

*By Marianne Udow-Phillips and Theodore J. Iwashyna Detroit Free Press guest writers Filed Under Opinion Commentary
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Today, in the United States, more than half of all hospital deaths are from something that most people have never heard of: [severe sepsis](#). That is the medical term for an overwhelming infection. Many more people die of sepsis than die of [prostate cancer and breast cancer combined](#). From 2000 through 2010, deaths from sepsis increased by 17% while deaths from other causes, such as heart disease and cancer, declined.

Indeed, the rise in hospital deaths from sepsis is in part because of a decline in the death rate from these other diseases: people are surviving other serious diseases, but in a weakened condition that makes them more vulnerable to sepsis. Today's challenge is to do more to recognize and treat sepsis earlier — when it is most treatable.

The rise in the proportion of deaths in hospitals from sepsis calls for public health and public policy action. Michigan can become a leader in sepsis diagnosis and treatment, including setting statewide standards of care.

Sepsis is caused by an overwhelming immune response to infection. Immune chemicals released into the blood in response to infection trigger widespread inflammation that leads to blood clots, leaky blood vessels and damage to vital organs. In the worst cases, the heart and lungs can weaken, organs can fail and patients can go into septic shock and die.

Sepsis is most commonly caused by bacteria that have infected the lungs, abdomen or urinary tract. Prompt diagnosis and treatment (usually with antibiotics and large amounts of intravenous fluids) is essential to survival. Once shock has set in, even a single hour delay in appropriate treatment can mean a 7% rise in mortality.

Policy leadership is essential to both increasing research and disseminating best practices in diagnosis and treatment. We need to fund pilot projects and evaluate innovative models of sepsis care in Michigan hospitals. These models need to integrate the emergency department, intensive care unit and other inpatient units to ensure patients get the right care wherever they are. Policymakers can convene hospitals, insurers, EMS and consumer groups to develop systematic, coordinated responses to severe infections.

Policy leadership has always been important in advancing public health and treatment of disease. As an example, our state's policy leadership built the statewide trauma system we have today. In 2001, the Statewide Trauma Care Commission was created and concluded that Michigan's trauma system was sorely lacking. By 2004, the [Michigan Trauma System Plan](#) was created. Patients across our state are benefiting every day from this coordinated approach to reducing deaths from trauma — the Centers for Disease Control and Prevention has held up Michigan as a [model of success](#).

What the state did for trauma systems, it can do for sepsis. The development of the comprehensive trauma system in Michigan was a 20-year journey. We cannot wait that long to improve the care of patients with sepsis. It is time to start now.

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