Overview of the Condition/Disease

Definition: COVID-19 is an infectious respiratory disease caused by the coronavirus SARS-CoV-2. It is transmitted by small aerosols and large respiratory droplets. Infection with the virus may cause mild to severe illness. Severe cases of COVID-19 may result in hospitalization and death. While anyone may become ill from COVID-19, those with underlying comorbidities (diabetes, high blood pressure, liver disease, kidney disease, cardiorespiratory disease) are at higher risk for developing severe disease, as well as the elderly, pregnant and immune compromised.

Pathophysiology: The COVID-19 disease process is complex. The presence of the virus in the body causes a slew of host reactions that lead to the symptomatology that can be seen with the disease. The virus invades host cells binding to receptors like ACE2 which can be found on cells in the lungs, heart and vasculature lining (among others). Binding at these receptors can lead to damage of the lung and heart tissue, causing negative cardiopulmonary changes.



Best Practice Standards for Prevention and Management

Education: The best way to prevent infection is maintaining a safe distance from others (6 feet or greater), wearing a fitted mask, washing hands frequently and receiving a COVID-19 vaccine. A person should also avoid poorly ventilated spaces/crowds, disinfect highly touched surfaces (doorknobs, light switches, counter tops) and monitor their health daily. COVID-19 vaccines are highly effective at preventing severe illness, hospitalizations, and death.

Interventions:

- Vaccination Recommendations:
 - CDC recommends everyone ages 6 months and older get vaccinated against COVID-19.
 - o Everyone 5 years and older should also get a COVID-19 booster, if eligible.
 - O A person is considered 'fully vaccinated' 2 weeks after receiving their second dose and 'up-to-date' after receiving the primary series and a booster shot

Please visit the CDC for vaccination guideline updates:

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/

If you have symptoms of COVID-19 or if you have been recently exposed to someone who has tested positive for COVID-19 present for testing. Available testing options:

- 1) NAAT RT-PCR
- 2) Antigen test ('rapid')



If you come in contact with someone who has tested positive for COVID-19 or you have symptoms of COVID-19...

- Quarantine & isolation: Follow guidelines given from your local health department
 - Unvaccinated
 - After exposure, quarantine away from others
 - After a positive test, isolate in the residence starting from date of symptom onset or the positive test if asymptomatic
 - o Up-to-date
 - After exposure, monitor for symptoms of COVID-19 and wear a mask when around others.
 - After a positive test, isolate in the residence starting from date of symptom onset or the positive test if asymptomatic

If a person has tested positive for COVID-19 within 90 days of an exposure, you do not need to quarantine unless you develop symptoms.

Please visit the CDC for the most up to date recommendations for quarantine and isolation.

https://www.cdc.gov/coronavirus/2019-ncov/your-health/quarantine-isolation.html



Anticipating, Recognizing, and Responding to Symptoms



Seek timely medical attention when current interventions and/or medications are not managing symptoms.

Potential symptoms: Cough, fever, shortness of breath/difficulty breathing, chills, shivering, runny nose, congestion, sore throat, muscle pain, headache, fatigue, nausea, vomiting, diarrhea, loss of tase and loss of smell.

Manifestation of symptoms: Symptoms may develop 2-14 days after exposure (mostly 3-7 days).



Interventions to manage symptoms:

After being diagnosed with COVID-19...

- For mild to moderate symptoms
 - O Supportive therapy rest, hydration, over-the-counter pain relievers / fever reducers
 - o Isolation
 - Medications- antivirals and monoclonal antibodies have been approved by the FDA and may be prescribed by a provider for individuals at higher risk of



hospitalization and death. These medications should be started as soon as possible after symptom diagnosis to be effective.

- Severe symptoms
 - Isolate & seek medical attention if there are emergency warning signs
 - Trouble breathing
 - Persistent pain or pressure in the chest
 - New confusion
 - Inability to wake or stay awake
 - Pale, gray, or blue colored skin, lips, or nail beds, depending on skin



Guidelines and Process for Interdisciplinary Team

Care teams are responsible for educating and assisting members with receiving a COVID-19 vaccine, as well as receiving COVID-19 testing if needed.

- Care teams may assist members with coordinating care with providers and finding transportation
- Care teams should support recommendations with evidence-based information to encourage vaccination, testing and treatment in addition to addressing misinformation



Cultural Considerations

- Health complications related to COVID-19 has disproportionately affected ethnic and minority groups
 - O Black/African American, Hispanic/Latinx, American Indian and Alaska Native persons experience hospitalization and death at higher rates when compared to their non-Hispanic White counterparts, even when demographic and socioeconomic considerations are made
- Past and present experiences with racism and discrimination are contributing factors to distrust in the healthcare system, especially as it relates to vaccination and seeking treatment concerns related to COVID-19
- Contributing inequities seen in social determinants of health like access to quality healthcare, general health status, education, economic stability and other factors influence rates of severe illness seen in ethnic and minority groups as well
 - Access to healthcare can be limited by lack of transportation, lack of childcare, inability to take off work, language barriers and cultural differences
 - Many of the comorbid diseases that increase the risk of severe illness with COVID-19 like high blood pressure, diabetes, chronic kidney disease on



dialysis and congestive heart failure are seen at higher levels in racial or ethnic groups



Quality Assurance Monitoring

The Quality Department of My Choice Wisconsin monitors member COVID-19 vaccination rates as an effort to support member health and well-being through vaccination.



Additional Resources

Centers for Disease Control and Prevention

World Health Organization

Wisconsin Department of Health and Human Services



References

Centers for Disease Control and Prevention. (n.d.). Coronavirus disease 2019 (covid-19). Centers for Disease Control and Prevention. Retrieved February 17, 2022, from https://www.cdc.gov/coronavirus/2019-nCoV/index.html

Centers for Disease Control and Prevention. (n.d.). Health equity considerations and racial and ethnic minority groups. Centers for Disease Control and Prevention. Retrieved March 10, 2022, from https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/raceethnicity.html#:~:text=Impact%20of%20Racial%20Inequities%20on%20Our%20Nation's% 20Health,-

Racism%2C%20either%20structural&text=COVID%2D19%20data%20shows%20that,with %20non%2DHispanic%20White%20populations.

Covid-19 (coronavirus disease). Wisconsin Department of Health Services. (2022, January 21). Retrieved February 17, 2022, from https://www.dhs.wisconsin.gov/covid-19/index.htm

World Health Organization. (n.d.). Coronavirus disease (covid-19). World Health Organization. Retrieved February 17, 2022, from https://www.who.int/emergencies/diseases/novelcoronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19

Yuki, K., Fujiogi, M., & Koutsogiannaki, S. (2020). COVID-19 pathophysiology: A review. Clinical immunology (Orlando, Fla.), 215, 108427. https://doi.org/10.1016/j.clim.2020.108427

