

McLaren Flint
Sepsis Order Set
Screening Tool

Patient Name: _____ DOB: _____

Diagnosis: _____

Allergies: NKA Other: _____ Weight _____ (pounds) Height _____ (inches)

1. **Systemic Inflammatory Response Syndrome (SIRS)** (check two or more of the following):

- Temperature greater than or equal to 100.4^oF or less than or equal to 96.8^oF
- Heart rate greater than or equal to 90 beats per minute
- Respiratory rate greater than or equal to 20 breaths per minute
- WBC with greater than or equal to 12,000/mm³ or less than or equal to 4,000/mm³ or greater than 0.5 K/ml bands

If two of the above checked, move to #2

2. **Infection** (check one or more of the following):

- Suspected or documented infection
- Antibiotic therapy (not prophylaxis)

If one of the above checked, request order from physician for Sepsis Lab Panel and move to #3

3. **Organ Dysfunction** (check one or more of the following within 3 days of new infection):

- Respiratory: PaO₂/FiO₂ less than or equal to 300 or mechanical ventilation
- Cardiovascular: SBP less than 90 or MAP less than 65 or on vasopressors
- Renal: urine output less than 0.5ml/kg/hr. after fluid resuscitation; creatinine increase greater than 0.5mg/dl from baseline
- Metabolic: lactate greater than or equal to 4mmo/L
- Hematologic: platelets less than 10,000; INR greater than 1.5
- Hepatic: serum total bilirubin greater than or equal to 4mg/dl
- CNS: altered consciousness (unrelated to primary neuropathology); Glasgow Coma Score less than or equal to 12

Nurse Interpretation of Above:

- If any are checked in # 3, **Patient has screened positive for severe sepsis**
- Contact physician with above results**

Contact physician: _____ Date/Time: _____

- Negative screen for sepsis*
- No severe sepsis diagnosis by physician; Reason: _____
- Physician diagnosis of severe sepsis

If diagnosis of severe sepsis:

- Sepsis bundle implemented; physician **must** complete Sepsis Admission Orders
- Sepsis bundle not implemented; Reason: _____

Nurses Signature: _____ Date: _____ Time: _____



ADMIT TO: Inpatient Status SERVICE: ICU Other: _____

ADMITTING PHYSICIAN: _____

DIAGNOSIS: Severe Sepsis Septic Shock

Allergies: NKA _____

3 hour Bundle: These orders are to be accomplished as soon as possible over the first 3 hours

Patient Care:

- Vital Signs: HR, B/P RR, Oxygen Saturations and Temperature** every 15 minutes until MAP greater than 65mmHg, then every 1 hour and PRN
- Activity:** Bed rest with head of the bed at 30 degrees at all times
- ROM every 4 hours and turn patient every 2 hours
- Skin Integrity:** Evaluation on admission and every shift
- CVP:** Every 1 hour, if central venous access available. Goal: End expiratory CVP greater than 8 and less than 12 or MAP greater than 65 mmHg
- Weight:** on admission and daily
- Intake and Output:** STRICT record every shift
- Accu -Chek Testing: **On admission and every 4 hours; if Accu-Chek is greater than 180, initiate IV Insulin -Critical Care Setting Order Set (M1708-184). Call House Officer if results:** _____
- Place nasogastric /orogastric tube
- Place/Maintain Foley Catheter to gravity and monitor urine output hourly
- Central Line insertion

- Diet: NPO
 with ice chips and medication
- Clear Liquid
 - Cardiac Diet
 - ADA: _____ kCal
 - Other: _____
 - Consult to dietitian

Continuous Infusions

- Per Surviving Sepsis Guidelines, Infuse 30 mL/kg Bolus within 3 hours of presentation of Septic Shock. Consider amounts administered in the ED in determining patient's total bolus needs.

Sodium Chloride 0.9% IV Bolus

- 1,000 mL IV Bolus, wide open rate Q 20 minutes x 2 doses for patients less than 67 kg
- 1,000 mL IV Bolus, wide open rate Q 20 minutes x 3 doses for patients 68-100 kg
- 1,000 mL IV Bolus, wide open rate Q 20 minutes x 4 doses for patients 101-133 kg
- 1,000 mL IV Bolus, wide open rate Q 20 minutes x 5 doses for patients 134-167 kg
- 1,000 mL IV Bolus, wide open rate Q 20 minutes x 6 doses for patients 168-200 kg

Sodium Chloride 0.9% IV Maintenance

- 1,000 mL IV Bolus, 125 mL/hr, start after initial fluid boluses
- 1,000 mL IV Bolus, 100 mL/hr, start after initial fluid boluses
- 1,000 mL IV Bolus, 150 mL/hr, start after initial fluid boluses
- 1,000 mL IV Bolus, 200 mL/hr, start after initial fluid boluses

Time (required)

Date (required)

Physician Signature (required)

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Medications

VTE PROPHYLAXIS: Choose ONE Mechanical Intervention:

- Anti – embolic stockings – apply/maintain, knee high
- Anti – embolic stockings – apply/maintain, thigh high
- Foot Pumps – apply/maintain
- Intermittent Pneumatic Compression – apply/maintain, above the knee
- Intermittent Pneumatic Compression – apply/maintain, below the knee
- Intermittent Pneumatic Compression Stockings IPC
- Apply Support Stockings (non-graduated)
- Discontinue Sequentials

VTE PHARMACOLOGICAL PROPHYLAXIS (optional; not indicated if on therapeutic anticoagulation):

Pharmacological Interventions

- Heparin 5000 units SubQ every 8 hours

Antibiotics: administer STAT after blood cultures drawn

Suspected Source	Empiric Antibiotic	Severe Penicillin or Cephalosporin Allergy
Abdominal Source	<input type="checkbox"/> Piperacillin/tazobactam 4.5gm q8 +/- <input type="checkbox"/> Tobramycin PTD	<input type="checkbox"/> Cefepime 2 gm Q8 + Metronidazole 500 mg Q8 OR <input type="checkbox"/> Aztreonam 2 gm Q8 + Metronidazole 500 mg Q8 + Vancomycin PTD
CNS Infection	<input type="checkbox"/> Ceftriaxone 2gm q12 +/- <input type="checkbox"/> Ampicillin 2gm q4 (if listeria suspected) +/- <input type="checkbox"/> Vancomycin PTD (recent CNS infection, trauma, or implant) +/- <input type="checkbox"/> Acyclovir 10 mg/kg q8h (dose on IBW) for suspected Viral Meningitis <input type="checkbox"/> <i>For suspected pneumococcal meningitis in adults, administer dexamethasone 0.15mg/kg q6⁰, first dose 10-20 min. prior to first antibiotic dose</i>	<input type="checkbox"/> Levofloxacin 750 mg + Vancomycin PTD +/- <input type="checkbox"/> Bactrim 5 mg/kg Q6 (if listeria suspected) +/- <input type="checkbox"/> Acyclovir 10 mg/kg q8h (dose on IBW) for suspected Viral Meningitis <input type="checkbox"/> <i>For suspected pneumococcal meningitis in adults, administer dexamethasone 0.15mg/kg q6⁰, first dose 10-20 min. prior to first antibiotic dose</i>
Febrile Neutropenia	<input type="checkbox"/> Cefepime 2 gm Q8 If anaerobic coverage is needed use: <input type="checkbox"/> Piperacillin/Tazobactam 4.5 gm Q8	<input type="checkbox"/> Aztreonam 2 gm Q8 + Vancomycin PTD +/- <input type="checkbox"/> Metronidazole 500 mg Q8
CAP (NO ICU or PSA Risk)	<input type="checkbox"/> Ceftriaxone 1 gm Q24 + Azithromycin 500 mg IV Q24 OR <input type="checkbox"/> Ceftriaxone 1 gm Q24 + Doxycycline 100 mg Q12 MRSA Risk, ADD <input type="checkbox"/> Vancomycin PTD OR <input type="checkbox"/> Linezolid 600 mg Q12	<input type="checkbox"/> Levofloxacin 750 mg Q24 MRSA Risk, ADD <input type="checkbox"/> Vancomycin PTD OR <input type="checkbox"/> Linezolid 600 mg Q12
HAP (ICU or PSA Risk)	<input type="checkbox"/> Cefepime 2 gm Q8 OR <input type="checkbox"/> Piperacillin/Tazobactam 4.5 gm Q8 +/- <input type="checkbox"/> Clindamycin 900 mg Q8 for aspiration risk	<input type="checkbox"/> Aztreonam 2 gm Q8 + Clindamycin 900 mg Q8 + Vancomycin PTD +/- <input type="checkbox"/> Tobramycin 7 mg/kg x1 for high risk of PSA

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Sepsis Admission Orders

Suspected Source	Empiric Antibiotic	Severe Penicillin or Cephalosporin Allergy
	MRSA Risk, ADD <input type="checkbox"/> Vancomycin PTD OR <input type="checkbox"/> Linezolid 600 mg Q12	MRSA Risk, ADD <input type="checkbox"/> Vancomycin PTD OR <input type="checkbox"/> Linezolid 600 mg Q12
Aspiration Pneumonia	<input type="checkbox"/> Ceftriaxone 1 gm Q24 +/- <input type="checkbox"/> Clindamycin 900 mg Q8 for poor oral hygiene	<input type="checkbox"/> Levofloxacin 750 mg Q24 + Clindamycin 900 mg Q8
Skin and Skin Structure Infection	Non-Pyogenic <input type="checkbox"/> Ceftriaxone 2 gm Q24 Pyogenic <input type="checkbox"/> Ceftriaxone 2 gm Q24 + Vancomycin PTD	Non-Pyogenic or Pyogenic <input type="checkbox"/> Levofloxacin 750 mg Q24 + Vancomycin PTD +/- <input type="checkbox"/> Clindamycin 600 mg Q6 x 48 hours for suspected necrotizing fasciitis
Diabetic Foot Ulcer	<input type="checkbox"/> Piperacillin/tazobactam 4.5 gm Q8 + vancomycin PTD	<input type="checkbox"/> Aztreonam 2 gm Q6 + Vancomycin PTD PLUS <input type="checkbox"/> Metronidazole 500 mg Q8 OR <input type="checkbox"/> Clindamycin 600 mg Q6 x 48 hours for suspected necrotizing fasciitis
Urinary tract Infection	<input type="checkbox"/> Ceftriaxone 1 gm Q24 +/- <input type="checkbox"/> Tobramycin PTD for recurrent infection +/- <input type="checkbox"/> Vancomycin PTD for recent instrumentation or male with recurrent infection	<input type="checkbox"/> Aztreonam 2 gm Q8 + Vancomycin PTD
Nosocomial Urinary Tract Infection	<input type="checkbox"/> Cefepime 2 gm Q8 + Vancomycin PTD	<input type="checkbox"/> Aztreonam 2 gm Q8 + vancomycin PTD
Unknown Source of Infection	<input type="checkbox"/> Piperacillin/tazobactam 4.5 gm Q8 + Vancomycin PTD	<input type="checkbox"/> Aztreonam 2 gm Q6 + Metronidazole 500 mg Q8 + Vancomycin PTD

- All antibiotics should be given within first hour and reevaluated in 48 hours when cultures are returned
- Pharmacy may adjust all antibiotic doses based on creatinine clearance
- All doses will be given according to dosing guidelines

Analgesics

Mild-Pain: Select ONLY ONE

- Acetaminophen 650 mg tab PO Q4H as needed for mild pain (pain score 1-3)
- Acetaminophen 650 mg liquid via nasogastric tube Q4H as needed for mild pain (pain score 1-3)
- Acetaminophen 650 mg rectal suppository Q4H as needed for mild pain (pain score 1-3)
- Ibuprofen 600 mg tab PO Q6H as needed for mild pain (pain score 1-3)
- Ibuprofen 400 mg tab PO Q4H as needed for mild pain (pain score 1-3)
- Ibuprofen 600 mg liquid via nasogastric tube Q6H as needed for mild pain (pain score 1-3)

Moderate-Pain: Select ONLY ONE

- Ketorolac 15 mg IV push Q6H as needed for moderate pain (pain score 4-6) x 48 hours (preferred over opioid)
- Ketorolac 30 mg IVP Q6H as needed for moderate pain (pain score 4-6) x 48 hours (preferred over opioid; only for patients less than 65 years of age)

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Sepsis Admission Orders

- HYDROcodone/acetaminophen 5 mg/325 mg, 1 tablet PO Q4H as needed for moderate pain (pain score 4-6)
- HYDROcodone/acetaminophen 7.5 mg/325 mg, 1 tablet PO Q4H as needed for moderate pain (pain score 4-6)
- HYDROcodone/acetaminophen 7.5 mg/325 mg/ 15 mL, 15 mL via nasogastric tube Q4H as needed for moderate pain (pain score 4-6)
- OxyIR 5 mg tablet PO Q4H as needed for moderate pain (pain score 4-6)
- OxyIR 5 mg tablet PO Q3H as needed for moderate pain (pain score 4-6)
- TraMADol 50 mg Q6H as needed for moderate pain (pain score 4-6)
- TraMADol 100 mg Q6H as needed for moderate pain (pain score 4-6)
- Morphine 2 mg IVP Q4H as needed for moderate pain (pain score 4-6)
- Morphine 2 mg IVP Q3H as needed for moderate pain (pain score 4-6)
- HYDROmorphine 0.5 mg IVP Q4H as needed for moderate pain (pain score 4-6)
- HYDROmorphine 0.5 mg IVP Q4H as needed for moderate pain (pain score 4-6)

Severe Pain: Select ONLY ONE

- HYDROcodone/acetaminophen 7.5 mg/325 mg, 2 tablets PO Q4H as needed for severe pain (pain score 7-10)
- HYDROcodone/acetaminophen 10 mg/325 mg, 1 tablet PO Q4H as needed for severe pain (pain score 7-10)
- OxyIR 10 mg tablet PO Q4H as needed for severe pain (pain score 7-10)
- OxyIR 10 mg tablet PO Q3H as needed for severe pain (pain score 7-10)
- OxyCODONE/acetaminophen 5 mg/325 mg, 1 tablet Q4H as needed for severe pain (pain score 7-10)
- Morphine 4 mg IVP Q4H as needed for severe pain (pain score 7-10)
- Morphine 4 mg IVP Q3H as needed for severe pain (pain score 7-10)
- HYDROmorphine 1 mg IVP Q4H as needed for severe pain (pain score 7-10)
- HYDROmorphine 1 mg IVP Q3H as needed for severe pain (pain score 7-10)
- FentaNYL 25 mcg IVP Q2H as needed for severe pain (pain score 7-10) (ICU ONLY)
- FentaNYL 50 mcg IVP Q2H as needed for severe pain (pain score 7-10) (ICU ONLY)

Opioid Reversal Agent

- Narcan 0.1 mg IVP Q2 minutes as needed for respirations less than 10/minute or over-sedation. Maximum total dose 0.4 mg/ Notify provide if given

Antiemetics: Select ONLY ONE

- Ondansetron 4 mg IVP Q8H as needed for nausea or vomiting
- Ondansetron 4 mg IVP Q6H as needed for nausea or vomiting
- Ondansetron 4 mg oral dissolving tablet Q8H as needed for nausea or vomiting
- Ondansetron 4 mg oral dissolving tablet Q6H as needed for nausea or vomiting
- Phenergan 25 mg rectal suppository Q6H as needed for nausea or vomiting
- Compazine 5 mg tablet PO Q6H as needed for nausea or vomiting
- Compazine 25 mg rectal suppository Q12H as needed for nausea and vomiting
- Compazine 10 mg IVP Q6H as needed for nausea or vomiting

Refractory Nausea and Vomiting: Select ONLY ONE

- Reglan 5 mg IVP Q6H as needed for refractory nausea or vomiting

Adult Bowel Management:

- Colace 100 mg PO BID, hold for loose stools
- Colace 100 mg liquid via nasogastric tube BID, hold for loose stools

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Sepsis Admission Orders

- Miralax 17 gram oral powder, reconstituted in 8 oz of water or fruit juice, daily as need for constipation. If no bowel movement in 12 hours, administer a second dose
- Dulcolax laxative 10 mg rectal suppository daily as needed for constipation, if no bowel movement in 48 hours

Stress Ulcer Prophylaxis

- Famotidine 20 mg PO BID
- Famotidine 20 mg IVP BID
- Pantoprazole tablet 40 mg PO Daily
- Pantoprazole granules via nasogastric tube daily

Respiratory

Inhaled Beta-2 Agonists, Short-acting, Scheduled

- Albuterol 2.5 mg/3 mL nebulized inhalation QID
- Albuterol 2.5 mg/3 mL nebulized inhalation Q4H
- Albuterol 2.5 mg/3 mL nebulized inhalation Q6H
- Albuterol HFA 90 mcg/inh, 2 puffs QID
- Albuterol HFA 90 mcg/inh, 2 puffs Q6H

Inhaled Beta-2 Agonists, Short-acting, PRN, Select ONLY ONE

- Albuterol 2.5 mg/3 mL nebulized inhalation Q4H PRN shortness of breath or wheezing
- Albuterol 2.5 mg/3 mL nebulized inhalation Q2H PRN shortness of breath or wheezing
- Albuterol HFA 90 mcg/inh, 2 puffs Q4H PRN shortness of breath or wheezing

Inhaled Anticholinergic

- Atrovent 0.02% nebulized inhalation QID
- Spiriva Respimat, 2 inhalations once daily

Inhaled Combination Bronchodilators: Scheduled doses, choose not more than one. NOT recommended if patient is on scheduled albuterol.

- DuoNeb 0.5 mg-2.56 mg/ 3mL nebulized inhalation Q6H
- DuoNeb 0.5 mg-2.56 mg/ 3mL nebulized inhalation Q4H
- DuoNeb 0.5 mg-2.56 mg/ 3mL nebulized inhalation QID
- Symbicort 80 mcg-4.5 mcg/inhalation, 2 puffs BID
- Symbicort 160 mcg-4.5 mcg/inhalation, 2 puffs BID
- DuoNeb 0.5 mg-2.56 mg/ 3mL nebulized inhalation Q4H as needed for shortness of breath or wheezing
- DuoNeb 0.5 mg-2.56 mg/ 3mL nebulized inhalation Q2H as needed for shortness of breath or wheezing

Inhaled Corticosteroids

- Pulmicort Respules 0.25 mg/2mL nebulized inhalation BID
- Pulmicort Respules 0.5 mg/2 mL nebulized inhalation BID
- QVar 40 mcg/ inhalation, 1 puff BID
- QVar 40 mcg/inhalation, 2 puffs BID
- QVar 80 mcg/inhalation, 1 puff BID
- QVar 80 mcg/inhalation, 2 puffs BID

Laboratory

- Arterial Blood gas
- Comprehensive chemistry
- CBC with diff.
- BMP

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Sepsis Admission Orders

- CMP
- PT (with INR)
- Activated Partial Thromboplastin
- Blood cultures x 2 from separate sites prior to antibiotic therapy

Bacterial cultures as clinically indicated from the following sources:

- Urine
- Sputum
- Wound (site _____)
- Cerebral Spinal Fluid (CSF)
- Other: _____

Diagnostic Tests

- Chest X-ray, portable
- EKG

Respiratory

- Mixed venous oximetry only. Per CMS guidelines this is required for patients in Septic Shock. If unable to obtain a Mixed venous O2 level, Passive leg raises may be done by the physician/APN/PA.
- Oxygen therapy

Consults

- Infectious Disease--Physician Name: _____
- Critical Care--Physician Name: _____
- Surgery: Specify _____ Physician Name: _____
- Other: _____ Physician Name: _____

Time (required)

Date (required)

Physician Signature (required)

**6 hour Bundle: These orders are to be accomplished as soon as possible over the first 6 hours;
DO NOT DISCONTINUE 3 hour Bundle**

Continuous Infusions

IV Bolus

Sodium Chloride 0.9% Bolus, 500 mL infusion over 30 minutes Q30 minutes x 6 doses; give AFTER 30 mL/kg bolus if ANY of the following: SBP less than 90, MAP less than 65, urine output less than 30 mL/hr (unless known ESRD), CVP less than 8. Bolus may be given over 15-30 minutes.

Vasopressors: for hypotension that does not respond to initial fluid resuscitation

Levophed 8 mg/250 mL; 0.1 mcg/kg/min continuous infusion. Increase by 0.01 mcg/kg/min every 10 minutes until MAP \geq 65 or SBP > 90. **Contact physician for further orders if unable to achieve goal or if a rate of 0.6 mcg/kg/min is achieved. Max rate: 3 mcg/kg/min**

Vasopressin 20 units/ 250 mL; 0.03 units/min. DO NOT Titrate. Start if Levophed is infusing at greater than 0.1 mcg/kg/min for more than 4 hours. Reduce rate by 0.01 units/min every 30 minutes until off AFTER catecholamine(s) are discontinued.

EPINEPHrine 4 mg/250 mL; 0.01 mcg.kg/min. Increase by 0.01 mcg/kg/min every 10 minutes until MAP \geq 65 or SBP > 90 bpm. **Max rate 0.2 mcg/kg/min.**

DOBUTamine 500 mg/250 mL; 2.5 mcg/kg/min continuous infusion. Increase by 2.5 mcg/kg/min every 15 minutes until desired response is achieved: CI \geq 2, HR < 110, MAP >65, or SBP > 90. **Max: 20 mcg/kg/min.**

Steroids

Solu-CORTEF 100 mg IVP Q12H, begin if patient on Levophed at 0.1 mcg/kg/min for more than 4 hours

Solu-CORTEF 50 mg IVP Q12H, begin if patient on Levophed at 0.1 mcg/kg/min for more than 4 hours

Time (required)

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