

Pest Control Fact Sheet

Blue/green bottle Flies



Introduction: Blow flies are commonly known worldwide and in Britain. Alternatively, the name bottle fly may reflect the shiny, glass-like or metallic coloration of the flies. Blow flies enter buildings, and structures, domestic homes, ready to breed. They are more than just a nuisance; they are of medical importance because of their mechanical transmission of disease organisms and ability to cause myiasis (infestation of tissues/cavities) in humans and animals by the fly larvae.

Recognition: The blue bottle flies have a dull bluish-black thorax and a shiny metallic dark blue abdomen. Its body and legs are covered with black bristle-like hair, the eyes are red in colour with clear and black legs and antennae.

They measure up to 10 to 15mm long which makes them slightly larger than the common house fly.

The green bottle fly is measured up to 10-14mm long, slightly larger than a house fly, and has brilliant, metallic, blue-green or golden colorations with black markings. It has black bristle-like hair and three cross-grooves on the thorax. The wings are clear with light brown veins, and the legs and antennae are black.

Biology: *Egg>Larva>Pupa>Adult:* Female blowflies, lays several batches of eggs of up to 180 on suitable food materials (carcasses or meat). The eggs are whitish in colour and about 1.5mm long and will hatch within 1-2 days. Upon hatching, the larvae may feed on the surface and then burrow into the food material. The larvae or maggots are usually whitish in colour, legless and measure up to 18mm long. Larvae pass through three moults before emerging into adulthood. The fully grown or mature larvae will move away from the food source to pupate in soil or dry areas. The pupae are reddish brown and will develop into adult blow flies within 1-2 weeks. Although the green bottle fly has very similar egg laying patterns and larval development as the blue bottle fly, they are slightly slower due to their dependence on outside ambient conditions.

Potential harm: Blow flies have been suspected of carrying diseases. Due to their habitation, they carry pathogenic micro-organisms from sewage, garbage and dumpsites, animal and human excrement, dead and infected carcasses etc. This micro-organism can be passed onto humans when blowflies infect or make contact with human food source. The micro-organisms may be mechanically transferred via external body surfaces, by their infected fluids during frequent regurgitation and by infected faecal deposits. The diseases carried by the blow flies are very similar to those of the house flies. Some are better-known including *Entamoeba coli* and *Shigella dysenteriae*, which cause diarrhoea, and *Vibrio comma* which causes cholera. Non-intestinal disease organisms include plague (*Pasteurella pestis*), anthrax (*Bacillus anthracis*), tuberculosis (*Mycobacterium tuberculosis*), and tularaemia (*Pasteurella tularensis*). Myiasis refers to any disease that may result from the infestation of human tissues or cavities by fly larvae.

Intestinal myiasis is usually accidental and has involved species of *Chrysomya*, *Lucilia*, *Calliphora*, and *Phaenicia*, which can result in diarrhoea with blood discharge and living or dead larvae being expelled with the vomit or stool. All representative species highlighted above are recorded as causing myiasis in humans.

Habits: Blow flies enter buildings and domestic houses ready to breed or to lay their eggs. Most species develop in meat or animal carcasses, animals or human excrement, decaying vegetation, garbage and food waste. Dead rodents, birds, and other small animals can be the source of flies within structures or buildings, while animal or human excrement and garbage are common outdoor sources. With a very acute sense of smell blow flies are usually the first to arrive after an animal dies.

Control: Blow flies control includes inspection, sanitation, mechanical control, and insecticide application. Physical control methods should be first used to get rid of blow flies in a particular location (removal of food source). Approved insecticide and sticky paper can be used to control the remaining lava, and adult. Blow flies can be controlled in buildings, restaurant and homes by good sanitation or hygiene practice, fly screen, electronic fly killers (EFK) etc