

# Community Acquired Pneumonia: Oct 2019 Guideline Update

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# New Guidelines Released Oct 1 2019

## AMERICAN THORACIC SOCIETY DOCUMENTS

### **Diagnosis and Treatment of Adults with Community-acquired Pneumonia**

An Official Clinical Practice Guideline of the American Thoracic Society and  
Infectious Diseases Society of America

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Marcos I. Restrepo, and Cynthia G. Whitney; on behalf of the American Thoracic Society and Infectious Diseases  
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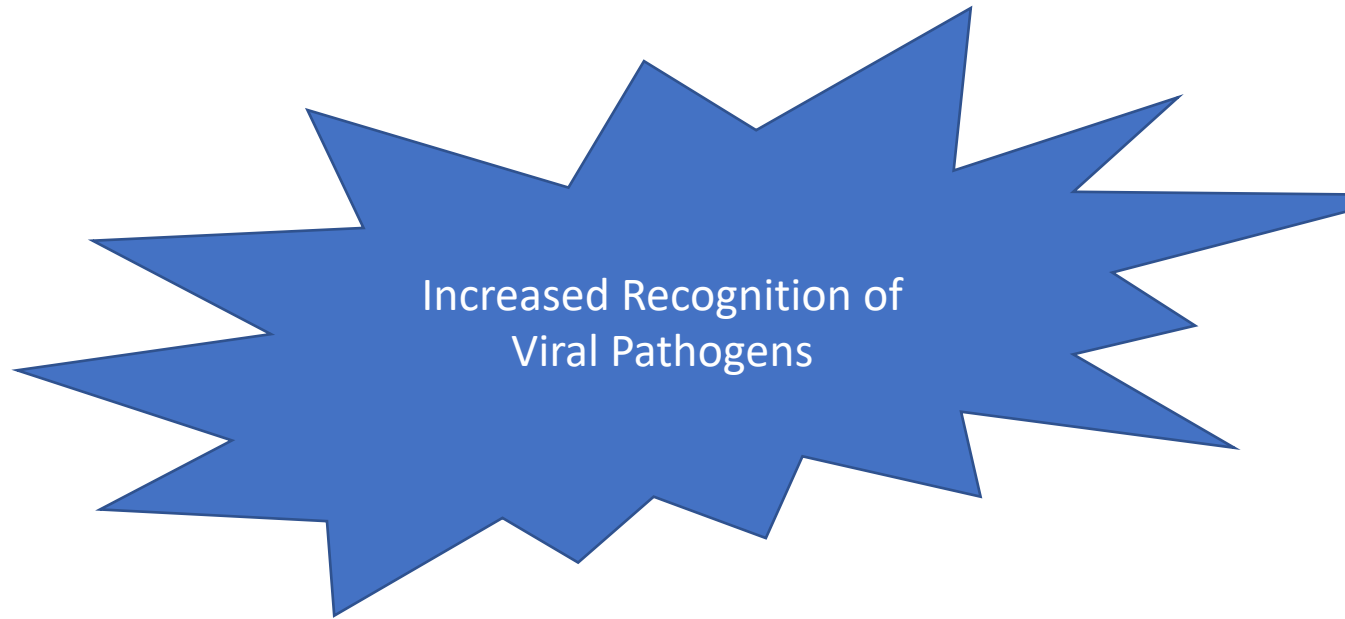
THIS OFFICIAL CLINICAL PRACTICE GUIDELINE WAS APPROVED BY THE AMERICAN THORACIC SOCIETY MAY 2019 AND THE INFECTIOUS DISEASES SOCIETY OF AMERICA  
AUGUST 2019



Last Update :  
2007!!!!

# Treatable Pathogens

- *Streptococcus pneumoniae*
- *Haemophilus influenzae*
- *Mycoplasma pneumoniae*
- *Staphylococcus aureus*
- *Legionella sp.*
- *Chlamydia pneumoniae*
- *Moraxella catarrhalis*



# Role of Sputum Gram Stain and Culture

## 2007

- Routine etiologic tests are optional for outpatients with CAP (Moderate Recommendation: level III evidence)
- Pretreatment blood samples and expectorated sputum sample should be obtained based on specific factors (next slide)

## 2019

- Recommend NOT obtaining sputum Gram stain and culture in the outpatient setting (strong evidence rating, very low quality of evidence )

# Role of Sputum Gram Stain and Culture

2007:  
Pretreatment  
blood samples  
and expectorated  
sputum sample  
should be  
obtained based  
on:

**Table 5. Clinical indications for more extensive diagnostic testing.**

Indication	Blood culture	Sputum culture	<i>Legionella</i> UAT	Pneumococcal UAT	Other
Intensive care unit admission	X	X	X	X	X <sup>a</sup>
Failure of outpatient antibiotic therapy		X	X	X	
Cavitary infiltrates	X	X			X <sup>b</sup>
Leukopenia	X			X	
Active alcohol abuse	X	X	X	X	
Chronic severe liver disease	X			X	
Severe obstructive/structural lung disease		X			
Asplenia (anatomic or functional)	X			X	
Recent travel (within past 2 weeks)			X		X <sup>c</sup>
Positive <i>Legionella</i> UAT result		X <sup>d</sup>	NA		
Positive pneumococcal UAT result	X	X		NA	
Pleural effusion	X	X	X	X	X <sup>e</sup>

**NOTE.** NA, not applicable; UAT, urinary antigen test.

<sup>a</sup> Endotracheal aspirate if intubated, possibly bronchoscopy or nonbronchoscopic bronchoalveolar lavage.

<sup>b</sup> Fungal and tuberculosis cultures.

<sup>c</sup> See table 8 for details.

<sup>d</sup> Special media for *Legionella*.

<sup>e</sup> Thoracentesis and pleural fluid cultures.

# Role of Sputum Gram Stain and Culture

2019: Gram Stain and Cultures Recommended if:

- Severe CAP
- Empirically treated for MRSA or P.aeruginosa
- Previously infected with MRSA or P.aeruginosa
- Hospitalized or received IV antibiotics in last 90 days



Emphasis on De-escalation

# Treatment Outpatient – No Co-morbidities/ Risk Factors

## 2007

- Macrolide (strong recommendation)

## 2019

- Amoxicillin OR
- Doxycycline OR
- Macrolide ( if local pneumococcal resistance < 25%)

# Treatment- Severe CAP

- $\beta$ - Lactam + Macrolide >  $\beta$ - Lactam + Fluoroquinolone



# Healthcare Associated Pneumonia (HCAP)

- Category no longer recognized
- Emphasis on local validated risk factors for MRSA and *P. aeruginosa*



Emphasis on De-escalation

# Concepts NOT covered in 2007 Guidelines

- Corticosteroids: NOT Recommended
- Procalcitonin: NOT Recommended to determine initial antibiotic therapy
- Routine use of follow-up chest imaging: NOT Recommended

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