

Distinguishing Influenza-Like Illness from Inhalational Anthrax

The CDC presented considerations for distinguishing influenza-like illness from inhalational anthrax (MMWR, 9 Nov 01, 50:44 pp. 984-986). “Although many different illness might present with influenza-like illnesses (ILI) symptoms, the presence of certain signs and symptoms might help to distinguish other causes of ILI from inhalational anthrax. Nasal congestion and rhinorrhea are features of most ILI cases not associated with anthrax. Nasal congestion and rhinorrhea are feature of most ILI cases not associated with anthrax.” The table below compares the symptoms and signs of inhalational anthrax with influenza and influenza-like illnesses.

Symptom/Sign	Inhalational anthrax (n=10)	Laboratory-confirmed influenza	ILI from other causes
Elevated temperature	70%	68%–77%	40%–73%
Fever or chills	100%	83%–90%	75%–89%
Fatigue/malaise	100%	75%–94%	62%–94%
Cough (minimal or nonproductive)	90%	84%–93%	72%–80%
Shortness of breath	80%	6%	6%
Chest discomfort or pleuritic chest pain	60%	35%	23%
Headache	50%	84%–91%	74%–89%
Myalgias	50%	67%–94%	73%–94%
Sore throat	20%	64%–84%	64%–84%
Rhinorrhea	10%	79%	68%
Nausea or vomiting	80%	12%	12%
Abdominal pain	30%	22%	22%

“Vaccination against influenza is the best means to prevent influenza and its severe complications. The influenza vaccine is targeted towards persons aged ≥ 65 years and to persons aged 6 months to 64 years who have a high risk medical condition because these groups are at increased risk for influenza-related complications. The vaccine also is targeted towards health-care workers to prevent transmission of influenza to high-risk persons. In addition, vaccination is recommended for household members of high-risk persons and for healthy persons aged 50–64 years. The vaccine can prevent 70%–90% of influenza infections in healthy adults. However, the vaccine does not prevent ILI caused by infectious agents other than influenza, and many persons vaccinated against influenza will still get ILI. Therefore, receipt of vaccine will not definitely exclude influenza from the differential diagnosis of ILI or increase the probability of inhalational anthrax as a cause, especially among persons who have no probable exposure to anthrax. Frequent hand washing can reduce the number of respiratory illnesses and pneumococcal polysaccharide vaccine can reduce the risk for serious pneumococcal disease.”