

### COVID-19

#### *COVID: High-Risk Patients and Providers*

*Faculty: Charlotte Page Wills, MD*

COVID-19 has a dramatically variable risk of serious illness depending on age, underlying medical conditions, and other factors. Accurately risk stratifying patients is imperative for both hospitalization and at home management decisions. Further, identifying which healthcare providers are at greatest risk is critical to protecting our healthcare workforce. The speaker will review the evidence on risk prediction for serious illness with COVID-19 and discuss management strategies for protecting patients and providers.

- Identify which patients and providers are at highest risk for serious illness with COVID-19.
- Explain best management strategies regarding hospitalization, treatment, and isolation.
- Discuss staffing strategies that have been implemented to protect healthcare providers.

#### *Critical Update: Coronavirus (COVID-19)*

*Faculty: Alexander P. Isakov, MD, FACEP*

The Coronavirus (COVID-19) outbreak is one of the most significant medical events in decades, stressing public health systems and impacting our global economy. This session will include the latest news regarding the infection and how emergency physicians can be best prepared to the infection in their own communities.

- Briefly review the history of the COVID-19 infection.
- Identify critical clinical and lab findings needed to diagnose COVID-19.
- Outline treatment strategies for infected individuals.

#### *Lung Ultrasound in the Age of COVID*

*Faculty: Arun Nagdev, MD*

The diagnosis of COVID is fraught with poor sensitivity and specificity of chest x-rays and lab tests, while isolation precautions and hourlong disinfection protocols deter CT imaging. Lung POCUS has been used internationally to help triage severity and diagnose COVID at the bedside to improve patient care and decrease exposure risk to staff members. This course will review the current literature on the use of lung ultrasound for COVID and provide attendees with a how-to strategy they can implement immediately.

- Review the current literature on lung ultrasound in COVID infections.
- Review sonographic findings commonly seen in COVID infections.
- Provide attendees with a POCUS protocol and how-to strategy to evaluate patients with suspected COVID.

### *Experimental Treatments with COVID-19, What Worked and What Didn't?*

*Faculty: Salim Rezaie, MD, FACEP*

Many medications were trialed during the COVID-19 pandemic. What worked and what didn't? Is there good evidence based research to support any of the medication used.

- Discuss the use of Chloroquine and azithromycin.
- Discuss the use of remdesivir.
- Discuss the use of steroids.
- Discuss new therapies not mentioned in the other 3 objectives.

### *Lessons Learned: Airway Management for COVID-19 Patients*

*Faculty: Erik K. Nordquist, MD, FACEP*

Coming out of the war on COVID-19 we have been through many trial and errors with airway management.

- Discuss how intubation may have led to worse outcomes.
- Discuss the use of BIPAP for COVID patients
- Discuss the use of HFNC for COVID patients.
- Discuss silent hypoxemia.

### *Neurologic Manifestations of COVID-19: Don't Miss This Presentation*

*Faculty: Evie G. Marcolini, MD, FACEP*

Initial reports suggested that COVID-19 was a respiratory illness that presented with cough, shortness of breath and fever. Later research indicated that a substantial number of patients had neurologic manifestations of the illness. These less common presentations put both the patient and healthcare worker at risk. The speaker will review what is known about the neurologic manifestations and complications of COVID-19 using a case based format.

- Discuss the most common presentations of COVID patients.
- Discuss the potential neurologic manifestations of COVID-19.
- Review the appropriate diagnostic testing in patients with neurologic symptoms.
- Review optimizing PPE especially when there is an emergent condition in a presenting patient.

### *Beyond Intubation: ARDS in COVID Patients*

*Faculty: Roderick Fontenette, MD, FACEP*

Hypoxic respiratory failure is a challenge any emergency physician must be prepared for, especially in the era of COVID-19. Often initial ED management ends with placement of an endotracheal tube, however, what happens when the tube is in but your patient is still blue. This session will equip you with the ability to optimize your patients on the ventilator.

- Describe initial ventilator settings needed for COVID 19 patients.
- Describe settings on the ventilator that have been associated with improved outcomes for ARDS patients.
- List interventions, bedside ventilator changes, that can be made to improve refractory hypoxemia.

### *Combatting Violence at Home During a Pandemic*

*Faculty: Jennifer A. Newberry, MD, JD, FACEP*

Stay at home orders while designed to protect the populace being governed while it may have inadvertently placed some of our most vulnerable people at risk. Many of the factors known to exacerbate domestic violence and non-accidental trauma, for example job loss, financial stress, drug and alcohol use, are increased during stay-at-home orders while many of the services designed to combat violence at home unavailable. The speaker will discuss what is known regarding the impact of disasters and stay-at-home orders on domestic violence and review opportunities for society and healthcare workers to identify at risk individuals and intervene.

- Discuss the impact of stay-at-home orders during a disaster on domestic / intimate partner violence, and Non-accidental trauma.
- Review opportunities for emergency care providers and public health and to identify high risk individuals and intervene within the required system changes during the COVID-19 pandemic.
- Discuss utilization of social services within your community as well as state to ensure any at-risk patient or family has a resource to use.

### *Pediatric Patients and COVID: Carriers and Presentations of Disease*

*Faculty: Russ Horowitz, MD*

Pediatric patients do not manifest COVID as adult patients may. Fever, respiratory complaints, GI complaints will vary, Devising a testing strategy and treatment can be challenging to the provider, patient and family. Best practices will be presented along with data on the epidemiology of COVID and the experience of Pediatric EDs and Community Hospitals.

- Describe the epidemiology of pediatric manifestations of COVID.
- Recognize the presentations and understand the management of pediatric patients with COVID.
- Present optimal strategies for management of these patients in the era of COVID.
- Discuss disposition and outpatient follow up of these patients in the era of COVID.

### *Sweat the Small Stuff: Optimizing Bedside Care of the COVID Patient*

*Faculty: Elaine Rabin, MD, FACEP*

Planning for hospital impacts of mass casualty events are ingrained in our institutions' emergency management response plans. However, these efforts are typically aimed at managing patient populations. Bedside treatment of patients with COVID-19 can be complicated by circumstances that may not be thought of in the typical HICS planning sessions. Come hear from a front-line worker about unforeseen difficulties in the bedside treatment of these patients.

- Discuss and propose solutions for how specialty personnel shortages affect bedside treatment (e.g. lack of enough respiratory therapists for vent management).
- Discuss and propose solutions for how lack of or delays in ancillary services impact bedside patient care (e.g. not enough blood gas analyzers).
- Discuss how the makeup of the treatment team may vary due to lack of personnel resources.

### *Avoiding Intubation in COVID-19: What Works?*

*Faculty: Swaminatha Mahadevan, MD*

Early on during the COVID-19 pandemic recommendations were to intubate early to protect patients and providers. Experience taught us this may have been a deadly decision. The speaker will review the evidence behind avoiding intubation and critical tools emergency providers must know to optimize the outcome of their COVID-19 patients.

- Discuss the use of non-invasive positive pressure ventilation for COVID-19 patients.
- Review the evidence and effectiveness of prone positioning to improve oxygenation.

### *COVID: KD vs. MIS-C: OMG!*

*Faculty: Jeffrey R. Avner, MD, FAAP*

Caring for febrile pediatric patient is hard enough. Now with COVID the big challenge in these small patients is when to consider COVID versus other "more common" causes of fever. What strategies are there for you to optimize these patients? What is the most up to date and evidence based approach? How can you differentiate Multiple inflammatory syndrome in children and Kawasaki's disease? This course will provide direction on this endless looping road.

- Recognize the clinical and laboratory of MIS-C and Kawasaki's Disease
- Discuss and propose current algorithms to the approach to these febrile patients
- Review the literature that has led to the current approach to the febrile pediatric patient and how to parse out those that warrant further investigation and those that do not



## Courses by Track

### *Moral Injury in Healthcare Workers: The Aftermath of a Pandemic (COVID-19)*

*Faculty: Jay A. Kaplan, MD, FACEP*

Emergency physicians are fairly adept at employing a variety of coping mechanisms in order to treat patients in extremis. With COVID, in addition to worrying about our own family and friends, at work we are working with resource constraints and possibly choosing between our safety and the care and well being of our patients. When working in the crisis setting is replaced with the stillness of recovery, and we are able to feel and reflect, psychological scars and moral injury may be revealed. Learn recognition and treatment strategies for these trying situations.

- Recognize the signs of moral injury that require intervention in a colleague or yourself.
- Review a plan of action for emotional recovery that follows working the frontlines during a pandemic.
- Discuss strategies for recovering from moral injury.