Sepsis – What You Need to Know

What is sepsis? Sepsis is a serious medical condition caused by bloodstream infection with biologic agents (most commonly, bacterial infection and toxic products certain bacteria make) resulting in fever, tachycardia, vasodilation (often with hypotension), and activation of many mediators of inflammation. Vasodilation and hypotension may cause damage to major organs by depriving them of nutrients and oxygen. In severe cases, one or more organ systems can fail. If untreated, or if the infection is overwhelming, the patient can potentially develop multiple organ failures (often characterized by shock with either respiratory failure and/or kidney failure, and/or heart failure), and die. **Sepsis is one of the leading causes of death in the U.S.** It arises unpredictably and can progress rapidly, usually requiring treatment in hospital intensive care units. People with chronic kidney disease are at increased risk for sepsis.

What are the symptoms of sepsis? Common symptoms are fever, chills, rapid breathing and heart rate, prostration sometimes accompanied by localized pain, and occasionally confusion and disorientation. Many of these symptoms, such as fever and difficulty breathing, can mimic other infectious and non-infectious conditions.

How is sepsis diagnosed? Physicians diagnose sepsis by doing a careful history and physical examination, noting important physical signs such as fever, increased heart and respiratory rates, and searching for a source of infection if it can be found on exam. Evaluation also entails complete blood counts (looking for elevated WBC); blood cultures, and other body fluid cultures from where the patient’s history and physical suggests sepsis might potentially have its source (for example, sputum, urine, cerebrospinal fluid, abscess aspiration, etc.). Radiologic studies (for example, a chest X-ray in a patient with pulmonary findings on exam), or a CT scan (of an area potentially involving a source of sepsis; for example, an abdominal CT in a patient with serious findings on abdominal exam) can also help identify the site of infection.

More information about sepsis is available at the National Institutes of Health website: [https://www.nigms.nih.gov/Education/pages/factsheet_sepsis.aspx](https://www.nigms.nih.gov/Education/pages/factsheet_sepsis.aspx)

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**Network Announcements**

**Staff Announcement** – The Network welcomes new Quality Improvement and Education Coordinators: Derek Taylor, RN and Jewel Peterman, RN, BSN.

Derek brings twenty-six years of experience meeting and exceeding customer expectations: 8 years in Nephrology, and eighteen years working in the airline industry as a Customer Service Director. Derek has served as a Dialysis Clinic Manager, Charge Nurse, Vaccination Manager and Safety Manager. He is the chairperson of the Clover Park Technical College Hemodialysis Program Advisory Committee, and is a member of ANNA and NRAA.

Jewel brings a background working with non-profits addressing the needs of underserved populations and business operations. Her nursing experience includes acute hospital care, the LA County jail system, and as Clinical Coordinator for ICHD R & D serving inner East Los Angeles.

**Blog** – To receive the latest information impacting the kidney community, sign up for our ESRD Network blog posts at [https://nwrnbulletins.wordpress.com/](https://nwrnbulletins.wordpress.com/) - simply click “Follow” in the lower right corner.