TEXAS Health and Human Services

Texas Department of State Health Services

Jennifer A. Shuford, M.D., M.P.H.
Interim Commissioner

Interim Veterinary Guidance on Companion Animal Monkeypox Testing in Texas

Note: This document references testing for Clade II (formerly the West African clade) of monkeypox virus in animals. Information on testing for other poxviruses more common to animals should be sought from the performing laboratory.

Key Points

- Monkeypox (MPX) is a disease caused by infection with the monkeypox virus (MPXV), an orthopoxvirus, that can lead to serious illness in humans.
- Past MPX outbreaks were traced back to human exposure to animals infected with MPXV.
- There is now limited evidence that MPXV can spread to dogs through contact with infected humans. Human cases may be able to infect other companion animals as well, but this is still unproven.
- Currently, MPX testing for animals is only available through the Centers for Disease Control and Prevention (CDC).
- **Department of State Health Services (DSHS) and CDC approval for testing is required prior to shipping samples to CDC.**
- Personal protective equipment (PPE) for MPX and hand hygiene should be emphasized for veterinarians assessing suspect animal monkeypox cases.

Can animals be tested for MPX?

Yes. MPX testing for animals is only available through the CDC. Both real-time polymerase chain reaction (rt-PCR) and enzyme-linked immunosorbent assay (ELISA) are available for animals that meet testing criteria. For acutely ill animals, rt-PCR will be the most useful diagnostic test. **Testing must be approved by both the DSHS and CDC prior to sample submission**.

Private zoonotic laboratories do not currently offer MPX testing for animals, but commercial testing may become available in the future.

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Criteria for Testing

Only animals that exhibit clinical signs consistent with MPX and meet epidemiological criteria should be considered for MPX testing. Veterinarians requesting MPX testing should first perform a thorough and systematic evaluation of the suspect animal case while wearing appropriate PPE.

Clinical criteria include new onset of rash or poxvirus-like lesions, or two or more of the following clinical signs: conjunctivitis, coryza and/or nasal secretions; cough; anorexia; lethargy; bloating; fever; labored breathing.

Epidemiological criteria are close contact (e.g., petting, cuddling, kissing, licking, sharing food and living spaces) with a probable or confirmed MPX case in the 21 days prior to the suspect animal's symptom onset.

To accurately determine if epidemiological criteria for the animal are met, name and other personal information for human contacts may be necessary. Public health staff will assist in interviewing owners or other human contacts to the animal as needed.

Test Approval

Testing of animals for MPX requires coordination with your regional Zoonosis Control office and approval by DSHS and CDC. If you are a veterinarian who would like to request approval to test a pet for MPX, **you must contact your regional DSHS Zoonosis Control office (see link in Resources).**

Once approved, DSHS will coordinate with the requesting veterinarian to ensure proper samples are collected while wearing appropriate PPE (see CDC link in Resources for information on PPE and sample collection). Submitters should send their samples directly to the CDC for testing.

Interpretation of Results

CDC's rt-PCR assay is considered confirmatory laboratory evidence for MPX. This test can detect MPXV DNA and distinguish it from other orthopoxviruses.

Detection of anti-orthopoxvirus IgG antibodies using ELISA can give presumptive evidence for MPXV infection. Anti-orthopoxvirus IgG antibodies are thought to be detectable two to four weeks post onset and may be able to be detected months to years after illness resolves. Serology results should be interpreted in conjunction with epidemiologic criteria, clinical presentation, and past medical history.

All non-negative laboratory results for MPXV infection in animals should be reported to your regional Zoonosis Control office. Regional public health veterinarians and epidemiologists can aid in the interpretation and investigation of results.

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Resources

Regional DSHS Zoonosis Control contacts:
https://www.dshs.state.tx.us/IDCU/health/zoonosis/Contact-Us.aspx

DSHS: https://www.dshs.state.tx.us/IDCU/disease/monkeypox/

CDC: https://www.cdc.gov/poxvirus/monkeypox/veterinarian/index.html

American Veterinary Medical Association: https://www.avma.org/resources-tools/one-health/veterinarians-and-public-health/monkeypox

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