## **2014 SEPSIS Project**

- **Exclusion Criteria:** 
  - Less than 18 years of age
  - Pregnant
  - Prisoners
- Inclusion Criteria:
  - Known or suspected infection
  - 18 years of age or older
- Process
  - o Check a Lactic acid in patients with a known or suspected infection
  - o Complete a **finger stick** to obtain the lactic acid result
  - Document the result under "Interventions" in the PCR. If this is not documented under interventions we will not be able to generate the report
  - o If the lactic acid is 2.0 or greater
    - Treatment
      - For patients who are hemodynamically <u>stable</u>:
        - Administer 1 liter of fluid-you do not need orders from medical command
        - For patients who are hemodynamically <u>unstable</u>:
          - Administer 20 cc/kg bolus to correct hypotension and reassess-You do not need orders from medical command
          - IT IS IMPERATIVE ATHAT YOU DOCUMENT HOW MUCH
            FLUID THE PATIENT RECEIVED IN YOUR CARE IN THE PCR
    - If the lactic acid is 4.0 or greater with a known or suspected infection inform Medical Command this patient is a "Sepsis Alert"
      - Medical Command will then pass this information along to the receiving facility
        - If patient is transported to CAMC General or CAMC Memorial they should have a bed awaiting your arrival or shortly thereafter
    - Treatment-administer 20cc/kg fluid bolus and reassess
    - Always check blood sugar and temperature and record in the PCR
    - PLEASE BE SURE TO DOCUMENT HOW MUCH FLUID WAS ADMINSITERED BY EMS SO
      WE CAN PROVE THAT EARLY TREATMENT AND RECOGNITION MAKES A DIFFERENCE IN
      THE OUTCOME OF THE PATIENT

It is imperative that the PCR be completed by the end of your shift. CAMC has to get consent on these patients within the first 24 hours of arrival or they cannot be enrolled into the study.

## Reminders

- Infection-A foreign invader into the body
- ♣ Sepsis-A known or suspected infection with 2 out of the 4 SIRS criteria
- Severe sepsis-(Affecting distant organs)
  - Possible signs
    - New onset of confusion/ALOC
    - Low O2 sats if the primary source is not the lungs
    - A lactic acid of 2.0 to 3.9
- Septic shock
  - A lactic acid of 4.0 or greater no matter what the vitals are or:
  - The patient is hypotensive and unresponsive to fluid challenges and now requires a vasopressor

## **♣** SIRS-Systemic Inflammatory Response Syndrome

- Heart Rate > 90
- Respiratory rate > 20
  - ETCO2 less than 31
- Temperature Greater than 100.4F or less than 96.8F or greater than 38 C or less than 36 C
- Elevated blood sugar 120 or greater in the Nondiabetic
- WBC-White blood cell count less than 4,000 or greater than 12,000
  - Bands greater than 10%-immature WBC's
- Not all patients will meet the SIRS criteria
  - Patients on beta blockers, calcium channel blockers cannot develop tachycardia like patients who are not on these types of drugs
  - o Elderly patients cannot generate a temperature like others can