American Fisheries Society-Fish Health Section
“Bluebook”

USAHA Aquaculture Committee
October 21, 2018
Kansas City, MO

Bill Keleher

KENNEBEC RIVER BIO SCIENCES
Who Controls What

• Federal
  – USDA (competent authority)
  – USFWS (regulations on imports under Title 50)

• States
  – Primary responsibility for all aquatic animal imports (domestic & international)
  – Predominantly Natural Resource but increasing involvement by Agriculture agencies
States

- **State Import Regulations**
  - Range from none to very stringent

  - Maine Dept. of Marine Resources (Chapter 24)
    - “Blue Book” means “Bluebook Fish Health Section American Fisheries Society. Suggested Procedures for the Detection and Identification of Certain Finfish and Shellfish Pathogens (Blue Book 2007 Edition)”. If a more recent edition is available, the more recent edition will be used.
    - “Standard methods” means pathogen detection methods specified in the Blue Book and/or in OIE publications, unless other standards are specifically approved by the Commissioner.
Diagnostic Methods for Exports to Canada

OIE diagnostic methods are appropriate unless otherwise stated. For diseases not listed by OIE please refer to information below.

Finfish

*Ceratomyxa shasta*:

Population must be screened via intestinal mucosal smear stained with Ziehl-Neelsen acid fast stain or methylene blue. Any positive results found must be confirmed via PCR according to current AFS-FHS (American Fisheries Society-Fish Health Section), Blue Book.

*Infection pancreatic necrosis (IPN)*:

Susceptible population must be screened via cell culture (CHSE-214, BF-2 cell lines or FHM). Any positive results found must be confirmed via PCR screening according to the current AFS-FHS (American Fisheries Society-Fish Health Section), Blue Book.

Whirling disease (*Myxobolus cerebralis*):

Susceptible populations must be screened via Pepsin-Trypsin digest method using partial head. Any positive results must be confirmed via PCR according to current AFS-FHS (American Fisheries Society-Fish Health Section), Blue Book / (Canada Fisheries and Oceans Fish Health Protection Regulations) 2004.

*Oncorhynchus masou virus disease (*Oncorhynchus masou* Virus):

Susceptible population must be screened via cell culture (CHSE-214, BF-2 cell lines or RTG-2). Any positives found must be confirmed via PCR according to the current AFS-FHS (American Fisheries Society-Fish Health Section), Blue Book.
FISH HEALTH SECTION
BLUE BOOK
2016 EDITION

SUGGESTED PROCEDURES FOR THE DETECTION AND IDENTIFICATION OF CERTAIN FINFISH AND SHELLFISH PATHOGENS

PREFACE

INTRODUCTION

CITATION GUIDELINES

SECTION 1. DIAGNOSTIC PROCEDURES FOR FINFISH AND SHELLFISH PATHOGENS

SECTION 2. USFWS/AFS-FHS STANDARD PROCEDURES FOR AQUATIC ANIMAL HEALTH INSPECTIONS

SECTION 3. QA/QC MODEL FOR FISH HEALTH LABS
B. Committee Function

1. The Handbook Revision and Oversight Committee for each year shall hold quarterly meetings each year (summer/August, fall/November, winter/February and spring/May).

2. At least 2/3 of the committee must be present to make official decisions. At least a 2/3 of the (10) members present for a vote are required to make a significant change to the handbook. A significant change is defined as a functional change in how a procedure is performed or how the committee functions. Example of a change that could be made without 2/3 vote include correcting formatting or typos.

3. The Handbook Revision and Oversight Committee shall address all requests for revision of the handbook.

4. The Handbook Revision and Oversight Committee shall keep the handbook current and shall update all distributable (web page, and text) versions biennially, no later than 30 days after final have been considered and adopted or declined (spring quarterly meeting/May).

5. The Handbook Revision and Oversight Committee shall maintain possession of the editable copies of the handbook.

6. The Handbook Revision and Oversight Committee shall oversee the distribution of the handbook.
A1.2 Handbook Revision and Oversight Committee

A. Committee Construction

1. The handbook revision and oversight committee shall consist of ten people.
   
   a. Three (3) from the U. S. Fish and Wildlife Service.
   
   b. Three (3) from the American Fisheries Society – Fish Health Section.
   
   c. United States Fish and Wildlife Service National Aquatic Animal Health Coordinator or their duly appointed representative (Ex-Officio).
   
   d. Chairman of the American Fisheries Society – Fish Health Section or their duly appointed representative (Ex-Officio).
   
   e. National Oceanic and Atmospheric Administration - Fisheries Service National Aquatic Animal Health Coordinator or their duly appointed representative (Ex-Officio).
   
   f. United States Department of Agriculture - Animal and Plant Health Inspection Service Aquaculture Program Manager or their duly appointed representative (Ex-Officio).
   
2. The committee will be co-chaired by one non ex-officio individual from USFWS and one non ex-officio individual AFS-FHS.

3. The terms of the non-ex-officio committee members shall be three consecutive years.
   
   a. Terms shall begin two months prior to the individual’s first summer (August) quarterly meeting.
   
   b. Terms shall conclude 10 months after the individual’s third consecutive summer (August) quarterly meeting.
   
   c. An individual may not serve on the committee again once their three-year term has expired, unless a period of two years has elapsed.

4. Each non ex-officio committee member will rotate through the committee as follows.
   
   a. Year one – in-coming member.
Progress To Date

• Presentation made to AFS-FHS Executive Committee
• Motion made at AFS-FHS Business Meeting
• Approved ad-hoc committee to examine revamping Inspection Manual
### Chiefs vs Patriots

**NFL · Sun, 10/14**

<table>
<thead>
<tr>
<th>Team</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas City Chiefs</td>
<td>6</td>
<td>3</td>
<td>17</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>10</td>
<td>14</td>
<td>3</td>
<td>16</td>
<td>43</td>
</tr>
</tbody>
</table>

Final: New England Patriots 43 - Kansas City Chiefs 40