



THE COMMITTEE ON TRAUMA

QUALITY PROGRAMS
of the AMERICAN COLLEGE
OF SURGEONS

Maintaining Trauma Center Access and Care during the COVID-19 Pandemic: Guidance Document for Trauma Medical Directors American College of Surgeons: Committee on Trauma

Introduction

Regionalized trauma systems have been developed to ensure access to care for injured patients who require time-sensitive life-saving interventions and advanced critical care to support recovery. The current worldwide COVID-19 pandemic threatens to overwhelm the healthcare system and thus impact the ability to care for critically injured patients and other surgical emergencies. The intent of this document is to advise trauma medical directors and trauma program managers on factors to consider as the public health and healthcare sectors prepare for an anticipated surge of critically ill patients related to COVID-19 infection. This document is not meant to be all inclusive for the planning and preparation required by hospitals and healthcare systems, but to raise awareness of the importance of preserving capacity to respond to traumatic injuries that routinely occur in our communities.

Engaging in the Planning Process

Trauma Medical Directors (TMD) should be actively engaged in regional and hospital planning for this epidemic.

I. Regional Planning:

- a. At the regional level, the TMD should engage with Healthcare Coalitions and local health departments to establish policies for regional distribution of patients and engage in ongoing discussion of regional ICU triage, regional resource allocation, and development of crisis standards of care, commensurate with the resources of the community.
- b. The TMD should ensure that the impact on the triage and transport of injured patients is considered in the planning process and discuss the importance of preserving capacity at regional Level I and II trauma centers to receive and manage these patients.
- c. The TMD should be involved in discussions regarding the management of injured patients, as it relates to adaptation of standards of care, and be involved in ongoing regional discussions as the situation evolves. The TMD should serve as a subject matter expert in establishing criteria for early triage to palliative care for injured patients not likely to survive.

- d. The TMD should be aware of the potential impact on trauma patients across the continuum of care including transport limitations by the EMS and aeromedical services, potential disruptions in the transfer process for injured patients needing a higher level of care, and limitations in discharge disposition for COVID patients.

Reference: [https://journal.chestnet.org/article/S0012-3692\(15\)51990-9/fulltext](https://journal.chestnet.org/article/S0012-3692(15)51990-9/fulltext)

II. Hospital Planning: The TMD should be engaged in hospital planning including development of ICU surge capability and capacity, ICU triage criteria, ICU service management, cross-training of ICU providers, and protection of the healthcare workforce.

Specific items to consider:

- a. The TMD should serve as a subject matter expert in the hospital incident command structure and ensure hospital leadership is aware of the expected needs to support trauma care during this time frame.
- b. When possible, COVID patients should be cohorted in a separate location from non-COVID patients, however optimal injury care should be a priority.
- c. Ensure hospital has identified a triage and resource prioritization process for ICU admission, ventilator allocation, and resource-limited interventions. This process should be independent of the direct care providers.
- d. Ensure the hospital has identified trigger points and plans to request additional PPE, ventilators, etc. when local supplies are depleted, first from local Health Care Coalitions, then county Emergency Management Agency (EMA), then state EMA and finally FEMA.
- e. Ensure the hospital has a plan to limit visitation to all patients and assure best practice hygiene for all visitors
- f. Ensure the hospital has process and supporting policies for disaster credentialing and privileging, including degree of supervision required, clinical scope of practice, mentoring and orientation, electronic medical record access, and verification of credentials.
- g. Support policies to restrict elective appointments and procedures.

III. Policies & Procedures to Protect and Support Trauma Team

- a. Ensure that all trauma team providers undergo PPE fit testing and are reviewing appropriate sources for training in use of PPE and remaining current in emerging guidance from the CDC and regional health agencies.
- b. Promote individual behaviors that limit the risk of disease transmission to include hand washing, avoiding handshakes, covering mouth when coughing, and staying home when ill.
- c. Educate staff on community, regional, and state disaster plans and resources.

- d. Support social distancing practices and allow providers not on service and non-clinical staff to work from home
- e. Transition from in-person to virtual meetings for administrative and educational activities.
- f. When possible, restructure trauma teams and stagger cohorts to reduce the number of trauma/ICU providers in the hospital simultaneously to decrease exposure risk and preserve staff.
- g. Develop redundancy in backup schedules for providers who may be ill or exposed.
- h. Develop a mechanism to monitor the wellbeing of team members who have had potential COVID exposure or who are on quarantine.
- i. Ensure that each trauma team member has an individual plan to support childcare and family/pet needs.
- j. Ensure regular scheduled communication for team providers as hospital policies and procedures evolve, provide situational awareness on the patient load, and support development of a centralized, on-line resource for the healthcare system to disseminate information and policies and procedures.
- k. Allow personnel with specific critical skills to concentrate on those skills. For example, surgical intensivists may need to help overwhelmed medical intensivists with ventilator management of critical COVID-19 patients, while general surgeons could assist with trauma alerts, emergency general surgery procedures, and floor rounds.
- l. Support schedules and team culture that optimize wellness and maintain resilience for team members.

IV. *Strategies at Point of Care*

a. Trauma Bay

1. Trauma evaluation should not be delayed to determine COVID status but appropriate precautions should be taken
2. Ensure strict use of PPE for droplet contact precautions for **ALL** patients
3. If a patient has upper respiratory symptoms (URS), immediately place a face mask on the patient.
4. Add questions about fever, upper respiratory symptoms, COVID-19 exposure history, travel history to history and take appropriate isolation measures.
5. Minimize the number of personnel at the bedside to only those required for direct patient care
6. Develop policies and procedures for airway management for potential COVID patients requiring emergent intubation.

See CDC references below

b. Operating Room

1. Develop a hospital policy for managing patients in the operating room with known or suspected COVID-19 infection and prevent delays in critical operative interventions for unstable patients.
2. Ensure agreements are in place with the anesthesia team for management of these patients

c. Intensive Care

1. Maintain situational awareness of ICU capacity in the hospital and ensure that critical care needs of trauma patients are considered
2. Monitor the availability of ventilators and oxygen supply.

V. *Strategies for Managing Scarce Resources*

Shortages of PPE and blood products may develop. The TMD should support hospital policies and procedures to preserve these resources.

a. PPE

1. Cluster work that needs to be done for a patient to minimize patient room entry/exits and need for PPE donning/doffing.
2. Restrict non-essential personnel and students from the operating room, ICU, and emergency department environments.
3. Minimize the number of personnel to only those essential for patient care during trauma team activation and in the operating room.
4. Support hospital policies for reuse of selected PPE when appropriate.

b. Blood Products

Due to community social distancing policies and public fear of donation and disease transmission, we are already seeing a decrease in the regional blood supply in parts of the country.

1. Monitor blood supply in region region and support restrictive transfusion strategies in the ICU when appropriate.
2. Support messaging to encourage blood donation in the community. It is safe to donate blood and there is no data to suggest that COVID 19 can be transmitted via blood transfusion.

Resources

CDC COVID testing and PPE recommendations

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients.html>

<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>

<https://www.fda.gov/medical-devices/letters-health-care-providers/surgical-mask-and-gown-conservation-strategies-letter-healthcare-providers>

Crisis Standards of Care

<https://asprtracie.hhs.gov/technical-resources/63/crisis-standards-of-care/0>
[Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response](#), NASEM.
[Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement: Triage](#)
[https://journal.chestnet.org/article/S0012-3692\(15\)51990-9/fulltext](https://journal.chestnet.org/article/S0012-3692(15)51990-9/fulltext)

ICU Preparedness

https://sccm.org/disaster?_zs=kgajd1&_zl=VLSb6
<https://sccm.org/Disaster/COVID-19-ICU-Preparedness-Checklist>

Blood Donation

<https://www.redcross.org/about-us/news-and-events/press-release/2020/red-cross-media-statement-on-2019-novel-coronavirus.html>