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# Does the patient meet any of the following criteria?

- Resides in a nursing home or other LTC facility
- Acute hospitalization for >2 days within the prior 90 days

PHARMACY CODE SEPSIS ANTIMICROBIAL POCKET CARD

- Received IV therapy, wound care, or chemotherapy within the past 30 days
- Attendance at a hospital or hemodialysis clinic within the past 30 days
- Systemic cancer not in remission
- ANC <500
- Severe cell-mediated immune deficiency



Suspected Source	Antibacterial A (Select One)	Antibacterial B  ND (Select One) ±	Antibacterial C	/- /-
Undifferentiated or Vascular Access Device	Piperacillin-tazobactam 4.5g IV Q8H extended infusion*	Vancomycin ~25 mg/kg x1 (load) + vancomycin 15mg/kg	Tobramycin 7mg/kg IV Q24H - if at risk of <i>P. aeruginosa</i>	Caspofungin 70mg IV ONCE + caspofungin 50 mg
Infection	OR	OR	infection: • Prior IV antibiotics within 90	IV Q24H - if at risk of invasiv candidiasis:
	Cefepime 2g IV Q8H extended infusion*  OR  Meropenem 1g IV Q8H extended infusion* - if at risk for ESBL infection  • Previous ABX exposure  • Previous colonization  • Recent treatment of ESBL organism	Linezolid 600mg IV q12h - if at risk of VRE infection:  Liver transplant  Known colonization Prolonged broad antibacterial therapy Prolonged profound immunosuppression	days  5 or more days of hospitalization prior to onset  Acute renal replacement therapy prior to onset  Septic shock  Known colonization with MDROs	Central venous catheter     Broad-spectrum antibiotics     + 1 of the following risk factors: Parenteral nutrition, dialysis, recent abdominal surgery, necrotizing pancreatitis, systemic steroids or other immunosuppressive agents
Pneumonia	Piperacillin-tazobactam 4.5g IV	Azithromycin 500mg IV Q24H	Tobramycin 7mg/kg IV Q24H	
	Q8H extended infusion*  OR  Meropenem 1g IV Q8H extended infusion* - if at risk for ESBL	OR Levofloxacin 750mg IV Q24H AND Vancomycin ~25 mg/kg x1	- if at risk of <i>P. aeruginosa</i> infection:  • Prior IV antibiotics within 90 days  • 5 or more days of hospitalization prior to onset	
	infection     Previous ABX exposure     Previous colonization     Recent treatment of ESBL organism	(load) + 15 mg/kg <u>OR</u> Linezolid 600mg IV Q12h - if at risk of VRE infection:  Liver transplant  Known colonization	Acute renal replacement therapy prior to onset     Septic shock Known colonization with MDROs	
	OR  Cefepime 2g IV Q8H extended infusion*	Prolonged broad antibacterial therapy     Prolonged profound immunosuppression		
Urinary Tract Infection	Piperacillin-tazobactam 4.5g IV Q8H extended infusion*	Vancomycin ~25 mg/kg x1	<b>Tobramycin</b> 5mg/kg IV Q24H - if at risk of <i>P. aeruginosa</i>	
	OR	(load) + vancomycin 15mg/kg OR	infection: • Prior IV antibiotics within 90	
	Meropenem 1g IV Q8H extended infusion* - if at risk for ESBL infection  • Previous ABX exposure  • Previous colonization  • Recent treatment of ESBL organism	Linezolid 600mg IV Q12h - if at risk of VRE infection:  Liver transplant  Known colonization  Prolonged broad antibacterial therapy  Prolonged profound immunosuppression	days  5 or more days of hospitalization prior to onset  Acute renal replacement therapy prior to onset  Septic shock  Known colonization with MDROs	
Intra-Abdominal Infection	Piperacillin-tazobactam 4.5g IV Q8H extended infusion*	Vancomycin ~25 mg/kg x1 (load) + vancomycin 15mg/kg		Caspofungin 70mg IV once + caspofungin 50 mg IV
	OR	OR		Q24H - if at risk of invasive candidiasis:
	Meropenem 1g IV Q8H extended infusion* - if at risk for ESBL infection • Previous ABX exposure	Linezolid 600mg IV Q12h - if at risk of VRE infection:  Liver transplant  Known colonization		Central venous catheter     Broad-spectrum antibiotics     + 1 of the following risk factors: Parenteral nutrition, dialysis. recent abdominal

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Antimicrobial Safety and Sustainability Program Previous colonization Prolonged broad antibacterial surgery, necrotizing pancreatitis, systemic steroids or other immuno-Recent treatment of ESBL therapy Prolonged profound immunosuppression organism suppressive agents OR Cefepime 2g IV Q8H extended infusion\* + Metronidazole 500mg Skin/Skin Structure Vancomycin ~25 mg/kg x1 (load) Cefazolin 2g IV Q8H Infection - Pure Cellulitis + vancomycin 15mg/kg with MRSA Risk: Known colonization with MDROs Recent MRSA infection Known MRSA colonization Skin & Skin Structure and/or IV access site purulence or abscess Skin/Skin Structure Piperacillin-tazobactam 4.5g IV Vancomycin ~25 mg/kg x1 Infection - Cellulitis with Q8H extended infusion\* (load) + vancomycin 15mg/kg Special Risks: OR Malignancy on chemotherapy Meropenem 1g IV Q8H extended Neutropenia infusion\* - if at risk for ESBL Severe cell-mediated immunodeficiency infection Previous ABX exposure Immersion injuries Previous colonization Animal Bites Recent treatment of ESBL Diabetic foot ulcer organism OR Cefepime 2g IV Q8H extended infusion\* + Metronidazole 500mg IV Q8H Necrotizing Fasciitis (including Fournier's Piperacillin-tazobactam 4.5g IV Vancomycin ~25 mg/kg x1 Clindamycin 600mg IV Q8H (use only in combination with Q8H extended infusion\* (load) + vancomycin 15mg/kg Gangrene), vancomycin for toxin Clostridial Gas Gangrene OR suppression) or Myconecrosis Meropenem 1g IV Q8H extended Linezolid 600mg IV Q12h - if infusion\* - if at risk for ESBL at risk of VRE infection: infection Liver transplant · Previous ABX exposure Known colonization Previous colonization Recent treatment of ESBL Prolonged broad antibacterial therapy Prolonged profound organism immunosuppression Cefepime 2g IV Q8H extended infusion\* + Metronidazole 500mg IV O8H Bacterial Meningitis -Ceftriaxone 2g IV Q12H Ampicillin 2g IV Q4H (>50 Vancomycin ~25 mg/kg x1 "Spontaneous" (load) + vancomycin 15mg/kg years of age OR immunocompromised) Bacterial Meningitis - Post-Meropenem 1g IV Q8H extended Vancomycin ~25 mg/kg x1 Trauma or Neurosurgery infusion' (load) + vancomycin 15mg/kg

<sup>\*</sup>The first dose should be given as a bolus dose (over 30 mins.) and subsequent doses should be given as extended infusion

Suspected Source	Antibacterial A (Select One)	AND	Antibacterial B (Select One)	Antibacterial C
Undifferentiated	Ertapenem 1g IV Q24h OR Piperacillin-tazobactam 4.5g IV Q8H		comycin ~25 mg/kg x1 (load) ncomycin 15mg/kg	
	extended infusion*  OR			
	Cefepime 2g IV Q8H extended infusion*			
Pneumonia	Ceftriaxone 2g IV q24H + Azithromycin 500mg IV Q24H			+/- Vancomycin ~25 mg/kg x (load) + vancomycin 15mg/kg
	OR			
	Levofloxacin 750mg IV Q24H			
Urinary Tract Infection	Ertapenem 1g IV q24h		comycin ~25 mg/kg x1 (load) ncomycin 15mg/kg	
Intra-Abdominal Infection	Piperacillin-tazobactam 4.5g IV Q8H extended infusion*		comycin ~25 mg/kg x1 (load) ncomycin 15mg/kg	
	OR			
	Ertapenem 1g IV Q24H			

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Antimicrobial Safety and Sustainability Program				
Skin/Skin Structure Infection - Pure	Cefazolin 2g IV Q8H	Vancomycin ~25 mg/kg x1 (load)		
Cellulitis with MRSA Risk:		+ vancomycin 15mg/kg		
<ul> <li>Known colonization with MDROs</li> </ul>				
<ul> <li>Recent MRSA infection</li> </ul>				
<ul> <li>Known MRSA colonization</li> </ul>				
<ul> <li>Skin &amp; Skin Structure and/or IV access site purulence or abscess</li> </ul>				
Skin/Skin Structure Infection – Cellulitis	Piperacillin-tazobactam 4.5g IV Q8H	Vancomycin ~25 mg/kg x1 (load)		
with Special Risks:	extended infusion*	+ vancomycin 15mg/kg		
<ul> <li>Malignancy on chemotherapy</li> </ul>	OR			
<ul> <li>Neutropenia</li> </ul>	OK .			
<ul> <li>Severe cell-mediated immunodeficiency</li> </ul>	Meropenem 1g IV Q8H extended infusion*			
Immersion injuries	<ul> <li>if at risk for ESBL infection</li> </ul>			
Animal Bites	Previous ABX exposure			
<ul> <li>Diabetic foot ulcer</li> </ul>	Previous colonization     Recent treatment of ESBL organism			
	1 Necent treatment of LODE organism			
	OR			
	Cefepime 2g IV Q8H extended infusion* +			
	Metronidazole 500mg IV Q8H			
	OR			
	Aztreonam 2g IV Q8H + Metronidazole 500mg IV Q8H			
Bacterial Meningitis - "Spontaneous"	Ceftriaxone 2g IV Q12H	Vancomycin ~25 mg/kg x1 (load)	Ampicillin 2g IV Q4H (>50 years of	

<sup>\*</sup>The first dose should be given as a bolus dose (over 30 mins.) and subsequent doses should be given as extended infusion

## **How to Address Antibiotic Allergies**

#### Penicillins

• Substitute with AZTREONAM if history of type I immediate hypersensitivity (e.g., urticaria, angioedema, anaphylaxis, bronchospasm), except those with a history of type I hypersensitivity reaction to CEFTAZIDIME).

+ vancomycin 15mg/kg

age)

 For a history of other serious reactions, avoid the implicated drug but others in the class may be used (exception: cephalosporins with same R group side chains).

## Fluoroquinolones

If there is a history of an immediate reaction to one fluoroquinolone, AVOID USE of any of the class.

### Vancomycin

• Avoid if there is a history of bullous reaction, or of associated thrombocytopenia. If there is a history of possible immediate reaction or macular skin reactions, carefully assess the history. If the reaction involved flushing, pruritus, or urticaria, then, premedicate with an antihistamine (diphenhydramine or hydroxyzine) and acetaminophen, hold/reduce opiates (if possible), and infuse at ½ or 1/3 rate over 2-3 hours.

## General Guidance for Approved Antibiotic Regimens:

Approved Monotherapy ABX:
Ampicillin/sulbactam
Cefepime
Cefotaxime
Cefotetan
Ceftaroline fosamil
Ceftazidime
Ceftriaxone
Doripenem
Ertapenem
Imipenem/Cilastatin
Levofloxacin
Meropenem
Moxifloxacin
Piperacillin/tazobactam
Ticarcillin/clavulanate

	Approved <b>Combi</b>	nat	ion Therapy ABX:		
*Requires one antibiotic from Table 1 AND one antibiotic from Table 2*					
Table 1			Table 2		
	Amikacin		Cephalosporins (1st and 2nd Generation)	Cefazolin	
Aminoglycosides	Gentamicin			Cefoxitin	
	Kanamycin			Cefuroxime	
	Tobramycin		Clindamycin IV	Clindamycin	
Aztreonam	Aztreonam		Daptomycin	Daptomycin	
Ciprofloxacin	Ciprofloxacin		Glycopeptides	Teicoplanin	
				Televancin	
				Vancomycin	
			Linezolid	Linezolid	
				Azithromycin	
			Macrolides	Erythromycin	
				Telithromycin	
				Ampicillin	
			Penicillins	Nafcillin	
			remonins	Oxacillin	
				Penicillin G	