

QUICK REFERENCE: RESPIRATORY DISEASE IN SLO COUNTY



	Influenza	Pneumonia (Community Acquired)	Valley Fever (Coccidioidomycosis)	Tuberculosis	
SIGNS + SYMPTOMS	Fever	✓	✓	✓	
	Productive Cough		✓	✓	
	Other Symptoms	Headache; dry cough; myalgia followed by sore throat; nasal congestion; rhinitis.	Coarse crackles; dyspnea; chest pain; absence of rhinorrhea and sore throat.	Tiredness; myalgia; arthralgia; headache; chest pain. Rash in acute phase (erythema multiforme or nodosum).	Weight loss; night sweats; hemoptysis.
COURSE	Disease Course	Condition generally improves with or without treatment.	Condition worsens in absence of antibiotics.	May take weeks or months, but most cases resolve with or without treatment. Disseminated disease in < 1%.	Onset is generally insidious. Improves only with tuberculosis-specific treatment.
EPIDEMIOLOGY	Respiratory Transmission	✓	+/- Mycoplasma spread person-to-person.	✓	
	Incidence Rate	U.S. = 5,000-20,000 / 100,000	U.S. = 1,720 / 100,000	California = 18.8 / 100,000 SLO County = 150.4 / 100,000	California = 5.2 / 100,000 SLO County = 2.2 / 100,000
	Risk Factors	During community outbreaks, highest incidence among school-aged children. Degree of fever correlates with viral shedding (ceases within 7-10 days of symptom onset).	Persons with underlying illness, age > 50. Incidence increases during influenza epidemic. Mycoplasma in late summer or fall.	Outdoor work; contact with newly disturbed soil. Clusters typically follow dust-generating events.	Immigration from or travel to countries other than U.S., Canada, Australia, New Zealand, and Western Europe; immunosuppression; known contact with tuberculosis case.
TESTING	Type and Timing	Nasopharyngeal swab specimen (in viral transport media). RT-PCR; DFA; IFA.	RT-PCR; sputum culture; blood culture; urinary <i>Streptococcus pneumoniae</i> antigen (not applicable to children); CBC (leukocytosis). Urinary antigen for Legionella.	Serology: EIA (IgM detected in 50% of cases in week 1, 90% of cases in week 3); Immunodiffusion (can cross-react with Histoplasma). Culture. Consider sending specimen to UC Davis.	Sputums for AFB smear, NAAT, and/or culture. IGRA or Tuberculin Skin Test (reactivity 2-10 weeks after initial infection). Negative TST or IGRA does not rule out active TB in a symptomatic patient.
RADIOLOGY	Common Chest X-Ray Findings	Usually bilateral perihilar peribronchial thickening and ground-glass opacities and consolidation with a patchy or nodular appearance. A normal chest X-ray does not exclude diagnosis or suggest less severe illness.	New infiltrates with lobar or segmental consolidation; generally focal or limited to one side (though this may change with time).	Consolidation is most common finding (75%). Multiple nodules with increased involvement of inferior pulmonary lobes, interlobular septal thickening, bilateral hilar lymphadenopathy, and pleural effusions.	Consolidation, segmental atelectasis or infiltrate, pleural effusion, nodules, lymphadenopathy and, less commonly, cavitation or miliary infiltrates.
DO I ...?	Isolate	✓	+/-	✓	
	Report	+/- Deaths under age 65, ICU admissions (any age), and novel strains (any age).		✓	✓



Valley fever is most prevalent in the fall.



Community acquired pneumonia is somewhat more common in winter.



Flu "season" is November-April with highest incidence from January-March.

