

## North Carolina Childhood Blood Lead Surveillance Data

The "**Target Population**" for children ages 1 and 2 is the sum of the number of live births from the previous two calendar years (Source: NC Vital Statistics data, State Center for Health Statistics).

"**Number Tested**" is an unduplicated count of children with blood lead samples collected during the calendar year (Source: NCLEAD, NC Childhood Blood Lead Surveillance System, Children's Environmental Health). "**Percent (%) Tested**" is the number of children tested divided by the target population and multiplied by 100.

Starting July 5, 2012, the CDC lowered its reference value to 5 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ). Therefore, surveillance tables for 2013 and later include a column for children tested with at least one result  $\geq 5 \mu\text{g}/\text{dL}$ , in addition to the column for children confirmed at 5-9  $\mu\text{g}/\text{dL}$ .

"**% Tested  $\geq 5 \mu\text{g}/\text{dL}$** " is the number of children tested with at least one result  $\geq 5 \mu\text{g}/\text{dL}$  divided by the total number tested and multiplied by 100.

Starting in 2013, children are counted as being "tested" for lead poisoning until they are confirmed to have a lead level  $\geq 5$  micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ). After a child has a "**confirmed**" lead level, the child is no longer counted as "**tested**" during subsequent years. Blood lead tests after lead level confirmation are considered "**follow-up**" test results and are not counted in the surveillance tables.

Classification is based on the lower of the two test results. Children are counted only in the column of the highest level in which they were confirmed during the calendar year; therefore, the categories "**Confirmed 5-9  $\mu\text{g}/\text{dL}$** ," "**Confirmed 10-19  $\mu\text{g}/\text{dL}$** ," and "**Confirmed  $\geq 20 \mu\text{g}/\text{dL}$** " are mutually exclusive. Children are counted as having "**confirmed**" lead levels when they have two consecutive blood lead test results  $\geq 5 \mu\text{g}/\text{dL}$  within a six-month period, up until December 31, 2017. The second test result must be a diagnostic test, preferably a venous sample, sent to an outside reference laboratory for analysis.

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.

## 2017 NORTH CAROLINA CHILDHOOD BLOOD LEAD SURVEILLANCE DATA, BY COUNTY

County	Ages 1 and 2 Years Tested for Lead Poisoning					Ages Birth to 6 Years			
	Target Population*	Number Tested**	Percent (%) Tested	Number $\geq 5 \mu\text{g/dL}$	% Tested $\geq 5 \mu\text{g/dL}$	Number Tested**	5-9	Confirmed 10-19	$\geq 20$
ALAMANCE	3,639	2,250	61.8	37	1.6	2,539	7	4	1
ALEXANDER	686	408	59.5	7	1.7	473	3		
ALLEGHANY	199	81	40.7	3	3.7	93	2		
ANSON	496	210	42.3	5	2.4	313	3		
ASHE	423	270	63.8	3	1.1	372	2		
AVERY	296	145	49.0	1	0.7	159			
BEAUFORT	917	683	74.5	12	1.8	742	8		
BERTIE	359	256	71.3	5	2.0	310	3	1	
BLADEN	684	528	77.2	5	0.9	566			
BRUNSWICK	2,022	1,181	58.4	6	0.5	1,429	2		
BUNCOMBE	5,220	3,283	62.9	38	1.2	3,686	8	4	1
BURKE	1,801	1,276	70.8	12	0.9	1,353	3	1	
CABARRUS	4,935	2,348	47.6	24	1.0	2,589	5	3	1
CALDWELL	1,622	1,159	71.5	6	0.5	1,245	2	1	
CAMDEN	180	114	63.3	1	0.9	122			
CARTERET	1,158	814	70.3	5	0.6	855	2		
CASWELL	394	251	63.7	4	1.6	274			
CATAWBA	3,418	1,919	56.1	22	1.1	2,220	6		1
CHATHAM	1,305	689	52.8	3	0.4	772	3		
CHEROKEE	479	311	64.9	3	1.0	346	1		
CHOWAN	279	152	54.5	1	0.7	167			
CLAY	184	107	58.2			132			
CLEVELAND	2,143	1,576	73.5	22	1.4	2,231	7		1
COLUMBUS	1,193	831	69.7	13	1.6	1,051	1	1	
CRAVEN	2,893	1,962	67.8	16	0.8	2,169	5		
CUMBERLAND	10,859	4,180	38.5	53	1.3	4,656	10	3	
CURRITUCK	522	189	36.2	5	2.6	213		1	
DARE	667	290	43.5	3	1.0	306	1		
DAVIDSON	3,520	2,559	72.7	26	1.0	2,746	9	1	
DAVIE	808	511	63.2	9	1.8	544	2		
DUPLIN	1,454	885	60.9	8	0.9	1,111	3	1	
DURHAM	8,577	4,160	48.5	36	0.9	4,690	10	2	
EDGECOMBE	1,205	889	73.8	23	2.6	1,070	1	1	
FORSYTH	8,835	5,669	64.2	85	1.5	6,041	23	6	1
FRANKLIN	1,408	862	61.2	9	1.0	935	2		
GASTON	5,049	2,265	44.9	29	1.3	2,505	7	2	
GATES	220	106	48.2			123			
GRAHAM	161	148	91.9	2	1.4	174			
GRANVILLE	1,151	695	60.4	9	1.3	790	4		
GREENE	410	297	72.4	8	2.7	355	2		
GUILFORD	12,353	9,260	75.0	105	1.1	10,111	31	10	2
HALIFAX	1,133	976	86.1	30	3.1	1,071	5	2	
HARNETT	3,661	1,984	54.2	33	1.7	2,334	8	4	1
HAYWOOD	1,213	867	71.5	13	1.5	908	2		
HENDERSON	2,158	1,309	60.7	13	1.0	1,514	4	1	
HERTFORD	462	357	77.3	5	1.4	418	1		
HOKE	1,891	922	48.8	11	1.2	1,035	2	2	
HYDE	88	56	63.6	1	1.8	65	1		
IREDELL	3,859	2,027	52.5	17	0.8	2,208	4	2	
JACKSON	792	610	77.0	14	2.3	649	2	2	
JOHNSTON	4,603	2,627	57.1	26	1.0	2,950	3		1

\*Target Population is based on the sum of live births in 2015 and 2016.

Prepared by Children's Environmental Health  
Last updated 2/27/2019

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County	Ages 1 and 2 Years Tested for Lead Poisoning					Ages Birth to 6 Years			
	Target Population*	Number Tested**	Percent (%) Tested	Number ≥ 5 µg/dL	% Tested ≥ 5 µg/dL	Number Tested**	5-9	Confirmed 10-19	≥ 20
JONES	173	118	68.2			132			
LEE	1,536	1,083	70.5	16	1.5	1309	3	1	
LENOIR	1,280	834	65.2	14	1.7	1055	6	1	
LINCOLN	1,600	747	46.7	11	1.5	904	3		
MACON	698	450	64.5	2	0.4	479		2	
MADISON	430	273	63.5	5	1.8	314			
MARTIN	503	306	60.8	5	1.6	405	3		
MCDOWELL	933	566	60.7	13	2.3	630	2	1	
MECKLENBURG	29,727	9,718	32.7	79	0.8	11568	26	5	1
MITCHELL	292	138	47.3	2	1.4	185			
MONTGOMERY	612	550	89.9	11	2.0	628	4	2	
MOORE	2,190	1,689	77.1	16	0.9	1798	7		
NASH	2,067	1,689	81.7	33	2.0	1900	5	2	
NEW HANOVER	4,552	3,220	70.7	41	1.3	3582	11	1	
NORTHAMPTON	377	291	77.2	10	3.4	324	2		
ONSLOW	8,132	3,518	43.3	39	1.1	4229	4	4	
ORANGE	2,373	1,119	47.2	14	1.3	1228	3	1	
PAMLICO	182	159	87.4	4	2.5	172	1		
PASQUOTANK	972	762	78.4	13	1.7	830	8	1	1
PENDER	1,266	847	66.9	13	1.5	999	2		
PERQUIMANS	234	165	70.5	3	1.8	184	1		
PERSON	804	456	56.7	7	1.5	522	1	1	
PITT	4,186	2,252	53.8	18	0.8	2489	4		
POLK	280	101	36.1	6	5.9	159			
RANDOLPH	3,158	2,073	65.6	29	1.4	2311	6	4	
RICHMOND	1,075	670	62.3	16	2.4	796	2	1	
ROBESON	3,546	2,308	65.1	33	1.4	2595	10	1	1
ROCKINGHAM	1,842	954	51.8	22	2.3	1112	6	3	1
ROWAN	3,253	1,807	55.5	30	1.7	2032	6	3	
RUTHERFORD	1,340	505	37.7	10	2.0	800		1	
SAMPSON	1,663	1,298	78.1	17	1.3	1461	3	1	
SCOTLAND	898	546	60.8	6	1.1	607	2	1	
STANLY	1,368	1,131	82.7	20	1.8	1202	4	3	
STOKES	791	475	60.1	7	1.5	510		1	
SURRY	1,473	907	61.6	23	2.5	1008		1	
SWAIN	388	232	59.8	3	1.3	261			
TRANSYLVANIA	537	416	77.5	3	0.7	438	1	1	
TYRRELL	90	51	56.7			55			
UNION	4,775	1,960	41.0	22	1.1	2562	5	3	1
VANCE	1,070	604	56.4	12	2.0	725	5	1	
WAKE	25,886	11,797	45.6	138	1.2	13574	32	8	3
WARREN	363	241	66.4	5	2.1	289	3		
WASHINGTON	245	159	64.9	1	0.6	188			
WATAUGA	722	502	69.5	4	0.8	570	2	1	
WAYNE	3,266	2,248	68.8	28	1.2	2599	8	5	
WILKES	1,410	962	68.2	24	2.5	1003	5		
WILSON	1,935	1,553	80.3	29	1.9	1645	11	1	2
YADKIN	778	484	62.2	6	1.2	563	3		
YANCEY	336	141	42.0	1	0.7	177	1		
<b>STATE</b>	<b>241,591</b>	<b>132,579</b>	<b>54.9</b>	<b>1,691</b>	<b>1.3</b>	<b>150,838</b>	<b>421</b>	<b>117</b>	<b>20</b>

\*Target Population is based on the sum of live births in 2015 and 2016.

\*\* 117 children tested were unable to be assigned to a county due to missing address.

State totals do not include those results missing county assignments.

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Last updated 2/27/2019