

Project Title: *Using Community Engagement in Addressing the Prevalence of Stray and Wild Animals in Wyandotte County to Encourage Student Interest in Animal and Human Health Careers*

Description: According to the ninth annual *County Health Rankings & Roadmaps*, by the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin Population Health Institute (UWPHI), Wyandotte County was ranked among the lowest in Kansas “health outcomes.” Health outcomes measure both how long people live and how healthy people feel. The rankings allow each state to see how its counties compare on more than 30 factors that influence health: education; income; housing; employment; smoking; access to care; teen births; community safety; physical inactivity; alcohol and drug use; and adult obesity. Wyandotte County ranked last of 103 counties for social determinants of health such as unemployment, percent of children in poverty, high school graduation rate and percent of children in single-parent households.

One contributor to physical inactivity in Wyandotte County is the prevalence of stray and wild animals. Parents are anxious for the safety of the children and are reluctant to allow them to walk to school or play outside. Likewise, adults are less likely to take a walk, bike around the neighborhood, or even wait at a bus stop for fear of encountering dogs, snakes or other wildlife. They have good cause to worry. According to the Public Health Department, in 2018 nearly 200 citizens in Wyandotte County alone visited an emergency room for animal bites. While most of these visits were for dog bites, reports of wild animal bites, especially from raccoons and bats, are on the rise- posing a serious risk for rabies transmission. Engaging high school learning about and addressing this community concern offers an opportunity to introduce career information specific to animal and human health.

We propose to develop a curriculum related to stray and wild animals, create a framework for community presentations that uses Kansas State University students to train high school students to act as *promotores*, (the Spanish term for community health workers.) Participants will be selected from the students participating in one of several OneHealth related career and technical education pathways including Animal Health, Health and Human Services and BioPlus, in collaboration with their teachers and advisers. Once trained, students will make presentations to community groups, elementary and middle schools, the Kids on Campus Summer Camp at Kansas City Kansas Community College and elsewhere in their neighborhoods. Given that more than 40 languages and dialects are spoken in the Kansas City Kansas School District, with Spanish being the most prevalent language spoken, it is crucial that information be made available in multiple languages. By using the *promotores* model, we are increasing the opportunities for multi-cultural dialog and exchange of information in a way that is beneficial to residents of Wyandotte County.

Goals: The broad goals of this project are: 1) encourage collaboration between local health departments, extension agents, Kansas State University students and area health professionals, 2) provide engaging multi-lingual veterinary science lessons specific to stray and wild animals, including career exploration for K-12 schools, summer camps, 4-H spin clubs and other interested community groups, 3) establish sustainable relationships and encourage cross – cultural dialog not possible before between stakeholders by using the *promotores* model.

Outcomes: These goals will be confirmed by the following outcomes: 1) increased citizen awareness of how to deal with stray and wild animals, 2) decreased number of Wyandotte County citizens seeking treatment for animal bites, 3) increase awareness among high school students about the breadth of careers in animal and human health 4) increase interest of citizens in contributing to community problems associated with animal health. Outcomes will be measured in a multiple ways including: 1) feedback from participants in 4-H club sessions, school-based, summer camp and community group presentations and 2) analysis of feedback from

Wyandotte Health Department, Kansas State Research and Extension (KSRE) Wyandotte, and area animal health professionals.

Approach: K-State Olathe (KSO) is a graduate campus that can easily connect the people of Greater Kansas City area to the expertise of KSU Manhattan, particularly in the area of public health. KSRE Wyandotte County has stated that there is a need for greater 4-H content development on responsible pet ownership. KSRE Wyandotte, KSO, and Wyandotte Public Health Dept. believe that a collaborative one health approach to this problem including dog body language, zoonotic diseases, and responsible pet ownership could be beneficial to Wyandotte County residents, particularly underserved and English Language learners. The OneHealth curriculum developed by Beth Montelone and Lisa Freeman as primary investigators, is still being implemented by Martha Nowak, K-12 Engagement Coordinator at KSO. Further, KSO is a partner in the implementation of a Five-Year Community Health Improvement Plan (CHIP), which sets out benchmarks for the health and wellbeing of county residents; included in the plan are benchmarks for addressing underemployment and the need for improved K-12 education and post-secondary attainment in Wyandotte County. The Project Outcomes and Timeline for this grant are outlined in Tables 1 and 2. The Budget is in Table 3. Letters of support from stakeholders are included.

Potential Impact for collaborators: The purpose of this project is to create a collaborative effort between KSU, KSRE, KSO, Kansas City Kansas Community College (KCKCC), the Wyandotte County Public Health Department and Kansas City Kansas Public Schools. This will raise intergenerational and cross-cultural public awareness of animal body language, demonstrate how to reduce the incidence of zoonotic diseases, and promote responsible pet ownership, while highlighting college and career pathways in Public Health, Animal Science, Human Health, Veterinary Medicine, Psychology and Food Science.

Table 1 Project Outcomes

Short-term (changes in knowledge, skills)	Medium-Term (changes in behavior)	Long-term (changes in condition)
<p>Community members, 4-H members and other students gain:</p> <ul style="list-style-type: none"> • Core competencies • Leadership skills • Problem-solving skills • Critical thinking skills <p>(Build on One Health Kansas lessons already developed and adapt to specific age group and language deliveries)</p>	<ul style="list-style-type: none"> • Improved practices of community members for a healthy lifestyle • Increased collaboration with public health departments, Extension, and Kansas State University and schools • Increased diverse student interest in STEM careers • Increase audience to include multi-lingual and Spanish- speaking populations • Increase of students participating in Safe Routes to School Program 	<ul style="list-style-type: none"> • More diverse students pursue STEM careers, particularly in public health, behavioral health and veterinary medicine • Public health department experiences a decrease in animal bite reports • Community members experience better health as a result of spending more time outdoors.

Table 2 Project Timeline

Semester	Inputs	Activities	Outputs
Summer 2019	<ul style="list-style-type: none"> • CECD funding • Project Director, KSO • Wyandotte & Johnson Co. Extension agents 	<ul style="list-style-type: none"> • Recruitment of KSU student ambassadors for training sessions • Engage partner health departments, Extension agents and area schools • Development of printable 1-hour English and Spanish lessons and materials on dog bite prevention (1), zoonotic disease (2), and responsible pet ownership (3) for use in 4-H Spin clubs, outreach events and formal presentations by KSO, Wyandotte Health Dept., KSRE Wyandotte • Pilot programming during KCKCC summer camp 	<ul style="list-style-type: none"> • Feedback surveys collected for each outreach program • Formal lessons developed for 4-H spin clubs, and school program delivery that is NGSS-aligned
Fall 2019	<ul style="list-style-type: none"> • Extension agents • Project Director • Partner Health Departments and Extension agents 	<ul style="list-style-type: none"> • Extension agents and KSO responsible for program delivery through 4-H, area schools, and community outreach events. • Extension agents, KSO staff provide programming at six KCKCC summer camp K-State Friday programs • Recruit high school <i>promotores</i> 	<ul style="list-style-type: none"> • Submit lessons for national 4-H curriculum spin club adoption • Six presentations at KCKCC summer camps • Share materials with Vet Med Rocks outreach group for sustainability and greater reach
Spring 2020	<ul style="list-style-type: none"> • Extension agents • Project Director • Partner and Non-partner Health Departments and Extension agents 	<ul style="list-style-type: none"> • Analyze Survey Results • Inform Partner and Non- partner Health Departments and Extension Agents 	<ul style="list-style-type: none"> • Successful feedback from stakeholders (public health departments, Extension agents, KSO) • Comparison of dog bite reports between years 2019 and 2020