

Sepsis Pathophysiology Cheat Sheet

Hey there, friend!

Thanks for downloading this cheat sheet!

Keep it handy when you go to clinical, skills lab, lecture class, or any other time you need to remember or study the pathophysiology of sepsis, septic shock, or multiple organ dysfunction syndrome (MODS).

To make learning the pathophysiology of sepsis easier for you, I have broken it down into 7, easy-to-follow, steps for you.

Please note: these are not "official" steps, I just put it together this way to make it easier for you to learn. :)

[And if you need more help with pathophysiology, be sure to check out this playlist on YouTube.](#)

Thanks for being here, friend! And thanks for allowing me to help you along your nursing school journey.

All my best,
Christina

Sepsis Pathophysiology

Cheat Sheet

PATHOPHYSIOLOGY OF SEPSIS:

Step #1: The body's immune response is triggered

The body has been invaded by a pathogen (bacteria, virus, fungi, etc.), which causes the body's immune system to activate.

Step #2: White blood cells come to the rescue

The immune system will send white blood cells to kill the invading pathogens. These white blood cells carry weapons called inflammatory mediators and cytokines (things like interleukins, tumor necrosis factor, interferons, and histamine).

Step #3: Vasodilation, capillary leak, and blood clotting

The white blood cells release these inflammatory mediators and cytokines.

When these weapons are released, it causes 3 things to happen in the body:

1. The blood vessels dilate (vasodilation)
2. The small blood capillaries become leaky (capillary leak)
3. Tiny blood clots form throughout the body

These 3 factors decrease the blood's ability to get to the organs.

Step #4: There is not enough blood flow to the organs

Because of all the vasodilation, capillary leak, and blood clotting, the blood is not able to get to where it needs to go - the organs!

Step #5: Metabolic acidosis

When the organs don't get the blood they need, they can't get rid of the waste products that build up in the body. Plus, the kidneys can't make enough bicarbonate to balance out the pH.

Over time, the blood becomes more and more acidic, leading to metabolic acidosis.

Step #6: Septic shock

A patient is considered to be in septic shock if they have received a full fluid resuscitation (30 mL of fluid per kilogram of body weight), but their blood pressure is not responding.

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Step #7: Multiple organ dysfunction syndrome (MODS)

MODS occurs when 2 or more of the patient's organs have stopped working properly. As sepsis continues, and the organs don't get the blood flow they need, they start to fail.

FINAL THOUGHTS...

I know sepsis and all the other med-surg disorders can be difficult to understand.

But remember, friend, you know more than you think you do! And you will absolutely PASS nursing school. Believe in yourself!

[And if you want some great study tips to help you learn med-surg faster, check out these videos here.](#)