

Centre for Environment, Fisheries & Aquaculture Science

Aquatic Animal Diseases

Contingency Planning

**OPERATIONS MANUAL**

Version 1 September 2012



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## 1 Introduction

The aim of the Operations Manual is to provide a clear, concise and functional working document for use by staff when dealing with notifiable aquatic animal diseases at the National Disease Control Centre (NDCC) in Weymouth. The manual has been developed by the Fish Health Inspectorate (FHI) and the Epidemiology team. Its main functions are to:

- Provide both experienced and new Cefas staff with clear instruction on dealing with suspicion and/or confirmation of a notifiable disease within England and Wales
- Outline procedures on diagnosis and outbreak investigation
- Define roles and responsibilities of key staff involved in decision-making
- Highlight the necessary actions to be taken to contain or eradicate a notifiable disease
- Make sure that key external partners are included and informed
- Ensure lists and details of suppliers and materials that may be required are readily available to diagnostic and field staff

The Operations Manual is a generic document describing NDCC operation for any notifiable disease outbreak in England and Wales. Specific operational details exist for those diseases considered exotic to the UK and covered by the Contingency Plan (listed below). These are provided in separate annexes which include reference to standard operating procedures (SOPs). The Operations Manual, annexes and SOPs therein will be checked at least annually, and updated to reflect new legislation and scientific advances.

### 1.1 Diseases covered by the Contingency Plan

#### 1.1.1 Diseases exotic to the EU

- Epizootic haematopoietic necrosis
- Epizootic ulcerative syndrome
- *Bonamia exitiosa*<sup>1</sup>
- *Perkinsus marinus*
- *Microcytos mackini*
- Taura syndrome
- Yellowhead disease

#### 1.1.2 Diseases for which England and Wales has approved free status

- Viral haemorrhagic septicaemia (VHS)
- Infectious haematopoietic necrosis (IHN)
- Infectious salmon anaemia (ISA)
- *Marteilia refringens* (with the exception of the Tamar estuary)
- *Gyrodactylus salaris*

The contingency plan also covers white spot syndrome virus (WSSV), for which England and Wales does not have confirmed free status. Policies on eradication or containment may be different for each disease. Specific information will be provided in the disease annexes.

## 2 Terms of reference

EC Directive 2006/88/EC article 47 lays down the criteria for aquatic animal disease contingency plans for diseases exotic to the EU and emerging diseases. This operation manual addresses these diseases and also includes diseases for which England and Wales have approved free Status (listed above). The Statutory Instrument that provides legal powers is the Aquatic Animal Health (England and Wales) Regulations 2009. The Operations Manual has been developed with reference to the

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<sup>1</sup> *Bonamia exitiosa* is currently listed as exotic but is now found in a number of locations in Europe, including the Fal Estuary in Cornwall.

work done to date for *Gyrodactylus salaris* by Cefas, Defra, and the Scottish Government (see the *Gyrodactylus salaris* Contingency Plan (Anon., 2011), the Defra framework response plan for exotic animal diseases (Defra, 2007) and the review of contingency planning by Westergaard (2008)).

## 2.1 Cross Border Issues

The Scottish Government Contingency Plan for *Gyrodactylus salaris* details the Scottish response for cross border issues in relation to activities on shared river catchments, the Tweed and the Esk:

*“In the event of an outbreak of G. salaris in any part of the Tweed, containment and/or eradication will be the responsibility of Scottish Ministers in co-operation with their Defra counterparts. In the event of an outbreak of G. salaris in any part of the Esk, containment and/or eradication will be the responsibility of Defra Ministers in co-operation with their Scottish counterparts. In the event of restrictions having to be served in cross border catchments, Scottish Ministers will issue the Initial Designation Notices (IDN) or Confirmed Designation Notices (CDN) to cover those waters in the Tweed or Border Esk catchments that lie within Scotland and Defra Ministers will issue for waters that lie within England.”*

This response will be reflected within England and Wales for any other diseases covered by the contingency plan.

## 3 National Disease Control Centre (NDCC)

The NDCC will be located at Cefas (Weymouth laboratory) and will have responsibility for running the field and laboratory operations during an outbreak of a notifiable aquatic animal disease. Responsibilities will include:

- NDCC actions and decisions including H&S
- Administration, prioritising actions and work flow.
- Field investigations, receiving reports of suspicion and acting accordingly
- Diagnostic functions
- Epidemiology, provision of advice to Aquatic Animal Health Policy Group (AAHPG)
- Notification of results
- Control, eradication and disinfection

### 3.1 NDCC key personnel:

- Cefas Head of NDCC
- Cefas Head of FHI
- Cefas Head of Epidemiology
- Cefas Scientific Advice Lead
- Cefas Support Services Manager
- Cefas Information Services Manager

Members of the NDCC should be familiar with Defra’s Framework Response Plan for Aquatic Animal Diseases, this Operations Manual, its disease annexes and the SOP for NDCC activation and set to work and how these documents interrelate. All current contingency planning manuals and supporting documents are located on TRIM<sup>2</sup>. Current post holder information for key roles (Defra and Cefas personnel) required for an emergency response to an exotic aquatic animal disease outbreak is maintained by the Epidemiology team (see operations manual supporting document: Emergency response - Roles & personnel).

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<sup>2</sup> TRIM container: [Fish and Shellfish Health – EpiRisk - Contingency Planning – Contingency Plan for Aquatic Animal Diseases (current)].

## 4 Aquatic Animal Health Policy Group (AAHPG)

The primary role of the AAHPG is to provide disease control policy advice and strategy recommendations. The group is based in London and is chaired by the CVO (or delegated representative), its responsibilities will include:

- Overall direction of control strategies
- Provision of information to OIE, European Commission, EU member states and to national agricultural and trading bodies
- Liaison with diagnostic laboratories
- Liaison with other necessary institutions i.e. Devolved Administrations (DAs), industry, veterinary associations, local government and police etc.
- Contact with press and other media
- Maintenance of a decision log

Full details of these procedures will be documented in Defra's Framework Response Plan for Aquatic Animal Diseases (ownership of this document is to be transferred to Cefas).

### 4.1 AAHPG membership

- CVO (Chair) (overall responsibility for contingency plans in the UK)
- DCVO
- Cefas Scientific Advice Lead
- Defra Deputy Senior Responsible Owner for Aquatic Animal Health
- Defra Aquatic Animal Health Policy Lead

## 5 Expert Group

For each disease an expert group will be nominated by the Head of Epidemiology. The role of this group will be to advise and make recommendations on the likely impacts, spread and control of the disease on both farms and in the wild. The Expert Group is located in Weymouth and is chaired by the Cefas Scientific Advice Lead.

### 5.1 Expert Group membership

- Cefas Scientific Advice Lead (Chair)
- Cefas Head of FHI
- Cefas Head of Epidemiology
- Appropriate diagnostic and scientific staff
- The most relevant disease expert(s)

## 6 Alert status

Defra's standard alert system has been adopted as a basis for responding to specific aquatic animal diseases (e.g. those that are exotic to the EU or exotic to the UK).

WHITE ALERT	The disease is not present or suspected within England and Wales and will be the state of alert under normal circumstances
BLACK ALERT	The risk of disease is higher than normal, for example disease may be suspected or confirmed in a nearby EU administration. This would warrant a higher level of vigilance. The decision to raise the state of alert from white to black would be taken by the Cefas Head of Epidemiology
AMBER ALERT	This indicates that there is a high level of suspicion of the presence of disease on a particular premise on clinical grounds, following investigation by the FHI. Samples will have been submitted for laboratory analysis

RED ALERT                      This indicates that disease has been confirmed

The state of alert refers to the whole of England and Wales. The current status for each disease is maintained by the Epidemiology team which is responsible for informing key personnel (including FHI and AAHPG) when a change of status for a particular disease takes place.

## 7 NDCC actions at suspicion of a notifiable disease

### 7.1 Level of suspicion

At initial suspicion of a notifiable disease incursion a FHI inspector will be dispatched to investigate, collect samples and make an assessment of the level of suspicion. This level needs to be confirmed with the head of the FHI and will determine subsequent action taken by Cefas and Defra (see Fig. 1), which may include convening either a CVO stock-take telecon (moderate level of suspicion) or Amber telecon (high level of suspicion).

### 7.2 CVO Stock-take telephone conference.

A stock-take meeting will be convened when the level of suspicion is moderate. The Head of FHI will discuss evidence acquired so far with a limited group of people nominated by the CVO without the involvement of other agencies and stakeholders. Issues that would require consultation with the expert group prior to an Amber telecon (should this be required) will be identified.

### 7.3 Amber (/Red) telephone conference

If enough evidence exists to warrant a high level of suspicion of an outbreak of a notifiable fish disease the Alert Level will become AMBER and an Amber teleconference will be called. This meeting is chaired by the CVO and appropriate participants (depending on the details of the potential outbreak) will be determined by the Defra Aquatic Animal Health Policy Lead from the listing in the Framework Response Plan for Aquatic Animal Diseases. Participants from Cefas will include:

- Cefas Head of NDCC
- Cefas Head of FHI
- Cefas Head of Epidemiology
- Cefas Scientific Advice Lead
- Documenting Officer for decision logging

The Head of FHI will give a brief local situation report and present laboratory results. The Head of Epidemiology will provide a national situation assessment (including epidemiological evidence). The CVO will review the situation and decide on the course of subsequent actions to be taken. This may include the gathering of further evidence and/or expert opinion prior to a second Amber telecon, or a decision to confirm a disease outbreak may be made. **If the CVO confirms a disease situation, the Alert level will become RED and the meeting will continue as a Red telecon.** Immediate movement restrictions and will be decided and an appropriate level of stakeholder engagement will be proposed by the Head of FHI.

The standing agenda for an Amber (/ Red) telecon. can be found in Appendix 1

### 7.4 Cefas Head of Fish Health Inspectorate Responsibilities

At Amber alert the Cefas Head of FHI will advise the following of the alert status and the likely implications of the disease:

- Fish Health inspectors
- Diagnostic Staff
- Administration Staff
- Sampling equipment kit preparation team
- The Environment Agency's National Fisheries Technical Team (Brampton)
- Cefas Support Services Manager (for NDCC activation).

FHI administration staff or a Fish Health Inspector will issue an Initial Designation (ID) to cover the interval preceding Confirmed Designation. A field Inspector will investigate the source of suspicion (Index Case (IC)), and report to Cefas Head of FHI from the field and, if necessary:

- Collect samples and record clinical signs of disease as per the relevant SOP
- Inspect movement and mortality records and make copies and, where appropriate, collate relevant Section-30 data (for contact tracing)
- Further question the farmer with regard to introduction and spread
- If fish delivery is implicated, check transport logs for farmer and trader concerned and copy details

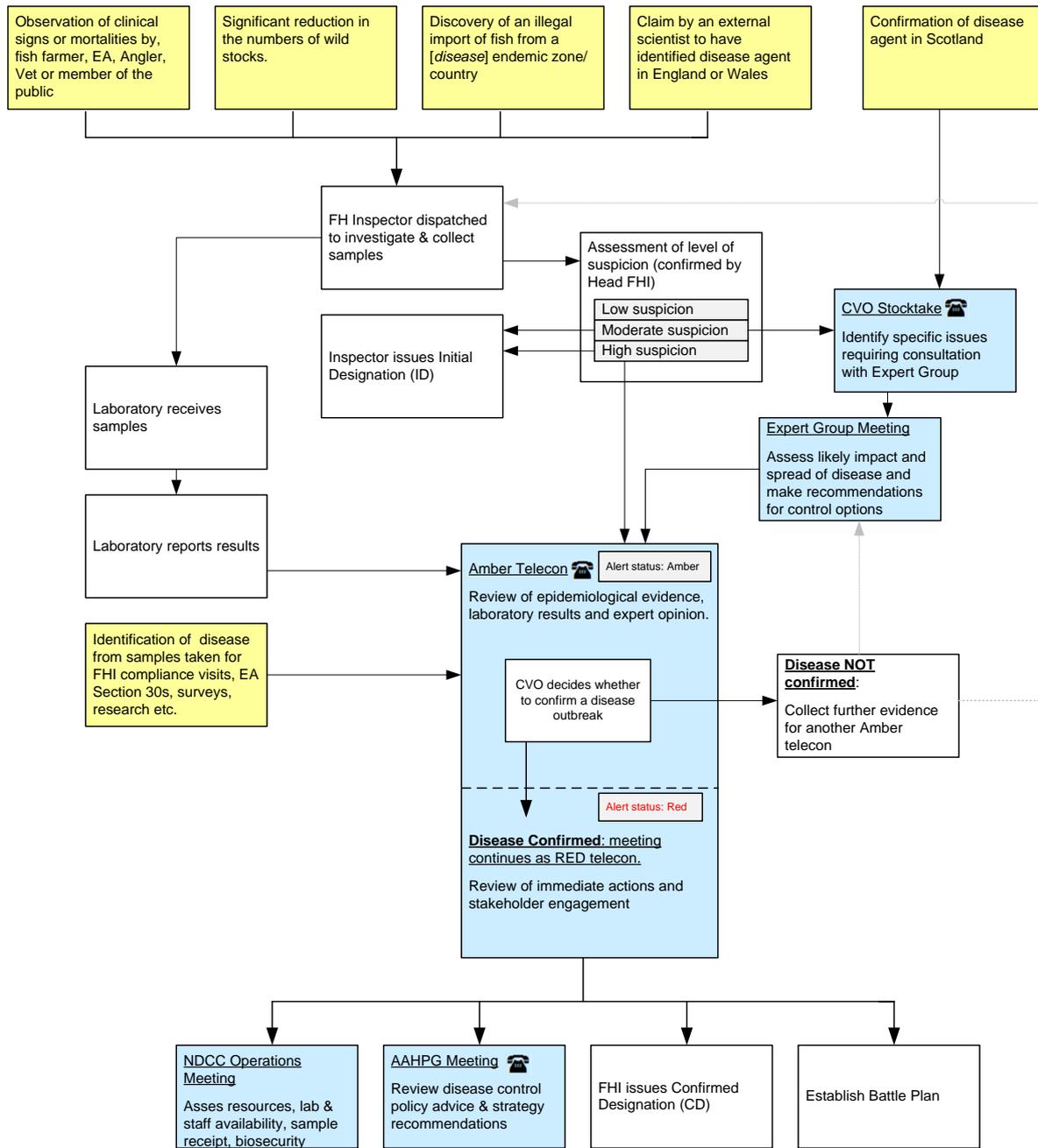
### **7.5 Cefas Support Services Manager Responsibilities**

The Cefas Support Services Manager is responsible for maintaining operations manual supporting documents: NDCC Activation plan and set to work SOP DI0001 and the call out cascade protocol.

At Amber alert, or when ordered by the Cefas Head of NDCC, the Cefas Support Services Manager will:

- Ensure that the NDCC is made ready as per the Activation plan and set to work SOP
- Ensure that a documenting officer is made available for conference calls and during the operation of the NDCC.

**Figure 1. Actions following suspicion of a notifiable aquatic animal disease**



Key:

Initiation events

Meetings

☎ Teleconference

## 8 NDCC actions on confirmation of a notifiable disease (Red alert)

On confirmation of a notifiable disease the alert status for that disease will become RED and the Cefas Head of NDCC will assume command.

### 8.1 Cefas Head of NDCC responsibilities

- Instigate the battle plan (see section 8.5)
- Handle the allocation of staff resources

### 8.2 Cefas Head of Fish Health Inspectorate responsibilities

- Ensures that the FHI are advised on the need to implement Confirmed Designations (CDs).
- Prioritisation of farm and non-farm sites that will need to be contacted by telephone.
- Start contact tracing by field inspectors (all follow-on contact visits will be scheduled on the live fish movement database (LFMD) under the relevant contact code)
- Identification of any staff or resourcing bottlenecks and reporting to Cefas Head of NDCC.
- Ensure all FHI staff have copies of the exotic disease incident recording sheet and these are all completed as necessary.

### 8.3 Cefas Head of Epidemiology responsibilities

- To make an initial report to AAHPG within 3 days of NDCC activation. The report should include:
  - A brief history of the case including: possible sources, evidence for disease, possible spread and areas at risk
  - An assessment of the likely disease consequences for farmed and wild stocks of fish in the affected areas.
  - Recommendation for actions at this stage of the operation

### 8.4 Cefas Support Services Manager responsibilities

- Initiate the call out of required staff from the call out cascade protocol
- Ensure that the NDCC is fully operational within 2 hours
- Ensure a document control officer is available
- Ensure a system is in place for recording communications, minutes of meetings and decisions in an incident log for the duration of the outbreak (see Appendix 2 for recording sheet)

### 8.5 Instigation of battle plan

Central to the coordination of operations during an emergency event is the establishment of a battle rhythm; this ensures that specific activities (including AAHPG and Expert Group meetings) occur in a timely fashion. A full battle plan is defined in the Framework Response Plan for Aquatic Animal Diseases, which lays out the criteria for meetings and briefings.

#### 8.5.1 Birdtable meetings

A key component of the battle rhythm is the **Birdtable**. This is a short (15 minute) telecon chaired by the Head of NDCC which is attended by stakeholders and representatives from key Government departments. Birdtables may take place up to three times a day (8:30 am, 12:00 pm and 18:00pm - frequency dependent on circumstances and is likely to vary with stage of the outbreak). This briefing allows the lead member of each group participating in the operation to provide a concise update and provides the opportunity for stakeholders to communicate issues to policy and operational groups. Specific questions raised are minuted and taken up immediately outside of the birdtable by relevant parties as directed by the chair. The minutes of birdtables are produced within 2 hours. Participants from Cefas will include:

- Cefas Head of NDCC

- Cefas Head of FHI
- Cefas Head of Epidemiology
- Cefas Scientific Advice Lead
- Cefas diagnostic lead
- Cefas Support Services Manager
- Documenting Officer for decision logging

The standing agenda for a birdtable can be found in Appendix 1

## **9 Administration**

### **9.1 Placement of movement restrictions**

#### **9.1.1 Legal powers**

The powers for issuing movement restrictions are provided by the Aquatic Animal Health (England and Wales) Regulations 2009. Under this Act Section 25 (2), areas can be designated for the purpose of disease control. The movements of live fish, eggs and gametes of fish, along with any equipment, material or substance liable to transmit disease into, out of, and within designated areas, are prohibited without the permission of the Secretary of State for Environment, Food and Rural Affairs for England or the Welsh Government. In addition an inspector may control the destruction and disposal of any infected stocks under Section 26 (3).

#### **9.1.2 Decision making**

Recommendations for movement restrictions should be based on agreed policy, field investigations and epidemiological findings. The Cefas Head of Epidemiology should then advise the AAHPG who will take the decision on movement restrictions and ensure that a sound legal base exists. It will then be the responsibility of Cefas Head of FHI to ensure that the FHI impose movement restrictions in line with current policy. The control policy, and therefore movement restrictions, will be regularly reviewed by the AAHPG.

#### **9.1.3 Initial Designation Declaration (ID)**

An Initial Designation (ID) is an immediate standstill notice, which may be placed when a competent authority suspects the presence of a listed disease. The procedures are documented in SOP 2018, Investigation and control measures for Notifiable Diseases. An ID may be placed when a farm falls under suspicion (as defined in EC decision SANCO/6084 2008), i.e. either due to abnormal mortalities, signs consistent with a notifiable disease, or epidemiological links (including a shared catchment) with an infected site (for example the import of live fish).

#### **9.1.4 Confirmed Designations (CD).**

Waters that are confirmed as being infected may be designated as infected by placement of a Confirmed Designation (CD). Buffer catchments can also be designated by means of a CD. In accordance with EC decision SANCO/6084 2008, a protection zone must be declared covering all or part of the river catchment. All farms in the protection zone must be visited and fish sampled (generally 150 fish sample, details in the disease annexes). The surveillance zone is 'an extended area outside the protection zone' determined on a case by case basis. The Head of Epidemiology has responsibility for recommending the scope of the surveillance and protection zone(s) to the AAHPG for approval. The protection zone and surveillance zone together comprise the containment zone. All farms in the containment zone must be subject to targeted surveillance to re-establish disease freedom.

### 9.1.5 Responsibilities

- ID documents are prepared by Fish Health Inspectors in the field or by the FHI Technical Manager or trained ATTA member
- CD documents are prepared by the FHI technical manager or trained ATTA member.
- Documents are signed, stamped and served by a fish health inspector or warranted member of the FHI (serving can also be done by post)
- Demarcation of surveillance and protection zones is the responsibility of the Head of Epidemiology

### 9.1.6 Administrative action following suspicion or confirmation

Following suspicion or immediate confirmation at a fish farm site, put-and-take fishery or wild freshwater fishery, the entire freshwater catchment will be placed under suspicion.

All farms in the containment zones will have movement restrictions applied. Suspect catchments will comprise of all water catchments which are deemed to be linked through water movements will also have movement restrictions applied.

An Initial Designation (ID) will be served on all fish farm sites:

- Within the water catchment(s) where suspicion or confirmation has been identified
- With epidemiological connections to the suspected site or suspect catchment(s)
- Within the Buffer Zone(s)

All suspect freshwater catchments will be designated by ID. The ID will cover all waters holding susceptible species, within that catchment. This will include all fish farms, put-and-take fisheries any other fish holding facilities, and the wild waters of the catchment that contain susceptible species.

The immediate response may warrant the designation of all freshwater catchment areas in England and Wales if initial suspicion and/or investigations suggest the possibility of the disease being widespread throughout numerous catchments. Nationwide designation is only likely to apply to *Gyrodactylus salaris*. Outbreak scenarios and control options are outlined in the disease annexes. The size of the control zone will depend on the receipt of positive laboratory results and advice from investigations led by the Epidemiology team.

## **9.2 Revocation of movement restrictions**

As catchments are declared free from the pathogen then movement restrictions will be revoked. The containment zone can only officially re-establish pathogen free status once a programme of targeted surveillance has been completed, normally 2 – 4 years (see Draft EC decision SANCO/6084 2008). Movements of susceptible species from the containment zone to pathogen free areas will not be permitted until the surveillance program is completed (however, movement of non-susceptible species may be possible). Revocation of movement restrictions will be directed by the AAHPG. In many situations the decision to revoke a declaration may be based around a programme of testing, devised by the Epidemiology team, which demonstrates freedom from the disease.

In considering the revocation of movement restrictions the following parameters must be taken into account:

- Whether the disease has been confirmed within a suspect catchment
- Whether eradication has been deemed to be successful
- What epidemiological links exist
- In the case of negative results, whether sufficient sampling has been conducted within the suspect area

### 9.3 Fish Movement Applications

Applications to move live fish and gametes, along with any equipment, material or substance liable to transmit disease (which are subject to movement restrictions) will need to be submitted in writing to the FHI. This will be assessed by a senior fish health inspector. A decision will be made, based on the current policy for the pathogen in question.

### 9.4 Mapping and GIS

Geographic Information Systems (GIS) will aid the identification of areas in relation to suspected catchment(s) and buffer zone(s). The location of all authorized fish farms, dealers and importers are held on the LFMD. Currently considerable GIS experience exists within Cefas and knowledge of data collection and quality control methods.

The FHI currently national coverage of the following datasets:

- Ordnance Survey 1:10000
- Ordnance Survey 1:25000
- Ordnance Survey 1:50000
- Ordnance Survey 1:250000
- Ordnance Survey Miniscale
- Ordnance Survey Coastline
- Ordnance Survey Strategic (transport links line data)
- Postcode Sector-Level Data

Other datasets not currently of national coverage include:

- Ordnance Survey Unitary Boundary Line Data
- Ordnance Survey Parish Boundary Line Data
- Ordnance Survey County Boundary Line Data
- Ordnance Survey District Boundary Line Data

Some infected areas (e.g. fisheries) may be missing from latest versions of the OS maps. In these instances consideration will be given to the use of websites providing aerial and satellite imagery, examples include Google Earth, Multimap & Streetmap. Information on designated areas of conservation interest and more accurate map references can be obtained at [www.magic.gov.uk](http://www.magic.gov.uk)

Current mapping procedures ensure that designations can be mapped and made available, for hard or soft-copy publication, the same day a designation is confirmed. Hard-copy maps will be plotted and distributed from the Weymouth Laboratory at sizes up to ISO A1. Soft-copy data can be distributed in both dynamic and static formats. Dynamic formats such as ESRI Shape and MapInfo Table can be distributed electronically and immediately utilised within GIS software by end-users. Dynamic PDF files can be distributed for interactive, but un-editable data sharing. Static maps can be distributed in many electronic formats including standard PDF, TIFF and JPEG. Geographic information will be uploaded to the [Aquatic Animal Health & Movements](http://www.magic.gov.uk) website as soon as a designation is confirmed.

Desk instructions are documented and stored within the Inspectorates Trim system. They can be found by searching for 'ATTA desk instruction Disease Designation mapping'. There are currently four people familiar with the system but it further GIS training will be provided to additional team members to ensure that the mapping capability within the FHI is consistent and of the highest standard at all times.

### 9.5 IT responsibilities

The responsibility for IT during an emergency situation lies with the Cefas Information Services Manager. Responsibilities include:

- Daily update of the [Aquatic Animal Health & Movements](http://www.magic.gov.uk) with disease information
- Placing geographic information (maps) on the website

- Updating information on all the notifiable diseases
- Maintaining internet links between Cefas, Defra, Marine Scotland, Welsh assembly and EA websites
- Ensuring the website reflects all sites currently under a CDD declaration for a notifiable disease
- Enabling IT equipment for emergency and seconded staff
- Ensuring that field staff have adequate electronic communications enabled e.g. blackberries, laptops.

## **10 Field Investigations**

The FHI has the following powers under the Aquatic Animal Health (England and Wales) Regulations 2009. Where there are reasonable grounds for suspicion of a notifiable or emerging disease, fish health inspectors can:

- Place an Initial Designation (section 25)
- Take samples of aquatic animals or water (section 24)
- Examine the samples in a designated laboratory
- Assist epidemiological investigations to determine the spread of disease

Following initial suspicion and/or confirmation, it is envisaged that a number of sites will need to be inspected and sampled, depending on the findings of the outbreak investigation.

### **10.1 Preparation and arrangement of an inspection**

Procedures and necessary steps prior to carrying out an inspection and sampling are documented in the relevant SOP 2018, Investigation and Control Measures for Notifiable Diseases.

#### Responsibilities:

- FHI technical manager assigns the task to a fish health inspector
- Fish Health Inspectors communicate sampling requirements
- FHI technical manager schedules visits on the LFMD.

In the case of a suspected exotic notifiable disease preference should be given to sending the most experienced inspector available.

### **10.2 Collection of sampling equipment**

When a sample visit is scheduled on the LFMD, the kit required will automatically be prepared.

#### Responsibilities:

- Field support technician prepares sampling equipment
- Field support technician orderings additional resources and supplies
- Fish health inspectors maintain emergency sampling kits

### **10.3 Disinfection of equipment and biosecurity during visits**

#### Arrival and departure from site

SOP 2019 Inspectorate Biosecurity Measures, (Q Pulse), instructs inspectors on the cleaning and disinfection of protective clothing and equipment when moving on and off sites at all times. It also clearly lays out procedures to be followed during an outbreak for separating clean and dirty equipment and working areas.

### Sampling equipment

All disposable sampling equipment taken onto site and into the sampling area, should be classed as contaminated and must not be used at a different site or sampling location. This equipment should either be appropriately disposed of on site or stored within the inspector's vehicle in a sealed container away from other samples and clean sample equipment. The equipment should be disposed of appropriately at the Cefas Weymouth laboratory.

### Order of visits

The order of site visits will be planned with respect to the likelihood of the sites being infected and the risk of spreading infection. Individual inspectors will be selected for visits to high risk and infected sites and their activities will be restricted to these sites. Infected and high risk sites will be visited last during the monitoring phase.

### Disposal of sampled carcasses

Wherever possible carcasses will be left on site providing the farmer is using an approved method of disposal. A list of approved processing units for animal by-products (ABP's) is available should it be necessary to take sampled carcasses off-site. Additional information is provided by the national fallen stock scheme (see supporting document: Suppliers of equipment and services).

## **10.4 Site inspection and information collection**

It should be possible for inspectors to carry out most inspections on their own. However, on occasions it may be necessary for inspectors to work in pairs or teams when collecting samples from wild fish or when collecting a large number of samples. In such situations, the work will be agreed and shared accordingly. For auditing purposes records must be maintained which detail the actions of all persons involved.

If a situation develops where inspectors are unable to cope with the workload and additional staffing is required, the Cefas Head of NDCC will be responsible for providing a resourcing a solution. Additional resource may be seconded from the following areas:

1. Other previously trained Cefas, Weymouth staff
2. Marine Scotland (Fish Health Inspectorate)
3. DARDNI (Fish Health Inspectorate)
4. Environment Agency
5. Salmon and freshwater group (Cefas, Lowestoft)
6. Animal Health and Veterinary Laboratories Agency (AHVLA)
7. Rural Payments Agency

Warrants for external staff will be issued following training.

### Visit data sheets

Visit data sheets (7/10 forms), are completed in conjunction with a disease investigation memo for all inspections associated with a disease outbreak or investigation. The standard farm visit data sheets will be completed in accordance with SOP 2018 Investigations and Control Measures for Notifiable Diseases (Q Pulse) for each field visit.

### Movement records

For farm sites, movement records will be checked on site in accordance with SOP 2018 (Q Pulse). There is currently no legal requirement for put-and-take and wild fisheries to record fish movements made either on or off site. Records of stocking (section 30 consents) and netting consents are presently received from the Environment Agency which are available on the LFMD (however this is subject to change). As part of the investigation, and to provide valuable information to the Epidemiology team, enquires must be made to establish if any other non-consented movements have occurred either ON or OFF put-and-take or wild fisheries. This information must be logged on the LFMD. If evidence of an illegal import is established the investigation will be terminated and passed to the Cefas Enforcement Officer and will proceed under caution. Evidence of an un-consented introduction will be passed to the EA enforcement team. During an outbreak of a notifiable disease inspectors must obtain copies of any movement records that are kept.

### Mortality records

Mortality records will provide essential information to aid the outbreak investigation. Operators of Aquaculture Production Businesses (APBs) are legally obliged to keep mortality records. These records must be copied or taken away for analysis by the FHI and the Epidemiology team.

### Medicine records

Under the Animal and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 1997, Fish Health Inspectors have the power to inspect medicine records held by a fish farmer. Examination of these records will be a crucial factor when selecting which fish to sample for notifiable and emerging diseases. Where possible, samples should not be taken from fish being treated with medicines. Copies of medicine records should be made for analysis by the FHI and the Epidemiology team.

## **10.5 Sampling programme**

A management plan will be established when an outbreak occurs for each specific area to ensure that necessary samples are taken and examined. This plan will depend on the pathogen and where it is found or suspected. The sampling programme will aim to establish the presence and distribution of the disease. The sampling conducted will at a minimum meet criteria required by the Diagnostic Manual for aquatic diseases (EC decision SANCO/6084 2008).

The priority for the focus of sampling and investigation will be as follows:

- Suspect or 'index' case (IC).  
Confirm or rule out the presence of the notifiable disease in relation to a suspected case (index case). If sufficient suspicion remains, or the disease is confirmed, then an outbreak investigation will be conducted to establish the disease origin and spread.
- Sites with epidemiological links to the index case  
All sites with epidemiological links to the index case will be targeted as being of the next highest priority. This may be through live fish or fish transporter movements.
- Establish the disease distribution within infected catchments (protection zone)  
It will then be necessary to establish the disease spread within an infected catchment. Water movements and catchment characteristics will play a major role in determining which sites are at risk and prioritizing sampling. All remaining APBs (those without epidemiological links), put-and-take fisheries and wild fisheries will be sampled.
- Sampling in the surveillance zone (catchments around the infected catchment)  
Sampling within the surveillance zones will also be undertaken. If additional positive cases are found in the infected areas and buffer zones their limits will be revised and further outbreak investigation undertaken.

The NDCC will review whether an increased level of surveillance for the disease at a national level is required. This will be dependent upon the individual situation and the pattern of disease spread.

## **10.6 Selection of fish for sampling**

Fish health inspectors are trained to select fish across different batches and focus on sick or moribund fish. Procedures are documented in the relevant SOP located on Q Pulse (see relevant disease annex). Initially, the sampling programme will be designed to detect the presence of the disease and not estimate its prevalence. Therefore focus will be on the highest risk groups present on the farm.

## **10.7 Method of sampling**

The method of sampling will at a minimum follow the OIE guidelines and those required by the Diagnostic Manual for aquatic animal diseases. The procedures to be followed are detailed in the relevant disease annex.

## **10.8 Sampling wild fish populations**

Samples required from wild fish populations will be sourced using the method of capture most appropriate for the pathogen in question. This will commonly be electro-fishing or netting. However, consideration should be given to adapting fish passes and fish ladders to help catch fish for sampling. Care must be taken not to block or obstruct fish passes. New legislation under the Marine Bill 2010 may provide the EA with emergency bylaw powers to do this.

The number of sample locations required on a river system will be determined the Epidemiology team. Factors of influence will be:

- Population size and structure
- Size and area of the catchment being studied
- Presence of barriers (natural and man-made) which can delineate the boundaries of epidemiological units within a catchment
- Environmental conditions such as water temperature and flow which may influence the spread of the pathogen
- If sampling involves areas designated as SACs/SSSIs, consultation with Natural England or the Countryside Commission for Wales will be required.

Where appropriate, assistance will be sought from local EA teams to assist with sampling (EA have trained sampling teams).

## **10.9 Transport of samples to the laboratory**

Samples must be returned to the laboratory in accordance with SOP 1138, Method for Booking in and Initial Preparation of Samples (additional requirements detailed in disease annexes) and packed in accordance with UN3373 Category B (infectious substances) that may contain an animal pathogen.

The courier service to be used wherever possible by the FHI is TNT. Information on the location of depots can be found in supporting document: Suppliers of equipment and services. Before using any other courier service, checks must be made to ensure that UN3373 category B samples will be accepted.

When returning with samples from the field a fish health inspector will be responsible for the correct storage of samples and ensuring they are passed to the field support technician on arrival at the laboratory.

When samples have been taken that have not been scheduled on the LFMD, the field inspector must inform the FHI technical manager so that relevant laboratory staff are made aware.

## **11 Diagnostic functions**

### **11.1 Sample receipt at laboratory**

#### Responsibilities:

- Unpacking and logging in samples: Field Support Technician
- Isolation of clean and dirty working areas: FHI Technical Manager and the Field support technician
- Ensuring PM room is vacated by HABS (on red alert): FHI Technical manager
- Updating the SOPs covering these areas: FHI Technical manager

## 11.2 Diagnostic methodologies

Detection and diagnosis of notifiable diseases will be based on EC decision SANCO/6084/2009 and the principles and guidelines detailed in the current OIE Diagnostic Manual for Aquatic Animal Diseases. Specific diagnostic methods employed will conform to these principles and will be based on a thorough and scientifically rigorous validation prior to adoption.

The current OIE Manual is available at [www.oie.int](http://www.oie.int)

## 11.3 Notification of Results

As part of the confirmatory diagnosis procedure, the Head of NDCC must ensure that the first identification of an exotic notifiable disease in England and Wales is confirmed by the relevant OIE Reference Laboratory (see [www.oie.int](http://www.oie.int)). The current submission template is available from Defra. Confirmation of subsequent cases can be made by the National Reference Laboratory (Cefas may seek OIE Reference Laboratory confirmation in equivocal cases).

## 12 Epidemiology

The Epidemiology team will lead the outbreak investigation based on current desk instructions (see operations manual supporting document: Epidemiology outbreak instructions).

### Responsibilities:

- Supply of field reports, data and results: Fish Health Inspectors
- Interpretation of above: Epidemiology team
- Definition of catchments and buffers zones: Epidemiology team
- Design of sampling and surveillance programs: Epidemiology team

Following the establishment of a suspect or confirmed infected catchment, the Epidemiology team will consider all links to other water catchments through the following:

- Anthropogenic movements of fish between catchments
- Natural movements and migration of fish between catchments
- Water movements between catchments
- Fish processing activities
- Recreational activities
- Movement of equipment or fish transporters
- Escapee fish
- Natural movement of mammalian predators and piscivorous birds

The Epidemiology team will further undertake responsibilities outlined in Defra's Framework Response Plan for Aquatic Animal Diseases including:

- Participation of Cefas Head of Epidemiology in the Aquatic Animal Health National Experts Group (AAHNEG)
- Provision of reports on progress in the control of the outbreak and distribution of the pathogen

## 12.1 Establishing the point of infection

The Epidemiology team will attempt to determine the origin(s) of an exotic notifiable disease and the likely time that the pathogen may have been in England or Wales. It is anticipated that this may not always be possible, especially where no mortality or clinical signs of disease have been observed. In these circumstances, a practical approach should be to prioritise the links with the highest risk, as determined from case data, although all possibilities of infection must be considered. Tracings may have to go back several years if disease appears to be long standing, is present in wild populations or there are links to other previously infected sites.

## **12.2 Fish movements**

The movement of live infected and/or susceptible fish will pose the greatest risk to the spread of a notifiable disease. This includes:

- The intentional movement of farmed or wild stocks (legal or otherwise)
- The unintentional movement of farmed or wild stocks (e.g. via water movements)
- The natural movement and migration of wild fish species up and downstream and between catchments via brackish waters
- Escapes from fish farms and sport fisheries
- Import of stock from a disease free farm, zone or country that subsequently declares the existence of disease
- Introduction of ornamental fish from contained facilities to the wild

## **12.3 Movements of fish farm stock**

Fish Health inspectors will ensure that movement records are inspected, verified as accurate and complete and copies are obtained for analysis at the NDCC.

The rapid analysis of such records is essential as live fish movements are the greatest risk factor for the spread of diseases. The analysis of movement records will be completed by the FHI and the Epidemiology team jointly.

## **12.4 Wild fish movements**

The movement of wild fish between catchments may provide sufficient risk to include these areas under suspicion. There is also a risk from anglers moving live bait and water from one catchment to another. Where this activity has been identified, a risk assessment should be conducted and consideration given to further actions including sampling and official suspicion based on the level of the activity and the associated level of risk.

## **12.5 Escapes of fish**

Where escapes are known to have occurred, the infection pressure upon wild fish may be increased. However, suspicion or confirmation will immediately apply to the entire catchment following initial reports, so fish farm escapees will not change the immediate response in terms of the outbreak investigation. Extra bio-security measures must be taken to prevent fish escapes and the risk of increased spread of disease. Advice on best practice should be provided to fish farmers by inspectors during routine inspections. Where significant risk of escape exists, early depopulation of the farm may be considered.

## **12.6 Water movements**

Water movements occur between and within water catchments (e.g. water authority water transfer schemes, hydro electric power generation). The risk associated with this activity will increase with increasing frequency and volume of water being moved. The risk associated with this activity will further increase should infected or susceptible fish be transported through water movement to areas where other susceptible populations exist. It will be necessary to consider water movements from an infected (suspected or confirmed) catchment to an uninfected catchment (and vice versa, as fish may swim against the current). It is difficult to obtain good water transfer data and this relies on liaison with the Environment Agency.

The Epidemiology team will provide recommendations on whether to apply for revocation of water abstraction consents. The Environment agency will provide guidance on whether this is possible. If not, the NDCC will require a recommendation from the Epidemiology team on whether to revise the boundary of containment zone.

## 12.7 Angling and other risks

All other routes of spread should be considered, these may include transfer of disease by:

- Fishing nets
- Fishing boats
- Fishing waders (especially with felt soled boots)
- Other lower risk items of fishing tackle such as fly lines and flies etc.
- Canoes and pleasure craft
- Movements of wildlife
- Walkers and members of the public with their dogs

In the event of an outbreak, investigations into risks posed by leisure activities will be assessed. Contact will be made with the relevant representative organizations if required e.g.

### **Angling Trust,**

Eastwood House, 6 Rainbow Street, Leominster, Herefordshire, HR6 8DQ  
Tel 0844 7700616 Fax: 01159 819039 Email: [admin@anglingtrust.net](mailto:admin@anglingtrust.net)

### **British Canoe Union HQ,**

18 Market Place, Bingham, Nottingham, NG13 8AP  
Tel: 0845 370 9500 or 0300 0119 500 Fax: 0845 370 9501 [info@bcu.org.uk](mailto:info@bcu.org.uk)  
(also the offices of Canoe England) Office Hours 8.30am - 5.00pm Monday - Friday.

### **Scottish Canoe Association**

Caledonia House, South Gyle, Edinburgh EH12 9DG  
Tel: 0131 317 7314 Fax: 0131 317 7319 [www.canoescotland.com](http://www.canoescotland.com)

### **Welsh Canoeing Association**

Canolfan Tryweryn, Frongoch, Bala, Gwynedd LL23 7NU  
Tel: 01678 521199 Fax: 01678 521158 [www.welsh-canoeing.org.uk](http://www.welsh-canoeing.org.uk)

### **Canoe Association of Northern Ireland**

Unit 2 Rivers Edge 13-15 Ravenhill Road Belfast BT6 8DN  
Tel: 0870 2405065 [www.cani.org.uk](http://www.cani.org.uk)  
Office Hours: Mon 2pm - 5pm, Tues 9.30am - 1pm, Wed 9.30am - 1pm, Thurs 2pm - 5pm

### **Royal Yacht Association,**

Ensign Way, Hamble, Hants, SO31 4YA TEL 02380 604 100  
<http://www.rya.org.uk/contactus/Pages/default.aspx>

## 12.8 Processing activities

There is a risk associated with establishments processing fish from a suspected or infected zone and discharging untreated effluent into a water course containing susceptible species. Any fish farm or processing plant wishing to process infected fish from a designated area will require to be authorized as an Aquaculture Processing Establishment (APE). There are currently no APE's in England and Wales. A number of other fish farms, including rainbow trout farms, process fish on-site with product from non-UK sources. This may be permitted as a condition of their authorization as an APB but this does not cover infected fish from a designated area (2006/88/EC allows the free movement of eviscerated carcasses, irrespective of disease status (i.e. declared categories i - v), as long as they do not come from a designated area). All other fish processing units fall under the remit of the FSA and local authorities but are not currently authorized as APEs.

## 12.9 Epidemiological split of catchments

Infected catchments may be split into discrete epidemiological units for the purpose of disease control. This will be assessed by the Epidemiology team at the catchment level, with consideration for the process of constructing barriers, closing fish passes and water transfer pipes. Movement restrictions will remain on the entire catchment (even after splitting) until demonstration of freedom

from disease has been established. Following the establishment of freedom from disease, consideration may be given to the revocation of movement controls from epidemiologically separate areas. Zoning concepts will be used when splitting and controlling disease in catchments and nationally.

## 13 Eradication

The policy aim is to eradicate exotic notifiable disease wherever possible. However, in some situations this may not be achievable. In this case, a policy of containment will prevail. Policies on eradication or containment may be different for each disease and will be periodically reviewed during the course of an outbreak by the AAHPG. Disease specific information will be provided in the annexes.

### 13.1 On site procedures during site disinfection

Field inspectors planning to carry out a site disinfection must have first been trained and then follow SOP 1741 "Site Disinfection" (Q Pulse).

### 13.2 Methods of stunning and killing stock.

Based on the assumption that a decision has been made to kill the farmed stock then the guidelines in the OIE Code will be followed. Biosecurity and Fish welfare must be taken into account. All fish should be culled humanely in a method agreed with the site operator. Some methods of euthanasing fish are detailed in SOP 1133, Euthanasing Fish for Sampling (Q pulse). In certain situations culling might require the use of an electrical or mechanical stunner. These appliances are usually fixed so sourcing one from elsewhere (if not available on site) could be problematic. Costs involved in the FHI purchasing and storing a stunner and pump would be highly significant. In addition, companies would be reluctant to lend equipment due to bio-security risks. If equipment is unavailable (e.g. a large restocking site) then use of a killing tank and large quantities of anaesthetic would be required.

### 13.3 Disposal of carcasses during an Outbreak

Legislation for England & Wales covering animal by-products include:

- Animal By-Product Regulations 2005 SI 2347
- Animal By-Product (amendment) Regulations 2009 SI 1119
- Animal By-Product (Wales) Regulations 2006 SI 1293

A summary of this information can be found at: [www.netregs.gov.uk/netregs](http://www.netregs.gov.uk/netregs)

Diseased farmed aquatic organisms or those kept for human consumption, which die by means other than slaughtering must be considered **Category 2** waste.

Category 2 waste must be disposed of by either:

- Direct incineration
- Or rendering followed by incineration, landfill, composting or biogas treatment of the rendered material.

The locations of rendering or incineration plants can be found by either, contacting local councils, the national fallen stock scheme or local animal health offices (See supporting document: Suppliers of equipment and services). The preferred option would be to use a category 2 licensed waste collection company. Alternatively a local Vet may be able to help.

The Animal By-Products regulations ban the burial of animal carcasses, **except**: during **outbreaks of notifiable disease** (if there is a lack of capacity at rendering plants and incinerators, or if transport of the carcasses would spread disease).

### 13.4 Transporting animal by-products

Animal by-products must be collected and transported in leak proof, closed containers or sealed new packaging. Each category of waste must be kept separate. If waste is to be collected from a site then anyone removing it must either be

- Registered as a professional carrier of waste
- Or registered as a controlled carrier of waste.

The Environment Agency is responsible for the registration of carriers. Waste operators premises can be approved by the local Animal Health offices. A list of waste carriers is documented in the waste directory.

#### Transportation documentation

All movements of by-products must be accompanied by a commercial document. There is no standard format for this. However, it must include:

- A record of the origin and quantity of the material
- A description of the material
- The date of transport
- The name and address of the carrier
- The name and address of the receiver
- If the animal by-product is to be used for composting or pet food, any approval numbers showing that the animal by-product has been treated and is therefore safe to be used

Documents must travel with the consignment and copies must be kept for two years. Permission for unloading and loading of animal by-products must be sought from an Animal Health officer.

## 14 Demonstrating Freedom from diseases

Following confirmation of a notifiable disease and investigations into the distribution and pattern of disease spread, consideration will be given to establishing or demonstrating freedom from the disease for certain areas of England and Wales. The following will be considered:

- Non-suspect sites (fish farm, put-and take fishery and catchment)
- Sites within Surveillance Zones
- Suspected, but unconfirmed sites and catchments
- Confirmed sites and catchments

Non-suspect sites with no epidemiological links and no indication of disease can be declared free of notifiable disease in accordance the criteria laid down in the Diagnostic Manual for aquatic animal diseases (EC decision SANCO/6084 2008). No additional screening or testing is required. However, the decision for a national testing programme in accordance with disease free declaration will be made by the AAHPG.

Suspected but non-confirmed sites and catchments will be declared free from a notifiable disease following adequate sampling and negative test results. The level of testing will be determined by the Epidemiology team.

Sites within Surveillance Zones surrounding infected catchments must be tested regularly whilst the catchment remains infected. Provided that their status remains negative, then these sites and catchments can be declared free following successful eradication within the confirmed catchment which they surround.

Confirmed sites and catchments can be declared free following the completion of an eradication programme as laid down in the Diagnostic Manual for aquatic animal diseases (EC decision SANCO/6084 2008).

Where there are no wild susceptible species associated with an infected site, then a programme to demonstrate freedom (based on guidance in EC decision 6084/2009) could begin following the removal of all infected stocks, cleaning and disinfection of fish farm tanks, ponds, synchronous fallowing (for a three week period after the last farm is destocked) and re-stocking.

Single farm compartments on a protected water supply can regain free status after 6 weeks of fallowing, provided it is restocked with fish from an approved free zone or compartment.

## 15 References

Anon., 2011. *Gyrodactylus salaris* - contingency plan. The Scottish Government, Edinburgh, pp 215.

Defra, 2007. Defra's Framework Response Plan for Exotic Animal Diseases. Defra, London, pp 137.

Westergaard, J.M., 2008. Contingency planning: Preparation of contingency plans. *Zoonoses and Public Health* 55, 42-49.

### EC Directive

COUNCIL DIRECTIVE 2006/88/EC of 24 October 2006 on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals

### Statutory Instruments

The Aquatic Animal Health Regulations (England and Wales) Regulations 2009

## 16 Operations manual supporting documents

All current contingency planning manuals and supporting documents are located on TRIM [Fish and Shellfish Health – EpiRisk - Contingency Planning – Contingency Plan for Aquatic Animal Diseases (current)].

- Activation plan and set to work SOP DI0001
- Call out cascade protocol
- Communication & contact information
- Emergency response - Roles & personnel
- Epidemiology outbreak instructions
- Suppliers of equipment and services

## 17 Appendix 1 – Standing agendas

### 17.1 Agenda for an Amber/ red telecom.

**Chair: CVO**

<b>Agenda Item</b>	<b>Responsible</b>	
Local situation report, laboratory results and interpretation	Head FHI	
National situation assessment including epidemiological evidence, time line and risk assessment	Head Epidemiology	
Review of evidence to inform decision to confirm disease/move to red alert	CVO	
<b>If disease is confirmed and/or the state of alert is moved to Red, the following agenda items will also be discussed:</b>		
Area and movement restrictions implementation and communications	Head FHI	
Stakeholder engagement, timing and content: <ul style="list-style-type: none"> <li>• National</li> <li>• Local</li> </ul>	Head AAHP Head FHI	
Objectives and lines to take for communication	Defra Comms.	
Environment Agency issues	EA rep	
Food standards Agency issues	FSA rep	
Public Health implications	DH/HPA rep	
Summary of action points	CVO	

## 17.2 Agenda for a Birdtable

**Chair: Head NDCC**

<b>Agenda Item</b>	<b>Responsible</b>	
Update on current situation	Head FHI	
Epidemiology	Head Epidemiology	
Field operations: <ul style="list-style-type: none"> <li>• Site visits &amp; sampling</li> <li>• Culling, disposal &amp; disinfection</li> <li>• Animal welfare</li> </ul>	Head FHI	
NDCC operations: <ul style="list-style-type: none"> <li>• Laboratory (sample processing)</li> <li>• Inspectorate (ICs &amp; IDs; contact tracing; mapping)</li> <li>• Resources (equipment, personnel)</li> </ul>	<i>Diagnostic lead</i> Cefas information services manager Head NDCC	
Disease control policy	Head AAHP	
Science	Cefas scientific advice lead	
Procurement & contracts	Cefas Support Services Manager	
Devolved Administrations: <ul style="list-style-type: none"> <li>• Wales</li> <li>• Scotland</li> </ul>	Wales rep Scotland rep	
Ops Partners: <ul style="list-style-type: none"> <li>• Environment Agency</li> <li>•</li> </ul>	EA rep	
Stakeholders: <ul style="list-style-type: none"> <li>• BTA</li> <li>•</li> </ul>	BTA rep	
CVO comments	CVO	
Next Birdtable	Head NDCC	



## 19 Appendix 3 - Glossary of terms

AAHPG	Aquatic Animal Health Policy Group. A central committee established by Defra, and based in London to provide disease policy advice and oversee implementation of Contingency Plan and review arrangements annually
AHVLA	Animal Health and Veterinary Laboratories Agency. AHVLA may be called upon to assist with the mathematical modelling and qualitative risk analyses to support decisions made during the operation of the Contingency Plan
Cefas	Centre for Environment, Fisheries and Aquaculture Science, an executive agency of Defra
CD	Confirmed Designation. This is an order, activated by Defra, made under the Aquatic Animal Health (England and Wales) Regulations 2009, which enables a notice to be served prohibiting the movement of fish, eggs or fish food to, from or within the designated area. It is the main statutory weapon in the fight against a notifiable disease.
CVO	Chief Veterinary Officer
DA	Devolved Administration
DCVO	Deputy Chief Veterinary Officer.
Defra	Department for Environment, Food and Rural Affairs. Responsible for overall policy and co-ordination of contingency action
EA	Environment Agency. Responsible for assisting with action taken in non-farm waters
FHI	Fish Health Inspectorate, based at the Cefas Weymouth Laboratory. Responsible for enforcing fish health legislation and directing front line disease control measures of the Contingency Plan
GIS	Geographic Information System
Cefas Head NDCC	Head of the National Disease Control Centre.
IC	Index Case. The fish farm or river site where the notifiable disease is first detected
ID	Initial Designation. A Fish Health Inspector may serve this under the Aquatic Animal Health (England and Wales) Regulations 2009. It can be served on any waters on the spot.
IP	Infected Premises. All fish farm sites that are infected with the named pathogen
LDCC	Local Disease Control Centre. These will be set up where necessary to co-ordinate sampling in the event of an eradication or containment plan. These could be set up in local Environment agency office or Defra regional offices.

Marine Scotland	An agency of the Scottish Government Marine Directorate (SGMD). Assistance may be sought in the event of an extensive outbreak.
NDCC	National Disease Control Centre. This will be located at the Cefas Weymouth Laboratory. Its role is to act as the incident centre and the focal co-ordination point for the operation of the Contingency Plan
OIE	Office International des Epizooties (the World Organisation for Animal Health) responsible for the confirmation of all notifiable diseases.
OS	Ordnance Survey
Q PULSE	Quality management software designed to provide electronic management of quality systems.
S30	Section-Thirty Consent. This applies to the section of the Salmon and Freshwater Fisheries Act 1975 under which it is an offence to introduce fish into inland water without first obtaining the written consent of the Environment Agency.
SOP	Standard Operating Procedures