The Local Prevalence of Lead Poisoning in the US

This appendix presents estimates of the extent of lead exposure in American children on a local basis; such figures have not been available previously. These estimates clearly reveal the seriousness of lead poisoning for communities in many urban areas of the country: **in many of these areas, a majority of children have unacceptable blood lead levels (i.e., above 10-15 ug/dl).** And the prevalence of affected children is especially alarming among the urban poor in certain regions of the U.S. Urban areas (standard metropolitan statistical areas, or SMSAs) with older central cities and relatively small amounts of new housing -- the "Rust Belt", the Northeast, and much of the Midwest -- typically have higher prevalence rates. By contrast, urban areas in the "Sun Belt" and the West Coast generally have lower prevalence rates, because of their higher proportion of newer housing.

Tables A-1 and A-2 contain summaries of the data on a national basis. The importance of key parameters -- family income, child's age, race, and residence location -- are clear. Overall, in the central cities of large urban areas, almost 70% of poor Black children and about 35% of poor white children are at risk of lead toxicity. Tables A-3, A-4, and A-5 present a breakdown of these data on a local basis, by SMSA.[1]

How the Estimates were Derived

These estimates are based upon information collected and analyzed for the Agency for Tox: ^ bstances and Disease Registry (ATSDR), a component of the US Public Health Service. In 1988 the ATSDR published a comprehensive Report to Congress on childhood lead poisoning in the United States.[2] That report

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[1] Table A-3 contains estimates for SMSAs of over 1 million people. Tables A-4 and A-5 both contain estimates for SMSAs of under 1 million people, but those in Table A-5 tend to be smaller. As an artifact of the census data from which the estimates were calculated, the residence location could be distinguished as "central city" versus "not central city" for SMSAs included in Table 4 but not in Table 5. As a result, the calculations in Table 5 are likely to be proportionally underestimated.

[2] Agency for Toxic Substances and Disease Registry (1988), The Nature and Extent of Lead Poisoning in Children in the United States: A Report to Congress (Atlanta: U.S. Department of Health and Human Services/Public Health Service), Doc. No. 99-2966.

analyzed existing data on numbers of lead-exposed children throughout the U.S., including results from a national sampling of children in the late 1970s. Those data were adjusted (by linear and logistic regression techniques) to take into account the reductions in lead exposure following the phasedown in use of leaded gasoline since 1982.

To derive the data set forth in this appendix, data from the ATSDR Report were used to take into account the distribution of children in housing units according to the age of the housing. Because levels of lead in paint are closely associated with the age of housing, residence by age of housing is an appropriate surrogate for apportioning the risk of elevated blood lead levels attributable to paint exposure.

The ATSDR report presented aggregate data for the US as a whole. Because of the limitations of the national sampling data,[3] the ATSDR Report only dealt with white and Black children, aged six months to 5 years living in the nation's 318 standard metropolitan statistical areas (SMSAs). Omitted from the ATSDR analysis, and from the estimates presented in this appendix, are all children of other racial and ethnic groups, all children not living in these 318 urban areas, and all children older than 6 years of age.

Using the ATSDR data, one of the two principal authors of the ATSDR Report, Dr. Annemarie Crocetti, has derived local estimates of numbers of children with blood lead levels above the range of concern (i.e., 10 to 15 ug/dl). These local estimates reflect the impact of local differences in the age of housing and presence of lead paint in housing.

To calculate the local estimates, data used in the ATSDR Report were categorized by housing unit, as pre-1950, 1950-1969, and post-1970. The data were further stratified to take into account variations in family income (less than $6000, $6000-14,999, and equal to or greater than $15,000), age (six months to 2 years; 3-5 years), race (white or Black), and location (in central city or not in central city).

These figures are estimates, not measurements. They are by no means definitive, and no margin of error can be calculated. However, these estimates are based upon reasonable assumptions as to the impact of exposure to lead paint on children's blood lead levels. Data from recent lead screening programs in Oakland and Baltimore have been compared to these estimates; the latter fall within 5% of the projections made by local public health officials, using actual screening data, of the number of children with elevated blood lead levels attributable to lead paint.

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[3] The samples were collected and analyzed as part of the Second National Health and Nutrition Examination Survey, or NHANES II.

Table A-1 Estimated percentages of children 6 months to 5 years who are projected to exceed selected blood lead levels by strata and residence in SMSAs of 1 million or more.

Strata	In Central City		Not In Central City	
	>10	>15	>10	>15
	(ug/dl)		(ug/dl)	
> $6,000				
White				
.5 - 2 years	79.9	36.6	69.7	28.4
3 - 5 years	80.8	35.5	70.2	27.1
Black				
.5 - 2 years	95.9	67.0	91.6	57.4
3 -5 years	97.1	68.5	93.3	58.1
$6,000 - 14,99				
White				
.5 - 2 years	65.1	23.5	53.1	17.4
3 - 5 years	65.1	22.2	52.6	16.1
Black				
.5 - 2 years	91.4	53.6	84.6	43.9
3 - 5 years	92.6	53.6	85.9	43.3
> $15,000				
White				
.5 - 2 years	47.7	12.5	35.4	8.6
3 - 5 years	46.7	11.4	34.2	7.7
Black				
.5 - 2 years	85.2	38.8	75.2	29.6
3 - 5 years	85.7	37.7	75.4	28.3

Young Black children living below the poverty level in urban areas may have a greater than 95% chance of having a blood lead level in excess of 10 ug/dl.

Table A-2. Estimated percentages of children 6 months to 5 years who are projected to exceed selected blood lead levels by strata and residence in SMSAs under 1 million.

| | In Central City | | Not in Central City | |
| | >10 | >15 | >10 | >15 |
Strata	(ug/dl)		(ug/dl)	
> $6,000				
White				
.5 - 2 years	67.2	26.3	55.8	19.9
3 - 5 years	67.4	25.0	55.6	18.6
Black				
.5 - 2 years	90.8	55.2	84.3	46.0
3 - 5 years	92.4	55.7	86.0	45.8
$6,000 - 14,999				
White				
.5 - 2 years	50.1	15.8	38.8	11.4
3 - 5 years	49.5	14.6	37.7	10.3
Black				
.5 - 2 years	82.9	41.5	73.7	33.0
3 - 5 years	84.1	40.7	74.7	31.9
>$15,000				
White				
.5 - 2 years	32.5	7.6	22.7	5.1
3 - 5 years	31.2	6.7	21.4	4.4
Black				
.5 - 2 years	72.6	27.3	60.6	20.2
3 - 5 years	72.7	26.0	60.2	18.9

Table A-3. Estimated total number of children 6 months to 5 years who are projected to exceed selected blood lead levels for individual SMSAs with populations over 1 million.

SMSA	SMSA Population	>10 ug/dl #	>10 ug/dl %	>15 ug/dl #	>15 ug/dl %
Anaheim-Santa Ana-Garden Grove, CA	158969	52670	33.1	14858	9.3
Atlanta, GA	175193	82453	47.1	28614	16.3
Baltimore, MD	168937	98857	58.5	42063	24.9
Boston, MA	176957	122862	69.4	42187	23.8
Buffalo, NY	87443	54012	61.8	20631	23.6
Chicago, IL	604862	371952	·61.5	154037	25.5
Cincinnati, OH-KY-IN	120413	65746	54.6	23957	19.9
Cleveland, OH	147225	95304	64.7	40365	27.4
Columbus, OH	96246	48738	50.6	17179	17.8
Dallas-Fort Worth, TX	290019	124350	42.9	41025	14.1
Denver-Boulder, CO	142197	51825	36.4	16122	11.3
Detroit, MI	330694	186768	56.5	77492	23.4
Fort Lauderdale-Hollywood, FL	64944	25345	39.0	8062	12.4
Houston, TX	314479	124209	39.5	40204	12.8
Indianapolis,IN	100752	50174	49.8	17323	17.2
Kansas City, MO-KS	114924	58019	50.5	21743	18.9
Los Angeles-Long Beach, CA	654692	380905	58.2	137769	21.0
Miami, FL	125378	64150	51.2	24194	19.3
Milwaukee, WI	116685	66110	56.7	25041	21.5
Minneapolis- St. Paul, MN-WI	184637	82904	44.9	24921	13.5
Nassau-Suffolk, NY	172248	61078	35.5	16776	9.7
New Orleans, LA	112345	64845	57.7	29866	26.6
New York, N.Y-NJ	656937	490977	74.7	222229	33.8
Newark, NJ	134614	95230	70.7	40318	30.0
Philadelphia, PA-NJ	357534	221654	62.0	94297	26.4
Phoenix, AZ	119152	38518	32.3	12298	10.3
Pittsburgh, PA	147585	86921	58.9	30447	20.6
Portland, OR-WA	98903	44249	44.7	13899	14.1
Riverside-San Bernardino-Ontario, CA	156291	63519	40.6	19204	12.3
Sacramento, CA	82569	33781	40.9	10627	12.9
St. Louis, MO-IL	178984	99705	55.7	41969	23.4
San Antonio, TX	111714	48747	43.6	17114	15.3
San Diego, CA	156162	62949	40.3	19683	12.6
San Francisco-Oakland, CA	206937	114921	55.5	40817	19.7
San Jose, CA	98287	34700	35.3	9863	10.0
Seattle-Everett, WA	119113	47556	39.9	14321	12.0
Tampa-St. Petersburg, FL	101611	41849	41.2	14585	14.4
Washington, DC-MD-VA	236578	122406	51.7	46267	19.6

Table A-4. Estimated total number of children 6 months to 5 years who are projected to exceed selected blood lead levels for individual SMSAs with populations of 1 million or less.

SMSA	SMSA Population	>10 ug/dl #	ug/dl %	>15 ug/dl #	ug/dl %
Akron, OH	49485	23429	47.3	8242	16.7
Albany-Schenectady-Troy, NY	59747	29156	48.8	8847	14.8
Albuquerque, NM	39071	11023	28.2	3120	8.0
Allentown-Bethlehem-Easton, PA-NJ	43276	19460	45.0	5461	12.6
Ann Arbor, MI	19647	6980	35.5	1925	9.8
Appleton-Oshkosh, WI	23728	7510	31.7	1915	8.1
Austin, TX	52468	15397	29.3	4473	8.5
Bakersfield, CA	46461	15826	34.1	4364	9.4
Baton Rouge, LA	52065	21281	40.9	7229	13.9
Beaumont-Port Arthur-Orange, TX	36925	16125	43.7	6479	17.5
Birmingham, AL	68266	32349	47.4	13265	19.4
Bridgeport, CT	27682	14567	52.6	5394	19.5
Charleston-North Charleston, SC	43296	16705	38.6	6290	14.5
Charlotte-Gastonia, NC	50445	20231	40.1	6575	13.0
Chattanooga, TN-GA	30889	13388	43.3	5207	16.9
Colorado Springs, CO	31351	8686	27.7	2647	8.4
Columbia, SC	33221	13371	40.2	4476	13.5
Davenport-Rock Island-Moline, IA-IL	33983	14111	41.5	4456	13.1
Dayton, OH	68605	31169	45.4	10425	15.2
Des Moines, IA	27196	9821	36.1	2766	10.2
Duluth-Superior, MN-WI	22088	9550	43.2	2608	11.8
Erie, PA	22830	10365	45.4	3198	14.0
Eugene-Springfield, OR	20899	5679	27.2	1533	7.3
Evansville, IN-KY	25042	9779	39.1	3164	12.6
Flint, MI	39017	19212	49.2	6707	17.2
Fort Wayne, IN	33846	15343	45.3	5229	15.4
Fresno, CA	52133	21308	40.9	6210	11.9
Gary-Hammond-East Chicago, IN	58072	28707	49.4	10310	17.8
Grand Rapids, MI	58978	22941	38.9	7426	12.6
Greenville-Spartanburg, SC	43937	16046	36.5	5464	12.4
Hartford, CT	50646	23660	46.7	8404	16.6
Honolulu, HA	24296	7536	31.0	2170	8.9
Huntsville, AL	24900	9751	39.2	2950	11.8
Jackson, MS	31228	15673	50.2	5639	18.1
Jacksonville, FL	70984	29455	41.5	11630	16.4
Jersey City, NJ	43551	30946	71.1	12739	29.3
Kalamazoo-Portage, MI	22318	9144	41.0	2854	12.8
Knoxville, TN	33976	12470	36.7	4201	12.4
Lansing- East Lansing, MI	41420	16515	39.9	4595	11.1
Las Vegas, NV	41774	11947	28.6	3316	7.9

Continued

SMSA	SMSA Population	>10 ug/dl #	%	>15 ug/dl #	%
Lawrence-Haverhill, MA-NH	22356	11134	49.8	3391	15.2
Lexington-Fayette, KY	26668	11153	41.8	3580	13.4
Lorain-Elyria, OH	21713	8471	39.0	2687	12.4
Louisville, KY-IN	73518	29203	39.7	10684	14.5
Macon, GA	22100	10774	48.8	3926	17.8
Madison, WI	23209	6783	29.2	1794	7.7
Mcallen-Pharr-Edinburg, TX	39025	12771	32.7	3810	9.8
Memphis, TN-AR-MS	87808	44671	50.9	18082	20.6
Mobile, AL	43200	18308	42.4	6606	15.3
Modesto, CA	24415	7629	31.2	2072	8.5
Nashville-Davidson, TN	70665	26153	37.0	8475	12.0
New Brunswick-Perth Amboy-Sayreville, N	40200	14721	36.6	4058	10.1
New Haven-West Haven, CT	31415	15790	50.3	6049	19.3
Norfolk-Virginia Beach-Portsmouth, VA-NC	76451	36210	47.4	14924	19.5
Oklahoma City, OK	79127	27265	34.5	8554	10.8
Omaha, NE-IA	52525	19742	37.6	6392	12.2
Orlando, FL	59118	19414	32.8	7050	11.9
Oxnard-Simi Valley-Ventura, CA	46338	12672	27.3	3353	7.2
Paterson-Clifton-Passaic, NJ	34954	20872	59.7	8723	25.0
Peoria, IL	31382	12726	40.6	4162	13.3
Providence-Warwick-Pawtucket, RI-MA	60958	30624	50.2	10317	16.9
Raleigh-Durham, NC	38089	14458	38.0	5088	13.4
Richmond, VA	48973	20881	42.6	8268	16.9
Roanoke, VA	15271	5340	35.0	1707	11.2
Rochester, NY	76623	35835	46.8	12130	15.8
Rockford, IL	23738	9715	40.9	2794	11.8
Salinas-Seaside-Montery, CA	29091	10804	37.1	3112	10.7
Salt Lake City-Ogden, UT	129167	33147	25.7	8706	6.7
Santa Barbara-Santa Maria-Lompoc, CA	21855	7497	34.3	1957	9.0
Shreveport, LA	38986	19978	51.2	8130	20.9
South Bend, IN	23745	11867	50.0	4054	17.1
Spokane, WA	30870	9659	31.3	2759	8.9
Springfield-Chicopee-Holyoke, MA-CT	37183	18126	48.7	6036	16.2
Stockton, CA	32809	12488	38.1	3900	11.9
Syracuse, NY	53313	24031	45.1	7479	14.0
Tacoma, WA	47047	17782	37.8	5304	11.3
Tuscon, AZ	45133	11519	25.5	3174	7.0
Tulsa, OK	62119	21785	35.1	6518	10.5
Uticia-Rome, NY	23982	11736	48.9	3624	15.1
Vallejo-Fairfield-Napa, CA	28569	8999	31.5	2717	9.5
Waterbury, CT	15777	7110	45.1	2604	16.5
West Palm Beach-Boca Raton, FL	39576	13666	34.5	4328	10.9
Wichita, KS	41057	17930	43.7	5662	13.8
Worcester, MA	25913	12244	47.3	3534	13.6
Youngstown-Warren, OH	40084	18529	46.2	6654	16.6

Table A-5. Estimated total number of children 6 months to 5 years who are projected to exceed selected blood lead levels for individual small SMSAs.

SMSA	SMSA Population	>10 ug/dl #	>10 ug/dl %	>15 ug/dl #	>15 ug/dl %
Abilene, TX	14225	5838	41.0	1645	11.6
Albany, GA	11632	5509	47.4	2171	18.7
Alexandria, LA.	16306	7710	47.3	3054	18.7
Altoona, PA	10151	4170	41.1	1101	10.8
Amarillo, TX	17746	6932	39.1	1980	11.2
Anchorage, AK	21407	5421	25.3	1445	6.8
Anderson, IN	9632	4985	51.8	1608	16.7
Anderson SC	9616	3797	39.5	1551	16.1
Anniston, AL	9154	3895	42.5	1628	17.8
Asheville, NC	11197	3601	32.2	1061	9.5
Athens, GA	18196	7644	42.0	2712	14.9
Atlantic City, NJ	14555	6227	42.8	2622	18.0
Augusta, GA-SC	31646	12739	40.3	4180	13.2
Bangor, ME and Lewiston-Auburn, ME	11993	5774	48.1	1610	13.4
Battle Creek, Mi	14682	7432	50.6	2549	17.4
Bay City, Mi	10201	3108	30.5	818	8.0
Bellingham, Wa	7796	2765	35.5	703	9.0
Benton Harbor, Mi	14393	6690	46.5	2634	18.3
Billings, MT	10159	3085	30.4	806	7.9
Biloxi-Gulfport, MS	18850	7439	39.5	2336	12.4
Binghampton, NY-PA	18656	8968	48.1	2517	13.5
Bismarck ND and Grand Forks,ND-MN	18443	5832	31.6	1630	8.8
Bloomington, IN and Owensboro, KY	14569	6374	43.8	1897	13.0
Bloomington-Normal, IL	9472	2835	29.9	729	7.7
Boise City, ID	17230	3922	22.8	1041	6.0
Bradenton, FL	9790	3145	32.1	994	10.2
Bremerton, WA	11475	2814	24.5	801	7.0
Bristol, CT and Meriden, CT	8989	3951	44.0	1082	12.0
Brockton, MA	12103	4931	40.7	1549	12.8
Brownsville-Harlingen-San Benito, TX	26998	8512	31.5	2422	9.0
Bryan-College Station, Tex. And Sherman- [	16515	5253	31.8	1532	9.3
Burlington, Vt.	9044	2588	28.6	670	7.4
Canton, OH	31219	13814	44.2	4230	13.5
Casper, WY and Great Falls, MT	16226	4226	26.0	1083	6.7
Cedar Rapids, IA	13168	4405	33.5	1179	9.0
Champaigna-Urbana-Rantoul, IL	13291	4788	36.0	1302	9.8
Charleston, WV	19226	6941	36.1	2190	11.4
Charlottesville, VA	7503	2340	31.2	747	10.0
Chico, CA	10771	2993	27.8	879	8.2
Clarksville-Hopkinsville, TN-KY	15972	5384	33.7	1684	10.5
Columbia, MO	8618	2044	23.7	553	6.4

Continued

SMSA	SMSA Population	>10 ug/dl #	%	>15 ug/dl #	%
Columbus, GA-AL	21334	10793	50.6	3752	17.6
Corpus Christi, TX	37248	14351	38.5	4211	11.3
Cumberland, Md.-WV	7711	4117	53.4	1358	17.6
Danbury, CT	9714	3233	33.3	1136	11.7
Danville, VA	9090	3950	43.5	1576	17.3
Daytona Beach, FL	18061	6758	37.4	2394	13.3
Decatur, IL	10145	5073	50.0	2377	23.4
Dubuque, IA and Iowa City, IA	15991	5934	37.1	1615	10.1
Eau Claire, WI	9989	3596	36.0	956	9.6
El Paso TX and Las Cruces, NM	64306	32423	50.4	10484	16.3
Elkhart, IN	11804	4724	40.0	1491	12.6
Elmira, NY	10935	3246	29.7	885	8.1
Fall River, MA-RI	13069	6744	51.6	1927	14.7
Fargo-Moorhead, ND-MN	12868	4002	31.1	1046	8.1
Fayetteville, NC	27557	11285	41.0	3517	12.8
Fayetteville-Springdale, AR	14422	3736	25.9	980	6.8
Fitchburg-Leominster, MA and Pittsfield, M	13068	6056	46.3	1716	13.1
Florence, AL	9916	3440	34.7	1161	11.7
Florence, SC	9486	3857	40.7	1351	14.2
Fort Collins, CO	13130	2570	19.6	644	4.9
Fort Myers-Cape Coral, FL	14925	4044	27.1	1262	8.5
Fort Smith, AR-OK	15809	5229	33.1	1737	11.0
Fort Walton Beach, FL and Panama City, FL	19921	6153	30.9	1960	9.8
Gadsden, AL	8391	3591	42.8	1355	16.1
Gainesville, FL	12528	3712	29.6	1186	9.5
Galveston-Texas City, TX	19484	8742	44.9	3274	16.8
Glen Falls, NY	8144	4231	52.0	1202	14.8
Greely, CO	12386	3456	27.9	888	7.2
Green Bay, WI	12812	4253	33.2	1142	8.9
Greensboro-Winston-Salem-High Point, NC	53487	20807	38.9	6439	12.0
Hagerstown, MD	8009	3349	41.8	912	11.4
Hamilton-Middletown, OH	22874	8546	37.4	2787	12.2
Harrisburg, PA	24192	13004	53.8	5147	21.3
Hickory, NC	8888	2797	31.5	880	9.9
Huntington-Ashland, WV-KY-OH	24931	10666	42.8	3313	13.3
Jackson, MI	11694	5201	44.5	1609	13.8
Jacksonville, NC	15536	5723	36.8	1934	12.4
Janesville-Beloit, WI	11476	4820	42.0	1418	12.4
Johnson City-Kingsport-Bristol, TN-VA	27946	9044	32.4	2598	9.3
Johnstown, PA	14308	7639	53.4	2332	16.3
Joplin, MO	8539	4464	52.3	1274	14.9
Kankakee, IL	9332	4235	45.4	1677	18.0
Kenosha, WI	9103	4134	45.4	1192	13.1
Killeen-Temple, TX	28554	9752	34.2	2809	9.8
Kokomo, IN	17943	7964	44.4	2633	14.7

SMSA	SMSA Population	>10 ug/dl		>15 ug/dl	
		#	%	#	%
La Crosse, WI and Rochester, MN	15905	4679	29.4	1193	7.5
Lafayette, LA	17473	5911	33.8	1940	11.1
Lafayette-West Layafette, IN	8218	2582	31.4	744	9.1
Lake Charles, LA	18245	8102	44.4	2845	15.6
Lakeland-Winterhaven, FL	27123	10120	37.3	3425	12.6
Lancaster, PA	23663	12473	52.7	3743	15.8
Laredo,TX and Victoria, TX	22498	7877	35.0	2328	10.3
Lawton, OK and Enid, OK	19245	8052	41.8	2841	14.8
Lima, OH	20587	9481	46.1	2740	13.3
Lincoln, NE	16369	4724	28.9	1386	8.5
Little Rock-No. Little Rock, AR and Pine Bl.	35625	15794	44.3	6674	18.7
Long Branch-Asbury Park, NJ	34205	12666	37.0	4045	11.8
Longview-Marshall, TX	13585	5/23	42.1	2017	14.8
Lowell, MA-NH	16114	6849	42.5	2093	13.0
Lubbock, TX	21505	7739	36.0	2206	10.3
Lynchburg, VA	9762	3733	38.2	1224	12.5
Manchester, NH	13545	6127	45.2	1723	12.7
Mansfield, OH	10353	4553	44.0	1505	14.5
Medford, OR	10376	3147	30.3	888	8.6
Melbourne-Titusville-Cocoa, FL	19038	6126	32.2	1854	9.7
Midland, TX and San Angelo, TX	20398	7039	34.5	1907	9.3
Monroe, LA	11628	4612	39.7	1683	14.5
Montgomery, AL	22645	11724	51.8	4709	20.8
Munice, IN	8679	4058	46.8	1322	15.2
Muskegon-Norton Shores-Muskegon Heights,	14451	6440	44.6	2375	16.4
Nashua, NH	8720	2558	29.3	630	7.2
New Bedford, MA	12355	6168	49.9	1901	15.4
New Britain, CT	8761	3578	40.8	946	10.8
New London-Norwich, CT-RI	20995	8917	42.5	2740	13.1
Newark, OH	9929	4204	42.3	1206	12.1
Newburgh-Middleton, NY	21434	9027	42.1	2576	12.0
Newport-News Hampton, VA	26886	10986	40.9	3220	12.0
Northeast Pennsylvania	40080	15658	39.1	4369	10.9
Norwalk, CT	8057	3957	49.1	1451	18.0
Ocala, FL	9539	3483	36.5	1416	14.8
Odessa, TX	14966	4120	27.5	1073	7.2
Olympia WA	10931	2377	21.7	630	5.8
Parkersburg-Marietta, WV-OH	13332	4769	35.8	1499	11.2
Pascagoula-Moss Point, MS	11402	3030	26.6	850	7.5
Pensacola, FL	25674	9189	35.8	3122	12.2
Petersburg-Colonial Heights-Hopewell, VA	9525	4232	44.4	1346	14.1
Portland, ME	15075	6617	43.9	1842	12.2
Portsmouth-Dover-Rochester, NH-ME	12840	6147	47.9	1710	13.3
Poughskeepsie, NY	17870	7255	40.6	2265	12.7
Provo-Orem, UT	39433	8736	22.2	2384	6.0

Continued

SMSA	SMSA Population	>10 ug/dl #	>10 ug/dl %	>15 ug/dl #	>15 ug/dl %
Pueblo, CO	10188	3617	35.5	1052	10.3
Racine, WI	15267	6907	45.2	2291	15.0
Reading , PA	18971	9673	51.0	2792	14.7
Redding, CA	10303	2605	25.3	721	7.0
Reno, NV	15497	3440	22.2	890	5.7
Richland-Kennewick-Pasco, WA	15888	3593	22.6	945	5.9
Rock Hill, SC	8018	3068	38.3	1163	14.5
Saginaw, MI	19585	9126	46.6	3092	15.8
St.Cloud, MN	17825	5066	28.4	1341	7.5
St. Joseph, MO	8029	3770	47.0	962	12.0
Salem, OR	22225	7065	31.8	1939	8.7
Salisbury-Concord, NC	13781	6135	44.5	2167	15.7
Santa Cruz, CA	13799	5221	37.8	1394	10.1
Santa Rosa, CA	23936	7138	29.8	2050	8.6
Sarasota, FL	9681	2460	25.4	635	6.6
Savannah, GA	22997	11919	51.8	4781	20.8
Sharon, PA	9231	4114	44.6	1309	14.2
Sheboygan, WI	8437	3951	46.8	1017	12.1
Sioux City, IA-NE	11012	4108	37.3	1047	9.5
Sioux Falls, SD	9535	3029	31.8	825	8.7
Springfield, IL	15764	7019	44.5	2521	16.0
Springfield, MO	16944	5805	34.3	1715	10.1
Springfield, OH	14214	7299	51.4	2434	17.1
Stamford, CT	12672	5948	46.9	1909	15.1
State College, PA	6467	2660	41.1	705	10.9
Steubenville-Weirton, OH-WV	12249	4867	39.7	1396	11.4
Tallahasse, FL	12816	4542	35.4	1659	12.9
Terre Haute, IN	13280	6547	49.3	1995	15.0
Texarkana, TX-Texarkana, AR	10369	4349	41.9	1457	14.1
Toledo, OH-MI	64793	30746	47.5	10634	16.4
Topeka, KS and Lawrence, KS	17289	5439	31.5	1480	8.6
Trenton NJ	20327	12036	59.2	4975	24.5
Tuscaloosa, AL	10415	4011	38.5	1333	12.8
Tyler, TX	12801	5119	40.0	1774	13.9
Vineland-Millville-Bridgeton, NJ	11307	5974	52.8	2079	18.4
Visalia-Tulare-Porterville, CA	29095	9190	31.6	2686	9.2
Waco, TX	16268	7452	45.8	2424	14.9
Waterloo-Cedar Falls, IA	11890	4394	37.0	1363	11.5
Wausau, WI	8620	3143	36.5	828	9.6
Wheeling, WV-OH	12473	5737	46.0	1644	13.2
Wichita Falls, TX	12229	5577	45.6	1862	15.2
Williamsport, PA	8894	4469	50.2	1244	14.0
Wilmington, DE-NJ-MD	41065	17437	42.5	5888	14.3
Wilmington, NC	11151	4187	37.5	1529	13.7
Yakima, WA	13409	5328	39.7	1531	11.4
York, PA	20323	10158	50.0	3194	15.7
Yuba City, CA	9217	3079	33.4	882	9.6

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