PDS Updates webinar Q&A:
Preventing bull preputial breakdown – what the PDS demonstrated

Thursday 23 April 2026

This Q&A document supports the 'Preventing bull preputial breakdown – what the PDS demonstrated' webinar, part of a national MLA Producer Demonstration Sites (PDS) Updates webinar series showcasing practical, producer-led projects delivering productivity and sustainability outcomes.

The webinar presented on-farm findings from PDS projects investigating vaccination-based approaches to preventing bull preputial breakdown. The session highlighted key risk factors, management strategies, and practical lessons producers can apply to improve bull wellbeing and reproductive performance.

This document includes responses to questions raised during the webinar and additional questions submitted by participants. The webinar was presented by Dr Enoch Bergman, Swan Veterinary Services, who shared the results and insights from the PDS project.

The responses are provided by a registered veterinarian and reflect professional observations from specific Producer Demonstration Sites and regional contexts. They are intended to inform discussion rather than replace herd-specific veterinary advice.

Q. What are your thoughts on selecting against poor sheath/prepuce conformation, or more broadly considering the whole sheath–prepuce complex as a structural trait. Is there a standard way to score or assess this in practice and are these phenotypes already being collected?

A. Some breed societies include preputial conformation scoring, particularly in Bos indicus cattle, where pendulous prepuces and mucosal eversion increase the risk of trauma and prolapse. Selection against excessively pendulous prepuces is therefore more common in those systems.

Within the context of the balanoposthitis observed in southern Western Australia, which primarily affects British-bred bulls, observations from the PDS suggest that bulls with "tighter" preputial orifices or relatively larger penile diameter may experience increased risk of tearing following inflammation or trauma. This hypothesis has not been formally quantified, and these specific phenotypic traits are not currently collected as part of routine genetic or structural scoring systems.

Q. Coopers MH + IBR recommend the second dose within six months. For this problem does the second dose need to be within four weeks?

A. We recommend adherence to the manufacturer's dosing instructions**.** Bovilis MH + IBR requires a two-dose primary vaccination course, with a flexible interval as between doses as specified on the product label. Longer intervals are acceptable, however, based on clinical experience and within the context of the PDS, administering the booster approximately one to two weeks prior to joining can help ensure immunity is established at the time of mating.

Where bulls have been vaccinated at the stud with Bovilis MH + IBR, a single booster prior to first joining is generally considered sufficient, provided this aligns with label directions and veterinary advice.

Q. Do you think its worth vaccinating with Selenium prior to joining with both young and older bulls?

A. In regions where selenium deficiency, or other micromineral deficiencies are present, addressing these deficiencies is important for overall animal health and reproductive performance. Selenium can be provided through a range of supplementation strategies, and the most appropriate method will depend on the level of deficiency, required lead time, and overall herd management plan. Diagnostic testing should be considered when determining supplementation strategies, as different supplementation methods vary in their bioavailability and the time required to correct deficiencies**.**

Note: While some vaccines may include selenium-containing substances as part of their formulation, selenium itself is not a vaccine.

Q. If you only have a small herd of heifers/cows (less than 30), would you still recommend vaccination in young bulls?

A. Where balanoposthitis has previously been observed in virgin bulls vaccination may reduce the likelihood or severity of future breakdowns. Factors such as bull libido. bull-to-cow ratio and mating pressure are also likely to influence risk. In herds with no prior history of bull breakdown, changes to current management practices, including vaccination, may be less likely to deliver measurable benefit.

Q. If you're purchasing female replacements, is vaccinating the bulls only the best course of prevention? Are annual vaccinations beneficial? Should purchased-in females be treated upon entry to the herd?

A. In many production systems, bulls are likely to be exposed to the bovine herpesviruses during mating. Some animals may have pre-existing immunity from prior exposure or vaccination.

Vaccinating females may reduce exposure risk within a given joining period, however, susceptibility may recur in subsequent seasons.

From a practical management perspective, the PDS focused on protecting the population at highest risk of clinical consequences, namely virgin bulls during their first mating, rather than attempting to eliminate virus exposure at a whole-herd level.

Q. We are in central Queensland and find that in a good wet season we have issues with prolapsed penis. We have also put this down to tall grass and sharp seeds causing irritation or infection.

A. Any factor that inflames the prepuce may increase the likelihood of balanoposthitis. In the Esperance region of southern Western Australia, bovine herpesvirus is believed to play a role, and vaccinating virgin bulls prior to joining has been associated with a reduction in in first season breakdowns, as observed in the results of this PDS.

The relative contribution of the bovine herpesvirus, pasture condition and environmental factors in northern regions or different production systems remain less clear and warrants further investigation.

Q. Does selection for tidy, clean sheathed bulls assist in reduction of incidence of preputial prolapse i.e. reduced trauma opportunity?

A. In the southern systems discussed, British-bred bulls typically have relatively tidy preputial confirmation. In Bos indicus bulls, however, preputial conformation varies more widely and selecting bulls with sound sheath structure is an important component of pre-breeding examination and selection to reduce the risk of trauma and prolapse.

Q. What role does high protein pastures and high clover - phytoestrogen pastures play in balanoposthitis?

A. Within the context of this PDS and regional observations in the Esperance region of southern Western Australia, I don't believe it plays a substantial role. The young bulls appear to tear their prepuces (at least part of the time) due to oedema potentially related to the bovine herpes virus rather than prolapse as described for Bos indicus bulls. Regardless, it is a great question and I believe it could be related in some management systems.

Q. What antibiotic is being used and can you explain the logic behind this?

A. In clinically affected cases, treatment may involve the use of broad-spectrum antibiotics in combination with anti-inflammatory therapy to reduce the likelihood and severity of secondary

bacterial infection. Any antibiotic use should occur under veterinary direction and in accordance with antimicrobial stewardship principles, label directions, and appropriate withholding periods.

Within this PDS, oxytetracycline was one of the antibiotics used by the attending veterinarian due to its broad-spectrum activity. The choice of antibiotic and treatment approach was based on individual case assessment rather than a standardised protocol..

Q. Ideally how long before joining should you vaccinate with Rhinogard and/or Bovilis MH + IBR? (first shot and booster timing?)

A. Bovilis MH + IBR requires a two-dose primary vaccination course, with a flexible interval between doses as specified on the product label. In practice, the booster is often administered one to two weeks prior to joining to help ensure immunity is established at the time of mating.

Rhinogard is commonly administered as a single dose approximately one week prior to joining. Where bulls have been vaccinated by the stud, a pre-joining booster may still be considered in consultation with a veterinarian and in accordance with label directions.***Q. If vaccination reduces severity but not latent carriage, are we inadvertently selecting for bulls that look reproductively sound but are still infectious? And if stress events are the main reactivation trigger, is there any evidence-based management protocol producers should be following during high-stress periods like transport or peak breeding?***

A. Most bulls are likely to become latently infected with the bovine herpesvirus after their initial breeding season. Preventing exposure entirely is therefore difficult in typical mating systems.. The focus of vaccination, as demonstrated in this PDS, is not to eliminate infection but to reduce clinical expression and protect bulls during high-risk periods, particularly their first mating.

Q. Is a mucosal immune delivery and response more important

A. Mucosal immune responses may play a role in protection against bovine herpesviruses. Intranasal vaccines can stimulate both specific and non-specific mucosal immunity, which may be beneficial for mucosal tissues, including the prepuce.

Direct comparative data between vaccine delivery methods in this context are limited. Vaccine choice should therefore be made in consultation with a veterinarian, taking into account herd size, management practices, and logistical considerations.

Q. Where and how are the heifers being exposed?

A. Exposure may occur through contact with other cattle within the herd or via the bull themselves during mating. In this region, seroconversion of cows appears to be slower than amongst bulls, with

many bulls showing evidence of exposure to bovine herpesvirus before or during their first mating opportunity.

Q. What is your opinion on giving all vaccinations just before joining?

A. From a veterinary perspective, cattle are generally capable of mounting effective immune response to multiple vaccines administered simultaneously. When several vaccines are given concurrently, careful attention to handling and administration technique is important.

Based on clinical experience, some vaccines contain stronger adjuvant systems and may be more likely to cause local injection reactions if not managed carefully. In these situations, separating injections sites when administering multiple vaccines can help minimise local tissue reaction. Maintaining good hygiene, appropriate injection site management and sound needle practices remain critical to support animal welfare and vaccine efficacy.

Vaccination timing and combinations should be considered within the context of individual herd management and planned in consultation with a veterinarian.

If you have any questions, please feel free to email pds@mla.com.au and we will work with the team to assist with your enquiry.