

Enterisol – a new and exciting product from BI.

This is the cutting edge news. The effect of using the ileitis vaccine in the USA has seen a dramatic lift in pig health & performance.

Benefits include:

- **A reduction in the number of poor doer pigs**
- **A reduction in overall batch variation**
- **A reduction in post-weaning mortality**
- **A reduction in post-weaning medication costs.**

In the USA, the return has been calculated as high as \$5 per \$1 invested.

Summer Infertility -it's coming again

It's difficult to keep track of the seasons due to the unusual weather patterns of late, but we need to start preparing for summer infertility or pay the penalty in pig sale losses in 2007.

New Faces

The Portec team welcomes two new faces:

Pauline James is our new office administrator and **Dr John Carr** is our new consultant pig vet. Marie has taken on a less visible, yet still important, role in running the practice's herd recording bureau services.



Website Launch

The Portec website is now live. Although there will be a growth phase over the next few months we welcome comments from all our clients on its developments.

This is your website and where possible we aim to concentrate on health maintenance of your pigs and maximising the profitability of the farms.

A major drive on the website will be on-site training opportunities.

The site will also feature on-line purchasing, payments and review of laboratory and health reports in a secure client only section.

The Website can be accessed at:

www.portec.com.au

PigPass

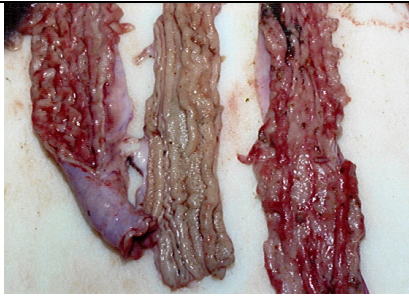
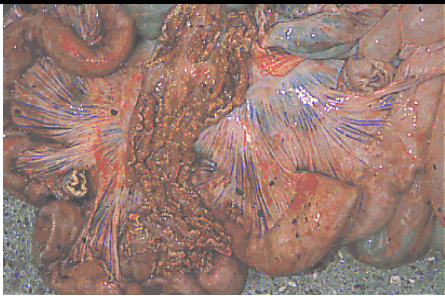
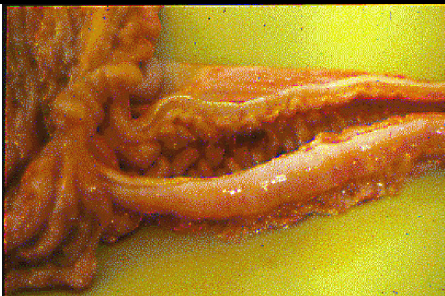
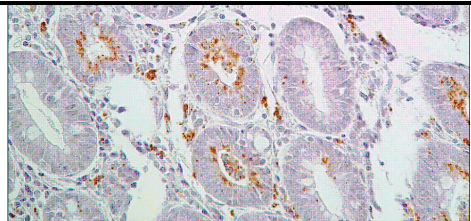
In light of the recent antibiotic residue breaches in pork and pork byproducts sent to the Singapore market, a new vendor declaration, the PigPass, has been implemented. In addition to the extra paperwork, the change of note is the extension of the withholding periods for a number of medicines and in feed products. The ESI or Export Slaughter Intervals that now apply will require many producers to review their current health control and treatment protocols.

Arguably the two most critical changes affect olaquinox and Baycox. Currently olaquinox has an ESI of 28 days – a significant increase of its domestic WHP of 12 hours! Compliance with the 28 day ESI is January 1st 2007 and so the availability of the new ileitis vaccine is very timely indeed. In the case of Baycox, it now has a 100 day ESI and this seriously constrains the selection of offal for export from producers of trade pork pigs. As there are products that are yet to have their ESIs established, Portec Australia will update our clients as soon as the information becomes available. If you have any doubt as to how the new rules affect your farm, please do not hesitate in contacting one of the Portec Australia vets.

ILEITIS – old curse, new cure

Other names	Ileitis, PIA, Porcine Intestinal Adenomatosis, Red Gut, Porcine Enteropathy.		
Causal agent	Lawsonia intracellularis a bacteria.		
Age group	Acute form occur in young breeding stock or finishing pigs		
	Young growing pigs exhibit chronic forms of the disease		
	The disease, albeit not apparent, can affect 15 to 50% of the growing herd		
Clinical signs			
Acute Form Proliferative haemorrhagic enteropathy (PHE)		Death (often the first signs seen). Pale and anaemic animals. Depression, reduced appetite and reluctance to move. Retarded growth. Watery, dark or bright red diarrhoea. The hindquarters may be stained with bloody faeces. Abortion may occur in recovering animals often within 6 days of the onset of clinical signs. More often seen in young adults greater than 70 kg.	
Chronic forms		More often seen in growing animals 20 to 70 kg. The clinical signs depend on the extent of the intestinal lesions.	
PIA Necrotic ileitis Regional Ileitis		With Porcine intestinal adenomatosis (PIA) clinical signs can be very slight with irregular periods of diarrhoea and anorexia. Animals with Necrotic ileitis have more severe clinical signs in individuals with severe loss of condition and often persistent scour. Death is not uncommon. Major effect is the increased FCR and thus feed costs necessary to finish the animal. In chronically affected herds, days to slaughter may be extended by up to 14 days – up to \$12 per pig lost. Animals with Regional ileitis also present with severe loss of condition and sometimes a terminal peritonitis	
			
Variation within a group of pigs can be most pronounced Loose faeces – cow pat like – occasionally with blood			
Infectivity			
The pigs are infected by oral contact with faeces from infected pigs and the disease can be shed for at least 10 weeks. Nearly all farms have the organism present on the unit			
Incubation period			
The incubation period is 13 days			

Post-mortem Lesions

Post-mortem findings	Post mortem findings generally restricted to the terminal 50 cm of the small intestine and possibly just into the spiral colon and caecum.	
		PHE The small intestine and large intestines are dilated and filled with a formed blood clot. The colon contains black tarry faeces. The intestinal contents are rarely liquid. The intestines bulge out of the abdomen once opened. PIA: The intestinal wall thickens often with oedema to varying degrees. The mucosa is thrown into folds and may result in sharply defined plaques or marked multiple polyp formation.
		Necrotic ileitis: There is necrosis of the underlying PIA lesion resulting in yellow/grey cheesy masses that adhere tightly to the wall. Regional ileitis: The lower intestine becomes thickened and ridged. Often referred to as hosepipe gut. Ulceration can be seen in the mucosa.
	Definitive diagnosis can be done through histological examination, through a microscope and using special antibody stains (IHC) the <i>Lawsonia</i> organisms can be recognised (the brown areas in the picture the circles are loops of bowel) together with the characteristic lesions. Other tests that can be used are PCR on the faeces and antibody concentration in the blood. This can be extremely helpful in planning a vaccine programme.	

Treatment

- The new Enterisol Ileitis vaccine is the first live vaccine launched in Australia
- Antimicrobial therapy.
- Wash and disinfect pens
- Minimise mixing of pigs
- Use all-in/all-out
- Maintain proper pig density, water and feeder space
- Maintain proper building temperature and ventilation
- Match health history of incoming pigs to those on the farm
- Reduce faecal spread between groups of grow/finish pigs

Common differentials – the need for an accurate diagnosis

- Intestinal twist, Haemorrhagic bowel syndrome, gastric ulceration, Swine Dysentery, Salmonellosis, Whip worms and chronic TGE
- Salmonella - colon and focal ulcers and lymph node enlargement
- Swine dysentery - large intestine only, without swelling of lymph nodes
- Whip worms - pin point lesions in colon and adult worms in large intestine

Zoonotic Implications

- Unsure. *Lawsonia intracellularis* has been recognized in other animals – horses and hares.

Summer Infertility

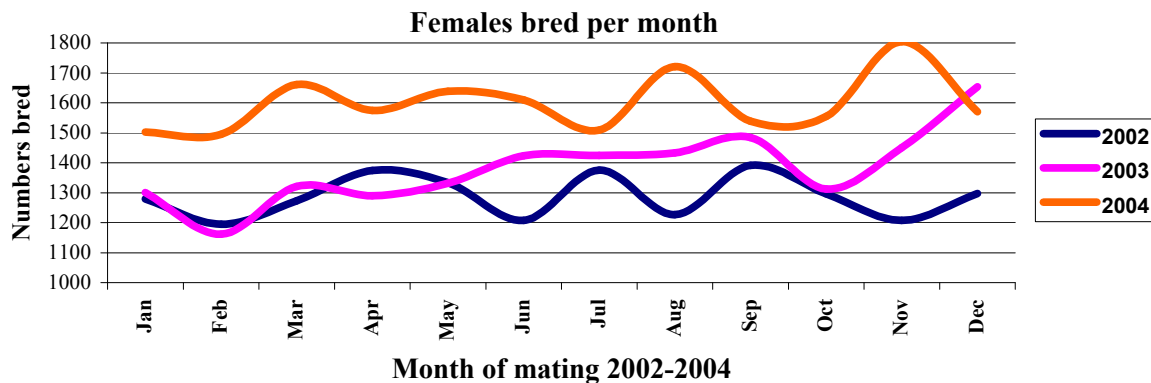
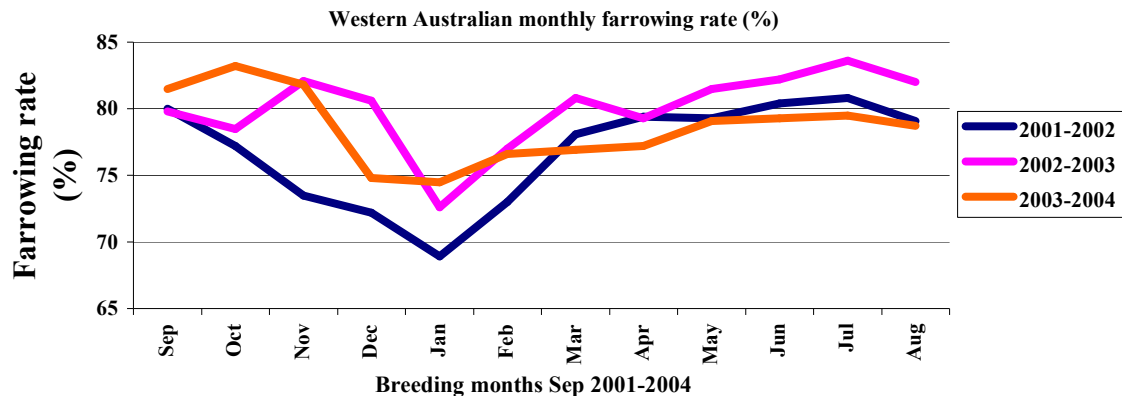
The actual cause of summer infertility is not known. There is a clear association with temperature, daily temperature fluctuations, lighting patterns, feed intake by sows, housing type – with outdoor sows performing worse. However, whatever the cause the fact that it exists is real and the data shows we do little about it. And what we do is generally far too late.

Monthly farrowing rate variation over the years 2002-2004

51,000 served females from Western Australia over the years 2002 –2004

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
2002	80	77	74	72	69	73	78	79	79	80	81	79	%
2003	80	79	82	81	73	77	81	79	82	82	84	82	%
2004	82	83	82	75	75	77	77	77	79	79	80	79	%
Averages for the period 2002-2004													
	81	80	79	76	72	76	77	79	80	81	81	80	%

The variation in farrowing rate is predictable year in year out. The variation in farrowing rate varied from 82-69% (21% variation). The summer reduction in farrowing rate actually extends over a 3-4 month period. January fertility is particularly poor. The average reduction in farrowing rate was around 8%.



When the numbers of females breed are examined surprisingly no seasonal trends are noted. Numbers breed in the middle of summer are actually the lowest, when they should be the greatest. It is essential that we modify our breeding targets to reflect summer infertility.

Suggestions for Spring 2006:

Review breeding targets – estimate a 8% reduction in farrowing rate for 3 months. Mate as many weaned and 1st return sows as possible. Consider culling after pregnancy diagnosis to ensure pig flow is kept optimal. Review and increase gilt pool. Maximise lactation feed intake, particularly in gilts. Enhancing lactation feed intakes will be a topic in a future newsletter.