

**Annual Report
Lead Screening
Texas Department of State Health
Services
September 30, 2005**

Annual Report
Lead Follow – up Community Intervention
Parkland Health & Hospital System

Parkland Health & Hospital System received continuation funding from the Texas Department of State Health Services to provide follow-up screening for persons exposed to lead in the West Dallas and Cadillac Heights communities and develop primary care provider education on the health impact of environmental exposure to lead and other toxic chemicals associated with lead.

Three major activities were conducted in these communities during the summer of 2006:

1. **Birth defects study**
2. **Behavioral health fairs**
3. **Physician Continuing Medical Education**

The following are the results of these activities:

1. **Birth Defects Study**

Considerable data analysis has begun to isolate the women from the 2002 study with children with birth defects and to find medical record numbers for these women. Parkland medical records have been search by Medical Record Number in an attempt to find Parkland records on the women who claimed they had children with neurological birth defects; however, the results were not useable since in most cases our available records don't go back far enough. Therefore, Parkland initiated a birth defects study for women in the original study who had indicated they had a child with birth defects.

Goals and outline

The Lead and Birth Defects project is intended to estimate the incidence rate of birth defects among women who were exposed to environmental lead from the lead smelters that operated in Dallas from the 1930's to 1990. Project staff asked these women about a number of known etiologic factors for birth defects, such as alcohol consumption during pregnancy, mother's age at birth and sex of the child, in an effort to account for the effects of these factors. Project investigators also asked the women's assistance in obtaining their past blood lead test results (1980-present) from the City of Dallas Health Department, to help estimate lifetime highest blood lead, as a possible correlate of birth defect incidence rates. Other hypotheses to be tested do not require the past blood lead data, and consist of comparing study incidence rates with birth defect incidence rates across the state of Texas from the Texas Department of State Health Services' Birth Defects Epidemiology and Surveillance Division.

Duration of the project

Although project activities occurred throughout fiscal 2006, the large majority of staff participation hours took place in July and August 2006. Funding was not made available until June of 2006.

Number of staff involved

The project employed 15 Parkland staff. Except for the project director Brad Walsh, the staff members worked outside their usual 40-hour week, to minimize disruption of their work activities for their department.

Project activities through the end of FY 2006

Project staff was required to take online coursework to complete their eligibility to take part in the study during the IRB application process in April and May 2006. Beginning in July 2006, staff was brought together for several evenings of training. Recruiting calls to women who had taken part in the 2002 Dallas Lead Project were begun the third week in July. To be eligible, a woman had to have had children during their lifetime, and to have been exposed to lead from the smelters while they were in operation (defined as having lived, worked or gone to school within 1 mile of the smelters). Attachment 1 provides a copy of the approved IRB, consent forms and protocol)

Women who agreed to take part in the study were scheduled to come to an appointment at Parkland's deHaro Saldivar Health Center starting August 1st. These interview appointments were held Monday through Thursday evenings, and on Saturdays and Sundays. The last scheduled interviews took place on August 22nd. Another home visit interview took place the following week. These interviews consisted of an informed consent discussion and signatures, the study interview and the consent forms for requesting blood lead test results from the City of Dallas Health Department.

Many of the women who had given birth to a child with a birth defect could not describe the defect clearly enough for us to classify it according to the standard British Pediatric Association Classification of Diseases Manual (as modified and used the Texas Birth Defects Monitoring Division of the Texas Department of State Health Services). The informed consent form was designed to also obtain the women's consent to access any birth records they had at Parkland Hospital, so that project staff could refer to these records when determining how to designate the specific birth defects for the study. The goal is to definitively rule in or out each identified birth defect, and to classify each birth defect precisely using the BPA Manual, so that investigators can derive an incidence rate for all specific birth defects in this population.

Attendance

Approximately 410 women agreed during telephone recruiting calls to come to the interview at a scheduled date and time. However the no-show rate was high. One hundred eighty-eight women came out, were determined to be eligible, and completed the interview.

Activities in FY 2007

During fiscal year 2007, the project director will review the medical records requested for these women, and code the birth defects they identified. The project director will also complete data entry of the interview forms, and receive and enter into the database any blood lead test results from the City of Dallas Health Department. Finally the project director will calculate birth defect incidence rates by type and overall, and evaluate the

study hypotheses about birth defect incidence rates and etiologic factors. If the results merit it, the project director will then author a publication on the findings.

2. Continuing Medical Education

Continuing Medical Education program was held for community physicians, nurses, pharmacists and other health care providers. The program, "Lead in the Head," was held in August 2006 for an audience of approximately 62 community registrants. Attachment 2 contains the curriculum, registration and course evaluation for this program.

3. Behavioral Health Fairs

Further analysis verifying that behavioral health was a significant issue within the West Dallas and Cadillac Heights neighborhoods was conducted in 2005. As a result of this analysis, Parkland held 2 large behavioral health fairs and 2 mini-fairs called "MIND your health". (See Attachment 3 for the press release, invitation letter and brochure) Invitations and brochures were sent to 2,878 participants in the 2002 lead study who had indicated behavioral health problems in that study. Of the 2,878 invitations mailed, 522 were returned to date with bad addresses. Of those, only 75 had new forwarding addresses listed.

The purpose of these events was to provide introduction to resources for those who had identified behavioral health as an issue in their family. Parkland joined with the Lakewest YMCA and Buckner Benevolences to bring together community mental health organizations to provide depression screenings and information on housing and employment. Parkland provided social workers to discuss the results of mental health screenings or other psychosocial issues. A summary of the activities is as follows:

Lakewest YMCA Mind your Health Fair: Saturday, August 19

99 registered participants

Set up:

- The event took place in the Multipurpose Center at the Lakewest YMCA - 3737 Goldman Street, Dallas 75212
- One half of the room was used for ongoing mental health seminars conducted by PHHS Behavioral Health Staff and other community agency representatives. The other half of the room had community agency booths displaying resources and information regarding their services.
- Healthy snacks, refreshments, giveaways and door prizes were provided.
- 19 people were screened for depression; 16 during the depression workshop and 3 at the screening table in the resource area. 3 people with a score of ≥ 20 (major depression, severe) 3 in the 15-19 range (major depression, moderately severe), 5 with a score btw. 10-14, 5 with a score btw. 5-9 and 3 with a score under 5. 19 PHQ 9's completed, 10 received appointments for the depression group at deHaro Saldivar Health Center on 8/30/06
- 2 people attended the 9 a.m. depression group
- 2 people attended the 12 p.m. depression group

4 total participated: 2 were COPC patients, 2 were given information on how to become patients, 2 received appointment with Psychiatrist and/or their primary care provider 2 did not want follow up appointments at that time.

All 17 patients who were given appointments for depression were offered a choice on a.m. or p.m. session or an opportunity for an individual session.

- The following agencies / booths were present:
 - Salesmanship Club Youth and Family Center
 - PHHS - Mammography
 - PHHS - COPC (Access, BMI screening, Blood Pressure)
 - PHHS - Translators
 - UT Southwestern Medical Center / Children's Medical Center
 - Child Protective Services
 - Care Van (Immunizations)
 - Cadillo-Pereira Immigration Law Firm
 - Texas Cooperative Extension (Nutrition & Demonstration)
 - YMCA
 - Casa Shelter
 - ADAPT of Texas
 - Dallas County Elections Office
 - Villas of Remond (Active Senior Living Community)
 - Senior Source

Follow-up mini-fair on Friday, August 25th at deHaro-Saldivar Health Center - 1400 N. Westmoreland Road, Dallas 75211:

- Approximately 45 participants
- The following services were provided in the lobby area:
 - Senior Source booth
 - PHHS Behavioral Health Information, depression surveys
 - PHHS General Health Education
 - PHHS Breast Cancer Information
 - Snacks, giveaways and door prizes.

The Bluit- Flowers and Oak West Community Mind Your Health Fairs:

Date: August 19/2006

Place: Buckner Family And Children Services
2006 Didsbury
Dallas, Texas 75224

Time: 10:00pm - 2:00pm

Total Fair Attendees – 200

Total signed in who attended the behavioral group sessions:(36)

(15) actually made appointments, and only (2) kept their appointments.

1 person was found to be in crisis and social workers were able to stabilize the patient, make a follow up appointment and develop a follow up plan. The patient is now stable

Group sessions were:

Depression
Stress Management
Parenting Your Child in Crisis
Medical screenings: Immunizations

Agencies Participated: (Booths)

Texas Workforce Commission Workforce
Greater Dallas Council on Alcohol and Drug Abuse
Salesmanship Club
Bluitt -Flowers and Oak West Health Center
Approximately 250 people attended the event.

Follow-up mini-fair August 23/2006 Behavioral Fair at Bluitt-Flowers Health Center
Depression Screenings: Total (30)
Spanish speaking: (10)

Community Concerns:

A small group of community residents protested the Birth Defects study conducted by Parkland. Attachment 4 contains their material and corresponding news articles. It is not believed they impacted the turn out of effect of the study.

ATTACHMENT 1

ATTACHMENT 2

ATTACHMENT 3

ATTACHMENT 4