

Supplementary Online Content

Bao W, Liu B, Simonsen DW, Lehmler H-J. Association between exposure to pyrethroid insecticides and risk of all-cause and cause-specific mortality in the general US adult population. *JAMA Intern Med*. Published December 30, 2019.
doi:10.1001/jamainternmed.2019.6019

eTable 1. Detection Rates of Other Metabolites of Pyrethroids, NHANES 1999-2002

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Detection Rates of Other Metabolites of Pyrethroids, NHANES 1999-2002

Metabolites	Detection rate
cis-DCCA	39.1%
trans-DCCA	28.0%
4F-PBA	1.2%
cis-DBCA	0.7%

Abbreviations: cis-DCCA, cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid; trans-DCCA, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid; 4F-PBA, 4-fluoro-3-phenoxybenzoic acid; cis-DBCA, cis-(2,2-dibromovinyl)-2,2-dimethylcyclopropane-1-carboxylic acid.

eTable 2. Urinary 3-Phenoxybenzoic Acid Levels (ng/mL), According to Population Characteristics

Characteristics	Geometric mean (95% confidence interval)	Selected percentile (95% confidence interval)				
		Min	25th	50th	75th	Max
Sex						
Male	0.28 (0.26-0.31)	0.07	0.07 (0.04-0.10)	0.24 (0.19-0.29)	0.63 (0.55-0.72)	69.07
Female	0.29 (0.26-0.32)	0.07	0.07 (0.04-0.10)	0.23 (0.19-0.27)	0.63 (0.52-0.74)	58.89
Race/ethnicity						
Hispanic	0.25 (0.23-0.28)	0.07	0.07 (0.04-0.10)	0.22 (0.18-0.25)	0.56 (0.43-0.69)	58.69
Non-Hispanic white	0.27 (0.24-0.30)	0.07	0.07 (0.04-0.10)	0.21 (0.17-0.26)	0.55 (0.45-0.65)	69.07
Non-Hispanic black	0.50 (0.44-0.58)	0.07	0.22 (0.16-0.27)	0.53 (0.45-0.62)	0.99 (0.75-1.23)	40.63
Other	0.26 (0.20-0.34)	0.07	0.07 (0.01-0.13)	0.19 (0.08-0.31)	0.73 (0.37-1.09)	36.32
Education						
Less than high school	0.36 (0.31-0.41)	0.07	0.12 (0.06-0.17)	0.34 (0.27-0.41)	0.75 (0.61-0.88)	58.89
High school	0.27 (0.24-0.31)	0.07	0.07 (0.04-0.10)	0.24 (0.19-0.28)	0.60 (0.49-0.72)	58.89
College or higher	0.27 (0.24-0.30)	0.07	0.07 (0.04-0.10)	0.20 (0.16-0.25)	0.57 (0.47-0.67)	69.07
Family income to poverty ratio						
<1.3	0.29 (0.25-0.34)	0.07	0.07 (0.03-0.11)	0.29 (0.21-0.36)	0.60 (0.46-0.74)	58.69
1.3-3.5	0.32 (0.30-0.35)	0.07	0.07 (0.04-0.10)	0.26 (0.22-0.29)	0.72 (0.61-0.83)	69.07
>3.5	0.25 (0.22-0.28)	0.07	0.07 (0.04-0.10)	0.18 (0.14-0.23)	0.53 (0.42-0.63)	58.89
Missing	0.32 (0.26-0.40)	0.07	0.11 (0.08-0.13)	0.32 (0.21-0.43)	0.75 (0.57-0.93)	12.28
Smoking						
Never smoker	0.27 (0.24-0.30)	0.07	0.07 (0.04-0.10)	0.22 (0.18-0.26)	0.60 (0.50-0.70)	58.69

Ever smoker	0.33 (0.30-0.37)	0.07	0.07 (0.04-0.10)	0.29 (0.23-0.35)	0.76 (0.64-0.88)	69.07
Current smoker	0.27 (0.24-0.30)	0.07	0.07 (0.05-0.09)	0.21 (0.16-0.26)	0.55 (0.41-0.69)	36.32
Alcohol drinking						
Non-drinker	0.28 (0.26-0.31)	0.07	0.07 (0.04-0.10)	0.23 (0.19-0.27)	0.61 (0.52-0.71)	69.07
Moderate drinking	0.29 (0.24-0.37)	0.07	0.07 (0.03-0.11)	0.26 (0.15-0.38)	0.73 (0.52-0.94)	21.05
Heavy drinking	0.27 (0.24-0.31)	0.07	0.07 (0.05-0.09)	0.24 (0.19-0.28)	0.61 (0.48-0.74)	17.27
Missing	0.36 (0.23-0.55)	0.07	0.07 (-0.04-0.18)	0.29 (0.04-0.55)	0.93 (0.28-1.58)	36.32
Physical activity categories						
Below	0.30 (0.27-0.34)	0.07	0.07 (0.04-0.10)	0.27 (0.23-0.32)	0.70 (0.59-0.81)	58.89
Meet	0.25 (0.21-0.29)	0.07	0.07 (0.03-0.11)	0.19 (0.14-0.24)	0.52 (0.39-0.66)	58.89
Exceed	0.28 (0.25-0.32)	0.07	0.07 (0.04-0.10)	0.22 (0.15-0.28)	0.62 (0.52-0.71)	69.07
BMI categories						
<25 kg/m ²	0.29 (0.26-0.32)	0.07	0.07 (-0.04-0.10)	0.24 (0.19-0.29)	0.64 (0.49-0.79)	57.22
25-29.9 kg/m ²	0.25 (0.21-0.29)	0.07	0.07 (0.04-0.10)	0.20 (0.15-0.26)	0.57 (0.40-0.73)	58.89
≥30 kg/m ²	0.32 (0.29-0.35)	0.07	0.07 (0.04-0.10)	0.27 (0.23-0.32)	0.69 (0.61-0.77)	69.07
Missing	0.31 (0.21-0.46)	0.07	0.07 (0.02-0.12)	0.26 (0.15-0.37)	0.47 (-0.67-1.62)	11.97

eTable 3. Creatinine-Adjusted Urinary 3-Phenoxybenzoic Acid Levels ($\mu\text{g/g}$ Creatinine), According to Population Characteristics

Characteristics	Geometric mean (95% confidence interval)	Selected percentile (95% confidence interval)				
		Min	25th	50th	75th	Max
Sex						
Male	0.22 (0.20-0.24)	0.02	0.09 (0.08-0.11)	0.20 (0.18-0.22)	0.41 (0.36-0.47)	32.32
Female	0.36 (0.33-0.39)	0.02	0.17 (0.14-0.19)	0.32 (0.28-0.35)	0.65 (0.54-0.76)	75.2
Race/ethnicity						
Hispanic	0.22 (0.19-0.24)	0.02	0.09 (0.08-0.11)	0.20 (0.17-0.23)	0.41 (0.34-0.47)	75.24
Non-Hispanic white	0.28 (0.26-0.31)	0.02	0.13 (0.11-0.14)	0.26 (0.24-0.29)	0.53 (0.45-0.62)	43.62
Non-Hispanic black	0.36 (0.31-0.42)	0.02	0.16 (0.13-0.20)	0.35 (0.29-0.40)	0.68 (0.51-0.85)	22.39
Other	0.33 (0.26-0.41)	0.02	0.15 (0.10-0.21)	0.27 (0.20-0.34)	0.63 (0.40-0.86)	23.28
Education						
Less than high school	0.33 (0.30-0.37)	0.02	0.16 (0.14-0.18)	0.30 (0.25-0.35)	0.62 (0.53-0.71)	31.64
High school	0.29 (0.25-0.32)	0.02	0.13 (0.11-0.15)	0.28 (0.24-0.32)	0.52 (0.42-0.62)	75.24
College or higher	0.27 (0.24-0.29)	0.02	0.11 (0.10-0.13)	0.24 (0.21-0.27)	0.52 (0.45-0.60)	32.33
Family income to poverty ratio						
<1.3	0.29 (0.26-0.33)	0.02	0.14 (0.10-0.18)	0.28 (0.24-0.33)	0.53 (0.45-0.61)	75.24
1.3-3.5	0.31 (0.29-0.33)	0.02	0.14 (0.12-0.15)	0.28 (0.25-0.31)	0.58 (0.46-0.69)	32.33
>3.5	0.26 (0.23-0.29)	0.02	0.11 (0.09-0.13)	0.24 (0.21-0.26)	0.50 (0.42-0.58)	43.62
Missing	0.27 (0.22-0.32)	0.04	0.12 (0.09-0.15)	0.26 (0.20-0.33)	0.53 (0.34-0.72)	7.97
Smoking						
Never smoker	0.27 (0.24-0.30)	0.02	0.11 (0.09-0.13)	0.24 (0.21-0.27)	0.53 (0.46-0.61)	75.24

Ever smoker	0.31 (0.28-0.35)	0.02	0.15 (0.12-0.18)	0.29 (0.25-0.33)	0.56 (0.50-0.62)	43.62
Current smoker	0.28 (0.26-0.32)	0.02	0.13 (0.11-0.15)	0.26 (0.23-0.29)	0.51 (0.40-0.62)	25.96
Alcohol drinking						
Non-drinker	0.29 (0.26-0.31)	0.02	0.12 (0.10-0.14)	0.26 (0.23-0.29)	0.54 (0.47-0.62)	75.24
Moderate drinking	0.28 (0.23-0.35)	0.02	0.12 (0.09-0.15)	0.28 (0.19-0.36)	0.60 (0.37-0.83)	22.39
Heavy drinking	0.27 (0.25-0.30)	0.02	0.14 (0.12-0.16)	0.25 (0.22-0.28)	0.49 (0.43-0.56)	15.46
Missing	0.29 (0.20-0.43)	0.02	0.12 (0.05-0.19)	0.25 (0.12-0.38)	0.53 (0.20-0.87)	23.28
Physical activity categories						
Below	0.30 (0.27-0.33)	0.02	0.13 (0.11-0.15)	0.27 (0.24-0.31)	0.54 (0.43-0.64)	32.33
Meet	0.25 (0.20-0.31)	0.02	0.11 (0.07-0.14)	0.22 (0.18-0.27)	0.43 (0.28-0.58)	75.24
Exceed	0.28 (0.25-0.31)	0.02	0.12 (0.10-0.14)	0.26 (0.23-0.29)	0.55 (0.48-0.63)	27.6
BMI categories						
<25 kg/m ²	0.30 (0.28-0.34)	0.02	0.13 (0.12-0.15)	0.28 (0.24-0.32)	0.56 (0.47-0.65)	32.33
25-29.9 kg/m ²	0.25 (0.22-0.28)	0.02	0.10 (0.08-0.13)	0.24 (0.20-0.28)	0.46 (0.36-0.56)	43.62
≥30 kg/m ²	0.29 (0.27-0.32)	0.02	0.13 (0.11-0.16)	0.26 (0.23-0.29)	0.55 (0.45-0.65)	75.24
Missing	0.33 (0.24-0.46)	0.02	0.15 (0.09-0.21)	0.26 (0.09-0.43)	0.64 (0.01-1.27)	9.32