**Supplementary Table S1.** Concentration of COEs exposed to each type of work in four coking plants workshops

| Type of work	TWA#			
	Workshop-one	Workshop-two	Workshop-three	Workshop-four
Larry car operator	0.191	0.208	0.280	0.339
Stop car operator	0.165	0.189	0.115	0.208
Pusher car operator	0.070	0.058	0.064	0.115
Quench car operator	0.096	0.153	0.089	0.116
Temperature controller	0.080	0.084	0.099	0.215
Temperature measurer	0.083	0.100	0.086	0.133
Benchman coke side	0.081	0.070	0.096	0.096
Coke side machine operator	0.200	0.189	0.105	0.526
Furnace cover worker	0.068	0.099	0.102	0.165
Ascension pipe worker	0.169	0.122	0.102	0.183
Coke oven repairer	0.133	0.148	0.101	0.251
Supervisors	0.010	0.010	0.010	0.010

Note. TWA: Time weighted average concentration, #: unit is mg/m^3. The reference standard of COEs concentration (calculated as benzene dissolved matter) was PC-TWA 0.1 mg/m^3.
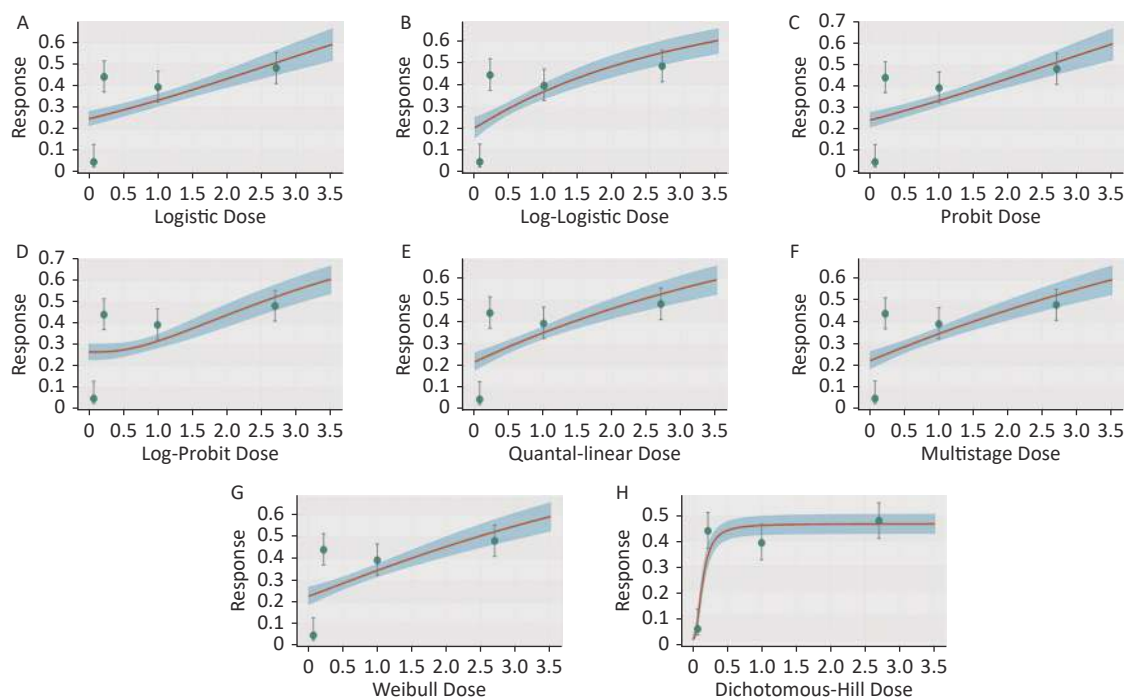
Supplementary Figure S1. Dose-response relationship between CED-COEs and mitochondrial DNA copy number damage rate in the total population. (A) Logistic model (B) Log-Logistic model (C) Probit model (D) Log-Probit model (E) Quantal-linear model (F) Multistage model (G) Weibull model (H) Dichotomous-Hill model. The X-axis described the dose of CED-COEs and the Y-axis described the rates of mtDNAcn damage. This plot includes original dose-response data and a fitted curve with its 90th percentile interval shaded in blue.
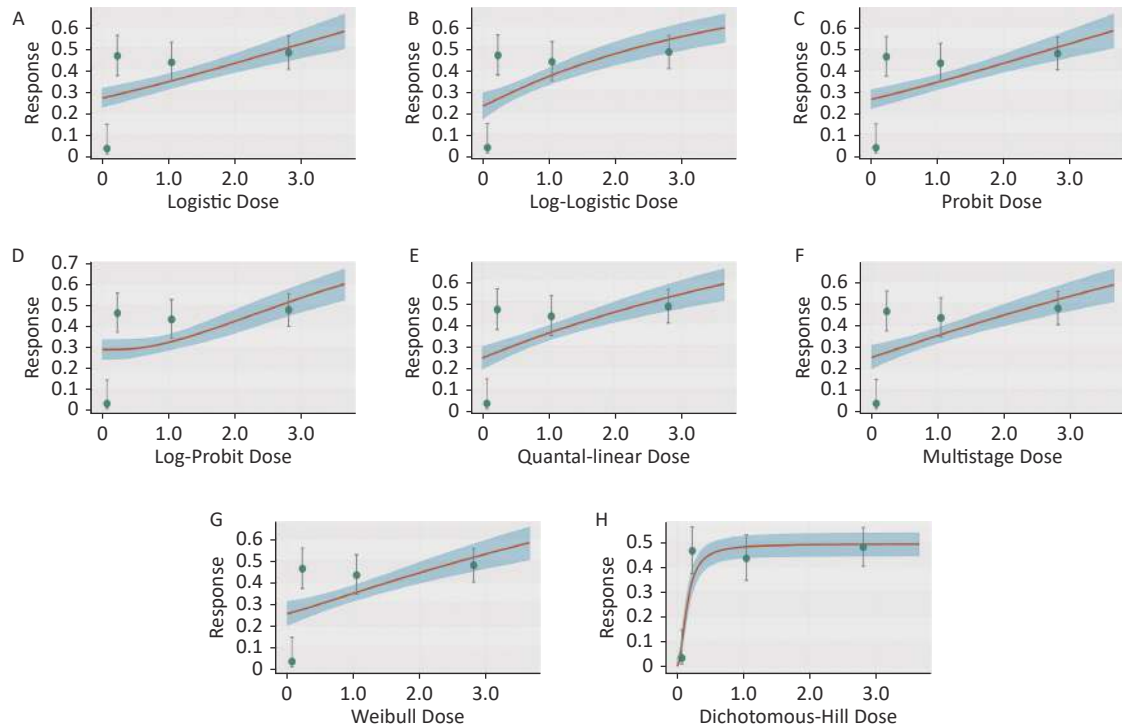
Supplementary Figure S2. Dose-response relationship between CED-COEs and mitochondrial DNA copy number damage rate in male. (A) Logistic model (B) Log-Logistic model (C) Probit model (D) Log-Probit model (E) Quantal-linear model (F) Multistage model (G) Weibull model (H) Dichotomous-Hill model. The X-axis described the dose of CED-COEs and the Y-axis described the rates of mtDNAcn damage. This plot includes original dose-response data and a fitted curve with its 90th percentile interval shaded in blue.
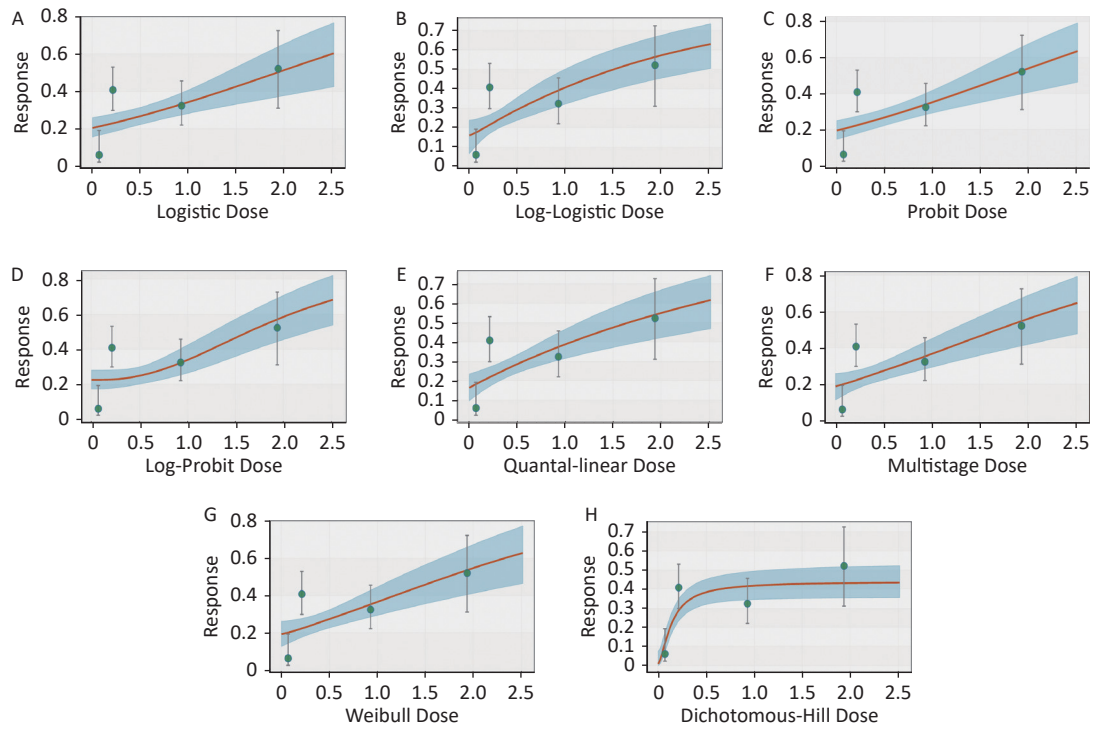
Supplementary Figure S3. Dose-response relationship between CED-COEs and mitochondrial DNA copy number damage rate in female. (A) Logistic model (B) Log-Logistic model (C) Probit model (D) Log-Probit model (E) Quantal-linear model (F) Multistage model (G) Weibull model (H) Dichotomous-Hill model. The X-axis described the dose of CED-COEs and the Y-axis described the rates of mtDNAcn damage. This plot includes original dose-response data and a fitted curve with its 90th percentile interval shaded in blue.