

Ethylene Oxide Hemoglobin Adduct in Smokers (2013 - 2018)

CAS Number 75-21-8

Geometric mean and selected percentiles of hemoglobin adduct concentrations (in pmol/g hemoglobin) for the cigarette smoking 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	135 (119-152)	154 (141-166)	244 (224-271)	368 (323-430)	477 (429-637)	416
Total population	15-16	130 (107-157)	155 (129-176)	258 (212-291)	373 (319-411)	477 (405-568)	377
Total population	17-18	137 (116-162)	154 (128-188)	260 (214-337)	382 (337-453)	458 (392-526)	351
Age 18-49 years	13-14	133 (118-150)	146 (119-171)	244 (216-276)	375 (305-458)	513 (375-661)	271
Age 18-49 years	15-16	101 (75.2-137)	121 (90.4-166)	203 (168-268)	323 (235-411)	411 (310-534)	220
Age 18-49 years	17-18	125 (100-155)	143 (108-184)	256 (193-337)	392 (337-458)	458 (365-557)	194
Age 50+ years	13-14	138 (104-183)	166 (124-210)	238 (209-304)	357 (304-477)	464 (311-904)	145
Age 50+ years	15-16	199 (167-236)	206 (155-264)	309 (259-397)	426 (359-572)	572 (405-1110)	157
Age 50+ years	17-18	164 (135-198)	174 (143-208)	267 (211-310)	351 (276-501)	501 (344-626)	157
Male	13-14	135 (117-156)	145 (123-171)	265 (211-304)	406 (302-529)	526 (406-758)	231
Male	15-16	119 (88.9-159)	154 (118-186)	249 (202-310)	379 (315-424)	426 (400-484)	231
Male	17-18	129 (103-160)	147 (102-206)	256 (179-337)	359 (289-489)	501 (337-557)	207
Female	13-14	135 (107-169)	156 (125-180)	231 (199-269)	352 (280-458)	459 (342-661)	185
Female	15-16	145 (121-175)	155 (116-182)	265 (203-300)	372 (272-658)	541 (301-1110)	146
Female	17-18	149 (121-183)	175 (143-193)	288 (225-351)	392 (304-494)	458 (360-625)	144

Limit of detection (LOD, see Data Analysis section) for Survey years 13-14, 15-16, and 17-18 are 8.20, 8.20, and 12.9 respectively.

*Cigarette Smoking is defined as a serum cotinine concentration more than 10 ng/mL in participants from the National Health and Nutrition Examination Survey, excluding those who used other tobacco products.