



Australia's animal health system

Biosecurity - Working together



Australia's robust animal health system has surveillance, preparedness and response arrangements to promptly detect and respond effectively to an exotic animal disease outbreak, if it were to occur. This would include timely notification to trading partners. Australia would implement a rapid response with the aim of regaining a disease-free status.

None of these endemic skin conditions are reportable to the World Organisation for Animal Health and all occur worldwide.

For further information

Email: animal.welfare@aff.gov.au

Disclaimer

Images used are examples only and not for further distribution or to be considered diagnostic in cases of clinical disease in livestock. Any suspected skin disease should be thoroughly investigated by a licenced veterinarian.

Skin Conditions that may occur in Australian Cattle



Field guide

October 2023

Animal Welfare Branch | Traceability, Plant and Live Animal Exports Division

Bovine Herpesvirus 2 (pseudo-lumpy skin disease)

- Very rarely occurs in Australia
- Firm, round, raised 1-2 cm plaques with flat surface and depressed centre
- Lesions appear suddenly
- Lesions all over the body, but in Australia lesions are mostly found on teats
- Lesions slough after 1-2 weeks leaving 1-2cm circular hairless patches resembling ringworm
- Lesions disappear in a few weeks.



Source: Northern Territory Government



Source: David Beggs, University of Melbourne



Source: David Beggs, University of Melbourne

Bovine Papillomavirus (warts)

- Warts of varying form and size
- Located anywhere on the body
- Most frequently seen on head, neck, shoulder and brisket
- Self-limiting, resolve without treatment in 1-12 months.



Source: David Beggs, University of Melbourne

Department of Agriculture, Fisheries and Forestry

Pseudocowpox

- Initially appears as small, red, raised sores on teats and udders
- Progresses to small vesicles or pustules
- May form a circular ring or horseshoe shape of small scabs, over a couple of weeks
- The lesions cause little pain and disappear after several weeks
- Infection will spread slowly through milking herds of cows and there are no systemic signs.



Source: David Beggs, University of Melbourne

Skin allergies (e.g. urticaria, hives)

- Hypersensitivity reactions to allergens in the environment, feed or medications
- Fast-onset of haired, dome-shaped wheals that may crust
- May appear as raised tufts of hair
- Fluid builds up under the skin in severe cases
- Lesions can appear anywhere on the skin
- Lesions tend to resolve within 24-48 hours or once access to the allergen is ceased.



Source: DAFF



Source: DAFF

Dermatophilosis (rain scald)

- Scabs and crusting in matted hair
- Hairless and discharge in areas where scabs are pulled/rubbed off
- Affects areas of the body that are wet for prolonged periods
- Rarely causes significant disease in cattle.



Source: Tony Brightling

External parasites (e.g. ticks) and hypersensitivities

- Clinical signs will depend on which parasite is affecting the animal
- Parasites can cause skin reactions (hypersensitivities) that look like infectious conditions.



Source: Northern Territory Government

Dermatophytosis (ringworm)



Source: David Beggs, University of Melbourne

- Circular hairless lesions, up to 3cm diameter, may join to form larger patches
- Head and neck most affected
- Skin initially moist and red, progressing to dry, scaly and grey.



Source: David Beggs, University of Melbourne

Onchocerciasis (nematode parasite)



Source: Alfons Renz, University of Tübingen

- Lesions, typically nodules, may be itchy (pruritic), with areas of crusts, ulceration, hair loss (alopecia) and loss of coat colour (depigmentation)
- Nodules are located in the skin and can easily be felt
- Depending on the species of *Onchocerca*, nodules may be located on the udder, belly or brisket
- Most nodules are 2.5-3.5cm in diameter
- Usually <4 nodules per brisket.

Other skin conditions



Source: Tony Brightling

- Easily recognisable conditions that tend to occur as single lesions
- Include skin cancers (e.g. squamous cell carcinoma around the eyes of light-coated cattle), haematomas and granulomas.

Bovine Papular Stomatitis



Source: David Beggs, University of Melbourne

- Circular, raised, red papules with erosions and ulcers
- Caused by parapoxvirus
- Affects the muzzle, nose, oral mucosa, oesophagus, sometimes the teats and rumen
- More common in young cattle <2 years of age
- Considered to be of little clinical importance worldwide
- Resolves within 7-12 days.



Source: Tony Brightling

Photosensitisation

- Occurs when skin becomes more susceptible to ultraviolet light because of the presence of photodynamic agents, usually ingested plants, and liver damage
- Non-pigmented, sun-exposed skin most affected (e.g. udder and along the back)
- Skin may be itchy, red, swollen and blistered
- Scabs may develop
- Skin lesions heal well with supportive care.



Source: David Beggs, University of Melbourne

Buffalo fly lesions



Source: Jess Morgan, Flyboss

- Buffalo flies are found in hot and humid regions of Australia
- Small hairless lesions with red scabs
- Secondary infections with open ulcers, scabbing and crusting.
- More common and severe in older animals
- Can cause insect bite hypersensitivity
- Found beneath the corners of eyes, neck, dewlap, belly, shoulders, and flanks of high-risk cattle.



Source: Glenn Kenneally