

Decision Tree for Dealing with Aquatic Animal Mass Mortality Events (MMEs)

Table of contents

INTRODUCTION

- Background
- Objectives
- Scope
- Intended audience

• Definition of emergency in aquaculture

• Definition of a mass mortality event

• Phases in an Emergency

Preparedness phase

Response phase

Recovery phase

• Elements of an Emergency Response

Early warning

Early detection

Early response



Does this warrant action?

PREPAREDNESS PHASE

Advance preparation and operational planning

RESPONSE PHASE

• Initial Response

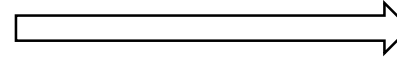
• Situational assessment

• Seeking internal assistance

• Seeking regional and international assistance

• Communication

DECISION TREE FOR DEALING WITH MASS MORTALITY EVENTS



Criteria for the authorities to take action.

- What to do
- When to do

- Situational evaluation

Scenario 1

MME is clearly pathogen related

Scenario 2

MME is clearly environmentally related

Scenario 3

MME is of unknown/combined/uncertain cause

- Conducting field investigation

- Consultation with affected fish farmers
- Field sample collection
- Laboratory tests
- Surveillance
- Risk communication

- Immediate actions to be considered by Competent Authority

- Actions following identity of cause of mortality events

- Dealing with mortality events in wild populations

- Impacts of mortality events

RECOVERY PHASE

- Post-mortem evaluation and improvement and follow-up actions
- What are the minimum preparedness and advance preparedness requirements and actions needed?

TOOLS, GUIDANCE, STANDARDS

- Emergency Response Tools
- When to seek external (regional and international assistance) and information that need to be provided

Case study examples

Situational evaluation

Unprecedented mass mortality

1.

Disease outbreak with potential to reach epidemic proportions

or

Likely to remain restricted in geographic location

2.

Pathogen related

or

Unknown or combined cause

or

Environmentally related

3.

Emergence of a new pathogen

or

Incursion of an OIE-listed disease

or

Change in behaviour of an endemic disease

4.

Competent Authorities for aquatic animal health –
Veterinary/Fisheries

or

Competent Authorities:
Public Health/Food Safety
and Environment