

**GOVERNMENT OF THE REPUBLIC OF THE UNION OF MYANMAR**  
**MINISTRY OF HEALTH AND SPORTS**  
**DEPARTMENT OF MEDICAL SERVICES**



**Guidelines for Hemodialysis**  
**in COVID-19 Pandemic Era (Version 01)**

**Version - DoMS/COVID-19/Hemodialysis/Version 01-2020**  
**Date - 14 December 2020**

## **GUIDELINES FOR HEMODIALYSIS IN COVID 19 PANDEMIC ERA**

### **(Version 01)**

#### **General principles**

- Hemodialysis patients are immunocompromised and highly susceptible populations.  
Hemodialysis centers are a high-risk area in terms of COVID-19.
- All medical staffs, HD patients, and their caregivers should be educated about personal hygiene, including washing hands, wearing masks, and avoiding unnecessary contact.
- Surgical masks and hand sanitizer should be available at the entrance of the HD unit. Healthcare workers, HD patients, and their caregivers should perform standard, contact, and droplet precautions, including hand hygiene and wearing masks.
- Each HD unit should prepare an environment suited to minimize infection transmission, such as keeping proper distance between beds.

#### **Before the arrival of the patient**

Educate all dialysis staff about

- Epidemiology, testing and triage of COVID19
- Use of PPEs including donning, doffing and proper disposal
- Cough etiquette, hand hygiene and universal precautions

Enough stock of

- Dialysate, dialyzers and bloodlines, catheters, fistula needles, heparin, disinfectants and medicines
- PPE & hand sanitizers

Keep signboard in dialysis unit and waiting area asking patients to report any fever, cough or breathing problem

1. Instruct all patients to inform the unit about any symptoms before coming to the dialysis unit so that they can be addressed separately in screening area
2. Separate waiting area for screening or waiting in a personal vehicle for screening

### **The screening area**

Designated entry and exit for patients and staff

Dedicated area where patients can be screened before entering inside dialysis area

Enough space in the screening area to maintain distance between individuals, and clean it between sessions

Every patient wears a mask as they enter the screening area

Screen all the patients for

- COVID-19 symptoms
- History of contact with a confirmed COVID-19 patient
- Do CXR+/- CT for new cases

All patients wash hands with soap and water for at least 20 seconds, or sanitizing hands with 60% alcohol-based hand rub before entering the unit.

### **The dialysis area**

Instruct all patients to practice cough etiquette

Instruct all patients instructed not to eat inside the dialysis area

Place an alcohol-based hand sanitizer near each dialysis bed/chair

Keep plastic lined trash can for proper disposal of tissues etc. by the patients near each dialysis bed/chair

Instruct all staff to leave all personal belongings and change into hospital attire before entering dialysis room

All staff, patients, attendants and caregivers wear a three-layer surgical facemask inside the dialysis unit

All dialysis staff follow hand hygiene between patients

### **All dialysis staffs**

- Ask all dialysis staff about new onset respiratory symptoms
- If present, ask them to take leave
- Maintaining distancing in unit

## **Screening and Management of Maintenance Hemodialysis patients regarding COVID-19**

- Patients entering the hemodialysis unit must undergo epidemiologic and symptomatologic screening for COVID-19 as guided by MOHS.
- Refer to Algorithm-1 (Screening and Management of Maintenance HD patient for HD in COVID-19 era)
- Hemodialysis patients who have contracted COVID-19 infection as confirmed by PCR testing must be hospitalized to Designated Hospital with hemodialysis facility.
- HD will be provided for at least 3 weeks if possible or 2 weeks until they are discharged by MOHS discharge criteria.
- Refer to Algorithm – 2 (Management of COVID-19 confirmed HD patients)
- As viral shedding is expected to be prolonged, a strategy to conserve hospital resources in these otherwise clinically well patients includes step down care to a sub-center. Such patients should be cohorted at a specific dialysis center with personal transportation using a fixed route.
- If the patient is being discharged from the designated hospital, hemodialysis should be done in sub-centre prepared to follow all recommended infection prevention and control practices for the care of a patient with COVID-19
- When these patients are ready to discharge from the designated hospitals, appropriate planning and allocation to sub-center dialysis unit should be done.
- If the patient is negative from at least two consecutive respiratory specimens collected > 24 hours apart (total of two negative specimen) tested using FDA authorized molecular viral assay to detect SARS-COV-2 RNA, they can be referred back to their outpatient dialysis center.
- Both primary teams and nephrologists need to be aware of the importance of appropriate discharge planning for HD patients.
- For hemodialysis patients hospitalized with COVID-19, decisions about discharge from the designated hospital or sub-center should be based on their clinical status and the ability of the outpatient dialysis unit to meet their care needs and adhere to recommended infection prevention and control practices.
- The hospital discharge planning team should communicate as early as possible with the receiving outpatient dialysis unit to ensure arrangements have been made for the patient to receive hemodialysis.
- The patient should not take public transport until they met criteria for discontinuation of transmission based precautions.

**MOHS Discharge Criteria for COVID-19 confirmed patients (as of 10-10-2020) (Version-6)**

***I. For symptomatic COVID-19 confirmed patients:***

**(a) Patients with mild or moderate illness who are not severely immunocompromised**

- 10 days after onset of symptoms, plus at least 1 additional day without symptoms (including without fever with no antipyretics and without respiratory symptoms and other COVID-19 symptoms) provided that history of onset of symptoms is reliable
- If the history of onset of symptoms is not reliable, at least 11 days is recommended to stay in hospital.

**(b) Patients with severe to critical illness or who are severely immunocompromised**

- 10 days after onset of symptoms, plus at least 4 additional days without symptoms (including without fever with no antipyretics and without respiratory symptoms and other COVID-19 symptoms)
- At least 20 days is recommended to stay in hospital.

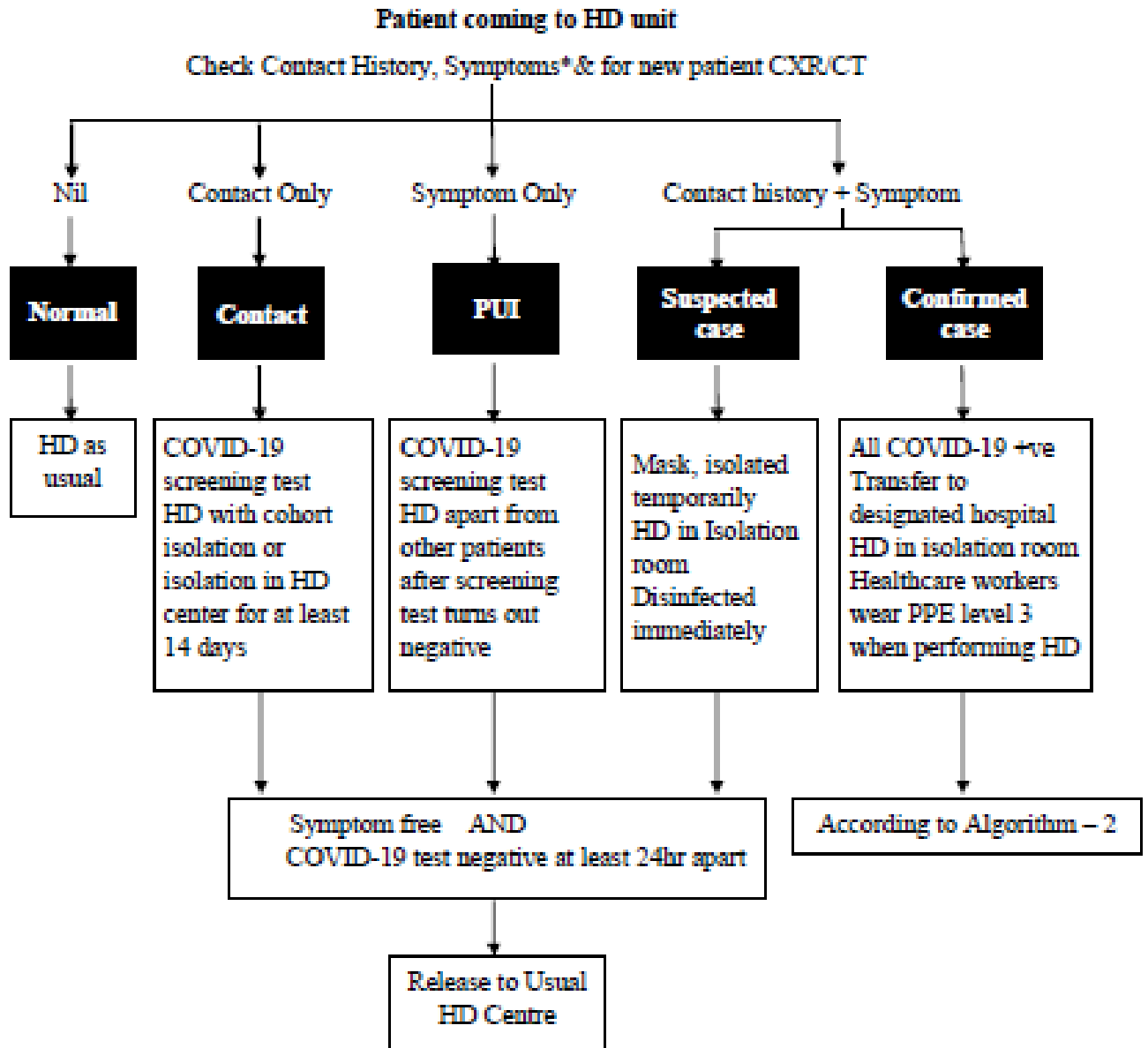
***II. For asymptomatic COVID-19 confirmed patients:***

- 10 days after taking swab with positive test for SARS-CoV-2

## **Cleaning and Disinfection**

- Current procedures for routine cleaning and disinfection of dialysis stations are appropriate for patients with COVID-19 infection; however, it is important to validate that the product used for surface disinfection is active against COVID-19.
- Facilities should ensure they are following the manufacturer's label instructions for proper use and dilution of the disinfectant.
- Staff should be educated, trained, and have competency assessed for all cleaning and disinfection procedures in the facility. Ensure staff use appropriate PPE according to manufacturer's recommendations when cleaning.
- Routine disinfection of surfaces at the station should occur with no patient present to reduce the opportunities for cross-contamination and to avoid exposing patients to disinfectant fumes.
- If visible blood or other soil is present, surfaces must be cleaned prior to disinfection.
- Disposable medical supplies brought to the dialysis station should be discarded.
- All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer's instructions and facility policies.
- Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.
- If linens or disposable cover sheets are used on the dialysis chairs, follow standard procedures for containing and/or laundering used items.

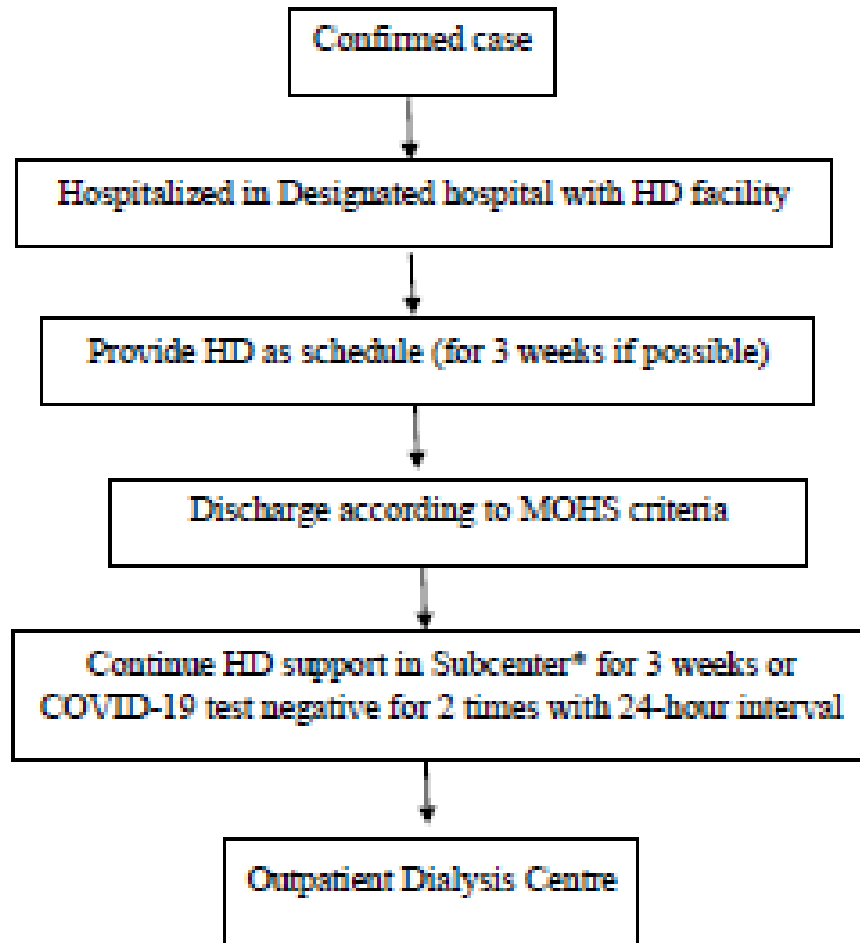
**Algorithm-1: Screening and HD of Maintenance HD patient in COVID-19 era**



COVID-19 test +ve at any stage = Confirmed case

\* Symptoms: Fever  $\geq 37.5^{\circ}\text{C}$  or Respiratory symptoms (cough, sore throat, shortness of breath) or loss of smell/ taste

**Algorithm – 2: Management of Confirmed COVID-19 Hemodialysis Patient**



NOTE: The guideline is general guideline. This should be adapted and modified depending on the intensity of COVID-19 outbreak, availability of resources and feasibility of each hospital.