



SEPSIS

awareness

SUSPECT SEPSIS

In the United States alone, sepsis takes a life every two minutes. Quick identification and treatment can save lives.

One of our key areas of clinical focus is reducing sepsis mortality – a key metric that directly impacts the lives of our patients and the communities we serve. And one of our True North Statements relates to Sepsis – “we will deliver the highest quality, safest and most affordable health care services, exceeding expectations for every person we encounter.” To this end, while we did see improved sepsis mortality in 2018, **we need your help** to keep sepsis prevention and treatment top of mind.

What is Sepsis:

It's a sneaky, potentially life-threatening disease. It is the body's overwhelming and life-threatening response to infection that can lead to tissue damage, organ failure, and death.¹ It doesn't discriminate and can happen to anyone – young or old, healthy or ill. Sepsis is the 10th leading cause of death in the United States and every year, more than 270,000 people die from it^{1,2}, more than from prostate cancer, breast cancer and AIDS combined. One of every 2-3 deaths in a hospital are the result of sepsis.^{3,4} The most devastating part is that it's treatable, especially when it's caught early and treated properly. Eighty percent of sepsis deaths could be prevented with rapid diagnosis and treatment.¹

Assessing and Treating Sepsis:

All SSM Health hospitals have implemented a sepsis protocol and order set, based on the Centers for Medicare & Medicaid Services (CMS) sepsis core measure guidelines. Within this protocol, systemic inflammatory response syndrome (SIRS) criteria, signs of infection and indications for organ dysfunction are assessed.

- Rapid respirations
- Fever
- Elevated heart rate
- Elevated white blood cell count

If at least two SIRS criteria are met, along with signs of infection and indications for organ dysfunction, sepsis should be suspected, and the sepsis protocol and order set initiated. It is critical for multiple disciplines and departments to be communicating and collaborating using strong teamwork skills, to quickly identify and treat sepsis. This means the SEP 1 core measure bundle should be implemented:

Within three hours of presentation time:

- Antibiotics administered
- Blood culture collected
- Lactic acid collected
- Crystalloid bolus administered (fluids)

Within six hours of presentation time:

- A repeat lactic acid is collected, for severe sepsis presentation
- Vasopressors are administered, for septic shock presentation
- A repeat volume and tissue perfusion assessment (related to fluids) is done, for septic shock presentation

Severe sepsis = sepsis (two SIRS + infection/suspected infection) + one organ dysfunction within six hours of each other or documentation of “severe sepsis.”

Septic shock = severe sepsis + initial lactate \geq four and/or severe sepsis + persistent hypotension, and/or documentation of septic shock within six hours of severe sepsis presentation time.

Our data shows that patients who have completed the SEP1 core measure bundle have an almost 50% survival rate vs those that do not, and their length of stay decreases by one day.

For More Information

- Refer to the Center for Clinical Excellence and your ministry’s work in the Sepsis Improvement Campaign
- Visit the Sepsis Alliance website, www.sepsis.org. The Sepsis Alliance is the nation's leading sepsis advocacy organization for more information.
- Connect with a local member of your Sepsis Prevention team for questions about our practices at SSM Health. Knowing the signs of sepsis, and early onset of treatment, can save a life!

REFERENCES:

¹www.sepsis.org

²National Vital Statistics Reports, 2005

³Angus DC, Linde-Zwirble WT, Lidicker J, et al. Epidemiology of Severe Sepsis in the United States: Analysis of Incidence, Outcome and Associated Costs of Care. Crit Care Med 2001;29:1301-10

⁴Liu V, et al. JAMA, 2014:May 18th, online