



Bilharzia (*Schistosomiasis*)

What is Bilharzia?

- 💧 Bilharzia is an infection by a parasitic flatworm (blood-fluke).
- 💧 In South Africa there are 2 kinds of flatworms:
 - ✓ *Schistosoma haematobium*, causing urinary and bladder bilharzia.
 - ✓ *Schistosoma mansoni*, causing intestinal bilharzia.
- 💧 Adult flatworms can live and deposit eggs for many years in the small blood vessels, lining the bladder or the large intestine. These eggs are trapped in the tissues, where they eventually calcify or are passed out with the urine or stool.
- 💧 The symptoms range from weakness or fatigue to the presence of blood in the last few drops of urine passed.
- 💧 Some people can also develop a life-threatening systemic allergy (Katayama fever) due to these parasites.
- 💧 Heavy bilharzia infection can eventually cause bladder cancer.

How is Bilharzia transmitted?

- 💧 Humans are the primary host and freshwater snails the secondary host of the bilharzia parasite.
- 💧 The life cycle of the flatworm is maintained when infected humans urinate or defecate in or near water bodies.
- 💧 The flatworm eggs hatch in the water and the larval stage (miracidium) enters the water snails, where they mature.
- 💧 These snails then release free-swimming larvae (cercariae), which can survive in the water for up to 48 hours and then penetrate the human skin within seconds of contact. In humans, bilharzia affects the liver, lungs, spleen, intestines and the bladder.

How can Bilharzia patients be treated?

- 💧 Anti-bilharzia medication destroys the flatworms in the body. Katayama fever is treated with allergy suppressing medication.
- 💧 Medical treatment of bilharzia can cure the patient from infection, but damage to body tissues cannot be cured.

How can Bilharzia be prevented?

- 💧 Avoid contact with contaminated water. Do not swim in or drink it.
- 💧 Install treated water supplies.
- 💧 Proper sanitation, recreational and laundry facilities.
- 💧 Screening and treating people for bilharzia will diminish the source of parasites introduced to the water body.

Reference: DWAF (2003). Management of water-related microbial diseases, Vol. 1.

Photo: Credit - CDC

