

Skin Lesions on cattle's

When applying cryosurgery recommendations to **cattle**, the types of lesions treated will differ slightly due to the unique conditions and environments cattle face. Here's a tailored list of **common skin lesions in cattle** that are suitable for cryosurgery with CryoIQ PRO device with interchangeable tips and a recommendation of what PRO tip to be used and treatment recommendations:

1. Warts (Papillomatosis)

- **Description:**
 - Caused by the **bovine papillomavirus**, warts are very common in young cattle and typically appear on the head, neck, teats, or udder.
- **Normal Size: - Diameter:** 5-50 mm, although clusters may become larger.
- **Cryosurgery Use:** Warts are excellent candidates for cryosurgery. Smaller warts (5-15 mm) can be frozen in a single session, while larger clusters may require multiple freeze-thaw cycles.

Removing warts from the udder or teats can be particularly beneficial for milking cows to prevent irritation and secondary infections.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm
- D3, spray freezing, treating size Ø 9-22mm

2. Teat Lesions (Viral or Traumatic)

- **Description:** Small, benign growths or scars caused by trauma, viral infections (such as pseudocowpox), or chronic irritation. These are common in dairy cattle due to frequent handling and milking.
- **Normal Size: - Diameter:** 3-10 mm.
- **Cryosurgery Use:** Cryosurgery is an effective option for removing these small lesions, improving teat health and reducing discomfort during milking.

This treatment is especially important for dairy cows, where lesion-free teats improve milking efficiency.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm

3. Actinic Keratosis (Sun Damage)

- **Description:** Pre-cancerous lesions caused by excessive exposure to sunlight, particularly in cattle with light or unpigmented skin (e.g., around the eyes, muzzle, and udders).
- **Normal Size: - Diameter:** 5-20 mm.
- **Cryosurgery Use:** Early-stage actinic keratosis can be treated effectively with cryosurgery. Lesions on sensitive areas, such as the eyes or muzzle, require careful application to avoid damaging surrounding tissue.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm
- D3, spray freezing, treating size Ø 9-22mm

4. Sarcoids

- **Description:** Benign but locally invasive tumours caused by **bovine papillomavirus**. Commonly found around the head, neck, and limbs, these lesions can interfere with movement or harnessing in working cattle.
- **Normal Size: -Diameter:** 10-50 mm, although they can grow larger.
- **Cryosurgery Use:** Cryosurgery can be used to treat small sarcoids (<25 mm) or residual tissue after partial removal of larger sarcoids. Multiple freeze-thaw cycles may be necessary for complete treatment.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm
- D3, spray freezing, treating size Ø 9-22mm

5. Fly Bite Granulomas

- **Description:** Small, raised nodules caused by irritation or hypersensitivity to fly bites. These lesions commonly occur around the ears, neck, or belly.
- **Normal Size: - Diameter:** 5-15 mm.
- **Cryosurgery Use:** Cryosurgery is effective for resolving granulomas by freezing and destroying the inflamed tissue, reducing irritation and the risk of secondary infection.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm

6. Udder and Perineal Papillomas

- **Description:** Papillomas (warts) in the udder or perineal area can interfere with milking and cause irritation or discomfort.
- **Normal Size: - Diameter:** 5-20 mm.
- **Cryosurgery Use:** Cryosurgery is ideal for these localized growths. A careful approach is needed to minimize trauma to the delicate udder tissue.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm
- D3, spray freezing, treating size Ø 9-22mm

7. Small Abscesses

- **Description:** Superficial abscesses caused by trauma or infection. These are usually localized swellings containing pus and may occur around the head, shoulders, or limbs.
- **Normal Size: Diameter:** 10-25 mm.
- **Cryosurgery Use:** Cryosurgery can be used to destroy the tissue surrounding small abscesses after drainage, helping prevent recurrence or further infection.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm
- D3, spray freezing, treating size Ø 9-22mm

8. Photosensitivity Lesions (Photodermatitis)

- **Description:** Lesions caused by photosensitizing agents (e.g., certain plants or medications) combined with UV light exposure. These typically occur on light-coloured or hairless areas.
- **Normal Size: - Diameter:** 5-15 mm patches.
- **Cryosurgery Use:** Small lesions caused by photodermatitis can be effectively frozen to remove damaged tissue and promote healing.

Recommended tips:

- DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm

9. Ear Tags-Associated Nodules

- **Description:** Nodules or small lesions that develop around ear tags due to irritation or infection. These are common in cattle with permanent identification tags.
- **Normal Size: - Diameter:** 5-10 mm.
- **Cryosurgery Use:** Cryosurgery can remove the lesion while preserving the ear tag area. Freezing prevents the spread of irritation and encourages faster healing.

Recommended tips: - DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm

10. Small Cutaneous Fibromas

- **Description:** Benign connective tissue growths commonly found on the skin of cattle. These can occur anywhere on the body and may cause discomfort if located near harnesses or areas of frequent movement.
- **Normal Size: - Diameter:** 5-15 mm.
- **Cryosurgery Use:** Cryosurgery is highly effective for treating small fibromas, particularly those causing irritation or rubbing.

Recommended tips: - DST60, spray freezing, treating size Ø 0-6mm
- D2, spray freezing, treating size Ø7-18mm

General Guidelines for Cryosurgery on Cattle's

- **Lesion Size:** Larger lesions will require additional freeze-thaw cycles, this is depending on size and type of lesion.
- **Preparation:** Sedation may be necessary for large or uncooperative animals, especially for sensitive areas like the udder, muzzle, or eyes.
- **Cryogen Choice:** Nitrous oxide is a most suitable cryogen.
- **Post-Treatment Care:**
 - Monitor the lesion for proper healing.
 - Advise on infection prevention, especially for lesions in areas exposed to dirt or manure.