Algorithm for evaluation and management of patients hospitalized with radiographic evidence of pneumonia in the absence of SARS-CoV transmission worldwide

Radiographic evidence of pneumonia requiring hospitalization?

Yes

Continue droplet precautions and treat as clinically indicated for community-acquired pneumonia

No

Treat as clinically indicated

The clinician should ask the patient about the following:

A. Recent travel (within 10 days) to mainland China, Hong Kong, or Taiwan or close contact with ill persons with a history of travel to such areas
B. Employment in an occupation at particular risk for SARS-CoV exposure, including a healthcare worker with direct patient contact or a worker in a laboratory which contains live SARS-CoV
C. Close contact with others who have been told they have pneumonia

Yes to one of three questions

1. Notify the local health department
2. Evaluate for alternative diagnosis as clinically indicated.
   This work up may include the following:
   A. CBC with differential
   B. Pulse oximetry
   C. Blood cultures
   D. Sputum Gram’s stain and culture
   E. Testing for viral respiratory pathogens such as influenza A and B, respiratorysyncytial virus
   F. Specimens for legionella and pneumococcal urinary antigen
3. The health department and clinicians should look for evidence of clustering of patients with radiographically-confirmed pneumonia without alternative diagnoses (e.g., while traveling, exposure to other cases of pneumonia, clusters of pneumonia among healthcare workers).
4. NOTE: If the health department and clinician have a high suspicion for SARS-CoV infection, consider SARS isolation precautions and immediate initiation of the algorithm in Figure 2

No to three questions

Treat as clinically indicated

After 72 hours, alternative diagnosis?

Yes

If part of a cluster of pneumonia (or there are other reasons to consider at higher risk for SARS-CoV disease), consider SARS-CoV testing in consultation with health department. Continue treating pneumonia as clinically indicated.

No

Treat as clinically indicated

1 Or Acute Respiratory Distress Syndrome (ARDS) of unknown etiology
2 Guidance for the management of community-acquired pneumonia is available from the Infectious Diseases Society of America (IDSA) and can be at http://www.journals.uchicago.edu/IDSA/guidelines/
3 The 2003 SARS-CoV outbreak likely originated in mainland China, and neighboring areas such as Taiwan and Hong Kong are thought to be at higher risk due to the high volume of travelers from mainland China. Although less likely, SARS-CoV may also reappear from other previously affected areas. Therefore, clinicians should obtain a complete travel history. If clinicians have concerns about the possibility of SARS-CoV disease in a patient with a history of travel to other previously affected areas (e.g., while traveling abroad, had close contact with another person with pneumonia of unknown etiology or spent time in a hospital in which patients with acute respiratory disease were treated), they should contact the health department.