Northwestern Memorial Hospital				
SUGGESTED EMPIRIC ANTIMICROBIAL THERAPY BY SITE OF INFECTION				
Empiric antimicrobial guidelines are based on the most likely organisms responsible for infection, NMH susceptibilities, and prevalence of resistant organisms. Therapy may need to be adjusted once identification and susceptibility are determined. Previous antimicrobial therapy may affect the susceptibility of organisms that subsequently cause infection. Close attention should be given to courses of antimicrobial therapy administered to patients in the recent past. In many cases, obtaining the appropriate specimen(s) before antibiotics are started is critical to successful outcomes of an infectious disease. Alterations in empiric antimicrobial therapy may be required.				
Anatomic site /diagnosis	**Common Pathogens**	**Preferred therapy**	**Alternative****	**Comments**
CENTRAL NERVOUS SYSTEM				
Meningitis—acute bacterial	*Streptococcus pneumoniae, Neisseria meningitidis, Listeria monocytogenes*	vancomycin + ceftriaxone +/- ampicillin†	vancomycin + aztreonam +/- trimethoprim-sulfamethoxazole†	Empiric antibiotics are indicated prior to LP if acute bacterial meningitis is suspected. Penicillin testing necessary with Beta-lactam allergy; contact infectious diseases and allergy services. If pneumococcal meningitis suspected, administer dexamethasone before or with first dose of antibiotics: Dexamethasone 10mg IV q 6 hours x 2-4 days. If *S. pneumoniae is* ruled out as cause, discontinue dexamethasone. IDSA Bacterial Meningitis Guidelines † Ampicillin or trimethoprim-sulfamethoxizole is given to cover *Listeria monocytogenes*, more common in patients over age 50, alcoholics, pregnant women, and patients with impaired cellular immunity.

Meningitis--postsurgical or post traumatic	*S. aureus, S. epidermidis,* Gram-negatives	vancomycin + cefepime (preferred)	For true PCN allergy: vancomycin + meropenem	Healthcare-Associated Ventriculitis and Meningitis
Brain abscess-primary	*S. pneumoniae,* Streptococcus spp., Bacteroides spp., Enterobacteriaceae, *S. aureus*	vancomycin +ceftriaxone + metronidazole +/- ampicillin		Biopsy for microbiology and pathology is necessary for diagnosis.
Encephalitis	HSV, arboviruses, enteroviruses, VZV, noninfectious causes.	IV acyclovir		Obtain blood cultures. See IDSA guidelines for an extensive list of epidemiologic risk factors, diagnostic work-up, and individualized empiric therapy for encephalitis: IDSA Encephalitis Guidelines
Prophylaxis for *Neisseria meningitidis* contacts		Ciprofloxacin 500 mg PO x1 OR Rifampin 600 mg PO q 12 hours x 4 doses	Ceftriaxone 250 mg IM x 1 is preferred agent in pregnancy.	Contact Infection Control (pager 59196) for guidance.