

LOUISIANA OFFICE OF PUBLIC HEALTH'S CARBON MONOXIDE SURVEILLANCE DATA



Louisiana Department of Health/Office of Public Health/Section of Environmental Epidemiology & Toxicology/Occupational Health & Injury Surveillance Program

The following tables summarize carbon monoxide laboratory results reported to Louisiana's Occupational Health & Injury Surveillance Program. Louisiana law requires that healthcare providers, including

[LA Heavy Metal & CO Surveillance website](#)

[Publication](#)

[CDC & EPA CO Links](#)

[Report a case](#)

For more information about the carbon monoxide surveillance program or this report, contact 504.568.8159 or [oph.seetweb@la.gov](mailto:oph.seetweb@la.gov)

**Adult Blood Carbon Monoxide Laboratory Surveillance (Ages 16 years and older)**

Blood Tests	2011		2012**		2013		2014		2015		2016		2017		2018		2019***		2020***	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of tests received*	104		2,262		4,967		7,714		6,029		200		713		105		2,370		197	
Number of patients tested	103		787		1,616		2,573		2,270		158		464		88		1,033		150	
<b>Sex</b>																				
Male	50	49%	407	52%	875	54%	1,347	52%	1,291	57%	89	56%	246	53%	46	52%	496	48%	80	53%
Female	53	51%	380	48%	741	46%	1,226	48%	979	43%	69	44%	218	47%	42	48%	537	52%	70	47%
<b>Test Results: Adults (≥ 16 years)</b>																				
<b>BLOOD</b>	103		787		1,616		2,573		2,270		158		464		88		1,033		150	
≥ 9	9	9%	25	3%	17	1%	24	1%	27	1%	6	4%	19	4%	11	13%	28	3%	10	7%
<b>Cases (Patients with test results ≥ 9):</b>	<b>9</b>		<b>25</b>		<b>17</b>		<b>24</b>		<b>27</b>		<b>6</b>		<b>16</b>		<b>11</b>		<b>28</b>		<b>10</b>	
Smokers (elevated CO not due to an acute event)	3	33%	2	8%	7	41%	18	75%	13	48%	1	17%	4	25%	0	0%	0	0%	0	0%
Work-related	0	0%	2	8%	2	12%	6	25%	4	15%	0	0%	1	6%	0	0%	0	0%	0	0%
Gas Leaks (household appliances, e.g., heaters)	1	11%	1	4%	2	12%	0	0%	3	11%	0	0%	0	0%	0	0%	0	0%	0	0%
Gas-Powered Equipment (e.g., generator use indoors)	4	44%	12	48%	2	12%	0	0%	1	4%	2	33%	3	19%	3	27%	0	0%	0	0%
Fire (house or car)	0	0%	1	4%	2	12%	0	0%	2	7%	1	17%	7	44%	7	64%	0	0%	0	0%
Other/Unknown	1	11%	7	28%	2	12%	0	0%	4	15%	2	33%	1	6%	1	9%	28	100%	10	100%

\*Carboxyhemoglobin levels (carbon monoxide attached to hemoglobin in the blood) are routinely tested in patients when blood samples are drawn (CDC, 2014). A patient may have multiple COHb test results during a single hospital or clinic visit, regardless of the initial COHb level or reason for the hospital visit. The carbon monoxide action threshold is determined by a laboratory report of a venous blood specimen with a COHb level > 12% for smokers or > 9% for non-smokers (ATSDR, 2012). Smoking status is determined for adult cases with test results > 9%.

\*\*The number of elevated COHb levels increased in 2012 due to indoor generator use during Hurricane Isaac, which caused power outages in some Louisiana parishes from Aug. 31- Sept. 7, 2012.

\*\*\*There are fluctuations in the number of lab tests received from 2011 to 2020. Average annual summaries would not accurately reflect the current data. It is unknown why the number of tests fluctuates from year to year. In 2019, there was an observed increase in the cause of cases being classified as "Other/Unknown" due to loss to follow-up. There was a decrease in the amount of tests received during 2020, we believe this decrease is likely attributed to the initial outbreak of COVID-19.

LOUISIANA OFFICE OF PUBLIC HEALTH'S HEAVY METAL SURVEILLANCE DATA

**Child Blood Carbon Monoxide Laboratory Surveillance (Ages 15 years and younger)**

Blood Tests	2011		2012**		2013		2014		2015		2016		2017		2018***		2019		2020***	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of tests received*	6		78		60		162		130		61		43		19		197		22	
Number of patients tested	6		35		28		66		49		36		28		15		94		12	
<b>Sex</b>																				
Male	1	17%	18	51%	18	64%	33	50%	26	53%	18	50%	16	57%	9	60%	59	63%	7	58%
Female	5	83%	17	49%	10	36%	33	50%	23	47%	18	50%	12	43%	6	40%	35	37%	5	42%
<b>Test Results: Child (&lt; 16 years)</b>																				
<b>BLOOD</b>	6		35		28		66		49		36		28		15		94		12	
≥ 9	0	0%	8	23%	3	11%	3	5%	0	0%	3	8%	3	11%	2	13%	5	5%	5	42%
<b>Cases (Patients with test results ≥ 9):</b>	<b>0</b>		<b>8</b>		<b>3</b>		<b>3</b>		<b>0</b>		<b>3</b>		<b>3</b>		<b>2</b>		<b>5</b>		<b>5</b>	
Gas Leaks (household appliances, e.g., heaters)	0	0%	0	0%	2	67%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Gas-Powered Equipment (e.g., generator use indoors)	0	0%	7	88%	0	0%	0	0%	0	0%	3	100%	2	67%	0	0%	0	0%	0	0%
Fire (house or car)	0	0%	0	0%	1	33%	2	67%	0	0%	0	0%	1	33%	2	100%	0	0%	0	0%
Other/Unknown	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	5	100%	5	100%

\*Carboxyhemoglobin levels (carbon monoxide attached to hemoglobin in the blood) are routinely tested in patients when blood samples are drawn (CDC, 2014). Therefore, a patient may have

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