

# OPTIMISING HEIFER HEALTH: SOUTHERN BEEF PROGRAM

Give your heifers the best chance of reproductive success.



360°  
OPTIMISING  
HEIFER HEALTH

This program is designed to help cattle producers manage their herd more effectively and achieve optimum reproductive performance.

## THE FUTURE OF YOUR HERD LIES WITH YOUR HEIFERS

A few key cattle diseases and parasites can have devastating effects on your heifers' growth and reproductive performance. Lost calves result in fewer weaners sold and lost revenue for you.

**Zoetis supports a practical approach towards increasing overall herd performance by optimising heifer health and improving reproductive performance. This can be achieved by focusing on:**



**MINIMISING CALF  
LOSSES**



**MAXIMISING HEIFER  
GROWTH**



**MAXIMISING REPRODUCTIVE  
PERFORMANCE**



The 360° Optimising Heifer Health Program from Zoetis has been designed to focus on the critical areas that influence the reproductive performance of your heifers. It provides guidance and support for southern beef producers so that they can maximise their beef output in the short term as well as build a strong and reproductive herd for the future.

# WHY FOCUSING ON HEIFERS IS SO IMPORTANT

Heifers have the highest potential for future earnings of any group in a herd. Conversely, they are also at risk of causing the greatest losses if they do not get pregnant, or worse still, die. Heifers are most at risk of losses due to the preventable reproductive diseases — pestivirus, vibriosis and leptospirosis – due to lack of exposure prior to mating.

## 1. PESTIVIRUS

A recent review of diseases of significance to the red meat industry in Australia has ranked pestivirus in the top 3 diseases with the biggest cost to Australia's southern beef industry. Pestivirus is estimated to cost the southern beef industry over \$63 million annually.<sup>1</sup> 40-60% of heifers have never been infected and are susceptible to future infection.<sup>6-8</sup>

## 2. VIBRIOSIS

In newly infected herds, vibriosis can lead to conception rates as low as 40%.<sup>2</sup> The greatest of these reproductive losses are often seen in heifer mobs. Recent survey work shows that vibriosis is still prevalent in bulls in southern Australia.<sup>3</sup>

## 3. LEPTOSPIROSIS

Leptospirosis can lead to abortions, still births, birth of weak or dead calves and reduced fertility. It can also spread from cattle to humans and can develop into an ongoing chronic-fatigue-like illness. Exposure to clostridial diseases (e.g. pulpy kidney, tetanus, malignant oedema, blackleg and black disease) may result in mortalities that are easily prevented.

## 4. PARASITES

Poor worm control may reduce growth rates by at least 20%.<sup>4</sup> Delays in heifers reaching critical mating weights can have a profound effect on heifer pregnancy rates and the profitability of your herd.



# THE 360° OPTIMISING HEIFER HEALTH PROGRAM

## GENETICS

### Why it's important

- Genetic gains are cumulative, permanent and obtainable by selection of herd sires from performance recorded herds, bred in temperate regions
- Need to balance the selection of fertility, growth and carcass traits in both male and female cattle

### Key actions

1. Select polled bulls where possible
2. Define breeding objective and build selection index to achieve production goals
3. Target heifers to be above average genetic merit for key measurements of fertility, growth and carcass using Estimated Breeding Values where possible

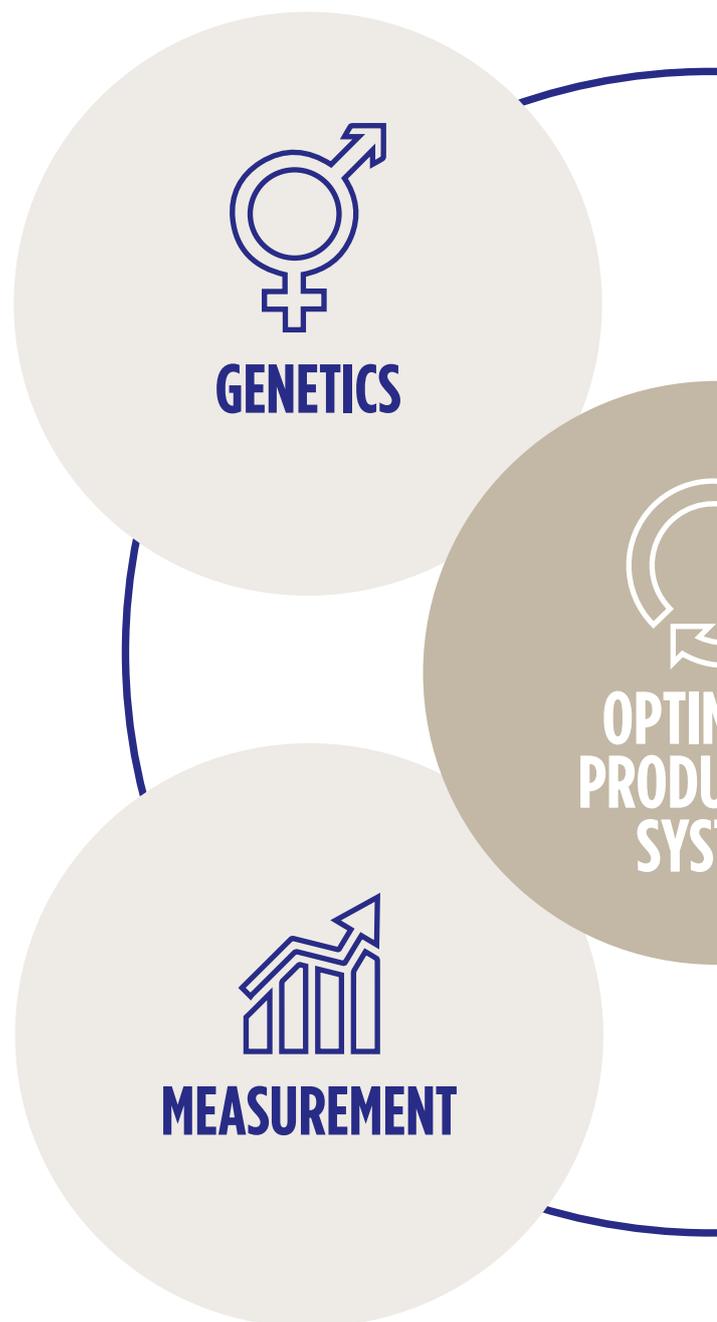
## MEASUREMENT

### Why it's important

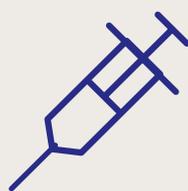
- Allows productivity to be monitored from one year to the next
- Allows progress to be monitored over the long term
- Helps assess the impact of any management interventions

### Key measurements

1. Opening numbers by class of stock
2. Closing numbers by class of stock
3. Sales by dollar and heads
4. Purchases by dollar and heads
5. Total kilograms of cattle sold



Zoetis can help maximise productivity by minimising diseases affecting heifers at each stage of their lives. Our broad range of animal health products are designed to control key production limiting diseases, therefore maximising the outputs of your heifers and your herd.



## DISEASE



## NUTRITION



## DISEASE PREVENTION

### Why it's important

- Reproductive and other diseases will slow weight gain, lower reproductive rates and result in higher death rates
- Poor worm control may reduce cattle growth rates

### Key actions

1. Vaccinate against common diseases that affect production (see overleaf)
2. Drench to control internal parasites



## NUTRITION

### Why it's important

- Nutrition is one of the key factors contributing to fertility<sup>4</sup>
- Achieving critical mating weight can increase herd profitability, productivity and longevity<sup>4</sup>
- Monitoring body condition score is critical to avoiding complications associated with over and under feeding – refer to Repro Active Tech Note on body Condition Scoring<sup>5</sup> for more information
- Supplementation with trace elements such as copper, cobalt and selenium can improve growth rates in heifers and young cattle where deficiency occurs.

### Key actions

1. Manage stocking rate to ensure optimum pasture quantity, quality and utilisation
2. Use strategic supplementation with trace elements to improve growth rates and heifer health where necessary
3. Weigh and body condition score heifers to ensure heifers will meet critical mating weight but not get over fat.

# DISEASE IMPACT ON HEIFERS

DISEASE	IMPACT	SOLUTION FOR HEIFERS
Clostridial diseases	Rapid death is the primary sign of clostridial diseases. Even if clinical signs are recognised, treatment is usually not effective	Vaccinate heifers annually with Ultravac <sup>®</sup> 5in1 or Ultravac <sup>®</sup> 7in1. Where local and seasonal conditions increase the risk of Enterotoxaemia (Pulpy Kidney), more frequent booster doses may be required.
Leptospirosis	Losses from pregnancy testing to calving. Calf deaths. Abortions and still births. Risk of leptospirosis spreading from cattle to humans	Vaccinate heifers (and breeding cows) with Ultravac <sup>®</sup> 7in1 or Leptosshield from a young age to prevent them ever becoming infected and shedding Lepto organisms and to prevent infertility and abortion.
Pestivirus (BVDV)	40-60% of heifers have never been infected and are susceptible to future infection. Increased risk of abortions, still births, calf diseases and abortions Increased scours / coccidiosis and pneumonia in growing cattle. <sup>6-8</sup>	Vaccinate replacement heifers with two doses of Pestigard <sup>®</sup> prior to joining.
Vibriosis	In newly infected herds conception rates can drop as low as 40%. Losses from pregnancy testing to marking. Too many late calves. Vibriosis can result in permanent infertility in some infected heifers. <sup>2</sup>	Vaccinate bulls with Vibrovax <sup>®</sup> annually to prevent bulls spreading vibriosis. Vaccinate heifers and cows if necessary with Vibrovax <sup>®</sup> prior to joining to eradicate the disease from infected herds. Seasonally mate bulls and cull heifers and cows that do not conceive in the designated mating period.
Parasites – Worms & Lice	Poor worm control can reduce growth rates by at least 20% <sup>4</sup>	Incorporate Dectomax <sup>®</sup> as part of a strategic drenching program. Dectomax <sup>®</sup> is available as an Injectable or Pour-On drench.
Trace element deficiency	Reduced growth rates in young animals and reproductive performance	Supplement as required with Copper, Cobalt and Selenium to correct deficiency.
Calving difficulty	Calf and heifer losses	Grow heifers to their genetic potential prior to calving. <sup>4</sup> Calve in body condition score 3-3.5. <sup>5</sup> Utilise genetic selection tools to select easy calving heifers and mate them to bulls with low birth weight EBVs.

## VACCINE

## KEY BENEFITS

### Ultravac® 7in1



- Only Ultravac®7in1 prevents urinary shedding of leptospires when used prior to natural exposure, to protect you, your family, your workers and your herd
- Vaccinating heifers keeps the unborn calf safe and sound from leptospirosis
- Also provides protection against tetanus, blackleg, pulpy kidney, black disease and malignant oedema

### Pestigard®



- Pestigard® prevents nasal shedding of pestivirus to safeguard your heifers and cows reproductive potential.
- It is the only registered vaccine in Australia to prevent pestivirus

### Vibrovox®



- Vibrovox® prevents the spread of vibriosis
- Heifer vaccination has been shown to improve early conception rates resulting in significantly more calves being born early in the calving period ²

### Dectomax®



- Dectomax® kills the parasites that count
- Dectomax Injectable provides persistent activity against the 5 major worms
- Dectomax Injectable is a low irritant formulation and easy to administer
- Dectomax is also available as a Pour-On formulation
- Identify the mixture of worm types in your local area at: [www.wormtrax.com.au](http://www.wormtrax.com.au)

### Genetics (Angus)



- Genetic testing of black Angus cattle can enable selection of superior heifers to become herd replacements and elite females for submission to AI or ET programs

# HEIFER VACCINATION PROGRAM

	PRE-JOINING (6-8 WEEKS)	PRE-JOINING (2-4 WEEKS)	PRE-CALVING
Ultravac® 7in1		✓	✓
Pestigard®	✓*	✓	
Vibrovox®	✓**	✓	
Dectomax®	✓†		✓†

\* The interval between the priming and booster doses can be extended from 4 weeks to 6 months

\*\* Heifer vaccination against vibriosis may be required to control vibriosis in herds known to be infected with the disease. In heifers and cows over 18 months of age, only one dose of 5ml is necessary for the primary course. In yearling heifers it is recommended to give two doses of 5mls at the intervals shown above.

† As required based on worm egg counts

## VIBROVAX® – BULL VACCINATION PROGRAM

Vaccination of bulls against vibriosis can be an effective means of preventing your heifers (and cows) from becoming infected. This can occur if bulls mate infected cows or heifers, for example, if infected cows are purchased or your bull gets into the neighbour's cow herd and mates infected cows. Bulls require two 5mL doses prior to their first joining followed by annual 5mL boosters prior to joining.

	1 <sup>ST</sup> SEASON / NEW BULLS		BULLS
	PRE-JOINING (6-8 WEEKS)	PRE-JOINING (2-4 WEEKS)	PRE-JOINING (2-4 WEEKS)
Vibrovox®	✓	✓	✓



For more information talk to your **Zoetis Representative**, call **1800 963 847**

**References:** 1. MLA Report B.AHE.0010, 2015 2. Hum S. NSW Department of Primary Industries (DPI) February 2007. *Primefact*, 451. 3. Hancock AS *et al*, Infectious reproductive disease pathogens in dairy herd bulls, *Aust. Vet. J.* 2015;93:349–353 4. Zoetis Repro Active Tech Note, Critical Mating Weights, 2014. Zoetis Data on File 5. Zoetis Repro Active Tech Note, Condition Scoring, 2014. Zoetis Data on File 6. MLA Report B.NBP.0382, 2014 7. Taylor LF, Black PF, Pitt DJ *et al.* *Aust Vet J.* 2006; 84:163-168 8. Taylor L. *The Australian Cattle Veterinarian* 2010; 57:14-28 9. Schatz TJ, Colm RM, Hearnden MN. In: *Proc Australian Society of Animal Production* 26th Biennial Conference 2006, 84.



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