New World Screwworm

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Why in News?

Recently, United States reported its first human case of the flesh-eating parasite, the New World screwworm.

- New World Screwworm (NWS) is a species of ***parasitic flies*** that can cause myiasis and feed on live tissue.
- Screwworms are a ***type of blue-grey blowfly***.
- **Scientific name –** Cochliomyia hominivorax.
- **Family -** It belongs in the subfamily **Chrysomyinae** of the family **Calliphoridae** of the order Diptera (true flies).
- **Nomenclature –** The parasites are named after the screwlike way they burrow into the tissue.
- It is literally means man-eater.



- **Distribution –** Endemic in Cuba, Haiti, the Dominican Republic, and countries in South America.

- **Host organism –** Females are attracted to and lay eggs on open wounds or another entry point like a nasal cavity in warm-blooded animals and rarely humans.
- **Reproduction –** One female can lay up to 300 eggs at a time and may lay up to 3,000 eggs during her 10- to 30-day lifespan.
- These eggs hatch into larvae (known as maggots), which burrow into the wound using their sharp mouth hooks to feed on the living flesh, leading to infestation.
- After feeding, the larvae fall into the ground, burrow into the soil and emerge as adult screwworm flies.
- **Infestation –** It can be extremely painful, especially in humans, with a high mortality rate if left untreated.
- **Symptoms**
    - Wounds or sores that do not heal
    - Bleeding from open sores
    - Feeling larvae movement within a skin wound or sore
    - A foul-smelling odour from the site of the infestation.
- **Treatment -** There are no vaccines or biological products available, except for the use of sterilised male flies in the sterile insect technique (SIT).
- **Eradication -** The US eradicated New World screwworms in 1966 by using a method called the sterile insect technique.

References

1. Indian Express| New World screwworm.
2. World organisation for Animal health| Cochliomyia hominivorax

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