

# SEPSIS FROM VIRAL INFECTIONS

## Almost any virus can cause sepsis<sup>1</sup>

### How?

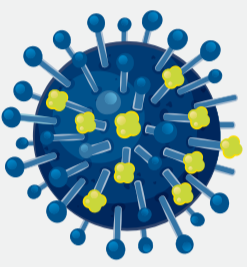
Viruses “hijack” normal, living cells in your body and use these cells to replicate.<sup>1</sup>

### However...

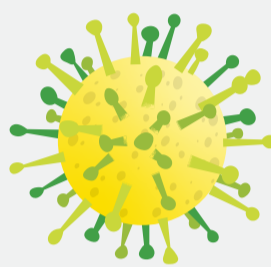
Viral sepsis is very rare.<sup>2</sup>



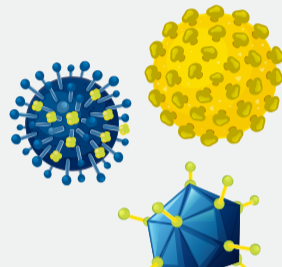
Some of the **most common** viral infections:<sup>1</sup>



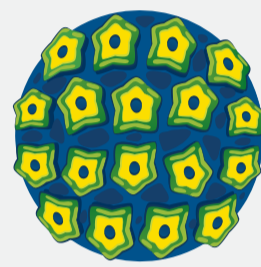
INFLUENZA



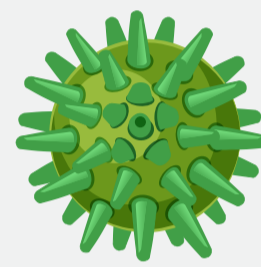
MENINGITIS



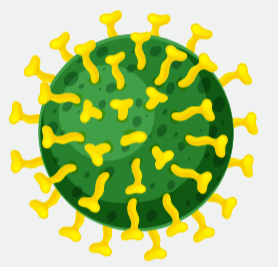
PNEUMONIA



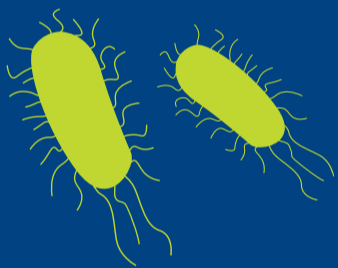
HPV



HERPES



ROTAVIRUS



### Fast Fact:

Viruses only contribute to **~1% of documented sepsis cases.**<sup>2</sup>

Which viruses are a leading cause of sepsis?

### INFLUENZA VIRUSES are a major cause of severe infection<sup>2</sup>

About 60% of mortality from seasonal influenza occurs in people older than 65 years of age.<sup>2</sup>

Influenza A and B viruses cause seasonal and non-seasonal outbreaks worldwide.<sup>2</sup>

#### Symptoms Include:<sup>4</sup>




-  Fever
-  Cough
-  Runny Nose

### DENGUE VIRUSES

are a leading cause of sepsis in some tropical countries<sup>2</sup>

Dengue virus is one of the most widespread viruses transmitted by mosquitos.<sup>2</sup>

#### Symptoms Include:<sup>4</sup>

-  Fever
-  Severe Headache
-  Joint/Muscle Pain

### HERPES

is the leading cause of NEONATAL SEPSIS<sup>2</sup>

### Fast Fact:

In newborns, Herpes simplex virus (HSV) can cause three types of disease: skin, eye and mouth disease, encephalitis, and disseminated disease. **Disseminated HSV disease is the most severe form of HSV infection, with a case fatality rate as high as 29%.<sup>2</sup>**



**Viral sepsis may be under-diagnosed** if diagnostic tests for viruses are not performed.<sup>2</sup>

REFERENCES:

1. **Viral Infections.** Sepsis Alliance. Updated July 11, 2019. <https://www.sepsis.org/sepsisand/viral-infections/>
2. Lin GL, McGinley JP, Drysdale SB, Pollard AJ. **Epidemiology and Immune Pathogenesis of Viral Sepsis.** *Front Immunol.* 2018 Sep 27;9:2147. doi: 10.3389/fimmu.2018.02147. PMID: 30319615; PMCID: PMC6170629.
3. **Dengue - Symptoms and Treatment.** Centers for Disease Control and Prevention. Last reviewed May 3, 2019. <https://www.cdc.gov/dengue/symptoms/index.html>
4. **Seasonal Influenza - Flu Symptoms & Complications.** Centers for Disease Control and Prevention. Last reviewed September 5, 2019. <https://www.cdc.gov/flu/symptoms/symptoms.html>