



TEXAS DEPARTMENT OF STATE HEALTH SERVICES

2010 Annual Report

Adult Blood Lead Levels in Texas

2010 Data Summary

In 2010, 34,574 blood lead reports were received for 31,567 individuals 15 years of age and older in Texas (Table 1). Of those, 33,964 (98.24%) were below 25 µg/dL, and 610 (1.76%) were above this level (Figure 1). The majority of individuals with blood lead levels greater or equal to 25 µg/dL were male (Table 2); 35 years of age or older (Table 3); and were exposed to lead at work (Table 4).

Race and ethnicity information is largely unknown. Among the 34,574 reports received in 2010, 85.41% had no race information (Table 5), and 71.50% had no ethnicity information (Table 6).

Occupational settings remain the predominant source of exposure for reported elevated (25 µg/dL or higher) blood levels in Texas. Industries with the highest number of reported elevated blood lead test results are primary metal manufacturing; specialty trade contractors; computer and electronic product manufacturing; heavy and civil engineering construction; waste management and remediation services; and nonmetallic mineral product manufacturing (Figure 2).

Non-occupational exposures also occur. The most frequently reported sources of exposure in a non-occupational setting are shooting and/or reloading bullets, non-traditional herbal remedies, and home renovation/restoration (Table 7). Individuals may report more than one type of exposure at a time.

During 2010, follow-up activity was conducted for individuals with blood lead levels of 10 µg/dL or higher. Individuals were contacted via mail and/or telephone and provided educational information related to lead exposure and prevention methods. Additionally, healthcare providers and employers were often contacted in instances where individuals had blood lead levels equal or greater to 25 µg/dL.

Table 1. Reported blood lead tests for individuals 15 years of age and older in Texas, 2010

Number of reports	Number of individuals	Range of reported results	Mean blood lead level	Median blood lead level
34,574	31,567	0-111 µg/dL	3.08 µg/dL	2 µg/dL

Figure 1. Distribution of blood lead levels among individuals 15 years of age and older in Texas, 2010

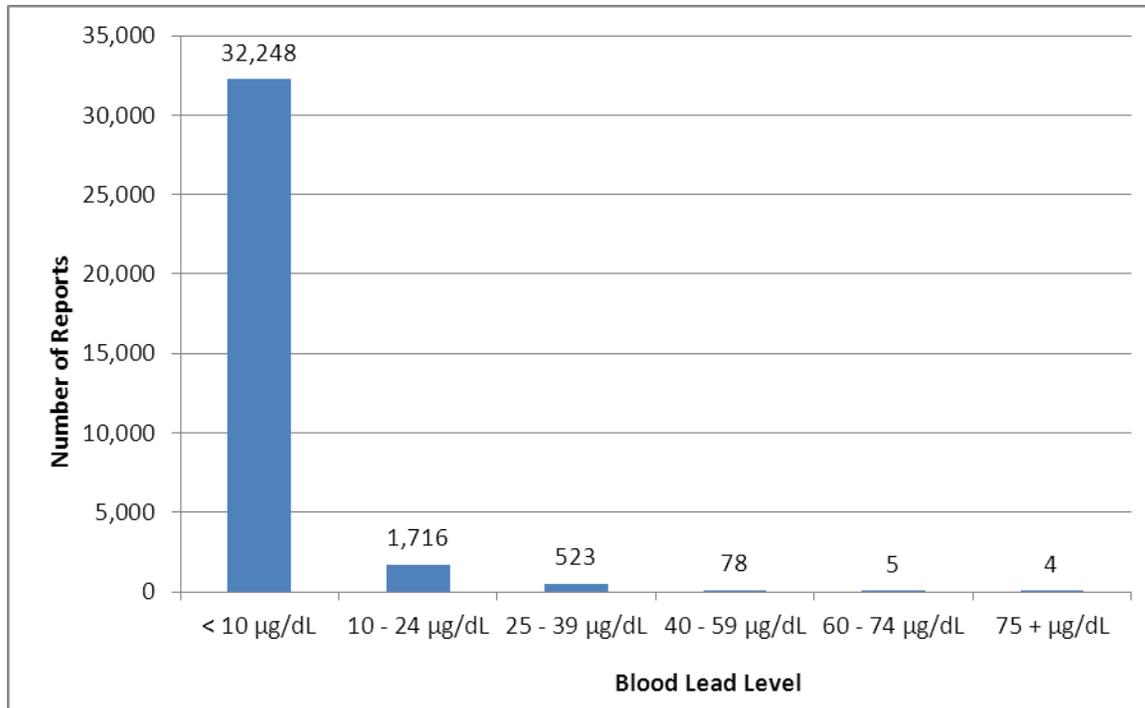


Table 2. Distribution of gender by blood lead test result for individuals 15 years of age and older in Texas, 2010

<u>Gender</u>	<u>All Blood Lead Levels</u>		<u>Blood Lead Levels \geq 25 μg/dL</u>		<u>Blood Lead Levels \geq 40 μg/dL</u>	
	<u>Number of reports</u>	<u>Percent</u>	<u>Number of reports</u>	<u>Percent</u>	<u>Number of reports</u>	<u>Percent</u>
Male	22,901	66.24	600	98.36	83	95.40
Female	11,636	33.66	10	1.64	4	4.60
Unknown	37	0.11	0	0.00	0	0.00
Total	34,574	100	610	100	87	100

Table 3. Distribution of age by blood lead test result for individuals 15 years of age and older in Texas, 2010

<u>Age</u>	<u>All Blood Lead Levels</u>		<u>Blood Lead Levels \geq 25 μg/dL</u>		<u>Blood Lead Levels \geq 40 μg/dL</u>	
	<u>Number of reports</u>	<u>Percent</u>	<u>Number of reports</u>	<u>Percent</u>	<u>Number of reports</u>	<u>Percent</u>
15 - 17 years	8,362	24.19	4	0.65	0	0.00
18 - 24 years	3,935	11.38	46	7.53	9	10.34
25 - 34 years	5,280	15.27	133	21.77	29	33.33
35 - 44 years	5,465	15.81	161	26.35	19	21.84
45 - 54 years	5,368	15.53	189	30.93	16	18.39
55 - 64 years	3,362	9.72	57	9.33	9	10.34
65 + years	2,745	7.94	20	3.27	5	5.75
Unknown	57	0.16	0	0.00	0	0.00
Total	34,574	100	610	100	87	100

Table 4. Work-relatedness among reported blood lead tests for individuals 15 years of age and older in Texas, 2010

<u>Work-relatedness</u>	<u>All Blood Lead Levels</u>		<u>Blood Lead Levels \geq 25 $\mu\text{g/dL}$</u>		<u>Blood Lead Levels \geq 40 $\mu\text{g/dL}$</u>	
	<u>Number of reports</u>	<u>Percent</u>	<u>Number of reports</u>	<u>Percent</u>	<u>Number of reports</u>	<u>Percent</u>
Occupational	4,911	14.20	558	91.33	65	74.71
Non-occupational	187	0.54	28	4.58	12	13.79
Both occupational and non-occupational	1	0.00	1	0.16	0	0.00
Unknown	29,475	85.25	23	3.76	10	11.49
Total	34,574	100	610	100	87	100

Table 5. Distribution of race by blood lead test result for individuals 15 years of age and older in Texas, 2010

Race	All Blood Lead Levels		Blood Lead Levels \geq 25 μg/dL		Blood Lead Levels \geq 40 μg/dL	
	Number of reports	Percent	Number of reports	Percent	Number of reports	Percent
American Indian/Alaskan Native	75	0.22	4	0.65	0	0.00
Asian	385	1.11	9	1.47	6	6.90
Black	1,980	5.73	77	12.60	10	11.49
White	1,949	5.64	364	59.57	32	36.78
Hawaiian/Pacific Islander	1	0.00	0	0.00	0	0.00
Other	651	1.88	31	5.07	4	4.60
Unknown	29,533	85.41	125	20.46	35	40.23
Total	34,574	100	610	100	87	100

Table 6. Distribution of ethnicity by blood lead test result for individuals 15 years of age and older in Texas, 2010

Ethnicity	All Blood Lead Levels		Blood Lead Levels \geq 25 μg/dL		Blood Lead Levels \geq 40 μg/dL	
	Number of reports	Percent	Number of reports	Percent	Number of reports	Percent
Hispanic	7,924	22.92	321	52.54	41	47.13
Not Hispanic	1,927	5.57	192	31.42	24	27.59
Unknown	24,723	71.50	97	15.88	22	25.29
Total	34,574	100	610	100	87	100

Figure 2. Texas industries with the highest number of blood lead test results $\geq 25 \mu\text{g/dL}$ in individuals 15 years of age and older in Texas, 2010

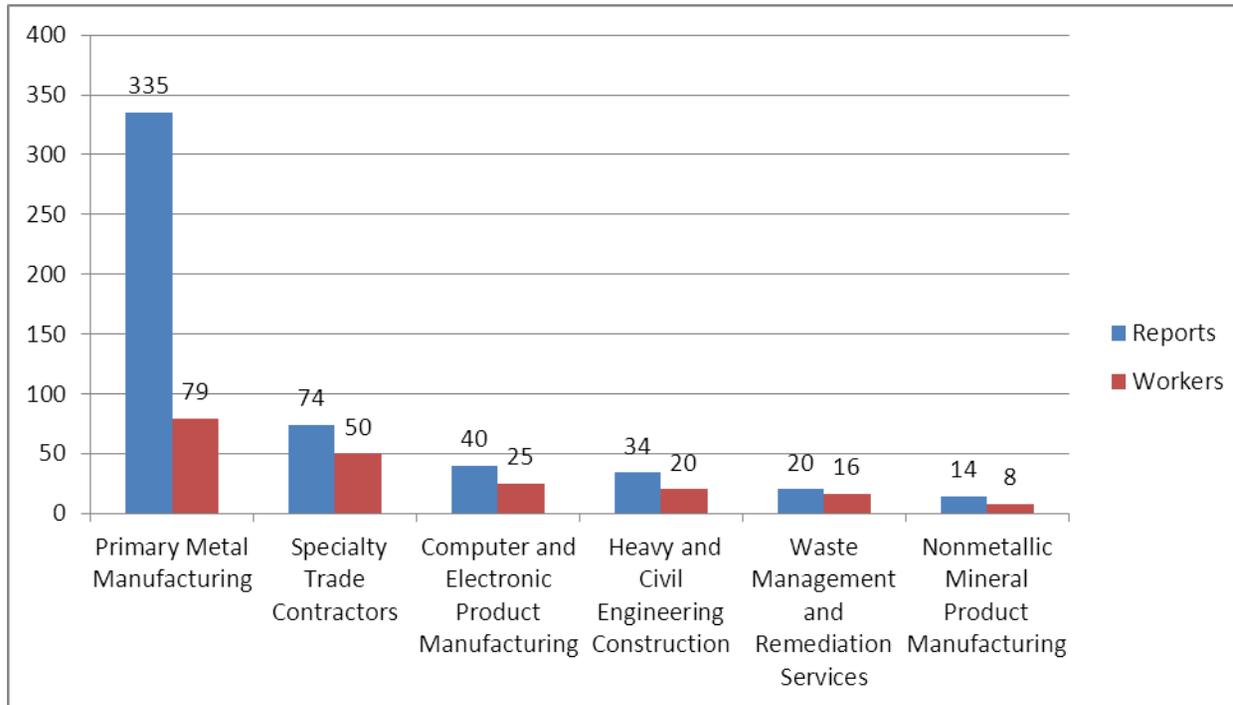


Table 7. Types of non-occupational exposures among individuals 15 years of age and older with elevated blood lead levels in Texas, 2010

<u>Source of Exposure</u>	<u>Number of reports</u>	<u>Number of Individuals</u>
Shooting and/or reloading	15	11
Herbal remedies	2	2
Removing paint/restoration	2	1
Childhood exposure	1	1
Retained bullet	1	1
Clay Pottery	1	1
Pica	1	1

Table 8. Counties with the highest number of resident individuals with blood lead levels $\geq 25 \mu\text{g/dL}$ in individuals 15 years of age and older, 2010

<u>County</u>	<u>Number of reports</u>	<u>Number of Individuals</u>
Harris	134	86
Denton	126	18
Collin	106	18
Dallas	45	20
Kaufman	21	10