GUIDE

NATIONAL INSTITUTE for MEDICAL RESPITE CARE

Clinical Guidelines for Medical Respite Care: COVID-19 & Airborne Infectious Diseases

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Introduction

Airborne illnesses present a unique challenge to people experiencing homelessness. People experiencing homelessness (PEH) are particularly vulnerable to disease transmission given the congregant nature of shelters and encampments, and due to lack of resources to adhere to public health recommendations, such as isolation, quarantine, and hygiene. Although rates of tuberculosis (TB) have declined in the United States, the rate of TB incidence is 10 times greater in people experiencing homelessness than the general population, and COVID-19 disproportionately impacts people of color (BIPOC) who are overly represented in the homeless population[1,2]. Overall, PEH are at greater risk for hospitalization and death from COVID-19 and TB than the general population because of co-morbid health conditions[3,4,5,6,7]. Active TB and COVID-19 can present with similar symptoms, including fever, chills, cough, shortness of breath, and fatigue[7,8]. Given the overlap of symptom presentation with other infectious diseases and pulmonary conditions, COVID-19 and TB can go undiagnosed, risking increased transmission and inadequate treatment. The COVID-19 pandemic has demonstrated that alternative care sites that implement a medical respite care model are effective in addressing and preventing the spread of disease[9]. As the COVID-19 pandemic continues, respite care programs can anticipate receiving more referrals for people who have an active COVID-19 infection but who do not require hospitalization. Given the airborne transmission of COVID-19, strategies to reduce/minimize transmission of this disease can also be applicable to other infectious airborne diseases, such as tuberculosis (TB)[10]. **This document provides guidance to understand COVID-19 and TB symptom presentation and disease spread, and outlines potential interventions for airborne infectious diseases that may be implemented within medical respite care settings.**

Key Terms and Definitions

Airborne transmission is defined as the spread of an infectious agent caused by the dissemination of droplet nuclei that remain infectious when suspended in air over long distances and time.

Alternate Care Site is a broad term for any building or structure that is temporarily converted for health care use during a public health emergency to provide additional health capacity and capability for an affected community, outside the walls of a traditional established health care institution.

COVID-19 is the illness caused by the SARS-CoV-19 virus. Symptoms include fever, chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headaches, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea.

Harm Reduction: A philosophical approach to medical care that extends beyond substance use and, in general, establishes individual agency and self-determination as central to any health intervention or efforts towards well-being. Harm reduction approaches call for the non-judgmental, non-coercive provision of services and resources to people experiencing homelessness to assist people in reducing harms related to chronic health conditions or health behaviors. Harm reduction-based care is collaborative, provides education on available interventions, and centers the goals of the individual in care planning.

Isolation is a strategy used to separate a person or people with a confirmed or suspected infectious disease from those without, in an attempt to decrease disease transmission.

Latent tuberculosis infection **(LTBI)** occurs when the body is infected with the bacteria *mycobacterium tuberculosis*, but the infected person is asymptomatic. People with LTBI are not considered infectious but require treatment to lower the risk of the latent TB infection converting to an active infection.

Long-COVID is a diagnosis to describe the continual, recurrent, or new physical and mental health symptoms that persist four or more weeks after a person is infected with COVID-19, regardless of if they continue to test negative.

Quarantine is a strategy used to prevent transmission of airborne infectious disease by keeping people who have been in close contact with someone with the disease apart from others, in an attempt to decrease disease transmission.

Tuberculosis disease **(TB disease)** occurs when the body is infected with the bacteria *mycobacterium tuberculosis*. Symptoms can include a productive cough for 3 weeks or longer, chest pain, coughing up blood, weakness or fatigue, weight loss, loss of appetite, chills, fever, and night sweats.

Clinical Considerations

Background

People with chronic medical conditions are more likely to have severe complications from COVID-19. Additionally, people with chronic medical conditions are at increased risk for developing TB disease. These conditions include, but are not limited to:

- Cancer
- Chronic kidney, liver, or lung disease
- Dementia or other neurological conditions
- Diabetes (type 1 or 2)
- Heart conditions
- HIV infection
- Other immunocompromised states
- Mental health conditions
- Overweight and obesity
- Pregnancy
- Current or past tobacco use
- Substance use disorders

Airborne infectious diseases remain difficult for many medical respite care (MRC) programs to manage given the disease transmission mode. Without alternate care sites, MRC programs carry the burden of providing recuperative areas as well as isolation and quarantine on-site. In addition, individuals who are referred for other health conditions may present with asymptomatic COVID-19 or TB infection(s) or develop these conditions while onsite. MRC programs must have a plan for accommodating patients who require isolation or quarantine, as those experiencing homelessness may have limited other options.

Medical respite care can be an opportunity to:

- Safely isolate or quarantine to reduce transmission in the community,
- Connect to and engage in specialty or follow-up care,
- Have a safe space to rest and recuperative from acute symptoms,
- Address other chronic conditions that increase risk of illness, and
- Move towards housing to support overall health.

Assessment

In all assessment processes, it is important to implement a trauma-informed and harm reduction-based approach, recognizing that people may not be ready to share their entire health history in the first encounter. A good history is key to creating an appropriate plan of care and can be built over several visits. A comprehensive assessment for COVID-19 and airborne infectious diseases includes the following:

Complete a History and Physical which includes:

All patients should be screened upon admission for symptoms of COVID-19 and/or active TB.

- **TB:** In addition to an initial symptom screen for active TB, patients should be asked about previous TB testing, previous treatment for active or latent TB, and BCG vaccination status. Offer and execute TB testing and follow-up surveillance to eligible patients per CDC guidelines.
- **COVID-19:** In addition to an initial symptom screen, patients should be asked if they have had a known exposure to someone with COVID-19, or themselves diagnosed, within the last 10 days. Ask about COVID-19 vaccination status and booster status. If a patient has a history of COVID-19 infection, screen for Long-COVID.
    - Depending on screening results, complete COVID-19 testing at admission.
    - Consider screening for COVID-19 for all patients entering a MRC program when community transmission is elevated due to the inherent risk in the congregate setting.

Patient Assessment

- Consider the information gathered in the patient history. If there is concern for an active respiratory infection, follow CDC guidelines regarding isolation, additional work-up, and treatment.
- Assess for other high-risk factors, such as untreated HIV.
- The CDC recommends several assessments and tests for evaluating a person for Long-COVID. This includes:
    - Screening for status of activities of daily living (PROMIS, Post-COVID Functional Scale, EuroQol-5D).
    - Behavioral health impact (PHQ-9, GAD-7).
    - Substance use changes (SBIRT), exercise capacity, balance, and fall risk.
    - Additional evaluation for other specific illnesses, such as impaired renal function, critical illness myopathy and polyneuropathy, residual cardiac or pulmonary manifestations, and psychiatric sequelae[11].

Care Plan and Management

Strategies and treatment plans implemented should be person-centered, collaborative, and based on priorities and needs identified during the assessment process. As noted, interventions should be trauma-informed and integrate harm reduction principles to minimize risks and improve care.

Environmental Strategies

Isolation and Quarantine

- Create an isolation space, when possible, for infected patients. If not possible, maximize space to allow for social distancing and provide PPE for all staff and clients. If possible, do not allow any more intakes until after isolation period is complete.
- Cohort people who are positive in one area if space does not allow for individual isolation spaces.
- Provide accessible bathrooms that are used by just those who are positive with a specific airborne illness.
- Provide meals within quarantine space to minimize spread to general population.
- Utilize available isolation and quarantine facilities within your jurisdiction (hotel, in-shelter isolation and quarantine, etc.), and provide medical support in-person or virtually for the duration of the isolation or quarantine period.
- Implement harm reduction policies for people who use drugs and must be in isolation or quarantine. Examples include access to medication-assisted treatment and monitoring patients for signs and symptoms of severe withdrawal, which may require transfer to a higher level of care.
- Implement harm reduction strategies to support patients remaining in quarantine, such as supplying patients with snacks, cigarettes/tobacco or alcohol, or having amnesty "drop boxes," and activities for quarantine such as TV, tablets, books, and other individual preferred activities.

Physical Distancing and Other Precautions

- For Staff: Ask staff who are sick to stay home. Consider a staff symptom attestation system to encourage staff to attest to their health (lack of symptoms) daily. Encourage staff to seek vaccination against COVID-19. Follow CDC guidelines for TB risk assessment and testing for staff.
- Consider screening patients daily for symptoms of COVID-19 and TB, and direct symptomatic patients to testing, isolation, and treatment as needed.
- Consider testing patients regularly for COVID-19 infection depending on community rates.
- Encourage hand hygiene and increase chance of compliance by offering hand sanitizer and/or handwashing stations.
- Frequently clean solid surfaces (i.e., wood, metal, plastic) with 1:10 bleach cleaner.

- Offer and encourage compliance with personal protective equipment (PPE) to all staff and patients, including masks, eye protection, gloves and gowns depending on level of potential exposure.
- Promote physical distancing between patients by allowing 6 feet between patients when possible. Some examples include spacing beds farther apart, having patients sleep head-to-toe, and limiting the number of patients in larger group spaces.
- Develop physical spacing and barriers to allow for social distancing.
- Improve ventilation by increasing outdoor air circulation and updating air filtration systems. Open windows and doors, when possible, to increase air flow.
- Limit unnecessary visitors to the respite program.
- Limit unnecessary aerosolizing treatments, such as nebulizer treatments.
- Utilize trauma-informed procedures, including privacy in exams and clinical conversations.

Person Specific Strategies

Treatment for Patients with COVID-19 Infection

- Transfer patients with signs of worsening infection requiring emergent care to the emergency department (ED). Symptoms can include difficulty breathing, persistent chest pain, confusion, somnolence, pale / gray / or blue colored skin, lips, or nail beds.
- Provide thermometers and pulse oximeters in facilities that do not have 24-hours surveillance, and train residents to self-screen for COVID symptoms and develop a system for reporting symptoms so that appropriate triage can occur.
- Facilitate access to COVID-19 treatment, such as oral antiviral medication or monoclonal antibody therapy for eligible patients. Screen for preexisting conditions and contraindications to determine the best treatment option. As treatment options evolve it may be necessary to test for variant type, as some treatments may be less effective with certain variants.
- Follow CDC guidelines for ending isolation. Consider conducting daily rapid antigen tests starting at day 5. Best practice is that 2 consecutive tests, at least 24-hours apart, indicates patient could return to the general population if unable to provide full 10-day isolation resources.

Treatment for Long-COVID

- Identify potential symptoms of Long-COVID at intake and assessment, as symptoms may be physical, psychological, and social, and may impact daily functioning.
- Allow opportunities for rest to address ongoing fatigue.
- Connect patients with social services to apply for benefits related to experiencing Long-COVID, such as disability income from Social Security(SSI/SSDI).
- Manage other chronic conditions that may be exacerbated by COVID or Long-COVID.
- Provide space to complete rehabilitation treatments, such as oxygen, to support recovery. Consider referring patients to clinics specializing in treatment of Long-COVID.

Treatment for Tuberculosis and Latent Tuberculosis Infection

- LTBI: Individuals who test positive for LTBI should be referred for further work-up (e.g., chest radiography) and determine eligibility for LTBI treatment. Specific guidance for medical treatment is available from the CDC.
- Ideally, medication treatment for LTBI will be completed during the medical respite stay to support treatment completion and prevent developing drug-resistant versions of TB. Full treatment can take up to 4 months.
    - Programs may need to transfer the patient to care to a Directly Observed Treatment (DOT) program if they are not able to stay within medical respite until treatment completion.
- Active TB: Follow CDC guidelines for isolation and quarantine for patients with suspected or known active TB.
    - In some cases this may require hospital transfer for work-up and treatment initiation. If sending a patient with suspected active TB to the emergency room, have patient don an N-95 mask if available, and call the hospital to notify them of the patient's history and pending arrival.
    - Liaise directly with the local health department to report the case, assist with treatment planning, assist with disease surveillance, and conduct and execute an investigation regarding potential exposure and necessary follow-up for staff and other patients at the facility.
    - Assist the patient with initiating medical treatment for TB disease. Connect the patient with long-term, community-based supports for medication management and dosing to support adherence and prevent developing resistance to medications.
- Coordinate treatment with a designated local TB treatment provider (*communities have TB clinics or infectious disease teams at their public health department, community health center, safety net hospitals, or teaching hospitals*).
- If positive result occurs within medical respite facility, initiate symptom screening and possible x-ray diagnostic protocol for high-risk or symptomatic individuals.

Prevention

- Offer vaccinations per CDC guidelines, including COVID-19 vaccine and boosters.
- Monitoring for symptoms that could indicate presence of infectious disease and screening as needed.
- Testing for TB for those with high risk factors prior to admission into respite to ensure the program's capacity to manage symptoms and prevent transmission.
- Surveillance testing of all residents in MRC program. Increase frequency when COVID-19+ individuals are present.

Referrals

Patients may benefit from referrals to specialists to address organ systems and function impacted by being sick with COVID-19 or TB. These referrals will be based on individual symptoms, complications, and supports needed. This may include specialists such as pulmonology or cardiology, behavioral health, or rehabilitation providers such as physical therapy or occupational therapy.

Discharge Planning

Discharge planning for someone with COVID-19 or TB will vary greatly based on whether they have an active infection, how connected they are to care, and on the impact the disease has had on their overall functioning and co-morbid conditions. Many individuals may not require any specific support related to their COVID-19 diagnoses, and so discharge planning should focus on any other pre-existing conditions. Although housing is the ideal discharge plan setting, lack of adequate housing may make that impossible. Considerations for preparing for discharge include:

- Connecting to resources in the community that are designated specifically for PEH with COVID-19 or TB (e.g., Protective Action hotels).
- Establishing a warm hand-off and communicating with follow-up providers regarding treatment status and necessary follow-up.
- Transferring records to follow-up health care providers regarding disease status, vaccination status, and treatment status.
- For TB, transfer to community entity that will provide continued support for medication treatment and monitoring.

Advanced Training and Advocacy

Additional resources and training to address endemic COVID-19 and potential surges in COVID-19 cases:

- Monitor CDC guidelines on Isolation and Quarantine for PEH.
- Utilize the National Health Care for the Homeless Council resources related to COVID-19 and PEH.
- Continue education in harm reduction approaches to health care and self-management.
- Become trained on providing monoclonal antibody treatments (mAb).

Congregate living and unstable housing do not allow for individuals to fully receive treatment for, and recover from, the symptoms of Long-COVID. To provide adequate opportunities to recover, communities should:

- Ensure patient enrollment in comprehensive insurance coverage and connection to primary care to facilitate connections to specialty care and other services as needed.
- Integrate health care within the state's Continuum of Care, as well as shelters and alternate care sites, to facilitate access to quality, comprehensive health care.
- Apply for disability benefits (SSI/SSDI) using new guidance on "Long-COVID" as a disabling condition.
- Educate shelter providers on use of PPE and methods for creating isolation and quarantine spaces within congregate shelters to minimize disease transmissions.

Additional resources and training to address and prevent TB infection among people experiencing homelessness:

- National Health Care for the Homeless Council Clinical Resources on TB
- CDC Guidance on Addressing TB in People Experiencing Homelessness

Case Example 1: Long-COVID

Background: Tyrone (he/him/his) is a 63-year-old, African American who has been homeless on and off for the past 8 years. The most recent episode began in October 2020 when he lost his job when the restaurant he worked at closed as a result of the COVID-19 pandemic. He was referred to respite care after a short hospitalization when he presented with chest pains, shortness of breath, fever, and dehydration caused by diarrhea. During the hospitalization Tyrone was treated for his symptoms and improved, but no underlying cause was identified. He remained extremely fatigued and experienced dizziness spells.

At admission to the medical respite program, Tyrone showed difficulty concentrating and reported a headache that has been on and off for weeks. He still felt out of breath often, but his diarrhea had improved and he only felt chest pains when he exerted himself.

Assessment: The medical provider took a full history of Tyrone and identified that he had been regularly taking his medication for high blood pressure and high cholesterol. He reported becoming mildly ill with fever and cough three months prior. He also reported that he noticed that foods tasted different and that he thought his sense of smell was going as he got older. Tyrone did not require and hospitalization or medication for this illness, which resolved within a few days, and he believed he had a cold.

Intervention: The medical respite provider determined that Tyrone likely had COVID-19, and although he was no longer symptomatic, was experiencing symptoms of Long-COVID. During his stay the occupational therapist assessed Tyrone's ability to perform activities of daily living, and the physical therapist assessed his mobility and strength. It was determined that Tyrone was experiencing difficulty balancing and tired easily, impacting his ability to feel safe while standing in the shower, and complete routine tasks without taking several breaks. Tyrone's treatment plan included exercises to build up his endurance and improve his balance, as well as compensatory strategies to complete ADLs more easily and safely.

Outcomes: At the end of his 2-week stay Tyrone showed improvements in his ability to manage his symptoms. He was referred to outpatient physical therapy to continue strength building, and his new diagnosis of Long-COVID was provided to his primary care provider, with a follow-up appointment scheduled in the next month. Tyrone returned to the general population shelter.

Case Example 2: Tuberculosis

Background: Kai (they/them/theirs) is 28 years old who has been staying intermittently with acquaintances or sleeping outside in various locations in the community for the past year, following a month-long incarceration. Kai presented to the emergency room after experiencing significantly worsening coughing and chest pain, loss of appetite, and, most recently, a fever that has been worsening. Kai was initially tested for COVID-19 but was negative. After learning their history of incarceration, Kai was also tested for TB, which was positive. Kai was admitted to begin initial treatment for active TB disease. After Kai was more stable and the fever resolved, they were referred to the medical respite program for continued isolation and quarantine for continued resolution of symptoms, and to continue medication treatment.

Assessment: Once at the medical respite program, Kai was assessed to develop a care plan and supports for completing the medical treatment of TB. The medical respite team coordinated with the local health department that would be delivering and providing clinical support to Kai to complete the TB treatment. The case manager identified additional needs with Kai, which included identifying activities for Kai to keep busy while isolated and finding a more stable housing option for discharge. Kai noted they felt they would really only be able to remain engaged and adherent with the health department team if they had a more stable place to stay and consistent phone access. Kai also identified that prior to hospitalization, they engaged in heavy alcohol use in order to help with sleep and manage the stress of being homeless. Kai expressed a goal to maintain their recovery since the process of detoxing and not using alcohol had started while hospitalized, and also requested alternative forms of nicotine in order to avoid smoking cigarettes.

Intervention: Kai's case manager supported them in coordinating care with the health department team throughout the medical respite stay. The provider of the medical respite program was able to prescribe nicotine patches and gum to support Kai's desire to reduce cigarette use. They assisted Kai in accessing an affordable cell phone to enable continued communications with their health department team, to join an online-based recovery support group, and to engage in online-based leisure activities while isolating. Kai and the case manager reviewed and completed applications for various housing and recovery-based programs to move into after discharge. Kai was monitored for active symptoms, and once they no longer exhibited symptoms, and sputum testing indicated they were no longer infectious, they were able to move into the non-isolation space of the medical respite program. Kai benefited from support from their case manager to develop more regular routines while ensuring they engaged regularly with the nursing team for treatment.

Outcomes: Kai was accepted into a transitional housing and recovery program. Kai's providers sent documentation to the housing program that Kai was no longer actively symptomatic, and with follow-through on the medication regimen, was no longer infectious, therefore, safe to enter a housing program. Kai and the respite program were able to share their new housing information with the health department, whose staff would be able to continue Kai's treatment long-term and ensure completion of the full regimen.

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