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Increased Sow Mortality Observed in the PigCHAMP Database
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Production records of 783 farms in the United States (U.S.) and Canada were used to observe breeding female mortality rate and its related factors such as herd size, lactation length, parity and season. Average annual mortality rates during the 1997 period in the U. S. and Canada were 5.68% and 4.26%, respectively. Average breeding female inventories in the U.S. and Canada were 733 and 363, respectively. Average lactation length in the U.S. and Canada were 18.3 and 22.3 days, respectively. In regression analysis, shorter average lactation length and larger herd size were related with higher annual mortality rate. An interaction between the association of lactation length and herd size with mortality rate was also found. Lactation length and herd size were grouped to obtain mean mortality rate for each subgroup. On farms with lactation length ≤ 18 days, mortality rate increased as herd size increased. No increase was found in farm groups with

lactation length > 18 days and ≤ 800 breeding females. Regardless of lactation length groups, farms having > 800 breeding females had higher mortality rates than those with < 200 females. Higher mortality rates were associated with more numbers of dead pigs at farrowing and decreased farrowing rate, but not with other herd productivity measurements (e.g. pigs weaned per mated female per year) and farrowing facility utilization. Extracting data by parity and season groups from each farm record, older parity was associated with higher mortality rates in both countries. In the U.S., summer season was associated with higher mortality rate. In addition, our research indicates that annual mortality from 1993 to 1997 increased from 4.3 to 5.8% in 5-year records on 345 U.S. farms. We recommend that producers, especially in large herds, spend more time and pay more attention to observe breeding females.

Keywords: Mortality; Breeding-herds; Lactation duration; Pig-management