

Sepsis Awareness Training

Non-Clinical Staff



Pre-Training Survey

Please complete the Pre-training Assessment questions in the **GREEN** section of the form.

Thank you!

Please answer the questions in the green section <u>PRIOR TO</u> the start of the session			Please answer the questions in the blue section <u>AT THE END</u> of the session and hand in	
Pre-Training Assessment	Yes	No	Yes	No
I know what sepsis is				
I can identify high risk groups for developing sepsis				
I am familiar with the early signs and symptoms of sepsis				
I am aware of the risk factors and early signs and symptoms of sepsis associated with the elderly				
I am aware of time sensitive interventions with regards to initial diagnosis and treatment of early sepsis				
I know the appropriate diagnostic tests for patients exhibiting the early signs of sepsis				
I am familiar with Post Sepsis Syndrome				




**SEPSIS AWARENESS TRAINING
PRE AND POST ASSESSMENT
CLINICAL STAFF**

PLEASE COMPLETE THE FOLLOWING QUESTIONS AS DIRECTED.
 YOU DO NOT NEED TO PUT YOUR NAME ON THIS... IT IS COMPLETELY ANONYMOUS. THIS INFORMATION WILL BE USED TO ASSESS PARTICIPANT LEVEL OF UNDERSTANDING AND LEARNING PRE AND POST SESSION. THANK YOU!

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I am familiar with Post Sepsis Syndrome				

Items answered: Yes ___ No ___
 Did you attend to sepsis? Home Health Hospital Assisted Living Community Agency Other (please specify) ___
 Do you have a story to help increase sepsis awareness? Yes ___ No ___
 Please contact: Alyssa DeCunzio: 677.991.9297 a241.a241@newellcenteradvisors.org

© 2014 Quality Improvement Organizations. All rights reserved. Each facility with a license to practice in the State of New England is required to have a sepsis awareness program in place. This program was developed by the Quality Improvement Organizations in New England. For more information, please contact: Alyssa DeCunzio: 677.991.9297 a241.a241@newellcenteradvisors.org

Sepsis Training Content Outline

- Sepsis Alliance video “SEPSIS: EMERGENCY”
- What is sepsis
- Who is at risk for sepsis?
- Signs, symptoms and stages of sepsis
- What actions to take if you suspect sepsis
- Preventing sepsis
- How you can help to raise awareness and maybe save a life

Sepsis: Emergency video

- Cut and paste this URL into your browser

<https://www.youtube.com/watch?v=DnsQ4RIXsZY>



What is Sepsis?

- Sepsis is the body's response to an **infection**. The body attacks itself rather than the infection ¹.
- If not treated **promptly** Sepsis can result in:
 - Organ Failure
 - Tissue Damage
 - Death
- **Sepsis is a medical emergency!**



1. (Singer, et al. JAMA 2016;315(8) 801-810)

Sepsis and Infection

- You must have an infection to have sepsis
- Sometimes people don't know they have an infection
- Sepsis can show up with different combinations of symptoms
- Sepsis can develop after a patient has been seen by a health professional ¹



1. <https://www.acep.org/patient-care/dart/#sm.001mcxsdr126we9pva41rwky0ud26>

Why This is Important...

- Each year over 1.5 million people in the US get sepsis and about 270,000 die from it ¹
- 18 million people die of Sepsis worldwide every year
- Sepsis is the leading cause of childhood deaths
- 1 in 3 patients who die in a hospital have sepsis ²
- A leading cause of death and healthcare costs ^{3,4}
- Sepsis is the most expensive condition treated in U.S. hospitals⁵

¹ CDC

² CDC

³. Fleischmann, et al. Am J Resp Crit Care Med. 2016; 193:259-272

⁴. Iwashyna, et al. J Am Geriatr Soc. 2012;60:1070-1077

⁵.AHRQ

Why Haven't I Heard of Sepsis?

You may have heard of people dying of:

- Pneumonia
- Abdominal Infections
- Kidney Infections
- Blood Poisoning

But often the cause of death may have been sepsis



Public Awareness is Poor

- 35% of Americans have never heard of sepsis, yet 80% of sepsis cases originate in the community (outside of the hospital)
- Only 12% can identify the most common symptoms
- 50% do not know you need to seek urgent medical attention
- The public needs an understandable definition of sepsis



<https://www.sepsis.org/2018-sepsis-awareness-survey/>

https://www.cdc.gov/mmwr/volumes/65/wr/mm6533e1.htm?s_cid=mm6533e1_w

<https://ccforum.biomedcentral.com/articles/10.1186/cc11511>

Sepsis and Famous People You May Know

Died from Sepsis

- Mother Theresa
- Pope John Paul II
- Patty Duke (actor)
- Leslie Nielson (actor)
- Casey Kasem (radio)
- Lawrence Welk (musician)
- Mohammed Ali (boxer)
- Prince Ranier of Monaco
- Christopher Reeve (actor)
- Jim Henson (Muppets creator)

Survived Sepsis

- Angelica Hale (child singer)
- Mary Louise Parker (actor)
- Chris Young (singer/song writer)



Angelica Hale partnered with Sepsis Alliance on the It's About TIME campaign
Picture source: <https://www.sepsis.org/itsabouttime/>

Who is at Risk for Sepsis?

Anyone with an infection!

Those at higher risk include:

- People 65 or older or infants less than 1 year old
- People with chronic illnesses: diabetes, cancer, AIDS
- People with weakened immune systems
- People recently hospitalized or recovering from surgery
- People with wounds, invasive lines, drains, catheters
- People who have had sepsis in the past

Sepsis Risk and Aging

- Elderly are more susceptible to infections:
 - Weakened immunity
 - Fragile skin, bedsores, ulcerations
 - Multiple chronic conditions
 - Admissions to a hospital or other facility
- Some patients may not be able to communicate symptoms of infection due to dementia or stroke

Source: <http://www.todaysgeriatricmedicine.com/archive/MA19p20.shtml>

Know the signs and symptoms of sepsis.



**Shivering, fever,
or very cold**



**Extreme pain
or discomfort**



**Clammy
or sweaty skin**



**Confusion
or disorientation**



Short of breath



High heart rate

Sepsis May Present Differently in Older

- Fever may be delayed, absent or low-grade, between 98.6° to 100.4° Fahrenheit
- Decline in functional status may be a symptom of infection, including new or increasing confusion, incontinence, falling, deteriorating mobility, reduced food intake, or failure to cooperate with staff
- Signs of infection and organ dysfunction may be difficult to recognize with multiple comorbidities

Resource: Clifford KM, Dy-Boarman EA, Haase KK, Maxvill K, Pass SE, Alvarez CA. Challenges with Diagnosing and Managing Sepsis in Older Adults. *Expert Rev Anti Infect Ther.* 2016;14(2):231–241.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4804629/>

Sepsis Progression

Let's look at some important definitions to help recognize the progression of sepsis.

SIRS

Systemic Inflammatory Response Syndrome (SIRS)

- Temperature over 100.4 or below 96.8
- Fast heart rate over 90 beats per minute
- Breathing over 20 times per minute

Note: SIRS can exist without progressing to Sepsis

Sepsis Progression

Let's look at some important definitions to help recognize the progression of sepsis.

SIRS

Sepsis

Sepsis

Two or more SIRS + an infection

- *Infections that lead to sepsis most often:*
 - *Bladder or kidney infection*
 - *Lungi infection*
 - *Skin infection*
 - *Abdominal infection*

Sepsis Progression

Let's look at some important definitions to help recognize the progression of sepsis.

SIRS

Sepsis

Severe Sepsis

Severe Sepsis

- Sepsis symptoms
- AND
- An organ is failing

Sepsis Progression

Let's look at some important definitions to help recognize the progression of sepsis.

SIRS

Sepsis

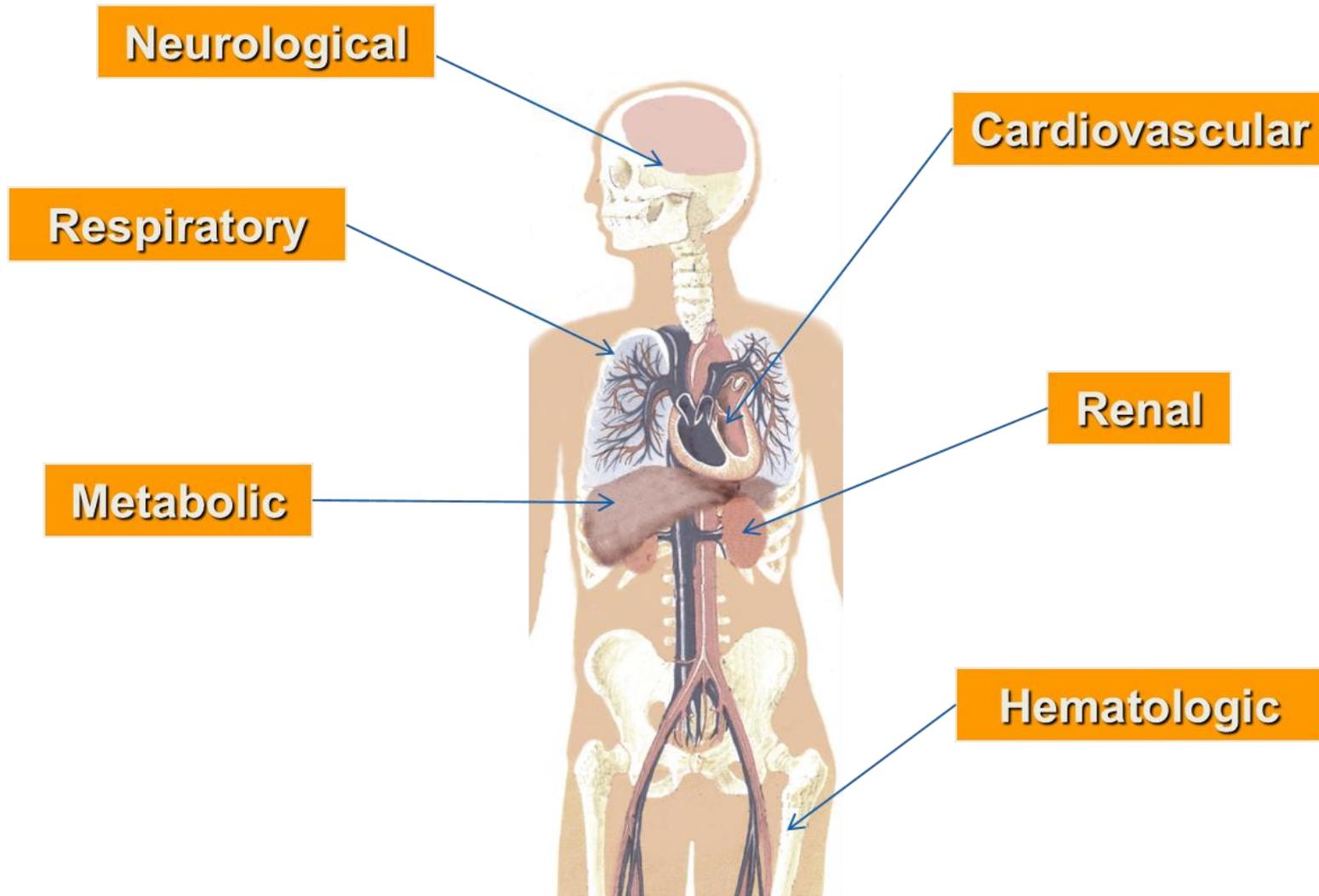
Severe Sepsis

Septic Shock

Septic Shock

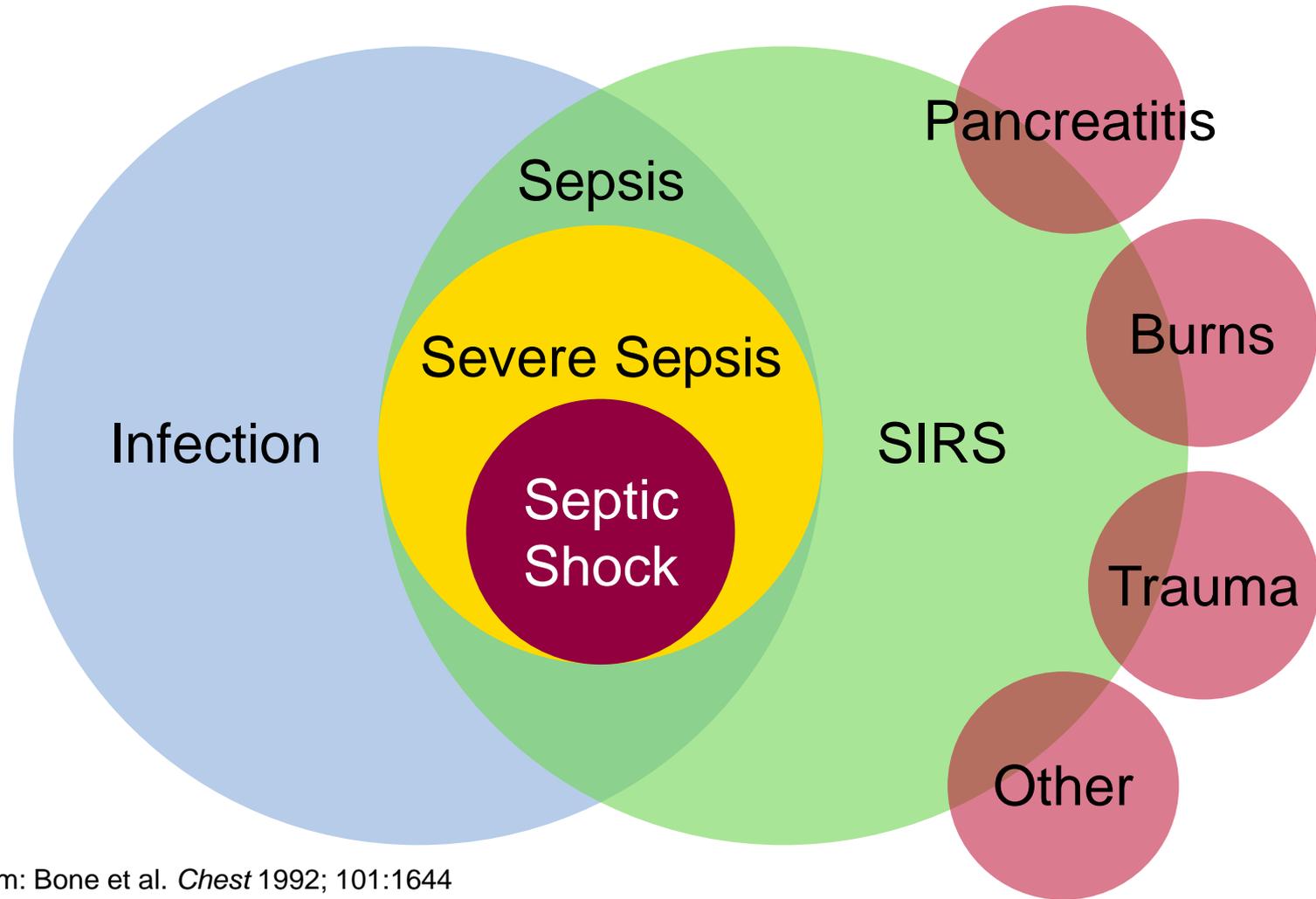
- Dangerously low blood pressure
- Most severe form of sepsis
- Most difficult to treat

Acute Organ Dysfunction as a Marker of Severe Sepsis



Kathleen M. Vollman RN, MSN, CCNS, FCCM Clinical Nurse Specialist/Educator/Consultant ADVANCING NURSING kvollman@comcast.net Northville, Michigan www.vollman.com. <http://slideplayer.com/slide/4002936/> Retrieved 23 February 2016.

Relationship of Infection, SIRS, Sepsis, Severe Sepsis and Septic Shock

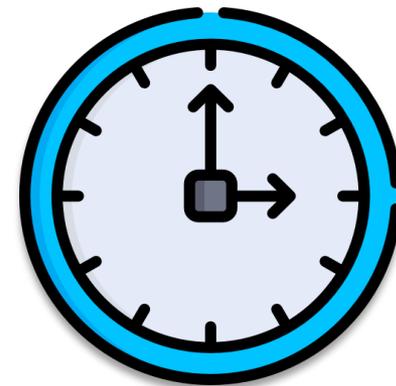


Adapted from: Bone et al. *Chest* 1992; 101:1644

Early Recognition is Important

Every minute counts!

For every hour that treatment is delayed the risk of death increases by 8% ¹



When sepsis is caught early, it:

- Increases the chance for surviving
- Helps avoid long term health-related complications
- Helps avoid sepsis-related hospitalizations
- Can be prevented from progressing to septic shock

1. Crit Care Med,2006; 34: 1589-96.

When Sepsis is Diagnosed



- People with sepsis are usually treated in the hospital
- Doctors will treat the infection with intravenous (IV) antibiotics
- Patients receive IV fluids
- Blood and vital signs are tested

Post Sepsis Syndrome

Affects up to 50% of sepsis survivors

Physical and/or psychological long-term effects, such as:

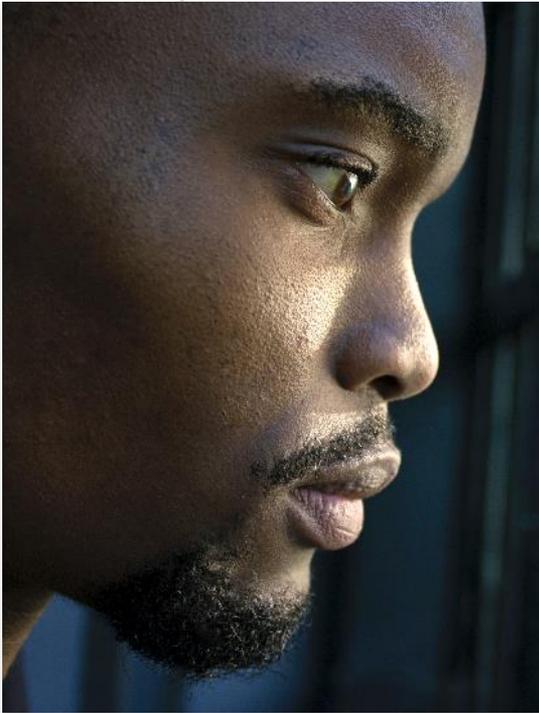
- Impaired cognitive function-especially among older patients
- Mobility impairments (muscle weakness)
- Disabling muscle and joint pain
- Amputations
- Loss of self-esteem
- Extreme fatigue
- Insomnia
- Nightmares, hallucinations, and panic attacks

Higher risk with an ICU or extended hospital stay



Post Sepsis Syndrome

Significant impact on family, friends, and caregivers



- Increased dependency on caregivers
- Inadequate hospital discharge education on what to expect during recovery
- Difficulty accessing follow-up community treatment
- Disruption to their lives
- Cost

Helping Patients Watch For Signs of Sepsis

Patient information sheet

For patients and family members to watch for the early signs and symptoms of sepsis

Used if a patient is diagnosed with an infection or is at high risk for developing an infection

My plan for preventing infection at home

Things I can do to prevent infection:

- Wash my hands with soap and water for 20 seconds.
- Stay away from people with colds, coughs, or flu.
- Get recommended vaccinations.
- Eat healthy food.
- Keep my wounds clean and covered.
- Have a plan for what to do if I have a yellow or red sign of infection.

Look for signs of infection:

- Do a daily "stoplight" check.
- Report any yellow or red signs of infection to my caregiver.
- Watch for danger signs of sepsis by your body, such as confusion, one of the signs of concern.

Signs of infection and sepsis at home

Common infections can sometimes lead to sepsis. Sepsis is a deadly response to an infection.



Green Zone
No signs of infection.



Yellow Zone
Take action today.

Call: _____



Red Zone
Take action now!

Call: _____

Are there changes in my heartbeat or breathing?	<ul style="list-style-type: none"> • My heartbeat is as usual. • Breathing is normal for me. 	<ul style="list-style-type: none"> • Heartbeat is faster than usual. • Breathing is a bit more difficult and faster than usual. 	<ul style="list-style-type: none"> • Heartbeat is very fast. • Breathing is very fast.
Do I have a fever?	I have not had a fever in the past 24 hours and I am not taking medicine for a fever.	Fever between 100°F to 101.4°F.	Fever is 101.5°F or greater.
Do I feel cold?	I do not feel cold.	<ul style="list-style-type: none"> • I feel cold and cannot get warm. • I am shivering or my teeth are chattering. 	<ul style="list-style-type: none"> • Temperature is below 96.8°F. • Skin or fingernails are pale or blue.
How is my energy?	My energy level is as usual.	I am too tired to do most of my usual activities.	<ul style="list-style-type: none"> • I am very tired. • I cannot do any of my usual activities.
How is my thinking?	Thinking is clear.	Thinking feels slow or not right.	My caregivers tell me I am not making sense.
Are there changes in how I feel after a hospitalization, procedure, infection or change in wound or IV site?	<ul style="list-style-type: none"> • I feel well. • I had pneumonia, a urinary tract infection (UTI) or another infection. • I had a wound or IV site. It is healing. 	<ul style="list-style-type: none"> • I do not feel well. • I have a bad cough. • My wound or IV site looks different. • I have not urinated (peed) for 5 or more hours. When I do urinate (pee), it burns, is cloudy or smells bad. 	<ul style="list-style-type: none"> • I feel sick. • My wound or IV site is painful, red, smells or has pus.



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What Actions Should I take?



- If you are talking with a patient, or their family member or friend, whether on the phone or in person, and you notice or hear about signs and symptoms that may be sepsis, notify the clinician in charge.
- Say the words, “I suspect sepsis”.
- Follow protocols for emergency communication.
- **Sepsis should always be treated as a medical emergency!**

Preventing Sepsis

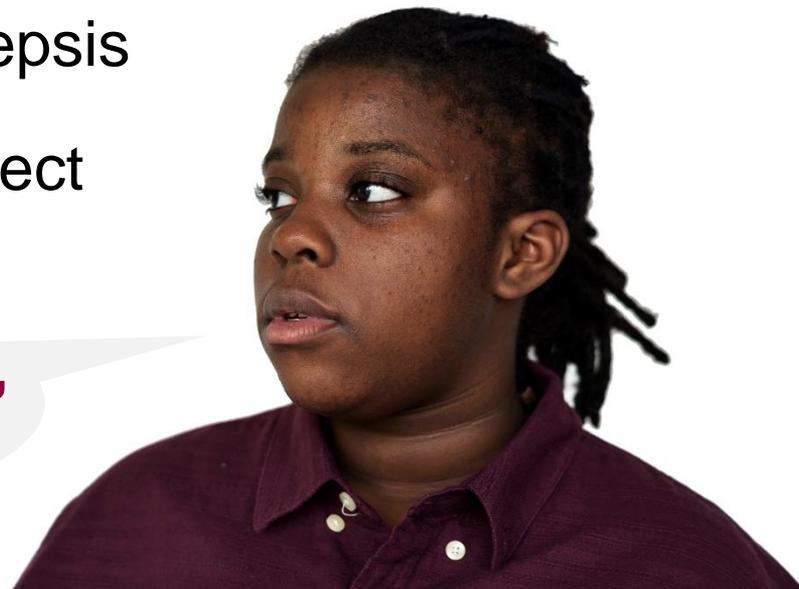


- Wash hands often
- Get vaccinated and stay on schedule:
 - Flu
 - Pneumonia
 - All other recommended
- Prevent infections by keeping cuts clean and covered until healed and look for signs of infection
- Treat infections promptly
- Take antibiotics as prescribed
- Maintain good overall health and care for chronic conditions

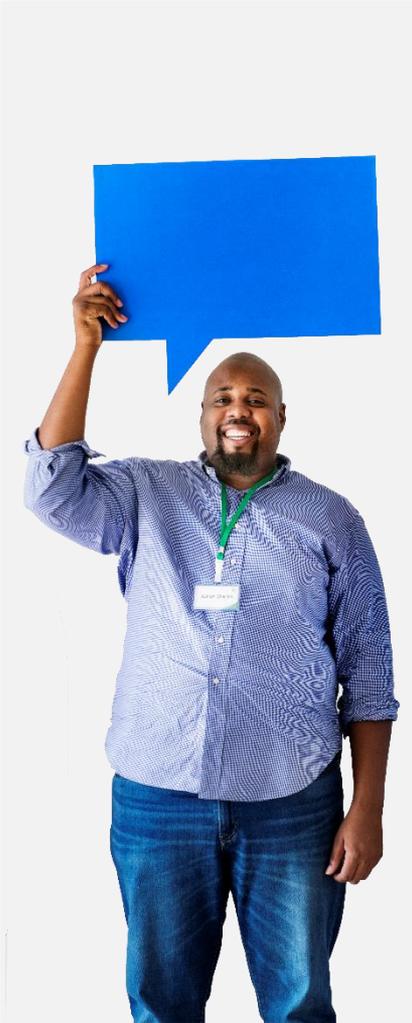
How You Can Help

- Understand sepsis: Know the early signs of sepsis and who is at high risk for sepsis.
- Know preventive measures to decrease your risk
- Spread the word and educate coworkers, family, friends and loved ones about the signs & symptoms of sepsis
- Seek immediate care if they suspect sepsis and say the words

“I suspect sepsis.”



What can you do to increase awareness and educate?



- Bulletin boards, Posters-in the workplace and community
- Slogan contest
- Social Media:
 - share links for videos such as “Sepsis Emergency video”
 - 👍 “like” a page (eg. Sepsis Alliance, Rory Staunton Foundation, Global Sepsis Alliance, etc)
 - Follow on Twitter
- September is Sepsis Awareness Month- find one of many ways to get involved each year
- ANY Month is a good month to be involved and spread the word

Organizations Working to Stop Sepsis

Healthcentric Advisors New England QIN-QIO

Providing education and resources to promote awareness and educate on early identification and treatment of sepsis

www.healthcentricadvisors.org

Sepsis Alliance

Largest sepsis advocacy organization in the U.S. working in all 50 states
Resources for patients, health professionals, Nursing Station, Sepsis Coordinator Network

www.sepsis.org

Centers for Disease Control (CDC)

Resources for patients, families and health care professionals including clinical information and guidelines

www.cdc.gov/sepsis/index.html

Organizations Working to Stop Sepsis

IPRO and TMF

We thank the NY and TX QIN-QIOs for sharing their resources:

<http://www.stopsepsisnow.org> <https://www.tmf.org/Health-Care-Providers/Nursing-Homes/Early-ID-of-Sepsis-in-Texas-Nursing-Homes>

Surviving Sepsis Campaign- Society of Critical Care Medicine

Clinical guidelines, bundles, performance improvement

<http://www.survivingsepsis.org/Pages/default.aspx>

Rory Staunton Foundation:

Advocacy, education, resources and *Rory's Regulations* for hospitals

<https://rorystauntonfoundationforsepsis.org/>

Global Sepsis Alliance

Not-for-profit charitable organization to raise awareness worldwide

<https://www.global-sepsis-alliance.org/>

Questions



Feedback

For more information

Alyssa DaCunha, MPH
Program Administrator
adacunha@healthcentricadvisors.org
877.904.0057 x3241

<https://healthcentricadvisors.org/sepsis-training>

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