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Public Health Agency Site:

Fort Riley, Kansas

8/21/2023-10/23/2023

Site Preceptor:

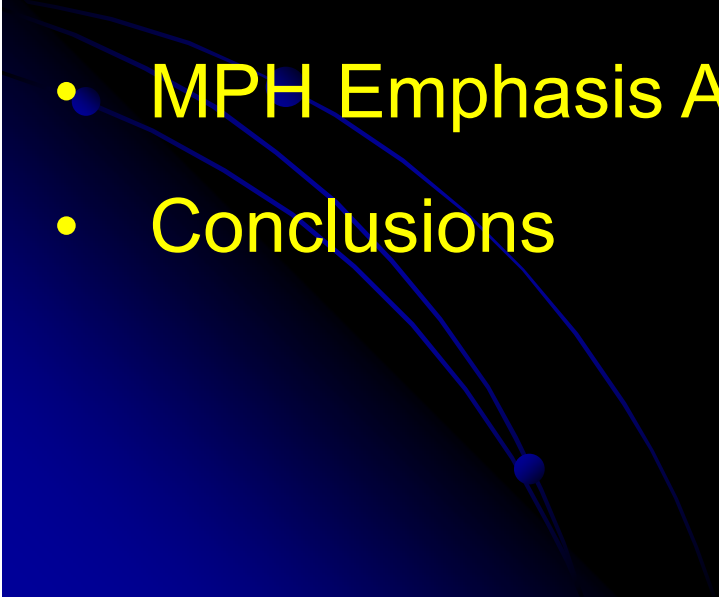
William Nuessle (Captain)

Chief of Environmental Health

Irwin Army Community Hospital



Presentation Overview

- Demographics of Fort Riley
 - Fort Riley Public Health Accreditation
 - Department of Public Health (DPH) at Fort Riley
 - Department of Army Food Inspector Handbook
 - MPH Foundational Competencies
 - MPH Emphasis Area Competencies
 - Conclusions
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Demographics



(Military one source, 2024)

- Population: 62,683
- Location: Northeastern Kansas, one hour west of Topeka (the state capital)
- Fort Riley is in both Geary and Riley counties

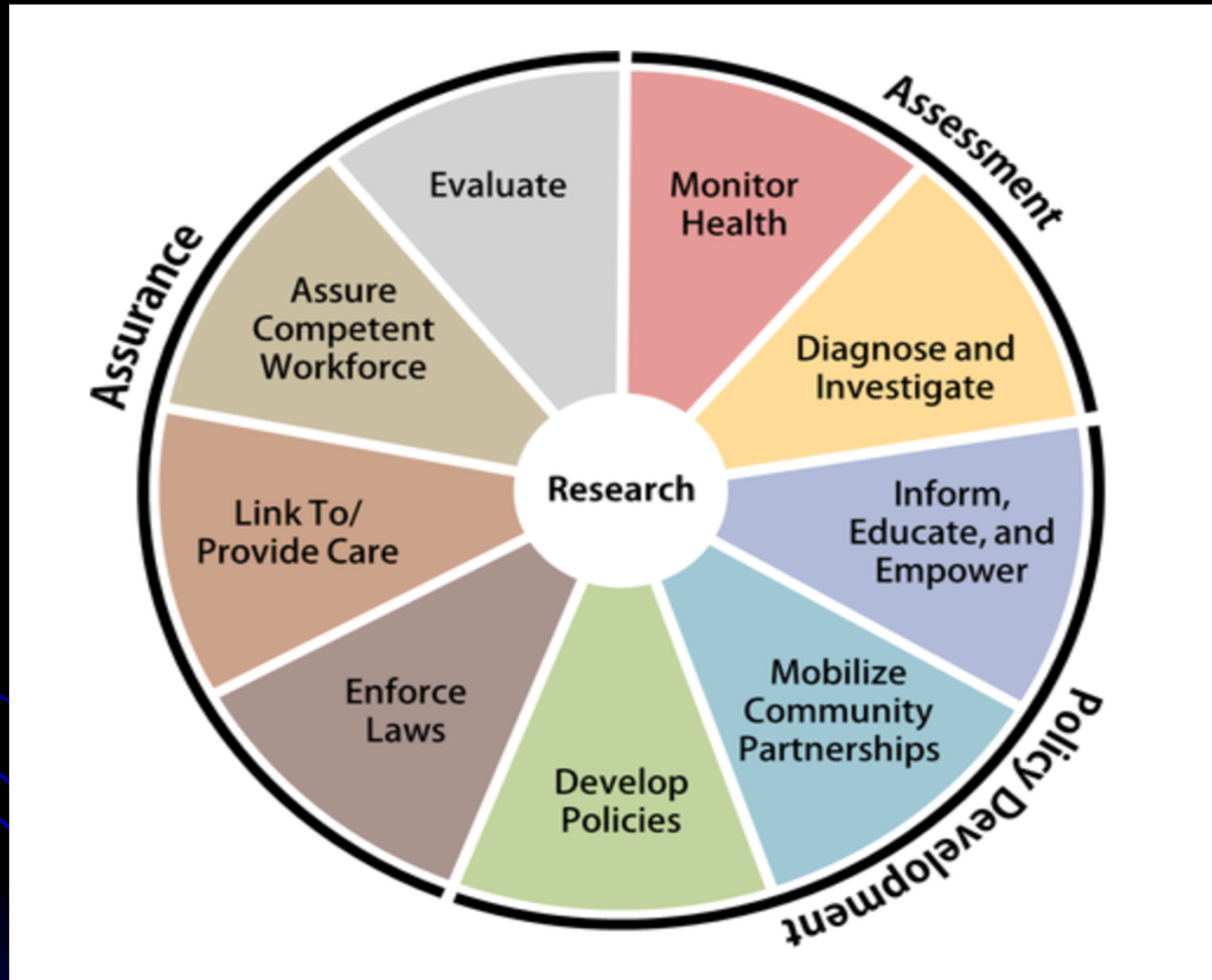
Fort Riley Public Health Accreditation

- In 2016, the Fort Riley Public Health Department (PHD) became the first military PHD to seek national accreditation from the Public Health Accreditation Board (PHAB)
- Currently, the department is actively involved in the process of re-accreditation.



(Melton et al., 2019)

Essential Public Health Services



Centers for Disease Control and Prevention, 2024

DPH sections at Ft. Riley

- Occupational Health
- Industrial Hygiene
- Public Health Nursing
- Army Wellness Center
- Army Hearing
- Program
- Veterinary Services
- Environmental Health



(Military one source, 2024)

Occupational health

- Medical surveillance examinations
- Pre-employment physical exams, including hearing tests, vision screenings, immunization checks, tuberculosis screening, and vital checks
- Education on various occupational health programs,
 - such as blood-borne pathogens, hearing and vision conservation, occupational health and injury prevention, mitigation, and work-related immunizations

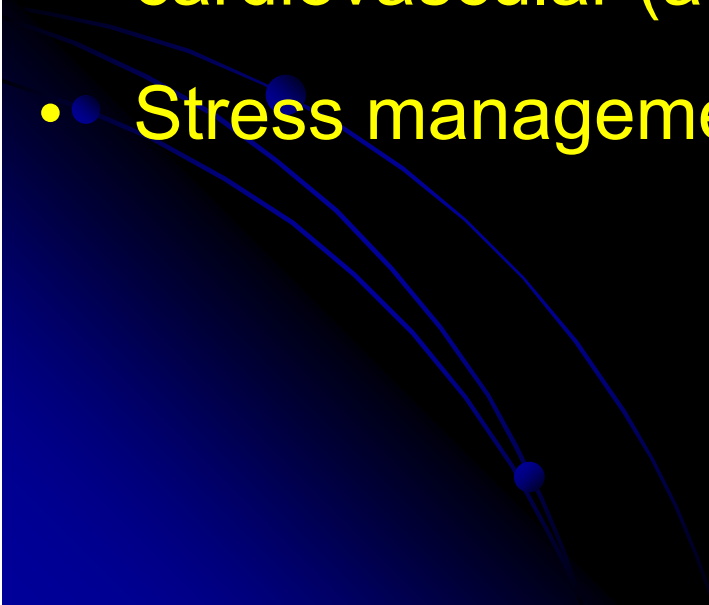
Industrial Hygiene

- Ventilation
- Noise exposure and protection
- Air contaminants such as asbestos, lead, and other hazardous materials
- Indoor air quality and ventilation investigation
- Worksite noise level assessment conducted through calibrated and tested noise dosimeters
- Conduct office ergonomics assessments and provide solutions

Public Health Nursing

- Conduct daycare sanitation inspections
- Execute disease surveillance and prevention
- Conduct STD counseling sessions covering awareness, treatment, and prevention
- Conduct smoking cessation counseling sessions
- Administer immunization screening and review of vaccination policies

Army Wellness Center

- Behavioral health counseling services
 - Assessments of total body weight, fat percentage, and fat-free mass (BodPod)
 - Conduct fitness tests and measures of individual cardiovascular (aerobic) fitness levels
 - Stress management and smoking cessation classes
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Army Hearing Program

- Hearing readiness
- Hearing conservation
- Education



(Military one source, 2024)

Veterinary Services



- Sanitary Inspection of the Commissary
- Audit of a commercial food processing facility
- Food defense assessment
- Zoonotic disease prevention
- Rabies bite reports

(Military one source, 2024)

Environmental Health

- Water Quality Surveillance
- Vector surveillance (mosquitoes and ticks)
- Hospital Waste Management
- Sanitation inspection of Child and Youth

Development Centers

- Conduct food service safety and sanitation inspections at the dining facilities (DFACs) and restaurants on base

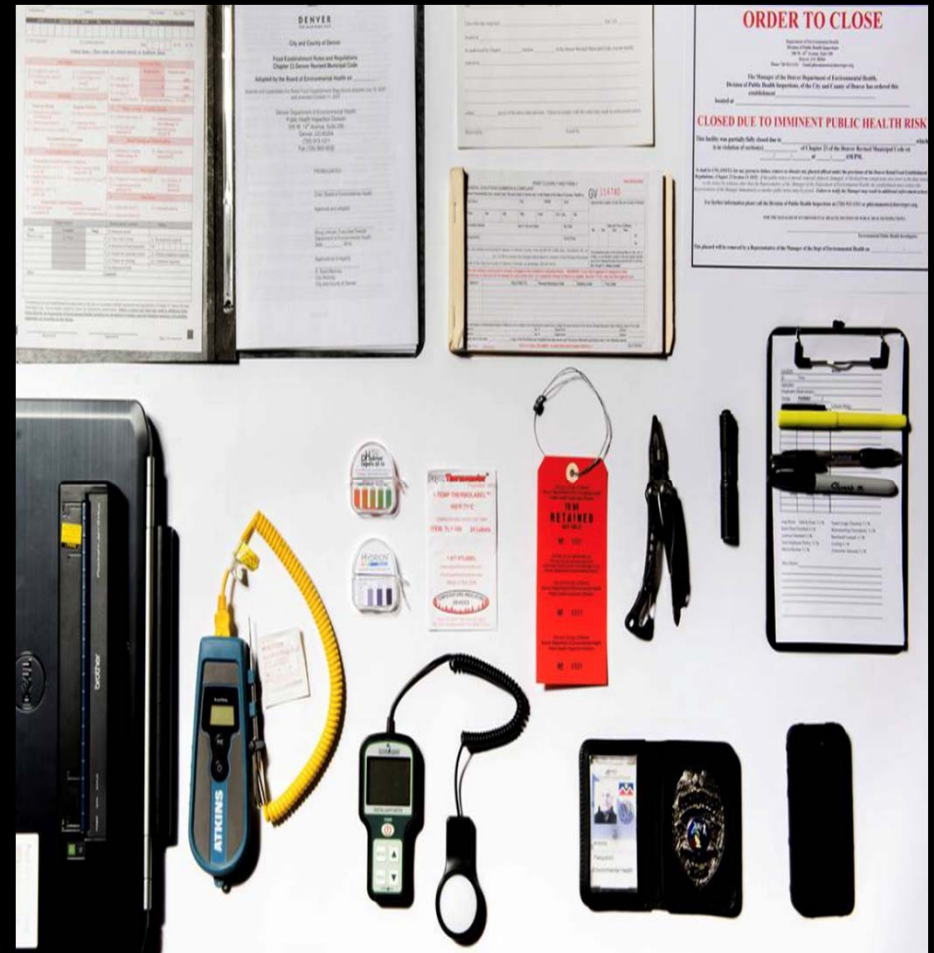
Department of Army Food Inspector Handbook



Regulation: TB MED 530

1.Preparation

- Flashlight
- Calibrated thermometer
- Notebook
- Camera/cellphone with a camera
- Inspection forms



2.Introduction



- When entering the premises, we declare, “Public Health is conducting a routine inspection.”
- Subsequently, we display badges with names and job titles.

3. Hand-washing Station

- A hand-washing facility must have the following:
 - Soap
 - Paper towels
 - Hot (at least 100°F/38°C) and cold running water
 - Trash container
 - Hand-washing sign



4. Food Storage

- Check for food labels (common name, expiry date)
- No rust, dust, or mold on storage racks
- Salads in refrigeration are sealed or covered



Food storage guidelines

- Ensure raw meat, poultry, and fish are kept separate from cooked/ready-to-eat food (or stored below cooked and ready-to-eat food)
- Keep food away from chemicals and cleaning supplies (X)



Food storage guidelines

- Ensure accurate temperature displays and no ice contact with food in freezers and refrigeration storage units



Food storage guidelines



- Ensure dry food storage is elevated 6" above the floor, off walls for pest control; maintain an 18" clearance above for fire safety.

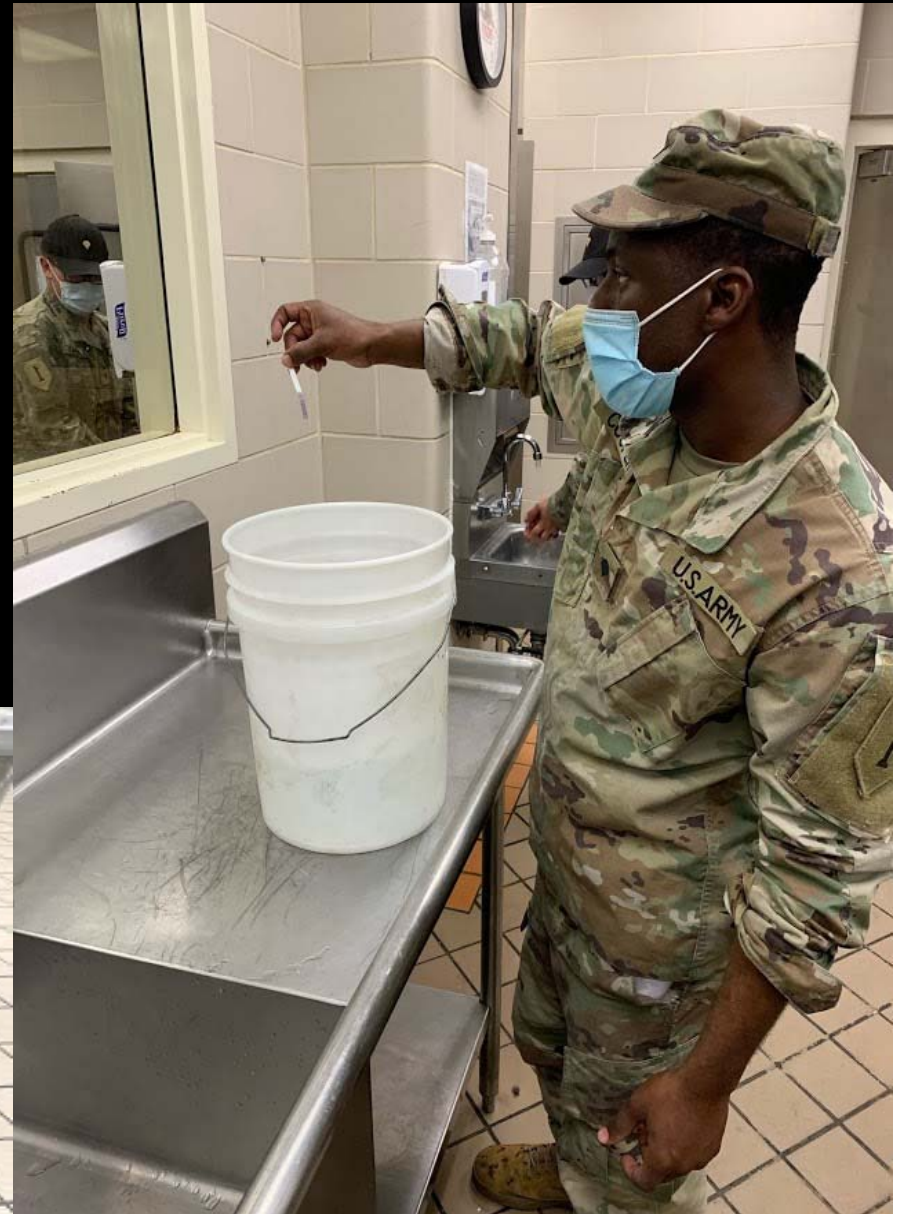
5. Food preparation

- Ensure food-contact surfaces are sanitized after each use or when handling different food
- Avoid cross-contamination



Food preparation

- Check for proper labeling of sanitizers and soap, and ensure they are kept away from any food source
- Test sanitizer concentration with a kit to ensure its efficiency (100 parts per million/PPM of chlorine)



Food preparation



- Check the ventilation hood systems for grease, dust, or condensation that may drip onto food

Food preparation

- Check for sufficient access to potable water to support food preparation, sanitation, and hygiene activities



Food preparation

Gloves used for handling food:

- Are no substitute for handwashing hand washing
- Are for single use only
- Should be right for the task
- Must be safe (synthetic rubber, neoprene, nitrile, or vinyl are recommended)
- Natural Rubber Latex (NRL) gloves have been associated with allergic reactions



6. Dishwashing station

Ensure:

- That utensils cleaned and placed in the racks are free from food debris
- No wet stacking of pots and pans
- No cloth drying of dishes



Dishwashing station

Ensure:

- The dishwasher has a final rinse temperature of 180°F or higher
- Inspect the pre-rinse faucet's tension spring to prevent nozzle contact with dirty sink water, avoiding cross-contamination



7. Serving station

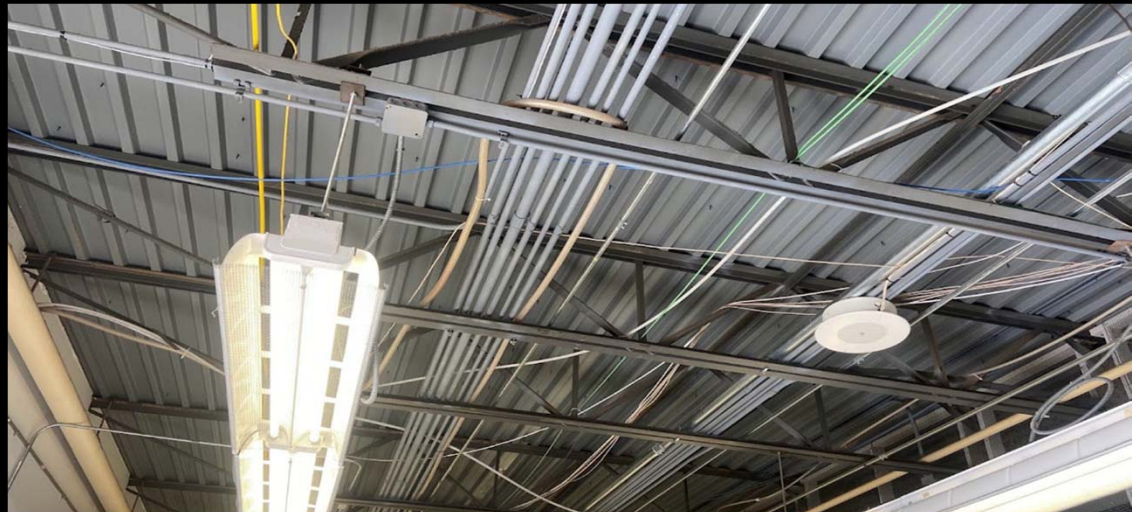
- Check food temperatures with a thermometer to ensure accuracy
- Inspect the serving area for cleanliness



Serving station



- Ensure the serving area is free from open ceilings or missing tiles, which could cause debris to fall onto food
- Bulk dispensers' tubes must be designed in a way that diverts condensation and splashes (1" protruding at a 45-degree angle)



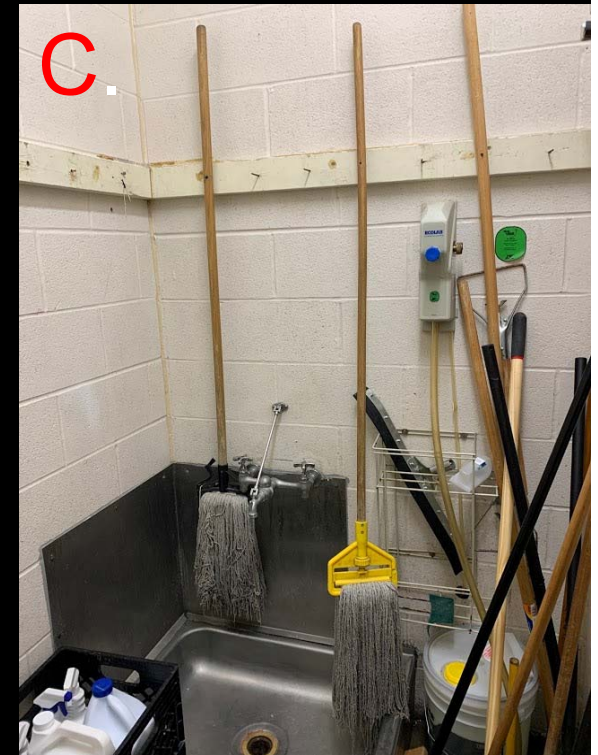
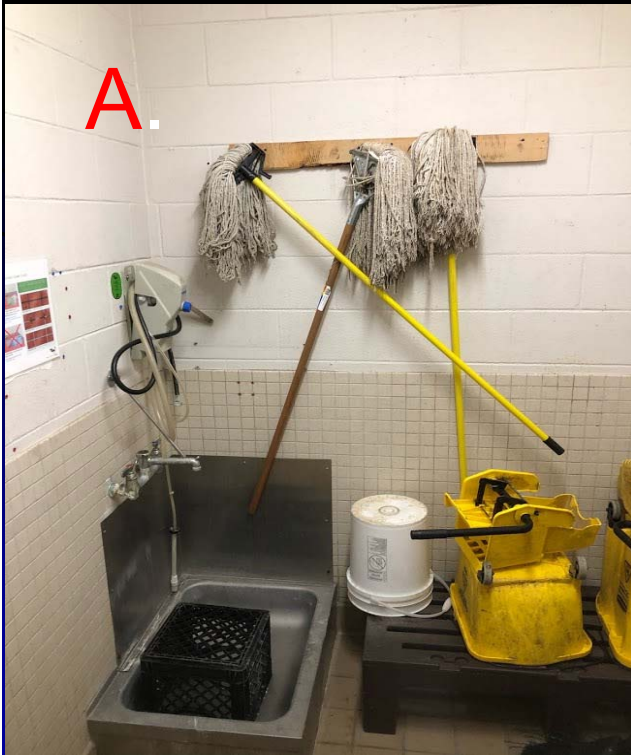
8. Dining station

- Check cleanliness, no open ceilings or missing tiles; assess chair and table serviceability
- Avoid using sponges on furniture as they harbor pathogens when torn



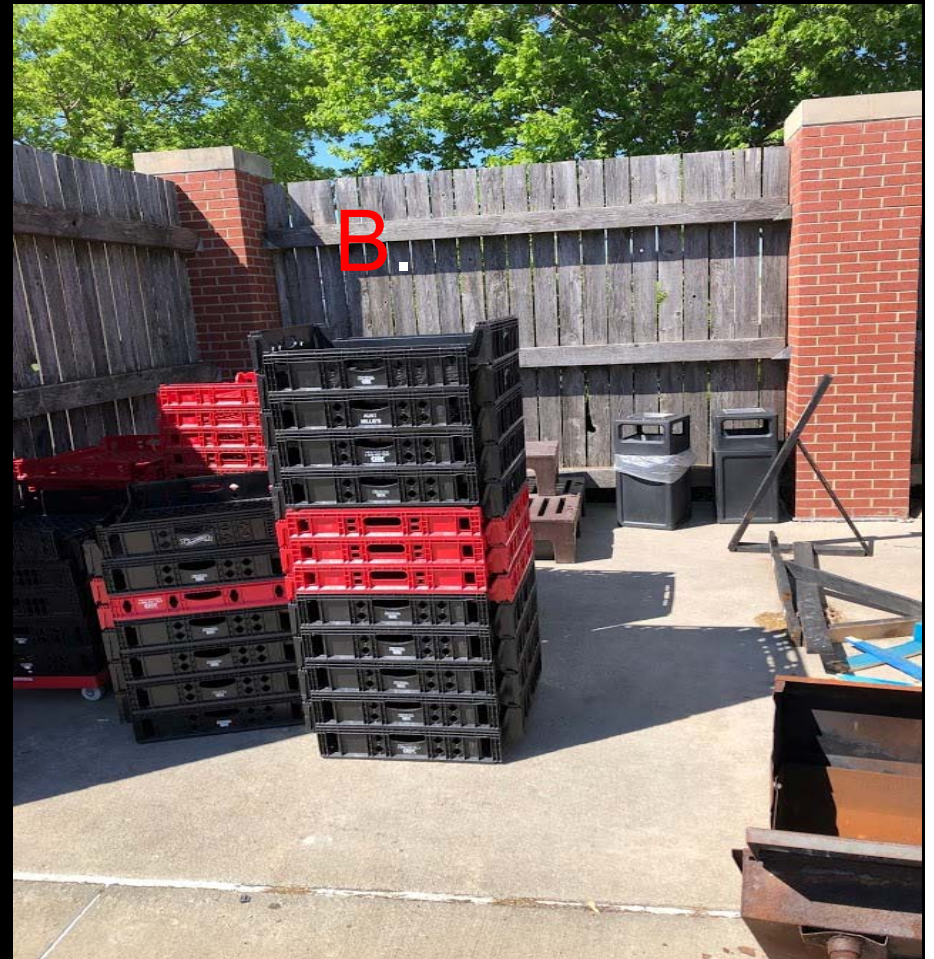
9. Utility closet

- Check cleanliness and proper storage of mops and brooms (air dry without soiling walls, handles, or supplies)
- Ensure good ventilation to prevent musty smells that could attract rodents and insects



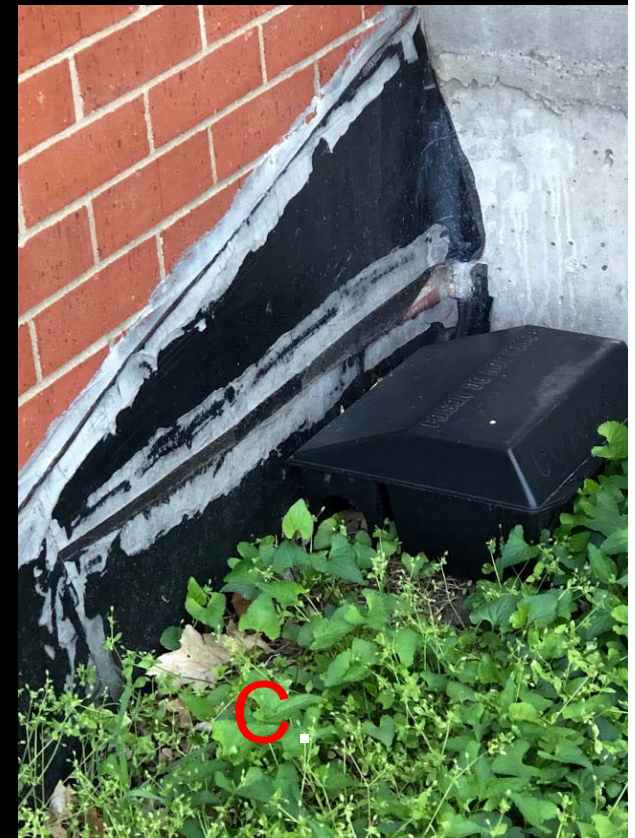
10. Dining facility exterior

- Check for cleanliness, well-manicured grass, and holes in the walls (which could serve as entry points and breeding grounds for pests)



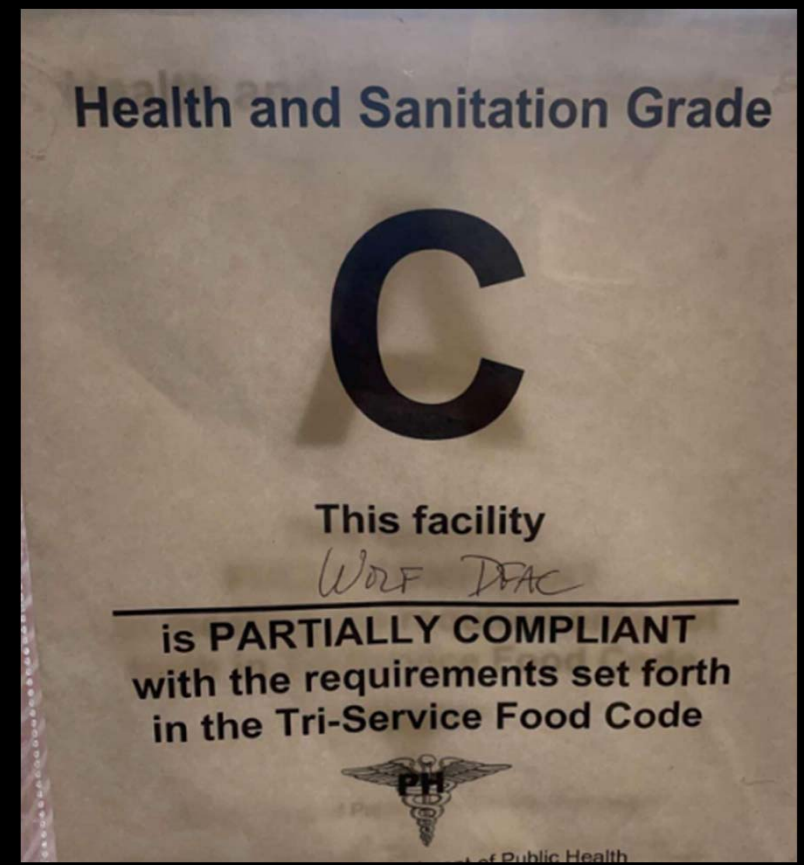
Dining facility exterior

- Check for the installation of air curtains on entryways to prevent the entry of flying insects
- Dumpsters with closed lids should be kept at least 50 feet from the dining facility



11. Documentation and grading

- DD Form 2972, Food Facility Risk Assessment Survey
- DD Form 2973, Food Operation Inspection Report
- DD Form 2974, Tactical Kitchen Food Sanitation Insp



MPH Foundational Competencies Attained

- **Planning and management to promote health (8 and 9):** by formulating the food inspection process in a military dining facility using TB Med 530 guidelines/food inspector handbook
- **Communication (18 and 19):** by creating an informative poster for circulation to the Public Health Department of Fort Riley, Kansas State University, and the Military Science Department
- **Interprofessional Practice (21):** through professional engagements with various departmental staff at Fort Riley Public Health and collaborating with scholars from diverse disciplines during the **40th Frontier Field Trip**.

MPH Emphasis Area Competencies Attained

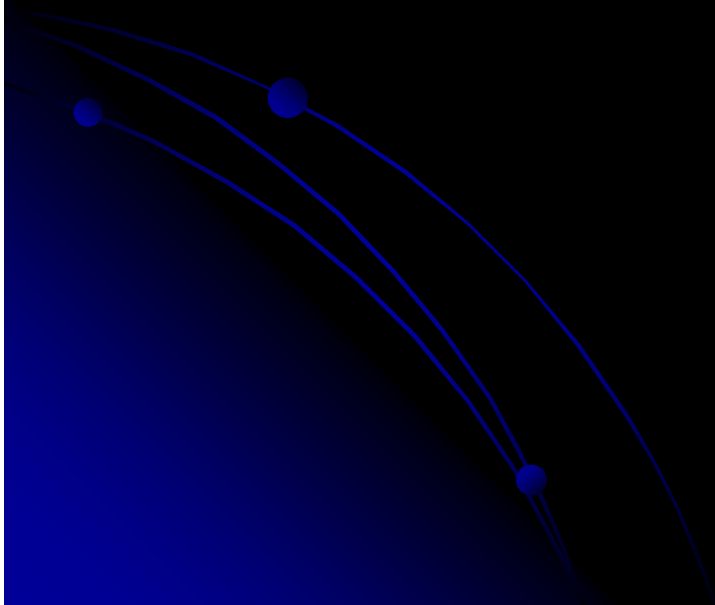
- Food safety and biosecurity (1)
- Threats to the food system (2)
- Food safety laws and regulations (3)
- Food safety policy and the global food system (4)
- Multidisciplinary leadership (5)

Competencies 1 through 4 were attained through in-person food inspection operations at the military dining facilities in Fort Riley.

Multidisciplinary leadership competency is attained during internship rotations through various public health sections, including epi, industrial hygiene, occupational health, and public health nursing.

Conclusion

- There exists a positive correlation between food safety and food management systems
- Food safety management is a multidisciplinary effort involving organizations such as Codex, the FDA, and the Food Safety and Inspection Service (FSIS) (Weinroth et al., 2018)



Conclusion

- The success of food safety management is contingent upon integrating essential elements such as HACCP, GMP, GHP, and food defense strategies (Weinroth et al., 2018)
 - The CDC estimates that each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 die from foodborne diseases (CDC, 2024)
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The 40th *Frontier* Field Trip: “I’ll be there for you: Living in a microbe’s paradise”



The 40th *Frontier* Field Trip:
“I’ll be there for you: Living in a microbe’s paradise”



My Internship Experience at the Fort Riley Public Health Department.

Fredrick Deya, Master of Public Health Student at Kansas State University



Background

- The Department of Public Health at Irwin Army Community Hospital (Fort Riley, Kansas) achieved national public health accreditation in 2018 through the Public Health Accreditation Board (PHAB), making it the first military site to do so. Currently, the department is in the process of obtaining re-accreditation. It encompasses several divisions: Environmental Health, Army Wellness Center, Industrial Hygiene, Occupational Health, Army Hearing Program, Health Promotions Officer, Public Health Nursing, and Veterinary Services that entirely serve to promote soldiers, their families, and Army Civilian employee's health and wellness, and to prevent disease and injury.

Objective

- To examine specific threats to the food system and scientifically investigate how to prevent, control, or mitigate them in the food production system.
- Understand different food safety laws, regulations, regulatory bodies, and their unique legislative authorities, missions, and jurisdictions.
- To identify different stakeholders' food safety and bio-security technical needs and the appropriate collaboration in the food system.

Snapshot of "DO NOT's" observed during Internships

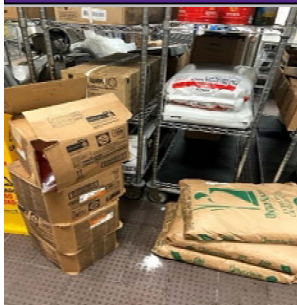


Figure 1: Food packages in contact with floor/store. At least 6 inches 15 centimeters above the floor or on top of plastic pallets)



Figure 2: Wrong thawing approach (food not completely submerged under running drinking water).



Figure 3: Personal beverage containers should be kept away from refrigeration/warming/cooking units



Figure 4: Scoop handle in contact with popcorn



Figure 3: A photo of Fort Riley Public Health Department Accreditation in 2018.



Figure 4: Dented food can cause poisoning due to the bacteria *Clostridium botulinum*. Whiteside Warrior Restaurant, 2023.

Key outcomes

- Understanding of military food safety laws, regulations, and the roles of regulatory bodies, including an awareness of their legislative authorities, missions, and jurisdictions such as Defense Personnel Support Center (DPSC) Handbook 4155.2, Tri-Service Food Code (TB MED 530/NAVMED P-5010-1/AFMAN 48-147_IP), Army Regulation 30 – 22 (Food Program)
- The ability to identify specific threats to the food system/conduct food inspection, and provide scientifically informed prevention, control, and mitigation strategies in military dining facilities and food outlets on Garrison using Department of Defense (DD) forms:
 - DD Form 2972, Food Facility Risk Assessment Survey
 - DD Form 2973, Food Operation Inspection Report
 - DD Form 2974, Tactical Kitchen Food Sanitation
- Implementing programs to promote health and wellness in the Fort Riley community, like staff flu vaccinations at Irwin Community Hospital

Snapshot of "DO's" observed during Internships



Figure 5: Cold water thawing (frozen food completely sunk in water)



Figure 6: Mobile water container and inspection for field training exercise

Additional Learning Experience

The 40th Frontier Field Trip: "I'll be there for you: Living in a microbe's paradise" at Council Grove, Kansas

- Learned about a 1990s-era public health crisis that prompted new regulatory approaches in the United Kingdom and beyond.
- Understood the history of the 1990s foodborne disease outbreak that culminated in a tragic disaster, involving unfortunate morbidity and mortality in the United Kingdom.
- Explored the role of public health regulatory minds inside and outside of Great Britain in the 1990s, including scientists and policymakers across the Atlantic in the U.S., who played a crucial role in solving the foodborne outbreak crisis.



Figure 7 : Picture 1,2 & 3 MPH lecturers, Dr. Jason Ackleson (facilitating discussion group), Dr. Valentina Trinetta (facilitating discussion group), and Dr. Justin Kastner (participating in role-play as a 24-year-old university-based professor Robbie Williams). Picture 4, 5 & 6 students drawn from various disciplines engage in discussions and role plays.

References

1. Center for Disease Control and Prevention (2024)
<https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html>
2. Melton, J. J., Shirey, L. A., Barraza, E. M., & Bullock, S. H. (2019). Public Health Accreditation of Army Preventive Medicine Departments: Improving Military Medical Treatment Facility Practice to Impact Force Readiness. *Military medicine*, 184(5-6), 117–121. <https://doi.org/10.1093/milmed/usy308>
3. Military one source, (2024).<https://installations.militaryonesource.mil/in-depth-overview/fort-riley/>
4. Weinroth, Margaret D, Ariel D Belk, and Keith E Belk (2018). History, Development, and Current Status of Food Safety Systems Worldwide.” *Animal Frontiers* 8, no. 4. <https://doi.org/10.1093/af/vfy016>.