



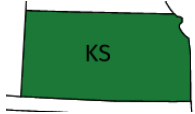
Multiproject Report to Increase Riley County Health Department Public Health Professional Interconnectivity

Anna Kucera

March 19, 2021

Emphasis: Infectious Diseases/Zoonoses

About me



Hometown - Kansas City, Kansas



2018 - BS, Biological Systems Engineering

– Minor, Mathematics



Class of 2022, College of Veterinary Medicine

Outline

Overview

Products

Health
Professional
Survey

Academic
Health
Department

COVID-19
Fliers

Competency
Fulfillment

Conclusion



Overview

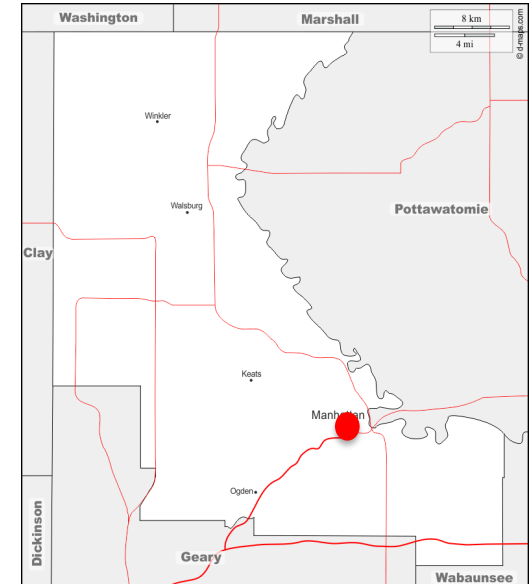
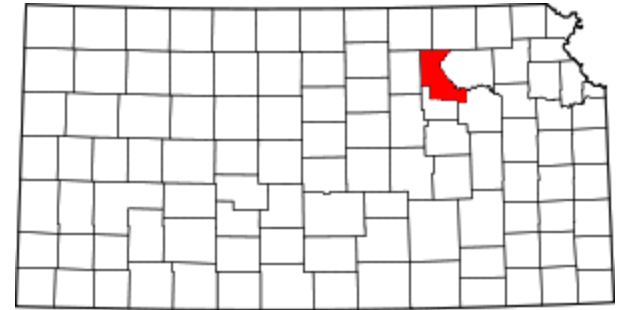
Applied Practice Experience (APE)

- Virtual experience
- 12 weeks
 - 4 weeks at US Army DCC
 - 5 weeks RCHD
 - 3 weeks during KSU CVM



Riley County Health Department (RCHD)

- Riley County, Kansas
 - 609 square miles¹
 - 74,000 estimate population¹
- RCHD located Manhattan, KS
 - 30 full time employees
 - 20 part-time employees
- Close proximity
 - Kansas State University
 - Fort Riley





Overview

Products

Products

1. Health Professional Survey*
 - Availability Survey
 - Human Health Professional Survey
 - Veterinary Health Professional Survey
2. Academic Health Department (AHD)
 - AHD Paper
 - Template Memorandum of Agreement (MOA)
 - Template Formal Working Agreement
3. COVID-19 Fliers

* Joint project with Amanda Preczewski



Overview

Products

Health
Professional
Survey

Disease Reporting

- No standard disease reporting method
- Diseases and disease reporting procedures differ per state
- Frequent human disease reporting shortfalls in the United States
- In Riley County
 - Enteric disease reporting – KDHE
 - All other human diseases – RCHD
 - Animal reportable diseases – KDAH

Kansas Statutes Chapter 65.

Public Health § 65-118

“Each person licensed to practice the healing arts or engaged in a postgraduate training program approved by the state board of healing arts, licensed dentist, licensed professional nurse, licensed practical nurse, administrator of a hospital, licensed adult care home administrator, licensed physician assistant, licensed social worker, and teacher or school administrator.”²



Health Professional Surveys

Objective

- Evaluate likelihood of current deficiencies in reporting
- Assess compliance, knowledge, attitudes, and barriers associated with mandatory reporting
- Evaluate differences with human/animal disease reporting

Health Professional Surveys

- Target audience
 - Health professionals
 - Veterinarians
- Questions
 - Qualitative
 - Diagnostic frequency
 - Reporting compliance
 - Quantitative
 - Reporting barriers
 - Reportable disease knowledge

Surveys

Appendix G – Human Healthcare Professional Surveys

Survey Questions for Human Healthcare Professionals (MDs/DOs)

The survey will be administered using Qualtrics, so the formatting will appear differently than in this version.

Demographics

1. What year did you graduate from medical school?

2. What is your medical specialty?
 - o Family medicine
 - o Internal medicine
 - o Urgent Care
 - o Pediatrics
 - o Emergency Medicine
 - o OB/Gyn
 - o Other _____
3. What category best describes your current practice?
 - o Private practice
 - o Group practice
 - o Health Maintenance Organization (HMO)
 - o Hospital-based

Knowledge Based Questions

According to Kansas statutes and regulations (K.S.A. 65-118, 65-128, 65-6001 - 65-6007, K.A.R. 28-1-2, 28-1-4, and 28-1-18), please indicate whether the following diseases are reportable or not and select the appropriate reporting timeline. Do not use resources to complete this portion of the survey. Results will remain anonymous and will help inform future disease reporting training.

1- Anthrax

___ Reportable (within 4 hours) ___ Reportable (within 24 hours)
___ Not reportable ___ I do not know

2- Blood lead levels

___ Reportable (within 4 hours) ___ Reportable (within 24 hours)
___ Not reportable ___ I do not know

Appendix H – Veterinary Health Professional Surveys

Survey Questions for Veterinarians

The survey will be administered using Qualtrics, so the formatting will appear differently than in this version.

Demographics

1. What year did you graduate from veterinary school?

2. What is your specialty (if applicable)?

3. What category best describes your current practice?
 - o Private practice
 - o Group practice
 - o Animal Shelter
 - o Hospital-based
 - o Other: _____
4. Which types of animals do you generally diagnose/treat?
 - o Dogs
 - o Cats
 - o Food Animal
 - o Equine
 - o Exotics
 - o Zoo/wildlife
 - o Other: _____

Knowledge of Reporting Requirements

According to regulations published by Kansas Department of Agriculture, please indicate whether the following diseases are reportable or not. Do not use resources to complete this portion of the survey. Results will remain anonymous and will help inform future disease reporting training. A link to a listing of reportable diseases will be provided immediately upon completion of this portion of the survey.

1- Vestibular Stomatitis

___ Reportable ___ Not reportable
___ I do not know

Health Professional Surveys

- Results
 - Availability survey
 - Public health professional survey
 - Veterinarian survey
 - Submission to K-State IRB for approval
- Project continued by co-student Amanda Preczewski

Product Takeaways/Analysis

- Continued work
 - Distribution of surveys
 - Collection and analysis of survey data
- Future analysis
 - Shortcomings in health care professional knowledge about reporting
 - Variations between human health care professionals and veterinarians regarding disease reporting

Product Takeaways/Analysis

- Future actions
 - Evaluate health department capacity for increased disease reporting
 - Evaluate causes of delayed reporting
 - Further health care professional engagement regarding disease reporting
- Future possible project expansion
 - Evaluate efficiency of disease reporting procedure
 - Compare disease reporting between AHD vs non-AHD counties



Overview

Products

Health
Professional
Survey

Academic
Health
Department

Academic Health Department (AHD)

- Formal partnership between health department and an academic institution.³
 - Shared resources
 - Collaborative education and training
 - Joint research and services

```
graph TD; AI[Academic Institution] --- AHD[AHD]; PHD[Public Health Department] --- AHD;
```

Academic
Institution

Public Health
Department

AHD

AHD Objectives

- Evaluate feasibility of RCHD creating a AHD partnership with Kansas State University Master of Public Health Program (KSUMPHP)
- If feasibility exists, complete or provide supporting documents for implementation

AHD Targeted Benefits

KSUMPHP

- Applied research opportunities³
- Increased graduate awareness of public health roles³
- Better prepared graduates for the workforce
- Access to real world research population⁴

RCHD

- Increased capacity to meet community health needs³
- Enhanced graduate recruitment³
- Better prepared graduates for the workforce³
- Avenue for applicable research⁴
- Support accreditation assessment⁴

AHD Components

1. Defined academic-health agency relationship
2. Formal Working Agreement
3. Shared resources for specific operations

Final Products

- AHD Report
 - Successful attributes
 - Implementation timeline
 - Suggested activities
- Template Memorandum of Agreement (MOA)
- Template Formal Working Agreement

Template Documents

MEMORANDUM OF AGREEMENT
between
RILEY COUNTY HEALTH DEPARTMENT
and
KANSAS STATE UNIVERSITY MASTER OF PUBLIC HEALTH DEPARTMENT
regarding the formation of an
ACADEMIC HEALTH DEPARTMENT

1. **PURPOSE**

The purpose of this Memorandum of Agreement (MOA) is to provide for the formation of an Academic Health Department whose purpose is to develop academic and educational cooperation on the basis of equality and reciprocity and to promote sustainable partnerships and mutual agreement, and mutually reinforcing activities between the Riley County Health Department (herein referred to as RCHD) and the Kansas State University Master of Public Health Department (herein referred to as KSUMPHD). Both KSUMPHD and RCHD may be referred to as the "party" or collectively as "parties." RCHD and KSUMPHD will remain separate entities, but for the purpose of participating in this MOA the combined efforts and activities will be referred to as an Academic Health Department (AHD). The goal of this mutually beneficial partnership shall be to... (insert desired goal)

EXAMPLES

- Enhance public health instruction, practice, research and workforce development and to improve community health in Riley County.
- Address the basic conditions that effect the health and well-being of all those in the community and to strengthen the multi-faceted system that affects health and health equity.
- Establish an affiliation between RCHD and KSUMPHD in which RCHD is designated as and agrees to serve as a community-based public health AHD for one or more academic or professional programs of KSUMPHD, and sets forth the responsibilities of the parties and terms and conditions of the affiliation established.

2. **PARTNERSHIP PRINCIPLES**

- 2.1. The work of the AHD and KSUMPHD shall adhere to the following *principles*:
 - 2.1.1. Establish clear and open communication by striving to understand each other's needs and interests, and potential contributors.
 - 2.1.2. Promote co-learning about community health and improvement;
 - 2.1.3. Respect the unique nature of each partner and the contribution of each partner;

3

FORMAL WORKING AGREEMENT
of
ACADEMIC HEALTH DEPARTMENT
entered into by
RILEY COUNTY HEALTH DEPARTMENT
and
KANSAS STATE UNIVERSITY MASTER OF PUBLIC HEALTH DEPARTMENT

1. **Scope of Activities**

1.1. RCHD and KSUMPHD, aim to cooperate in areas that may include, but are not restricted to, all those activities mentioned in this section (2.1- 2.8). Before any activity may be implemented, the Academic Health Department Advisory Committee (see 2.5) shall discuss the issues relevant to the satisfaction of each party. The parties will enter into specific agreements based on the mutually agreed objectives and outcomes of the activity. Activity agreements will include such terms as the following:

- 1.2. Promote co-learning regarding community health and improvement.
- 1.3. Respect the unique nature of each partner and the contribution of each partner.

2. **Opportunities for collaborative public health professional preparation**

- 2.1. RCHD will host MPH students and, as appropriate, undergraduate students for internship according to KSUMPHD guidelines.
- 2.2. RCHD will host Master of Public Health (MPH) students for practicum opportunities for which the students will receive academic credit. Each student will provide a minimum of 300 hours of work. RCHD will identify adequate local supervisor(s)/preceptor(s). KSUMPHD will provide a faculty advisor and practicum coordinator. [Refer to MPH practicum handbook and to the existing MOA between KSUMPHD for the MPH program.]
- 2.3. KSUMPHD Student may assist RCHD through involvement in research, study, and service learning.

3. **Opportunities for workforce development**

- 3.1. The RCHD will plan and implement workforce development training based on needs identified by RCHD, KSUMPHD faculty and community partners as part of the Public Health Program's objectives to enhance the public health workforce in the region.

4. **Opportunities for enhanced public health practice and collaborative research**

- 4.1. KSUMPHD faculty and students may assist RCHD with data analysis.

3

Product Takeaways/Analysis

- Continued work
 - RCHD/KSUMPHP agree and sign an MOA, initiating an AHD
 - RCHD/KSUMPHP agree, sign, and implement a Formal Working Agreement
- Future actions
 - Delineation or hiring an AHD Coordinator
 - Assimilating and maintaining available project list
 - CITI training for all ALE students/preceptors
- Future possible project expansion
 - Contact Kent County Health Department, Michigan about internal project proposal form
 - Joint roundtable discussions to identify relevant research questions
 - Develop intern introduction experience



Overview

Products

Health
Professional
Survey

Academic
Health
Department

COVID-19
Fliers

COVID-19

- Originated Wuhan, China December 2019
- Disease – COVID-19⁵
- Virus – SARS-CoV-2⁵
- Spread via respiratory droplets
- Clinical signs – fever, dry cough, loss of taste, and malaise⁶
- Predisposition – elderly, pre-existing medical condition⁷
- Prevention – physical distancing, working remotely, wearing masks



COVID-19 Fliers

Objectives

- Create original informational fliers (max 2) related to COVID-19 for KSUMPHP
- Fliers targeted to general audience
- 8 ½" x 11"

COVID-19 Fliers

STAY WELL DURING COVID-19

Why should I worry about getting sick?

While an initial quarantine for COVID-19 has ended, the concern for contracting COVID-19 is not over. Stay alert and informed to protect yourself and those around you from contracting COVID-19.

What should I watch for?

Mild Sickness Signs		Emergency Signs		
				
Fever	Cough	Confusion	Difficulty staying awake	Persistent chest pain/pressure
				Trouble breathing

Who should I contact?

If you are experiencing mild sickness signs and think you may have COVID-19, stay home. Most people have mild illness and don't need medical treatment. Seek medical treatment immediately if you experience any emergency signs or other concerning signs.

How should I stay informed?

Want to learn more? The most informed news sources from a public health perspective include the following locations:

Center for the Disease Control
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Kansas Department of Health and Environment
<https://www.coronavirus.kdheks.gov/>

World Health Organization
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>



Created May 25, 2020

STAYING WELL DURING COVID-19

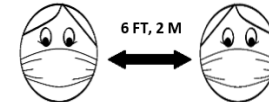
Why should I worry about getting sick?

While an initial quarantine for COVID-19 has ended, the concern for contracting COVID-19 is not over. Stay alert and informed to protect yourself and those around you from contracting COVID-19.



How to protect myself?

There are many ways to protect yourself from getting COVID-19. Wearing a cloth mask helps protect others around you in case you have COVID-19 but no symptoms. Physically distancing yourself 6 feet (or 2 meters) away from people also helps to prevent the spread of disease. Also, don't forget to wash your hands for at least 20 seconds with soap and water.



Who should I contact?

If you are experiencing mild sickness signs, such as fever and cough, or think you may have COVID-19, stay home. Most people have mild illness and don't need medical treatment. Seek medical treatment immediately if you experience any emergency signs such as confusion, difficulty staying awake, persistent chest pain, trouble breathing, or other concerning signs.



How should I stay informed?

Want to learn more? The most informed news sources from a public health perspective include the following locations:



Center for the Disease Control
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Kansas Department of Health and Environment
<https://www.coronavirus.kdheks.gov/>

World Health Organization
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>



Created May 25, 2020

Product Takeaways/Analysis

- Insights
 - Scientific advances rapidly outdate information based on previous knowledge
 - Educational fliers must use uniform wording to increase ease of understanding
- Possible future actions
 - Update/recreate COVID-19 flier with current research knowledge



Overview

Products

Health
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Academic
Health
Department

COVID-19
Fliers



Overview

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Fliers



8 Public Health Foundational Competencies Categories

- Evidence-based Approaches to Public Health
- Public Health and Health Care Systems
- Planning and Management to Promote Health
- Policy in Public Health
- Leadership
- Communication
- Interprofessional Practice
- Systems Thinking

Foundational Competencies

Evidence-based Approaches to Public Health	2. Select quantitative and qualitative data collection methods appropriate for a given public health context
Public Health and Health Care Systems	5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
Planning and Management to Promote Health	7. Assess population needs, assets and capacities that affect communities' health
	9. Design a population-based policy, program, project or intervention
Policy in Public Health	13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
Leadership	16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
Communication	18. Select communication strategies for different audiences and sectors
	19. Communicate audience-appropriate public health content, both in writing and through oral presentation
Interprofessional Practice	21. Perform effectively on interprofessional teams

Health Professional Surveys

Evidence-based Approaches to Public Health	2. Select quantitative and qualitative data collection methods appropriate for a given public health context
Public Health and Health Care Systems	5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
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Interprofessional Practice	21. Perform effectively on interprofessional teams

AHD

Evidence-based Approaches to Public Health	2. Select quantitative and qualitative data collection methods appropriate for a given public health context
Public Health and Health Care Systems	5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
Planning and Management to Promote Health	7. Assess population needs, assets and capacities that affect communities' health
	9. Design a population-based policy, program, project or intervention
Policy in Public Health	13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
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COVID-19

Evidence-based Approaches to Public Health	2. Select quantitative and qualitative data collection methods appropriate for a given public health context
Public Health and Health Care Systems	5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
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Interprofessional Practice	21. Perform effectively on interprofessional teams

Emphasis Competencies

Number and Competency		Description
1	Pathogens/pathogenic mechanisms	Evaluate modes of disease causation of infectious agents.
2	Host response to pathogens/immunology	Investigate the host immune response to infection.
3	Environmental/ecological influences	Examine the influence of environmental and ecological forces on infectious diseases.
4	Disease surveillance	Analyze disease risk factors and select appropriate surveillance.
5	Disease vectors	Investigate the role of vectors, toxic plants and other toxins in infectious diseases.



Overview

Products

Competency
Fulfillment

Conclusion

Health
Professional
Survey

Academic
Health
Department

COVID-19
Fliers

Conclusion

- Health Professional Surveys
 - 6 competencies
 - Action - distribution, collection, and analysis of health professional survey data
- Academic Health Department (AHD)
 - 4 competencies
 - Action
 - RCHD/KSUMPHP agree and sign an MOA
 - RCHD/KSUMPHP agree, sign, and implement a Formal Working Agreement
- COVID-19 Fliers
 - 3 competencies
 - No action

Thanks

- Major Professor – Dr. Robert Larson
- Committee Members
 - Dr. Natalia Cernicchiaro
 - Dr. Susan Moore
- RCHD Preceptor – Edward Kalas

References

- 1. U.S. Census Bureau. (2019). U.S. Census Bureau QuickFacts: Riley County, Kansas. Retrieved from <https://www.census.gov/quickfacts/rileycountykansas>
- 2. Kansas Revisor of Statutes Section 65-118. (2013). Retrieved December 28, 2020, from https://www.ksrevisor.org/statutes/chapters/ch65/065_001_0018.html
- 2. London, Adams, Chelsey Chmelar, and Hoann Hoganson. 2015. "An Academic Health Department: Everyone Wins." October 7, 2015. <https://www.malphp.org/sites/default/files/files/Events/MPPHC/2015%20MPPHC/Presentations/304%20London%20.pdf>.
- 4. Erwin, Paul Campbell, and C. William Keck. 2014. "The Academic Health Department: The Process of Maturation." *Journal of Public Health Management and Practice* 20 (3): 270–277. <https://doi.org/10.1097/PHH.000000000000016>.
- 5. Liu, Y., Kuo, R., & Shih, S. (2020). COVID-19: The first documented coronavirus pandemic in history. *Biomedical Journal*, 43(4), 328-333. doi:10.1016/j.bj.2020.04.007
- 6. Ragab, D., Eldin, H. S., Taeimah, M., Khattab, R., & Salem, R. (2020). The COVID-19 Cytokine Storm; What We Know So Far. *Frontiers in Immunology*, 11. doi:10.3389/fimmu.2020.01446
- 7. CDC (2021). People at Increased Risk. Retrieved January 23, 2021, from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/index.html>

Image References

- Slide 2
 - <https://www.k-state.edu/today/students/announcement/?id=56544>
- Slide 5
 - https://d-maps.com/carte.php?num_car=75404&lang=en
 - https://en.wikipedia.org/wiki/Riley_County,_Kansas
- Slide 6
 - <https://www.rileycountyks.gov/Facilities/Facility/Details/Riley-County-Health-Department-9>

The seal of Kansas State University is partially visible on the left side of the slide. It is a circular emblem with the text "KANSAS STATE UNIVERSITY" around the top and "1863" at the bottom. A star is also present in the design.

QUESTIONS?