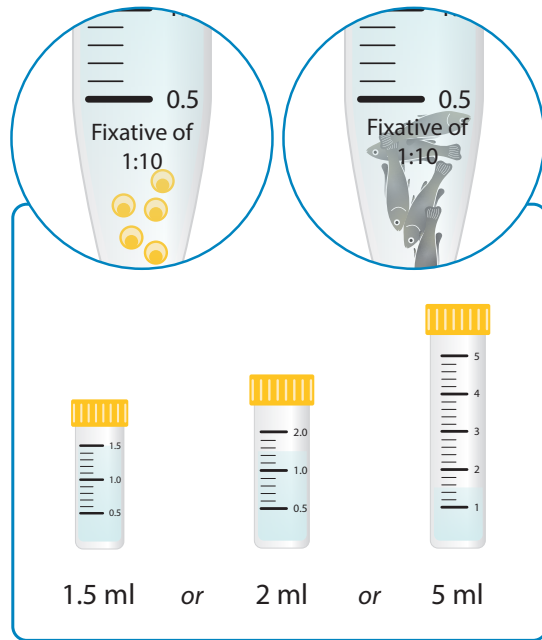


# Quick fish sampling guide for disease diagnostics

## Histology sampling guide

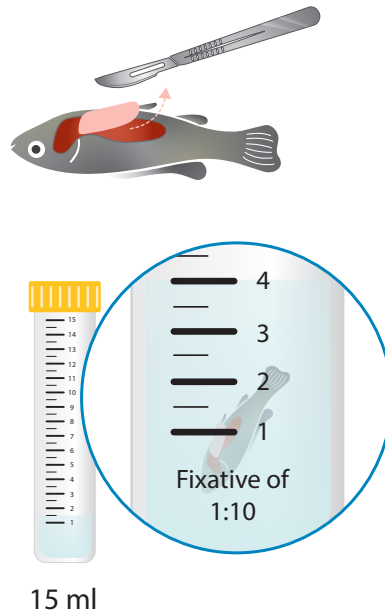
### Step 1: Sample collection

**A For fry or eggs < 1 cm:**  
For swim-up fry or fertilized eggs < 1 cm:  
Place 3–5 whole fry and/or eggs in 10% neutral buffered formalin (NBF) fixative at a ratio of fish to fixative of 1:10.

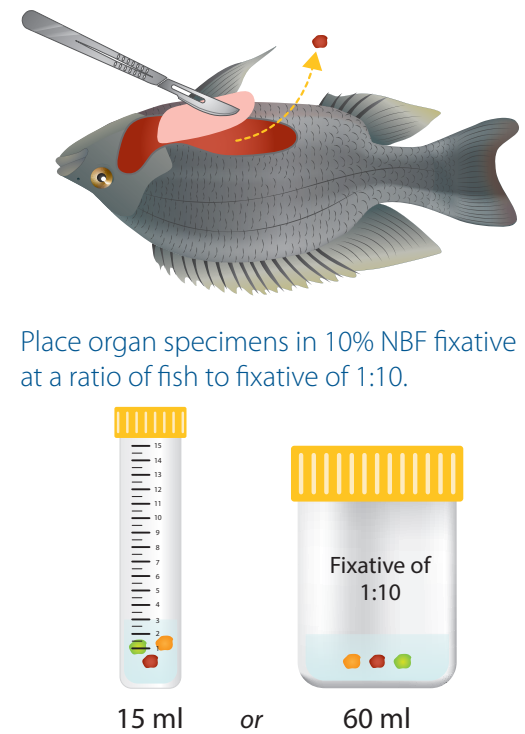


Avoid the use of tubes with narrow bottoms, especially conical, as tissues do not mix adequately with fixative. Better to use flat bottom tubes.

**B For fingerlings 1–5 cm:**  
Cut off gill opercula.  
Open abdomen. Pull out viscera to protrude slightly from opening to expose internal organs. Place fish in 10% NBF fixative at a ratio of fish to fixative of 1:10.  
*Caution: Do not to cut the intestines.*

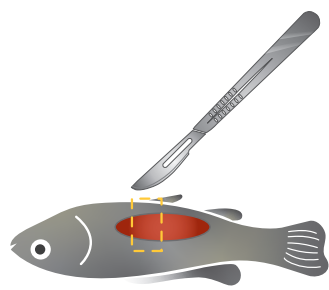


**C For fish > 5 cm:**  
Dissect a 5 x 5 mm section (clean cuts) for each organ (take whole organ if < 5 mm thick). For standard histology, collect from brain, gill, eye, heart, pyloric caeca, stomach, intestine, spleen, liver, kidney and a representative lesion if any (see below for more details).



Place organ specimens in 10% NBF fixative at a ratio of fish to fixative of 1:10.

### Lesion sampling

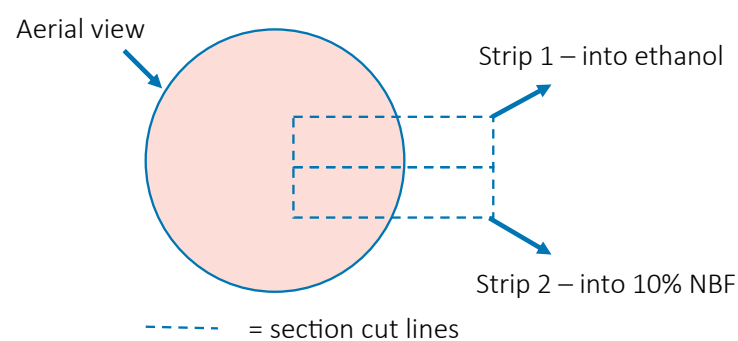


5 mm depth  
5 mm wide

lesion sampling in addition to normal tissues

### For large lesion:

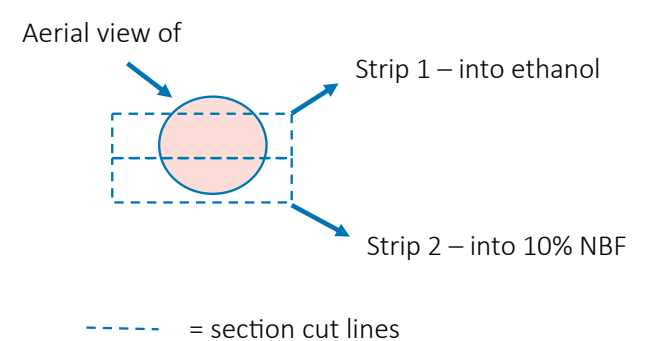
#### Diagram 1



Place a strip into 95%–100% ethanol ethanol for molecular diagnostic or in case of confirmed presence of epizootic ulcerative syndrome.

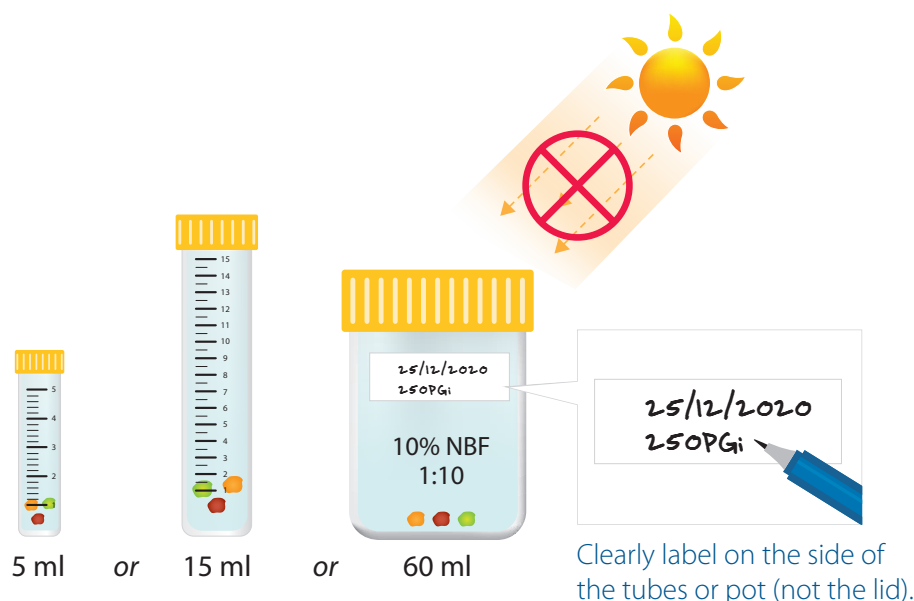
### For small lesion:

#### Diagram 2



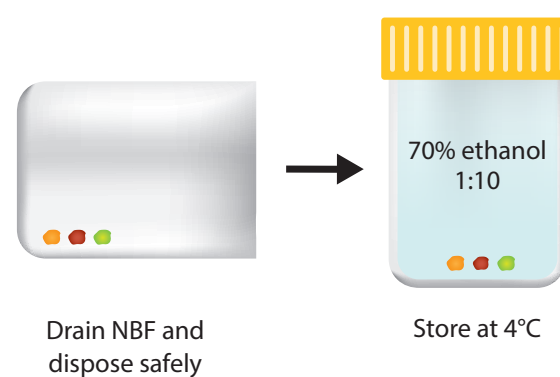
### Step 2: Fixation

Immerse 5 x 5 mm tissue sections in 10% NBF fixative at a 1:10 ratio.  
Store at room temperature away from sun for 24–48 hours.



Clearly label on the side of the tubes or pot (not the lid).

### Step 3: End of fixation



Note: Proceed with 70% ethanol for long-term storage or when doing specialist stains such as immunohistochemistry (IHC). For immediate processing, the 70% is not needed. Please note it is also harder to ship samples in alcohol, as it may require dangerous goods paperwork.

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