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

2018 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	3,795	2,264	59.7	30	1.3	2,456	7	
ALEXANDER	720	471	65.4	6	1.3	523		
ALLEGHANY	197	77	39.1	1	1.3	90		
ANSON	522	175	33.5	1	0.6	229		
ASHE	425	242	56.9	4	1.7	302	1	2
AVERY	258	149	57.8	2	1.3	163		
BEAUFORT	901	706	78.4	6	0.8	788	2	1
BERTIE	361	256	70.9	3	1.2	301		
BLADEN	658	521	79.2	6	1.2	552		
BRUNSWICK	1,985	1,279	64.4	7	0.5	1,428	2	2
BUNCOMBE	4,987	3,246	65.1	38	1.2	3,600	5	1
BURKE	1,827	1,323	72.4	19	1.4	1,398	7	2
CABARRUS	5,070	2,644	52.1	29	1.1	2,907	5	3
CALDWELL	1,605	1,177	73.3	14	1.2	1,294		
CAMDEN	179	105	58.7			109		
CARTERET	1,113	778	69.9	5	0.6	817		
CASWELL	407	261	64.1	8	3.1	287		
CATAWBA	3,316	2,299	69.3	16	0.7	2,530	4	2
CHATHAM	1,303	690	53.0	14	2.0	744	4	2
CHEROKEE	478	290	60.7	3	1.0	349	1	1
CHOWAN	247	166	67.2	4	2.4	175		
CLAY	190	117	61.6			140		
CLEVELAND	2,124	1,559	73.4	17	1.1	2,093	7	3
COLUMBUS	1,171	806	68.8	8	1.0	985	2	
CRAVEN	2,825	2,024	71.6	12	0.6	2,238	3	2
CUMBERLAND	10,952	4,448	40.6	49	1.1	4,903	8	3
CURRITUCK	519	187	36.0	1	0.5	199		
DARE	663	310	46.8	3	1.0	317		
DAVIDSON	3,533	2,731	77.3	36	1.3	2,893	6	1
DAVIE	789	566	71.7	15	2.7	602	5	1
DUPLIN	1,359	934	68.7	9	1.0	1,132	1	
DURHAM	8,528	4,126	48.4	40	1.0	4,549	12	3
EDGECOMBE	1,198	855	71.4	20	2.3	990	5	2
FORSYTH	8,867	5,619	63.4	87	1.5	5,975	24	9
FRANKLIN	1,402	924	65.9	7	0.8	1,033	4	1
GASTON	5,112	2,250	44.0	23	1.0	2,515	5	
GATES	211	120	56.9	2	1.7	138		1
GRAHAM	162	115	71.0	3	2.6	125		
GRANVILLE	1,169	729	62.4	5	0.7	828		1
GREENE	412	347	84.2	10	2.9	402	1	
GUILFORD	12,476	9,435	75.6	101	1.1	10,150	16	8
HALIFAX	1,152	1,006	87.3	29	2.9	1,087	5	2
HARNETT	3,747	2,081	55.5	48	2.3	2,458	9	3
HAYWOOD	1,233	837	67.9	16	1.9	873	3	2
HENDERSON	2,129	1,307	61.4	15	1.1	1,497	10	2
HERTFORD	453	304	67.1	3	1.0	366	1	2
HOKE	1,815	942	51.9	14	1.5	1,059	3	1
HYDE	73	46	63.0	1	2.2	51		1
IREDELL	3,781	1,888	49.9	19	1.0	2,026	5	2
JACKSON	764	510	66.8	4	0.8	540		
JOHNSTON	4,654	2,530	54.4	22	0.9	2,872	6	2

*Target Population is based on the number of live births in 2016 and 2017

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JONES	189	128	67.7			152		
LEE	1,569	1,089	69.4	22	2.0	1,294	10	1
LENOIR	1,263	980	77.6	13	1.3	1,241	6	
LINCOLN	1,615	773	47.9	6	0.8	936	2	2
MACON	672	491	73.1	5	1.0	515		
MADISON	373	293	78.6	5	1.7	326	2	1
MARTIN	485	330	68.0	7	2.1	451	1	2
MCDOWELL	901	582	64.6	9	1.5	629	1	
MECKLENBURG	29,622	9,166	30.9	67	0.7	10,846	18	13
MITCHELL	276	83	30.1	1	1.2	114		
MONTGOMERY	566	463	81.8	12	2.6	523	4	
MOORE	2,241	1,612	71.9	15	0.9	1,779	7	
NASH	2,126	1,641	77.2	19	1.2	1,816	1	5
NEW HANOVER	4,507	3,398	75.4	50	1.5	3,790	16	3
NORTHAMPTON	400	294	73.5	2	0.7	323		
ONSLOW	8,019	4,227	52.7	42	1.0	5,038	2	1
ORANGE	2,345	1,169	49.9	10	0.9	1,261	6	1
PAMLICO	171	166	97.1	7	4.2	205	1	
PASQUOTANK	971	772	79.5	12	1.6	823	3	
PENDER	1,309	882	67.4	8	0.9	1,003	3	1
PERQUIMANS	246	174	70.7	6	3.4	194	2	1
PERSON	844	419	49.6	6	1.4	510	2	1
PITT	4,074	2,484	61.0	22	0.9	2,715	3	1
POLK	301	132	43.9	2	1.5	189	1	
RANDOLPH	3,176	2,197	69.2	26	1.2	2,400	7	3
RICHMOND	1,092	843	77.2	18	2.1	954	10	
ROBESON	3,557	2,642	74.3	34	1.3	2,905	13	
ROCKINGHAM	1,797	1,001	55.7	25	2.5	1,103	5	4
ROWAN	3,238	2,054	63.4	30	1.5	2,280	7	2
RUTHERFORD	1,348	461	34.2	1	0.2	703	1	1
SAMPSON	1,662	1,292	77.7	11	0.9	1,470	4	
SCOTLAND	910	667	73.3	8	1.2	722	3	1
STANLY	1,422	1,140	80.2	16	1.4	1,221	7	3
STOKES	784	479	61.1	7	1.5	509	1	
SURRY	1,461	865	59.2	13	1.5	960	3	
SWAIN	321	208	64.8	4	1.9	226	1	
TRANSYLVANIA	515	364	70.7	5	1.4	406	1	
TYRRELL	89	47	52.8	1	2.1	54		
UNION	4,798	1,736	36.2	16	0.9	2,325	2	2
VANCE	1,114	624	56.0	13	2.1	770	4	2
WAKE	25,702	12,972	50.5	161	1.2	14,690	39	19
WARREN	353	266	75.4	2	0.8	298	2	1
WASHINGTON	260	154	59.2	2	1.3	204	3	
WATAUGA	765	542	70.8	2	0.4	582		
WAYNE	3,247	2,152	66.3	10	0.5	2,508	6	3
WILKES	1,340	918	68.5	16	1.7	969	3	1
WILSON	1,903	1,504	79.0	31	2.1	1,591	6	3
YADKIN	784	504	64.3	7	1.4	561	1	1
YANCEY	324	157	48.5	7	4.5	198	2	
STATE	240,864	136,309	56.6	1,649	1.2	153,360	401	147

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