U.S. CENTRAL COMMAND
COVID-19 PANDEMIC PLAYBOOK
FOR OPERATIONAL ENVIRONMENTS

This playbook contains guidance and references generally available as of the issuance date and is meant to be a reference for pandemic response based upon the best information available at the time of publication. It does not supersede the Department of Defense Policy, or existing U.S. Central Command (CENTCOM) operational orders and guidance, instead it is a complimentary supplement to them.

This document is based upon the best information available at the time of publication. It is not intended to define a standard of care and should not be construed as one. Neither should it be interpreted as prescribing an exclusive course of management. Variations in practice are inevitable and appropriately occur when clinicians take into account the needs of individual patients, available resources and limitations unique to an institution or type of practice.

VERSION 2.0, 10 JUNE 2020

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EXECUTIVE SUMMARY

This playbook is aimed at healthcare and public health providers and staff in the United States Central Command (USCENTCOM) Area of Responsibility (AOR). The USCENTCOM AOR is a medically austere operational environment where Role 3 (R3) is the highest level of medical capability. All planning assumptions proceed from there. This playbook is a concise source of key information, references, and materials for providers and healthcare leaders to easily review. The playbook is comprehensive but ***not all inclusive*** and does not negate the need for communication and information sharing with local, Joint Task Force (JTF), Service Component and USCENTCOM Headquarters (HQ) Command and Surgeon Cells.

ADDITIONS & REVISIONS

Revisions and updates were completed throughout this document to be current as of 27 May 2020. Major additions and revisions include:

- Updated guidance for patient movement
- Added recommendations for discharge from isolation
- Added Force Health Protection (including Field Sanitation, Food Safety & Food Service, Zoonotic Disease Potential, and Considerations for Animal Care Personnel)
- All other revisions involve addition of resource links throughout and minor refinement of language for clarity and grammar.

RESOURCE:

Key Assumptions, Management of COVID-19 in Austere Operational Environments, Joint Trauma System (JTS) Clinical Practice Guideline (CPG), Special Edition V2.0, 28 May 2020, p5.

HOW TO USE

This document provides key information in text and graphic images for rapid review. The Table of Contents will link users to the topic they want to review, which will contain key facts and figures, as well as also linking users to external resources that can provide greater detail. Users are encouraged to use this playbook as a tool to connect to best practice resources that will augment existing clinical and military expertise and local, JTF, Service Component, and USCENTCOM guidance.

KEY DEFINITIONS

1. **AE Patient Classification**: A basic metric to convey patient acuity and level of infectivity to others. Patient classification will be performed in accordance with Air Force Instruction 48-307, En Route Care and Aeromedical Evacuation Medical Operations, 09 Jan 2017.
2. **Airborne Spread**: Spread of disease via small liquid particles (aerosols) that remain aloft for prolonged periods of time and may travel longer distances. Airborne precautions aim to mitigate this method of transmission.
3. **Antibody**: Proteins produced by infected individual as part of their immune response to infection by the pathogen

4. **Antigen**: Proteins or other cellular or chemical features associated with the pathogen (e.g., viral DNA, surface proteins, etc.)
5. **Contact Spread**: Spread of disease via direct contact with an infected patient or contaminated surface. Contact Precautions aim to mitigate this method of transmission.
6. **Droplet Spread**: Spread of disease via relatively large liquid particles that settle from the air quickly (within a few feet). Droplet Precautions aim to mitigate this method of transmission.
7. **Intermediate Care Ward (ICW)**: An inpatient nursing unit that typically accommodates patients requiring med surgical to progressive (step-down) – level care. In pandemic conditions, this definition may broaden to incorporate levels of care similar to mass casualty. Staffing considerations and KSAs will be commensurate with the roles required. The mission may require staff to increase their KSAs. Additional considerations may be needed for patients requiring isolation. In a crisis environment, all staff are asked to work at the top of their license.
8. **Isolation**: The separation of an individual or group infected or reasonably believed to be infected with a communicable disease from those who are healthy in such a place and manner to prevent the spread of the communicable disease. Isolation is a medical term and ordered by a medical provider, but requires command support for successful execution.
9. **Pathogen**: an organism that causes disease (e.g. virus, bacteria, fungus, or parasite). The term is also used to describe prions – non-living protein particles that display infectious behavior.
10. **Patient Under Investigation (PUI)**: A patient with signs and symptoms consistent with known possible presentations of COVID-19 with potential exposure to the virus. Potential exposure to the virus is defined as close contact with known or other suspected cases and/or travel through regions with widespread sustained transmission of COVID-19. In areas where COVID-19 is already widespread, symptoms alone may make the diagnosis of "PUI." Confirmatory testing has not yet been performed or was initially negative but with continued high index of suspicion for COVID-19. All PUIs must be isolated.
11. **Quarantine**: The separation of an individual or group that has been potentially exposed to a communicable disease, but is not yet ill, from others who have not been so exposed, in such a manner and place to prevent the possible spread of the communicable disease. This is a form of Restriction of Movement (ROM) and is a command function that is medically supported. Quarantine is a commander's responsibility.
12. **Social Distancing**: The practice of reducing close contact between people to slow the spread of disease. It includes limiting large group gatherings (no more than 10 persons, closed buildings and gathering spaces, cancelling events, and advising people to stay six feet apart as much as possible). Preparation of isolation berthing, including activities of daily living (e.g., hydration, food, hygiene, trash disposal) is addressed on pages 10-11 of the COVID-19 CPG for Austere Operational Environments.

ACRONYMS AND ABBREVIATIONS

AE - Aeromedical Evacuation
AFMES - Air Force Medical Examiner System
AOR - Area of responsibility
C2 - Command and Control
CJTF - Combined Joint Task Force
CCIR - Commander's Critical Information Reporting
CCOP - Central Command Operating Procedures
CCSG - Command Surgeon
CONOPS - Concept of Operations
CONPLAN - Concept of Operations Pan
CSOC - Crisis Standards of Care
DHA - Defense Health Agency
EXORD - Executive Order
FFR - Filtering Facepiece Respirators
HIPAA - Health Insurance Portability and Accountability Act
HPCON - Health Protection Conditions
ICW - Intermediate Care Ward
KSA - Knowledge, Skills and Abilities
MS - Medication Safety
MSAT - Medical Situational Awareness in the Theater
MWR - Morale Welfare and Recreation
PHEO - Public Health Emergency Officer
PHEM - Public Health Emergency Management
PFA - Psychological First Aid
PMG - Patient Management Guide
PPE - Personal Protective Equipment
PS - Patient Safety
PUI - Person Under Investigation
QS - Quality and Safety
SIPRNet - Secret Internet Protocol Router Network
SME - Subject matter expert
TPMRC-E - Theater Patient Movement Requirements Center East
USCENTCOM – United States Central Command
USTRANSCOM - U.S. Transportation Command
VITAL-T - Virtual Inspection and LINKUP in Theater
VH - Virtual Health

OPERATIONAL PLANNING

The attached USCENTCOM CONPLAN 1251-15, Regional Concept Plan for Preparation and Response for Pandemic Influenza and Infectious Disease (PI&ID), delineates the policies, actions and requirements for the employment of military resources within the USCENTCOM AOR for PI&ID preparation and response. This plan, along with other plans, are available for download on the USCENTCOM SIPRnet website. You can also reach the SIPRnet through https://ccsg.nonrel.centcom.smil.mil/Private/SitePages/Home.aspx and click on the COVID-19 link. There will be links to EXORDS and instructions. Refer to G3 for assistance if copies of instructions are needed.

Specific Health Service Guidance is delineated in the Annex Q to the *USCENTCOM EXORD Novel Coronavirus Outbreak Response Operations* in the above SIPRnet.

An excellent summary of medical operational experiences was authored by Task Force Medical 14. The *Task Force Medical 14 COVID Nursing Guide, 29 May 2020*, which contains photographs and detailed descriptions, can assist in preparation and planning. The guide is included as an attachment.

COMMAND AND CONTROL

Coordination is essential between Command Staff, medical teams, and public health/preventive medicine assets. Given the highly complex nature of the COVID-19 disease and need for subject matter expertise (SME), Commanders are encouraged to designate a COVID-19 response and planning team consisting of medical and public health/preventive medicine SMEs along with operational planners. Task Force Med Leaders are encouraged to coordinate with respective Surgeon teams and Force Health Protection assets to translate and communicate all guidance and policy down to the most forward units with attention to operational security and patient privacy laws. In order to facilitate a coherent Joint effort, the response should follow established DoD procedures as outlined in DODI 6200.03 Public Health Emergency Management (PHEM) Within the DoD, 28 Mar 2019 and DODI 6055.17 DoD Emergency Management (EM) Program, Change 3 effective 12 Jun 2019.

All leaders should operate under a number of considerations/assumptions including (but not limited to):

1. Command and Control (C2) authorities will remain unchanged unless otherwise directed. Combined Joint Task Force Surgeon (CJTF) and Component Surgeon cells should continue to collaborate and communicate closely with higher headquarter authority and disseminate information to the most forward units.
2. Current USCENTCOM missions will continue, unless otherwise directed, throughout the COVID-19 pandemic, daily tasks may need to be reprioritized as required by a pandemic response to maintain surgical and critical care capabilities while minimizing spread of infectious disease in theater.
3. Leaders are encouraged to collaborate and delegate authority to improve comprehensiveness planning and operation activities. Subordinate leaders should be empowered to utilize their expertise and innovation within the boundaries set-forth by pre-established policy and guidance. The USCENTCOM Health Protection Condition (HPCON) Checklist, Joint Force Health Protection Team, COVID-19 Crisis Action Team will assist appropriate actions and is located at Appendix A.

4. Communication is key for interdisciplinary COVID-19 planning and response. Limit jargon, clearly define all acronyms and unfamiliar terms, for example. Commanders should communicate key information to subordinate units.

5. Logistical and patient movement channels are likely to be altered by the pandemic both in theater and at receiving Role 4 CONUS and OCONUS facilities. These challenges must be overcome by clear communication and adaptive planning strategies.

RESOURCES

Refer to Headquarters, CJTF, and Component guidance for specific information and requirements with regards to operational planning guidance.

The U.S. Department of Health and Human Services provides Critical Care Planning-COVID-19 Quick Notes a two-page document which describes operationalization of the concept in three major categories: space, staff, supplies, and provision of critical care.

Planning and Preparation, DoD COVID-19 PMG v3.0, 14 May 2020, v3.0, p6 and Implications of COVID-19 on Surgical Care p50, DOD COVID-19 PMG v3.0, p50.

COVID-19 Response and Prevention Planning-Knovel (Elsevier)

DODI 6200.03 Public Health Emergency Management (PHEM) Within the DoD, 28 Mar 2019

DODI 6055.17 DoD Emergency Management (EM) Program, Change 3 effective 12 Jun 2019.

COMMUNICATIONS

All USCENTCOM bases and facilities should establish a local and regional PACE (Primary-Alternate-Contingency- Emergency) plan for both operational and clinical communication incorporating social distancing and division of labor during the pandemic response period.

The USCENTCOM Component and CJTF teams may have prospectively published local and regional PACE plans for both operational and clinical consultation and communication. Forward-stationed medical teams/medics should identify and test these options PRIOR to needing urgent consultation.

Division of labor and social distancing could strain all routine secure and unsecure DoD communication and collaboration platforms (i.e. teleconferencing video conferencing networks, remote access email), resulting in the incorporation of non-DoD unsecure platforms (e.g., Zoom, Skype, WhatsApp). Operational security and patient privacy must be a primary consideration when selecting communication platforms, especially when using non-DoD platforms.

***UPDATE 2.0**: In answer to social distancing challenge in the work place, the DoD has established the Commercial Virtual Remote (CVR) environment that utilizes the approved Microsoft Teams platform to improve personnel connection and information sharing. This platform is approved for controlled unclassified information sharing and is noted HIPAA compliant. It connects with individuals' regular NIPR email accounts for ease of communications and scheduling. For more information on how to get connected visit https://www.cloud.mil/CVR/.*

RESOURCE

Refer to the Planning and Preparation, DoD COVID-19 PMG v3.0, 14 May 2020, v3.0, p6

DOCUMENTATION

Documentation of patient care and movement should continue via the usual platforms (i.e. paper or electronic charts) as previously established at the local treatment facility. The appropriate ICD-10 codes, and symptoms (e.g. fever, cough and shortness of breath), should be entered as detailed as possible in order to capture these patients in Theater Medical Data Store (TMDS) and Medical Situational Awareness in the Theater (MSAT) and future databases and overall future performance improvement opportunities.

JTS has published the ICD-9 and ICD-10 Codes to accompany the new COVID-19 registry under development. The codes can be found on the JTS website.
https://jts.amedd.army.mil/assets/docs/education/COVID-19_ICD-9_ICD-10_Codes.pdf

Please ensure that outpatient encounters are closed at the end of the patient encounter (i.e. when the patient departs medical facility).

SUSPECTED, CONFIRMED CASES

All patients, staff, and support personnel with symptoms (fever, cough, shortness of breath) should be tested for COVID-19 using the available confirmatory diagnostic test.

All persons who test positive need to be moved into isolation and prepared for evacuation to OCONUS or CONUS locations as designated for the evacuation plan per that region.

Command and medical teams are responsible for establishing a plan for patient tracking and re-unification (for family notification of patient status) locally. In accordance with USCENTCOM regulations, local Commanders will include COVID-19 patient tracking as part of their Commander's Critical Information Reporting (CCIR). Patient tracking for the USCENTCOM AOR will be accomplished using MSAT.

PERFORMANCE IMPROVEMENT (PI)

The JTS has partnered with the Uniformed Services University of Health Sciences (USU) to develop a registry for COVID-19 patient data acquisition. Detailed documentation is essential to assist key term triggers for audits. If using hard copy/paper charting, all documentation should be uploaded as soon as possible.

The registry will ease tracking and monitoring the progress of this disease process, while evaluating the quality and possibility for improvement of delivery of care. In the meantime, units should designate a person responsible for tracking and monitoring the COVID-19 patient care and patient movement.

JTS and USU host biweekly e-conferences focused on COVID-19 PI. These conferences are a forum to discuss issues affecting care of these patients.

For information email: DHA.JBSA.j-3.List.JTS-PIP@mail.mil (JTS PI team).

Intermediate and after action reviews for provide an important source for sharing best practices and innovative ideas to enhance performance improvement:

1. TF MED 14 COVID-19 Nursing Document. See the attachment.
2. COVID-19 Monitoring and Response Among U.S. Air Force Basic Military Trainees — Texas, March–April 2020, MMWR, 05 June 2020

TRANSPORT

Transport guidance has changed frequently and is ever changing with the current environment. Check with local G3 to ensure most current guidance is followed. As of the date of this publication:

- All symptomatic patients, inpatient or outpatient, on a base should be prepped for evacuation. Commander may grant an exception to stay in AOR on a case by case basis.
- Host Nation admitted patients may remain in hospital at commander's discretion.
- Navy Afloat remains on ship unless ship's capability is in danger of being exceeded (either by volume or the severity of the patient.)
- Asymptomatic COVID+ should stay but a commander may decide to evacuate.

The attached U.S. Transportation Command (USTRANSCOM) Instruction 41-02, 11 July 2019 outlines Patient Movement of Contagious and potentially exposed casualties. This playbook is a summary that pertains specifically to COVID-19. ***The guidance for movement and evacuation of COVID-19 positive patients is rapidly evolving. Early and close coordination of these movement requests with Theater Patient Movement Requirements Center East (TPMRC-E) and next higher headquarters is crucial.***

To ensure correct resource allocation and transport prioritization, units should refrain from using locally derived patient categorization. Patient classification should remain IAQ AFI 48-307, En Route Care and Aeromedical Evacuation Medical Procedures, 9 January 2017.

There is a need for a standardization of language for documenting and communicating patient condition. The table below presents the best recommendation for that standard language to ensure correct considerations for patient safety in movement.

Table 1. Categorization Tool for Patient Assessment Documentation

Category	Physical Findings	Objective Criteria
Severe (ICU)	Increased work of breathing	-Intubated -NEWS score >7 -SpO2 <85% on RA or <92% on 5L NC
Moderate (ICW/ICU)	Cough & dyspnea	-SpO2 <90% on RA & >92% on ≤4L NC -NEWS score 5-6
Minimal	Cough & mild SOB	-SpO2 ≥92% on RA -NEWS score ≤4

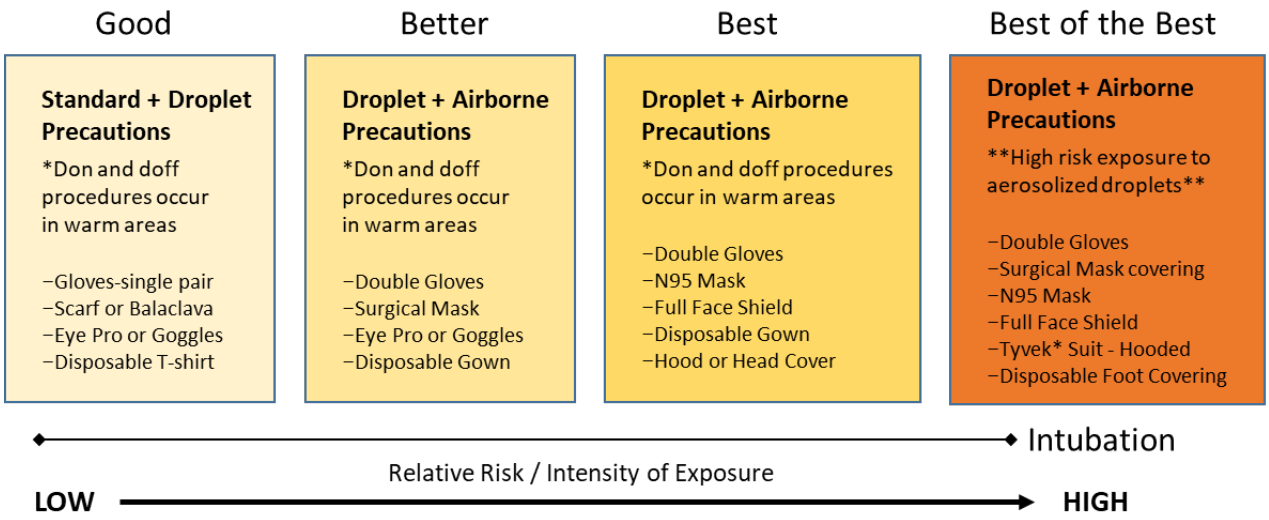
Movement of multiple COVID-19 patients will be performed using a DoD certified and approved contagious patient movement system. Planning considerations must take into account downtime for decontamination of aircraft following COVID-19 patient evacuation. Upon consultation and appropriate approvals, capabilities developed outside of the DoD for moving patients exposed to or infected with COVID-19 may be used for approved missions via commercial aircraft. The sending MTF must coordinate movement with TPMRC-E for both intra and inter-theater PM.

Refer to local, CJTF, Component, and USCENTCOM guidance for specific knowledge on Operational Planning assumptions, considerations and guidance located on the USCENTCOM Surgeon (CCSG) SharePoint.

PERSONAL PROTECTIVE EQUIPMENT (PPE) CONSIDERATIONS

COVID-19 is a respiratory virus that requires up to advanced droplet (droplet/airborne) precautions depending on the risk of activity (below). All re-use and extension of PPE MUST be done in accordance with CDC, JTS, and USCENTCOM best practices and guidance.

Figure 1. Good, Better, Best Characteristics of PPE



**Isolation areas can be similar to preparing for "hot zone" management. Don and doff procedures occur in "warm areas" in the "hot zone" management.

RESOURCES:

National Ebola Training and Education Center (NETEC) Personal Protective Equipment (PPE) for COVID-19 video (17:50)

USCENTCOM Infection Prevention and Control Policy in a Deployed Setting or service component site such https://portal.arcent.swa.army.mil/covid19opt/SitePages/Home.aspx

USCENTCOM Policy for the Decontamination and Reuse of Filtering Face piece Respirators (FFR)
Example: N95

USCENTCOM policies align with CDC guidance. Capabilities are limited in the AOR by the types of equipment available. Follow CDC link for updated guidance:

- CDC Decontamination and Reuse of Filtering Facepiece Respirators
- CDC Strategies to Optimize the Supply of PPE and Equipment

FACILITIES MANAGEMENT

Employed cleaning protocols should ensure adequate sanitization in all environments, including quarantine/isolation/patient care areas, as well as all workspaces and quarters. All non-dedicated, non-disposable patient care medical equipment should be cleaned and disinfected according to manufacturer's instructions and facility policies. The U.S. Environmental Protection Agency (EPA) has compiled a list of Disinfectants for Use Against SARS-CoV-2 (COVID-19).

Doorway Management: Strategic opening and closing of doorways can prevent viral transmission. Opening high-flow doorways in hallways can reduce the number of high-touch surfaces in a facility, while closing the doors of individual office spaces can reduce cross-contamination of virus across office spaces. Doorway management approaches MUST consider operational security, facility security, safety, and privacy guidelines.

- *Entrances/Exits:* Hand sanitizer dispensers should be placed near entryways.
- *Bathroom Entrances/Exits:* Hand washing signs should be clearly posted. When possible, position trash cans inside bathrooms near the door to allow paper towel use and disposal for no-touch exit.

Separate ventilation is important. Below is an example of how one MTF set up special ventilation in the isolation rooms. Photos follow the example. (*Source: COVID-19 16 Apr 2020 Conference Q&A)*

Per CDR Miguel Gutierrez:

The most critical part of moving forward is having discussions with your facility engineer to look at duct air flows to see what options you may have for the rooms within your ED.

Once all negative pressure rooms were used, we placed portable HEPA filters in single rooms. When those ran out, we placed the pumps/meds outside the doors of those rooms.

At Naval Hospital Camp Pendleton facility engineers were able to isolate five rooms linked by the same air duct system which fed into our decontamination room. They were able to engineer plastic/cardboard material to enclose rooms which traditionally had only curtains (pictures included). They installed individual HEPA filters in each room which feed into the ducts. We also installed VTCs which feed to a central area in our ED to minimize unnecessary traffic into the room while allowing consultants local and distant (telemedicine) to evaluate/assist as needed.

Per CDR Travis Deaton:

Our facilities team was able to take four of our individual closed rooms and use ducting, fans and pressure monitors to convert these to negative pressure isolation rooms with an antechamber. When we outgrew this space, we walled off a section of our ED and did the same thing for another 14 beds (cohorted, not individually isolated). We also placed a few large tents in the parking lot with power, HVAC, lights, computers and bathrooms. This provided three separate clinical spaces to treat low, medium and high risk ILI patients. It allowed us to downgrade some PPE posture in the low risk areas and avoid full gown, gloves, shoe and hair covers.

RESOURCES:

USCENTCOM Infection Prevention and Control Policy in a Deployed Setting (CCOP-02)

CDC Cleaning and Disinfecting your Facility

CDC Cleaning and Disinfection for Households

ISOLATION AREAS

Isolation areas will need to be established in accordance with best practice and other applicable guidance. Because known sick and infected patients will be localized in this location, placement and establishment of these areas MUST take into consideration the following issues:

- The protection of both medical facilities (non-COVID infected patients) and general population areas.
- Ensuring that patients and designated COVID-19 care providers can transition to and from: medical facilities, medical evacuation platforms, and sleeping/hygiene areas without endangering the general population.
- Safety guidelines (e.g., PPE-required areas) that are clearly marked and well-understood by all (consider language, education, and literacy barriers).

RESOURCE:

DoD COVID-19 PMG v3.0, 14 May 2020, pp11, 48

DoD Management of COVID-19 in Austere Operational Environments, 28 May 2020 v2.0, pp.10-12

SURGE CAPABILITIES

Units will investigate and proactively plan inpatient and outpatient surge capabilities within their existing resources. Special consideration should be given to preventing cross-infection of the patient population. A sample checklist to assist with surge capability planning at the role 1, 2, 3 level is at Appendix A.

CRISIS STANDARDS OF CARE (CSOC)

CSOC are guidelines that are applied when a pervasive or catastrophic disaster makes it impossible to achieve the usual standards of care.

The National Academies Press released an article from the National Academies of Sciences, Engineering and Medicine entitled, *Rapid Expert Consultation on Crisis Standards of Care for the COVID-19 Pandemic*. This expert guide assists the provider in establishing a rationale for the implementation of crisis standards of care.

Additional assistance in developing and implementing this crisis standards of care can be accessed in the milBook under: https://www.milsuite.mil/book/groups/covid-19-clinical-operations-group

CRITICAL RESOURCE CONSERVATION

There are limited resources for both the treatment and the diagnosis of COVID-19. Within the framework of responding to a global crisis, there must be evaluation and conservation of critical resources in terms of personnel, supplies and equipment. This section offers the resources for establishing a protocol for resource management with the focus on conservation. This is a broad approach and should be tailored to the resources of the facility for which the provider is managing.

RESOURCES:

USCENTCOM Policy for the Decontamination and Reuse of Filtering Facepiece Respirators (FFR) Such as the N95, (CAC required)

CDC Decontamination and Reuse of Filtering Facepiece Respirators

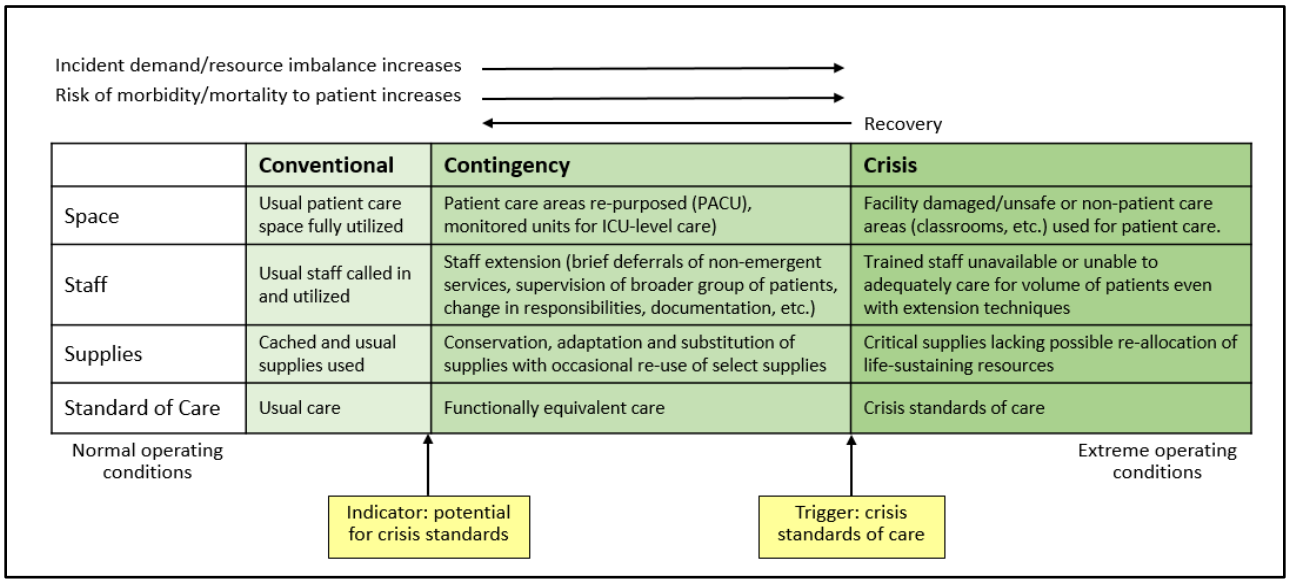
CDC Strategies to Optimize the Supply of PPE and Equipment

The below table published by *New England Journal of Medicine* is a community standard consensus opinion of values.

Table 2. Ethical values to guide rationing of absolutely scarce healthcare resources in a COVID-19 pandemic

Ethical values & guiding principles	Application to COVID-19 pandemic
Maximize benefits	
• Save the most lives • Save the most life-years – maximize prognosis	• Receives the highest priority • Receives the highest priority
Treat people equally	
• First come, first serve • Random selection	• Should not be used • Used for selecting among patients with similar prognosis
Promote and reward instrumental value (benefit to others)	
• Retrospective – priority to those who have made relevant contributions • Prospective – priority to those who are likely to make relevant contributions	• Gives priority to research participants and healthcare workers when other factors such as maximizing benefits are equal • Gives priority to healthcare workers
Give priority to the worst off	
• Sickest first • Youngest first	• Used when it aligns with maximizing benefits • Used when it aligns with maximizing benefits such as preventing spread of the virus.

Table 3. Paradigms for Changing Standards of Care (NAM 2009)



a. *Unless temporary, requires state empowerment, clinical guidance, and protection for triage decisions and authorization for alternate care sites/techniques. Once situational awareness achieved, triage decisions should be as systematic and integrated into institutional process, review, and documentation as possible.*

b. *Institutions consider impact on the community of resource use (consider "greatest good" versus individual patient needs—e.g., conserve resources when possible), but patient-centered decision-making is still the focus.*

c. *Institutions (and providers) must make triage decisions—balancing the availability of resources to others and the individual patient's needs—shift to community-centered decision-making*

ETHICAL CONSIDERATIONS

During a local, regional, national and global crisis, many decisions may require ethical considerations. These decisions are best managed in a multidisciplinary/multi-level command structure setting employing a good, better, best approach. Additional resources are listed below.

RESOURCES:

DoD COVID-19 PMG v3.0, 14 May 2020:

- Ethics of Clinical Research during a Pandemic, p73
- Palliative Medicine during the COVID-19 Pandemic, pp47-50
- Adjunctive Therapies: Treatment Protocols p32 (ethics discussed)

Scarce Resource Management and Crisis Standards of Care. Overview and Materials

Crisis Standards of Care: A Toolkit for indicators and Triggers; Board on Health Sciences Policy; Institute of Medicine

INFECTION PREVENTION AND CONTROL

TRIAGE/SECURITY

Medical triage is a familiar concept for all military medical personnel. The primary goal of saving as many lives as possible remains the same for pandemic disease triage. However, the operational concepts shift to two main ideas:

1. Identifying and cohorting infectious or potentially infectious persons as soon as possible.
2. Identifying infected individuals who are most likely to rapidly deteriorate/require prolonged advanced medical care to prioritize medical evacuation.

RESOURCES:

DoD COVID-19 PMG, v3.0, 14 May 2020

- Screening and Triage: Early Recognition of Patients with COVID-19, p11
- Appendix B: Example Triage Protocols during COVID-19 Pandemic, p96

Management of COVID-19 in Austere Operational Environments CPG v2.0, 28 May 2020

- Actions on Identification of a COVID-19 PUI, p5
- Providing Medical Care to a COVID-19, p13

CDC Information on Contact Tracing and Epidemiologic Interviewing

Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers

Complete DD Form 3112, Personnel Accountability and Assessment Notification for Coronavirus Disease 2019 (COVID-19) Exposure, April 2020. Turn in DD Form 3112 to Public Health. See attachment.

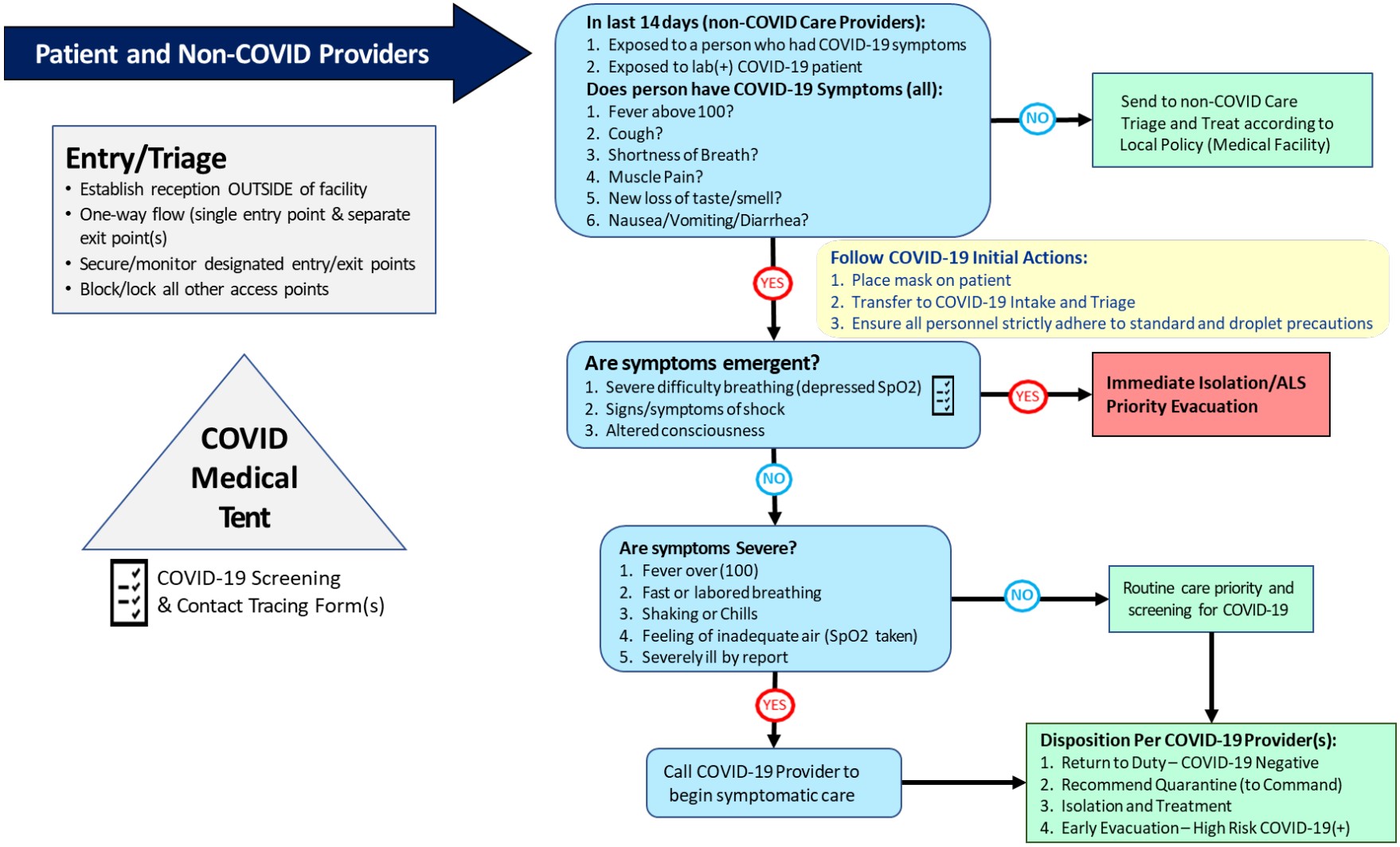
TRIAGE PROTOCOL AND EXAMPLE

Example: Patient intake and triage approach used by Task Force Medical 14

- The trauma and COVID-19 screening and treatment locations were separated to minimize exposure.
- A speaker phone was placed outside the hospital entrance for direct access to the Patient Administration Department (PAD) line.
- Patients answered a series of questions to dictate their course.
- If COVID-19 was suspected and the patient was stable, they would wait to be assessed in the COVID-19 screening trailer located 50 meters from the hospital entrance.
- For patients deemed unstable, the evaluation would be conducted within the COVID-19 ICU.
- Pending the results of the provider's assessment, the patient would either go into quarantine in the respective base location or get admitted to the COVID-19 portion of the medical footprint.
- Those that were able to be quarantined were evaluated at various intervals and provided meals by the hospital staff until release criteria was met.

Refer to the figure below for more details about triage protocol.

Figure 2. Patient Receiving and Triage Protocol



** Image Adjusted from the USAG West Point COVID-19 Response, West Point Community Playbook and JTS Overview of COVD-19 in Austere Environments Infographic*

INFECTION PREVENTION AND CONTROL MEDICAL CONSIDERATIONS

Standard hospital infection prevention and control procedures will be implemented immediately in accordance with practice guidelines and best practice principles. Isolation (aka Transmission-Based Precautions) and Quarantine protocols are "step above" infection prevention and control measures employed in an epidemic/pandemic situation.

RESOURCES:

Routine Infection Control and Prevention Principles: USCENTCOM Infection Prevention and Control Policy in a Deployed Setting

CDC Infection Control Guidelines & Guidance Library

Management of COVID-19 in Austere Operational Environments, Quarantine and Isolation Procedures: 28 May 2020, p8

Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care during the COVID-19 Pandemic

Table 4. Quarantine versus Isolation

	Quarantine	Isolation
Whose activity?	***Command*** approves and tracks quarantine activities. A person does not have to be seen by a health provider unless symptoms occur in quarantine.	A person must be seen by a ***healthcare official or provider*** to enter isolation.
What is it?	The separation of an individual or group that has been potentially ***exposed*** to a communicable disease, but ***not yet ill*** to prevent spread of disease.	The separation of people who ***are infected or with suspected infections*** with a communicable disease to prevent spread of that illness.
Who is it for?	***Potentially exposed persons*** to COVID-19 + individual OR PUI but not yet showing symptoms (Command Identified or Self-Identified)	***Known COVID-19+ or suspected COVID-19 cases as determined by a healthcare official of provider.***
How long is it?	14 days after the last exposure, assuming all release criteria should be coordinated with a designated COVID-19 provider.	***Until released by health provider.***
What does this mean for daily life?	Stay in quarters or designated quarantine areas. Limit/prohibit movement to essential common areas (e.g., dining facilities, laundry facilities, and bathroom/hygiene facilities) and duty location. Practice standard hygiene and precautionary measures. Wear a mask or face covering as directed when leaving quarantine areas. Quarantined individual and teammates should monitor symptoms and report any changes to the supervisor and a healthcare provider.	Person CANNOT leave designated isolation location except in emergency or if instructed by medical personnel. Food, medication and other supplies MUST be delivered by designated personnel to the isolation area. Designated personnel will treat and monitor as determined by a health provider. Medical evacuation according to Command guidance.

INFECTION PREVENTION AND CONTROL NON-MEDICAL CONSIDERATIONS

Outside of medical setting personnel ***must*** practice basic public health and infection prevention guidelines that focus on:

- Social Distancing
- Shelter-In-Place Activities
- Hygiene and General Protection Measures

Social Distancing is the practice of maintaining a minimum amount of separation between individuals and all other persons outside of their routine close contacts. Routine close contacts are those groups that routinely experience a close contact environment. Examples include roommates in barracks/quarters, family members in the same household, and teams that routinely experience unavoidable close contact in execution of daily duties (e.g., medical staff). For social distancing consider the following:

1. Ensure that all personnel can maintain at least 6-ft spacing between themselves at all times.
2. Ensure the lowest possible number of personnel in duty spaces (as needed to execute mission) and prevent (as much as possible) sharing of workspaces and equipment:
    a. Reduce the number of personnel in duty areas by instituting teleworking, day-on/off or week-on/off.
    b. Cohort all personnel into specific teams and ONLY persons from that team will work at the same time.
    c. Hand-overs will be done remotely or with a limited person(s) from the departing team.
    d. Each team cleans and disinfects the space, ESPECIALLY high touch surfaces prior to departing (See Hygiene and General Protection, below).

Shelter-in-Place Restrictions require that all personnel limit their activity to quarters and their designated duty location (ONLY during their scheduled work period). This mandates NO social gathering or non-essential activities outside of personal areas AND closure of non-essential facilities (e.g., MWR, shoppettes). Essential activities/facilities include dining facilities (See Food Safety and Food Service section for more information duty activities as scheduled), medical care, and personal laundry.

Hygiene and General Protection Measures. All personnel should maintain an elevated awareness of personal hygiene and routine cleaning practices that will prevent the spread of the virus including hand hygiene, routine wear of face coverings outside of personal areas, daily personal hygiene and grooming, cleaning/disinfection of high touch surfaces and common areas.

RESOURCES:

Non-Medical Infection Control, USCENTCOM Infection Prevention and Control Policy, pp. 17-18. CAC required

CDC How to Protect Yourself and Others

CDC Cleaning and Disinfecting Your Facility

CDC Cleaning and Disinfecting Your Home

OSHA Guidance on Preparing Workplaces for COVID-19

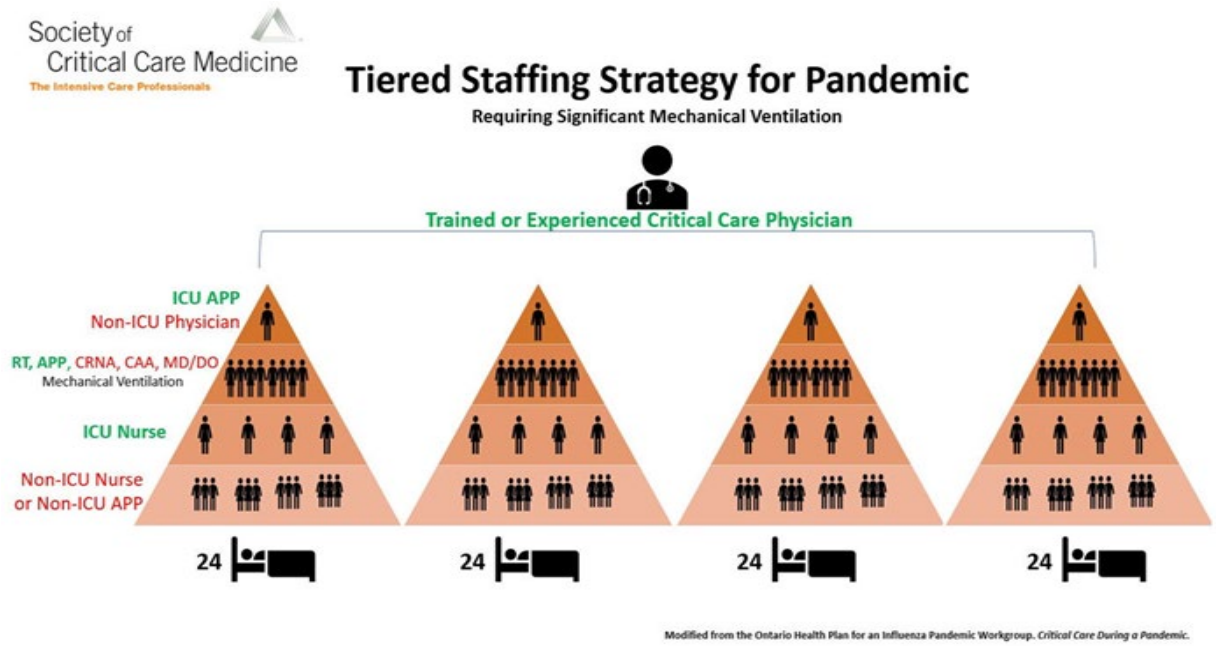
HUMAN RESOURCES

STAFF (PATIENT STAFFING RATIOS, RESILIENCE/WELL-BEING)

Outbreak response requires advanced staffing approaches to ensure safety and well-being of staff and patients, while limiting the spread of infectious disease. Facility managers should identify and assign essential personnel as per operational planning. Plans should identify tiered strategy planning and minimal risk approach. The tiered staffing strategy for pandemic (below) will be applied and tailored according to local resources and manning. Exact staffing plans and staffing ratios will depend on personnel, resources, and mission requirements. Additional considerations include:

1. Designated and/or specialized COVID-19 care team separate from combat operations
2. Designated runners to ancillary services to reduce donning/doffing activities and protecting PPE supplies
3. Assignment and training of non-medical personnel to assist as runners, computer and administrative activities (e.g., transcribing notes for records, scanning/uploading patient files, etc.), and assisting with patient registration/screening (frontline).
4. Work/rest cycles for prolonged management of potentially overwhelming numbers of critical care patients

Figure 3. Tiered Staffing Strategy



Case Example: Staffing Approach used by TF MED 14

A tiered approach assisted strategic staff management. Pandemic staffing ratios were used as a guideline, but modified based on tactical patient care/workload. Permitting unit skill sets, nursing personnel were categorized into COVID-19 and trauma teams. A minimum of two staff members were required on shift regardless of census and a critical care nurse for Rapid Response.

Table 5.COVID-ICU

Patient: Nurse Ratio	
Staff	**Patient Volume/Acuity**
66S Intensive Care RN	2 severe or 10 moderate
66H Medical-Surgical RN	1 severe (with oversight of 66S) or 10 moderate
68C Licensed Practical Nurse	10 moderate

Table 6. COVID-ICW

Patient: Nurse ratio by MOS	
68W Medic	10 moderate (with oversight by 68C or 66H)

RESOURCES:

Staff, COVID-19 Practice Management Guidelines V3.0, 14 May 2020 pp.7-9

TF MED 14 COVID-19 Nursing Document (attached)

SKILLS BUILDING/TRAINING

Cross-training/Up-training

All healthcare personnel should be up-trained and practice at the top of their licensure. All healthcare personnel should familiarize or review how to conduct certain critical activities (in case of personnel shortages):

1. Use of critical care medications and ward stock
2. Daily preventative maintenance checks and services (PMCS) of critical equipment
3. Oxygen burn rate for patient usage and refill plan

The following are recommended critical care topics for providers to review and drill improve response and success in managing COVID-19 critical patients:

1. Code Blue management of COVID-19 patient
2. Rapid Sequence Intubation roles of nursing staff
3. Ventilator management and ABG interpretation
4. Titration of critical care medications and side effects
5. PPE donning and doffing
6. Rapid response team parameters
7. Prone of a patient in an austere environment
8. Working knowledge of critical equipment (POGS, EDOCS)
9. Unit specific standard operating procedures

Units should conduct practice drills: PPE donning/doffing, patient procedures, transfers, proning, Code Blue, etc.

Leadership should consider cross-training non-medical personnel to assist clinical staff as appropriate and allowable. Non-medical personnel must perform Just-in-Time Training: DHA US-001 HIPAA and Privacy Act Training. CAC required.

Society of Critical Care Medicine provides free COVID-19 Resources for Non-ICU Clinicians. Topics include:

- Recognition and Assessment of the Seriously Ill Patient
- Critical Care for the Non-ICU Nurse
- Airway Management
- Airway Assessment and Management
- Diagnosis and Management of Acute Respiratory Failure
- Mechanical Ventilation
- Prone Positioning
- Diagnosis and Management of Shock

RESOURCES:

Personnel Considerations, DoD COVID-19 Practice Management Guidelines, 14 May 2020. p14

The Elsevier, COVID-19 Health Care Hub provides clinical toolkits, podcasts, expert opinions and many other tools for providers and staff in the COVID-19 response.

There are also resources for care of older adults and children. The web-based resources are free but require initial completion of a basic online form. https://www.sccm.org/COVID19

The Defense Institute for Medical Operations (DIMO, www.dimo.af.mil) hosts the following courses:

- MASL D319329 - Medical Readiness Principles of Food Protection
- MASL D319328 - Malaria & Other Infectious Disease Threats
- MASL D319318 - Infection Control in Ebola & Pandemic Management

STAFF SURVEILLANCE AND STAFFING DECISIONS

Individual risk assessment and fitness for duty should be determined with the support of serology testing results, if available and updated staff medical records.

- All healthcare workers should engage in appropriate education, training and policies to comply with infection prevention and control.
- If possible, perform serologic and other testing for COVID-19 on healthcare workers with common symptoms and who have had likely exposures to COVID-19 patients.
- Healthcare workers with serological evidence of COVID-19 should have protective antibodies and may return to duty. However, it's unclear whether subsequent "waves" of COVID-19 may occur and it is still unknown how protective the presence of antibodies on serologic testing may be in preventing repeat infection.
- Healthcare workers who are ill should not be involved in direct patient care.

RESOURCES:

CDC Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19.

Additional Training, Resources, and Tools are listed at Appendix B.

MEDICAL MANAGEMENT

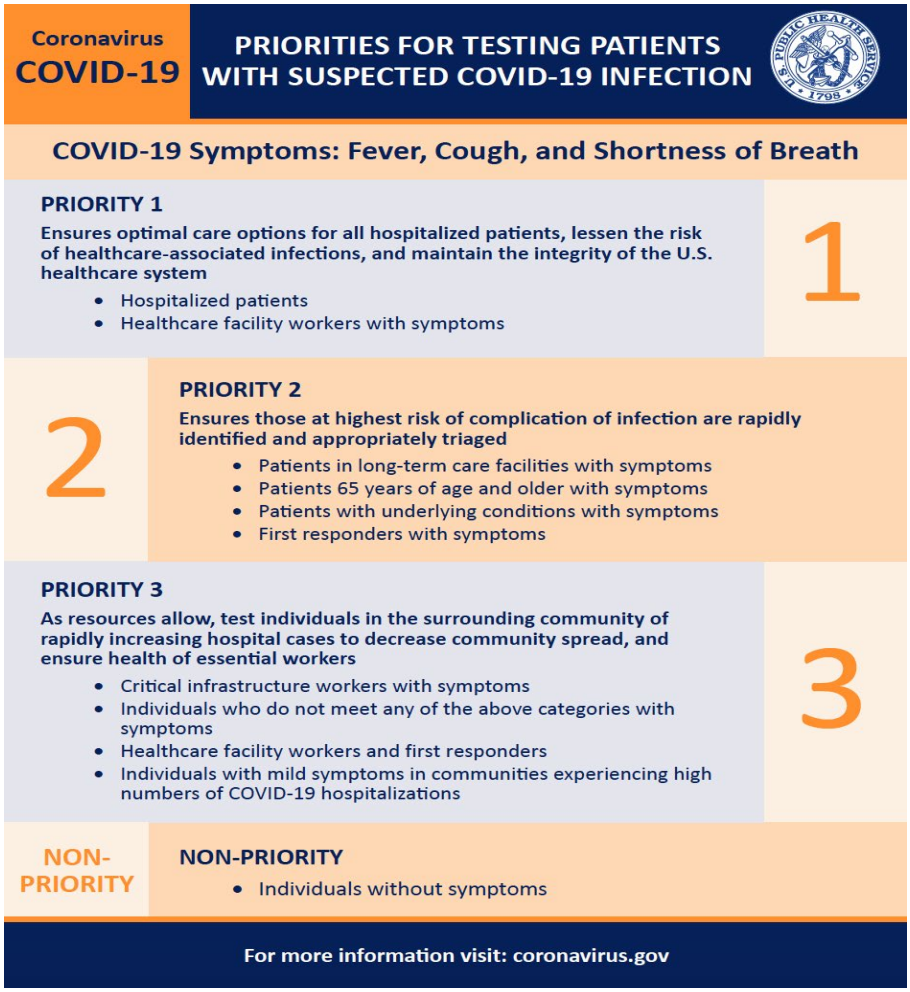
GENERALIZED SCREENING

All testing recommendations prioritize testing for persons with consistent with COVID-19. There are no DOD or CDC recommendations on screening the general population for asymptomatic infection with COVID-19. Until this becomes available, facilities should follow the guidance of USCENTCOM HQ and local Command and Surgeon teams.

DIAGNOSTIC TESTING

At this time the focus of diagnostic testing for COVID-19 are patients who demonstrate symptoms, (fever, cough, shortness of breath) and those who are at high risk for infection or potential complications (healthcare workers, elderly, or patients with known medical comorbidities, and who are immunocompromised). Please refer to the laboratory section of this document for guidance on performing testing.

Figure 4. Priorities for testing patients with suspected COVID-19 infection.



IMMEDIATE

There is no cure or vaccination for COVID-19. The treatment available now remains supportive care, which includes antipyretics, supplemental oxygen, and potentially mechanical ventilation. All medications currently used in the treatment of COVID-19 are off-label or are a part of research study protocols.

COVID-19 has manifested primarily as a significant respiratory infection that can rapidly deteriorate into a severe pneumonitis, requiring supplemental oxygen and potentially mechanical ventilation. The severity seems to primarily affect the elderly population, and those with underlying medical comorbidities. However, this virus has also affected otherwise young healthy individuals. Providers must be aware and monitor all patients for potential rapid deterioration and intervene as soon as possible.

The DoD developed the DoD COVID-19 Practice Management Guidelines to assist providers throughout the DoD with comprehensive care for treatment and management of COVID-19.

With the decreased availability of staff and resources in the austere setting, a supplement to the DoD PMG for COVID-19 contains a section for considerations in the austere environment, under the same link immediately above.

PROLONGED CARE

Due to the global nature of this pandemic, as well as the infectivity of COVID-19, there are many special considerations when planning to evacuate patients from downrange. It is recognized that the DOD's usual protocols and ability to evacuate patients has been severely limited. Patients may require treatment over a prolonged time (possibly several days) prior to evacuation to a higher echelon of care. It is a priority for the downrange provider to plan for longer than expected care. The DoD PMG for COVID-19 and the CPG for austere locations referenced previously, are useful tools. Additionally, the JTS prolonged field care guidelines, while not specific to COVID-19, are useful for prolonged field care and can be found here:

RESOURCES:

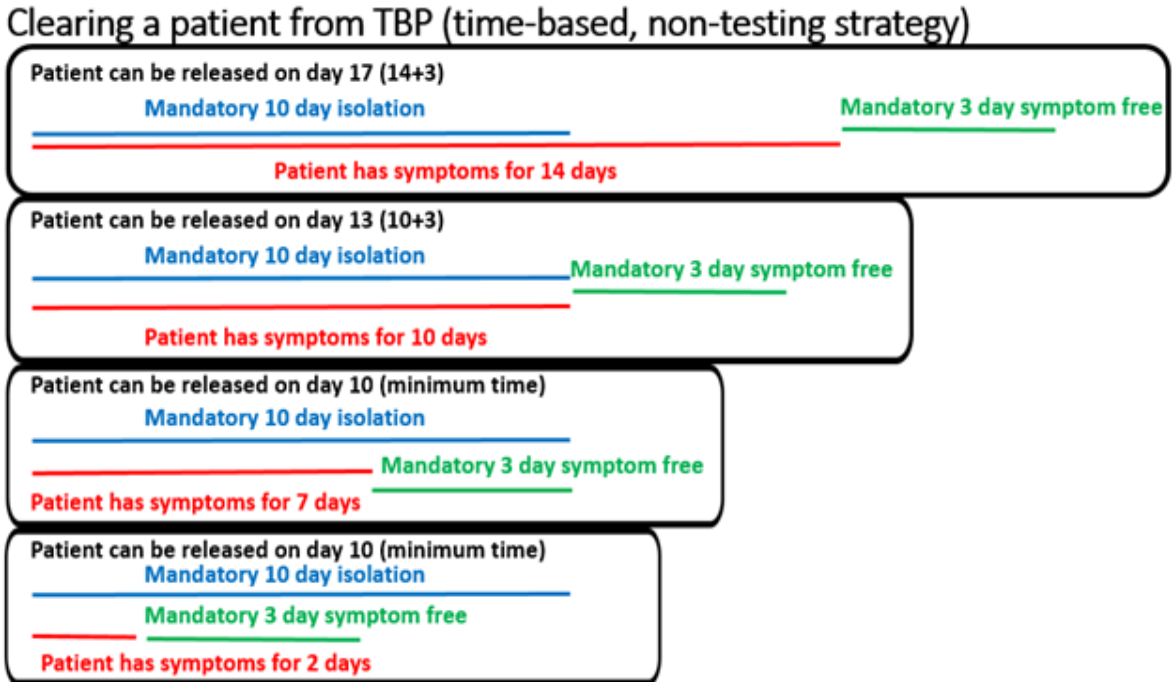
JTS Nursing Interventions in Prolonged Field Care CPG, 22 Jul 2018

JTS Documentation in Prolonged Field Care CPG, 13 Nov 2018

DISCHARGE

Discharging a patient from Transmission-Based Precautions (AKA Isolation) has been based on either testing strategies or time based. Patients can move through the various levels of care (mild outpatient self care, moderate ward level care and severe ICU level care) but must remain in isolation and follow transmission-based precautions (TBP) during this entire time. A patient can be discharged from TBP once their symptoms improve AND their fever resolves AND they have two negative PCR tests which are 24hrs apart (test based strategy). Alternatively, a time based strategy may be used which requires patients to have recovered (fever free off antipyretics AND improvement in symptoms) for 72 hours and at least 10 days have elapsed since symptoms first started. Below is a diagram of several time based scenarios.

Figure 5. Clearing a patient for release.



TELEMEDICINE

Listed below are emergency telehealth resources which forward-stationed medical teams/medics can use for assistance or clarification on any topics or concerns:

VITAL-T Program

Virtual Inspection and LINKUP in Theater (VITAL-T) provide "real time" virtual access to Quality and Safety (QS) expertise through Virtual Health (VH) capabilities for Infection Prevention and Control (IPC), Patient Safety (PS), and Medication Safety (MS).

Submit a Vital-T Consult in 2 Easy Steps

1. Call with questions or to arrange a Virtual Consult or Service with the appropriate QS expert.
2. Email: mailto:usarmy.jbsa.medcom.list.medcom-vitalt@mail.mil or
   24-hour VITAL-T hotline: 210-307-0923

During the COVID-19 crisis, consult services could be conducted using any of the following approved means (the optimal means for connection will be individualized):

1. Google Duo
2. FaceTime
3. Skype
4. Adobe Connect

AD.VI.SOR

Advanced Virtual Support for Operational Forces (AD.VI.SOR) program is specifically designed for operational virtual health support. Phone: 833-238-7756; Email: dod.advisor_office@mail.mil

Additionally, many **Virtual Critical Care Consultation (VC3) service providers** have deployed to austere settings before and can help work through the unique problems faced in austere settings

DHA Infection Prevention and Control Tiger Team

The DHA Tiger Team is an alternative source for infection prevention and control reach-back, which is overwhelmed in the current situation. The team will review received questions on a daily basis and work to develop a response within 1-2 business days. dha.ncr.clinic-support.list.ipc-group@mail.mil

Table 7. Local USCENTCOM ADVISORS for Urgent Needs

Local USCENTCOM ADVISORS for Urgent Needs
379 EMDG SGH: DSN 318-455-5042 or cell 011-974-5080-3442
379 EMDG Help Line (answered 24/7): DSN 318-455-1000
455 EMDG: DSN 318-481-4664
KAF: DSN 318-421-6339, Intensivist: CDR Carl Riddick via WhatsApp at 503-539-7167
CRNA: CDR Diane Howell via WhatsApp at 631-402-3060
Kabul: DSN 318-449-9259
BDSC: DSN 318-239-2033, Intensivist: LTC Sally Delvecchio
USMH-K: 318.430.2508

Local USCENTCOM ADVISORS for Urgent Needs
USCENTCOM Preventive Medicine Physicians: Col(s) Vinh Tran, DSN 312-529-0348; MAJ(P) Fred Hauser, DSN 312-529-0361
USCENTCOM Pharmacist: MAJ Franklin Small, DSN: 318-480-5094/SVOIP: 308-430-6834
PHEO: MAJ Brandon Aden, DSN is 318-480-6087; SOVIP is 308-430-8507

As a final alternative, the following MEDCENs below may be contacted (ask for the on-call critical care staff).

***Note:** MEDCENS may be intensively involved in COVID-19 response locally. Personnel should exhaust all local, regional, USCENTCOM reach back and all dedicated telehealth resources PRIOR to calling MEDCENs.*

Table 8. MEDCEN Contact List.

MEDCEN Contact List
Landstuhl Regional Medical Center, Germany. DSN: 314-590-7141 Intensive Care Unit
Walter Reed National Military Medical Center, MD. (301) 295-4611, option 4 Command Duty (301) 295-4810 Emergency Room
Madigan Army Medical Center, Fort Lewis, WA (DSN 782) **(**253) 968-1110 Information Desk
Brooke Army Medical Center, Fort Sam Houston, TX (DSN 429) (210) 916-0808 Emergency Room
Naval Medical Center Portsmouth, NS Norfolk, VA (DSN 377) (757) 592-5473 Critical Care (757) 953-1365 Emergency Room
Eisenhower Army Medical Center, Fort Gordon, GA (DSN 773) (706) 787-6938/6019 AOD (706) 787-6039 Emergency Room
David Grant Medical Center, Travis Air Force Base, CA (DSN 799) (707) 423-3040 ICU or (707) 423-3825 Emergency Room
Tripler Army Medical Center, HI (DSN 433) (808) 433-6661 Information Desk (808) 433-4032 ICU or (808) 433-3707 Emergency Room
William Beaumont Army Medical Center, Fort Bliss, TX (915)892-6880 House Supervisor or (915) 742-2139 ICU
Keesler Medical Center, Keesler AFB, MS (DSN 591) (228) 376-0500 Emergency Room

BEHAVIORAL HEALTH

Leaders ***must*** consider the behavioral health and mental/physical resiliency of health providers and staff responding to an outbreak, as well as that of COVID-19 patients and the general population, who are experiencing major life-style changes and isolation. A number of tools and resources have been provided for leaders to respond to behavioral health concerns and improve resiliency. Forward stationed medics/medical teams are encouraged to reach back locally to Role 2/Role 3 facilities, where behavioral health resources may be stationed, utilize chaplain services, and telehealth resources to connect persons in need with help.

Special considerations for behavioral health during the COVID-19 pandemic include:

1. Prolonged isolation of COVID-19 designated staff and patients.
2. Disruption of non-duty activities and resiliency behaviors (e.g., physical activity, rest/relaxation).
3. Risk for minimal work/rest cycles due to potentially overwhelming numbers.
4. Moral stressors of triaging patients to receive care in pandemic environment.
5. Fear response for novel or unfamiliar risks/threats.

RESOURCES:

Mental Health and Wellness in COVID-19 Clinical Management (patients, providers) - DoD COVID-19 PMG v3.0, 14 May 2020 pp56-58

Resiliency/Well-Being – Stress and Coping, CDC Mental Health and Resiliency during COVID-19

Leadership checklist to mitigate team stress is located at Appendix C.

Leadership checklist to promote team sleep is at Appendix D.

Navy Leader's Guide for Managing Sailors in Distress –The purpose is to help Leaders recognize distress related behaviors, provide support to Sailors within the unit, and collaborate with Navy helping agencies to meet the needs of distressed individuals.

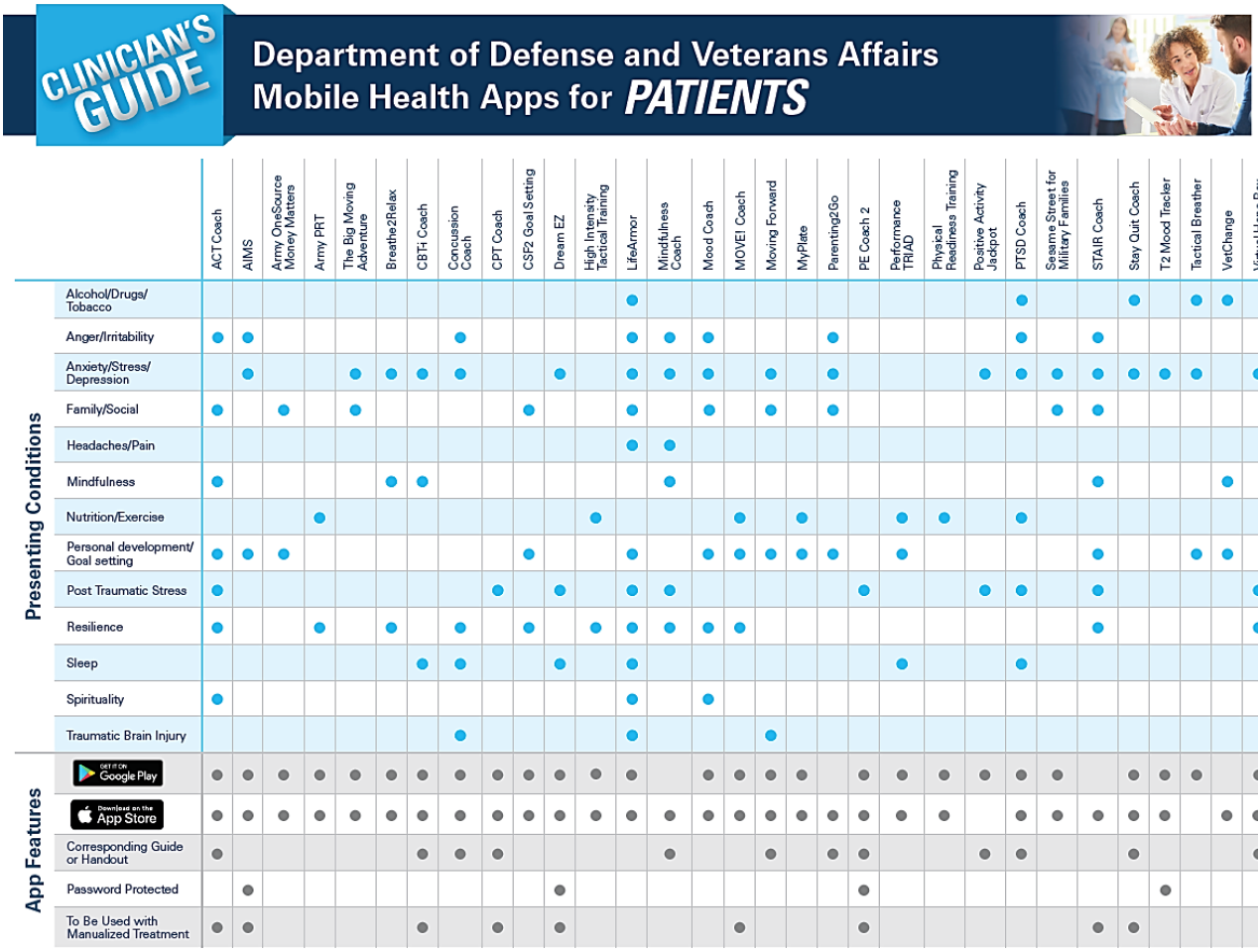
The DoD and VA offer the below mobile apps for mental health guidance.

Provider Resilience: Through psychoeducation and self-assessments, Provider Resilience gives frontline providers tools to keep themselves productive and emotionally healthy as they help our nation's service members, veterans, and their families. Apple version. Android version.

Psychological First Aid (PFA): PFA Mobile was designed to assist responders who provide psychological first aid (PFA) to adults, families, and children. Apple version. Android version.

Other apps can be viewed by downloading the below brochure at https://health.mil/Reference-Center/Publications/2019/08/28/DoD-and-VA-Mobile-App-Clinicians-Guide. Brochure does not provide links to the apps.

Figure 6. Clinician's guide of mobile health apps



ARMED FORCES MEDICAL EXAMINER SYSTEM AND MORTUARY AFFAIRS

All U.S Military Service Members and U.S. Civilian personnel who die in an Operational Environment are under the medico-legal jurisdiction of Armed Forces Medical Examiner System (AFMES) in accordance with Title 10 U.S. Code 1471. If a death occurs, immediately notify AFMES at (202) 409-6811. All medical intervention should remain in place. Contact mortuary affairs for further guidance on the handling of the decedent. Secure clothing, personal protective gear, and medical/treatment records. These should accompany the decedent to mortuary affairs.

RESOURCE:

Safety and Health Guidance for Mortuary Affairs Operations: Infectious Materials Technical Guide 195A, November 2015.

ANCILLARY SERVICES

Ancillary service personnel will practice previously described infection prevention and COVID-19 medical management control measures.

PHARMACY

Goals are to reduce the impact of exposure risks and preserve access to medications. Pharmacists will support ongoing clinical evaluation studies and treatment protocols for emerging therapeutics.

RESOURCE:

DHA COVID-19 Response CONOPS. See CONOPS attachment.

RADIOLOGY

Once providers deem a diagnostic study necessary, take measures to minimize risk of cross contamination of equipment and environment. Equipment (including wheels) and X-ray cassettes shall be wiped down prior to entering and exiting patient care areas. Use disposable X-ray cassette protective sleeves or other type of similar barrier material for portable chest X-ray capability and equipment. Portable machines should be positioned so as to prevent contact with the patient whenever possible.

LABORATORY (SCREENING/TESTING)

Appropriate PPE and infection control/prevention procedures to prevent blood borne pathogen and aerosol exposure will be employed. Patient screening may include nasopharyngeal swab specimens (most common) or tracheal aspirates from intubated patients.

Testing capability may include: I-STAT ABG or VBG, Rapid Flu test, Rapid Dengue test, respiratory pathogen film array (BioFire), and COVID-19 polymerase chain reaction (PCR) test.

RESOURCES:

Nasopharyngeal swab technique training video (7:19)

Management of COVID-19 in Austere Operational Environments v2.0, 28 May 2020 pp9-10

DoD COVID-19 PMG v3.0, 14 May 2020, pp11-12

Frequently Asked Questions about Biosafety and COVID-19

ENVIRONMENTAL SERVICES/HOUSEKEEPING

Employed cleaning protocols should ensure adequate sanitization in all environments, including quarantine/isolation/patient care areas, as well as all workspaces and quarters. All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer's instructions and facility policies.

- *Routine Cleaning and Disinfection Procedures:* Use cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label.
- *High Touch Surfaces:* In addition to standard environmental cleaning, employ routine cleaning of high-touch surfaces: tables, chair arm rests, doorknobs, light switches, countertops, handles, desks, phones, keyboards, mouse devices, toilets, faucets, sinks, etc.
- *Bathroom Entrances/Exits:* When possible, position trash cans inside bathrooms near the door to allow no-touch exit. Hand washing signs should be placed in entryways.

RESOURCES:

List of Disinfectants for Use Against SARS-CoV-2

Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Healthcare Settings, 10. Implement Environmental Infection Control

FORCE HEALTH PROTECTION

Force Health Protection (FHP) assets which include public health, preventive medicine, and veterinary services are important stakeholders and subject matter experts on issues of infectious disease control (including zoonotic disease), sanitation, food protection and safety, and water systems protection and safety. Veterinary Services (VS) are equally important subject matter experts in animal medicine and husbandry, human-animal bond, and agricultural systems. Where available, FHP personnel should be consulted regarding these issues, but there are forums and toolkits for FHP- and VS-related issues.

This information in this section is intended to supplement not supersede the USCENTCOM/ARCENT and TRANSCOM policy and guidance. Any operational issues or challenges regarding FHP or the movement and care of authorized animals and animal-care personnel should be resolved through local, ARCENT, and USCENTCOM Command leadership.

FIELD SANITATION AND ISOLATION

In many cases, isolation facilities will need to be rapidly established that may require alternative waste and hygiene approaches to protect the uninfected general population (e.g. alternative showering facilities, pit latrines, bed cans). FHP assets should be consulted to ensure best possible practices are being implemented and that all safety and handling precautions are implemented.

RESOURCE:

Management of COVID-19 in Austere Operational Environments,v2.0, 28 May 2020

Central Command Regulation 40-2 08 Nov 2017, Deployment Force Health Protection (SIPRnet)

CDC Sanitation & Hygiene

DoDD 6200.04, Force Health Protection, Oct 2004

ATP 4-02.8, Force Health Protection, Mar 2016

Training Circular 4-02.3, Field Hygiene and Sanitation

Health Service Support Casualty Prevention for Expeditionary Operations, AFTTP 3-42.2, 2004

FOOD SAFETY AND FOOD SERVICE

There is still no evidence for concern that food and food packaging serves any role in transmission of COVID-19. Protection in dining facilities will focus on protection against direct human to human transmission and should include the following considerations.

- A la carte dining options (e.g., deli and sandwich stations, omelet stations) should be suspended during the pandemic.
- Fresh fruits and vegetables and deserts should not be presented in a salad bar format. These foods should be cleanly prepared and packaged in covered food containers.
- Meal lines and dining areas should consider social distancing. Seating should be placed in appropriate distances and/or limitations on capacity should be implemented. Consider outdoor dining options and take out approaches.
- Consider implementing servers – designated personnel that are screened for fever and symptoms at the start of each shift - instead of self-serve approaches or pre-plating or packaging meals to reduce contact during the serving process.

RESOURCE:

DoD Veterinary Services COVID-19 Resource Page Provides white papers, external links, situation reports and other operational guidance related to food safety and protection, FHP, and animal medicine/animal health during the COVID-19 pandemic.

FDA Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic

VETERINARY CARE

Government owned animals (GOAs) and authorized privately owned animals (POAs) should continue to receive veterinary medical care in accordance with DoD and contract specific guidelines at local VS locations (veterinary treatment facility or similar). Any currently understood possibility of zoonotic transmission DOES NOT exceed the harm caused by not ensuring care for these animals. Elective procedures and veterinary medical care activities should be cancelled for the duration, but standards of care for public health and readiness should be maintained in accordance with applicable policy, health certificate requirements, and best practice guidelines (e.g. vaccination, emergency care, retail/distribution of medication and preventatives, etc.).

RESOURCES

DoD Veterinary Services COVID-19 Resource Page

CDC COVID-19 and Animals

American Veterinary Medical Association (AVMA) COVID-19 webpage

ANIMAL TO HUMAN TRANSMISSION

The COVID-19 virus is known to have zoonotic origins: believed to originate at a live animal and wet market in Wuhan, China. It appears that in rare situations, COVID-19 infected persons can spread the virus to animals. The virus has been detected in felids (wild and domestic cats), canids (domestic dogs), and mustelids (ferrets and similar). It is unlikely that this virus will cause disease in healthy domestic animals. ***There is no evidence to suggest domestic animals serve any significant role in transmission of the virus to humans.*** Human-human transmission remains the primary source of transmission. However, given the possibility for zoonotic transmission of the COVID-19 virus, the following recommendations should be implemented:

- Commanders should strictly enforce USCENTCOM General Order (GO) 1C (paragraph 2.g) that prohibits the adoption of unauthorized pets or mascots of any kind on DoD installations. Exceptions to this policy include authorized GOAs, including military working dogs (MWDs) and DoD Contracted Working Dogs, and installations where personnel live off-base and are authorized POAs.
- ***It is not recommended to routinely test animals for COVID-19*** using BioFire or any other testing platform. The CDC provides guidance on testing animals for COVID-19. The CCSG team and ARCENT Command Veterinarian should be consulted PRIOR to any testing of animal patients for COVID-19.

RESOURCES:

USCENTCOM General Order 1C (para. 2g), 21 May 2013

AVMA Interim recommendations for intake of companion animals from households where humans with COVID-19 are present

NASPHV Compendium of Measures to Prevent Disease Associated with Animals in Public Settings

Interim Infection Prevention and Control Guidance for Veterinary Clinics Treating Companion Animals During the COVID-19 Response

CDC Evaluation for SARS CoV-2 Testing in Animals

CONSIDERATIONS FOR ANIMAL CARE PERSONNEL

VS personnel should routinely implement and train local non-VS animal care personnel in the principles and standards of infection control outlined in the *NASPHV Compendium of Measures to Prevent Disease Associated with Animals in Public Settings* and applicable infection control policy and best practices. Elective veterinary visits and procedures should be cancelled through the pandemic. Animal care personnel should remain aware of current shortages and high demand of PPE for their human medical counterparts and practice prudent PPE implementation when treating animals, conducting laboratory procedures, and routine husbandry practices during the COVID-19 pandemic. The CDC makes

recommendation on their website for PPE use when caring for animals. Working dog handlers that require isolation or quarantine should NOT conduct daily care for their dog. The Kennel Master, trainer, or other handlers should provide routine care for that dog until the assigned handler can return to duty.

RESOURCES:

CDC Interim Guidance for Public Health Professionals Managing People With COVID-19 in Home Care and Isolation Who Have Pets or Other Animals

NASPHV Compendium of Measures to Prevent Disease Associated with Animals in Public Settings

SUPPLIES

All disposable and non-durable medical supplies (including PPE) stock will be distributed and stocked IAW with pre-planning and role/location specific guidance.

Employ cleaning protocols to ensure adequate sanitization in all environments, including quarantine /isolation/ patient care areas, workspaces and quarters. All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to existing location and USCENTCOCM specific infection control policies, manufacturer guidelines, and best practices.

Table 9. PPE Recommendations for the MHS

Category	Definition	Required Isolation/PPE
0	Patient not suspected of having COVID-19	STAFF • Surgical mask • PPE according to task. See standard precautions. PATIENTS: Avoid close contact with any staff unless necessary for healthcare purposes.
1	Asymptomatic patient with known exposure to COVID-19 OR traveled from high risk areas within last 14 days.	STAFF • Surgical mask • PPE according to task. See standard precautions. PATIENTS: MUST wear surgical mask if traveling outside room for medically essential purposes.
2	Patient under investigation (PUI) or positive COVID-19	STAFF • Contact precautions (gown and gloves) • Droplet precautions (surgical mask appropriate per current CDC guidelines if no aerosol-generating procedures performed in room) • Eye protection (face shield or goggles) PATIENTS: MUST wear surgical mask if traveling outside room for medically essential purposes.
3	**Positive COVID-19** requiring aerosol-generating procedures (i.e. BIPAP, CPAP, endotracheal intubation, high flow nasal cannula, nebulizers, tracheal suctioning)	STAFF • Contact precautions (gown and gloves) • Consider head and foot covers • Airborne precautions (N95 respirator or PAPR) • Eye protection (face shield or goggles) • Negative pressure room PATIENTS: MUST wear surgical mask if traveling outside room for medically essential purposes.

Source: Figure 8: PPE Recommendations for the MHS (adopted for the MHS using CDC guidelines accessed 31 Mar 2020; https://www.cdc.gov/coronavirus/2019-CoV/hcp/index.html PAPR: Powered air-purifying respiratory. PUI: Patient under investigation. High-risk area- Area with level 3 travel health notice identified by the CDC.

RESOURCES:

CDC Strategies to Optimize the Supply of PPE and Equipment

HHS Hospital Personal Protective Equipment Planning Tool

Personal Protective Equipment (PPE) Burn Rate Calculator

POINTS OF CONTACT

The USCENTCOM Command Surgeon (CCSG) team is the main point of contact for this document at (813)-529-0345/0361/0362 (COMM/DSN) or centcom.macdill.centcom-hq.mbx.ccsg-clinops@mail.mil

MAJ Fred Hauser and Col(s) Vinh Tran are the USCENTCOM Public Health Emergency Office point of contacts and can be reached through the same organization mailbox (centcom.macdill.centcom-hq.mbx.ccsg-clinops@mail.mil)

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APPENDIX A: PANDEMIC RESPONSE PLANNING CHECKLIST

Role of Care: • R1 • ERC • R2 • R3 • R4

Primary POC **Email:** **Phone:**

1. Pandemic Threat Working Group Members, Principle Command & Control, Medical Lead		
Identify Members of Threat Working Group ● Medical Lead Recommended: Infectious disease specialist or emergency medicine/surgeon, if medical specialist unavailable. ● Minimal Recommended: BOS-I Commander or designee, Medical Asset Leads or Designated Specialist, Public Affairs, Medical Assets, Tenant Unit/Mission Representatives, Security Forces		
	Quantify threat to force	
	Plan for dissemination of information to MTF population	
	Determine Health Protection Condition (HPCON)	
	Identify primary sources of threats and screening methods (i.e. front gate, flight line)	
2. Centralized Concerning Symptom Reporting		
	Establish diagnosis algorithm for concerning disease	
	Establish hotline to call in symptoms to arrange meetup between protected medical asset and possible infected patient	
	Designate evaluation area segregated from healthy population	
	Closure of medical assets to unscreened patients	
3. Designated healthy, quarantine, and Infected/Isolated Facilities		
	Plan social separation: separate population into healthy, quarantine, and infected/isolated populations	
	Establish means to provide sleeping, food, water, hygiene, sanitation and socialization/recreation	
	Method to enforce segregation of population	
	Establish criteria for entry and exit of patients from groups (i.e. clinically resolve or infected) and rules for outside personnel entry (i.e. medical providers only with specific PPE)	
	Establish decontamination/disinfection protocols	
4. Treatment Plan		
	Identify locations that can provide medical support (ward/ICU) and maintain isolation	
	Designation of treatment team and contingencies for medical team casualties	
	Inventory personal protection equipment, materials, and medications and report to higher command estimated duration of supplies	
	Request any additional assets from higher commands that may be required	
	Biohazard disposal plan	

5. Specific Equipment		
	Respirators with filter capacity of at least 94% - N95 or FFP2 Respirators	
	Disposable gowns, face shields, soap	
	Disinfectant (i.e. bleach, CaviWipes™)	
	Oxygen concentrators for nasal cannula	
	Oxygen tanks with refill capacity or oxygen source (i.e. POGS) capable of providing pressurized oxygen to enable FiO_2 of 100%	
	i-STAT with arterial blood gas cartridges	
	Thermometer	
	Tracheal suction catheters and suction (inline)	
	Bag valve masks	
	Pulse oximeter	
	Ventilator with air inlet filters	
	Ventilator circuits	
	Heat and moisture exchanger (HME) and bio expiratory filters for ventilator circuits	
	Nasogastric tubes	
	Long term sedatives (i.e. Propofol, Ketamine) and paralytics (i.e. Vecuronium, Pancuronium)	
	Deep vein thrombosis prophylaxis (Chemical and Mechanical)	
	Antibiotics and supportive care medications dependent on prevalent pathogens	
6. Evacuation plan		
	Establish evacuation protocols to higher levels of care versus treat in place	
	Verify function and availability of in theater patient movement capabilities	
	Plan for disposition of any contagious human remains	
7. Contingencies for contractors/civilians		
	Plan for chronic medication shortages and medical care as mail, movement, and local facilities become unavailable	

APPENDIX B: ADDITIONAL TRAINING AND RESOURCES

The following resources are available for rapid access and review in preparing for or responding to COVID-19 patients locally:

1. *Current COVID-19 Resources: Policy, Military-specific, Clinical*, etc. will be posted in the DoD COVID-19 Clinical Operations Group site https://www.milsuite.mil/book/groups/covid-19-clinical-operations-group

2. *DoD Instruction for Public Health Emergency Management (PHEM) within the DoD*. DoD6200.03 (28 March 2019) https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/620003p.pdf

3. *Joint Trauma System (JTS) Clinical Practice Guidelines (CPGs)* (https://jts.amedd.army.mil/index.cfm/PI_CPGs/cpgs)

4. *The Elsevier, COVID-19 Health Care Hub* provides clinical toolkits, podcasts, expert opinions and many other tools for providers and staff in the COVID-19 response.

5. *The Elsevier Engineering Resources* for the COVID-19 response https://www.elsevier.com/connect/engineering-resources-for-the-covid-19-response

6. *Infection Prevention and Control Policy in a Deployed Setting* and USCENTCOM Surgeon (CCSG) Clinical Operations SharePoint site (CAC Required) https://intelshare.intelink.gov/sites/ccsg/SitePages/Home.aspx

7. *The COVID-19 Clinical Operations Group* has prepared a the following MilSuite group page (CAC Required) https://www.milsuite.mil/book/groups/covid-19-clinical-operations-group

8. *The US DoD Coronavirus Rumor Control* should be used to clarify points of confusion and prevent decision making based on misinformation (https://www.defense.gov/Explore/Spotlight/Coronavirus/Rumor-Control/fbclid/I/)

9. *The Centers for Disease Control and Prevention*, COVID-19 webpage (https://www.cdc.gov/coronavirus/2019-ncov/index.html)

10. *National Institute of Health, COVID19 webpage* https://covid19treatmentguidelines.nih.gov site updated 21 April 2020.

APPENDIX C: MITIGATING TEAM STRESS

WRAIR Walter Reed Army Institute of Research
Soldier Health ★ World Health

COVID-19 Leadership Checklist
Mitigating Team Stress

SHARE INFORMATION

Sharing information establishes communication and trust with your team.

- ❑ *Stay up-to-date on the latest developments*
- ❑ *Share what you know with the team*
- ❑ *Let them know when you don't know the answer*

Self Check: Have you updated your team recently?

CONNECT

Connecting with others can help prevent people from feeling isolated and alone.

- ❑ *Run regular meetings to provide structure and stability*
- ❑ *Strengthen your team's sense of community and shared purpose*
- ❑ *Set up a group text to check in regularly with all team members including those without government iPhones*

Self Check: Are you connecting with your own leaders and teammates?

RECOGNIZE LIMITS

Stress can diminish people's ability to process complex information.

- ❑ *Remember to repeat whatever is important and over-communicate*
- ❑ *Be patient if someone makes a mistake or isn't tracking*
- ❑ *Build in redundant checks for critical pathways to reduce errors*

Self Check: Are you making simple mistakes? Do you need to take a minute to recharge?

MAINTAIN PHYSICAL RESILIENCE

When people take care of themselves physically, they can handle stress better.

- ❑ *Prioritize sleep*
- ❑ *Encourage good nutrition*
- ❑ *Get regular exercise*

Self Check: Are you remembering to take care of your physical health?

MAINTAIN PSYCHOLOGICAL RESILIENCE

Using mental resilience skills can help people manage stress and stay strong.

- ❑ *Encourage a balanced diet of news to avoid feeling overwhelmed*
- ❑ *Keep a detailed to-do list to keep things manageable*
- ❑ *Use positive self-talk or buddy talk to get through stressful moments*
- ❑ *Use "Grounding" (name 3 things you can see, hear, and physically feel) to reduce anxiety spikes and orient yourself to the moment*

Self Check: What mental resilience skills are you practicing?

NORMALIZE STRESS

It is important to acknowledge the impact of stress, letting unit members feel more connected and less emotionally isolated.

- ❑ *Recognize your team's stress ("This is unchartered territory")*
- ❑ *Remember there are individual differences in how people cope with stress*
- ❑ *Give permission to talk about stress to the team*
- ❑ *Recognize that high-achievers are likely to feel even more stress during crises*

Self Check: Have you acknowledged your own stress level to someone?

SEIZE THE MOMENT

Leaders can reframe this moment as a critical opportunity for the entire team to contribute to the shared mission of finding solutions to the crisis.

- ❑ *Remind your team of the important mission at hand*
- ❑ *Everyone has an essential role to play, no matter their rank or occupation*

Self Check: How can this challenge provide you a leadership opportunity?

CONTROL THE CONTROLLABLES

Reduce stress and save energy by focusing efforts on what can be controlled and accepting what can't be controlled.

- ❑ *Encourage your team members to identify what they can control*
- ❑ *Have team members practice deep breathing and mindfulness when things start to feel like they are out of control*

Self Check: What is within your control? What do you have to accept?

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TAKE THE LONG VIEW

This isn't a one-time process.
Pace yourself and your team for a marathon.
Remember to be kind to yourself and your team.

APPENDIX D: SLEEP CHECKLIST

COVID-19 SLEEP CHECKLIST
LEADERS AND SUPERVISORS

WRAIR Walter Reed Army Institute of Research

Leaders and supervisors can take care of their staff and support team performance by prioritizing sleep for everyone.

Use the SLEEP acronym…

- **S**et the conditions
- **L**ead by example
- **E**ncourage sleep
- **E**ducate about sleep
- **P**lan and prioritize

SET THE CONDITIONS

- ☐ *Ensure light boxes and black out curtains are available for staff*
- ☐ *Designate appropriate, comfortable spaces for staff napping*

Ask yourself: "Have I created a culture that supports sleep?"

LEAD BY EXAMPLE

- ☐ *Watch your own sleep habits and make sure you are getting enough sleep*
- ☐ *Model appropriate caffeine use and sleep health*
- ☐ *Acknowledge the reality of sleep debt and fatigue during COVID-19*
- ☐ *Avoid sending texts or emails to staff during non-duty hours*

Ask yourself: "Am I walking the walk?"

ENCOURAGE

- ☐ *Ask your staff about their sleep*
- ☐ *Emphasize the importance of sleep*
- ☐ *Allow and encourage staff to take naps when appropriate*
- ☐ *Talk about the importance of sleep at all levels of leadership*

Ask yourself: "Am I checking in with my team about their sleep?"

EDUCATE

- ☐ *Reinforce points about self-awareness, caffeine, and light*
- ☐ *Ensure team members know the basics of sleep health (e.g., 7-9 hrs per night)*
- ☐ *Encourage staff to get sleep problems checked out medically as needed*
- ☐ *Remember that decision-making and moral reasoning are impacted by lack of sleep*
- ☐ *Remind your team that good sleep helps to protect health and fend off infection*

Ask yourself: "What information am I sharing about sleep?"

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NIGHT SHIFT TIP: LEVERAGE ANCHOR SLEEP

- Providers who cover night shifts may want to adjust their sleep to nighttime sleeping on their days off, but this change may cause havoc with their restorative sleep
- Instead, maintain "anchor sleep": On their days off, make sure that at least 4 hours of sleep are anchored—or match—to their typical nightshift sleeping schedule
- However, it is best to keep providers on the same schedule as long as possible, as it is difficult for them to switch from day shifts to night shifts frequently

PLAN AND PRIORITIZE: SCHEDULING SHIFTS

- ☐ *Limit staff shifts to 12 hours when possible*
- ☐ *Plan forward shift rotations that move with the clock*
  - *Shifting from day to evening, and evening to night, makes for an easier transition*
- ☐ *When possible, schedule shifts according to people's chronotype*
  - *Put your "early birds" on the morning shift and your "night owls" on the night shift*
- ☐ *Don't extend schedules for night shift workers*
  - *Have staff attend meetings and complete administrative tasks during their shifts*
- ☐ *Give team members more time to sleep after a long shift*
  - *The need for sleep goes up after longer periods of wakefulness*

Ask yourself: "Am I scheduling my team members' shifts effectively?"

PLAN AND PRIORITIZE: MANAGING SHIFT TRANSITIONS

- ☐ *Stagger shifts by changing out some team members every 4 hours*
  - *This enables new team members to refresh the remaining team*
- ☐ *Ensure a team member who is shifting their schedule isn't alone on the floor*
  - *Make sure others are around to keep them alert*
- ☐ *Prevent staff errors toward the end of a night shift*
  - *Establish additional safety protocols given the documented elevated risk in errors*
- ☐ *Allot time off for individuals who are significantly shifting their schedule*
  - *Allow a minimum of 32 hours off for those with an 8 hour change in shift time*
- ☐ *Check in with team members to see how their shift schedules are working for them*

Ask yourself: "Are my team members handling shift changes safely?"

THIS IS A MARATHON, NOT A SPRINT.

BY PRACTICING SLEEP LEADERSHIP, YOU AND YOUR TEAM CAN ADVANCE THE MISSION TO COMBAT COVID-19.

Selected references: Barger et al. (2018). Effect of fatigue training on safety, fatigue, and sleep in emergency medical services personnel and other shift workers: a systematic review and meta-analysis. Prehospital Emergency Care, 22(sup1), 58-68. | Burgess et al. (2007). Optimal shift duration and sequence: recommended approach for short-term emergency response activations for public health and emergency management. American Journal of Public Health, 97(Supplement_1), S88-S92. | Harrison et al. (2019). Circadian Profile of an Emergency Medicine Department: Scheduling Practices and Their Effects on Sleep and Performance. The Journal of emergency medicine. | Patterson et al. (2018). Evidence-based guidelines for fatigue risk management in emergency medical services. Prehospital emergency care, 22(sup1), 89-101.