

# PCVAD - What to Do in the Barn Today

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In the fall 2004 Ontario and Quebec swine producers started to see a significant increase in mortality generally beginning at four weeks into the finisher and lasting approximately six weeks. A diagnosis of PMWS with a subsequent name change to Porcine Circovirus Associated Disease (PCVAD) in North America was made. The impact on mortality has been dramatic (**Table 1**).

**Table 1. Reported Mortality from PCVAD in Ontario and Quebec, 2005-06**

	1Q '05	2Q '05	3Q '05	4Q '05	1Q '06	2Q '06
<b>Finisher Max</b>	4.8%	5.8%	9.2%	16.3%	17.3%	15.5%
<b>Finisher Min</b>	1.3%	1.3%	1.5%	1.5%	2.1%	3.0%
<b>Finisher Avg</b>	3.5%	4.2%	5.8%	5.3%	7.1%	8.2%

Many different intervention strategies have been attempted through the ensuing two years and in our clinical experience have little to no value. In no particular order: feed medication, vaccination type and timing, water supplementation, nutraceuticals, ration formulation changes, water acidification, feed manufacturing changes, sanitation protocols, injectable antibiotics, and sorting affected pigs have produced no consistent results and will have cost the industry more money on top of existing losses. As always in a desperate situation there are those that market the “silver bullet”.

This paper is being written in early October 2006. At this point there are very promising vaccine results with pig vaccines and pending results but too early yet on sow vaccine efficacy. Madec’s 20 point control program is not applicable to the current North American pig industry structure however components of it address common sense management of the pig and population. We have summarized some principles of disease control (**Figure 1**) that are applicable and we suggest sustainable within the North American industry.

## Figure 1. Principles of Disease Control

### 1. *All In-All Out (AIAO)*

- ✓✓✓ - site
- ✓ - barn (2 barns/site)
- ? - room

### 2. *Sanitation*

- Barn & transport
  - protocol
  - audit

### 3. *Do not co-mingle*

- from    – sow
  - nursery
- gilt sourcing
- boar sourcing

### 4. *Limit pig movement within AIAO groups*

- minimal age spread with all group stages.
  - specific minimum and maximum limits
- cross-foster restrictions

### 5. *Effective sow herd immunity*

- gilt acclimation - separate site from sow site
- sow herd immunity program
- colostrum management

### 6. *Biosecurity*

- protocol
- audit

### 7. *Effective pig care*

- space
- air
- feed/rations
- water
- pig/population intervention

### 8. *Effective diagnosis and monitoring of disease.*

### 9. *Control or eliminate primary pathogen circulation in S-N-F.*

### 10. *Effective information system*

- timely
- accurate
- production    → financial    → health
- targets

The challenges to the North American industry are: to assess how far we have strayed from long term effective large population management, what the lessons from this devastating disease are, and how effectively we apply those lessons in the future.