https://bit.ly/CovidABC1

WELCOME to Dr. Cate's COVID News and Resources page

The latest news is at the top. Older stuff down towards the bottom.

COVID Treatment

(August 2021 UPDATE)

There is now an FDA-approved infusion therapy that works to shorten the course of COVID and it's FREE thanks to FEMA. You must be treated within 10 days of symptoms onset. Click here to sign up online: https://floridahealthcovid19.gov/

COVID Home Test

(August 2021 UPDATE)

Available for $24 at CVS and Walgreens find out what store near you carries the test here: CVS

https://www.cvs.com/shop/abbott-binaxnow-covid-19-antigen-self-test-2-tests-for-serial-testing-prodid-550147

And here: Walgreens

https://www.walgreens.com/store/c/binaxnow-covid-19-antigen-self-test-at-home-kit/ID=300414527-product

https://bit.ly/CovidABC2

COVID News for TIB Meeting July 2021

Am I for or against the vaccine? The answer is YES. Both.

There is no blanket answer for everyone so it's a silly question in a way. Risks and benefits must be considered for every individual person. The latest science and the best science must be applied intelligently to understand both risks and benefits.

Email DrCate@ABCfws.com if you want to discuss your situation.

Is the vaccine working?

Yes but that does not mean its perfect. We've had cases + in vaccinated folks. Fortunately these cases (not just at ABC but everywhere) have been mild meaning no hospital but can be long duration like weeks. It's been happening so far at ABC after events where folks were all vaccinated and together indoors not wearing masks. And it's caught people by surprise because if you think you are vaccinated you may not consider your fatigue could be covid. Runny nose cough and respiratory symptoms may be absent or very minor after vaccination.

Which Vaccine is Best?

I recommend PFIZER as your FIRST CHOICE

If you have decided to get a vaccine, you should know that this vaccine has fewer side effects than the other 2 currently available in the US and is slightly more effective.

It is an mRNA vaccine and requires 2 shots.

Effectiveness

- Prevention of infection by original strain 95%.
- Prevention of hospitalization from original strain close to 100%
- DELTA VIRUS UPDATE:
    - **Preliminary results show effectiveness against delta 87% after two doses**

- Another study showed effectiveness against infection (sympt.+asympt.) is down **from 94.3% in May to 64% in June. Probable cause: rise of delta prevalence.**
- Effectiveness against hospitalization **down from 98.2% in May to 93% in June.**

I Recommend MODERNA as Your SECOND CHOICE

If you have decided to get a vaccine and you can't find anywhere to get the PFIZER vaccine, this is a good second choice. It still has fewer side effects than the Astra Zeneca vaccine and is still extremely effective.

Like Pfizer, It is an mRNA vaccine and requires 2 shots.

Effectiveness

- Prevention of infection by original strain: 94%
- As of March 2021, 94% effective against COVID-19 hospitalization among fully vaccinated adults
- DELTA VIRUS UPDATE
  - Preliminary results show 72% effective from 14 days after first dose. Not enough data for two doses.

I Recommend J&J if you are in a rush

If you have decided to get a vaccine and you need immunity quickly, this is a reasonable option since it only requires one dose. The technology is newer, less predictable and the efficacy is not as good as the two USA mRNA vaccines.

DO NOT USE if you have an immune deficiency. People with clotting disorders should also consider a different vaccine due to the very rare deadly clots that can form.

Effectiveness

- About 70% against infection
- About 85% against hospitalization/severe disease
- DELTA VIRUS UPDATE
  - Preliminary data says it's effectiveness against delta is "promising" no specifics available

Pregnancy and COVID vaccines

No good studies have evaluated vaccine safety in pregnancy. All we have to go on so far is "preliminary data did not show any obvious findings."

Am I High Risk of Severe COVID, Long COVID or Other Complications?

The decision to get a vaccine should be made after considering your personal risk of having serious or deadly COVID, as well as having complications like organ damage or other issues from "long COVID."

We do know that **people with immune deficiencies and people with metabolic disease are the two categories at highest risk** of all types of serious COVID issues, so I will discuss how you can tell if you fall into one of those categories.

Immune issues that increase risk

Immune factors associated with more serious COVID are:

- Age over 65 and over 85 the risk is even higher because the immune system becomes weaker as we age.
- Pregnancy affects the immune system in ways that seem to increase risk of serious infection.
- HIV infection

Other immune issues are not well understood. The following common immune issues have **not** yet been shown to increase the risk. It may be that some immune suppression prevents the more serious inflammation, or it may be that we just don't have enough data yet.

- Auto-immune disorders
- Taking asthma medications

Metabolic issues that increase risk of severe infection

The following conditions have been found to increase risk of COVID severity:

- Morbid obesity, meaning body mass index (BMI) over 40. Calculate your BMI here.
- Triglycerides over 150
- LDL (often called "bad" cholesterol) below 100
- HDL (often called "good" cholesterol) under 30

- Total Cholesterol under 140
- Fatty Liver (high AST and ALT liver enzymes in the blood)
- Gout (High uric acid levels in the blood)
- Polyunsaturated fatty acids in your bloodstream or body fat (you are likely to have this issue if you eat fast food, junk food or other foods high in seed oils, which I call the Hateful 8).

Kids!

Long COVID in kids may be far more common than we thought, according to a study in the UK "more than half of children aged between 6 and 16 years old who contract the virus have at least one symptom lasting more than 120 days, with 42.6 percent impaired by these symptoms during daily activities."

Other studies contradict this suggesting long covid rates much lower, around 5%.

The most important thing to know is that kids can get long covid even if they had no symptoms of their COVID infection. Long COVID in kids can cause:

- Shortness of breath
- Fatigue
- Digestive problems
- Chest pain
- Rash
- Blood clots
- Hallucinations
- Strokes
- Hair lossAnd nearly 100 other symptoms according to one of the few studies of long COVID in kids.

Delta Variant

What we know about this newer variant

- It's more contagious. Compared to the original strain from Wuhan where each contagious person infected an average of 2.5 people, with delta it's an average of 6 people.
- It may be more severe, twice as many hospitalizations in one study, but we're not sure yet.
- It was expected to become the dominant strain in the US back in May and that has already happened among kids

https://bit.ly/CovidABC6

https://bit.ly/CovidABC7

Resource List

COVID TESTING LOCATIONS

CVS has the easiest process, Walgreens is also good.

To find a location, google: “Where to get tested for covid-19 near me.”

When scheduling at CVS if Dr Cate or an HRBP has recommended you test, check the box that asks “I have been prioritized for testing by a doctor”

COVID TESTING TYPES

REGULAR TEST: Called PCR. Can be done with a swab deep in the nose OR the front of the nose OR saliva/back of the throat. All are more accurate than the antibody test. 2-5 days for results.

RAPID TEST: Called “antigen” test. Accurate ONLY if you have symptoms. Do not get rapid testing when you were exposed but don’t yet have symptoms.

RAPID BLOOD TEST: Called “antibody” test. Done with a finger stick or blood draw. Do not get this test unless requested to do so by a doctor.

Email DrCate@ABCfws.com if you have questions on testing.

COST of TESTING

ABC insurance covers all types with no copay

The rapid test costs 100-150 depending on location

The PCR test costs 20-40 depending on location

Free testing is available at Department of Health Locations, find one near you using this link: http://www.floridahealth.gov/all-county-locations.html

https://bit.ly/CovidABC8

COUGH and SYMPTOM RELIEF MEDS

For serious cough and shortness of breath, by Prescription

Dr Cate or your doctor can prescribe you inhalable steroids delivered by a nebulizer device can prevent hospitalization and should be prescribed for anyone with coronavirus or symptoms of coronavirus who has asthma, sleep apnea, obesity, diabetes, fatty liver or other serious underlying condition.

Nebulizer devices are available at Walgreens by prescription and over the counter at Publix and most other pharmacies.

What can I take for covid cough OVER THE COUNTER?

EXAMPLES, Left from CVS | Right from WalMart

This segment provides guidance on purchasing over the counter cough meds.

Prescription drugs may interact with certain ingredients. Therefore, you should do a quick google search on the drug you take and the active ingredient in the cough medication to avoid interactions. For example, if you take atenolol search for “atenolol dextromethorphan interactions.”

The only true OTC cough suppressant is **DEXTROMETHORPHAN**, the DM in the Mucinex **DM** shown above. It does not make you drowsy. About 5 percent of people who take it feel it keeps them awake.

The other active ingredient in the above two examples is a mucus loosener, called **GUAIFENESIN**, which the label calls and 'expectorant' (the technical term for a compound that loosens thick mucus). Mucinex is a brand name for guaifenesin. It is especially important if you have a history of asthma or your cough is productive.

AVOID PHENYLEPHRINE. This drug is related to sudafed and useful mostly for sinus congestion. It is added to many cough medicines so be sure to read active ingredients to avoid it. It will not help suppress a dry cough and it can make you feel like you drank way way way too much coffee.

Also be sure to review supportive measures like humidification, which really helps. And if you have to use inhalers from time to time, be sure to stock up and consider a nebulizer.

I have diarrhea at night, what can I do for that?

Benadryl (generic is diphenhydramine) can help slow down your digestive system, as can Dramamine, and they both help you get back to sleep quickly.

What can I do for nausea?

Benadryl (generic is diphenhydramine) can help with nausea, as can Dramamine.

What can I take to help me sleep?

Sleep is important, and OTC antihistamines like Benadryl and Dramamine (generic is diphenhydramine) can help to make you relaxed and drowsy.

Tylenol PM

Nyquil help you sleep

Does Benadryl really do all those things?

Yes. Basically everyone should have it or the generic (diphenhydramine) in their house all the time.

What can I take for fever or pain?

USE acetaminophen (Tylenol) only

AVOID: advil, aspirin, ibuprofen, aleve (these are all known as "NSAIDS") because it seems to worsen the disease.

Can HRBP who refers someone to me send me the information from Jody's Q&A including symptoms and dates/travel etc?

Team Member Advised to Go Home

- Unless a doctor advises otherwise, Schedule COVID-19 RNA testing (nose swab) at a Department of health, Urgent care or other established clinic location staffed by trained medical personnel (the parking lot pop-ups may not be staffed by medical personnel)
- If you need a doctor's note for the testing location selected and your doctor can't help you in a timely manner, you can contact Dr Cate DrCate@ABCfws.com or 707 339 1976. Be sure to include your full name and store number when you contact Dr. Cate.
- Unless your doctor or Dr Cate advises otherwise, plan to stay out 10 days from the first day of symptoms or until the test result is negative, whichever occurs first.
- Contact absence pro if you are advised to stay out 4 or more days.
- Please contact your doctor or Dr. Cate to help you manage your health condition. [contact info]
- If the result is positive advise HR ASAP

WHEN CAN I RETURN TO WORK?

You do not need a negative test to return to work. You just need to answer “yes” to the following three questions:

1. Has it been at least 10 days since your symptoms first started?
2. Has it been 24 hours since you last had a fever (without using fever-reducing medicines)?
3. Have your symptoms, such as cough or headache, improved?

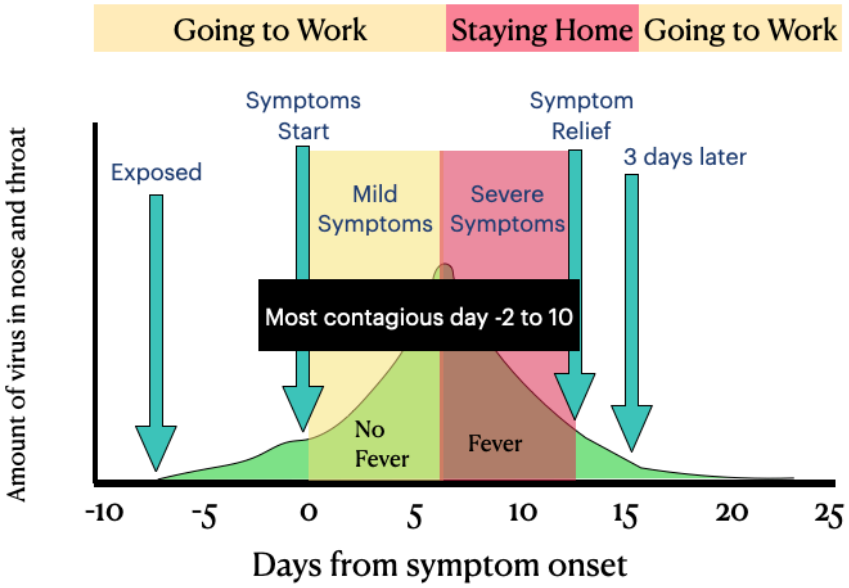
TRANSMISSION TIMING

I think I’ve been exposed, how long until I start feeling sick?

If you were exposed to someone with coronavirus, expect to develop symptoms somewhere between 2 and 14 days, but if you haven’t developed any symptoms before 12 days there’s less than 3% chance you will.

https://bit.ly/CovidABC12

Symptom Timeline v Contagiousness



https://www.medicalnewstoday.com/articles/covid-19-study-estimates-rate-of-silent-transmission#Questions-remain

Cites a study that investigated incubation time and concluded that the median for developing symptoms is 5.1 days, and 97.5% of those developing symptoms do so within 11.5 days.

Someone I live with has been diagnosed with COVID. What is the chance I will get it?

About 15 %. However that was before we had a protocol on isolation, so it's probably much less if you adhere to the isolation guide outlined in the article below.

https://www.medrxiv.org/content/10.1101/2020.03.03.20028423v3

The household secondary attack rate was 15%, and children were as likely to be infected as adults.

If you never never had symptoms

You may discontinue home isolation when at least 14 days have passed since the date of their first positive COVID-19 diagnostic test and have had no subsequent illness

(source) and (source)

Retesting not necessary

"We know that if you are 10 days since the onset of your symptoms and at least 3 days [asymptomatic], and that may actually go down in the future, but 3 days asymptomatic, you are no longer contagious," Giroir said.

He added that some individuals are being tested three or six times, which is not necessary, at least for the average individual who has been isolating at home.

Repeat testing will still be recommended for the critically ill and individuals with immunosuppression or immune deficiencies, said Giroir. People who fall into a grey area will need to consult with their clinicians, he said.

The repeat tests are "clogging up the system," Giroir said. He also added that they can be a "disservice" to some people, as they might stay out of work longer if they continue to test positive when they are no longer infectious.

REINFECTION

Can you be reinfected after you recover?

Probably not. They said “maybe” at first but now realize that was probably wrong.

https://www.statnews.com/2020/03/06/were-learning-a-lot-about-the-coronavirus-it-will-help-us-assess-risk/

HOUSEHOLD CLEANING

Key areas of the kitchen are fridge door handles, oven knows, microwave handle and buttons, and the faucet, in addition to flat surfaces.

In addition to household disinfectants, consider appropriately diluted bleach or rubbing Keep in mind, cleaners can be damaging so before you use, make sure the cleaner of choice will not damage the surface.

CDC guidance on household cleaning

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html

SOCIAL DISTANCING AT HOME

Follow the same rules that you would at work, specifically keep a minimum of 6 feet distance and no touching. This includes pets.

Good article on how to live with someone who has the virus, discusses bedroom, bathroom and kitchen safety with diagrams.

https://www.usatoday.com/in-depth/news/2020/03/21/coronavirus-how-safely-take-care-someone-sick-covid-19/2866984001/

FACE MASK ALTERNATIVE

For folks with difficulty breathing through a regular mask this high tech mask pushes the air into the mask making breathing easier. $50-60

https://www.amazon.com/dp/B086Z2B2F8/ref=cm_sw_r_sms_awdb_imm_t1_q2TSFbRR14SQ5

RESEARCH

MILD DISEASE

“Together, these findings suggest a more efficient transmission of SARS-CoV-2 than SARS-CoV through active pharyngeal viral shedding at a time when symptoms are still mild and typical of upper respiratory tract infection. Later in the disease, COVID-19 then resembles SARS in terms of replication in the lower respiratory tract. Of note, the two patients who showed some symptoms of lung affection showed a prolonged viral load in sputum.”

ADDITIONAL SYMPTOMS

“After analyzing data from 1.5 million users between March 24 and 29, the team found that 59% of people who had received a COVID-19 diagnosis experienced a loss of smell and taste.” “Among those who had tested negative for COVID-19, only 18% reported a loss of smell and taste.”

“The study authors also note that six of the patients with COVID-19 had no respiratory symptoms but did experience digestive symptoms.” [204 patients]

SEVERE DISEASE

Virological assessment of hospitalized cases of coronavirus disease 2019

https://www.medrxiv.org/content/10.1101/2020.03.05.20030502v1.full.pdf

IMMUNITY

“ using antibodies from four mice that had been immunized against SARS-CoV reduced infection with a model virus that contained SARS-CoV-2’s spike proteins.

The infection was reduced by 90% in cell cultures.”

Six Types of Symptom Sets

https://www.medscape.com/viewarticle/934132?src=mkm_covid_update_200720_mscpedit_&uac=139841DZ&impID=2468783&faf=1

TRANSMISSIBILITY

Surgical masks cut transmission about 50%

N99 by about 70%

Being socially distanced outdoors without mask (i.e. playing soccer) cuts transmission by 20 times, so by 99 plus percent.

Mutation increased transmissibility 10X

https://www.medicalnewstoday.com/articles/why-does-sars-cov-2-spread-so-easily

- SARS-CoV-2, however, has a specific structure that allows it to bind “at least 10 times more tightly than the corresponding spike protein of [SARS-CoV] to their common host cell receptor.”
- Partly, this is due to the fact that the spike protein contains a site that recognizes and becomes activated by an enzyme called furin.
- Furin is a host-cell enzyme in various human organs, such as the liver, the lungs, and the small intestines. The fact that this enzyme resides in all of these human tissues means that the virus can potentially attack several organs at once.
- SARS-CoV and coronaviruses in the same family do not have the same furin activation site, some studies have shown.
- The “furin-like cleavage site” recently discovered in SARS-CoV-2 spike proteins may explain the viral life cycle and pathogenicity of the virus, say researchers.

Shortlink to this page

Https://bit.ly/CovidABC