

Supplemental material

Supplemental Table 1. Geometric mean (GM) concentrations of biomarkers of inflammation<sup>a</sup> among reproductive-aged women from South Africa (n=416), by indoor residual spraying (IRS) status.

	Non-IRS household (n=170)	Non-DDT IRS household (n=129)	DDT IRS household (n=117)	<i>p-value</i>
IgA	189.5	192.0	202.8	0.26
IgG	1583.6	1601.0	1585.4	0.93
IgM	168.5	166.9	162.4	0.75
IL-1 $\beta$	0.57	0.60	0.51	0.66
IL-6	2.32	2.18	2.11	0.64
IL-8	2.32	2.21	1.85	0.16
TNF- $\alpha$	8.93	8.81	8.59	0.88
CRP	7.64	6.97	6.68	0.78
SAA	14.13	16.34	14.83	0.66
I-CAM	0.82	0.78	0.90	0.32
V-CAM	1.19	1.11	1.21	0.59

Abbreviations: CRP, C Reactive Protein; Ig, immunoglobulins; I-CAM1, Intercellular Adhesion Molecule-1; IL-1 $\beta$ , Interleukin-1 $\beta$ ; IL-6, Interleukin-6; IL-8, Interleukin-8; SAA, Serum Amyloid A; TNF- $\alpha$ , Tumor Necrosis Factor- $\alpha$ ; V-CAM1, Vascular Cell Adhesion Molecule-1.

<sup>a</sup> IgA, IgG and IgM: mg/dL; IL-1 $\beta$ , IL-6, IL-8, and TNF- $\alpha$ : pg/ml; CRP, I-CAM, SAA and V-CAM: mg/L. *P-values* from ANOVA tests comparing GM concentrations of biomarkers of inflammation across groups defined by IRS were all  $\geq 0.16$

Supplemental Table 2. Percent change in plasma concentrations of biomarkers of inflammation in relation to quintiles<sup>a</sup> of *p,p'*-DDE (ng/g lipids) exposure among 416 reproductive-aged women from the South African Study of Women and Babies (SOWB).

Biomarkers <sup>b</sup> ( <i>nat log</i> )	Unadjusted coefficients (95% CI)			
	Quintile 2	Quintile 3	Quintile 4	Quintile 5
IgA	-0.5 (-11.3, 10.3)	2.3 (-8.5, 13.0)	0.9 (-9.9, 11.8)	-0.9 (-11.8, 10.0)
IgG	1.5 (-6.5, 9.6)	5.6 (-2.5, 13.6)	3.4 (-4.7, 11.5)	6.4 (-1.7, 14.5)
IgM	-2.5 (-15.1, 10.1)	-1.4 (-13.9, 11.1)	0.6 (-12.0, 13.1)	8.6 (-4.1, 21.3)
IL-1 $\beta$	-10.4 (-49.9, 29.1)	-22.1 (-61.5, 17.3)	-22.0 (-61.6, 17.6)	-18.3 (-58.1, 21.6)
IL-6	-10.7 (-37.8, 16.3)	-26.1 (-53.1, 0.9)	-11.6 (-38.8, 15.5)	-21.2 (-48.5, 6.2)
IL-8	-8.1 (-38.8, 22.6)	0.8 (-29.8, 31.4)	-13.2 (-44.0, 17.5)	-12.9 (-43.8, 18.1)
TNF- $\alpha$	-15.0 (-34.2, 4.3)	-16.1 (-35.3, 3.1)	-12.1 (-31.4, 7.2)	-15.0 (-34.4, 4.4)
CRP	0.6 (-49.3, 50.6)	7.5 (-42.2, 57.3)	16.2 (-33.9, 66.2)	-21.7 (-72.0, 28.7)
SAA	7.2 (-34.8, 49.2)	-9.3 (-51.2, 32.6)	2.8 (-39.3, 44.9)	-25.1 (-67.5, 17.3)
I-CAM	-1.1 (-23.5, 21.3)	11.9 (-10.5, 34.2)	14.2 (-8.3, 36.7)	-2.9 (-25.5, 19.7)
V-CAM	-0.4 (-22.6, 21.9)	3.6 (-18.5, 25.8)	6.9 (-15.5, 29.2)	-5.7 (-28.1, 16.8)

Abbreviations: CRP, C Reactive Protein; Ig, immunoglobulins; I-CAM, Intercellular Adhesion Molecule-1; IL-1 $\beta$ , Interleukin-1 $\beta$ ; IL-6, Interleukin-6; IL-8, Interleukin-8; IQR, interquartile range; SAA, Serum Amyloid A; TNF- $\alpha$ , Tumor Necrosis Factor- $\alpha$ ; V-CAM, Vascular Cell Adhesion Molecule-1.

<sup>a</sup> Cut-points: quintile-1,  $\leq$ 345.04 (reference); quintile-2, 345.05 to 972.76; quintile-3, 972.77 to 2,011.87; quintile-4, 2,011.88 to 3,633.32; and quintile-5,  $>$ 3,633.32 ng/g lipids.

<sup>b</sup> IgA, IgG and IgM: mg/dL; IL-1 $\beta$ , IL-6, IL-8, and TNF- $\alpha$ : pg/ml; CRP, I-CAM, SAA and V-CAM: mg/L

Supplemental Table 3. Percent change in plasma concentrations of biomarkers of inflammation in relation to quintiles<sup>a</sup> of *p,p'*-DDT (ng/g lipids) exposure among 416 reproductive-aged women from the South African Study of Women and Babies (SOWB).

Biomarkers <sup>b</sup> ( <i>nat log</i> )	Unadjusted coefficients (95% CI)			
	Quintile 2	Quintile 3	Quintile 4	Quintile 5
IgA	1.2 (-9.6, 12.0)	-3.2 (-13.9, 7.5)	-0.7 (-11.4, 10.1)	-0.1 (-10.9, 10.7)
IgG	-1.7 (-9.8, 6.3)	2.4 (-5.6, 10.5)	-0.2 (-8.3, 7.9)	4.9 (-3.1, 13.0)
IgM	8.4 (-4.2, 20.9)	0.2 (-12.4, 12.7)	2.9 (-9.6, 15.5)	-2.4 (-15.0, 10.2)
IL-1 $\beta$	7.0 (-32.3, 46.4)	-12.1 (-51.3, 27.2)	-19.2 (-58.5, 20.1)	-36.3 (-75.7, 3.1)
IL-6	3.8 (-23.2, 30.9)	-9.9 (-36.9, 17.0)	-10.3 (-37.3, 16.8)	-24.3 (-51.4, 2.9)
IL-8	3.5 (-27.0, 34.0)	-11.1 (-41.5, 19.3)	-19.3 (-49.8, 11.2)	-31.8 (-62.4, -1.2)
TNF- $\alpha$	-3.5 (-22.8, 15.8)	-10.0 (-29.2, 9.2)	-12.4 (-31.6, 6.9)	-15.9 (-35.2, 3.4)
CRP	15.8 (-34.1, 65.7)	-14.0 (-63.8, 35.7)	23.9 (-26.0, 73.8)	11.6 (-38.5, 61.6)
SAA	20.1 (-21.9, 62.1)	-11.5 (-53.4, 30.4)	-1.0 (-43.0, 41.0)	14.7 (-27.4, 56.9)
I-CAM	12.7 (-9.7, 35.2)	9.8 (-12.5, 32.2)	23.6 (1.2, 46.0)	14.8 (-7.7, 37.3)
V-CAM	13.0 (-9.2, 35.2)	-1.7 (-23.9, 20.4)	11.0 (-11.2, 33.2)	6.7 (-15.6, 29.0)

Abbreviations: CRP, C Reactive Protein; Ig, immunoglobulins; I-CAM, Intercellular Adhesion Molecule 1; IL-1 $\beta$ , Interleukin-1 $\beta$ ; IL-6, Interleukin-6; IL-8, Interleukin-8; IQR, interquartile range; SAA, Serum Amyloid A; TNF- $\alpha$ , Tumor Necrosis Factor- $\alpha$ ; V-CAM, Vascular Cell Adhesion Molecule.

<sup>a</sup> Cut-points: Q1,  $\leq$ 61.26 (reference); Q2, 61.27 to 155.76; Q3, 155.77 to 377.95; Q4, 377.96 to 1,120.90; and Q5,  $>$ 1120.90 ng/g lipids.

<sup>b</sup> IgA, IgG and IgM: mg/dL; IL-1 $\beta$ , IL-6, IL-8, and TNF- $\alpha$ : pg/ml; CRP, I-CAM, SAA and V-CAM: mg/L.