Building on years of supporting responsible antibiotic use, the National Pork Board has adopted a new Three-point Antibiotic Stewardship Plan that is proactive, collaborative and aggressive in its strategy and scope. Using education, research and communication tactics, the plan will ultimately work for the betterment of people, pigs and the planet.

More than ever, U.S. pig farmers remain committed to continuous improvement to ensure responsible on-farm antibiotic use. A major component of this ongoing improvement has been, and will continue to be, a comprehensive research strategy.

For 2016, the National Pork Board will make antibiotic use and resistance a top research priority in its budget. Since 2000, the Pork Checkoff has invested $5.3 million in research on the epidemiology of antibiotic resistance, as well as efforts to define alternatives to antibiotic use. The board will invest close to a million dollars of new money in additional research and producer education projects in 2016.

Producer and Public Health Antibiotic Research Priorities 2016

As always, the National Pork Board will continue to work closely with federal agencies and other commodity group partners to research and identify models and metrics that will provide value to the pork industry for continual improvement of responsible antibiotic use. Specifically, there will be a full-time subject matter expert in 2016 who will evaluate models and metrics to assess antibiotic stewardship and use in the U.S. swine industry.

The National Pork Board’s comprehensive antibiotic strategy underscores the industry’s commitment to using antibiotics responsibly to protect both animal health and human health.

To foster a comprehensive, multi-disciplinary approach, the National Pork Board’s research will continue its history of program coordination and cooperation with all collaborators. As with all Checkoff-funded research, upon completion of these studies, results will be available at pork.org.
The following areas have been identified as **priorities to be investigated** by third-party researchers and scientists beginning in 2016. All of these are intended to provide data for animal and public health outcomes (pig health/welfare, human health/safety, environmental impact and pork quality).

- **Analysis and assessment of preventive uses of antibiotics at therapeutic doses in pork production to optimize swine health and public health.** For example, this may include comparative research investigating swine health (including clinical and subclinical disease), swine welfare and food safety outcomes with and without therapeutic preventive antibiotic uses.

- **Analysis and assessment of specific animal population antibiotic treatment versus individual animal treatment in pork production to optimize swine health and public health.** For example, this may include comparative research of animal population versus individual animal treatment investigating swine health and welfare, pork quality and worker health and safety outcomes.

- **Evaluation of on-farm challenges to antibiotic record keeping and identification of strategies to improve antibiotic record keeping practice for continuous improvement of responsible antibiotic use on the farm.**

- **Characterization and assessment of the environmental fate of antibiotics, antibiotic metabolites, antibiotic resistant bacteria and antibiotic resistant genes on swine farms.** For example, research studies may include assessment of and potential mediation steps for antibiotic fate and transport in soils, surface water runoff and/or leaching to groundwater when manure is applied to land in accordance with best management practices.

- **Exploration of strategies to protect herd health and minimize the need for antibiotics.** For example, strategies may include vaccination, environmental controls and alternative feed-based therapeutics.

To learn more about National Pork Board’s antibiotic stewardship plan, visit [www.pork.org/antibiotics](http://www.pork.org/antibiotics).

For more detailed information on specifics about the research priorities, contact Dr. Jennifer Koeman at jkoeman@pork.org.