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## Husbandry Education™ Linked to Production of More High Value Nursery Pigs

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### Introduction and Objectives

Intense management of newly placed nursery pigs is important to maximize production as well as pig welfare. The objective of this trial was to assess gains that result when caregivers are trained and empowered to attend the principles of animal comfort, environment and preventive medicine in nursery pigs.

### Material and Methods

To minimize the effects of known risk factors that affect nursery performance, pigs were matched by sow source, health status, weaning date and barn size. Wean to finish barns ranged in inventories from 2,499 to 6,696 pigs. As part of its Husbandry Education™ program, Pfizer Animal Health provided an embedded husbandry educator (HE) to train caregivers on individual pig care and barn management. Twenty barns per treatment were randomly allocated to either a husbandry educator (HE) or standard care (SC). Altogether 137, 622 pigs (70,111 SC and 67,511 HE) were enrolled. Sites were managed similarly, as they were part of the same production system. Site visits by the HE occurred daily for the first 2 weeks and decreased to one visit per week after 6 weeks post nursery placement. Husbandry training involved classification of pigs as A, B, C as they moved away from optimal health and, once classified, treatment was given to individual sick pigs according to the farm's protocol, thereby encouraging compliance. Training in other sound husbandry practices included monitoring humidity and ensuring proper ventilation. At close out, SC and HE care givers jointly visited all sites and classified pigs as high value or substandard (light or lame, boars, defects). Percent mortality and medication cost were calculated from production records obtained for the 7-8 week nursery period. To measure the effects of the HE program on pig production data were analyzed with a linear mixed model and all test of treatment differences were 2-

sided and performed at the 5% level of significance. Risk assessment was used to calculate the 'number of pigs needed to treat' by dividing % substandard pigs under SC care by % substandard pigs under HE care.

### Results and Discussion

Statistical analysis (Table 1) indicated that barns that received HE training had a significantly lower percentage of substandard pigs, a higher percentage of pigs requiring individual treatment and a lower overall medication cost than SC barns ( $P \leq 0.05$ ). HE barns also had a higher percentage of high value pigs ( $P \leq 0.05$ ). For every 43 pigs raised under HE care, one additional full value nursery pig was produced compared to SC.

Table 1. Impact of the Husbandry Educator

	SC	HE	Difference
<b>Pigs enrolled</b>	70,111	67,511	2,600
<b>% substandard</b>	6.05%	3.75%	<b>2.32%*</b>
<b>% mortality</b>	2.13%	2.15%	0.02%
<b>% individual TX</b>	8.76%	9.89%	<b>1.13%*</b>
<b>% HVP</b>	91.45%	93.92%	<b>2.44%*</b>
<b>Med/cost/pig</b>	\$0.197	\$0.109	\$0.088

SC= standard care; HE= husbandry educator care, Ind TX= Individual treatment, HVP= high value nursery pig; \* statistically significant differences  $p \leq 0.05$ .

Known risk factors associated with nursery performance such as weaning age, weaning weight, all in all out management, etc are well known<sup>1</sup>. Results from this trial demonstrate that an embedded husbandry educator who focused on care giver training was linked to increased pig wellness and productivity. Husbandry Education™ given at critical times significantly impacted nursery performance.

### References

<sup>1</sup>de Grau A, Dewey C, Friendship R, de Lange K. Can J Vet Res 2005, 69(4):241-5.