North Carolina Childhood Blood Lead Surveillance Data

"**Target Population**" for children ages 1 and 2 is the sum of the number of live births from the previous two calendar years[1].

"**Number Tested**" is an unduplicated count of children tested for lead poisoning during the calendar year. Children are counted as being tested for lead poisoning in successive years until they are confirmed to have a lead level ≥ 5 micrograms per deciliter (µg/dL). "**Percent Tested**" is the number of children tested divided by the target population and multiplied by 100. "**Lead ≥ 5**" is the number of children tested with at least one result ≥ 5 µg/dL. "**Percent ≥ 5"** is the number of children tested with at least one result ≥ 5 µg/dL divided by the total number tested and multiplied by 100.

Confirmation is based on a child receiving two consecutive blood lead test results ≥ 5 µg/dL within a 12-month period. The second test result of the pair, which is considered the diagnostic (i.e., confirmation) test, must be sent to an outside reference laboratory for analysis*****. Confirmed lead levels are based on the confirmation date and are classified according to the highest level confirmed during the calendar year. The categories **Confirmed 5-9** and "**Confirmed ≥ 10** are mutually exclusive.

The numbers reported for North Carolina Childhood Blood Lead Surveillance Data may vary somewhat from previous reports due to ongoing improvements in data quality and receipt of previously unreported test results from laboratories.

*****The point of care blood lead analyzer (i.e., LeadCare) used by some health care providers to analyze specimens in-house, is not acceptable for analyzing diagnostic blood lead specimens.

Additional notes concerning past surveillance data

Prior to 2012, the Centers for Disease Control and Prevention (CDC) identified children as having a blood lead "level of concern" at 10 µg/dL[2]. Therefore, annual surveillance tables for 2012 and prior years include columns for **Lead ≥ 10** and **Percent ≥ 10**.

Based on compelling evidence of the harmful effects of lead at even lower blood lead levels, the CDC no longer uses the term "level of concern" and instead uses a reference value, currently 5 µg/dL, to identify children exposed to lead and in need of follow-up case management[2]. Beginning July 5, 2012, North Carolina also adopted the reference value of 5 µg/dL. Therefore, annual surveillance tables for 2013 and later years include columns for **Lead ≥ 5** and **Percent ≥ 5**.

In addition, on July 1, 2017, NC General Statutes §130A-131.9H were revised to lower the confirmation level that triggers environmental follow-up from ≥ 10 to ≥ 5. Confirmation based on two consecutive blood lead test results was also extended from a six-month to 12-month period.

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[1] Source: Vital Statistics data, NC State Center for Health Statistics

[2] https://www.cdc.gov/nceh/lead/data/blood-lead-reference-value.htm

2019 NORTH CAROLINA CHILDHOOD BLOOD LEAD SURVEILLANCE DATA, BY COUNTY

	Ages 1 and 2 Years Tested for Lead Poisoning					Ages Birth to 6 Years		
County	Target Population*	Number Tested	Percent Tested	Lead ≥ 5	Percent ≥ 5	Number Tested	Confirmed 5-9	Confirmed ≥ 10
ALAMANCE	3,897	1,951	50.1	36	1.8	2,120	10	1
ALEXANDER	721	516	71.6	3	0.6	569		
ALLEGHANY	193	75	38.9	1	1.3	94	1	
ANSON	519	204	39.3	5	2.5	282		
ASHE	415	259	62.4			306		
AVERY	272	176	64.7	3	1.7	190	1	
BEAUFORT	886	675	76.2	5	0.7	741		1
BERTIE	350	266	76.0	3	1.1	314		2
BLADEN	696	472	67.8	6	1.3	516		1
BRUNSWICK	1,994	1,191	59.7	3	0.3	1,345		
BUNCOMBE	4,874	2,951	60.5	19	0.6	3,359	1	2
BURKE	1,790	1,359	75.9	16	1.2	1,453	4	1
CABARRUS	5,102	2,546	49.9	21	0.8	2,820	7	4
CALDWELL	1,560	1,069	68.5	10	0.9	1,208	5	
CAMDEN	187	106	56.7	1	0.9	110		
CARTERET	1,068	691	64.7	7	1.0	732	1	1
CASWELL	422	268	63.5	4	1.5	311		
CATAWBA	3,345	2,180	65.2	12	0.6	2,382	5	3
CHATHAM	1,313	650	49.5	3	0.5	732		
CHEROKEE	479	292	61.0	1	0.3	324	1	
CHOWAN	277	177	63.9	1	0.6	190		1
CLAY	172	96	55.8			109		
CLEVELAND	2,227	1,647	74.0	14	0.9	2,007	9	1
COLUMBUS	1,144	778	68.0	10	1.3	950	3	
CRAVEN	2,723	2,087	76.6	16	0.8	2,335	6	1
CUMBERLAND	10,908	3,248	29.8	47	1.4	3,640	8	2
CURRITUCK	520	165	31.7	1	0.6	177		
DARE	662	307	46.4	1	0.3	319	1	
DAVIDSON	3,513	2,634	75.0	32	1.2	2,753	5	1
DAVIE	767	516	67.3	7	1.4	544	4	1
DUPLIN	1,360	1,001	73.6	5	0.5	1,331	3	2
DURHAM	8,333	4,558	54.7	23	0.5	5,104	10	3
EDGECOMBE	1,224	852	69.6	8	0.9	1,004		1
FORSYTH	8,702	5,519	63.4	62	1.1	5,922	18	11
FRANKLIN	1,416	856	60.5	4	0.5	951	3	1
GASTON	5,114	2,071	40.5	15	0.7	2,314	2	
GATES	194	102	52.6	1	1.0	115	1	
GRAHAM	156	85	54.5			96		
GRANVILLE	1,189	694	58.4	1	0.1	773		
GREENE	411	308	74.9	3	1.0	364	2	
GUILFORD	12,333	8,773	71.1	74	0.8	9,349	19	4
HALIFAX	1,130	866	76.6	17	2.0	907	3	2
HARNETT	3,731	1,833	49.1	26	1.4	2,204	7	3
HAYWOOD	1,158	780	67.4	4	0.5	821		1
HENDERSON	2,133	1,231	57.7	13	1.1	1,428	7	1
HERTFORD	460	341	74.1	6	1.8	359	2	
HOKE	1,726	835	48.4	8	1.0	931	2	2
HYDE	69	45	65.2	1	2.2	55		
IREDELL	3,748	2,039	54.4	14	0.7	2,225	5	2
JACKSON	738	492	66.7	3	0.6	543		1
JOHNSTON	4,617	2,469	53.5	11	0.4	2,781	3	1

*Target Population is based on the number of live births in 2017 and 2018

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JONES	194	137	70.6			151		
LEE	1,551	1,050	67.7	12	1.1	1,189	3	1
LENOIR	1,240	992	80.0	17	1.7	1,254	7	6
LINCOLN	1,662	644	38.7	6	0.9	774	1	
MACON	661	405	61.3	5	1.2	465	1	
MADISON	398	260	65.3	3	1.2	287	2	
MARTIN	495	396	80.0	5	1.3	594	2	
MCDOWELL	875	570	65.1	7	1.2	626	2	1
MECKLENBURG	29,397	9,800	33.3	72	0.7	11,419	20	10
MITCHELL	284	86	30.3			114		
MONTGOMERY	548	484	88.3	10	2.1	521	8	
MOORE	2,277	1,747	76.7	13	0.7	1,914	4	1
NASH	2,156	1,651	76.6	25	1.5	1,892	9	2
NEW HANOVER	4,412	3,026	68.6	34	1.1	3,429	15	8
NORTHAMPTON	371	257	69.3	3	1.2	277	1	
ONSLOW	7,983	4,811	60.3	42	0.9	5,526	7	5
ORANGE	2,313	1,169	50.5	6	0.5	1,283	1	1
PAMLICO	163	162	99.4	1	0.6	178	1	
PASQUOTANK	946	742	78.4	10	1.3	800	4	2
PENDER	1,281	877	68.5	4	0.5	999	3	1
PERQUIMANS	245	177	72.2	3	1.7	196	1	
PERSON	843	340	40.3	7	2.1	428	1	
PITT	4,136	2,587	62.5	12	0.5	2,814	2	
POLK	310	132	42.6	1	0.8	185	2	
RANDOLPH	3,096	2,208	71.3	24	1.1	2,429	4	6
RICHMOND	1,129	893	79.1	18	2.0	1,000	3	1
ROBESON	3,481	2,514	72.2	20	0.8	2,813	5	3
ROCKINGHAM	1,773	1,058	59.7	17	1.6	1,166	5	
ROWAN	3,181	2,035	64.0	24	1.2	2,236	3	1
RUTHERFORD	1,343	432	32.2	2	0.5	659		
SAMPSON	1,665	1,352	81.2	14	1.0	1,615	9	1
SCOTLAND	898	671	74.7	10	1.5	736		1
STANLY	1,408	1,098	78.0	16	1.5	1,183	9	1
STOKES	800	478	59.8	7	1.5	507	4	
SURRY	1,495	801	53.6	20	2.5	887	5	
SWAIN	293	198	67.6	3	1.5	223		1
TRANSYLVANIA	530	365	68.9	3	0.8	402		
TYRRELL	72	38	52.8	2	5.3	46		1
UNION	4,837	1,648	34.1	10	0.6	2,209	3	4
VANCE	1,146	606	52.9	4	0.7	714		1
WAKE	25,263	12,820	50.7	98	0.8	13,995	34	17
WARREN	335	229	68.4	4	1.7	260	2	2
WASHINGTON	263	161	61.2	1	0.6	218	3	
WATAUGA	752	581	77.3	6	1.0	641	2	
WAYNE	3,249	2,082	64.1	12	0.6	2,475	8	1
WILKES	1,345	941	70.0	7	0.7	977	4	1
WILSON	1,915	1,488	77.7	21	1.4	1,560	8	8
YADKIN	755	424	56.2	4	0.9	470	3	
YANCEY	353	171	48.4	2	1.2	205		
STATE	239,056	133,096	55.7	1,234	0.9	149,450	370	146

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