ISSUE: Livestock producers at every level of the supply chain are interconnected, including here in the strong cow/calf state of Tennessee. A downside to this is the potential for emerging diseases to have catastrophic impacts on animal health and economic stability. Out of caution, producers employ preventive biosecurity on farms, feedlots, and throughout the supply chain to limit the risks of contracting and spreading disease to ensure a safe and healthy food supply.

Disposal capacity for the removal of diseased animal carcasses is one aspect of biosecurity management the producer controls. Producers take seriously the importance of proactive disease management, but how much are they willing to invest to protect animal health and reduce financial risks associated with disease outbreaks?

WHAT HAS BEEN DONE: Thompson led a first-of-its-kind study to determine how much money feedlot producers are willing to invest in on-site disposal capacity within the next three years. Field survey results demonstrated that, on average, feedlot producers were willing to make a one-time investment of approximately $14,000 in on-farm disposal capacity for use during a disease outbreak when carcasses cannot be removed from the farm due to quarantine. Several of the factors contributing to the feedlot operators’ willingness to pay included size of the feedlot, the perceived risk of disease, and death loss rate. Each variable speaks to the feedlots’ ability to invest in current on-site disposal methods and whether the producer believes it is immediately necessary to invest in this disposal capacity proactively before a disease outbreak occurs.

IMPACT: This study provides important information to industry and policymakers regarding biosecurity cost and policy structures. Biosecurity is the first line of defense to ensure a healthy and plentiful food supply. Understanding how producers make the decision to invest in biosecurity is important in creating cost structures and forming policies that incentivize adoption that are both beneficial to the producer, animal health, and to the food supply.

PUBLICATIONS: