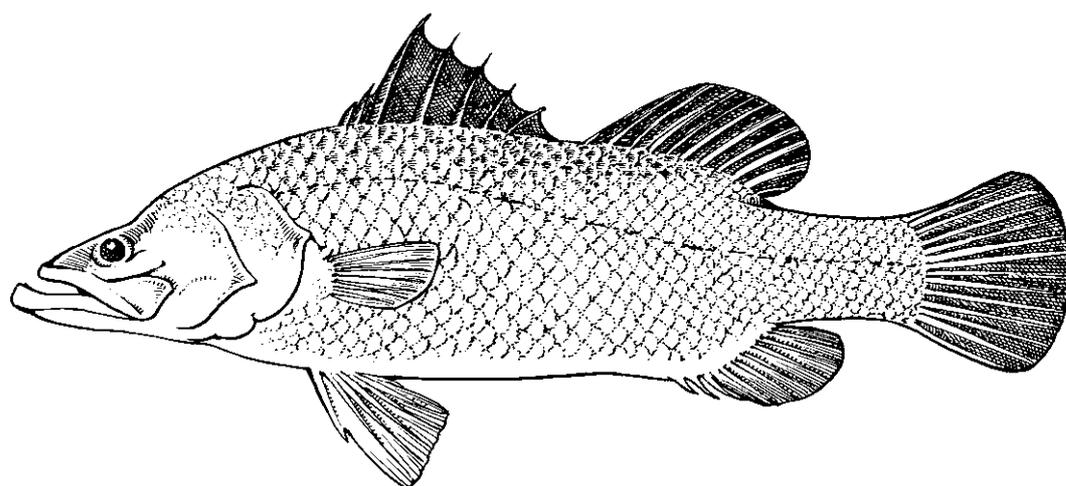


# Health management technical guidelines for aquaculture

Version: February 2008



## 1 Introduction

This document is a technical guideline for health management for aquaculture, including aquaculture undertaken under the self-assessable code. Most of the document consists of guidelines of what you should do in regard to health management **EXCEPT FOR** the disease notification procedure and chemical usage, which are **MANDATORY** under the legislation.

## 2 General

### 2.1 Animal source

Animals should be obtained from disease-free farms or sources only, after appropriate health testing and disease-free certification by a reputable veterinary laboratory; disinfect eggs or larvae where appropriate. Movement of aquatic animals from interstate is not permitted under the self-assessable code.

- a) Quarantine (isolate) all animal introductions from the rest of the farm for an appropriate period of time. The length of quarantine time depends on the species of aquatic animal and potential disease or parasite. Please contact DPI&F veterinary and extension officers for advice.
- b) Seek advise on appropriate preventative treatments for parasites to all introduced animals while still in quarantine.

## 3 Operational Management

### 3.1 Hygiene

- a) Seek advise on the disinfection of eggs or larvae prior to use.
- b) Remove sick and dying animals as soon as possible and treat in a quarantine section or dispose of appropriately, so there is no contamination of the farm animals or aquatic environment. See disease notification section page 3.

### 3.2 Record Keeping

- a) Record all introductions and disposals of aquatic animals; include their source or destination.
- b) Record all outbreaks of sickness and deaths.
- c) Measure and record growth rates.

### 3.3 Chemical use

- a) Ensure all personnel are aware of the hazards of the chemicals used, and that they have training on the storage, use and handling of the chemicals used and are provided with appropriate protection gear to the chemical.
- b) Comply with the regulations on the use of chemicals in aquaculture. Be aware of the chemicals registered for use in aquaculture and the need to consult a registered vet. No antibiotics or feeds containing antibiotics are to be used whatsoever – you must consult a vet. If you use anything that is not registered or prescribed you will be in breach of the legislation. Controls over the supply and use of Agvet chemicals in Queensland are provided for in legislation, in particular the *Agricultural and Veterinary Chemical (Queensland) Act 1994* (Agvet Code), the *Chemical Usage (Agricultural and Veterinary) Control Act 1988* (Chemical Usage Act), *Agricultural Chemicals*

#### **4 Disease**

If you suspect that there is a disease on the premises you must notify the Department in accordance with the Disease Notification Procedure. The criteria for notification of disease is if there is any unusual mortality in conjunction with **ANY TWO** of the following criteria:

- a) Animals coming to the edge or water surface of the pond/tank/cage.
- b) Animals demonstrating unusual swimming patterns.
- c) Reduced feeding and failure to thrive.
- d) Unusual changes in the physical appearance of the animal such as red or black colouration of prawn, ulcers or mouldy growth on skin, blackening of skin, pop eye, erosion of fins and tails, fouling of gills etc.

##### **4.1 Disease Management**

- a) Isolate any animals showing signs of any disease or ectoparasitic infestation to affected ponds and tanks only.
- b) Prevent bird, animal, vehicle and human vectors from spreading disease through the farm/hatchery.
- c) Personnel should work on the healthy animals each day before they have any contact with the sick ones.
- d) Obtain veterinary laboratory assistance to determine the cause(s) of any losses; always attempt to get a diagnosis.
- e) Where appropriate/requested collect sick specimens of affected aquatic animals for laboratory examination
- f) Seek advise from the Department on the destruction, disposal and disinfection methods for diseased and dead aquatic animals.
- g) Chemicals and therapeutics are to be used only on the advice of an aquaculture veterinarian, and withdrawal times must always be observed.

##### **4.2 Disease Emergencies**

Prepare a contingency plan to handle the diagnosis of a 'declared disease' or other 'serious disease' event on the farm/hatchery; this should include:

- a) A plan and ability to completely isolate each pond, tank, sub unit or system to prevent transfer of disease by water, bird, animal or human to other farms and the aquatic environment.
- b) A capacity to disinfect an entire pond, tank, sub unit or system.
- c) A capacity and an appropriate method to destroy, collect and dispose of large numbers of aquatic animals in accordance with expert advice.
- d) Keeping records to allow tracing the origin and disposal of any affected group of aquatic animals.

### 4.3 Disease Notification Procedure

Under Section 100 of the *Fisheries Act 1994*

*'A person who knows or reasonably suspects a fisheries resource or a fish habitat is showing signs of disease, or knows or reasonably suspects disease may be in fisheries resources or a fish habitat, must immediately notify the chief executive or an inspector'*

An aquaculture licence or permit holder must therefore notify a Fisheries Research Centre or a Fisheries Extension Officer or the Queensland Boating and Fisheries Patrol (QB&FP) of the occurrence of, or the possibility of, a disease outbreak. Officers may be contacted by calling the Call Centre on

**13 25 23**

**8 a.m to 8 p.m.**

**Monday to Friday**

**(excluding public holidays)**

**or**

DPI&F after-hour emergency number 3830 8550 for suspected exotic disease

The Fisheries or QBFP Officer will then contact the designated DPI&F expert for the particular event and will receive advice on an appropriate course of action, eg site inspection, sample collection etc. The reporting aquaculturist will then be advised of this course of action. In most instances of disease in freshwater or marine aquaculture the regional expert will be either:

<b>North Region</b>	<b>South Region</b>
Duty Fish Pathologist (or Laboratory Manager)	Duty Fish Pathologist (or Laboratory Manager)
Oonoonba Veterinary Laboratory	Animal Research Institute, Yeerongpilly
Department of Primary Industries and Fisheries	Department of Primary Industries and Fisheries
TEL: (07) 4722 2624 (w)	TEL: (07) 3362 99471 (w)