New World Screwworm Sample Collection Protocols

Human Sample Submission

New World Screwworm (NWS) is an invasive, parasitic fly. When NWS lays eggs in a pre-existing wound or mucous membrane, the hatched larvae or maggots can cause a disease called myiasis. NWS myiasis can be a very painful and serious condition. Medical professionals who suspect their patients might have NWS myiasis can submit samples to a public health laboratory for identification. This document is intended for medical providers and to serve as guidance for submission of larvae for NWS myiasis confirmatory testing.

Supplies

The following is needed for NWS collection:

- Gloves
- 70% alcohol (ethanol or isopropyl)
- Forceps
- Screw cap vial or container that tightly seals (preferably plastic)
- Plastic bag with a zipper closure
- Appropriate lab paperwork provided by your local health department

Collection Procedures

Using forceps, gently remove larvae of different sizes from several sites within the open wound. Ensure samples are removed from the deepest part of the wound, secondary myiasis may be present. Place the larvae in the vial or container and ensure it is completely submerged in alcohol. Seal the container and place it in the plastic bag for shipment.

Submitting Samples

Suspected cases of NWS myiasis should be reported to the Texas Department of State Health Services (DSHS) immediately. DSHS regional office can help submitters with sample submission to confirm NWS infestation in their patients.

 Contact your regional Zoonosis Control office for completed laboratory submission paperwork

https://www.dshs.texas.gov/notifiable-conditions/-zoonosis-control/contactinformation

- Provide information on patient demographics, travel history, location of infestation, and other pertinent clinical details
- Submit larvae for testing according to steps outlined in "Collection Procedures"
- Ensure any larvae that are discarded without submission were also submerged in 70% alcohol (ethanol or isopropyl) or 5-10% formalin long enough to kill the larvae
- Secure samples in a leak proof container and submit to your closest LRN
- Email [NWS inbox email address] with any additional questions

Information on Reporting



TEXAS
PARKS &
WILDLIFE



Livestock or Domestic Pets

(800) 550-8242

Wildlife

(512) 389-4505

Humans

(888) 963-7111

tahc.texas.gov/agency/contact.html#r egions

tpwd.texas.gov/wildlife

https://www.dshs.texas.gov/notifiableconditions/-zoonosis-control/contactinformation

For more information, visit [ADD DSHS NWS PAGE LINK HERE]

