

## FARMERS' BEHAVIORAL HEALTH IMPACTS HERD HEALTH

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Farmers' behavioral health affects the animals they raise. Dog owners are well aware their pets sense how they feel.

Practitioners of artificial insemination of livestock have long known their stress levels affect the conception rate of the animals they are breeding. Animals detect the tension of the people working with them. Reproductive success diminishes when the AI technician is stressed out.

Animals can sense when their handler is upset or relaxed and calm. I know from my own experiences when I raised cattle that if I felt the need to hurry as I artificially inseminated a cow, she usually didn't cooperate. If I took my time, the cow relaxed and the job usually went faster and was more likely to lead to a pregnancy.

**Stress increases the risk of farming-related injuries.** An analysis of injuries to North Dakota farmers during the Farm Crisis of the 1980s by Jack Geller, Richard Ludtke and Terry Stratton, published in 1990 in the Journal of Rural Health, indicated that stress, especially financial difficulties, increased their chances of injury.

Using data from the Iowa Farm Family Health and Hazard Survey (1994) and the Iowa Farm Poll (1989), Kendall Thu, Paul Lasley and other colleagues determined that stress was a risk factor for agricultural injuries. Their research was reported in the Journal of Agromedicine in 1997.

**Farmers' stress levels also can affect the health of their animals.** Christina Lunner Kolstrup and Jan Hultgren examined the relationship of symptoms reported by 41 owners or managers and 20 employed workers on Swedish dairy farms to the physical health of their cows. Their study was published in the Journal of Agricultural Safety and Health in 2011.

The study confirmed that stressful working conditions and behavioral health symptoms "are not uncommon" among owners/managers and employed workers. The owners/managers and dairy farm workers reported their perceived stressors and symptoms on questionnaires. Generally, the workers reported more symptoms than the owners/managers.

Reported stressors included these: having to work very fast, having little influence over decisions and workloads, low sense of meaningfulness of the work and low sense of staff coherence. These stressors were associated with the following symptoms: feelings of irritation, fatigue, insomnia, headaches, nervousness and abdominal pain. Workers who felt their contributions to the dairy farm operation were valued by the owners/managers reported fewer symptoms and greater pleasure from their work.

The study found that the incidence of behavioral health symptoms of the owners/managers and employed workers was positively correlated with the incidence of mastitis in cows and the total number

of cow diseases that were reported in the dairy veterinary records. It should be emphasized that, by design, the study yielded findings that are correlations, not cause-effect outcomes.

**Happy cows are likely to have happy handlers.** How their caretakers feel and treat their cows are more important. It is probably also the case that healthy animals make their caretakers feel better too.

The health of farm animals and the condition of farm buildings, machinery and fences may be indicators of the stress level of the persons who work on the farm. A veterinarian friend mentioned to me that the somatic cell count in milk samples from dairy cows and the body condition scores of beef cattle often reflect how stressed their owners are.

**It helps if supervisors promote regular communication with their workers** and demonstrate leadership in maintaining a behaviorally healthy working environment. Regularly scheduled meetings of the owners, managers and the farm workers helps the employees to feel their perceptions are valued.

Some supervisors reward valuable suggestions of employees with bonuses. Another beneficial management practice is to make sure all employees, including the owners, have sufficient time to sleep, recreate, exercise, and associate with family and friends. These are investments in employees that improve production and safety.

**Fatigue is a common problem of farm workers.** We accumulate sleep debt whenever we obtain less than our bodies need. Most persons require about eight hours of sleep daily but the normal range varies from six to ten hours.

If we accumulate ten hours of sleep debt, we behave similarly to when we have .08 percent alcohol in our blood, which is the legal minimum for inebriation in most states and provinces. Ten hours of sleep debt slows our reaction time, reduces the accuracy of motor movements and memory, makes us more emotionally impulsive and compromises judgment. In short, insufficient sleep increases the risk of injuries.

When we are tired we are more likely to incur injuries when working with animals. Livestock can detect when “we aren’t our usual selves.” The annual reports by the National Institute of Occupational Safety and Health, entitled [Injuries among Farm Workers in the United States](#), routinely indicate animals are the leading cause of nonfatal farming-related injuries.

It is important that farmers who work with livestock recognize healthy working conditions and good behavioral health of the workers increase productivity.

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