

# A global perspective on...

P

Porcine

C

Circo

V

Virus

A

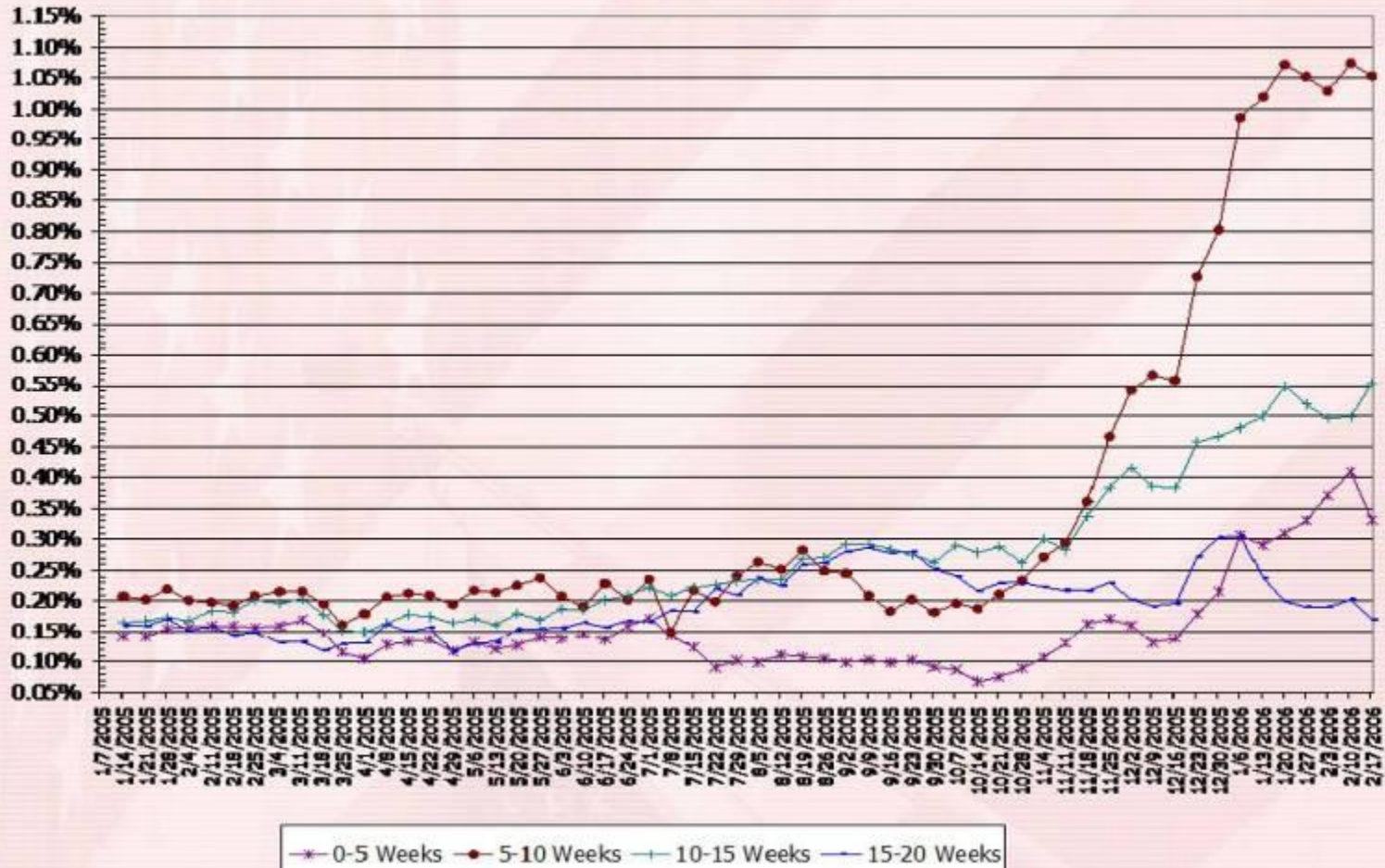
Associated

D

Disease

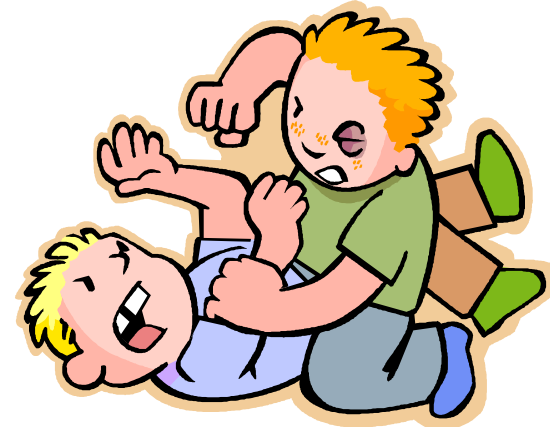
# PCVAD kills pigs!

Finishing Mortality by Age - Three Week Average  
2006 YTD



# PCVAD kills morale!

- The many unknowns of the disease, the high mortality, high costs and people frustration translate into a very emotional situation. The lack of answers mean tempers run high and morale runs low.
- No farm has “controlled” PCVAD without improving management.



# PVCAD kills businesses!

**1999; 802000 sows : 2005; 463000 sows = 42% loss**

- 1999 STALL BAN (EU 2013) 10%
- 2000 SWINE FEVER 5%
- **2000/2 PCVAD 50%**
- 2001 FOOT & MOUTH 5%
- AGE OF BUILDINGS/FARMERS 10%
- POWER OF SUPERMARKETS 10%
- CHEAP IMPORTS 10%

# PCVAD kills cash!

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- Cost
  - \$7.75
    - Mortality
    - ADG
    - Treatments

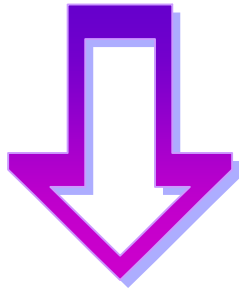
(Hollis PIC Canada Symposium 2006)

# Strategies for PCVAD control

Decrease infection

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Increase immunity  
(decrease susceptibility,  
favour immune response)



(Maintain health balance)

**STABLE HERD**

- 1- Management
- 2- Nutritional
- 3- Genetic
- 4- Therapeutic
- 5- Immunological
- 6- Biosecurity

Usually a combination

# Management

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- Madec 20
- Management Strategies
- Batch Farrowing
- Wean to Finish

# Madec 20

- Basics of pig management: strict AI/AO, limit stress, reduce stocking densities and strict hygiene.
- Minimum 16 points for significant response.
- MM and MLC developed the 4 golden rules: 1- Limit pig to pig contact 2- “Stress is a killer” 3- Good hygiene 4- Good nutrition.

## Control of PMWS and PDNS



# Madec 20

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- Individual measures not successful by themselves.

A Danish study (Hassing 2003) found AI/AO alone did not significantly reduce mortality.

**Results:** reduction in mortality from 19 to 3.7%, from 12 to 3%, from 21.4 to 10.2% and from 20.3 to 5.8% (*Madec, 1999, 2001*)

# Effect of Madec Principles on W-F Mortality

			W-F Mortality	
	Before	After	Before 3 months	After 3 months
Unit 1	8	15	19.0	3.7
Unit 2	7	19	12.0	3.0
Unit 3	2	13	21.4	10.2
Unit 4	7	16	20.3	5.8
Unit 5	8	15	20.5	6.0
Unit 6	5	14	16.8	7.5
Unit 7	5	16	23.0	7.7
Unit 8	11	16	18.0	8.3

(Hollis PIC Canada Symposium 2006)

# Management Strategies

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Practical recommendations at Farm level:

## 1- Minimize stress:

- Environmental stress: Temperature, air quality, minimum space.
- Nutritional stress: Good diet, enough feeders and drinkers.
- Emotional stress: Minimize mixing, wean entire litter into the same pen, subdivide but not mix, avoid mass treatments, minimize handling, move animals with care.
- Immunological stress: Vaccinations and other immunosuppressor diseases (i.e. PRRS)

# Management Strategies

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Practical recommendations at Farm level:

## **2- Start best quality piglets:**

- Ensure colostrum intake.
- Delay fostering to 12-24 hs post farrowing. Do not foster after 24 hs post farrowing.
- Delay weaning up to 28 days.

## **3- Minimize secondary problems:**

- Improve hygiene: Environment (AI/AO, C+D).
- Disinfect castration equipment after each litter, change needle after each litter/pen, grind teeth instead of clipping.

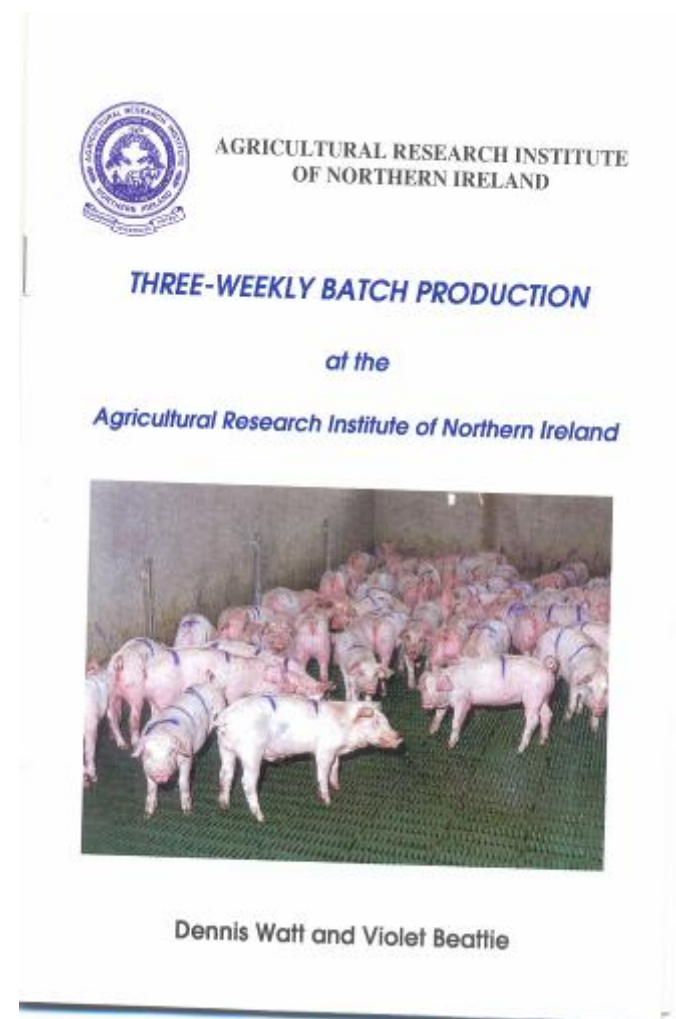
# Batch Farrowing

Batch farrowing every 2,3,4 and even 5 weeks

- Advantages: allow certain management practices, faster growth...
- Disadvantages: herd size, achieve mating targets..

## Results:

- Reduction in mortality 23.6% to 5.3% (*Dennis, 2002*), from 18-20% to 6-8% (*Waddilove, 2003*).



# Batch Farrowing

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## POSITIVES

- HEALTH
- FOCUS
- HOLIDAYS
- BREAKS MUNDANE ROUTINE
- ALL IN ALL OUT BY BUILDING
- FEED SAVING
- MOVEMENTS
- STAFF

# Batch Farrowing

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## NEGATIVES

- INITIAL START UP
- 10% EXTRA SOWS
- EXTRA WEANING ACCOMODATION
- PLANNING & MANAGEMENT

# Batch Farrowing

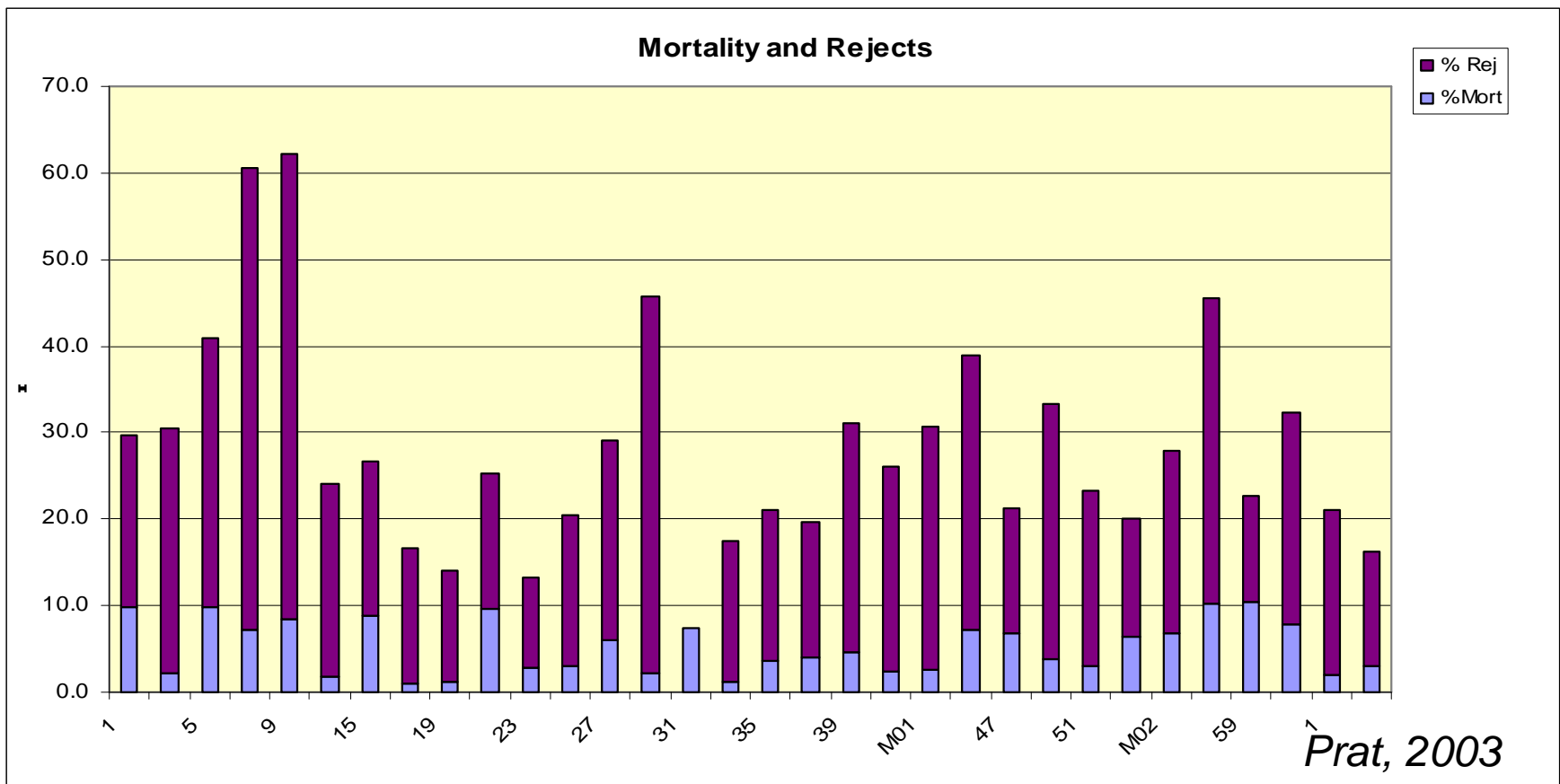
## Weekly Production vs. 5-Weekly Batch Production

	Weekly	5-Weekly
ADG-gms	641	670
FCE	2.33	2.03
Mortality	14.0%	5.0%

(Hollis PIC Canada Symposium 2006)

# Batch Farrowing

Variable between batches (3 week batch farrowing)



# Wean to Finish

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What do we mean by wean to finish?

.....Weaning into a single space into which the piglets are reared from weaning until sale for slaughter.

Can be through moveable pen divisions or separate rooms but pigs do not leave the site and are not mixed beyond weaning.

# Wean to Finish

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- **Predicted Growth Performance Advantages of Wean-to-finish**
- ADG - Days to Market
  - 5 to 11 days due to feed intake improvement
  - 2 to 4 days less empty space
- ADG - Market Weight
  - 7 to 20 lb (3.18 - 9.09 kg) improvement
  - 3 to 7 lb (1.36 - 3.18 kg) increase from less down time
  - 7 to 15 lb (3.18 - 6.82 kg) increase from feed intake improvement

(Dritz et al 1998)

# Wean to Finish

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Worked example of additional savings in a 5000  
sow operation

- Labour
- Trucking
- Cleaning

# Wean to Finish

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## Labour

Moving and receiving pigs: **\$408 per move**

(3 employees @ 8 hr. x 17 per hr)

Cleaning: **\$272 per move**

(2 employees @ 8 hr. x 17 per hr) = **\$680 per move**

(weekly)

(\$680 per week x 52 weeks) x 2 = **\$70,720 annually**

# Wean to Finish

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## Cleaning

Two power washers: **\$30 per cleaning**  
(repair, maint. and deprec.)

Utilities: **\$16 per cleaning**

Disinfectant: **\$10 per cleaning**

**=\$56 per cleaning** (weekly)

(\$56 per week x 52 weeks)x2

**=\$5824 annually**

# Wean to Finish

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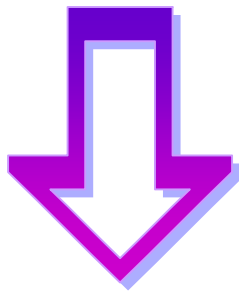
- **Transportation Trucking: \$500 per move**  
(1,000 feeder pigs @ \$.05 per pig for fuel, truck maint. and clean-up, etc.) = **(\$500 per week x 52 weeks) x 2 = \$52,000 annually**
- **Total annual savings for wean-to-finish: \$128,544**
- **Equates to \$1.28**

# Conclusions

Decrease infection

+

Increase immunity  
(decrease susceptibility,  
favour immune response)



(Maintain health balance)

**STABLE HERD**



**& ABOVE ALL.....**

**NEVER GIVE UP!**

PIC

Thanks for your  
attention!!

