

SOLVING SEPSIS

TRANSFORMING HEALTH SECURITY

DIVISION OF RESEARCH, INNOVATION, AND VENTURES (DRIVE) | DRIVE.HHS.GOV | SOLVINGSEPSIS@HHS.GOV

WHAT IS SEPSIS?

You or someone you care about will likely get sepsis in your lifetime.

A potentially life-threatening medical emergency, sepsis is the body's extreme response to an infection. All roads can lead to sepsis. It can arise from any infection that triggers a chain reaction throughout the body. To be prepared against health security threats, we need to address sepsis directly. Without timely treatment, sepsis can rapidly lead to tissue damage, organ failure, and even death.

At least 1.7 million adults in the U.S. develop sepsis each year. That's more than the number of people who have heart attacks and strokes combined.

WHAT SOLVING SEPSIS IS DOING

The Solving Sepsis Program is committed to a multi-pronged approach to combat sepsis.

Greater than 80% of patients that develop sepsis acquire it in the community. For every hour appropriate treatment is delayed, the likelihood of death increases. To ensure everyone gets the right care

at the right time, we are addressing the entire continuum of care of a sepsis patient — from early pre-hospital interactions with healthcare providers, through hospital care and discharge — seeking innovative interventions at each step to reduce sepsis mortality.

We are leading change by forming innovative and critical partnerships across the U.S. government and with external partners to take a systems approach towards solving pediatric and adult sepsis through the development of the following products:

- **Diagnostics, medical devices, and wearables** that can predict and identify sepsis — for use in physician offices, emergency rooms, hospital wards, nursing facilities, and even the home.
- **Software** that uses artificial intelligence/machine learning to monitor, predict, diagnose, and prognosticate trajectory of sepsis in the pre-hospital, inpatient, and post-discharge settings.
- **Precision medicine treatment** approaches and clinical management plans that harness large-scale data to address the complex nature of sepsis.
- **Training** to raise awareness and educate on sepsis among healthcare professionals and promote the use of new technologies in clinical settings.

More than 1.7 million people

develop sepsis each year in the U.S. alone

Approximately 270,000 Americans

die each year due to sepsis

1 out of 3 patients

who die in the hospital have sepsis

86.8% of sepsis

cases were present on admission to the hospital

More than **\$62 billion** is spent on sepsis healthcare costs .

<https://www.cdc.gov/sepsis/datareports/index.html>

Buchman TG, Simpson SQ, Sciarretta KL, et al: Sepsis Among Medicare Beneficiaries: 3. The Methods, Models, and Forecasts of Sepsis, 2012-2018. Crit Care Med 2020; 48:302-318

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