

Sepsis Awareness Training


Clinical Staff




Pre-Training Assessment

Please complete the Pre-training Assessment questions at the **TOP** and on the **LEFT** side of the form.

Thank you!

 **Quality Improvement Organizations**
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

 **NEW ENGLAND QUALITY INNOVATION NETWORK**
Supporting the Transformation of Health Care
in Partnership with QualityNet

Sepsis Awareness Training
Pre and Post-Learning Assessment - Clinical Staff

Your name is not required. This is not a quiz.
It is used solely to assess understanding of sepsis before and after training.

Instructions:

1. Please complete the top section of this form at the start of training.
2. Pre-learning Assessment: Read the statements in the **LEFT** section below and respond by checking one of the boxes.
3. Post-learning Assessment: Repeat with statements in the **RIGHT** section below and complete the bottom.

Date: _____

My provider setting: ☐ Hosp. ☐ SNF ☐ HH ☐ AL ☐ Comm Agency ☐ Med Off ☐ Other _____

My Role is: ☐ MD/DO/NP/PA ☐ RN ☐ LPN ☐ CNA/MA ☐ PT/OT/RT ☐ Pharmacist ☐ Other _____

Pre-learning Assessment			Post-learning Assessment		
Please complete this section <u>before</u> training.			Please complete this section <u>after</u> training.		
	T	F		T	F
1. Sepsis should be treated as a medical emergency in all instances.			1. Sepsis should be treated as a medical emergency in all instances.		
2. Patients with sepsis will present with fever and confusion in all instances.			2. Patients with sepsis will present with fever and confusion in all instances.		
3. Common infections that may progress to sepsis are lung infection, skin infection, UTI, and intra-abdominal infection, but sepsis can also occur without an infection.			3. Common infections that may progress to sepsis are lung infection, skin infection, UTI, and intra-abdominal infection, but sepsis can also occur without an infection.		
4. Organ dysfunction is a life-threatening result of sepsis and can occur anywhere in the body.			4. Organ dysfunction is a life-threatening result of sepsis and can occur anywhere in the body.		
5. I am familiar with post-sepsis syndrome and its potential long-term effects.			5. I am familiar with post-sepsis syndrome and its potential long-term effects.		
6. Sepsis can be prevented by preventing infections and treating them promptly.			6. Sepsis can be prevented by preventing infections and treating them promptly.		

Are you a sepsis survivor? ☐ Yes ☐ No

If you are willing to share your story to help increase sepsis awareness please enter your contact information here:

Or contact: Alyssa DaCunha: 877.904.0057 x3241 adacunha@healthcentricadvisors.org

Thank you!

This material was originally created by the Atlantic Quality Innovation Network, the Quality Improvement Network-Quality Improvement Organization for New York, South Carolina and the District of Columbia. It has been updated by the New England Quality Innovation Network-Quality Improvement Organization for New England, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The content presented is not necessarily reflect CMS policy. CMS20191211.001.001

Sepsis Training Content Outline

- Sepsis Alliance video “SEPSIS: EMERGENCY”
- What is sepsis
- High risk populations
- Importance
- Early signs/symptoms
- Definitions
- Treatment strategies and antibiotic stewardship
- Post sepsis syndrome
- Tools for screening and education
- Case study
- Prevention

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 overwhelming and life-threatening response to **INFECTION**
- **NOT ENOUGH OXYGEN** is reaching the tissues
- If not recognized and treated **PROMPTLY**, sepsis can result in:
 - Organ failure
 - Tissue damage
 - Death

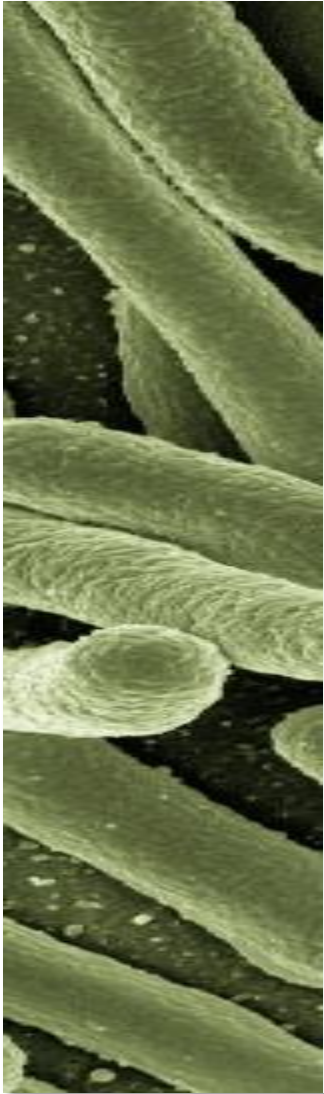
Singer M, Deutschman CS, Seymour C, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA*. 2016;315(8):801-810. doi:10.1001/jama.2016.0287.

Sepsis and Infection

- Sepsis is always triggered by an infection
- Sometimes people don't know they have an infection
- Sometimes the causative agent of the infection is not identified
- Sepsis diagnosis is sometimes missed due to various manifestations of sepsis
- *Conversely: If symptoms of sepsis exist a source of infection should be sought*



Watch for Progression



Common Infectious Diseases That May Progress to Sepsis:

- **Pneumonia**
- **Skin Infections (cellulitis)**
- **Urinary Tract Infections**
- **Intra-abdominal infections**
- **Post-partum Endometritis**
- **Influenza**
- *Clostridium difficile* (*C.diff*) Enteritis
- **Tick Borne Infections especially in the immunocompromised**

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>

Why This is Important...

- Each year over 1.5 million people in the US get sepsis and about 250,000 die from it ¹
- 1 in 3 patients who die in a hospital have sepsis ¹
- Mortality rate for Severe Sepsis is **29%** ¹ which is greater than:
 - AMI (25%) ²
 - Stroke (23%) ³
 - Trauma (1.5%) ⁴
- A leading cause of hospital readmissions
- The most expensive condition treated in U.S. hospitals ⁵

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

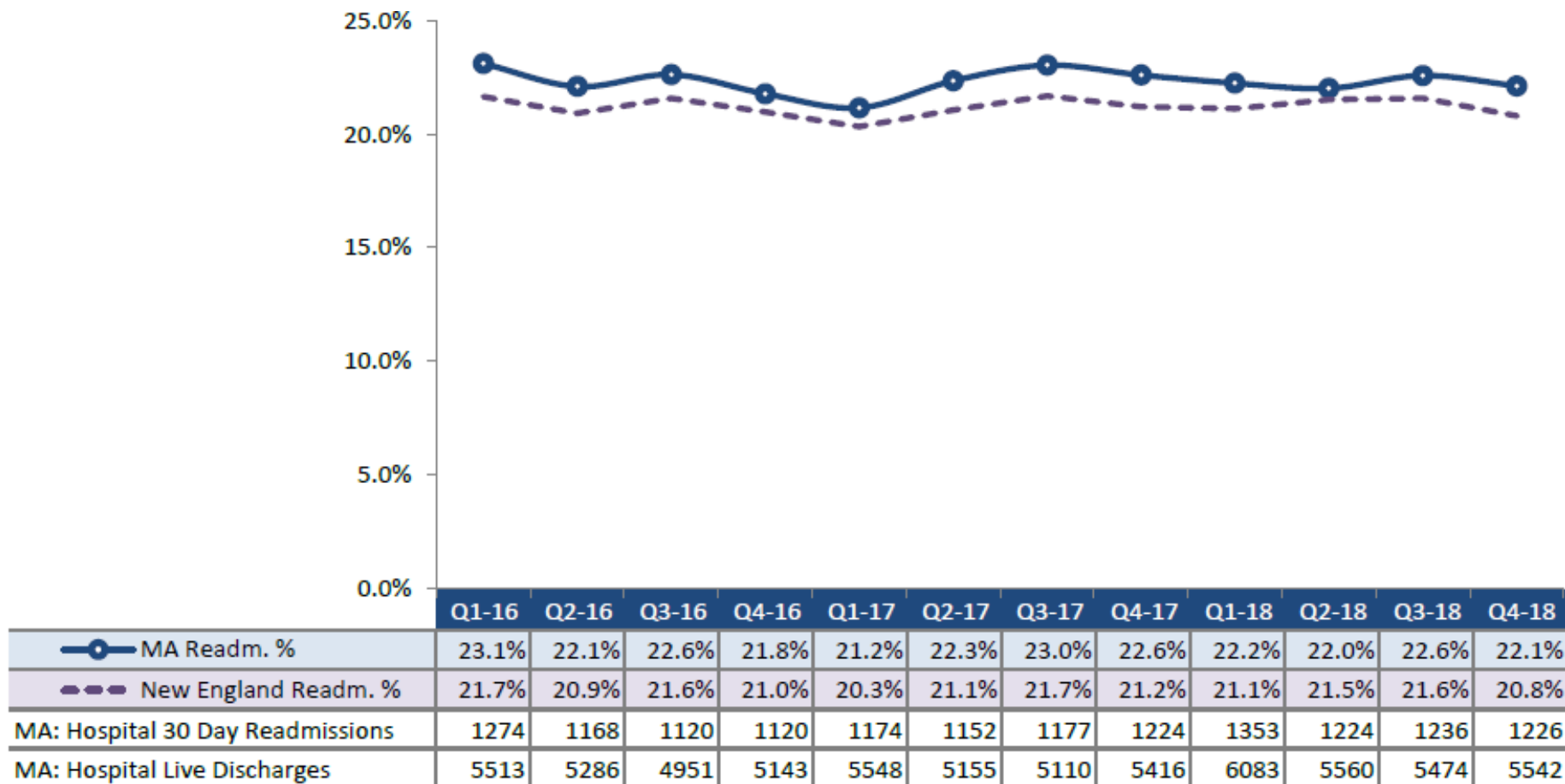
2. JACC 1996

3. American Heart Association. *Heart Disease and Stroke Statistics- 2005 Update*

4. National Highway Traffic Safety Administration. *Traffic Safety Facts 2003*

5. AHRQ <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital-Conditions.pdf>

Sepsis (Any Dx): All Cause 30 Day Hospital Readmissions



***Medicare fee-for-service beneficiaries discharged with sepsis (on any diagnosis code) and readmitted within 30 days for any reason**

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

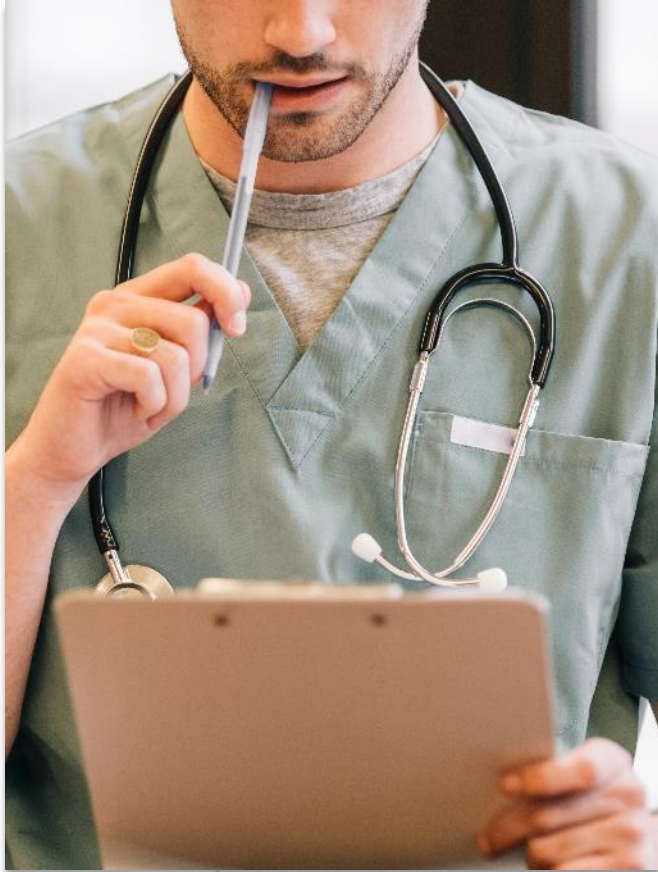
- Angelica Hale (child singer)
- Mary Louise Parker (actor)
- Chris Young (singer/song writer)



Angelica Hale partnered with Sepsis Alliance on the It's About TIME campaign

Picture source: <https://www.sepsis.org/itsabouttime/>

Healthcare Providers Awareness



- Sepsis is one of the most under recognized and misunderstood conditions by healthcare providers
- Healthcare providers need improved clinical prompts to facilitate earlier identification of sepsis

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

An easy way to remember:



When it comes to sepsis, remember
IT'S ABOUT TIME™ Watch for:



TEMPERATURE
higher or lower
than normal



INFECTION
may have signs
and symptoms of
an infection



MENTAL DECLINE
confused, sleepy,
difficult to rouse



EXTREMELY ILL
"I feel like I might
die," severe pain
or discomfort

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

Sepsis May Present Differently in Older Adults

- Fever may be low grade, delayed or absent
- 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

Resources::

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/>

High KP, Bradley SF, Gravenstein S, Mehr DR, Quagliarello VJ, Richards C, Yoshikawa TT, Clinical Practice Guideline for the Evaluation of Fever and Infection in Older Adult Residents of Long-Term Care Facilities: 2008 Update by the Infectious Diseases Society of America, *Clinical Infectious Diseases*, Volume 48, Issue 2, 15 January 2009, Pages 149–171, <https://doi.org/10.1086/595683>

Definitions

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

SIRS

Systemic Inflammatory Response Syndrome (SIRS)

- Temperature ≥ 38.3 C (101 F) or ≤ 36 C (96.8 F)
- Respiratory Rate ≥ 20
- Heart Rate ≥ 90
- White Blood Count ≥ 12 K, ≤ 4 K or $\geq 10\%$ bands

Note: SIRS can exist without progressing to sepsis

Definitions

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

SIRS

Sepsis

Sepsis

≥2 SIRS + suspected or confirmed infection

- *Infections that lead to sepsis most often:*
 - *Bladder or kidney infections*
 - *Lung infections*
 - *Skin infections*
 - *Abdominal infections*

Definitions

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

SIRS

Sepsis

Severe Sepsis

Severe Sepsis

Sepsis (+) NEW or ACUTE onset organ dysfunction and/or failure

Definitions

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

SIRS

Sepsis

Severe Sepsis

Septic Shock

Septic Shock

Severe Sepsis (+) hypotension (SBP \leq 90 mm/Hg)
that does NOT respond to fluid OR lactate \geq 4 mmol/L

Acute Organ Dysfunction as a Marker of Severe Sepsis

Neurological

Confusion, altered consciousness

Respiratory

Increased oxygen requirements
 $\text{SaO}_2 < 90\%$

Metabolic

Unexplained metabolic acidosis

- $\text{pH} \leq 7.30$ or base deficit $\geq 5.0 \text{ mEq/l}$
- Lactate $> 4 \text{ mmol/L}$

Cardiovascular

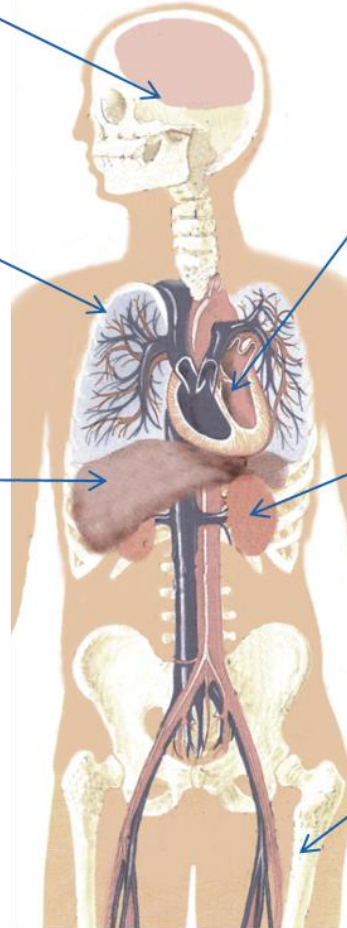
Tachycardia
 $\text{SBP} < 90 \text{ mm/Hg}$

Renal

$\text{UO} < 0.5 \text{ ml/kg per hour}$
(despite fluid)

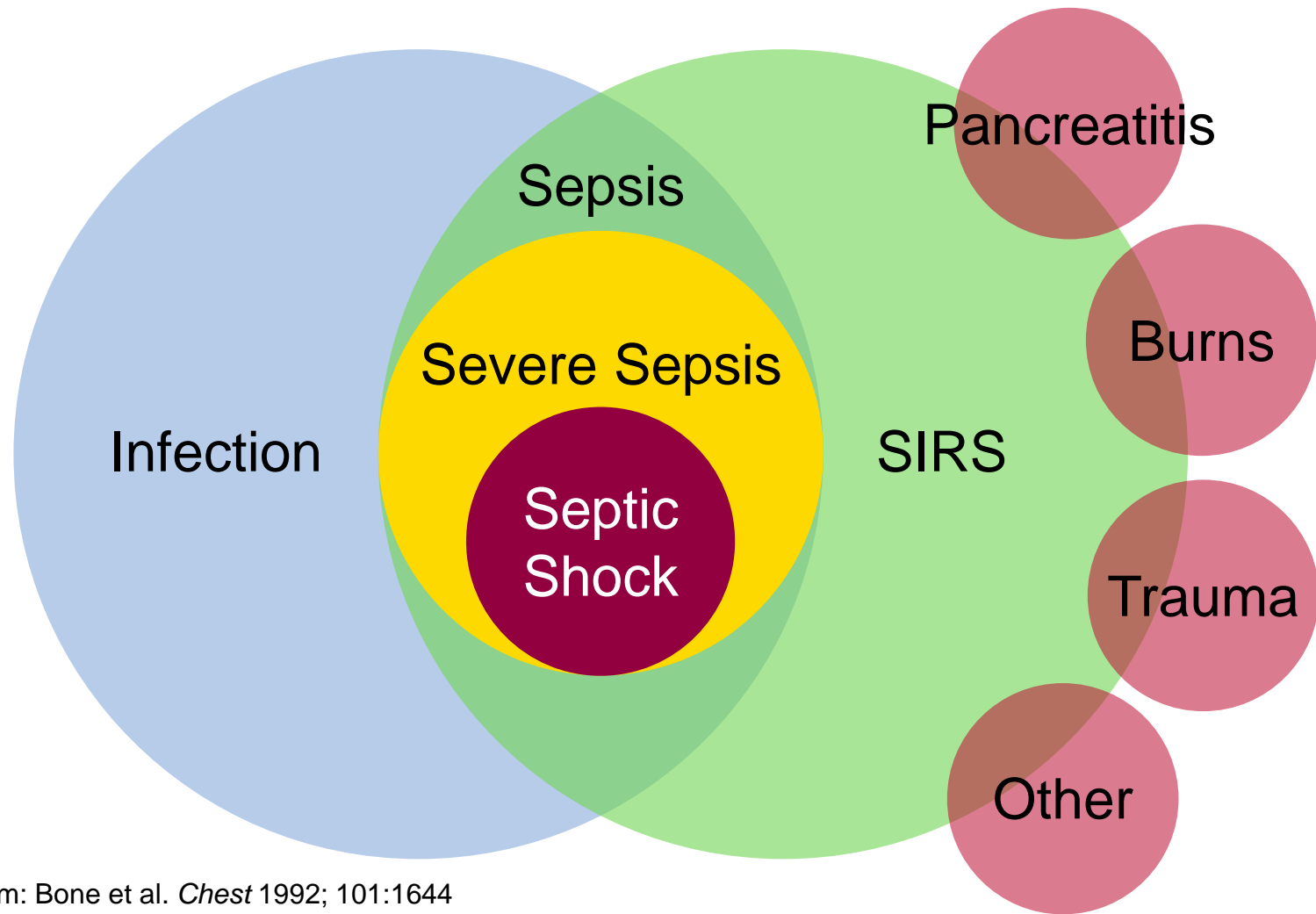
Hematologic

$\text{Platelets} < 80,000/\text{mm}^3$
Decline in platelet count
of 50% over 3 days



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

2016 Definitions for Sepsis

Third International Consensus Definitions for Sepsis

- Sepsis should be defined as life-threatening organ dysfunction caused by a dysregulated host response to infection
- For clinical operationalization, organ dysfunction can be represented by an increase in the Sequential [Sepsis-related] Organ Failure Assessment (SOFA) score of 2 points or more, or the quickSOFA

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

2016 Definitions for Sepsis

quickSOFA (qSOFA) Criteria:

- Better predictor of patient outcomes for non-hospital and non-ICU settings (vs. SIRS criteria)
- Appropriate and easy to use in the outpatient setting

2 of the 3 criteria provides simple bedside criteria to identify adults with suspected infection who are likely to have poor outcomes:

- ☐ Altered mental status
- ☐ Hypotension (systolic <100mmHg)
- ☐ Increased respiration rate (>22 breaths per minute)

2016 Definitions for Septic Shock

Third International Consensus Definitions for Septic Shock

- Septic shock should be defined as a subset of sepsis in which particularly profound circulatory, cellular, and metabolic abnormalities are associated with a greater risk of mortality than with sepsis alone
- Patients with septic shock can be clinically identified by
 - Vasopressor requirement to maintain a mean arterial pressure of 65 mm Hg or greater
 - Serum lactate level greater than 2 mmol/L (>18 mg/dL) in the absence of hypovolemia

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

100-100-100 Early Detection Tool



Is their
temperature
above 100?



Is their
heart rate
above 100?



Is their
blood pressure
below 100?

And does
the resident
just not look
right? Tell
the nurse,
**screen for
sepsis** and
notify the
physician
immediately.

Minnesota Hospital Association

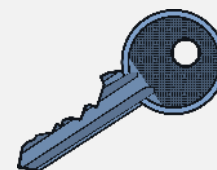
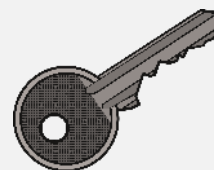
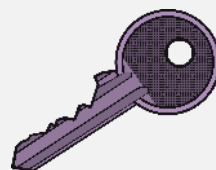
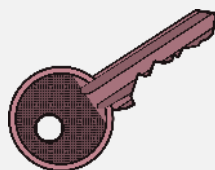
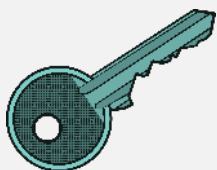
Resources and details: <https://www.mnhospitals.org/quality-patient-safety/quality-patient-safety-initiatives/sepsis-and-septic-shock#/videos/list>

Early recognition is key

- Sepsis-induced organ damage **may not be apparent**
- **You cannot detect organ damage until it is too late**
- Survival depends on **timely** assessment and treatment when **changes** first happen in the patient/resident's condition
- Knowing which patient/residents are **more susceptible** to sepsis and are at higher risk will help with early recognition

<http://www.prweb.com/releases/sepsis/awareness/prweb11102587.htm>

Singer M, Deutschman CS, Seymour C, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA*. 2016;315(8):801-810. doi:10.1001/jama.2016.0287.



Time to Treatment is Critical

- Mortality increases by 8% for every hour that appropriate treatment is delayed¹
- Early identification and treatment are the keys to improved outcomes
- When sepsis is caught early, it...
 - increases the chance for surviving
 - can prevent progression to septic shock



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

Initial Treatment- Evidence Based

Consistent with Surviving Sepsis Campaign¹



Recommended within **1st** hour of recognition



Within **3** Hours of Presentation

- ✓ Measure blood lactate level
- ✓ Obtain blood cultures (prior to giving antibiotics)
- ✓ Administer broad-spectrum IV antibiotics
- ✓ Administer 30ml/kg crystalloid for hypotension or lactate ≥ 4 mmol/L

1. Surviving Sepsis Campaign Bundle revised 4/2015 by SSC Executive Committee

Initial Treatment- Evidence Based



Within 6 Hours of Presentation of Septic Shock

- ✓ Administer vasopressors (for hypotension that does not respond to initial fluid resuscitation) to maintain a mean arterial pressure (MAP) $\geq 65\text{mmHg}$
- ✓ For persistent hypotension ($\text{MAP} < 65$) or initial lactate $\geq 4\text{mmol/L}$, reassess volume status and tissue perfusion
- ✓ Repeat lactate level if initial level was elevated

**Time of presentation is defined as the time of triage in the emergency department or, if presenting from another care venue, from the earliest chart annotation consistent with all the elements of severe sepsis or septic shock ascertained through chart review*

Antibiotic Stewardship vs. Treating Sepsis



Not a Conflict in Strategies!

The **right** drug
For the **right** diagnosis
With the **right** dose and duration

- Appropriate use of all antibiotics in all health care settings
- Urgent antibiotic therapy required for bacterial infections to prevent progression to sepsis and septic shock
- Next steps should focus on identifying pathogens to tailor antimicrobial therapy or scale back (de-escalation)

Antibiotic Stewardship and Sepsis

Additional Guidance ¹

- **Treat clinically significant infections** (not contamination or colonization)
 - Do not treat asymptomatic bacteriuria
- **Track local resistance patterns**
 - CDC interactive maps <https://www.cdc.gov/hai/>
 - Health Map Resistance <https://www.resistanceopen.org/>
 - How to read and interpret an antibiogram video: https://www.youtube.com/watch?v=_Vv6Z0HeECM&feature=youtu.be

1. Antibiotic Stewardship in Sepsis. The Hospitalist. May 2018

Hospitalization

Sepsis patients of any age: Older adult sepsis patients are:

- Are more severely ill than others hospitalized
 - Have considerably longer lengths of stay (median=10 days)¹
 - Are more likely to die during hospitalization
- 13 times more likely to be hospitalized ²
 - More likely to be admitted to the ICU ³
 - 76% are more likely to be discharged to SNF ⁴

1. MMWR Vol.65 Aug.2016

2. <https://www.sepsis.org/sepsis-alliance-news/sepsis-and-aging-community-presentation/>

3. *Sepsis in Older Americans: Saving Lives through Early Recognition*

4. *Sepsis in Older Americans: Saving Lives through Early Recognition*



Post Sepsis Syndrome

Affects up to 50% of sepsis survivors

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

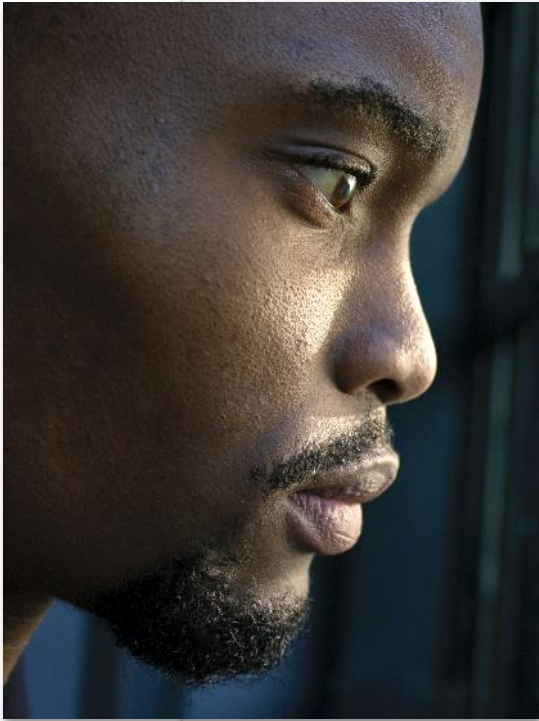
- Impaired cognitive function-especially among older patients
- Mobility impairments (muscle weakness)
- Disabling muscle and joint pain
- Amputations
- Loss of self-esteem
- Extreme fatigue
- Insomnia
- Nightmares, hallucinations, and panic attacks

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

Questions to Ask Yourself

- Does this agency /facility have sepsis reduction efforts in place?
 - A process to screen patients/residents for sepsis?
 - A process for sepsis treatment? Standing order/protocol?
- Do you know which patients/residents have the **potential for sepsis** in your facility?
- Are you more closely monitoring patients/residents who were discharged from a hospital with an infection or sepsis?

INTERACT Stop and Watch Tool

Stop and Watch is a helpful tool to help identify changes in a patient's condition that could be the early signs of sepsis:



Seems different than usual

Talking or communicating less than usual

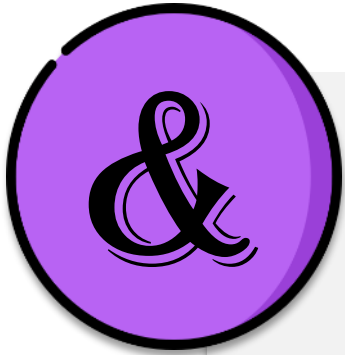
Overall needs more help than usual

Participating in activities less than usual

<http://www.pathway-interact.com/>

INTERACT Stop and Watch Tool

Stop and Watch is a helpful tool to help identify changes in a patient's condition that could be the early signs of sepsis:



Ate less than usual (not because dislikes food)

No bowel movement in 3 days: or diarrhea

Drinking less than usual

<http://www.pathway-interact.com/>

INTERACT Stop and Watch Tool

Stop and Watch is a helpful tool to help identify changes in a patient's condition that could be the early signs of sepsis:



Weight change

Agitated or nervous more than usual

Tired weak confused or

Change in skin color or condition

Help with walking, transferring or
toileting more than usual

<http://www.pathway-interact.com/>

Post-Acute Situation Background Assessment Recommendation (SBAR) for Sepsis

Example 1

Example 2

SBAR for Sepsis

SITUATION

- My name is _____
- I'm calling from _____
- I need to speak with you about patient/resident, Mr. or Mrs. _____
- This patient/resident is showing signs and symptoms of infection and sepsis.

BACKGROUND

- The patient/resident was admitted on _____ (date) with the diagnosis of _____ (original condition).
- The patient/resident is now showing these signs of possible infection _____ (describe the signs and potential source of infection).
- This started on _____ (date).
- The patient/resident is allergic to _____
- The patient's/resident's advance care directive is _____

ASSESSMENT (describe key findings)

- My assessment of the situation is that the patient/resident may be experiencing a new or worsening infection. Here are my findings.
 - Current vital signs
BP _____ HR _____ RR _____ Temp _____
SpO2 _____ (on room air or supplemental O2)
 - The patient/resident has voided _____ times in the last 8 hours.
 - Mental status is (changed OR unchanged) from baseline: _____
 - Other physical assessment findings that are related to possible infection or sepsis (e.g., lung sounds, wound assessment): _____

RECOMMENDATION

- I am concerned that this patient/resident may have sepsis.
 - Would you like to order a serum lactate, blood culture and basic metabolic panel?
 - How soon can you see this patient/resident?
- If the patient/resident is hypotensive, should I start an IV and give a fluid bolus?
- The physician should confirm, clarify and request additional information and then work with the nurse to take appropriate action with this patient/resident.

Before calling the physician, NP, PA or other health care professional:

Evaluate the patient/resident and complete this form.

Check vital signs; be alert for the early sepsis warning signs.

Review the patient/resident record: recent hospitalizations, lab values, medications and progress notes.

Note any allergies.

Be aware of the patient's/resident's advance care wishes.

Sepsis Early Warning Signs

Report any of these findings

Temperature $\geq 38.3^{\circ}\text{C}$ (101°F)

or $\leq 36^{\circ}\text{C}$ (96.8°F)

Heart rate ≥ 90 bpm

Respiratory rate ≥ 20 bpm

White blood cell count

$\geq 12,000 \mu\text{L}^{-1}$ or

$\leq 4,000 \mu\text{L}^{-1}$

Altered mental status

SpO2 $\leq 90\%$

Decreased urine output

From recently drawn labs (within 24 hours)

Creatinine > 2 mg/dl

Bilirubin > 2 mg/dl

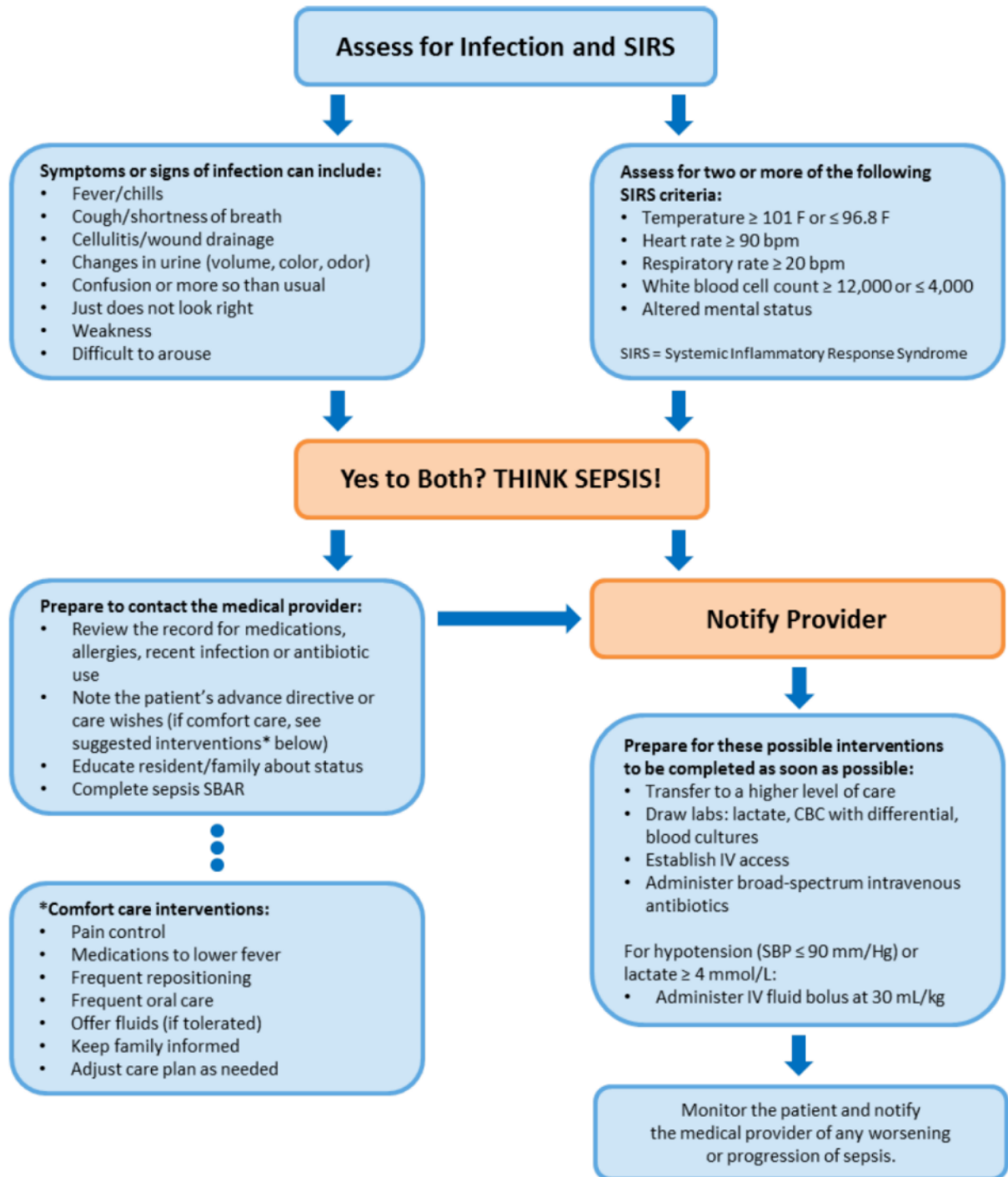
Platelet count $\leq 100,000 \mu\text{L}$

Lactate ≥ 2 mmol/L

Coagulopathy INR ≥ 1.5

or aPTT > 60 secs

Post-Acute Care Sepsis Early Identification and Treatment Pathway



Sepsis Zone Tool

Patient information sheet to self-monitor for the early signs and symptoms of sepsis

Provide this for residents that have either been diagnosed with an infection or are at high risk for developing an infection

My plan for preventing infection at home

Things I can do

- ☐ Wash my hands and water door knob
- ☐ Stay away from colds, flu, your doctor
- ☐ Get record whooping
- ☐ Eat healthy
- ☐ Keep my
- ☐ Have a plan the yellow

Look for signs

- Do a daily stoplight
- Report any yellow risk
- Watch for danger by your damage, one of the a sign 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.



Red Zone
Take action now!

Call: _____

Call: _____

	Green Zone	Yellow Zone	Red Zone
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.

Teach Back Method

- Studies have shown that patients forget 40-80% of the information they receive almost immediately after hearing it ¹
- Teach Back is asking people to restate in their own words what has been presented to them
- How Teach Back can help ensure effective communication:



- Helps gauge the need for re-explaining if necessary
- Heightens engagement of your audience
- Fosters trust between presenter and audience
- Creates an opportunity for dialogue between you and the audience

1. N Engl J Med 2009; 360: 1418-1428

Talking with Patients & Families

- Start the discussion by asking if they have heard of sepsis
- *If they have let them tell you what they know*



Do you know what
sepsis is?

I think so. Does it
have something to do
with bacteria?



Talking with Patients & Families

- Share key points about sepsis:
 - The body's over active/often life threatening response to an infection anywhere (skin, urine, respiratory etc.)
 - Anyone with an infection may be at risk for developing sepsis
 - Early signs and symptoms; fever/feeling cold, sleepy/confused, short of breath, rapid heart rate, decreased /dark urine
 - Its important that you let your caregiver know if you experience any of the above
 - **Sepsis is a medical emergency!**



Case Study

A 74-year-old female, who is a longtime nursing home resident, has a medical history of CAD, osteoarthritis and stroke with left-leg weakness.



She normally eats in the dining room, but wanted to stay in her room today. She asked for a blanket because she feels chilled and is not acting like her usual self. Her color is pale and she stated it burned when she went to the bathroom. You also notice she is coughing more than normal.

Case Study

Her vital signs are:

T 100.3

HR 117

RR 22

BP 105/43

O2 SAT 90% on room air



Does she have two or more SIRS criteria? **HR,RR**

Does she have a possible or active infection? **UTI?**

Does she have additional organ dysfunction? **Respiratory?**

Does she screen positive for severe sepsis? **Yes**

Preventing Sepsis



- ☐ Follow infection control practices (hand hygiene, catheter removal)
- ☐ Treat infections promptly
- ☐ Recognize the symptoms of severe infection
- ☐ Ensure vaccinations are up-to-date
- ☐ Maintain good overall health and care for chronic conditions

How You Can Help



- Educate colleagues, patients, family and friends:
 - About the signs of sepsis and who is at risk
 - About need to seek immediate care and use the words “I suspect sepsis”
 - About how to prevent infections
 - With use of patient education materials and Teach Back Method
- Take precautions to prevent infections and sepsis
- If you suspect sepsis- Act immediately and initiate care

Organizations Working to Stop Sepsis

New England QIN-QIO

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

<http://www.healthcarefornewengland.org/sepsis>

Sepsis Alliance

Largest sepsis advocacy organization in the U.S. working in all 50 states

Resources for patients and health professionals

<http://www.sepsis.org/>

Centers for Disease Control (CDC)

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

<https://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





Recommendations

Post-Training Assessment

Please complete Post Training Assessment questions on the **RIGHT** and **BOTTOM** and hand in to the presenter at the end of training session.

Thank you!



Sepsis Awareness Training

Pre and Post-Learning Assessment - Clinical Staff

Your name is not required. This is not a quiz.
It is used solely to assess understanding of sepsis before and after training.

Instructions:

1. Please complete the top section of this form at the start of training.
2. Pre-learning Assessment: Read the statements in the **LEFT** section below and respond by checking one of the boxes in the column labeled "T" (True) or "F" (False).
3. Post-learning Assessment: Repeat with statements in the **RIGHT** section below and complete the bottom.

Date: _____

My provider setting: ☐ Hosp. ☐ SNF ☐ HH ☐ AL ☐ Comm Agency ☐ Med Off ☐ Other _____

My Role is: ☐ MD/DO/NP/PA ☐ RN ☐ LPN ☐ CNA/MA ☐ PT/OT/RT ☐ Pharmacist ☐ Other _____

Pre-learning Assessment		T
Please complete this section before training.		
1. Sepsis should be treated as a medical emergency in all instances.		
2. Patients with sepsis will present with fever and confusion in all instances.		
3. Common infections that may progress to sepsis are lung infection, skin infection, UTI, and intra-abdominal infection, but sepsis can also occur without an infection.		
4. Organ dysfunction is a life-threatening result of sepsis and can occur anywhere in the body.		
5. I am familiar with post-sepsis syndrome and its potential long-term effects.		
6. Sepsis can be prevented by preventing infections and treating them promptly.		

Post-learning Assessment		T	F
Please complete this section after training.			
1. Sepsis should be treated as a medical emergency in all instances.			
2. Patients with sepsis will present with fever and confusion in all instances.			
3. Common infections that may progress to sepsis are lung infection, skin infection, UTI, and intra-abdominal infection, but sepsis can also occur without an infection.			
4. Organ dysfunction is a life-threatening result of sepsis and can occur anywhere in the body.			
5. I am familiar with post-sepsis syndrome and its potential long-term effects.			
6. Sepsis can be prevented by preventing infections and treating them promptly.			

Do you know someone who has had sepsis or are you a sepsis survivor? Please share your story.

If you are willing to share your story to help increase sepsis awareness please enter your contact information here:

Or contact: Alyssa DaCunha: 877-904.0057 x3241 adacunha@healthcentricadvisors.org

Thank you!

This material was originally created by the National Quality Improvement Network, the Quality Improvement Network Quality Improvement Organization for New York, South Carolina, and the District of Columbia. It has been updated by the New England Quality Improvement Network Quality Improvement Organization for New England, under contract with the Centers for Healthcare & Medical Services (CHMS), an agency of the U.S. Department of Health and Human Services. The content presented is not necessarily reflect CHMS policy. CHMS/CHQIN/2011/011/419

Evaluation and CEUs

In order to get your CEUs, please complete the evaluation form provided.



For more information

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

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