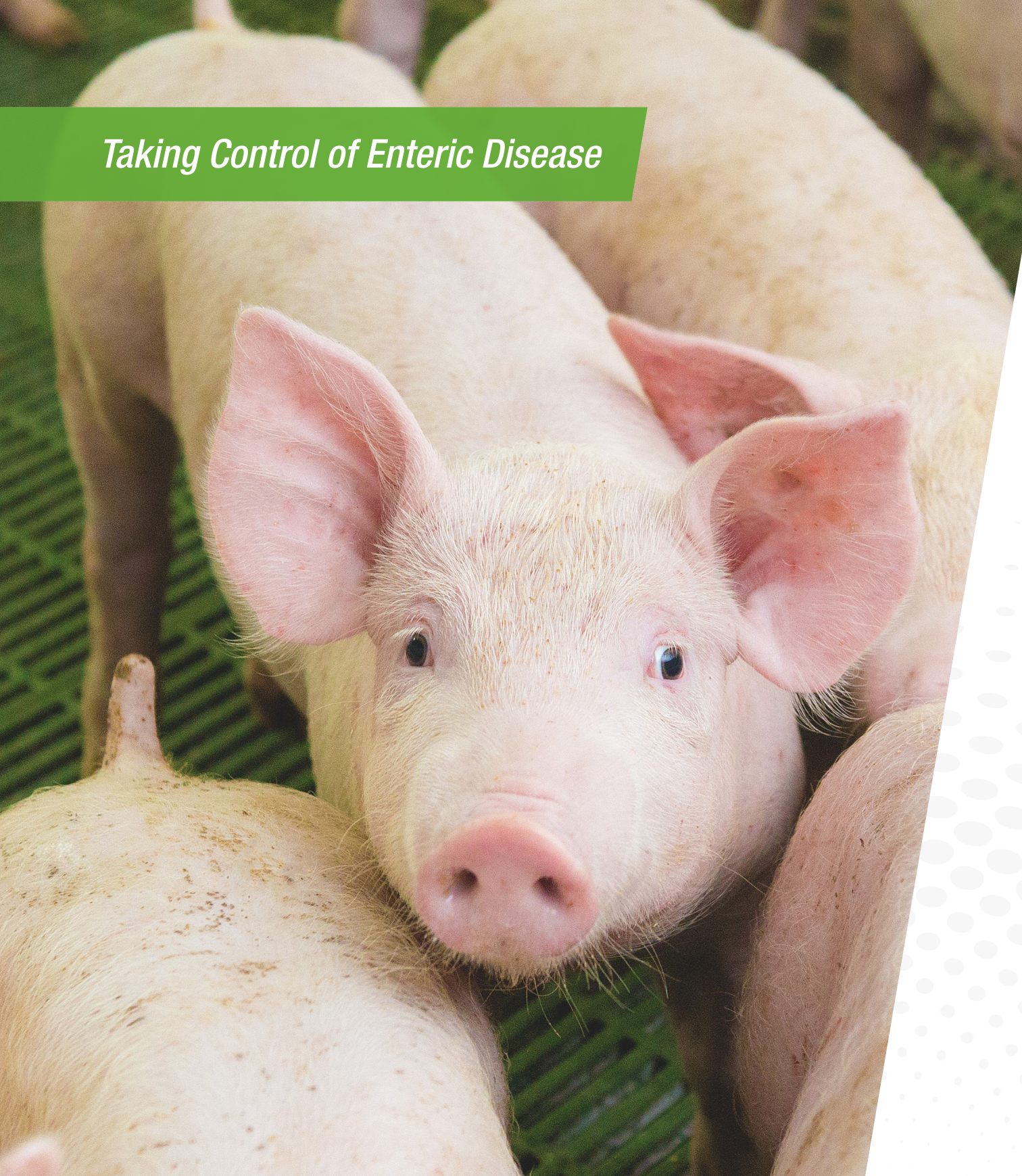


Taking Control of Enteric Disease



Mecadox[®]



The Standard Is Set

For more than 45 years, Mecadox® medicated feed additive has set the industry standard for an antimicrobial solution that is effective, consistent, flexible and reliable. **Mecadox** has been proven to control swine dysentery and bacterial enteritis, as well as increase weight gain and improve feed efficiency in swine. It is the preferred swine health management tool for the industry.

Safe Solutions From a Respected Partner

At Phibro Animal Health Corporation, we believe that we have a responsibility to keep your pigs safe and healthy, but we also have a responsibility to keep consumers safe and healthy.

Mecadox (*carbadox*) one-of-a-kind disease control solution is FDA-approved, does not require a Veterinary Feed Directive (VFD) and is used exclusively in animal health—it is never used in human medicine. **Mecadox** medicated feed additive is an antibacterial drug and is the only U.S.-approved quinoxaline class antibacterial. Backed by the strength and reputation of Phibro, you can trust that it is manufactured under strict internal quality control procedures and standards and is supported by an experienced team of sales and technical professionals with the knowledge to provide training and support.

Effective Enteric Disease Control

Enteric diseases can pose costly threats to your operation through poor growth, mortality and medication expense. **Mecadox** offers safe and effective control of enteric pathogens, including *Salmonella choleraesuis*, a cause of salmonellosis, and *Brachyspira hyodysenteriae*, a cause of swine dysentery.





Growth Response to *Mecadox* in Pigs With a High Genetic Capacity for Lean Tissue Growth

Researchers at Iowa State University found *Mecadox* provided significant improvement (feed-to-gain ratio [F/G] and average daily gain [ADG]) in pigs with high genetic capacity for lean tissue growth.

Growth Response to *Mecadox* in Pigs With a High Genetic Capacity for Lean Tissue Growth¹

Item	Genetic Capacity	<i>Mecadox</i> 0 g/ton ^a	<i>Mecadox</i> 50 g/ton ^a	Unit Change
13 to 75 lb BW ADG, lb ^b	High	1.16	1.34	+ 0.18
	Low	1.23	1.26	+ 0.03
F/G ratio ^c	High	1.85	1.69	- 0.16
	Low	1.98	1.92	- 0.06
13 to 250 lb BW ADG, lb	High	1.68	1.77	+ 0.09
	Low	1.61	1.60	- 0.01
F/G ratio ^d	High	2.92	2.78	- 0.14
	Low	3.16	3.18	+ 0.02
Tenth rib, in ^e (Backfat)	High	1.08	0.96	- 0.12
	Low	1.42	1.56	+ 0.14
Loin eye, in ^e	High	5.19	5.70	+ 0.51
	Low	4.63	4.37	- 0.26
Muscle, (%) ^e	High	54.4	56.2	+ 1.8
	Low	45.9	45.6	- 0.3
Fat, (%) ^e	High	29.1	27.0	- 2.1
	Low	37.1	38.5	+ 1.4

^a*Mecadox* fed from 13 to 75 lb body weight
^bGenotype x *Mecadox* effect, ($P < 0.01$)
^cGenotype x *Mecadox* effect, ($P < 0.13$)
^dGenotype x *Mecadox* effect at 250 lb significant ($P < 0.16$)
^eGenotype x *Mecadox* effect at 250 lb significant ($P < 0.09$)

¹Adapted by B.R. Gramm and R.D. Nimmo from Stahly, T.S., N.H. Williams and S.G. Swenson. 1996. Growth Response to Carbadox in Pigs with a High or Low Genetic Capacity for Lean Tissue Growth. Iowa State University Swine Research Report ASL-R1368.

High lean gain pigs fed *Mecadox* to 75 lb reached market weight (250 lb) in 7.2 fewer days, required 33.2 lb less feed and had an absolute improvement in muscle content of 1.8%. Less feed was needed per pig, and pigs had fewer days to market.

Improve Pig Performance, Even in Limited Space Conditions

When animal flow schedules get pressured, or during the last weeks in the nursery, pig space can be limited. *Mecadox* can help maintain pig performance in these situations.

Effect of *Mecadox* in Nursery Pigs Reared in Limited or Adequate Floor Space²

Day 0 to 28	Pen space	<i>Mecadox</i> 0 g/ton	<i>Mecadox</i> 50 g/ton	Unit change	Percentage change
ADG (lb/day) ^a	Limited	0.597	0.771	0.174	29%
	Adequate	0.659	0.846	0.187	28%
F/G ratio	Limited	2.232	1.984	- 0.248	-11%
	Adequate	2.119	1.873	- 0.246	-11%
ADFI (lb/day)	Limited	1.350	1.531	0.181	13%
	Adequate	1.403	1.586	0.183	13%

^a*Mecadox* effect significant at $P < 0.05$.

²Adapted by B.R. Gramm and R.D. Nimmo from Yen, J.T. and W.G. Pond. 1987. Effect of Dietary Supplementation with Vitamin C or Carbadox on Weanling Pigs Subjected to Crowding Stress. Journal of Animal Science. 64:1672-1681

After 28 days, the crowded pigs (allowed only 1.4 sq ft/pig) fed *Mecadox* were approximately 5.0 lb heavier and had a 10% better feed conversion than non-medicated pigs. With pigs allowed ample floor space (2.7 sq ft/pig), *Mecadox* use resulted in similar performance improvements.

The results of this study show that *Mecadox* medicated feed additive is vital to maintaining performance during the late nursery period when ADG is greater and when feeder and pig space is limited. This is especially important when you consider that the accelerated lean growth that takes place in the nursery cannot be recovered later in life.

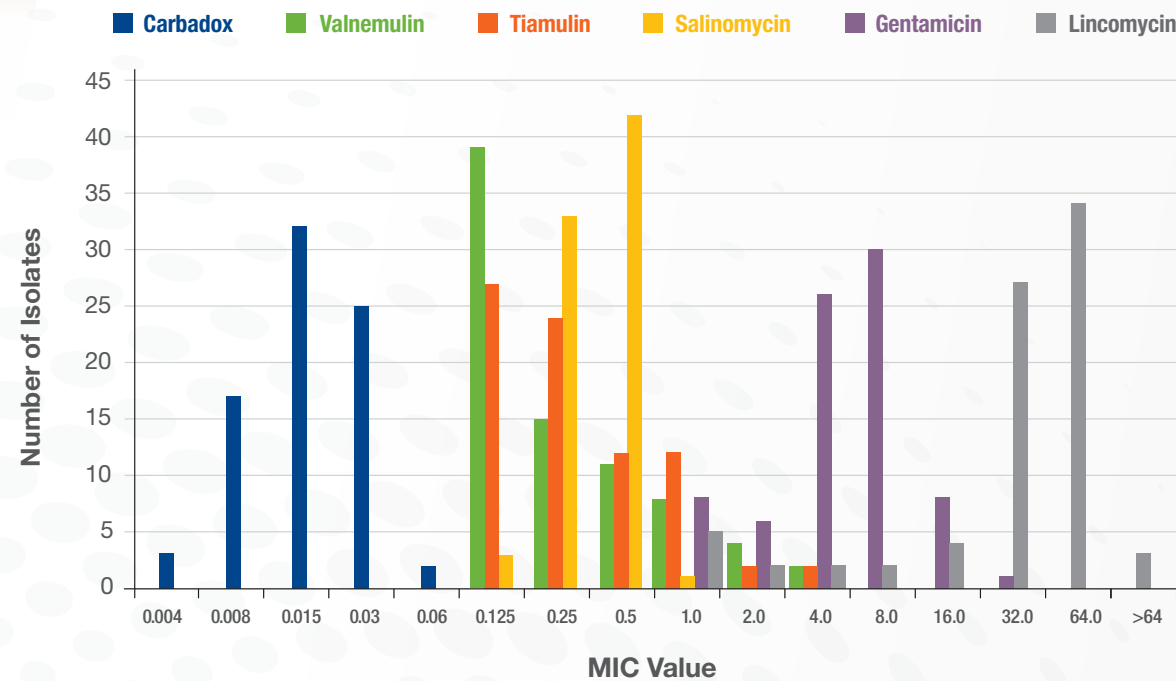




Mecadox Effectiveness Against *Brachyspira* Isolates

Mecadox can be used as a management tool to protect your pigs and help them perform to their full potential. Data shows **Mecadox** as one of the most effective products used to control scours caused by gram-negative bacteria, such as *Brachyspira hyodysenteriae*. Data from Iowa State University demonstrate **Mecadox** in a class by itself; no other feed additive medications have minimum inhibitory concentration (MIC) values as low as **Mecadox** for the *Brachyspira* spp. (2009 Annual Report-Veterinary Diagnostic Laboratory, Iowa State University, p. 21).

MIC Distribution of *Brachyspira* Isolates from Pigs³



³Adapted by Phibro from K. A. Clothier, J.M. Kinyon, T. S. Frana, N. Naberhaus, L. Bower, E. L. Strait, K. Schwartz. 2011. *Species identification and minimum inhibitory concentration patterns of Brachyspira isolates associated with clinical disease in swine*. Poster presented at the 42nd Annual American Association of Swine Veterinarians Meeting, Phoenix, AZ.



Example Neo-Terramycin® and Mecadox Programs for Enteric Disease Control and Growth Enhancement

Nursery/Grower Diets			
Ration 1	Ration 2	Ration 3	Ration 4
Neo-Terramycin † at the rate of 10 mg/lb of body weight*	Mecadox 50 grams per ton	Mecadox 50 grams per ton	Mecadox 50 grams per ton**

* Feed for the initial 7-14 days post-weaning. Refer to the **Neo-Terramycin** label below for additional details.

** Feed for the balance of the initial 7-10 week feeding program regardless of traditional nursery feeding programs or the nursery portion of wean-to-finish feeding programs.

† Refer to product label for warnings and indications. Use only as directed. Although a 5-day withdrawal period is required, we recommend you follow the NPPC voluntary 14-day withdrawal period for all products containing tetracyclines.

The recommended Phibro feeding program can be modified to include the administration of attenuated live vaccines. Please consult your Phibro Technical Services representative for additional assistance.

Animal	Drug	Dosage Level	Indications
Swine	Mecadox (carbadox)	10 - 25 g/ton (0.0011 - 0.00275%)	For increased rate of weight gain and improvement of feed efficiency.
	Mecadox (carbadox)	50 g/ton (0.0055%)	For control of swine dysentery (vibronic dysentery, bloody scours or hemorrhagic dysentery); control of bacterial swine enteritis (salmonellosis or necrotic enteritis caused by <i>Salmonella choleraesuis</i>); for increased rate of weight gain and improvement of feed efficiency.

FDA Status: Feed mill license required if the source of carbadox contains more than 2.5 g/lb (0.55%). Regulation §558.115
 WARNING STATEMENT REQUIRED: Do not feed to swine within 42 days before slaughter.
 CAUTION: Do not use in feeds containing bentonite. Not for use in pregnant swine or swine intended for breeding purposes

Animal	Drug	Dosage Level	Indications
Swine	Neo-Terramycin (Neomycin/ Oxytetracycline)	To provide 10 mg/lb of body weight daily	For treatment of bacterial enteritis caused by <i>Escherichia coli</i> and <i>Salmonella choleraesuis</i> and treatment of bacterial pneumonia caused by <i>Pasteurella multocida</i> susceptible to Oxytetracycline; treatment and control of colibacillosis (bacterial enteritis) caused by <i>Escherichia coli</i> susceptible to Neomycin.
LIMITATIONS FOR USE: Feed continuously for 7-14 days. Withdraw 5 days before slaughter.			

FDA Status: Feed mill license required. Regulation: §558.455
 VFD CAUTION: Federal law restricts medicated feed containing this Veterinary Feed Directive (VFD) drug to use by or on the order of a licensed veterinarian.



The Phibro Difference

*There's a reason why **Mecadox** medicated feed additive has been the industry standard for over 45 years. Your pigs face disease challenges that can negatively impact their health—and the profitability of your operation—on a daily basis. More often than not, threats to enteric health are the culprit.*

*Count on the solutions and support you need to achieve the results you want with Phibro Animal Health Corporation as your partner in swine health. Start your pigs off with a healthy foundation by using **Mecadox** to protect them against enteric disease—so you can maintain healthy pigs and healthy profits.*

***Mecadox**—Taking Control of Enteric Disease.*

Talk With a Phibro Expert

888.475.7355 | www.pahc.com



HEALTHY ANIMALS. HEALTHY FOOD. HEALTHY WORLD.®



Do not feed **Mecadox** to swine within 42 days before slaughter and do not use in feeds containing bentonite. Not for use in pregnant swine intended for breeding purposes.

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