

Dr. Caleb Shull, The Maschhoffs, discusses his research and the relationship between mortality and opportunity costs.



Mortality

Mortality rates across all stages of production are a challenge for the swine industry. On average, piglet mortality is 20%, 8-12% in growing pigs, and 12% for sows. It is difficult to make continuous and sustained improvements on mortality, primarily because we are dealing with individual pig units and metrics. It can also be difficult to understand the root cause of why a pig has died. In addition, labor is a limiting factor in providing proper pig care, and early identification of pigs needing additional attention or treatment.

Opportunity cost

Dr. Caleb Shull estimates 2.9 billion dollars in annual losses from combined piglet, growing pig and sow mortality across the United States. When evaluating the cost of mortality, opportunity cost is often utilized. Opportunity cost takes in to account what you would have made off the pig if it had gone to harvest, and subtracts off the costs you did not incur because of the pig dying at an earlier age. These cost savings would be related to feed, labor, transport and health expenses. If the value of a weaned pig is \$60 and you have \$1 invested in health and labor costs, and that pig does not survive, you would subtract the \$1 in savings from the value of the pig. Leaving you \$59 in opportunity cost or lost value due to mortality.

Research

Many commercial swine operations carry out their own research. One of the primary considerations when conducting such research is return on investment. Improving pigs per sow and throughput are significant drivers of margin, and influence profitability of an operation. Research to improve and address causes of mortality requires a greater number of experimental units, to see significant differences, when compared to growth performance work.

Looking forward

Collaboration is essential to solving the industry wide issue of mortality. This requires commercial operations to look outside their business for partnerships, such as with academia or outside vendors. Control what factors you are able, this includes keeping endemic disease in check on your operation. Use of technology can help you better understand your barn and manage the pig's environment. There are valuable technologies currently on the market, but you have to be willing to implement such changes on your operation. As an industry, we cannot continue down the current path, now is the time to make positive change to set a brighter course for future generations.

To Listen to this full podcast please visit: <https://globalagnetwork.com/pigx/podcast/season-2-ep-1-mortality-economics-with-dr-caleb-shull>

