

Personal Care and Consumer Product Chemicals and Metabolites

Urinary Benzophenone-3 (2003 - 2010)

CAS Number 131-57-7

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	22.9 (18.1-28.9)	18.1 (15.5-23.2)	94.0 (67.5-123)	370 (225-570)	1040 (698-1390)	2517
Total population	05-06	19.4 (16.5-22.8)	14.1 (12.5-17.5)	68.8 (54.5-87.2)	433 (294-597)	1150 (936-1510)	2548
Total population	07-08	18.3 (13.7-24.3)	14.3 (10.7-19.8)	64.1 (42.8-116)	365 (223-524)	801 (471-2080)	2604
Total population	09-10	22.3 (18.0-27.7)	16.4 (12.7-20.5)	81.2 (55.0-126)	493 (320-742)	1750 (931-3120)	2749
Age 6-11 years	03-04	21.2 (16.4-27.3)	17.2 (14.9-25.9)	66.7 (38.7-102)	158 (106-246)	246 (154-618)	314
Age 6-11 years	05-06	21.2 (14.3-31.3)	19.4 (11.7-26.1)	58.8 (40.5-102)	259 (115-433)	852 (355-2200)	356
Age 6-11 years	07-08	24.1 (15.0-38.7)	17.2 (11.8-25.0)	79.9 (32.9-168)	392 (129-1610)	1410 (165-43600)	389
Age 6-11 years	09-10	21.7 (15.6-30.2)	14.6 (12.0-19.7)	52.7 (27.2-119)	470 (80.7-1900)	1570 (153-6440)	415
Age 12-19 years	03-04	22.9 (18.0-29.3)	20.1 (16.1-25.1)	67.1 (45.2-93.8)	170 (137-240)	407 (183-717)	715
Age 12-19 years	05-06	21.2 (15.8-28.4)	14.9 (12.1-21.4)	64.3 (39.7-95.3)	227 (130-382)	633 (252-1260)	702
Age 12-19 years	07-08	21.5 (16.0-28.8)	15.0 (11.9-21.3)	59.3 (36.7-111)	214 (113-613)	613 (206-1350)	401
Age 12-19 years	09-10	23.3 (16.6-32.5)	16.6 (13.1-19.7)	62.3 (35.1-129)	423 (184-843)	988 (550-2670)	420
Age 20+ years	03-04	23.1 (18.0-29.6)	18.1 (14.7-23.3)	109 (72.1-140)	450 (315-733)	1220 (769-1750)	1488
Age 20+ years	05-06	19.0 (16.5-21.8)	13.5 (12.0-16.3)	70.9 (55.2-87.2)	543 (390-638)	1200 (954-1690)	1490
Age 20+ years	07-08	17.3 (13.0-23.0)	13.7 (10.0-19.5)	64.1 (41.5-117)	371 (240-516)	801 (516-1790)	1814
Age 20+ years	09-10	22.3 (17.9-27.7)	16.5 (12.3-22.5)	86.7 (63.1-129)	505 (339-760)	1890 (1240-3170)	1914
Male	03-04	16.8 (13.2-21.3)	13.7 (11.4-16.8)	55.3 (33.2-86.6)	178 (134-324)	567 (238-1350)	1229
Male	05-06	14.6 (10.8-19.7)	11.8 (8.80-15.9)	43.4 (31.0-68.8)	227 (103-552)	909 (479-1190)	1270
Male	07-08	11.9 (8.84-16.0)	9.40 (7.70-12.3)	37.6 (22.6-54.7)	172 (79.9-376)	471 (208-1410)	1294
Male	09-10	15.3 (12.7-18.6)	12.2 (10.0-15.2)	52.8 (33.9-72.6)	223 (129-332)	610 (318-1270)	1399
Female	03-04	30.7 (23.7-39.8)	26.0 (20.2-34.1)	137 (106-172)	596 (403-769)	1340 (776-1790)	1288
Female	05-06	25.5 (21.7-29.9)	17.9 (14.3-23.1)	129 (82.9-166)	638 (478-900)	1410 (945-2620)	1278
Female	07-08	27.6 (20.4-37.3)	25.6 (17.5-33.9)	117 (72.6-211)	535 (361-757)	1260 (643-2280)	1310
Female	09-10	32.0 (23.7-43.3)	23.0 (16.4-29.8)	148 (73.3-260)	1020 (540-1800)	3200 (1760-4400)	1350
Mexican American	03-04	16.5 (10.9-25.1)	11.9 (8.50-18.3)	45.5 (25.9-78.2)	178 (76.4-412)	412 (178-2180)	613
Mexican American	05-06	14.3 (10.7-19.1)	10.2 (7.40-14.1)	45.6 (24.1-75.7)	214 (166-313)	635 (337-1090)	637
Mexican American	07-08	12.1 (9.49-15.3)	9.90 (7.70-12.4)	32.6 (25.0-48.3)	142 (85.0-268)	409 (214-778)	531
Mexican American	09-10	17.2 (13.7-21.6)	12.5 (10.5-14.5)	41.9 (30.2-57.4)	351 (248-546)	1130 (493-2140)	566
Non-Hispanic Black	03-04	12.8 (9.38-17.4)	10.2 (7.40-14.4)	34.3 (22.8-50.6)	127 (90.8-176)	247 (143-499)	652
Non-Hispanic Black	05-06	12.4 (9.77-15.6)	9.40 (7.30-11.8)	33.0 (22.3-46.5)	208 (115-291)	556 (269-1060)	678
Non-Hispanic Black	07-08	8.55 (6.75-10.8)	7.40 (5.00-9.70)	25.5 (17.5-34.5)	117 (66.8-217)	422 (195-786)	597
Non-Hispanic Black	09-10	14.0 (10.9-18.1)	8.90 (7.30-10.5)	30.9 (21.9-50.5)	276 (143-437)	705 (320-3000)	516
Non-Hispanic White	03-04	27.7 (20.3-37.8)	24.4 (16.8-32.0)	121 (83.6-162)	507 (316-769)	1340 (733-2070)	1092
Non-Hispanic White	05-06	21.6 (18.5-25.2)	16.0 (13.5-19.0)	82.4 (64.2-114)	552 (392-754)	1370 (945-2050)	1038
Non-Hispanic White	07-08	23.1 (15.0-35.5)	18.7 (11.0-33.7)	101 (47.4-206)	459 (241-749)	1160 (487-2620)	1077
Non-Hispanic White	09-10	26.1 (19.0-35.9)	21.1 (14.6-29.7)	94.9 (59.8-186)	610 (325-1240)	2130 (934-3820)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 03-04, 05-06, 07-08 and 09-10 are 0.3, 0.4, 0.4, and 0.4 respectively.

Urinary Benzophenone-3 (creatinine corrected) (2003 - 2010)

CAS Number 131-57-7

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	22.2 (17.6-28.0)	16.2 (12.7-21.6)	82.0 (58.7-108)	415 (283-577)	1080 (686-1600)	2514
Total population	05-06	18.9 (15.8-22.6)	13.5 (11.2-16.8)	60.4 (47.6-81.4)	445 (346-553)	1210 (794-1970)	2548
Total population	07-08	18.4 (13.9-24.4)	13.5 (10.2-17.8)	67.9 (45.2-117)	338 (215-584)	935 (525-1800)	2604
Total population	09-10	23.3 (18.7-29.1)	16.1 (12.8-19.8)	79.1 (52.2-124)	579 (355-1040)	2340 (1380-3010)	2749
Age 6-11 years	03-04	25.8 (19.5-34.1)	22.4 (14.4-33.7)	84.6 (41.0-131)	171 (132-365)	427 (171-710)	314
Age 6-11 years	05-06	23.3 (15.9-34.1)	17.5 (11.6-28.3)	67.7 (39.7-105)	249 (106-631)	868 (264-2080)	356
Age 6-11 years	07-08	29.7 (19.0-46.6)	19.3 (12.4-32.3)	103 (51.1-159)	442 (133-1550)	1430 (187-29100)	389
Age 6-11 years	09-10	28.3 (20.4-39.4)	18.8 (14.7-21.1)	53.9 (33.2-132)	565 (104-3410)	1780 (253-8230)	415
Age 12-19 years	03-04	17.2 (13.7-21.5)	12.9 (10.4-16.5)	43.6 (29.5-57.7)	136 (91.7-239)	350 (173-646)	713
Age 12-19 years	05-06	15.8 (11.6-21.6)	12.1 (9.16-17.0)	42.5 (28.6-58.7)	164 (101-438)	625 (225-956)	702
Age 12-19 years	07-08	16.7 (12.4-22.4)	12.1 (8.57-17.6)	55.7 (30.4-74.8)	211 (88.2-505)	505 (163-902)	401
Age 12-19 years	09-10	18.7 (13.4-26.1)	13.6 (10.1-19.7)	39.9 (25.5-91.6)	412 (89.8-750)	1240 (629-2540)	420
Age 20+ years	03-04	22.8 (17.8-29.1)	16.2 (12.7-21.9)	93.2 (66.0-130)	491 (361-700)	1330 (880-1880)	1487
Age 20+ years	05-06	19.0 (16.3-22.2)	13.4 (11.2-16.2)	64.2 (49.3-87.0)	509 (406-628)	1480 (816-2200)	1490
Age 20+ years	07-08	17.7 (13.3-23.6)	12.6 (9.93-17.5)	67.7 (44.1-127)	362 (249-584)	960 (581-1970)	1814
Age 20+ years	09-10	23.6 (18.8-29.5)	16.3 (12.7-20.2)	83.6 (58.3-146)	602 (364-1230)	2470 (1350-3080)	1914
Male	03-04	13.6 (10.8-17.1)	10.3 (8.36-12.9)	40.0 (24.9-62.5)	169 (93.3-316)	381 (229-685)	1228
Male	05-06	11.7 (8.74-15.8)	9.43 (6.72-12.5)	31.9 (19.7-49.4)	176 (77.1-406)	553 (317-948)	1270
Male	07-08	10.0 (7.37-13.7)	7.50 (5.74-10.0)	28.7 (18.5-47.3)	142 (65.8-225)	332 (181-960)	1294
Male	09-10	13.7 (11.4-16.6)	10.7 (8.53-12.7)	44.6 (29.7-57.4)	186 (123-287)	420 (287-1230)	1399
Female	03-04	35.5 (27.1-46.4)	28.2 (20.2-37.0)	144 (101-224)	686 (491-1130)	1850 (1220-2580)	1286
Female	05-06	30.0 (25.3-35.6)	20.9 (17.0-29.0)	129 (88.0-175)	707 (527-912)	1880 (1150-2770)	1278
Female	07-08	33.0 (25.0-43.7)	26.2 (19.1-41.1)	156 (90.2-235)	617 (385-935)	1500 (746-2710)	1310
Female	09-10	38.6 (28.1-53.0)	25.7 (17.5-35.2)	161 (76.3-378)	1580 (955-2410)	3250 (2540-4640)	1350
Mexican American	03-04	15.1 (9.44-24.0)	11.1 (6.95-16.0)	40.7 (18.3-85.8)	158 (87.4-362)	595 (118-1860)	612
Mexican American	05-06	12.9 (10.2-16.2)	8.63 (6.16-12.5)	32.1 (23.1-51.8)	216 (135-408)	948 (441-1220)	637
Mexican American	07-08	11.8 (8.87-15.6)	8.97 (7.00-12.4)	33.6 (26.0-43.2)	154 (93.4-249)	413 (217-932)	531
Mexican American	09-10	17.1 (13.4-21.7)	12.2 (9.64-14.5)	40.4 (26.4-60.3)	288 (155-603)	1310 (441-2180)	566
Non-Hispanic Black	03-04	8.78 (6.49-11.9)	6.80 (5.27-9.00)	19.7 (13.5-33.4)	79.8 (46.8-139)	185 (79.8-536)	651
Non-Hispanic Black	05-06	8.69 (7.02-10.8)	6.29 (5.52-7.78)	21.2 (14.5-34.5)	118 (74.9-245)	448 (208-876)	678
Non-Hispanic Black	07-08	6.65 (5.24-8.42)	5.09 (4.15-6.10)	17.8 (13.2-24.2)	86.6 (57.5-122)	297 (113-903)	597
Non-Hispanic Black	09-10	10.2 (8.12-12.7)	6.46 (5.40-7.67)	23.1 (15.5-38.2)	160 (79.9-396)	653 (305-1580)	516
Non-Hispanic White	03-04	28.3 (20.6-38.8)	22.0 (14.6-32.7)	116 (73.5-175)	510 (380-760)	1330 (852-2410)	1091
Non-Hispanic White	05-06	22.7 (19.4-26.7)	16.2 (13.0-19.7)	77.3 (56.5-106)	538 (406-679)	1500 (828-2430)	1038
Non-Hispanic White	07-08	24.1 (15.6-37.2)	18.1 (11.0-30.0)	103 (53.6-198)	494 (227-960)	1170 (522-2710)	1077
Non-Hispanic White	09-10	29.3 (20.7-41.5)	22.1 (14.6-33.1)	99.2 (54.3-241)	767 (412-1550)	2590 (1510-3250)	1206

Urinary Benzophenone-3 (2011 - 2016)†

CAS Number 131-57-7

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	23.2 (17.2-31.3)	18.7 (13.6-27.0)	83.8 (50.8-142)	461 (290-861)	1200 (861-1610)	2489
Total population	13-14	25.2 (20.4-31.2)	21.0 (16.8-25.3)	87.9 (72.7-102)	417 (269-642)	1210 (853-1760)	2686
Total population	15-16	19.3 (15.9-23.4)	16.3 (13.8-19.7)	66.5 (44.1-98.8)	338 (253-460)	930 (626-1270)	2651
Age 3-5 years	15-16	16.9 (9.57-29.9)	13.4 (5.80-28.2)	54.7 (20.9-133)	205 (62.6-387)	387 (130-6010)	141
Age 6-11 years	11-12	18.7 (12.3-28.2)	13.2 (8.20-20.8)	55.4 (28.0-108)	336 (134-653)	657 (236-1270)	396
Age 6-11 years	13-14	26.0 (16.5-40.9)	19.2 (14.4-30.0)	77.6 (39.0-206)	363 (171-720)	824 (271-1840)	409
Age 6-11 years	15-16	20.0 (13.7-29.2)	16.3 (11.8-23.0)	53.2 (34.4-94.9)	166 (96.0-332)	640 (160-3060)	415
Age 12-19 years	11-12	27.8 (15.4-50.2)	21.6 (10.8-42.1)	109 (34.0-255)	433 (159-1160)	1120 (261-1990)	388
Age 12-19 years	13-14	29.2 (23.3-36.4)	26.2 (19.7-36.4)	87.2 (57.8-137)	261 (167-504)	537 (269-1340)	462
Age 12-19 years	15-16	16.3 (10.9-24.3)	14.3 (8.90-22.9)	42.3 (25.7-84.3)	132 (77.2-278)	291 (118-755)	405
Age 20+ years	11-12	23.1 (17.8-30.0)	19.2 (14.4-27.0)	83.8 (52.8-137)	482 (305-805)	1250 (975-1640)	1705
Age 20+ years	13-14	24.6 (19.7-30.6)	20.1 (16.0-24.7)	90.6 (73.4-102)	482 (294-801)	1360 (875-2740)	1815
Age 20+ years	15-16	19.7 (16.4-23.8)	16.7 (14.5-20.3)	70.7 (48.9-108)	450 (303-521)	1080 (641-1480)	1690
Male	11-12	17.2 (12.1-24.5)	16.0 (9.40-23.6)	50.2 (40.1-78.7)	295 (141-448)	594 (301-1360)	1259
Male	13-14	19.0 (15.8-22.9)	16.8 (14.4-19.8)	55.0 (46.4-63.1)	231 (176-259)	576 (340-864)	1285
Male	15-16	13.7 (11.3-16.6)	13.1 (10.1-15.5)	40.3 (28.8-62.7)	144 (111-192)	395 (244-627)	1307
Female	11-12	31.0 (22.7-42.2)	22.2 (16.0-34.1)	137 (79.9-243)	781 (467-1220)	1720 (1260-2290)	1230
Female	13-14	32.9 (24.9-43.5)	26.2 (19.4-37.2)	120 (94.9-195)	733 (447-1230)	1950 (1200-3460)	1401
Female	15-16	26.9 (20.8-34.7)	21.2 (18.6-27.0)	106 (67.0-157)	559 (453-800)	1300 (934-1610)	1344
Mexican American	11-12	16.8 (10.5-26.8)	13.4 (7.20-25.2)	46.1 (25.2-115)	305 (111-644)	885 (305-1740)	316
Mexican American	13-14	25.9 (20.5-32.7)	19.0 (15.0-24.2)	69.3 (44.1-86.6)	256 (204-538)	893 (518-1230)	438
Mexican American	15-16	12.6 (10.2-15.5)	11.0 (8.50-12.9)	32.9 (27.0-41.4)	112 (73.4-167)	318 (150-597)	513
Non-Hispanic Black	11-12	14.5 (11.4-18.5)	10.9 (8.00-14.1)	41.4 (28.8-59.5)	316 (192-433)	895 (475-1270)	665
Non-Hispanic Black	13-14	10.9 (7.48-15.8)	9.60 (6.60-13.1)	26.9 (19.6-39.9)	104 (60.3-205)	448 (118-1070)	609
Non-Hispanic Black	15-16	10.1 (8.06-12.7)	7.90 (6.20-9.50)	24.8 (20.8-32.9)	144 (93.6-243)	423 (261-611)	610
Non-Hispanic White	11-12	26.8 (17.8-40.5)	22.2 (14.8-36.5)	101 (52.8-216)	512 (255-1130)	1230 (805-1830)	813
Non-Hispanic White	13-14	29.7 (22.7-38.8)	24.9 (19.5-32.9)	108 (94.0-131)	523 (340-853)	1470 (1150-2860)	988
Non-Hispanic White	15-16	24.2 (19.1-30.5)	20.3 (17.0-25.6)	87.7 (61.2-134)	483 (278-627)	1080 (755-1610)	781
All Hispanic	11-12	21.2 (15.2-29.4)	16.3 (10.6-22.7)	57.9 (38.2-126)	408 (261-684)	1020 (527-1610)	571
All Hispanic	13-14	28.2 (23.8-33.4)	20.1 (16.5-23.9)	81.5 (64.7-98.3)	415 (219-824)	1120 (738-1780)	690
All Hispanic	15-16	15.4 (12.5-19.0)	12.8 (10.3-16.1)	41.3 (32.3-53.2)	152 (98.8-258)	420 (264-867)	859
Non-Hispanic Asian	11-12	16.7 (10.5-26.5)	11.9 (7.30-21.1)	66.4 (37.6-122)	486 (157-1350)	1640 (770-2780)	352
Non-Hispanic Asian	13-14	18.6 (12.4-28.0)	17.0 (8.30-26.8)	64.2 (36.1-107)	254 (114-532)	532 (283-1770)	289
Non-Hispanic Asian	15-16	15.9 (10.2-24.9)	12.3 (7.10-21.4)	49.4 (27.0-112)	343 (119-622)	685 (319-2790)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 0.400, 0.400, and 0.400 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Benzophenone-3 (creatinine corrected) (2011 - 2016)†

CAS Number 131-57-7

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	26.4 (19.3-36.2)	18.8 (13.3-27.3)	102 (57.8-162)	613 (330-1020)	1680 (1010-2500)	2487
Total population	13-14	25.2 (20.5-31.0)	19.8 (15.7-24.7)	79.8 (66.2-103)	467 (299-603)	1190 (847-1810)	2684
Total population	15-16	19.6 (16.3-23.5)	15.5 (13.0-19.0)	58.8 (44.7-87.8)	372 (246-440)	858 (746-1170)	2650
Age 3-5 years	15-16	39.7 (21.2-74.2)	29.6 (13.4-68.6)	114 (37.9-447)	455 (130-1040)	1040 (447-16700)	140
Age 6-11 years	11-12	26.9 (17.9-40.2)	18.8 (13.0-28.6)	67.8 (37.8-135)	552 (138-1010)	1010 (297-1670)	395
Age 6-11 years	13-14	32.8 (21.5-50.1)	28.8 (16.7-45.7)	90.0 (46.9-189)	401 (152-868)	868 (432-1700)	409
Age 6-11 years	15-16	25.8 (17.7-37.4)	19.8 (12.3-31.9)	61.9 (38.1-97.8)	199 (117-503)	848 (198-3740)	415
Age 12-19 years	11-12	27.1 (14.2-51.8)	16.7 (8.69-44.3)	102 (29.9-331)	631 (117-3050)	1720 (331-3900)	388
Age 12-19 years	13-14	23.7 (17.8-31.4)	21.6 (15.8-28.7)	63.0 (49.1-86.2)	221 (116-440)	506 (221-647)	462
Age 12-19 years	15-16	12.7 (8.95-18.0)	10.8 (7.99-14.7)	30.9 (19.0-43.7)	91.3 (42.9-186)	204 (100-631)	405
Age 20+ years	11-12	26.3 (19.8-34.8)	19.8 (13.9-26.6)	107 (68.1-156)	640 (371-957)	1890 (1080-2500)	1704
Age 20+ years	13-14	24.7 (20.3-30.0)	18.8 (15.2-23.1)	82.3 (69.5-102)	529 (317-790)	1420 (915-2660)	1813
Age 20+ years	15-16	20.1 (16.6-24.3)	16.0 (13.3-20.2)	68.7 (50.3-98.8)	416 (289-639)	1050 (772-1420)	1690
Male	11-12	16.1 (11.3-22.8)	11.9 (8.77-18.1)	48.8 (31.6-84.5)	237 (120-442)	716 (267-1030)	1258
Male	13-14	15.9 (13.2-19.3)	13.8 (10.9-17.5)	44.0 (33.1-58.5)	181 (146-229)	432 (299-532)	1284
Male	15-16	11.9 (9.89-14.4)	10.4 (7.88-13.6)	34.1 (24.3-50.2)	118 (92.6-145)	380 (204-436)	1307
Female	11-12	42.7 (30.6-59.5)	30.1 (19.7-49.4)	186 (107-374)	1150 (771-1910)	2720 (1660-4230)	1229
Female	13-14	38.9 (29.2-51.8)	29.7 (21.3-39.9)	153 (83.6-242)	905 (603-1250)	2550 (1440-3500)	1400
Female	15-16	31.6 (24.5-40.8)	23.3 (17.1-32.1)	113 (69.2-199)	746 (391-965)	1450 (979-1810)	1343
Mexican American	11-12	18.9 (12.4-29.0)	13.8 (8.75-22.0)	45.3 (23.5-132)	369 (132-820)	1030 (371-2330)	316
Mexican American	13-14	26.4 (20.2-34.4)	18.2 (15.6-23.2)	59.1 (40.6-82.7)	296 (122-1090)	1180 (473-2130)	438
Mexican American	15-16	13.2 (10.8-16.2)	11.4 (9.12-13.8)	30.5 (24.2-37.0)	111 (77.4-144)	287 (166-659)	513
Non-Hispanic Black	11-12	11.3 (8.82-14.5)	7.48 (6.04-9.49)	27.6 (18.0-42.1)	269 (159-376)	747 (376-1010)	665
Non-Hispanic Black	13-14	8.02 (5.57-11.5)	6.43 (4.68-8.60)	16.9 (11.6-24.7)	93.5 (51.1-204)	332 (144-818)	609
Non-Hispanic Black	15-16	7.84 (6.47-9.49)	5.82 (4.52-7.00)	18.0 (13.5-24.7)	99.4 (58.9-178)	393 (183-758)	609
Non-Hispanic White	11-12	32.6 (21.1-50.4)	25.5 (15.3-41.1)	128 (70.8-248)	793 (334-1320)	1970 (1030-3500)	811
Non-Hispanic White	13-14	31.2 (24.5-39.6)	25.3 (20.1-31.5)	115 (77.3-159)	569 (432-765)	1270 (871-2550)	987
Non-Hispanic White	15-16	25.6 (20.3-32.4)	19.3 (15.5-29.4)	92.6 (53.8-131)	440 (289-746)	1070 (767-1540)	781
All Hispanic	11-12	23.7 (17.6-32.0)	15.9 (11.4-21.7)	65.0 (38.6-132)	425 (265-916)	1850 (784-2330)	571
All Hispanic	13-14	28 (23.2-33.7)	18.8 (16.3-22.5)	66.8 (50.9-84.5)	338 (190-1020)	1380 (974-2740)	690
All Hispanic	15-16	15.7 (12.9-19.3)	13.1 (11.0-15.4)	36.9 (30.5-46.4)	139 (103-215)	426 (250-808)	859
Non-Hispanic Asian	11-12	22.3 (14.3-34.9)	14.2 (8.24-27.8)	73.1 (41.6-153)	624 (282-1640)	1860 (641-4410)	352
Non-Hispanic Asian	13-14	23.1 (16.3-32.8)	20.2 (12.9-34.4)	67.5 (48.4-102)	253 (131-537)	657 (287-1900)	288
Non-Hispanic Asian	15-16	19.4 (13.7-27.5)	15.9 (10.9-22.1)	57.9 (41.8-101)	400 (175-636)	652 (332-2670)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Bisphenol A (2003 - 2010)

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	2.64 (2.38-2.94)	2.80 (2.50-3.10)	5.50 (5.00-6.20)	10.6 (9.40-12.0)	16.0 (14.4-17.2)	2517
Total population	05-06	1.90 (1.79-2.02)	2.00 (1.90-2.00)	3.70 (3.50-3.90)	7.00 (6.40-7.60)	11.5 (10.0-13.6)	2548
Total population	07-08	2.08 (1.92-2.26)	2.10 (1.90-2.30)	4.10 (3.60-4.60)	7.70 (6.80-8.70)	13.0 (10.0-15.6)	2604
Total population	09-10	1.83 (1.72-1.94)	1.90 (1.70-2.00)	3.50 (3.30-3.80)	6.60 (6.00-7.20)	9.60 (8.50-11.3)	2749
Age 6-11 years	03-04	3.55 (2.95-4.29)	3.80 (2.70-5.00)	6.90 (6.00-8.30)	12.6 (9.50-15.1)	16.0 (11.5-23.3)	314
Age 6-11 years	05-06	2.86 (2.52-3.24)	2.70 (2.30-2.90)	5.00 (4.40-5.80)	13.5 (9.30-16.8)	22.8 (13.6-34.6)	356
Age 6-11 years	07-08	2.48 (2.21-2.77)	2.40 (1.90-3.00)	4.50 (3.70-5.50)	7.60 (6.30-9.50)	13.4 (8.80-17.8)	389
Age 6-11 years	09-10	1.81 (1.55-2.10)	1.70 (1.50-2.00)	3.40 (3.00-4.00)	6.50 (4.30-9.70)	9.20 (6.50-15.1)	415
Age 12-19 years	03-04	3.74 (3.31-4.22)	4.30 (3.60-4.60)	7.80 (6.50-9.00)	13.5 (11.8-15.2)	16.5 (15.2-20.9)	715
Age 12-19 years	05-06	2.42 (2.18-2.68)	2.40 (2.10-2.70)	4.30 (3.90-5.20)	8.40 (6.50-10.8)	11.9 (10.7-14.8)	702
Age 12-19 years	07-08	2.45 (2.14-2.80)	2.40 (2.10-2.60)	4.40 (3.60-5.50)	9.70 (7.30-11.9)	12.2 (9.70-19.0)	401
Age 12-19 years	09-10	2.11 (1.86-2.40)	2.20 (1.90-2.40)	3.80 (3.20-4.50)	6.90 (4.70-10.8)	11.1 (6.90-21.0)	420
Age 20+ years	03-04	2.41 (2.15-2.72)	2.60 (2.30-2.80)	5.10 (4.50-5.70)	9.50 (8.10-11.3)	15.2 (12.4-18.1)	1488
Age 20+ years	05-06	1.75 (1.62-1.89)	1.80 (1.70-2.00)	3.40 (3.10-3.70)	6.40 (5.80-7.50)	10.7 (8.80-12.1)	1490
Age 20+ years	07-08	1.99 (1.82-2.18)	2.00 (1.80-2.30)	3.90 (3.40-4.60)	7.40 (6.60-8.50)	13.2 (9.10-15.7)	1814
Age 20+ years	09-10	1.79 (1.67-1.93)	1.80 (1.60-2.00)	3.50 (3.30-3.70)	6.50 (6.00-7.20)	9.60 (8.30-11.3)	1914
Male	03-04	2.92 (2.63-3.24)	3.20 (2.70-3.60)	6.10 (5.40-6.60)	10.4 (9.50-11.6)	16.0 (12.7-17.6)	1229
Male	05-06	2.09 (1.92-2.28)	2.10 (2.00-2.30)	3.70 (3.40-4.20)	7.70 (6.80-9.30)	12.8 (10.1-15.8)	1270
Male	07-08	2.20 (2.01-2.41)	2.10 (1.90-2.40)	4.00 (3.60-4.70)	8.10 (6.70-9.70)	14.0 (8.70-20.8)	1294
Male	09-10	1.94 (1.82-2.07)	1.90 (1.70-2.00)	3.70 (3.40-4.10)	6.90 (5.90-7.90)	10.9 (8.40-13.5)	1399
Female	03-04	2.41 (2.11-2.75)	2.50 (2.20-2.80)	5.00 (4.20-6.20)	10.6 (8.70-12.5)	15.9 (13.5-20.1)	1288
Female	05-06	1.74 (1.55-1.95)	1.80 (1.60-2.00)	3.70 (3.10-4.00)	6.20 (5.80-7.60)	10.4 (7.70-14.7)	1278
Female	07-08	1.97 (1.80-2.16)	2.00 (1.80-2.20)	4.10 (3.60-4.60)	7.40 (6.80-8.20)	12.0 (9.60-14.1)	1310
Female	09-10	1.73 (1.60-1.87)	1.80 (1.60-2.00)	3.40 (3.20-3.70)	6.50 (5.60-7.10)	9.20 (8.00-11.2)	1350
Mexican American	03-04	2.58 (2.15-3.08)	2.60 (2.10-3.20)	5.20 (4.40-6.50)	9.90 (7.30-13.9)	15.4 (10.2-19.7)	613
Mexican American	05-06	2.05 (1.75-2.40)	2.00 (1.70-2.40)	3.60 (3.00-4.20)	6.90 (5.40-10.1)	12.2 (8.00-15.6)	637
Mexican American	07-08	2.09 (1.94-2.26)	2.00 (1.80-2.30)	3.80 (3.30-4.30)	7.10 (6.10-8.60)	11.7 (7.70-14.6)	531
Mexican American	09-10	1.92 (1.69-2.19)	2.10 (1.80-2.30)	3.50 (3.10-4.10)	6.50 (5.20-7.50)	9.00 (6.90-16.2)	566
Non-Hispanic Black	03-04	4.24 (3.73-4.82)	4.30 (3.80-5.10)	8.20 (7.10-9.80)	14.2 (11.7-16.9)	20.6 (14.9-25.2)	652
Non-Hispanic Black	05-06	2.50 (2.25-2.77)	2.70 (2.30-3.00)	4.60 (4.00-5.00)	8.00 (6.80-9.30)	11.3 (8.90-14.2)	678
Non-Hispanic Black	07-08	2.66 (2.38-2.97)	2.80 (2.60-3.10)	5.40 (4.40-6.40)	9.10 (7.50-10.4)	13.3 (10.0-15.1)	597
Non-Hispanic Black	09-10	2.51 (2.22-2.83)	2.60 (2.30-3.00)	4.40 (3.80-5.00)	7.30 (6.10-8.80)	10.3 (7.90-13.6)	516
Non-Hispanic White	03-04	2.51 (2.26-2.79)	2.70 (2.50-3.00)	5.20 (4.70-5.80)	9.60 (8.30-10.9)	15.1 (12.6-16.7)	1092
Non-Hispanic White	05-06	1.76 (1.62-1.91)	1.80 (1.60-2.00)	3.50 (3.20-3.80)	6.80 (5.90-7.60)	11.0 (8.80-13.7)	1038
Non-Hispanic White	07-08	2.06 (1.87-2.27)	2.00 (1.80-2.30)	4.00 (3.40-4.70)	7.80 (6.70-8.90)	13.7 (9.80-16.1)	1077
Non-Hispanic White	09-10	1.73 (1.60-1.87)	1.70 (1.60-1.90)	3.40 (3.10-3.70)	6.40 (5.40-7.60)	9.20 (8.20-11.2)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 03-04, 05-06, 07-08 and 09-10 are 0.4, 0.4, 0.4, and 0.4 respectively.

Urinary Bisphenol A (creatinine corrected) (2003 - 2010)

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	2.58 (2.36-2.82)	2.50 (2.31-2.80)	4.29 (3.88-4.75)	7.67 (6.62-8.66)	11.2 (9.78-12.4)	2514
Total population	05-06	1.86 (1.79-1.92)	1.71 (1.64-1.79)	3.01 (2.86-3.20)	5.73 (5.29-6.36)	9.70 (8.31-10.9)	2548
Total population	07-08	2.10 (1.95-2.25)	1.95 (1.84-2.03)	3.45 (3.02-3.83)	6.09 (5.10-7.45)	10.0 (7.48-13.2)	2604
Total population	09-10	1.91 (1.79-2.04)	1.76 (1.67-1.84)	3.06 (2.80-3.33)	5.33 (4.68-6.06)	8.03 (6.94-10.0)	2749
Age 6-11 years	03-04	4.32 (3.63-5.14)	4.29 (3.63-5.23)	7.14 (5.83-9.56)	12.2 (9.84-14.8)	15.7 (12.2-23.2)	314
Age 6-11 years	05-06	3.14 (2.79-3.54)	2.80 (2.55-3.06)	5.04 (4.46-5.71)	15.6 (8.15-22.4)	24.6 (19.9-48.5)	356
Age 6-11 years	07-08	3.05 (2.73-3.41)	2.69 (2.38-3.12)	5.06 (4.33-5.60)	11.9 (6.30-17.4)	20.8 (12.7-26.3)	389
Age 6-11 years	09-10	2.36 (2.09-2.65)	2.18 (2.00-2.53)	3.70 (3.14-4.29)	5.97 (4.57-9.15)	9.57 (6.52-13.7)	415
Age 12-19 years	03-04	2.80 (2.52-3.11)	2.74 (2.35-3.22)	4.74 (4.21-5.09)	7.79 (6.41-8.87)	11.8 (8.05-14.2)	713
Age 12-19 years	05-06	1.80 (1.67-1.95)	1.65 (1.50-1.76)	2.73 (2.41-2.98)	5.71 (4.07-7.50)	8.52 (6.94-12.2)	702
Age 12-19 years	07-08	1.90 (1.72-2.10)	1.69 (1.50-2.00)	2.94 (2.38-3.60)	5.10 (4.17-6.82)	7.72 (5.32-13.9)	401
Age 12-19 years	09-10	1.70 (1.47-1.95)	1.60 (1.34-1.88)	2.63 (2.11-3.58)	4.47 (3.76-6.19)	6.71 (4.40-17.8)	420
Age 20+ years	03-04	2.39 (2.17-2.64)	2.36 (2.15-2.59)	3.93 (3.44-4.33)	6.64 (5.97-7.74)	10.0 (9.01-11.4)	1487
Age 20+ years	05-06	1.75 (1.67-1.84)	1.64 (1.56-1.75)	2.84 (2.67-3.08)	5.38 (4.89-5.87)	8.54 (7.58-9.77)	1490
Age 20+ years	07-08	2.04 (1.90-2.20)	1.92 (1.79-2.03)	3.36 (2.91-3.78)	6.02 (4.88-7.48)	9.32 (7.48-12.1)	1814
Age 20+ years	09-10	1.90 (1.76-2.05)	1.76 (1.66-1.84)	3.04 (2.76-3.24)	5.33 (4.67-6.11)	8.00 (6.97-10.0)	1914
Male	03-04	2.38 (2.15-2.63)	2.31 (2.08-2.70)	4.19 (3.81-4.64)	7.10 (6.41-8.28)	9.94 (9.06-11.7)	1228
Male	05-06	1.68 (1.57-1.80)	1.56 (1.45-1.64)	2.73 (2.43-3.14)	5.27 (4.64-6.04)	8.40 (6.81-11.4)	1270
Male	07-08	1.85 (1.71-2.01)	1.77 (1.57-1.91)	2.97 (2.59-3.33)	5.41 (4.47-7.51)	9.52 (6.29-13.4)	1294
Male	09-10	1.74 (1.62-1.87)	1.60 (1.48-1.72)	2.76 (2.53-2.96)	5.00 (4.16-5.86)	7.50 (6.22-9.00)	1399
Female	03-04	2.78 (2.50-3.08)	2.68 (2.40-2.94)	4.41 (3.81-5.15)	7.93 (6.48-10.2)	12.4 (9.29-18.2)	1286
Female	05-06	2.04 (1.95-2.14)	1.85 (1.76-2.02)	3.21 (2.98-3.39)	6.47 (5.51-7.50)	9.86 (8.62-11.8)	1278
Female	07-08	2.36 (2.17-2.57)	2.14 (1.98-2.33)	3.77 (3.43-4.31)	6.67 (5.41-7.83)	10.5 (7.45-15.2)	1310
Female	09-10	2.09 (1.92-2.27)	1.93 (1.80-2.15)	3.33 (2.94-3.84)	5.49 (4.87-6.74)	8.80 (6.47-12.5)	1350
Mexican American	03-04	2.34 (2.02-2.71)	2.38 (2.00-2.65)	3.85 (3.24-4.55)	7.09 (5.00-9.04)	10.9 (8.50-14.3)	612
Mexican American	05-06	1.84 (1.66-2.04)	1.62 (1.45-1.84)	2.99 (2.56-3.60)	6.00 (4.51-8.00)	10.3 (6.84-14.9)	637
Mexican American	07-08	2.04 (1.86-2.24)	1.88 (1.72-2.11)	3.33 (2.96-3.95)	5.68 (5.05-6.59)	8.90 (6.30-11.8)	531
Mexican American	09-10	1.91 (1.71-2.13)	1.76 (1.67-1.87)	3.13 (2.63-3.57)	5.51 (4.72-6.97)	8.71 (5.86-14.4)	566
Non-Hispanic Black	03-04	2.92 (2.58-3.32)	2.95 (2.51-3.27)	4.90 (4.07-6.13)	8.64 (7.53-9.63)	11.9 (10.2-13.3)	651
Non-Hispanic Black	05-06	1.76 (1.62-1.90)	1.68 (1.53-1.92)	2.82 (2.67-3.04)	4.56 (3.85-5.43)	6.81 (5.00-9.27)	678
Non-Hispanic Black	07-08	2.06 (1.91-2.23)	2.03 (1.83-2.25)	3.24 (2.86-3.78)	5.71 (5.15-6.54)	8.59 (6.54-10.9)	597
Non-Hispanic Black	09-10	1.82 (1.65-2.01)	1.70 (1.56-1.89)	2.90 (2.39-3.17)	4.94 (4.02-6.03)	6.74 (5.95-8.09)	516
Non-Hispanic White	03-04	2.58 (2.37-2.81)	2.55 (2.32-2.80)	4.30 (3.93-4.67)	7.58 (6.32-8.87)	11.0 (9.34-12.4)	1091
Non-Hispanic White	05-06	1.85 (1.75-1.96)	1.70 (1.60-1.82)	3.08 (2.78-3.31)	5.80 (5.13-6.72)	9.77 (7.87-11.5)	1038
Non-Hispanic White	07-08	2.15 (1.97-2.35)	1.97 (1.84-2.11)	3.50 (3.04-3.95)	6.44 (5.04-8.00)	10.9 (7.47-14.5)	1077
Non-Hispanic White	09-10	1.94 (1.79-2.10)	1.78 (1.67-1.92)	3.16 (2.80-3.59)	5.45 (4.67-6.94)	8.55 (6.73-10.0)	1206

Urinary Bisphenol A (2011 - 2016)†

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	1.51 (1.41-1.62)	1.40 (1.30-1.60)	3.00 (2.70-3.30)	5.60 (4.90-6.50)	9.40 (7.70-11.2)	2489
Total population	13-14	1.28 (1.20-1.36)	1.30 (1.20-1.40)	2.50 (2.40-2.70)	4.90 (4.10-5.60)	7.70 (6.80-8.30)	2686
Total population	15-16	1.10 (1.00-1.20)	1.10 (1.00-1.20)	2.10 (1.80-2.40)	4.20 (3.60-5.00)	6.80 (5.50-8.20)	2651
Age 3-5 years	15-16	1.21 (.986-1.49)	1.30 (1.00-1.50)	2.10 (1.70-2.80)	3.50 (2.60-9.40)	7.40 (3.10-45.5)	141
Age 6-11 years	11-12	1.58 (1.41-1.78)	1.50 (1.30-1.70)	3.10 (2.60-3.50)	6.70 (5.10-8.00)	8.70 (6.20-21.4)	396
Age 6-11 years	13-14	1.43 (1.30-1.59)	1.40 (1.30-1.60)	2.90 (2.30-3.40)	4.40 (4.10-5.20)	8.00 (5.20-10.2)	409
Age 6-11 years	15-16	1.14 (.987-1.32)	1.20 (.900-1.30)	2.10 (1.70-2.40)	4.00 (2.80-5.80)	6.20 (4.80-8.50)	415
Age 12-19 years	11-12	1.69 (1.42-2.00)	1.70 (1.30-2.10)	3.30 (2.80-4.00)	6.90 (4.80-7.90)	10.0 (7.10-13.0)	388
Age 12-19 years	13-14	1.28 (1.16-1.41)	1.20 (1.10-1.40)	2.40 (1.90-2.70)	4.60 (3.30-5.20)	6.80 (5.20-8.10)	462
Age 12-19 years	15-16	1.21 (1.03-1.42)	1.30 (.900-1.40)	2.30 (1.70-2.80)	4.30 (3.50-6.20)	7.10 (4.80-9.20)	405
Age 20+ years	11-12	1.48 (1.35-1.61)	1.40 (1.20-1.60)	2.90 (2.50-3.30)	5.40 (4.70-6.30)	9.30 (7.30-12.2)	1705
Age 20+ years	13-14	1.26 (1.18-1.35)	1.30 (1.20-1.40)	2.50 (2.40-2.80)	4.90 (4.10-6.00)	7.80 (6.80-8.60)	1815
Age 20+ years	15-16	1.08 (.976-1.19)	1.10 (.900-1.10)	2.00 (1.80-2.50)	4.10 (3.50-5.30)	6.80 (5.00-8.90)	1690
Male	11-12	1.64 (1.49-1.81)	1.50 (1.40-1.70)	3.20 (2.70-3.70)	6.00 (5.00-7.70)	9.50 (7.80-11.2)	1259
Male	13-14	1.43 (1.30-1.58)	1.40 (1.30-1.60)	2.80 (2.40-3.20)	5.30 (4.30-6.60)	8.30 (6.80-10.3)	1285
Male	15-16	1.19 (1.06-1.34)	1.10 (1.00-1.30)	2.40 (1.90-2.90)	4.90 (3.90-6.20)	7.80 (5.40-11.2)	1307
Female	11-12	1.39 (1.25-1.55)	1.30 (1.20-1.50)	2.80 (2.40-3.20)	5.20 (4.30-6.30)	8.50 (6.50-13.4)	1230
Female	13-14	1.15 (1.05-1.26)	1.20 (1.10-1.30)	2.30 (2.00-2.60)	4.20 (3.80-5.20)	7.20 (5.60-8.10)	1401
Female	15-16	1.02 (.914-1.13)	1.00 (.900-1.10)	1.80 (1.60-2.20)	3.70 (3.40-4.10)	5.80 (4.80-6.50)	1344
Mexican American	11-12	1.45 (1.30-1.63)	1.40 (1.20-1.60)	2.80 (2.30-3.10)	5.00 (4.20-6.50)	7.70 (5.90-9.70)	316
Mexican American	13-14	1.28 (1.06-1.53)	1.30 (1.00-1.70)	2.50 (2.10-2.80)	4.10 (3.50-4.90)	5.60 (4.60-7.30)	438
Mexican American	15-16	1.09 (.957-1.25)	1.10 (1.00-1.30)	2.10 (1.80-2.40)	4.00 (3.30-4.60)	6.00 (4.30-9.50)	513
Non-Hispanic Black	11-12	2.12 (1.88-2.38)	2.00 (1.80-2.40)	4.10 (3.40-4.60)	7.10 (5.70-8.10)	11.4 (8.10-14.3)	665
Non-Hispanic Black	13-14	1.83 (1.62-2.07)	1.90 (1.50-2.20)	3.60 (3.20-4.10)	6.80 (5.70-7.80)	9.80 (7.70-12.9)	609
Non-Hispanic Black	15-16	1.45 (1.31-1.61)	1.40 (1.30-1.60)	2.70 (2.40-3.00)	5.00 (4.10-6.00)	7.60 (6.00-10.9)	610
Non-Hispanic White	11-12	1.46 (1.34-1.58)	1.30 (1.20-1.50)	2.90 (2.50-3.20)	5.40 (4.60-6.60)	8.90 (6.90-13.4)	813
Non-Hispanic White	13-14	1.22 (1.13-1.31)	1.30 (1.10-1.40)	2.40 (2.20-2.70)	4.40 (3.90-5.90)	7.40 (6.40-8.30)	988
Non-Hispanic White	15-16	1.05 (.935-1.19)	1.00 (.900-1.10)	1.90 (1.70-2.50)	4.10 (3.10-5.00)	6.60 (4.80-8.80)	781
All Hispanic	11-12	1.48 (1.25-1.74)	1.40 (1.20-1.70)	2.80 (2.20-3.40)	5.70 (4.20-7.30)	9.10 (6.50-14.1)	571
All Hispanic	13-14	1.31 (1.18-1.46)	1.30 (1.10-1.50)	2.60 (2.20-2.80)	4.10 (3.70-4.70)	6.10 (4.90-7.50)	690
All Hispanic	15-16	1.11 (.990-1.23)	1.10 (1.00-1.30)	2.20 (1.90-2.50)	4.00 (3.50-5.00)	6.60 (5.00-8.10)	859
Non-Hispanic Asian	11-12	1.03 (.863-1.23)	.900 (.800-1.10)	1.80 (1.50-2.20)	4.00 (2.40-6.40)	7.30 (3.90-11.9)	352
Non-Hispanic Asian	13-14	.782 (.646-.948)	.800 (.700-.900)	1.40 (1.00-1.80)	2.40 (1.80-3.30)	3.60 (2.40-12.1)	289
Non-Hispanic Asian	15-16	.702 (.629-.784)	.700 (.600-.800)	1.30 (1.10-1.60)	2.30 (1.80-2.70)	3.10 (2.40-4.40)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 0.400, 0.200, and 0.200 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Bisphenol A (creatinine corrected) (2011 - 2016)†

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	1.72 (1.61-1.84)	1.58 (1.46-1.71)	2.86 (2.62-3.01)	4.62 (4.12-5.65)	8.24 (6.47-11.0)	2487
Total population	13-14	1.28 (1.18-1.39)	1.21 (1.11-1.32)	2.12 (1.92-2.33)	3.88 (3.46-4.24)	5.09 (4.65-5.96)	2684
Total population	15-16	1.12 (1.04-1.20)	1.03 (.952-1.11)	1.85 (1.70-2.00)	3.44 (3.00-4.14)	5.30 (4.69-6.77)	2650
Age 3-5 years	15-16	2.86 (2.27-3.60)	2.73 (2.00-3.18)	4.55 (3.33-6.62)	7.50 (5.51-11.1)	12.5 (7.50-36.7)	140
Age 6-11 years	11-12	2.27 (1.97-2.62)	2.00 (1.78-2.16)	3.33 (2.93-3.75)	7.94 (4.71-12.4)	14.0 (6.45-47.5)	395
Age 6-11 years	13-14	1.81 (1.68-1.96)	1.80 (1.52-2.03)	3.10 (2.63-3.46)	4.48 (4.00-4.96)	7.03 (5.00-9.92)	409
Age 6-11 years	15-16	1.47 (1.28-1.69)	1.35 (1.09-1.67)	2.38 (2.05-2.84)	4.46 (3.44-5.37)	6.20 (4.74-8.57)	415
Age 12-19 years	11-12	1.64 (1.44-1.87)	1.48 (1.13-1.98)	2.88 (2.21-3.23)	4.50 (3.37-8.16)	8.74 (3.57-18.4)	388
Age 12-19 years	13-14	1.04 (.887-1.21)	.932 (.809-1.19)	1.71 (1.33-2.03)	2.69 (2.28-3.33)	3.99 (3.29-4.67)	462
Age 12-19 years	15-16	0.94 (.843-1.05)	.872 (.802-.954)	1.44 (1.25-1.71)	2.81 (2.06-3.72)	4.62 (3.21-6.67)	405
Age 20+ years	11-12	1.68 (1.57-1.80)	1.55 (1.43-1.68)	2.75 (2.54-3.00)	4.55 (4.00-5.39)	7.73 (5.73-10.0)	1704
Age 20+ years	13-14	1.27 (1.16-1.39)	1.21 (1.11-1.30)	2.09 (1.90-2.31)	3.88 (3.33-4.37)	5.09 (4.58-5.97)	1813
Age 20+ years	15-16	1.1 (1.01-1.19)	1.02 (.933-1.11)	1.80 (1.63-1.98)	3.39 (2.92-4.22)	5.24 (4.52-7.09)	1690
Male	11-12	1.54 (1.40-1.69)	1.37 (1.20-1.59)	2.55 (2.21-2.94)	4.38 (3.75-6.00)	8.24 (6.01-11.0)	1258
Male	13-14	1.2 (1.11-1.31)	1.12 (.988-1.25)	1.95 (1.78-2.24)	3.75 (3.25-4.29)	4.91 (4.42-7.02)	1284
Male	15-16	1.04 (.936-1.15)	.943 (.846-1.09)	1.73 (1.45-2.06)	3.43 (2.77-4.52)	5.00 (4.10-7.14)	1307
Female	11-12	1.91 (1.76-2.08)	1.75 (1.57-1.97)	2.93 (2.73-3.24)	4.94 (4.27-6.24)	8.13 (6.00-11.1)	1229
Female	13-14	1.36 (1.23-1.51)	1.28 (1.17-1.43)	2.25 (2.03-2.48)	3.94 (3.27-4.48)	5.18 (4.50-6.07)	1400
Female	15-16	1.19 (1.11-1.29)	1.10 (.978-1.21)	1.94 (1.79-2.14)	3.45 (2.94-4.58)	5.56 (4.75-6.79)	1343
Mexican American	11-12	1.64 (1.49-1.80)	1.46 (1.32-1.64)	2.70 (2.34-3.01)	4.50 (3.45-7.00)	7.37 (4.76-11.4)	316
Mexican American	13-14	1.3 (1.16-1.45)	1.27 (1.05-1.57)	2.25 (1.97-2.50)	3.57 (3.04-3.98)	4.25 (3.93-4.83)	438
Mexican American	15-16	1.15 (1.04-1.26)	1.07 (.946-1.20)	1.89 (1.67-2.27)	3.79 (2.84-5.47)	5.94 (4.03-9.09)	513
Non-Hispanic Black	11-12	1.65 (1.48-1.84)	1.50 (1.30-1.71)	2.63 (2.11-3.17)	4.82 (3.82-6.24)	7.23 (5.98-10.7)	665
Non-Hispanic Black	13-14	1.35 (1.25-1.46)	1.32 (1.13-1.46)	2.17 (1.96-2.35)	3.89 (3.24-4.27)	5.00 (4.40-6.01)	609
Non-Hispanic Black	15-16	1.12 (.995-1.27)	.987 (.893-1.12)	1.90 (1.54-2.16)	3.53 (2.51-5.00)	5.63 (3.91-7.75)	609
Non-Hispanic White	11-12	1.77 (1.64-1.92)	1.64 (1.49-1.78)	2.90 (2.65-3.08)	4.60 (4.05-6.00)	9.00 (6.11-12.3)	811
Non-Hispanic White	13-14	1.28 (1.14-1.44)	1.21 (1.06-1.38)	2.13 (1.85-2.42)	3.94 (3.33-4.56)	5.60 (4.65-6.53)	987
Non-Hispanic White	15-16	1.12 (1.01-1.24)	1.04 (.930-1.16)	1.82 (1.59-2.04)	3.47 (2.96-4.44)	5.26 (4.44-7.14)	781
All Hispanic	11-12	1.66 (1.44-1.90)	1.47 (1.28-1.70)	2.80 (2.39-3.14)	4.82 (3.67-7.00)	7.69 (5.76-9.62)	571
All Hispanic	13-14	1.3 (1.19-1.43)	1.25 (1.09-1.42)	2.20 (1.92-2.47)	3.61 (3.13-3.98)	4.54 (4.03-4.89)	690
All Hispanic	15-16	1.13 (1.04-1.23)	1.03 (.888-1.20)	1.92 (1.67-2.18)	3.60 (2.91-4.46)	5.93 (4.29-7.75)	859
Non-Hispanic Asian	11-12	1.38 (1.25-1.52)	1.32 (1.16-1.40)	2.11 (1.84-2.50)	4.04 (2.80-6.25)	7.42 (4.38-12.1)	352
Non-Hispanic Asian	13-14	0.99 (.847-1.16)	.918 (.778-1.05)	1.62 (1.39-1.97)	2.71 (2.09-4.00)	4.44 (2.71-10.0)	288
Non-Hispanic Asian	15-16	0.855 (.758-.965)	.800 (.683-.900)	1.47 (1.17-1.71)	2.62 (2.09-3.27)	3.43 (2.62-5.71)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Bisphenol F (2013 - 2016)†

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	13-14	.532 (.460-.616)	.400 (.300-.500)	1.10 (.900-1.40)	4.00 (2.80-5.30)	9.80 (6.50-16.1)	2682
Total population	15-16	*	<LOD	.800 (.600-.900)	2.90 (2.20-4.30)	8.20 (6.10-13.3)	2651
Age 3-5 years	15-16	*	<LOD	.300 (<LOD-.700)	.900 (.500-1.10)	1.10 (.700-52.9)	141
Age 6-11 years	13-14	.421 (.343-.516)	.300 (.200-.400)	.900 (.600-1.30)	2.30 (1.50-3.30)	3.90 (3.00-6.10)	409
Age 6-11 years	15-16	*	<LOD	.500 (.300-.700)	1.50 (.800-2.50)	2.80 (1.50-9.60)	415
Age 12-19 years	13-14	.567 (.458-.701)	.400 (.300-.600)	1.20 (1.00-1.50)	5.30 (2.50-8.40)	8.80 (6.50-18.7)	461
Age 12-19 years	15-16	*	.200 (<LOD-.400)	1.00 (.500-2.50)	6.10 (2.40-16.5)	17.2 (6.10-34.7)	405
Age 20+ years	13-14	.541 (.457-.641)	.400 (.300-.500)	1.20 (.900-1.50)	4.20 (2.60-6.30)	12.2 (6.00-21.4)	1812
Age 20+ years	15-16	*	<LOD	.800 (.600-1.00)	2.90 (2.00-5.10)	7.80 (5.90-14.4)	1690
Male	13-14	.582 (.505-.671)	.400 (.400-.500)	1.20 (1.10-1.40)	5.10 (3.00-6.50)	12.4 (7.00-17.7)	1284
Male	15-16	*	<LOD	.900 (.600-1.20)	3.70 (2.40-7.40)	14.4 (6.40-19.5)	1307
Female	13-14	.489 (.401-.596)	.300 (.300-.500)	1.00 (.700-1.50)	3.30 (2.40-4.60)	8.90 (4.50-21.4)	1398
Female	15-16	*	<LOD	.600 (.500-.800)	2.60 (1.50-4.20)	6.40 (5.10-7.70)	1344
Mexican American	13-14	*	.300 (<LOD-.400)	.600 (.400-1.10)	1.90 (1.00-5.10)	5.30 (1.90-14.9)	438
Mexican American	15-16	*	<LOD	.300 (.300-.400)	1.30 (.800-2.60)	4.30 (1.70-7.90)	513
Non-Hispanic Black	13-14	.607 (.540-.683)	.400 (.400-.500)	1.30 (1.10-1.70)	5.40 (3.50-8.90)	14.6 (8.10-26.4)	608
Non-Hispanic Black	15-16	*	.300 (<LOD-.400)	1.10 (.700-1.90)	5.90 (2.30-10.8)	12.1 (7.60-22.7)	610
Non-Hispanic White	13-14	.581 (.473-.713)	.400 (.300-.600)	1.30 (1.00-1.60)	4.30 (2.70-6.50)	12.4 (5.70-24.1)	987
Non-Hispanic White	15-16	*	<LOD	.800 (.600-1.00)	3.20 (2.20-5.50)	10.3 (5.50-18.5)	781
All Hispanic	13-14	*	.300 (.200-.400)	.700 (.500-1.10)	2.50 (1.40-5.90)	8.20 (4.10-18.0)	690
All Hispanic	15-16	*	<LOD	.400 (.300-.500)	1.30 (1.00-1.80)	3.80 (2.00-6.60)	859
Non-Hispanic Asian	13-14	*	<LOD	.400 (.300-.700)	1.10 (.600-2.00)	2.10 (1.10-7.00)	287
Non-Hispanic Asian	15-16	*	<LOD	.200 (<LOD-.400)	1.10 (.700-1.30)	1.70 (.900-3.30)	275

Limit of detection (LOD, see Data Analysis section) for Survey year 13-14 and 15-16 are 0.200 and 0.200 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Bisphenol F (creatinine corrected) (2013 - 2016)†

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	13-14	0.534 (.471-.606)	.444 (.385-.515)	1.07 (.899-1.21)	3.33 (2.39-4.76)	8.39 (5.90-12.0)	2680
Total population	15-16	*	<LOD	.737 (.645-.857)	2.57 (1.91-3.52)	7.78 (5.97-9.70)	2650
Age 3-5 years	15-16	*	<LOD	.933 (<LOD-1.41)	1.88 (1.13-2.81)	2.78 (1.75-55.1)	140
Age 6-11 years	13-14	0.532 (.431-.656)	.452 (.360-.636)	1.19 (.798-1.74)	2.44 (1.91-3.49)	4.76 (3.48-10.0)	409
Age 6-11 years	15-16	*	<LOD	.652 (.538-.769)	1.68 (1.09-3.54)	5.88 (1.63-20.7)	415
Age 12-19 years	13-14	0.46 (.365-.580)	.388 (.287-.474)	1.06 (.680-1.46)	3.23 (1.85-5.17)	8.80 (3.31-14.4)	461
Age 12-19 years	15-16	*	.260 (<LOD-.385)	.706 (.410-1.86)	4.29 (1.56-7.91)	7.91 (4.10-21.9)	405
Age 20+ years	13-14	0.546 (.479-.622)	.464 (.395-.526)	1.06 (.875-1.21)	3.40 (2.29-5.03)	8.75 (5.70-13.8)	1810
Age 20+ years	15-16	*	<LOD	.746 (.636-.889)	2.33 (1.71-3.56)	7.78 (5.45-10.7)	1690
Male	13-14	0.489 (.426-.563)	.398 (.311-.492)	.994 (.783-1.16)	3.98 (2.63-5.17)	9.47 (6.81-13.8)	1283
Male	15-16	*	<LOD	.725 (.583-1.04)	3.00 (1.82-5.83)	11.3 (6.66-14.5)	1307
Female	13-14	0.581 (.497-.678)	.494 (.421-.583)	1.11 (.896-1.40)	3.09 (2.11-4.10)	6.97 (3.89-14.1)	1397
Female	15-16	*	<LOD	.738 (.606-.923)	2.21 (1.57-3.06)	5.46 (4.26-7.78)	1343
Mexican American	13-14	*	.308 (<LOD-.400)	.667 (.497-.875)	1.75 (.995-3.61)	4.22 (2.02-6.73)	438
Mexican American	15-16	*	<LOD	.483 (.376-.612)	1.37 (.943-2.17)	4.20 (1.95-6.92)	513
Non-Hispanic Black	13-14	0.449 (.392-.515)	.350 (.304-.389)	.980 (.758-1.27)	3.24 (2.37-4.67)	8.28 (4.67-12.1)	608
Non-Hispanic Black	15-16	*	.292 (<LOD-.343)	.781 (.566-1.23)	3.89 (2.24-6.02)	9.27 (4.73-14.6)	609
Non-Hispanic White	13-14	0.611 (.515-.726)	.517 (.424-.612)	1.14 (.994-1.43)	3.89 (2.63-6.50)	10.8 (5.90-15.3)	986
Non-Hispanic White	15-16	*	<LOD	.792 (.645-1.13)	2.90 (1.82-5.00)	8.22 (5.45-13.8)	781
All Hispanic	13-14	*	.308 (.255-.395)	.698 (.526-.933)	2.02 (1.41-4.05)	5.56 (3.00-16.0)	690
All Hispanic	15-16	*	<LOD	.500 (.424-.588)	1.32 (1.08-1.54)	3.14 (1.95-5.32)	859
Non-Hispanic Asian	13-14	*	<LOD	.672 (.492-.843)	1.31 (.843-2.90)	2.00 (1.17-7.78)	286
Non-Hispanic Asian	15-16	*	<LOD	.500 (<LOD-.583)	.857 (.700-1.55)	1.74 (.857-5.88)	275

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Bisphenol S (2013 - 2016)†

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	13-14	.427 (.375-.487)	.400 (.300-.500)	.900 (.700-1.10)	2.10 (1.70-2.40)	3.60 (2.50-4.70)	2682
Total population	15-16	.467 (.405-.537)	.400 (.400-.500)	1.00 (.900-1.30)	2.40 (1.90-3.10)	4.10 (3.10-5.90)	2651
Age 3-5 years	15-16	.401 (.314-.513)	.300 (.200-.600)	.900 (.700-1.30)	2.10 (1.30-2.90)	2.90 (1.40-4.90)	141
Age 6-11 years	13-14	.351 (.306-.404)	.300 (.300-.400)	.700 (.500-.800)	1.40 (1.00-1.60)	2.10 (1.50-4.90)	409
Age 6-11 years	15-16	.368 (.313-.431)	.300 (.300-.400)	.700 (.600-.800)	1.60 (1.20-2.30)	3.00 (2.30-5.10)	415
Age 12-19 years	13-14	.400 (.332-.482)	.400 (.300-.500)	.800 (.600-1.10)	1.80 (1.20-2.40)	3.20 (1.80-8.30)	461
Age 12-19 years	15-16	.371 (.305-.452)	.400 (.300-.400)	.800 (.600-.900)	1.80 (1.00-2.70)	2.70 (1.80-3.90)	405
Age 20+ years	13-14	.441 (.381-.510)	.400 (.400-.500)	.900 (.800-1.10)	2.10 (1.80-2.50)	3.80 (2.60-4.60)	1812
Age 20+ years	15-16	.496 (.427-.575)	.500 (.400-.600)	1.10 (1.00-1.40)	2.60 (2.00-3.40)	4.40 (3.30-6.60)	1690
Male	13-14	.455 (.393-.527)	.400 (.400-.500)	.900 (.700-1.10)	2.30 (1.60-2.60)	3.90 (2.40-6.40)	1284
Male	15-16	.501 (.420-.597)	.500 (.400-.600)	1.10 (.900-1.50)	2.50 (2.00-3.50)	4.40 (3.00-7.20)	1307
Female	13-14	.403 (.343-.473)	.400 (.300-.500)	.900 (.700-1.10)	2.00 (1.50-2.30)	3.40 (2.40-4.60)	1398
Female	15-16	.436 (.378-.502)	.400 (.300-.500)	1.00 (.900-1.20)	2.20 (1.80-2.90)	3.90 (2.90-5.20)	1344
Mexican American	13-14	.498 (.381-.650)	.500 (.400-.600)	1.00 (.800-1.40)	2.10 (1.60-4.30)	4.90 (2.20-10.8)	438
Mexican American	15-16	.650 (.525-.805)	.600 (.500-.800)	1.30 (1.00-2.20)	3.20 (2.40-4.30)	5.00 (3.30-8.60)	513
Non-Hispanic Black	13-14	.636 (.537-.754)	.600 (.500-.700)	1.40 (1.20-1.70)	3.20 (2.10-4.80)	6.00 (3.50-9.50)	608
Non-Hispanic Black	15-16	.712 (.616-.824)	.700 (.500-.800)	1.50 (1.40-1.90)	4.10 (3.00-5.20)	6.60 (5.10-8.60)	610
Non-Hispanic White	13-14	.383 (.334-.440)	.400 (.300-.400)	.800 (.600-.900)	1.90 (1.40-2.40)	3.00 (2.40-4.00)	987
Non-Hispanic White	15-16	.389 (.343-.440)	.300 (.300-.400)	.900 (.800-1.10)	2.10 (1.70-2.40)	3.00 (2.20-4.30)	781
All Hispanic	13-14	.507 (.424-.606)	.500 (.400-.600)	1.00 (.800-1.30)	2.10 (1.70-3.30)	4.10 (2.60-6.40)	690
All Hispanic	15-16	.663 (.548-.804)	.600 (.500-.700)	1.40 (1.10-1.80)	3.60 (2.80-4.50)	6.50 (4.50-8.10)	859
Non-Hispanic Asian	13-14	.327 (.270-.397)	.300 (.300-.300)	.600 (.500-.900)	1.40 (1.00-2.70)	2.80 (1.60-6.50)	287
Non-Hispanic Asian	15-16	.455 (.361-.575)	.400 (.300-.500)	1.00 (.700-1.40)	2.40 (1.80-2.90)	3.60 (2.60-5.40)	275

Limit of detection (LOD, see Data Analysis section) for Survey year 13-14 and 15-16 are 0.100 and 0.100 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Bisphenol S (creatinine corrected) (2013 - 2016)†

CAS Number 80-05-7

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	13-14	0.428 (.387-.474)	.380 (.352-.411)	.797 (.690-.903)	1.80 (1.49-2.10)	3.33 (2.60-4.68)	2680
Total population	15-16	0.474 (.417-.539)	.455 (.400-.514)	.917 (.791-1.09)	2.00 (1.67-2.45)	3.64 (2.75-4.56)	2650
Age 3-5 years	15-16	0.94 (.752-1.18)	.725 (.588-1.17)	2.00 (1.41-2.57)	3.75 (3.18-5.71)	5.71 (3.18-7.56)	140
Age 6-11 years	13-14	0.444 (.390-.505)	.405 (.345-.457)	.778 (.652-.938)	1.59 (1.14-2.27)	2.63 (2.05-4.93)	409
Age 6-11 years	15-16	0.473 (.417-.538)	.450 (.375-.515)	.762 (.652-.968)	1.85 (1.39-2.38)	3.73 (2.33-5.12)	415
Age 12-19 years	13-14	0.325 (.287-.368)	.294 (.256-.331)	.588 (.500-.674)	1.31 (.886-1.88)	2.27 (1.33-4.58)	461
Age 12-19 years	15-16	0.288 (.246-.338)	.252 (.216-.303)	.552 (.465-.766)	1.17 (.976-1.61)	1.77 (1.40-2.38)	405
Age 20+ years	13-14	0.444 (.396-.498)	.389 (.357-.426)	.839 (.714-.960)	1.88 (1.56-2.22)	3.49 (2.71-4.91)	1810
Age 20+ years	15-16	0.505 (.438-.583)	.476 (.412-.556)	.989 (.823-1.15)	2.20 (1.73-2.76)	3.89 (2.86-4.84)	1690
Male	13-14	0.383 (.335-.437)	.333 (.299-.370)	.741 (.630-.851)	1.56 (1.33-1.93)	2.81 (1.88-4.76)	1283
Male	15-16	0.437 (.375-.509)	.407 (.357-.488)	.870 (.738-1.05)	2.00 (1.55-2.44)	3.52 (2.56-4.55)	1307
Female	13-14	0.477 (.431-.529)	.417 (.385-.455)	.848 (.729-.986)	2.03 (1.67-2.60)	3.64 (2.97-5.20)	1397
Female	15-16	0.513 (.453-.580)	.481 (.431-.548)	1.01 (.833-1.14)	2.04 (1.70-2.76)	3.70 (2.72-5.00)	1343
Mexican American	13-14	0.507 (.410-.627)	.458 (.370-.549)	.962 (.722-1.25)	2.22 (1.30-5.42)	5.57 (2.26-14.9)	438
Mexican American	15-16	0.682 (.556-.836)	.638 (.504-.778)	1.27 (.947-1.59)	2.87 (1.82-3.89)	4.17 (3.64-6.16)	513
Non-Hispanic Black	13-14	0.471 (.398-.557)	.414 (.336-.519)	.943 (.792-1.11)	2.10 (1.50-3.67)	4.11 (2.58-6.69)	608
Non-Hispanic Black	15-16	0.551 (.503-.604)	.476 (.427-.556)	1.12 (.968-1.36)	2.86 (2.38-3.64)	4.84 (3.57-6.58)	609
Non-Hispanic White	13-14	0.402 (.354-.457)	.357 (.316-.390)	.714 (.596-.864)	1.68 (1.38-1.95)	3.02 (2.20-4.58)	986
Non-Hispanic White	15-16	0.412 (.363-.468)	.408 (.333-.476)	.800 (.656-1.00)	1.61 (1.41-1.91)	2.53 (2.00-3.66)	781
All Hispanic	13-14	0.503 (.435-.581)	.487 (.411-.538)	.909 (.756-1.09)	2.03 (1.53-2.78)	3.90 (2.80-5.75)	690
All Hispanic	15-16	0.677 (.551-.831)	.635 (.476-.779)	1.29 (1.02-1.68)	3.33 (2.35-3.79)	4.96 (3.84-6.33)	859
Non-Hispanic Asian	13-14	0.42 (.359-.492)	.389 (.357-.459)	.720 (.546-.938)	1.68 (.964-2.76)	2.76 (1.75-8.04)	286
Non-Hispanic Asian	15-16	0.555 (.471-.653)	.467 (.398-.647)	1.08 (.800-1.38)	2.56 (1.52-4.69)	4.83 (2.56-7.92)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary 4-tert-Octylphenol (2005 - 2010)‡

CAS Number 140-66-9

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	*	<LOD	<LOD	<LOD	.200 (<LOD-.300)	2548
Total population	07-08	*	<LOD	<LOD	<LOD	.300 (.200-.300)	2604
Total population	09-10	*	<LOD	<LOD	.200 (<LOD-.300)	.300 (.300-.400)	2749
Age 6-11 years	05-06	*	<LOD	<LOD	<LOD	.300 (.200-.300)	356
Age 6-11 years	07-08	*	<LOD	<LOD	.200 (<LOD-.300)	.300 (.200-.400)	389
Age 6-11 years	09-10	*	<LOD	<LOD	.300 (<LOD-.400)	.400 (.300-.600)	415
Age 12-19 years	05-06	*	<LOD	<LOD	<LOD	.200 (<LOD-.400)	702
Age 12-19 years	07-08	*	<LOD	<LOD	<LOD	.300 (<LOD-.400)	401
Age 12-19 years	09-10	*	<LOD	<LOD	.300 (.200-.300)	.300 (.300-.400)	420
Age 20+ years	05-06	*	<LOD	<LOD	<LOD	.200 (<LOD-.300)	1490
Age 20+ years	07-08	*	<LOD	<LOD	<LOD	.300 (.200-.400)	1814
Age 20+ years	09-10	*	<LOD	<LOD	<LOD	.300 (.200-.400)	1914
Male	05-06	*	<LOD	<LOD	<LOD	.200 (<LOD-.300)	1270
Male	07-08	*	<LOD	<LOD	<LOD	.300 (.200-.400)	1294
Male	09-10	*	<LOD	<LOD	.200 (<LOD-.300)	.300 (.300-.400)	1399
Female	05-06	*	<LOD	<LOD	<LOD	<LOD	1278
Female	07-08	*	<LOD	<LOD	<LOD	.300 (.200-.300)	1310
Female	09-10	*	<LOD	<LOD	.200 (<LOD-.300)	.300 (.200-.400)	1350
Mexican American	05-06	*	<LOD	<LOD	<LOD	.300 (<LOD-.800)	637
Mexican American	07-08	*	<LOD	<LOD	<LOD	.300 (.200-.300)	531
Mexican American	09-10	*	<LOD	<LOD	<LOD	.300 (<LOD-.500)	566
Non-Hispanic Black	05-06	*	<LOD	<LOD	<LOD	.200 (<LOD-.400)	678
Non-Hispanic Black	07-08	*	<LOD	<LOD	.200 (<LOD-.300)	.300 (.200-.500)	597
Non-Hispanic Black	09-10	*	<LOD	<LOD	.300 (.200-.400)	.500 (.400-.600)	516
Non-Hispanic White	05-06	*	<LOD	<LOD	<LOD	.200 (<LOD-.300)	1038
Non-Hispanic White	07-08	*	<LOD	<LOD	<LOD	.200 (.200-.300)	1077
Non-Hispanic White	09-10	*	<LOD	<LOD	.200 (<LOD-.300)	.300 (.300-.400)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 05-06, 07-08, and 09-10 are 0.2, 0.2, and 0.2 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

‡The 2003-2004 data were removed due to potential for contamination that may have occurred during sampling. Not measured after Survey years 2009-2010.

Urinary 4-tert-Octylphenol (creatinine corrected) (2005 - 2010)‡

CAS Number 140-66-9

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	*	<LOD	<LOD	<LOD	.560 (<LOD-.620)	2548
Total population	07-08	*	<LOD	<LOD	<LOD	.670 (.560-.880)	2604
Total population	09-10	*	<LOD	<LOD	.470 (<LOD-.500)	.640 (.580-.680)	2749
Age 6-11 years	05-06	*	<LOD	<LOD	<LOD	.410 (.350-.610)	356
Age 6-11 years	07-08	*	<LOD	<LOD	.440 (<LOD-.540)	.600 (.420-.930)	389
Age 6-11 years	09-10	*	<LOD	<LOD	.560 (<LOD-.670)	.740 (.640-.830)	415
Age 12-19 years	05-06	*	<LOD	<LOD	<LOD	.450 (<LOD-.560)	702
Age 12-19 years	07-08	*	<LOD	<LOD	<LOD	.420 (<LOD-.540)	401
Age 12-19 years	09-10	*	<LOD	<LOD	.360 (.270-.440)	.450 (.340-.560)	420
Age 20+ years	05-06	*	<LOD	<LOD	<LOD	.580 (<LOD-.670)	1490
Age 20+ years	07-08	*	<LOD	<LOD	<LOD	.700 (.580-.930)	1814
Age 20+ years	09-10	*	<LOD	<LOD	<LOD	.640 (.580-.700)	1914
Male	05-06	*	<LOD	<LOD	<LOD	.390 (<LOD-.440)	1270
Male	07-08	*	<LOD	<LOD	<LOD	.510 (.390-.600)	1294
Male	09-10	*	<LOD	<LOD	.380 (<LOD-.420)	.480 (.450-.610)	1399
Female	05-06	*	<LOD	<LOD	<LOD	<LOD	1278
Female	07-08	*	<LOD	<LOD	<LOD	.880 (.670-1.08)	1310
Female	09-10	*	<LOD	<LOD	.540 (<LOD-.580)	.700 (.640-.880)	1350
Mexican American	05-06	*	<LOD	<LOD	<LOD	.480 (<LOD-.740)	637
Mexican American	07-08	*	<LOD	<LOD	<LOD	.520 (.440-.610)	531
Mexican American	09-10	*	<LOD	<LOD	<LOD	.560 (<LOD-.750)	566
Non-Hispanic Black	05-06	*	<LOD	<LOD	<LOD	.320 (<LOD-.400)	678
Non-Hispanic Black	07-08	*	<LOD	<LOD	.320 (<LOD-.410)	.460 (.340-.610)	597
Non-Hispanic Black	09-10	*	<LOD	<LOD	.300 (.250-.330)	.440 (.320-.560)	516
Non-Hispanic White	05-06	*	<LOD	<LOD	<LOD	.610 (<LOD-.670)	1038
Non-Hispanic White	07-08	*	<LOD	<LOD	<LOD	.700 (.560-.930)	1077
Non-Hispanic White	09-10	*	<LOD	<LOD	.500 (<LOD-.560)	.670 (.580-.740)	1206

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

‡The 2003-2004 data were removed due to potential for contamination that may have occurred during sampling. Not measured after Survey years 2009-2010.

Urinary Triclocarban (2013 - 2016)†

CAS Number 101-20-2

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	13-14	*	<LOD	.200 (.200-.200)	2.20 (1.20-4.10)	13.4 (8.00-24.5)	2686
Total population	15-16	*	<LOD	.200 (.100-.200)	1.70 (.600-3.60)	11.5 (6.30-22.5)	2651
Age 3-5 years	15-16	*	<LOD	<LOD	.400 (.200-1.20)	1.20 (.200-14.9)	141
Age 6-11 years	13-14	*	<LOD	<LOD	.300 (.200-.500)	.900 (.400-5.50)	409
Age 6-11 years	15-16	*	<LOD	.100 (<LOD-.200)	.500 (.200-1.40)	1.40 (.500-3.60)	415
Age 12-19 years	13-14	*	<LOD	.200 (.100-.200)	.900 (.400-1.90)	2.60 (1.40-9.40)	462
Age 12-19 years	15-16	*	<LOD	.100 (<LOD-.200)	.700 (.200-2.30)	2.30 (.900-6.10)	405
Age 20+ years	13-14	*	<LOD	.200 (.200-.300)	3.40 (1.80-7.00)	17.9 (10.0-30.8)	1815
Age 20+ years	15-16	*	<LOD	.200 (.100-.200)	2.50 (.900-6.30)	19.6 (7.10-30.5)	1690
Male	13-14	*	<LOD	.200 (.200-.400)	3.50 (1.60-9.90)	31.9 (13.9-47.6)	1285
Male	15-16	*	<LOD	.200 (.100-.300)	1.70 (.600-9.80)	16.9 (4.80-37.5)	1307
Female	13-14	*	<LOD	.200 (.100-.200)	1.70 (.600-3.50)	7.50 (3.50-12.9)	1401
Female	15-16	*	<LOD	.100 (<LOD-.200)	1.40 (.500-2.60)	6.60 (2.60-22.5)	1344
Mexican American	13-14	*	<LOD	.100 (<LOD-.200)	.600 (.200-3.30)	3.30 (.400-16.3)	438
Mexican American	15-16	*	<LOD	.100 (<LOD-.200)	.400 (.200-1.70)	2.40 (.700-8.60)	513
Non-Hispanic Black	13-14	.397 (.295-.536)	.200 (.100-.300)	1.10 (.700-2.00)	11.3 (6.00-17.9)	27.0 (11.7-67.9)	609
Non-Hispanic Black	15-16	*	<LOD	.600 (.300-1.30)	6.60 (1.60-23.3)	30.1 (9.70-56.9)	610
Non-Hispanic White	13-14	*	<LOD	.200 (.100-.200)	2.00 (.800-4.50)	14.8 (7.10-32.5)	988
Non-Hispanic White	15-16	*	<LOD	.100 (<LOD-.200)	1.30 (.400-3.10)	11.5 (4.40-24.4)	781
All Hispanic	13-14	*	<LOD	.100 (<LOD-.200)	.600 (.300-2.10)	4.40 (1.10-9.40)	690
All Hispanic	15-16	*	<LOD	.200 (<LOD-.200)	1.10 (.300-3.20)	5.70 (2.40-14.7)	859
Non-Hispanic Asian	13-14	*	<LOD	.100 (<LOD-.100)	.500 (.200-1.40)	2.20 (.800-7.80)	289
Non-Hispanic Asian	15-16	*	<LOD	<LOD	.300 (.200-1.30)	2.50 (.300-15.4)	275

Limit of detection (LOD, see Data Analysis section) for Survey year 13-14 and 15-16 are 0.100 and 0.100 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Triclocarban (creatinine corrected) (2013 - 2016)†

CAS Number 101-20-2

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	13-14	*	<LOD	.275 (.248-.306)	1.96 (1.00-4.17)	14.6 (8.93-21.3)	2684
Total population	15-16	*	<LOD	.235 (.189-.294)	1.53 (.778-3.36)	11.3 (5.64-20.1)	2650
Age 3-5 years	15-16	*	<LOD	<LOD	1.15 (.538-2.18)	2.18 (.778-18.0)	140
Age 6-11 years	13-14	*	<LOD	<LOD	.413 (.323-.725)	.778 (.389-7.77)	409
Age 6-11 years	15-16	*	<LOD	.260 (<LOD-.361)	.820 (.368-1.76)	1.76 (.882-10.3)	415
Age 12-19 years	13-14	*	<LOD	.200 (.146-.248)	.559 (.380-.888)	1.97 (.769-8.70)	462
Age 12-19 years	15-16	*	<LOD	.160 (<LOD-.190)	.399 (.236-1.94)	2.26 (.426-5.11)	405
Age 20+ years	13-14	*	<LOD	.292 (.261-.333)	3.20 (1.67-7.07)	17.6 (10.7-22.9)	1813
Age 20+ years	15-16	*	<LOD	.241 (.189-.330)	2.45 (1.00-5.68)	18.0 (7.73-24.1)	1690
Male	13-14	*	<LOD	.250 (.185-.306)	3.00 (1.07-9.86)	21.3 (13.7-28.3)	1284
Male	15-16	*	<LOD	.226 (.153-.292)	1.71 (.659-5.74)	13.0 (2.67-28.5)	1307
Female	13-14	*	<LOD	.292 (.250-.357)	1.65 (.700-4.17)	9.33 (4.17-14.9)	1400
Female	15-16	*	<LOD	.241 (<LOD-.316)	1.25 (.732-3.36)	10.1 (3.36-19.9)	1343
Mexican American	13-14	*	<LOD	.200 (<LOD-.292)	.559 (.292-1.35)	1.35 (.444-21.5)	438
Mexican American	15-16	*	<LOD	.194 (<LOD-.265)	.571 (.316-1.39)	1.84 (.850-5.96)	513
Non-Hispanic Black	13-14	0.293 (.220-.391)	.172 (.127-.235)	.741 (.513-1.11)	7.90 (2.41-19.3)	23.9 (10.8-28.9)	609
Non-Hispanic Black	15-16	*	<LOD	.403 (.259-.714)	4.69 (1.15-18.2)	21.8 (8.51-44.8)	609
Non-Hispanic White	13-14	*	<LOD	.278 (.233-.333)	2.06 (.800-7.12)	15.4 (9.87-22.6)	987
Non-Hispanic White	15-16	*	<LOD	.212 (<LOD-.275)	1.39 (.667-3.56)	11.3 (3.36-20.8)	781
All Hispanic	13-14	*	<LOD	.192 (<LOD-.233)	.617 (.351-1.35)	4.48 (1.24-10.6)	690
All Hispanic	15-16	*	<LOD	.233 (<LOD-.304)	1.05 (.500-2.67)	5.96 (1.84-14.8)	859
Non-Hispanic Asian	13-14	*	<LOD	.217 (<LOD-.250)	.625 (.379-1.67)	3.06 (.769-12.1)	288
Non-Hispanic Asian	15-16	*	<LOD	<LOD	.392 (.280-1.80)	2.82 (.375-23.8)	275

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Triclosan (2003 - 2010)

CAS Number 3380-34-5

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	13.0 (11.6-14.6)	9.20 (7.90-10.9)	47.4 (38.2-58.4)	249 (188-304)	461 (383-522)	2517
Total population	05-06	18.5 (16.1-21.3)	15.1 (11.8-18.5)	76.2 (57.9-97.6)	334 (279-402)	655 (573-739)	2548
Total population	07-08	15.3 (13.5-17.4)	12.1 (10.2-13.8)	57.2 (46.1-65.9)	225 (176-288)	494 (371-615)	2604
Total population	09-10	14.5 (12.6-16.6)	10.7 (8.80-12.6)	51.2 (39.4-67.7)	238 (200-284)	483 (398-569)	2749
Age 6-11 years	03-04	8.16 (6.20-10.8)	6.00 (4.00-8.50)	20.7 (14.3-31.6)	123 (36.4-163)	157 (113-380)	314
Age 6-11 years	05-06	12.8 (9.89-16.7)	10.3 (8.30-17.2)	35.4 (23.9-65.8)	97.6 (67.4-181)	246 (99.5-462)	356
Age 6-11 years	07-08	11.8 (7.57-18.2)	9.80 (6.70-13.9)	27.7 (14.8-52.2)	98.5 (40.5-364)	296 (67.4-826)	389
Age 6-11 years	09-10	10.9 (9.35-12.8)	9.90 (7.10-11.9)	28.3 (22.1-35.5)	95.5 (71.5-117)	200 (114-474)	415
Age 12-19 years	03-04	14.5 (11.0-19.1)	10.3 (8.20-13.1)	39.0 (26.5-86.4)	304 (134-566)	655 (310-890)	715
Age 12-19 years	05-06	18.8 (14.9-23.8)	15.4 (11.0-21.0)	67.5 (45.3-100)	330 (174-461)	566 (389-707)	702
Age 12-19 years	07-08	18.2 (13.8-23.8)	13.8 (9.40-20.1)	63.2 (38.7-110)	296 (144-395)	401 (308-853)	401
Age 12-19 years	09-10	11.7 (9.89-13.8)	8.80 (7.30-10.9)	30.2 (24.3-40.6)	165 (56.7-289)	301 (220-431)	420
Age 20+ years	03-04	13.6 (12.0-15.3)	9.60 (8.20-11.5)	51.7 (39.6-65.7)	261 (198-317)	472 (406-522)	1488
Age 20+ years	05-06	19.3 (16.4-22.6)	15.5 (11.8-19.4)	84.3 (61.0-114)	366 (289-462)	738 (583-864)	1490
Age 20+ years	07-08	15.4 (13.7-17.3)	12.3 (10.1-14.4)	60.1 (48.5-69.0)	225 (185-286)	504 (378-573)	1814
Age 20+ years	09-10	15.5 (12.9-18.5)	11.1 (8.60-14.2)	61.8 (41.8-86.0)	262 (214-327)	544 (415-621)	1914
Male	03-04	16.2 (13.4-19.6)	11.7 (9.30-14.8)	84.9 (50.6-111)	317 (231-433)	574 (461-716)	1229
Male	05-06	21.3 (17.6-25.7)	17.6 (11.9-23.2)	103 (69.9-143)	446 (366-488)	738 (601-873)	1270
Male	07-08	15.2 (12.9-17.9)	12.3 (9.50-15.3)	60.6 (45.8-72.8)	236 (159-338)	467 (367-636)	1294
Male	09-10	14.8 (12.7-17.4)	10.9 (8.60-13.3)	55.1 (40.4-77.5)	243 (214-295)	455 (327-600)	1399
Female	03-04	10.6 (9.29-12.1)	7.60 (6.10-9.10)	33.2 (27.1-39.4)	144 (96.5-250)	380 (258-430)	1288
Female	05-06	16.2 (13.9-18.8)	12.6 (10.1-15.6)	58.7 (41.5-81.9)	226 (169-304)	513 (310-773)	1278
Female	07-08	15.5 (12.6-18.9)	12.0 (9.90-14.1)	52.1 (37.1-74.4)	210 (133-367)	504 (285-648)	1310
Female	09-10	14.2 (12.0-16.8)	10.5 (8.70-12.6)	50.0 (34.4-63.8)	235 (149-302)	488 (332-661)	1350
Mexican American	03-04	14.6 (10.6-20.1)	8.80 (5.40-17.5)	65.4 (32.8-127)	357 (225-456)	597 (372-992)	613
Mexican American	05-06	26.7 (21.2-33.7)	18.7 (13.5-25.5)	196 (99.4-269)	668 (475-759)	866 (750-1180)	637
Mexican American	07-08	17.1 (12.9-22.6)	11.8 (8.40-17.8)	67.4 (42.5-106)	358 (208-474)	556 (363-856)	531
Mexican American	09-10	14.9 (12.2-18.3)	10.2 (8.20-12.8)	54.7 (33.3-86.5)	345 (260-494)	691 (443-1180)	566
Non-Hispanic Black	03-04	14.4 (11.4-18.2)	11.1 (8.70-16.1)	37.6 (30.2-58.0)	203 (87.5-341)	450 (254-750)	652
Non-Hispanic Black	05-06	17.3 (13.3-22.4)	14.0 (10.4-19.0)	59.2 (37.7-98.3)	258 (138-460)	541 (273-1190)	678
Non-Hispanic Black	07-08	13.7 (11.7-16.1)	11.3 (8.80-13.9)	41.4 (28.9-49.6)	150 (93.5-265)	480 (190-757)	597
Non-Hispanic Black	09-10	12.8 (10.8-15.0)	9.30 (7.70-11.7)	34.3 (24.0-44.6)	168 (88.4-263)	451 (202-959)	516
Non-Hispanic White	03-04	12.9 (11.2-14.9)	9.20 (7.40-11.0)	49.2 (37.8-63.4)	245 (163-334)	461 (383-527)	1092
Non-Hispanic White	05-06	17.5 (14.9-20.6)	15.1 (10.9-19.0)	74.3 (54.1-90.3)	288 (231-366)	569 (462-693)	1038
Non-Hispanic White	07-08	15.0 (12.6-17.7)	12.3 (9.80-14.5)	59.6 (41.9-73.4)	197 (147-266)	408 (296-537)	1077
Non-Hispanic White	09-10	14.0 (11.8-16.7)	10.5 (8.30-12.9)	51.7 (33.1-79.2)	216 (174-266)	431 (301-565)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 03-04, 05-06, 07-08 and 09-10 are 2.3, 2.3, 2.3, and 2.3 respectively.

Urinary Triclosan (creatinine corrected) (2003 - 2010)

CAS Number 3380-34-5

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	12.7 (11.5-14.1)	9.48 (8.22-10.4)	43.9 (33.8-60.6)	212 (172-241)	368 (294-463)	2514
Total population	05-06	18.0 (16.0-20.3)	13.0 (11.5-16.1)	73.2 (57.3-91.6)	304 (240-364)	532 (434-674)	2548
Total population	07-08	15.5 (13.7-17.5)	12.4 (10.6-14.2)	50.4 (40.2-59.8)	233 (171-300)	443 (330-559)	2604
Total population	09-10	15.1 (13.2-17.4)	10.9 (9.41-12.4)	49.4 (37.0-67.3)	256 (191-322)	454 (352-557)	2749
Age 6-11 years	03-04	9.93 (7.43-13.3)	7.55 (4.72-13.4)	25.1 (15.3-35.6)	116 (39.9-236)	236 (115-336)	314
Age 6-11 years	05-06	14.1 (10.8-18.5)	13.5 (7.97-18.5)	38.6 (26.0-54.1)	108 (62.4-169)	241 (108-598)	356
Age 6-11 years	07-08	14.5 (9.47-22.1)	13.0 (8.00-17.5)	33.1 (17.5-72.4)	132 (52.7-331)	331 (131-599)	389
Age 6-11 years	09-10	14.2 (12.4-16.4)	12.0 (8.84-15.0)	37.1 (27.0-47.3)	129 (89.1-155)	300 (148-469)	415
Age 12-19 years	03-04	10.9 (8.32-14.2)	7.45 (5.48-10.7)	31.8 (21.9-61.1)	193 (90.7-318)	356 (169-580)	713
Age 12-19 years	05-06	14.0 (11.0-17.8)	11.1 (8.68-13.6)	51.0 (33.0-73.4)	193 (125-306)	385 (203-739)	702
Age 12-19 years	07-08	14.1 (11.0-18.1)	11.0 (7.87-14.4)	50.2 (27.1-78.8)	206 (95.3-293)	378 (238-571)	401
Age 12-19 years	09-10	9.38 (7.86-11.2)	7.71 (5.71-9.21)	23.2 (17.3-29.3)	153 (63.0-201)	247 (166-379)	420
Age 20+ years	03-04	13.4 (12.0-15.1)	10.0 (8.89-11.4)	50.0 (36.0-73.8)	224 (186-272)	385 (308-506)	1487
Age 20+ years	05-06	19.3 (16.9-22.0)	13.7 (11.6-17.0)	86.1 (64.0-109)	343 (262-411)	581 (440-718)	1490
Age 20+ years	07-08	15.8 (14.0-17.8)	12.6 (10.7-14.5)	52.3 (43.8-64.6)	244 (186-309)	484 (336-568)	1814
Age 20+ years	09-10	16.4 (13.7-19.6)	11.5 (9.63-14.8)	57.1 (38.4-80.2)	279 (202-364)	504 (372-601)	1914
Male	03-04	13.2 (11.3-15.6)	9.21 (6.86-12.1)	73.1 (45.8-85.9)	237 (175-294)	384 (294-506)	1228
Male	05-06	17.1 (14.1-20.7)	12.4 (10.0-18.5)	82.6 (58.2-109)	308 (232-368)	472 (355-721)	1270
Male	07-08	12.8 (10.9-15.0)	10.0 (8.12-13.0)	45.7 (32.1-57.3)	191 (132-241)	330 (253-456)	1294
Male	09-10	13.3 (11.3-15.7)	9.21 (7.40-11.7)	43.9 (33.5-67.4)	230 (178-276)	345 (276-429)	1399
Female	03-04	12.2 (10.6-14.2)	9.54 (8.45-10.4)	32.3 (26.2-46.6)	182 (138-217)	336 (225-480)	1286
Female	05-06	19.0 (16.1-22.6)	13.8 (11.7-16.7)	64.0 (47.6-89.8)	301 (209-434)	619 (418-898)	1278
Female	07-08	18.5 (15.6-22.0)	14.4 (12.4-16.8)	55.3 (38.5-77.0)	300 (182-435)	571 (359-729)	1310
Female	09-10	17.1 (14.6-20.1)	12.3 (10.7-14.8)	50.6 (37.0-71.3)	300 (187-422)	556 (422-668)	1350
Mexican American	03-04	13.3 (9.38-18.8)	9.18 (5.45-13.9)	66.7 (28.8-112)	292 (151-432)	453 (263-1150)	612
Mexican American	05-06	24.1 (19.3-29.9)	17.6 (13.3-22.8)	154 (96.4-242)	440 (379-601)	736 (601-818)	637
Mexican American	07-08	16.6 (12.2-22.6)	12.6 (8.51-16.5)	60.1 (39.6-80.3)	325 (182-475)	637 (368-828)	531
Mexican American	09-10	14.8 (12.1-18.2)	9.38 (7.63-12.4)	45.4 (32.2-110)	352 (244-458)	578 (402-737)	566
Non-Hispanic Black	03-04	9.94 (7.92-12.5)	7.74 (5.50-10.0)	30.2 (25.6-37.3)	132 (78.0-213)	260 (127-513)	651
Non-Hispanic Black	05-06	12.2 (9.47-15.6)	9.50 (7.64-11.8)	41.0 (23.3-77.4)	179 (106-243)	352 (203-674)	678
Non-Hispanic Black	07-08	10.6 (8.91-12.7)	8.34 (6.47-10.1)	28.6 (22.3-36.7)	120 (71.0-203)	266 (151-407)	597
Non-Hispanic Black	09-10	9.23 (7.62-11.2)	6.62 (5.63-8.18)	22.7 (16.9-29.1)	136 (63.6-240)	356 (180-689)	516
Non-Hispanic White	03-04	13.3 (11.6-15.1)	9.82 (8.11-11.5)	47.0 (34.3-67.7)	213 (160-272)	358 (276-480)	1091
Non-Hispanic White	05-06	18.4 (16.0-21.2)	13.5 (11.6-17.0)	73.4 (56.8-97.0)	282 (231-343)	472 (367-699)	1038
Non-Hispanic White	07-08	15.6 (13.1-18.7)	13.0 (10.7-14.8)	50.4 (35.9-65.9)	222 (129-303)	418 (262-586)	1077
Non-Hispanic White	09-10	15.8 (13.1-19.0)	11.4 (9.41-14.8)	52.0 (37.0-71.3)	242 (159-323)	410 (317-547)	1206

Urinary Triclosan (2011 - 2016)†

CAS Number 3380-34-5

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	11.8 (10.6-13.1)	7.10 (6.10-7.90)	41.6 (30.2-59.5)	267 (207-332)	553 (429-722)	2489
Total population	13-14	9.78 (9.01-10.6)	6.30 (5.70-7.20)	33.9 (29.1-39.1)	172 (138-208)	379 (324-431)	2686
Total population	15-16	5.79 (4.96-6.76)	3.00 (2.50-3.80)	12.8 (9.50-17.8)	135 (79.2-187)	348 (250-451)	2651
Age 3-5 years	15-16	*	2.20 (<LOD-2.90)	5.30 (3.40-7.40)	14.5 (7.70-28.8)	41.5 (14.5-73.0)	141
Age 6-11 years	11-12	7.18 (5.73-9.01)	5.00 (3.40-7.30)	17.2 (10.4-21.8)	77.6 (28.9-184)	184 (78.7-393)	396
Age 6-11 years	13-14	8.24 (6.70-10.1)	6.10 (4.80-8.00)	22.9 (15.3-33.5)	73.8 (52.7-96.0)	124 (91.2-204)	409
Age 6-11 years	15-16	4.45 (3.35-5.91)	2.70 (2.10-3.20)	7.70 (4.30-18.6)	54.1 (22.2-95.3)	135 (54.8-300)	415
Age 12-19 years	11-12	10.1 (7.70-13.3)	5.80 (4.70-7.50)	25.5 (15.1-38.9)	156 (73.5-286)	489 (171-1550)	388
Age 12-19 years	13-14	7.96 (6.81-9.31)	6.00 (4.80-7.40)	19.7 (15.4-25.3)	85.7 (37.2-183)	224 (122-325)	462
Age 12-19 years	15-16	5.16 (3.92-6.79)	2.90 (2.20-3.80)	8.80 (7.00-13.8)	136 (32.2-292)	357 (164-575)	405
Age 20+ years	11-12	12.7 (11.2-14.4)	7.60 (6.40-8.50)	57.4 (37.0-75.8)	298 (243-388)	594 (437-845)	1705
Age 20+ years	13-14	10.3 (9.32-11.3)	6.40 (5.60-7.50)	39.3 (32.4-48.5)	203 (147-270)	420 (350-529)	1815
Age 20+ years	15-16	6.10 (5.11-7.29)	3.10 (2.60-4.00)	15.1 (10.0-20.9)	143 (83.9-234)	369 (244-486)	1690
Male	11-12	11.6 (10.1-13.1)	6.40 (5.30-7.50)	41.6 (28.1-58.7)	320 (211-388)	566 (392-722)	1259
Male	13-14	9.95 (8.75-11.3)	6.40 (5.20-8.50)	34.7 (29.3-40.6)	172 (126-215)	372 (297-479)	1285
Male	15-16	5.68 (4.67-6.91)	2.90 (2.30-3.80)	12.6 (8.20-19.6)	132 (65.0-216)	348 (170-528)	1307
Female	11-12	12.0 (10.2-14.0)	7.60 (6.20-8.60)	42.2 (25.7-75.8)	242 (188-286)	545 (380-855)	1230
Female	13-14	9.63 (8.41-11.0)	6.20 (5.60-7.10)	31.7 (24.9-42.5)	173 (112-240)	384 (302-528)	1401
Female	15-16	5.90 (4.75-7.31)	3.20 (2.60-4.00)	12.8 (9.00-20.8)	136 (64.3-234)	369 (172-586)	1344
Mexican American	11-12	12.6 (8.98-17.8)	7.20 (4.70-11.7)	47.6 (21.9-82.7)	411 (151-628)	628 (393-1250)	316
Mexican American	13-14	8.65 (5.55-13.5)	5.20 (2.60-12.2)	31.9 (15.4-68.0)	191 (79.5-346)	488 (180-822)	438
Mexican American	15-16	5.76 (4.54-7.30)	3.00 (2.20-4.10)	13.4 (7.20-22.0)	152 (65.2-332)	453 (252-592)	513
Non-Hispanic Black	11-12	10.5 (9.08-12.2)	6.70 (5.70-8.40)	29.9 (22.4-40.0)	169 (106-278)	475 (278-718)	665
Non-Hispanic Black	13-14	8.34 (7.54-9.23)	5.50 (4.40-6.60)	24.9 (18.9-32.6)	145 (68.6-209)	304 (204-509)	609
Non-Hispanic Black	15-16	5.66 (4.36-7.34)	3.10 (2.50-4.10)	12.9 (7.50-22.6)	115 (63.2-189)	329 (204-445)	610
Non-Hispanic White	11-12	11.7 (10.0-13.7)	7.00 (5.60-8.00)	44.6 (24.4-75.8)	248 (184-392)	552 (365-759)	813
Non-Hispanic White	13-14	10.0 (8.95-11.3)	6.40 (5.60-8.00)	34.7 (29.2-43.1)	148 (122-210)	350 (253-438)	988
Non-Hispanic White	15-16	5.58 (4.47-6.97)	2.90 (2.40-3.70)	12.2 (8.00-19.6)	133 (49.2-214)	341 (164-486)	781
All Hispanic	11-12	13.4 (11.6-15.5)	7.50 (6.40-9.30)	48.3 (33.2-75.5)	411 (264-518)	861 (536-1040)	571
All Hispanic	13-14	9.14 (6.95-12.0)	6.00 (3.70-9.50)	29.6 (17.9-44.3)	208 (131-325)	583 (325-737)	690
All Hispanic	15-16	6.49 (5.32-7.91)	3.20 (2.50-4.20)	15.6 (12.0-22.2)	179 (102-346)	486 (346-645)	859
Non-Hispanic Asian	11-12	11.7 (7.75-17.8)	7.30 (3.80-15.1)	42.9 (18.6-125)	274 (117-433)	453 (235-636)	352
Non-Hispanic Asian	13-14	11.5 (9.24-14.3)	6.20 (4.30-9.10)	71.5 (25.2-121)	294 (212-428)	594 (384-740)	289
Non-Hispanic Asian	15-16	7.78 (4.90-12.3)	3.20 (2.00-7.40)	39.2 (9.00-127)	242 (127-350)	441 (248-820)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 2.30, 1.70, and 1.70 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Triclosan (creatinine corrected) (2011 - 2016)†

CAS Number 3380-34-5

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	13.4 (11.8-15.1)	8.39 (6.79-10.0)	49.3 (37.4-57.5)	309 (229-404)	642 (508-788)	2487
Total population	13-14	9.83 (9.00-10.7)	6.90 (6.27-7.65)	29.9 (25.1-34.4)	173 (138-207)	358 (292-425)	2684
Total population	15-16	5.88 (5.12-6.76)	3.53 (3.17-3.92)	12.4 (9.25-18.6)	123 (67.5-210)	299 (232-392)	2650
Age 3-5 years	15-16	*	6.00 (<LOD-7.88)	11.3 (8.24-15.7)	27.8 (15.7-36.0)	53.2 (27.8-131)	140
Age 6-11 years	11-12	10.3 (8.18-12.9)	6.70 (5.62-9.06)	22.4 (16.3-31.7)	103 (54.5-153)	235 (113-333)	395
Age 6-11 years	13-14	10.4 (8.61-12.6)	8.97 (6.62-11.5)	23.4 (18.4-36.1)	78.1 (57.0-125)	184 (81.2-268)	409
Age 6-11 years	15-16	5.73 (4.35-7.54)	3.67 (3.08-4.80)	11.3 (6.23-20.7)	52.0 (32.7-122)	168 (69.1-259)	415
Age 12-19 years	11-12	9.84 (7.85-12.4)	5.83 (4.95-7.23)	26.3 (19.0-37.8)	182 (65.0-399)	421 (182-647)	388
Age 12-19 years	13-14	6.46 (5.24-7.96)	5.11 (4.39-5.93)	15.7 (10.0-21.8)	53.6 (33.2-105)	153 (102-289)	462
Age 12-19 years	15-16	4.01 (3.26-4.93)	2.39 (2.07-2.67)	7.31 (5.06-13.1)	82.5 (24.7-205)	218 (93.9-296)	405
Age 20+ years	11-12	14.4 (12.4-16.7)	9.06 (7.41-11.2)	54.3 (43.9-75.0)	364 (246-514)	660 (536-817)	1704
Age 20+ years	13-14	10.4 (9.44-11.4)	7.17 (6.32-8.26)	34.4 (29.3-41.6)	202 (162-234)	408 (296-531)	1813
Age 20+ years	15-16	6.22 (5.27-7.35)	3.65 (3.24-4.21)	13.1 (9.77-22.2)	149 (67.5-263)	311 (254-441)	1690
Male	11-12	10.8 (9.49-12.2)	6.40 (5.24-8.53)	37.4 (26.8-49.4)	226 (153-309)	536 (311-656)	1258
Male	13-14	8.36 (7.44-9.41)	5.74 (4.80-6.67)	26.7 (22.6-31.8)	143 (111-195)	296 (216-426)	1284
Male	15-16	4.95 (4.20-5.84)	3.08 (2.67-3.54)	9.45 (7.59-12.5)	110 (43.3-190)	263 (158-303)	1307
Female	11-12	16.5 (13.8-19.6)	10.8 (8.44-12.7)	53.3 (44.2-75.0)	381 (273-539)	746 (614-900)	1229
Female	13-14	11.5 (10.0-13.1)	8.08 (6.70-9.23)	34.4 (25.1-42.2)	205 (150-253)	419 (294-573)	1400
Female	15-16	6.94 (5.68-8.48)	4.00 (3.45-5.00)	15.1 (11.3-25.1)	149 (58.9-278)	385 (254-595)	1343
Mexican American	11-12	14.2 (10.4-19.5)	8.29 (6.10-12.4)	62.5 (31.8-111)	399 (163-536)	536 (271-900)	316
Mexican American	13-14	8.82 (5.50-14.1)	6.08 (3.08-13.4)	25.5 (15.9-61.3)	147 (68.8-340)	425 (142-659)	438
Mexican American	15-16	6.04 (4.82-7.56)	3.43 (2.79-4.35)	12.6 (8.64-20.5)	245 (78.2-358)	429 (314-599)	513
Non-Hispanic Black	11-12	8.18 (7.09-9.44)	5.52 (4.66-6.27)	21.5 (16.7-29.9)	130 (74.3-222)	365 (229-461)	665
Non-Hispanic Black	13-14	6.16 (5.30-7.15)	4.27 (3.52-4.93)	16.7 (12.7-21.3)	107 (66.1-125)	218 (116-284)	609
Non-Hispanic Black	15-16	4.38 (3.61-5.32)	2.67 (2.22-3.18)	9.70 (6.00-18.6)	80.3 (46.0-139)	249 (158-297)	609
Non-Hispanic White	11-12	14.2 (12.1-16.7)	8.95 (6.79-11.7)	51.9 (39.1-69.1)	311 (180-569)	675 (508-817)	811
Non-Hispanic White	13-14	10.6 (9.78-11.5)	7.78 (6.67-9.09)	33.0 (26.4-40.2)	178 (128-215)	339 (247-420)	987
Non-Hispanic White	15-16	5.92 (4.83-7.26)	3.54 (3.18-4.14)	11.8 (8.62-20.1)	116 (43.3-221)	264 (144-464)	781
All Hispanic	11-12	15 (13.0-17.3)	8.58 (6.52-11.4)	70.8 (40.8-98.6)	449 (320-514)	647 (506-913)	571
All Hispanic	13-14	9.07 (6.64-12.4)	6.08 (3.75-11.0)	24.7 (17.0-55.6)	197 (114-322)	462 (322-619)	690
All Hispanic	15-16	6.62 (5.42-8.09)	3.69 (3.03-4.57)	15.1 (9.44-27.7)	257 (165-338)	440 (361-537)	859
Non-Hispanic Asian	11-12	15.7 (10.2-24.2)	10.5 (6.05-17.4)	51.8 (23.6-142)	333 (127-609)	575 (381-719)	352
Non-Hispanic Asian	13-14	14.6 (11.5-18.6)	8.00 (5.74-13.3)	100 (39.3-151)	406 (247-528)	659 (419-917)	288
Non-Hispanic Asian	15-16	9.47 (6.43-14.0)	4.83 (3.51-7.20)	37.2 (12.6-158)	299 (210-392)	505 (343-595)	275

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Butyl paraben (2005 - 2010)

CAS Number 94-26-8

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	*	<LOD	1.30 (.800-1.80)	6.60 (4.80-10.7)	19.6 (16.4-26.7)	2548
Total population	07-08	*	<LOD	1.10 (.900-1.50)	9.00 (6.20-11.4)	20.9 (15.2-30.1)	2604
Total population	09-10	*	<LOD	.600 (.500-.800)	5.10 (3.40-8.10)	17.1 (10.5-29.4)	2749
Age 6-11 years	05-06	*	<LOD	.400 (.200-.600)	1.90 (.800-5.80)	7.50 (1.70-18.5)	356
Age 6-11 years	07-08	*	<LOD	.300 (.200-.500)	1.30 (.900-1.70)	3.80 (1.00-11.4)	389
Age 6-11 years	09-10	*	<LOD	.300 (<LOD-.400)	.900 (.500-1.70)	2.20 (1.30-5.10)	415
Age 12-19 years	05-06	*	.200 (<LOD-.400)	.900 (.600-1.80)	9.60 (4.10-16.1)	24.6 (14.5-33.4)	702
Age 12-19 years	07-08	*	<LOD	.800 (.600-1.40)	6.20 (2.50-11.5)	15.8 (6.20-33.2)	401
Age 12-19 years	09-10	*	<LOD	.500 (.400-.900)	5.70 (1.40-15.7)	18.6 (5.70-39.0)	420
Age 20+ years	05-06	*	<LOD	1.70 (1.00-2.20)	6.80 (4.80-11.7)	20.5 (15.8-28.3)	1490
Age 20+ years	07-08	*	<LOD	1.50 (1.00-1.90)	9.80 (6.70-13.4)	24.6 (16.5-32.0)	1814
Age 20+ years	09-10	*	<LOD	.700 (.500-1.00)	6.00 (3.70-10.0)	18.7 (11.9-35.1)	1914
Male	05-06	*	<LOD	.300 (<LOD-.300)	1.10 (.600-2.00)	3.20 (1.90-5.50)	1270
Male	07-08	*	<LOD	.200 (.200-.300)	1.00 (.700-1.50)	3.60 (2.00-7.20)	1294
Male	09-10	*	<LOD	<LOD	.800 (.500-1.20)	2.70 (1.50-12.0)	1399
Female	05-06	.904 (.760-1.07)	.500 (.400-.700)	3.70 (2.90-4.80)	17.4 (11.7-20.8)	34.9 (28.2-41.1)	1278
Female	07-08	.926 (.825-1.04)	.500 (.400-.700)	3.90 (3.00-4.70)	17.9 (12.1-20.5)	34.8 (25.2-52.1)	1310
Female	09-10	*	.300 (.200-.400)	1.80 (1.30-2.30)	11.3 (6.60-18.8)	31.8 (17.7-49.4)	1350
Mexican American	05-06	*	.200 (<LOD-.300)	1.10 (.700-2.30)	11.3 (6.40-15.6)	27.3 (16.5-35.9)	637
Mexican American	07-08	*	<LOD	.900 (.500-1.30)	6.80 (3.50-13.2)	22.7 (13.2-30.7)	531
Mexican American	09-10	*	<LOD	.900 (.400-1.30)	8.30 (4.50-13.8)	18.8 (13.8-35.1)	566
Non-Hispanic Black	05-06	*	.300 (.200-.400)	2.10 (1.00-3.50)	9.10 (4.40-25.0)	31.8 (10.1-82.6)	678
Non-Hispanic Black	07-08	*	.200 (<LOD-.300)	1.10 (.700-1.70)	7.10 (4.20-9.90)	20.0 (8.90-31.3)	597
Non-Hispanic Black	09-10	*	<LOD	.500 (.300-.900)	3.10 (1.40-7.30)	9.00 (5.60-16.7)	516
Non-Hispanic White	05-06	*	<LOD	1.00 (.700-1.80)	5.80 (4.00-9.00)	17.7 (11.7-25.9)	1038
Non-Hispanic White	07-08	*	<LOD	1.20 (.800-1.60)	9.10 (5.00-13.3)	19.6 (12.1-32.0)	1077
Non-Hispanic White	09-10	*	<LOD	.700 (.500-.900)	4.90 (2.70-9.20)	17.7 (9.20-34.5)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 05-06, 07-08, and 09-10 are 0.2, 0.2, and 0.2 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

Urinary Butyl paraben (creatinine corrected) (2005 - 2010)

CAS Number 94-26-8

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	*	<LOD	1.16 (.910-1.62)	7.82 (6.26-11.2)	21.2 (16.8-27.3)	2548
Total population	07-08	*	<LOD	1.16 (.880-1.59)	9.83 (6.51-13.5)	23.1 (18.1-30.4)	2604
Total population	09-10	*	<LOD	.710 (.610-.930)	5.58 (3.55-10.0)	18.0 (10.2-27.6)	2749
Age 6-11 years	05-06	*	<LOD	.440 (.370-.660)	1.65 (1.00-5.29)	7.92 (1.64-30.5)	356
Age 6-11 years	07-08	*	<LOD	.540 (.410-.720)	1.24 (.920-2.80)	5.91 (.930-76.0)	389
Age 6-11 years	09-10	*	<LOD	.530 (<LOD-.630)	1.36 (.740-1.89)	2.74 (1.56-6.58)	415
Age 12-19 years	05-06	*	.190 (<LOD-.250)	.690 (.490-1.20)	6.67 (3.60-11.2)	18.7 (9.52-28.9)	702
Age 12-19 years	07-08	*	<LOD	.670 (.450-.930)	3.70 (1.80-7.41)	9.64 (6.00-18.7)	401
Age 12-19 years	09-10	*	<LOD	.550 (.420-.790)	3.75 (1.21-11.9)	13.8 (3.75-23.7)	420
Age 20+ years	05-06	*	<LOD	1.49 (1.06-1.96)	9.07 (6.55-14.8)	25.5 (17.9-30.4)	1490
Age 20+ years	07-08	*	<LOD	1.52 (1.04-2.21)	12.4 (8.35-15.1)	27.5 (21.2-36.8)	1814
Age 20+ years	09-10	*	<LOD	.830 (.640-1.19)	7.06 (3.79-11.9)	22.0 (13.1-31.2)	1914
Male	05-06	*	<LOD	.290 (<LOD-.350)	.830 (.570-1.16)	2.28 (1.43-2.91)	1270
Male	07-08	*	<LOD	.290 (.260-.340)	.830 (.620-1.36)	2.40 (1.56-4.85)	1294
Male	09-10	*	<LOD	<LOD	.700 (.560-1.09)	2.50 (1.18-5.87)	1399
Female	05-06	1.06 (.914-1.24)	.750 (.600-.860)	4.44 (3.01-6.26)	19.8 (13.5-25.7)	34.7 (26.9-42.7)	1278
Female	07-08	1.11 (.984-1.25)	.670 (.550-.920)	4.44 (3.02-6.12)	20.6 (14.6-25.9)	39.4 (28.1-77.7)	1310
Female	09-10	*	.450 (.420-.520)	2.17 (1.67-3.10)	13.5 (8.75-22.5)	28.2 (18.4-45.7)	1350
Mexican American	05-06	*	.240 (<LOD-.290)	1.20 (.760-1.68)	9.15 (5.36-15.2)	20.3 (15.8-29.2)	637
Mexican American	07-08	*	<LOD	.810 (.610-1.07)	8.57 (3.28-12.0)	23.0 (12.7-29.5)	531
Mexican American	09-10	*	<LOD	.930 (.570-1.76)	8.01 (4.77-10.5)	17.0 (10.5-27.1)	566
Non-Hispanic Black	05-06	*	.220 (.180-.270)	1.46 (.750-2.64)	8.18 (3.65-17.9)	21.0 (10.9-51.3)	678
Non-Hispanic Black	07-08	*	.220 (<LOD-.280)	.900 (.570-1.27)	5.21 (3.13-6.18)	12.1 (6.14-21.4)	597
Non-Hispanic Black	09-10	*	<LOD	.390 (.270-.590)	2.63 (.890-4.71)	7.00 (3.26-11.9)	516
Non-Hispanic White	05-06	*	<LOD	1.12 (.850-1.65)	6.93 (5.21-9.91)	20.9 (15.4-27.3)	1038
Non-Hispanic White	07-08	*	<LOD	1.18 (.810-2.09)	10.7 (6.32-14.8)	26.8 (15.1-40.4)	1077
Non-Hispanic White	09-10	*	<LOD	.780 (.620-1.13)	6.34 (3.44-12.6)	20.8 (9.12-33.2)	1206

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

Urinary Butyl paraben (2011 - 2016)†

CAS Number 94-26-8

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	*	<LOD	.300 (.200-.400)	2.50 (1.60-3.40)	7.70 (4.50-11.4)	2489
Total population	13-14	*	<LOD	.200 (.100-.200)	1.30 (.800-1.70)	4.40 (2.70-6.10)	2686
Total population	15-16	*	<LOD	<LOD	.700 (.400-1.40)	4.00 (1.80-7.80)	2651
Age 3-5 years	15-16	*	<LOD	<LOD	.200 (.100-1.10)	1.10 (.200-54.2)	141
Age 6-11 years	11-12	*	<LOD	<LOD	.700 (.300-1.00)	1.50 (1.00-1.90)	396
Age 6-11 years	13-14	*	<LOD	<LOD	.300 (.200-.500)	.600 (.300-1.30)	409
Age 6-11 years	15-16	*	<LOD	<LOD	.200 (.100-.200)	.300 (.200-.800)	415
Age 12-19 years	11-12	*	<LOD	.300 (<LOD-.400)	.900 (.500-1.60)	1.90 (1.10-7.10)	388
Age 12-19 years	13-14	*	<LOD	.200 (.100-.200)	1.20 (.500-1.90)	5.90 (1.70-26.7)	462
Age 12-19 years	15-16	*	<LOD	<LOD	.400 (.100-1.50)	1.50 (.300-4.00)	405
Age 20+ years	11-12	*	<LOD	.400 (.300-.500)	3.30 (2.20-5.50)	8.90 (5.50-13.9)	1705
Age 20+ years	13-14	*	<LOD	.200 (.100-.300)	1.50 (.900-2.20)	4.90 (2.70-7.40)	1815
Age 20+ years	15-16	*	<LOD	.100 (<LOD-.100)	1.10 (.500-1.90)	5.00 (2.00-12.2)	1690
Male	11-12	*	<LOD	<LOD	.400 (.200-.500)	1.30 (.500-2.40)	1259
Male	13-14	*	<LOD	<LOD	.200 (.100-.200)	.400 (.300-.700)	1285
Male	15-16	*	<LOD	<LOD	.100 (<LOD-.200)	.200 (.100-.400)	1307
Female	11-12	*	<LOD	.900 (.600-1.40)	5.90 (3.40-10.4)	13.4 (9.30-24.5)	1230
Female	13-14	*	<LOD	.500 (.400-.800)	2.90 (1.90-4.90)	8.40 (4.90-15.3)	1401
Female	15-16	*	<LOD	.300 (.100-.500)	2.30 (1.50-5.30)	14.8 (5.00-20.1)	1344
Mexican American	11-12	*	<LOD	.300 (<LOD-.400)	1.80 (1.40-5.90)	10.0 (3.20-13.7)	316
Mexican American	13-14	*	<LOD	.200 (.100-.300)	1.60 (.500-4.40)	7.10 (2.10-21.2)	438
Mexican American	15-16	*	<LOD	.100 (<LOD-.100)	.300 (.200-.700)	2.30 (.700-6.80)	513
Non-Hispanic Black	11-12	*	<LOD	.200 (<LOD-.300)	1.60 (1.00-2.50)	4.70 (2.50-8.10)	665
Non-Hispanic Black	13-14	*	<LOD	.100 (<LOD-.200)	.800 (.500-1.70)	3.20 (1.70-5.50)	609
Non-Hispanic Black	15-16	*	<LOD	.100 (<LOD-.200)	.500 (.200-1.00)	2.00 (.900-3.70)	610
Non-Hispanic White	11-12	*	<LOD	.300 (.200-.500)	2.60 (1.50-4.60)	8.00 (4.10-13.0)	813
Non-Hispanic White	13-14	*	<LOD	.200 (.100-.200)	1.20 (.700-1.70)	3.20 (1.80-5.60)	988
Non-Hispanic White	15-16	*	<LOD	<LOD	1.10 (.500-1.90)	4.80 (1.50-17.7)	781
All Hispanic	11-12	*	<LOD	.300 (<LOD-.400)	2.60 (1.30-7.00)	10.2 (3.40-21.5)	571
All Hispanic	13-14	*	<LOD	.200 (.100-.300)	1.90 (.700-4.30)	9.00 (3.20-20.7)	690
All Hispanic	15-16	*	<LOD	.100 (<LOD-.100)	.500 (.300-1.00)	4.00 (1.20-6.20)	859
Non-Hispanic Asian	11-12	*	<LOD	.400 (<LOD-1.10)	3.10 (1.40-7.70)	12.0 (4.80-20.5)	352
Non-Hispanic Asian	13-14	*	<LOD	.200 (<LOD-.500)	2.90 (1.10-10.0)	18.4 (5.60-26.1)	289
Non-Hispanic Asian	15-16	*	<LOD	.100 (<LOD-.300)	1.30 (.500-2.30)	5.60 (1.80-15.7)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 0.200, 0.100, and 0.100 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Butyl paraben (creatinine corrected) (2011 - 2016)†

CAS Number 94-26-8

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	*	<LOD	.560 (.476-.667)	3.50 (2.00-4.55)	10.0 (6.26-13.5)	2487
Total population	13-14	*	<LOD	.250 (.202-.318)	1.54 (.952-2.22)	4.39 (3.25-6.96)	2684
Total population	15-16	*	<LOD	<LOD	.786 (.438-1.80)	4.57 (2.23-8.48)	2650
Age 3-5 years	15-16	*	<LOD	<LOD	.778 (.467-1.17)	1.38 (.652-164)	140
Age 6-11 years	11-12	*	<LOD	<LOD	.825 (.737-1.12)	1.56 (.825-2.44)	395
Age 6-11 years	13-14	*	<LOD	<LOD	.411 (.326-.538)	.714 (.467-.984)	409
Age 6-11 years	15-16	*	<LOD	<LOD	.318 (.280-.392)	.538 (.389-.769)	415
Age 12-19 years	11-12	*	<LOD	.378 (<LOD-.588)	1.35 (.588-2.21)	2.21 (1.50-7.45)	388
Age 12-19 years	13-14	*	<LOD	.194 (.159-.233)	1.02 (.484-1.88)	4.00 (1.74-12.1)	462
Age 12-19 years	15-16	*	<LOD	<LOD	.316 (.185-.517)	.800 (.333-2.15)	405
Age 20+ years	11-12	*	<LOD	.609 (.500-.789)	4.02 (2.58-6.28)	12.2 (7.04-17.9)	1704
Age 20+ years	13-14	*	<LOD	.269 (.208-.382)	1.74 (1.15-2.63)	5.42 (3.42-8.95)	1813
Age 20+ years	15-16	*	<LOD	.211 (<LOD-.241)	1.33 (.538-2.59)	6.63 (3.18-15.8)	1690
Male	11-12	*	<LOD	<LOD	.583 (.424-.824)	1.35 (.778-2.25)	1258
Male	13-14	*	<LOD	<LOD	.225 (.179-.280)	.417 (.304-.583)	1284
Male	15-16	*	<LOD	<LOD	.233 (<LOD-.256)	.318 (.259-.412)	1307
Female	11-12	*	<LOD	1.56 (1.08-2.00)	8.19 (5.33-12.1)	17.6 (11.8-30.8)	1229
Female	13-14	*	<LOD	.690 (.411-1.11)	3.42 (2.41-4.87)	10.2 (6.22-13.4)	1400
Female	15-16	*	<LOD	.339 (.238-.606)	3.72 (2.03-6.63)	16.6 (6.63-27.2)	1343
Mexican American	11-12	*	<LOD	.533 (<LOD-.660)	3.48 (1.30-4.33)	7.45 (3.50-19.2)	316
Mexican American	13-14	*	<LOD	.247 (.189-.350)	1.71 (.811-5.00)	10.6 (1.87-25.4)	438
Mexican American	15-16	*	<LOD	.179 (<LOD-.217)	.500 (.333-.786)	2.15 (.814-7.22)	513
Non-Hispanic Black	11-12	*	<LOD	.298 (<LOD-.378)	1.43 (.875-1.93)	3.47 (1.93-6.72)	665
Non-Hispanic Black	13-14	*	<LOD	.146 (<LOD-.189)	.583 (.368-1.16)	2.86 (1.19-3.25)	609
Non-Hispanic Black	15-16	*	<LOD	.132 (<LOD-.167)	.503 (.276-1.16)	1.80 (.778-3.80)	609
Non-Hispanic White	11-12	*	<LOD	.606 (.500-.778)	3.78 (2.08-5.63)	11.5 (5.39-15.7)	811
Non-Hispanic White	13-14	*	<LOD	.259 (.200-.368)	1.54 (.778-2.33)	4.03 (2.50-6.09)	987
Non-Hispanic White	15-16	*	<LOD	<LOD	1.20 (.438-3.18)	6.23 (2.59-22.4)	781
All Hispanic	11-12	*	<LOD	.526 (<LOD-.700)	3.50 (1.53-6.88)	13.7 (6.54-19.2)	571
All Hispanic	13-14	*	<LOD	.250 (.219-.309)	1.73 (.896-3.92)	10.3 (3.56-14.3)	690
All Hispanic	15-16	*	<LOD	.175 (<LOD-.212)	.577 (.389-1.13)	3.40 (1.37-8.70)	859
Non-Hispanic Asian	11-12	*	<LOD	.824 (<LOD-1.30)	6.28 (2.03-12.3)	14.9 (7.89-18.8)	352
Non-Hispanic Asian	13-14	*	<LOD	.440 (<LOD-.606)	3.46 (1.43-13.0)	23.6 (5.45-38.4)	288
Non-Hispanic Asian	15-16	*	<LOD	.292 (<LOD-.370)	1.07 (.595-3.40)	4.24 (1.36-15.4)	275

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Ethyl paraben (2005 - 2010)

CAS Number 120-47-8

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	*	<LOD	4.80 (3.40-6.00)	26.2 (19.4-31.9)	57.2 (40.3-83.4)	2548
Total population	07-08	*	<LOD	5.40 (3.80-6.90)	29.3 (21.9-42.4)	72.1 (54.6-91.8)	2604
Total population	09-10	*	1.10 (<LOD-1.20)	6.60 (4.90-8.30)	37.6 (24.4-51.3)	82.6 (60.3-119)	2749
Age 6-11 years	05-06	*	<LOD	<LOD	2.60 (1.70-4.70)	9.90 (2.80-30.7)	356
Age 6-11 years	07-08	*	<LOD	1.70 (1.10-2.60)	4.60 (2.30-36.7)	35.6 (2.60-282)	389
Age 6-11 years	09-10	*	<LOD	1.50 (1.20-1.80)	3.70 (2.50-5.30)	11.5 (4.50-18.4)	415
Age 12-19 years	05-06	*	<LOD	2.30 (1.30-3.20)	11.3 (7.90-24.1)	38.0 (17.7-122)	702
Age 12-19 years	07-08	*	<LOD	3.00 (2.30-4.90)	23.0 (7.30-60.3)	60.3 (12.5-159)	401
Age 12-19 years	09-10	*	<LOD	3.50 (2.10-5.90)	33.8 (19.4-49.6)	83.2 (34.5-284)	420
Age 20+ years	05-06	*	<LOD	5.90 (4.60-8.10)	30.4 (22.3-38.6)	69.5 (48.1-89.5)	1490
Age 20+ years	07-08	*	1.10 (<LOD-1.40)	6.20 (4.60-9.20)	34.7 (22.8-50.4)	77.4 (51.4-120)	1814
Age 20+ years	09-10	*	1.30 (1.10-1.50)	8.40 (6.00-10.6)	45.0 (29.1-60.3)	91.4 (62.6-129)	1914
Male	05-06	*	<LOD	1.90 (1.20-3.00)	8.90 (5.80-13.7)	25.2 (15.7-29.2)	1270
Male	07-08	*	<LOD	2.40 (1.50-3.00)	11.2 (6.60-15.3)	28.3 (15.3-42.8)	1294
Male	09-10	*	<LOD	2.20 (1.90-2.70)	10.4 (7.40-19.1)	36.4 (19.1-61.3)	1399
Female	05-06	*	1.30 (<LOD-2.20)	10.0 (7.50-13.2)	42.7 (32.3-62.8)	98.7 (74.7-147)	1278
Female	07-08	*	1.80 (1.40-2.50)	10.1 (6.90-16.5)	62.0 (38.2-80.8)	123 (78.5-259)	1310
Female	09-10	3.84 (3.35-4.41)	2.00 (1.60-2.40)	15.4 (12.5-18.4)	62.4 (45.7-78.7)	138 (92.2-211)	1350
Mexican American	05-06	*	<LOD	3.70 (1.90-6.10)	24.0 (11.6-37.7)	55.6 (40.3-120)	637
Mexican American	07-08	*	<LOD	4.10 (2.90-5.90)	23.6 (12.8-30.1)	48.3 (31.0-65.2)	531
Mexican American	09-10	*	<LOD	4.30 (2.60-7.70)	31.0 (21.5-46.3)	65.5 (46.3-92.2)	566
Non-Hispanic Black	05-06	*	1.00 (<LOD-1.50)	5.70 (3.70-9.80)	31.3 (20.4-52.1)	92.3 (41.5-166)	678
Non-Hispanic Black	07-08	*	1.00 (<LOD-1.50)	7.90 (3.90-15.8)	39.9 (24.0-63.4)	97.2 (58.3-256)	597
Non-Hispanic Black	09-10	3.62 (3.11-4.22)	1.90 (1.60-2.40)	11.1 (8.10-17.5)	58.6 (33.8-93.7)	166 (66.0-297)	516
Non-Hispanic White	05-06	*	<LOD	4.80 (3.10-6.10)	24.0 (15.5-32.3)	54.7 (36.4-86.8)	1038
Non-Hispanic White	07-08	*	1.00 (<LOD-1.30)	5.20 (3.50-7.10)	27.2 (18.0-40.8)	67.1 (42.8-98.1)	1077
Non-Hispanic White	09-10	*	1.10 (<LOD-1.20)	6.50 (4.50-8.50)	37.5 (22.7-52.7)	78.7 (49.7-138)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 05-06, 07-08, and 09-10 are 1.0, 1.0, and 1.0 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

Urinary Ethyl paraben (creatinine corrected) (2005 - 2010)

CAS Number 120-47-8

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	*	<LOD	4.61 (3.39-6.30)	27.1 (19.1-34.0)	66.5 (46.5-84.2)	2548
Total population	07-08	*	<LOD	5.56 (4.31-7.56)	32.7 (22.5-50.2)	80.0 (53.2-117)	2604
Total population	09-10	*	1.65 (<LOD-1.82)	6.11 (4.90-7.96)	36.6 (28.0-47.2)	94.6 (67.3-127)	2749
Age 6-11 years	05-06	*	<LOD	<LOD	4.18 (1.91-10.2)	13.5 (4.18-29.0)	356
Age 6-11 years	07-08	*	<LOD	2.54 (1.82-3.30)	6.13 (3.26-34.3)	34.3 (3.30-207)	389
Age 6-11 years	09-10	*	<LOD	2.37 (1.97-3.09)	5.00 (3.74-6.67)	10.1 (6.11-27.3)	415
Age 12-19 years	05-06	*	<LOD	1.94 (1.29-2.65)	10.9 (3.57-20.2)	32.0 (14.1-57.8)	702
Age 12-19 years	07-08	*	<LOD	2.93 (1.93-3.97)	12.9 (4.60-37.9)	37.9 (8.79-110)	401
Age 12-19 years	09-10	*	<LOD	3.11 (2.22-5.94)	26.2 (13.0-33.9)	52.4 (28.8-177)	420
Age 20+ years	05-06	*	<LOD	6.36 (4.63-7.92)	32.4 (23.7-46.0)	76.8 (57.3-97.9)	1490
Age 20+ years	07-08	*	1.58 (<LOD-1.97)	6.97 (4.94-10.9)	38.5 (24.8-61.9)	94.1 (53.6-146)	1814
Age 20+ years	09-10	*	1.82 (1.61-2.13)	8.08 (5.92-10.7)	43.7 (33.1-56.0)	106 (78.1-137)	1914
Male	05-06	*	<LOD	1.82 (1.48-2.15)	6.38 (3.55-9.95)	15.5 (10.2-22.3)	1270
Male	07-08	*	<LOD	2.14 (1.67-3.03)	8.61 (5.54-12.4)	21.7 (11.7-32.7)	1294
Male	09-10	*	<LOD	2.45 (2.22-2.92)	8.63 (6.14-13.7)	28.8 (14.4-43.2)	1399
Female	05-06	*	2.09 (<LOD-2.60)	12.7 (8.45-16.2)	57.3 (40.7-75.2)	107 (82.9-141)	1278
Female	07-08	*	2.63 (2.09-3.55)	13.9 (9.09-22.5)	66.1 (40.9-95.1)	130 (78.8-203)	1310
Female	09-10	4.63 (4.13-5.19)	2.90 (2.47-3.43)	16.8 (13.7-22.0)	71.9 (53.4-98.8)	173 (121-227)	1350
Mexican American	05-06	*	<LOD	3.49 (2.09-5.23)	23.6 (11.8-33.2)	68.5 (32.1-107)	637
Mexican American	07-08	*	<LOD	4.44 (2.86-5.81)	22.5 (15.9-27.2)	47.7 (26.7-74.2)	531
Mexican American	09-10	*	<LOD	4.40 (3.09-6.31)	30.0 (16.0-36.9)	59.1 (36.9-87.2)	566
Non-Hispanic Black	05-06	*	.970 (<LOD-1.14)	4.48 (2.90-6.07)	22.0 (14.1-36.8)	47.5 (33.7-106)	678
Non-Hispanic Black	07-08	*	1.18 (<LOD-1.47)	6.37 (3.20-10.9)	38.8 (16.5-53.1)	90.7 (42.6-172)	597
Non-Hispanic Black	09-10	2.62 (2.14-3.21)	1.57 (1.20-2.05)	7.35 (5.15-9.97)	44.9 (22.0-75.0)	98.8 (60.0-162)	516
Non-Hispanic White	05-06	*	<LOD	4.73 (3.38-6.58)	27.5 (16.2-38.4)	70.6 (46.0-91.2)	1038
Non-Hispanic White	07-08	*	1.48 (<LOD-1.82)	5.71 (3.74-8.97)	32.3 (20.0-53.6)	75.7 (40.5-121)	1077
Non-Hispanic White	09-10	*	1.79 (<LOD-2.03)	6.63 (4.84-9.18)	37.7 (27.7-53.4)	114 (62.8-164)	1206

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

Urinary Ethyl paraben (2011 - 2016)†

CAS Number 120-47-8

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	*	<LOD	5.10 (4.00-7.10)	33.6 (24.6-42.9)	68.8 (52.1-106)	2489
Total population	13-14	*	<LOD	5.30 (4.50-6.50)	33.5 (25.5-46.4)	77.0 (66.4-97.9)	2686
Total population	15-16	*	<LOD	4.20 (3.00-6.20)	28.3 (21.0-42.4)	91.5 (59.7-123)	2651
Age 3-5 years	15-16	*	<LOD	1.40 (<LOD-2.30)	5.50 (2.30-35.6)	35.6 (4.20-74.9)	141
Age 6-11 years	11-12	*	<LOD	<LOD	3.40 (1.70-6.90)	6.90 (3.40-17.4)	396
Age 6-11 years	13-14	*	<LOD	1.30 (1.00-1.70)	5.60 (2.90-8.40)	10.7 (6.60-17.3)	409
Age 6-11 years	15-16	*	<LOD	1.30 (<LOD-1.60)	3.90 (2.00-9.20)	15.2 (5.10-38.1)	415
Age 12-19 years	11-12	*	<LOD	2.00 (1.10-3.10)	9.60 (5.50-14.0)	21.5 (9.60-69.2)	388
Age 12-19 years	13-14	*	<LOD	2.40 (1.60-3.40)	15.6 (6.60-29.3)	48.7 (19.4-83.4)	462
Age 12-19 years	15-16	*	<LOD	1.70 (1.10-2.80)	7.20 (2.20-28.2)	28.2 (6.30-62.9)	405
Age 20+ years	11-12	*	<LOD	7.20 (5.50-10.0)	41.1 (33.4-51.0)	86.5 (58.0-140)	1705
Age 20+ years	13-14	*	1.10 (<LOD-1.30)	6.90 (5.50-8.60)	43.3 (32.2-53.4)	84.8 (70.5-114)	1815
Age 20+ years	15-16	*	<LOD	6.30 (5.10-7.30)	35.5 (24.7-58.0)	117 (75.7-146)	1690
Male	11-12	*	<LOD	2.20 (1.60-2.90)	10.0 (6.10-18.9)	31.2 (18.9-39.8)	1259
Male	13-14	*	<LOD	2.40 (1.80-3.10)	8.50 (6.00-14.4)	34.0 (15.6-62.8)	1285
Male	15-16	*	<LOD	1.80 (1.40-2.20)	7.80 (6.20-13.5)	28.2 (16.8-39.3)	1307
Female	11-12	*	1.60 (1.10-2.60)	12.9 (9.40-17.5)	58.2 (45.4-68.8)	145 (86.5-153)	1230
Female	13-14	*	1.60 (1.20-2.30)	12.5 (8.60-17.8)	58.7 (46.4-72.9)	110 (81.5-149)	1401
Female	15-16	*	1.30 (<LOD-2.00)	11.1 (7.80-14.8)	63.0 (36.8-117)	169 (119-248)	1344
Mexican American	11-12	*	<LOD	4.40 (2.40-6.40)	22.0 (12.9-35.5)	45.4 (22.4-171)	316
Mexican American	13-14	*	<LOD	4.20 (2.60-7.70)	32.6 (16.7-53.4)	70.6 (52.5-123)	438
Mexican American	15-16	*	<LOD	1.80 (1.40-2.80)	15.2 (9.30-24.9)	53.4 (18.5-128)	513
Non-Hispanic Black	11-12	*	1.50 (1.10-2.00)	8.00 (5.80-12.8)	55.4 (33.4-79.7)	106 (82.8-139)	665
Non-Hispanic Black	13-14	*	1.40 (1.10-1.90)	6.80 (4.90-9.20)	48.8 (29.9-77.0)	115 (77.0-230)	609
Non-Hispanic Black	15-16	3.14 (2.56-3.84)	1.90 (1.40-2.60)	8.40 (5.90-11.9)	41.1 (29.6-60.8)	119 (64.7-139)	610
Non-Hispanic White	11-12	*	<LOD	4.60 (3.50-9.10)	33.6 (21.6-45.4)	62.6 (42.9-132)	813
Non-Hispanic White	13-14	*	<LOD	5.20 (3.90-6.50)	29.2 (17.8-46.4)	68.5 (48.7-86.6)	988
Non-Hispanic White	15-16	*	<LOD	4.40 (2.90-6.90)	28.4 (18.8-57.9)	110 (58.0-145)	781
All Hispanic	11-12	*	<LOD	4.50 (3.00-5.80)	24.4 (15.2-34.6)	55.9 (27.1-115)	571
All Hispanic	13-14	*	<LOD	5.50 (3.70-8.70)	35.5 (23.9-53.4)	90.4 (62.5-123)	690
All Hispanic	15-16	*	<LOD	2.30 (1.70-3.40)	17.7 (13.6-24.9)	61.1 (26.4-108)	859
Non-Hispanic Asian	11-12	*	<LOD	4.90 (3.40-8.30)	39.4 (16.0-59.1)	92.4 (43.4-186)	352
Non-Hispanic Asian	13-14	*	<LOD	6.00 (2.70-11.3)	52.1 (27.4-75.0)	99.9 (65.5-174)	289
Non-Hispanic Asian	15-16	*	<LOD	2.50 (1.90-5.60)	34.4 (16.5-57.3)	77.8 (43.7-99.7)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 1.00, 1.00, and 1.00 respectively.

<LOD means less than the limit of detection, which may vary for some chemicals by year and by individual sample.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Ethyl paraben (creatinine corrected) (2011 - 2016)†

CAS Number 120-47-8

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	*	<LOD	6.57 (5.32-8.80)	39.5 (28.4-50.6)	87.7 (63.6-121)	2487
Total population	13-14	*	<LOD	5.41 (4.31-6.33)	36.6 (26.5-47.5)	99.3 (69.5-129)	2684
Total population	15-16	*	<LOD	5.04 (3.55-6.78)	30.8 (23.1-40.7)	90.8 (56.2-124)	2650
Age 3-5 years	15-16	*	<LOD	5.00 (<LOD-7.89)	11.8 (6.46-94.7)	83.0 (8.49-129)	140
Age 6-11 years	11-12	*	<LOD	<LOD	5.92 (3.74-7.50)	7.95 (6.51-17.8)	395
Age 6-11 years	13-14	*	<LOD	2.45 (2.03-2.96)	6.30 (3.94-9.44)	12.4 (7.02-26.6)	409
Age 6-11 years	15-16	*	<LOD	2.54 (<LOD-2.84)	5.26 (3.94-9.28)	16.0 (6.46-26.9)	415
Age 12-19 years	11-12	*	<LOD	2.53 (1.81-3.83)	11.1 (6.70-14.5)	20.5 (11.9-44.1)	388
Age 12-19 years	13-14	*	<LOD	2.24 (1.83-2.81)	11.8 (4.44-15.7)	36.1 (13.2-73.2)	462
Age 12-19 years	15-16	*	<LOD	1.64 (1.29-2.05)	4.47 (2.70-12.0)	12.7 (3.95-41.6)	405
Age 20+ years	11-12	*	<LOD	9.17 (6.69-12.5)	46.4 (34.7-64.8)	110 (71.5-146)	1704
Age 20+ years	13-14	*	1.57 (<LOD-1.84)	6.97 (5.76-8.73)	47.0 (35.1-63.1)	113 (76.0-169)	1813
Age 20+ years	15-16	*	<LOD	6.82 (5.13-8.60)	40.7 (27.4-55.9)	107 (74.3-167)	1690
Male	11-12	*	<LOD	2.45 (2.07-2.94)	8.76 (5.32-14.2)	23.2 (13.2-33.1)	1258
Male	13-14	*	<LOD	2.17 (1.78-2.63)	7.89 (5.23-12.5)	26.6 (13.8-41.0)	1284
Male	15-16	*	<LOD	2.26 (1.87-2.45)	8.49 (5.07-11.3)	18.0 (12.4-23.8)	1307
Female	11-12	*	2.96 (2.37-4.08)	18.9 (12.5-27.6)	81.9 (55.6-121)	146 (115-181)	1229
Female	13-14	*	2.54 (2.09-3.05)	14.5 (10.3-20.8)	73.2 (51.8-104)	167 (104-221)	1400
Female	15-16	*	2.10 (<LOD-2.73)	11.2 (9.24-14.5)	63.4 (48.9-99.6)	189 (137-253)	1343
Mexican American	11-12	*	<LOD	4.73 (3.29-8.92)	25.4 (14.2-33.9)	45.4 (32.6-121)	316
Mexican American	13-14	*	<LOD	4.85 (3.13-8.28)	33.9 (16.4-60.9)	75.8 (30.0-319)	438
Mexican American	15-16	*	<LOD	2.73 (2.29-3.55)	14.0 (7.16-25.9)	43.1 (20.8-120)	513
Non-Hispanic Black	11-12	*	1.39 (1.06-1.75)	6.98 (4.74-8.92)	40.2 (24.8-55.3)	79.3 (61.1-135)	665
Non-Hispanic Black	13-14	*	1.20 (1.05-1.39)	5.13 (3.53-7.24)	30.6 (18.4-38.8)	77.2 (38.8-129)	609
Non-Hispanic Black	15-16	2.42 (2.04-2.88)	1.60 (1.29-2.09)	6.46 (4.87-8.63)	33.2 (18.5-49.0)	73.5 (47.9-135)	609
Non-Hispanic White	11-12	*	<LOD	7.20 (4.88-10.4)	40.1 (26.4-63.5)	93.8 (58.4-131)	811
Non-Hispanic White	13-14	*	<LOD	5.25 (3.95-6.33)	36.6 (22.0-51.9)	87.1 (51.9-162)	987
Non-Hispanic White	15-16	*	<LOD	5.90 (3.61-9.05)	35.8 (18.6-48.9)	99.6 (55.9-165)	781
All Hispanic	11-12	*	<LOD	5.03 (3.74-7.13)	31.6 (13.2-54.0)	60.2 (43.6-121)	571
All Hispanic	13-14	*	<LOD	6.55 (3.94-8.72)	35.1 (26.6-56.1)	103 (56.1-135)	690
All Hispanic	15-16	*	<LOD	3.03 (2.54-3.74)	18.1 (12.8-25.9)	70.4 (33.6-120)	859
Non-Hispanic Asian	11-12	*	<LOD	7.21 (4.46-13.6)	48.9 (26.3-78.9)	100 (50.4-149)	352
Non-Hispanic Asian	13-14	*	<LOD	7.52 (3.33-14.6)	65.9 (36.9-105)	116 (80.6-191)	288
Non-Hispanic Asian	15-16	*	<LOD	3.55 (2.75-4.64)	46.0 (11.0-73.5)	100 (46.0-257)	275

<LOD means less than the limit of detection for the urine levels not corrected for creatinine.

* Not calculated: proportion of results below limit of detection was too high to provide a valid result.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Methyl paraben (2005 - 2010)

CAS Number 99-76-3

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	56.4 (46.9-67.9)	63.5 (47.9-74.5)	216 (168-282)	560 (432-777)	974 (827-1110)	2548
Total population	07-08	60.1 (49.6-72.8)	59.8 (47.5-73.3)	204 (171-253)	544 (444-675)	902 (746-1100)	2604
Total population	09-10	57.1 (51.0-63.9)	55.1 (46.7-62.6)	213 (179-259)	621 (546-716)	1010 (919-1170)	2749
Age 6-11 years	05-06	33.5 (25.6-43.8)	25.0 (19.4-35.3)	86.7 (61.5-153)	289 (238-868)	1560 (389-2090)	356
Age 6-11 years	07-08	35.2 (25.0-49.6)	30.1 (19.6-38.5)	94.0 (46.6-214)	340 (218-527)	651 (430-995)	389
Age 6-11 years	09-10	33.9 (27.4-41.9)	26.5 (20.4-33.3)	79.4 (59.0-126)	415 (163-849)	873 (477-1230)	415
Age 12-19 years	05-06	53.8 (43.9-66.0)	53.5 (39.4-65.7)	192 (163-264)	491 (380-720)	901 (571-1210)	702
Age 12-19 years	07-08	64.9 (50.3-83.8)	66.3 (48.0-96.7)	221 (180-276)	521 (424-789)	971 (574-1390)	401
Age 12-19 years	09-10	53.9 (40.9-70.9)	56.5 (39.4-75.6)	176 (122-291)	716 (399-934)	984 (805-1210)	420
Age 20+ years	05-06	60.3 (48.7-74.7)	70.0 (57.1-85.3)	225 (177-322)	602 (439-814)	974 (827-1110)	1490
Age 20+ years	07-08	63.0 (51.8-76.7)	64.0 (51.4-79.8)	210 (172-267)	558 (447-678)	916 (743-1190)	1814
Age 20+ years	09-10	61.0 (53.5-69.6)	59.1 (50.6-72.6)	239 (188-276)	625 (566-711)	1010 (909-1270)	1914
Male	05-06	29.8 (24.8-35.8)	23.7 (19.5-29.4)	97.6 (78.1-121)	299 (229-355)	491 (385-743)	1270
Male	07-08	33.6 (27.3-41.3)	27.4 (20.8-39.9)	93.5 (71.0-137)	312 (260-407)	598 (460-734)	1294
Male	09-10	31.7 (27.6-36.4)	25.3 (20.6-30.6)	94.0 (76.8-122)	366 (275-482)	727 (569-919)	1399
Female	05-06	104 (80.8-135)	137 (93.0-168)	356 (279-427)	842 (660-974)	1110 (956-1330)	1278
Female	07-08	105 (90.2-123)	116 (95.2-139)	315 (248-424)	683 (558-901)	1140 (917-1420)	1310
Female	09-10	100 (87.9-114)	106 (90.9-125)	349 (271-405)	812 (696-931)	1230 (1010-1550)	1350
Mexican American	05-06	78.2 (61.0-100)	86.3 (64.7-121)	301 (233-349)	742 (474-896)	1100 (896-1170)	637
Mexican American	07-08	80.5 (66.0-98.2)	87.0 (63.4-117)	283 (222-348)	630 (533-791)	1030 (773-1240)	531
Mexican American	09-10	82.9 (68.6-100)	85.5 (73.0-99.8)	293 (231-385)	821 (536-1120)	1580 (855-2360)	566
Non-Hispanic Black	05-06	174 (133-229)	216 (150-306)	616 (465-789)	1180 (1010-1480)	1690 (1210-2880)	678
Non-Hispanic Black	07-08	152 (135-171)	159 (135-194)	483 (421-552)	1080 (938-1350)	1720 (1210-2700)	597
Non-Hispanic Black	09-10	191 (171-213)	223 (170-288)	678 (533-849)	1470 (1220-2010)	2340 (1650-2750)	516
Non-Hispanic White	05-06	43.8 (36.7-52.3)	44.3 (36.7-58.2)	165 (132-209)	412 (320-520)	806 (485-974)	1038
Non-Hispanic White	07-08	48.9 (39.9-59.9)	47.6 (37.8-62.0)	158 (129-198)	430 (301-557)	671 (524-921)	1077
Non-Hispanic White	09-10	43.5 (39.4-48.1)	41.3 (33.5-47.7)	150 (127-176)	463 (361-557)	757 (619-888)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 05-06, 07-08, and 09-10 are 1.0, 1.0, and 1.0 respectively.

Urinary Methyl paraben (creatinine corrected) (2005 - 2010)

CAS Number 99-76-3

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	55.0 (46.8-64.6)	58.8 (47.0-73.4)	221 (170-264)	527 (426-685)	902 (753-995)	2548
Total population	07-08	60.6 (49.8-73.8)	61.0 (45.3-83.2)	228 (188-288)	538 (439-645)	820 (694-1000)	2604
Total population	09-10	59.6 (53.5-66.3)	57.7 (52.3-68.5)	232 (195-262)	544 (468-632)	887 (734-1020)	2749
Age 6-11 years	05-06	36.8 (27.9-48.7)	26.9 (21.0-36.6)	108 (55.9-164)	259 (195-753)	1540 (313-2510)	356
Age 6-11 years	07-08	43.4 (31.3-60.2)	33.1 (21.8-55.0)	118 (62.3-197)	424 (218-668)	817 (558-1020)	389
Age 6-11 years	09-10	44.2 (35.7-54.6)	32.3 (26.5-42.9)	110 (67.6-158)	483 (258-722)	849 (535-1080)	415
Age 12-19 years	05-06	40.1 (33.7-47.8)	41.7 (31.5-56.3)	160 (129-178)	362 (280-428)	549 (434-656)	702
Age 12-19 years	07-08	50.5 (40.1-63.7)	52.8 (36.6-78.1)	167 (111-245)	336 (292-395)	475 (376-623)	401
Age 12-19 years	09-10	43.3 (33.5-55.9)	43.5 (27.5-68.6)	168 (123-221)	399 (292-558)	632 (425-890)	420
Age 20+ years	05-06	60.5 (50.5-72.5)	69.6 (51.5-90.9)	251 (189-320)	602 (462-729)	930 (788-1010)	1490
Age 20+ years	07-08	64.7 (52.9-79.2)	69.7 (51.1-92.5)	256 (209-316)	576 (450-710)	865 (697-1130)	1814
Age 20+ years	09-10	64.6 (57.0-73.3)	71.2 (56.6-84.7)	251 (217-287)	566 (495-673)	924 (753-1060)	1914
Male	05-06	23.9 (20.6-27.8)	21.1 (17.4-25.3)	72.1 (58.0-89.5)	209 (160-260)	368 (262-498)	1270
Male	07-08	28.3 (22.8-35.0)	23.5 (17.2-33.2)	80.7 (56.9-111)	257 (181-318)	444 (386-558)	1294
Male	09-10	28.4 (25.1-32.2)	23.3 (19.3-26.9)	77.7 (59.6-105)	260 (212-370)	516 (412-633)	1399
Female	05-06	123 (99.3-152)	147 (111-196)	377 (319-445)	788 (676-910)	1050 (937-1290)	1278
Female	07-08	126 (109-145)	160 (134-182)	374 (325-422)	734 (576-879)	1040 (835-1260)	1310
Female	09-10	121 (107-137)	146 (125-162)	359 (307-426)	745 (606-890)	1080 (924-1390)	1350
Mexican American	05-06	70.3 (57.1-86.7)	85.8 (67.2-106)	249 (191-303)	515 (431-656)	870 (656-1080)	637
Mexican American	07-08	78.5 (63.6-97.0)	96.2 (59.4-127)	293 (245-370)	627 (541-728)	831 (729-963)	531
Mexican American	09-10	82.3 (71.1-95.2)	95.2 (76.0-113)	284 (237-337)	623 (459-899)	1130 (657-2120)	566
Non-Hispanic Black	05-06	122 (93.0-161)	161 (98.2-225)	377 (334-462)	792 (581-1100)	1220 (916-1590)	678
Non-Hispanic Black	07-08	118 (105-133)	134 (111-155)	356 (311-403)	757 (573-882)	1030 (847-1290)	597
Non-Hispanic Black	09-10	138 (118-163)	165 (127-203)	403 (356-498)	928 (729-1120)	1350 (1080-1680)	516
Non-Hispanic White	05-06	46.1 (39.0-54.4)	45.6 (34.5-59.7)	170 (142-234)	447 (339-706)	814 (640-995)	1038
Non-Hispanic White	07-08	51.0 (40.5-64.2)	46.7 (35.8-66.3)	191 (154-230)	481 (383-614)	747 (574-966)	1077
Non-Hispanic White	09-10	48.9 (44.5-53.7)	45.9 (39.5-51.9)	184 (154-215)	468 (388-560)	734 (631-924)	1206

Urinary Methyl paraben (2011 - 2016)†

CAS Number 99-76-3

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	40.3 (35.4-46.0)	39.0 (32.4-47.8)	172 (149-198)	471 (401-593)	841 (692-975)	2489
Total population	13-14	48.1 (43.0-53.8)	41.7 (34.5-50.4)	167 (151-186)	445 (404-509)	819 (663-918)	2686
Total population	15-16	31.8 (27.0-37.5)	28.2 (22.1-34.8)	127 (97.6-154)	422 (334-528)	722 (619-807)	2651
Age 3-5 years	15-16	23.1 (16.2-33.0)	13.3 (9.30-24.4)	92.8 (53.3-200)	439 (123-1090)	1090 (332-1570)	141
Age 6-11 years	11-12	18.5 (15.7-21.9)	13.8 (11.2-17.7)	58.6 (43.8-78.2)	217 (155-363)	549 (329-983)	396
Age 6-11 years	13-14	28.6 (21.4-38.1)	22.7 (17.8-30.3)	62.1 (43.5-100)	260 (150-408)	542 (290-878)	409
Age 6-11 years	15-16	17.2 (13.4-22.2)	10.7 (8.40-15.1)	52.5 (29.8-92.1)	229 (144-332)	512 (256-909)	415
Age 12-19 years	11-12	26.3 (19.0-36.5)	17.0 (9.80-31.2)	121 (62.4-219)	538 (376-667)	772 (609-996)	388
Age 12-19 years	13-14	40.5 (32.7-50.1)	32.0 (25.2-41.7)	147 (89.6-193)	452 (309-725)	942 (612-1220)	462
Age 12-19 years	15-16	24.2 (16.2-36.2)	16.3 (10.4-30.9)	111 (52.6-184)	383 (184-670)	670 (287-1300)	405
Age 20+ years	11-12	46.8 (41.3-53.1)	48.9 (37.8-61.0)	188 (158-231)	477 (409-611)	870 (676-1070)	1705
Age 20+ years	13-14	52.2 (46.0-59.3)	46.8 (37.8-57.3)	179 (163-201)	457 (417-525)	823 (663-918)	1815
Age 20+ years	15-16	35.5 (30.4-41.4)	31.7 (27.1-41.6)	140 (108-166)	445 (357-531)	727 (647-807)	1690
Male	11-12	23.2 (19.2-28.1)	17.3 (12.5-23.4)	81.9 (65.7-119)	312 (224-396)	575 (401-822)	1259
Male	13-14	31.1 (26.8-36.2)	24.4 (20.1-29.8)	77.2 (67.2-94.6)	273 (230-328)	561 (408-740)	1285
Male	15-16	18.2 (15.7-21.2)	13.9 (11.2-17.5)	57.9 (43.8-70.6)	229 (167-291)	480 (348-633)	1307
Female	11-12	68.6 (59.0-79.9)	76.9 (67.5-89.2)	248 (201-309)	637 (493-819)	972 (772-1190)	1230
Female	13-14	72.8 (63.6-83.4)	73.9 (61.0-94.1)	248 (217-276)	583 (490-680)	904 (801-1070)	1401
Female	15-16	54.4 (44.6-66.4)	59.2 (40.8-86.5)	200 (163-267)	561 (479-670)	874 (707-1180)	1344
Mexican American	11-12	43.9 (31.5-61.2)	44.9 (26.2-68.1)	192 (111-302)	529 (328-912)	1080 (471-1740)	316
Mexican American	13-14	62.1 (49.2-78.4)	57.4 (45.1-84.0)	230 (154-341)	518 (361-725)	915 (535-1530)	438
Mexican American	15-16	33.8 (26.9-42.5)	30.9 (21.2-43.8)	120 (85.2-174)	420 (255-587)	741 (607-870)	513
Non-Hispanic Black	11-12	123 (100-152)	155 (115-199)	450 (341-579)	934 (819-1110)	1390 (1020-1990)	665
Non-Hispanic Black	13-14	111 (96.1-129)	110 (86.4-143)	375 (313-482)	927 (709-1180)	1430 (1020-2040)	609
Non-Hispanic Black	15-16	92.8 (76.4-113)	88.1 (67.9-109)	378 (298-471)	871 (655-1380)	1660 (1220-2470)	610
Non-Hispanic White	11-12	31.0 (26.9-35.8)	30.0 (23.4-36.4)	130 (96.8-160)	372 (269-453)	603 (453-772)	813
Non-Hispanic White	13-14	37.9 (32.8-43.7)	32.5 (28.3-39.0)	123 (94.3-153)	328 (267-391)	573 (422-711)	988
Non-Hispanic White	15-16	25.9 (21.9-30.7)	22.1 (17.5-27.6)	103 (77.5-137)	344 (267-444)	619 (479-705)	781
All Hispanic	11-12	50.1 (40.5-62.1)	46.0 (39.5-59.4)	203 (130-301)	666 (406-1080)	1170 (766-2100)	571
All Hispanic	13-14	61.9 (52.2-73.3)	60.0 (49.0-73.5)	221 (161-291)	539 (417-702)	842 (639-1070)	690
All Hispanic	15-16	34.2 (28.6-40.9)	31.7 (22.7-40.5)	119 (95.0-155)	353 (281-545)	707 (574-782)	859
Non-Hispanic Asian	11-12	36.1 (29.2-44.5)	37.1 (24.6-57.4)	140 (97.9-175)	395 (259-509)	692 (461-1030)	352
Non-Hispanic Asian	13-14	45.0 (37.9-53.5)	38.9 (30.5-53.0)	168 (118-197)	384 (271-475)	663 (393-914)	289
Non-Hispanic Asian	15-16	27.0 (16.9-43.1)	25.9 (12.1-38.5)	102 (57.1-207)	410 (157-917)	623 (366-1830)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 1.00, 1.00, and 1.00 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary Methyl paraben (creatinine corrected) (2011 - 2016)†

CAS Number 99-76-3

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	46 (41.3-51.3)	47.9 (36.9-61.7)	203 (179-228)	494 (399-571)	797 (632-993)	2487
Total population	13-14	48.2 (43.1-53.9)	41.8 (35.5-49.1)	180 (145-205)	410 (379-460)	653 (585-697)	2684
Total population	15-16	32.3 (28.1-37.2)	28.8 (23.8-36.2)	133 (113-157)	406 (333-436)	640 (545-780)	2650
Age 3-5 years	15-16	53.5 (38.6-74.1)	36.8 (22.7-60.8)	198 (90.7-344)	914 (223-2520)	2210 (535-4060)	140
Age 6-11 years	11-12	26.4 (22.8-30.7)	19.4 (14.6-23.8)	69.9 (53.0-113)	282 (182-458)	644 (354-1220)	395
Age 6-11 years	13-14	36.1 (28.0-46.5)	28.2 (20.9-36.5)	72.7 (50.9-122)	263 (160-564)	588 (341-881)	409
Age 6-11 years	15-16	22.2 (18.1-27.3)	13.6 (11.1-18.1)	60.2 (46.2-88.6)	287 (189-466)	684 (372-1060)	415
Age 12-19 years	11-12	25.7 (19.3-34.2)	17.1 (11.8-33.4)	100 (53.2-175)	335 (213-545)	609 (450-773)	388
Age 12-19 years	13-14	32.9 (27.7-39.0)	24.3 (18.1-33.8)	99.5 (75.3-145)	339 (234-412)	495 (377-655)	462
Age 12-19 years	15-16	18.8 (13.3-26.6)	13.5 (8.78-18.6)	65.4 (35.0-155)	311 (148-436)	467 (311-715)	405
Age 20+ years	11-12	53.4 (47.7-59.8)	64.9 (53.2-75.2)	228 (199-250)	523 (429-623)	815 (669-1110)	1704
Age 20+ years	13-14	52.6 (46.6-59.4)	47.5 (38.7-58.5)	199 (170-229)	429 (390-476)	666 (591-781)	1813
Age 20+ years	15-16	36.2 (31.5-41.6)	36.5 (27.9-45.2)	140 (125-182)	418 (353-449)	663 (541-794)	1690
Male	11-12	21.8 (18.3-26.0)	16.2 (12.5-21.1)	74.1 (57.1-93.3)	250 (181-321)	450 (327-560)	1258
Male	13-14	26.1 (22.9-29.8)	18.4 (16.6-22.2)	61.3 (52.1-74.0)	215 (172-284)	411 (323-479)	1284
Male	15-16	15.9 (13.7-18.4)	11.0 (9.65-13.9)	44.8 (38.0-57.8)	196 (148-228)	398 (285-438)	1307
Female	11-12	94.5 (83.1-108)	119 (101-136)	309 (259-356)	682 (571-805)	1090 (797-1300)	1229
Female	13-14	86.5 (74.1-101)	90.5 (72.2-125)	266 (237-307)	564 (506-614)	828 (665-998)	1400
Female	15-16	64 (54.4-75.4)	77.3 (58.2-98.0)	238 (174-303)	518 (447-613)	849 (715-1040)	1343
Mexican American	11-12	49.5 (37.0-66.2)	50.5 (32.5-79.7)	200 (133-298)	496 (316-982)	1090 (484-2160)	316
Mexican American	13-14	63.3 (46.8-85.5)	67.9 (45.6-96.0)	229 (146-317)	570 (360-764)	883 (578-1130)	438
Mexican American	15-16	35.4 (28.9-43.4)	35.0 (23.2-50.2)	123 (93.5-161)	432 (272-474)	609 (470-701)	513
Non-Hispanic Black	11-12	96.1 (79.4-116)	117 (88.0-157)	341 (274-382)	696 (626-842)	1090 (879-1190)	665
Non-Hispanic Black	13-14	82 (75.2-89.5)	84.6 (65.8-100)	251 (211-289)	584 (521-672)	924 (655-1120)	609
Non-Hispanic Black	15-16	71.8 (62.3-82.6)	76.5 (59.4-89.4)	287 (226-361)	622 (535-772)	1160 (772-1490)	609
Non-Hispanic White	11-12	37.8 (33.1-43.2)	33.4 (25.7-47.6)	177 (141-208)	425 (321-556)	719 (544-833)	811
Non-Hispanic White	13-14	39.9 (34.5-46.2)	31.8 (26.4-38.7)	139 (104-182)	357 (294-404)	560 (444-640)	987
Non-Hispanic White	15-16	27.5 (23.6-32.0)	23.2 (17.6-31.1)	119 (102-137)	329 (292-416)	556 (434-844)	781
All Hispanic	11-12	56.1 (46.3-68.0)	57.1 (47.2-75.2)	217 (160-332)	577 (456-813)	1090 (662-1490)	571
All Hispanic	13-14	61.4 (49.8-75.7)	60.8 (51.7-74.6)	227 (179-270)	542 (390-637)	774 (570-1070)	690
All Hispanic	15-16	34.9 (29.8-40.9)	34.5 (25.1-47.0)	126 (105-159)	398 (274-470)	577 (474-675)	859
Non-Hispanic Asian	11-12	48.3 (39.5-59.2)	54.9 (31.6-79.8)	198 (167-238)	473 (344-600)	840 (528-1170)	352
Non-Hispanic Asian	13-14	56.9 (45.2-71.6)	59.1 (35.7-82.0)	202 (160-275)	469 (365-608)	761 (475-911)	288
Non-Hispanic Asian	15-16	32.9 (22.6-47.7)	23.3 (15.1-43.2)	135 (85.5-247)	479 (325-725)	826 (548-1040)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary n-Propyl paraben (2005 - 2010)

CAS Number 94-13-3

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	7.91 (6.41-9.77)	8.70 (5.90-12.4)	48.9 (36.6-64.8)	160 (129-200)	299 (237-354)	2548
Total population	07-08	7.59 (6.22-9.26)	7.60 (5.70-10.6)	44.1 (34.1-55.6)	144 (115-196)	268 (231-290)	2604
Total population	09-10	6.97 (5.96-8.16)	6.40 (5.10-8.00)	44.3 (38.6-50.3)	153 (133-183)	297 (233-334)	2749
Age 6-11 years	05-06	3.41 (2.43-4.77)	2.50 (1.60-4.30)	11.1 (7.10-21.0)	47.5 (30.0-91.9)	125 (55.8-383)	356
Age 6-11 years	07-08	3.61 (2.39-5.44)	3.50 (1.90-6.00)	13.7 (7.60-22.8)	49.1 (21.7-99.6)	99.6 (80.4-120)	389
Age 6-11 years	09-10	3.28 (2.58-4.17)	2.70 (2.00-4.00)	10.2 (7.00-14.0)	42.9 (28.2-61.6)	114 (56.8-239)	415
Age 12-19 years	05-06	8.16 (5.70-11.7)	8.40 (5.00-13.9)	46.4 (24.1-68.5)	165 (96.7-222)	310 (201-361)	702
Age 12-19 years	07-08	8.85 (6.73-11.6)	7.90 (5.30-12.0)	49.2 (31.1-62.2)	193 (100-234)	271 (195-314)	401
Age 12-19 years	09-10	7.01 (5.13-9.58)	7.90 (4.40-11.0)	39.7 (24.8-57.8)	153 (78.1-299)	367 (136-694)	420
Age 20+ years	05-06	8.67 (6.83-11.0)	11.2 (7.70-14.4)	55.6 (41.2-75.6)	172 (130-233)	302 (237-367)	1490
Age 20+ years	07-08	8.04 (6.56-9.84)	8.40 (6.10-11.9)	48.8 (38.3-61.1)	152 (118-202)	272 (232-312)	1814
Age 20+ years	09-10	7.58 (6.28-9.15)	7.50 (5.30-9.90)	48.9 (42.6-58.0)	166 (139-199)	298 (251-334)	1914
Male	05-06	2.96 (2.33-3.77)	2.30 (1.60-3.10)	13.8 (9.00-18.0)	51.7 (39.7-70.9)	125 (77.2-185)	1270
Male	07-08	3.02 (2.47-3.71)	2.30 (1.70-3.30)	12.6 (8.40-17.4)	56.4 (38.9-89.5)	140 (98.1-209)	1294
Male	09-10	2.77 (2.26-3.40)	2.00 (1.40-2.60)	11.4 (7.70-15.4)	57.3 (44.6-67.8)	134 (86.1-184)	1399
Female	05-06	20.4 (16.0-25.9)	29.1 (21.6-37.5)	93.0 (75.7-129)	254 (193-318)	357 (318-395)	1278
Female	07-08	18.4 (15.7-21.5)	23.3 (20.5-26.1)	76.3 (62.9-100)	210 (164-269)	312 (271-363)	1310
Female	09-10	16.9 (14.6-19.4)	20.2 (17.0-25.9)	83.3 (70.0-92.4)	227 (171-295)	361 (297-502)	1350
Mexican American	05-06	10.6 (8.08-13.8)	12.1 (7.00-17.5)	65.9 (43.5-93.3)	247 (174-293)	389 (293-453)	637
Mexican American	07-08	7.82 (5.98-10.2)	7.00 (4.20-12.9)	52.1 (36.9-64.1)	146 (105-201)	217 (161-401)	531
Mexican American	09-10	8.94 (7.25-11.0)	8.70 (5.70-13.3)	58.9 (45.7-68.5)	182 (117-299)	451 (269-911)	566
Non-Hispanic Black	05-06	26.8 (21.5-33.3)	34.7 (28.3-44.2)	125 (89.5-165)	331 (236-411)	531 (367-730)	678
Non-Hispanic Black	07-08	21.3 (18.4-24.7)	28.6 (21.8-34.8)	85.4 (70.8-96.9)	222 (176-282)	410 (277-506)	597
Non-Hispanic Black	09-10	26.1 (21.8-31.3)	29.9 (23.4-39.5)	129 (87.4-167)	322 (229-503)	572 (369-654)	516
Non-Hispanic White	05-06	6.21 (5.02-7.68)	6.00 (4.60-9.10)	35.7 (28.4-49.6)	130 (92.1-157)	229 (156-318)	1038
Non-Hispanic White	07-08	6.49 (5.05-8.33)	6.10 (4.50-9.20)	36.8 (26.9-47.5)	129 (91.3-196)	251 (190-290)	1077
Non-Hispanic White	09-10	5.34 (4.55-6.27)	4.40 (3.60-5.70)	35.6 (26.1-44.3)	128 (92.4-141)	235 (170-300)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 05-06, 07-08, and 09-10 are 0.2, 0.2, and 0.2 respectively.

Urinary n-Propyl paraben (creatinine corrected) (2005 - 2010)

CAS Number 94-13-3

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	05-06	7.71 (6.40-9.30)	8.27 (5.87-11.3)	52.9 (41.6-66.1)	161 (140-178)	263 (226-288)	2548
Total population	07-08	7.65 (6.22-9.40)	8.00 (5.34-11.6)	50.0 (39.5-59.8)	138 (115-168)	235 (199-293)	2604
Total population	09-10	7.28 (6.30-8.41)	6.67 (5.35-8.50)	45.1 (37.3-53.5)	155 (128-187)	253 (223-300)	2749
Age 6-11 years	05-06	3.75 (2.67-5.26)	2.70 (1.89-4.43)	11.5 (8.07-16.0)	52.1 (22.9-100)	121 (55.5-352)	356
Age 6-11 years	07-08	4.45 (3.03-6.53)	3.50 (1.79-6.85)	16.5 (8.82-28.8)	59.1 (28.6-94.4)	98.4 (65.0-139)	389
Age 6-11 years	09-10	4.27 (3.34-5.47)	3.33 (2.41-4.62)	12.0 (8.52-16.6)	46.1 (27.5-108)	143 (72.5-243)	415
Age 12-19 years	05-06	6.08 (4.36-8.49)	5.44 (3.03-10.5)	33.0 (20.7-48.7)	116 (81.9-161)	175 (140-239)	702
Age 12-19 years	07-08	6.88 (5.30-8.94)	5.68 (3.51-9.90)	33.2 (26.7-46.5)	103 (87.2-112)	132 (105-235)	401
Age 12-19 years	09-10	5.64 (4.17-7.62)	5.19 (3.53-9.03)	32.9 (20.4-42.4)	107 (57.6-217)	218 (101-397)	420
Age 20+ years	05-06	8.70 (7.08-10.7)	10.8 (7.39-15.2)	63.2 (49.7-80.5)	178 (152-198)	270 (236-293)	1490
Age 20+ years	07-08	8.26 (6.70-10.2)	9.91 (6.15-12.6)	57.9 (47.3-69.1)	161 (127-199)	273 (212-312)	1814
Age 20+ years	09-10	8.03 (6.74-9.56)	8.27 (6.10-10.8)	55.5 (43.5-66.0)	164 (136-200)	270 (232-314)	1914
Male	05-06	2.38 (1.92-2.95)	1.84 (1.42-2.46)	9.52 (6.79-12.8)	40.5 (31.1-51.5)	90.8 (56.8-125)	1270
Male	07-08	2.55 (2.06-3.15)	1.74 (1.40-2.53)	10.7 (5.99-15.4)	44.7 (29.0-66.1)	112 (77.4-144)	1294
Male	09-10	2.48 (2.05-3.00)	1.71 (1.35-2.25)	8.85 (6.12-14.2)	40.3 (33.8-57.6)	105 (74.5-143)	1399
Female	05-06	23.9 (19.9-28.8)	34.9 (26.9-46.6)	114 (101-132)	235 (193-263)	306 (277-342)	1278
Female	07-08	22.0 (18.7-25.8)	30.4 (25.2-36.3)	93.3 (80.8-110)	199 (161-245)	302 (271-370)	1310
Female	09-10	20.4 (17.8-23.3)	25.7 (21.8-30.7)	97.1 (81.8-115)	223 (191-248)	334 (295-389)	1350
Mexican American	05-06	9.49 (7.29-12.4)	11.0 (6.69-16.4)	55.2 (44.9-79.6)	186 (147-271)	329 (194-441)	637
Mexican American	07-08	7.63 (5.72-10.2)	6.60 (4.10-13.4)	47.9 (39.5-66.7)	162 (123-187)	273 (187-304)	531
Mexican American	09-10	8.87 (7.42-10.6)	7.97 (5.87-12.8)	54.7 (42.3-73.8)	184 (140-269)	325 (221-575)	566
Non-Hispanic Black	05-06	18.8 (15.2-23.3)	23.6 (19.0-30.8)	83.7 (61.8-105)	217 (169-255)	318 (242-377)	678
Non-Hispanic Black	07-08	16.6 (14.1-19.5)	22.9 (18.0-27.2)	64.2 (51.4-73.3)	141 (117-172)	254 (169-311)	597
Non-Hispanic Black	09-10	18.9 (15.2-23.5)	21.1 (18.2-27.7)	80.9 (59.5-109)	200 (151-249)	301 (223-376)	516
Non-Hispanic White	05-06	6.53 (5.32-8.02)	6.45 (3.96-9.11)	47.4 (32.6-65.3)	146 (119-184)	241 (184-278)	1038
Non-Hispanic White	07-08	6.77 (5.14-8.93)	5.81 (3.94-10.5)	45.4 (32.2-61.4)	132 (105-172)	215 (169-295)	1077
Non-Hispanic White	09-10	6.00 (5.19-6.94)	5.12 (4.05-6.25)	37.8 (32.1-49.2)	148 (115-183)	242 (215-272)	1206

Urinary n-Propyl paraben (2011 - 2016)†

CAS Number 94-13-3

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	5.39 (4.69-6.19)	4.70 (3.80-5.90)	28.5 (24.5-34.1)	126 (94.0-142)	200 (163-278)	2489
Total population	13-14	5.74 (5.06-6.50)	4.80 (3.90-5.70)	33.7 (27.1-41.1)	120 (106-130)	224 (193-284)	2686
Total population	15-16	4.20 (3.43-5.13)	3.20 (2.40-4.50)	22.8 (17.3-29.5)	86.8 (77.5-100)	176 (148-208)	2651
Age 3-5 years	15-16	3.24 (2.28-4.60)	2.20 (1.40-2.60)	7.30 (4.10-23.3)	79.3 (30.6-226)	226 (30.6-458)	141
Age 6-11 years	11-12	2.20 (1.81-2.68)	1.40 (1.20-1.80)	6.40 (4.80-11.8)	28.1 (17.9-53.4)	77.7 (41.3-185)	396
Age 6-11 years	13-14	2.96 (2.20-3.99)	2.40 (1.80-2.80)	7.60 (5.90-15.4)	44.7 (28.5-75.6)	113 (45.3-213)	409
Age 6-11 years	15-16	2.10 (1.62-2.72)	1.50 (1.20-1.80)	4.90 (3.30-7.80)	31.5 (10.1-60.8)	69.7 (43.9-86.8)	415
Age 12-19 years	11-12	3.69 (2.77-4.92)	2.80 (1.80-4.20)	14.7 (9.50-23.4)	81.8 (51.5-151)	208 (122-357)	388
Age 12-19 years	13-14	5.15 (3.89-6.83)	3.10 (2.40-4.90)	24.5 (12.5-54.0)	119 (90.5-147)	217 (139-299)	462
Age 12-19 years	15-16	3.09 (1.99-4.81)	1.90 (1.10-3.90)	15.0 (4.50-30.6)	53.6 (30.6-166)	221 (48.8-424)	405
Age 20+ years	11-12	6.29 (5.45-7.25)	6.20 (4.80-8.50)	35.4 (29.2-43.2)	135 (98.1-151)	213 (163-323)	1705
Age 20+ years	13-14	6.27 (5.51-7.12)	5.70 (4.40-7.20)	39.2 (31.3-43.2)	126 (112-161)	235 (202-304)	1815
Age 20+ years	15-16	4.74 (3.93-5.72)	4.00 (2.90-5.30)	27.1 (18.9-35.8)	99.8 (85.2-111)	182 (157-227)	1690
Male	11-12	2.44 (1.99-2.98)	1.70 (1.40-2.10)	8.90 (6.70-12.0)	46.5 (28.0-80.6)	137 (65.8-258)	1259
Male	13-14	2.61 (2.20-3.09)	1.70 (1.30-2.20)	9.20 (6.20-13.3)	49.8 (37.1-65.8)	128 (94.0-175)	1285
Male	15-16	1.95 (1.66-2.28)	1.30 (1.10-1.60)	5.40 (4.30-8.50)	35.8 (27.7-42.3)	79.2 (55.0-102)	1307
Female	11-12	11.6 (10.0-13.4)	13.8 (12.4-16.3)	54.7 (48.6-67.2)	151 (141-175)	252 (183-323)	1230
Female	13-14	12.2 (10.6-14.1)	13.5 (10.3-18.2)	57.0 (50.1-67.6)	179 (143-203)	329 (230-376)	1401
Female	15-16	8.77 (6.55-11.8)	8.90 (5.60-14.1)	44.6 (34.0-58.3)	128 (107-176)	266 (190-413)	1344
Mexican American	11-12	6.15 (3.98-9.52)	6.50 (2.60-11.1)	30.0 (22.7-57.5)	181 (70.4-312)	312 (146-1060)	316
Mexican American	13-14	7.76 (5.55-10.8)	6.00 (3.60-14.0)	45.0 (29.7-57.4)	124 (80.7-184)	195 (137-342)	438
Mexican American	15-16	4.46 (3.40-5.85)	3.10 (2.30-4.60)	21.2 (13.4-31.8)	87.3 (58.4-158)	200 (126-298)	513
Non-Hispanic Black	11-12	16.4 (14.1-19.1)	18.0 (13.4-23.1)	61.1 (49.9-82.9)	183 (147-225)	340 (221-477)	665
Non-Hispanic Black	13-14	15.4 (13.1-18.0)	15.7 (10.8-20.3)	71.8 (58.2-86.4)	249 (187-305)	396 (344-430)	609
Non-Hispanic Black	15-16	13.3 (10.9-16.3)	14.1 (11.7-17.8)	53.9 (44.6-72.0)	175 (140-213)	265 (203-376)	610
Non-Hispanic White	11-12	4.14 (3.57-4.79)	3.30 (2.50-4.20)	21.0 (15.3-30.8)	94.6 (70.3-135)	163 (137-202)	813
Non-Hispanic White	13-14	4.46 (3.78-5.27)	3.40 (2.70-4.20)	23.8 (17.4-32.2)	98.3 (78.6-120)	202 (130-241)	988
Non-Hispanic White	15-16	3.42 (2.78-4.22)	2.60 (1.90-3.30)	17.8 (9.30-29.0)	70.4 (54.5-100)	132 (105-198)	781
All Hispanic	11-12	6.87 (5.42-8.71)	6.70 (3.80-9.30)	33.6 (26.1-50.4)	181 (95.3-273)	333 (236-556)	571
All Hispanic	13-14	7.73 (6.26-9.56)	6.20 (4.40-10.4)	45.0 (35.7-54.1)	127 (112-157)	207 (165-324)	690
All Hispanic	15-16	4.61 (3.81-5.57)	3.60 (2.70-4.80)	22.3 (16.2-27.1)	86.2 (66.3-120)	190 (125-255)	859
Non-Hispanic Asian	11-12	5.07 (4.06-6.34)	5.50 (3.40-7.70)	27.0 (22.3-37.2)	95.8 (63.6-143)	169 (123-292)	352
Non-Hispanic Asian	13-14	4.42 (3.71-5.27)	3.90 (2.20-8.10)	28.8 (19.3-41.1)	77.8 (60.6-120)	158 (95.5-209)	289
Non-Hispanic Asian	15-16	2.93 (1.66-5.19)	2.00 (1.10-4.80)	15.7 (7.00-37.3)	72.4 (36.7-96.9)	120 (65.0-367)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 0.200, 0.100, and 0.100 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary n-Propyl paraben (creatinine corrected) (2011 - 2016)†

CAS Number 94-13-3

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	6.16 (5.42-6.99)	5.35 (3.97-7.07)	36.7 (31.1-42.2)	129 (105-162)	215 (183-321)	2487
Total population	13-14	5.74 (5.10-6.46)	4.75 (3.81-5.91)	36.7 (30.3-41.9)	124 (99.0-148)	222 (186-253)	2684
Total population	15-16	4.26 (3.59-5.07)	3.17 (2.32-4.60)	22.9 (19.1-29.0)	83.0 (69.9-96.3)	158 (129-196)	2650
Age 3-5 years	15-16	7.5 (5.48-10.3)	4.06 (3.03-5.91)	16.3 (8.46-43.4)	120 (43.7-592)	724 (43.4-1510)	140
Age 6-11 years	11-12	3.18 (2.62-3.87)	2.09 (1.58-3.16)	9.11 (5.71-12.2)	37.0 (19.8-53.1)	116 (43.6-202)	395
Age 6-11 years	13-14	3.74 (2.84-4.94)	2.73 (1.75-4.00)	10.9 (7.00-18.3)	40.5 (24.4-98.6)	153 (52.1-271)	409
Age 6-11 years	15-16	2.7 (2.19-3.33)	2.08 (1.44-2.60)	6.21 (4.26-9.84)	34.2 (15.1-66.6)	69.5 (45.7-127)	415
Age 12-19 years	11-12	3.6 (2.75-4.70)	2.46 (1.93-3.52)	14.9 (9.36-24.9)	69.8 (32.3-130)	133 (75.6-202)	388
Age 12-19 years	13-14	4.18 (3.24-5.39)	2.82 (2.03-4.46)	20.7 (9.86-39.0)	76.0 (56.4-102)	118 (94.2-197)	462
Age 12-19 years	15-16	2.4 (1.62-3.57)	1.43 (1.11-2.96)	10.1 (4.52-16.4)	60.4 (20.1-86.6)	103 (60.4-263)	405
Age 20+ years	11-12	7.17 (6.22-8.27)	7.28 (5.23-9.77)	45.7 (38.1-51.6)	152 (117-183)	258 (190-365)	1704
Age 20+ years	13-14	6.3 (5.61-7.08)	5.71 (4.40-7.22)	41.8 (35.9-47.8)	138 (112-166)	231 (199-259)	1813
Age 20+ years	15-16	4.83 (4.08-5.72)	4.22 (2.82-5.89)	29.0 (22.8-34.3)	91.5 (73.1-113)	184 (135-224)	1690
Male	11-12	2.29 (1.90-2.75)	1.38 (1.21-1.67)	7.39 (6.02-9.39)	46.2 (28.5-72.7)	94.5 (57.3-190)	1258
Male	13-14	2.19 (1.87-2.56)	1.35 (1.17-1.59)	7.42 (5.24-8.93)	42.2 (32.3-52.2)	110 (78.9-141)	1284
Male	15-16	1.7 (1.47-1.96)	1.15 (.966-1.35)	5.36 (3.28-9.13)	30.5 (20.5-41.4)	64.1 (52.7-84.6)	1307
Female	11-12	16 (13.9-18.4)	20.9 (16.7-25.7)	74.7 (62.3-88.7)	185 (164-213)	345 (239-426)	1229
Female	13-14	14.4 (12.1-17.2)	17.5 (13.2-22.3)	65.9 (56.9-82.9)	198 (152-226)	281 (237-338)	1400
Female	15-16	10.3 (7.96-13.4)	11.1 (7.50-17.2)	47.8 (40.1-60.4)	130 (107-160)	235 (196-331)	1343
Mexican American	11-12	6.93 (4.57-10.5)	7.19 (3.71-10.9)	40.5 (24.4-75.9)	159 (90.0-236)	315 (159-536)	316
Mexican American	13-14	7.9 (5.27-11.9)	6.75 (3.60-16.0)	52.7 (30.9-67.2)	134 (89.0-205)	231 (158-284)	438
Mexican American	15-16	4.68 (3.68-5.95)	3.44 (2.25-6.05)	22.1 (13.8-32.8)	97.2 (60.6-132)	196 (130-238)	513
Non-Hispanic Black	11-12	12.8 (11.3-14.4)	13.9 (11.3-18.0)	54.5 (43.4-65.7)	140 (105-185)	207 (166-333)	665
Non-Hispanic Black	13-14	11.4 (10.0-12.9)	10.8 (7.87-13.9)	56.0 (44.6-67.6)	137 (108-186)	233 (191-274)	609
Non-Hispanic Black	15-16	10.3 (8.81-12.0)	9.94 (7.53-13.4)	46.3 (38.8-56.2)	130 (107-157)	229 (157-369)	609
Non-Hispanic White	11-12	5.06 (4.35-5.88)	3.20 (2.50-5.06)	31.1 (27.3-37.1)	120 (88.2-164)	213 (164-345)	811
Non-Hispanic White	13-14	4.69 (4.01-5.48)	3.58 (2.66-4.63)	29.2 (22.9-36.2)	112 (81.6-158)	212 (165-259)	987
Non-Hispanic White	15-16	3.63 (3.02-4.36)	2.38 (1.87-3.61)	22.1 (15.3-28.5)	73.1 (52.1-91.5)	134 (96.7-200)	781
All Hispanic	11-12	7.7 (5.99-9.90)	7.47 (5.00-10.1)	51.5 (35.2-72.9)	162 (119-196)	318 (185-473)	571
All Hispanic	13-14	7.67 (5.91-9.97)	6.40 (4.71-10.3)	46.5 (35.4-61.9)	139 (109-205)	240 (173-285)	690
All Hispanic	15-16	4.7 (3.97-5.56)	3.64 (2.68-5.59)	22.6 (17.6-31.3)	95.1 (63.5-118)	177 (121-233)	859
Non-Hispanic Asian	11-12	6.8 (5.47-8.45)	6.90 (3.41-13.7)	46.5 (35.6-59.5)	136 (94.4-188)	222 (168-304)	352
Non-Hispanic Asian	13-14	5.54 (4.23-7.26)	5.22 (2.70-8.39)	43.9 (31.4-57.0)	104 (87.0-137)	153 (113-250)	288
Non-Hispanic Asian	15-16	3.57 (2.25-5.67)	2.25 (1.27-5.39)	21.2 (8.80-43.4)	102 (52.1-153)	182 (125-276)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary 2,4-Dichlorophenol (2003 - 2010)

CAS Number 120-83-2

Metabolite of other chlorophenols

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	1.04 (.895-1.21)	.900 (.800-1.10)	2.70 (2.30-3.10)	8.80 (6.60-11.9)	21.3 (14.1-29.5)	2525
Total population	05-06	.945 (.791-1.13)	.800 (.700-1.00)	2.00 (1.60-2.40)	4.90 (3.90-6.30)	11.9 (7.00-20.4)	2548
Total population	07-08	.970 (.852-1.11)	.800 (.700-.900)	1.80 (1.50-2.30)	5.10 (3.80-7.60)	12.6 (9.00-18.1)	2604
Total population	09-10	.803 (.729-.885)	.700 (.700-.800)	1.50 (1.40-1.70)	4.00 (3.30-5.00)	8.80 (6.40-15.7)	2749
Age 6-11 years	03-04	1.01 (.796-1.28)	.800 (.600-1.20)	2.30 (1.70-3.20)	7.70 (3.80-20.1)	23.5 (9.40-31.0)	314
Age 6-11 years	05-06	1.01 (.879-1.15)	.800 (.800-1.10)	2.00 (1.60-2.30)	4.90 (3.30-6.60)	9.80 (6.30-17.6)	356
Age 6-11 years	07-08	1.04 (.778-1.39)	.900 (.700-1.20)	1.80 (1.20-2.80)	5.90 (2.90-10.1)	11.4 (6.60-20.7)	389
Age 6-11 years	09-10	.975 (.768-1.24)	.700 (.600-.900)	1.80 (1.40-2.30)	5.00 (3.20-8.40)	14.2 (4.40-90.9)	415
Age 12-19 years	03-04	1.27 (.971-1.67)	1.10 (.800-1.50)	3.40 (2.50-5.00)	13.6 (6.10-25.5)	31.5 (14.5-85.0)	722
Age 12-19 years	05-06	1.18 (.997-1.39)	1.00 (.900-1.20)	2.50 (2.00-3.10)	5.50 (4.00-8.30)	13.9 (7.10-33.6)	702
Age 12-19 years	07-08	1.19 (.989-1.44)	1.10 (.800-1.40)	2.60 (2.00-3.00)	5.60 (3.10-10.8)	11.6 (5.70-36.5)	401
Age 12-19 years	09-10	.967 (.794-1.18)	.800 (.700-.900)	1.60 (1.40-2.70)	5.80 (3.70-10.1)	14.4 (7.10-24.8)	420
Age 20+ years	03-04	1.01 (.874-1.17)	.900 (.700-1.10)	2.60 (2.20-3.00)	8.50 (6.60-10.4)	19.4 (12.2-27.0)	1489
Age 20+ years	05-06	.907 (.737-1.12)	.800 (.600-1.00)	2.00 (1.50-2.40)	4.90 (3.70-6.40)	11.1 (6.50-20.9)	1490
Age 20+ years	07-08	.932 (.820-1.06)	.800 (.700-.900)	1.70 (1.40-2.20)	5.00 (3.80-7.60)	13.2 (9.20-18.1)	1814
Age 20+ years	09-10	.764 (.699-.836)	.700 (.600-.700)	1.40 (1.30-1.60)	3.60 (3.10-4.50)	8.00 (5.60-13.9)	1914
Male	03-04	1.22 (1.02-1.45)	1.10 (.800-1.50)	3.00 (2.50-3.50)	9.40 (6.80-13.9)	22.7 (13.6-40.9)	1231
Male	05-06	1.16 (.973-1.37)	1.00 (.900-1.20)	2.40 (2.00-2.80)	5.50 (4.40-7.90)	12.9 (7.30-25.3)	1270
Male	07-08	1.06 (.943-1.19)	.900 (.800-1.00)	1.90 (1.60-2.20)	5.40 (3.90-8.20)	13.6 (10.1-18.1)	1294
Male	09-10	.879 (.789-.979)	.800 (.700-.800)	1.60 (1.40-1.80)	4.00 (3.20-5.70)	10.4 (5.20-18.4)	1399
Female	03-04	.896 (.754-1.07)	.800 (.600-.900)	2.30 (2.00-2.70)	8.10 (5.70-11.1)	19.8 (12.0-27.5)	1294
Female	05-06	.779 (.637-.954)	.700 (.500-.800)	1.50 (1.30-2.10)	4.30 (2.80-6.20)	9.40 (5.40-19.6)	1278
Female	07-08	.893 (.750-1.06)	.700 (.600-.800)	1.80 (1.20-2.50)	4.70 (3.10-8.00)	11.9 (7.60-18.6)	1310
Female	09-10	.737 (.659-.824)	.600 (.600-.700)	1.40 (1.30-1.70)	4.00 (3.00-5.50)	7.80 (5.80-15.8)	1350
Mexican American	03-04	1.94 (1.46-2.56)	1.70 (1.20-2.10)	4.50 (2.80-9.30)	26.9 (12.7-52.1)	66.0 (47.5-84.2)	617
Mexican American	05-06	1.97 (1.49-2.59)	1.60 (1.20-2.10)	5.00 (3.30-6.60)	20.9 (8.80-39.7)	46.5 (21.9-79.5)	637
Mexican American	07-08	1.59 (.969-2.60)	1.20 (.600-2.60)	4.20 (2.10-9.50)	13.4 (7.90-29.6)	38.0 (16.4-74.0)	531
Mexican American	09-10	1.25 (.860-1.81)	.900 (.700-1.30)	2.70 (1.60-4.30)	11.3 (4.30-26.3)	29.1 (7.60-76.3)	566
Non-Hispanic Black	03-04	2.42 (1.92-3.06)	2.20 (1.70-2.70)	7.40 (4.00-9.60)	20.8 (11.2-38.3)	49.2 (24.0-69.7)	636
Non-Hispanic Black	05-06	2.45 (1.93-3.12)	2.10 (1.70-2.40)	5.20 (3.90-7.40)	20.3 (10.6-36.9)	42.6 (21.3-129)	678
Non-Hispanic Black	07-08	1.73 (1.49-2.01)	1.40 (1.10-1.60)	3.70 (2.90-4.90)	17.8 (9.70-25.8)	37.7 (24.6-56.8)	597
Non-Hispanic Black	09-10	1.54 (1.06-2.23)	1.20 (.800-2.00)	3.10 (2.10-4.80)	12.4 (4.30-46.4)	35.2 (7.80-107)	516
Non-Hispanic White	03-04	.837 (.698-1.00)	.700 (.600-.900)	2.10 (1.70-2.60)	6.20 (4.00-8.80)	13.4 (8.60-22.0)	1077
Non-Hispanic White	05-06	.734 (.610-.883)	.700 (.500-.900)	1.40 (1.20-1.80)	3.10 (2.70-3.90)	5.30 (4.30-7.90)	1038
Non-Hispanic White	07-08	.817 (.732-.911)	.700 (.600-.800)	1.50 (1.20-1.80)	3.10 (2.60-4.40)	6.40 (4.60-8.80)	1077
Non-Hispanic White	09-10	.651 (.594-.712)	.600 (.500-.700)	1.30 (1.10-1.40)	2.80 (2.20-3.50)	5.60 (3.80-7.40)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 03-04, 05-06, 07-08 and 09-10 are 0.17, 0.2, 0.2, and 0.2 respectively.

Urinary 2,4-Dichlorophenol (creatinine corrected) (2003 - 2010)

CAS Number 120-83-2

Metabolite of other chlorophenols

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	1.02 (.873-1.18)	.880 (.770-1.00)	2.19 (1.84-2.73)	7.39 (5.00-9.83)	15.4 (11.1-20.9)	2522
Total population	05-06	.922 (.798-1.06)	.750 (.660-.880)	1.58 (1.33-1.86)	4.00 (3.00-5.71)	8.90 (5.98-16.6)	2548
Total population	07-08	.978 (.867-1.10)	.790 (.700-.880)	1.63 (1.36-1.89)	4.00 (3.14-5.63)	11.7 (6.82-18.9)	2604
Total population	09-10	.838 (.757-.929)	.680 (.630-.740)	1.33 (1.18-1.58)	3.48 (2.77-4.55)	8.17 (5.44-14.3)	2749
Age 6-11 years	03-04	1.23 (.965-1.56)	1.03 (.750-1.45)	2.39 (1.82-3.36)	9.29 (3.98-16.5)	20.9 (12.9-38.1)	314
Age 6-11 years	05-06	1.11 (.950-1.29)	.970 (.800-1.08)	1.74 (1.38-2.19)	4.38 (3.33-7.80)	10.9 (5.12-23.3)	356
Age 6-11 years	07-08	1.28 (1.00-1.63)	1.06 (.750-1.40)	2.06 (1.44-3.21)	4.49 (3.13-9.27)	11.2 (5.70-24.4)	389
Age 6-11 years	09-10	1.27 (.986-1.64)	.930 (.820-1.20)	2.03 (1.54-2.94)	5.89 (3.50-11.0)	15.9 (5.71-121)	415
Age 12-19 years	03-04	.954 (.725-1.26)	.790 (.660-1.00)	2.08 (1.44-3.75)	8.02 (4.72-12.5)	14.8 (8.02-40.0)	720
Age 12-19 years	05-06	.878 (.765-1.01)	.700 (.600-.800)	1.65 (1.22-1.93)	3.92 (2.90-4.82)	8.28 (4.82-15.9)	702
Age 12-19 years	07-08	.927 (.776-1.11)	.790 (.640-1.00)	1.51 (1.14-2.22)	3.81 (2.38-5.92)	10.3 (4.28-21.8)	401
Age 12-19 years	09-10	.778 (.656-.921)	.580 (.510-.690)	1.18 (.970-1.40)	3.38 (2.11-6.27)	7.38 (3.39-19.4)	420
Age 20+ years	03-04	1.00 (.863-1.16)	.870 (.770-1.00)	2.17 (1.80-2.69)	7.16 (4.88-9.01)	15.0 (10.6-20.8)	1488
Age 20+ years	05-06	.909 (.774-1.07)	.740 (.650-.870)	1.55 (1.25-1.89)	4.00 (2.84-6.19)	8.80 (5.71-16.8)	1490
Age 20+ years	07-08	.958 (.847-1.08)	.770 (.670-.880)	1.60 (1.32-1.85)	3.98 (3.14-5.59)	12.1 (8.15-18.9)	1814
Age 20+ years	09-10	.810 (.735-.892)	.670 (.620-.730)	1.27 (1.11-1.56)	3.33 (2.65-4.23)	7.64 (5.16-12.3)	1914
Male	03-04	.995 (.850-1.17)	.900 (.730-1.06)	2.23 (1.82-2.82)	6.84 (4.54-9.01)	13.7 (9.29-21.8)	1230
Male	05-06	.927 (.814-1.06)	.770 (.670-.880)	1.60 (1.36-1.86)	4.12 (3.08-5.45)	8.90 (5.19-16.6)	1270
Male	07-08	.891 (.808-.984)	.720 (.660-.790)	1.44 (1.29-1.67)	4.00 (2.97-5.30)	9.96 (6.82-13.4)	1294
Male	09-10	.788 (.706-.879)	.620 (.580-.660)	1.25 (1.06-1.48)	3.66 (2.52-5.47)	7.69 (4.84-16.9)	1399
Female	03-04	1.03 (.845-1.27)	.870 (.770-1.00)	2.17 (1.73-2.73)	8.00 (4.57-12.1)	17.2 (11.1-23.7)	1292
Female	05-06	.916 (.770-1.09)	.740 (.640-.880)	1.56 (1.19-1.96)	3.91 (2.66-6.50)	8.93 (5.53-23.7)	1278
Female	07-08	1.07 (.910-1.26)	.850 (.720-1.00)	1.75 (1.43-2.29)	4.07 (3.13-7.65)	14.4 (6.50-26.8)	1310
Female	09-10	.890 (.789-1.00)	.740 (.660-.850)	1.41 (1.24-1.67)	3.39 (2.76-4.52)	8.79 (5.16-14.8)	1350
Mexican American	03-04	1.76 (1.30-2.38)	1.33 (1.04-1.74)	3.85 (2.29-8.81)	23.8 (10.6-51.6)	71.4 (30.8-88.8)	616
Mexican American	05-06	1.77 (1.38-2.27)	1.25 (.990-1.73)	3.79 (2.70-5.35)	16.6 (6.75-31.8)	38.1 (23.8-55.3)	637
Mexican American	07-08	1.55 (.925-2.60)	1.18 (.630-2.28)	3.33 (1.93-6.50)	14.2 (5.65-30.6)	33.1 (16.6-60.0)	531
Mexican American	09-10	1.24 (.860-1.78)	.910 (.630-1.28)	2.03 (1.43-3.90)	11.0 (3.54-26.4)	26.4 (10.2-93.5)	566
Non-Hispanic Black	03-04	1.66 (1.28-2.16)	1.47 (1.06-1.96)	4.14 (2.46-7.31)	14.9 (7.93-20.1)	22.9 (16.7-45.0)	635
Non-Hispanic Black	05-06	1.72 (1.39-2.14)	1.32 (1.11-1.56)	3.28 (2.33-5.35)	14.9 (7.40-28.1)	37.0 (15.0-83.4)	678
Non-Hispanic Black	07-08	1.34 (1.14-1.59)	.990 (.800-1.17)	2.36 (1.85-3.12)	13.1 (5.70-23.3)	33.8 (22.7-41.1)	597
Non-Hispanic Black	09-10	1.11 (.739-1.67)	.890 (.630-1.19)	2.07 (1.25-3.87)	8.37 (2.99-22.0)	22.0 (7.05-83.1)	516
Non-Hispanic White	03-04	.864 (.721-1.03)	.780 (.690-.890)	1.86 (1.54-2.23)	5.08 (3.58-8.00)	10.8 (6.84-18.2)	1076
Non-Hispanic White	05-06	.772 (.660-.904)	.670 (.580-.790)	1.25 (1.07-1.56)	2.78 (2.11-3.52)	4.82 (3.33-8.62)	1038
Non-Hispanic White	07-08	.853 (.765-.950)	.730 (.660-.810)	1.36 (1.14-1.67)	2.97 (2.53-3.33)	5.16 (3.84-9.38)	1077
Non-Hispanic White	09-10	.731 (.674-.793)	.630 (.580-.690)	1.13 (1.01-1.25)	2.76 (2.29-3.30)	5.16 (3.79-6.46)	1206

Urinary 2,4-Dichlorophenol (2011 - 2016)†

CAS Number 120-83-2

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	.695 (.619-.781)	.600 (.600-.700)	1.30 (1.10-1.60)	3.50 (2.80-4.40)	9.00 (5.60-13.0)	2489
Total population	13-14	.669 (.603-.743)	.600 (.500-.700)	1.30 (1.20-1.40)	3.00 (2.70-3.50)	6.40 (4.80-11.5)	2686
Total population	15-16	.596 (.509-.698)	.500 (.500-.600)	1.30 (1.10-1.70)	3.80 (2.90-4.70)	7.70 (5.20-11.7)	2651
Age 3-5 years	15-16	.493 (.381-.636)	.400 (.300-.500)	.800 (.600-1.30)	2.50 (1.30-7.10)	7.80 (2.50-16.9)	141
Age 6-11 years	11-12	.672 (.558-.810)	.600 (.400-.700)	1.10 (1.00-1.40)	3.60 (1.90-5.50)	11.3 (4.10-23.2)	396
Age 6-11 years	13-14	.773 (.646-.925)	.700 (.600-.900)	1.20 (1.10-1.60)	2.90 (2.10-4.80)	8.90 (3.30-21.8)	409
Age 6-11 years	15-16	.681 (.510-.909)	.600 (.400-.800)	1.30 (1.00-2.00)	4.60 (2.20-7.10)	8.50 (4.80-15.0)	415
Age 12-19 years	11-12	.711 (.591-.857)	.600 (.500-.800)	1.30 (1.00-1.50)	3.30 (2.10-5.80)	9.00 (4.10-13.0)	388
Age 12-19 years	13-14	.668 (.576-.775)	.600 (.500-.700)	1.10 (.900-1.40)	2.40 (1.70-4.40)	7.30 (3.10-13.8)	462
Age 12-19 years	15-16	.819 (.631-1.06)	.700 (.500-1.00)	1.90 (1.50-2.60)	5.80 (4.50-8.40)	10.8 (6.30-22.4)	405
Age 20+ years	11-12	.695 (.613-.789)	.600 (.500-.700)	1.30 (1.10-1.60)	3.50 (2.80-4.60)	9.00 (5.20-13.1)	1705
Age 20+ years	13-14	.659 (.593-.732)	.600 (.500-.700)	1.30 (1.20-1.40)	3.10 (2.70-3.50)	6.20 (4.90-10.8)	1815
Age 20+ years	15-16	.562 (.481-.657)	.500 (.500-.600)	1.30 (1.00-1.60)	3.40 (2.60-4.30)	7.40 (4.50-11.7)	1690
Male	11-12	.717 (.641-.802)	.600 (.600-.700)	1.30 (1.10-1.60)	3.20 (2.20-4.40)	7.10 (4.60-10.6)	1259
Male	13-14	.708 (.637-.786)	.600 (.600-.700)	1.30 (1.10-1.60)	2.90 (2.60-3.30)	6.20 (4.10-11.3)	1285
Male	15-16	.613 (.532-.705)	.500 (.500-.600)	1.30 (1.00-1.70)	3.60 (2.60-4.30)	7.70 (4.40-12.3)	1307
Female	11-12	.675 (.581-.784)	.600 (.500-.700)	1.20 (1.00-1.60)	3.80 (2.80-6.00)	11.1 (4.90-24.3)	1230
Female	13-14	.635 (.553-.729)	.600 (.500-.700)	1.20 (1.10-1.40)	3.10 (2.50-4.10)	7.60 (4.40-12.3)	1401
Female	15-16	.580 (.466-.721)	.500 (.400-.600)	1.40 (1.00-1.80)	4.20 (2.90-5.80)	8.10 (5.70-14.5)	1344
Mexican American	11-12	.895 (.720-1.11)	.800 (.600-1.00)	1.80 (1.30-2.60)	6.60 (3.50-10.5)	14.5 (7.40-27.0)	316
Mexican American	13-14	.807 (.609-1.07)	.600 (.400-1.00)	1.70 (1.10-2.90)	4.00 (3.00-12.2)	14.6 (3.90-49.9)	438
Mexican American	15-16	.970 (.706-1.33)	.800 (.500-1.10)	2.40 (1.40-4.80)	9.20 (6.30-14.5)	17.1 (11.3-23.4)	513
Non-Hispanic Black	11-12	1.23 (.965-1.57)	.900 (.800-1.20)	2.20 (1.60-3.30)	6.90 (4.20-14.8)	25.0 (8.40-53.6)	665
Non-Hispanic Black	13-14	1.11 (.791-1.54)	.800 (.700-1.10)	2.00 (1.40-3.30)	8.20 (3.00-28.2)	23.5 (6.50-81.9)	609
Non-Hispanic Black	15-16	1.42 (.986-2.04)	1.10 (.800-1.50)	3.00 (2.10-5.00)	16.0 (6.10-50.6)	55.5 (20.7-153)	610
Non-Hispanic White	11-12	.577 (.514-.647)	.500 (.500-.600)	1.00 (.900-1.20)	2.50 (1.70-3.70)	4.90 (3.30-9.40)	813
Non-Hispanic White	13-14	.588 (.525-.659)	.500 (.500-.600)	1.10 (1.00-1.30)	2.60 (2.30-2.90)	4.60 (3.10-5.50)	988
Non-Hispanic White	15-16	.458 (.397-.528)	.400 (.400-.500)	1.00 (.800-1.30)	2.40 (1.90-3.10)	4.20 (3.20-5.10)	781
All Hispanic	11-12	.981 (.760-1.27)	.800 (.600-1.00)	2.10 (1.30-3.10)	6.10 (3.90-13.0)	15.9 (7.00-42.0)	571
All Hispanic	13-14	.786 (.641-.965)	.600 (.500-.800)	1.60 (1.20-2.10)	3.50 (3.10-7.80)	12.4 (4.20-26.1)	690
All Hispanic	15-16	.982 (.757-1.27)	.800 (.600-1.10)	2.40 (1.60-3.60)	9.00 (5.40-15.0)	17.7 (10.5-30.1)	859
Non-Hispanic Asian	11-12	.621 (.478-.807)	.500 (.400-.700)	1.10 (.800-1.60)	3.60 (1.70-7.10)	11.1 (3.50-17.7)	352
Non-Hispanic Asian	13-14	.567 (.435-.738)	.500 (.300-.700)	1.20 (.800-1.60)	2.70 (1.70-5.80)	7.30 (2.50-58.9)	289
Non-Hispanic Asian	15-16	.466 (.364-.596)	.400 (.300-.600)	1.00 (.800-1.30)	2.30 (1.80-5.40)	6.50 (2.20-10.8)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 0.200, 0.100, and 0.100 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary 2,4-Dichlorophenol (creatinine corrected) (2011 - 2016)†

CAS Number 120-83-2

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	0.791 (.706-.886)	.614 (.560-.690)	1.29 (1.08-1.48)	3.33 (2.67-4.57)	8.10 (5.65-11.2)	2487
Total population	13-14	0.668 (.611-.730)	.556 (.510-.595)	1.13 (1.03-1.29)	2.73 (2.26-3.33)	5.96 (4.41-8.38)	2684
Total population	15-16	0.605 (.524-.699)	.467 (.421-.537)	1.14 (.900-1.48)	3.02 (2.22-3.99)	6.08 (4.18-9.53)	2650
Age 3-5 years	15-16	1.16 (.921-1.46)	.833 (.682-1.21)	1.92 (1.36-2.55)	4.44 (2.81-14.9)	17.2 (4.28-50.0)	140
Age 6-11 years	11-12	0.964 (.807-1.15)	.741 (.620-.851)	1.38 (1.07-1.61)	3.51 (2.22-7.36)	12.4 (5.13-34.9)	395
Age 6-11 years	13-14	0.977 (.833-1.14)	.800 (.698-.909)	1.52 (1.20-1.94)	3.41 (2.22-6.60)	9.68 (4.48-23.7)	409
Age 6-11 years	15-16	0.877 (.683-1.13)	.727 (.541-.851)	1.60 (1.05-2.31)	4.25 (2.40-9.84)	10.0 (4.14-17.4)	415
Age 12-19 years	11-12	0.693 (.582-.825)	.545 (.465-.678)	1.15 (.875-1.50)	2.73 (1.96-4.00)	4.82 (3.06-9.75)	388
Age 12-19 years	13-14	0.542 (.472-.623)	.439 (.385-.519)	.833 (.678-1.13)	1.72 (1.31-3.08)	4.10 (2.45-5.27)	462
Age 12-19 years	15-16	0.636 (.523-.774)	.457 (.382-.550)	1.29 (.875-1.75)	3.66 (2.86-5.43)	7.03 (4.00-21.3)	405
Age 20+ years	11-12	0.79 (.694-.898)	.610 (.556-.675)	1.30 (1.07-1.54)	3.33 (2.55-4.77)	8.33 (5.75-11.3)	1704
Age 20+ years	13-14	0.661 (.600-.728)	.538 (.495-.588)	1.14 (.991-1.31)	2.77 (2.22-3.47)	5.96 (4.39-8.53)	1813
Age 20+ years	15-16	0.573 (.498-.659)	.446 (.404-.513)	1.08 (.854-1.42)	2.71 (2.03-3.88)	5.80 (3.85-8.51)	1690
Male	11-12	0.67 (.594-.756)	.538 (.462-.609)	1.08 (.903-1.27)	2.89 (2.10-3.46)	5.65 (4.26-7.63)	1258
Male	13-14	0.595 (.550-.642)	.496 (.455-.538)	1.03 (.906-1.12)	2.41 (2.11-2.77)	4.39 (3.06-7.65)	1284
Male	15-16	0.534 (.471-.607)	.424 (.380-.476)	.957 (.811-1.18)	2.67 (1.75-3.53)	4.95 (3.60-8.44)	1307
Female	11-12	0.928 (.816-1.06)	.714 (.634-.833)	1.45 (1.27-1.76)	4.02 (3.06-6.37)	11.2 (6.37-18.1)	1229
Female	13-14	0.747 (.667-.836)	.616 (.560-.676)	1.29 (1.11-1.43)	3.29 (2.37-4.15)	7.69 (4.69-12.6)	1400
Female	15-16	0.682 (.568-.820)	.526 (.450-.625)	1.32 (.915-1.82)	3.66 (2.40-5.65)	6.48 (4.55-13.0)	1343
Mexican American	11-12	1.01 (.856-1.19)	.788 (.620-1.04)	1.67 (1.50-2.14)	5.94 (3.50-9.36)	14.7 (6.16-33.3)	316
Mexican American	13-14	0.823 (.614-1.10)	.632 (.452-.864)	1.43 (.938-2.29)	6.25 (2.45-12.0)	13.5 (6.32-37.3)	438
Mexican American	15-16	1.02 (.740-1.40)	.727 (.500-1.13)	2.31 (1.50-3.93)	7.73 (5.65-12.5)	19.7 (10.0-35.1)	513
Non-Hispanic Black	11-12	0.959 (.766-1.20)	.737 (.588-.851)	1.56 (1.18-2.34)	5.26 (3.00-15.0)	19.9 (6.61-40.7)	665
Non-Hispanic Black	13-14	0.815 (.617-1.08)	.576 (.500-.704)	1.40 (.952-2.30)	5.32 (2.37-14.7)	15.4 (4.69-51.3)	609
Non-Hispanic Black	15-16	1.1 (.798-1.51)	.760 (.538-1.15)	2.17 (1.59-2.99)	11.2 (4.00-38.0)	59.8 (11.8-133)	609
Non-Hispanic White	11-12	0.7 (.609-.805)	.563 (.519-.619)	1.08 (.885-1.33)	2.89 (1.79-3.78)	5.75 (3.27-9.67)	811
Non-Hispanic White	13-14	0.615 (.557-.679)	.521 (.476-.570)	1.05 (.906-1.24)	2.22 (1.88-2.78)	3.64 (3.01-5.71)	987
Non-Hispanic White	15-16	0.485 (.435-.541)	.408 (.380-.444)	.870 (.758-1.00)	1.82 (1.49-2.63)	3.60 (2.61-4.72)	781
All Hispanic	11-12	1.1 (.919-1.31)	.870 (.700-1.12)	2.00 (1.54-2.72)	5.70 (3.96-9.26)	14.7 (6.37-43.5)	571
All Hispanic	13-14	0.78 (.628-.970)	.629 (.508-.774)	1.30 (.980-1.98)	4.48 (3.03-6.81)	11.1 (6.16-23.8)	690
All Hispanic	15-16	1 (.755-1.33)	.772 (.543-1.08)	2.14 (1.58-3.44)	7.20 (5.30-12.5)	17.4 (9.16-37.2)	859
Non-Hispanic Asian	11-12	0.832 (.629-1.10)	.667 (.513-.952)	1.42 (1.01-2.12)	3.50 (2.31-7.82)	8.00 (3.50-17.0)	352
Non-Hispanic Asian	13-14	0.72 (.540-.961)	.588 (.469-.813)	1.38 (1.06-1.71)	3.51 (1.95-6.78)	7.65 (2.54-54.1)	288
Non-Hispanic Asian	15-16	0.567 (.473-.680)	.455 (.385-.533)	1.05 (.845-1.67)	3.43 (2.19-4.66)	5.44 (4.17-7.65)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary 2,5-Dichlorophenol (2003 - 2010)

CAS Number 583-78-8

Metabolite of 1,4-Dichlorobenzene (Paradichlorobenzene) and other chlorophenols

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	12.9 (10.1-16.3)	10.5 (8.00-14.2)	40.9 (29.8-54.7)	190 (133-282)	705 (342-1330)	2525
Total population	05-06	9.55 (6.67-13.7)	8.10 (5.60-11.5)	26.4 (19.0-36.6)	111 (69.9-166)	332 (175-794)	2548
Total population	07-08	9.04 (7.22-11.3)	6.60 (5.50-8.30)	25.7 (19.2-34.7)	131 (90.2-222)	473 (296-753)	2604
Total population	09-10	6.10 (4.94-7.53)	4.70 (3.70-5.90)	18.4 (13.3-26.0)	101 (68.0-146)	301 (168-618)	2749
Age 6-11 years	03-04	12.5 (8.22-18.9)	9.10 (5.60-17.4)	42.1 (21.7-83.9)	161 (111-626)	928 (249-1640)	314
Age 6-11 years	05-06	10.5 (8.29-13.4)	7.80 (5.90-10.6)	28.1 (17.8-40.2)	104 (55.4-226)	336 (189-785)	356
Age 6-11 years	07-08	9.31 (6.20-14.0)	6.50 (4.60-10.9)	23.3 (12.2-45.6)	151 (61.1-306)	464 (222-934)	389
Age 6-11 years	09-10	7.19 (4.36-11.8)	4.80 (2.70-9.90)	30.4 (12.4-50.7)	146 (63.7-368)	503 (103-4940)	415
Age 12-19 years	03-04	16.9 (11.1-26.0)	11.5 (8.20-20.6)	49.9 (26.8-94.0)	233 (94.5-1060)	1080 (287-3970)	722
Age 12-19 years	05-06	11.9 (8.47-16.8)	9.60 (6.40-16.7)	36.0 (22.3-54.4)	127 (89.9-160)	459 (160-894)	702
Age 12-19 years	07-08	11.3 (8.78-14.5)	7.40 (6.20-9.10)	30.1 (18.5-52.6)	193 (66.7-448)	611 (254-1560)	401
Age 12-19 years	09-10	8.01 (5.53-11.6)	4.80 (3.50-8.80)	24.9 (19.1-42.7)	191 (61.2-368)	526 (243-1140)	420
Age 20+ years	03-04	12.3 (9.97-15.3)	10.4 (8.00-14.0)	40.5 (30.1-49.2)	181 (141-250)	583 (316-924)	1489
Age 20+ years	05-06	9.12 (6.15-13.5)	7.80 (5.20-11.5)	24.9 (17.3-35.3)	110 (62.9-183)	327 (159-852)	1490
Age 20+ years	07-08	8.71 (6.83-11.1)	6.60 (5.10-8.70)	24.6 (18.8-34.5)	124 (95.9-186)	452 (286-672)	1814
Age 20+ years	09-10	5.75 (4.77-6.92)	4.60 (3.70-5.70)	16.9 (12.7-23.1)	88.4 (66.4-117)	266 (156-450)	1914
Male	03-04	14.9 (11.8-18.8)	12.5 (9.00-16.5)	40.5 (30.7-54.5)	152 (120-259)	631 (259-1950)	1231
Male	05-06	12.0 (8.55-16.7)	9.90 (7.80-13.8)	29.0 (21.8-40.5)	114 (71.7-200)	396 (175-916)	1270
Male	07-08	10.9 (8.86-13.4)	8.30 (6.30-9.90)	29.4 (23.2-39.6)	139 (100-248)	546 (311-727)	1294
Male	09-10	7.09 (5.68-8.85)	5.30 (4.40-6.70)	21.9 (15.2-33.5)	103 (63.3-191)	311 (133-736)	1399
Female	03-04	11.2 (8.51-14.7)	8.50 (6.30-12.0)	42.8 (26.0-64.2)	212 (141-364)	732 (371-1100)	1294
Female	05-06	7.69 (5.17-11.4)	5.90 (3.90-9.40)	21.1 (14.3-35.7)	110 (60.5-183)	317 (141-794)	1278
Female	07-08	7.57 (5.70-10.1)	5.50 (4.40-7.30)	20.6 (13.9-31.8)	118 (57.4-268)	442 (213-838)	1310
Female	09-10	5.28 (4.17-6.69)	3.90 (3.00-5.10)	16.7 (12.1-22.1)	99.5 (58.2-156)	287 (158-591)	1350
Mexican American	03-04	30.1 (19.2-47.2)	23.7 (14.7-39.8)	103 (57.4-156)	841 (282-2040)	2370 (2040-3710)	617
Mexican American	05-06	32.2 (22.2-46.7)	23.0 (14.9-37.1)	120 (69.6-228)	867 (298-1320)	1630 (916-3650)	637
Mexican American	07-08	22.2 (9.88-49.8)	16.4 (5.40-60.7)	104 (35.2-364)	566 (313-1710)	1920 (672-3460)	531
Mexican American	09-10	13.0 (5.80-29.1)	10.3 (3.30-26.2)	53.6 (19.4-199)	361 (124-900)	998 (247-3700)	566
Non-Hispanic Black	03-04	54.0 (35.9-81.2)	43.9 (26.2-65.6)	159 (97.0-338)	817 (342-2330)	2330 (887-3730)	636
Non-Hispanic Black	05-06	43.9 (33.2-58.1)	33.2 (25.3-47.6)	161 (79.9-255)	722 (360-1370)	1700 (886-6440)	678
Non-Hispanic Black	07-08	27.4 (21.3-35.2)	18.5 (13.2-26.7)	102 (61.9-147)	682 (364-943)	1490 (933-1870)	597
Non-Hispanic Black	09-10	23.0 (13.0-40.8)	17.3 (8.00-42.7)	82.7 (38.6-168)	443 (119-2180)	1240 (273-4940)	516
Non-Hispanic White	03-04	8.94 (7.15-11.2)	7.80 (6.30-9.40)	25.9 (19.3-36.6)	115 (61.8-171)	255 (148-522)	1077
Non-Hispanic White	05-06	6.19 (4.18-9.17)	5.90 (3.80-9.20)	15.7 (11.4-21.9)	43.7 (31.2-73.1)	105 (62.2-166)	1038
Non-Hispanic White	07-08	6.24 (5.04-7.74)	5.10 (4.20-6.20)	15.4 (12.2-19.9)	49.8 (37.0-90.2)	142 (103-294)	1077
Non-Hispanic White	09-10	4.10 (3.22-5.21)	3.30 (2.60-4.40)	10.9 (8.10-15.5)	45.5 (29.0-82.7)	124 (79.3-215)	1206

Limit of detection (LOD, see Data Analysis section) for Survey years 03-04, 05-06, 07-08 and 09-10 are 0.12, 0.2, 0.2, and 0.2 respectively.

Urinary 2,5-Dichlorophenol (creatinine corrected) (2003 - 2010)

CAS Number 583-78-8

Metabolite of 1,4-Dichlorobenzene (Paradichlorobenzene) and other chlorophenols

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	03-04	12.5 (10.1-15.6)	9.29 (7.25-12.5)	34.4 (26.8-45.4)	141 (100-251)	578 (313-851)	2522
Total population	05-06	9.31 (6.70-12.9)	7.32 (5.33-10.2)	20.4 (14.8-30.5)	89.3 (54.9-176)	292 (176-640)	2548
Total population	07-08	9.12 (7.35-11.3)	6.24 (5.00-7.77)	24.2 (17.2-30.3)	109 (70.8-175)	409 (234-745)	2604
Total population	09-10	6.36 (5.07-7.99)	4.12 (3.31-5.16)	16.2 (11.7-22.8)	80.2 (59.5-127)	269 (144-505)	2749
Age 6-11 years	03-04	15.2 (9.93-23.1)	10.6 (5.87-26.7)	44.7 (28.9-80.0)	183 (95.3-617)	830 (330-2150)	314
Age 6-11 years	05-06	11.6 (8.90-15.1)	8.00 (5.95-12.6)	24.7 (16.8-37.8)	129 (55.8-242)	419 (151-709)	356
Age 6-11 years	07-08	11.5 (7.95-16.5)	7.70 (5.41-11.7)	29.5 (19.6-50.9)	131 (59.9-239)	420 (170-1110)	389
Age 6-11 years	09-10	9.36 (5.65-15.5)	6.25 (4.09-9.60)	33.9 (12.6-65.0)	177 (66.1-496)	536 (111-5950)	415
Age 12-19 years	03-04	12.7 (8.50-18.9)	9.05 (6.17-13.3)	34.8 (18.6-67.0)	177 (67.0-516)	549 (187-2120)	720
Age 12-19 years	05-06	8.88 (6.34-12.4)	6.91 (4.15-11.1)	23.4 (17.7-30.0)	78.0 (58.5-112)	279 (112-659)	702
Age 12-19 years	07-08	8.79 (6.81-11.4)	5.56 (4.42-7.50)	20.9 (13.8-34.9)	130 (41.8-251)	353 (158-799)	401
Age 12-19 years	09-10	6.44 (4.40-9.42)	4.05 (2.34-8.69)	19.4 (11.6-37.7)	121 (49.3-218)	257 (119-1180)	420
Age 20+ years	03-04	12.2 (10.1-14.8)	9.13 (7.25-12.4)	32.7 (26.7-42.9)	140 (103-203)	552 (283-838)	1488
Age 20+ years	05-06	9.15 (6.43-13.0)	7.29 (5.29-10.0)	19.6 (14.2-30.4)	90.7 (48.5-197)	274 (163-701)	1490
Age 20+ years	07-08	8.94 (7.07-11.3)	6.15 (4.93-8.00)	24.3 (16.6-30.6)	101 (70.0-162)	422 (234-729)	1814
Age 20+ years	09-10	6.09 (4.97-7.45)	3.97 (3.27-4.78)	14.7 (11.0-20.5)	72.5 (56.6-97.2)	261 (141-446)	1914
Male	03-04	12.2 (9.73-15.3)	9.65 (7.23-12.7)	32.7 (25.3-39.1)	108 (79.0-183)	358 (161-1080)	1230
Male	05-06	9.60 (7.17-12.9)	8.11 (5.95-10.5)	20.5 (15.9-28.2)	74.9 (50.5-141)	249 (137-534)	1270
Male	07-08	9.17 (7.63-11.0)	6.24 (5.22-7.81)	25.5 (19.7-32.4)	110 (70.7-167)	353 (234-572)	1294
Male	09-10	6.36 (5.04-8.02)	4.21 (3.36-4.97)	16.7 (11.7-24.0)	83.2 (53.7-141)	280 (111-727)	1399
Female	03-04	12.9 (9.91-16.8)	8.95 (6.98-13.2)	37.1 (26.7-56.9)	209 (124-362)	660 (408-940)	1292
Female	05-06	9.04 (6.18-13.2)	6.60 (4.56-10.4)	20.4 (14.1-33.8)	104 (55.8-199)	309 (149-933)	1278
Female	07-08	9.07 (6.91-11.9)	6.08 (4.71-8.04)	22.4 (14.7-30.6)	107 (59.2-216)	509 (185-908)	1310
Female	09-10	6.37 (4.92-8.25)	4.10 (3.09-5.69)	15.6 (11.3-22.1)	77.1 (53.3-148)	267 (151-481)	1350
Mexican American	03-04	27.3 (17.4-42.9)	17.8 (9.86-36.3)	79.8 (45.8-138)	809 (196-2110)	2200 (1250-2480)	616
Mexican American	05-06	29.0 (20.5-41.0)	18.6 (12.9-27.3)	99.4 (61.6-165)	675 (296-1400)	1680 (718-2720)	637
Mexican American	07-08	21.6 (9.44-49.6)	16.4 (5.09-58.9)	83.9 (30.8-281)	572 (182-1490)	1490 (700-2220)	531
Mexican American	09-10	12.9 (5.78-28.8)	9.12 (3.38-26.7)	45.0 (17.3-236)	460 (105-1000)	1000 (380-2800)	566
Non-Hispanic Black	03-04	37.1 (24.3-56.7)	27.4 (17.5-47.7)	103 (63.8-216)	609 (248-1210)	1240 (627-2430)	635
Non-Hispanic Black	05-06	30.9 (23.6-40.3)	20.5 (17.3-29.1)	104 (57.7-180)	480 (294-1080)	1480 (515-3100)	678
Non-Hispanic Black	07-08	21.3 (16.2-27.9)	14.6 (10.2-19.7)	64.6 (48.0-101)	529 (217-884)	1130 (793-1560)	597
Non-Hispanic Black	09-10	16.7 (9.19-30.2)	12.5 (6.74-22.0)	58.9 (22.3-106)	349 (92.6-878)	878 (277-3890)	516
Non-Hispanic White	03-04	9.24 (7.48-11.4)	7.14 (5.67-8.76)	24.8 (18.7-31.7)	79.7 (50.2-141)	216 (124-516)	1076
Non-Hispanic White	05-06	6.52 (4.51-9.43)	5.60 (3.86-8.51)	14.1 (10.7-19.7)	40.2 (28.4-61.6)	110 (47.3-224)	1038
Non-Hispanic White	07-08	6.52 (5.26-8.07)	4.89 (3.95-6.20)	14.4 (11.4-19.2)	53.2 (40.1-75.9)	131 (82.5-249)	1077
Non-Hispanic White	09-10	4.60 (3.59-5.90)	3.27 (2.77-4.10)	10.4 (7.22-15.2)	41.3 (25.0-69.1)	130 (73.4-180)	1206

Urinary 2,5-Dichlorophenol (2011 - 2016)†

CAS Number 583-78-8

Geometric mean and selected percentiles of urine concentrations (in µg/L) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	4.21 (3.15-5.62)	3.10 (2.30-3.90)	13.4 (9.40-18.9)	69.9 (40.9-117)	213 (121-404)	2489
Total population	13-14	2.78 (2.15-3.59)	1.80 (1.40-2.50)	7.50 (5.30-11.4)	37.7 (23.8-58.0)	148 (78.4-266)	2686
Total population	15-16	2.97 (2.19-4.02)	2.10 (1.60-2.80)	9.30 (5.70-16.3)	51.0 (29.3-103)	175 (95.9-358)	2651
Age 3-5 years	15-16	2.53 (1.45-4.43)	1.60 (.800-3.10)	8.00 (2.80-18.2)	35.6 (15.0-76.8)	262 (35.6-573)	141
Age 6-11 years	11-12	3.45 (2.11-5.64)	2.30 (1.60-3.30)	9.20 (4.40-21.2)	69.1 (27.8-168)	369 (99.9-986)	396
Age 6-11 years	13-14	2.90 (1.98-4.24)	2.00 (1.30-3.00)	8.20 (4.30-14.9)	29.6 (19.7-73.8)	123 (38.0-438)	409
Age 6-11 years	15-16	3.82 (2.21-6.58)	2.70 (1.40-5.30)	14.4 (5.60-36.5)	73.4 (35.8-189)	196 (83.4-343)	415
Age 12-19 years	11-12	4.15 (2.43-7.10)	3.20 (1.60-8.00)	14.0 (7.30-28.8)	55.7 (28.6-209)	236 (71.2-468)	388
Age 12-19 years	13-14	2.72 (1.75-4.24)	2.10 (1.30-3.30)	6.00 (3.80-14.0)	21.7 (10.6-77.7)	77.7 (21.7-315)	462
Age 12-19 years	15-16	5.12 (3.40-7.71)	3.30 (2.30-6.80)	17.6 (10.3-36.1)	125 (66.7-210)	373 (207-711)	405
Age 20+ years	11-12	4.31 (3.21-5.78)	3.20 (2.30-4.10)	14.2 (9.40-19.2)	71.4 (39.5-118)	198 (118-408)	1705
Age 20+ years	13-14	2.78 (2.20-3.51)	1.80 (1.40-2.40)	7.80 (5.50-11.5)	42.7 (25.2-61.2)	169 (87.2-308)	1815
Age 20+ years	15-16	2.68 (1.97-3.64)	1.90 (1.50-2.50)	7.90 (5.00-13.4)	40.9 (21.7-99.0)	164 (73.5-352)	1690
Male	11-12	4.42 (3.38-5.78)	3.30 (2.40-4.50)	13.2 (9.40-20.8)	55.5 (37.1-106)	194 (99.8-341)	1259
Male	13-14	2.96 (2.31-3.80)	2.00 (1.50-2.60)	7.20 (5.20-11.5)	36.1 (23.1-52.6)	175 (77.6-250)	1285
Male	15-16	3.25 (2.41-4.38)	2.40 (1.70-3.10)	9.90 (6.30-16.6)	44.9 (24.0-99.0)	159 (80.8-358)	1307
Female	11-12	4.01 (2.86-5.61)	2.80 (2.00-3.70)	13.9 (9.20-17.7)	83.3 (42.4-124)	352 (117-614)	1230
Female	13-14	2.61 (1.96-3.48)	1.70 (1.30-2.50)	7.80 (5.20-11.9)	38.3 (21.6-63.8)	136 (63.2-376)	1401
Female	15-16	2.72 (1.90-3.90)	1.80 (1.40-2.50)	8.40 (4.80-17.6)	51.9 (31.6-140)	199 (89.4-373)	1344
Mexican American	11-12	5.92 (3.36-10.4)	4.00 (2.20-8.40)	21.2 (14.2-42.7)	178 (58.4-341)	362 (119-1130)	316
Mexican American	13-14	4.60 (2.78-7.61)	2.70 (1.40-6.30)	14.5 (6.70-29.2)	90.5 (32.9-486)	584 (85.3-1840)	438
Mexican American	15-16	9.27 (4.65-18.5)	7.20 (3.00-18.6)	33.6 (13.8-124)	310 (118-462)	633 (428-930)	513
Non-Hispanic Black	11-12	16.6 (10.4-26.2)	13.4 (8.80-19.4)	47.9 (24.9-100)	227 (108-569)	759 (341-2480)	665
Non-Hispanic Black	13-14	9.58 (5.03-18.2)	7.20 (3.90-14.2)	27.6 (15.6-70.7)	175 (51.4-874)	843 (150-3710)	609
Non-Hispanic Black	15-16	18.1 (10.4-31.4)	12.7 (7.20-25.9)	69.9 (38.4-150)	503 (175-1940)	2210 (768-6510)	610
Non-Hispanic White	11-12	2.78 (2.13-3.63)	2.00 (1.60-2.50)	7.40 (5.40-9.70)	34.4 (18.1-67.6)	112 (52.1-178)	813
Non-Hispanic White	13-14	1.95 (1.54-2.46)	1.40 (1.10-1.90)	4.70 (3.30-6.50)	19.0 (12.8-25.9)	53.7 (25.2-131)	988
Non-Hispanic White	15-16	1.60 (1.33-1.93)	1.30 (1.10-1.60)	4.00 (2.90-5.00)	18.7 (10.4-24.3)	38.0 (28.7-51.9)	781
All Hispanic	11-12	7.96 (4.50-14.1)	6.30 (3.20-14.9)	29.1 (16.0-66.7)	196 (84.1-399)	536 (194-1630)	571
All Hispanic	13-14	4.26 (2.84-6.40)	2.80 (1.50-5.00)	11.8 (7.20-22.4)	77.7 (42.7-236)	420 (112-807)	690
All Hispanic	15-16	8.79 (4.94-15.6)	6.40 (3.30-14.8)	35.3 (18.7-80.8)	284 (116-503)	633 (415-930)	859
Non-Hispanic Asian	11-12	3.77 (2.17-6.53)	2.40 (1.40-5.40)	13.0 (5.40-43.4)	86.8 (38.6-160)	378 (86.8-810)	352
Non-Hispanic Asian	13-14	2.66 (1.64-4.32)	1.70 (1.20-2.90)	6.20 (3.30-18.5)	50.3 (13.0-154)	154 (38.7-2450)	289
Non-Hispanic Asian	15-16	2.54 (1.79-3.61)	2.00 (1.40-3.20)	7.60 (4.80-12.5)	30.1 (15.6-55.8)	158 (31.2-318)	275

Limit of detection (LOD, see Data Analysis section) for Survey years 11-12, 13-14, and 15-16 are 0.200, 0.100, and 0.100 respectively.

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.

Urinary 2,5-Dichlorophenol (creatinine corrected) (2011 - 2016)†

CAS Number 583-78-8

Geometric mean and selected percentiles of urine concentrations (in µg/g of creatinine) for the U.S. population from the National Health and Nutrition Examination Survey.

Demographic Categories	Survey (Years)	Geometric Mean (95% CI)	50th Percentile (95% CI)	75th Percentile (95% CI)	90th Percentile (95% CI)	95th Percentile (95% CI)	Sample Size
Total population	11-12	4.8 (3.65-6.32)	3.19 (2.38-4.43)	11.4 (7.97-17.9)	66.4 (39.9-125)	215 (145-342)	2487
Total population	13-14	2.77 (2.12-3.62)	1.82 (1.43-2.40)	6.80 (4.62-9.72)	32.2 (21.9-45.5)	108 (58.4-270)	2684
Total population	15-16	3.02 (2.25-4.04)	2.03 (1.54-2.74)	8.45 (4.88-14.1)	44.0 (26.2-80.1)	133 (66.8-249)	2650
Age 3-5 years	15-16	5.95 (3.51-10.1)	3.51 (1.95-6.90)	17.7 (5.17-45.4)	59.4 (36.4-213)	440 (59.4-1610)	140
Age 6-11 years	11-12	5.01 (3.10-8.09)	3.02 (2.00-5.00)	10.6 (5.53-21.7)	98.1 (32.9-166)	377 (125-1180)	395
Age 6-11 years	13-14	3.66 (2.50-5.36)	2.41 (1.62-3.54)	9.73 (5.25-15.6)	37.6 (16.9-110)	172 (70.4-615)	409
Age 6-11 years	15-16	4.92 (2.92-8.27)	3.07 (1.95-6.19)	15.6 (6.95-38.4)	83.5 (41.2-160)	224 (109-460)	415
Age 12-19 years	11-12	4.04 (2.51-6.52)	2.41 (1.54-5.34)	12.1 (5.67-27.6)	47.9 (26.3-99.5)	157 (55.1-324)	388
Age 12-19 years	13-14	2.21 (1.44-3.40)	1.53 (.915-2.52)	5.16 (2.63-12.0)	22.7 (12.2-38.9)	54.2 (21.7-236)	462
Age 12-19 years	15-16	3.98 (2.62-6.03)	2.61 (1.30-5.15)	13.8 (6.35-26.5)	92.2 (42.0-131)	235 (113-781)	405
Age 20+ years	11-12	4.9 (3.67-6.56)	3.33 (2.50-4.51)	11.5 (8.04-18.0)	70.3 (38.8-136)	226 (145-342)	1704
Age 20+ years	13-14	2.78 (2.15-3.59)	1.81 (1.44-2.29)	6.67 (4.62-9.47)	32.6 (21.1-51.0)	126 (58.4-325)	1813
Age 20+ years	15-16	2.73 (2.04-3.64)	1.89 (1.43-2.55)	6.97 (4.38-11.7)	35.7 (19.3-69.1)	89.9 (50.8-270)	1690
Male	11-12	4.15 (3.14-5.49)	2.87 (2.14-4.13)	9.73 (6.88-16.1)	52.8 (31.4-106)	157 (125-233)	1258
Male	13-14	2.49 (1.93-3.22)	1.69 (1.23-2.22)	5.49 (4.18-8.11)	27.4 (19.6-45.8)	88.7 (58.4-160)	1284
Male	15-16	2.83 (2.12-3.79)	2.01 (1.44-2.73)	7.01 (4.81-13.2)	37.0 (22.0-57.8)	121 (55.3-223)	1307
Female	11-12	5.53 (4.14-7.37)	3.39 (2.57-5.00)	13.1 (8.84-19.5)	90.1 (45.2-147)	331 (145-557)	1229
Female	13-14	3.07 (2.30-4.09)	1.96 (1.52-2.54)	8.22 (5.07-11.9)	33.8 (21.7-56.2)	140 (50.4-374)	1400
Female	15-16	3.2 (2.31-4.44)	2.04 (1.59-2.99)	9.57 (4.74-17.1)	52.8 (27.3-90.7)	149 (71.7-334)	1343
Mexican American	11-12	6.67 (4.04-11.0)	4.85 (2.25-8.69)	22.4 (12.6-37.6)	189 (49.2-249)	383 (213-981)	316
Mexican American	13-14	4.68 (2.72-8.06)	2.47 (1.36-5.71)	14.5 (7.24-25.0)	91.8 (26.9-559)	559 (89.0-1330)	438
Mexican American	15-16	9.72 (4.86-19.5)	6.71 (3.08-19.3)	33.1 (13.7-131)	204 (93.1-466)	689 (289-1240)	513
Non-Hispanic Black	11-12	12.9 (8.32-19.9)	9.41 (6.35-15.1)	34.5 (18.1-75.0)	174 (83.7-567)	744 (236-1790)	665
Non-Hispanic Black	13-14	7.07 (3.87-12.9)	5.62 (2.55-10.4)	21.2 (10.0-54.1)	128 (32.7-527)	415 (103-2580)	609
Non-Hispanic Black	15-16	14 (8.41-23.3)	9.92 (5.05-18.5)	52.8 (31.5-76.2)	369 (121-1430)	2020 (544-4830)	609
Non-Hispanic White	11-12	3.4 (2.57-4.49)	2.36 (1.76-3.19)	6.96 (4.70-9.67)	34.5 (16.4-80.1)	126 (55.3-232)	811
Non-Hispanic White	13-14	2.03 (1.53-2.69)	1.48 (1.13-1.91)	4.15 (2.96-6.34)	18.2 (10.6-32.5)	45.8 (26.0-86.3)	987
Non-Hispanic White	15-16	1.7 (1.45-1.99)	1.33 (1.19-1.60)	3.78 (2.91-4.81)	13.5 (8.89-23.8)	34.4 (23.4-46.3)	781
All Hispanic	11-12	8.92 (5.45-14.6)	6.55 (3.50-13.8)	28.8 (16.6-53.6)	184 (97.2-266)	383 (213-1240)	571
All Hispanic	13-14	4.23 (2.77-6.47)	2.50 (1.41-5.07)	11.5 (6.84-18.7)	84.6 (32.2-226)	401 (135-993)	690
All Hispanic	15-16	8.96 (4.93-16.3)	6.09 (2.96-16.3)	36.4 (18.9-71.7)	213 (131-354)	597 (271-1670)	859
Non-Hispanic Asian	11-12	5.05 (2.93-8.69)	2.99 (1.74-7.04)	15.3 (6.51-45.6)	106 (58.7-177)	236 (97.5-632)	352
Non-Hispanic Asian	13-14	3.4 (2.10-5.52)	2.06 (1.33-3.26)	8.99 (3.21-20.8)	45.2 (17.3-158)	207 (32.6-3020)	288
Non-Hispanic Asian	15-16	3.1 (2.24-4.29)	2.43 (1.56-3.87)	8.75 (5.59-13.7)	31.2 (16.7-111)	127 (39.9-211)	275

† Participants are age 6+ in Survey 11-12 and 13-14, while participants are 3+ in Survey 15-16.