* Sepsis arises when the body’s response to an infection injures its own tissues and organs, potentially leading to death or significant morbidity.
* The body normally releases chemicals into the bloodstream to fight an infection. Sepsis occurs when the body's response to these chemicals is out of balance, triggering changes that can damage multiple organ systems.
* Sepsis is defined as a clinical syndrome in which patients have an infection that is accompanied by an extreme systemic response.
* Sepsis of sufficient severity that the function of major organ systems in the body (such as heart, kidney, brain, and others) is impaired is referred to as “severe sepsis.”
* Patients with severe sepsis that have continued organ system impairment and/or low blood pressure that does not respond to treatment with adequate fluid replacement are considered to be in “septic shock.”
* The combination of early detection of sepsis coupled with timely, appropriate interventions can significantly improve the chances of survival for patients with all types of sepsis.
* Sepsis ranges from less to more severe. As sepsis worsens, blood flow to vital organs, such as your brain, heart and kidneys, becomes impaired.
* Sepsis can also cause blood clots to form in your organs and in your arms, legs, fingers and toes — leading to varying degrees of organ failure and tissue death (gangrene).
* Causes:

1. Bacterial, viral or fungal infection due to knee wound and burns.
2. [appendicitis](https://www.webmd.com/digestive-disorders/digestive-diseases-appendicitis), [pneumonia](https://www.webmd.com/lung/tc/pneumonia-topic-overview), [meningitis](https://www.webmd.com/children/understanding-meningitis-basics), or a [urinary tract infection](https://www.webmd.com/women/guide/your-guide-urinary-tract-infections), you’re also at risk.
3. Bone infection called osteomyelitis
4. Pneumonia
5. Infection of digestive system (stomach and colon)
6. Bloodstream infection

* Who are affected by sepsis:

1. Elderly people
2. Pregnant women
3. Neonates (new born child)
4. Hospitalized patients
5. People with low immune system due to illness like HIV/AIDS, cancer, liver cirrhosis, kidney disease and diabetes
6. People who take drugs(steroids) that suppresses the immune system

* Symptoms:

1. Rapid breathing (higher than or equal to 22 breaths a minute)
2. [Fever and chills](https://www.webmd.com/first-aid/fevers-causes-symptoms-treatments)
3. Very low [body temperature](https://www.webmd.com/first-aid/body-temperature)
4. Peeing less than normal
5. Rapid [pulse](https://www.webmd.com/heart-disease/pulse-measurement)
6. [Nausea and vomiting](https://www.webmd.com/digestive-disorders/digestive-diseases-nausea-vomiting)
7. [Diarrhea](https://www.webmd.com/digestive-disorders/digestive-diseases-diarrhea)

* Prevention:

1. Prevention of microbial transmission and infection.
2. Personal hygiene and sanitation like washing hands and bathing regularly.
3. Vaccines (<https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html>)
4. Water, air, sanitation and hygiene (WASH) improvements in community
5. Cleaning wounds