- Increasing hygiene measures
- Planning for all employees to telework
- Planning on sheltering in place at critical facilities
- Assessing stockpiles of critical materials, including food, PPE, and critical equipment

Initial Mitigation

If there are no confirmed cases of coronavirus among employees, but confirmed cases within the service area/community, public power utilities should consider:

- Increasing hygiene measures
- Instituting non-essential employee telework and continue planning for all employee telework
 - Also consider staggering shifts for essential personnel
- Sheltering-in-place as appropriate at critical facilities
- Limiting attendance to large group events
- Planning for facility decontamination and remediation

Response

If there are multiple employees with confirmed coronavirus, public power utilities should consider:

- Instituting employee teleworking for all appropriate employees
 - Stagger shifts for essential employees so they have as little contact with each other as possible.
- Sheltering-in-place at critical facilities
- Instituting travel restrictions
- Planning for facility decontamination and remediation

Facility Management

- Identifying what the basic daily cleaning requirements are and whether the frequency of cleaning should be increased.
 - How many times a day?
 - Where should hand-sanitizer/disinfectant wipes be placed?
- Determining when the organization limits access to, and employs protective measures for, critical facilities.
- Deciding what type of decontamination should occur if an affected employee/vendor/contractor reports to work location and whether the immediate area or entire facility should be shut down.
- Determining when an organization should consider implementation of employee/visitor screening at building entrances, and when visitors should be restricted from entering facilities.

Management of Vendors/Contractors/Supply Chain Disruptions

- Determining when an organization would consider suspending in-person vendor meetings.
- Defining what type of material and services are critical.
- Assessing the current stockpiles of critical materials and the course of action if the stockpiles become low or depleted.
- Identifying what plans vendors/contractors/suppliers have in place to ensure continuity of operations.

Mutual Aid

- Internal response, if possible
 - Could delay restoration time
- If outside resources are required, every effort should be made to isolate the responding companies from utility personnel.
 - Each company is encouraged to continue their specific requirements regarding social distancing with their team.
 - Both requesting and responding organizations may want to consider screening of crews using non-contact thermometers before deployment and upon arrival to verify employees do not have fevers above 100.4 F.
- Plan to leverage technology to minimize face-to-face interaction.
- Strive to assign crews from the same company to the same areas to reduce cross pollination and exposure between companies.

Mutual Aid

- Move to a more self-contained team strategy to limit the exposure between company and responding crews.
 - Keep crew teams intact to minimize exposure.
 - Request responding companies to staff with additional support personnel as necessary to assist with crew logistics needs such as food, fuel, material, etc.
 - Request that responding off system crews are equipped with additional vehicles to be used while traveling to minimize exposure of crew members to each other

Mutual Aid

- Use technology for onboarding (e.g., online conferencing services, conference calls). Have safety onboarding information that can be distributed to crews in advance, with conference calls for Q&A.
- Conduct daily briefings remotely where feasible. Look for opportunities within the restoration process to execute the function remotely...dispatching functions, assessment, etc.
- If practicable, avoid pre-staging unless threat is imminent.
- Work in small isolated teams where practical.

Mutual Aid

- Provide full situational awareness of COVID-19 impact to responding crews and support personnel with regular updates.
- Minimize exposure to other outside vendors.
- Identify local COVID-19 testing locations and communicate to responding companies.

Mutual Aid

Food – Boxed meals and bottled water should be used to minimize exposure and interaction between individuals. These will be available at the site and will be distributed in a drive-thru method. It is recommended that responding companies/crews have one person designated to pick up the meals. Hand sanitizer and cleaning supplies, as available will be provided at each location. Large, community type eating areas should not be established.

Fuel – As necessary, staggering and/or scheduling of individual crews should be done to minimize exposure between individuals. Hand sanitizer and cleaning supplies, as available will be provided at each location for use by utility employee to clean each vehicle's fueling contact area (fuel caps and tanks) prior to fueling.



ECG COVID-19 DATA SURVEY

37 RESPONDANTS

1. Have you minimized the # of employees that report to work daily?

	Number of Response(s)		Response Ratio
No	19		51.3%
Yes	18		48.6%
No Responses	0		0.0%
Total	37		100%

2. Have you modified your business hours of operation? If so, how?

	Number of Response(s)	Response Ratio
No	29	78.3%
Yes	8	21.6%
Total	37	100%

3. Are you allowing employees to telecommute or work remotely?

	Number of Response(s)	
	Response Ratio	
No	18	48.6%
Yes	19	51.3%
No Responses	0	0.0%
Total	37	100%



4. Have you modified or suspended your service cut-off policy for non-payment? If so, how?

	Number of Response(s)		Response Ratio
No	8		22.2%
Yes	28		77.7%
Total	36		100%

5. Have you modified your payment options for customers? If so, how?

	Number of Response(s)	
	Response Ratio	
No	14	37.8%
Yes	23	62.1%
Total	37	100%

6. Are you treating all city services the same for disconnect & payments?

	Number of Response(s)	
	Response Ratio	
No	3	8.1%
Yes	33	89.1%
Electric	0	0.0%
Natural Gas	0	0.0%
Water & Sewer	0	0.0%
Total	37	100%



7. Have you closed city facilities?

	Number of Response(s)	
	Response Ratio	
No	5	13.5%
Yes	32	86.4%
No Responses	0	0.0%
Total	37	100%

8. Are you cancelling Public Meetings in your Community?

	Number of Response(s)	
	Response Ratio	
No	7	18.9%
Yes	30	81.0%
No Responses	0	0.0%
Total	37	100%



9. Are you communicating COVID-19 Information to public via social media or website?

	Number of Response(s)	
	Response Ratio	
No	0	0.0%
Yes	37	100.0%
No Responses	0	0.0%
Total	37	100%

We Will Get Through This

"2020 can't get any worse"

April:



Important and Helpful Resources

- **ESCC – Electricity Subsector Coordination Council**
Jon Beasley represents ECG.
 - <https://www.electricitysubsector.org/>
- **CDC – Centers for Disease Control**
 - <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- **ECG - Electric Cities of Georgia**
 - <https://ecoga.org/2020/03/25/updated-novel-coronavirus-covid-19-resource-guide/>
- **APPA – American Public Power Assoc.**
 - <https://www.publicpower.org/resource/information-about-coronavirus>