



# KOI HERPESVIRUS CONFIRMED IN LAKE MANITOBA CARP

## What Manitobans can do to help

- In 2008, dead carp were observed in Lake Manitoba and Lake St. Martin. Samples from Lake Manitoba tested positive for koi herpesvirus. This was the first confirmed case in wild carp in Manitoba.
- This virus is found world-wide and was first detected in North America in 1999.
- It was confirmed in dead carp from the Kawartha Lakes in Ontario in 2007. Additional dead carp were reported in other lakes in Ontario in 2008.

## What fish species are affected?

- Koi herpesvirus is a disease that affects common carp, koi and goldfish.

## Can the virus be transferred to humans?

- No. It can't be transmitted to humans. Infected carp are safe to handle and eat.

## Symptoms of infected carp include:

- patches of discoloration or blisters on the skin
- sunken eyes
- pale and rotting gills
- notched nose
- erratic swimming



## How do fish get infected?

- The disease is caused by direct contact with infected fish (ex: at spawning sites). The virus is most likely to enter the body through the gills. The virus may also live in water for a short time, in feces and possibly in mud at the lake bottom.
- The virus causes disease and death when water temperatures are between 18°C — 28°C. Outbreaks are rare when water temperature is lower than 13°C.
- Infected fish can have a high mortality rate. Annual mortality rates vary in wild stocks.
- Some fish that survive an outbreak become lifetime carriers of the disease, passing the virus to other fish.

## Preventing disease outbreaks

- Outbreaks of the virus in the wild are virtually impossible to prevent or treat.
- It is important that live carp, koi and goldfish from infected waters are not released into uncontaminated waters.
- Dead or diseased goldfish or koi should not be flushed down the toilet. They should be humanely destroyed and buried.

## Removal and disposal of dead carp

- Private property owners are encouraged to remove fish from their shoreline areas.
- Wear gloves and use tools such as shovels or rakes to remove the fish.
- Tools and gloves used for fish removal should be disinfected with mild bleach.
- Bury fish at a depth of 1½ feet. Fish carcasses can also be composted with a mixture of vegetation at suitable site locations.
- Note: most landfill sites in the province do not accept dead animal or fish carcasses.
- Anglers and people fishing for food should use similar precautions described above for disposal of carp refuse.

## What Manitoba is doing about the koi herpesvirus

- Manitoba Fisheries Branch is working with the federal Department of Fisheries and Oceans and the Canadian Food Inspection Agency to monitor koi herpesvirus in Lake Manitoba and Lake St. Martin.
- Plans are being developed in the event that carp die-off is extensive.

**To report carp die-off in Manitoba waters call Manitoba Fisheries Branch at 204-945-6784 or toll free at 1-800-282-8069.**

For more information:

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