

IT'S MORE THAN JUST A PEN MOVE

Pen moves cause social stress, which reduces performance.

Pen movement is an overlooked aspect of a fresh cow program. Fresh cows are the most fragile and immunosuppressed group of cows on every dairy, and pen moves cause social stress, which reduces performance. Researchers from the University of Wisconsin School of Veterinary Medicine list reducing pen moves among the five keys to preventing poor fresh cow transition.¹

Each pen move requires a cow to familiarize herself with new surroundings and re-establish her social rank in the new group. Studies have shown that it takes two to five days for a group of cows to become socially stable after a pen move.² In the meantime, the production declines really add up.³

HOSPITAL PENS MAKE IT WORSE

Moving fresh cows into a hospital pen can create even more problems. Fresh cows have a compromised immune system after calving, and moving them into a group with sick cows carries serious risks.⁴

Other metabolic diseases — Risk of disease transmission is high when fresh cows are housed with sick ones.

Salmonella — Hospital cows are 11 times more likely to contract *Salmonella* from carriers shedding organisms in the pen.⁵

Mastitis — Contagious mastitis pathogens can be easily passed via equipment or milkers' hands from sick cows to fresh herdmates. Each outbreak costs \$200 per case.⁶

Mycoplasma — Many *mycoplasma* outbreaks begin when sick cows are grouped with fresh cows. *Mycoplasma* cost can add up to \$20 per day.⁷

Metritis — Each case costs between \$304 and \$354 in losses of production and performance.⁸

Take steps to reduce the number of animals that need to be moved to a hospital pen. Using treatments with no milk withhold allows producers to reduce the impact of pen moves and keeps fresh cows transitioning into high production.



COSTS OF A PEN MOVE

Reduced dry matter intake

Less time spent eating

Reduced milk production

Greater number of aggressive confrontations

Reduced lying time

COUNT THE COSTS OF YOUR PEN MOVES

Use this worksheet to help you determine pen moves on your dairy and how you can minimize effects on performance.

Q1. How many times do you move your cows during the transition period?
Example: 1 – early dry area, 2 – close-up pen, 3 – fresh pen, etc.

Q2. Do you move fresh cows into a hospital pen when they are sick?
 No Yes If so, for what conditions? How long do they typically stay there?

Q3. Do you use an antibiotic with a milk withhold time?
 No Yes If so, do you move treated cows into the hospital pen during the withhold time?

Q4. Do your cows in the hospital pen often contract other diseases?
 No Yes, please describe (diseases, incidence):

Q5. What percentage of cows moved to the hospital pen return to the milking herd?

Q6. What is your herd metritis rate? Do you move diagnosed cows to the hospital pen?

Q7. Is *Salmonella* a concern in your herd?
 No Yes If so, where is it most often contracted?

Q8. Is *Mycoplasma* a concern in your herd?
 No Yes If so, where is it most often contracted?

Q9. Do you have a pen dedicated to fresh cow management?
 No Yes, please describe (size, stock density, duration of stay):

Q10. What is your protocol for evaluating and monitoring cows during the fresh period? Please list:

Q11. How do you evaluate the success of your fresh cow management program?

Q12. What are some ways you think you can decrease the number of pen moves?

¹Nordlund K. The Five Key Factors in Transition Cow Management of Freestall Dairy Herds, in *Proceedings*. 46th Florida Dairy Production Conference, 2009. Available at <http://dairy.ifas.ufl.edu/dpc/2009/Nordlund.pdf>. Accessed March 25, 2011.

²Boe KE and Faerevik G. 2003. Grouping and social preferences in calves, heifers, and cows. *Appl. Anim. Behav. Sci.* 80:175-190.

³von Keyserlingk MA, Olenick D, Weary DM. Acute behavioral effects of regrouping dairy cows. *J Dairy Sci.* 2008;91(3): 1011-6.

⁴Kirk J and Jardon P. Dairy hospital pens. UC Davis Veterinary Medicine Extension. Available at http://www.vetmed.ucdavis.edu/vetext/INF-DA/INF-DA_DAIHOSPITALPENS.HTML. Accessed March 25, 2011.

⁵*Salmonella*: Cobbold RN, Rice DH, Davis MA, Besser TE, Hancock DD. Long-term persistence of multi-drug-resistant *Salmonella enterica* serovar Newport in two dairy herds. *J Am Vet Med Assoc.* 2006;228(4):585-591.

⁶Mastitis: National Mastitis Council. The Value and Use of Dairy Herd Improvement Somatic Cell Count. Available at: www.nmconline.org/dhiscc.htm. Accessed: April 27, 2011.

⁷*Mycoplasma*: Punyapornwithaya V, Fox LK, Hancock DD, Gay JM, Wenz JR, Allredge JR. Incidence and transmission of *Mycoplasma bovis* mastitis in Holstein dairy cows in a hospital pen: A case study. *J Prev Vet Med.* 2011;98(1):74-80.

⁸Metritis: Modified from Overton M, Fetrow J. Economics of Postpartum Uterine Health, in *Proceedings*. Dairy Cattle Reproduction Council Convention, 2008: 39-44.