

H600.6 P928 89/12/2

NON-CIRCULATING

DOCUMENTS COLLECTION

Texas Preventable Disease

Vol. 49, No. 48
December 2, 1989



NEWS

contents:

Frank Bryant, Jr. MD, FAAFP
Chairman
Texas Board of Health

Robert Bernstein, MD, FACP
Commissioner

Reportable Occupational Diseases -- Texas, 1988
TB Notes: TB/HIV Registry
Publication of Guide for Developing Policies for
HIV-Infected Students and School Staff

**Bureau of Disease Control and Epidemiology,
1100 West 49th Street, Austin, Texas 78756 (512-458-7455)**

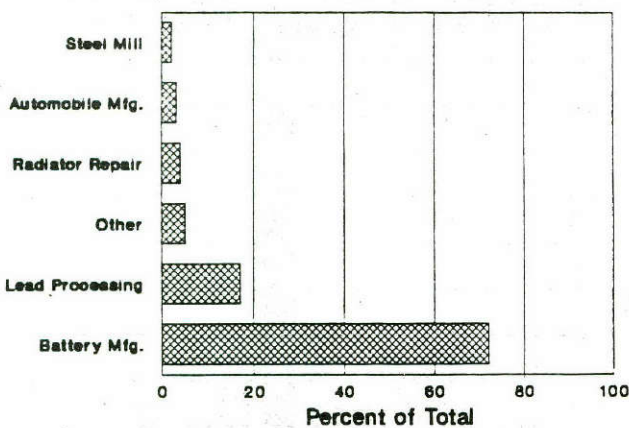
REPORTABLE OCCUPATIONAL DISEASES -- TEXAS, 1988

ADULT ELEVATED BLOOD LEAD LEVELS

Texas experienced a substantial decrease (43%) in reported cases of elevated blood lead levels of 40 micrograms/deciliter (mcg/dL) or greater in 1988; 211 cases were reported in 1988 compared with 372 reported in 1987. Elevated blood lead levels first became reportable in Texas in October 1985. Multiple reports were submitted on many individuals because the Occupational Safety and Health Administration (OSHA) requires that employees be retested at two-month intervals as long as their blood lead levels are 40 mcg/dL or greater. Hispanics accounted for 77 (36.5%) of the cases reported. Of the remaining cases, 72 (34%) were non-Hispanic whites, 61 (28.9%) were black, and 1 (0.5%) was of unknown ethnicity.

Seventy-three percent of the lead reports received were on individuals who worked in battery manufacturing plants. An additional 16% worked in companies which manufactured lead products or processed non-ferrous metals. Figure 1 illustrates the percentage of lead reports by industry.

**Figure 1.
Reported elevated blood lead levels
by type of injury, Texas, 1988**

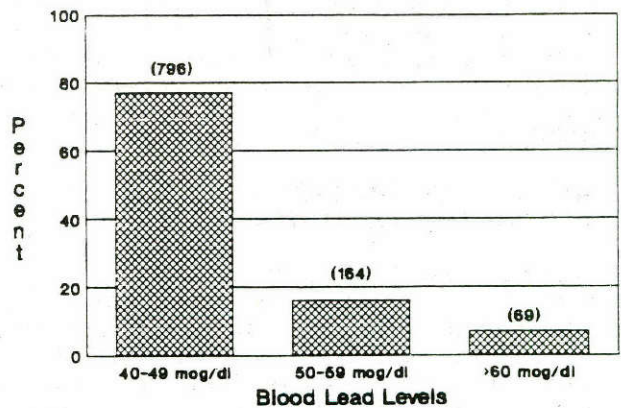


During 1988, the lead surveillance system identified 15 new companies with employees who had elevated blood lead levels. Since the Occupational Disease Reporting Act went into effect in 1985, 76 companies have been identified through this surveillance effort. Twenty-four

percent (18/76) of these companies manufactured lead products or processed non-ferrous metals; 16% (12) were radiator repair shops; 14% (11) were battery manufacturers; 8% (6) were chemical manufacturers; 4% (3) were battery reclamation plants or scrap metal smelters; and 3% (2 each) were indoor firing ranges, ammunition manufacturers, and steel fabricating plants. The remaining 25% (19) were from a variety of other industries.

The number of reports by lead level are illustrated in Figure 2. The highest lead level reported was 112 mcg/dL from an employee working in a battery reclamation plant. The employee was responsible for separating lead and plastics from crushed batteries.

**Figure 2.
Distribution of lead reports by blood
lead level, Texas, 1988**



In an effort to protect the health of workers, the Texas Department of Health prioritizes reports of elevated blood lead levels on the basis of lead level and the presence of symptoms. Because the employee's health may be adversely affected, reports are considered high priority if an employee's blood lead level is greater than 60 mcg/dL, averages above 50 mcg/dL over a six-month period, or symptoms of lead poisoning are reported. Companies with employees meeting these criteria for high priority are inspected by the state or a local health department. Lead exposures are measured and recommendations are made concerning methods to reduce exposures.

During 1988, 69 individuals experienced blood lead levels 60 mcg/dL or above. Fifty-four percent of the cases were employed in battery manufacturing plants, 14.5% in battery reclamation plants or scrap metal smelters, 8.7% in radiator repair shops, 7.2% in lead processing plants, and 7.2% in chemical manufacturing facilities. The remaining workers (8.4%) worked in other industries.

Exposure to lead can cause illness ranging from non-specific symptoms such as fatigue, irritability, headaches, and dizziness to more serious conditions such as peripheral neuropathy and severe abdominal pain. Extremely high lead exposure for prolonged periods of time can lead to coma and eventual death. Of the 211 cases reported, three individuals experienced symptoms of lead exposure; all three had symptoms involving the brain or central nervous system such as sleeplessness, irritability, fatigue, blackout spells, headaches, and memory problems. Other symptoms reported included nausea, vomiting, and chest pains.

In 1988, the National Institute for Occupational Safety and Health (NIOSH) Cooperative Agreement, entitled the Texas Sentinel Event Notification System for Occupational Risk (TxSEN-SOR), provided funding for the development of three educational brochures. *Reportable Occupational Diseases in Texas* provides information on occupational disease reporting requirements, steps for reporting, and resources. *Lead in Industry: A Guide for Employers* and *Working with Lead: A Guide for Employees* address health effects associated with lead, the OSHA standard for lead, and protective practices. Copies of these brochures can be obtained from the TDH Environmental Epidemiology Program, 1100 West 49th Street, Austin, Texas 78756; telephone: (512) 458-7269 or TexAn 824-9269.

ACUTE OCCUPATIONAL PESTICIDE POISONING

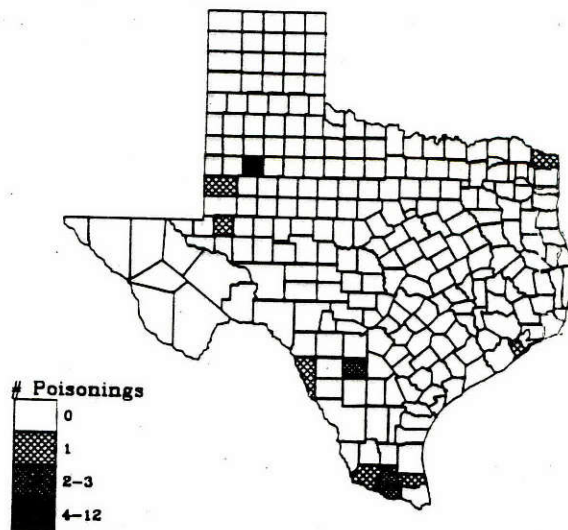
During 1988, 24 cases of acute occupational pesticide poisoning were reported to the Texas Department of Health. In comparison, only 11 cases were reported statewide in 1987. The 1988 cases ranged in age from 13-59 years with a mean age of 30.8 years. Twenty (83%) of the cases were Hispanic, and four (17%) were non-Hispanic whites. Sixteen (67%) of the cases were male.

Through the aforementioned NIOSH funding, the TDH Epidemiology Division implemented an active surveillance system for acute occupational pesticide poisoning. This surveillance was concentrated on three geographic regions in Texas where labor-intensive crops are grown. The regions selected were the Lower Rio Grande Valley, Wintergarden, and High Plains. In these three regions, 17 physicians, 25 migrant health clinics, and 25 emergency departments agreed to assist in the surveillance of pesticide poisoning. Participants were contacted routinely each month to obtain information on patients who had been identified with con-

firmed or suspected pesticide poisoning thought to be work related.

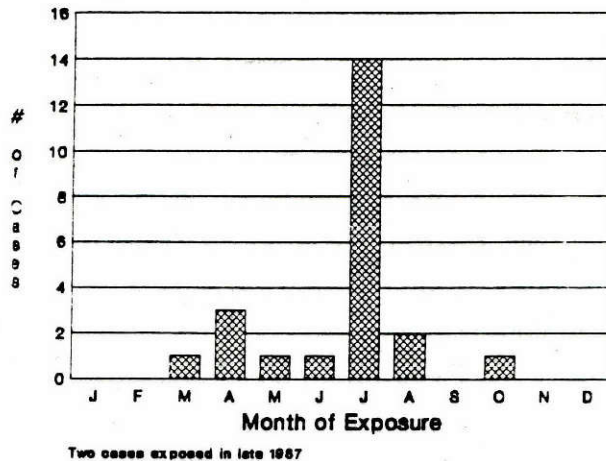
Figure 3 illustrates the number of reported poisonings by county. Twelve (50%) of the poisonings occurred in Lynn County. Three (13%) poisonings were reported in Frio County and two (8%) in Hidalgo County. Ector, Bowie, Gaines, Galveston, Starr, Willacy, and Maverick counties reported one poisoning each (29%).

Figure 3.
Reported occupational pesticide poisonings by county of exposure, Texas, 1988



Twenty-two of the reported pesticide illnesses occurred between March and October as illustrated in Figure 4. Fourteen (64%) of these cases were exposed during July. Two cases were exposed in late 1987, but were not diagnosed and reported until 1988.

Figure 4.
Reported occupational pesticide poisonings by month of exposure, Texas, 1988



Fourteen (58%) of the 24 exposures involved agricultural applications of pesticides to crops. Twelve exposures occurred during a single incident when fieldworkers in Lynn County were sprayed by an aerial applicator as they left

the fields one evening; the workers reentered the fields the following morning to continue work. Two separate cases occurred when ground applicators were exposed while spraying field crops.

Five (21%) exposures resulted from the misapplication of insecticides to either a commercial or residential facility. Three (13%) exposures involved laborers working in recently treated fields or loading recently treated crops. In addition, two cases were exposed at the work site. One farmworker became ill after getting wet from irrigation water which contained

insecticides. Another laborer inhaled insecticides while loading an airplane for crop dusting.

During 1988, pyrethrins accounted for 15 (63%) of the exposures reported to the TDH. Organophosphate insecticides were responsible for 4 (17%) cases. Temik and benzenoid contributed one poisoning each (8%), and in four (17%) cases the type of pesticide was unknown. [Note: Illness may have resulted from exposure to more than one pesticide.]

Prepared by: Janet L. Pichette, Occupational Epidemiology Technician, Environmental Epidemiology Program, Texas Department of Health.



TUBERCULOSIS CONTROL DIVISION NOTES

The 1989 Half-Year Report of Matching Tuberculosis and AIDS Cases: The TB/AIDS Registry Matching Project is conducted cooperatively between the TDH Tuberculosis Control Division and the HIV Division. A TB/AIDS match is defined as a reported case which occurs in the tuberculosis case registry and also in the AIDS case registry. The number of cases of *M. tuberculosis* matched to AIDS cases are reported annually to the CDC Tuberculosis Division by year of diagnosis for both registries.

For the period from January through June of 1989, 92 cases were reported as new matches from the Texas tuberculosis and AIDS registries. A review of the case reports indicated 76 AIDS patients developed mycobacterial infections, and four persons with mycobacterial disease became AIDS cases. Twelve persons were diagnosed with concurrent AIDS and mycobacterial infections. In one case, multiple mycobacterial infections were identified.

Cases were identified as the following:

- 20 cases of *M. tuberculosis*
- 57 cases of *M. avium complex*
- 8 cases of *M. kansasii*
- 1 case of a *M. nonchromogenicum*
- 7 suspects or positive reactors to tuberculin skin testing

Of the 20 *M. tuberculosis* cases, 12 were pulmonary, and 8 were extrapulmonary. These cases were predominantly in Harris County which contributed 40%. Dallas County contributed 35% of the cases; Walker County, 20%; and Jefferson County, 5% (Table 1).

Incidence for all cases submitted, including mycobacteria other than tuberculosis, had

Table 1.
TB/AIDS Registry case matches by
reporting month and county -- Texas,
January - June 1989

County	Jan	Feb	Mar	Apr	May	June	Total	%
Bexar	2	0	2	0	2	1	7	7.6
Dallas	5	3 (2)	7 (2)	2	5 (2)	6 (1)	28 (7)	30.4
Harris	2 (2)	4 (4)	10 (1)	4	1	3 (1)	24 (8)	26.1
Jefferson	2	0	0	0	1 (1)	0	3 (1)	3.3
Travis	2	4	2	1	0	0	9	9.8
Walker	2 (1)	1 (1)	2 (2)	1	0	1	7 (4)	7.6
Other	2	3	2	2	2	3	14	15.2
Total	17 (3)	15 (7)	25 (5)	10	11 (3)	14 (2)	92 (20)	100.0
Deaths	7 (1)	6 (3)	9 (2)	3	3 (1)	3 (1)	31 (8)	33.7

Note: Numbers in parentheses indicate *M. tuberculosis* cases.

similar containment in Harris and Dallas counties, accounting for 26.1% and 30.4%, respectively. Travis County, with 9.8% of the matched cases, exceeded Bexar County and the Texas Department of Corrections system which accounted for 7.6% each. Jefferson County reported 3.3% of matched cases, and all other counties cumulatively reported 15.2%. In seven cases, the tuberculosis and AIDS reports were from two different locations, indicating either a patient move or alternate site reporting. Two cases identified as matches were Mexican nationals.

Of the 92 matched cases, 88 were male; 58 (63%) were white, including 1 female; 22 (23.9%) were black, including 3 females; 11 (11.9%) were Hispanic, and 1 was Asian. Matched cases ranged in age from 19 to 52 years; 34 (36.9%) were 20-29 years of age, 38 (41.3%) were 30-39 years, 14 (15.2%) were 40-49 years, and 5 were >49 years of age.

During the study period, 31 of the 92 reported cases resulted in death, yielding a mortality rate of 33.7%. Of these 31 deaths, 25 (80.6%) occurred within one month of diagnosis.

Prepared by: Rosemary Farrer, Records Analyst, TB/AIDS Registry Matching Project, TDH.

PUBLICATION OF GUIDE FOR DEVELOPING POLICIES FOR HIV-INFECTED STUDENTS AND SCHOOL STAFF*

The National Association of State Boards of Education (NASBE) is one of 20 national organizations that receive assistance from CDC to help schools provide effective health education programs to prevent the spread of human immunodeficiency virus (HIV). NASBE has published a guide that CDC commends to its readers: *Someone at School Has AIDS: A Guide to Developing Policies for Students and School Staff Members Who Are Infected with HIV*.

To develop the guide, NASBE convened experts in medicine, public health, education, and law** and has recommended scientifically and legally based policy statements that local and state departments of education can use in developing policies for HIV-infected students and staff. The guide addresses infection control, HIV-infected students and school staff, confidentiality, and HIV-antibody testing. The guide also

includes resources for further information about HIV education, discrimination, disease reporting, policymaking, and crisis management.

Copies of the guide are available from NASBE, Publications Department, 1012 Cameron Street, Alexandria, VA 22314; telephone (703) 684-4000.

*CDC. MMWR 1989;38(35):614-5.

**Representatives of the following organizations participated in developing and/or reviewing the guide: American Academy of Pediatrics, American Association of School Administrators, American Bar Association, American Federation of Teachers, American Medical Association, Association of State and Territorial Health Officials, CDC, Council for Exceptional Children, Council of Chief State School Officers, Intergovernmental Health Policy Project, Michigan Department of Education, National Association of Elementary School Principals, National Association of School Nurses, National Association of Secondary School Principals, National Congress of Parents and Teachers, National Education Association, National School Boards Association, US Department of Education, and US Department of Justice.

TEXAS PREVENTABLE DISEASE NEWS (ISSN 8750-9474) is a free, weekly publication of the Texas Department of Health, 1100 West 49th Street, Austin, TX 78756. Second-class postage paid at Austin, TX. POSTMASTER: Send address changes to TEXAS PREVENTABLE DISEASE NEWS, 1100 West 49th Street, Austin, TX 78756.

TEXAS PREVENTABLE DISEASE NEWS
Texas Department of Health
1100 West 49th Street
Austin, TX 78756

**SECOND CLASS POSTAGE
PAID AT AUSTIN, TX**

RETURN POSTAGE GUARANTEED

