



New Koi Protocol



The Fish Vet

What are the major risks when introducing new fish?

The biggest threat to our prized koi is Koi Herpesvirus (KHV is currently exotic to Australia) and bacterial diseases, because they can happen so quickly and cause very high death rates. Working on the assumption that any new koi could introduce any of these diseases, below are some measures to mitigate risks:

Know your source:

- Purchase from trusted source,
- with known history,
- and has regular veterinary visits.

Quarantine procedure:

- New fish should be quarantined for >30 days,
- and at KHV-permissible temperature (22-25°C, range 15-28°C).
- Include sentinels (cohabitante with fish <1yo) in the quarantine pond.
- This quarantine facility should preferably be off-site (i.e. at a different location).

Health screening:

- **Physical and microscopic examination of new koi by a fish veterinarian**
 - This test checks general health of new fish and helps with early detection of the presence of external parasites. It will give the new owner peace-of-mind that the fish they purchased are not laden with disease.
 - If disease agents are detected, these fish can be target-treated with the appropriate medicine/s.
 - Diagnostic samples may be taken at this point to help with further testing if warranted.
- **Serum biochemistry**
 - This test checks general health and function of organs.





- **Test for KHV**

Note that KHV has been listed by the World Organization for Animal Health (OIE; www.oie.int) as notifiable. If you suspect KHV, you must be notify the relevant government department immediately.

Some of the test methods available:

- Pond-side testing (kits commercially available):
 - FASTest Koi HV (Megacor [Austria] & Vet Lab Supplies [UK]).
 - A direct solid-phase immunochromatographic “sandwich principle” for the qualitative detection of KHV antigens.
- Laboratory testing
 - ELISA Method (indirect):
 - Using blood, ELISA testing can provide evidence that a fish was at one time exposed to and infected with KHV. Unfortunately, because indirect tests like the ELISA cannot determine if the fish is still infected with virus, it is not recommended as a primary diagnostic tool.
 - PCR Method (direct):
 - This can be performed on blood or gill tissue biopsies. It is the most sensitive and specific test. If positive samples appear in an area not previously confirmed positive (e.g. in Australia), the test results must be confirmed by sequencing the PCR product.

Clean & Disinfect Equipment

- Quaternary ammonium compounds at 500 mg/L for >60 minutes;
- Chlorine at 200 mg/L for >60 minutes; or
- Virkon at 3-10 g/L.

Protect resident fish during high risk periods

- Virkon in water at 5-10 mg/L, 1-2 times/week (with 5-10% partial water changes prior to dosing).
- Maintain salinity in pond at 2-5 g/L.
- Supplement with vitamin C in-water (1-10mg/L) or in-feed (500-700mg/kg food).
- Practice good biosecurity.

For more detailed information contact [The Fish Vet](http://TheFishVet.com)

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