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Animal Health and Welfare, OMAFRA
1 Stone Road West, Guelph, Ontario N1G 4Y2

Leslie Woodcock	(519) 826-6364

Wellington Place, R. R. # 1, Fergus, Ontario N1M 2W3

Neil Anderson	(519) 846-3410
Tim Blackwell	(519) 846-3413
Ann Godkin	(519) 846-3409
Jocelyn Jansen	(519) 846-3414
Bob Wright	(519) 846-3412
Kathy Zurbrigg	(519) 846-3418

OVC, University of Guelph, Guelph, Ontario N1G 2W1

Babak Sanei	(519) 824-4120 ext. 54650

Office of the Chief Veterinarian, OMAFRA
1 Stone Road West, Guelph, Ontario N1G 4Y2

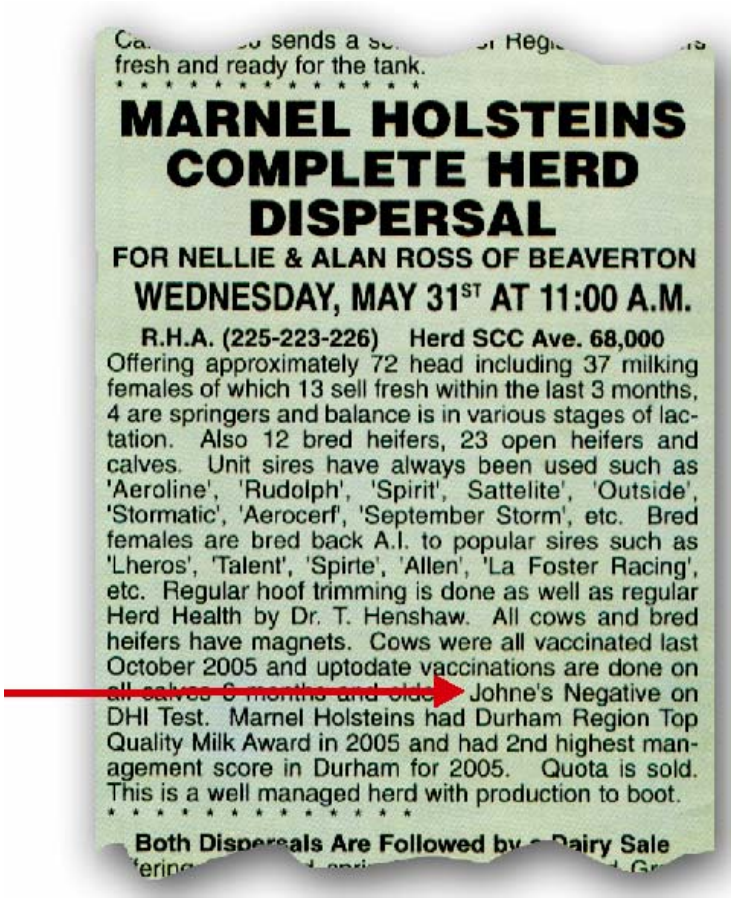
Chief Veterinarian	Deb Stark	(519) 826-3528
Assistant Chief Veterinarian	David Alves	(519) 826-3127
Provincial Biosecurity	Paul Innes	(519) 826-4043
Epidemiology	Bruce McNab	(519) 826-4178

Contact: Kathy Zurbrigg, Animal Health and Welfare
Ontario Ministry of Agriculture, Food and Rural Affairs
Wellington Place, R.R. #1, Fergus, Ontario, Canada N1M 2W3
Tel: (519) 846-3418 Fax: (519) 846-8101
E-mail: kathy.zurbrigg@omafra.gov.on.ca

Herd Level Efforts on Disease Control

Ann Godkin, Animal Health and Welfare, OMAFRA

Producers are recognizing the importance of advertising their efforts to prevent contagious disease in their herds. This effort informs potential buyers that they are less likely to acquire a disease if purchasing animals from such herds. These herds are good sources for healthy replacement dairy cows and heifers.



fresh and ready for the tank.

MARNEL HOLSTEINS
COMPLETE HERD DISPERSAL
FOR NELLIE & ALAN ROSS OF BEAVERTON
WEDNESDAY, MAY 31ST AT 11:00 A.M.

R.H.A. (225-223-226) Herd SCC Ave. 68,000

Offering approximately 72 head including 37 milking females of which 13 sell fresh within the last 3 months, 4 are springers and balance is in various stages of lactation. Also 12 bred heifers, 23 open heifers and calves. Unit sires have always been used such as 'Aeroline', 'Rudolph', 'Spirit', Sattelite', 'Outside', 'Stormatic', 'Aerocerf', 'September Storm', etc. Bred females are bred back A.I. to popular sires such as 'Lheros', 'Talent', 'Spirte', 'Allen', 'La Foster Racing', etc. Regular hoof trimming is done as well as regular Herd Health by Dr. T. Henshaw. All cows and bred heifers have magnets. Cows were all vaccinated last October 2005 and uptodate vaccinations are done on all calves 6 months and older. Johne's Negative on DHI Test. Marnel Holsteins had Durham Region Top Quality Milk Award in 2005 and had 2nd highest management score in Durham for 2005. Quota is sold. This is a well managed herd with production to boot.

Both Dispersals Are Followed by a Dairy Sale

This ad, from a recent Ontario farm newspaper, is for an Ontario herd. It shows that the owners have put a great effort into disease prevention. The sales ad reports their disease prevention efforts and results. They have strived to prevent contagious mastitis (low SCC), BVD (vaccination status) and Johne's Disease (herd tested by DHI using the milk ELISA). They make it clear that their herd health program is overseen by a veterinarian.

Many producers and veterinarians are concerned that we need certification programs for Johne's disease. Many good efforts have been snagged by the difficulty of creating a "certification" program based on testing, and aborted because of high testing costs and low returns on investment.

For the three diseases this herd owner and their veterinarian wish to control, there are no guarantees about the status of any particular cow. Yet this is a herd that clearly places great emphasis on disease control.

Who would you want your dairy clients to buy from?

There are no "perfect" tests that give the status of an individual cow in black and white for most of the diseases of interest to us. For mastitis, interpretation of SCC is a continuum where we are "surer" of the meaning of the results (the risk of infection) at the extremes of the spectrum. For viral diseases, we use serology, a secondary test for evidence of infection. For Johne's Disease, we can use whole herd testing for the likelihood of infection in a herd and then we can "test" heifer raising by inspecting for the risk of infection transfer.

As veterinarians, we should utilize our expertise to help our clients purchase healthy replacement cattle. This will involve more than testing. We do "pre-purchase exams" for other species, why not for heifers? A pre-purchase exam should involve not just the animals themselves but the farms the farms of origin.

Disease "certification" programs based on extensive testing programs do have their place. However, a good track record of disease occurrence, testing by a third party, animal identification and veterinary oversight in the seller's herd goes a long way to ensure the health of any new additions to a buyer's herd.

Bacterial Counts in Free-Stall Bedding on Fifteen Ontario Farms

Neil Anderson, Animal Health and Welfare, OMAFRA

Mastitis rates are related to bacterial counts in bedding (Hogan 1989). The likelihood of mastitis increases with the percentage of dirty free stalls (Schukken 1990). Advisors commonly state that bedding counts must be below 1 million cells per gram of bedding, or per mL solution, when tested using standardized methods. Therefore, it makes sense to adopt husbandry practices that assure clean stalls. Nevertheless, how clean is clean, when using common stall-cleaning methods? Our summer-2005 research findings on 15 Ontario farms should be of interest to practitioners dealing with environmental mastitis in their clients' herds.

There were no sand-bedded stalls in the project. One person collected all bedding samples from every farm. We packed samples with ice in a cold chest while in transit to our office for freezing and subsequent delivery to the laboratory.

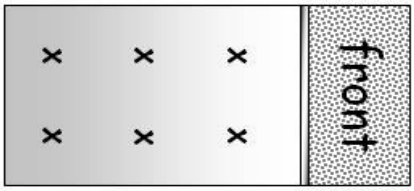


Figure 1. Stall bed sampling

Figure 1. We followed a standardized protocol for stall selection within a barn and bedding selection within a stall. Stalls were located at the 1/3rd, middle and 2/3 rd point in the rows. The diagram shows the six locations used for collection of bedding from each stall. We took care not to collect manure. We pooled bedding from locations within a barn to form a composite sample for the farm. We also collected new bedding samples from their storage sites.

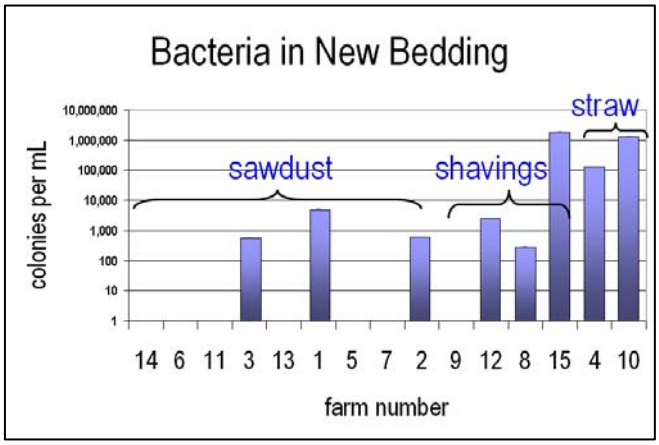


Figure 2

Figure 2. Sawdust, shavings and straw were the three bedding types encountered on the 15 farms. Remarkably, there was no bacterial growth in new bedding samples from 7 of 15 farms. Two samples of new bedding had counts in excess of 1 million colonies per mL. One of those, from farm #15, was from shavings stored outdoors and covered with a plastic tarp. All others were stored indoors.

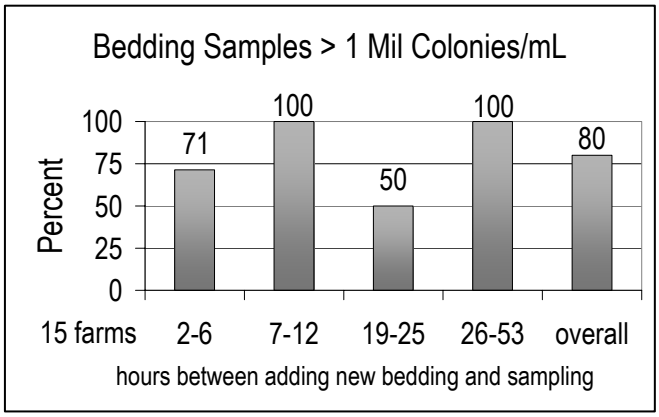


Figure 3

Figure 3. Samples were collected between 2 to 53 hours following the addition of new bedding to stalls. Overall, 80% of the farms had bacterial counts greater than 1 million cells per mL in their samples of stall bedding. For example, in the group sampled 2-6 hours after addition of new bedding, 71% had counts greater than 1 million and in 100% of samples in the 7-12 hour category.

Figure 4. Streptococci and Coliform were the major species identified in bedding samples collected from stalls. Fully 73% (11/15) of samples had greater than 1 million colonies of Streptococcus spp. One of 15 samples (7%) had greater than 1 million colonies of Coliforms. The likelihood of hazardous levels of Streptococcus spp. was 38 times greater than for Coliforms (OR=38, 95% CI 3.7-395).

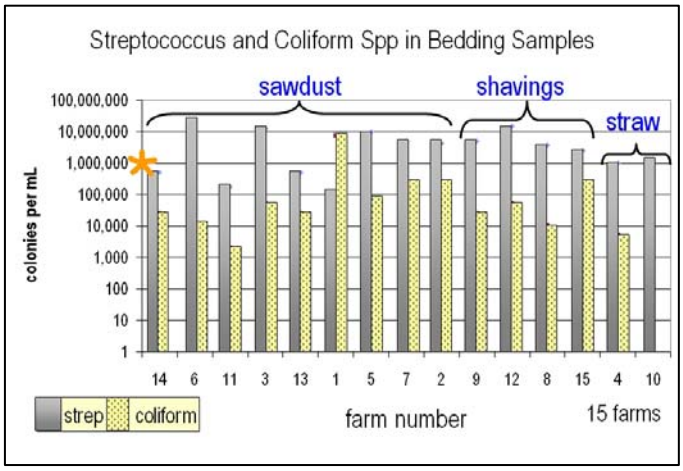


Figure 4

On several farms, bedding from recently cleaned stalls had hazardous levels of environmental bacteria soon after addition of new bedding. The reason may be the common practice of removing manure patties and adding new bedding onto the wet spots. This cleaning protocol fails to remove contaminated bedding in adjacent parts of the stall.

When looking for environmental determinants of mastitis, we should investigate grooming techniques and cleanliness of bedding. Producers often clean and groom stalls while cows are in the parlor. Since recently milked cows may be at greater risk of udder infections, it is reasonable to provide the cleanest beds immediately after milking. Samples collected a few hours after this major stall grooming should provide a practical assessment of stall husbandry.

Bacterial cultures could reinforce or stimulate change in stall husbandry more convincingly than visual assessments that score stalls as dirty or clean. Our sampling technique included bedding from the rear, middle and front of stalls. It was an effort to assess overall stall cleanliness in a fair manner rather than focus on the commonly contaminated rear part of the stall. Some producers clean the entire back 1/3rd of every stall at morning and evening milkings and clean soiled spots at two additional times. Their approach has great merit. However, producers should consider stall-cleaning protocols that include cleaning of the entire stall surface on a regular schedule.

Acknowledgements: Ms Chantal Fleury (Animal Science, McGill University, Ontario-Quebec Summer 2005 Student Exchange Program) visited farms and collected bedding samples. Dr. Anna Bashiri, Department of Population Medicine, Ontario Veterinary College, University of Guelph, provided laboratory services. SunNorth Systems, Seaforth, Ontario, paid for laboratory testing.

References:

1. Hogan JS *et al.* Bacterial counts in bedding materials used on nine commercial dairies. J Dairy Sci. 1989;72(1):250-258.
2. Schukken YH *et al.* Risk Factors for Clinical Mastitis in Herds with a Low Bulk Milk Somatic Cell Count. 1. Data and Risk Factors for All Cases. J. Dairy Sci. 1990;73(12):3463-3471.

Bacteria Total Aerobic and Coliform Count – Bedding

The Animal Health Laboratory, University of Guelph, offers the test on Mondays, Tuesdays and Wednesdays each week. The cost is $17.80 with a turnaround time of 2-3 days. Please see page 42 of the May 1, 2006 AHL Fee Schedule. Call 519-824-4120 x 54502 for their sampling advice.

Manual or Automatic Controllers for Curtain Walls

Neil Anderson, Animal Health and Welfare, OMAFRA

The choice of automatic or manual curtain controllers is one of many decisions required when building a dairy barn. An automatic controller adds cost. However, it adjusts curtains when we are absent from the barn. Producer testimonials are common for both systems. There are scant graphic data to illustrate what happens with temperature and humidity in the barns. Some illustrations may benefit those giving advice or making a choice.

A pilot project looked at two free-stall barns – one with manual curtain controllers and one with automatic controllers. Data loggers recorded hourly temperature (°C) and relative humidity (%) within two free-stall barns and outside the barns during the same days in February and March 2006. Graphs illustrate the findings over 6 days in early February.

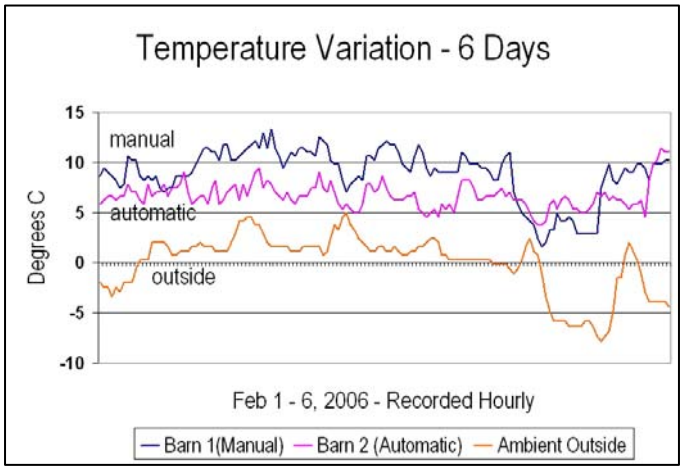


Figure 1

Figure 1. Temperature recordings within a barn with manually controlled curtains (top line), a barn with automatically controlled curtains (middle line) and outside the barn (bottom line). Ambient outside temperatures ranged from -8 to +5°C during the 6 days. During the sudden drop in ambient temperature on day 5 (right side of graph), temperatures were warmer within the barn with automatic controllers than within the barn with manual controllers.

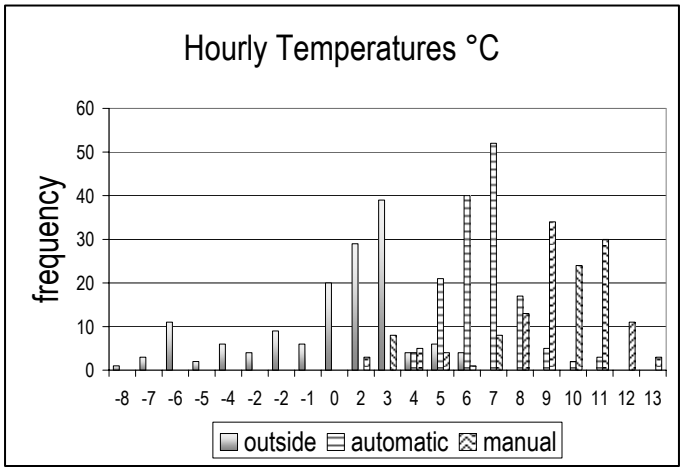


Figure 2

Figure 2. In the barn with manual curtains, temperatures were generally warmer and mostly between 8-12°C with an overall range of 2-13°C. In the barn with automatic controllers, temperatures were cooler and mostly between 5-8°C with an overall range of 4-11°C. The most common outdoor temperatures were 0-3°C.

The barn with manual controllers was a 2-year-old, 4-row, free-stall barn, with the milk parlor inside the cow housing. It had a drive-through feed alley and maternity pens. In addition to curtains, it had chimneys along the peak of the roof. Stocking density was slightly less than one cow per stall. The barn with automatic controllers was a 4-year-old, 6-row, free-stall barn, with the milk parlor away from the cow housing. It had a centre feed bunk with overhead conveyor, feed mixing area, maternity pens and special needs pens under one roof. It had chimneys along the peak of the roof. Stocking density was about one cow per stall.

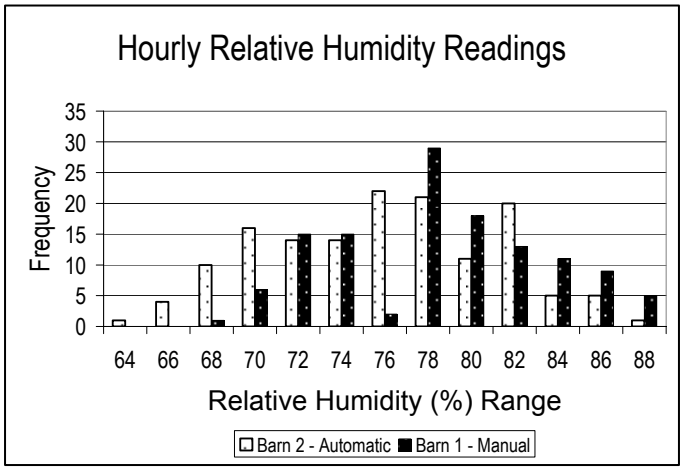


Figure 3

Figure 3. The frequency of hourly relative humidity readings within a barn with automatic curtain controllers and a barn with manual curtain controllers during February 1-6, 2006. The ambient relative humidity outside the barns ranged from 68-99% over the observation period. The barn with automatic controllers had more hourly readings at lower relative humidity. The barn with manual controllers had more hourly readings at higher humidity levels.

Temperature and humidity within barns are environmental factors of interest to producers and veterinarians. In winter, barn temperatures above freezing keep water systems and cow alleys from freezing. Moreover, since dairy cows perform better in cooler temperatures, producers commonly strive to achieve barn temperatures of 5-10°C during winter months. Humidity is of interest because environmental bacteria and hazards of mastitis are greater in moist bedding.

Data from these two barns are interesting but may not convince anyone to invest in automatic curtain controllers. Automation of curtains may provide a more consistent environment in a barn. It is unknown if the additional cost return benefits from improved feed intake, milk production or health. However, there should be savings in labour. Next winter it would be useful to log data from several barns. If you have two similar barns with manual and automatic curtain controllers, we would be interested in collecting data from them. Please let us know.

From the Hospital Pen…….

Ann Godkin, Animal Health and Welfare, OMAFRA

Association between the existence of calves persistently infected with BVD virus and commingling on pen morbidity in feedlot cattle.
A summary of O'Connor MA, SD Sorden and MD Apley. AJVR Vol 66 No.12 December 2005

Cattle in a 4000-head feedlot in Iowa, housed in 50 pens, were assessed over 18 months for the relative impact of commingling (cattle from a maximum of 5 sources) and the presence of a BVD-PI animal on disease. Cattle entered the lot at a mean weight <360 kgs. All cattle were vaccinated 7 to 10 days post-arrival with MLV vaccine for BVD, IBR, PI-3 and BRSV. All cattle were ear notched and tested for BVD on arrival.

Ear notches from 10 of 5,041 calves were positive for BVD and were presumed to be PI. These calves were in 8 pens. Treatments (for any disease) were given to 909 calves; 654 of these were treated for respiratory disease. None of the PI calves died during the feeding period.

Commingling had the biggest effect on pen respiratory disease treatment rates. Commingled pens had a 3 to 4 x increased risk of respiratory disease. Respiratory disease treatment rates were reduced in those pens with a PI present in comparison to those without one. The lowest disease treatment rates were those in pens where calves were from a single source and a PI was present. The risk of respiratory disease was decreased by 60% if calves were from a single source and the pen had a BVD-PI calf present.

Automatic Mixer for Acidified Milk

Neil Anderson, Animal Health and Welfare, OMAFRA

Timely stirring of acidified milk assures calves receive a consistent mix when they latch on to nipples. Since milk naturally separates with acidification, timely stirring is an essential part of the free-access feeding scheme. At a Milverton-area farm, a dose of old-fashioned ingenuity from a young farmer assures an even mix throughout the day. His solution may be of use to others.

Figure 1

Figure 1. The storage and mixing system consists of a barrel, a 1/3-HP motor to drive a mixer and two timers

(shown in Figures 2 and 3). The motor mounts to a lid. A cart makes easy work of moving the barrel for washing and filling. Cables attach to the lid in three locations and they support the mixer above the barrel when moving the barrel away.

Two switches (not shown), mounted on a beam over the barrel, permit automatic or manual control of the mixer. The automatic switch is in the off-position when the mixer is out of the barrel. The manual switch facilitates mixing of fresh batches of milk.

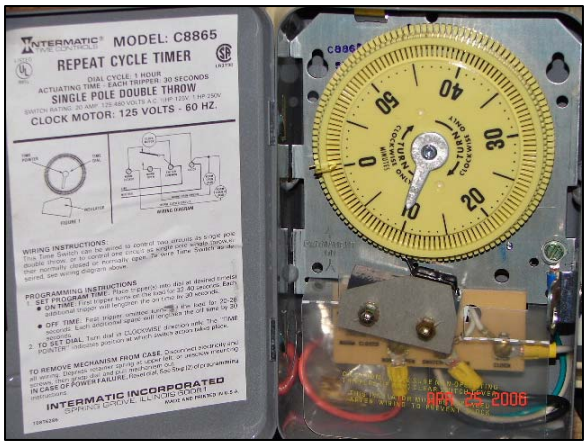


Figure 2. Automation for mixing consists of two timers. A repeat cycle timer controls when power goes to the motor and a second controls the duration of time that the motor operates. The repeat cycle timer shown in the photo has calibrations in minutes. It turns the motor on each hour to achieve 24 mixes per day.

Over-mixing can turn the feeding system into a butter churn. With the high speed of the 1/3-HP motor, short hourly-bursts of vigorous stirring produce excellent results**.** When the barrel is full, the mixer runs for 12 seconds. When below half, the mixer runs for 6 seconds.

Figure 3. The other timer in the system has calibrations in seconds to control the running time of the motor. An electrician completed the wiring of the timers (shown in the photos) and the switches.

Wasting Pigs and a Change of Environment

Tim Blackwell, Animal Health and Welfare, OMAFRA

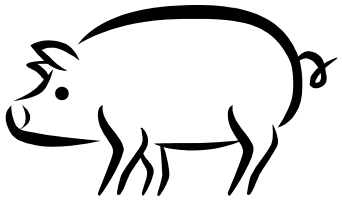
The original description of PCAD, Porcine Circovirus Associated Disease (at that time called Post-weaning multi-systemic wasting syndrome or PMWS), indicated that affected pigs had a 100% case fatality rate. It now appears that a large proportion of pigs become infected but only a small percentage show clinical signs. Field observations, as well as lesions observed in slaughterhouse specimens, indicate that many infected pigs do recover and reach slaughter weight. Unfortunately, many do not.

The spread of PCAD has resulted in some swine producers having a higher proportion of poor doing pigs on the farm. Poor doing pigs in group pens are difficult to accurately diagnose and treat. Today there is a tendency to assume that all such pigs are suffering from PCAD, but this may not be true in all cases. Post mortem examination of wasting pigs may demonstrate lesions that explain the poor growth. However, in other cases, no lesions are found. If no feed is found in the intestinal tract and no lesions are found to explain the failure to eat, starvation is sometimes suggested as the cause of the wasting. Since these pigs always have free access to feed, it is difficult to explain why they refuse to eat in the absence of organic lesions.

On some farms, removing gaunt and wasted individuals to a new pen environment with similarly affected pigs and offering a different ration starts these pigs eating again. The reason for this change in appetite is unknown. It has been hypothesized that a few strongly negative social interactions at the feeder can discourage subsequent attempts to acquire feed, particularly in low ranking individuals within the pen. The resulting catabolic state can further suppress appetite. Moving these pigs to a new environment with a more egalitarian social structure and a different feed or feeding format can reverse the wasting syndrome in some pigs.

Streptococcus suis Isolated from a Swine Producer in New York

Tim Blackwell, Animal Health and Welfare, OMAFRA



An outbreak last year of *Streptococcus suis* infections in people working closely with pigs in China served as a reminder of the zoonotic potential of *S. suis*. Recently the first case of *S. suis* meningitis in the U.S was confirmed in a previously healthy swine producer in New York state. Clinical signs in this farmer included a sudden onset of fever and confusion. *S. suis* has been confirmed as a cause of human infections in many parts of Asia and Europe. It was first reported from Denmark in 1968 and was identified in Quebec in 1996. Human infection with *S. suis* most commonly results in meningitis, but endocarditis, cellulitis, arthritis and pneumonia have also been reported. The farmer in New York recovered completely following antibiotic therapy. Veterinarians should remain vigilant concerning this rare but serious zoonotic disease.

Notes from CgFARAD

Adapted from information by Dr. Trish Dowling, CgFARAD

While most Procaine penicillin G (PPG) products have a label withdrawal time of 8-10 days for cattle and swine, CgFARAD would like to point out those brands that still have a shorter withdrawal time on the label. **Penmed, PenPro and Procaine Penicillin G** still have the original, shorter, withdrawal of 5 days on their labels. CgFARAD would direct veterinarians to use an 8-day withdrawal for swine and a 10-day withdrawal for cattle for all on-label doses of PPG products.

Livestock Medicine Use on Ontario Swine Farms: A Brief Summary of 100 Ontario CQA records

Kathy Zurbrigg, Animal Health and Welfare, OMAFRA

Two independent reviews of the Ontario CQA records have been completed, one in 2002 and one in 2005. Data were taken from 100 randomly chosen CQA records from those farms shipping over 1500 hogs per year. In the 2005 review, if a record was not available at the time the data were collected, then a 2004 record was used. Various assessments were completed using the data, including general descriptive information of the farms involved and overall livestock medicine use on the 100 swine farms.

The average, minimum and maximum number of livestock medicines protocols used on Ontario swine farms and the proportion of these drug protocols that were of a particular drug type was calculated. All drugs were placed into a "Type of Drug" category, i.e. antibiotics, vaccines, anthelmentics, steroids, etc.

In 2002, the average number of livestock treatment protocols per farm, (as obtained from the veterinary treatment protocol sheet) was **8.6**. In 2005, the average was **20.1** treatment protocols per farm. The

increased number of treatment protocols per farm in 2005 likely represents more detailed treatment protocol sheets being written by veterinarians since the 2002 review.

Table 1. The proportion of treatment protocols by "type of drug" out of the total treatment protocols for all 100 farms.

Type of Drug	Proportion 2002	Proportion 2006
Acidifier	0.11%	0.82%
Anesthetic/analgesic	0.82%	2.06%
Anthelmentic	7.50%	3.00%
Anti-inflammatory	3.70%	5.80%
Antibiotic	54.50%	57.05%
Hormone	9.90%	7.10%
Insecticide/disinfectant	0.11%	1.56%
Topical	0.70%	1.00%
Vaccine	16.40%	14.50%
Vitamin/Mineral	6.10%	5.45%
Other		0.31%

The proportions of the types of drugs used on the study farms did not change greatly with the exception of a few categories. In 2005, the proportion of records identifying use of anesthetics and analgesics more than doubled from 2002. The types of anesthetics and analgesics used did not change but more records of these drugs were found in 2005 than 2002. The increased use in this category could reflect the move, by both veterinarians and producers, towards improved swine welfare and individual treatment of pigs. This concept is supported by the increased use of anti-inflammatories in the 2005 review. The increase is surprising as a recent change in the CQA standards requires that all medications be approved for food-animal use. This change severely restricts the number of anesthetics and analgesics available for swine veterinarians.

A second drug category that had significant changes from 2002 was anthelmentics. The number of protocols decreased in 2005 by more than half.

The largest proportion of treatment protocols was for antibiotic use, with vaccines being the next largest category of protocol (**Table 2**). Not surprisingly, 4 of the 5 most common medication protocols in 2002 were either vaccines or antibiotics. In 2005, all 5 of the most common treatment protocols were antibiotics or vaccines. These are listed in Table 2.

Table 2. The five treatments that were most commonly found on CQA treatment protocol sheets in 2002 and 2005.

Treatment (2002)	Proportion of all treatment protocols reviewed in 2002	Treatment (2005)	Proportion of all treatment protocols reviewed in 2005
Penicillin (all types)	20.3%	Penicillin (all types)	16.7%
Vaccines (all types)	16.5%	Vaccines (all types)	14.5%
Tetracyclines (oral and injectable)	8.0%	Tetracyclines (oral and injectable)	10.8%
Trimethoprim/sulfa	7.5%	Tylosin	5.3%
Oxytocin	5.8%	Trimethoprim/sulfa	4.5%

Avian Influenza Update

Paul Innes, Veterinary Biosecurity, Office of the Chief Veterinarian of Ontario, and Babak Sanei, Animal Health and Welfare, OMAFRA

Avian Influenza, or "Bird Flu", continues to be in the headlines daily. The following summarizes the current Avian Influenza situation and the efforts underway to manage the risk of AI spread in Ontario.

Highly Pathogenic H5N1 (Asia) Key Points:

- The H5N1 (Asia) strain has been reported in at least 50 countries in Asia, Europe and Africa since 2003.
- This strain is more pathogenic to many species of wild and domestic birds, humans and other mammals than other known strains of AI virus.
- Currently, H5N1 (Asia) does not easily cross from birds to humans. Almost all cases in humans to date had direct contact with infected birds or their feces, and **there is no reason for the public to avoid eating properly handled and cooked poultry and eggs.**
- Cases in domestic cats have been reported; these have also resulted from direct exposure to infected birds. Transmission from cats to humans has not been demonstrated.
- There is some evidence of transmission to swine. The role of swine in the epidemiology of this virus is unclear, but swine are always a concern with respect to mixing of influenza viruses.
- The virus is likely being spread both by wild bird migration and by the movement of live poultry, contaminated people and equipment.
- Poor biosecurity allows the virus to infect commercial poultry operations and spread to other farms.
- Some wildlife experts predict H5N1 (Asia) will be detected in North America in 2006.
- Concerns about a human pandemic are based on the possibility of mutations of the avian influenza virus or recombination with human influenza viruses, which would allow for effective, and sustainable, transmission from person to person. These are essential factors in the evolution of a pandemic strain, and it is uncertain if these changes will occur with this particular virus.

What is Ontario doing to manage the risk?

- The poultry industry marketing boards are including mandatory biosecurity standards in their On-Farm Food Safety programs. Service industries, such as livestock feed suppliers, are developing and adopting farm visit biosecurity protocols and guidelines. These measures are aimed to be effective against AI and a broad range of hazards.

- The Canadian Cooperative Wildlife Health Centre (CCWHC) is undertaking a wild bird survey for the second consecutive year, focusing on those species and areas where H5N1 is most likely to be found. For more information on the 2006 survey see the CCWHC web site. http://wildlife1.usask.ca/en/aiv/index.php

- Contingency planning is occurring at the provincial and national levels with government, wildlife and poultry industry representatives. The focus of these discussions is risk assessment and response in the event H5N1 is discovered in North America, Canada or Ontario.

- OMAFRA, the Poultry Industry Council and the University of Guelph are developing training and educational resources for non-regulated, hobby and small flock owners on the basics of biosecurity and disease prevention. This project will also develop training materials for veterinarians on the recognition and management of poultry diseases, and basic biosecurity guidelines for poultry clients, complemented by a series of seminars and wet lab sessions planned for the fall of 2006. Further details will be available later in the summer.

Anti-Virals in Animals: The Use of Tamiflu or Similar Products in Veterinary Medicine in Ontario

Dr. Kim Klotins, Antimicrobial Resistance Specialist, OMAFRA

The use of anti-viral medications to prevent or treat a variety of viral infections, including influenza, herpes and shingles, is becoming more common in our society. Influenza is a current hot topic around the world, particularly in dogs, horses and birds. Clients seeking protection from avian influenza for their pets and livestock are asking veterinarians to explore treatment options with anti-virals.

There are currently two classes of anti-virals approved in either the USA or Canada to prevent or treat influenza in people. Oseltamivir – Tamiflu® and Zanamivir – Relenza® are neuraminidase inhibitors. Amantadine – Symmetrel® or generic and Rimantadine – Flumadine® are in the adamantane group of ion channel inhibitors. The neuraminidase inhibitors are active against both influenza A and B strains of virus, whereas the ion channel inhibitors are only active against influenza A strains. Both the canine influenza (H3N8) and the H5N1 strain of avian influenza are subtypes of influenza A virus.

There are no approved animal indications for these drugs and there is little published data on the efficacy or safety of these products in any animal species. These products should not be used in food-producing animals. The US Food and Drug Administration is expected to prohibit the use of these anti-virals in poultry as of June 2006. The use of these anti-virals in dogs or horses in Canada is currently not prudent for a number of reasons, including the development of resistance to these products.

For more information, please contact Kim Klotins at (519) 826-3215 or kim.klotins@omafra.gov.on.ca.

Information Regarding the Handling of Dead Wild Birds in Ontario

Adapted from information provided by Bruce McNabb, Veterinary Epidemiologist, OMAFRA

Increased awareness about Avian Influenza and West Nile virus has led to many calls to Government of Ontario call centres, public health units and veterinarians regarding the proper procedure when a dead wild bird is found. The Ontario Avian Influenza Working Group (OAIWG), which is composed of specialists from the Canadian Cooperative Wildlife Health Centre (CCWHC), the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), the Ministry of Health and Long-Term Care (MOHLTC), the Ministry of Natural Resources (MNR), and the Canadian Wildlife Service (CWS), has provided the following information on dealing with dead wild birds.

- If more than three dead wild birds of any species are reported in one location, please direct calls to the Canadian Cooperative Wildlife Health Centre at (519) 824-4120 ext.54662.

- Authorities in Ontario are not currently accepting dead wild birds where only a single bird is found in one location, **unless that bird is a crow, raven or blue jay**. This protocol will be re-examined if necessary.

- Annual surveillance for West Nile virus (WNV) is being conducted this spring/summer. Therefore **if the dead wild bird is a crow, raven or blue jay**, the person should phone their local health unit to find out whether or not the health unit requires the bird for the purposes of WNV surveillance. Note that it may or may not be necessary for the health unit to collect the bird, depending on the number of submissions at that time.

- If the dead bird is not being collected, then the person can dispose of the bird in the following manner:
  a. Carcasses should be handled using an implement such as a small shovel or large tongs, or by hand only if disposable plastic or rubber gloves are worn.
  b. Alternatively, carcasses may be placed in a puncture-resistant leak-proof plastic bag of appropriate size by inverting the bag over the hand, then grasping the carcass through the bag, and wrapping the bag around the bird without touching it.
  c. Carcasses should be buried several feet deep where they will not be disturbed, or double-bagged and placed in garbage destined for a landfill.
  d. Do not dispose of a dead bird in a manner such that someone could handle it again.
  e. People handling birds should wash their hands thoroughly with soap and water afterward.

- If you have sick or dead farmed birds such as chickens, ducks or geese, you should call your veterinarian to get a diagnosis that includes laboratory testing.

Disease surveillance information on wild birds in Canada can be found on the Canadian Cooperative Wildlife Heath Centre's web site. http://wildlife1.usask.ca/en/CCWHC_home.php

The Role of the Private Practitioner in Avian Influenza

Paul Innes, Veterinary Biosecurity, Office of the Chief Veterinarian of Ontario, and Babak Sanei, Animal Health and Welfare, OMAFRA

The approximately 2000 regulated commercial poultry producers in Ontario are largely serviced by the small number of poultry veterinarians in both private practice and industry, who collectively make up the Ontario Association of Poultry Practitioners (OAPP). However, there are estimated to be at least 25,000 non-regulated and non-commercial holdings, collectively referred to as "small flocks." These include purebred enthusiasts, gamebird operations, aviaries, and people raising a small number of broilers, layers or turkeys as pets or for personal consumption.

These flocks are dispersed throughout the province, and many farm and rural clients in your practice may keep a few birds on their premises. It is important that these bird owners have access to the appropriate veterinary advice and resources in order to protect their birds and themselves from the potential impact of diseases like Avian Influenza. It is also critical to detect the presence of this virus in the province as early as possible, as this will maximize the effectiveness of control and eradication efforts. **Rural veterinarians play a crucial role in the detection and management of this and other emerging diseases**, and are encouraged to help their clients improve biosecurity and to recognize and respond appropriately to health problems in their birds. OMAFRA and the Animal Health Laboratory monitor avian submissions for the possibility of avian influenza and other significant diseases. Client sample submissions are to be encouraged whenever possible.

Resources for Veterinarians and Producers

OMAFRA has developed biosecurity recommendations for small flock owners. This, and other information on Avian Influenza, and on biosecurity in general, is available on the Ministry web site at http://www.omafra.gov.on.ca/english/livestock/vet/disease_pre.html.

For questions regarding submitting avian samples to the Animal Health Laboratory, contact Dr. Jim Fairles (519) 824 4120 x 54611. If Avian Influenza virus is suspected, call the Canadian Food Inspection Agency immediately. CFIA 24-hr Foreign Animal Disease Line: 1-877-814-2342

More information on Avian Influenza and biosecurity is available on the OMAFRA web site at http://www.omafra.gov.on.ca/english/livestock/poultry/health.html.

Continuing Education/Coming Events

June 21, 2005	Ontario Association of Swine Veterinarians annual meeting. Ontario Pork Congress, Stratford fairgrounds (evening).
June 21 & 22, 2006	Ontario Pork Congress, Stratford fairgrounds, Stratford, ON. (519) 625-8811, Fax: (519) 625-8878, e-mail: opc@orc.ca . www.porkcongress.on.ca
July 5 - 8, 2006	Canadian Veterinary Medical Association Annual Convention, Delta St. John's Hotel and Conference Centre, St. John's, Newfoundland. Contact Linda Huskins (613) 236-1162 ext. 126, lhuskins@cvma-acmv.org . www.canadianveterinarians.net/index.aspx
July 9 - 13, 2006	American Dairy Science Association, American Society of Animal Science, 2006 Joint Annual Meeting, Minneapolis, Minnesota. www.adsa.asas.org/meetings/2006/
July 15 - 19, 2006	143rd American Veterinary Medical Association (AVMA) Annual Convention, Honolulu, Hawaii. avmaconvention.org
July 18 – 20, 2006	Equine Dental short course, Wisconsin. 1-800-247-3901
July 27 - 30, 2006	Equine Acupuncture Certification Program (session 1 of 4). Contact Barbara Lowell 1-800-891-1986 ext 101. Session 2 - Sept. 14 - 17, 2006.
July 30 - Aug. 1, 2006	American Association of Equine Practitioners (AAEP) Continuing Education Meetings. Focus 2006: Focus on Dentistry in conjunction with the 14th Annual Practice Management Seminar, Indianapolis, Indiana. AAEP office (859) 233-0147, e-mail: aaepoffice@aaep.org . www.aaep.org/continuing_edu.htm
July 30 - Aug. 4 2006	Foreign Animal Diseases Training Course, University of Wisconsin School of Veterinary Medicine, Madison Wisconsin. Contact Dr. Chris Olsen. www.vetmed.wisc.edu/pbs/courses/FAD2006
August 9 & 10, 2006	National Mastitis Council (NMC) Regional Meeting, Delta Prince Edward Hotel, Charlottetown, Prince Edward Island. www.nmconline.org/meetings.htm
Sept. 21 - 23, 2006	American Association of Bovine Practitioners Annual Convention, Saint Paul, Minnesota. www.aabp.org
Sept. 23 - 26, 2006	Allen D. Leman Swine Conference, St. Paul, Minnesota. 1-800-380-8636 www.cvm.umn.edu/outreach/events/adl
Sept. 26, 2006	Equine Ultrasound lab, Colorado State University. 1-800-457-9715
Sept. 27 – 29, 2006	Diagnosis and Treatment of Lameness in Horses, Colorado State University. 1-800-457-9715
Oct. 12 - 19, 2006	110th United States Animal Health Association Annual Meeting, Minneapolis Hilton Hotel, Minneapolis, Minnesota. www.usaha.org
Oct. 15 - 19, 2006	24th World Buiatrics Congress, Nice France Convention Centre - Acropolis. www.wbc2006.com
Dec. 2 - 6, 2006	52nd Annual American Association of Equine Practitioners Convention, San Antonio, Texas. www.aaep.org

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Please return this form with your comments to:

Kathy Zurbrigg, Animal Health and Welfare, Ontario Ministry of Agriculture, Food and Rural Affairs
Wellington Place, R.R. # 1, Fergus, Ontario N1M 2W3
Tel.: (519) 846-3418 Fax: (519) 846-8101 E-mail: kathy.zurbrigg@omafra.gov.on.ca

Comments: .....

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Deadline for next issue: August 14, 2006

Ontario
Ministry of Agriculture,
Food and Rural Affairs

Animal Health and Welfare
2nd Floor, Wellington Place
R.R. #1, Fergus, Ontario
N1M 2W3