

**MARINE AND AQUACULTURE
RESEARCH FACILITIES UNIT
(MARFU)**

The Aquarium Complex

Disease Prevention and Treatment Protocol

The following are protocols required to prevent the introduction and spread of disease within The Aquarium Complex. Negligence in not following these protocols will result in disinfection of the system to be charged to the researcher responsible for the breach. Supervisors are responsible to ensure that students follow the developed protocols.

All fish must be treated for parasites using the following formalin bath protocol PRIOR to introduction to any MARFU system: This applies to all animals before they are introduced into MARFU from external sources AND when moved within the facility i.e., from one system to another.

MARFU Formalin Treatment Protocol for Marine Finfish:

250ppm Formalin (37% w/w formaldehyde) for no less than 45 minutes.

Notes on Formalin before you begin:

- Formalin is a reducing agent that will absorb oxygen from water; in addition, it is also toxic to fish gills and will lower the efficiency of gaseous exchange. For this reason, only well-aerated water should be treated and treatments should never be done with water >28 degrees Celsius.
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PERSONAL PROTECTIVE EQUIPMENT - *The following PPE is necessary to complete the task.*

Appendix A – Determining the dose of formalin required to achieve 250ppm

Using the following formula:

$$C_1V_1 = C_2V_2$$

Where:

$$C_1 = 1000$$

V_1 = Formalin dose in mL

$$C_2 = 250$$

V_2 = Your volume of seawater to be treated in litres

Example –

