



SDCC Sepsis Initiative

Protecting and Treating Sepsis in our SDCC
Communities



1. Become comfortable with the SDCC selected sepsis tools to train your clinical teams
2. Practice using the sepsis tools with two case studies
3. Role play: C.N.A/PCA practice calling supervisor alerting the team for possible sepsis alert



- SOUTH DENVER
CARE CONTINUUM

Train-the-Trainer Pre-Test

- 1. What is sepsis?**
 - a. An infection in the bone
 - b. A local infection, such as cellulitis or appendicitis
 - c. A toxic reaction to an infection
 - d. A chronic disease
- 2. Sepsis is contagious like Influenza?**
 - a. True
 - b. False
- 3. Who is at highest risk for developing sepsis?**
 - a. 65 years and older
 - b. Young children and infants
 - c. Compromised/weakened immune system
 - d. All the above
- 4. Which type of infection can lead to sepsis?**
 - a. Infections of the lung (i.e. pneumonia)
 - b. Infections of the skin (i.e. cellulitis)
 - c. Infections of urinary track (i.e. UTI)
 - d. Infections of gastrointestinal (i.e. norovirus & c difficile)
 - e. All the above
- 5. 80% of sepsis cases originate in the home and community**
 - a. True
 - b. False
- 6. Approximately how many people die each hour due to sepsis?**
 - a. 7
 - b. 504
 - c. 36
 - d. 153
- 7. Every hour a resident does not receive antibiotics the risk of death increases by ___%**
 - a. 90%
 - b. 60%
 - c. 7.6%
 - d. 25.7%
- 8. Sepsis can be treated if it's identified early**
 - a. True
 - b. False
- 9. As healthcare providers we can do the following to help decrease sepsis**
 - a. Hand hygiene
 - b. Flu and Pneumonia vaccinations
 - c. Educate each other, families and residents
 - d. Add sepsis education to Stay Healthy at Home binders
 - e. All the above
- 10. All of the following are signs of sepsis EXCEPT:**
 - a. Temperature over 100
 - b. Slow Heart rate, below 60
 - c. Blood Pressure under 100



What is Sepsis?

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



2 ways the body reacts to infection:

1st- Local Response

inflammation, redness, pus, pain at site of infection

2nd- Total Body Response

S.I.R.S-Systemic Inflammatory Response Syndrome

Infection into the blood

Total body response to infection



Who is at risk for systemic infection reaction?

1. Compromised/weakened immune system
2. Overwhelming infection and/or resistant organisms
3. 65 years old and older, young children and infants
4. Invasive tubes/procedures
5. Multiple Chronic Conditions
6. Infections of the lung, skin, urinary and gastrointestinal systems



Treatment for Sepsis

1. Early identification
 - every hour a resident does not receive antibiotics the risk of death increases by 7.6%
2. Review Advanced Directives
3. Notify Physician
4. Contact Family
5. Hospitalization or treatment in community can include:
 - Labs: CBC, WBC, lactate level, blood cultures
 - IV Fluids at a fast rate
 - Antibiotics
 - Oxygen Therapy
 - Monitor organ failure, pain control, symptom relief and comfort care by our C.N.A./PCA's






-SOUTH CARE DENVER CONTINUUM



ACT FAST!

Early detection of sepsis requires fast action

STOP AND WATCH (INTERACT™)

- S** - Seems different than usual
- T** - Talks or communicates less 
- O** - Overall needs more help
- P** - Pain: new or worsening; participated less in activities
- A** - Ate less 
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- H** - Help with walking, transferring and toileting more than usual

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This content was adapted from the INTERACT™ tool. This material was prepared by Lake Superior Quality Innovation Network, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The materials do not necessarily reflect CMS policy. 11809-60C-10-02

ACT FAST!

Early detection of SEPSIS requires fast action

If resident has suspected infection AND two or more:

- Temperature >100°F or <96.8°F Pulse >100
- SBP <100 mmHg or >40 mmHg from baseline Respiratory rate >20/SpO2 <90%
- Altered mental status
-

Plan for:

- Review advance directive Contact the physician
- Contact the family
-

If transferring resident to hospital:

- Prepare transfer sheet Call ambulance
- Call in report to hospital Report positive sepsis screen
-

If resident stays in facility, consider options below that are in agreement with resident's advance directives:

- Labs: CBC w/diff, lactate level (if able) UA/UC, blood cultures, as able from 2 sites, not from lines
- Establish IV access for IV 0.9% @ 30ml/kg Administer IV, PO or IM antibiotics
- Monitor for worsening in spite of treatment, such as:
 - Urine output <400ml in 24 hours SBP <90 despite IV fluids
 - Altered mental status
- Comfort care:
 - Pain control Analgesic for fever
 - Reposition every 2-3 hrs Oral care every 2 hrs Offer fluids every 2 hrs Keep family informed
 - Adjust care plan as needed
- Consider transferring to another level of care such as palliative care, hospice or hospital

Every hour a resident in septic shock doesn't receive antibiotics, the risk of death increases 7.6%

Call the doctor!

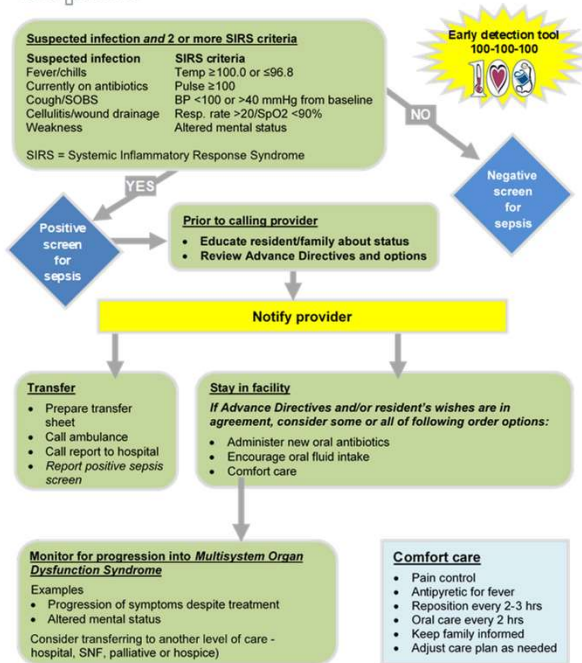


And does the resident just not look right? Tell the nurse, **screen for sepsis** and notify the physician immediately.

- SOUTH DENVER CARE CONTINUUM

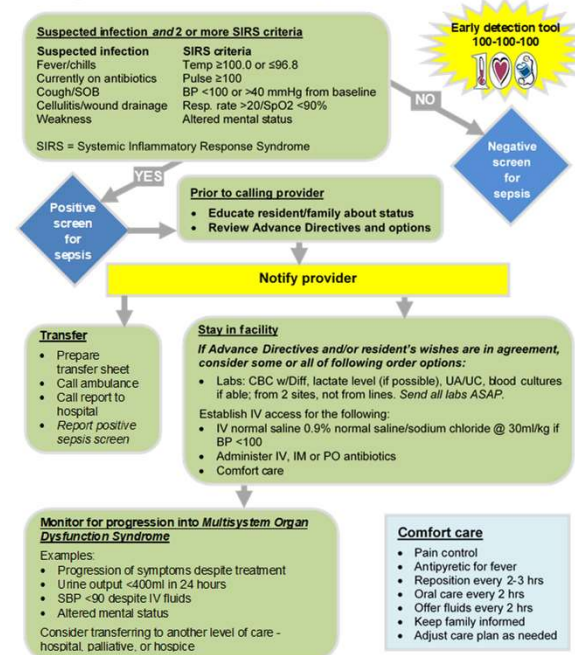
seeing sepsis

Intermediate care and assisted living algorithm for adults



seeing sepsis

Skilled nursing facility sepsis algorithm for adults








- SOUTH DENVER CARE CONTINUUM

Signs of infection and sepsis at home



Common infections can sometimes lead to sepsis. Sepsis is a deadly response to an infection. If you think you have sepsis, act NOW!

	 Green zone No signs of infection.	 Yellow zone Take action today. Call your doctor or nurse:  _____	 Red zone Take action now! Call or see your doctor now!  _____
Do I have a fever?	No fever in the past 24 hours and 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 don't feel cold.	<ul style="list-style-type: none"> I feel cold and can't get warm. I'm shivering or my teeth are chattering. 	<ul style="list-style-type: none"> Temperature is below 96.8 °F. Skin or fingernails are pale.

- SOUTH CARE DENVER CONTINUUM

SEPSIS FACT SHEET

A POTENTIALLY DEADLY OUTCOME FROM AN INFECTION

What should I do if I think I have an infection or sepsis?

- Call your doctor or go to the emergency room immediately if you have any signs or symptoms of an infection or sepsis. This is a medical emergency.
- It's important that you say, "I am concerned about sepsis."
- If you are continuing to feel worse or not getting better in the days after surgery, ask your doctor about sepsis. Sepsis is a common complication of people hospitalized for other reasons.

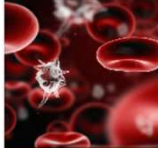


What is sepsis?
Sepsis is a complication caused by the body's overwhelming and life-threatening response to an infection, which can lead to tissue damage, organ failure, and death.







When can you get sepsis?
Sepsis can occur to anyone, at any time, from any type of infection, and can affect any part of the body. It can occur even after a minor infection.

What causes sepsis?
Infections can lead to sepsis. An infection occurs when germs enter a person's body and multiply, causing illness and organ and tissue damage. Certain infections and germs lead to sepsis most often. Sepsis is often associated with infections of the lungs (e.g., pneumonia), urinary tract (e.g., kidney), skin, and gut. *Staphylococcus aureus* (staph), *Escherichia coli* (E. coli), and some types of *Streptococcus* (strep) are common germs that can cause sepsis.

Are certain people with an infection more likely to get sepsis?
Anyone can develop sepsis from an infection, especially when not treated properly. However, sepsis occurs most often in people aged 65 years or older or less than 1 year, have weakened immune systems, or have chronic medical conditions (e.g., diabetes).
A CDC evaluation found more than 90% of adults and 70% of children who developed sepsis had a health condition that may have put them at risk.
Ask your doctor about your risk for getting sepsis. If you suspect sepsis, ask your doctor, "Could it be sepsis?"

What are the symptoms of sepsis?
There is no single sign or symptom of sepsis. It is, rather, a combination of symptoms. Since sepsis is the result of an infection, symptoms can include infection signs (diarrhea, vomiting, sore throat, etc.), as well as **ANY** of the **SYMPTOMS** below:

 Shivering, fever, or very cold	 Extreme pain or discomfort	 Clammy, or sweaty skin
 Confusion or disorientation	 Short of breath	 High heart rate

- SOUTH CARE DENVER CONTINUUM

PROTECT YOUR PATIENTS FROM SEPSIS.

of SEPSIS
KNOW THE SIGNS. SPOT THE RISKS. ACT FAST.

Infections put your patients at risk for sepsis. Be alert to the signs and, if suspected, act fast.

Sepsis is the body's extreme response to an infection. It is life-threatening, and without prompt treatment, often rapidly leads to tissue damage, organ failure, and death.

SEPSIS STATS

More than
1.5 MILLION
people get sepsis each year in the U.S.

At least
250,000
Americans die from sepsis each year

About
1 IN 3 PATIENTS
who die in a hospital have sepsis

WHAT CAUSES SEPSIS?

The most frequently identified pathogens that cause infections that can develop into sepsis include *Staphylococcus aureus* (staph), *Escherichia coli* (E. coli), and some types of *Streptococcus* (strep).

Four types of infections that are often linked with sepsis:



Anyone can get an infection, and almost any infection can lead to sepsis. Certain patients are at increased risk for developing sepsis:


WHO IS AT RISK?




- SOUTH CARE DENVER CONTINUUM

LIFE AFTER SEPSIS FACT SHEET

WHAT SEPSIS SURVIVORS NEED TO KNOW



Many survivors
are left with
LIFE-CHANGING
challenges.



ABOUT SEPSIS

What is sepsis?
Sepsis is a complication caused by the body's overwhelming and life-threatening response to an infection, which can lead to tissue damage, organ failure, and death.


What causes sepsis?
Any type of infection that is anywhere in your body can cause sepsis. It is often associated with infections of the lungs (e.g., pneumonia), urinary tract (e.g., kidney, skin, and gut). An infection occurs when germs enter a person's body and multiply, causing illness and organ and tissue damage.

LIFE AFTER SEPSIS

What are the first steps in recovery?
After you have had sepsis, rehabilitation usually starts in the hospital by slowly helping you to move around and look after yourself: bathing, sitting up, standing, walking, taking yourself to the restroom, etc. The purpose of rehabilitation is to restore you back to your previous level of health or as close to it as possible. Begin your rehabilitation by building up your activities slowly, and rest when you are tired.

How will I feel when I get home?
You have been seriously ill, and your body and mind need time to get better. You may experience the following physical symptoms upon returning home:

- General to extreme weakness and fatigue
- Breathlessness
- General body pains or aches
- Difficulty moving around
- Difficulty sleeping
- Weight loss, lack of appetite, food not tasting normal
- Dry and itchy skin that may peel
- Brittle nails
- Hair loss



Centers for Disease Control and Prevention
National Center for Injury Prevention and Control
Division of Field Epidemiology



How can we help prevent Sepsis?

Proper handwashing of course!

- Infection control with sterile technique and maintenance of
 - Intravenous lines
 - Foley catheters
 - Wound care
 - Invasive techniques
- Flu, pneumonia and COVID vaccines
- Education upon discharge in the Stay Healthy at Home Binder



My mom's story ... Maria





My mom's story ... Maria





CNA/PCA



Sepsis Case Study (PCA/C N A)

Phyllis is your client that you work with every Monday, Wednesday and Friday in her home after she had a recent hospitalization. You are helping her with her ADL's such as showering, cleaning up her apartment, walking her dog and making her breakfast and lunch. You saw her last on Friday and now on Monday she seems different.

She is arguing with you about how you cleaned up the kitchen, which she has never done before. She has needed help going to the bathroom 3 times already this morning! When you helped her get up you noticed that her skin was clammy and she seemed hot. You ask her if she is in pain and she crankily says "of course I am!"

You call your supervisor in the office and they ask you to get her vital signs:

Heart rate 110

Blood pressure 90/50

Temperature 100

Respiratory rate 26

Actions:

Review your sepsis educational material

What will you tell your supervisor when you report the vital signs?

Call your supervisor






-SOUTH DENVER CARE CONTINUUM

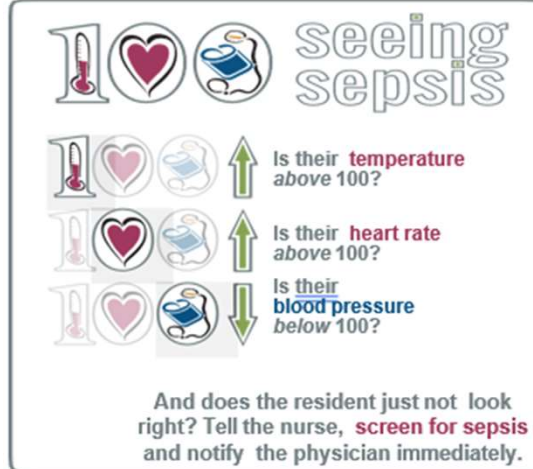
Quality Improvement Organizations
and Innovation Network
Lake Superior Quality Innovation Network
www.lsqin.org

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100 seeing sepsis

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.

Sepsis Case Study (PCA/C N A)

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Sepsis Case Study (PCA/ C N A) #2:

Mrs. Taylor, a 53-year-old female that has been receiving Home Care PCA/CNA services three times weekly the past month, vital sign monitoring and bathing. You last saw Mrs. Taylor two days ago and she was feeling great and encouraged that she was finally getting stronger at that time. Today though, when you arrive, Mrs. Taylor is lying in bed and relates she has been weak, nauseated and sweating profusely since soon after her husband left for work this morning. Mrs. Taylor has a history of hypertension and a recent discovery of large B cell lymphoma, for which she is undergoing chemotherapy (the last dose was two weeks ago). Mrs. Taylor also mentions that she has had a lot of burning and urgency when she urinates that started last night and states her lower back has just started hurting as well.

You call your supervisor in the office and they ask you to get her vital signs:

Temperature 102.3

Heart Rate 118

Respiratory Rate 21

Blood Pressure 104/66

Actions:

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What will you tell your supervisor when you report vital signs?

Call your supervisor

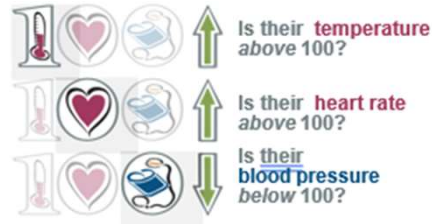
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Questions?

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SDCC Sepsis Initiative

Train the Trainer tools available on

<http://southdenvercc.org>

SDCC Username: SDCC
Member Password: Sdcc@2020