

Health and production benefits in veal calves born from NCD and BRD vaccinated cows.

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INTRODUCTION

- ▶ Neonatal calf diarrhea (NCD) and bovine respiratory disease (BRD): most important health problems in veal calves.
- ▶ Passive immunity transfer from NCD and BRD vaccinated dams is a way to prevent NCD and BRD in calves.
- ▶ Intensive antimicrobial use may be reduced.

OBJECTIVE

Measure the benefit of vaccinating pregnant cows against BRD and NCD (Bovilis® Bovipast RSP / Bovilis® Bovigrip and Bovilis® Rotavec® Corona) for the health and productivity of veal calves.

MATERIALS AND METHODS

- ▶ 10 veal farms in Brittany (France): calves arrived at the veal farm at an age of at least 14 days (average age of 21 days).
- ▶ **2 groups:**
 - 1/ Group V2+:** 211 calves received adequate colostrum from cows vaccinated with Bovilis® Bovipast RSP and Bovilis® Rotavec® Corona on 40 different dairy farms.
 - 2/ Group V-:** colostrum management and mother vaccination history unknown, originating from normal commercial farms.
- ▶ Treatment protocols were similar between Group V2+ and V-, with individual antibiotic treatment at first intention.
- ▶ Compared for incidence of clinical BRD, NCD, weight, general condition at 3 (d3) and 45 days (d45) post arrival, antibiotic treatments, mortality and carcass weight.

There is a clear health and production benefit when veal calves receive adequate colostrum from cows that were vaccinated against Bovine Respiratory Disease and Neonatal Calf Diarrhea.



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RESULTS

Clinical BRD at d3: less in V2+ (11.4%) compared to V- (19.1%) (P=0.028) (Fig. 1).

Weight: higher at d3 (+1.2 Kg, p=0.026) and d45 (+2.1 Kg, P= 0.0065) in V2+.

Mortality: lower in V2+ (2.8%, 6 calves) compared to V- (12.1%, 21 calves) (P=0.01).

Odds of mortality: 4.57 times lower in V2+ than in V- (P=0.01).

Antibiotic treatments: Less antibiotic treatments per calf in V2+ (2.9) compared to V- (3.5) (P=0.02) and number of treatments per farms is higher in V- compared to V2+ (Fig. 2).

All other measured parameters: not statistically significantly different. This was expected as NCD occurs mainly before arrival.

FIGURE 1. Comparison of groups for incidence of BRD and NCD.

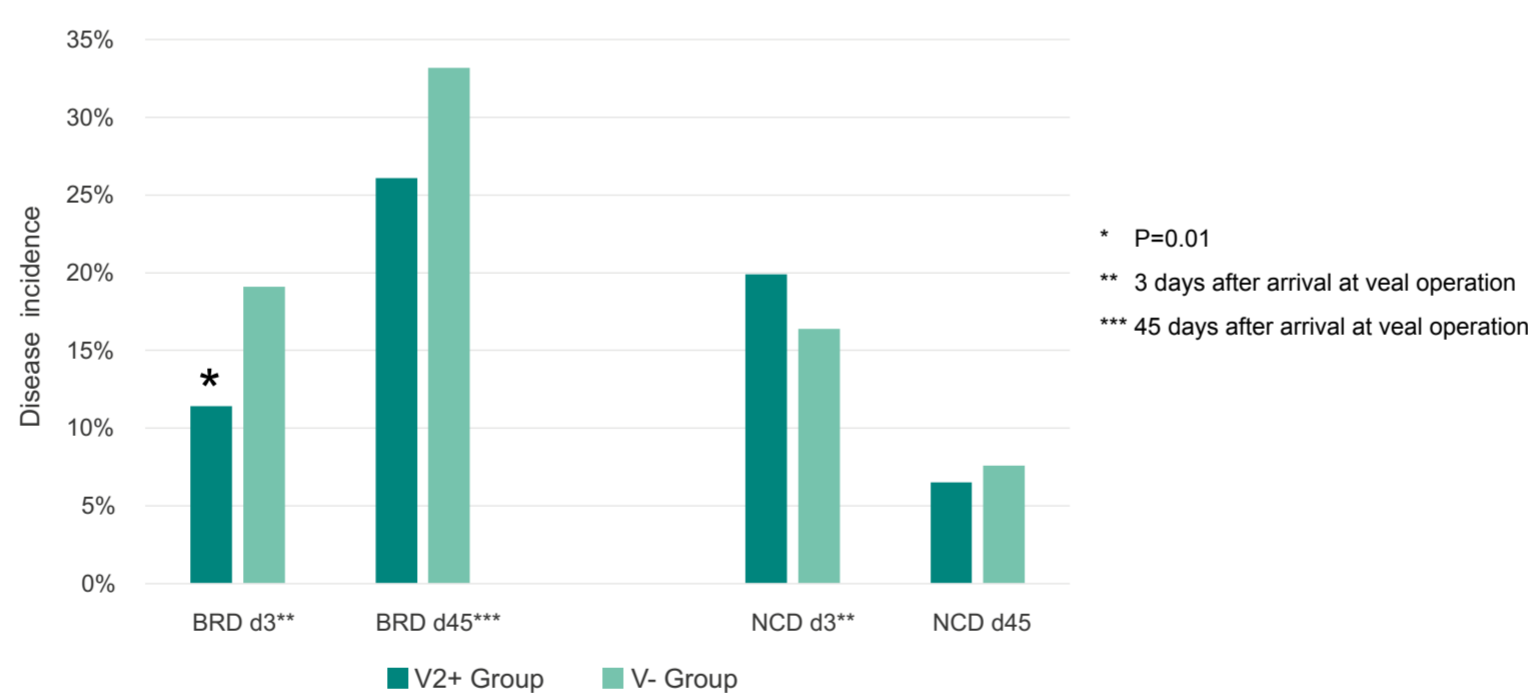
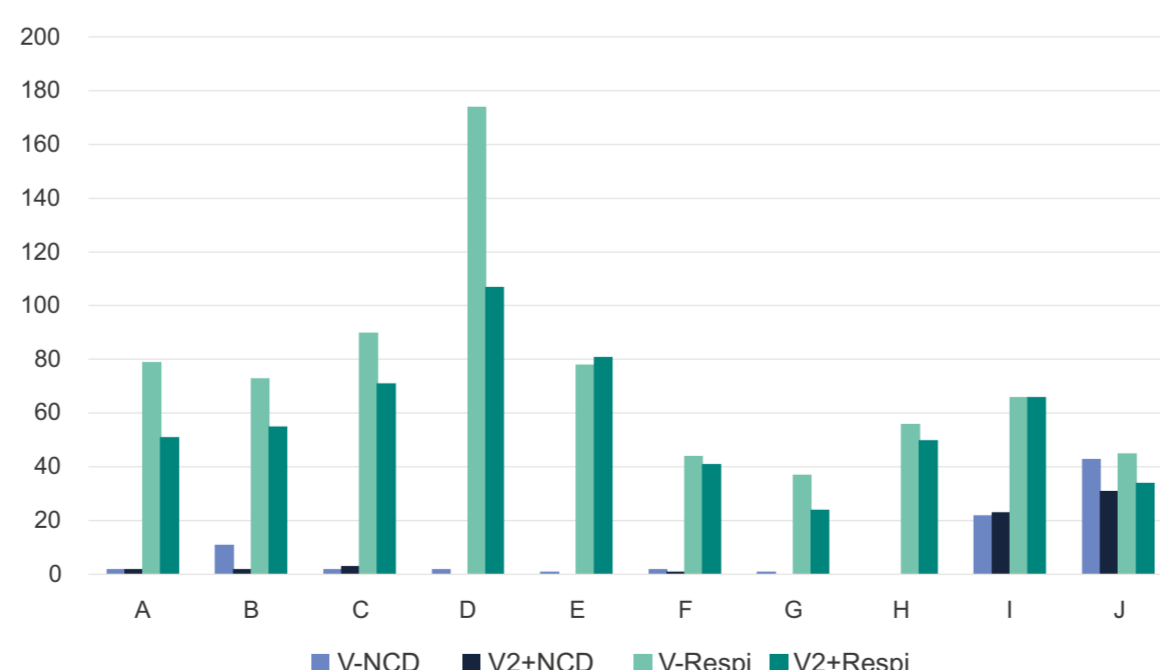


FIGURE 2. Number of antibiotic treatments (NCD + BRD) per farm: V2+ versus V-.



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