Back to Campus: Health and Wellness Support during COVID-19

Getting back to normal is going to take all our tools and efforts.

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Presenters:

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Getting Back to Normal, What does this mean?

Learning Objectives:

At the conclusion of this session, participants will be able to:

- Describe best health practices to prevent COVID-19 transmission
- Describe the duration of isolation and precautions
- Describe the role of viral diagnostic testing
- Describe services to be provided in Fall 2021
- Describe steps while traveling to keep others from being sick
- Describe the role of inflammation in relation to severe COVID-19
- Describe effective practices for preventing COVID-19
- Describe the different COVID-19 vaccine technologies and current trends in vaccination

Ending Isolation and Precautions for Adults with COVID-19

- CDC recommends that all people, regardless of symptoms and regardless of whether or not they have had laboratory-confirmed COVID-19 in the past, continue to use all recommended prevention strategies to prevent COVID-19 transmission!

1. Get Vaccinated
2. Wear mask (As of Thursday 5/13/21 if you are vaccinated you do not have to wear a mask)
3. Stay at least 6 feet away from others who do not live with you
4. Avoid crowds
5. Wash hands regularly

Duration of Isolation and Precaution Recommendations:

- Most adults with COVID-19 illness, isolation and precautions can be discontinued in 10 days after symptom onset
- Symptom onset is defined as the date on which symptoms first began, including non-respiratory symptoms and after resolution of fever for at least 24 hours, without the use of fever-reducing medications, and with improvement of other symptoms.
- Adults with severe illness may remain contagious beyond 10 days that may warrant extending duration of isolation and precautions for up to 20 days after symptom onset (Refer to healthcare provider)

Source: Centers for Disease Control (CDC)

Duration of Isolation and Precaution Recommendations-Continued

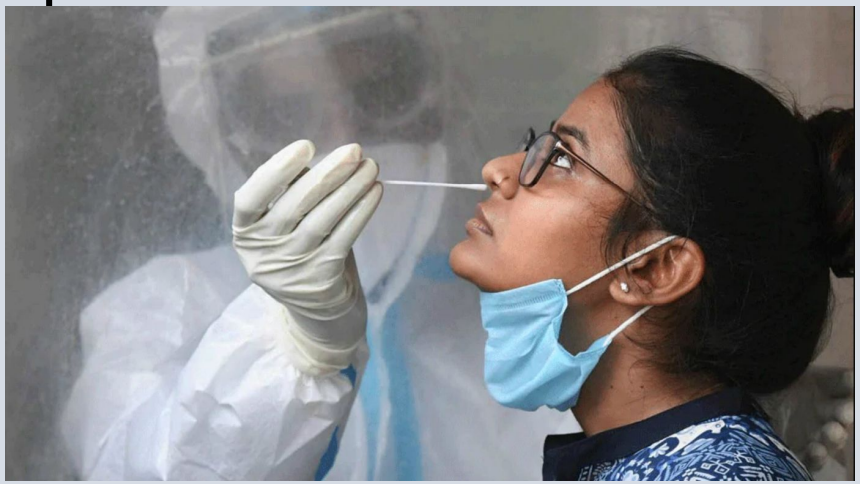
- Immunocompromised patients (i.e. Conditions such as being on chemotherapy for cancer; untreated HIV infection, immunodeficiency disorders; taking immune suppressing medications), may be contagious beyond 20 days and require additional testing and consultation with infectious disease specialists and infection control experts
- For adults who never develop symptoms, isolation and other precautions can be discontinued 10 days after the date of their first positive RT-PCR test results for COVID-19

Source: CDC

Role of Viral Diagnostic Test:

- The RT-PCR or antigen test is the use of an RT-PCR assay to detect the presence of COVID-19 to discontinue isolation or precautions
- A test-based strategy is no longer recommended except to discontinue isolation or precautions earlier than would occur for immunocompromised individuals

Source: CDC



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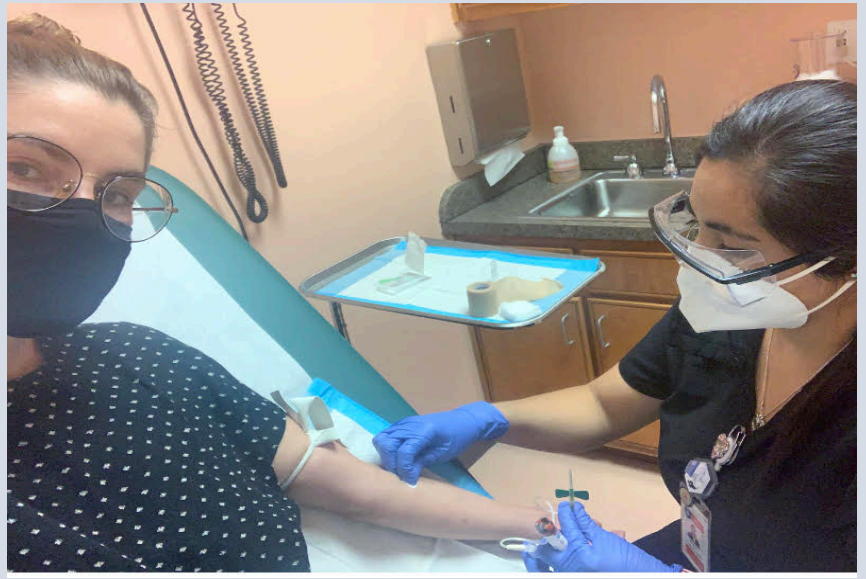

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Viral Diagnostic Test:

- For adults previously diagnosed with laboratory-confirmed COVID-19 who remain asymptomatic, recovery, retesting or quarantine is not recommended
- If another exposure occurs or might have occurred within 90 days after the date of symptom onset from the initial COVID-19 infection, viral retesting is unlikely to yield useful information, even if the adult had close contact with an infected person

Source: CDC

Clinic Services that will Continue in the Fall 2021 (UHCL):

- RT-PCR COVID-19 Testing
- Telemedicine
- Phone Triage
- Face to Face MD and Nursing Assessments and Treatment
- Contact tracing

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University of Houston Clear Lake

If Exposed to COVID-19 while Traveling - Protect others from getting sick.

- Keep at least 6 feet apart from others.
- Wear a mask.
- Wash hands often.
- Watch your health for symptoms.

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Source: CDC

Even with no symptoms, you can spread the virus to others!

- Get tested 5 days after exposure, if negative stay home for 7 days
- If you don’t get tested stay home for 10 days
- Whether or not you get tested, avoid being around people at increased risk for severe illness for 14 days
- If you test positive or get sick , isolate yourself from others 10-14 days

Source: CDC

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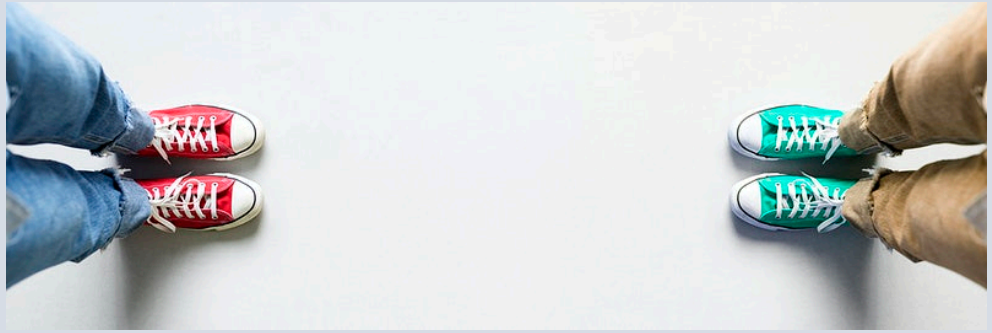
Preventing COVID-19: Effective Practices



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The Role of Inflammation in Severe COVID-19

- Inflammation is a normal response to injury or infection, but some individuals have preexisting elevated inflammatory levels
- This can make them subject to uncontrolled inflammation when infected by the coronavirus, leading to a cytokine storm
- Diabetes, obesity, age and are all related to the immune system functioning irregularly when confronted by the virus
- High levels of cytokines are associated with septic shock and multiple organ failure, myocardial damage and circulatory failure seen in some COVID-19 patients

Source: National Institutes of Health (NIH)

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Preventing Severe COVID-19: Obesity

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- Maintain a healthy weight (BMI of less than or equal to 30)
- According to the Centers for Disease Control and Prevention (CDC), a person is three times more likely to be hospitalized for COVID-19 if they have a body mass index (BMI) of 30 or higher
- A main cause is the fact that obesity leads to a number of chronic illnesses (heart disease, diabetes, cancer, high blood pressure (hypertension, stroke) that can worsen COVID-19 symptoms
- Losing weight can reduce baseline inflammation, reducing inflammation can prevent these other chronic diseases in turn preventing many of the severe symptoms COVID-19 can cause

Source: Centers for Disease Control and Prevention (CDC)

Preventing COVID-19: Get moving!

- Regular exercise boosts immune-system response, which may help fight against COVID-19 infections
- Greatest benefit was seen in those that engaged in 2.5- 5 hours per week of moderate-intensity physical activity, or 1.25- 2.5 hours per week of vigorous-intensity aerobic physical activity
- Not all or nothing! (Even just walking 30 minutes a day, five days a week is enough to help)
- “Even after we controlled for variables such as obesity and smoking in the analysis, we still saw inactivity was strongly associated with much higher odds of hospitalization, ICU admission, and death compared with moderate physical activity or any activity at all,” Dr. Robert E, Sallis

Source: National Institute of Health,

& British Journal of Sports Medicine

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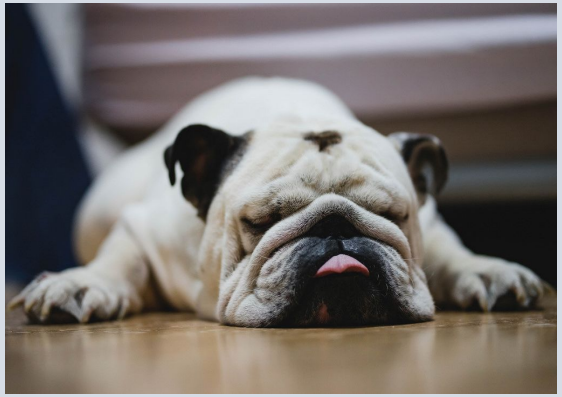
Preventing COVID-19: Catch your Zzzz's.



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- Research suggests those who experience disrupted sleep are at an increased risk of becoming both infected with COVID-19 and progressing to a more severe stage of the disease
- Disruptions to the sleep-wake cycle can affect metabolic, immune and even psychological health
- People who sleep less than five or six hours per night are more likely to become infected
- Napping during the day didn't have any protective effects against COVID-19

Source: BMJ Nutrition Prevention & Health

Preventing COVID-19: Vitamin D

- There is some evidence to suggest that vitamin D might help protect against becoming infected with and developing severe COVID-19
- Roughly half of the world's population has levels below the optimal range
- Vitamin D may protect against COVID-19 in two ways:

    1. It may help boost our bodies' natural defense against viruses (especially upper respiratory viruses) and bacteria

    2. It may help prevent an exaggerated inflammatory response, which has been shown to contribute to severe illness in some people with COVID-19

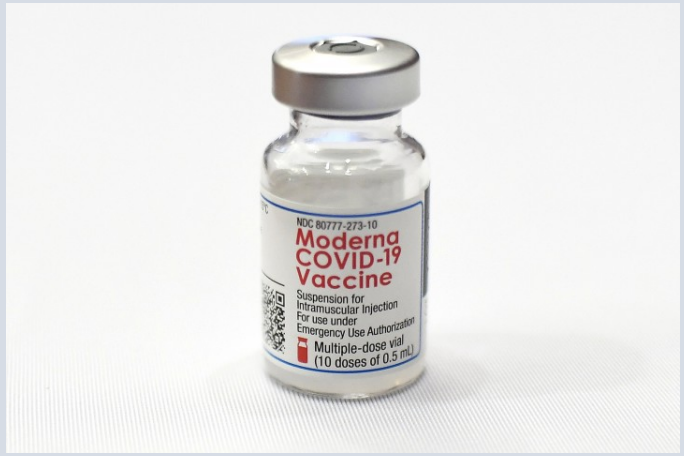
Source: University of Chicago Medicine, The Journal of the American Medical Association (JAMA), 2021

Preventing COVID-19: Vitamin D

- Our bodies make vitamin D when exposed to sunshine. Five to 10 minutes of sun exposure on some or most days of the week should be adequate to make enough of the vitamin
- Good food sources of vitamin D include fatty fish, foods fortified with vitamin D (such as dairy products, soy milk, and cereals), cheese, and egg yolks.
- The recommended dietary dose of vitamin D is 600 IU each day for adults 70 and younger
- Have your Vitamin D level checked and add a Vitamin D supplement if advised by your health care provider

Source: University of Chicago Medicine, The Journal of the American Medical Association (JAMA), 2021

Vaccines Authorized and Recommended in the United States:



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- Recommended for people aged 18 years and older
- 2 shots, one month (28 days) apart
- 94.1% effective at preventing laboratory-confirmed COVID-19 illness in people who received two doses who had no evidence of being previously infected

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- Recommended for people aged 12 years and older
- 2 shots, 21 days apart
- 95% effective at preventing laboratory-confirmed COVID-19 illness in people without evidence of previous infection

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- Recommended for people aged 18 years and older
- One shot
- Women, younger than 50 years old especially, should be aware of the rare risk of blood clots with low platelets after vaccination (occurring at a rate of about 7 per 1 million vaccinated women between 18 and 49 years old)
- 66.3% effective at preventing laboratory-confirmed COVID-19 illness in people without evidence of previous infection

Side Effects following Vaccines:

- Common side effects include pain, redness and/or swelling at the injection site, tiredness, headache, muscle pain, chills, fever, nausea
- In general, research suggests side effects are a good thing and associated with a generated robust immune response
- BUT…. Just because you didn’t feel awful, doesn’t mean you didn’t generate a robust immune response
- Over-the-counter medicine, such as ibuprofen, acetaminophen, aspirin, or antihistamines can be taken to relieve post-vaccination side effects if you have no other medical reasons that prevent you from taking these medications normally
- It is NOT recommended you take these medicines before vaccination for the purpose of trying to prevent side effects

Source: CDC

Preventing COVID-19: What is fully vaccinated?

- Two weeks after second dose of Pfizer or Moderna or two weeks after single dose of Johnson & Johnson
- If you have a compromised immune system or are taking certain medications, you may not be protected, even if you are fully vaccinated
- Fully vaccinated people can resume activities without wearing a mask or physically distancing, except where required by federal, state, local, tribal, or territorial laws, rules, and regulations, including local business and workplace guidance.

Source: CDC

What we know…

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- COVID-19 vaccines are effective at preventing COVID-19 , especially severe illness and death
- COVID-19 vaccines reduce the risk of spreading the virus
- 273,545,207 doses have been administered in the United States
- 47.4% of U.S. population has received at least one dose, 37.1% of U.S. population is fully vaccinated
- 72.9% of U.S. Population ≥ 65 Years of Age have been fully vaccinated
- 41.68% of Texas population has been fully vaccinated
- 41.57% of Harris County population has been fully vaccinated

Source: CDC (Statistical Data as of: May 16, 2021 6:00am ET), Texas Department of Health and Human Services

What we are still learning…

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- How effective the vaccines are against the variants (so far the vaccines appear to protect against most of the known variants)
- It's possible for a variant to reduce a vaccine's protection but not entirely eliminate it
- How well the vaccines protect people that are immunocompromised
- How long vaccines can offer protection
- At six months, the Pfizer and Moderna vaccines showed minimal antibody decline (we only have 6 months of data)
- It is possible some level of protection could last years, even decades

Source: CDC, World Health Organization (WHO)

Will boosters be needed?

- It’s likely for at the least the first few years
- A big difference between COVID-19 and other coronaviruses is that, COVID-19 can replicate any where in the body vs only in the respiratory tract
- Without boosters, it is not clear yet if COVID-19 will retain the ability to cause severe disease or eventually become more like other common coronaviruses that cause only mild symptoms

Source: CDC, WHO

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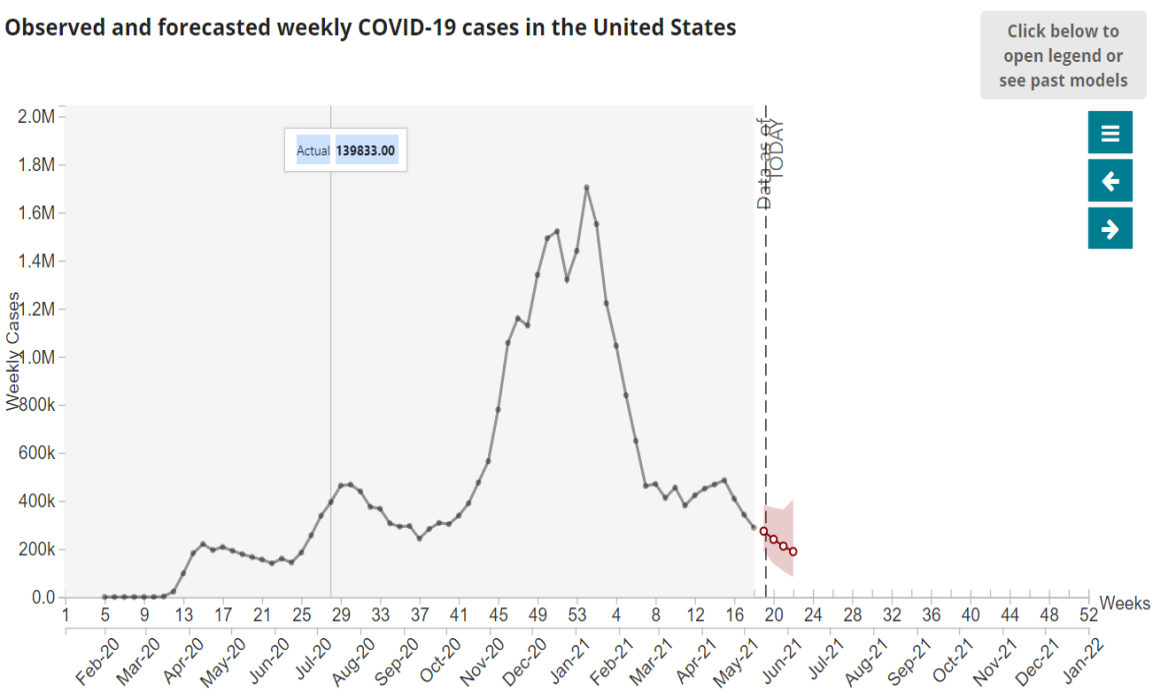
What about protection from natural immunity?

- CDC recommends getting vaccinated even if you've already had COVID-19
- Evidence suggests that protection from natural infection can be strong but differs by person
- One study showed that some people showed no antibodies by three months post infection, while others had very high levels at eight months
- Emerging research suggests that the mRNA vaccines elicit antibody levels that are generally higher than natural infection and may better protect against variants

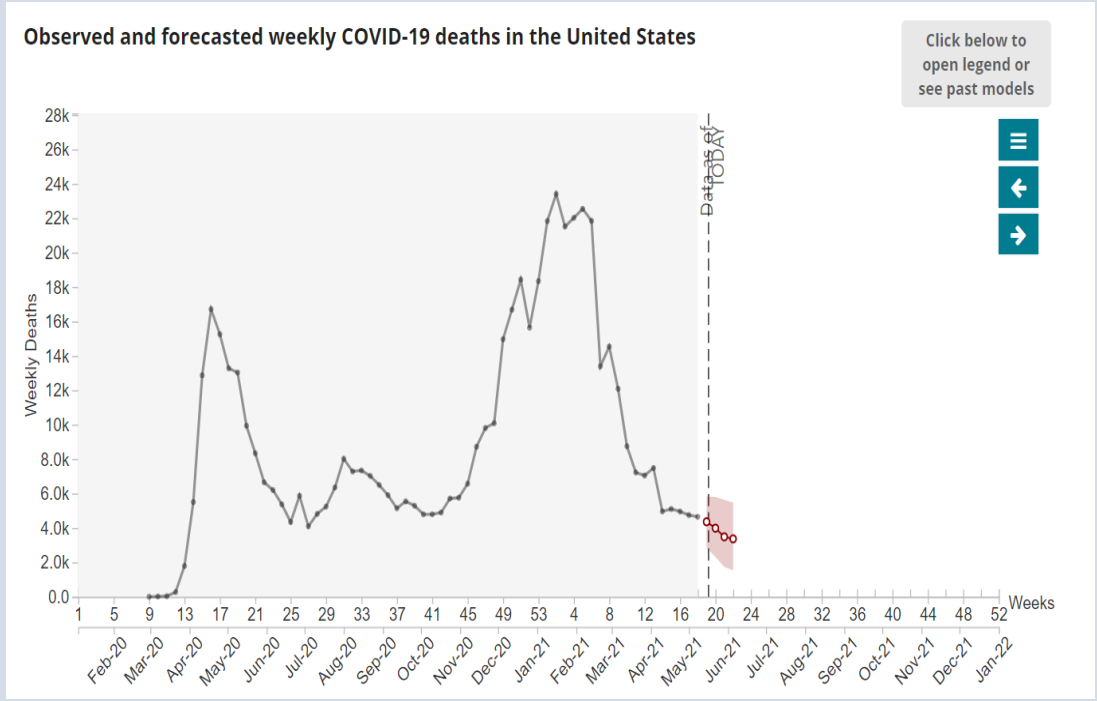
Source: CDC, National Institute of Allergy and Infectious Diseases

Observed and forecasted weekly COVID-19 Cases/Deaths in the United States:

Cases:



Deaths:



Source: CDC