What is myiasis?

Myiasis is infection with a **fly larva**, usually occurring in tropical and subtropical areas. Myiasis is an infestation of the skin by developing larvae (**maggots**) of a variety of fly species (myia is Greek for fly) within the arthropod order Diptera. Worldwide, the most common flies that cause the human infestation are *Dermatobia hominis* (human botfly) and *Cordylobia anthropophaga (tumbu fly)*. There are several ways for flies to transmit their larvae to people.

* Some flies deposit their eggs on or near a wound or sore, the larvae that hatch burrow into the skin. Certain species’ larvae will move deeper in the body and cause severe damage.
* Some flies attach their eggs to mosquitoes, other flies or ticks and wait for those insects to bite people. Their larvae then enter these bites.
* One type of fly found in Africa lays its eggs on the ground or on damp cloth such as clothing or bed linens that are hung out to dry. The larvae hatch from the eggs and people gets infected by contact with the ground or clothes that have fly larvae attached to them.

#### What are the signs and symptoms of infection with myiasis?

A **lump** will develop in tissue as the larva grows. Larvae under the skin may move on occasion. Usually, larvae will remain under the skin and not travel throughout the body.

#### How is myiasis treated?

The larvae need to be surgically removed by a medical professional. Typically, the wound is cleaned daily after the larvae are removed. Proper hygiene of wounds is very important when treating myiasis. Sometimes medication is given, depending on the type of larva that causes the problem.

How can prevent infection with myiasis?

* Take extra care going to tropical areas and spending a lot of time outside. Cover your skin to limit the area open to bites from flies, mosquitoes, and ticks. Use insect repellent and follow Travelers Health guidelines.
* In areas where myiasis is known to occur, protect yourself by using window screens and mosquito nets.
* In tropical areas, protect the clothes that were put on the line to dry.

Myiasis is the name of an infestation caused exclusively by fly larvae (Arthropoda, Insecta, Diptera) in vertebrate hosts. The clinical severity of myiasis varies according to the behavior of the insect in relation to its host, i.e., obligatory or facultative parasitism. There are three basic forms of infestation: traumatic or wound (the larvae feed on living or necrotic tissues), furuncular (larvae penetrate the healthy skin and a furuncle develops) and cavitary (larvae invade mainly the digestive and urinary tracts).

**Depending upon the site of infection myiasis can be of following types:**

**Furuncular myiasis:** occurs after penetration of larva into skin, papule or nodule with a central punctum, which causes pruritus and pain. Number of larvae within lesion varies with offending species Such as:

***Dermatobia hominis*,**

***Cordylobia anthropophaga*,**

***Cuterebra* species,**

***Wohlfahrtia vigil*, and**

***Wohlfahrtia magnifica***

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**Migratory myiasis:** occurs when a dipteran maggot migrates through burrows in skin, producing migratory “creeping” pattern. Larvae of *Gasterophilus* (horse botfly) and *Hypoderma* (cattle botfly) cause this pattern in humans.

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**Cutaneous myiasis and wound myiasis:** Wound myiasis occurs when fly larvae infest open wounds of host, *Cochliomyia hominivorax*, *Chrysomya bezziana*, and *W. magnifica* are the most common flies for wound myiasis.

**Cavitary myiasis** corresponds to infection of body cavities

**Orbital myiasis**, or ophthalmomyiasis profunde, is infection of any anatomic structure of eye

Other uncommon forms include ENT myiasis, urogenital myiasis, intestinal myiasis, cerebral myiasis, tracheopulmonary myiasis, and umbilical cord myiasis

Myiasis remains a major economic problem in animal farming, as it leads to reduced milk production, weight and fertility issues, and also reduced hide quality, with consequent economic losses. Human myiasis is found worldwide, but with more species and greater abundance in poor socioeconomic regions of tropical and subtropical countries. In non-endemic countries, myiasis is also an important condition, as it can represent the fourth most common travel-associated skin disease.