

Master of Public Health
Applied Practice Experience

***THE FOOD SAFETY AND INSPECTION SERVICE'S ROLE IN
THE CONTROL OF LISTERIA MONOCYTOGENES***

by

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MPH Candidate

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Applied Practical Experience Site:

USDA Food Safety and Inspection Service

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Supplementary field experience activities completed at the University of Padova with the International Mobility of Veterinary Students & Food Biotechnologists (iMOVES&FB) program in June 2025

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Chapter 1 - Portfolio Products

I began my Applied Practical Experience (APE) in April 2025 with the Food Safety and Inspection Service (FSIS) with my preceptor Dr. Gregory Abreu, a Deputy District Manager at FSIS. Dr. Kastner, Dr. Abreu, and I videoconferenced to discuss the field experience and to consider ideas for my APE products. Dr. Abreu identified a need for a presentation to FSIS supervisors about their role in food safety with a focus on the control of *Listeria monocytogenes*. I worked with Dr. Abreu to identify Agency policy to present, and I gave the presentation to the FSIS supervisors in September 2025. I interviewed Dr. Abreu for a career introspective article in the *One Health Newsletter* which helped me consider my future career options. He described his journey through veterinary school, work in a large animal practice, and service in public health with FSIS. Dr. Kastner suggested that I participate in the International Mobility of Veterinary Students & Food Biotechnologists (iMOVES&FB) trip to Italy as part of my APE to help round out my field experience by giving me food safety related insights from within the European Union. I learned about differences in Italian food safety and biosecurity compared to the United States (U.S.). The trip helped to give me a multidisciplinary view of food safety. I included my systems thinking tool in my ILE which describes how I applied thinking tools in my APE products.

Table 1.1 Summary of Portfolio Products

Portfolio Product		Description
1	Presentation to FSIS supervisors	I presented to a group of FSIS supervisors regarding the Agency's revised policy and procedures that were introduced in response to recent <i>Listeria monocytogenes</i> outbreaks.
2	Career newsletter article	I interviewed Dr. Gregory Abreu about his career for an article in the <i>One Health Newsletter</i> .
3	iMOVES&FB Trip and Newsletter Article	I participated in the iMOVES&FB trip to Italy which had a multidisciplinary focus on food safety, public health, and animal

		welfare. I wrote an article about the trip for the <i>One Health Newsletter</i> .
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Table 1.2 Portfolio Products and Competency Addressed

Portfolio Product		Description	
1	Presentation to FSIS supervisors	12	Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
		15	Evaluate policies for their impact on public health and health equity
		19	Communicate audience-appropriate public health content, both in writing and through oral presentation
		22	Apply systems thinking tools to a public health issue
2	Career newsletter article	19	Communicate audience-appropriate public health content, both in writing and through oral presentation
3	iMOVES&FB Trip and Newsletter	5	Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
		12	Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
		19	Communicate audience-appropriate public health content, both in writing and through oral presentation

Chapter 2 - Competencies

Table 2.1 Summary of MPH Foundational Competencies

Number and Competency		Description
5	Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	The iMOVES&FB trip allowed me to compare legislation for food safety, animal health, and biosecurity between Europe and the U.S.
12	Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	I reviewed the policy-making process when I prepared for my presentation to FSIS supervisors.
15	Evaluate policies for their impact on public health and health equity	I assessed how FSIS regulations related to <i>Listeria monocytogenes</i> have helped public health when I prepared for my presentation to FSIS supervisors.
19	Communicate audience-appropriate public health content, both in writing and through oral presentation	I considered my audience when I drafted my newsletter articles and FSIS presentation.
22	Apply systems thinking tools to a public health issue	I discussed systems thinking tools in my presentation to FSIS supervisors.

Competency 5 - Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings.

The iMOVES&FB trip allowed me to compare biosecurity measures for highly pathogenic avian influenza (HPAI) between Italy and the U.S. I learned about the roles that the European Food Safety Authority (EFSA) and the European Commission (EC) play in food safety in the EU from Dr. Lorenzo Terzi, a former EU regulatory trade official, and other speakers. They spoke to us about how EU trade agreements and how harmonization of food safety rules facilitates trade. I was able to compare the EU regulatory authorities to my experiences in the U.S.

Competency 12 - Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.

I reviewed how FSIS creates policy while I prepared my presentation for FSIS supervisors and during my literature review on FSIS regulation of *Listeria monocytogenes*. FSIS must follow multiple steps when creating new rules. For example, FSIS must publish the proposed rule in the Federal Register to get comments from stakeholders, including federally inspected meat and poultry establishments and the public. I attended the iMOVES&FB lectures that discussed international trade agreements. I learned about how the World Trade Organization's (WTO)

Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) facilitates agricultural trade by helping to protect nations' animal health, plant health, and food safety. I learned about how the European Food Safety Authority (EFSA) and the European Commission (EC) work together on legislation on food safety in the European Union (EU).

Competency 15 - Evaluate policies for their impact on public health and health equity.

I evaluated how FSIS regulations have impacted public health while I worked on my FSIS presentation and did my literature review for my APE. I considered how FSIS rules and regulations have prevented foodborne illness from *Listeria monocytogenes*. I discussed FSIS policies during my presentation to FSIS supervisors.

Competency 19 - Communicate audience-appropriate public health content, both in writing and through oral presentation.

I considered my audiences when I drafted my iMOVES&FB article, career introspective article, and FSIS presentation. My iMOVES&FB article was for the *One Health Newsletter*, so I considered how the reader would likely be interested in a multidisciplinary approach to human and animal health. My career introspective article was about Gregory Aberu, DVM, who transitioned from a career in animal health to public health, so I drafted the article thinking about a potential audience of veterinary students considering their career options after finishing school. I understood that the group of FSIS supervisors had a mix of backgrounds in food safety and years of experience, so I presented them basic and advanced food safety topics.

Competency 22 - Apply systems thinking tools to a public health issue. I applied systems thinking in my presentation to FSIS supervisors. I described how supervisors should use systems thinking to consider how well a company's overall food safety system is working to prevent foodborne illness. I talked about how to consider the different parts of the food safety programs and how they work together to prevent potential hazards. I emphasized that supervisors need to look at the overall system instead of the individual parts of the food safety system.

Table 2.2 MPH Foundational Competencies Course Mapping

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		
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		x			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	x
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			
Communication					
18. Select communication strategies for different audiences and sectors	DMP 815, FNDH 880 or KIN 796				

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content		x			x
Interprofessional Practice					
21. Perform effectively on interprofessional teams		x			x
Systems Thinking					
22. Apply systems thinking tools to a public health issue			x	x	