



COVID-19 Clinical Guidelines for Nursing Staff

Created in 2020.12
English Revised in 2024.09

I. What is Covid-19

On February 11, 2020, the World Health Organization designated the disease caused by this novel coronavirus as COVID-19. In our country, it is classified as a Class IV statutory infectious disease, "Severe Special Infectious Pneumonia," caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The disease primarily presents with respiratory symptoms including nasal congestion, runny nose, cough, fever, shortness of breath, diarrhea, etc.

II. Transmission Routes

- (i) Droplet transmission: Infected individuals release virus-containing droplets when coughing, sneezing, or talking. These droplets can be directly inhaled into the respiratory tract of healthy individuals, constituting the main transmission route.
- (ii) Contact transmission: Includes direct contact with infected individuals or touching surfaces or objects that they have touched (indirect contact). Contact with virus-contaminated secretions from the mouth, nose, eyes, or surfaces, followed by touching one's own mouth, nose, or eyes, can also lead to infection.
- (iii) Airborne transmission: In specific circumstances, especially in poorly ventilated indoor environments, the virus may spread through small aerosols known as airborne transmission.
- (iv) Fecal-oral transmission: While not a primary route, the virus can be present in the feces of infected individuals and may spread through contact with contaminated objects or food.

III. Incubation Period

Typically ranges from 2 to 14 days after infection, with the majority having an incubation period of about 5 to 6 days. Even during the incubation period, infected individuals may be asymptomatic or exhibit only mild symptoms but still pose a potential risk for virus transmission.

IV. Diagnosis

- (i) Nucleic acid testing (RT-PCR): Real-time reverse-transcription polymerase chain reaction (RT-PCR) testing on throat swabs or deep respiratory samples

- detects the virus's genetic material (RNA), confirming COVID-19 infection.
- (ii) Antigen testing: Detects viral protein antigens in patient samples, providing faster results than RT-PCR but with lower sensitivity, especially several days after symptom onset.
 - (iii) Antibody testing (serological test): Detects antibodies in the blood, suitable for testing individuals in the recovery phase after confirmed infection, but generally not used for early diagnosis as antibodies may not have developed early in the infection.

V. Clinical Manifestations

Main symptoms include fever, cough, and shortness of breath, with some patients experiencing gastrointestinal symptoms such as nausea, vomiting, and diarrhea. Chest X-rays typically reveal pneumonia, and severe cases may present with complications like acute kidney injury, pericarditis, disseminated intravascular coagulation (DIC), etc.

VI. Risk Factors for Severe Disease

Age ≥ 65 years, cancer, diabetes, chronic kidney disease, cardiovascular diseases (excluding hypertension), chronic lung diseases (interstitial lung disease, pulmonary embolism, pulmonary hypertension, tracheal dilation, chronic obstructive pulmonary disease), tuberculosis, chronic liver diseases (cirrhosis, non-alcoholic fatty liver disease, alcoholic liver disease, immune hepatitis), smokers, BMI ≥ 30 (or BMI > 95 th percentile for children and adolescents aged 12-17), pregnancy (or within six weeks postpartum), immunocompromising conditions (HIV infection, congenital immunodeficiency, use of steroids or other immunosuppressants), low socioeconomic status, lack of adequate medical care, residing or working in densely populated areas, lack of appropriate personal protective measures, etc.

VII. Treatment

- (i) Supportive care: For patients with mild to moderate symptoms, includes rest, adequate fluid intake, proper nutrition, and use of antipyretics and cough suppressants as needed to alleviate symptoms.
- (ii) Oxygen therapy: For patients progressing to severe illness, especially those experiencing respiratory distress and hypoxemia, oxygen therapy may be necessary, including mechanical ventilation (e.g., respirators) to assist breathing.
- (iii) Antiviral therapy: Currently used to treat COVID-19, such as Remdesivir, Paxlovid, and Molnupiravir, which inhibit viral replication and help reduce viral load and infection duration.

(iv) Immunomodulatory therapy: Some patients may receive immunomodulatory therapy such as corticosteroids or Tocilizumab to manage inflammation.

VIII. Daily Life Precautions

- (i) Home rest: Stay at home during illness, monitor body temperature morning and evening, record health status and activity history, wear medical masks, avoid going out, and maintain a distance of at least 1 meter from others.
- (ii) Mask hygiene: Replace masks immediately if they become soiled with nasal or oral secretions, and dispose of them folded inward into a trash bin.
- (iii) Hand hygiene: Maintain frequent hand washing with soap and water or alcohol-based hand sanitizers.
- (iv) Environmental hygiene: Prepare homemade disinfectant solution for home use.
- (v) COVID-19 vaccination: Adhere to vaccination policies to enhance personal protection.
- (vi) Seeking medical attention: If symptoms such as fever, cough, or difficulty breathing occur, perform self-antigen rapid screening test if necessary and seek medical treatment. Wear a mask when using public transportation or going out, and follow hospital-established triage protocols for medical treatment.
- (vii) There is no need for extensive disinfection. Focus on regularly touched items and surfaces at home, such as doorknobs, tabletops, children's toys, etc. Targeted wiping and disinfection of these areas is sufficient.
- (viii) Comply with COVID-19 vaccination policies to enhance personal protection.
- (ix) If any symptoms such as fever, cough, or difficulty breathing occur, perform self-antigen rapid screening test if necessary and seek medical treatment. When using public transportation or going out, wear a mask, and follow hospital-established triage protocols for medical treatment.

After discharge, please follow the doctor's instructions and return to the clinic on time for follow-up. If you have any questions, please ask them at any time. The nursing staff is very helpful. front page Taipei/Tamsui MacKay/ Children's Hospital (02)25713760, Hsinchu Mackay/Children's Hospital (03)5745098, Taitung Mackay Hospital(089)310150 ext. 311. Available for consultation Monday to Friday from 9:00 AM to 12:00 PM & 2:00 PM to 5:00 PM.

May God Bless You