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Crowding has its Limits
Detrimental effects surface above 120%
by [Jim Dickrell](#)

Research studies from across the globe suggest you can only overcrowd pens so much before cows say no more.

“One hundred twenty percent may be the maximum stocking density before you see detrimental effects,” says Peter Krawczel of the Miner Institute in Chazy, N.Y.

Above that limit, cows:

- sacrifice feeding time to make up for lost resting time.
- spend more time actually standing or waiting in alleys to lie down; and
- are unable to recover from resting deprivation once it exceeds two to four hours per day.

In a Canadian study, cows decreased lying times from 13 hours/day at 100% stocking rates to 11 hours/day when stocking rates climbed to 150%. And the Miner Institute’s research shows that every hour lost in resting time results in a loss of 3.7 lb./cow/day in milk production.

Researchers also found that a greater number of aggressive interactions per hour occurred with each increase in stocking density, Krawczel says.

Plus, overcrowding in the freestalls tends to result in overcrowding at the feed bunk, he adds.

“One potential coping strategy that was observed was the shift in feeding times, which may be problematic if the ration is sorted by the first cows to eat,” Krawczel says. He notes that milk fat percent was reduced about 0.2% when stocking rates reached 142%.

Somatic cell counts tend to climb as well, from less than 150,000 cells/ml at stocking rates below 113% to more than 225,000 cells/ml at a rate of 142%. There is also a tendency for more clinical cases of mastitis.

In addition, hoof health is compromised as cows stand on wet concrete more hours of the day.