

Brand new flock. Same old litter? Not with **IMPACT-P(NA)** litter-biotic.



IMPACT-P(NA) creates healthier litter for healthier birds.

- ✓ Reduces Mortality
- ✓ Improves Weight Gain
- ✓ Improves Feed Conversion
- ✓ Boosts Settlements

IMPACT-P(NA) adds billions of beneficial bacteria to each square foot of litter to ensure a consistent and predictable litter microbiome for antibiotic free poultry production. These natural waste degraders respond to increased moisture, heat and manure in the litter to crowd-out pathogens, compost manure, stabilize nutrients and condition built-up litter for extended useful life.

Overwhelms and out-competes pathogens



IMPACT-P(NA) adds huge numbers of beneficial *Bacillus* bacteria to the litter to overwhelm and out-compete pathogens that can cause disease outbreaks in your flock.

IMPACT-P(NA) has proven effective in:

- REDUCING** disease-causing bacteria in the litter by 53%.
- REDUCING** disease-causing bacteria on the exterior of birds by 57%.
- DRASTICALLY SLOWING** outbreaks of Necrotic Dermatitis without antibiotics.
- REDUCING** Salmonella Enteritidis in broiler and breeder flocks.
- REDUCING** E. Coli populations to levels unable to cause avian cellulitis.
- REDUCING** Enterobacterium populations in litter by 13%.

Lowers Ammonia Levels



IMPACT-P(NA) can cut in half average litter ammonia production for a flock's entire growout.

Improves Settlements



IMPACT-P(NA) has improved profits and reduced production costs for growers for over 25 years.

Dries, Composts, and Improves the Litter



IMPACT-P(NA) continuously dries and composts the litter - stabilizing phosphorus and nitrogen in the litter, reducing ammonia off-gassing, and improving the litter for re-use.

Easy and Safe Dry Application



IMPACT-P(NA) is quick and easy to apply with a seed broadcaster; non-toxic and safe to apply with birds in the house; non-corrosive and will not damage equipment; good to use within days of litter acidifiers.

How to Apply IMPACT-P(NA)

Minimum Application Rate: 1 pound per 1,000 sq. ft.

20-pound pail → 20,000 sq. ft (500 ft. x 40 ft. house)

25-pound pail → 25,000 sq. ft (500 ft. x 50 ft. house)

When to Apply: Apply IMPACT-P(NA) to both fresh and built-up litter as early as possible at the beginning of each flock.

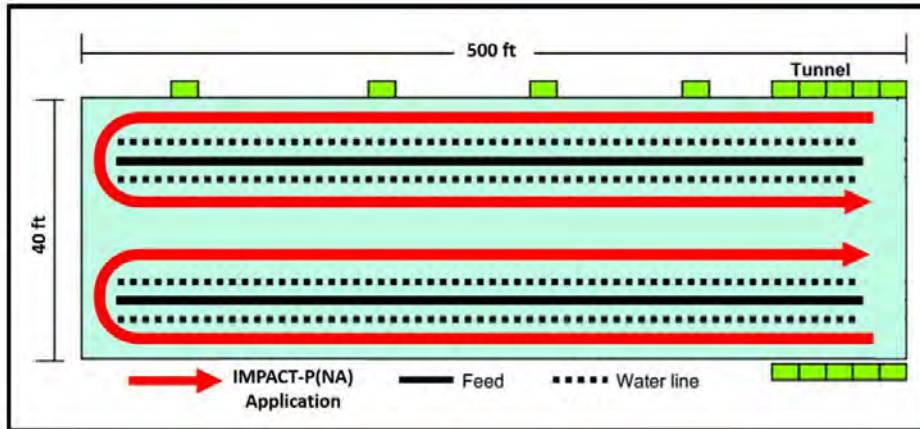
Litter acidifiers temporarily reduce the pH of the litter and kill large numbers of active bacteria. Delaying the application of IMPACT-P(NA) helps to maximize the beneficial bacteria populations.

! If Using Litter Acidifiers for Ammonia Reduction

IMPACT-P(NA) should be spread 5-7 days after applying the acid product, but no later than the end of the brooding period. IMPACT-P(NA) is non-toxic and is safely spread with the birds in the house.

*** IMPACT-P(NA) is not affected by insecticides.**

How to Apply: Use a walk behind or shoulder seed spreader to evenly apply IMPACT-P(NA) to the **top** of the litter. Walk a horseshoe up one side of the feed and water lines and down the other. Repeat this process for each set of feed and water lines.



*When your goal is out-competing disease-causing pathogens...
You can never have too many good bacteria in the litter!*

Estimated costs of poor litter conditions for a flock of 20,000 birds.

Source: "Litter Quality and Broiler Performance", UGA Extension Bulletin 1267. A link to this bulletin is available at impactpoultryproducts.com

Factor and Cost	Rationale for Costs
Ammonia (\$430)	When litter conditions deteriorate, ammonia is always a problem. Research has shown that if ammonia levels are allowed to reach and remain at 50 ppm or above, feed conversion can be increased by 8 points and final body weight decreased by 0.25 lbs.
Disease (\$120)	Admittedly, this is difficult to estimate, but it is potentially the most costly. One serious disease outbreak can cause economic disaster. It is estimated that disease costs the U.S. broiler industry nearly \$500 million/year in mortality, morbidity and medication. A very conservative estimate would be that poor litter conditions are responsible for only 10 percent of these losses.
Parasites (\$140)	Anticoccidial drugs cost the U.S. poultry industry an estimated \$125 million/year. Anthelmintics (de-wormers) cost another \$35 million. Considering that initial parasitic loads in built-up litter may increase the likelihood of serious infections, and that wet litter promotes oocyst sporulation, the cost of poor litter conditions is considerable.
Condemns & Downgrades (\$260)	Several studies have reported that litter conditions significantly affect condemns and grade. Cleaning out has been shown to reduce condemns by as much as 50 percent. Breast blisters have been shown to be highly correlated with poor litter conditions.
Total (\$950)	Adding up these estimated losses, we find that poor litter conditions cost producers at least \$950 per 20,000 birds produced. Remember, this is a very conservative estimate; actual losses could likely be much greater.