

August 20, 2018

The Honorable Thomas M. Middleton

Chair

Senate Finance Committee

3 East Miller Senate Office Building

Annapolis, MD 21401-1991

The Honorable Shane E. Pendergrass

Chair

House Health and Government Operations Committee

241 House Office Building

Annapolis, MD 21401-1991

Re:

House Bill 1467 (Chapter 489) / Senate Bill 574 (Chapter 490), Acts of 2018 -

Report on the Sepsis Public Awareness Campaign Workgroup

Dear President Miller, Speaker Busch, Chair Middleton, and Chair Pendergrass:

Pursuant to House Bill 1467 (Chapter 489) / Senate Bill 574 (Chapter 490), Acts of 2018, and in accordance with §2-1246 of the State Government Article, the Sepsis Public Awareness Campaign Workgroup submits this legislative report on the development of a sepsis public awareness campaign.

Thank you for your interest in preventing sepsis fatalities in Maryland. If you should have any questions about this report, please contact the Prevention and Health Promotion Administration at (410) 767-5047.

Sincerely.

Lucy Wilson, MD, ScM

Chair

Enclosure

cc:

Robert Neall, Secretary, Maryland Department of Health

Howard Haft, MD, MMM, CPE, FACPE, Deputy Secretary, Public Health Services

Webster Ye, JD, Director, Office of Governmental Affairs

Donna Gugel, MHS, Director, Prevention and Health Promotion Administration

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Executive Summary

This report is a summary of the sepsis public awareness campaign created pursuant to Chapter 489 of the Acts of 2018 (HB 1467 / SB 574). The Secretary of Health has established a Sepsis Public Awareness Campaign Workgroup (Workgroup). The Workgroup is charged with: (1) developing a public awareness campaign on sepsis awareness and prevention; (2) identifying, reviewing, and evaluating methods for disseminating information to the public about sepsis; and (3) identifying cost-effective methods for disseminating information to the public about sepsis.

The Workgroup met two times during 2018, on July 9, 2018 and July 25, 2018. At these meetings, the Workgroup discussed the necessary components of the public awareness campaign, the target audience, sepsis awareness resources, and cost-effective methods to disseminate information. The Workgroup also discussed future sepsis awareness efforts that should be considered including a healthcare provider education campaign, and a sepsis curriculum for school-aged children.

Major recommendations from the Workgroup on a Sepsis Public Awareness Campaign include the following:

- 1. <u>Messaging</u>: The core messaging should define sepsis in layman's terms, explain why the public needs to know about sepsis, and educate the public on how to quickly recognize symptoms and get emergency medical care.
- 2. <u>Resources</u>: Because there are existing available sepsis public awareness resources, it is not necessary to create new materials. Some sources with existing resources available include the Centers for Disease Control and Prevention, the Sepsis Alliance, MedStar Health, and the Rory Staunton Foundation. Resources available include resources that provide information on what sepsis is, the symptoms of sepsis, sepsis prevention, and sepsis in children, as well as testimonials from sepsis survivors and family members of sepsis patients.
- 3. <u>Cost-effective Methods</u>: Cost effective methods identified to disseminate sepsis public awareness resources include: participating in Sepsis Awareness Month, creating a website, requesting a proclamation from the Governor's Office, coordinating with the Maryland State Department of Education, coordinating with the healthcare community, issuing press releases, social media posts, arranging a speakers' bureau, locating a volunteer celebrity spokesperson, partnering with community organizations, and partnering with local elected officials.

Workgroup Members

The Maryland Department of Health would like to thank the volunteer Sepsis Public Awareness Workgroup members for their time and energy dedicated to this important effort to increase public awareness of sepsis:

Name	Position on Workgroup
Cheryl Douglass	Sepsis survivor
James L. Eure	Sepsis survivor
Chad Orton	Sepsis family member
Jean Murray	Representative of hospital (Anne Arundel Medical Center)
Sharon Powell	Representative of hospital (Frederick Regional Health System)
Stefanie Gilbert	Licensed emergency medicine physician (Shady Grove Adventist Hospital)
Sara Vazer	Licensed primary care physician
Charles Callahan	Licensed pediatrician (University of Maryland Medical Center)
Patricia Hall	Representative of a local health department (St. Mary's County Health
	Department)
Robert Imhoff	Representative of the Maryland Patient Safety Center
Patricia Travis	Representative of the Maryland Nurses Association
Alicia Mezu	Representative from the Maryland State Department of Education
Lucy Wilson (chair)	Representative from the Maryland Department of Health
Jeanne DeCosmo	Infection control professional (MedStar Health)
Nikki Laska	Individual with expertise in public communication (Maryland Department of
	Health)

Introduction

Sepsis is a complication of an infection that can be life-threatening. It occurs when the body's immune response to an infection triggers reactions that can damage organ systems. Early treatment improves outcomes, but if untreated, sepsis can lead to death.

Sepsis is a leading cause of deaths in hospitals; it affects 1.5 million people each year in the United States and approximately 250,000 Americans die from sepsis each year. Annually, sepsis kills more Americans than breast cancer, prostate cancer, and acquired immunodeficiency syndrome (AIDS) combined, but the 2017 Sepsis Alliance Annual Awareness survey showed that less than 1 percent of respondents knew the signs and symptoms of sepsis. This discrepancy between the significant impact of sepsis on Americans and low levels of public knowledge about sepsis reveals the need to increase public awareness about this disease.

In Chapter 489 of the Acts of 2018 (HB 1467 / SB 574), the General Assembly directed the Secretary of the Maryland Department of Health to establish a Sepsis Public Awareness Campaign Workgroup. The Workgroup is charged with: (1) developing a public awareness campaign on sepsis awareness and prevention; (2) identifying, reviewing, and evaluating methods for disseminating information to the public about sepsis; and (3) identifying cost-effective methods for disseminating information to the public about sepsis.

Workgroup Meetings

The Workgroup held two meetings; the first on July 9, 2018 and the second on July 25, 2018. Both meetings were held at the Maryland Patient Safety Center offices in Elkridge, MD, with a conference call line provided.

At the first meeting, the Workgroup discussed the roles and duties of the Workgroup prescribed in HB 1467 / SB 574 "Public Health—Sepsis Public Awareness Campaign Workgroup," the necessary components of the public awareness campaign, the target audience, sepsis awareness resources, and cost-effective methods to disseminate information.

At the second meeting, the Workgroup finalized recommendations on messaging, resources, and cost-effective methods to disseminate materials for a sepsis public awareness campaign. The Workgroup also discussed some future efforts that should be considered to improve sepsis awareness and outcomes.

Public Awareness Campaign Recommendations

The Workgroup discussed public awareness campaign messaging, resources, and cost-effective methods to disseminate information for the Sepsis Public Awareness Campaign (the Campaign).

¹ Centers for Disease Control and Prevention, "Data & Reports", 20 July 2018, Division of Healthcare Quality Promotion, 26 July 2018 https://www.cdc.gov/sepsis/datareports/index.html.

² Durning, Marijke Vroomen, "Educating the Public About Sepsis", 29 September 2017, CDC Safe Healthcare Blog, 26 July 2018 https://blogs.cdc.gov/safehealthcare/educating-the-public-about-sepsis/>.

MESSAGING

Similar prior public health awareness campaigns such as those for stroke and heart attack were used as models and best practice for sepsis awareness. The core messaging of the Campaign should define sepsis in layman's terms, explain why the public needs to know about sepsis, and educate the public on how to quickly recognize sepsis symptoms and get emergency medical care. Though the Campaign's audience is the general public, the Campaign should engage with healthcare providers and develop a partnership with them to ensure information being shared with the public will allow the public to communicate effectively with healthcare providers.

<u>Definition of Sepsis</u>

The Campaign should include a definition of sepsis appropriate for the public that emphasizes urgency, uses plain language at a low reading level (a 6th grade reading level is recommended based on guidelines from healthcare organizations), and emphasizes that most cases are not hospital acquired and can occur in otherwise healthy individuals of all ages.³ Phrases such as the following should be used to define sepsis for the public:

- "Sepsis is the body's deadly response to an infection"
- "Sepsis can kill you if you don't get treatment fast"
- "The body attacks its own organs and tissues, which can lead to tissue damage, organ failure, and death"
- "Sepsis is a medical emergency"
- "Sepsis can impact anyone—young or old, sick or healthy"

Clinical definitions and guidelines were discussed by the Workgroup; however, it was determined that these definitions are best directed towards the healthcare provider audiences that they are intended for.^{4, 5, 6, 7, 8, 9}

Risks Associated with Sepsis

Sepsis occurs frequently, and the Campaign should inform the public that sepsis is a leading cause of death using language such as the following: "Sepsis happens a lot. It kills more people

³ Badarudeen S and Sabharwal S. Assessing Readability of Patient Education Materials: Current Role in Orthopaedics. *Clin Orthop Relat Res.* 2010; 468(10):2572-2580.

⁴ Singer M, Deutschman CS, Seymour CW, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA*. 2016;315(8):801-810.

⁵ Health Research and Educational Trust, "Sepsis", 27 July 2018 http://www.hret-hiin.org/topics/sepsis.shtml.

⁶ Levy MM, Evans LE, Rhodes A. The Surviving Sepsis Campaign Bundle: 2018 Updated. *Intensive Care Med.* 2018;44(6):925-928.

⁷ Rhodes A, Evans LE, Alhazzani W, et al. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016. *Critical Care Medicine*. 2017;45(3):486-552

⁸ Surviving Sepsis Campaign Executive Committee, "Surviving Sepsis Campaign Responds to Sepsis-3", 1 March 2016, Surviving Sepsis Campaign, 27 July 2018 < http://www.survivingsepsis.org/SiteCollectionDocuments/SSC-Statements-Sepsis-Definitions-3-2016.pdf>.

⁹ Seymour CW, Gesten F, Prescott HC, et al. Time to Treatment and Mortality during Mandated Emergency Care for Sepsis. *The New England Journal of Medicine*. 2017;376:2235-2244.

than breast cancer, AIDS, and prostate cancer combined." Additionally, messaging should emphasize that sepsis is deadly and that time is an important factor using graphics such as the "IT'S ABOUT TIME" messaging from the Sepsis Alliance (see Appendix, Figure 1). In addition to the risk of death, the Campaign should include information about the long-term consequences for sepsis survivors. Many survivors become amputees or suffer from lifelong organ dysfunction.

How Sepsis May Occur

Sepsis occurs in individuals who have an infection, and it can occur at home or in a health-care setting. Because some members of the public perceive sepsis as only a hospital-acquired condition, the materials used in the Campaign should emphasize that sepsis begins outside of healthcare settings for nearly 80 percent of patients. Additionally, the Campaign should inform the public that anyone can get sepsis, but also that there are populations that are more susceptible to sepsis such as infants and seniors, people with chronic and acute illnesses, and people with impaired immune systems.

Signs and Symptoms of Sepsis

Many existing resources contain infographics clearly displaying the signs and symptoms of sepsis, including a mnemonic device for the symptoms of sepsis:

- Shivering, fever, or very cold temperature
- Extreme physical pain or discomfort
- Pale, mottled, or discolored skin
- Sleepiness and difficulty waking, disorientation, or confusion
- "I feel like I might die"
- Shortness of breath, rapid breathing, or elevated heart rate

See the Resources section below for examples of resources with this information.

What to do if Symptoms of Sepsis are Present

The Campaign should contain clear messaging expressing that if an individual believes that they or someone they know is experiencing sepsis, they should go to the emergency room or call 911 immediately and tell their healthcare provider that they suspect sepsis based on the symptoms observed. The Campaign should instruct patients to use a phrase such as "I suspect sepsis", "could it be sepsis?", or "what about sepsis?" to communicate to their healthcare provider when they suspect sepsis.

Methods for Prevention of Sepsis

The Campaign should communicate to the public that early treatment is essential for sepsis survival. The primary sepsis prevention message of the Campaign should include prevention,

¹⁰ MedStar Health sepsis awareness materials

¹¹ Centers for Disease Control and Prevention, "Saving patients from sepsis is a race against time", 23 August 2016, CDC Newsroom Releases, 26 July 2018 https://www.cdc.gov/media/releases/2016/p0823-sepsis-patients.html>.

knowing the symptoms, and acting fast when sepsis is suspected. The Campaign should convey the importance of taking steps to prevent infection (by taking care of chronic conditions, getting recommended vaccines, completing prescribed courses of antibiotics, and following up on provider recommendations), practicing good hygiene (through proper hand hygiene, general hygiene, oral hygiene, and blood sugar control and management of medical devices including implantable devices), knowing the symptoms of sepsis, and acting fast if symptoms do not improve or if there is sudden worsening of symptoms.

RESOURCES

Many sepsis public awareness resources already exist, so it is not necessary to create new materials for the Campaign. The resources listed in this section are examples of the types of resources that the Workgroup recommends for use in the Campaign, and this list is not inclusive of all available resources.

Sources with existing sepsis public awareness resources available include the CDC, the Sepsis Alliance, MedStar Health, and the Rory Staunton Foundation. The Sepsis Alliance and MedStar Health have both offered to discuss co-branding their sepsis awareness resources with the Maryland Department of Health.

- Patient Resources from the CDC: https://www.cdc.gov/sepsis/get-ahead-of-sepsis/patient-resources.html#a2;
- Sepsis Fact Sheet from the Rory Staunton Foundation: https://rorystauntonfoundationforsepsis.org/sepsis-fact-sheet/;
- MedStar Health Sepsis Prevention Education: https://www.medstarhealth.org/mhs/about-medstar/quality-and-patient-safety/sepsis-prevention-education/
- Sepsis Alliance Resources for Patients and Family: https://www.sepsis.org/patients-and-family/

Workgroup members emphasized that before the Campaign is implemented, efforts should be made to reach out to other healthcare systems in the state to identify if they have additional sepsis public awareness resources. An overview of the types of resources that the Workgroup recommends to be part of the Campaign is shown below.

<u>Defining Sepsis</u>, <u>Basic Awareness</u>, and <u>Symptoms</u>. The Workgroup recognized that early recognition of sepsis is critical for survival, and therefore, improving the public's general knowledge base about sepsis is needed. The Campaign should include resources that educate the public about what sepsis is and the symptoms of sepsis:

- "Domino Effect": https://www.youtube.com/embed/H IArvYx vo
- "Protect Yourself and Your Family From Sepsis":
 https://www.cdc.gov/sepsis/pdfs/Consumer_fact-sheet_protect-yourself-and-your-family-P.pdf
- Sepsis Information Guides: https://www.sepsis.org/resources/sepsis-information-guides/
- "Stop Sepsis. Save Lives": https://www.youtube.com/watch?v=poN0uBBJemM

- "Know the Symptoms of Sepsis": https://www.cdc.gov/sepsis/images/sepsis-symptoms-animated-600x600-FB_v4.gif
- "Sepsis: What You Need to Know to Save a Life": https://www.youtube.com/watch?v=7f_FxKGEk4E
- See Appendix, Figures 1-7 for more examples

<u>Sepsis Prevention</u>. Materials with information about how to prevent infections and prevent the progression of sepsis:

- "Four Ways to Get Ahead of Sepsis" (video): https://www.youtube.com/watch?v=5JvGiAFLels
- "Four Ways to Get Ahead of Sepsis" (infographic):
 https://www.cdc.gov/sepsis/pdfs/Consumer_infographic_four-ways-to-get-ahead-of-sepsis-P.pdf
- "Start the Conversation Today":
 https://www.cdc.gov/sepsis/pdfs/Consumer_conversation-starter_start-the-conversation-sepsis-P.pdf

Non-English Resources. The Workgroup determined that in order to reach all Marylanders, resources should also be provided in languages other than English. The following resources were identified but the Workgroup noted that most resources are only available in English and additional translation services are needed:

- CDC Spanish language resources: https://www.cdc.gov/sepsis/get-ahead-of-sepsis/sp/index.html
- MedStar Health is in the process of converting materials into 7 different languages (Spanish, Amharic, Arabic, Korean, French, Tagalog, and Somali)

<u>Resources for Sepsis and Children</u>. The Workgroup identified that because symptoms of sepsis can differ in children, the Campaign should include materials focused on signs and symptoms of sepsis in children:

- "Sepsis—It's about Time with Angelica Hale": https://www.youtube.com/watch?v=GU2oiAczTq8&feature=youtu.be
- Pediatric Sepsis: https://rorystauntonfoundationforsepsis.org/pediatric-sepsis/
- Sepsis Education Modules: https://rorystauntonfoundationforsepsis.org/education-modules/
- See Appendix, Figures 8 9 for more examples

<u>Information from Survivors and Family Members</u>. Stories from sepsis survivors and family members can be compelling to the public and be an effective way to convey the importance of sepsis awareness:

- "What YOU Need to Know About Sepsis": https://vimeo.com/265621288
- "MedStar Health Sepsis Awareness: Through the Eyes of a Survivor": https://www.youtube.com/watch?v=DJUtA-a4HjI

• "Faces of Sepsis": https://www.sepsis.org/faces/

COST-EFFECTIVE METHODS

Cost-effective methods for disseminating information to the public about sepsis include:

- <u>Sepsis Awareness Month</u>. September is Sepsis Awareness Month, and September 13 is World Sepsis Day. ^{12,13} Sepsis Awareness Month can be used to reach a wider audience. During this time, awareness can be heightened by linking multiple sources, thereby amplifying the public messaging impact.
- Website. A webpage hosted on the Maryland Department of Health website or another partner website (the Maryland Patient Safety Center offered to discuss hosting a webpage) could include a basic definition of sepsis and links to resources on sepsis public awareness.
- <u>Proclamation from the Governor's Office</u>. A proclamation about sepsis awareness from the Governor's office could be made during Sepsis Awareness Month (September).
- Coordinating with the Maryland State Department of Education (MSDE). Information could be distributed on the school-based health center website, and a memo could be sent to the State Superintendent. The Sepsis Alliance provides materials geared towards school nurses: https://www.sepsis.org/sepsis-and/sepsis-school-nurses/. The Campaign could coordinate with elementary school flu vaccination clinics to send a leaflet with sepsis information home with children (health officer memos for flu vaccinations are typically dated in August).
- Coordinating with the healthcare community. Resources could be disseminated at long-term care facilities, pharmacies (including MinuteClinics), home care visits, primary care, urgent care, school health centers, and vaccination clinics (the meningitis vaccine group is involved with sepsis).
- <u>Press releases</u>. The Maryland Department of Health Office of Communications could coordinate sepsis awareness press releases.
- <u>Social media posts</u>. The Maryland Department of Health Office of Communications could post sepsis awareness resources on social media. The Campaign should coordinate with social media pages for healthcare systems and professional organizations to provide consistent messaging about sepsis.
- <u>Speakers' bureau</u>. Maryland sepsis survivors and family members that would be willing to be part of a speakers' bureau could be identified and those on the speakers' bureau could speak at events for both healthcare providers and the public.
- <u>Celebrity spokesperson</u>. If a celebrity were willing to volunteer to serve as a spokesperson for sepsis, the message could reach a broader audience. The Sepsis Alliance

¹² Sepsis Alliance, "Sepsis Awareness Month", 26 July 2018 < https://www.sepsis.org/sepsisawarenessmonth/>.

¹³ World Sepsis Day, 26 July 2018 < https://www.world-sepsis-day.org/>.

- currently has an initiative with Angelica Hale (an America's Got Talent finalist and sepsis survivor).¹⁴
- <u>Partnering with community organizations</u>. The Campaign could partner with community-based organizations such as faith-based organizations, the local ombudsman, parent teacher associations, and sports groups to reach a broad audience.
- <u>Local elected officials</u>. The Campaign could work with local elected officials to present resolutions about sepsis and reach local constituents.

During Workgroup meetings, some methods of disseminating sepsis awareness information were discussed that would require dedicated funding, including:

- <u>Translation services</u>. In order to reach a broader audience, materials could be translated into languages other than English.
- <u>Audio public service announcements</u>. Public service announcements (ex: https://www.sepsis.org/resources/psa/) could be played on the radio.
- <u>Sponsored social media posts</u>. Sponsored public service announcement posts could be made through social media platforms.
- <u>Videos in waiting rooms</u>. Public service announcement videos could be played in hospital and doctor's office waiting rooms.

The Campaign could partner and coordinate with other organizations that may have funding for the methods that would require dedicated funding.

Current and Future Efforts

HB 1467 / SB 574 require the Workgroup to develop, but not implement, the Campaign. However, Workgroup members identified some efforts that can be taken at this time, such as submitting a request for a proclamation from the Governor's office during Sepsis Awareness month and coordinating social media posts as well as issuing a press release.

Though this Campaign is intended to increase public awareness, many Workgroup members brought up the importance of also providing healthcare provider education to increase awareness of sepsis among healthcare providers. Because immediate treatment is vital for sepsis survival, it is important for providers to be able to identify and quickly treat sepsis. Additionally, the Workgroup proposed that a sepsis education campaign focused on providing a sepsis curriculum for school-aged children would be beneficial. Future efforts in Maryland could focus on sepsis provider education and a sepsis education curriculum for children.

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¹⁴ Sepsis Alliance, "Sepsis Alliance Launches New Initiative with Angelica Hale", 26 June 2018, Sepsis Alliance News, 26 July 2018 < https://www.sepsis.org/sepsis-alliance-news/its-about-time-press-release/>.

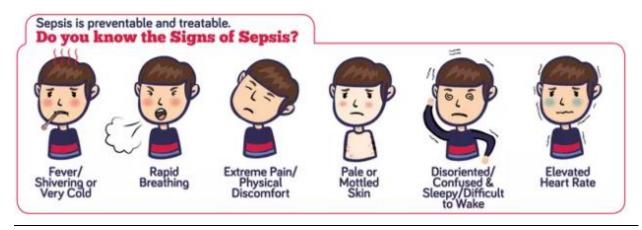
Appendix

Figure 1. "It's About Time"



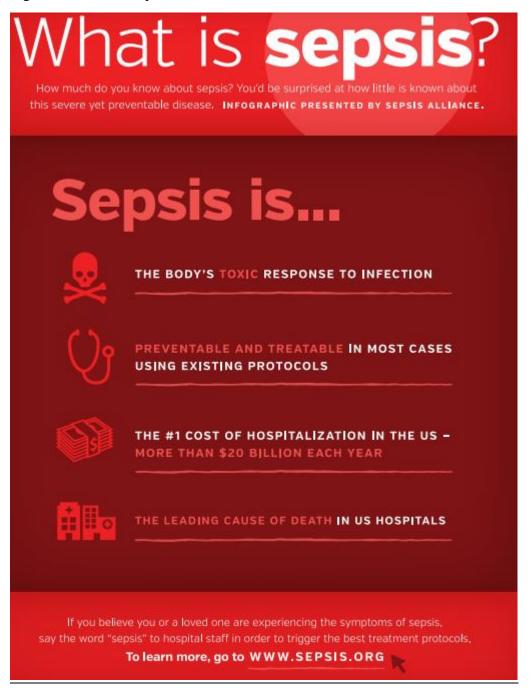
https://www.sepsis.org/sepsis/symptoms/

Figure 2. "Signs of Sepsis"



https://rorystauntonfoundationforsepsis.org/sepsis-fact-sheet/

Figure 3. "What is sepsis?"



SYMPTOMS OF SEPSIS

Shivering, fever, or very cold

Extreme pain or general discomfort ("worst ever")

Pale or discolored skin

Sleepy, difficult to rouse, confused

"I feel like I might die"

Short of breath



Watch for a combination of these symptoms. If you suspect sepsis, CALL 911 or go to a hospital and say, "I AM CONCERNED ABOUT SEPSIS."



Sepsis is your body's toxic response to infection.

Sepsis is a medical emergency.

Fast treatment is critical for survival.

Treat all infections seriously.

Wash your hands often.

Get vaccinated against preventable illnesses.

Take antibiotics as prescribed.

©2017 Sepsis Alliance

SEPSIS.ORG

Figure 5. "Acting Quickly Can Save Lives from Sepsis"

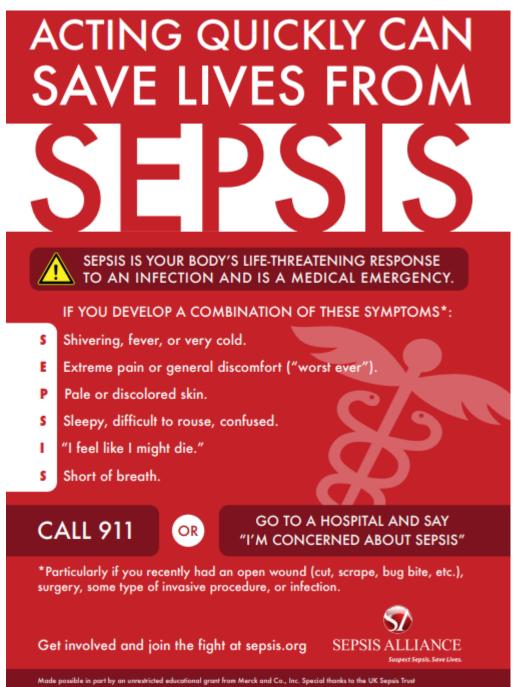


Figure 6. "These are the Faces of Sepsis"



Figure 7. MedStar Health Sepsis Brochure

Early Treatment Saves Lives

You can help us help you. The sooner you or a family member gets treatment, the better.



Look for signs of sepsis.



Call your doctor or go to the emergency room.



Ask, "Could this be sepsis?"

THINK SEPSIS? Say Sepsis.

For more information on sepsis, please scan the QR code with your smartphone, or visit the website below.

MedStarHealth.org/Sepsis



MedStar Franklin Square Medical Center
MedStar Georgetown University Hospital
MedStar Hosp Hospital
MedStar Hosp Hospital
MedStar Montgomery Medical Center
MedStar National Rehabilitation Network
MedStar Southern Maryland Hospital
Center
MedStar Southern Maryland Hospital
MedStar Southern Maryland Hospital
MedStar Washington Hospital Center
MedStar Washington Hospital Center
MedStar Washington Hospital Center
MedStar Ambulatry Services
MedStar PromptCare
MedStar PromptCare
MedStar Visiting Nurse Association
MedStar Visiting Nurse Association
MedStar Institute for Innovation
MedStar Institute for Innovation
MedStar Health Research Institute



10980 Grantchester Way Columbia, MD 21044





SEPSIS: When an infection turns deadly

Knowledge and Compassion
Focused on You

What is sepsis?

- Sepsis is a deadly response to an infection. Some call it blood-poisoning.
- It can kill you if you don't get treatment fast.
- Sepsis happens a lot.
 - It kills more people than breast cancer, AIDS, and prostate cancer combined.
- It's an emergency!



Who is at risk for sepsis?

- People who have been in a hospital
- People with bad burns
- People who get infections easily
- Infants and children
- The elderly
- People with tubes or drains
- People with open sores or cuts

How do I know if I have sepsis?

Symptoms may include:

- Fever greater than 101° or shaking chills
- Very low temperature (less than 96.8°)
- Confusion or sleepiness
- Throwing up, diarrhea, unable to keep food and fluids down for more than 12 hours
- Fast heartbeat without exercising
- Hard to breathe, or breathing very fast or very slow

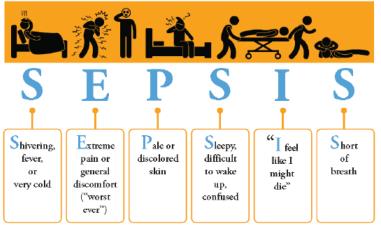
Report any symptoms to your doctor, who can determine if this is sepsis.

What should I do if I think I have sepsis?

☑ Call your doctor **or** go to the emergency room.

☑ Ask, "Could this be sepsis?"

You can help us help you. The sooner you or a family member gets treatment, the better.



Infographic source: Centers for Disease Control and Prevention (CDC)

(MedStar Health)

What is Sepsis? Sepsis and Kids

Sepsis is the body's overwhelming and life-threatening response to an infection which can lead to tissue damage, organ failure, and death.



Every year, sepsis strikes over 75,000 children in the U.S., and kills enough kids to fill a kindergarten class every 48 hours.

How Can I Spot Sepsis?

Sepsis can happen as the result of any infection. There is no one symptom of sepsis. If your child is unwell with either a fever or very low temperature (or has had a fever in the last 24 hours):



Brought to you by Erin's Campaign for Kids, with special thanks to the UK Sepsis Trust

Any Child Who:

- 1. Feels abnormally cold to touch
- 2. Looks mottled, bluish, or has very pale skin
- 3. Has a rash that does not fade when you press it
- 4. Is breathing very fast
- 5. Has a convulsion
- 6. Is very lethargic or difficult to wake up





Sepsis.org

A Child Under 5 Who:

- 1. Is not eating
- 2. Is vomiting repeatedly
- 3. Has not urinated in 12 hours

IF YOU SEE ONE OR MORE OF THESE SYMPTOMS. YOUR CHILD MAY BE

TIME IS VERY CRITICAL. SEE A DOCTOR URGENTLY OR CALL 9-1-1 AND SAY "I'M CONCERNED ABOUT

Figure 9. "Sepsis Takes the Lives of Over 18 Children Each Day"

SEPSIS

TAKES THE LIVES OF OVER 18 CHILDREN EACH DAY

MORE THAN CHILDHOOD CANCERS

SEPSIS IS A COMMON AND SERIOUS COMPLICATION OF AN INFECTION

If your child has any of these symptoms you should take immediate action:

- Skin abnormally cold to touch
- Bluish or very pale skin
- Rash that does not fade when pressed on
- Very fast or rapid breathing
- Seizures
- Lethargy or difficulty waking up

Acting quickly could save your child's life.

If your child has any of these symptoms* don't be afraid to go to the hospital or call 911 and say "I AM CONCERNED ABOUT SEPSIS."

*Particularly if they recently had an open wound (cut, scrape, bug bite, etc.), surgery, some type of invasive procedure, or infection.

Get involved and join the fight at sepsis.org





Made possible in part by an unrestricted educational grant from Merck and Co., Inc. Special thanks to the UK Sepsis Trust