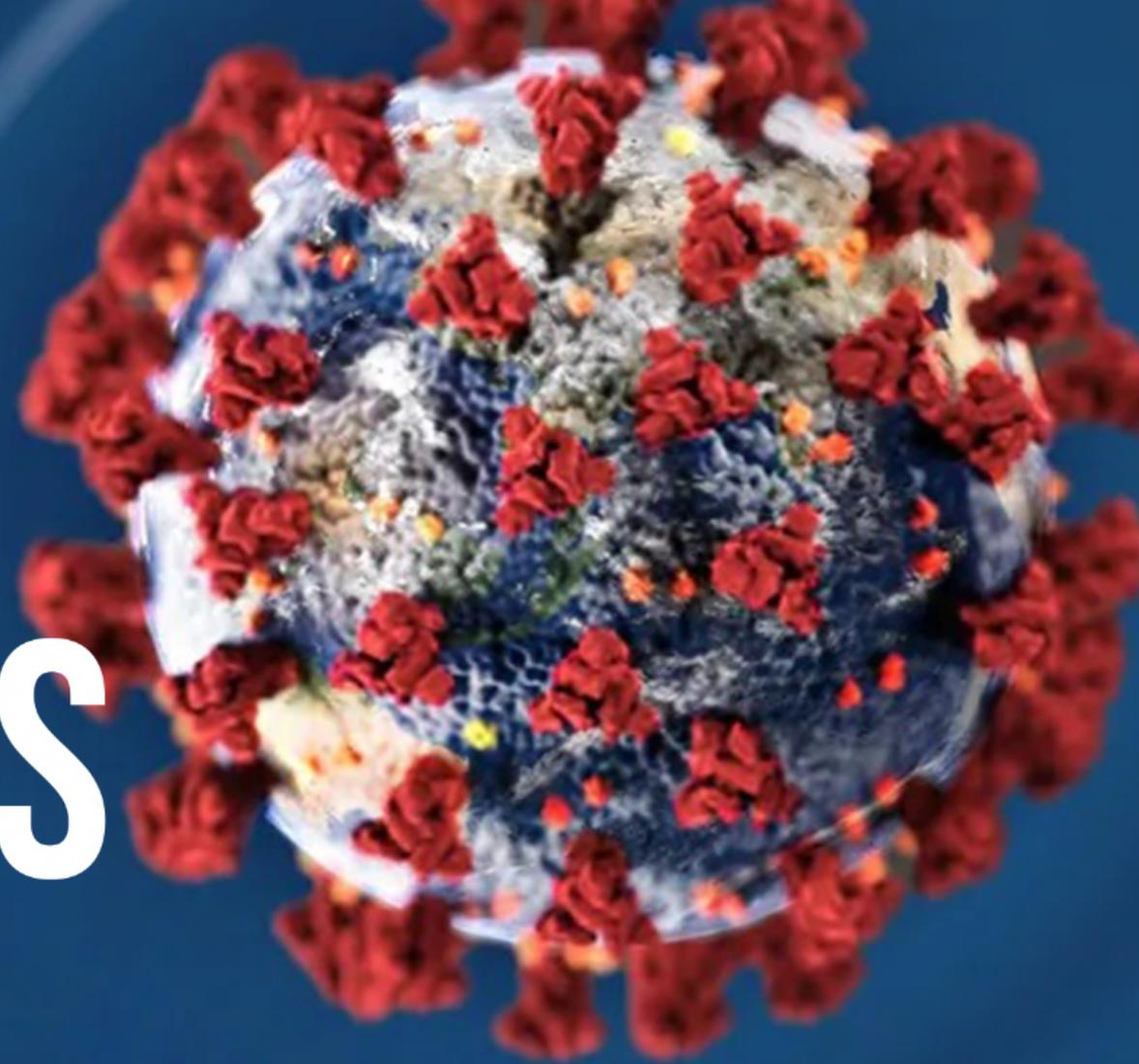


# CANCER IN THE TIME OF CORONAVIRUS



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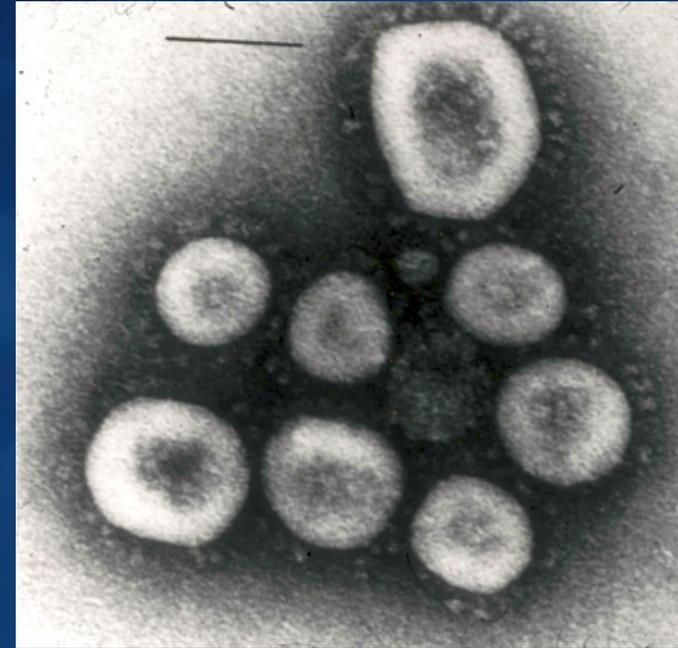
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# CONTENTS

- Coronavirus 101
- Cancer and COVID-19
- Cancer Treatment
- Prevention & Control of COVID-19
- Questions & Answers

# WHAT ARE CORONAVIRUSES?

- “corona” = crown
- Origin estimated circa 2400-3300 BC
- Coronavirus genera
  - *alpha*: cats, dogs, humans, bats, pigs
  - *beta*: humans, bats, camels, mice, hedgehogs
  - *gamma*: beluga whales, birds
  - *delta*: birds



# WHAT ARE CORONAVIRUSES?

- Many cause “common cold”
- But also caused:
  - SARS in 2002-2003
  - MERS on 2012
  - COVID-19 in 2019-2020

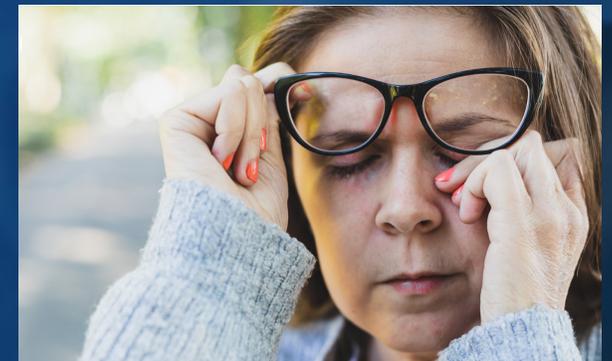


# WHAT IS COVID-19?

- Common:
  - **Fever**
  - **Cough**
  - **Shortness of Breath**
- 5 out of 6 have mild to moderate symptoms and recover.
- 1 out of 6 develop pneumonia and multi-organ system failure.
- First cases seen in Wuhan, China in December 2019
- Human-to-human transmission
- Spread by “droplets” not “aerosol”
- **Hand to Face** (mouth, nose, eyes)

# HOW TO CATCH COVID-19

1. Prolonged (10-30 minutes) and close contact (within 6 feet) with someone who has active symptoms (fever, cough, shortness of breath) or *about* to develop symptoms.
2. Hand touches droplets.
3. Hand touches face (mouth, nose, eyes).



## COVID-19 RISK FACTORS FOR SEVERE DISEASE

- Older age (especially over 70 years-old)
- Lowered immune system
- Under study:
  - Hypertension
  - ACE and ARB inhibitors
  - Males
  - Heart disease
  - Stroke
  - Cancer

## 3 HANDS-DOWN RULES TO LIVE BY

1. Always know where your hands are and clean them often.
2. Don't touch your face. Wear a simple mask to prevent face touching.
3. Distance yourself. But call, videochat, or instant message your social circle.



# WHEN TO GET HELP FOR CANCER PATIENTS



## Call Your Doctor

- Fever
- Cough
- Weakness or fatigue
- Diarrhea
- Dehydration
- Someone COVID-19 positive at home
- Worsening cancer or treatment symptoms



## Get Tested for COVID-19

- Fever
- Cough



## Go to the Hospital

- Shortness of breath
- Neutropenic or Transplant & Fever

## WHERE TO GET TESTED



The COVID-19 Call Center is available 24/7 | 1 (866) 779-6121 | [COVID-19@flhealth.gov](mailto:COVID-19@flhealth.gov)

- County Health Departments
- Drive-Thru Test Sites (need referral from your doctor)
- Avoid hospitals unless experiencing shortness of breath
- The FDA has not approved any direct-to-consumer tests, yet.

WHAT IF I OR  
SOMEONE I LIVE  
WITH HAS  
SYMPTOMS OF  
COVID-19?

- Isolate within the home
- If possible, stay in a separate room or bathroom
- Put a mask on the symptomatic person at home if they need to be around others
- Everyone must clean hands several times a day

## WHY IS MY DOCTOR DELAYING MY TREATMENT NOW?

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You or a close contact have COVID-19

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Post-surgical treatment that can be temporarily delayed with low-risk

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Treatment with high-risk of weakening immune system

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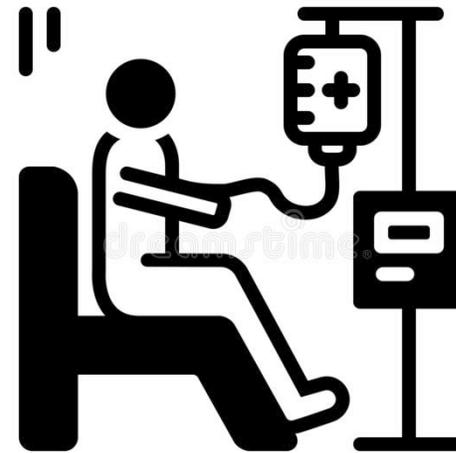
Alternative treatment option by mouth is available

---

Long-term treatment that can be temporarily delayed with low-risk

## WHY IS MY DOCTOR NOT DELAYING MY TREATMENT NOW?

- Disease with high-risk of progression or death in the next 2-4 weeks without therapy
- No treatment alternatives that can be given by mouth
- Time-sensitive surgery
- Symptoms uncontrollable by oral medications
- Life-threatening complication of disease



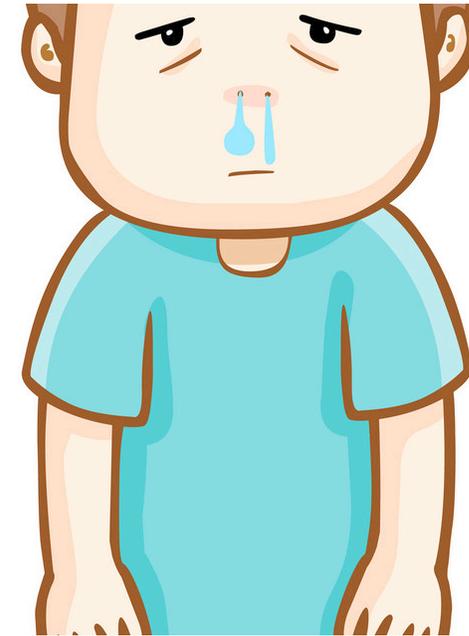
## WHAT OTHER STRATEGIES IS MY ONCOLOGIST USING TO PROTECT ME?

- Reducing medication dosage
- Lengthening time to start next cycle
- Telehealth visits
- Switching injection to oral drug
- Home health care



## WHAT DO I DO FOR RUNNY NOSE?

- Monitor symptoms for development of
  - *cough,*
  - *fever, or*
  - *shortness of breath*
- Self-isolate in your home



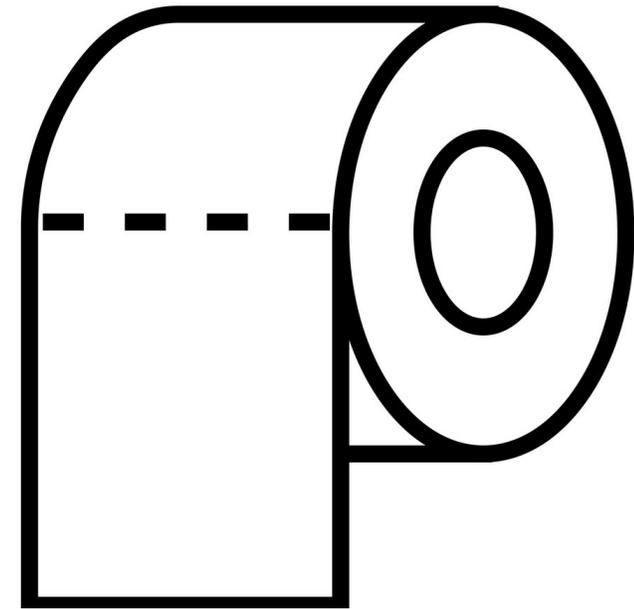
## WHAT DO I DO FOR NAUSEA OR VOMITING?

Continue your usual management  
with anti-nausea and anti-vomiting  
medications



## WHAT DO I DO FOR DIARRRHEA?

- Call your oncologist to see if additional testing is needed
- Monitor symptoms for development of cough, fever, or shortness of breath
- Continue your usual management with anti-diarrhea medications if this is part of your cancer plan and your symptoms have not changed



## EXERCISE & NUTRITION

- Continue daily exercise goals
  - Try to prioritize exercises inside the home
  - Avoid communal places like gyms
- Try to maintain a balanced diet – there is no need to change your nutritional plan due to COVID-19
  - Try to shop at low-volume times or ask people you live with to go shopping to reduce your exposure to potentially sick individuals

**How about running or other outdoor activities?**

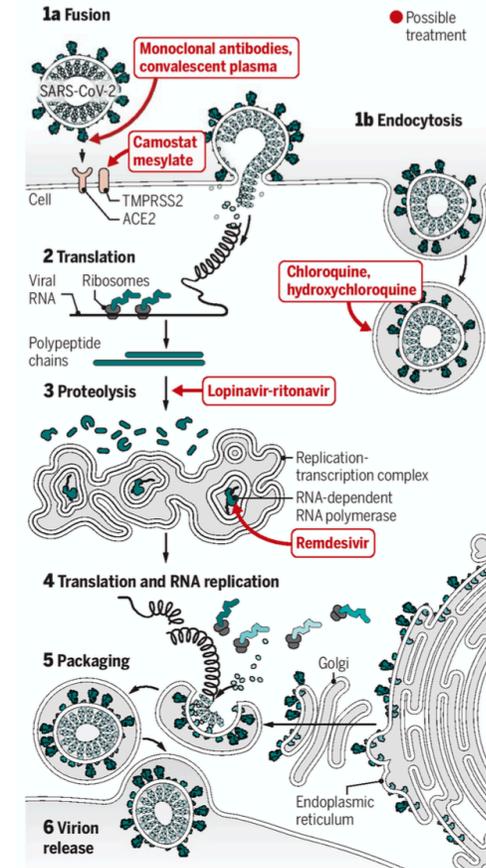


**Outdoor exercise such as running is fine but stay away from others. Avoid all group or contact sports**

#FlattenTheCurve

# COVID-19 TREATMENTS

- SOLIDARITY Clinical Trial
  - First patient March 28, 2020
  - Randomized treatments:
    - Chloroquine and hydroxychloroquine
    - Lopinavir and ritonavir
    - Lopinavir, ritonavir, and interferon-beta
    - Remdesivir



# CORONAVIRUS VACCINES

- 48 vaccines in development
- 2 vaccines currently being tested in humans
  - Started March 16, 2020

2 candidate vaccines in clinical evaluation

Platform	Type of candidate vaccine	Developer	Coronavirus target	Current stage of clinical evaluation/regulatory status- Coronavirus candidate	Same platform for non-Coronavirus candidates
Non-Replicating Viral Vector	Adenovirus Type 5 Vector	CanSino Biological Inc. and Beijing Institute of Biotechnology	COVID-19	Phase 1 <a href="https://www.chictr.org/ct2/ChiCTR2000030906">ChiCTR2000030906</a>	Ebola
RNA	LNP-encapsulated mRNA	Moderna/NIAID	COVID-19	Phase 1 <a href="https://www.clinicaltrials.gov/ct2/show/study/NCT04283461">NCT04283461</a>	multiple candidates

## RATIONAL HOPE

- Practice caution, not fear
- Wave to your neighbors
- Video and phone calls with loved ones
- Be respectful to the service workers – grocery employees, food and delivery workers, police officers, firefighters, military, etc.
- Trust your doctors and clinics

## COMMON QUESTIONS

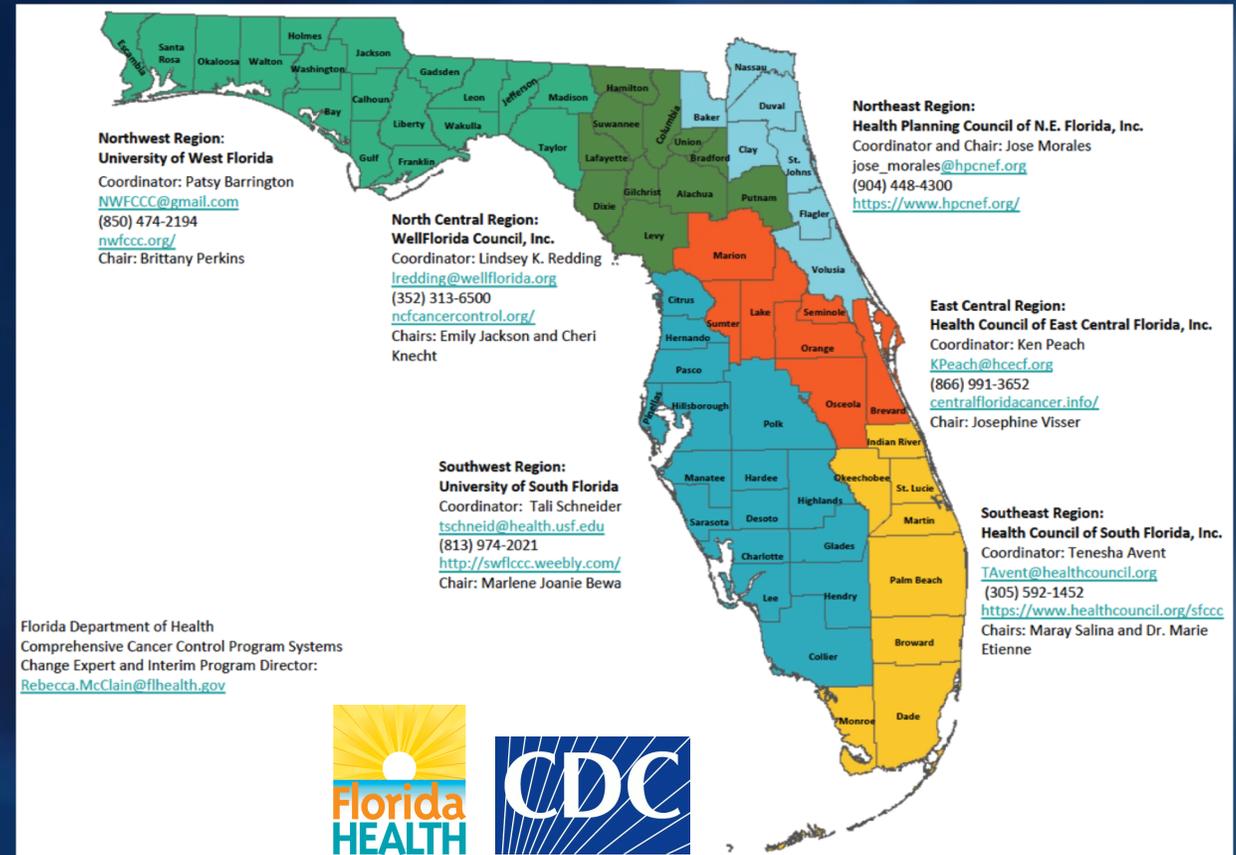
- Can I play with my kids?
- Can I go through the Bojangles drive-through?
- Do hormone therapies weaken the immune system?
- Should I suspend treatment in the middle of a course of therapy?
- Should I delay cancer surveillance scans?
- Should I delay my biopsy?
- Are all cancer patients immune compromised?

## PATIENT RESOURCES

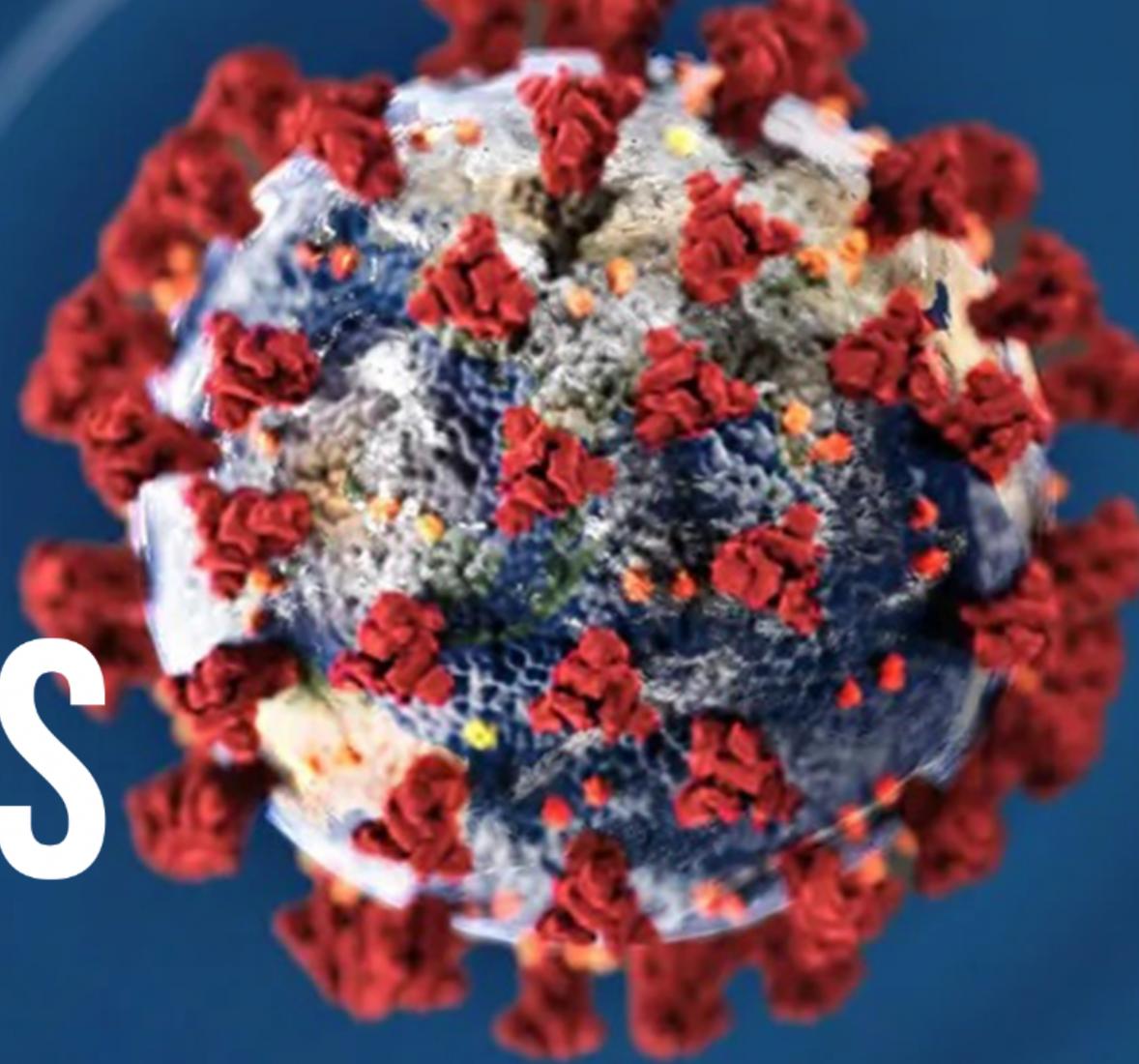
- CDC: <https://www.cdc.gov/coronavirus>
- CDC Travel FAQ: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/faqs.html>
- American Cancer Society: <https://www.cancer.org/about-us/what-we-do/coronavirus-covid-19-and-cancer.html>
- DOH of Florida: <https://floridahealthcovid19.gov/>
- Cancer.Net: <https://www.cancer.net/blog/tags/coronavirus>
- NPR Social Distancing: <https://www.npr.org/sections/health-shots/2020/03/17/817251610/its-time-to-get-serious-about-social-distancing-here-s-how>

# THANK YOU

- North Central Region Cancer Control Collaborative
- UF Health Cancer Center
- Florida Cancer Control and Research Advisory Council (CCRAB)



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