

Micro-Aid® for Horses Impact on Ammonia and Other Noxious Gases

Micro-Aid® is a safe, all-natural feed additive that has been proven through extensive research in multiple species to reduce ammonia and other noxious gases. Research also demonstrates that Micro-Aid® reduces intestinal ammonia, which then results in less damage to absorptive tissue, reduced gut oxygen consumption, and improved nutrient utilization.

Horse stalls and barns can be incubators of a wide range of respiratory problems, especially during the winter months. This is because stables contain various concentrations of dust, bacteria, viruses, fungal spores and ammonia. Poor ventilation in the barn can exacerbate the level of these compounds. Even with daytime warming in early spring and late fall, most barns remain closed overnight. This results in elevated ammonia levels for several months of the year in many geographic regions.

Ammonia originates via bacterial decomposition of fecal and urinary nitrogenous compounds excreted by the horse. This reaction is influenced by stall ambient temperature. Unfortunately, excess ammonia can negatively impact equine health. The consequences are diverse and include such issues as eye and respiratory lesions, nasal discharge, heaves, and foal pneumonia. In young horses, respiratory problems may permanently impair future performance, while respiratory problems are a major cause of poor health and performance in mature horses.

Ammonia concentrations as low as 50 ppm elicit a negative impact in humans, while a level not to exceed 25 ppm in a constant environment for 8 hours or 35 ppm for 15 minutes is generally recommended. The maximum ammonia concentration recommended by OSHA for livestock production facilities is 25 ppm. Additionally, ammonia concentrations of 25 ppm have been shown to reduce gain and feed efficiency in other livestock species.

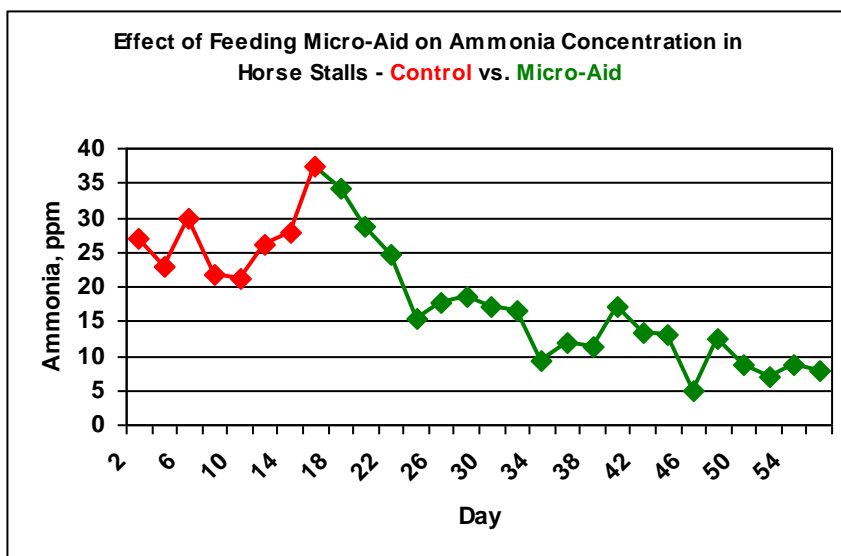
In addition to health and performance issues, equine operations are encountering increasing levels of scrutiny from zoning officials and environmental groups. Zoning regulations vary greatly depending upon the locale, and many equine operations are evaluated by environmental agencies to determine if their operations fall under the guidelines of Animal Feeding Operations (AFO) and Concentrated Animal Feeding Operations (CAFO). The industry is also becoming more aware of the negative aspects that high environmental ammonia concentrations can have on the health and well-being of workers in these facilities.

Micro-Aid® is an effective technology that has been used in the livestock and poultry industry for years to control odors, improve performance and to provide a safer work environment for farm labor. The success of Micro-Aid® in livestock operations demonstrates its value for equine operations as well. Controlling noxious gases with Micro-Aid® provides a healthier environment that reduces respiratory stress, improves digestion and oxygen capacity, and enhances equine performance. Because horse owner awareness and concern about the health and welfare of horses and people is increasing, the cost for utilizing Micro-Aid® to control stall ammonia and other noxious gases is more than justified given the positive results obtained. Micro-Aid® can be fed to horses for just pennies per day.

In a recent field study, Micro-Aid® reduced stall ammonia concentrations by 65%. This reduction in ammonia creates a healthier environment; thus, positively influencing the health and well-being of horses and farm workers.

In addition to improving the external environment, Micro-Aid® also improves the internal environment of the gastrointestinal tract. By reducing intestinal ammonia (by-product of digestive processes), Micro-Aid® improves the gut's health and digestive capacity, resulting in better nutrient utilization and increased blood oxygen capacity.

Micro-Aid® is a safe, all-natural feed additive that is effective in all horses. Micro-Aid® promotes a healthier internal and external environment that results in improved digestion and oxygen capacity, reduced respiratory stress, and reduced health risk for horses and farm workers.



Micro-Aid® in all feed, all the time