



# COVID-19, Cardiovascular Disease, and Respiratory Issues





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The Healthy Libraries Program, (HeLP), a partnership with the Suffolk Library Cooperative System and is supported by the American Heart Association is an interdisciplinary team of public health, nursing, respiratory care, and social work students whose aim is to:

- Provide evidence-based health information, screening, and case management
- Refer patrons to promote access
- For students to experience working on an interprofessional team



Participants in this session will improve their understanding of:

- What is COVID-19, how does it spread?
- Who is at risk, what are the symptoms?
- How can the spread of COVID-19 be prevented?
- Personal prevention behaviors
- Why testing is important, where to get tested?
- What is telehealth, where to access it?
- Guidelines for those with Cardiovascular disease and Respiratory issues.
- Resources available?

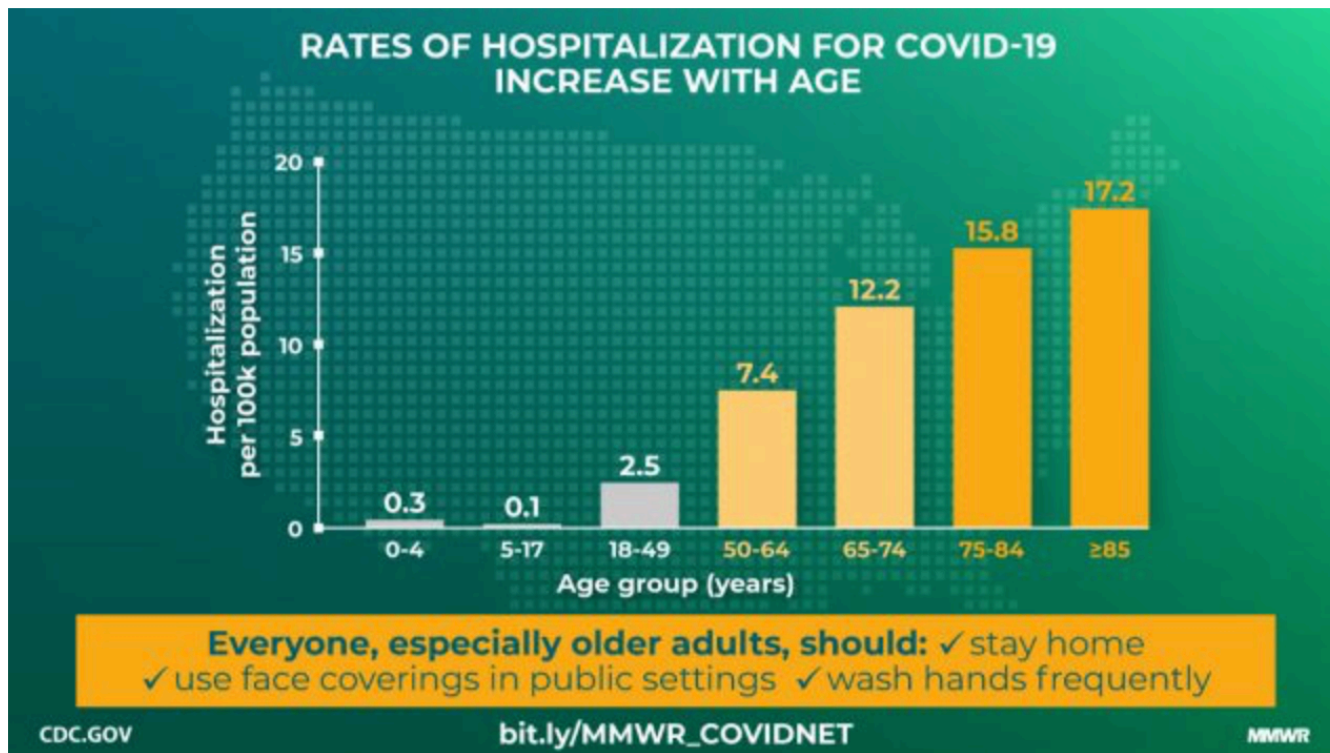




- COVID-19 is a respiratory illness that can spread from person to person.
- Beta Coronavirus named SARS-CoV-2 similar to other respiratory viral outbreaks like MERS and SARS
- COVID-19 is a disease process that arises from the SARS-CoV-2 virus strain
- Coronaviruses are a large family of viruses that are common in people as well as different species of animals.
- Video explaining COVID-19:
- <https://www.youtube.com/watch?v=Xj1nUFFVK1E>
- [https://www.osmosis.org/learn/COVID-19\\_\(Coronavirus\\_Disease\\_19\)?utm\\_source=youtube&utm\\_medium=social-media&utm\\_content=awareness-organic&utm\\_term=youtube-description&utm\\_campaign=covid19-facts](https://www.osmosis.org/learn/COVID-19_(Coronavirus_Disease_19)?utm_source=youtube&utm_medium=social-media&utm_content=awareness-organic&utm_term=youtube-description&utm_campaign=covid19-facts)



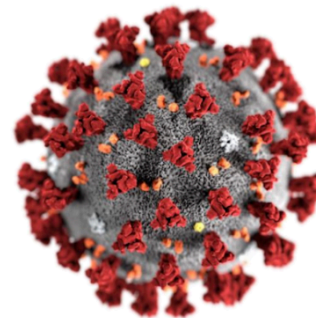
- Any person can get sick.
- Affects any age.
- Some people are at a higher risk of **developing serious complications** from COVID-19:
  - Older adults
  - People who have serious medical conditions like heart disease, diabetes, lung disease, hypertension and those who are immunocompromised
- Cases reported in all 50 states plus US territories.
- As of **April 28<sup>th</sup>, 2020** there have been **981,246 cases** of COVID-19 in the United States with **55,258 total US deaths**.
- New York State has the highest rate with **287,607 confirmed cases** and **21,883 deaths** currently being reported.





### COVID-19: How It Spreads

- Investigations are ongoing to better understand routes of transmission
- Largely based on what is known from other coronaviruses
  - Presumed to occur primarily through close person-to-person contact
    - May occur when respiratory droplets are produced when an infected person coughs or sneezes
  - Possibly by touching a surface or object that has the virus on it and then touching the mouth, nose, or eyes





Symptoms\* can include

**FEVER**



**COUGH**



\*Symptoms may appear 2-14 days after exposure.

**SHORTNESS OF BREATH**



Seek medical advice if you develop symptoms, and have been in close contact with a person known to have COVID-19 or if you live in or have recently been in an area with ongoing spread of COVID-19.

Newly added symptoms:

- Chills
- Repeated shaking with chills
- Muscle pain
- Sore throat
- New loss of taste or smell
- Headache

Seek medical attention immediately if there are emergency warning signs:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips/face



Everyone should:

- Wash your hands often with soap and water for at least 20 seconds or use hand sanitizer if soap is not available
- Avoid close contact
- Cover your mouth and nose with a cloth face cover when around others
- Cover coughs and sneezes
- Clean and disinfect

**Proper Hand Washing Video:**

<https://www.youtube.com/watch?v=-LKVUarhtvE>



## How to wear cloth face coverings

They should:

- Fit snugly but comfortable against the side of the skin
- Be secured with ties or ear loops
- Include multiple layers of fabric
- Allow for breathing without restriction
- Be able to be washed and machine dried without damage or change to shape
- Be routinely washed depending on the frequency of use

Should not be placed on children under the age of 2 years, anyone who has trouble breathing, is unconscious, incapacitated or who has the inability to remove it them self.

Do not touch eyes, nose, and mouth while removing. Wash hands immediately after removal.





COVID-19, testing remains critical

Testing leads to:

- quick identification of cases
- quick treatment for those people and immediate isolation to prevent spread
- quick identification of anyone who came into contact with infected people so they too can be quickly isolated

Testing data will help us develop a full picture of the progression and spread of this disease.







### Nasal/Oral Swab or Saliva Tests

- Look for signs of an active infection
- Sample from back of the throat with a cotton swab, saliva sample or nasal swab
- Detects signs if the virus is present
- Confirms if the diagnosis is positive or negative
- Helps to diagnose current cases but cannot tell if someone had the infection and recovered

### Antibody Tests:

- Detects antibodies, which are produced by your own immune system, to fight off the virus
- Antibodies are present in anyone who has recovered from COVID-19
- Useful for patients with mild or no symptoms
- Can detect someone who has recovered



Stony Brook University offers free drive thru testing seven days a week from 7am to 7pm. Appointments are required.

Testing is free to all eligible New Yorkers as ordered by a health care provider or by calling the NYS COVID-19 hotline at 1-888-364-3065

Fill out a COVID-19 online assessment to share your symptoms and preregister for testing:

<https://covid19screening.health.ny.gov/>



- People with serious underlying health conditions such as lung disease are NOT more likely to contract but are more likely to develop more severe symptoms if they get infected.
- The lungs are the first and main body organ affected by COVID-19.
- The virus rapidly invades cells in the lungs causing inflammation and breathing problems.
- It is thought to attack the cells lining the airways.
- This lung damage can lead to respiratory failure or ARDS (Acute Respiratory Distress Syndrome).
- Video on how coronavirus spreads:
- <https://www.nytimes.com/video/health/100000007056651/covid-ards-acute-respiratory-distress-syndrome.html>
- The American Lung Association has a helpline number to answer any questions regarding COVID-19: 1-800-LUNGUSA



- Continue taking medications for asthma, COPD, and other lung diseases.
- Having a poorly controlled chronic condition puts individuals at increased risk for severe illness.
- If running low on medication call your healthcare provider and/or see if your insurance allows a 90-day supply.
- Mail order pharmacy options.
- The most important factor in decreasing complications is keeping asthma well-controlled.
- Nebulizer precautions.
- Anyone with a compromised immune system should be especially stringent on staying home and practicing preventative measures.
- Contact your healthcare provider to determine an individual plan of action based on specific situation
- If you're at home on oxygen keep your equipment clean, have extra equipment available in case something breaks.
- If you're on an oxygen concentrator, make sure that the concentrator is serviced regularly and the filters are changed regularly.



- Cigarette smoking or Vaping
  - Have been linked to lung inflammation and reduces lung and immune function
- Poor air quality
  - People who live in places with more pollution could be more vulnerable
- <https://www.lung.org/lung-health-diseases/lung-disease-lookup/covid-19/webinars>
- Link to access and register for ALA previously recorded COVID-19 webinars and future webinars



- The virus causes the heart to have to work harder to get oxygenated blood throughout the body.
- This could exacerbate problems for someone with heart failure
- Less robust immune system.
- Destabilize plaque
- Recommendations:
  - Standard precautions
  - Physical activity at home
  - Healthy eating
  - Stress management



- Practice primary prevention methods such as social distancing, hand-washing, etc.
- Continue with medications (ACE inhibitors or ARBs) unless otherwise advised by your health care provider.
- Avoid high blood pressure hazards:
  - OTC Medications (NSAIDs like Motrin, Advil, Aleve)
  - Prescription Drugs (corticosteroids, oral birth control, immunosuppressants, mental health drugs and cancer medications can affect blood pressure – monitor blood pressure closely and consult your doctor)
  - Alcohol & Caffeine
  - Herbs and Food Combinations
  - Stress
- Extra prescription medication on hand
- Recognize a blood pressure emergency
  - Blood pressure rising quickly, chest/back pain, numbness/weakness – seek medical attention immediately





Prevention is the best defense - Stay home

Exercising, eating healthy, getting enough rest and reducing stress are ways you can **keep your immune system in top shape**





Practicing yoga -- as part of an overall healthy lifestyle -- can:

- help lower blood pressure
- increase lung capacity
- improve respiratory function
- improve balance
- boost circulation
- tone muscles
- It also can give you a sense of well-being while building strength



### Yoga & Respiratory Health

If you're affected by lung disease such as chronic obstructive pulmonary disease (COPD), asthma or lung cancer, there are safe exercise options for patients who have difficulty breathing, (under the guidance of a respiratory therapist or healthcare provider). Through gentle, breathing-based exercises, such as tai chi or yoga, you can improve your physical strength and promote emotional wellbeing. **These practices not only improve lung health and capacity, but can also help one cope with the stress, anxiety and depression that unfortunately sometimes accompany a lung disease. Check with your local library to see if they offer yoga classes.**



## Stress Reduction: Meditation

Recent studies have offered promising results about the impact of meditation in reducing blood pressure. There is also evidence that it can help people manage insomnia, depression and anxiety.

Some research suggests that meditation physically changes the brain and could help:

- increase ability to process information
- slow the cognitive effects of aging
- reduce inflammation
- support the immune system
- reduce symptoms of menopause
- control the brain's response to pain
- improve sleep



Picture taken from: [meditationlifeskills.com](http://meditationlifeskills.com)



**Research indicates that the practice of gratitude can have dramatic and lasting effects in a person's life. It can lower blood pressure and improve immune function... grateful people engage in more exercise, have better dietary behaviors, are less likely to smoke and abuse alcohol, and have higher rates of medication adherence.**

1. Health: What did your body do for you today?
2. Eat: What did you feed your body to nourish yourself today?
3. Activity: What did you do that you really enjoyed today?
4. Relationship: Who do you look forward to seeing?
5. Time: What are you doing right now?
6. Journal: Make a list of what you're grateful for each day when you wake up or before bed





### What are the benefits of heart-healthy eating?

Eating a heart-healthy diet is important for managing your blood pressure and reducing your risk of heart attack, stroke and other health threats.

Get quality nutrition from healthy food sources

### Aim to eat a diet that's rich in:

- Fruits
- Vegetables
- Whole-grains
- Low-fat dairy products
- Skinless poultry and fish
- Nuts and legumes
- Non-tropical vegetable oils

### Limit:

- Saturated and trans fats
- Sodium
- Red meat (if you do eat red meat, compare labels and select the leanest cuts available)
- Sweets and sugar-sweetened beverages



Image taken from: [health.clevelandclinic.org](http://health.clevelandclinic.org)





## **AHA Recommendation**

### **For Overall Cardiovascular Health:**

- At least 30 minutes of moderate aerobic activity (like walking) at least 5 days per week for a total of 150 min

AND

- Moderate-to high-intensity muscle-strengthening activity at least 2 days per week for additional health (free online exercises like yoga, Pilates, calisthenics)

### **For Lowering Blood Pressure and Cholesterol**

- An average of 40 minutes of moderate aerobic (walking) activity 3 or 4 times per week
- At home exercises from the AHA: <https://www.heart.org/en/healthy-living/fitness>



- Continue prevention and primary care through telehealth
- With recent concerns about crowds, social distancing, and the spread of COVID-19, you can get care from a clinician right from your home
  - Several ways to get care remotely: online consultation, video calls, and text
  - Use phone, tablet, or computer to receive virtual care
- Connect with a physician for your concerns/questions about COVID-19; address any symptoms you may be presenting
- Connect with your primary care physician for non-urgent care, mental health and other needs



### New York Presbyterian

[https://www.nyp.org/ondemand/urgent-care?gclid=CjwKCAjwkPX0BRBKEiwA7THxiAQ\\_trTNiVEY7iWtb6aayRvgWeLrY3VUmsmGK2Fk\\_ozsacTlqLy9IEBoCzEwQAvD\\_BwE](https://www.nyp.org/ondemand/urgent-care?gclid=CjwKCAjwkPX0BRBKEiwA7THxiAQ_trTNiVEY7iWtb6aayRvgWeLrY3VUmsmGK2Fk_ozsacTlqLy9IEBoCzEwQAvD_BwE)

\$49 per visit

8AM-12AM, 7 days a week

### City MD Virtual Care

<https://www.citymd.com/virtualcare>

Takes insurance (not complete list): Healthfirst, AmeriHealth, Metroplus, Oxford, etc.

Available 24/7, 365 days a year

### NYU Langone Virtual Urgent Care

<https://nyulangone.org/locations/virtual-urgent-care>

For patients who have minor medical concerns, not for emergencies

Flat rate of \$126 or insurance co-payment options for accepted plans



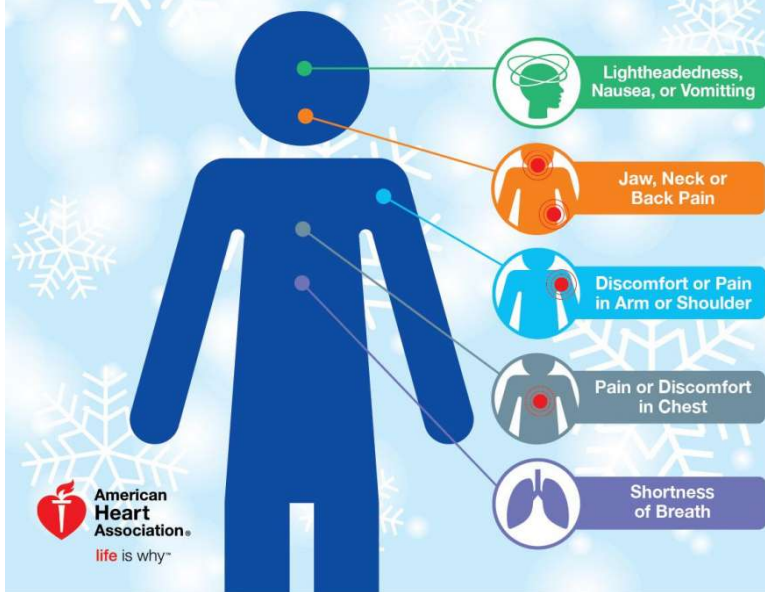


- If you experience life-threatening conditions, such as a heart attack or stroke, **DO NOT** delay seeking emergency help out of fear of contracting the virus in the hospital or being worried about adding additional strain to the medical system
- Under **NO** circumstance should you avoid going to an emergency room or calling 911 if you have serious symptoms, whether related or unrelated to COVID-19
  - Heavy bleeding, deep wounds, severe burns, head/neck/spine injury etc.
  - Symptoms associated with a heart attack or stroke
- Every minute that you delay, the likelihood of you having a worse outcome increases
- If a condition does not require emergency care, but cannot be treated through telehealth services, consider going to an urgent care facility



## Common Heart Attack

### WARNING SIGNS

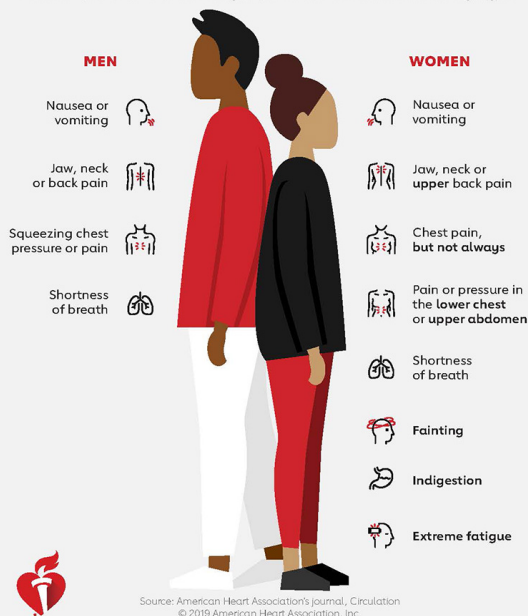


## Common Heart Attack Symptoms

### HEART ATTACK SYMPTOMS: MEN VS. WOMEN

By American Heart Association News

The most common symptom of a heart attack for both men and women is chest pain. But women may experience less obvious warning signs.





**SPOT A STROKE™**



**F**ACE

Drooping



**A**RM

Weakness



**S**PEECH

Difficulty



**T**IME

to Call 911



- With the enforcement of social distancing, it's easy to feel lonely, and can be especially difficult for those who experience mental health conditions
- We are all in this together and will get through this together
- We are physically distanced, but it's important to stay connected socially
  - Hold virtual gatherings to stay in touch with friends and family
  - Virtually work out with others
  - Take a free online course (<https://www.edx.org/>)
  - Play games on your phone or online with friends
- Remember that you are not alone
  - Reach out for help if you need it



(image taken from [Froedtert](#))

Join the American Heart & Stroke Association's Support Network

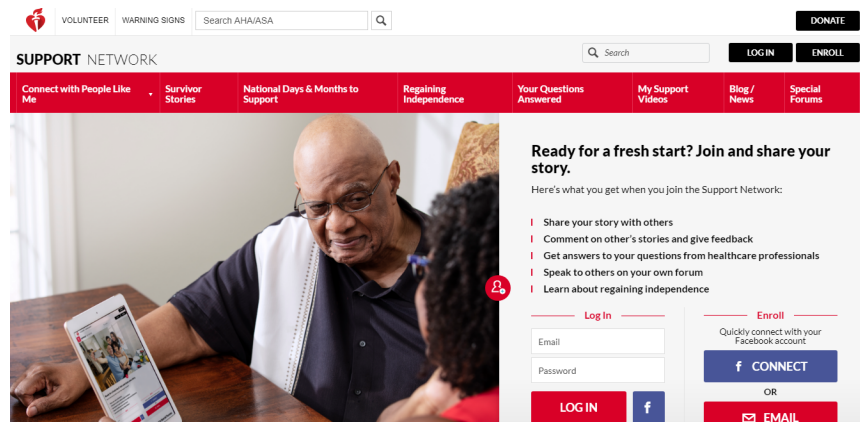
<https://supportnetwork.heart.org/>

Connect with others and share your experience

Seek and receive support

Explore different forums, read stories

Get answers to your questions from healthcare professionals





# Join the American Lung Association's Support Network

<https://www.lung.org/support-community/online-support-communities>

Connect with others

Call the Lung Help Line 1-800-LUNGUSA  
for any question on COVID-19



- Suffolk County Information Line (dedicated coronavirus/COVID-19 resources): 311
- Stony Brook Medicine Coronavirus Information
- General Hotline: (631) 638-1320
- Pregnancy Hotline: (631) 444-8940
- Have symptoms? Free COVID-19 testing (by appointment only): 888-364-3065
- For social service agencies in your area: Call 211 or visit [211li.org/cms](https://211li.org/cms)
- Food, paying housing bills, COVID-19 screening tool (in multiple languages)
- National Domestic Violence Hotline: 800-799-7233
- Child Abuse: Emergency Child Care Services for Essential Workers from SCOPE: 311 or visit [scopeonline.us/scope-emergency-child-care](https://scopeonline.us/scope-emergency-child-care)
- Filing for Medicaid: 855-355-5777/New York State of Health or 800-541-2831/Medicaid Helpline
- DSS Sanctions: (631) 853-3664



## Mental Health Services

- DASH (Family Service League's Diagnostic, Assessment and Stabilization Hub): (631) 952-3333
- New York State Hope Line (addiction): 877-846-7369; text 467369 (24/7)
- National Suicide Prevention Lifeline: 800-273-8255 (24/7)
- SAMHSA (Substance Abuse and Mental Health Services Administration): 800-662-4357 (24/7, English and Spanish)
- Office of Mental Health Free Emotional Support Line: 844-863-9314





## Food Assistance

- SNAP (Supplemental Nutrition Assistance Program): [myBenefits.ny.gov](https://myBenefits.ny.gov)
- WIC (Special Supplemental Nutrition Program for Women, Infants, and Children): Call (631) 444-5239 or visit [stonybrookmedicine/wic](https://stonybrookmedicine/wic)
- Island Harvest: [islandharvest.org/find-help/find-a-food-pantry/](https://islandharvest.org/find-help/find-a-food-pantry/)  
For emergency aid, email [emergencyresponse@licares.org](mailto:emergencyresponse@licares.org) or call (631) 582-3663.
- Long Island Cares/The Harry Chapin Food Bank: [licares.org/find-help/food-locator/](https://licares.org/find-help/food-locator/)



## Financial Assistance

- Free or Low-Cost WiFi (for qualifying individuals): 800-SAFELINK (800-723-3546)
- HEAP (for assistance paying energy bills): (631) 853-8820
- Mortgage Assistance: 888-342-3736

## Housing

- Illegal Evictions: Call 911 and show the police officer identification, lease or public utility bill with your name and address. If you are unable to get back into your apartment, you should contact the court system at 833-503-0447.



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