

## 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: Nurses practice calling Dr., PCP, PA s alerting the team for possible sepsis alert



#### 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:

1<sup>st</sup>- Local Response

inflammation, redness, pus, pain at site of infection

2nd- Total Body Response

S.I.R.S-Systemic Inflammatory Response

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 to 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



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#### **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
N - No bowel movement in three days or diarrhea
D - Drank less
W - Weight change
A - Agitated or nervous more than usual
T - Tired, weak, confused or drowsy 💼
C - Change in skin color or condition
H - Help with walking, transferring and toileting more than usual

Lake Superior Quality Innovation Network represents Michigan, Mannesota and Wasconstei. | gLakeSuperiorQN | www.ksgin.org This correct was added from the NETRACT® was Thin materia was properly Lake Buenet Casity, Innovation Hendra, United Casity (Innovation Hendra), United Casity (Innovation He

## **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:

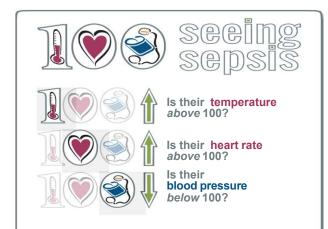
• Labs: CBC w/diff, lactate level (if able) UA/UC, blood cultures, as able from 2 sites, not

• 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!**



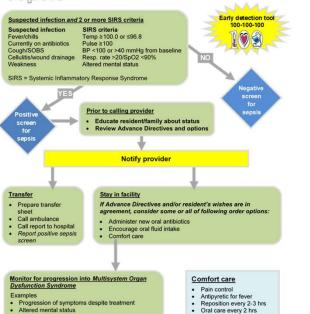
And does the resident just not look right? Tell the nurse, screen for sepsis and notify the physician immediately.





Consider transferring to another level of care -hospital, SNF, palliative or hospice)

Intermediate care and assisted living algorithm for adults



. Oral care every 2 hrs

- Keep family informed
- Adjust care plan as needed

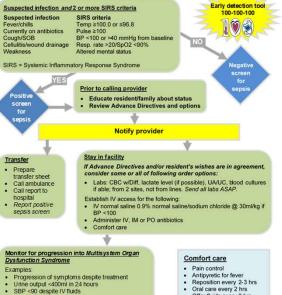


Altered mental status

hospital, palliative, or hospice

Consider transferring to another level of care -

#### **Skilled nursing facility** sepsis algorithm for adults



- Offer fluids every 2 hrs
  Keep family informed
- · Adjust care plan as needed

# -SOUTH DENVER CARE CONTINUUM

## **SBAR Communication Form**

and Progress Note for RNs/LPN/LVNs



#### Before Calling the Physician / NP / PA / other Healthcare Professional:

Evaluate the Resident/Patient: Complete relevant aspects of the SBAR form below

Check Vital Signs: BP, pulse, and/or apical heart rate, temperature, respiratory rate, O2 saturation and finger stick glucose for diabetics

Situation Review Record: Recent progress notes, labs, medications, other orders

Background

□ Have Relevant Information Available when Reporting

(i.e. medical record, vital signs, advance directives such as DNR and other care limiting orders, allergies, medication list)

Recommendation

Assessment



#### Situation: Name of community/agency (on call MD):\_\_\_\_\_ Code Status: Resident's Name: \_\_\_\_ \_\_\_\_RM#:\_\_\_\_ \_\_Age:\_\_\_\_Sex:\_\_\_\_ Diagnosis: \_ I am calling because this patient has met screening criteria for possible sepsis: \_\_\_\_\_Urgernt: Yes\_\_\_\_No\_\_\_\_ Background: History:\_\_\_ Patient has met the following (2) screening criteria: Temperature greater than 100 F OR 96.8 F: \_\_\_\_\_Heart rate above 100/min: \_\_\_ Blood Pressure below 100:\_\_\_\_\_\_Respiratory rate greater than 20/min: \_\_\_\_\_ Altered Mental Status: \_\_\_\_\_\_ WBC more than 12(cells/mcL):\_\_\_\_ AND suspected infection: \_\_\_\_ OR confirmed: \_\_\_\_\_ On PO/IV antibiotics currently or last time: \_\_\_\_\_ Assessment: I am concerned that the patient possibly has sepsis because: \_\_\_\_\_ Current Vital Signs: T: \_\_\_\_HR:\_\_\_\_BP:\_\_\_\_RR:\_\_\_\_02 sat: \_\_\_\_WBC:\_\_\_\_Blood Sugar: \_\_\_\_\_ Fevers in the last week/history/baseline: \_\_\_\_\_ Current labs/recent C&S: \_ Lung Sound: \_\_\_\_\_\_Allergies:\_\_\_\_\_ \_\_\_\_\_IV site:\_\_\_\_\_ Skin: Wounds: Foley\_\_\_\_ Last BM: \_\_\_\_\_ Abd:\_\_\_\_ Recommendation: Pending Labs: Nursing concerns: \_\_\_\_ How often do want vital signs? \_\_\_\_ If no improvement when would you want us to call you again? \_\_\_\_\_ Possible orders received: Chest X-ray □ BMP Urine C&S Urine C&S □ IVF; Blood culture NS\_\_LR\_\_ □ Labs: Transfer to . . . ....



#### SNF/NF to Hospital Transfer Form



Key Clinical Inform	nation				
Reason(s) for transfer	·				
8					
Is the primary reason	for transfer for o	liagnostic testing, r	not admission? 🛛 No	□ Yes	Tests:
Relevant diagnosis		2			
Heart Failure	Ejection Fraction	on if known	% Most recent Ech	o (date)	/ /
COPD		DM Most re	ecent Glucose (date/time)		On scheduled insulin 🗆 Yes 🛛 No
Cancer (active t	reatment)	🗆 Dementia	Other(s)		
Vital signs BP	HR_	RR	Temp	O2 Sat	Date/time taken (am/pm)
Most recent pain leve	2		( 🗆 N/A)	Pain	location
Most recent pain me	d		Date	given	/ / / Time (am/pm)
L					

 Code Status: Other (describe)
 □ Full Code
 □ DNR
 □ DNI
 □ DNH
 □ Comfort care only
 □ Uncertain

 Resident/Patient Decision Making Capacity
 □ Capable
 □ Requires proxy



This list is for hospital emergency rooms, hospitalists, and case managers; and for physicians, NPs, and PAs, who take off-hours call for the facility to assist with decisions about hospital admission or return to the facility.

F	2	•	1	I	i	t
1.0		•	L	L	L	c y

Address

Tel (

Key Contact

Circle 'Y' for yes or 'N' for no to indicate the availability of each item in your facility.

Capabilities	Yes	No
Primary Care Clinician Services		
At least one physician, NP, or PA in the facility three or more days per week	Y	N
At least one physician, NP, or PA in the facility five or more days per week	Y	N
Diagnostic Testing Onsite		
Basic Metabolic Panel ( <i>BUN, Ca, CI-, CRE, eGFR, GLU, K+, Na+, tCO</i> <sub>2</sub> )	Y.	N
Bladder Ultrasound	Y	Ν
Cardiac Echo	Y	Ν

Capabilities	Yes	No
Nursing Services		
24 Hour RN Converage	Y	N
O2 saturation	Y	N
Incentive spirometry	Y	N
Nebulizer treatments	Y	N
Interventions	8	
Advanced CPR (ACLS capability)	Y	N
Analgesic Pumps	Y	N



#### 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	Yellow zone Take action today. Call	Red zone Take action now! Call or
	infection.	your doctor or nurse:	see your doctor now!
		(G. 198	()
Do I have a	No fever in the past	Fever between 100 °F to	Fever is 101.5 °F or greater.
fever?	24 hours and not	101.4 °F.	
	taking medicine for a		
	fever.		
Do I feel cold?	I don't feel cold.	• I feel cold and can't get	• Temperature is below
		warm.	96.8 °F.
		• I'm shivering or my teeth are chattering.	<ul> <li>Skin or fingernails are pale.</li> </ul>





#### **SEPSIS FACT SHEET**

#### A POTENTIALLY DEADLY OUTCOME FROM AN INFECTION

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?

What causes 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.

#### think I have an infection or sepsis?

What should I do If I

 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, "Tam concerned about sepsis."

If you are continuing to feel worse or not getting better in the days after surgery, ask your doctor about septis. Septis is a common complication of people hospitalized for other masons.

other reasons.

Interchonors and log-for spipols. An infliction occurs when germs enter a person's body and multiply, causing latenses and organ and fissue demange. Cartain infections and germs load to sepsis most often. Sepsis is often associated with infections of the lungs e.g., pneumonia, uninary tarc (e.g., kideny, skin, and qu'i. Usiphylococcus aurus (staph), Extencibic coli E. coli, and some types of Streptococcus ptrep) 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







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.



## -SOUTH DENVER-INUUM



#### WHAT SEPSIS SURVIVORS NEED TO KNOW

#### **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?

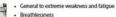
Many survivors are left with LIFE-CHANGING

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.



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 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



LIFE AFTER SEPSIS





## How can we all 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 ... Gary

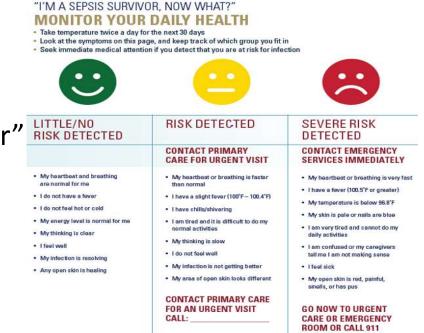
- 79-year-old, female Post hospital stay: (UTI / Weakness)
- Came home / Weakness "is this normal"?
- Blood pressure / heart rate = knew what to look for
- Caregiver took the measurements, acted fast!
- - heart rate 114, breathing "slowing down"
- - low grade fever (99.9F)
- - mom was too lethargic to act
- Family perspective is different = loved one, not a patient
- Being prudent versus being a son!
- Lessons learned: AWRENESS IS KEY





### My mom's story ... Gary

- Follow Discharge Suggestions
- Make a plan
- Designate a responsible "family member"
- Know who to call
- Know what to do
- Sepsis Recovery is a journey
- Follow the signs and the road map





# NURSE



neighborhood. She developed a stage 2 wound on her buttocks about 2 weeks ago and receives daily wound dressing changes.

Recently the area around the wound looks inflamed and has some exudate and Margaret has been complaining of increased pain in the area.

You medicate Margaret for pain and take her vital signs:

Heart rate 110

Blood pressure 100/68

Temperature 100.8 p o

Lung sounds clear

She is shaking and states she is really cold and would like another blanket. She seems more confused today and keeps asking what time it is and where is her mother?

Actions:

Refer to the Post-Acute Care Sepsis Early ID and Treatment Pathway

Fill out the SBAR

What do you think is going on? What will you request from the physician?

Call the physician

#### **Report Suspecting Sepsis**

<b>S</b> ituation:				
Name of community/agency				
Resident's Name:		RM#:	Age:	Sex:
Diagnosis:				
I am calling because this patie	ent has met screeni	ng criteria fo	r possible sepsis:	
			Urgernt: Yes	5No
Background:				
History:				
Patient has met the following	(2) screening crite	ria:		
Temperature greater than 10	) F OR 96.8 F:	Heart	rate above 100/min	n:
Blood Pressure below 100:				
Altered Mental Status:		WBC mor	e than 12(cells/mcL	):
AND suspected infection:				
On PO/IV antibiotics currently	or last time:			
Current Vital Signs: T:HR Fevers in the last week/histor Current labs/recent C&S:	y/baseline:			
Lung Sound:Aller	σies.			
Skin:Aller				
FoleyLast B				
Recommendation:				
Pending Labs:				
Nursing concerns:				
How often do want vital signs	;?			
If no improvement when wou	ld you want us to a	all you agair	ı?	
Possible orders received:		-		
Chest X-ray	BMP		Urine	C&S
Urine C&S	$\Box$ IVF;		Blood	culture
Labs:	NS	LR	<b>Trans</b>	sfer to
CBC with Diff	Resp. t	reatment	hospi	tal

□ ABG's

Quality Innovation Network

#### **ACT FAST!**

Early detection of sepsis requires fast action

#### STOP AND WATCH (INTERACT<sup>™</sup>)

- S Seems different than usual
- T Talks or communicates less
- O Overall needs more help
- P Pain: new or worsening; participated less in activities
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- N No bowel movement in three days or diarrhea
- D Drank less
- W Weight change
- A Agitated or nervous more than usual
- T Tired, weak, confused or drowsy
- C Change in skin color or condition
- H Help with walking, transferring and toileting more than usual

Lake Superior Quality 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.

Margaret is an 87 year old resident living in your long term care neighborhood. She developed a stage 2 wound on her buttocks about 2 weeks ago and receives daily wound dressing changes.

Recently the area around the wound looks inflamed and has some exudate and Margaret has been complaining of increased pain in the area.

You medicate Margaret for pain and take her vital signs:

- Heart rate 110
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- Temperature 100.8 p o
- Lung sounds clear

She is shaking and states she is really cold and would like another blanket. She seems more confused today and keeps asking what time it is and where is her mother?

Actions:

Refer to the Post-Acute Care Sepsis Early ID and Treatment Pathway

Fill out the SBAR

What do you think is going on? What will you request from the physician?

Call the physician

- □ CBC with Diff
- □ Lactic Acid (i stat)



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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