Public Health Practice

Stories from the Field
The University of Texas School of Public Health Student Practicum Experiences
Fall 2012 – Environmental & Occupational Health
The practicum experience is an integral part of the MPH and DrPH curricula. Public health students are provided with the opportunity to apply their classroom knowledge to real world settings through which they make a meaningful contribution to a public health organization.

Under the guidance of a community preceptor and faculty sponsor, students from all divisions gain a deeper understanding of public health practice, interact with professionals in the field, and expand their repertoire of professional skills.

This ninth-edition e-magazine showcases student practicum experiences throughout the Fall 2012 semester. (Prior semesters may be accessed through the e-book, a collection of student abstracts and e-magazines describing their experiences.)
# Practicum Topics

Serving Size: 1 Practicum per Student  
Servings per e-Magazine: 4

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**Environmental & Occupational Health**

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Radioactive Waste Disposal

Streamlined Radioactive Waste Disposal Procedures for NASA Johnson Space Center

By: Travis Halphen

At my practicum site, NASA Johnson Space Center Houston, I reviewed the current protocols and methods for handling radioactive waste and the lab procedures for collection of the radioactive waste. I worked with a NASA facility representative and individuals who work for a third party contractor, Wyle, which handles the radioactive waste.

The focus of my work was on worker safety, protection of the environment, and general public safety with regards to the disposal activities of the on-site radioactive waste. NASA’s approach for addressing this issue was to review all policies and procedures to remove the waste from the facility, protect from uncontrolled release, and ensure proper regulatory disposal from responsible companies. My activities included review of current disposal practices and procedures, review of regulatory requirements both state and federal, and provide educated feedback on how to streamline these procedures and reduce the amount of waste stored on-site.

I was able to conclude that the type of waste produced could be safely disposed of via the drainage system while still meeting state and federal regulatory requirements and without harming the environment or putting the general public at risk.

Public Health Significance

“Enforce” is the most closely related Public Health Essential Service if my practicum experience. NASA is a state and federally regulated facility that must ensure that when radioactive waste is handled and disposed that all laws and requirements are met. The focus of my project was to review and understand these regulations and provide the best available method of disposal meeting those requirements while protecting the health of the workers and the general public. A specific example would be reviewing the requirements of the NRC, EPA, and State of Texas regulations for drain disposal of radioactive materials and ensuring that my practicum site was aware of these requirements when considering changing disposal procedures. The enforcement of these regulations relates to the PHES task of assuring worker and public health at and around the NASA Johnson Space Center.

Highlights of working with NASA

- I was able to hold pieces of Apollo missions’ equipment.
- I was provided the opportunity to tour less publicly available areas of the space center, such as where they store the moon rocks.

Advice for Future Students

- Take every opportunity to meet people at your site outside your project to gain as much knowledge as you can from this experience.

The Nuclear Regulatory Commission, Environmental Protection Agency, and the State of Texas have regulations related to radioactive waste disposal. (Ref: www.NRC.gov and www.epa.gov)
Preventing workplace injuries

By: Jamiu Oluwatoyin Lawal

Under the supervision of the safety supervisor, I was responsible for keeping the work place safe for workers of the health department as well as for incoming visitors of the health department.

Using the department safety manual, we constantly educate and empower workers on ways of preventing falls, slips, trips and serious workplace injuries. And when they do occur we ensure prompt reporting and accurate documentation.

I was also involved in scheduling fire wardens for training and certification, conducting compulsory regular fire drills in the health department and the Multiservice centers across the city of Houston.

With an encouraging participation of the workers, the department recorded a steady decline in the number of monthly workplace injuries.

Duties during my practicum

• Assist in updating Department Safety Manual
• Presentation of safety tips during Leadership meetings
• Assist with updating Fire Warden and Documentation of training

Public Health Significance

Despite improvements in workplace safety and increased awareness of workplace injury and treatment, the Bureau of Labor Statistics reports 4.2 nonfatal workplace injuries per 100 full-time equivalent workers in 2007. That translates to over 4 million nonfatal injuries and illnesses. Fortunately, that number has been steadily declining over the past decade.

Workplace safety and Health cut across many essential public health services especially to inform, educate and empower workers about safety issues as well as to enforce laws and regulations that protect health and ensure safety.

HDHHS maintains a healthy working environment by paying attention to work station design, physical environment (temperature, light, noise, space and ventilation), task design and psychological factors (personal interaction etc.).

The safety unit is responsible for walking through the offices, making sure there are no cords across walkways; no low drawers are left open, educating workers on avoiding over-reach, sitting or standing for too long, and using awkward posture.

Lessons Learned [OR] Advice for Future Practicum Students

Working with the city of Houston has helped to develop my ability to navigate challenging work environment to accomplish the objectives. Recognizing that people work at different pace; have different temperament and level of understanding.

http://www.rsc-northwest.ac.uk/ac/eMagArchive/RSCeMags2010_11/Dec10menu/health_safety.html
Impact of the Halliburton EAP

Practicum Highlights

- Interacting with the EAP staff, counselors, project PI and other collaborators was a wonderful and rewarding experience.
- The work environment was very encouraging and the staff was always willing to help and provide any assistance needed.

Advice for Future Practicum Students

Always be willing to learn, be flexible, easily adaptable and always continuously find more efficient ways to achieve your goals.

In practice, things may take longer than you think. When you make plans and set timelines always be realistic and give yourself enough time to achieve your goals.

Comparing company relevant outcomes among Halliburton employees that use mental health services

by Ngozi Okafor

My practicum goal included developing a database to investigate the impact of the Employee Assistance Program’s (EAP) on workplace safety promotion. Halliburton EAP counselors perform thorough assessments to identify MH/SA problems and then refer employees to appropriate MH/SA providers or facilities for treatment.

I collaborated in a project that involved producing an evidence-based comparison of company relevant outcomes between 3 groups of employees that seek help for Mental Health or Substance Abuse (MH/SA) problems.

The groups are those who seek MH/SA treatment 1) directly from a provider, 2) through the Halliburton EAP, or 3) a Behavioral Health Insurance Company.

I used and successfully linked administrative data sets which included the MH/SA insurance claims and human resource data. I was also involved in pulling data from Halliburton database. I communicated and collaborated with the human resource staff and EAP staff.

Public Health Significance

My practicum experience will help the EAP achieve two essential services of public health. These services are:

- Evaluate the effectiveness, accessibility and quality of mental healthcare services
- Research for new insights and innovative solutions to health problems such as preventing injuries at the workplace and promoting workplace safety.

In addition to the two aforementioned essential services of public health, the EAP links people to needed mental health services and assures the provision of health care. The EAP also develops plans that support individual health efforts.
Employee Field Safety Programs

Health, Environment and Safety Plans for Field Activities Associated with Energy Exploration

By: Reyes Torres Jr.

In the course of my practicum I worked with Chevron’s HES Operations (Ops) Unit. The HES Ops organization is responsible for the overall safety and health of Chevron ETC’s research, training, and consulting staff which support Chevron’s global operations. ETC is primarily an office based work population, but a small subset of individuals have been identified as participants or managers of field activities. Given the nature of these field activities, they were ranked as “high risk” and identified as an area for HES focus.

My practicum assignment was to assist in developing field safety protocols to manage health and safety risk associated with the field activities managed by ETC. This includes continuing education field schools, field services such as seismic imaging and field based R&D.

Working with individuals within ETC, I assisted in the development of guidance which included: a safe work policy, a procedure for writing HES field work plans, a HES field plan template and job aids. These HES documents will be used in the future when planning ETC’s field activities.

Highlights of Practicum Experience

- Attendance of the AAPG Field Safety for Field Trip Leaders course
- Participation in a three day Wilderness First Aid course

Lessons Learned

Policies / programs are never one size fits all.

Public Health Significance

The development of HES plans for field activities associated with energy exploration ensures that field operations, which can be conducted in sensitive and remote locations, occur in a safe and reliable manner. By establishing minimum planning and performance expectations, corporations can reinforce several of the Essential Public Health Services including:

- Informing, educating and empowering people about health issues. Specifically ensuring that employees are enabled to successfully perform their task and they are aware of associated hazards through proper risk controls i.e. medical surveillance and PPE programs.

- Development of policies and plans that support individual and community health. With proper management and planning, field activities can be conducted in a responsible manner which eliminates and/or reduces infringement and health impact to people and the environment i.e. provisions for risk assessment by qualified resource and appropriate management of vendors.

- Enforce laws and regulations that protect health and ensure safety. By providing overall guidance for the organization of field activities, we have taken into account that the overall measure of success is the protection of our workforce, general public, and environment. To do this we have built a program founded on both regulatory and industry standards.

EPHS: http://www.apha.org/programs/standards/performancestandards/program/ressextentalservices.htm

Example: Seismic Data Acquisition
Workers laying out seismic lines in a remote field location

Example: Geological Field School
Participants enroll in field schools as part of continuing education and observe how natural settings are translated into computer models. http://bigcat.fhsu.edu/geo/geology/fieldcamp/

Example: Seismic Data Acquisition
Workers laying out seismic lines in a remote field location
For more information regarding The University of Texas School of Public Health, Office of Public Health Practice and the practicum program, please visit:

https://sph.uth.tmc.edu/practicum/