

## Concept Map Worksheet

DESCRIBE DISEASE PROCESS AFFECTING PATIENT  
(INCLUDE PATHOPHYSIOLOGY OF DISEASE PROCESS)

Sepsis is a life-threatening medical emergency. It can be described as the body's response to an infection (CDC, 2022). The infections that can lead to sepsis are usually bacterial infections that trigger a chain reaction through the body (CDC, 2022). As a result of a localized inflammatory response becoming systemic, capillary permeability increases and hypotension occurs. Fluid and immune mediators are released, causing blood flow to organs and tissues to be compromised. Thus, the immunologic overactivity causes circulatory dysregulation (HealthCom, 2023). These infections commonly occur in the lungs, urinary tract, or gastrointestinal tract (CDC, 2022). Some risk factors for sepsis are elderly people, weakened immune systems, and pre-existing chronic conditions (CDC, 2022). Symptoms of sepsis include tachycardia, fever, confusion, shortness of breath, etc. (CDC, 2022).

DIAGNOSTIC TESTS (REASON FOR TEST AND RESULTS)	PATIENT INFORMATION	ANTICIPATED PHYSICAL FINDINGS
<ul style="list-style-type: none"> <li>- Measure lactate level.                             <ul style="list-style-type: none"> <li>➤ When organs and muscles do not have adequate oxygen supply they release lactic acid. An increased lactic acid level can indicate there is an infection (Yale Medicine, 2023).</li> </ul> </li> <li>- White blood cells.                             <ul style="list-style-type: none"> <li>➤ Increased WBCs are a sign infection is present (Yale Medicine, 2023).</li> </ul> </li> <li>- Obtain blood cultures.                             <ul style="list-style-type: none"> <li>➤ A blood culture aims to identify which type of bacteria caused an infection in the blood (Sepsis Alliance, 2023).</li> </ul> </li> <li>- Urinalysis/Urine Culture.                             <ul style="list-style-type: none"> <li>➤ This will identify if there is an infection present and what type of bacteria it is (Sepsis Alliance, 2023).</li> </ul> </li> </ul>	<p>Peter Daniels                      Gender: M                      Age: 40                      Allergies: NKDA                      Primary Problem: Pt arrives to ED after three weeks of "viral type" illness. Fatigue and malaise x3 weeks. Pt reports fevers 101-104 F x1 week. Pt has been taking Ibuprophen and Tylenol q4-6 hours to control fever and muscle aches.                      Past Medical History: States he is currently "being worked up" for hypertension.                      Primary Medical Diagnosis: rule out viral infection.</p>	<p>T &gt;37.5                      Tachycardic                      Dyspnea                      Diaphoretic                      Confusion/Disorientation                      Pain/Discomfort                      Decreased urine output                      Increased lactate                      Increased leukocytes                      + blood cultures and/or + urine cultures</p>

## ANTICIPATED NURSING INTERVENTIONS

- Monitor vital signs.
- Obtain bloodwork / blood cultures.
- Obtain urine sample.
- Ensure IV access.
- Administer fluids (ie. Normal saline) as prescribed.
- Administer antibiotic as prescribed.
- Administer Ibuprophen or Tylenol.
- Administer oxygen if needed.
- Measure ins and outs.
- Assess lung sounds.
- ECG.
- Chest x-ray.
- Urinary ultrasound.

## References

- CDC. 2022. *What is sepsis?* <https://www.cdc.gov/sepsis/what-is-sepsis.html#:~:text=Sepsis%20is%20the%20body%27s%20extreme,%2C%20skin%2C%20or%20gastrointestinal%20tract>.
- HealthCom. 2023. *Helping patients survive sepsis.* <https://www.myamericannurse.com/helping-patients-survive-sepsis/#:~:text=Pathophysiology,flow%20to%20organs%20and%20tissues>.
- Sepsis Alliance. 2023. *Testing for sepsis.* <https://www.sepsis.org/sepsis-basics/testing-for-sepsis/#:~:text=Blood%20culture%3A%20A%20blood%20culture,results%20of%20a%20blood%20culture>.
- Yale Medicine. 2023. *Sepsis.* <https://www.yalemedicine.org/conditions/sepsis>