

Utah Fish Health Policy Board

Aquatic Animal Health Inspection Policy

Utah Code 4-37-503(6) requires that all rules adopted by the Fish Health Policy Board be consistent with the “suggested procedures for the detection and identification of pathogens published by the American Fisheries Society’s Fish Health Section” (Blue Book). Section 503 of the Aquaculture Act (Utah Code 4-37) and R58-17-8 of the Aquatic Animal Health Rule allows the Fish Health Policy Board to waive a requirement established by Fish Health Policy Board rules if the reasoning for a waiver is scientifically sound and will not threaten the health of other aquaculture facilities or free range aquatic animal populations.

Utah Code Section 4-37-503(6) states:

- (a) The board shall make rules consistent with its responsibilities and duties specified in this section.
- (b) Except as provided by this chapter, all rules adopted by the Fish Health Policy Board shall be consistent with the suggested procedures for the detection and identification of pathogens published by the American Fisheries Society’s Fish Health Section.
- (c)
 - (i) Rules of the department and Fish Health Policy Board pertaining to the control of disease shall remain in effect until the Fish Health Policy Board enacts rules to replace those provisions.
 - (ii) The Fish Health Policy Board shall promptly amend rules that are inconsistent with the current suggested procedures published by the American Fisheries Society.
- (d) The Fish Health Policy Board may waive a requirement established by the Fish Health Policy Board’s rules if:
 - (i) the rule specifies the waiver criteria and procedures; and
 - (ii) the waiver will not threaten other aquaculture facilities or wild aquatic animal populations.

Aquatic Animal Health Inspection Policy

- (1) Under no circumstances shall health approval be granted if a prohibited pathogen is detected.
(see R58-17-5(3)(a) (iv))
- (2) Restricted Health Approval may be granted to locations that test positive for restricted pathogens or have restricted pathogens in the water source(s) for a facility.
(see R58-17-5(3)(a) (viii)) or R58-17-10(2)

(3) Inspections for OIE (World Organization for Animal Health) listed pathogens are required for imports from International origins or from known endemic regions. (see R58-17-5 (2)(c))

(4) Tables 1-4 summarize inspection requirements for regulated (Prohibited and Restricted) and Reportable Pathogens.

Table 1. Summarizes Utah inspection requirements for Prohibited Fin Fish Pathogens.

Prohibited Fin Fish Pathogens	Inspection Requirement	Comment
IPNV Infectious pancreatic necrosis virus/ Aquatic Birnaviruses	Freshwater and Marine fish	
VHSV Viral hemorrhagic septicemia virus	Freshwater and Marine fish	
IHNV Infectious hematopoietic necrosis virus	Salmonids	
SVCV Spring viremia of carp virus	Cyprinids and Esocids. Brown Trout from endemic areas	Inspection requirement shall be applied as needed to koi and ornamental fish.
OMV Oncorhynchus masou virus	Salmonids	Required only if fish or eggs originate from known endemic areas.
EHNV Epizootic hematopoietic necrosis virus	Ictalurids, Percids Salmonids, Silurids, Gambusia	Required only if fish or eggs originate from known endemic areas; use OIE Manual for testing protocol.
<i>NOTE: Inspection is required for Prohibited Pathogens. Viral pathogens should be screened using 2 different cell lines. Any positive findings must be reported to the Utah Department of Agriculture and Food. Health approval will NOT be granted for positive findings.</i>		

Table 2. Summarizes Utah inspection requirements for Prohibited Crustacean Pathogens.

Prohibited Crustacean Pathogens	Susceptible Groups	Comment
WSSV White spot syndrome virus	Crustaceans	Use OIE Manual for testing protocol.
YHV Yellow head virus	Freshwater or Marine Shrimp	Use OIE Manual for testing protocol.
TSV Taura syndrome virus	Freshwater or Marine Shrimp	Use OIE Manual for testing protocol.
IHHNV Infectious hypodermal and hematopoietic necrosis virus	Freshwater or Marine Shrimp	Use OIE Manual for testing protocol.
<i>Note: Inspection is required for Prohibited Pathogens. Any positive findings must be reported to the Utah Department of Agriculture and Food. Health approval will NOT be granted for positive findings. A composite sample using the recommended OIE test for targeted surveillance is acceptable for lot certification.</i>		

Table 3. Summarizes Utah inspection requirements for Restricted Fin Fish Pathogens.

Restricted Pathogens	Susceptible groups	Comments
BKD (Bacterial Kidney Disease) <i>Renibacterium salmoninarum</i>	Salmonids >6 months old	Testing using DFAT is acceptable if: 1) individual samples from the most susceptible lot is examined or 2) each susceptible lot using 5 fish pools are examined. Confirmation using qPCR methods is acceptable.
Ceratomyxosis disease <i>Ceratomyxa shasta</i>	Salmonids	Required only for fish from known endemic areas.
Asian tapeworm <i>Schyzocotyle acheilognath</i>	Cyprinids, Poecilid (Gambusia)	Restricted health approval is possible without inspection.
Whirling disease <i>Myxobolus cerebralis</i>	Salmonids	One lot of the most susceptible species for each water source is required. Confirmation using qPCR methods is acceptable.
PKD (Proliferative Kidney Disease) <i>Tetracapsuloides bryosalmonae</i>	Salmonids	Required only for fish from known endemic areas.
<i>Note: Inspection is required for Restricted Fin Fish Pathogens. Any positive findings must be reported to the Utah Department of Agriculture and Food. Restricted health approval may be granted for positive findings.</i>		

Table 4. Summarizes the list of Utah reportable Aquatic Animal Pathogens.

Pathogen	Susceptible Groups	Comments
Furunculosis disease <i>Aeromonas salmonicida</i>	Any Freshwater Fish	No inspection requirement.
Enteric redmouth disease <i>Yersinia ruckeri</i>	Any Freshwater Fish	No inspection requirement.
<i>Centrocestus formosanus</i>	Any Freshwater Fish	No inspection requirement
USDA APHIS National Reportable Animal Diseases List (USDA/APIS NRADL)	Fish, Crustaceans, Mollusks, or Amphibians	No inspection requirement for NRADL pathogens not listed in this policy.
<i>Note: Inspections are NOT required for Reportable Pathogens. Any positive findings must be reported to the Utah Department of Agriculture and Food.</i>		

- (5) The Fish Health Policy Board recognizes that:
- (a) Granting of variances or waivers from rule can set legal precedent and produce defacto policies;
 - (b) Blue Book Section 2 – Aquatic Animal Health Inspections is more suited for salmonid hatchery inspections rather than free range sites or non-salmonid inspections; and
 - (c) Blue Book is updated on a regular basis.

- (6) As such, the following exceptions to the Blue Book Section 2 – Aquatic Animal Health Inspections are permissible and may be reevaluated by the Fish Health Policy Board when the Blue Book is updated, there are changes to pathogens of concern (virulence, distribution, etc.), or new pathogens mandate a change to current practices.
- (7) The following criteria delineate acceptable changes to Blue Book sampling requirements laid out in Chapter 2 – Aquatic Animal Health Inspections and provides specific criteria and procedures for each exception from rule.
- (8) Criteria specific to salmonid facilities
 - (a) Salmonid lots that have continuously shared a water source throughout their life history, which are greater than 12 months of age and are not considered broodstock (yearling) and broodstock age classes, may be combined into a single lot. If the combined lot of yearling and brood stock is only sampled lethally, it should be comprised of a representative sample of all rearing units.
 - (b) For salmonid brood facilities, lethal sampling is required for broodstock only if the following conditions exist:
 - (i) Progeny are not available at the facility for lethal sampling; or
 - (ii) A statistically valid sample of ovarian fluids from ripe females is not tested.
 - (A) A combination of ovarian and broodstock lethal samples may be used in lieu of complete ovarian sampling.
- (9) Criteria specific to free range salmonid inspections
 - (a) Free range locations are composed of a diverse group of aquatic animals that prohibit the collection of each individual species (lot) from these locations. Therefore, sampling efforts are focused on target species and/or surrogate populations that exhibit similar pathogen susceptibility.
 - (b) For initial approval of new locations, two inspections at least four months apart are required.
 - (c) If an attribute sample of the target species is not available in free range locations, surrogate salmonids can be used to supplement/fulfill attribute sample size. The following criteria for surrogate species testing is required:
 - (i) When the target species population is considered threatened, or the number of fish needed is not available (low population numbers, etc.), surrogate species may be used.
 - (ii) Only species in the family Salmonidae may be used as surrogates for the target salmonid population.
 - (iii) No surrogates are allowed for ovarian fluid collections.
- (10) Criteria specific to warm water/non-salmonid hatcheries and free range inspections
 - (a) A lot of warm water fish is considered a group of fish of the same species that reside in the same pond or recirculating system for at least 30 days.
 - (b) Age classes are not used to determine lots for warm water species.
 - (i) Warm water fish typically spawn freely and may spawn multiple times a season meaning that lots may contain fish of varying ages.
 - (c) A composite sample of 60 fish may be used for non-salmonid species that

co-habitate in the same pond or recirculating system and are of equal pathogen susceptibility.

- (i) The composite sample is in lieu of a statistical sample for each lot of fish.
 - (ii) The composite sample is comprised of a proportional representation from each lot.
 - (iii) For warm water brood facilities, a statistically valid sample of ovarian fluids from lots of spawning adults may be used to grant Health Approval in lieu of lethal sampling.
- (d) If an attribute sample of the target species is not available in free range locations, surrogates can be used to supplement/fulfill attribute sample requirement. The following criteria for surrogate species testing is required:
- (i) When the target species population is considered threatened, or the number of fish needed is not available (low population numbers, etc.), surrogate species may be used.
 - (ii) Only other species with similar susceptibility may be used as surrogates for the target species.
 - (iii) No surrogates are allowed for ovarian fluid collections.
- (11) Criteria applicable to facilities and free range locations where both salmonid and non-salmonid species reside in these locations:
- (a) For salmonids, an annual inspection is required. Health Approval is granted to salmonids and their gametes.
 - (b) For non-salmonids, Health Approval is required for each individual lot that is sold or transferred as live animals or gametes.

Approved by the Fish Health Policy Board and in effect on 11/3/2022. Amendments made to correct outdated code references on 3/19/2024.