

## Pelvic Organ Prolapse: Perineal Score Evaluation

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### INTRODUCTION:

Sow mortality has significantly increased in the last decade within the U.S. swine industry, a major contributor being pelvic organ prolapse (POP). The industry is lacking strategies to reduce the occurrence of POP on sow farms because we do not fully understand the underlying biological causes contributing to the increase of POP. The Iowa Pork Industry Center at Iowa State University, with funding from the National Pork Board and the Foundation for Food and Agricultural Research, had initiated work with U.S. swine breeding herds to identify potential risk factors to direct our next steps POP research. To help identify POP risk in sows during late gestation, a perineal score (PS) system was developed, tested, and is being utilized as a research tool.

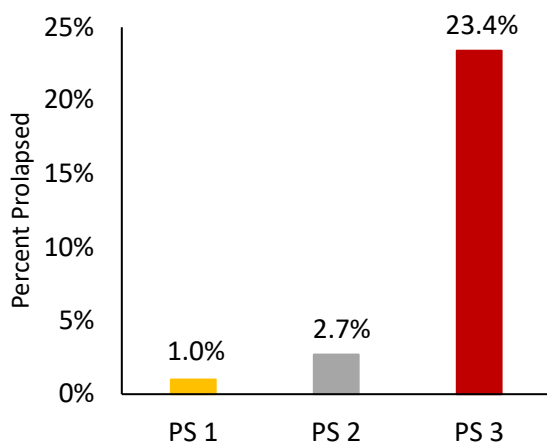
### Scoring System:

- A 3-point scoring system was used to assess POP risk during late gestation.
- Sows are scored at approximately 110-116 days of gestation.
- Scoring is only conducted while sows are laying down.



**Perineal Score 1:**  
Presumed “little to no” risk of POP. Has **none** of the following: protrusion, vulva swelling, swelling of perineal region.

Percent of sows that prolapsed based on perineal score



**Perineal Score 2:**  
Presumed “moderate” risk of POP. Has evidence of **some**, not all of the following: protrusion, moderate vulva swelling, swelling of perineal region.



**Perineal Score 3:**  
Presumed “high” risk of POP. Has **all** of the following: protrusion, moderate to severe vulva swelling, swelling of perineal region, may have beginnings of a POP.

**Figure 1.** Percent of sows that subsequently experienced POP. 2,864 sows were assigned a PS during late gestation (days 107-116). Sows assigned a PS1 ( $n = 1570$ ) had a 1% POP rate, PS2 ( $n = 1166$ ) had a 2.7% POP rate, and PS3 scored sows ( $n = 128$ ) had a 23.4% POP rate. These data demonstrate a method to distinguish differential risk of POP for late gestation sows ( $P < 0.01$ ).