Central Florida Disaster Medical Coalition

Infectious Disease Annex

Approved by CFDMC Board on June 21, 2022

Updated 5-24-23

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Record of Changes & Distribution

Changes	Distribution
Updated 4-30-21 (combined HCID/Ebola and Pandemic Plans)	**Posted 4-30-21**
Updated (based on COVID19 AAR)	**Sent out for 30 day member review** **Approved by CFDMC Board 6/21/22** **Posted 6/30/22**
Updated (based on COVID19 PPE updates)	**Updated 5/24/23** **Posted to Website**

1. Introduction

1.1 PURPOSE:

At any moment, a patient with a highly infectious disease can present at an emergency department. The World Health Organization warns that infectious diseases are emerging at a rate that has never been seen before. High consequence infectious diseases (HCIDs) include hemorrhagic fever viruses (Ebola, Marburg, etc.) and other highly contagious diseases include MERS-CoV, SARS, COVID-19 and other pandemic strains of the influenza virus. Additionally, the potential exists for highly infectious diseases to emerge as a result of deliberate introduction into human, animal, or plant populations for terrorist purposes, such as anthrax, smallpox, and tularemia. The circumstances of infectious disease emergencies may vary by multiple factors, including type of biological agent, scale of exposure, mode of transmission and intentionality (bioterrorism), and many others. Public health measures to contain such outbreaks are especially important for diseases with high morbidity or mortality and limited medical prophylaxis and/or treatment.

Central Florida is uniquely vulnerable to HCIDs or other infectious diseases. The July 2019 US Census estimates 4.5 million people reside in the nine counties representing East Central Florida (Regional Domestic Security Task Force Region 5 or RDSTF-5), and winter residents dramatically increase this population. In addition, domestic and international tourists flock to Central Florida for golf, shopping, water sports, theme parks and conventions. Orlando is the number one most visited destination in the world. In 2022, Orlando International Airport was the 7th busiest airport in the nation with 50.2 million passengers. This is consistent with pre-pandemic passenger levels. Visitors also arrive in Central Florida via cruises at Port Canaveral, Florida's fastest growing port and the second busiest port in the world, with more than five million travelers annually. All of these factors increase the potential for an outbreak in Central Florida.

HCIDs and other infectious diseases have the potential to significantly impact individual organization's operations, the healthcare system, and the health and safety of personnel and the general public. Many diseases could result in an epidemic and or lead to a worldwide pandemic.

The purpose of the Healthcare Coalition Infectious Disease Surge Annex is to guide the Region 5-Central Florida Disaster Medical Coalition in its ability to prepare for, respond to, and manage highly infectious patients that endanger the patients, visitors, staff, and family members of medical healthcare facilities within the region. This plan represents a collaborative regional effort with respect to preparedness for EIDs that pose a significant public health threat to Region 5. The purpose of the plan is to assist Region 5 in containing an outbreak of disease caused by an infectious agent or biological toxin, or response to other EID emergencies as defined in the overview of this plan. The plan identifies key information that organizations should know when confronted with a high consequence disease or infectious disease epidemic. It also describes how an organization may be affected, and what measures can be taken to mitigate those effects. In addition to education, this annex provides guidance on preparing and developing a course of action should an outbreak occur.

1.2 SCOPE:

The scope of this plan is to coordinate the Region 5 response to an infectious disease outbreak. High-consequence infectious diseases (HCIDs) or highly pathogenic respiratory viral infections may pose a public health risk due to the epidemic potential and has the potential to cause a public health emergency for which there are no, or insufficient, countermeasures. Examples include viral hemorrhagic fevers (VHF) (e.g., Ebola, Marburg, Lassa), smallpox, SARS, MERS, and H5N1 influenza A. The plan also addresses the response to a widespread outbreak or pandemic. The plan uses the World Health Organization (WHO) phases associated with pandemic influenza (1 through 6), and the Centers for Disease Control & Prevention (CDC) frontline hospital capabilities to identify, isolate, inform, and prepare for transport a patient suspected of having a highly infectious disease). This plan was designed to assist with public health, medical and emergency preparedness to respond to an occurrence, or threat of an occurrence, of pandemic influenza or an HCID and is not intended to apply to more routine infectious diseases (such as tuberculosis).

This plan applies to all Coalition member organizations, when an event occurs that is beyond the individual health care organization's ability to manage the response. This plan does not supersede or conflict with applicable laws and statutes and is intended to supplement the state and local emergency operations plans with information specific to an infectious disease.

This plan describes the actions the CFDMC, and its member organizations will follow to prepare and respond to an infectious disease outbreak.

1.3 OVERVIEW/BACKGROUND OF HCC AND SITUATION

The CFDMC Infectious Disease Surge Annex (IDSA) was developed by the Central Florida Emerging Infectious Disease (EID) Collaborative workgroup. This plan will be reviewed and updated in May of each year by the CFDMC. Lessons learned as they emerge from After Action Report/ Improvement Plans following real events or planned training exercises will be incorporated into the IDSA.

The CFDMC healthcare delivery system within RDSTF Region 5, comprised of Brevard, Indian River, Lake, Martin, Orange, Osceola, Seminole, St. Lucie and Volusia Counties, is a network of facilities and persons who carry out the tasks of ensuring that healthcare services are available and providing healthcare services to the public. This includes the Coalition, hospitals and health systems, emergency management, public health, EMS providers, long-term care providers, home health agencies, behavioral and mental health providers, specialty service providers (dialysis, pediatrics, urgent care, district Medical Examiners, funeral directors, etc.), support service providers (laboratories, pharmacies, blood banks, poison control, etc.), primary care providers, community health providers, and other healthcare and response stakeholders. There are more than 70 acute care hospitals and stand-alone emergency departments in Region 5.

The CFDMC Emerging Infectious Disease Collaborative was established in 2015 to coordinate and standardize preparedness and response to high consequence infectious diseases such as Ebola. The EID Collaborative is comprised of infectious disease subject matter experts such as hospital epidemiologists, healthcare acquired infection (HAI) professionals, hospital emergency preparedness staff, and representatives from public health, emergency management, emergency medical services, and nursing homes. The Collaborative converged on PPE, and minimum standards for PPE for this type of event have been established and equipment has been purchased and distributed by the

Coalition. The EID Collaborative has converged on donning and doffing protocols for PPE use. The EID Collaborative has now expanded the infectious disease annex to include all highly infectious diseases and to address response to a pandemic.

1.4 DESCRIPTION AND CAUSE:

Influenza is a highly infectious viral illness. The name “influenza” originated in 15th century Italy from an epidemic attributed to “influence of the stars.” The first pandemic or world-wide epidemic that clearly fits the description of influenza was in 1580. At least four (4) pandemics of influenza occurred in the 19th century and four (4) occurred in the 20th century. The Spanish flu pandemic of 1918–1919 caused an estimated 21 million deaths worldwide. The COVID-19 pandemic is ongoing.

There are three ‘types’ of influenza viruses that cause disease in humans: A, B, and C.

- Influenza A usually causes pandemics with moderate to severe illness, affecting all age groups.
- Influenza B generally causes milder disease than type A, and affects only humans, primarily children.
- Influenza C is rarely reported as a cause of human illness.

The nomenclature to describe the type of influenza virus is expressed in this order:

- Virus type
- Geographic site where it was first isolated
- Strain number
- Year of isolation
- Virus subtype

A high consequence infectious disease (HCID) is defined as:

- it is an acute infectious disease
- it typically has a high-case fatality rate
- it may not have effective prophylaxis or treatment
- it is often difficult to recognize and detect rapidly
- it has the ability to spread in the community and within healthcare settings

1.5 ASSUMPTIONS:

This plan takes an all-hazards approach to infectious diseases, while using standard state and local planning scenarios for Central Florida. This plan is based on the following general assumptions:

For high consequence infectious diseases:

- A HCID (confirmed or suspected) patient has presented to a health care facility or EMS within Florida Region 5 and has impacted operations up to and including the need for a facility to evacuate or the World Health Organization has declared a pandemic, or the State of Florida has issued an Executive Order declaring a public health emergency.
- Impacted facilities have activated their emergency operations plan and staffing of their facility operations center.

- Local resources will be used first, and then State resources, followed by federal request as needed.
- The increased number of area residents and staff needing medical help may burden and/or overcome the health and medical infrastructure. This increase in demand may require a regional response and/or subsequent city, county, state, and/or federal level of assistance.
- Facilities will communicate their medical needs through ESF-8 protocols and non-medical needs to the jurisdictional emergency operations center.
- Healthcare organizations will report status on situational awareness but will manage the incident on their own as much as possible before requesting assistance.
- The IDSA integrates the key elements of communicable disease control and prevention with emergency management concepts. A National Incident Management System (NIMS) compliant Incident Command System (ICS) organizational structure will be utilized to scale the response as needed to effectively manage and meet the incident objectives for the infectious disease emergency response.
- Region 5 Domestic Security Task Force (RDSTF) members and partners are trained and knowledgeable regarding the implementation and execution of this plan.
- The regional resources will work in full cooperation with and support of the appropriate Emergency Management Offices and Hospital Incident Command System (HICS) teams.
- All Florida Region 5 hospitals have emergency plans which address EID.
- The processes and procedures outlined in this response plan are designed to support and not supplant individual healthcare organization emergency response efforts.
- Full cooperation, collaboration, communication and coordination between the Regions' hospitals and the City and County Emergency Management Offices must be established to maximize the effectiveness of this plan.

The U.S. Department of Health and Human Services assumptions about pandemic disease along with real world experience and the CFDMC After Action report following Covid-19 pandemic forged the following assumptions:

- Susceptibility to the pandemic influenza will be universal.
- Risk groups for severe and fatal infections cannot be predicted with certainty. During annual fall and winter influenza season, infants and the elderly, persons with chronic illness, and pregnant women are usually at higher risk of complications from influenza infections.
- Attack rates will vary depending on the pathogen and risk factors for susceptibility.
- The typical incubation period for influenza averages two to three days. The World Health Organization reported that COVID-19 demonstrated a fourteen-day incubation period for a novel strain transmitted between people by respiratory secretions. The attack rate for droplet or airborne transmission of an infectious agent is unknown.
- Persons who become ill with COVID-19 may shed virus and can transmit infection for several days before the onset of illness. Viral shedding and the risk for transmission may be greatest during the first two days of illness.
- In an affected community, an outbreak will typically last about six to eight weeks. At least two pandemic disease waves are likely. Following the pandemic, the new viral subtype is likely to continue circulating and contribute to seasonal influenza.
- The seasonality of a pandemic cannot be predicted with certainty. The largest waves in the United States during 20th-century pandemics occurred in fall and winter.

1.6 GOALS & OBJECTIVES:

The goals of the IDSA are:

- To define key planning assumptions
- To outline the role and responsibilities of CFDMC
- To define concept of operations during a pandemic influenza outbreak
- To list the actions undertaken by CFDMC to prepare
- To improve community and partner agencies' preparedness for a pandemic

Planning will help to reduce transmission of the pandemic virus strain, to decrease cases, hospitalizations and deaths, to maintain essential services and to reduce the economic and social impact of a pandemic. The objectives of the IDSA are to:

- Assist all agencies that make up the coalition with preparing for and responding to a pandemic, HCID, or any other large-scale outbreak
- Standardize plans and protocols
- Provide training and equipment to healthcare partners to prepare for response
- Share best practices across the region

2. Concept of Operations

2.1 TRIGGERS/ACTIVATION:

This plan will be activated upon rapid identification and communication to the local health department of a potential HCID patient at the first point of contact in any healthcare setting in East Central Florida Region 5. This plan can be initiated by any of the region's hospitals, health clinics and offices, local health departments, emergency medical services, or County Emergency Operations Centers when potential HCID patient are suspected through laboratory diagnostics or consultation with Region 5 Health and Medical Co-Chairs.

WHO Phase Change Alert: notification of any WHO phase change will be received through national and international channels. When a phase change notification is received, the Department of Health will communicate to internal and external partners through established alerting protocols.

Based on alert and notification of a WHO phase change and/or validated surveillance system aberration, the appropriate components of this plan will be activated. CFDMC will mirror the activation levels of the State Emergency Operations Center.

Based on the course of the pandemic and the reduction of illness within the state, the response efforts will be scaled down in an appropriate and proportionate way. Surveillance systems will be monitored on a regular basis to determine pandemic influenza activity in the state and to identify further areas for investigation and confirmation of disease.

2.2 NOTIFICATIONS:

Healthcare facilities will report patients under investigation (PUI) for an HCID to the local health department (LHD). In addition, the healthcare facility will report PUIs to the Coalition (see Attachment 7). The LHD will then contact the State Health Department. When appropriate, the state epidemiologist contacts the Bureau of Preparedness and Response to initiate transport of patient to the regional treatment center. By state policy, the State Surgeon General (or their designee), the State ESF-8 Emergency Coordinating Officer, or the State Epidemiologist shall authorize patient transport to the regional treatment center.

Pandemics are typically declared by the World Health Organization and in Florida are issued as public health executive orders issued by the Florida State Surgeon General.

2.3 OPERATIONAL MISSION AREAS

2.3.1 Command and Coordination:

ICS is a management system that is used to achieve optimal command and control within an organization as well as seamless inter-agency coordination during any type of emergency. It uses a clearly defined chain of command with a limited span of control.

- State Role: The Florida Department of Health (FDOH) State Surgeon General is responsible for the overall direction, management and control of all Department personnel and resources committed to control of an influenza pandemic. Once the State Emergency Response Team (SERT) is activated this plan is incorporated into the established state emergency management structure.

- Regional Role: The State and local ICS structure will expand and contract as the pandemic situation warrants. If an area command or multi-agency coordination system (MAC) is used, it will follow Regional Domestic Security Taskforce (RDSTF) geographical boundaries.

- Local Role: The Health and Medical Emergency Support System (ESF-8) will coordinate and manage the response to an influenza pandemic and will utilize the incident command system (ICS).

- The overarching goal is to assist Emergency Management and Emergency Support Function 8 (ESF-8) with the National Preparedness Goals mission areas: Prevention, Protection, Mitigation, Response, and Recovery as it relates to healthcare disaster operations.

- WEB-EOC: Emergency Management utilizes WebEOC for event management mission requests and supplies. The Coalition monitors this for all disasters and shares relevant information. Informational posts are monitored, and relevant information is forwarded or included in the daily situation report. County situation reports are reviewed for situational awareness. Each county's mission requests submitted through WebEOC is reviewed to determine if local resources from within the coalition can meet the need. If a resource requested is readily available locally through the Coalition or other member organizations, the coalition will notify the State ESF-8 desk and the local requestor of the available local resources. If so directed by the State ESF-8 desk, the coalition will put the requesting organization in touch with the organization providing the resource to arrange transfer of the resource.

2.3.2 Initial Outbreak:

In an HCID, the initial outbreak focuses on the frontline hospital's capability to identify, isolate and inform. The EID Collaborative has established a standardized screening protocol for Ebola, which can be adapted to any HCID (see Attachment 1). Most hospitals within the region have undergone a frontline hospital assessment and have identified areas for isolation. Hospitals are required to report an HCID to the local health department.

In a pandemic, the Initial Outbreak encompasses WHO Phases 3, 4, 5 and early 6. The main objectives for the Initial Outbreak period are testing, contact tracing, and public information on mitigation measures.

2.3.3 Response Phase:

The response phase activities in an HCID focus on the frontline hospital's capability to stabilize and prepare the patient for transport. Standardized protocols for donning and doffing have been developed and CFDMC has purchased and distributed PPE (hoods and gowns). Standardized protocols for managing an HCID patient until transport to a regional treatment facility is underway have also been developed (see Attachment 6 - HCID Isolation Guide). Transport is through the Florida Infectious Disease Transportation Network.

The response phase activities in a widespread epidemic or pandemic focus on community control measures, including isolation of symptomatic cases, quarantine of suspected cases, wide-spread infection control procedures and mitigation efforts and public information and education. Hospitals will focus on increasing surge capacity to ensure appropriate treatment for the ill, managing staffing and equipment shortages, activating alternate care sites and managing large numbers of fatalities. Additional activities will include preparing for and conducting large-scale campaigns when preventative measures become available such as prophylaxis, antibody treatments or vaccines, and continuation of surveillance and tracking activities.

2.3.4 Surveillance:

The Florida Department of Health (FDOH) has the lead responsibility for disease surveillance. The FDOH Bureau of Epidemiology conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions that are reported from physician's offices, hospitals, laboratories and other medical providers and community partners. Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381.0031 (1,2), Florida Statutes. Data is collected and examined to determine the existence of trends. Syndromic surveillance was added to the disease reporting process as an active method of determining activities in the community that could be early indicators of outbreaks and bio-terrorism.

2.3.5 Community-based Testing

The Florida Department of Health has the lead responsibility for disease surveillance with its Department of Epidemiology. The Epidemiology Department conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions that are reported from physician's offices, hospitals, laboratories and other medical providers and community partners.

Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381.0031 (1,2), Florida Statutes.

Data is collected and examined to determine the existence of trends. They conduct syndromic and influenza-like surveillance activities. Syndromic surveillance was added to the disease reporting process as an active method of determining activities in the community that could be early indicators of outbreaks and bio-terrorism.
Case investigation, contact tracing, confinement and quarantine are the responsibilities of the Florida Department of Health (FDOH).

2.3.6 Data Reporting:

The data relied upon during an epidemic or pandemic is managed and reported by three state agencies, Division Emergency Management (DEM), FDOH, and the Agency for Health Care Administration (AHCA).
FDOH oversees the Merlin disease reporting system. This includes case volume, positivity rate, case outcomes and other public health data. Regional reports and numbers are pulled by CFDMC from the state dashboards and shared with regional partners.

AHCA oversees the Health Facility Reporting System (HFRS) bed reporting system. This provides data on census, ICU capacity, ventilator usage and more. CFDMC extracts regional data sets and shares this with its partners.

DEM utilizes WebEOC for event management mission requests and supplies. CFDMC monitors mission requests to the state.

2.3.7 Safety and Infection Control and Prevention:

- Immediate isolation of potential HCID patient(s) wherever presented is needed to protect other patients, healthcare workers, and the general population until transportation to the nearest treatment facility is possible. In most HCID events, patients will likely be placed in isolation to prevent transmission of the infection to others. Isolation facilities will inevitably vary between healthcare entities.

All Central Florida Region 5 healthcare facilities have established training in isolation procedures and infection control to enable them to safely place a patient in isolation. The length of isolation time that will be required will vary based on the disease, patient condition and symptomology, and the status of the Florida Infectious Disease Transportation Network (FIDTN), but all facilities need to be prepared to isolate a patient until transferred to a more capable facility. All Region 5 healthcare facilities should follow the SOPs and plans for each respective healthcare facility to ensure effective identification, isolation and communication of a potential HCID patient.

In a pandemic, CDC provides guidance on safety and infection control and prevention measures which are updated as the pandemic unfolds.

2.3.8 Worker Safety

Healthcare facilities must have procedures in place to be able to monitor staff for signs and symptoms of infection after they have provided care or potentially had exposure to an HCID or other infectious disease patient.

Hospitals should have procedures to address the needs of staff and incentivize their participation in providing care to an HCID patient. Incentives may include recognition through clothing, challenge coins and pay incentive. Staff may need non-congregate housing if they are exposed or assistance with childcare.

CFDMC includes self-care information in each situation report and is currently working with a vendor on a responder resiliency training for healthcare and emergency response personnel.

2.3.9 Non-Pharmaceutical Interventions

Even with the current technologies, it may take several months to over a year to develop countermeasures and treatments that can be produced on a large scale. In the interim, all agencies in the coalition should help promote nationally recognized protective measures. Examples of protective measures may include but are not limited to:

- Clean your hands often - Wash your hands often with soap and water for at least 20 seconds or use alcohol-based hand rub if soap and water are not available, especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
- Avoid close contact - Stay at least 6 feet (about 2 arms' length) from other people.
- Practice respiratory hygiene by covering your cough.
- Wear source control (i.e., facemask) when around others.
- Clean AND disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.

Additional measures may be needed to protect vulnerable populations. For example, early in the COVID-19 pandemic, hospitals and nursing homes restricted visitation. It is noted that this isolation has generated behavioral health issues. CFDMC has identified behavioral health resources (see CFDMC Behavioral Health Plan at https://www.centralfladisaster.org/resources).

2.3.10 Surge Staffing

A high prevalence of morbidity, mortality, and the worried well may lead to an increase in public demand for health services (e.g., hospitals, clinics, local health departments). Hospitals anticipating or experiencing health care demands that exceed their daily operating capabilities should activate hospital surge plans utilizing their emergency operating procedures and request assistance via the hospital incident command system (HICS) to county emergency management.

In the event of a 30% or greater reduced workforce either due to an emergency requiring large numbers of responders or widespread illness or other reasons, and individual agencies exhausting individual, agency specific continuity of operations plan, the Health Department and/or county Emergency Management Offices will initiate the continuity of operations plans to assist with the provision of critical services.

2.3.11 Alternate Care Sites

Alternate care sites may be identified by local emergency management, public health, or hospitals and may be used for testing, vaccinations, hospital ED triage, and treatment. Each county has an alternate care site plan and there is a regional ACS cache available upon request. During the initial COVID-19 surge in 2020, the Coalition deployed tents to support a hospital system for triage and testing.

2.3.12 Supply Chain, Supplies, Personal Protective Equipment (PPE):

The CFDMC EID Collaborative has converged on PPE for an HCID, and these are included on the CFDMC Minimum Hospital Equipment List (see Attachment 2). The EID Collaborative also converged on donning/doffing protocols for an HCID (see Attachment 3). An online training video has been posted to the website. An additional Ebola PPE cache is available for deployment to any healthcare facility within the region (see Attachment 8).

2.3.13 Medical Countermeasures

- Antivirals: Limited amounts of antiviral will be available for treatment and prophylaxis of a novel virus in a pandemic. State stockpiles will be available to priority groups for treatment and prophylaxis according to federal guidelines from the HHS. Treatment, containment, control and prevention strategies for pandemic viruses are most effective when antivirals for treatment and pre- and post-exposure prophylaxis are included with other non-pharmaceutical interventions.

- Convalescent plasma treatments: Plasma is the liquid part of blood. Convalescent plasma means plasma that comes from people who have recovered from an infection, like the coronavirus that causes COVID-19. This plasma may contain antibodies against the virus.

- Vaccines: When an epidemic or pandemic occurs, vaccines will likely not be available or will be in short supply and will be allocated on a priority basis following federal guidelines from the Department of Health and Human Services. Vaccine will be available for pandemic virus prophylaxis approximately six to eight months after the pandemic begins. The total vaccine supply will be under the control of the federal government. With the emergence of a novel influenza virus strain, all persons identified for vaccination will likely need two doses of vaccine to achieve optimal antibody response.

2.3.14 Patient Transport

- The current state of EID disaster response for the State of Florida is a redundant transportation system that includes a plan to transport a patient with a highly infectious pathogen by air to a regional treatment center. If air transportation is not available, a ground transportation network has been developed that transports a patient across Florida to our nearest regional treatment center (Emory). The Florida Infectious Disease Transportation Network (FIDTN) has been exercised regionally and found to be a robust state-wide response capability, although capacity is very limited.

- The primary means of transportation of an EID patient will occur through the activation of the FIDTN. Transportation needs will be coordinated with the assistance of the emergency

operations (ESF-8 representative) as required.

- Intra-facility transport procedures. As part of the CDC frontline hospital criteria, each hospital is to map patient transport routes specific to the layout of their campus. Hospitals are to have transport routes that utilized less populated routes and or outdoor routes for transporting patients. Alternatively, hospitals are to have plans in place to be able to care for the patient in the emergency department.

- Prioritization, transfer locations and the movement of patients to other facilities or specialty transfers is done in accordance with the state of Florida patient movement plan. State ESF-8 is prepared to coordinate resources to support the movement of persons with medical and functional needs in impacted areas where local health and medical systems are overwhelmed. Regional Patient Coordinators have been identified in each region to assist in coordinating patient placement.

- In all events, the coalition shares HFRS data on bed availability with regional and county emergency management leads and assists hospitals in locating appropriate beds as requested.

- As part of the regional trauma resource coordination plan, the region will be piloting a regional multi-organization coordination center (MOCC). If successful, the MOCC will be expanded to infectious disease outbreaks.

2.3.15 Fatality Management:

There are five (5) medical examiner (ME) offices in the region. Despite earlier planning to the contrary, it is possible that all epidemic or pandemic victims will be ME cases. Early in the COVID-19 pandemic, hospitals and funeral homes were alerted that all COVID-19 deaths fall under ME jurisdiction. The coalition has a regional mass fatality plan and the MEs have mutual aid agreements. There is limited morgue capacity at hospitals and the ME offices and local ESF-8 may assist in identifying emergency storage capacity. CFDMC has purchased portable morgues and these are located at hospitals across the region. In addition, the state FEMORS team is on standby along with the National Guard to provide transportation to storage areas. There is a state death registration system, and the coalition will assist in getting messaging out for that system.

2.3.16 Support Services.

These include:

Environmental Services (EVS):

- Each facility is to follow their own protocols using CDC guidelines.
- In an HCID, the regional protocol is that nursing and other clinical staff will perform daily cleaning tasks. EVS will perform terminal cleaning and be the last person out of the room. EVS will assist the last healthcare worker out of PPE. An EVS buddy will be in Level 1 PPE in the anteroom to assist the last EVS worker out of the room upon completion of terminal cleaning. EVS staff are to wear chemical PAPRs to protect from bleach fumes.

Laboratory:

- CDC recommends that Ebola testing be conducted only for persons who meet the criteria for persons under investigation (PUIs) for EVD. A PUI is a person who has both consistent signs and/or symptoms, including elevated body temperature or subjective fever or symptoms, including severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage, AND an epidemiological risk factor within the 21 days preceding the onset of symptoms.
- It is recommended that hospitals perform point of care testing for HCIDs when possible. The coalition purchased point of care (POC) lab testing equipment for eight hospitals who underwent a CDC Assessment Hospital site visit (See Attachment 5 - Laboratory POC Testing for Ebola).
- In the COVID-19 pandemic, testing was performed as prescribed under Executive Order, based on guidance from CDC. All test results were mandated to be reported to FDOH within 24 hours.

Waste Management, Decontamination: All waste from an HCID will be put in barrels for off-site transport and disposal. For novel pathogens, guidance from CDC and or OSHA will be followed. Standard waste disposal procedures are sufficient for disposing of personal protective equipment and other items contaminated with SARS Cov-2/COVID-19 in regular trash.

Behavioral Health: Disaster Behavioral Health responders work with survivors, families, responders and the community to assist with the mitigation of emotional, psychological, and physical effects of a disaster, natural or man-made. Disaster behavioral health responders apply the concepts of psychological first aid to help those affected overcome the initial impact of shock, denial, and depression when confronting disasters.

The region has a behavioral health response plan which includes a behavioral health liaison available to each county or regional ESF-8 and uses the Florida Crisis Response Team and other behavioral health response assets to provide services to survivors, families and responders. To support responders during the pandemic, the Coalition provided Mental Health First Aid training to members and partnered with the University of Miami DEEP Center to provide stress first aid training to the region's healthcare and emergency responders. See CFDMC Disaster Behavioral Health Plan at https://www.centralfladisaster.org/resources.

2.3.18 At-Risk Populations: Risk groups for severe and fatal infections cannot be predicted with certainty. During annual fall and winter influenza season, infants and the elderly, persons with chronic illness, and pregnant women are usually at higher risk of complications from influenza infections. The region follows CDC guidelines in identifying and protecting at-risk populations. Acute care hospitals need to strive to have a continuous screening process to be able to identify at risk patients and integrate screening into electronic medical records.

2.3.19 Communications: Communication strategies are an important component in managing any infectious disease outbreak and are essential in the event of an epidemic or pandemic. There will be an immediate and continuous demand from all segments of society for information on the actual and potential impact, magnitude, transmission, treatment, and recovery resulting from an HCID or pandemic or other outbreak event. Information demands during an event will be sustained over a long period and maintaining public confidence over many months will be based on consistency and credibility of messages. Accurate and timely information at all levels is critical in order to minimize unwanted and unforeseen social disruption and economic consequences and to maximize the effective outcome of the response. Public communications remain the responsibility of the local

jurisdiction and individual agency or organization and may be coordinated through the state emergency management system. Joint information centers will be established in each county to ensure consistent communications.

Upon notification of an HCID presenting at a healthcare facility in Central Florida Region 5 by the hospital or local health department, the CFDMC will provide situational awareness to all HCC members through conference calls and email updates.

The Coalition has redundant communication capabilities with its members, including more than two thousand individuals representing over 800 organizations. During blue skies, the Coalition uses Constant Contact and the website to share information on meetings, plans, trainings and exercises with its members. During exercises and gray skies, the Coalition uses the Everbridge health alert network and EMResource to share information with members. In an event, members receive a wealth of information from multiple mechanisms, including the news media and local emergency management. The Coalition's role in information sharing is to monitor communications from local and State ESF-8 and share information with member organizations that is not provided via other partners, such as regional status.

2.5 ROLES AND RESPONSIBILITIES

2.5.1 Central Florida Disaster Medical Coalition (CFDMC) primary role and responsibilities in an infectious disease event are facilitating situational awareness and resource coordination.

- CFDMC facilitates information sharing among participating health care organizations and with jurisdictional authorities to promote common situational awareness. Information is sought across multiple disciplines through various methods and is shared with partner agencies via posting on the coalition website and through emails and situation reports. During the COVID-19 pandemic, CFDMC produced a daily situation report for members including federal and state orders, rules and guidance, a regional overview on total cases, hospitalizations, deaths, and vaccines administered, and information shared during webinars and conference calls.

- CFDMC provides resource coordination and support at a regional level. Resource requests are made from the member organization in need to the local county emergency management/ESF-8. If the county cannot meet the need, the mission request is forwarded to the State EOC/ESF-8. CFDMC monitors mission requests daily and if a resource is available within the region, CFDMC will contact the State and local county to offer the resource. Through the Emerging Infectious Disease Collaborative, CFDMC also facilitates the coordination of EID incident response actions for participating healthcare organizations so incident objectives, strategies and tactics are consistent for the healthcare response. CFDMC may also be able to shift funding to meet the needs of a response. During the summer of 2021, in response to urgent needs identified by hospitals, CFDMC shifted funding to purchase portable morgues and a ventilator cache.

2.5.2: Hospitals: Hospitals are responsible for acute health care service provision. In addition to providing medical care, during an HCID or pandemic or other outbreak event hospitals will:

- Make beds and surge spaces rapidly available for initial triage and stabilization, and obtain additional staff, equipment, and supplies
- Ensure immediate bed availability (IBA) by rapidly prioritizing patients for discharge, maximizing the use of staffed beds, and using non-traditional spaces (e.g., observation areas)
- Establish virtual visitations and hotlines
- Rapidly expand capacity (for those facilities that provide it) by adapting procedural, pre- and post-operative, and other areas for critical care and assess staff, equipment, and supply needs for these spaces to facilitate requests
- Call back clinical and non-clinical staff; utilize staff in non-traditional roles. Adjust staffing ratios and shifts as required
- Implement emergency equipment, supplies and stocking strategies, and resource sharing agreements
- Implement PPE sustainment practices
- Rapidly isolate patients
- Provide personal protective equipment (PPE) and prophylaxis to their employees and visitors while awaiting either comprehensive evaluation, definitive diagnosis, or transfer
- Utilize tertiary care facilities, when possible, or designated facilities to assess, manage, and treat patients with suspected highly pathogenic transmissible infections (e.g., severe acute respiratory syndrome [SARS]/Middle East respiratory syndrome [MERS]) or non-transmissible infections (e.g., anthrax)
- Define and implement visitor policies for infectious disease emergencies, in collaboration with the HCC, to ensure uniformity.

The region has standardized a staffing model for an HCID such as Ebola (see Attachment 4). During an HCID, clinical management includes:

- Initial screening and triage protocol will be a syndromic based screening tool. Please see Attachment 1 for the Ebola screening tool.
- Treatment of symptoms will be per facility policy.

2.5.3 EMS: EMS agencies provides emergency medical services outside of a hospital setting. During an HCID or pandemic or other outbreak event EMS will also:

- Use Vital Alerts to notify the emergency departments of an incoming potential HCID patient.
- Coordinate patient distribution when tertiary care facilities or designated facilities are not available
- Recognize early on the need to distribute PPE to all LTC's, public safety, hospitals and other first line workers.
- Implement PPE sustainment practices
- Provide education and training to area partners
- Set up and manage testing sites ???Don't they just provide staffing?
- Provide support to hospitals and alternative care sites

2.5.4 Emergency Management: The primary role of emergency management is to "protect and preserve the safety" of the jurisdiction's citizenry. The emergency manager must develop relationships with emergency response agencies to facilitate inter-agency operations in emergencies. Emergency management coordinates emergency response efforts. During COVID-

19, the Governor designated the Florida Division of Emergency Management (FDEM) as the lead agency for the event. FDEM and the county emergency management offices worked closely with FDOH and the local health departments to set up and operate testing sites and vaccination sites.

2.5.5 Public Health: In an HCID or pandemic, public health workers play a key role as the subject matter experts. The public health system is responsible for surveillance, data collection and reporting, contact tracing, and other mitigation efforts.

2.5.6 Medical Examiners

Medical Examiner (ME) Offices provide cause of death investigations. Unexpectedly, all COVID deaths fell under the ME jurisdiction. All prior education and training were that Medical Examiners would not handle all deaths, just those at home. This required messaging to alert hospitals and funeral homes that all COVID deaths fall under the ME jurisdiction. Guidance on handling bodies was provided through links to CDC and national funeral association guidance on body handling and preparation. MEs were not required to perform an autopsy on each case, and bodies were kept at hospitals until the family could choose a funeral home.

Issues that need additional protocol development include:

- Protocols for safe handling of corpses, respecting cultural and religious beliefs. Death reporting.
- During the COVID-19 pandemic, medical examiners reported death based on the county where the death occurred; the health department reported based on county of residence.
- Medical Examiners' information on deaths is public information and for DOH it is protected information.
- The region needs to identify collection points in each county to relieve the strain on hospitals who have limited morgue capacity.
- The region has identified the need to expand cremation capacity.

These issues will be addressed during 2023-2024 in the update of the Mass Fatality Plan.

2.5.7 Long-Term Care Facilities

Nursing homes, assisted living facilities, and other long-term care agencies provide non-acute care and may help to alleviate hospital congestion. Plans need to be in place to support communication of patient medical history and condition quickly and efficiently from the hospital to the long-term care facility. There is a necessity for speed, flexibility and adaptability in carrying out the provision of care with needed supplies in these settings. To protect their vulnerable populations during an HCID or pandemic, these agencies may:

- Restrict visitations in accordance with regulatory guidance and requirements;
- Enhance PPE use and hygiene practices; and
- Perform resident and staff testing.

2.6 TRAINING AND EXERCISES

The EID Collaborative has identified the following minimum training requirements for hospitals:

- Practice donning and doffing PPE a minimum of twice per year;
- Perform clinical skills check while wearing PPE a minimum of twice per year (I.e., start IV, insert catheters, etc.);
- Participate in EID drill, tabletop, or functional drill based on organizational need;
- Drill patient movement within facility at least annually unless incorporated functional exercise; and
- Ensure patient care teams are trained based on type of patients seen (I.e., OB, PEDS, etc.).

To maintain the necessary skills and knowledge to appropriately respond to an EID emergency, CFDMC will provide ongoing training and exercise opportunities for CFDMC community partners. These include, but are not limited to:

- Communication drills,
- Ongoing ICS and NIMS training,
- IDSA trainings, drills, and exercises, and
- CFDMC and hospital/healthcare led EID workshops, drills and exercises.

2.7 DEACTIVATION AND RECOVERY

After an infectious disease outbreak is over, it can be expected that many people will be affected in a variety of ways. Many may have lost friends or relatives, suffer from fatigue or have financial losses as a result of the interruption of businesses and employment. CFDMC is planning trainings and services to help address these issues. Governments or other authorities should ensure that these concerns can be addressed and support the rebuilding of the society. If needed, organize training and education for personnel involved will be provided.

The Coalition will facilitate a regional after-action report and work with healthcare and emergency response partners to address improvement opportunities and test these improvements in future exercises.

3. CFDMC Emerging Infectious Disease Collaborative

The EID Collaborative was formed in 2014 in response to the Ebola outbreak that threatened the United States. Since that time the EID Collaborative has led the region's efforts in preparing for an HCID or pandemic. The EID Collaborative is led by Dr. Vincent Hsu, CFDMC Board Member and Hospital Epidemiologist and Executive Director for Infection Prevention at Advent Health Orlando. He also serves as an Assistant Director for the Advent Health Internal Medicine Residency Program with faculty appointments from the Colleges of Medicine at Florida State University and the University of Central Florida. The EID Collaborative is comprised of representatives from the region's acute care hospitals, including epidemiologist and healthcare acquired infection (HAI) professionals, public

health, EMS, and EM/ESF-8. This plan is the results of countless hours in planning by these members:

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4. Resources

4.1 Legal Authorities

Statute	Agency	Authority
Chapter 68. Title 42	Federal Government	Provides authority to declare and respond to emergencies and aid protect public health; implemented by the Federal Emergency Management Agency (FEMA)
Title 42 United States Code Section 264 (Section 361 of the Public Health Service [PHS] Act)	Federal Government Centers for Disease Control and Prevention (CDC)	Under its delegated authority, the CDC is empowered to detain, medically examine, or conditionally release individuals reasonably believed to be carrying a communicable disease. Influenza viruses that cause/ have potential to cause a pandemic are included in the list of quarantinable diseases.
Chapter 252, Florida Statutes Emergency Management Act Section 381.003, F.S.	Governor Florida Division of Emergency Management	Allows Governor to declare a state of emergency Gives Governor and Division direction and control of emergency management Allows Governor and Division to delegate authority to carry out critical functions to protect the peace, health, safety, and property of the people of Florida
Chapter 381, F.S. Section 381.0011, F.S. Communicable Disease and Quarantine Section 381.00315, F.S. Public Health Emergencies and Advisories	Department of Health	Authorizes the department to administer and enforce laws and rules relating to control of communicable disease Authorizes the department to declare, enforce, modify, and abolish quarantine of persons, animals, and premises Authorizes the department to specify the conditions and procedures for imposing and releasing a quarantine Authorizes the State Health Officer to declare public health emergencies and issue public health advisories

Section 381.0012, F.S. Enforcement Authority	Department of Health	Authorizes the department to maintain necessary legal action; request warrants for law enforcement assistance; and directs state and county attorney, law enforcement and city and county officials upon request to assist the department to enforce the state health laws and rules adopted under Chapter 381, F.S.
Section 768.28, F.S. Sovereign Immunity for State Officers and Employees	State Agencies	Protects state employees who administer immunizations as part of their official duties
Section 120.54, F.S.	State Agencies	Allows state agencies to adopt temporary emergency rules when there is immediate danger to public health, safety, or welfare without going through the normal rule making process

4.2 ADDITIONAL RESOURCES/REFERENCES

State, interstate, and federal assistance resource support to local communities is expected to be limited or not available. Supply chains will become compromised and both staffing and equipment will be in short supply. Sharing of information on how to stretch out resources is a CFDMC responsibility.

https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html

https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/strategies-optimize-ppe-shortages.html

https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html

https://www.dhs.gov/publication/st-multicooker-decontamination-n95-respirators (the State of Florida has purchased the Battel system to decontaminate N95s for reuse)

https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html

https://www.cms.gov/medicareprovider-enrollment-and-certificationsurveycertificationgeninfopolicy-and/guidance-use-certain-industrial-respirators-health-care-personnel

https://files.asprtracie.hhs.gov/documents/fema-mocc-toolkit.pdf

https://www.cms.gov/files/document/cms-non-emergent-elective-medical-recommendations.pdf

https://www.hhs.gov/sites/default/files/optimizing-ventilator-use-during-covid19-pandemic.pdf

https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Flong-term-care-strategies.html

ASPR TRACIE Developed Resources (available at https://asprtracie.hhs.gov/)

NETEC Resources (available at https://netec.org/)

Infectious Diseases

- Bioterrorism and High Consequence Biological Threats TC
- Coronaviruses (e.g., SARS, MERS and COVID-19) TC
- Ebola/VHF TC
- EMS Infectious Disease Playbook
- Healthcare Coalition Influenza Pandemic Checklist
- Hospital Personal Protective Equipment Planning Tool
- Infectious Disease Select Resources
- Influenza Epidemic/ Pandemic TC
- Novel Coronavirus Resources
- COVID-19 Regional Support Resources
- Rural Health and COVID-19 Quick Sheet
- Zika TC

Communications/Communication Systems

- Information Sharing
- Risk Communications/Emergency Public Information and Warning
- Social Media in Emergency Response

Crisis Standards of Care

- Ethics
- Fatality Management
- Healthcare-Related Disaster Legal/ Regulatory/ Federal Policy
- Hospital Patient Decontamination
- Hospital Surge Capacity and Immediate Bed Availability
- Mental/Behavioral Health (non-responders)
- Partnering with the Healthcare Supply Chain During Disasters
- Sample State Pandemic Plans

4.3 KEY ISSUES BY SCENARIO TYPE

This list supplements the considerations noted in **Section 2.4 Operational Mission Areas.**

Bioterrorism

- Recognition of event / determination of potential impact
- Defining the population at risk / implementing screening
- Environmental assessment
- Request for state/federal assets – PPE, ventilators, MCM / treatment, Federal Medical Station (FMS)
- State / federal declarations of disaster
- Risk communications
- Behavioral health (community and responders)
- Regional patient movement coordination / MOCC

- Surge capacity (outpatient and inpatient) with an emphasis on critical care
- Alternate care systems / sites
- Incorporation of SNS, FMS, and other federal resources into response
- MCM distribution – community
- MCM distribution and use – healthcare o?? Pharmacy (e.g., distribution, receipt, handling, billing)
- Clinical care (e.g., antitoxin)
- Crisis Standards of Care (CSC) – roles and responsibilities, triage decision-making
- Fatality management
- Waste management and environmental protection of facilities

VHF/Ebola

- Recognition of case(s) / determination of potential impact
- Identify – isolate – inform
- Testing / sample coordination
- Risk communications
- Behavioral health (community and responders)
- Regional patient movement coordination / MOCC role / thresholds (i.e., when is a MOCC needed?)
- PPE support / coordination
- Engineering and administrative controls for infection prevention
- Public health investigation / isolation / quarantine
- Frontline / Assessment / Regional treatment resources and roles o Surge capacity plan in event of multiple cases
- EMS transport mechanisms / teams / process
- Waste management and environmental protection of facilities
- Fatality Management

Highly Pathogenic Respiratory Viral Infection

- Recognition of case(s) / determination of potential impact
- Identify – isolate – inform
- Regional patient movement coordination / MOCC role / threshold (i.e., when is a MOCC needed?)
- Testing / sample collection
- Risk communication
- Behavioral health (community and responders)
- PPE support / coordination
- Public health investigation / isolation / quarantine
- Engineering and administrative controls for infection prevention
- Frontline / Assessment / Regional treatment resources and roles (may be significantly different than VHF; regional facilities may not be used; and usual referral centers may provide care) o?? Surge capacity plan in event of multiple cases
- EMS transport mechanisms / teams / process as applicable

Pandemic

- Recognition of case(s) / determination of potential impact
- Identify – isolate – inform
- Coalition vs. state coordination / interface (how do coalitions interface with state response to prevent duplication of effort / maintain coalition operations that may be different in different areas)
- Request for state/federal assets – PPE, ventilators, MCM / treatment, Federal Medical Station (FMS)
- State / federal declarations of disaster
- Regional patient movement coordination / MOCC role and ‘level loading’ policies
- Risk communications
- Behavioral health (community and responders)

- PPE use recommendations, support for fit-testing, supply / cache support role
- Supply Chain
- Public health investigation / isolation / quarantine
- Surge capacity (outpatient and inpatient, especially ICU)
- CSC – indicators and triggers (e.g., cancelling elective surgery), roles and responsibilities, triage decision-making
- Testing strategy and roles/responsibilities
- MCM distribution – community
- MCM distribution and use – healthcare
- Pharmacy (e.g., distribution, receipt, handling, billing)
- Clinical care
- Long-term care facility support
- Homecare agency support
- Alternate care sites / systems
- Fatality management

5. Attachments

Attachment 1 - HCID Standardized Screening Protocol

Attachment 2 - Region 5 Minimum Hospital Equipment List: See https://www.centralfladisaster.org/resources

Attachment 3 - HCID Donning/Doffing Protocol

Attachment 4: HCID Staffing Model

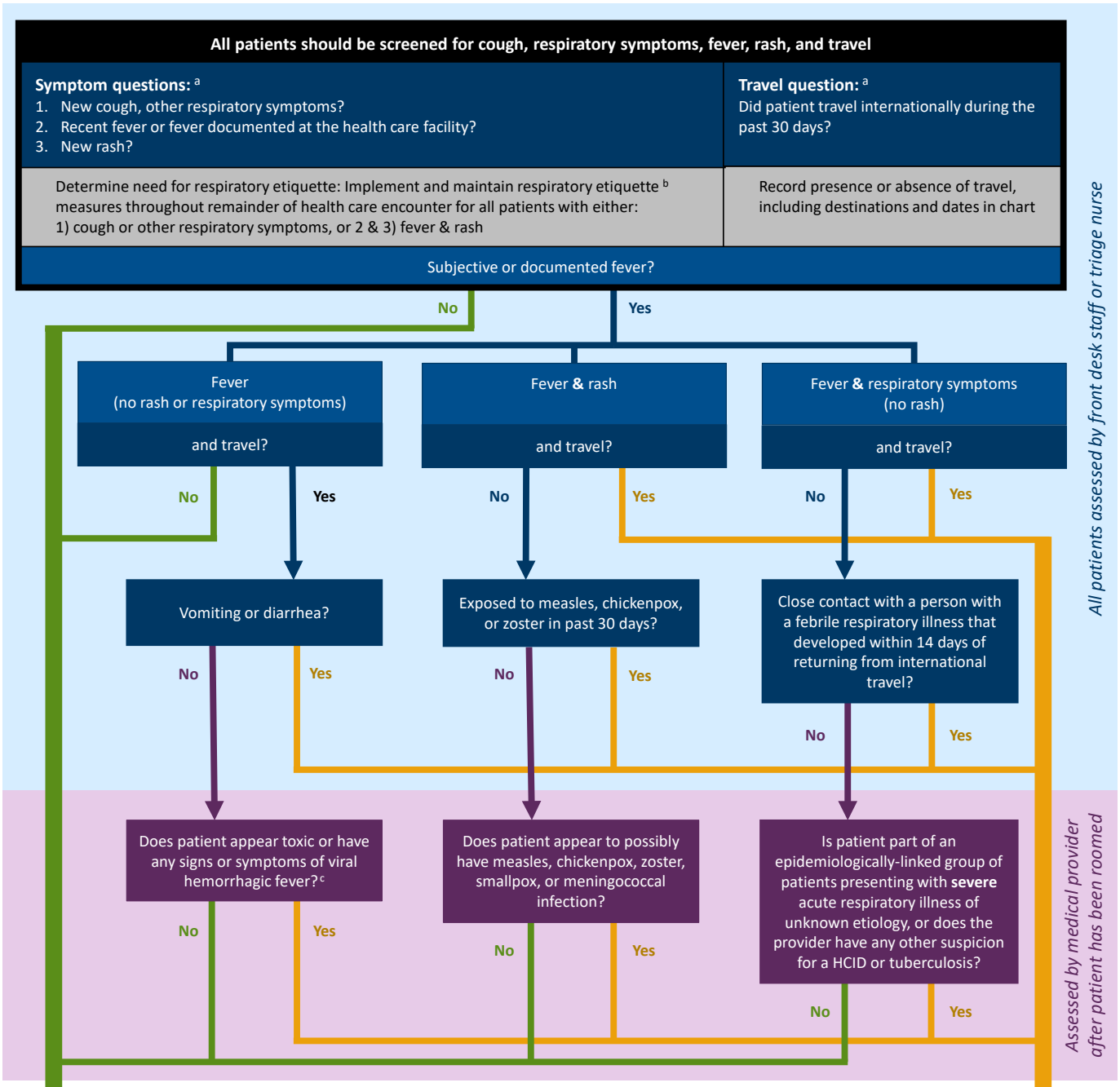
Attachment 5: HCID Laboratory POC Testing Protocol

Attachment 6: HCID Isolation Guide

Attachment 7: PUI Case Notification

Attachment 8: Regional Ebola Cache

High Consequence Infectious Disease (HCID)
Screening Guidance



- Follow routine Standard Precautions practices

No HCID risk identified

- Move patient to private room with closed door or to an airborne infection isolation (AII) room & control access to patient; post appropriate isolation signage
- Assess possible infections based on travel history, clinical presentation, or exposures to ill persons who have recently travelled internationally
- Viral hemorrhagic fever may need to be considered even in the absence of specific travel alerts [c]

HCID assessment recommended

For patients with recent travel, check for travel health notices:
- Travel Clinical Assistant (TCA): dph.georgia.gov/TravelClinicalAssistant
- CDC Travel Health Notices: wwwnc.cdc.gov/travel/notices
- WHO Disease Outbreak News: www.who.int/csr/don/en/

Suspect HCID or other highly infectious disease?

Yes

1. Implement airborne (or droplet for meningococcal disease or plague) and contact precautions & control access to patient
2. Providers should don appropriate PPE before entering room [d]
3. Notify infection preventionist and MDH (651-201-5414)
4. Screen persons accompanying the patient for symptoms & collect information on other contacts

Activate HCIDs plans, including possible transfer to biocontainment unit

DEPARTMENT OF HEALTH

651-201-5414 | 1-877-676-5414
www.health.state.mn.us

5/22/2018

Implementation of this screening guidance may vary based on site-specific considerations.

[a] Recent fever, fever documented at the health care facility, new rash, and international travel in the last 30 days should be ascertained as early in the patient encounter as possible; if possible, before arrival for patients making appointments by phone.

[b] Health care facilities should implement year round respiratory etiquette measures for all patients presenting with cough, other signs of respiratory infection, fever and rash, or skin lesions.

- Measures include the following:
  1) Have patient wear face mask (and replace damp or soiled masks).
  2) Provide easy access to hand hygiene supplies in patient waiting areas.
  3) Provide space and encourage patients to sit as far away from others as possible.
  4) Room patients as soon as possible for evaluation.
  5) Display respiratory etiquette signs at entry and waiting points.
  6) Droplet precautions may be instituted pending determination if airborne precautions are needed.

[c] Viral hemorrhagic fever (VHF) considerations.

- Travel to any location:
  - VHF should be considered among patients presenting with fever, severe myalgia, or extreme exhaustion in combination with evidence of coagulopathy (e.g., petechial rash, ecchymoses, overt bleeding) and gastrointestinal complaints (abdominal pain, vomiting, or diarrhea), especially following travel to South America, Africa, the Middle East, Mediterranean areas, or Asia.
- Travel to Guinea, Liberia, or Sierra Leone:
  - Current U.S. Centers for Disease Control and Prevention (CDC) guidance indicates to only test persons with any signs or symptoms of Ebola virus disease (EVD) who visited Guinea, Liberia, or Sierra Leone in the past 21 days if any of the following high risk Ebola virus exposures are present:
    1) Contact with blood or bodily fluids of acutely ill persons with suspected or confirmed EVD, such as providing care in a home or health care setting.
    2) Participation in funeral rituals, including preparation of bodies for burial or touching a corpse at a traditional burial ceremony.
    3) Working in a laboratory where human specimens are handled.
    4) Handling wild animals or carcasses that may be infected with Ebola virus (primates, fruit bats, duikers).
    5) Contact with the semen from a man who has recovered from Ebola virus disease (for example, oral, vaginal, or anal sex).

[d] Only assign providers who have been trained in the use of appropriate Personal Protective Equipment (PPE) to the care of the patient.

Appropriate precautions and PPE for particular suspected infections include the following:

- Standard precautions:
  - All patients.
- Droplet precautions:
  - PPE consists of simple face mask. Example pathogens include pertussis, influenza, meningococcal infection, and pneumonic plague in the absence of aerosol-generating procedures.
- Airborne precautions:
  - PPE consists of fit-tested N-95 face mask or Powered Air Purifying Respirator (PAPR). Example pathogens include measles, tuberculosis, and pneumonic plague if aerosol-generating procedures are required.
- Contact precautions:
  - PPE consists of gown and gloves. Example pathogens include MRSA, *clostridium difficile*, and other multidrug resistant organisms.
- Airborne and contact precautions:
  - Example infections include chickenpox and disseminated zoster.
- Level 1 Full Barrier HCID precautions:
  - PPE for "dry" HCIDs includes fit-tested N-95 respirator or PAPR, gloves (double gloves for suspected VHF), gown (American National Standards Institute [ANSI]/ Association for the Advancement of Medical Instrumentation [AAMI] level 3), hair cover, face shield, and booties. Example pathogens include Middle East Respiratory Syndrome [MERS], Severe Acute Respiratory Syndrome (SARS), smallpox, monkeypox, and dry viral hemorrhagic fever (i.e., no vomiting, diarrhea, bleeding, or need for aerosol-generating procedures including suctioning or intubation).
- Level 2 Full Barrier HCID precautions:
  - Full barrier PPE for "wet" HCIDs requires complete coverage through use of hood that covers head, neck and face, 3 pairs of gloves, impermeable gown extending to at least mid-calf or a coverall (ANSI/AAMI level 4), high boots, PAPR (or fit-tested N95 respirator), and an apron in some circumstances. Example infections included suspected viral hemorrhagic fever in a patient with bleeding, vomiting, diarrhea, or require intubation, suctioning, or are otherwise clinically unstable.

HCID Definition

Activation of a biocontainment unit in a HCID Assessment or Treatment Center should be considered a for any **confirmed or suspected** symptomatic infection with a pathogen that meets either of the following criteria:

1. Pathogens for which all forms of medical waste (including patient excreta, secreta, blood, tissue, tissue swabs, and specimens in transport media) are classified as Category A infectious substances (UN2814) by the U.S. Department of Transportation; [a,b]
   OR
2. A pathogen with the potential to cause a high mortality rate among otherwise non-critically ill immunocompetent people for which no routine vaccine exists and has one or both of the following characteristics:
   a. At least some types of direct clinical specimens pose generalized risks to laboratory personnel
   b. Known risk of secondary airborne spread within health care settings or unknown mode of transmission

[a] Does not include pathogens for which only cultures are considered Category A Infectious Substances.

[b] For some category A pathogens that cause a wide spectrum of disease for which severe manifestations are rare and have no evidence of person-to-person transmission (e.g., Seoul virus), infection control decisions should be made on a case-by-case basis, and do not absolutely require activation of an HCID Assessment Hospital or Treatment Center.

Central Florida Disaster Medical Coalition
High Consequence Infectious Disease Donning Level 2 PPE Protocol

Level 2 PPE is donned by all persons entering the room for a patient confirmed to have a high consequence infectious disease and for a patient suspected of a high consequence infectious disease that may be unstable, bleeding, vomiting, or have diarrhea. Level 1 PPE may be donned per facility guidance for clinically stable patients suspected of high consequence infectious disease. For Level 1 donning and doffing procedures, please see CDC Level 1 protocols. See links below for Level 2 donning and doffing videos.

This *Level 2* PP protocol is for use with coverall suit that has sewn in feet and flaps starting below the knee that goes over boots to be worn exterior to the suit. (I.e. Z200). PAPR instructions are for the Sentinel XL Dover PAPR. It is recommended that 2 pairs of gloves are worn. The inner glove is a nitrile glove and the outer glove is a surgical glove. Inner glove should be a different color than the outer glove.

Always don PPE using a buddy system and reader.

1. Remove shoes, change clothes and put on provided scrubs and socks.
2. Remove all jewelry and personal items from body. Secure hair so that it will not fall in face while under PAPR hood. Contact lens wearers should consider using eyeglasses. *If wearing eyeglasses*, consider additional securement for eyeglasses to ensure they do not *slide down your face while wearing the Level 2 PPE or* fall off during the donning and doffing processes.
3. Perform hand hygiene. You may use soap and water or alcohol-based hand rub (ABHR).
4. Configure the PAPR hood as follows:
    a. Remove intake tabs from both filters.
    b. Confirm tightness of on both filters of the PAPR assembly. Hand tighten only.
    c. Turn on and off to test battery and air flow.
    d. Remove protective films (blue and clear) from the inner and outer face shield.
    e. Attach PAPR hose to hood and PAPR assembly.
5. Put on coverall suit up to waist and pull up boot flaps.
6. Using boots 1 -2 sizes larger than normal size (If needed, pull toes of the bootie on the suit forward over the top of the feet) slide feet into boots. Pull outer boot flaps down over top of boots.
7. Complete donning rest of coverall suit, without zipping up the front. Tuck the suit hood into the coverall suit. *Your buddy may need to assist with tucking in the hood.*
8. Put on inner gloves and pull suit cuffs OVER the gloves.
9. Use securement tape *such as* chem tape, duct tape, *or* Coban® to tape inner gloves to suit. Wrap the securement tape or Coban® around the wrist two times. *If using securement tape, create a buddy tab by folding the end of the tape over and sticking it to the inside of the tape wrapped around the wrist to create a tab that can later be pulled to assist with removing the tape in the doffing process.*
10. *Your buddy is to assist with putting your PAPR hood.* Put on PAPR hood as follows:
    a. Turn on the PAPR breathing device.
    b. Buddy will hold PAPR assembly and hose behind and along back while donner puts on PAPR hood and adjusts it to conform internal headband.
    c. Buddy will hand PAPR to donner to hold.
    d. Buddy will tuck INNER layer of PAPR hood into coverall suit and finish zipping up protective suit.
    e. Buddy will secure Velcro® zipper flap on front of suit.
    f. Buddy will ensure outer PAPR hood layer is OUTSIDE of the suit.
    g. Secure PAPR belt assembly around waist, adjusting for a secure fit (I.e. Ensure no excesses belt material is loose.)

11. Apply second set of gloves, one size bigger than original pair, over the first set of gloves and over the cuffs of the suit. Check for tears.
12. *If the patient has excretions of body fluids,* don apron/gown over coverall. Buddy is to secure tie under PAPR hose.
13. Buddy to write caregiver name and discipline on front and back of outer hood shroud (I.e. flap).
14. Buddy will do a walk around to double check all PPE for breaches, all surfaces are taped, no excess gathering of suit, and boot flaps are down.
15. Prior to patient contact, disinfect outer gloves with ABHR. Allow to dry before patient contact.

Level 2 Donning Video: CFDMC - Infectious Disease PPE Protocol - Donning - v1.mp4 (vimeo.com)

Level 2 Doffing Video: CFDMC - Infectious Disease PPE Protocol - Doffing - v1.mp4 (vimeo.com)

Region 5 HCID Staffing Model

Nursing staffing model is based on nurse working 8-hour shift, with no more than 4 hours in level 2 PPE. Nurses are expected to be ICU nurse.

Nurse staff model:

- Nurse A – Patient care nurse (approx. 4 hours)
- Nurse B – Anteroom partial PPE for approx. 4 hours – Nurse B goes to full PPE to serve as buddy to assist with doffing PPE of Nurse A. Nurse B then becomes Nurse A.
- New nurse coming on duty every 4 hours. Total of 7 nurses per 24 hours.
- Daily cleaning tasks will be performed by nurse. Environmental services will not perform daily cleaning of EID patient room. EVS will perform terminal cleaning of room.
- Blood draws will be performed by nurse. Phlebotomy staff will not perform blood draws in EID patient rooms.
- Hospitals need to be prepared to increase to 2 patient care nurses based on patient needs.
- Reader/observer will work 12 hour shift and must be present for staff donning and doffing of PPE. The reader/observer is not required to be a nurse. The reader must have demonstrated competency with donning and doffing PPE in a training environment. (The group decided that posters were no longer needed to support the donning and doffing process with a reader/observer.)
- 1 MD Intensivist and 1 respiratory therapist will work 12-hour shifts. During their shift they are present to provide direction on patient care and are to be prepared to don level 2 PPE if needed inside patient room.
- Hospitals need to plan to have other subject matter experts (SME) available upon activation of their incident command system for EID response and patient care. Other SMEs include: Infection Prevention, Emergency Preparedness, Life Safety, Hospital Epidemiologist, Pharmacy, Employee/Occupational Health, Engineering/Maintenance, Security, Environmental Services Management, and Waste Management.

Attachment C - Region 5 Laboratory POC Testing Procedures for an HCID

Laboratory procedures:

a. CDC recommends that Ebola testing be conducted only for persons who meet the criteria for persons under investigation (PUIs) for EVD. A PUI is a person who has both consistent signs and/or symptoms, including:
    i. Elevated body temperature or subjective fever or symptoms, including severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage, AND
    ii. An epidemiological risk factor within the 21 days preceding the onset of symptoms.
b. It is recommended that hospitals perform point of care testing when possible. The coalition purchased point of care (POC) lab testing equipment for 8 hospitals.
    i. POC instruments should be placed within an enclosure or behind a barrier such as a benchtop bio-safety cabinet (BSC), a PCR workstation (e.g., "dead air box"), or a plexiglass splash shield to contain any splashes or potential aerosols that may be generated.
    ii. If placed inside BSC, ensure that appropriate airflow is not compromised by overloading the inside of the BSC, or by blocking the front or back air intake grilles. Consideration should be given to verifying inward airflow at the front opening of the BSC while instruments are operating.
c. Specimens collected for preliminary testing should be collected wearing Level 2 (i.e. PAPR level) PPE.
    i. Staff who may draw labs are to practice using lab testing equipment while wearing the appropriate PPE as part of bi-annual drills/exercises.
d. If it is determined that testing for Ebola virus is indicated, at least 4 mL of whole blood collected in a plastic tube preserved with EDTA is the preferred sample for testing adults. For pediatric samples, a minimum of 1 mL whole blood should be collected in pediatric-sized collection tubes. Blood must be collected in plastic collection tubes.
    i. Whole blood preserved with EDTA is preferred, but whole blood preserved with sodium polyanethol sulfonate, citrate or with clot activator is also acceptable.
    ii. Do not separate and remove serum or plasma from the primary collection container.
    iii. If the PUI's symptoms have been present for <3 days, a second sample collected 72 hours after onset of symptoms is required to definitively rule out Ebola.
e. If POC testing is not available and in-house laboratory testing is required then hospital plans need to address the following.
    i. Identify equipment that can be segregated and not used for testing any other specimens until it can be terminally cleaned and disinfected with approved disinfectant.
    ii. A risk assessment has been completed and the necessary administrative and engineering controls are in place to protect healthcare workers and prevent cross-contamination.
    iii. Laboratories should consider using equipment with closed tube systems in which the specimen container (e.g., vacutainer tube) stays capped during testing.

iv. Centrifugation can pose a risk of aerosolization. If centrifugation is necessary for testing, centrifuges should have sealed buckets or sealed rotors. After centrifugation, the sealed buckets or rotors should be opened inside a biosafety cabinet.

v. Automated blood culture instruments have been used in the core lab after careful evaluation of the risk assessment, ensuring that the outside of the bottle is cleaned with a disinfectant labeled for non-enveloped viruses before putting it in the instrument, and ensuring that staff who handle the bottles are wearing gloves. Alternatively, benchtop blood culture instruments are available, or blood culture bottles may be incubated manually in separate incubators and monitored for turbidity as an indication of growth. Subculture of any positive blood culture bottles should be performed within a biosafety cabinet in a separate laboratory area segregated from the core lab, preferably by using commercially available “venting unit” devices that sheath the needle during extraction of blood from the bottle to prevent needlesticks.

vi. Automated hematology analyzers with a closed tube system have been used in the core lab after careful evaluation of the risk assessment, ensuring that the outside of the tube is cleaned with a disinfectant labeled for non-enveloped viruses before running the sample on the instrument, and ensuring that staff who handle the specimens are wearing risk assessment-defined PPE.

f. For specimen transport within the facility:

i. Before removing patient specimens from the site of care, the outside of the specimen containers should be decontaminated with an approved disinfectant wipe.

ii. Place specimen in clean biohazard bag. Wipe exterior of bag with approved disinfectant wipe. Place biohazard bag with specimen in a secondary, durable leak proof container.

iii. Use 2 person team to prepare specimen for transport.

iv. Person drawing blood is to wipe exterior of container with disinfectant wipe.

v. Wearing clean exterior gloves, the second person is to open the biohazard bag. The person with the specimen is to drop it into the bag being careful to not touch the exterior of the bag.

vi. Close the biohazard bag. Use approved disinfectant wipe and wipe outside of biohazard bag.

vii. Take bag to door and notify anteroom staff to bring durable, leak-proof container to the doorway. Open door and carefully place biohazard bag into container.

viii. Anteroom staff is to wipe down exterior of container and place on clean barrier (i.e. chucks)

ix. 2-person transport team will take specimen container to the lab, per pre-designated route per facility specific protocol. One person will don clean gloves to carry the specimen. The second person will assist with opening doors, pushing elevator buttons, etc. to ensure the person carrying the specimen container does not touch anything during transport.

x. Specimens must be hand carried to the lab. Use of pneumatic tube system is not permitted.

g. For specimen transport to a public health LRN, hospital staff is to follow the Florida Department of Health procedures.

2.4.6.2 Waste Management, Decontamination

Waste management

a. All waste will be put in barrels for off-site transport and disposal.

2.4.7 Patient Care/ Management

Staffing plan

a. Nursing staffing model is based on nurse working 8-hour shift, with no more than 4 hours in level 2 PPE. Nurses are expected to be ICU nurse.
b. Nurse staff model:
c. Nurse A – Patient care nurse (approx. 4 hours)
d. Nurse B – Anteroom partial PPE for approx. 4 hours – Nurse B goes to full PPE to serve as buddy to assist with doffing PPE of Nurse A. Nurse B then becomes Nurse A.
e. New nurse coming on duty every 4 hours. Total of 7 nurses per 24 hours.
f. Daily cleaning tasks will be performed by nurse. Environmental services will not perform daily cleaning of EID patient room. EVS will perform terminal cleaning of room.
g. Blood draws will be performed by nurse. Phlebotomy staff will not perform blood draws in EID patient rooms.
h. Hospitals need to be prepared to increase to 2 patient care nurses based on patient needs.
i. Reader/observer will work 12 hour shift and must be present for staff donning and doffing of PPE. The reader/observer is not required to be a nurse. The reader must have demonstrated competency with donning and doffing PPE in a training environment. (The group decided that posters were no longer needed to support the donning and doffing process with a reader/observer.)
j. 1 MD Intensivist and 1 respiratory therapist will work 12-hour shifts. During their shift they are present to provide direction on patient care and are to be prepared to don level 2 PPE if needed inside patient room.
k. Hospitals need to plan to have other subject matter experts (SME) available upon activation of their incident command system for EID response and patient care. Other SMEs include: Infection Prevention, Emergency Preparedness, Life Safety, Hospital Epidemiologist, Pharmacy, Employee/Occupational Health, Engineering/Maintenance, Security, Environmental Services Management, and Waste Management.

CFDMC Disease Isolation Guide

The following guidance is intended for frontline hospitals, emergency departments, and outpatient clinics.

	Standard Precautions (used with all categories)	Droplet Precautions	Contact Precautions	Airborne Precautions	Airborne & Contact Precautions	HCID Level 1 Full Barrier PPE	HCID Level 2 Full Barrier PPE
Condition/ Suspected Infection(s)	For all patients	e.g., influenza, pertussis, meningococcal meningitis	e.g., MRSA, CDI, MDRO, lice, scabies	e.g., measles, tuberculosis	e.g., chickenpox, disseminated zoster	▪ e.g., monkeypox, smallpox, respiratory diseases (MERS, 2019-nCoV, pandemic ▪ influenza) PUI for VHF who is clinically stable and does not have vomiting, diarrhea, or bleeding	▪ e.g., confirmed VHF ▪ PUI for VHF who is clinically unstable or has vomiting, diarrhea, or bleeding, or requires intubation or other aerosol-generating procedures
Personal Protective Equipment (PPE)	Standard Precautions: All blood & body fluids potentially infectious. Wear PPE according to potential exposure.	Simple face mask	Gown and gloves	Respirator (fit-tested N95 or PAPR)	Gown, gloves, respirator (fit-tested N95 or PAPR)	▪ Fluid-resistant gown or coverall (ANSI/AAMI level 3) ▪ Gloves that extend past gown cuff (2 pairs for suspected VHF; 1 pair for viral respiratory pathogens) ▪ Fit-tested N95 respirator ▪ Full face shield	▪ Coverall ▪ 2 pairs of gloves that extend past gown cuff and secured with tape or Coban ▪ PAPR and hood that extends to ▪ shoulders and covers neck ▪ Impervious boots extending to mid-calf ▪ Use apron if patient is vomiting or has diarrhea
Isolation Room Type	Regular room No special ventilation needed	Regular room No special ventilation needed	Regular room No special ventilation needed	AIIR	AIIR	AIIR	AIIR

AAMI – Association for the Advancement of Medical Instrumentation; AIIR – airborne infection isolation room; ANSI – American National Standards Institute; CDI – *Clostridioides difficile* infection; MDRO – multidrug-resistant organism; MERS – Middle East Respiratory Syndrome; MRSA – methicillin-resistant *Staphylococcus aureus*; PAPR – powered air purifying respirator; PUI – person under investigation; SARS – Severe acute respiratory syndrome; VHF – viral hemorrhagic fever

Adapted from Minnesota Department of Health

HCID PUI & Positive Cases in Central Florida

Notification Process & Templates

Process:

- **Hospitals will identify key individuals (1-2) responsible for quickly and discretely communicating with the Coalition on persons under investigation or positive cases of high consequence infection diseases that emerge in Central Florida. These individuals could include e.g., hospital epidemiologists, infection preventionists, emergency managers, etc and they would:**
  - **Notify the Coalition within 24 hours of receipt of a PUI or confirmation of a positive case, using the template below**
  - **Receive notice from the Coalition of positive cases**
- **The Coalition will notify the designated hospital contacts above as well as Region 5 emergency managers, and county health departments immediately upon receipt of notification of a positive case by a hospital, using the script below.**

HCID PUI/Positive Case in Central Florida - Notification Key Points

Hospital _____ has identified _(number)__ patient(s) to be patients under investigation (PUI) or positive for a high consequence infectious disease. The following should be described for EACH patient who is confirmed.

- Patient risk factors include:
  - Travel from _____
  - Close contact with person who has tested positive _____
  - Other _____
- Dates of travel:
- Dates of "likely" exposure(s) period:
- Symptom onset:
- Severity of illness (as per initial setting):
  - Ambulatory – (ED → discharged)
  - Inpatient – (ED → hospitalization)
  - Inpatient – ICU/monitored bed – (if known)
- Number of close contacts to patient (I.e. family members living in same household) that are now PUI _____

Please provide information to Lynne Drawdy, Executive Director of Central Florida Disaster Medical Coalition at info@centralfladisaster.org

Coalition Notification Script:

On XX/XX/XX, the Central Florida Disaster Medical Coalition received notification of a PUI or confirmed case of a high consequence infectious disease in Central Florida. Patient risk factor is (travel, close contact with person who tested positive, other). The dates of travel or exposure was X. Symptom onset was X. Severity of illness is X. Number of close contacts who are now PUIs are X.

Region 5 Ebola Cache

As part of the region's strategy to effectively respond to an HCID (high consequence infectious disease), the Coalition worked with the region's hospitals to standardize PPE for Ebola Virus Disease, including purchasing equipment and establishing donning/doffing protocols.

In FY 2019-2020, the Coalition purchased and distributed to hospitals sufficient coveralls/suits to cover a three person team, for four hours shifts, for up to five days). Each hospital also received three (3) Sentinel XL HP Bioshield Full Hood System in Duffle (to cover a three person team for one four hour shift). Due to the cost of these hoods, the Coalition created a cache with 72 hoods on a trailer (to cover a three person team, for four hours shifts, for up to five days, deployable to any hospital within the region within four hours. The regional cache is currently housed at the Orlando Health warehouse.

Upon presentation of a PUI, a hospital within the region may request the regional hood cache from the Coalition. The initial request may be by phone call to 407/928-1288 or 407/908-0142 or email at info@centralfladisaster.org, but must also coincide with a submission of a mission request through the local ESF8.

Upon receipt of the request, the Coalition will work with the requesting hospital to deploy the regional cache, as follows:

1. The Coalition will notify the regional cache custodian (Orlando Health) and the Regional Medical Assistance Team (RMAT) command of the request.
2. The Coalition (either the projects manager or an RMAT member) will pick up the Ford 350 truck from the Orange County warehouse at 650 North Pine Hills Road, Orlando, FL 32808; pick up the Ebola cache trailer from the Orlando Health warehouse at 1420 Sligh Avenue, Orlando, FL 32806; and deliver the trailer to the requesting hospital.
3. If the Coalition is unable to pick up and deliver the trailer, Orlando Health will be asked if they can deliver the trailer to the requesting hospital.
4. If Orlando Health is unable to deliver the trailer, the requesting hospital will be asked to pick up the trailer from the warehouse for transport to the requesting hospital.
5. If there are PUIs at more than one hospital, the Coalition will distribute equipment to meet immediate needs (e.g., deploy hoods to each requesting hospital to cover the initial 24 hour period), and work with local vendors and the state to secure additional resources.
6. Upon transport of the PUI to an assessment facility, the requesting hospital will work with the Coalition to return the trailer to the warehouse.
7. The requesting hospital will replace any used hoods to ensure that the cache is ready for future deployments.