

**SPH 5850 – SPH 5855**  
**Public Health Practice Experience**  
**Poster Presentation Session**

**Abstracts**

**November 13, 2007**

## **CHILDHOOD IMMUNIZATIONS: THE KEY TO PREVENTING INFECTIOUS DISEASE AND PROTECTING OUR COMMUNITIES**

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Supervisor: Kim Fulda, DrPH

Tarrant County Public Health Department provides our surrounding communities with several services. Amongst other things, this institute regularly provides immunizations at all of its public health centers. Both adults and children can become ill, disabled or even die if the proper vaccinations have not been received. To ensure that immunizations are administered to children as scheduled, Tarrant County Public Health Department asked all of its Independent School Districts to report all of their first grade students' immunization records. Twelve of the sixteen school districts participated in reporting these data. The data included the name of the school, student name or ID, date of birth, immunization type, and dates of doses received. For analysis purposes, data management was performed to similarly format all immunization records. Biostatistician, Kim Fulda, DrPH, will perform several statistical analysis. Results will be reviewed by the department's epidemiologists who will later make their conclusion and recommendation accordingly.

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## **NUTRITIONAL AND PHYSICAL ACTIVITY PROGRAMS IN NEW JERSEY**

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Cancer Institute of New Jersey  
UMDNJ- Robert Wood Johnson Medical School  
Supervisor: Dr Elisa Bandera M.D., Ph.D.

Current guidelines for cancer prevention emphasize maintenance of a healthy weight, active life style and healthy diet but many New Jersey residents are not following these guidelines. The Nutritional and Physical Activity Programs Survey was first conducted in 2002 to identify programs offered to New Jersey residents promoting healthy dietary habits and physical activity.

In 2006-07 a follow-up survey was conducted. This survey was web-based as well as paper based. Survey was distributed statewide via email and hard copy to industries, hospitals, academic programs, private and public health agencies, and voluntary organizations from November 2006 to February 2007. Responses have been received from 204 ongoing programs, where 63 programs focused on physical activity, 42 only on nutrition and 95 of them provided both types of activities.

The purpose of this project was to integrate responses from the web-based and hard copies of the survey, enter, code, and analyze responses.

Preliminary results suggest a need for culturally appropriate programs targeting minority populations and programs with a cancer prevention focus. The new guide will be posted on the NJ Department of Health and senior services website and distributed in hard copy. Future plans include using Geographic Information System for interactive presentation of the data and analyses.

## **ADVOCACY AND OUTREACH FOR CHIP AND MEDICAID**

Becky DeSpain Eden, BSDH, MEd  
Children's Medical Center of Dallas  
Site Supervisor: Guwan Jones, MPH, CHES  
Advocacy Manager

This Public Health Practice Experience was designed is to develop skills in advocacy for public health insurance coverage for children. The primary activity was the planning, implementation, and evaluation of an application assistance event for Children's Medicaid and the Texas Children's Health Insurance Program, the major project of the Dallas CHIP Coalition, convened by the Advocacy Department of Children's Medical Center. The outreach campaign was held on Saturday, October 13 in eleven grocery stores in Dallas County. A press conference informed the public about the event and raise awareness about CHIP. Volunteers were recruited and trained in the application process. Final outcomes of the campaign were presented to the Coalition and to the Carnival Minyard Foundation, the major funder. Evaluation indicated contact with 905 families representing more than 2,000 children. A total of 842 applications for insurance were completed and delivered to the Texas Health and Human Services Commission.

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## **SISTERFRIENDS PROGRAM AND THE AINTIE TIA PROGRAM**

Sarah Eppes  
Fort Worth/Dallas *Birthing Project*  
Site Supervisor: Kim Parish Perkins

The Fort Worth/Dallas *Birthing Project* coordinates two different programs, both of which provide social support and education to pregnant and parenting mothers and families, with the goal of reducing the high infant mortality rates in Tarrant County. The SisterFriend program matches a woman from the community, the SisterFriend, to a pregnant teenager from the community, the Little Sister. The SisterFriend, serves as a mentor, friend and support person throughout the pregnancy and into the first year of parenting. The Aintie Tia program has trained nine community women to provide to the community prenatal education, labor support, and postpartum support. These nine women are the community's Ainties; they are devoted to the pregnant and parenting women of Tarrant County. Through this practicum experience I am better able to understand the challenges and rewards of running a health related nonprofit organization.

## **ADVERSE PERINATAL OUTCOMES AND HYPERTENSION IN SELECTED HIGH-RISK COMMUNITIES OF FORT WORTH**

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Division of Epidemiology & Assessment, CFWPHD  
Site Supervisor: Dorian Villegas, M.P.H., Epidemiologist

The Women's Health Assessment survey was developed to monitor the health and well-being of women of reproductive age in selected communities and was first administered in summer of 2007. Preliminary findings based on 405 face-to-face interviews indicate that the target population is predominantly non-white (89.3% black or Hispanic) and poor (56.6% with annual household incomes below \$15,000). Estimated rates of stillbirth, pre-term birth, and low birth weight are 24.5/1000 births and 93.8/1000 and 46.9/1000 live births, respectively. The estimated prevalence of hypertension, a risk factor for adverse perinatal outcomes, is 23.8%. After controlling for various demographic factors, logistic regression analysis showed significant association of hypertension with age over 40 and unemployment ( $P < 0.05$ ) and marginally significant association with perceived overweight status ( $P = 0.05$ ).

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## **TEXAS VERMICULITE PROJECT: A STUDY OF ASBESTOS EXPOSURE IN WEST DALLAS AREA**

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Parkland Health and Hospital System  
Site Supervisor: Brad Walsh, MPHs

W.R. Grace was operating a vermiculite processing plant in West Dallas from 1953 to 1992 and received unprocessed vermiculite from a mine in Libby, Montana. The vermiculite was later found to have been contaminated with asbestos. To study the impact of asbestos exposure in the community, we conducted chest X-rays for 420 residents in a quarter mile radius of the plant and later conducted pulmonary function tests for the subjects found to have lung scarring. We found pleural/parenchymal fibrosis suggestive of asbestos exposure in 5.2% and other chest diseases in 37% of the subjects. The findings so far suggest that this community is shouldering a large burden of disease. This study could play an important role in emphasizing the effects of asbestos exposure that is known to have long-term adverse health effects and possibly bring about policy changes to safeguard worker health.

## **DETERMINING EXCLUSIVE BREASTFEEDING RATES: A BASELINE MEASURE FOR INTERVENTION**

Kristen Hahn, MPH Candidate  
Middlesex Hospital, Middletown, Connecticut  
Supervisor: Mary Marshall-Crim APRN IBCLC

*Purpose:* The purpose of this practicum was to be introduced to the opportunities available for public health practice in a hospital and to apply the basic public health sciences of epidemiology and biostatistics in a practical setting. Additionally, the project was designed to help the hospital determine the ways that they could best serve their breastfeeding patient base. *Objectives:* The objectives set out for the project were: to be able to extract and interpret data from existing databases, effectively report statistical results to hospital staff, develop a system for the hospital to help maintain quality practices by measuring quality of care indicators, and to create an intervention protocol for IRB approval. *Outcomes:* At the conclusion of the practicum experience, all of the objectives were completed or on their way to completion. The intervention protocol is still under construction but will hopefully be completed in December and implemented shortly thereafter.

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## **REFUGEES IN OUR COMMUNITY**

Eunice Kimunai  
International Rescue Committee  
Site Supervisor: Lisa Lewis

IRC is a leading nonsectarian, non-profit agency dedicated to providing relief and resettlement assistance to refugees who are forced to flee their home countries.

IRC offers immediate assistance through resettlement services, including case management, financial assistance, referrals for medical services, securing affordable housing and employment placement for refugees. To achieve my goal and objectives, I worked with RSS (Refugee Social Services) Case Manager. This program assists individuals with medical and social service concern. In particular, this program can help individuals and families with application for Medicaid program, making doctors appointment, WIC program, and navigating the U.S health system. My functions include assisting the case manager with all aspect of RSS program; driving clients to their appointments; displaying sensitivity to cultural differences of refugee clients, and respecting their beliefs and values; maintaining proper boundaries with clients; adhere to IRC policies; communicating effectively to clients; and interpreting for Swahili speaking clients.

## **COLLIN COUNTY TOBACCO CESSATION PROGRAM**

Rajani Kanukolanu  
Collin County Health Care Services  
Site Supervisor : Dr. Muriel Marshall, DO, DrPH

Objective: To evaluate the Collin County tobacco cessation program targeting county employees and their dependents. To determine the continuation of the program.

Design: Un-blinded, single group study.

Setting: Collin County Health Care Services

Participants: Sixty-eight smoking employees enrolled from October 2006 to May 2007.

Methods: Interested employees received counseling from a physician assistant or a nurse. During counseling, behavioral modification and pharmaco-therapy were discussed. Eligible participants chose between five proven first line pharmaco-therapies for smoking cessation. All therapies were provided at no cost to the participants. Main outcome measure was Quit Result, the number of participants quitting smoking at the end of 8 weeks of pharmaco-therapy. The Program Result outcome included participants who quit smoking and those who reduced the number of cigarettes smoked per day at 8 weeks.

Results: Of the 68 participants, 10 participants (14.7 %) achieved the Quit Result. Men were more than two times likely to attain the Quit Result than women, 70% and 30% respectively. Twenty-three, or 33.8%, out of 68 smokers achieved the Program Result. A slightly higher percent of men (56.5%) than women (43.5%) attained the Program Result. No significant differences were observed for the Quit and Program Results by age, gender, number of cigarettes smoked per day, level of nicotine dependence, or number of previous quit attempts.

Conclusion: The abstinence rates achieved by the Collin County Tobacco cessation program were lower than most of the rates observed in the published research. However, a practically appropriate percentage of participants demonstrated decreases in the number of cigarettes smoked per day. Continuation of the program in the future should benefit the County and its employees.

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## **KAWASAKI DISEASE IN TEXAS CHILDREN: A NEED FOR HEALTHCARE PROVIDER CONTINUING EDUCATION**

Julius Larry  
PACE, UNTHSC  
Site Supervisor: Pam McFadden and Andy Crim

The purpose of this retrospective cross-sectional study was to evaluate Kawasaki Disease (KD) in Texas children by demographic characteristics and to assess the need for continuing education for healthcare providers in recognizing the symptoms of KD in young children. The study sample included 330 KD cases in Texas in 2004. Results revealed that children of all races/ethnicities less than five years old were predominantly affected ( $p < 0.05$ ). The results further presented physicians failed to diagnose Kawasaki Disease in 50.6% of cases on admission diagnosis. More physician education is needed to promote earlier detection and treatment of KD in children as well as an active surveillance system from the CDC.

## **DIABETES IDENTIFICATION AND MANAGEMENT PROGRAM: MEALS ON WHEELS, INC. OF TARRANT COUNTY.**

Guadalupe Leon & Deirdre Leon  
Meals on Wheels, Inc. and UNT-HSC  
Site Supervisor: Janice Knebl D.O. MBA

Meals on Wheels, Inc of Tarrant County (MOWI) has been charged with identifying MOWI clients within Tarrant County that have a diagnosis or are at risk of developing diabetes mellitus. Clients identified with diabetes mellitus were provided the necessary diabetic educational materials, received diabetic education and were assessed for their medical conditions including the determination of blood glucose and HgbA1C levels. We screened 2535 MOWI clients for diabetes and pre-tests were administered to 325 of those clients to determine baseline knowledge. Of those that completed the pre-tests, 125 clients received in-home medical assessments. We completed 112 pre-diabetes education HgbA1C blood tests and administered 90 post-diabetes education tests to clients. This program suggests that our method of identification and diabetic education along with diabetic self management techniques was able to improve the HgbA1C levels in the majority of the clients, which is an indication of improved glucose/glycemic control.

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## **EVALUATING THE IMPACT OF RISK FACTORS FOR LOW BIRTH WEIGHT IN GEOGRAPHICALLY IDENTIFIED HIGH RISK COMMUNITIES**

Nikhil Parikh, MBBS, MPHc  
City of Fort Worth, Texas, Public Health Department  
Epidemiology & Assessment Division  
Site Supervisor: Dorian Villegas, DrPHc, MPH

Geographically identified populations at risk for high infant mortality were included in this project. Local vital records data analyses conducted recently identified four geographic areas (ZIP Codes 76104, 76105, 76112 and 76119) heavily contributing to the infant mortality problem in Fort Worth and Tarrant County. In 2003, infant mortality rates (IMRs) ranged from 9.1 to 25.0 infant deaths per 1,000 live births within those areas. Such high statistics are highly contributed by low birth weight babies (<2500 grams), which in 2001-2003 resulted in an IMR of 56.7, compared to 3.2 for those with adequate birth weight (2500+ grams). Therefore, it was decided to explore the risk factors associated with low birth weight, specifically those suggested in MCH research related to Preconception health and Prematurity. Aggregated birth data files for 2001-2003 were analyzed to measure the impact of each risk factor affecting the risk population compared to rest of Tarrant County.

## **Assessment of Severe Injuries in Rosebud, South Dakota** **Aberdeen Area Severe Surveillance System**

Mohammad H. Rahman, M.S.  
JRCOSTEP, Indian Health Service  
Dept. of Health and Human Services  
Site Supervisor: Charles Mack

The purpose of my practicum experience was to help assess the frequency of occurrence of serious injury on the Rosebud Indian Reservation in South Dakota. Information was collected using the Aberdeen Area Severe Injury Surveillance System (SISS) protocol. The case definition for a severe injury is defined as ‘an injury that results in an amputation, loss of consciousness, major fracture, hospitalization, or fatality. The following report is an assessment of major injuries in the categories of drownings, falls, intentional injuries (i.e. assaults), motor vehicle crashes, other non-classifiable injuries and suicide attempts and/or completions. Falls were the leading cause of preventable injuries on the Rosebud Reservation. Assaults, motor vehicle crashes, and suicide were also prevalent causes of injury on the reservation. In analyzing severe injury by gender, males (60%) are more likely to be seriously injured than females (40%). Injury affects different segments of the reservation on varying levels.

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## **Addressing Health Equity and Disparities: An Internship at** **Tarrant County Public Health Department**

Deandra L. Stewart, B.S.  
Division of Administration of Tarrant County Public Health Department  
Site Supervisor: Santos Navarrette Jr., MBA, MA, Associate Director

Health inequities and disparities transpire when avoidable and unjust health circumstances or actions are placed on particular individuals. The Tarrant County Public Health Department (TCPHD) is in the process of hiring a Health Equity Coordinator to help counteract health inequities and disparities within the Tarrant County community. To appropriately employ a Health Equity Coordinator at the TCPHD, my practicum experience expanded upon various health equity concerns. Various evaluations determined that one of the major health issues was obesity and its by-products. A ten question survey meant for the Albert Galvan Health Clinic was created to help address obesity in correlation to health inequities/disparities. Fourteen health equity/disparities practices were benchmarked. Protocols for gaining health equity community buy-in as well as building a health equity coalition were suggested. The practicum experience served as a reinforcement of public health skills acquired within the classroom and promoted realistic public health procedures.

## **LEADING CAUSES OF DEATH and INFECTIOUS AGENTS**

Audra Wells  
Tarrant County Public Health  
Site Supervisors: Micky Moerbe, Dean Lampman

- Purpose: The purpose of my practicum experience was to analyze and discuss the Leading Causes of Death for Tarrant County in 2005 and to perform research on infectious agents.
- Site: The location site for the practicum experience was within the Epidemiology and Health Information Services Department at the Tarrant County Public Health Department.
- Summary: My practicum experience consisted of two projects. The first project involved researching and developing bioterrorism scenarios for infectious agents. Research was performed in order to identify general characteristics, transmission, portals of entry, incubation periods, prophylaxis, and treatment options for each infectious agent. The second project involved analyzing the 2005 Tarrant County mortality file to assess the leading causes of death. In order to assess the leading causes of death, the data had to be recoded, and frequency analyses had to be performed. Once the causes of death were assessed, the top ten causes of death were discussed.