

Public Health Practice



Stories from the Field

The University of Texas School of Public Health
Student Practicum Experiences
Fall 2011 - Environmental & Occupational Health

Prevention diabetes safe kids clean water policy disaster
response cancer adolescent sexual health HIV/AIDS research
obesity alcohol empowerment vaccinations maternal & child
health

The practicum experience is an integral part of the MPH curriculum. 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 sixth-edition e-magazine showcases student practicum experiences throughout the Fall 2011 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: 6

Hours per Week per Student	Approximately 12
Campuses (Houston)	1
Division	1

Student

Environmental & Occupational Health

Industrial Hygiene	Jillian Brown
Immunization Review	Sobia Faisal
Environmental Public Health	Krystle Hodge
Occupational Medicine Clinic	Ayanna Jones
Environmental Proteinases	Pamela Obodoechina
Environmental Toxicology	Taylor Sutherland

Industrial Hygiene Practicum

Monitoring Activities

- Monitoring workers during different tasks to determine their exposure to different chemicals
- Noise monitoring of different areas in the facility to determine where hearing protection would be needed

Industrial Hygiene:

Science and art devoted to the anticipation, recognition, evaluation, prevention and control of those environmental factors or stresses arising in or from the workplace which may cause sickness, impaired health and well being, or significant discomfort among workers or among citizens in the community.

- American Industrial Hygiene Association



Industrial Hygiene Practice at Chemical Manufacturing Facility

By: Jillian Brown

Working at the facility gave me a real-world view of the myriad of tasks an industrial hygienist is responsible for, and how he or she works together with others in the facility to assure safety and health is a priority.

The team I worked with was in the process of developing safety procedures and instituting safety programs. Exposure monitoring was conducted so that specific safety needs of the facility could be addressed.

Public Health Significance

Many Essential Services of Public Health were met during the practicum. Worker's exposure was monitored and employees were notified of results. Employees deserve to work in facility which they can feel safe in. Educating them on potential hazards and prevention & protection measures allows them to protect themselves and work safely.

Developing policies and plans which would keep workers at the facility safe was primary goal of the practicum.

When results for monitoring were analyzed, decisions were made for which actions would offer the worker the most protection.

The need for respiratory protection or personal protective equipment during certain tasks and in different areas was reviewed and implemented if needed.

Potential hazards were identified through housekeeping and overall facility audits so that unsafe conditions could be corrected.

Identifying hazards and developing protection plans are important to protect workers, but implementing the safety policies and enforcing them is the key to keeping all employees on the site safe. Policies put in place must be adhered to or workers could be injured... or worse. Safety must remain an essential part of the facility's daily activities.

Hepatitis B Immunization Pakistan

Duties in Practicum

Develop liaison with Expanded Program on Immunization Pakistan and potential stakeholders involve in implementation of this intervention.

Collecting information from wide set of sources like internet, immunization program in Pakistan and program delivery sites.

Report writing

In developing countries public health issues can best be addressed if we understand their needs, diverse culture, resources, and their level of understanding about that issue



.Source: www.drugster.info

Systematic / Programmatic Review of Hepatitis Immunization Program Pakistan

By Sobia Faisal

Hepatitis B is emerging public health disease in Pakistan. In programmatic review I looked for immunization strategies developed in Pakistan for prevention and control of this spreading disease. My final product is the report addressing policy, implementation, monitoring and evaluation aspects of hepatitis B immunization program in Pakistan. This systemic review is completed mainly through online research.

Public Health Significance

Hepatitis B is highly prevalent disease especially among high risk group (newborns, healthcare workers etc) in Pakistan. Immunization against Hepatitis B not only prevents morbidity but also reduces mortality from chronic liver diseases like hepato-cellular carcinoma and cirrhosis. My project provides essential information about Hepatitis B immunization status of Pakistan.

Additional information was collected by communicating with Expanded Program on Immunization Pakistan. I tried to emphasize on challenges faced by immunization program and looked at the probable factors responsible for these problems. I found that public health interventions are most effective when these are designed according to the need of target community.

I have reported degree of effectiveness of immunization programs in reference to immunization coverage achieved. Problems highlighted in my report represent some common difficulties faced by public health interventions in resource limited countries. This report can be used as a resource in improving immunization strategies in Pakistan and other developing countries.

Public Health & Environmental Services

Special duties @ HCPHES:

- Participate in food inspections in various establishments around Harris County.
- Develop impact reports for auto repair and paint & body shops.
- Create fact sheets of general home contaminants for public website.
- Operate and organize occupational health equipment.
- Conduct on site assessments for residential and workplace establishments.

**“Safeguarding your health
is our full time job.”**

-HCPHES



ismoph2012.org

Protecting Public Health through Education and Advocacy.

By: Krystle Hodge

Harris County Public Health and Environmental Services (HCPHES) is committed to promoting health education, implementing proper safety practices, and preventing adverse health effects in the community. During my time as an Environmental Public Health intern, my activities included working in the Occupational Health department, where I assisted in creating database inventories,

developing home contaminant fact sheets and participated in field inspections. At HCPHES, I learned: how to inspect and assess home contaminants and workplace safety hazards, respond to neighborhood nuisance complaints, the procedure for removing lead-based paint from community homes and how to create impact reports for workplace inspections.

Public Health Significance

The division of Environmental Public Health focuses on executing proper protections for food supplies, neighborhood sanitation, and residential and workplace establishments. Their mission is to **educate** and promote risk and safety awareness to the general public. This is important in reducing risk and injury,

while **protecting** and **improving** the safety of the communities.



Occupational Medicine Clinic

Healthcare Tailor-Made for Workers

By: Ayanna Jones

U.S. Health Works was the site for my practicum experience. I worked in this occupational medicine clinic as a resident physician. Workers presented to the clinic with new injuries, for medical surveillance, or for pre-employment physical exams.

As an occupational resident, I evaluated the health needs of workers and coordinated any further care that they needed, such as physical therapy.

U.S. Health Works designed their physicals to meet the needs of the companies they were serving and the safety of the workers. They also use evidenced based medicine, OSHA standards, and AMA guidelines to help direct the care they provide.



One of the many national clinics. Available from: <http://namasia.blogspot.com/2009/01/de-quervain-syndrome-and-acupuncture.html>

Action Packed Practicum

- Many opportunities to suture lacerations
- Don't use your inside voice: enthusiastic spirometry test coaching
- Meet the drivers: DOT physicals performed daily

Public Health Significance

The US Health Works clinic monitored the health status of community workers, educated and empowered them on preventive measures they could use at work to maintain a safe environment, and developed treatment plans to help individual workers heal and return to work.

Education was the essential service that the clinic provided to its clients. Workers were educated on protective equipment, ergonomic positions, and preventative measures they could take to maintain their health and safety. Employers were also educated on how to modify a worker's activity to prevent further injury. For example a patient with multiple episodes of heat exhaustion and rhabdomyolysis was educated on adequate hydration, heat stress, and the renal side effects of his medications.



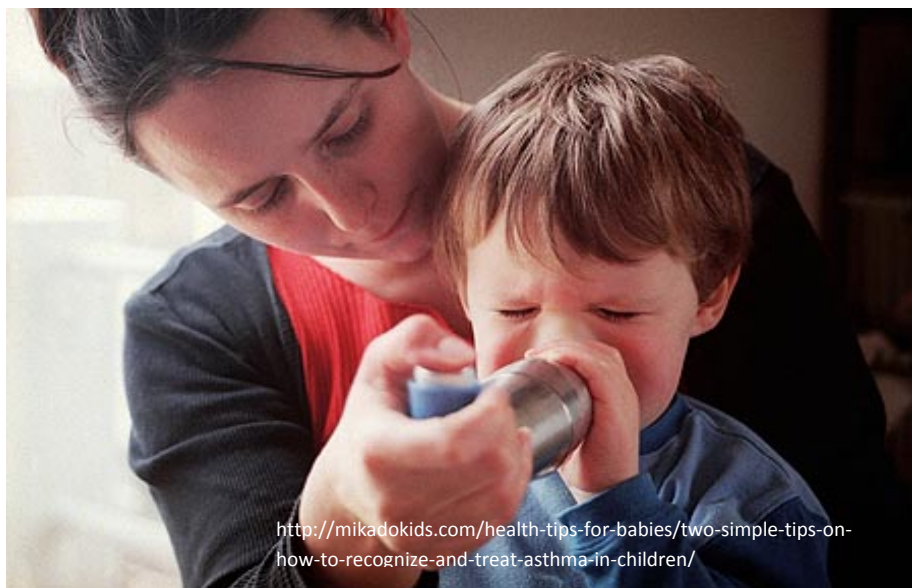
Increase Productivity and Reduce Medical Expenses– US Health Works. Occupational Medicine. Available from: http://www.ushealthworks.com/Services_OccMed.html

Childhood Asthma and Environmental Proteinases

Special events/ duties during your practicum

- Data entry
- Selection of dust samples for study analysis
- Creating avenues for easier access to study information.

There is definitely so much more than meets the eye or the lungs when it comes to dust.



<http://mikadokids.com/health-tips-for-babies/two-simple-tips-on-how-to-recognize-and-treat-asthma-in-children/>

Determining the etiologic role of household environmental proteinases in the development of childhood asthma.

By Pamela Obodoechina

My practicum involved working on a project carried out by SWCOEH at UTSPH which focuses on determining the relationship between proteinase activity measured from household mold, dust and fungi, and what role this activity may play in the development of childhood asthma.

This project is being carried out as a case-control study and the study participants are comprised of asthmatic and non-asthmatic

The project involved conducting home visits, walk-through surveys, analysis of air samples, performing blood draws on study participants, collection and analysis of dust samples and conducting interviews for the purposes of information collection.

The majority of my duties involved data entry using the Cardiff Teleform software, sorting out dust samples for analysis, and creating data entry sheets to make access to information easier.

The project is still ongoing and no results have been reached yet.

Public Health Significance

Considering the considerable prevalence of childhood asthma in the general public; the project contributes to the essential services of public health via research, by finding out the role that household environmental proteinases may play in the development of childhood asthma. Depending on the conclusion of the final results, new insights may be reached that would help mitigate the burden that childhood asthma places on the general public.

Environmental Toxicology

Regulatory Toxicology and Risk Assessment

By: Taylor Sutherland

I spent the summer working in the Toxicology Division of the Texas Commission on Environmental Quality (TCEQ).

While there, I helped develop toxicity factors for chemicals, performed literature research, and ran statistical analysis comparisons on ambient air data.

Methods: Toxicity factors were derived using the TCEQ's Effect Standards Guidelines-- similar to the procedures outlined in the EPA's Red book. Statistical analyses were completed with STATA.

My summer-long project was creating the acute section of the development support document for Methanol air exposures.



tceq.gov

- Invited to visit labs, air monitoring sites, and regional offices

- One-on-one information sessions with toxicologists

Public Health Significance

TCEQ serves the needs of the community by setting scientifically-based standards for air, land, and water contaminants. I contributed to this effort in several capacities. Foremost, I assisted by performing scientific literature searches on particular contaminants. This data compilation is the foundation for deriving the safe emission levels for the general public. Also, I was able to participate in citizen phone calls, evaluate the suitability of sampling procedures, and observe the Agenda process.

As such, my practicum experience incorporated both the education and enforcement services of public health:

- The emission levels derived will become the regulation levels required for industry compliance.
- Likewise, the transparency of the organization allows this information to be available to the public for their education and empowerment.



http://www.ehow.com/how_7833446_train-air-monitoring.html

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/>