

PORK SAFETY

Title: Food Safety Research And Response Network Web Site And Training Program – NPB #04-211

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Scientific Abstract:

The Food Safety Research and Response Network is a national consortium of food-safety researchers and food safety practitioners. Funding from the Pork Board was provided to support the development of a Web Site for the network and to provide funds for travel to support the development of study design and reporting guidelines for commodity-supporting research. The FSRRN Web site (www.fsrrn.net) established with these funds has served as the communication hub for the food safety consortium since its inception. The site provides the public with access to the contact information and expertise of all participating FSRRN investigators. For the public and other stakeholders, it provides summaries of project publications and results, news items relevant to commodity stakeholders, links to information focused on best farming management practices, information about systematic reviews for agriculture, and documents the support of the Pork Board and other sponsors. Additional information for food safety researchers about project design, and a manual for systematic reviews in both English and Spanish are available on the site. An internal site requiring investigators to login has provided administrative and other resources for participating investigators, and access to a gallery of images for use in scientific presentations. The funding provided to support study design and reporting guidelines for agriculture studies has produced a major advancement in the standardization of guidelines for authors submitting articles to peer-reviewed journals. The effort, REFLECT, (Reporting Guidelines for Randomized Control Trials), was adapted from a similar effort, CONSORT (Consolidated Standards of Reporting Trials), guiding the implementation of intervention trials for human medicine. The REFLECT document is the product of a consensus meeting supported by these Pork-Board and FSRRN funds that brought together 24 biostatisticians, epidemiologists, food-safety researchers, livestock production specialists, and journal editors. The REFLECT statement provides guidelines for intervention trials in support of livestock and food safety and provides a 22-item checklist to be used by researchers when designing their studies and reviewers when evaluating studies for publication. The REFLECT effort proposed new more consistent terminology for common use in livestock production trials. The REFLECT statement was adapted to guide reporting at the upcoming International Symposium of Epidemiology of Foodborne Pathogens in Pork, and has been endorsed as the method to report random control trials in five journals. These guidelines serve as a framework for researchers and graduate students preparing to submit the results of their research for publication, and for reviewers assessing if the research is suitable for publication in peer-reviewed journals. The REFLECT statement was also incorporated in the 2nd edition of the text *Veterinary Epidemiological Research*. The use of the REFLECT statement, which is focused on livestock trials should improve the design and reporting of studies conducted in support of

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livestock production and food-safety. A similar effort, that reflects prior guidelines developed for the comparison of tests for detecting pathogens in humans, Standards for the Reporting of Diagnostic Accuracy (STARD) is being adapted for use by food-safety researchers and agricultural commodities. This effort that was partially supported by Pork Board funds is in progress and will introduce standardized guidelines for the evaluation of assays used to detect bacterial pathogens such as *Salmonella*, *Campylobacter*, and *Escherichia coli*, O157:H7 in animal, food, and environmental samples. The guidelines developed by these efforts will facilitate the effective comparison, and interpretation of research studies and assist researchers, pork and other industry workers and policy-makers in their efforts to make informed decisions in support of food safety. Contact: Jay Levine, Jay_Levine@ncsu.edu.