

New World Screwworm Lab Bench Aid

Guidelines for Submitting Specimens for Laboratorians



March 2026

Authorization from Indiana Department of Health Vector-borne Disease Program

All laboratories must receive authorization to submit larval specimens for preliminary identification at the IDOH Entomology Laboratory.

Authorization can be requested by contacting the Vector-Borne and Zoonotic Disease Epidemiologist at 317-234-9727 (Epidemiologist On Call for after-hours inquiries, 317-233-xxxx)

- Download and complete the IDOH Entomology ID Form. Submitter will be provided with an authorization ID. This ID should be entered on the specimen submission form.
- Provide facility name, address, and primary point of contact for questions (name and phone number)
- IDOH will coordinate specimen pickup and provide instructions for receipt of test results.

Collection and Preservation of Specimens

Standard biosafety precautions for working with clinical specimens, such as gloves, are adequate.

- Collect a representative sample of larvae from a single infestation, especially if multiple stages or species appear to be present.
- IDOH prefers all larvae to be sent to the lab for identification.
 - Place all specimens in a single vial. If there are fewer than 10, collect them all. Otherwise, collect at least 10.
- Place larvae and eggs in a leakproof vial with 70% ethanol; this will kill but preserve them for identification.
 - The volume of liquid should be sufficient to fully submerge larvae and eggs.
 - 70% (or greater) isopropanol is an acceptable alternative.
- Do not dispose of any larvae or eggs in the trash or outside on the ground.
- Collect the remaining larvae and eggs in a separate leakproof container, submerge them in alcohol, place the container into a zip-top plastic bag, and seal it. Dispose of the sealed bag as biohazardous waste.

Specimen Packaging

Specimens should be packaged to be sent to IDOH for direct examination following the steps below.

- Label the vials with two or more unique identifiers, matching the submission form identifiers (patient's name, sex and date of birth, IDOH authorization ID).
- Wrap the lid of the specimen vial with parafilm or tape.
- Enclose the vial in a sealed plastic bag.
- Complete the IDOH submission form and enclose it in the outer portion of the package.
- Put the bag in the package with enough cushioning to protect the vial from impact during transit.
- Specimens should be held at room temperature awaiting pickup.

Diagnostic ID of New World Screwworm Fly Larvae

- Preliminary ID of new world screwworm fly larvae will be performed by state medical entomologists at the IDOH laboratory based on morphological characteristics.
- IDOH Entomology will coordinate with CDC's Diagnostic Parasitology Lab for confirmation.
- IDOH will notify the submitter listed on the Entomology ID form of results and an official copy of the test results will be provided to the facility once it is received from CDC.