

LOUISIANA OFFICE OF PUBLIC HEALTH'S HEAVY METAL SURVEILLANCE DATA



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

The following tables summarize heavy metal laboratory results reported to Louisiana's Occupational Health & Injury Surveillance Program. Louisiana law requires that healthcare providers, including clinical laboratories, report all laboratory tests for lead, mercury, cadmium, and arsenic. Test results above the action threshold are investigated to determine the source of exposure. The action threshold for each heavy metal is listed below each table. A limitation of this surveillance is that not all cases are captured, and these tables only include cases that are reported. Detailed documents describing occupational and non-occupational exposure sources, toxicity, susceptible populations, medical monitoring guidelines, and result standards are available at

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

[LA ABLES Article](#)

[Healthcare Provider Guidance: Lead](#)

[Report A Case](#)

[Shooting Range Factsheet](#)

For more information about the heavy metal surveillance program or this report, contact 504.568.8159 or oph.seetweb@la.gov.

Adult Blood Lead Laboratory Surveillance (Ages 16 years and older)

| Blood Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020* | | Annual Average (2011-2020) | |
|---------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|-------|------|-------|------|-------|------|----------------------------|-------------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 6,496 | | 6,695 | | 7,982 | | 8,280 | | 7,724 | | 7,982 | | 2,822 | | 5,351 | | 8,559 | | 2,771 | | 6,466 | |
| Number of patients tested | 5,502 | | 5,682 | | 6,274 | | 6,804 | | 6,471 | | 6,274 | | 2,455 | | 4,566 | | 7,963 | | 2,359 | | 5,435 | |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 4,616 | 84% | 4,735 | 83% | 5,179 | 83% | 5,582 | 82% | 5,204 | 80% | 5,179 | 83% | 1,856 | 76% | 3,325 | 73% | 6,239 | 78% | 1,836 | 78% | 4,375 | 80% |
| Female | 886 | 16% | 947 | 17% | 1,095 | 17% | 1,222 | 18% | 1,267 | 20% | 1,095 | 17% | 599 | 24% | 1,241 | 27% | 1,705 | 21% | 523 | 22% | 1,058 | 19% |
| Blood lead level (µg/dL) | | | | | | | | | | | | | | | | | | | | | | |
| 0 to < 10 | 5,193 | 94% | 5,287 | 93% | 5,894 | 94% | 6,476 | 95% | 6,165 | 95% | 5,894 | 94% | 2,270 | 92% | 4,322 | 95% | 7,764 | 98% | 2,318 | 98% | 5,158 | 95% |
| 10 to <25 | 250 | 5% | 330 | 6% | 288 | 5% | 244 | 4% | 241 | 4% | 288 | 5% | 157 | 6% | 182 | 4% | 165 | 2% | 29 | 1% | 217 | 4% |
| 25 to < 45 | 48 | 1% | 62 | 1% | 83 | 1% | 74 | 1.1% | 56 | 0.9% | 83 | 1% | 28 | 1% | 42 | 1% | 30 | 0.4% | 10 | 0.4% | 52 | 1% |
| >=45 | 11 | 0.2% | 5 | 0.1% | 9 | 0.1% | 10 | 0.1% | 9 | 0.1% | 9 | 0.1% | 0 | 0% | 20 | 0.4% | 4 | 0.1% | 2 | 0.1% | 8 | 0.1% |

This table includes all blood lead tests for adults in Louisiana ages 16 years and older reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. It is unknown why the number of lab results fluctuated drastically between 2016 and 2019. Aggregated data are provided to the CDC's Adult Blood Lead Epidemiology Surveillance (ABLES) program annually. The CDC aims to reduce blood lead levels of all exposed workers to <5 µg/dL. The venous blood action level that is currently used for women of childbearing age and all other people aged 6.1 years and older is 10 µg/dL. Percentages may not add up to 100 due to rounding.

*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.

Child Blood Lead Laboratory Surveillance (Ages 6.1 - 15 years)

| Blood Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017* | | 2018 | | 2019 | | 2020* | | Annual Average (2011-2020) | |
|---------------------------------|------|------|------|------|------|------|------|-----|------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|----------------------------|-------------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 865 | | 854 | | 684 | | 916 | | 854 | | 1,236 | | 181 | | 1,251 | | 1,162 | | 401 | | 840 | |
| Number of patients tested | 847 | | 793 | | 664 | | 891 | | 793 | | 1,165 | | 178 | | 1,097 | | 959 | | 373 | | 776 | |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 507 | 60% | 450 | 57% | 408 | 61% | 505 | 57% | 450 | 57% | 652 | 56% | 99 | 56% | 539 | 49% | 503 | 52% | 181 | 49% | 429 | 55% |
| Female | 340 | 40% | 343 | 43% | 256 | 39% | 386 | 43% | 343 | 43% | 513 | 44% | 79 | 44% | 558 | 51% | 456 | 48% | 192 | 51% | 347 | 45% |
| Blood lead level (µg/dL) | | | | | | | | | | | | | | | | | | | | | | |
| 0 to < 10 | 839 | 99% | 774 | 98% | 660 | 99% | 881 | 99% | 774 | 98% | 1,153 | 99% | 177 | 99% | 1,083 | 99% | 951 | 99% | 371 | 99% | 766 | 99% |
| 10 to <25 | 7 | 1% | 17 | 2% | 4 | 0.6% | 10 | 1% | 17 | 2% | 9 | 0.8% | 1 | 0.6% | 11 | 1% | 6 | 0.6% | 0 | 0% | 8 | 1% |
| 25 to < 45 | 1 | 0.1% | 2 | 0.3% | 0 | 0% | 0 | 0% | 2 | 0.3% | 2 | 0.1% | 0 | 0% | 3 | 0.3% | 1 | 0.1% | 0 | 0% | 1 | 0.1% |
| >=45 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 0.1% | 0 | 0% | 0 | 0% | 1 | 0.1% | 2 | 1% | 0 | 0% |

This table includes all blood lead tests for children in Louisiana between the ages of 6.1 years to 15 years reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. Letters about lead exposure awareness are mailed to the parents of children with elevated blood lead levels. The CDC aims to reduce blood lead levels of all exposed persons to < 5 µg/dL. The venous blood action level that is currently used for women of childbearing age and all other people aged 6.1 years and older is 10 µg/dL. Percentages may not add up to 100 due to rounding.

*It is unknown why the number of lab results decreased drastically in 2017. There was also 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
Adult Blood Mercury Laboratory Surveillance (Ages 16 years and older)

| Blood Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020* | | Annual Average (2011 - 2020) | |
|--|-------|------|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|------------------------------|-----|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 1,105 | | 1,321 | | 1,048 | | 1,102 | | 1,265 | | 1,454 | | 1,225 | | 1,443 | | 2,120 | | 471 | | 1,255 | |
| Number of patients tested | 1,050 | | 1,280 | | 1,029 | | 1,072 | | 1,243 | | 1,305 | | 1,195 | | 1,273 | | 1,758 | | 432 | | 1,164 | |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 661 | 63% | 886 | 69% | 653 | 63% | 637 | 59% | 778 | 63% | 821 | 63% | 659 | 55% | 704 | 55% | 1,007 | 57% | 221 | 51% | 703 | 60% |
| Female | 389 | 37% | 394 | 31% | 376 | 37% | 435 | 41% | 465 | 37% | 484 | 37% | 536 | 45% | 569 | 45% | 751 | 43% | 211 | 49% | 461 | 40% |
| Test Results: Adults (≥ 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| BLOOD | 1,050 | | 1,280 | | 1,029 | | 1,072 | | 1,243 | | 1,305 | | 1,195 | | 1,273 | | 1,758 | | 432 | | 1,164 | |
| >10 µg/L | 9 | 0.9% | 11 | 0.9% | 15 | 1% | 20 | 2% | 22 | 2% | 13 | 1% | 25 | 2% | 22 | 2% | 38 | 2% | 13 | 3% | 19 | 2% |

This table includes all blood mercury tests for adults in Louisiana ages 16 years and older reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. Mercury blood action thresholds correspond to the biological exposure index (BEI) levels established by the American Conference of Industrial Hygienists for the evaluation of occupational exposures in workers. The Health/Fish Consumption Advisories Program may issue mercury advisories.

*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.

Adult Urine Mercury Laboratory Surveillance (Ages 16 years and older)

| Urine Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020* | | Annual Average (2011 - 2020) | |
|--|------|------|------|------|-------|------|------|-----|------|------|------|-----|------|------|------|------|------|-----|-------|-----|------------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 569 | | 773 | | 1,107 | | 743 | | 715 | | 761 | | 581 | | 397 | | 575 | | 307 | | 653 | |
| Number of patients tested | 463 | | 741 | | 639 | | 720 | | 691 | | 741 | | 552 | | 376 | | 436 | | 273 | | 563 | |
| Number of patients with both Blood and Urine tests | 30 | 2% | 396 | 20% | 42 | 3% | 56 | 3% | 71 | 4% | 55 | 3% | 53 | 3% | 21 | 1% | 55 | 3% | 2 | 0% | 78 | 5% |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 293 | 63% | 565 | 76% | 373 | 58% | 389 | 54% | 369 | 53% | 406 | 55% | 303 | 55% | 202 | 54% | 343 | 79% | 168 | 62% | 341 | 61% |
| Female | 170 | 37% | 176 | 24% | 266 | 42% | 331 | 46% | 322 | 47% | 335 | 45% | 249 | 45% | 174 | 46% | 93 | 21% | 105 | 38% | 222 | 39% |
| Test Results: Adults (≥ 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| URINE | 463 | | 741 | | 639 | | 720 | | 691 | | 741 | | 552 | | 376 | | 436 | | 273 | | 563 | |
| ≥20 µg/g creatinine-adjusted | 5 | 1.1% | 1 | 0.1% | 3 | 0.5% | 0 | 0% | 3 | 0.4% | 0 | 0% | 1 | 0.2% | 1 | 0.3% | 3 | 1% | 0 | 0% | 2 | 0.3% |

Mercury urine action thresholds correspond to the biological exposure index (BEI) levels established by the American Conference of Industrial Hygienists for the evaluation of occupational exposures in workers. The action level decreased from 35 µg/g creatinine-adjusted to 20 µg/g creatinine-adjusted based on OSHA and BEI guidelines and is reflected from 2015 forward.

*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 Mercury Laboratory Surveillance (Ages 15 and younger)

| Blood Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020* | | Annual Average (2011 - 2020) | |
|--|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|------------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 76 | | 56 | | 56 | | 72 | | 80 | | 88 | | 122 | | 139 | | 108 | | 27 | | 82 | |
| Number of patients tested | 74 | | 53 | | 55 | | 70 | | 75 | | 86 | | 120 | | 121 | | 88 | | 27 | | 77 | |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 47 | 64% | 27 | 51% | 35 | 64% | 50 | 71% | 42 | 56% | 47 | 55% | 70 | 58% | 78 | 64% | 44 | 50% | 16 | 59% | 46 | 59% |
| Female | 27 | 36% | 26 | 49% | 20 | 36% | 20 | 29% | 33 | 44% | 39 | 45% | 50 | 42% | 43 | 36% | 44 | 50% | 11 | 41% | 31 | 41% |
| Test Results: Child (< 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| BLOOD | 74 | | 53 | | 55 | | 70 | | 75 | | 86 | | 120 | | 121 | | 88 | | 27 | | 77 | |
| >10 µg/L | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0.1 | 0.1% |

This table includes all blood mercury tests for children in Louisiana ages 15 years and younger reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. The mercury blood action thresholds for children are the values recommended in CDC's Case Definitions for Chemical Poisoning. The Health/Fish Consumption Advisories Program may issue mercury advisories.

*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.

Child Urine Mercury Laboratory Surveillance (Ages 15 and younger)

| Urine Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019* | | 2020** | | Annual Average (2011 - 2020) | |
|--|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|--------|------|------------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 22 | | 18 | | 12 | | 8 | | 16 | | 19 | | 4 | | 9 | | 25 | | 1 | | 13 | |
| Number of patients tested | 22 | | 15 | | 12 | | 8 | | 16 | | 19 | | 4 | | 7 | | 8 | | 1 | | 11 | |
| Number of patients with both Blood and Urine tests | 4 | 4% | 2 | 3% | 0 | 0% | 0 | 0% | 1 | 1% | 2 | 2% | 1 | 1% | 2 | 2% | 16 | 17% | 0 | 0% | 3 | 3% |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 14 | 64% | 13 | 87% | 3 | 25% | 5 | 63% | 7 | 44% | 15 | 79% | 3 | 75% | 3 | 43% | 4 | 50% | 0 | 0% | 7 | 60% |
| Female | 8 | 36% | 2 | 13% | 9 | 75% | 3 | 38% | 9 | 56% | 4 | 21% | 1 | 25% | 4 | 57% | 4 | 50% | 1 | 100% | 5 | 40% |
| Test Results: Child (< 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| URINE | 22 | | 15 | | 12 | | 8 | | 16 | | 19 | | 4 | | 7 | | 8 | | 1 | | 11 | |
| >10 µg/L | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 5% | 0 | 0% | 0 | 0% | 2 | 25% | 0 | 0% | 0.3 | 2.7% |

This table includes all urine mercury tests for children in Louisiana ages 15 years and younger reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. The mercury urine action thresholds for children are the values recommended in CDC's Case Definitions for Chemical Poisoning.

*It is unknown why the number of tests increased in 2019.

**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

Adult Blood Arsenic Laboratory Surveillance (Ages 16 years and older)

| Blood Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020* | | Annual Average (2011-2020) | |
|--|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|----------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 768 | | 658 | | 831 | | 725 | | 996 | | 1,381 | | 1,175 | | 1,418 | | 1,381 | | 776 | | 1,011 | |
| Number of patients tested | 754 | | 642 | | 798 | | 707 | | 980 | | 1,234 | | 1,111 | | 1,235 | | 1,234 | | 716 | | 941 | |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 478 | 63% | 419 | 65% | 515 | 65% | 471 | 67% | 609 | 62% | 781 | 63% | 601 | 54% | 714 | 58% | 781 | 63% | 464 | 65% | 583 | 62% |
| Female | 276 | 37% | 223 | 35% | 283 | 35% | 236 | 33% | 371 | 38% | 453 | 37% | 510 | 46% | 521 | 42% | 453 | 37% | 252 | 35% | 358 | 38% |
| Test Results: Adults (≥ 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| BLOOD | 754 | | 642 | | 798 | | 707 | | 980 | | 1,234 | | 1,111 | | 1,235 | | 1,234 | | 716 | | 941 | |
| ≥70 µg/L | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 14 | 2% | 1 | 0.1% |

This table includes all blood arsenic tests for adults in Louisiana ages 16 years and older reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. The blood action level for adults corresponds to the value cited by CDC/ATSDR for use by primary care practitioners. An arsenic blood action threshold has not been established for children.

*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.

Adult Urine Arsenic Laboratory Surveillance (Ages 16 years and older)

| Urine Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019 | | 2020* | | Annual Average (2011-2020) | |
|--|------|------|------|-----|------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|----------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 740 | | 954 | | 857 | | 1,304 | | 1,100 | | 1,127 | | 1,097 | | 1,096 | | 1,609 | | 525 | | 1,041 | |
| Number of patients tested | 501 | | 864 | | 561 | | 789 | | 640 | | 664 | | 794 | | 575 | | 648 | | 234 | | 627 | |
| Number of patients with both Blood and Urine tests | 46 | 4% | 17 | 1% | 31 | 2% | 22 | 1% | 64 | 4% | 62 | 3% | 49 | 3% | 49 | 3% | 59 | 3% | 11 | 1% | 41 | 3% |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 284 | 57% | 606 | 70% | 332 | 59% | 460 | 58% | 324 | 51% | 349 | 53% | 532 | 67% | 354 | 62% | 532 | 82% | 136 | 58% | 391 | 62% |
| Female | 217 | 43% | 258 | 30% | 229 | 41% | 329 | 42% | 316 | 49% | 315 | 47% | 262 | 33% | 221 | 38% | 116 | 18% | 98 | 42% | 236 | 38% |
| Test Results: Adults (≥ 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| URINE | 501 | | 864 | | 561 | | 789 | | 640 | | 664 | | 794 | | 575 | | 648 | | 234 | | 627 | |
| ≥35 µg/L (inorganic & methylated metabolites) | 2 | 0.4% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 36 | 6% | 72 | 11% | 32 | 14% | 14 | 2% |
| ≥50 µg/g creatinine-adjusted (organic) | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 14 | 2% | 3 | 1% | 2 | 0.3% |

This table includes all urine arsenic tests for adults in Louisiana ages 16 years and older reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. The arsenic threshold for adults corresponds to the biological exposure index (BEI) level established by the American Conference of Industrial Hygienists for occupational exposures. The action level for creatinine-adjusted urine tests is based on exposure to organic arsenic only. An arsenic urine action threshold has not been established for children.

*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

Adult Blood Cadmium Laboratory Surveillance (Ages 16 years and older)

| Blood Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019* | | 2020** | | Annual Average (2011 - 2020) | |
|--|------|-----|------|-----|------|------|------|-----|------|-----|------|------|------|------|------|-----|-------|------|--------|------|------------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 519 | | 696 | | 729 | | 890 | | 820 | | 767 | | 724 | | 795 | | 2,798 | | 707 | | 945 | |
| Number of patients tested | 449 | | 642 | | 671 | | 826 | | 785 | | 752 | | 663 | | 747 | | 1,416 | | 581 | | 753 | |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 326 | 73% | 431 | 67% | 436 | 65% | 598 | 72% | 520 | 66% | 445 | 59% | 352 | 53% | 458 | 61% | 956 | 68% | 526 | 91% | 505 | 67% |
| Female | 123 | 27% | 211 | 33% | 235 | 35% | 228 | 28% | 265 | 34% | 307 | 41% | 311 | 47% | 289 | 39% | 460 | 32% | 181 | 31% | 261 | 35% |
| Test Results: Adults (≥ 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| BLOOD | 449 | | 642 | | 671 | | 826 | | 785 | | 752 | | 663 | | 747 | | 1,416 | | 581 | | 753 | |
| ≥5 µg/L | 0 | 0% | 0 | 0% | 1 | 0.1% | 0 | 0% | 0 | 0% | 1 | 0.1% | 1 | 0.2% | 0 | 0% | 2 | 0.1% | 1 | 0.2% | 1 | 0.1% |

This table includes all blood cadmium tests for adults in Louisiana ages 16 years and older reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. The cadmium blood action threshold is based on requirements established by OSHA for medical surveillance of workers with occupational cadmium exposure. A cadmium blood action threshold has not been established for children.

*It is unknown why the number of tests drastically increased in 2019.

**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.

Adult Urine Cadmium Laboratory Surveillance (Ages 16 years and older)

| Urine Tests | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 | | 2019* | | 2020** | | Average Annual (2011 - 2020) | |
|--|------|-----|------|------|------|-----|------|-----|------|-----|------|------|------|-----|------|-----|-------|-----|--------|-----|------------------------------|------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Number of tests received | 283 | | 752 | | 448 | | 484 | | 374 | | 467 | | 440 | | 197 | | 1,014 | | 116 | | 458 | |
| Number of patients tested | 257 | | 705 | | 392 | | 430 | | 342 | | 454 | | 420 | | 178 | | 558 | | 113 | | 385 | |
| Number of patients with both Blood and Urine tests | 92 | 13% | 142 | 11% | 93 | 9% | 261 | 21% | 208 | 18% | 83 | 7% | 70 | 6% | 31 | 3% | 325 | 16% | 3 | 0% | 131 | 11% |
| Sex | | | | | | | | | | | | | | | | | | | | | | |
| Male | 232 | 90% | 619 | 88% | 312 | 80% | 336 | 78% | 249 | 73% | 225 | 50% | 233 | 55% | 88 | 49% | 470 | 84% | 40 | 35% | 280 | 73% |
| Female | 25 | 10% | 86 | 12% | 80 | 20% | 94 | 22% | 93 | 27% | 229 | 50% | 187 | 45% | 90 | 51% | 88 | 16% | 73 | 65% | 105 | 27% |
| Test Results: Adults (≥ 16 years) | | | | | | | | | | | | | | | | | | | | | | |
| URINE | 257 | | 705 | | 392 | | 430 | | 342 | | 454 | | 420 | | 178 | | 558 | | 113 | | 385 | |
| ≥3 µg/g creatinine-adjusted | 0 | 0% | 3 | 0.4% | 3 | 1% | 0 | 0% | 3 | 1% | 2 | 0.4% | 3 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 0.4% |

This table includes all urine cadmium tests for adults in Louisiana ages 16 years and older reported electronically and as hard copies by laboratories, physicians, clinics and hospitals. The cadmium urine action threshold is based on requirements established by OSHA for medical surveillance of workers with occupational cadmium exposure. A cadmium urine action threshold has not been established for children.

*It is unknown why the number of tests drastically increased in 2019.

**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.