

ELEMENT VII

SEPSIS AWARENESS AND EDUCATION

LEARNING OBJECTIVES

At the conclusion of course work or training on this element, the learner will be able to:

- Describe the scope of the sepsis problem and the NYS Sepsis Improvement Initiative;
- Recognize the signs and symptoms of sepsis to identify and treat at-risk patients, both adult and pediatric, as early as possible;
- Understand the need for rapid evaluation and management in adults and children if sepsis is suspected;
- Identify common sources of sepsis;
- Educate patients and families on methods for preventing infections and illnesses that can lead to sepsis and on identifying the signs and symptoms of severe infections and when to seek care.

DEFINITIONS

Sepsis: the body's extreme response to an infection.

CONTENT OUTLINE

I. Sepsis-scope of the problem

- a. Sepsis is a life-threatening medical emergency that requires early recognition and intervention.
- b. Sepsis prevalence and mortality US, NYS

II. New York State Sepsis Improvement Initiative and Rory Staunton's Law

- a. Purpose
 - i. Early recognition of sepsis is the responsibility of all healthcare providers.
 1. Most sepsis cases are community-acquired
 2. 7 in 10 patients with sepsis had recently used healthcare services or had chronic conditions requiring frequent medical care.
 - a. Public Health Law § 239-a
 - b. Education Law § 6505-b
- b. Hospital regulations

- i. Rory's Regulations: 10 NYCRR 405.2 and 405.4 were implemented in 2013, and they require hospitals in New York State to adopt evidence-based protocols to ensure early diagnosis and treatment of sepsis.

III. Causes of Sepsis

- a. Development of sepsis following infection
 - i. Any infection can trigger sepsis
 - ii. There are populations at increased risk of developing sepsis
 - 1. Extremes of age, chronic conditions, immune suppressed
 - iii. Sites and sources of infections commonly associated with sepsis include lung, urinary tract, skin, and gut

IV. Early Recognition of Sepsis

- a. Manifestations of sepsis may be subtle and vary by types of infections and populations
- b. Signs and symptoms that may be associated with sepsis in persons with confirmed or suspected infection can include:
 - i. Altered mental state, shortness of breath, fever, clammy or sweaty skin, extreme pain or discomfort, high heart rate
 - ii. Signs and symptoms in children and the elderly
 - iii. Severe forms of sepsis including septic shock

V. Principles of Sepsis Treatment

- a. Prompt diagnosis and treatment are critical for optimal outcomes; there is increased morbidity/mortality with delayed recognition and response
- b. Recommended diagnostic modalities include blood cultures and other testing to identify source and site of infection and organ dysfunction.
- c. Recommended treatment of sepsis includes administration of appropriate intravenous (IV) antimicrobial therapy, with source identification and de-escalation of antibiotics as soon as feasible

VI. Patient Education and Prevention

- a. Preventing infection: hand hygiene, wound care, and vaccination
- b. Risk factors (High-risk patients)
- c. Warning signs and symptoms of sepsis
- d. Seeking immediate care for worsening infection and signs and symptoms of sepsis
- e. Giving relevant history and information to clinicians