<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Pharmacy Mnemonic: INPPNEU1</th>
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<tr>
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<td><strong>Inpatient Pneumonia Pathway</strong></td>
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1. Admit to Dr.: 
2. Diagnosis: ____________________

**CRITERIA FOR SEVERE PNEUMONIA**
- Respiratory Rate ≥ 30
- PaO2/FiO2 ratio ≤ 250
- Multilobar infiltrates
- Confusion – new onset disorientation to person, place or time
- Uremia – BUN > 20 mg/dL
- Leukopenia (as a result of infection alone) – WBC count < 4,000
- Thrombocytopenia - platelet count < 100,000
- Hypothermia – core temperature < 36° C.
- Hypotension requiring aggressive fluid resuscitation
- Total of boxes checked – Patients with 3 or more meet criteria for admittance to ICU.

3. Vital Signs:
4. Activity:
5. Stat pulse oximetry on admission to unit; oxygen 2 - 5 L/min via NC to maintain SPO2 > 92%; call physician if SPO2 < 90%.
6. Daily SPO2 checks; record in Progress Notes.
7. ☐ SCDs ☐ TED hose
8. **CM:** Initiate Pneumococcal Vaccine/Flu Vaccine Orders
9. **CM:** Pneumonia *(Nursing Order – Do Not Delete)*
11. Diet: ____________________
12. Labs: **Stat labs:** **CM:** 2 sets of blood cultures prior to antibiotics

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<tr>
<th>CBC w/diff, CMP, Lactic Acid (call physician if &gt; 2)</th>
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<td>Sputum GS and culture - send immediately to lab</td>
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<tr>
<td><strong>Optional labs:</strong> ☐ ABG ☐ HIV ELISA ☐ LDH</td>
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<tr>
<td>☐ Urinary antigen for Legionella pneumophilia ☐ Sputum fungal and TB stains and cultures</td>
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13. ☐ Chest x-ray *(PA and Lateral)* Indication: 
   ☐ Portable Chest x-ray Indication: 

14. Respiratory Therapy:
   1) Inpatient Pneumonia Pathway
   2) HHN with Unit Dose Proventil q 4 hrs while awake and PRN
   3) May induce sputum if nursing unable to collect.

15. Consult Social Services for Smoking Cessation counseling.
16. BEGIN ADMINISTRATION OF ANTIBIOTICS WITHIN 6 HOURS OF PATIENT'S EARLIEST DOCUMENTED ARRIVAL TIME TO HOSPITAL AND AFTER BLOOD CULTURES ARE OBTAINED.

Select the appropriate type of admission (A, B, C, D) and then select the MINIMUM appropriate therapy:

A. General Floor Admission (Non ICU):

- **For Combination therapy**
  - **SELECT ONE DRUG FROM SECTION 1 AND 2**: **TOTAL OF 2 DRUGS**
  - **Section 1.**
    - Rocephin (ceftriaxone) 2 grams IVPB STAT, then q 24 hrs
    - Invanz (ertapenem) 1 gram IVPB STAT, then q 24 hrs
  - **Section 2.**
    - Zithromax (azithromycin) 500 mg IVPB STAT, then q 24 hrs
    - Vibramycin (doxycycline) 100 mg IVPB PO STAT, then q12hrs

- **OR**
  - **For Monotherapy Only:**
    - Levaquin (levofloxacin) 750 mg: IVPB PO STAT, then q 24 hrs

B. General Floor Admission (Non ICU) & Pseudomonas Risk:

(Risk factors include structural lung disease, recent disease, recent antibiotics or recent hospital admission)

- **SELECT ONE DRUG FROM SECTION 1 AND 2**: **TOTAL OF 2 DRUGS**
  - **Section 1.**
    - Zosyn (piperacillin/tazobactam) 4.5 grams IVPB STAT, then q 6 hrs
    - Merrem (meropenem) 1 gram IVPB STAT, then q 8 hrs
    - Maxipime (cefepime) 2 grams IVPB STAT, then q 12 hrs
  - **Section 2.**
    - Levaquin (levofloxacin) 750 mg IVPB PO STAT, then q24hrs
    - Zithromax (azithromycin) 500 mg IVPB PO STAT, then q 24hrs
    - Tobramycin 2mg/kg (based on Ideal Body Weight) Loading Dose
    - Consult pharmacy for further aminoglycoside dosing.

- **OR**
  - **For Beta Lactam Allergy give: Both drugs should be ordered.**
    - Levaquin (levofloxacin) 750 mg IVPB PO STAT, then q 24 hrs
    - Azactam (aztreonam) 2 grams IVPB IM STAT, then q 8 hrs.
### Inpatient Pneumonia Pathway

**Pharmacy Mnemonic:** INPPNEU3

#### C. Intensive Care Unit Admission:

**SELECT ONE DRUG FROM SECTION 1 AND 2: TOTAL OF 2 DRUGS**

**Section 1.**
- Maxipime (cefepime) 2 grams IVPB STAT, then q 12 hrs
- Zosyn (piperacillin/tazobactam) 4.5 grams IVPB STAT, then q6 hrs
- Merrem (meropenem) 1 gram IVPB STAT, then q 8 hrs

  **OR**
  - Rocephin (ceftriaxone) 2 grams IVPB STAT, then q 24 hrs
  - Unasyn (ampicillin/sulbactam) 3 grams IVPB STAT, then q 6 hrs

**Section 2.**
- Levaquin (levofloxacin) 750 mg IVPB STAT, then q 24 hrs
- Zithromax (azithromycin) 500 mg IVPB STAT, then q 24 hrs

  **OR**
  - Vibramycin (doxycycline) 100 mg IVPB STAT, then q12hrs

#### D. For Suspected MRSA Infection: ADD TO A, B or C regimen

- Vancocin (vancomycin) 15 mg/kg IVPB STAT, then q 12 hrs

  Pharmacy Vancomycin Consult.

17. Consult pharmacy to adjust for renal function and follow and adjust drug levels as needed.

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**Date & Time**

**Physician Signature**

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**DOCTOR'S ORDERS**

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**REV 08/14; SD40-3**