Integrating Components into Effective and Practical Biosecurity Programs for Aquaculture

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Objectives of biosecurity programs

- Prevent, control and possibly eradicate a disease within a respective epidemiological unit.
Objectives of biosecurity programs

- Provide financial dividends to the producer
Objectives of biosecurity programs

- Fulfill requirements for existing or emerging legal framework of national and international trade
Objectives of biosecurity programs

• Prevent, control and possibly eradicate a disease within a respective epidemiological unit

• Provide financial dividends to the producer

• Fulfill requirements for existing or emerging legal framework of national and international trade
Exercise in integration

• Split up in small (2-3) groups, with people sitting next to you

• Introduce yourselves if needed, and charge one member as the “note taker”

• Now, to the following brief scenario:
Scenario:

- You are working together in a veterinary practice, or a consulting company.

- You just received a call from an aquaculture operation who would like your group to develop a biosecurity program for them.

- You bravely accept the opportunity, and arrange a meeting with the farm managers for next week.
Scenario:

• Identify the series of steps or activities you need to do in order to put such a program together
• Prepare a list you will discuss with the client.

• You are welcome to use your notes or any other information source you need - however, you have only 3 minutes to get the list done.
Identify stakeholders

- **P**roducer (type of operation)
- **G**overnment: Local, State and National
- **S**ervice providers (veterinarian, para-veterinary fish biologist, insurance agent)
- **I**ndustry services (shipping, feed suppliers, wholesalers)
Identify stakeholders

- Producer (type of operation)
Identify stakeholders

- Government: Local, State and National (International?)
  
  - [http://library.enaca.org/Health/FieldGuide/html/contact.htm](http://library.enaca.org/Health/FieldGuide/html/contact.htm)
Identify stakeholders

- Service providers (veterinarian, para-veterinary fish biologist, insurance agent)
Identify stakeholders

• Industry services (shipping, feed suppliers, wholesalers)
Then fit them together... as best as you can
Build relationship with a producer

• Get to know producer’s operation, goals, and target achievements.
• Understand how those goals intersect with regulations and animal health needs

Establish “VCPR”: Veterinary/Client/Patient Relationship
Identify service components

- Identify and prioritize specific disease hazards
  - including an assessment of the actual risk and impacts from a disease outbreak

- Identify and prioritize critical control points and develop a plan for application of standard biosecurity procedures

- Develop a schedule of disease diagnostic sampling, submission and clinical inspection
Identify service components

• Supervise and optimize record keeping and disease occurrence monitoring

• Audit, issue (or revoke) veterinary aquaculture biosecurity certificates of inspection (V-ABC)

• Ensure compliance with
  - local, state, national regulations and requirements
  - international trade agreements/rules

• Seek official government endorsement of the V-ABC
Do the legwork – this is what you provide as **service**

**Identify stakeholders**

**build relationship with the producer**

**INTEGRATE COMPONENTS**

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<td>Is my farm at risk, if so, how much risk, what’s the impact?</td>
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<td>How do I get third-party recognition of disease freedom?</td>
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INTEGRATION

- Identify and prioritize specific disease hazards, followed by assessment of the actual risk and impacts from a disease outbreak
INTEGRATION

• Identify and prioritize critical control points

• Develop a plan for application of standard biosecurity procedures
INTEGRATION

• Identify and prioritize critical control points

• Develop a plan for application of standard biosecurity procedures
INTEGRATION

• Develop a schedule of disease diagnostic sampling, submission and clinical inspection

• Supervise and optimize record keeping and disease occurrence monitoring
INTEGRATION

• Audit, issue (or revoke) veterinary aquaculture biosecurity certificates of inspection (V-ABC)

• Ensure compliance with the local, state, national regulations and requirements or international trade agreements/rules

• Seek official government endorsement of the V-ABC
Thank you!

Questions a Farmer Might Ask

1. Which diseases are serious potential hazards?
2. Is my farm at risk, if so, how much risk, what is the impact?
3. Where can these hazardous diseases get in?
4. Are any of these diseases on the farm?
5. What can be done to prevent disease getting in or escaping?
6. What do I do if disease gets in?
7. How do I continue to monitor disease absence/presence?
8. How do I get third-party recognition of disease freedom?

Formal Biosecurity Process Step

1. Hazard Identification & Prioritization
2. Risk Assessment
3. Critical Control Point (CCP) Evaluation & Remediation
4. Risk Mitigation Management
5. Contingency Planning
6. Surveillance/Monitoring
7. Veterinarian Auditing & Certification

Necessary Documentation

1. Prioritized Disease List
2. Evaluation of Disease Impacts
3. Correctable CCPs to Monitor
4. Clinical Evaluation & Diagnostic Testing
5. CCP Corrective Actions
6. Isolation Treatment Depopulation
7. Farm, Lab & Vet Records
8. Certificate of Veterinary Inspection
9. Government Endorsement