# Sepsis Core Measure Checklist

Date of Admission:	(Time Ze	= Time at which infection is identified/documented + 2 SIRS present with 6 hours of one another)
ED Team	ED Team	ED Team
Inpt Team	Inpt Team	Inpt Team
Infection identified/d	ocumented in ED w	h relevant Sepsis orders initiated.
Lactate Result (not	order) IF >2.0 mmol/	
Documentation calli	ng this Severe Seps	3
Repeat Lactate result	ılt (order 2 hrs after	rior draw time through "Infection" Order Set)
Blood Cultures draw	n (not ordered) prio	to ATB
(on Green Sheet)		rdered) within 3 hrs of Time Zero, Selection from Empiric Broad Spectrum ATB Lis
SIRS Template use	d in note: 🗖 SIRS cr	eria indicated, 🗖 Suspected Site(s) Indicated, 🗖 In-hospital concurrent diagnosis
indicated, 🗖 Culture in	dicated, 🔲 30mL/k	Target documented, 🔲 ATB/Medications indicated
Assessment second	lary to Organ Dysfur	ction indicating Severe Sepsis <i>(Lactate &gt;2.0 mmol/l, INR &gt;1.5, PTT &gt; 60 sec,</i>
Platelet <100,000, Billi	rubin >2, Creatinine	2, Urine output < 0.5 mL/kg/hr for 2 hrs, SBP <90, MAP <65, SBP decrease by 40
from previous "normal"	<i>)-</i> but not when chroi	ic or due to medications
IF Severe Sepsis: 🗆 🤇	Consider 30 mL/kg C	rystalloid Fluid Bolus (0.9% NS or LR),
	· ·	rior draw time through "Infection" Order Set) which will order 2 additional Lactates.
-		psis induced hypotension (SBP < 90 mmHg, MAP < 65 mmHg, or_SBP decrease
Documentation calli		chronic or due to medications
	<b>e</b>	S or LR) for hypotension or Lactate $\geq$ 4.0 > 125 mL hr,
		Time Zero of Lactate $\geq$ 4.0 and/or Sepsis induced hypotension
Vasopressors (Nor	epinephrine 1 <sup>st</sup> choi	e unless compelling reason for alternative)
Within 6 hrs of Time	Zero of Lactate > 4	) and/or Sepsis Induced hypotension
		sion Assessment Note consisting of including Vital Signs, Cardiopulmonary,
	•	I may write the note after 6 hrs so long as you document the time you examined
the patient which must	,	Lestate 4.0 and/an Ocacia Induced by metancian
	o nis of 1 me ∠ero o	Lactate

### Top Issues of Focus

Broad Spectrum ATB AND Delivered within 3 hrs.	ED Provider not thinking/documenting/acting upon
	Sepsis treatment plan.
Infection/Sepsis Screen not suspected while in ED.	30 mL/kg ordered as one target volume based upon
	weight rather than small repeated boluses.
Inpatient delay in timing of ATB administration from time	Communication from Inpatient provider to ED team on
ordered in latric.	additional Sepsis orders on admission.
Blood Cultures within 3 hrs.	Lack of 6 hr Repeat Assessment note.

Reviewer Signature	Date	Time
Reviewed With Signature	Date	Time

Patient Label

Synarome

### **INFECTION-SEPSIS SPECTRUM (ISS) CHECKLIST**

AS DEFINED BY JOHNSON MEMORIAL HOSPITAL SEPSIS COMMITTEE:

**Time Zero =** *Time at which Infection is suspected/diagnosed* + 2 *or more SIRS present within 6 hours of one another* 

**SEPSIS** = Suspicion/diagnosis of infection + 2 or more SIRS (that cannot be excluded as due to the infection)

**SEVERE SEPSIS =** Suspicion/diagnosis of infection + 2 or more SIRS + organ dysfunction (including Lactate >2.0)

Date:		RO:			
	<u>ALL</u> of	the following with	nin (3) Hours of	Time Zero	
□ Lactate resu	llt (not order)	Draw Time:	Result Time:	Result:	Print Name
Blood Cultu	res drawn (prior to ATB) (r	not ordered)	1 <sup>st</sup> Set Time:	2 <sup>nd</sup> Set Time:	Print Name
IV Antibiotic	(ATB) initiated (not order	ed)	Time:	1	Print Name
	4	AND within (3) H	ours of Time Ze	ero	
□ 30 mL/kg Crys	talloid Fluid Bolus (0.9% N	S or LR) for		en over 4-5 hour	s Print Name
Hypotension or I	Lactate ≥4 (consider for Se	evere Sepsis)	Target time to 30mL/kg:	complete	
			Amount infus	ed in ED:	
Weight kg	X 30 =	_ mL predicted			
		AND within (6) H	ours of Time Ze	ro	
Repeat Lact	ate result if initial is > 2.0	Draw Time:	Result Time:	Result:	Print Name
mmol/L (order 2l	hrs after prior draw time)				

#### **SEVERE SEPSIS WITH SEPTIC SHOCK CHECKLIST** (all of the above measures plus the following)

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**SEPTIC SHOCK =** <u>Lactate  $\geq$  4.0 and/or</u> Sepsis-induced hypotension (SBP less than 90 mmHg, MAP less than 65 mmHg, or SBP decrease greater than 40 mmHg from baseline) in the hour after fluid resuscitation (30mL/kg) for  $\geq$  2 consecutive BP readings

Date:	SEPTIC SH		
	Within (	6) Hours of Septic Shock Cloc	k
□ Vasopressors		Time:	Print Name
	Within (	6) Hours of Septic Shock Cloc	k
-		on Assessment Note (written ry refill, pulse, and skin findir	by NP/PA/MD/DO) consisting of ngs
	•	nart until after six hour beyond tin . Not a part of the permanent me	
Infection with 0-1	Infection with >2 Sept	sis Severe Sepsis	Septic Multiorgan Dysfunction

Sepsis: I	Empiric Antibiotic Selection Pathway	Skin/Soft Tissue:	Piperacil
Early initiation of appropriate therapy intended for use in patients with these although antimicrobial therapy should worsened clinical outcomes and so ar agent can expand the empiric coverage	is associated with improved outcomes in severe sepsis and septic shock and these guidelines are e syndromes only. All patients with suspected sepsis should have appropriate cultures obtained, not be unduly delayed for this. Delays in initiating active therapy have been associated with ntimicrobials should be initiated as rapidly as possible. The addition of a second antimicrobial ge for resistant Gram-negative pathogens. This combination therapy has been advocated by		Vancomycin Preferred
active therapy in this population has active therapy in critically ill patients, o	urviving Sepsis Campaign) in critically ill patients in severe sepsis or septic shock given delays s been associated with an increased mortality. Despite the clear mortality benefit of initially combination therapy remains controversial. The addition of a second agent has not been	Necrotizing Skin/Soft Tissue: Gas Gangrene or Necrotizing	Sev
worsened outcomes. Therefore, the a based on patient severity of illness, th additional therapy. Antibiotic therapy s Patients who have milder forms of infe	butcomes and depending on the severity of illness and patient population may be associated with ddition of a second agent (e.g. tobramycin added to anti-pseudomonal betalactam) should be e likelihood of isolating resistant Gram-negative pathogens, and the potential adverse effects of should be narrowed to target the isolated pathogen when culture results become available. action may be more appropriately treated with narrow spectrum agents and antibiotic choices in	Fasciitis (Add Clindamycin if Streptococci suspected or evidence of toxic shock syndrome present)	Vancomycin I
recommended when culture and susc EIAD: extended interval aminoglycosi	current guidelines and clinical judgment. De-escalation to a single active agent is <b>strongly</b> eptibility results return. de dosing panel nd use should be based on assessment of severity of infection and likelihood of	Intra-abdominal Source	Piperacillir
resistance or isolation of the pathoger	the area targets		
Suspected Source of Infection	Suggested Antibiotics		
Unknown (includes catheter related blood stream	Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours <b>OR</b> Cefepime 1 gm IV q6hr		Ge
infection) :	PLUS Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose)		Vancomycin
	+/- Tobramycin 7 mg/kg IV EIAD		Sev
	Severe beta-lactam allergy (anaphylaxis, hives): Aztreonam 2 gm IV q8h PLUS		
	Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) +/-		Vancomycir
	Tobramycin 7 mg/kg IV EIAD		Ge
	‡Consider Micafungin 100mg IV qday in patients at high risk for invasive candidiasis. Major risk factors predicting candidemia at TNMC include: 1) Broad-spectrum antibiotics, 2) Central venous catheter, 3) Receipt of TPN, 4) Abdominal surgery, and 5) Steroid use. Presence of 2 or fewer of the risk factors suggests a 99.4% chance of <b>not</b> developing candidemia, while patients with >2 risk factors have a 4.7% risk of developing candidemia.	Community Acquired Pneumonia – No Pseudomonas Risk Factors Excludes nursing home	Cef
Urinary Tract	Not at risk for multi-drug resistant organisms	patients.	
Patients should be assessed for risk of multi-drug	Ceftriaxone 1g IV q24h (2 grams if >80kg) +/-		Sev
resistant pathogens. Suggested risk factors for	Gentamicin 7 mg/kg EIAD	Community Acquired	1)
resistant pathogens: 1) Residence in long-term care facility (LTCF) 2) Recent receipt of broad	Severe beta-lactam allergy (anaphylaxis, hives): Aztreonam 2 gm IV q8hr +/-	Pneumonia – Pseudomonas Risk Factors (structural lung disease, >10mg	Piperac
spectrum antibiotics 3) History of MDR urinary pathogen	Gentamicin 7 mg/kg IV EIAD	prednisone/day, malnutrition) Excludes nursing home	2)
4) History of recurrent UTI 5) Nosocomial UTI	At risk for multi-drug resistant organisms Cefepime 1 gm IV q6hr OR	patients.	Piperaci
	Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours +/-		
	Gentamicin 7 mg/kg IV EIAD +/- Vancomycin per pharmacy consult (initial 25mg/kg loading dose)		
	Severe beta-lactam allergy (anaphylaxis, hives):		Ser
	Aztreonam 2 gm IV q8h PLUS		
	Gentamicin 7 mg/kg IV EIAD PLUS		
	Vancomycin per pharmacy consult (initial 25mg/kg loading dose)		

icillin/tazobactam 4.5g IV q8h, infused over 4 hours **PLUS** red (initial loading dose of 25mg/kg) OR Daptomycin 6 mg/kg IV +/-Clindamycin 900mg IV Q8H

evere beta-lactam allergy (anaphylaxis, hives): Aztreonam 2 gm IV q8h **PLUS** n IV per pharmacy consult (initial 25mg/kg loading dose) +/-Clindamycin 900mg IV Q8H

illin/tazobactam 4.5g IV q8h, infused over 4 hours **OR** Cefepime 1g q6h hours **PLUS** Metronidazole 500 mg IV q8h +/-Gentamicin **OR** Tobramycin 7 mg/kg IV EIAD +/cin per pharmacy consult (initial 25mg/kg loading dose)

Severe beta-lactam allergy (anaphylaxis, hives): Aztreonam 2gm IV q8h PLUS Metronidazole 500 mg IV q8h PLUS ycin per pharmacy consult (initial 25mg/kg loading dose) +/-Gentamicin **OR** Tobramycin 7 mg/kg IV EIAD

Ceftriaxone 1 gram (2 grams if > 80 kg) IV q24h PLUS Azithromycin 500 mg IV q24h

Severe beta-lactam allergy (anaphylaxis, hives): Levofloxacin 750 mg IV q24h Cefepime 1 gm IV q6hr **OR** acillin/tazobactam 4.5g IV q8h, infused over 4 hours **PLUS** Levofloxacin 750 mg IV q24h

Cefepime 1 gm IV q6hr **OR** acillin/tazobactam 4.5g IV q8h, infused over 4 hours **PLUS** Tobramycin 7 mg/kg IV EIAD **PLUS** Azithromycin 500 mg IV q24h **OR** Levofloxacin 750 mg IV q24h

Severe beta-lactam allergy (anaphylaxis, hives): Aztreonam 2 g IV q8h PLUS Levofloxacin 750 mg IV q24h PLUS Tobramycin 7 mg/kg IV EIAD Nosocomial Pneumonia: healthcare-associated pneumonia (HCAP), hospital-acquired pneumonia (HAP). ventilator-associated pneumonia (VAP)

1)

2)

3)

Classification as healthcare associated

pneumonia: Antimicrobial therapy in preceding 90 d
 Hospitalization for >2d in preceding 90 d · Residence in a nursing home or extended care facility Home wound care
 Home infusion therapy (including antibiotics) Chronic dialysis within 30 d
 Immunosuppressive disease and/or therapy

Add azithromycin if requiring coverage of atypical pathogens (e.g. Legionella sp.)

Add Levofloxacin if evidence/suspic of S. pneumoniae infection

Add clindamycin in patients with beta-lactam allergy if requiring coverage for aspiration pneumonia/anaerobes

Cefepime 1 gm IV g6hr OR Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours OR Meropenem 1 gm IV q8hr PLUS Azithromycin 500 mg IV g24h PLUS Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) (Linezolid is also an option)

Cefepime 1 gm IV q6hr OR Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours OR Meropenem 1 gm IV q8hr PLUS Levofloxacin 750 mg IV q24h PLUS Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) (Linezolid is also an option)

Cefepime 1 gm IV g6hr OR Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours OR Meropenem 1 gm IV g8hr PLUS Tobramycin 7 mg/kg IV EIAD PLUS Azithromycin 500 mg IV q24h OR Levofloxacin 750 mg IV g24h PLUS Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) (Linezolid is also an option)

Severe beta-lactam allergy (anaphylaxis, hives): Aztreonam 2 gm IV q8h PLUS Tobramycin 7 mg/kg IV EIAD PLUS Azithromycin 500 mg IV q24h OR Levofloxacin 750 mg IV g24h PLUS Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) (Linezolid is also an option) +/-Clindamycin 600 mg IV q8h

## INFECTION-SEPSIS SPECTRUM (ISS) CHECKLIST

AS DEFINED BY JOHNSON MEMORIAL HOSPITAL SEPSIS COMMITTEE:

Time Zero = Time at which Infection is suspected/diagnosed + 2 or more SIRS present within 6 hours of one another **SEPSIS =** Suspicion/diagnosis of infection + 2 or more SIRS (that cannot be excluded as due to the infection) **SEVERE SEPSIS =** Suspicion/diagnosis of infection + 2 or more SIRS + organ dysfunction (including Lactate >2.0)

TIME ZERO:

Date:\_\_

ALL of the	e following with	in (3) Hours of	Time Zero	
☐ Lactate result (not order)	Draw Time:	Result Time:	Result:	Print Name
☐ Blood Cultures drawn (prior to ATB) (no	t ordered)	1 <sup>st</sup> Set Time:	2 <sup>nd</sup> Set Time:	Print Name
□ IV Antibiotic (ATB) initiated (not ordered	)	Time:		Print Name
<u>AN</u>	ID within (3) Ho	ours of Time Ze	ro	
☐ 30 mL/kg Crystalloid Fluid Bolus (0.9% NS Hypotension or Lactate ≥4 (consider for Sev		Total volume give Target time to 30mL/kg:		Print Name
Weight kg X 30 = r	nL predicted	Amount infuse	ed in ED:	
<u>Al</u>	ND within (6) Ho	ours of Time Zer	0	
□ Repeat Lactate result if initial is > 2.0 mmol/L (order 2hrs after prior draw time)	Draw Time:	Result Time:	Result:	Print Name

## SEVERE SEPSIS WITH SEPTIC SHOCK CHECKLIST

(all of the above measures plus the following)

SEPTIC SHOCK = Lactate ≥ 4.0 and/or Sepsis-induced hypotension (SBP less than 90 mmHg, MAP less than 65 mmHg, or SBP decrease greater than 40 mmHg from baseline) in the hour after fluid resuscitation (30mL/kg) for ≥ 2 consecutive BP readings

Date:	_SE	PTIC SHOCK
		Within (6) Ho
□ Vasopressors		
	10.56	Within (6) Ho

Repeat Volume Status and Tissue Perfusion As ncluding vital signs, cardiopulmonary, capillary ref

> This form to remain in front of patient's chart up Gina Croxford in the Quality Department. Not



	CL	0	С	K	:	
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urs of Se	eptic Shock Clock	
	Time:	Print Name
urs of Se	eptic Shock Clock	
	nt Note (written by NP/PA/ME e, and skin findings	0/DO) consisting of
	six hour beyond time zero, and th he permanent medical record, D	
11-		

Seps	sis: Empiric Antibiotic Selection Pathway	Skin/Soft Tissue:	Ppersoliin/tazobactam 4.5g M gfn, infused over 4 hours	
Early initiation of appropriate to	6:5: Empiric Antibiotic Selection representation of the series and an advance of the second of th		PLUS Vancomycin Preferred (Initial loading dose of 25mg/kg) CR Deptemycin 8 mg/kg 1/	
athough antimicrobial therapy womanted clinical extremes an	ahould not be unbuly charged to the unburged or the addition of a second entimicrobial with of so antimicrobials should be initiated as rapidly as possible. The addition of a second entimicrobial and an antimicrobial should be initiated as rapidly as possible. The addition of a second entimicrobial and an antimicrobial should be initiated as rapidly as possible.		Cindamycin 900mg N G8H	
agent can expand the empiric o international consumus guidelin	severage to the several several several several several several sepsis or sectic shock given delays nes (Surviving Sepsis Campaign) in critically ill patients in several sepsis or sectic shock given delays the clear mortality benefit at increased mortality. Despite the clear mortality benefit at the second section of the second		Concentral to Care	
to active therapy in this populati active therapy in critically il patie	on has been used to make the severity of liness and patient population may be assessed	Necrotizing Skin/Soft Tissue: Gas Gangrene or Necrotizing	Severe beta-lactam allergy (anaphylaxia, Mves):	
definitively associated with impro- worsened outcomes. Therefore,	the addition of a second agent (e.g. tobramycin added to anti-pseudomonal betalactam) should be the addition of a second agent (e.g. tobramycin added to anti-pseudomonal betalactam) should be the likelihood of isolating resistant Gramynegative psthogens, and the potential advance.		Aztreonam 2 gm IV g6h PLUS	
based on patient severity of links additional therapy. Antibiotic there	we decome and depending on the servery of inset and plant population may be associated with the addition of a section of genic (e.) is demanding in ideal to influence on the plant and the section of a section of a section of the section of a section of the sec	Fascilitis (Add Olindamycin if Streptococci suspected or evidence of toxic shock syndrome present)	Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) +/-	
Patients who have milder toms of these patients should be based up recommended when culture and s	pon current guidelines and clinical judgment. De-escalation to a single active agent is strongly unexpolibility results return.		Clindamycin 900mg IV Q8H	
EIAD: extended interval animopyo	and use should be based on assessment of severity of infection and likelihood of	Intra-abdominal Source	Piperacillin/tazobactam 4.5g IV oSh, infused over 4 hours OR	
resistance or isolation of the patho Suspected Source of	pen the agent targets Suggested Antibiotics		Cefepime 1g g6h hours PLUS	
Infection Unknown (includes catheter	Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours OR		Metronidazole 500 mg IV g8h	
related blood stream	Cefepime 1 gm IV q6hr PLUS		Gentamicin OR Tobramycin 7 mg/kg IV EIAD	
infection) z	Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose)		+/- Vancomycin per pharmacy consult (initial 25mg/kg loading dose)	
	Tobramycin 7 mg/kg IV EIAD			
	Severe beta-lactam allergy (anaphylaxis, hives);		Severe beta-lactam allergy (anaphylaxis, hives): Aztreonam 2gm IV q8h	
	Aztreonam 2 gm IV q8h PLUS		PLUS Metronidazole 500 mg IV g8h	
	Vancomycin IV per pharmacy consult (initial 25mg/kg loading dose) +/-		PLUS	
	Tobramycin 7 mg/kg IV EIAD		Vancomycin per pharmacy consult (initial 25mg/kg loading dose) +/-	
	#Consider Micefungin 100mg IV gday in patients at high risk for invasive candidiasis, Major risk form		Gentamicin OR Tobramycin 7 mg/kg IV EIAD	
	predicting candidemia at TMMC include: 1) Broad-spectrum antibiotics, 2) Central venous catheter, 3) Receipt of TPN, 4) Abdominal surgery, and 5) Steroid use. Presence of 2 or fewer of the risk factore	Community Acquired Pneumonia – No	Ceftriaxone 1 gram (2 grams if > 80 kg) IV q24h	
Urinary Tract	20maider Mostungin 100mg /V gday in parients at Ngh fisk for invasive candidiasis. Major risk feature predicing candidensis at TANG. Private: 1) Broad-separtum antibiolica, 2) Central venues catheter, 3) Researce of TR-N 4) Advormali surgery and 6) Steroid user. Prevence of 2 or lower of the risk factors magnetia at 60-4% phases of the Overlaping candidensis, while patients with >2 dak factors have a 4.7% and all of developing candidensis.	Pseudomonas Risk Factors Excludes nursing home	PLUS	
Patients should be assessed	Ceftriaxone 1g IV q24h (2 grams if >80kg)	patients.	Azithromycin 500 mg IV q24h	
for risk of multi-drug resistant pathogens.	+/- Gentamicin 7 mg/kg EIAD		Severe beta-lactam allergy (anaphylaxis, hives):	A.C. Star
Suggested risk factors for	Severe beta-lactam allergy (anaphylaxis, hives):	Community Acquired	Levofloxacin 750 mg IV q24h     Section 1 mg IV q24h     Cefepime 1 gm IV q6hr QR	
1) Residence in long-term care facility (LTCF)	Aztreonam 2 gm IV q8hr	Pneumonia – Pseudomonas Risk Factors (structural lung	Piperacillin/tazobactam 4.5g IV q8h, infused over 4 hours	
2) Recent receipt of broad Spectrum antibiotics	+/- Gentamicin 7 mg/kg IV EIAD	disease, >10mg prednisone/day, malnutrition)	PLUS Levofloxacin 750 mg IV q24h	Provide State
3) History of MDR uninary pathogen	At risk for multi-drug resistant organisms	Excludes nursing home	2) Celepime 1 gm IV g6hr OR	
4) History of recurrent UTI 5) Nosocomial UTI	Celepime 1 am IV a6hr OR	patients.	Piperacillin/tazobactam 4.5g IV g8h, infused over 4 hours	- Star
	Piperacillin/tazobactam 4.5g IV q8h, Infused over 4 hours		PLUS Tobramycin 7 mg/kg IV EIAD	
	Gentamicin 7 mg/kg IV EIAD		PLUS	1000
	+/- Vancomycin per pharmacy consult (initial 25mg/kg loading dose)		Azithromycin 500 mg IV q24h OR Levofloxacin 750 mg IV q24h	
	Severe beta-lactom allergy (anaphylaxis, hives):			The second
	Aztreonam 2 gm IV q8h PLUS		Severe beta-lactam allergy (anaphylaxis, hives); Aztreonam 2 g V q8h	Es .
	Gentamicin 7 mg/kg IV EIAD PLUS		PLUS	125
	PLUS Vancomycin per pharmacy consult (initial 25mg/kg loading dose)		Levofloxacin 750 mg IV q24h PLUS	
	strate ( the strate ( the state ( the state )		Tobramycin 7 mg/kg IV EIAD	

