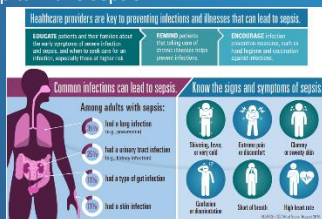


Nancy Fry RN, BSN, CNC, CEN; Dana Miller RN

- Sepsis is a complication caused by the body's overwhelming and life-threatening response to infection. It can lead to tissue damage, organ failure, and death. Sepsis is difficult to diagnose. It happens quickly and can be confused with other conditions early on. Sepsis is a medical emergency. Time matters. When sepsis is quickly recognized and treated, lives are saved.
- More than 1.5 million people get sepsis each year in the U.S according to the CDC
- About 250,000 Americans die from sepsis each year; one in three patients who die in a hospital have sepsis



To describe the initiatives of the Surviving Sepsis Campaign guidelines as well as discuss ED specific EBP initiatives implemented to improve sepsis bundle compliance and decrease severe sepsis and septic shock patient mortality.

**SHOCK**  
Severe  
Sepsis with  
persistent:  
Hypotensio  
Signs of end  
organ  
damage;  
Lactate >4  
mmol

**HOUR ONE BUNDLE: INITIAL RESUSCITATION FOR SEPSIS AND SEPTIC SHOCK (BEGIN IMMEDIATELY)**

- 1) Measure lactate level.<sup>a</sup>
- 2) Obtain blood cultures before administering antibiotics.
- 3) Administer broad-spectrum antibiotics.
- 4) Rapidly administer 30 mL/kg crystalloid for hypotensive or lactate  $\geq 4$  mmol/L.
- 5) Apply vasopressors if hypotensive during or after fluid resuscitation to maintain a mean arterial pressure  $\geq 65$  mm Hg.

<sup>a</sup>Permeable lactate if initial lactate elevated ( $\geq 2$  mmol/L).

- Hospital Sepsis Coordinator sends ED Coordinator emails with specific fallout information
- ED Coordinator sends personalized emails with fallout information and education to staff

[illegible]

- Improvement to sepsis three hour bundle compliance
- Decrease in patient mortality for both severe sepsis and septic shock

## Severe Sepsis Mortality

- Decreased from an average of 8.25% in 2015 (n≈unavailable) to 4.69% Jan 2017-May 2018 (n≈130)
  - Bundle compliance improved from an average of 55.67% to 66.81% for those time frames
- Septic Shock Mortality**
- Decreased from an average of 33.33% in 2015 (n≈unavailable) to 21.75% Jan 2017-May 2018 (n≈85.81)
  - Bundle compliance improved from an average of 63.08% to 73.44% for those time frames.

**Severe Sepsis Mortality**

Month	Mortality Percentage	Mortality Goal
Nov-16	10%	10%
Dec-16	10%	10%
Jan-17	10%	10%
Feb-17	13%	10%
Mar-17	13%	10%
Apr-17	8%	10%
May-17	5%	10%
Jun-17	0%	10%
Jul-17	8%	10%
Aug-17	0%	10%
Sep-17	10%	10%
Oct-17	10%	10%
Nov-17	13%	10%
Dec-17	10%	10%
Jan-18	7%	10%
Feb-18	7%	10%
Mar-18	4%	10%
Apr-18	0%	10%
May-18	0%	10%
Jun-18	0%	10%
Jul-18	0%	10%
Aug-18	0%	10%
Sep-18	0%	10%
Oct-18	0%	10%
Nov-18	0%	10%
Dec-18	0%	10%
Jan-19	0%	10%
Feb-19	0%	10%
Mar-19	0%	10%
Apr-19	0%	10%
May-19	0%	10%
Jun-19	0%	10%
Jul-19	0%	10%
Aug-19	0%	10%
Sep-19	0%	10%
Oct-19	0%	10%
Nov-19	0%	10%
Dec-19	0%	10%
Jan-20	0%	10%
Feb-20	0%	10%
Mar-20	0%	10%
Apr-20	0%	10%
May-20	0%	10%
Jun-20	0%	10%
Jul-20	0%	10%
Aug-20	0%	10%
Sep-20	0%	10%
Oct-20	0%	10%
Nov-20	0%	10%
Dec-20	0%	10%
Jan-21	0%	10%
Feb-21	0%	10%
Mar-21	0%	10%
Apr-21	0%	10%
May-21	0%	10%
Jun-21	0%	10%
Jul-21	0%	10%
Aug-21	0%	10%
Sep-21	0%	10%
Oct-21	0%	10%
Nov-21	0%	10%
Dec-21	0%	10%
Jan-22	0%	10%
Feb-22	0%	10%
Mar-22	0%	10%
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May-22	0%	10%
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Oct-25	0%	10%
Nov-25	0%	10%
Dec-25	0%	10%
Jan-26	0%	10%
Feb-26	0%	10%
Mar-26	0%	10%
Apr-26	0%	10%
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Mar-27	0%	10%
Apr-27	0%	10%
May-27	0%	10%
Jun-27	0%	10%
Jul-27	0%	10%
Aug-27	0%	10%
Sep-27	0%	10%
Oct-27	0%	10%
Nov-27	0%	10%
Dec-27	0%	10%
Jan-28	0%	10%
Feb-28	0%	10%
Mar-28	0%	10%
Apr-28	0%	10%
May-28	0%	10%
Jun-28	0%	10%
Jul-28	0%	10%
Aug-28	0%	10%
Sep-28	0%	10%
Oct-28	0%	10%
Nov-28	0%	10%
Dec-28	0%	10%
Jan-29	0%	10%

## REFERENCES

- [1] SSC Hour-1 Bundle. (2018). Retrieved May 20, 2018, from <http://www.survivingsepsis.org/Bundles/Pages/default.aspx>
- [2] Vital Signs. (2016, August 23). Retrieved May 19, 2018, from <https://www.cdc.gov/vitalsigns/sepsis/>
- \*Authors of this presentation have nothing to disclose concerning potential financial or personal relationships**