



Texas Preventable Disease NEWS

TEXAS STATE DOCUMENTS COLLECTION

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A BASELINE STUDY OF AIDS IN TEXAS: KNOWLEDGE, ATTITUDES, AND BEHAVIORS*

As of March 31, 1989, Texas ranked fifth in the nation for AIDS cases with a total of 6,312 cases and 3,829 deaths. Cited in a report from the Texas Legislative Task Force on AIDS, TDH estimates that 100,000 Texans are infected with human immunodeficiency virus (HIV), with Houston and Dallas ranking fourth and tenth respectively in the nation for AIDS cases. Since 1986, AIDS has been the leading cause of death for men 25-44 years of age in Houston, with Houston having more AIDS cases than 45 states, and Dallas more cases than 42 states, the report says. According to a preliminary announcement by the Centers for Disease Control concerning its HIV seroprevalence survey on college campuses, approximately 3/1,000 college students are HIV positive. The legislative task force estimates that by 1991, Texas will have 30,000 cases of AIDS and 250,000 Texans will be infected with HIV. The Texas death rate for AIDS is 61%, slightly higher than the national average.

Until a cure or vaccine for HIV is discovered, prevention through behavioral risk reduction will be the major focus among physicians and other health care professionals. Therefore, TDH commissioned a baseline study analyzing the knowledge, attitudes, and behaviors of Texans. The following summary of the special report prepared by University of Texas researchers Demetri Vacalis, PhD; Pamela J. Shoemaker, PhD; and Alfred McAlister, PhD, highlights the study's findings.

SUMMARY

- Most Texans did not know the signs and symptoms of AIDS.
- Superior knowledge about AIDS was related strongly to high educational level and high family income. Anglos dominated the "high" knowledge category, while blacks and Hispanics dominated the "low" knowledge

category. These data indicate that minorities have the greatest need for preventive programs through education.

- Almost two of every five Texans believe that donating blood places them at risk of HIV infection, and almost one in three would refuse an emergency transfusion due to fear of an HIV infection. These attitudes reflect a fear of the blood supply and an unreasonable fear of donating blood as a result of the AIDS epidemic.
- One sixth of the population was unaware that healthy appearing people can be a source of HIV infection. Most of the lower educated, lower income individuals do not understand the time delay from exposure to seropositivity. This lack of comprehension may increase the probability of participating in high risk behaviors.
- One of every six lower educated, lower income blacks and one in seven Hispanics do not understand the possibility of a mother transmitting this disease to her baby.
- A majority of Texans accept public schools as a provider of AIDS/STD education and indicate support for beginning this educational effort before high school, or even in elementary school.
- Texans generally accept the concept of HIV positive children attending school with noninfected children, but were unwilling to extend a similar approval to HIV positive teachers or staff. Generally, the higher the level of education and AIDS knowledge, the less fearful the response toward HIV positive children, faculty, and staff in public schools.
- A majority of Texans agreed that HIV testing should be required for prostitutes, those arrested for IV drug use, partners of

*Adapted from: Tx Medicine 1989;85:74-9

prostitutes, anyone getting married, prisoners, health care workers, and all pregnant women. A weak majority opposed HIV testing as a prerequisite to health insurance. Hispanics generally were more in favor of testing than were other Texas residents.

- Most Texans were against quarantining HIV positive individuals and agreed that AIDS patients should receive the same legal and social privileges currently enjoyed by the handicapped.

- A majority of Texans stated that AIDS was a result of a breakdown of traditional values, illustrating the need to understand the impact of values when discussing prevention.

- A few Texans viewed life as too short to change their sexual practices.

- The young, those most directly affected by the AIDS epidemic, were the most accepting as a group toward HIV positive individuals and were more likely to change their risk taking behavior.

- The perceived risk of infection tended to decrease with higher education. However, for many Texans, high risk sexual and drug behavior was not related to perceived risk. This trend was accentuated among blacks and Hispanics, who reported a high incidence of risk taking behaviors among their "at risk" populations.

- Almost all Texans reported having had sex within the past seven years. Subjects who attended religious services most often were less likely to have had multiple sex partners and have had sex with prostitutes. The most sexually active group was the 18- to 24-year-old group, with blacks more likely to report multiple sex partners than Hispanics or Anglos.

- Only half of the "at risk" respondents had used a condom in the past year, and only 32% of that half had the condom in place before the first genital contact was made. Of the

subjects who participated in anal sex, 58% reported never using a condom. During anal sex, Anglos (14%) more than Hispanics (13%) or blacks (3%) used a condom. Hispanics did not differentiate well between using a condom to prevent HIV infection and as a method of birth control.

- Most Texans reported participating in oral sex, with females more likely than males, and Anglos more likely than Hispanics or blacks.

- Only eight percent of those surveyed reported a prior STD infection. Blacks reported a five times higher rate than Anglos and four times higher than Hispanics.

- Twelve percent of the sexually active, heterosexual, nonmonogamous "at risk" population reported having anal sex within the past seven years. Heterosexual females (13%) more than males (9%) reported experiencing anal sex. Fifty-eight percent did not use a condom during anal sex.

- A small percentage of Texans (8%) reported a history of recreational or illegal drug use, mostly by the younger age groups. Drug use was lowest among those who attended religious services most often and highest in those with incomes of \$20,000-\$40,000.

- Physicians were by far the most trusted source of information, but religious leaders were important sources for those with non-accepting attitudes towards infected persons. Television and physician advice were the most commonly attributed sources of information that reduced fear of infection or led to a decision about whether to be tested for exposure to the HIV virus.

Hispanics were more likely to report influence from television than from physician advice. One third of the survey respondents reported they had changed their behavior in response to some communication. Television was credited with the largest share of those reported behavior changes, such as reducing the number of partners, using condoms, or initiating other safer sex practices.

LEAD POISONING FOLLOWING INGESTION OF HOMEMADE BEVERAGE STORED IN A CERAMIC JUG -- NEW YORK*

In the summer of 1987, seven persons living in Westchester County, New York, developed lead poisoning after ingesting a homemade beverage stored in a ceramic bean jug. The six adults and one child were relatives and lived at or frequently visited the home where the jug was kept. The 140-ounce brown ceramic jug had been obtained in Mexico and is of a type commonly used to cook beans. The first person to experience illness used the jug to store a beverage he prepared frequently from sugar, water, and mara, a grain imported from Colombia. After the beverage fermented, family members consumed it several items daily throughout the summer.

In October 1987, the first patient--a 67-year-old man--consulted a physician because of severe abdominal pain, fatigue, and weight loss. The physician initially suspected gastric carcinoma. However, because severe anemia (hemoglobin 8 gm) and red blood cells with basophilic stippling were detected, a blood-lead level was obtained. Both the blood-lead level (70 $\mu\text{g}/\text{dL}$) and the erythrocyte protoporphyrin (EP) (382 $\mu\text{g}/\text{dL}$) were markedly elevated. He received chelation treatment for lead during a two-week hospitalization.

After the initial case was diagnosed, a public health sanitarian visited the home to search for the source of lead. Interviews and a search of the premises identified the bean jug, which was severely corroded on the inside. Analysis of the jug by the New York State Department of Health (NYSDH) detected a lead content of 730 ppm, 100 times the normal value for a hollow vessel of this size.

Other household members were tested for lead. Six persons, aged 8-90 years, had elevated blood-lead levels (range: 35-70 $\mu\text{g}/\text{dL}$). An 8-year-old child had a lead level of 35 $\mu\text{g}/\text{dL}$ and an EP of 152 $\mu\text{g}/\text{dL}$ (CDC risk classification III [high risk]).** One of the five adults was also hospitalized.

Investigation by NYSDH revealed other earthenware with high lead contents in shops and bodegas in this town. The Westchester County Department of Health distributed bilingual fliers in ethnic communities in the county warning of the possible hazards from the use of ceramic ware.

No additional cases have been identified. All patients have been followed by their personal physician, and their blood values have returned to normal.

MMWR Editorial Note: Because of industrialization, lead is ubiquitous in the human environment. Common sources of lead exposure include lead-based paints (present on the interior surfaces of an estimated 30-40 million US homes), airborne lead from combusted lead additives in gasolines or from factories using lead, occupations such as the production or repair of lead-acid storage batteries or automobile radiators, and a variety of ethnic remedies, particularly those used by Asian and South American groups. Although lead-glazed pottery is not a widespread source of lead, it can release large amounts of lead into food and drink. Lead-glazed pottery has been responsible for outbreaks of serious poisoning; in several episodes similar to this one, imported pottery has been implicated. Home-made or craft pottery and porcelain-glazed vessels can release large quantities of lead, particularly if the glaze is chipped, cracked, or improperly applied. If the vessels are repeatedly washed, the glaze may deteriorate, and pottery previously tested as safe can become unsafe. Acidic foods, beverages, or even water can leach lead from the containers.

Excessive absorption of lead is one of the most prevalent and preventable childhood environmental health problems in the US. Once thought to be a problem confined to poor urban children, lead poisoning is now known to involve children in all socioeconomic strata. Although the toxic properties of lead affect all age groups, attention is generally focused on the serious consequences of elevated lead exposure on the developing central nervous system of children <6 years of age. The level in children at which further diagnostic follow-up is recommended is 25 $\mu\text{g}/\text{dL}$ of lead in whole blood; however, recent studies

*Adapted from: CDC. MMWR 1989;38(21):379-80.

**CDC defines an elevated blood-lead level in children as a confirmed concentration of lead in whole blood of $\geq 25 \mu\text{g}/\text{dL}$; lead toxicity is defined by an elevated blood level with an EP in whole blood $\geq 35 \mu\text{g}/\text{dL}$.

have shown that blood-lead levels as low as 10 $\mu\text{g}/\text{dL}$ may adversely affect childhood neurobehavioral function and development.

PDN Editorial Note: The use of pottery, both domestic and imported, has long been popular in Texas households. Health care providers are urged to remain alert to the possibility of lead poisoning from such sources and caution patients and clients accordingly.

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PERTUSSIS--TRAVIS COUNTY

The Austin-Travis County Health Department has received reports of ten confirmed cases of pertussis (whooping cough) since early June 1989. No commonality has been established for these cases, except that five occurred within the same zip code in South Austin and one case involved household transmission. Seven of the ten cases were in children less than 4 years of age.

During 1989, the Texas Department of Health has received 55 reports of confirmed pertussis from 18 counties throughout the state. The majority of these cases (78%) were reported in children 4 years of age and younger.

The summer months of June-August have traditionally been a time period for increased pertussis morbidity in Texas. Pertussis is transmitted via large aerosol droplets from the respiratory

tracts of symptomatic individuals. Transmission occurs most frequently in household settings, where as many as 90% of non-immune household contacts may acquire the infection. Incomplete protection by the vaccine contributes to disease acquisition, although children who receive at least three doses show protection levels of 85-95%. Waning immunity in adults and older children, who can transmit infection even when having few symptoms, also contributes to transmission. Therefore, prompt chemoprophylaxis for household contacts is a primary concern subsequent to index case diagnosis.

For further information regarding laboratory confirmation, case management, etc, contact the TDH Immunization Division at (512)458-7284 or toll-free 1-800-252-9152.

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