

Zebrafish and other Aquatic Animal Sample Collection and Shipping Guidelines

Samples for Microbiology (bacterial and/or fungal culture):

- **Culture swabs:** Submit culture swabs collected from skin, gills, or lesioned organs in a culturette containing a suitable transport medium, such as Amies Medium without charcoal. Ship overnight at ambient temperature.
- **Identification of bacterial and fungal cultures:** Submit cultures on agar plates wrapped in Parafilm®, or submit cultures on culture swabs with a suitable transport medium, such as Amies Medium without charcoal. Swabs and plates can be shipped overnight at ambient temperature.
- **Water samples:** Submit 100 mL of water in a plastic container with a tight-fitting lid that will not leak in transit. Ship water samples overnight with cold packs.

Environmental samples and feeds for PCR:

- **Detritus (biofilm or sediment) for PCR:** Collect 1 mL of detritus into a tube and submit frozen with cold packs. Dry ice is not required.
- **Feces for PCR:** Collect a pool of fish feces into a microcentrifuge tube and submit frozen with cold packs. Dry ice is not required.
- **Live feed cultures for PCR:** Submit at least 1 mL of live feed cultures frozen with cold packs. Dry ice is not required.

Whole fish:

- **Necropsy services:** Ship live fish in labeled heavy-duty plastic bladders or doubled plastic bags, secured so that they will not leak and containing approximately 1/3 system water and 2/3 air. Fish should be shipped overnight in insulated containers.
- **PCR testing:** Submit frozen fish with sufficient ice packs to ensure that fish remain frozen during transit. Dry ice is not required.
- **Histopathology services:** Whole fish can be fixed in 10% neutral buffered formalin (NBF) or another fixative such as Davidson's or Bouin's fixative (please indicate). To ensure proper fixation, open up the ventral cavity with small scissors. Ship samples overnight at ambient temperature.
- **Histopathology and PCR from an individual fish:** Submit fish that have been flash frozen in liquid nitrogen or at -80°C. Flatten the fish and wrap in foil, label each individual fish package and place into a larger, rigid plastic container such as a large conical tube. Ship samples overnight on dry ice.