

# Trematodes

**Trematodes** are a class of **flatworms**. There are bilaterally symmetrical first-mouth animals that live exclusively **parasitically**, most of which are vertebrate endoparasites. The class Trematoda contains the subclass **Digenea**, which includes four orders: **Strigeatoidea** (representative: *Schistosoma haematobium*), **Echinostomida** (representative: liver fluke), **Opisthochiida** (representative: Egyptian fluke) and **Plagiorchiida** (representative: pulmonary fluke).

## Macroscopic description

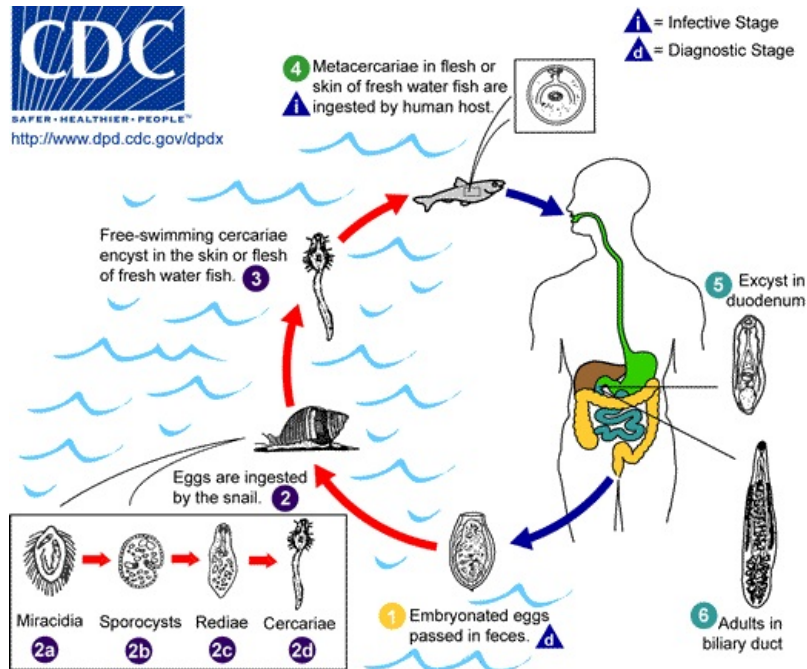
The size of the motile body can be from tenths of a millimeter to several centimeters. The body is **flattened**, usually has at least one **suction cup**, it can have more than one. The suction cup is used to attach the trematode to the host. There may be hooks or protrusions on the body. The body may be covered with **glycocalyx**, which has a protective function.

## Pathogenesis

They are mainly parasites of the digestive and respiratory systems, but can be parasites in almost **all organ systems**. Some species cause disease in their hosts. Diseases caused by trematodes are called **trematodoses**. They damage the hosts both mechanically and the products of their metabolism, if they occur in the digestive tract, deprive the host of part of the ingested food. In addition to the gonochoristic family Schistosomatidae and some members of the family Didymozoidae, these are **hermaphrodites**.

## Life cycle

Trematodes go through several development cycles. The first larval stage is called **miracidium** and develops into a fertilized egg, which then leaves. The first intermediate host is usually a **snail**. Parthenogenesis occurs in the body of this intermediate host (a new individual develops from an unfertilized egg). The first generations are sporocysts, followed by rediae and cercariae. The **cercaria** leaves the intermediate hosts and floats in the water. There are several ways to get to the final host and turn into a worm.



## Links

### External links

- Article Motolice on czech wikipedia (<https://cs.wikipedia.org/wiki/Motolice>)
- Article Trematode on english wikipedia (<https://en.wikipedia.org/wiki/Trematoda>)

### Literature

- VOTAVA, Miroslav. *Lékařská mikrobiologie speciální*. 1. edition. Brno : Neptun, 2003. 495 pp. ISBN 80-902896-

6-5.

- VOLF, Petr – HORÁK, Petr. *Paraziti a jejich biologie*. 1. edition. Praha : Triton, 2007. 318 pp. ISBN 978-80-7387-008-9.