MPH Final Presentation

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Plan

- Field Experience
- Hearing Protection/Final project
- Tying in to the MPH education

(It's always good to have one of those)
Field Experience
Branches

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

- Child and Youth Services Health Inspections
- Health education with soldiers
- STDs
- Immunization Screening and review of vaccination policies
Environmental Health

- Food Service Sanitations and Inspections
- Water Quality and Surveillance
- Disease Vector Surveillance
- Hospital Waste Management
- Child Development Center Sanitation and Inspections
Industrial Hygiene

- Ventilation
- Noise
- Air Sampling
- Radiation
- Ergonomics
- Indoor Air Quality
Occupational Health

- Medical Surveillance
- Reproductive Hazards
- Blood borne pathogens
- Hearing conservation and readiness
- Vision conservation and readiness
- Injury prevention and control
- Work related immunizations
- Worksite evaluations
- Personal protective equipment
- Employee health and wellness
- Occupational illness prevention and mitigation
Army Hearing Program

- Relevant Regulation Review
- Hearing readiness
- Hearing conservation
- Clinical hearing services
- Operational hearing services
- Education
Veterinary Services

- Sanitary inspection of the Commissary
- Audit of a commercial food processing facility
- Inspections of food items and food facilities on the installation
- Food defense assessment
- Zoonotic disease prevention
- Rabies bite reports
Hearing Protection
Final Project
Getting Started

- Reason for the curiosity
- Direction of research
- Execution
- Location
- Sampling plans vs. reality
Survey Questions

1: Noise exposure
2: Type of protection
3: Usage
4: Problems
5: Potential to change
Options for 4

- My hearing protector hurts my ears
- My hearing protector is uncomfortably hot
- My own voice sounds weird when I wear the hearing protector
- I am not able to communicate on the radio when I wear my hearing protector
- I have difficulty communicating with the other members of my squad when I wear the hearing protector
- My hearing protector interferes with the other equipment I need to use for my mission
- I am unable to hear quiet sounds in my environment when I wear my hearing protector
- I am unable to determine the direction of sounds in the environment when I wear my hearing protector
- I am not able to determine how far away sounds are when I wear my hearing protector
- My hearing protector is too complicated or is hard to use properly
Results

- Myriad of noises
- Potential for improvement
- Comfort
Interpretation of Problems

- Communication
  - Other soldiers 73.9%; 50.6%
  - Radio 72.6%; 47.9%
- Detecting Sounds
  - Picking up quiet sounds 67.1%; 36.9%
  - Direction 73.9%; 35.6%
- Distance 58.9%; 34.2%
TCAPS

- Tactical Communication and Protective Systems
- Latest hearing protection technology
- Designed to improve communication as well as protect
Shnazzy details

- Built in noise dosimeters
- Compatibility with various equipment
- Utilize bone vibrations for communication
Comparison of need to potential

Addresses the most prevalent concerns

Communication between members of a squad as well as compatibility with radios and other equipment

Allowing detection of quiet sounds while still protecting against noise damage

Compliance
Integration of this technology is the next step in improving the effectiveness of hearing protection.

- Trials
- Education
MPH education
Field experience

- Admin of Healthcare Organizations
- Environmental Toxicology
- Epidemiology
- Statistics
- Food Safety and Security
Project

- Behavior/Social PH
- Prevention
- Global Health Issues
- Statistics
Veterinary Services

(as I managed to convince them to let me in on the fun)

- Epidemiology
- Pathogenic Diseases
- Food Safety and Security
- BacT, Parasit, Tox
- Global Health Issues
- Statistics
Questions?