

QUESTION	QUALIFICATION
History	
Client Experience?	Find out whether the client is experienced, or new to fish health.
New fish lately?	New fish without quarantine bring fish diseases into collections
Were the new fish quarantined?	Quarantine should be at least 14 days, better still: 30 days.
Have the fish been transported lately?	Transported fish are immune threatened. Disease is more common.
Transported: Where and how?	Overseas shipment or transcontinental shipment can cause "bag burn". Koi shows can transmit disease.
Ornaments or rocks in pond?	Sharp rocks can and do cut fish. Gravel in pond is good unless left unmaintained for 24 –36 months depending on feeding rate.
Use the reverse side or separate sheet to describe illness.	Description should be thorough, including fish behavior, duration, appearance, and especially, exam after death. Notice the gills in the dead!
Describe all treatment doses, interval & results.	Treatments done without water testing complicate the proper forensics of cases – Formalin tests like Ammonia.
Number of fish in pond	No more than 1 inch per ten gallons of water without real fish expertise.
Polyculture?	Do they mix different species? Some can be aggressive!
Number of fish affected?	
Number lost so far?	If losses are > 50% think about Koi Herpes Virus or peracute water quality problem like pH crash.
When did the illness show up?	KHV shows up 5-10 days after introduction of carrier fish.
Total Inches of fish?	Crowding: > 1 inch per ten gallons
What are the fish fed?	Should not be catfish food. Should be two good quality staples and treats.
How much are the fish fed?	Fish should be fed 1-2 x daily, all they want in five minutes with none left over. Good treats include grapefruit and silkworm pupae.
Appetite recently?	Fish off feed are sick, or very, very cold! Fish that eat sparingly may be in warm water or with low O ₂
Sudden deaths?	Sudden death can suggest bacterial or viral conditions, or acute water quality issues. Examine gills!!
Dropsy? Sunken eyes?	Dropsy is an incurable infection of the kidney. Sunken eyes come with bacterial infections and KHV.
Is there debris on the pond bottom, or HAS there been?	Common! Winter leaf debris is carried over into Spring and disease organisms love the leaf litter and debris.
Water Quality Questions	
Water source?	Well, tap, Chlorine-treated? Chloramine-treated? Must know!
Does pond receive runoff?	Rainwater runoff from roof contains creosote, etc. Runoff from grass contains nitrates and insecticides.
Is the water cloudy?	Cloudy water precipitates gill disease and other stress-related conditions. The source can be bacteria or minerals
Diagnostic Lab Services: http://samples.koilab.com	
Special: Wood deck around pond?	Toxic woods include pressure treated and cedar

QUESTION	QUALIFICATION
Water Quality - Continued	
Ammonia level?	Ammonia should be 0.0 Reduce feedings. Change water.
Nitrite level?	Nitrite should be 0.0 – Low-level nitrite is a serious problem.
Nitrate level?	Nitrate should be < 80 ppm Nitrate is only chronically toxic.
PH Level?	PH should be 7.0 – 9.0 If it falls, raise it quickly!
Alkalinity level?	Alkalinity should be 80-250 ppm and can be raised with oyster shell or baking soda.
Water Temperature?	< 55 = No food & Low immune function. 68-75 = Good temperature 80+ = Heat stress / Low O ₂
Water temperature swing?	Owner should perform 8-hour interval daily temperature readings. > 20° per 24 hours is damaging.
Can you hear the pond?	It has been said that if you hear lots of surface agitation, there's enough oxygen.
Pond Construction / Facilities Questions	
Pond Construction?	Liner? Polyurea? Concrete? Mud?
Describe Filtration	Type, size, flows? (Water should turnover every hour or two.)
Water circulation?	Circulation needs to be aggressive for Koi. Turnover should be 1x every 1-2 hours.
Last filter overhaul?	Need to know manufacturer recommendations.
Last water change?	Some folks don't do water changes.
How much was changed?	Up to 70% can be good especially in Spring and Fall.
Normal water change regimen?	Should be 10% per week or 30% every 3 weeks. When water is close to tap temp, larger changes are possible.
Is there a UV?	UV is "ultraviolet" clarifier to kill bacteria & algae. Will not kill parasites.
Was UV off during attempted treatments?	UV can destroy Formalin, furans, and some other medications.
Carbon in filter?	Carbon can bind medications and soften water. Carbon removes tannins and other impurities.
Plants in system? Koi do not eat plants if fed decently. They damage plants in play.	They may be harmed by salt. Their soil can elaborate noxious gases if not maintained annually.
Pump location	Submerged: Stray voltage? Centrifugal: Better efficiency
System Size	$[L'' \times W'' \times D''] \div 231 = \text{US Gallons}$
Amount of sun per day	Full sun? Filtered sunlight? Shade? More sun is better, but grows a lot of algae.
Algae in system	Algae dusting is good String algae = overfeeding. Green water is not so good.
Fish medicines with guides: http://pondrx.com	
Special: Hydrogen sulfide testing	Hach.com sells H ₂ S kits.