



## Student Completed Project Information Sheet

Name of Project: 'Fit to Farm' – Does knowledge lead to behavior change in North Carolina farmers?

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Sponsor, if applicable: Southeast Center for Agricultural Health and Injury Prevention –  
University of Kentucky

Project Abstract:

Objectives: To assess blood pressure improvements among North Carolina farmers following knowledge based intervention; To examine the association between knowledge and behavior change. Methods: Fit to Farm, a health education program developed by the North Carolina Agromedicine Institute in 2016, was a pilot project created to assess the health and wellness of North Carolina farmers. This was accomplished by evaluating baseline knowledge before and after the delivery of the program, via pre and post-test questionnaires. Blood pressure screenings were conducted at baseline and approximately four weeks concluding the program. Relationships between baseline knowledge, learned knowledge, and change in health indicators were measured. SPSS was used to run descriptive statistics, and paired sample t-tests to explore these associations. Results: Delivery of the Fit to Farm program increased participant knowledge. Paired t-tests showed a significant difference between pre-test and post-test scores

(14.12 vs.16.12,  $p<.001$ ). Systolic and diastolic blood pressure measurements also considerably improved among participants (141.52 mmHg vs. 133.69 mmHg and 85.86 mmHg vs. 81.62 mmHg, respectively). However, further results obtained through binary logistic regression analysis (-.46) showed that participants with a large gain in knowledge were less likely to have reduced their blood pressure. No significant change was found in the relationship between knowledge and blood pressure. Conclusions: On-site, targeted health education programs can help improve farmers' blood pressure and knowledge base. Findings should be used in the development and implementation stages of programs addressing farmer health and wellness.