

Flystrike

What causes flystrike?

The Australian sheep blowfly (*Lucilia cuprina*) is responsible for initiating 90% of flystrike in Australia. Other flies typically infect sheep after *Lucilia cuprina* has initiated strike and cause secondary strike which is often deeper in the tissue. There are three conditions required for flystrike:

1. The **presence of flies** as a result of successful breeding and hatching events.
2. **Favourable weather** that allows flies to breed and move around (soil temperature above 15°C for hatching, ambient temperature 17-38°C, low wind), and causes wool to get wet and to stay wet (regular, consistent rainfall).
3. **Susceptible sheep** that have suitable sites for flies to lay their eggs.

Signs and symptoms

- The sheep bites, scratches, rubs, stamps its feet, twitches its tail, walks with its head low, lies down and becomes isolated from the mob.
- Many flies will be around the sheep, there will be a distinctive foul smell and the wool becomes wet, dark and matted.
- Common areas affected are the breech, shoulders and neck, poll, pizzle and wounds, with the affected area enlarging over a number of days.
- Maggots crowd at skin level and the skin becomes red, moist and inflamed, and may become black, hard and under-run when hairy maggots are present.
- Fever and depression develop and the sheep lies down and stops eating and drinking.
- Death often occurs in about one week.

Strategic prevention

The annual economic loss from flystrike is estimated at \$240 million for treatment costs and lost production, including mortalities, production losses of lost wool and reduced wool growth and value, weight loss, and impaired reproduction in affected animals. Prevention costs are estimated at almost a further \$84 million, totalling around \$324 million annually for the Australian sheep industry.

Implement an annual flystrike management plan which covers:

Monitoring

- Actively monitor the three conditions required for flystrike (presence of flies, favourable weather conditions, susceptible sheep) and know your plan of action (for both prevention and treatment) if these coincide to prevent further flystrike.

Animal husbandry

- The timing of shearing, crutching and lambing can be used to reduce risk, as well as employing correct lamb marking procedures (tail length of 3-4 joints, hygienic equipment and procedures, avoiding flystrike-risk periods where possible, etc.)
- Reducing the prevalence of dags, urine stain and dermatitis greatly reduces the risk of flystrike.
- Breech modification can be avoided when the average breech wrinkle of the mob is score 2 or less.

Preventative chemical strategies

- Use the FlyBoss Products tool to select a product.
- Use an appropriate chemical group and application method based on suitable equipment, training and the chosen chemical group.
- Read the chemical label and apply the correct rate, with the correct technique, per the label directions. Know and adhere to the export slaughter interval (ESI), meat and milk withholding periods (WHP), wool harvesting interval (WHI) and stock rehandling interval (SRI).

Breeding strategies

- Select for flystrike resistance by focusing on:
 - body: fleece rot, wool colour, conformation.
 - breech: wrinkle, dag (where dag is common), urine stain and breech cover.
- Use a range of available tools and classing and selection techniques to breed sheep that are more naturally resistant to flystrike.

Following diagnosis

Consult FlyBoss and get professional advice on the actions required for treatment.

Treat struck sheep

- Shear struck wool and 5 cm around the flystrike area.
- Place the maggot-infested wool into a plastic bag and leave in the sun to kill maggots.
- Apply a registered flystrike treatment. Use an appropriate chemical group and an application method based on suitable equipment, training and the chosen chemical group, and read and follow the chemical label.
- Remove struck sheep from the mob.
- Cull adult sheep that get repeated flystrike.

Resource links

[AWI It's Fly Time!](#)

[MLA Sheep blowflies](#)

[FlyBoss Susceptibility to flystrike](#)

[FlyBoss Tools](#)

[FlyBoss Management](#)

[FlyBoss Breeding and selection](#)

[FlyBoss Treatment](#)

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