

Supplemental Information

SUPPLEMENTAL TABLE 5 Risk of Adverse Neonatal Outcomes Related to Birth Timing and Fetal Growth in Women With a Disability Compared With Women Without Any Recognized Disability, Further Adjusting for Maternal Smoking, for Births in 2007 to 2018

Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	Adjusted RR (95% CI) ^b	Adjusted RR (95% CI) ^c
Preterm birth <37 wk					
No disability (<i>N</i> = 1 169 425)	71 931 (6.2)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	8329 (7.6)	1.24 (1.21–1.26) ^d	1.23 (1.20–1.26) ^d	1.19 (1.16–1.22) ^d	1.17 (1.14–1.20) ^d
Sensory only (<i>N</i> = 35 242)	2588 (7.3)	1.19 (1.15–1.24) ^d	1.19 (1.15–1.24) ^d	1.17 (1.13–1.22) ^d	1.17 (1.12–1.22) ^d
IDD only (<i>N</i> = 1718)	163 (9.5)	1.49 (1.27–1.75) ^d	1.55 (1.32–1.81) ^d	1.42 (1.21–1.66) ^d	1.36 (1.16–1.60) ^d
Multiple (<i>N</i> = 7027)	689 (9.8)	1.58 (1.47–1.71) ^d	1.58 (1.46–1.71) ^d	1.48 (1.37–1.60) ^d	1.45 (1.34–1.57) ^d
Preterm birth <34 wk					
No disability (<i>N</i> = 1 169 425)	17 740 (1.5)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	1998 (1.8)	1.20 (1.14–1.26) ^d	1.21 (1.15–1.27) ^d	1.17 (1.12–1.23) ^d	1.15 (1.09–1.21) ^d
Sensory only (<i>N</i> = 35 242)	669 (1.9)	1.25 (1.16–1.36) ^d	1.25 (1.16–1.36) ^d	1.23 (1.14–1.34) ^d	1.23 (1.13–1.34) ^d
IDD only (<i>N</i> = 1718)	44 (2.6)	1.64 (1.18–2.26) ^d	1.71 (1.23–2.37) ^d	1.54 (1.11–2.15) ^d	1.45 (1.02–2.06) ^d
Multiple (<i>N</i> = 7027)	170 (2.4)	1.59 (1.36–1.86) ^d	1.60 (1.37–1.87) ^d	1.51 (1.29–1.76) ^d	1.44 (1.21–1.70) ^d
Small for gestational age birth weight					
No disability (<i>N</i> = 1 169 425)	145 927 (12.5)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	12 832 (11.8)	0.94 (0.92–0.96)	1.01 (0.99–1.03)	1.00 (0.98–1.02)	0.98 (0.96–0.99)
Sensory only (<i>N</i> = 35 242)	4484 (12.7)	1.01 (0.98–1.04)	1.05 (1.02–1.08) ^d	1.05 (1.02–1.08) ^d	1.04 (1.01–1.07) ^d
IDD only (<i>N</i> = 1718)	289 (16.8)	1.34 (1.20–1.50) ^d	1.38 (1.23–1.55) ^d	1.33 (1.19–1.49) ^d	1.25 (1.12–1.41) ^d
Multiple (<i>N</i> = 7027)	982 (14.0)	1.09 (1.03–1.16) ^d	1.16 (1.09–1.23) ^d	1.13 (1.07–1.21) ^d	1.09 (1.02–1.16) ^d
Large for gestational age birth weight					
No disability (<i>N</i> = 1 169 425)	92 515 (7.9)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	9790 (9.0)	1.14 (1.12–1.17) ^d	1.05 (1.03–1.08) ^d	1.04 (1.01–1.06) ^d	1.05 (1.03–1.08) ^d
Sensory only (<i>N</i> = 35 242)	3017 (8.6)	1.10 (1.06–1.14) ^d	1.05 (1.01–1.09) ^d	1.04 (1.00–1.08) ^d	1.04 (1.00–1.08) ^d
IDD only (<i>N</i> = 1718)	136 (7.9)	1.02 (0.86–1.20)	0.94 (0.79–1.13)	0.93 (0.78–1.12)	0.96 (0.80–1.15)
Multiple (<i>N</i> = 7027)	656 (9.3)	1.20 (1.11–1.30) ^d	1.12 (1.03–1.21) ^d	1.08 (1.00–1.17) ^d	1.11 (1.03–1.20) ^d

^a Model 1 adjusts for maternal age, parity, neighborhood income quintile, rural residence, and immigrant status.

^b Model 2 further adjusts for stable chronic conditions, unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^c Model 3 further adjusts for smoking in pregnancy.

^d Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 6 Risk of Adverse Neonatal Outcomes Related to Morbidity and Mortality, in Women With a Disability, Compared With Women Without Any Recognized Disability, Further Adjusting for Maternal Smoking, for Births in 2007 to 2018

Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	Adjusted RR (95% CI) ^b	Adjusted RR (95% CI) ^c
Neonatal morbidity					
No disability (<i>N</i> = 1 169 425)	90 342 (7.7)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	9909 (9.1)	1.17 (1.15–1.20) ^d	1.16 (1.13–1.18) ^d	1.12 (1.10–1.15) ^d	1.11 (1.09–1.14) ^d
Sensory only (<i>N</i> = 35 242)	3191 (9.1)	1.17 (1.13–1.21) ^d	1.15 (1.11–1.19) ^d	1.13 (1.09–1.17) ^d	1.12 (1.09–1.17) ^d
IDD only (<i>N</i> = 1718)	211 (12.3)	1.58 (1.39–1.80) ^d	1.56 (1.37–1.78) ^d	1.44 (1.26–1.64) ^d	1.41 (1.23–1.62) ^d
Multiple (<i>N</i> = 7027)	758 (10.8)	1.40 (1.31–1.50) ^d	1.37 (1.27–1.46) ^d	1.28 (1.19–1.37) ^d	1.26 (1.17–1.35) ^d
Neonatal abstinence syndrome					
No disability (<i>N</i> = 1 169 425)	6438 (0.6)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	1628 (1.5)	2.86 (2.69–3.05) ^d	2.39 (2.24–2.54) ^d	1.76 (1.65–1.88) ^d	1.49 (1.40–1.59) ^d
Sensory only (<i>N</i> = 35 242)	238 (0.7)	1.25 (1.08–1.45) ^d	0.97 (0.83–1.13) ^d	0.93 (0.81–1.08)	0.88 (0.76–1.01)
IDD only (<i>N</i> = 1718)	53 (3.1)	5.87 (4.28–8.05) ^d	3.37 (2.49–4.55) ^d	1.52 (1.08–2.13) ^d	1.28 (0.92–1.78)
Multiple (<i>N</i> = 7027)	156 (2.2)	4.28 (3.59–5.10) ^d	3.13 (2.61–3.75) ^d	1.69 (1.40–2.05) ^d	1.49 (1.24–1.79) ^d
NICU admission					
No disability (<i>N</i> = 1 169 425)	133 502 (11.4)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	15 192 (13.9)	1.22 (1.20–1.24) ^d	1.21 (1.19–1.23) ^d	1.15 (1.13–1.17) ^d	1.14 (1.12–1.16) ^d
Sensory only (<i>N</i> = 35 242)	4604 (13.1)	1.14 (1.11–1.18) ^d	1.14 (1.10–1.17) ^d	1.11 (1.08–1.14) ^d	1.11 (1.07–1.14) ^d
IDD only (<i>N</i> = 1718)	369 (21.5)	1.83 (1.66–2.02) ^d	1.84 (1.67–2.03) ^d	1.61 (1.46–1.77) ^d	1.54 (1.39–1.70) ^d
Multiple (<i>N</i> = 7027)	1262 (18.0)	1.56 (1.48–1.65) ^d	1.53 (1.45–1.61) ^d	1.38 (1.31–1.45) ^d	1.36 (1.29–1.44) ^d
Neonatal mortality					
No disability (<i>N</i> = 1 169 425)	2181 (0.2)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)	1.00 (Referent)
Physical only (<i>N</i> = 109 115)	247 (0.2)	1.21 (1.06–1.38) ^d	1.22 (1.07–1.40) ^d	1.19 (1.04–1.36) ^d	1.12 (0.96–1.29)
Sensory only (<i>N</i> = 35 242)	89 (0.3)	1.35 (1.09–1.68) ^d	1.38 (1.11–1.71) ^d	1.35 (1.09–1.67) ^d	1.40 (1.12–1.75) ^d
IDD only (<i>N</i> = 1718)	6 (0.3)	1.81 (0.79–4.12)	1.80 (0.79–4.10)	1.67 (0.73–3.82)	1.51 (0.62–3.68)
Multiple (<i>N</i> = 7027)	19 (0.3)	1.44 (0.90–2.31)	1.46 (0.91–2.34)	1.37 (0.85–2.19)	1.19 (0.69–2.03)

^a Model 1 adjusts for maternal age, parity, neighborhood income quintile, rural residence, and immigrant status.

^b Model 2 further adjusts for stable chronic conditions, unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^c Model 3 further adjusts for smoking in pregnancy.

^d Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 7 Risk of Adverse Neonatal Outcomes Related to Birth Timing and Fetal Growth in Women With a Disability, Compared With Women Without Any Recognized Disability, Stratified by the Presence of Pregnancy Complications

Disability Type	With a Pregnancy Complication				Without a Pregnancy Complication			
	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	
Preterm birth <37 wk gestation								
No disability (N = 170 457)	21 120 (12.4)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	77 566 (5.5)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	2636 (14.6)	1.18 (1.13–1.22) ^b	1.15 (1.11–1.20) ^b	Physical only (N = 126 132)	8360 (6.6)	1.21 (1.18–1.24) ^b	1.17 (1.14–1.20) ^b	
Sensory only (N = 5322)	765 (14.4)	1.16 (1.08–1.24) ^b	1.14 (1.07–1.22) ^b	Sensory only (N = 39 666)	2526 (6.4)	1.16 (1.12–1.21) ^b	1.14 (1.09–1.19) ^b	
IDD only (N = 237)	35 (14.8)	1.19 (0.88–1.62)	1.19 (0.88–1.61)	IDD only (N = 1970)	169 (8.6)	1.52 (1.30–1.78) ^b	1.40 (1.20–1.64) ^b	
Multiple (N = 1313)	236 (18.0)	1.43 (1.26–1.61) ^b	1.35 (1.19–1.52) ^b	Multiple (N = 7510)	640 (8.5)	1.55 (1.43–1.68) ^b	1.47 (1.36–1.59) ^b	
Preterm birth <34 wk gestation								
No disability (N = 170 457)	6169 (3.6)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	18 360 (1.3)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	749 (4.1)	1.15 (1.06–1.24) ^b	1.15 (1.06–1.24) ^b	Physical only (N = 126 132)	1955 (1.5)	1.20 (1.14–1.26) ^b	1.18 (1.12–1.24) ^b	
Sensory only (N = 5322)	209 (3.9)	1.08 (0.94–1.24)	1.07 (0.93–1.23)	Sensory only (N = 39 666)	611 (1.5)	1.19 (1.09–1.29) ^b	1.17 (1.08–1.27) ^b	
IDD only (N = 237)	11 (4.6)	1.31 (0.74–2.34)	1.33 (0.75–2.39)	IDD only (N = 1970)	45 (2.3)	1.72 (1.25–2.37) ^b	1.58 (1.14–2.17) ^b	
Multiple (N = 1313)	72 (5.5)	1.51 (1.20–1.90) ^b	1.48 (1.18–1.85) ^b	Multiple (N = 7510)	155 (2.1)	1.60 (1.36–1.88) ^b	1.53 (1.29–1.80) ^b	
Small for gestational age birth weight								
No disability (N = 170 457)	24 607 (14.4)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	171 446 (12.0)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	2385 (13.2)	0.91 (0.88–0.95)	0.99 (0.95–1.03)	Physical only (N = 126 132)	14 425 (11.4)	0.95 (0.93–0.96)	1.01 (0.99–1.02)	
Sensory only (N = 5322)	777 (14.6)	1.01 (0.94–1.08)	1.05 (0.98–1.13)	Sensory only (N = 39 666)	4898 (12.3)	1.02 (0.99–1.05)	1.05 (1.02–1.08) ^b	
IDD only (N = 237)	33 (13.9)	0.95 (0.69–1.32)	1.04 (0.75–1.44)	IDD only (N = 1970)	342 (17.4)	1.43 (1.29–1.59) ^b	1.41 (1.27–1.57) ^b	
Multiple (N = 1313)	172 (13.1)	0.92 (0.80–1.05)	0.99 (0.86–1.14)	Multiple (N = 7510)	1034 (13.8)	1.11 (1.04–1.18) ^b	1.16 (1.09–1.23) ^b	
Large for gestational age birth weight								
No disability (N = 170 457)	17 147 (10.1)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	111 366 (7.8)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	2091 (11.6)	1.16 (1.11–1.21) ^b	1.04 (0.99–1.08)	Physical only (N = 126 132)	10 981 (8.7)	1.12 (1.10–1.14)	1.02 (1.00–1.04) ^b	
Sensory only (N = 5322)	616 (11.6)	1.16 (1.07–1.25) ^b	1.09 (1.01–1.18) ^b	Sensory only (N = 39 666)	3281 (8.3)	1.07 (1.03–1.11) ^b	1.02 (0.98–1.06)	
IDD only (N = 237)	24 (10.1)	1.00 (0.69–1.47)	0.77 (0.51–1.15)	IDD only (N = 1970)	145 (7.4)	0.98 (0.83–1.15)	0.93 (0.78–1.10)	
Multiple (N = 1313)	158 (12.0)	1.21 (1.04–1.41) ^b	1.03 (0.89–1.20)	Multiple (N = 7510)	684 (9.1)	1.19 (1.11–1.29) ^b	1.09 (1.01–1.17) ^b	

^a Adjusted models control for maternal age, parity, neighborhood income quintile, rural residence, immigrant status, stable and unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^b Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 8 Risk of Adverse Neonatal Outcomes Related to Neonatal Morbidity and Mortality in Women With a Disability, Compared With Women Without Any Recognized Disability, Stratified by the Presence of Pregnancy Complications

Disability Type	With a Pregnancy Complication				Without a Pregnancy Complication			
	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	
Neonatal morbidity								
No disability (N = 170 457)	19 928 (11.7)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	103 468 (7.3)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	2458 (13.6)	1.16 (1.12–1.21) ^b	1.11 (1.07–1.16) ^b	Physical only (N = 126 132)	10 645 (8.4)	1.16 (1.14–1.18) ^b	1.11 (1.09–1.14) ^b	
Sensory only (N = 5322)	709 (13.3)	1.14 (1.06–1.22) ^b	1.11 (1.03–1.19) ^b	Sensory only (N = 39 666)	3282 (8.3)	1.14 (1.10–1.18) ^b	1.10 (1.06–1.14) ^b	
IDD only (N = 237)	33 (13.9)	1.18 (0.86–1.63)	1.02 (0.73–1.43)	IDD only (N = 1970)	234 (11.9)	1.62 (1.43–1.84) ^b	1.49 (1.32–1.69) ^b	
Multiple (N = 1313)	220 (16.8)	1.43 (1.26–1.62) ^b	1.32 (1.16–1.50) ^b	Multiple (N = 7510)	737 (9.8)	1.35 (1.26–1.45) ^b	1.24 (1.16–1.33) ^b	
Neonatal abstinence syndrome								
No disability (N = 170 457)	758 (0.4)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	6998 (0.5)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	237 (1.3)	2.96 (2.55–3.44) ^b	1.76 (1.50–2.06) ^b	Physical only (N = 126 132)	1689 (1.3)	2.95 (2.77–3.14) ^b	1.77 (1.66–1.88) ^b	
Sensory only (N = 5322)	31 (0.6)	1.33 (0.92–1.92)	1.03 (0.69–1.55)	Sensory only (N = 39 666)	250 (0.6)	1.32 (1.14–1.52) ^b	0.98 (0.84–1.13)	
IDD only (N = 237)	6 (2.5)	6.10 (2.77–13.42)	1.65 (0.64–4.24)	IDD only (N = 1970)	54 (2.7)	5.79 (4.27–7.85) ^b	1.53 (1.10–2.12) ^b	
Multiple (N = 1313)	29 (2.2)	5.10 (3.48–7.48) ^b	1.78 (1.19–2.66) ^b	Multiple (N = 7510)	156 (2.1)	4.64 (3.89–5.54) ^b	1.87 (1.55–2.25) ^b	
NICU admission								
No disability (N = 170 457)	35 658 (20.9)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1 422 897)	151 084 (10.6)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 18 055)	4254 (23.6)	1.13 (1.09–1.16) ^b	1.10 (1.07–1.14) ^b	Physical only (N = 126 132)	15 979 (12.7)	1.19 (1.17–1.21) ^b	1.14 (1.12–1.16) ^b	
Sensory only (N = 5322)	1246 (23.4)	1.12 (1.06–1.18) ^b	1.11 (1.05–1.16) ^b	Sensory only (N = 39 666)	4685 (11.8)	1.11 (1.08–1.14) ^b	1.08 (1.05–1.11) ^b	
IDD only (N = 237)	65 (27.4)	1.30 (1.06–1.60) ^b	1.22 (0.99–1.51)	IDD only (N = 1970)	390 (19.8)	1.82 (1.65–2.00) ^b	1.58 (1.44–1.74) ^b	
Multiple (N = 1313)	376 (28.6)	1.36 (1.25–1.49) ^b	1.28 (1.17–1.39) ^b	Multiple (N = 7510)	1208 (16.1)	1.50 (1.42–1.58) ^b	1.34 (1.27–1.42) ^b	

Note that the neonatal mortality model was not reported because of small cell sizes <6 among infants born to mothers with intellectual or developmental disabilities.

^a Adjusted models control for maternal age, parity, neighborhood income quintile, rural residence, immigrant status, stable and unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^b Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 9 Risk of Adverse Neonatal Outcomes Related to Birth Timing and Fetal Growth in Women With a Disability, Compared With Women Without Any Recognized Disability, Stratified by Delivery Mode

Disability Type	Caesarean Delivery				Vaginal Delivery			
	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	
Preterm birth <37 wk gestation								
No disability (N = 436381)	36877 (8.5)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1156973)	61809 (5.3)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 44035)	4539 (10.3)	1.22 (1.18–1.25) ^b	1.16 (1.13–1.20) ^b	Physical only (N = 100152)	6457 (6.4)	1.20 (1.17–1.23) ^b	1.17 (1.14–1.20) ^b	
Sensory only (N = 13153)	1327 (10.1)	1.19 (1.13–1.26) ^b	1.15 (1.09–1.22) ^b	Sensory only (N = 31835)	1964 (6.2)	1.15 (1.10–1.20) ^b	1.13 (1.08–1.18) ^b	
IDD only (N = 595)	76 (12.8)	1.52 (1.22–1.89) ^b	1.40 (1.12–1.74) ^b	IDD only (N = 1612)	128 (7.9)	1.41 (1.17–1.70) ^b	1.33 (1.11–1.60) ^b	
Multiple (N = 2994)	401 (13.4)	1.57 (1.43–1.73) ^b	1.43 (1.30–1.57) ^b	Multiple (N = 5829)	475 (8.1)	1.51 (1.37–1.66) ^b	1.44 (1.32–1.59) ^b	
Preterm birth <34 wk gestation								
No disability (N = 436381)	11774 (2.7)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1156973)	12755 (1.1)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 44035)	1383 (3.1)	1.16 (1.09–1.22) ^b	1.14 (1.08–1.21) ^b	Physical only (N = 100152)	1321 (1.3)	1.19 (1.13–1.27) ^b	1.18 (1.11–1.25) ^b	
Sensory only (N = 13153)	400 (3.0)	1.13 (1.02–1.24) ^b	1.09 (0.99–1.21)	Sensory only (N = 31835)	420 (1.3)	1.19 (1.08–1.32)	1.18 (1.06–1.31) ^b	
IDD only (N = 595)	28 (4.7)	1.76 (1.21–2.55) ^b	1.59 (1.09–2.33) ^b	IDD only (N = 1612)	28 (1.7)	1.51 (1.00–2.30) ^b	1.42 (0.93–2.18)	
Multiple (N = 2994)	121 (4.0)	1.49 (1.24–1.78) ^b	1.39 (1.17–1.67) ^b	Multiple (N = 5829)	106 (1.8)	1.65 (1.35–2.01) ^b	1.60 (1.31–1.95) ^b	
Small for gestational age birth weight								
No disability (N = 436381)	51771 (11.9)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1156973)	144282 (12.5)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 44035)	4960 (11.3)	0.95 (0.92–0.97)	1.00 (0.97–1.03)	Physical only (N = 100152)	11850 (11.8)	0.94 (0.93–0.96)	1.01 (0.99–1.03)	
Sensory only (N = 13153)	1644 (12.5)	1.05 (1.00–1.10) ^b	1.09 (1.04–1.14) ^b	Sensory only (N = 31835)	4031 (12.7)	1.01 (0.98–1.04)	1.04 (1.01–1.08) ^b	
IDD only (N = 595)	105 (17.7)	1.43 (1.18–1.73) ^b	1.44 (1.19–1.73) ^b	IDD only (N = 1612)	270 (16.8)	1.35 (1.20–1.52) ^b	1.35 (1.20–1.52) ^b	
Multiple (N = 2994)	376 (12.6)	1.05 (0.95–1.16)	1.09 (0.99–1.21)	Multiple (N = 5829)	830 (14.2)	1.11 (1.04–1.19) ^b	1.16 (1.08–1.24) ^b	
Large for gestational age birth weight								
No disability (N = 436381)	49669 (11.4)	1.00 (Referent)	1.00 (Referent)	No disability (N = 1156973)	78844 (6.8)	1.00 (Referent)	1.00 (Referent)	
Physical only (N = 44035)	5471 (12.4)	1.10 (1.07–1.13) ^b	1.01 (0.98–1.03)	Physical only (N = 100152)	7601 (7.6)	1.12 (1.10–1.15) ^b	1.03 (1.00–1.05) ^b	
Sensory only (N = 13153)	1611 (12.3)	1.07 (1.02–1.13) ^b	1.01 (0.96–1.06)	Sensory only (N = 31835)	2286 (7.2)	1.07 (1.03–1.12) ^b	1.02 (0.98–1.07)	
IDD only (N = 595)	61 (10.3)	0.92 (0.71–1.19)	0.79 (0.60–1.03)	IDD only (N = 1612)	108 (6.7)	1.03 (0.85–1.24)	0.96 (0.79–1.16)	
Multiple (N = 2994)	425 (14.2)	1.23 (1.12–1.35) ^b	1.09 (0.98–1.20)	Multiple (N = 5829)	417 (7.2)	1.09 (0.99–1.20)	1.00 (0.91–1.11)	

^a Adjusted models control for maternal age, parity, neighborhood income quintile, rural residence, stable and unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^b Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 10 Risk of Adverse Neonatal Outcomes Related to Neonatal Morbidity and Mortality in Women with a Disability, Compared With Women Without Any Recognized Disability, Stratified by Delivery Mode

Disability Type	Caesarean Delivery			Vaginal Delivery			
	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a	Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a
Neonatal morbidity							
No disability (N = 436 381)	51 538 (11.8)	1.00 (Referent)	1.00 (Referent)	No disability (N = 115 6973)	71 858 (6.2)	1.00 (Referent)	1.00 (Referent)
Physical only (N = 44 035)	5989 (13.6)	1.15 (1.12–1.18) ^b	1.10 (1.08–1.13) ^b	Physical only (N = 100 152)	7 104 (7.1)	1.14 (1.11–1.17) ^b	1.10 (1.08–1.13) ^b
Sensory only (N = 13 153)	1745 (13.3)	1.12 (1.07–1.17) ^b	1.08 (1.03–1.13) ^b	Sensory only (N = 31 835)	2246 (7.1)	1.14 (1.09–1.18) ^b	1.10 (1.05–1.14) ^b
IDD only (N = 595)	102 (17.1)	1.44 (1.20–1.73) ^b	1.28 (1.06–1.53) ^b	IDD only (N = 1612)	165 (10.2)	1.64 (1.41–1.89) ^b	1.49 (1.28–1.72) ^b
Multiple (N = 2994)	478 (16.0)	1.35 (1.24–1.47) ^b	1.24 (1.14–1.35) ^b	Multiple (N = 5829)	479 (8.2)	1.32 (1.21–1.44) ^b	1.22 (1.12–1.34) ^b
Neonatal abstinence syndrome							
No disability (N = 436 381)	2003 (0.5)	1.00 (Referent)	1.00 (Referent)	No disability (N = 115 6973)	5753 (0.5)	1.00 (Referent)	1.00 (Referent)
Physical only (N = 44 035)	616 (1.4)	3.09 (2.81–3.41) ^b	1.90 (1.72–2.10) ^b	Physical only (N = 100 152)	1310 (1.3)	2.89 (2.69–3.10) ^b	1.70 (1.59–1.83) ^b
Sensory only (N = 13 153)	83 (0.6)	1.43 (1.14–1.80) ^b	1.13 (0.90–1.42)	Sensory only (N = 31 835)	198 (0.6)	1.25 (1.06–1.48) ^b	0.92 (0.77–1.09)
IDD only (N = 595)	17 (2.9)	6.23 (3.72–10.46) ^b	1.84 (1.06–3.22) ^b	IDD only (N = 1612)	43 (2.7)	6.03 (4.34–8.39) ^b	1.39 (0.97–1.99) ^b
Multiple (N = 2994)	72 (2.4)	5.19 (4.03–6.68) ^b	2.11 (1.62–2.74) ^b	Multiple (N = 5829)	113 (1.9)	4.47 (3.64–5.49) ^b	1.71 (1.37–2.14) ^b
NICU admission							
No disability (N = 436 381)	79 644 (18.3)	1.00 (Referent)	1.00 (Referent)	No disability (N = 115 6973)	107 098 (9.3)	1.00 (Referent)	1.00 (Referent)
Physical only (N = 44 035)	9120 (20.7)	1.13 (1.11–1.16) ^b	1.09 (1.07–1.12) ^b	Physical only (N = 100 152)	11 113 (11.1)	1.19 (1.17–1.22) ^b	1.14 (1.12–1.17) ^b
Sensory only (N = 13 153)	2665 (20.3)	1.11 (1.07–1.15) ^b	1.08 (1.04–1.12) ^b	Sensory only (N = 31 835)	3266 (10.3)	1.11 (1.07–1.15) ^b	1.07 (1.04–1.11) ^b
IDD only (N = 595)	171 (28.7)	1.56 (1.36–1.79) ^b	1.38 (1.21–1.57) ^b	IDD only (N = 1612)	284 (17.6)	1.84 (1.65–2.07) ^b	1.59 (1.41–1.78) ^b
Multiple (N = 2994)	764 (25.5)	1.38 (1.29–1.47) ^b	1.25 (1.17–1.33) ^b	Multiple (N = 5829)	820 (14.1)	1.50 (1.40–1.61) ^b	1.34 (1.26–1.44) ^b

^a Adjusted models control for maternal age, parity, neighborhood income quintile, rural residence, immigrant status, stable and unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^b Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 11 Risk of Adverse Neonatal Outcomes Related to Birth Timing and Fetal Growth in Women With a Disability, by Subtype of Disability, Compared With Women Without Any Recognized Disability

Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a
Preterm birth <37 wk gestation			
No disability (<i>N</i> = 1 593 354)	98 686 (6.2)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	4641 (7.0)	1.14 (1.11–1.17) ^b	1.09 (1.06–1.12) ^b
Neurologic disability only (<i>N</i> = 35 415)	2892 (8.2)	1.30 (1.26–1.36) ^b	1.25 (1.20–1.30) ^b
Permanent injury only (<i>N</i> = 22 105)	1632 (7.4)	1.18 (1.12–1.24) ^b	1.18 (1.12–1.24) ^b
Congenital anomaly only (<i>N</i> = 10 124)	755 (7.5)	1.19 (1.10–1.28) ^b	1.20 (1.11–1.29) ^b
Multiple physical disabilities (<i>N</i> = 10 578)	1076 (10.2)	1.63 (1.53–1.73) ^b	1.51 (1.42–1.61) ^b
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	2153 (6.6)	1.07 (1.02–1.12) ^b	1.06 (1.02–1.11) ^b
Vision loss only (<i>N</i> = 12 193)	1098 (9.0)	1.44 (1.35–1.53) ^b	1.35 (1.27–1.44) ^b
Multiple sensory disabilities (<i>N</i> = 413)	40 (9.7)	1.57 (1.16–2.12) ^b	1.49 (1.11–1.99) ^b
Intellectual or developmental disability only (<i>N</i> = 2207)	204 (9.2)	1.45 (1.25–1.67) ^b	1.37 (1.19–1.59) ^b
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	779 (9.9)	1.59 (1.48–1.71) ^b	1.49 (1.39–1.60) ^b
Physical and IDD (<i>N</i> = 632)	63 (10.0)	1.58 (1.22–2.03) ^b	1.38 (1.07–1.78) ^b
Sensory and intellectual or developmental disabilities (<i>N</i> = 230)	21 (9.1)	1.39 (0.90–2.15)	1.42 (0.93–2.18)
All 3 types of disabilities (<i>N</i> = 112)	13 (11.6)	1.97 (1.17–3.30) ^b	1.68 (1.00–2.81) ^b
Preterm birth <34 wk gestation			
No disability (<i>N</i> = 1 593 354)	24 529 (1.5)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	1119 (1.7)	1.11 (1.04–1.18) ^b	1.07 (1.01–1.14) ^b
Neurologic disability only (<i>N</i> = 35 415)	749 (2.1)	1.36 (1.26–1.47) ^b	1.32 (1.22–1.42) ^b
Permanent injury only (<i>N</i> = 22 105)	396 (1.8)	1.14 (1.03–1.27) ^b	1.17 (1.05–1.30) ^b
Congenital anomaly only (<i>N</i> = 10 124)	178 (1.8)	1.13 (0.97–1.32)	1.19 (1.02–1.39)
Multiple physical disabilities (<i>N</i> = 10 578)	262 (2.5)	1.60 (1.40–1.81) ^b	1.52 (1.34–1.73) ^b
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	532 (1.6)	1.06 (0.97–1.16)	1.07 (0.98–1.18)
Vision loss only (<i>N</i> = 12 193)	278 (2.3)	1.47 (1.30–1.66) ^b	1.35 (1.19–1.52) ^b
Multiple sensory disabilities (<i>N</i> = 413)	10 (2.4)	1.61 (0.87–2.98)	1.54 (0.84–2.82)
Intellectual or developmental disability only (<i>N</i> = 2207)	56 (2.5)	1.60 (1.19–2.16) ^b	1.53 (1.13–2.06) ^b
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	198 (2.5)	1.64 (1.42–1.89) ^b	1.56 (1.35–1.80) ^b
Physical and IDD (<i>N</i> = 632)	15 (2.4)	1.51 (0.90–2.52)	1.32 (0.78–2.22)
Sensory and intellectual or developmental disabilities or all 3 types of disabilities (<i>N</i> = 342)	14 (4.1)	2.69 (1.56–4.63) ^b	2.69 (1.58–4.58) ^b
Small for gestational age birth weight			
No disability (<i>N</i> = 1 593 354)	196 053 (12.3)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	7203 (10.9)	0.89 (0.87–0.91)	0.96 (0.94–0.98)
Neurologic disability only (<i>N</i> = 35 415)	4512 (12.7)	1.03 (1.00–1.06) ^b	1.08 (1.05–1.12) ^b
Permanent injury only (<i>N</i> = 22 105)	2612 (11.8)	0.96 (0.92–1.00)	1.00 (0.96–1.04)
Congenital anomaly only (<i>N</i> = 10 124)	1181 (11.7)	0.94 (0.88–0.99)	0.98 (0.92–1.03)
Multiple physical disabilities (<i>N</i> = 10 578)	1302 (12.3)	1.00 (0.94–1.05)	1.06 (1.01–1.12) ^b
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	3984 (12.3)	0.99 (0.96–1.03)	1.03 (1.00–1.06) ^b
Vision loss only (<i>N</i> = 12 193)	1631 (13.4)	1.07 (1.02–1.12) ^b	1.11 (1.05–1.16) ^b
Multiple sensory disabilities (<i>N</i> = 413)	60 (14.6)	1.18 (0.91–1.52)	1.23 (0.96–1.58)
Intellectual/developmental disability only (<i>N</i> = 2207)	375 (17.0)	1.37 (1.24–1.52) ^b	1.37 (1.24–1.52) ^b
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	1019 (13.0)	1.03 (0.97–1.10)	1.09 (1.02–1.16) ^b
Physical and IDD (<i>N</i> = 632)	120 (19.0)	1.51 (1.26–1.81) ^b	1.48 (1.23–1.76) ^b
Sensory and intellectual or developmental disabilities (<i>N</i> = 230)	42 (18.3)	1.46 (1.08–1.98) ^b	1.47 (1.08–1.99) ^b
All 3 types of disabilities (<i>N</i> = 112)	25 (22.3)	1.73 (1.20–2.48) ^b	1.65 (1.15–2.35) ^b
Large for gestational age birth weight			
No disability (<i>N</i> = 1 593 354)	128 513 (8.1)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	6263 (9.5)	1.19 (1.16–1.22) ^b	1.07 (1.04–1.10) ^b
Neurologic disability only (<i>N</i> = 35 415)	3087 (8.7)	1.09 (1.06–1.14) ^b	0.99 (0.95–1.03)
Permanent injury only (<i>N</i> = 22 105)	1937 (8.8)	1.09 (1.04–1.14) ^b	1.02 (0.97–1.07)

SUPPLEMENTAL TABLE 11 Continued

Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a
Congenital anomaly only (<i>N</i> = 10 124)	839 (8.3)	1.03 (0.96–1.10)	0.98 (0.91–1.05)
Multiple physical disabilities (<i>N</i> = 10 578)	946 (9.0)	1.13 (1.06–1.21) ^b	0.99 (0.92–1.06)
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	2784 (8.6)	1.08 (1.04–1.12) ^b	1.03 (0.99–1.07)
Vision loss only (<i>N</i> = 12 193)	1081 (8.9)	1.12 (1.05–1.19) ^b	1.04 (0.98–1.11)
Multiple sensory disabilities (<i>N</i> = 413)	32 (7.8)	0.96 (0.65–1.42)	0.92 (0.63–1.36)
Intellectual or developmental disability only (<i>N</i> = 2207)	169 (7.7)	0.99 (0.85–1.15)	0.91 (0.77–1.06)
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	754 (9.6)	1.22 (1.13–1.31)	1.08 (1.01–1.17)
Physical and IDD (<i>N</i> = 632)	58 (9.2)	1.19 (0.92–1.53)	1.11 (0.86–1.43)
Sensory and intellectual or developmental disabilities or all 3 types of disabilities (<i>N</i> = 342)	30 (8.8)	1.21 (0.85–1.74)	1.17 (0.82–1.67)

^a Adjusted models control for maternal age, parity, neighborhood income quintile, rural residence, immigrant status, stable and unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^b Identifies statistically significant RRs.

SUPPLEMENTAL TABLE 12 Risk of Adverse Neonatal Outcomes Related to Neonatal Morbidity and Mortality in Women With a Disability, by Subtype of Disability, Compared With Women Without Any Recognized Disability

Disability Type	Number (%) With Outcome	Unadjusted RR (95% CI)	Adjusted RR (95% CI) ^a
Neonatal morbidity			
No disability (<i>N</i> = 1 593 354)	123 396 (7.7)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	5706 (8.7)	1.12 (1.09–1.15) ^b	1.07 (1.04–1.10) ^b
Neurologic disability only (<i>N</i> = 35 415)	3429 (9.7)	1.25 (1.20–1.29) ^b	1.18 (1.15–1.22) ^b
Permanent injury only (<i>N</i> = 22 105)	1911 (8.6)	1.11 (1.07–1.16) ^b	1.08 (1.04–1.13) ^b
Congenital anomaly only (<i>N</i> = 10 124)	905 (8.9)	1.15 (1.08–1.23) ^b	1.11 (1.04–1.19) ^b
Multiple physical disabilities (<i>N</i> = 10 578)	1152 (10.9)	1.40 (1.33–1.49) ^b	1.29 (1.22–1.37) ^b
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	2792 (8.6)	1.11 (1.07–1.16) ^b	1.08 (1.04–1.12) ^b
Vision loss only (<i>N</i> = 12 193)	1158 (9.5)	1.22 (1.16–1.29) ^b	1.17 (1.10–1.24) ^b
Multiple sensory disabilities (<i>N</i> = 413)	41 (9.9)	1.30 (0.98–1.73)	1.19 (0.89–1.58)
Intellectual or developmental disability only (<i>N</i> = 2207)	267 (12.1)	1.55 (1.38–1.74) ^b	1.43 (1.27–1.60) ^b
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	831 (10.6)	1.37 (1.28–1.46) ^b	1.26 (1.18–1.34) ^b
Physical and IDD (<i>N</i> = 632)	89 (14.1)	1.81 (1.48–2.22) ^b	1.57 (1.29–1.93) ^b
Sensory and intellectual or developmental disabilities (<i>N</i> = 230)	22 (9.6)	1.23 (0.84–1.82)	1.17 (0.79–1.72)
All 3 types of disabilities (<i>N</i> = 112)	15 (13.4)	1.73 (1.08–2.79) ^b	1.45 (0.90–2.33)
Neonatal abstinence syndrome			
No disability (<i>N</i> = 1 593 354)	7756 (0.5)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	579 (0.9)	2.04 (1.85–2.24) ^b	1.49 (1.36–1.64) ^b
Neurologic disability only (<i>N</i> = 35 415)	555 (1.6)	3.47 (3.12–3.85) ^b	1.88 (1.70–2.09) ^b
Permanent injury only (<i>N</i> = 22 105)	354 (1.6)	3.39 (2.98–3.86) ^b	1.67 (1.48–1.88) ^b
Congenital anomaly only (<i>N</i> = 10 124)	107 (1.1)	2.36 (1.90–2.93) ^b	1.31 (1.04–1.65) ^b
Multiple physical disabilities (<i>N</i> = 10 578)	331 (3.1)	7.12 (6.28–8.07) ^b	3.14 (2.76–3.56) ^b
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	225 (0.7)	1.48 (1.27–1.73) ^b	1.02 (0.87–1.19) ^b
Vision loss only or multiple sensory disabilities (<i>N</i> = 12 606)	56 (0.4)	0.97 (0.73–1.29)	0.90 (0.65–1.25)
Intellectual or developmental disability only (<i>N</i> = 2207)	60 (2.7)	6.13 (4.62–8.12) ^b	1.52 (1.11–2.08) ^b
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	147 (1.9)	4.31 (3.60–5.16) ^b	2.18 (1.81–2.62) ^b
Physical and IDD (<i>N</i> = 632)	31 (4.9)	9.95 (6.45–15.35) ^b	1.38 (0.88–2.18)
Sensory and intellectual/developmental disabilities or all 3 types of disabilities (<i>N</i> = 342)	7 (2.0)	4.73 (1.94–11.49) ^b	0.74 (0.29–1.86)
NICU admission			
No disability (<i>N</i> = 1 593 354)	186 742 (11.7)	1.00 (Referent)	1.00 (Referent)
Physical only			
Musculoskeletal disability only (<i>N</i> = 65 965)	8720 (13.2)	1.13 (1.11–1.15) ^b	1.09 (1.06–1.11) ^b
Neurologic disability only (<i>N</i> = 35 415)	5298 (15.0)	1.27 (1.23–1.30) ^b	1.20 (1.17–1.23) ^b
Permanent injury only (<i>N</i> = 22 105)	3029 (13.7)	1.16 (1.12–1.21) ^b	1.13 (1.09–1.17) ^b
Congenital anomaly only (<i>N</i> = 10 124)	1342 (13.3)	1.12 (1.06–1.18) ^b	1.10 (1.04–1.16) ^b
Multiple physical disabilities (<i>N</i> = 10 578)	1844 (17.4)	1.48 (1.42–1.55) ^b	1.35 (1.29–1.41) ^b
Sensory only			
Hearing loss only (<i>N</i> = 32 382)	4128 (12.7)	1.09 (1.05–1.12) ^b	1.06 (1.03–1.10) ^b
Vision loss only (<i>N</i> = 12 193)	1735 (14.2)	1.21 (1.15–1.27) ^b	1.15 (1.10–1.21) ^b
Multiple sensory disabilities (<i>N</i> = 413)	68 (16.5)	1.42 (1.14–1.77) ^b	1.33 (1.07–1.64) ^b
Intellectual or developmental disability only (<i>N</i> = 2207)	455 (20.6)	1.72 (1.57–1.88) ^b	1.53 (1.40–1.67) ^b
Multiple			
Physical and sensory disabilities (<i>N</i> = 7849)	1319 (16.8)	1.42 (1.35–1.50) ^b	1.29 (1.22–1.36) ^b
Physical and IDD (<i>N</i> = 632)	191 (30.2)	2.52 (2.20–2.89) ^b	1.97 (1.71–2.26) ^b
Sensory and intellectual or developmental disabilities (<i>N</i> = 230)	44 (19.1)	1.59 (1.22–2.08) ^b	1.44 (1.10–1.90) ^b
All 3 types of disabilities (<i>N</i> = 112)	30 (26.8)	2.23 (1.51–3.30) ^b	1.70 (1.14–2.52) ^b

^a Adjusted models control for maternal age, parity, neighborhood income quintile, rural residence, immigrant status, stable and unstable chronic conditions, mental illness, substance use disorders, and prenatal care adequacy.

^b Identifies statistically significant RRs.