



The Texas Department of State Health Services is reporting the first human case of novel avian influenza A (H5N1) in Texas. The Texas Animal Health Commission believes the case to be associated with dairy cows.

While the affected dairy is not in Potter or Randall Counties, Amarillo is the medical hub for the North Texas Panhandle. The following considerations are offered:

1. The sensitivity of rapid antigen tests for novel influenza viruses is unknown and should be assumed to be low.
2. The sensitivity of RT-PCR for Influenza testing is dependent on the specific primer sequences used in the test assay. For a novel influenza virus, the sensitivity should be assumed to be low.
3. Increased use of respiratory viral pathogen panels over the past several years seems to have demonstrated a high rate of asymptomatic carriage of viral pathogens or co-infection with multiple pathogens. Therefore, the presence of a routine pathogen on respiratory viral pathogen or respiratory viral pathogen testing does not rule out a novel influenza virus infection.
4. Novel influenza virus should be considered when 1. The patient has direct contact with cattle or other presumed infected animals and 2. The patient has symptoms consistent with influenza including cough, fever, sore throat, or conjunctivitis, and 3. Alternate diagnoses are excluded based on history, exam, and test results.
5. If a patient is suspected of having a novel influenza virus, Amarillo Public Health should be contacted at 806-378-6321 to assist with sample processing and management.
6. Appropriate samples for testing at the state lab included:
 1. Nasopharyngeal swab in viral transport media.
 2. Nasopharyngeal washing viral transport media.
 3. Nasopharyngeal or oropharyngeal swabs in viral transport media.
7. The recommendation for the administration of chemoprophylaxis in asymptomatic individuals who have potentially been exposed to avian influenza A(H5N1) depends on the nature of the exposure.
 - a. Chemoprophylaxis should be administered to individuals in the same household or close family members with unprotected, prolonged contact with a confirmed or probable case.
 - b. Chemoprophylaxis may be considered in healthcare personnel or non-household members with prolonged unprotected close contact with a confirmed or probable case.
 - c. Chemoprophylaxis is typically not considered for individuals who have had social contact of a short duration with a confirmed or probable case in a non-hospital setting.



- d. For asymptomatic individuals, the treatment frequency dosing for oral oseltamivir or inhaled zanamivir (one dose twice daily for 10 days) is recommended instead of the typical antiviral chemoprophylaxis regimen (once daily for 10 days).
- e. Chemoprophylaxis for symptomatic individuals who have had contact with a confirmed or probable case is recommended. Treatment should be started immediately and not be delayed while testing is pending.

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