



Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria



GENERAL DIRECTORATE OF ANIMAL HEALTH Mexico-United States Commission for Prevention of Foot-and-Mouth Disease and other Animal Exotic Diseases

SCREWWORM MYIASIS

Screwworm myasis, also known in Spanish as "*gusanera*" is an infestation produced by fly larvae feeding of live mammal tissue, and on rare occasions, from birds.

Who or what causes it?

Two fly species cause myiasis: New World fly (*Cochliomyia hominivorax*) and Old World fly (*Chrysomya bezziana*).

What is its geographical distribution?

New World fly is found in the Western hemisphere (South America and the Caribbean), while Old World fly is found in the Eastern hemisphere (Asia and Africa.)

How does the larva propagate?

The infestation occurs when a fly deposits its eggs in a superficial wound of a mammal. The larvae hatch between 12 and 24 hours later and feed from live tissue during 4 to 8 days. After completing their development they drop to the ground to be transformed in pupae, and emerge as flies 7 to 10 days later.

What are the clinical signs?

The larvae can infest assorted wounds, even as small as a tick bite; however, the most frequent infestations occur in the bellybutton of newborns, in lesions caused by castration or dehorning, and in female's vulva or perineal regions.

In the onset of the infection minor movement can be observed inside the wound, which extends and deepens as larvae feed of the tissue, causing serohemorrhagic suppuration. Generally, infected animals separate from the group and show signs of depression, loss of appetite and discomfort in the wound; animals that don't receive treatment can die in 7 to 14 days due to toxicity or secondary infections.

How it is diagnosed?

Larva has a cylindrical shape surrounded by rings with protuberant spines that give it the appearance of a screw. It is whitish in color and in one end has two hooks used to rip tissue; nevertheless, it is difficult to distinguish from other similarly shaped larvae, such as *Cochliomyia macellaria*, *Lucilia cuprina* and *Dermatobia hominis*. Therefore, a morphologic diagnosis in an official laboratory is required.





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How can it be prevented?

Mexico has been free of the screwworm since 1991; thus, it is necessary to control the import of animals from affected countries and their products and byproducts, and bolster biosafety measures in livestock production units and treat animal wounds as soon as possible.

SENASICA carries out a permanent epidemiological surveillance aimed to timely detect animal diseases endangering livestock assets and the public health of our country.

Report immediately to the official veterinarian services about any suspicious case; an official veterinarian will visit the production unit, obtain the samples for laboratory diagnosis and give the appropriate instructions.

Contact us for more information or to report any suspicious cases:

Emergency phone: 01 (800) 751 2100 (24 hours/day - 365 days/year)

Phone: 01 (55) 5905 1000 (Extensions 51236, 51242 and 51243)

E-mail addresses: sive.dgsa@senasica.gob.mx gestioncpa.dgsa@senasica.gob.mx

You can also report at any SADER or SENASICA offices, or at the Regional Coordination Offices of the CPA closest to your community.