



# Improving Sow Retention Rates: A Case Study

System review finds sow mortality cause.

Second article in a three-part series on sow retention

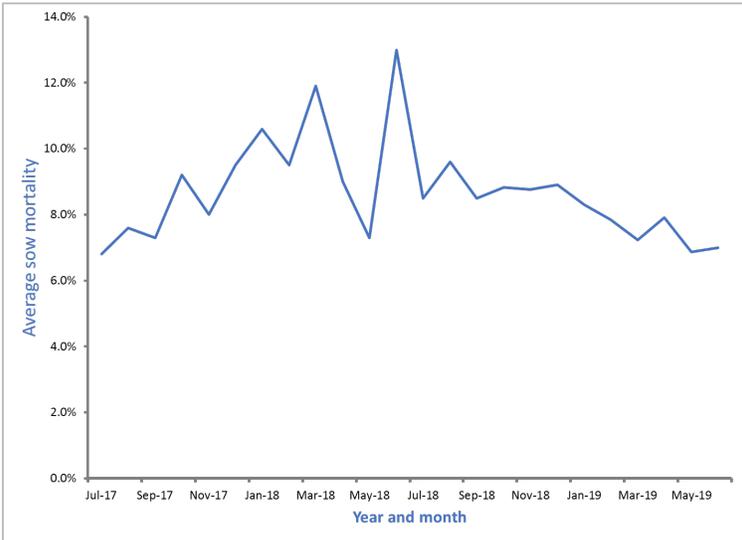
Lower sow retention can be the result of a higher mortality rate. Several risk factors contributing in different ways leave producers facing a very complex issue. The solution is a comprehensive approach to drive improvement. Let's walk through a case study.

**Case Study**  
Farm: 15,000-head sow operation  
Location: United States  
Issue: Increased rate of sow mortality

### The starting point

The producer experienced an escalation in annualized mortality from approximately 7% to a peak at 12-13% (see Figure 1). A system review indicated stocking density and selection were the two most significant opportunities, with a few additional areas to address.

**Figure 1: Annualized sow mortality in a 15,000 sow US producer**



Source: PIC Global Technical Services, unpublished



## Pig Improver

### Optimized stocking density in developing gilts

A data analysis revealed sow mortality was being driven by high losses of younger parity females. The producer and the PIC Technical Services team noticed pens in the gilt developer unit were overcrowded (relative to best practices) making it a tough situation for some gilts in each pen.

As a response, an action plan was developed to improve ventilation and a holding area was created for non-selects once identified. Having a dedicated space to hold non-selects allowed the farm to better utilize floor-space through the growing cycle and reduce the number of gilts per water source and feeder space during critical age periods.

These changes increased the pool of selectable gilts and the quality of the gilts available to breed after selection. The changes resulted in a positive impact on the retention of younger parity sows, reducing sow mortality from over 10% to a single-digit percentage.

Reducing overcrowding doesn't happen overnight. Production flow is typically set during facility construction and any decision to modify takes months to have any impact downstream. However, by proactively making small adjustments, you can still have a big impact on future gilt quality. For more information about optimal stocking densities by ages, please review the [Gilt and Sow Management Guidelines](#).

In the next Pig Improver, additional on-farm strategies to improve sow retention will be covered.