VS AQUATIC ANIMAL HEALTH
PROGRAM UPDATE & CAHPS

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VS Aquatic Animal Health (AAH) Program

- VS reformation
- Program priorities

**VS AAH Program Mission**
To protect and improve the health of U.S. farm raised aquatic animals in order to produce safe wholesome seafood, healthy recreational and display/ornamental animals, as well as protect the nation’s aquatic animal natural resources.
Aquatic Animal Health (AAH) Program

- Who we are
- What we do
AAH Program Priorities

- NAAHP and CAHPS
- Response to emerging diseases
- Communication
- Education and outreach
CAHPS

- Comprehensive health management planning
- Non-regulatory
- Developed with industry
- Science and risk based, responsive and scalable

5 Principles
- Aquatic Animal Health Team
- Risk evaluation
- Surveillance
- Investigation and reporting
- Response and recovery
Why CAHPS?

- History of U.S. aquaculture
- Unrealized national plan
- State and federal authorities
- Varied health requirements and processes
- Growth of the industry
- Trade
<table>
<thead>
<tr>
<th></th>
<th>OIE</th>
<th>AFS Blue Book</th>
<th>State Regulations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot or Farm level of inspection?</td>
<td>Farm</td>
<td>Farm and Lot</td>
<td>Lot treated like farm</td>
</tr>
<tr>
<td>Biosecurity following inspection?</td>
<td>Protected water supply, fish movements, other</td>
<td>No recommendation</td>
<td>Few address this</td>
</tr>
<tr>
<td>Which diseases to test?</td>
<td>OIE listed</td>
<td>No recommendation</td>
<td>OIE based lists, widespread serious diseases, VHS, ???</td>
</tr>
<tr>
<td>How many fish to test?</td>
<td>150+ reduce with history</td>
<td>Lot: at least 60</td>
<td>Lot: 60 or 30 or 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farm: at least 60 from every lots (same age, species, water supply and broodstock)</td>
<td>Farm: 60 per species or 150 to 170 per farm</td>
</tr>
<tr>
<td>Which fish to test?</td>
<td>All susceptible species per OIE manual or most susceptible species</td>
<td>Farm: all susceptible species (in BB), most susceptible species Lot: species shipped if susceptible</td>
<td>Farm: All susceptible, all species, species to be shipped Lot: Species to be shipped (if susceptible?)</td>
</tr>
<tr>
<td>How often? When?</td>
<td>Seasons when likely to be detected – twice a year</td>
<td>Farm: Once per year when water temps make detection most likely Lot: no guidance</td>
<td>Once per year typical, even for lot inspections No guidance on temps. VHS at 95 ºF, no problem!</td>
</tr>
<tr>
<td>Who collects samples?</td>
<td>Accredited veterinarian</td>
<td>Accredited Veterinarian, state or federal official, FHS-Inspector, FHS-pathologist</td>
<td>Farmer &gt;&gt; FHS Inspector &gt;veterinarian</td>
</tr>
<tr>
<td>Who conducts diagnostic assays?</td>
<td>Determined by CA</td>
<td>No recommendation</td>
<td>Few recommendations, confusion over APHIS approval</td>
</tr>
<tr>
<td>Which assay protocols to use?</td>
<td>OIE manual</td>
<td>Inspection section</td>
<td>None specified – BB, OIE or APHIS approved protocols</td>
</tr>
<tr>
<td>Certification required?</td>
<td>Competent authority (i.e., APHIS)</td>
<td>No recommendation</td>
<td>Testing labs, FHS Inspector, Veterinarian, Veterinarian with training, State official</td>
</tr>
</tbody>
</table>
Identifying the Right Problem

- Current burdens
  - Impact of regulations
- Where are we working the hardest?
- Where can we have the biggest impact?
- Where can we be smarter and have more meaning?
  - Surveillance and testing
Making CAHPS Work

- Veterinarians
- Data management
- Laboratory structure and approval
- Creating “Be-in”
- Implementation
Veterinarians

- Too many vets and not enough producers?

Or,

- Too many producers and not enough vets?
Data Dilemma

- What data do we need?
- Who holds the data from the program?
- Confidentiality and integrity
- Comparing and sharing
Laboratory Structure

- Assays and pathogens
- Proficiency
- Readiness
- Communication
Creating Be-In

- Incentives
- Roles and responsibilities
- Problem solving collaboration
  - We can if...
Implementation

▪ Uniformity and consistency
▪ Non-regulatory
▪ Not funded and limited resources
▪ Recognition of program and participation
▪ Model other programs like NPIP
CAHPS Proof of Concept Projects

- Proof of concept projects
  - WA, ME, NC, ID, FL
- Drafting template for CAHPS site specific health plan
- Master program in SCS CoreOne database
- CAHPS outreach
Other CAHPS Efforts

▪ NOAA NMFS
  ▪ Gulf Aquaculture

▪ USDA NIFA
  ▪ Rural veterinary medical training
What’s Trending for VS AAHP

- Emerging diseases
  - Tilapia Lake Virus
  - Koi Herpesvirus
  - Ostreid herpesvirus -1
  - Others
    - Fp, Ah, Se,

- Emerging Issues
  - Testing methodologies
    - PCR
  - Pooling samples
  - Risk pathway gaps

- Partnerships
  - NAAHP
  - AVMA
  - States
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