



CardioSmart<sup>®</sup>

American College of Cardiology

*Guideline-Based Patient Education*

# Coronavirus Disease 2019 (COVID-19) and the Cardiac Patient

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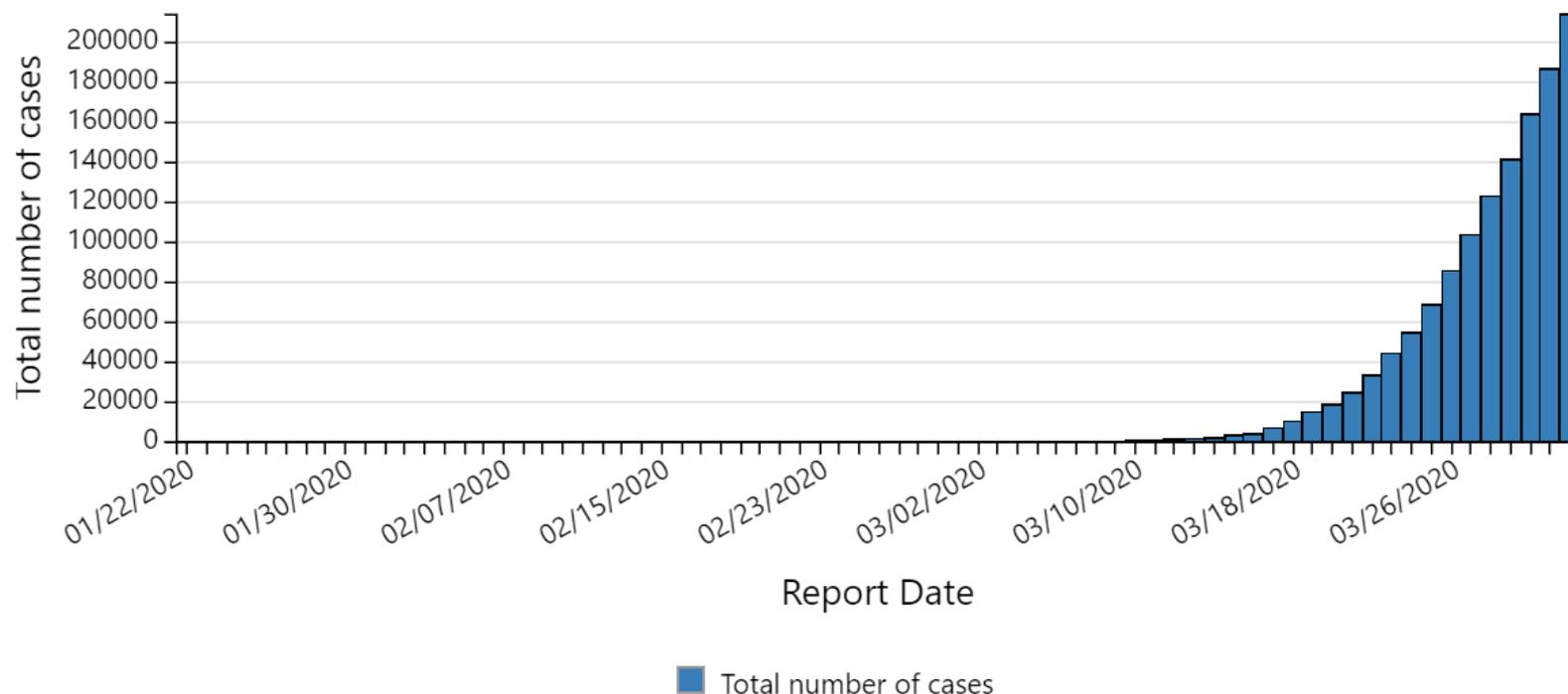
# Today's Program

- Overview of coronavirus disease 2019
- Symptoms to watch for
- People at greater risk of severe illness
- How coronavirus may affect the heart
- Tips to stay healthy
- Where to learn more

- Also called COVID-19 for short
- It's a “novel” or new virus
  - No one has any existing immunity to it
  - Unlike the flu, there is no vaccine to protect us
  - **We are still learning more every day**, don't yet know long-term effects
- An illness affecting the lungs and other parts of the respiratory system
- Spreads easily
  - People can spread the virus without having symptoms
  - Reason for stay-at-home orders, social distancing

# Coronavirus Disease 2019

Cumulative total number of COVID-19 cases in the United States by report date, January 12, 2020 to April 1, 2020, at 4pm ET (n=213,144)\*†



Source: CDC as of April 1, 2020

# COVID-19 Symptoms

The main symptoms of the disease are:

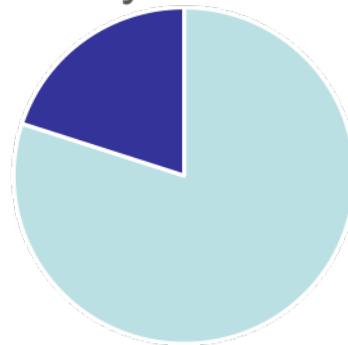
- Fever
- Cough
- Shortness of breath/difficulty breathing
- Loss of sense of smell or taste may signal infection, but is still being studied

# COVID-19 Symptoms

Most people will have mild symptoms or can recover at home without having to go to the hospital

For others, the virus can cause severe illness including pneumonia and even death.

Severity of COVID-19



■ Mild or recovery at home ■ Hospitalization ■ Severe illness or death

# Who is at Greatest Risk?

Anyone can get COVID-19. But certain people seem more likely to get very sick:

- Adults  $\geq$  65 years old
- People living in nursing homes or long-term care facilities
- People with existing medical conditions, including:
  - Heart conditions\*
  - Diabetes
  - Lung disease and moderate to severe asthma
  - Illnesses that lower the immune system's ability to fight infection
  - Obesity

# How it Affects the Heart

Although the main target of the virus is the lungs, it can also tax the heart, especially one that is weaker than normal.

How?

- COVID-19 triggers an inflammatory response that can **make the heart work harder**
  - A lung infection can **lower the amount of oxygen in the blood**, so the heart has to pump harder; there is also less oxygen-rich blood for the heart itself
  - Can lead to **drops in blood pressure** if the heart can't meet the demands of the body

People with heart disease may be at greatest risk based on data from China and Italy

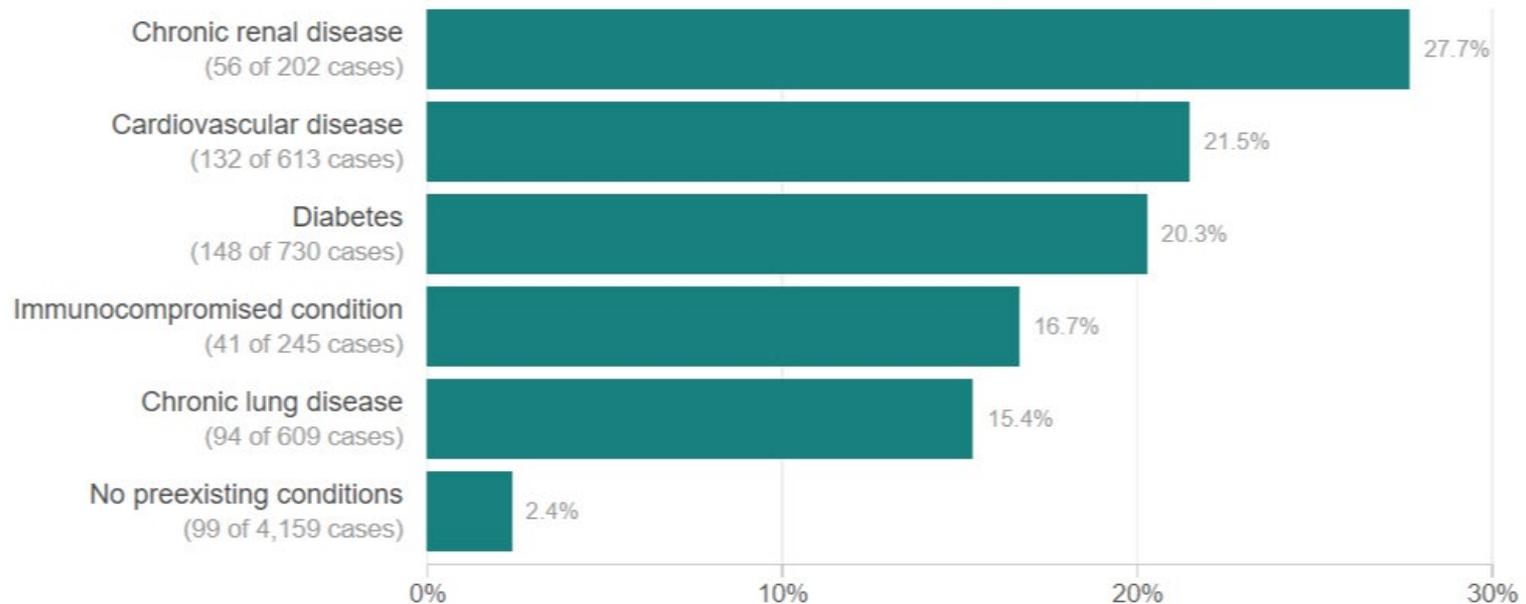
# How it Affects the Heart

## Other possible heart complications:

- May infect the heart muscle directly and cause inflammation, called myocarditis
- May cause chest pain or trigger heart attack
- Increase coagulation (possible cause of heart attacks)
- Heart failure
- Heart rhythm problems

## In U.S., COVID-19 Patients With Certain Underlying Conditions More Likely To End Up In ICU

Patients with certain illnesses were more likely to need intensive care treatment. For instance, among 6,637 cases in the CDC's data set for which hospitalization status was available, only 202 had chronic renal disease but of those patients, nearly 28% were treated in the ICU.



**Note:** Based on preliminary statistics summarizing 6,637 cases reported to the CDC with complete information and hospitalization status

# Tips to Stay Healthy

Here are steps you can take to avoid getting sick and to feel more in control amid the pandemic:

1. Maintain **social distance**
2. Keep up **heart-healthy habits**
3. **Take your medications** as directed
4. Know **when to call for help**, take advantage of telemedicine and ask questions
5. **Keep calm and stay connected**

# Maintain “Social” Distance

Limiting physical contact with others (called “social” distancing) is a key public health strategy to curb spread of disease.

- Works to:
  - Slow the spread of the virus so that people who get sick can access medical care (“flatten the curve)
  - Reduce the overall impact of COVID-19
  - Save lives
- Less about distancing yourself emotionally, socially or spiritually, but physically

# Maintain Distance cont.

Especially important for people with heart disease

- New research suggests the virus may not only spread through coughing and sneezing, but also in breathing or speaking to someone

Avoid children and grandchildren when possible as they may be carriers, but with few or no symptoms

# Effect of Maintaining Distance



# Keep Up Heart-Healthy Habits

- Choose **heart-healthy foods** – and snacks
  - Eat well-balanced meals
  - Try some new heart healthy recipes
- **Stay hydrated** by drinking plenty of water
- Get enough **sleep** – aim for 7-8 hours a night
- **Don't smoke or overindulge** with food or alcohol\*
- **Follow your care plan** and stay up-to-date with your vaccinations
- **Exercise** daily

# Keep Up with Exercise

Keep your heart and immune system strong by staying physically fit while at home:

- Sign up for **online workouts**, there's an app for that
- Get outside for **regular walks and fresh air**
- Start a **family step challenge** and aim for 10,000 steps a day!
- **Move about in your home** – going up stairs, even cleaning counts
- Spring has sprung, so start tending to your **garden** if you have one
- Turn on some music and **dance**

# Take Your Medications

- Take your medications as directed unless you are told otherwise by your health care professional
  - High blood pressure and heart failure medications, including ACE-inhibitors (for example, enalapril or lisinopril) or ARBs (for example, losartan or valsartan)
  - Statins
- Talk with your care team **before** starting any new over-the-counter drugs, vitamins or supplements
- Try to order refills in advance to have at least a 1-month supply on hand
- Ask if medications can be delivered

# A Shift to Telehealth

To help minimize the spread of COVID-19, many medical offices have decided to:

- Postpone routine care appointments and/or
- Offer care and manage heart conditions via telephone in place of an in-person visits (called telehealth or telemedicine)

Talk with your care team to find out if this would be appropriate for you.

# Know When to Call for Help

If you think you may have COVID-19 or have been exposed to it:

- Call your doctor's office or the Emergency Department first before going in (unless critical)
- Follow other CDC recommendations:
  - Stay home and isolate yourself from others
  - Monitor your symptoms
  - Ask about wearing a face mask
  - Avoid sharing personal household items and clean frequently touched surfaces
  - Contact your doctor if your symptoms worsen

# Know When to Call for Help

## When to call for help

when you've been diagnosed with or exposed to COVID-19



Call 911 anytime you think you may need emergency care. For example, call if:

- You have severe trouble breathing.
- You have severe dehydration. Symptoms of dehydration include:
  - Dry eyes and a dry mouth.
  - Passing only a little urine.
  - Feeling thirstier than usual.
- You are extremely confused or not thinking clearly.
- You pass out (lose consciousness).

If you have a high risk of having been exposed to this virus or you have tested positive but don't have symptoms, call your doctor **now** if you develop symptoms such as:

- Shortness of breath.
- Fever.
- Cough.

### If symptoms get worse...

If you have been diagnosed with coronavirus disease and already have a cough, fever, or shortness of breath, call your doctor **now** if your symptoms get worse or you don't get better as expected.

### Call first

Whether you have symptoms or not, call ahead to the doctor's office before you go. To prevent exposing other people to the virus, make sure you wear a face mask when you go to the doctor.

<https://www.cardiosmart.org/Coronavirus/More-Information/When-to-Call-for-Help>

Remember: There is a lot of misinformation online and being shared by emails, so be sure to call with questions.



My telehealth line:

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My doctor:

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The anxiety and uncertainty we feel about COVID-19 is real.

Be sure to mind your mental health, too.

- Grab a favorite book, watch a light-hearted TV show or movie, listen to your favorite tunes
- Meditate, practice yoga, laugh or find other ways to unwind
- Limit how much you watch the news, especially before bedtime
- Have a routine or structure to your day

Social distancing does NOT mean social isolation! It's about keeping physical distance, so **stay connected**.

- Reach out by phone, email and video chats
- Stay involved with hobbies online
- Find out about local community resources and ways you can help from a distance\*
- Find joy and things that fill your spirit
- Use some of the coping strategies you've learned in living with your heart disease and talk about your feelings
  - If you have worries or questions about the virus and your heart health, call your care team

# A Word on CHD for Parents

For parents of children with congenital heart disease, heed any orders to stay at home, limit contact with others (maintain social distance) and stick to the care plan in place.

- Children do not seem to be at high risk of developing COVID-19 and symptoms tend to be mild
- If your child has a cough/fever/chills or you suspect family members have been exposed, call your primary care doctor for guidance.
- If you or your child has more severe symptoms (trouble breathing, poor feeding, not urinating as often, loss of consciousness), call 911 and seek immediate medical attention.

# Where to Learn More

Remember that trusted sources like the CDC are the best way to get **the latest and most accurate** information about COVID-19:

[www.cdc.gov/coronavirus](http://www.cdc.gov/coronavirus)

Also, check out ACC's resources:

CardioSmart Coronavirus Hub

[www.CardioSmart.org/Coronavirus](http://www.CardioSmart.org/Coronavirus)

ACC's COVID-19 Hub

[www.acc.org/covid19](http://www.acc.org/covid19)