Emergency Preparedness Considerations for COVID-19

Sepsis and septic shock are life-threatening conditions that can complicate respiratory illnesses caused by viruses such as COVID-19 and influenza. As your hospital revisits its emergency preparedness plan, it is important to consider readiness for addressing septic shock.

Sepsis is an important concern with COVID-19 and influenza.

- 60% of patients hospitalized with COVID-19 develop sepsis\(^1\)
- Septic shock is present in 70% of non-survivors\(^1\)
- Sepsis is present in 100% of non-survivors\(^1\)
- Sepsis is a common cause of death from influenza\(^2\)

Early and adequate intravenous fluid resuscitation for septic shock reduces risk of endotracheal intubation, decreases organ injury and hospital length of stay, and saves lives.\(^1,2,3\) Patients who receive a 30ml/kg fluid bolus early in their course of treatment have the lowest likelihood of requiring endotracheal intubation, lower mortality, and shorter ICU length of stay.\(^4\)

**LifeFlow** is a disposable, single patient use, portable device that can deliver a 500ml fluid bolus in <2 minutes.

- ideally suited for the anticipated large numbers of patients in contact isolation rooms
- offers user-titrated fluid administration, which facilitates rapid reversal of shock while preventing fluid overload for patients with severe respiratory illness.

**World Health Organization COVID-19 guidance recommends following standard therapy for septic shock, which includes adequate early fluid resuscitation targeted at the reversal of shock and hypotension:**\(^5\)

- 30ml/kg for adults
- 40-60 ml/kg in the first 1 hour for children

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