

Supplementary Online Content

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

eAppendix. WHI survey of adverse pregnancy outcomes



**Form 158
Supplemental Questionnaire 2017**

Ver. 1

This questionnaire has questions about your experiences. Please answer each question as honestly as you can. No one will see your answers except for the scientists and staff at WHI. (Use a pencil or blue or black pen only.)



1. Are you willing to provide your email address as an additional way for us to contact you?
 Yes _____ **Print your email address on the line above.**
 No

These questions are about pregnancies.

2. Have you ever been pregnant?
 No → **Go to question 3.** Yes →

2.1 Were any of your babies born 3 weeks early or sooner?
 No Yes Don't know

2.2 During any of your pregnancies, did you have preeclampsia (toxemia, high blood pressure during and/or right after pregnancy also associated with protein in the urine) or eclampsia (preeclampsia AND seizures/convulsions)?
 No Yes Don't know

2.3 During any of your pregnancies, did you have high blood pressure (gestational hypertension, pregnancy-induced hypertension) not related to preeclampsia?
 No Yes Don't know

2.4 During any of your pregnancies, were you told you had gestational diabetes or high blood sugar, or sugar in the urine?
 No Yes Don't know

2.5 Have you ever given birth to a baby that weighed less than 5 pounds, 8 ounces (less than 2,500 grams)?
 No Yes Don't know

2.6 Have you ever given birth to a baby that weighed more than 9 pounds, 14 ounces (more than 4,500 grams)?
 No Yes Don't know

These questions are about dental health.

3. How would you describe the condition of your mouth and teeth?
 1 Excellent 2 Very good 3 Good 4 Fair 5 Poor
4. During the past 3 years, how often have you gone to the dentist or dental hygienist for routine check-ups or cleanings?
 1 Never 2 Once or less per year 3 Twice or more per year 4 As needed

PLEASE MAKE NO MARKS IN THIS AREA

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5. Has a dentist or dental hygienist ever told you that you had periodontal or gum disease?
 No Yes Don't know

6. Have you lost all of your permanent teeth, both upper and lower?
 No Yes

These questions are about memory and changes in mental functioning.

7. Do you feel like your memory is becoming worse?
 No Yes, but this does not worry me Yes, and this worries me

This next set of questions asks you to rate any change in your abilities, daily functioning and activities. Fill in the circle for each question that best fits your current ability level compared to 5 years ago.

Select the one best choice for each item and please do not skip any questions.

	No change	Minimal change	Some change	Clearly noticeable change	Much worse
7.1 Recalling information when I really try:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.2 Remembering names and faces of new people I meet:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.3 Remembering things that have happened recently:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.4 Recalling conversations a few days later:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.5 Remembering where things are usually kept:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.6 Remembering new information told to me:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.7 Remembering where I placed familiar objects:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.8 Remembering what I intended to do:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.9 Remembering names of family members and friends:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.10 Remembering without notes and reminders:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.11 People who know me would find that my memory is:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7.12 Remembering things compared to my age group:	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

This question is about your birth name.

8. U.S. census records have important historical information about the environment during your childhood, which may impact health. We would like to link your name to publicly available census records. Are you willing to provide your full birth name for this purpose?

Yes → Print your first, middle and last name as it appears **on your birth certificate.**

No _____ First name _____ Middle name _____ Last name at birth (maiden name)

Thank you for taking the time to complete this questionnaire.

eTable 1. Distribution of adverse pregnancy outcomes

	No	Yes	Don't Know
Gestational Diabetes	44545	959 (2.0)	1005 (2.1)
Low Birth Weight	40217	5773 (12.3)	447 (1.0)
High Birth Weight	43487	2691 (5.7)	222 (0.5)
Preterm delivery	38616	6790 (14.5)	879 (1.9)
Gestational Hypertension	41835	1506 (3.2)	3130 (6.7)
Preeclampsia	42567	2065 (4.4)	1774 (3.8)

eTable 2. Baseline characteristics for each APO by response (yes, don't know, and no)

Supplemental Table 2A: Baseline characteristics for Gestational Diabetes.

Variable	Level	No (n=44545)	Yes (n=959)	Don't Know (n=1005)	Missing (n=296)	Total (n=46805)	p-value
Age at enrollment	Median {IQR}	60.0 {55.0, 64.0}	58.0 {54.0, 61.0}	62.0 {57.0, 68.0}	62.0 {56.0, 66.2}	60.0 {55.0, 64.0}	< 1e-04
Hypertension	Yes	10750 (24.2)	332 (34.6)	364 (36.4)	91 (31.0)	11537 (24.7)	< 1e-04
Diabetes	Yes	972 (2.2)	145 (15.1)	62 (6.2)	7 (2.4)	1186 (2.5)	< 1e-04
Smoking	Yes	21092 (47.6)	422 (44.3)	476 (47.7)	134 (45.4)	22124 (47.5)	0.22
Hyperlipidemia	Yes	4244 (10.1)	106 (11.7)	134 (14.2)	29 (10.5)	4513 (10.2)	0.001
Ethnicity	White	39770 (90.2)	793 (83.9)	846 (85.1)	258 (88.4)	41667 (90.0)	
	Black	2235 (5.1)	73 (7.7)	74 (7.4)	20 (6.8)	2402 (5.2)	
	Hispanic	1045 (2.4)	37 (3.9)	23 (2.3)	8 (2.7)	1113 (2.4)	
	Other	1037 (2.4)	42 (4.4)	51 (5.1)	6 (2.1)	1136 (2.5)	< 1e-04
Education	High Sch & Below	7378 (16.7)	160 (16.8)	220 (22.1)	53 (18.1)	7811 (16.8)	
	Some College & Above	33250 (75.1)	706 (73.9)	686 (68.8)	210 (71.7)	34852 (74.9)	
	Other	3635 (8.2)	89 (9.3)	91 (9.1)	30 (10.2)	3845 (8.3)	<0.001
Income	Below \$20K	3212 (7.6)	86 (9.3)	124 (13.1)	38 (13.7)	3460 (7.8)	
	\$20K - \$74K	27344 (64.5)	585 (63.4)	643 (67.9)	173 (62.2)	28745 (64.5)	
	\$75K Above	11866 (28.0)	252 (27.3)	180 (19.0)	67 (24.1)	12365 (27.7)	< 1e-04
BMI	median {iqr}	26.1 {23.4, 29.9}	28.2 {24.6, 32.3}	27.6 {24.2, 31.6}	26.6 {23.2, 31.3}	26.2 {23.4, 30.0}	< 1e-04
Parity	5+	5955 (13.4)	175 (18.3)	160 (16.0)	37 (12.5)	6327 (13.6)	
	4	7393 (16.7)	169 (17.7)	167 (16.7)	50 (16.9)	7779 (16.7)	
	3	12710 (28.7)	298 (31.2)	266 (26.6)	73 (24.7)	13347 (28.6)	
	2	13635 (30.7)	253 (26.5)	266 (26.6)	90 (30.5)	14244 (30.6)	

	1	4202 (9.5)	59 (6.2)	99 (9.9)	24 (8.1)	4384 (9.4)	
	No term pregnancies*	467 (1.1)	1 (0.1)	42 (4.2)	21 (7.1)	531 (1.1)	< 1e-04
Breastfeeding	Yes	26299 (59.4)	604 (63.4)	551 (55.3)	162 (54.9)	27616 (59.3)	
Age at ASCVD	Median {IQR}	71.7 {66.8, 76.8}	69.5 {63.5, 74.4}	74.0 {69.5, 78.9}	70.0 {64.0, 78.6}	71.7 {66.8, 76.9}	< 1e-04
ASCVD	Yes	2831 (6.4)	86 (9.0)	108 (10.7)	27 (9.1)	3052 (6.5)	< 1e-04

Supplemental Table 2B: Baseline characteristics for Low Birth Weight.

Variable	Level	No (n=40217)	Yes (n=5773)	Don't Know (n=447)	Missing (n=368)	Total (n=46805)	p-value
Age at enrollment	Median {IQR}	60.0 {55.0, 64.0}	60.0 {56.0, 64.0}	64.0 {58.0, 68.0}	61.0 {56.0, 66.0}	60.0 {55.0, 64.0}	< 1e-04
Hypertension	Yes	9708 (24.2)	1603 (27.9)	121 (27.2)	105 (28.6)	11537 (24.7)	< 1e-04
Diabetes	Yes	976 (2.4)	177 (3.1)	16 (3.6)	17 (4.6)	1186 (2.5)	<0.001
Smoking	Yes	18629 (46.5)	3075 (53.5)	221 (49.8)	199 (54.7)	22124 (47.5)	< 1e-04
Hyperlipidemia	Yes	3837 (10.1)	593 (10.8)	48 (11.2)	35 (10.4)	4513 (10.2)	0.33
Ethnicity	White	35968 (90.4)	5008 (87.7)	374 (85.4)	317 (86.6)	41667 (90.0)	
	Black	1937 (4.9)	401 (7.0)	32 (7.3)	32 (8.7)	2402 (5.2)	
	Hispanic	958 (2.4)	137 (2.4)	10 (2.3)	8 (2.2)	1113 (2.4)	
	Other	939 (2.4)	166 (2.9)	22 (5.0)	9 (2.5)	1136 (2.5)	< 1e-04
Education	High Sch & Below	6632 (16.6)	1024 (17.9)	94 (21.0)	61 (16.8)	7811 (16.8)	
	Some College & Above	30072 (75.2)	4194 (73.2)	317 (70.9)	269 (74.1)	34852 (74.9)	
	Other	3261 (8.2)	515 (9.0)	36 (8.1)	33 (9.1)	3845 (8.3)	0.01
Income	Below \$20K	2919 (7.6)	452 (8.2)	55 (13.3)	34 (9.9)	3460 (7.8)	
	\$20K - \$74K	24623 (64.3)	3616 (65.6)	269 (65.0)	237 (68.7)	28745 (64.5)	
	\$75K Above	10753 (28.1)	1448 (26.3)	90 (21.7)	74 (21.4)	12365 (27.7)	< 1e-04

BMI	median {iqr}	26.2 {23.4, 30.0}	26.0 {23.2, 29.8}	25.7 {23.1, 29.5}	25.8 {23.0, 29.9}	26.2 {23.4, 30.0}	0.01
Parity	5+	4926 (12.3)	1253 (21.8)	82 (18.5)	66 (18.0)	6327 (13.6)	
	4	6490 (16.2)	1156 (20.1)	69 (15.5)	64 (17.5)	7779 (16.7)	
	3	11508 (28.7)	1621 (28.2)	113 (25.5)	105 (28.7)	13347 (28.6)	
	2	12756 (31.9)	1309 (22.7)	103 (23.2)	76 (20.8)	14244 (30.6)	
	1	3929 (9.8)	380 (6.6)	45 (10.1)	30 (8.2)	4384 (9.4)	
	No term pregnancies*	437 (1.1)	37 (0.6)	32 (7.2)	25 (6.8)	531 (1.1)	< 1e-04
Breastfeeding	Yes	24086 (60.2)	3056 (53.3)	262 (59.3)	212 (58.2)	27616 (59.3)	
Age at ASCVD	Median {IQR}	71.8 {66.9, 77.0}	70.7 {66.0, 75.9}	74.9 {68.6, 79.3}	70.6 {66.7, 77.4}	71.7 {66.8, 76.9}	0.001
ASCVD	Yes	2525 (6.3)	458 (7.9)	39 (8.7)	30 (8.2)	3052 (6.5)	< 1e-04

Supplemental Table 2C: Baseline characteristics for High Birth Weight.

Variable	Level	No (n=43487)	Yes (n=2691)	Don't Know (n=222)	Missing (n=405)	Total (n=46805)	p-value
Age at enrollment	Median {IQR}	60.0 {55.0, 64.0}	60.0 {56.0, 65.0}	64.0 {58.0, 68.0}	61.0 {57.0, 65.0}	60.0 {55.0, 64.0}	< 1e-04
Hypertension	Yes	10658 (24.6)	714 (26.7)	55 (24.9)	110 (27.2)	11537 (24.7)	0.06
Diabetes	Yes	1006 (2.3)	158 (5.9)	10 (4.5)	12 (3.0)	1186 (2.5)	< 1e-04
Smoking	Yes	20676 (47.8)	1143 (42.6)	111 (50.0)	194 (48.1)	22124 (47.5)	< 1e-04
Hyperlipidemia	Yes	4164 (10.1)	278 (11.0)	28 (13.7)	43 (11.4)	4513 (10.2)	0.14
Ethnicity	White	38657 (89.8)	2472 (92.8)	182 (84.7)	356 (89.0)	41667 (90.0)	
	Black	2254 (5.2)	99 (3.7)	18 (8.4)	31 (7.8)	2402 (5.2)	
	Hispanic	1026 (2.4)	72 (2.7)	6 (2.8)	9 (2.2)	1113 (2.4)	
	Other	1101 (2.6)	22 (0.8)	9 (4.2)	4 (1.0)	1136 (2.5)	< 1e-04
Education	High Sch & Below	7133 (16.5)	560 (20.9)	52 (23.4)	66 (16.4)	7811 (16.8)	

	Some College & Above	32526 (75.3)	1879 (70.2)	150 (67.6)	297 (73.7)	34852 (74.9)	
	Other	3546 (8.2)	239 (8.9)	20 (9.0)	40 (9.9)	3845 (8.3)	< 1e-04
Income	Below \$20K	3125 (7.5)	270 (10.4)	23 (11.4)	42 (11.0)	3460 (7.8)	
	\$20K - \$74K	26653 (64.4)	1714 (66.0)	134 (66.3)	244 (64.0)	28745 (64.5)	
	\$75K Above	11613 (28.1)	612 (23.6)	45 (22.3)	95 (24.9)	12365 (27.7)	< 1e-04
BMI	median {iqr}	26.1 {23.3, 29.9}	28.1 {25.0, 32.3}	26.5 {23.4, 30.4}	26.6 {23.7, 30.2}	26.2 {23.4, 30.0}	< 1e-04
Parity	5+	5462 (12.6)	758 (28.3)	42 (18.9)	65 (16.1)	6327 (13.6)	
	4	7058 (16.3)	619 (23.1)	41 (18.5)	61 (15.1)	7779 (16.7)	
	3	12425 (28.7)	765 (28.6)	49 (22.1)	108 (26.7)	13347 (28.6)	
	2	13618 (31.4)	462 (17.3)	53 (23.9)	111 (27.5)	14244 (30.6)	
	1	4264 (9.8)	68 (2.5)	16 (7.2)	36 (8.9)	4384 (9.4)	
	No term pregnancies*	482 (1.1)	5 (0.2)	21 (9.5)	23 (5.7)	531 (1.1)	< 1e-04
Breastfeeding	Yes	25470 (58.9)	1770 (66.2)	136 (62.4)	240 (59.4)	27616 (59.3)	
Age at ASCVD	Median {IQR}	71.7 {66.6, 76.9}	72.4 {67.8, 76.3}	75.6 {72.4, 81.5}	70.4 {66.3, 73.8}	71.7 {66.8, 76.9}	0.04
ASCVD	Yes	2789 (6.4)	202 (7.5)	24 (10.8)	37 (9.1)	3052 (6.5)	<0.001

Supplemental Table 2D: Baseline characteristics for Preterm Delivery.

Variable	Level	No (n=38616)	Yes (n=6790)	Don't Know (n=879)	Missing (n=520)	Total (n=46805)	p-value
Age at enrollment	Median {IQR}	60.0 {55.0, 64.0}	60.0 {55.0, 64.0}	63.0 {58.0, 67.0}	61.0 {57.0, 66.0}	60.0 {55.0, 64.0}	< 1e-04
Hypertension	Yes	9357 (24.3)	1782 (26.3)	246 (28.1)	152 (29.4)	11537 (24.7)	< 1e-04
Diabetes	Yes	927 (2.4)	202 (3.0)	26 (3.0)	31 (6.0)	1186 (2.5)	< 1e-04
Smoking	Yes	18041 (46.9)	3417 (50.5)	409 (46.6)	257 (49.7)	22124 (47.5)	< 1e-04

Hyperlipidemia	Yes	3640 (10.0)	706 (11.0)	102 (12.2)	65 (13.4)	4513 (10.2)	<0.01
Ethnicity	White	34456 (90.1)	6058 (90.2)	708 (82.0)	445 (86.6)	41667 (90.0)	
	Black	1919 (5.0)	349 (5.2)	92 (10.7)	42 (8.2)	2402 (5.2)	
	Hispanic	915 (2.4)	161 (2.4)	20 (2.3)	17 (3.3)	1113 (2.4)	
	Other	935 (2.4)	148 (2.2)	43 (5.0)	10 (1.9)	1136 (2.5)	< 1e-04
Education	High Sch & Below	6393 (16.7)	1122 (16.6)	189 (21.7)	107 (20.7)	7811 (16.8)	
	Some College & Above	28822 (75.1)	5061 (75.0)	605 (69.4)	364 (70.3)	34852 (74.9)	
	Other	3151 (8.2)	569 (8.4)	78 (8.9)	47 (9.1)	3845 (8.3)	<0.001
Income	Below \$20K	2796 (7.6)	491 (7.6)	120 (14.7)	53 (10.8)	3460 (7.8)	
	\$20K - \$74K	23691 (64.4)	4199 (64.9)	546 (66.7)	309 (63.2)	28745 (64.5)	
	\$75K Above	10310 (28.0)	1775 (27.5)	153 (18.7)	127 (26.0)	12365 (27.7)	< 1e-04
BMI	median {iqr}	26.2 {23.4, 30.0}	26.1 {23.3, 30.0}	26.9 {23.8, 30.5}	26.2 {23.6, 30.3}	26.2 {23.4, 30.0}	0.09
Parity	5+	4772 (12.4)	1328 (19.6)	155 (17.7)	72 (13.9)	6327 (13.6)	
	4	6210 (16.2)	1338 (19.8)	145 (16.6)	86 (16.6)	7779 (16.7)	
	3	11019 (28.7)	1947 (28.8)	232 (26.5)	149 (28.8)	13347 (28.6)	
	2	12255 (31.9)	1632 (24.1)	229 (26.2)	128 (24.7)	14244 (30.6)	
	1	3793 (9.9)	442 (6.5)	89 (10.2)	60 (11.6)	4384 (9.4)	
	No term pregnancies*	399 (1.0)	84 (1.2)	25 (2.9)	23 (4.4)	531 (1.1)	< 1e-04
	Breastfeeding	Yes	23027 (60.0)	3802 (56.4)	500 (57.1)	287 (55.3)	27616 (59.3)
Age at ASCVD	Median {IQR}	71.8 {66.9, 76.9}	70.6 {65.6, 76.0}	74.7 {70.7, 79.7}	71.8 {66.6, 76.3}	71.7 {66.8, 76.9}	< 1e-04
ASCVD	Yes	2399 (6.2)	513 (7.6)	85 (9.7)	55 (10.6)	3052 (6.5)	< 1e-04

Supplemental Table 2E: Baseline characteristics for Hypertensive Disorders of Pregnancy.

Variable	Level	No (n=40354)	Yes (n=2936)	Don't Know (n=3425)	Missing (n=90)	Total (n=46805)	p-value
Age at enrollment	Median {IQR}	60.0 {55.0, 64.0}	59.0 {55.0, 64.0}	62.0 {57.0, 67.0}	61.0 {56.0, 67.0}	60.0 {55.0, 64.0}	<1e-04
Hypertension	Yes	8784 (21.8)	1457 (49.8)	1263 (37.0)	33 (36.7)	11537 (24.7)	<1e-04
Diabetes	Yes	874 (2.2)	143 (4.9)	165 (4.8)	4 (4.4)	1186 (2.5)	<1e-04
Smoking	Yes	19092 (47.5)	1366 (46.8)	1619 (47.5)	47 (52.2)	22124 (47.5)	0.72
Hyperlipidemia	Yes	3681 (9.6)	394 (14.1)	426 (13.2)	12 (15.0)	4513 (10.2)	<1e-04
Ethnicity	White	36156 (90.5)	2537 (87.3)	2897 (85.8)	77 (86.5)	41667 (90.0)	
	Black	1904 (4.8)	227 (7.8)	261 (7.7)	10 (11.2)	2402 (5.2)	
	Hispanic	944 (2.4)	77 (2.7)	90 (2.7)	2 (2.2)	1113 (2.4)	
	Other	945 (2.4)	64 (2.2)	127 (3.8)	0 (0.0)	1136 (2.5)	<1e-04
Education	High Sch & Below	6532 (16.3)	562 (19.2)	702 (20.6)	15 (16.7)	7811 (16.8)	
	Some College & Above	30311 (75.6)	2089 (71.5)	2389 (70.2)	63 (70.0)	34852 (74.9)	
	Other	3250 (8.1)	269 (9.2)	314 (9.2)	12 (13.3)	3845 (8.3)	<1e-04
Income	Below \$20K	2790 (7.3)	241 (8.5)	419 (13.0)	10 (11.9)	3460 (7.8)	
	\$20K - \$74K	24557 (63.9)	1943 (68.7)	2192 (67.9)	53 (63.1)	28745 (64.5)	
	\$75K Above	11084 (28.8)	645 (22.8)	615 (19.1)	21 (25.0)	12365 (27.7)	<1e-04
BMI	median {iqr}	26.0 {23.3, 29.7}	28.2 {24.7, 32.5}	27.1 {24.0, 31.3}	26.8 {23.6, 33.3}	26.2 {23.4, 30.0}	<1e-04
Parity	5+	5297 (13.2)	479 (16.4)	543 (15.9)	8 (8.9)	6327 (13.6)	
	4	6633 (16.5)	539 (18.4)	594 (17.4)	13 (14.4)	7779 (16.7)	

	3	11559 (28.8)	860 (29.4)	908 (26.7)	20 (22.2)	13347 (28.6)	
	2	12496 (31.1)	779 (26.6)	947 (27.8)	22 (24.4)	14244 (30.6)	
	1	3768 (9.4)	267 (9.1)	339 (10.0)	10 (11.1)	4384 (9.4)	
	No term pregnancies*	433 (1.1)	5 (0.2)	76 (2.2)	17 (18.9)	531 (1.1)	<1e-04
Breastfeeding	Yes	23972 (59.7)	1643 (56.3)	1959 (57.6)	42 (46.7)	27616 (59.3)	
Age at ASCVD	Median {IQR}	71.8 {66.8, 76.7}	69.6 {64.7, 74.9}	73.2 {68.2, 78.0}	71.9 {66.5, 79.4}	71.7 {66.8, 76.9}	<1e-04
ASCVD	Yes	2416 (6.0)	273 (9.3)	354 (10.3)	9 (10.0)	3052 (6.5)	<1e-04

eTable 3. Primary and secondary analyses of the association of APOs with ASCVD

Supplemental Table 3: Secondary analyses displaying the results of 3 different models, adjusted for traditional ASCVD risk factors (hypertension, diabetes, smoking, hyperlipidemia and age), that compare “yes” responses to APO survey questions with “no” responses as the reference category. The first column shows the odds ratios for the “yes” response in a multinomial model (i.e. a model that compares “yes” to “no” and “don’t know” to “no”). The second column shows the odds ratios for the “yes” response in a binary logistic model in which the “don’t know” responses were set to “missing” (i.e. omitted from the regression). The third column shows the results of a binary logistic regression model in which the “yes” and “don’t know” responses were combined (i.e. forming a new category of “not no”) and compared with the “no” response.

APO	Multinomial	"Don't Know" set to "missing"	"Don't Know" combined with "Yes"
Gestational Diabetes	1.32	1.31	1.37
Hypertensive Disorders	1.38	1.37	1.33
Preterm Delivery	1.23	1.22	1.25
Low Birth Weight	1.25	1.25	1.24
High Birth Weight	1.07	1.04	1.08

eFigure 1. Overlap between the different adverse pregnancy outcomes (APOs)

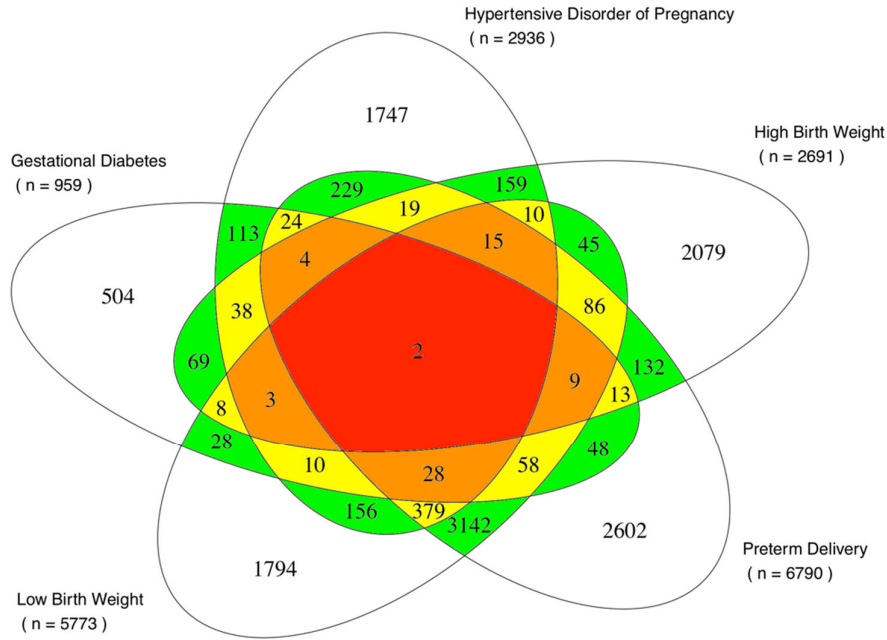


Figure 1: Venn diagram showing the overlap (n) between the different adverse pregnancy outcomes (APOs). White represents women with one APO, green represents women with two APOs, yellow represents three APOs, orange represents four and red represents all five APOs.

eFigure 2. Prevalence of ASCVD by APO response (yes, don't know, and no)

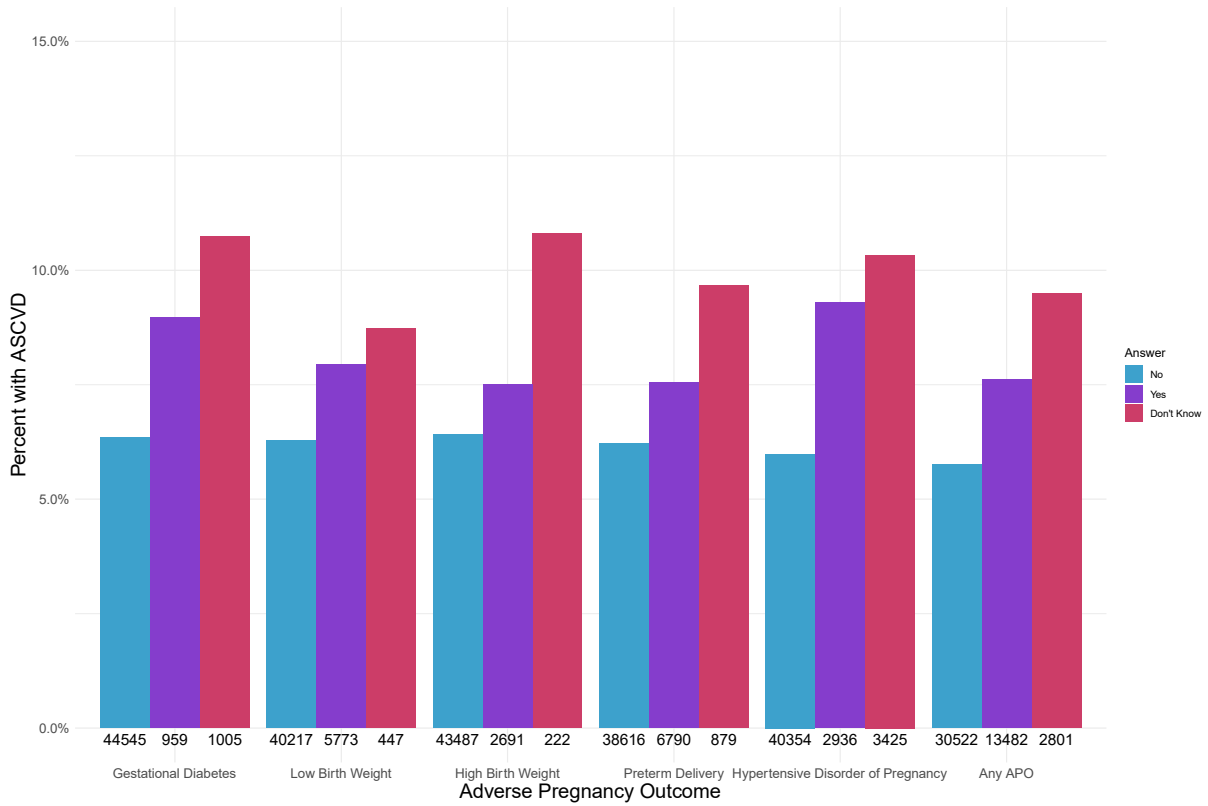
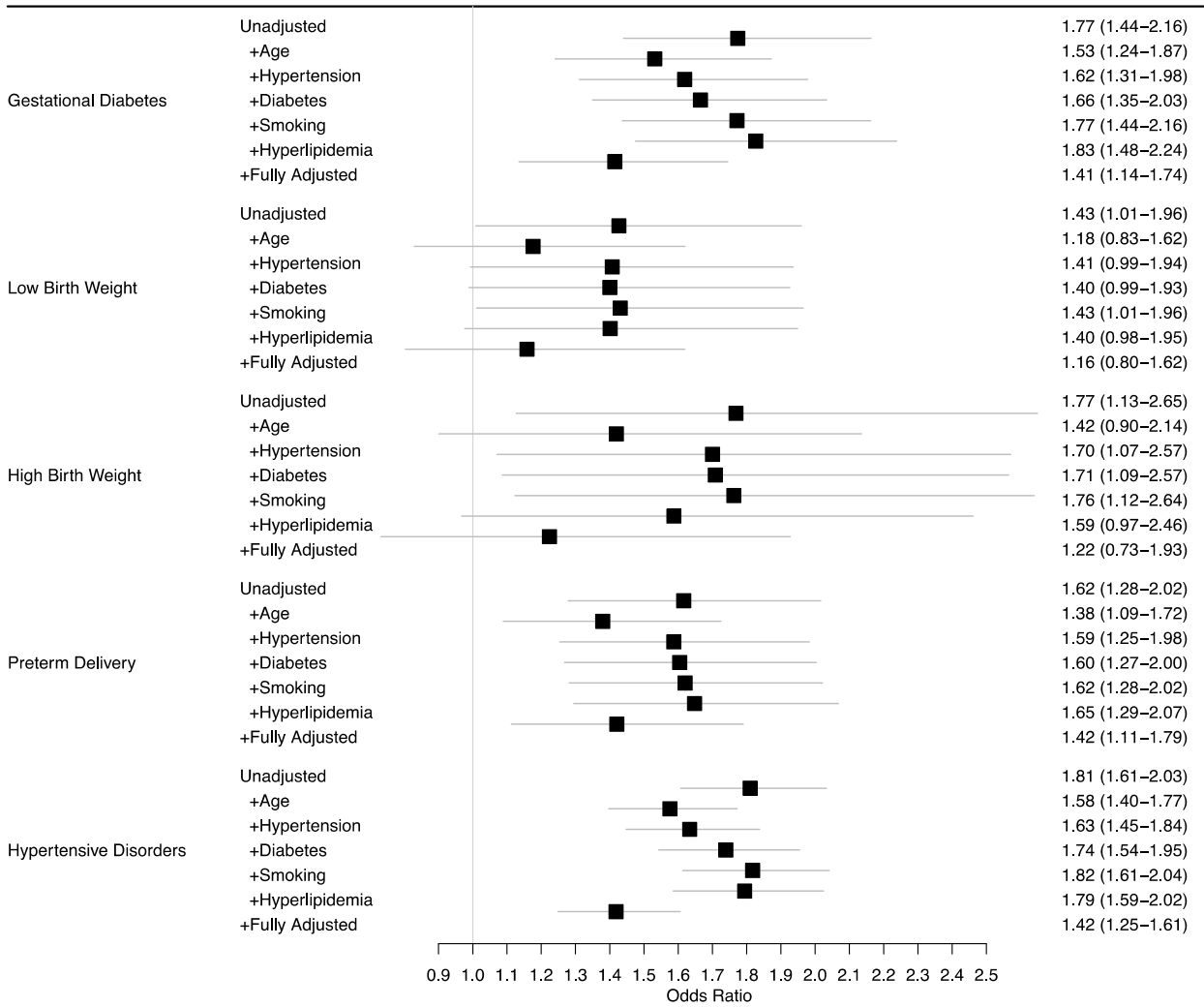


Figure 2: Bar graphs displaying prevalence of ASCVD according to answers to the questionnaire in percentage (yes, no, don't know). Numbers underneath bars represent number of answers for each category.

eFigure 3. Associations between don't know responses to APO survey items and ASCVD

Adverse Pregnancy Outcome Adjustment

Odds Ratio (95% CI)



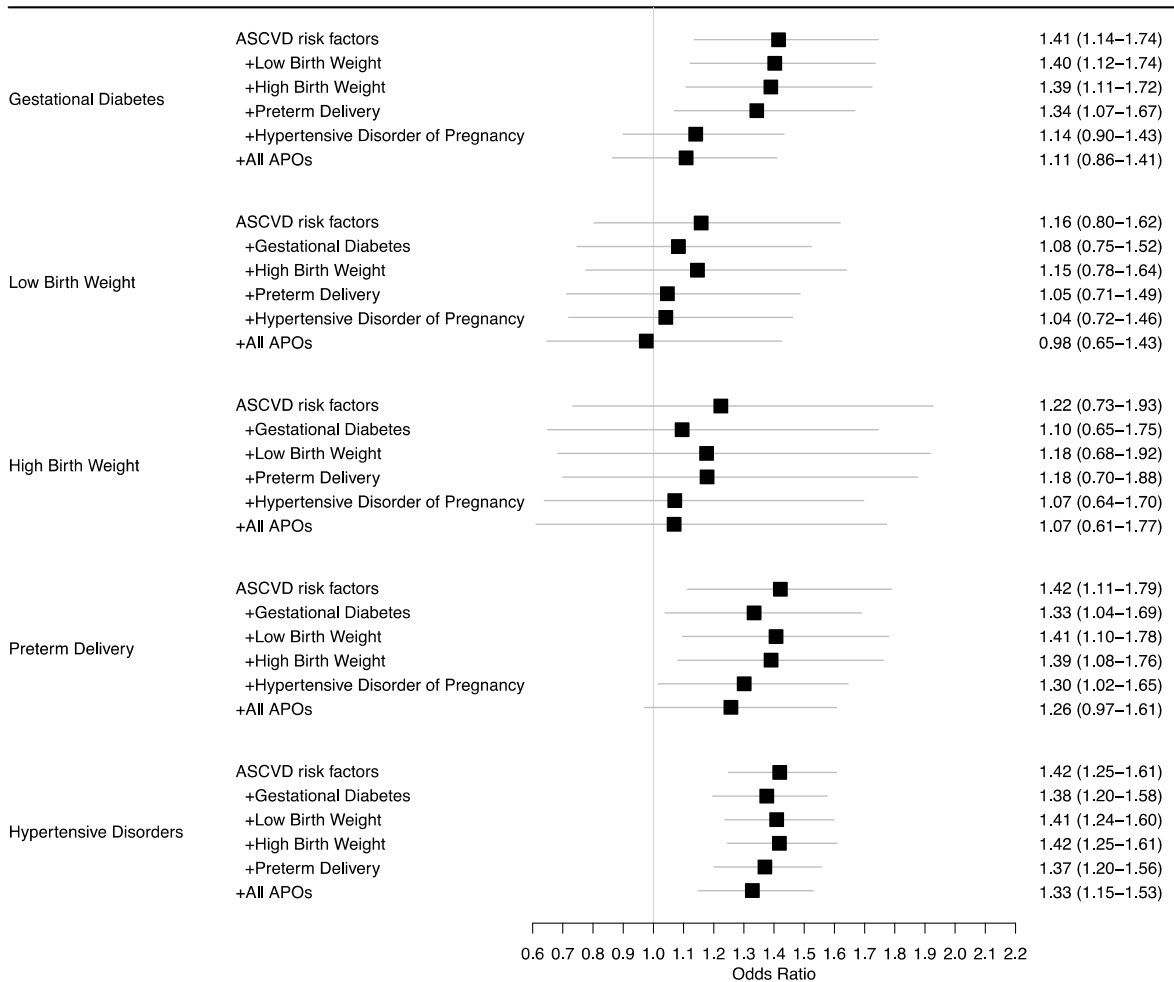


Figure 3A+B: Association between “don’t know” responses for each adverse pregnancy outcome (APO) and atherosclerotic cardiovascular disease (ASCVD) in the Women’s Health Initiative.

Plot A displays odds ratios and 95% confidence intervals from multinomial logistic regression models adjusting for traditional ASCVD risk factors individually and a final model adjusted for all ASCVD risk factors.

Plot B displays odds ratios and 95% confidence intervals from multinomial logistic regression models adjusted for traditional ASCVD risk factors and each of the other APOs individually and fully adjusted for every APO.

Results are for women who answered “don’t know”, using the answer “no” as the reference and ASCVD as the outcome.

eFigure 4. Associations between APOs and ASCVD adjusted for individual traditional risk factors

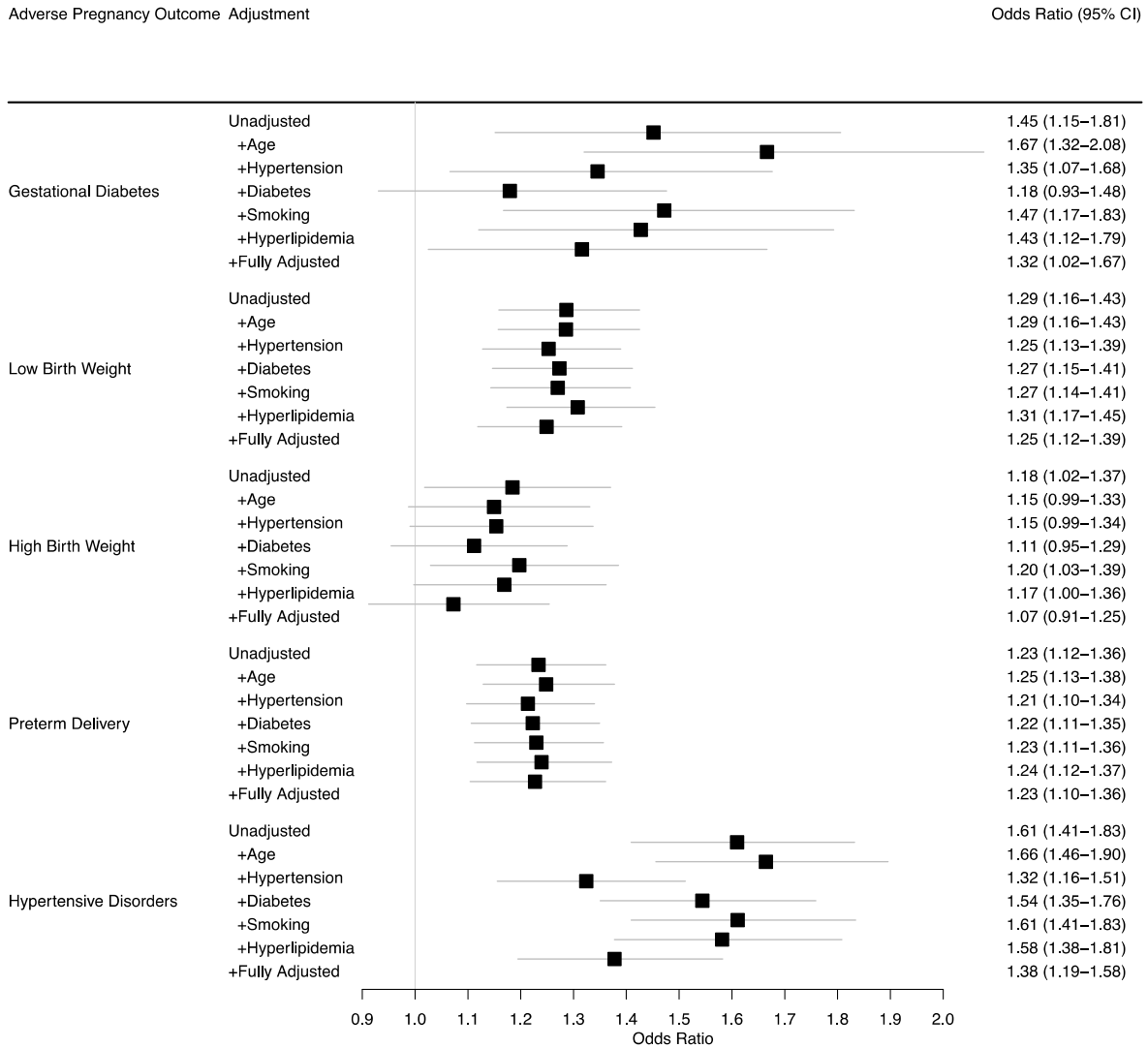


Figure 4: Association between adverse pregnancy outcomes (APOs) and atherosclerotic cardiovascular disease (ASCVD) in the Women’s Health Initiative.

The plot displays odds ratios and 95% confidence intervals from multinomial logistic regression models adjusting for traditional ASCVD risk factors individually and a final model adjusted for all ASCVD risk factors.

Odds ratios compare women who answered “yes” with the reference category of women who answered “no,” with ASCVD as the outcome.

eFigure 5. Associations between APOs and ASCVD, with additional adjustment for race/ethnicity, education, income, parity, breastfeeding, and body mass index

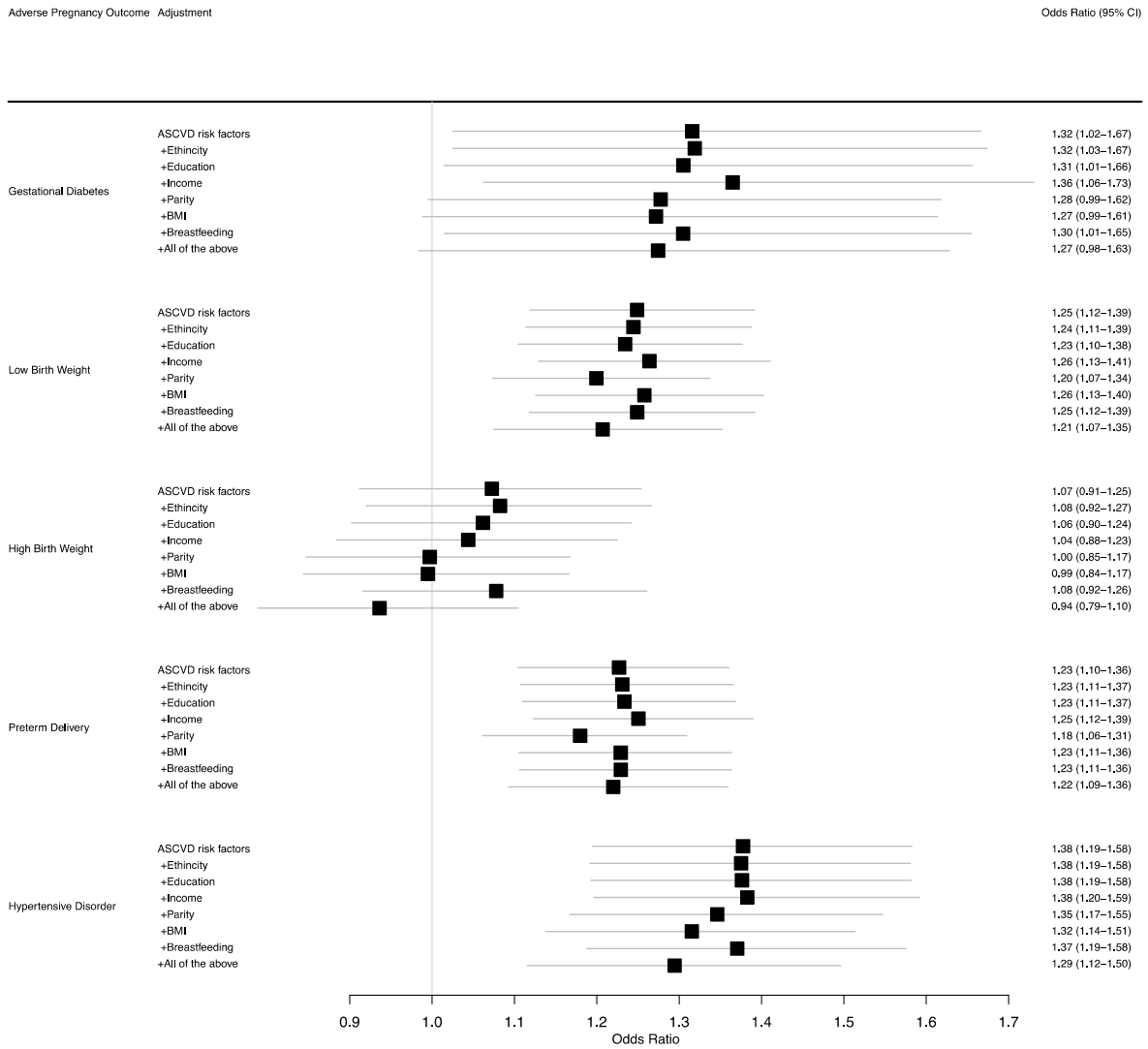


Figure 5: Adverse Pregnancy Outcomes and CVD Women’s Health Initiative Study. The plot displays odds ratios and 95% confidence intervals from multinomial logistic regression models, comparing “yes” responses to the reference category of “no,” adjusting for ethnicity, education, income, parity, breastfeeding and BMI, with ASCVD as the outcome.