



# **Surviving Sepsis Campaign**

## **Guidelines for Management of Severe Sepsis/Septic Shock**

### **An Overview**



# *Surviving Sepsis*

*Phase 1 Barcelona declaration*

*Phase 2 Evidence based guideline*

*Phase 3 Implementation and education*

# The Future: Sepsis Bundles

- Partnership with Institute of Healthcare Improvement
  - Key elements of guidelines identified
  - Failure modes defined
  - Goals established
- Metrics to establish baseline performance and to follow adherence and clinical outcomes

Metrics → Establish Baseline → Education → Performance Eval → Reinforcement → Performance Re-eval



# Severe Sepsis/Septic Shock Bundles

**6 hours**

**24 hours**

## **6 hour Severe Sepsis/Septic Shock Bundle**

- **Serum lactate measured.**
- **Blood cultures obtained prior to antibiotic administration.**
- **Broad-spectrum antibiotics administered within 3 hours of documented admission time.**
- **In the event of hypotension (SBP < 90, MAP < 70) or lactate > 4 mmol/L, initial fluid resuscitation with 20-40 ml of crystalloid (or colloid equivalent) per estimated kg of body weight.**

## 6 hour Severe Sepsis/Septic Shock Bundle

- Vasopressors employed for hypotension during and after initial fluid resuscitation.
- In the event of septic shock or lactate  $> 4$  mmol/L, CVP and ScvO<sub>2</sub> or SvO<sub>2</sub> measured.
- Inotropes (and/or PRBCs if hematocrit  $\leq 30\%$ ) delivered for ScvO<sub>2</sub>  $< 70\%$  or SvO<sub>2</sub>  $< 65\%$  if CVP  $\geq 8$  mmHg.

## 24-Hour Severe Sepsis and Septic Shock Bundle

- Glucose control maintained on average (or median)  $< 150$  mg/dl (8.3 mmol/L) .
- Drotrecogin alfa (activated) administered in accordance with hospital guidelines.
- Steroids given for septic shock requiring continued use of vasopressors.
- Adoption of a lung protective strategy with plateau pressures  $\leq 30$  cmH<sub>2</sub>O for mechanically ventilated patients.



A clinician, armed with the sepsis bundles, attacks the three heads of severe sepsis: hypotension, hypoperfusion and organ dysfunction. *Crit Care Med* 2004; 320(Suppl):S595-S597



**Actual title of painting is “Hercules Kills Cerberus,” by Renato Pettinato, 2001. Painting hangs in Zuccaro Place in Agira, Sicily, Italy. Used with permission of artist and the Rubolotto family.**



[www.survivingsepsis.org](http://www.survivingsepsis.org)



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