Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
Ammenheuser, 1998	Retrospective cohort	University of Texas Medical Branch (UTMB) in Galveston, TX, USA	Unknown	The mean age for users was 24.8 and non-users was 25.1. Ethnicities included 35% Black, 62% White, and 3% Asian.	Urine screening with EMIT II (Syva) immunoassay	34 (17 users)	Fetal mutant lymphocytes frequency per million evaluatable cells[b]	2.55(0.6) users; 0.85(0.23) non-users	Tobacco users were excluded using cotinine (nicotine metabolite) analysis in blood. All subjects denied regular use of alcohol.
							Maternal mutant lymphocytes frequency per million evaluatable cells[b]	6.48(0.48) users; 1.93(0.17) non-users	
Barros, 2006	Cross-sectional	Mário de Moraes Altenfelder Silva Maternity Hospital in São Paulo, Brazil	July 2001 - November 2002	Adolescent mothers 10-20yrs old, mean age with standard deviation was 16.5(1.5) for users and 16.9(1.5) for non-users. Eth-	Maternal hair and neonatal meconium were analyzed for cannabis. Interviews with mothers were also performed.	561 (26 users)	Habituation, NNNS	6.91(1.11) users; 6.89(1.50) non-users	Excluded infants exposed to other drugs including alcohol and tobacco. Individuals performing the NNNS examinations were blinded with regard to infant
							Attention, NNNS	5.30(1.19) users; 5.69(1.31) non-users	
							Premature onset of labor	0% users; 3.6% non-users	
							1-minute Apgar	8.5(1.30) users; 8.1(1.30) non-users	
							5-minute Apgar	9.7(0.60) users; 9.6(0.60) non-users	
							Arousal, NNNS	4.05(0.60) users;	

Author, Year	Type of study	Loca-tion of Study	Recruit-cruit-ment Period	Partici-pants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confound-ing
				nicity of the sample included 49% White and 51% Other.				3.68(0.70) non-users	drug expo-sure.
							Asymmetry, NNNS	0.85(0.83) users; 0.72(0.93) non-users	
							Birth weight (g)	3095(405) users; 3120(409) non-users	
							Maternal diabe-tes	0% users; 3.6% non-users	
							Excitability, NNNS[b,c]	3.27(1.40) users; 2.40(1.57) non-users	
							Gestational age (wks)	39.1 (1.1) users; 39.3(1.1) non-users	
							Handling, NNNS	0.44(0.28) users; 0.36(0.26) non-users	
							Head circumfer-ence (cm)	34.1(1.3) users; 34.1(1.3) non-users	
							Hypertonicity, NNNS	0.08(0.27) users; 0.17(0.38) non-users	
							Hypoglycemia	0.0% users; 0.7% non-users	
							Hypotonicity, NNNS	0.04(0.20) users; 0.13(0.37) non-	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
								users	
							Maternal hypertension	14% users; 18% non-users	
							Jaundice	36% users; 28% non-users	
							Length (cm)	48.1(1.9) users; 48.4(1.9) non-users	
							Lethargy, NNNS	4.04(1.97) users; 4.19(1.95) non-users	
							Neonate days in hospital	2.4(0.9) users; 2.5(0.9) non-users	
							Nonoptimal reflexes, NNNS	3.46(1.24) users; 3.71(1.36) non-users	
							Prenatal care	26(100) users; 515(96) non-users	
							Quality of movement, NNNS	5.10(0.64) users; 5.22(0.45) non-users	
							Regulation, NNNS[b]	5.75(0.62) users; 6.04(0.72) non-users	
							Stress/abstinence signals, NNNS	0.08(0.06) users; 0.07(0.05) non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
							Transient tachypnea	21% users; 22% non-users	
Berenson, 1996	Retrospective cohort	The University of Texas Medical Branch at Galveston, TX, USA	June 1, 1989 - February 28, 1990	Maternal ages 14-35yrs old, sample consisted of 49% White, 35% Black, and 16% Hispanic. All participants were recruited via medical records.	Urine screening during first prenatal visit, or during delivery if they had not been previously tested.	183 (36 users)	1-minute Apgar	AOR: 0.7(0.3-1.6)	Adjusted for: maternal race, number of cigarettes smoked per day, and whether mother drank alcohol while pregnant
							5-minute Apgar	AOR: 0.9(0.3-2.2)	
							Fetal distress	AOR:1.6 (0.6-4.2)	
							Intubation required	AOR: 1.9(0.4-9.8)	
							LBW	AOR: 1.2(0.5-2.8)	
							Maternal anemia	AOR: 0.7(0.1-4.3)	
							NICU/ICU	AOR: 0.5(0.2-1.4)	
							Respiratory distress syndrome	AOR: 0.6(0.1-6.4)	
							Sepsis	AOR:0.5 (0.1-2.0)	
							Small Head Size	AOR: 0.8(0.3-1.8)	
							Transfusion required	AOR: 0.6(0.1-6.5)	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
Bonello, 2014	Retrospective cohort	Midwives Data Collection (MDC) from all births in New South Wales, Australia	January 1, 2003 - December 31, 2006	All mothers were 18-44 yrs. old, admitted to hospital with diagnosis of mental/behavioral disorder for cannabinoid use during pregnancy.	Self-report	13443 (330 users)	LBW (<2500g)[b]	AOR: 4.85(3.55-6.62)	Adjusted for maternal age, pre-existing maternal diabetes, pre-existing maternal hypertension, pregnancy complications (pre-eclampsia, gestational diabetes), maternal smoking status (yes/no), remoteness of living area, Index of Relative Socio-economic Disadvantage, maternal country of
							Preterm birth (<37wks)[b]	AOR: 3.61(2.58-5.04)	
							NICU/ICU[b]	AOR: 2.84(2.19-3.68)	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
									birth, delivery method, infant gender and fetal/neonatal death.
Braunstein, 1983	Cohort	USA	Unknown	Unknown	Serum and urine screening	26 (13 users)	Hormone concentrations	No significant differences in hormone concentrations were found between THC and control groups	Patients were matched within two weeks of gestational age. Women who used other illegal drugs during pregnancy or the three months prior to conception were excluded.

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
Chasnoff, 1992	Prospective cohort	The National Association for Perinatal Addiction Research and Education (NAPARE), USA	Unknown	This sample included 34% White, 55% Black, 10% Hispanic, and 1% Oriental. Article states that the users and non-users had a similar mean age, but no mean age or range was given.	Urine screening	126 (45 users)	Birth weight (g)[c]	3081(625) users; 3447(727) non-users	Control group was matched at enrollment on maternal age, race, and socioeconomic class.
							Head circumference (cm)[c]	33.5(1.6) users; 34.9(2.1) non-users	
							Length (cm)[c]	49.3(3.0) users; 50.8(3.2) non-users	
							Preterm birth (<38wks)	15% users; 5% non-users	
El Marroun, 2009	Population-based prospective cohort	Generation R study in Rotterdam, Netherlands	April 2002 - January 2006	The mean age and standard deviation for users was 28.3(5.4) and 30.1(5.1) for non-	Self-report	5581 (41 users)	Birth weight (g)[b]	3122.9(544.5) users; 3450.1(544.9) non-users	Maternal age, educational level, national origin, alcohol use, parity , and gravidity were assessed with
							Gestational age (wks)	39.5(1.7) users; 39.8(1.7) non-users	
							Head circumference (cm)	Beta coefficient 2.66(-1.66 to 6.93) p=.22	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
				users. Maternal national origins collected but not reported.					questionnaires and considered as possible confounders.
El Maroun, 2010	Population-based prospective cohort	Generation R study in Rotterdam, Netherlands	April 2002 - January 2006	The mean age and standard deviation for users was 30.2(4.8) and 31.8(3.7) for non-users.	Self-report	94 (9 users)	Birth weight (g)[b]	3158(628) users; 3553(532) non-users	All users smoked tobacco and the majority drank alcohol.
							Cardiac blood flow[b]	For fetuses whose mother continued cannabis use during pregnancy, the inner diameter of their aorta was smaller and their pulmonary peak systolic velocity (PPSV) was lower than fetus of non-using mothers (Inner diameter aorta: Users =0.59(0.1); Non-users =0.66(0.06);	

Author, Year	Type of study	Location of Study	Recruitcruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
								PPSV: Users =66.8(7.8); Non-users =73.3(9.3)).[b] No difference was seen in aortic diameter or peak systolic velocity of in-fants whose mother stopped using cannabis during early pregnancy and those where the mother was a non-user (Inner diameter aor-ta=0.62(0.07); PPSV=72.6(8.2)). No difference in cardiac blood flow was found between the fol-lowing variables: Fetal heart rate of the aorta or pulmonary ar-teries, the inner	

Author, Year	Type of study	Loca-tion of Study	Recruit-cruit-ment Period	Partici-pants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confound-ing
								diameter of pulmonary ar-tery, and aortic PSV.	
							Gestational age (wks)	39.9(2.4) users; 39.9(1.8) non-users	
							Placental blood flow[b]	Pulsatility index (PI) and re-sistance index (RI) of mothers who used throughout pregnancy was higher than non-users (PI uterine artery: users =0.58(0.14); non-users =0.50(0.11); RI uterine artery: 1.00(0.44); non-users =0.79(0.30)). For cannabis using mothers that discontinued use in early	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
								pregnancy, lower pulsatility and resistance indices were seen compared to non-using mothers (early pregnancy users uterine artery PI: 0.44(0.07); RI: 0.63(0.17)) . No difference was found in any group between placental blood flow in umbilical artery and vein flow.	
Fried, 1984	Prospective cohort	Department of Psychology, Carelton University, Ottowa Hospitals in Ottowa,	1979-1983	The mean age for users was 25.9 and non-users was 29.3.	Self-report and urine screening	517 (18 users)	Birth weight (g)	3396(321) users; 3490(523) non-users	Crude numbers.
							Gestational age (wks)[b]	38.8(1.77) users; 39.7(1.67) non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
		Ontario, Canada							
Fried, 1987a	Prospective cohort	Department of Psychology, Carelton University, Ottowa Hospitals in Ottowa, Ontario, Canada	1979-1983	The mean age for users was 26.9 and non-users was 29.3.	Self-report	284 (32 users)	Prechtl Assessment, Day 9[b]	More hand-to mouth, startle, and tremors were significant; all other variables were not.	Crude numbers.
Fried, 1987b	Prospective cohort	Department of Psychology, Carelton University, Ottowa Hospitals in Ottowa, Ontario, Canada	1979-1983	The mean age for users was 26.9 and non-users was 29.3.	Self-report	250 (24 users)	Habituation to light, NBAS[b]	$F=4.67$; $df=188,3$; $p=0.032$	Gestation length (weeks), caffeine (mg per day), age at testing (days), family income, maternal age
							Irritability, NBAS[b]	$F=3.77$; $df=226,4$; $p=0.053$	
							Response to light, NBAS[b]	$F=1.51$; $df=227,3$; $p=0.220$	
							Startles, NBAS[b]	$F=12.89$; $df=227,3$; $p=0.000$	
							Tremulousness, NBAS[b]	$F=3.90$; $df=228,2$;	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
								p=0.050	
Fried, 1991	Prospective cohort	Department of Psychology, Carelton University, Ottowa Hospitals in Ottowa, Ontario, Canada	1979-1983	Unknown	Self-report	Unknown	Miscarriage	No association	Unknown.
							Apgar Score	No association	
							Major Complications at Birth	No association	
							Anomaly	No association	
							Presentation at birth	No association	
Fried, 1999	Prospective cohort	Department of Psychology, Carelton University, Ottowa Hospitals in Ottowa, Ontario, Canada	1979-1983	The mean age for users was 25.9 and non-users was 29.3. Infants were tested at birth.	Self-report	679 (115 users)	Head circumference (cm)	Infants exposed to cannabis ≥6 times/wk had a decrease in head circumference (z-score: -0.36(1.4) and 0.15(1.3), respectively)	Crude Numbers.
							Length (cm)	Infants exposed to cannabis ≥6 times/wk had a decrease in length (z-score: 0.34(1.8) and	

Author, Year	Type of study	Location of Study	Recruit-ment Period	Partici-pants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confound-ing
								0.69(1.2), re-spectively)	
							Birth weight (g)[b]	Infants exposed to cannabis ≥6 times/wk had a decrease in birth weight (z-score: 0.22(1.2) and 0.70(1.2), re-spectively)	
Gargari, 2012	Retro-spec-tive co-hort	Shahid Beheshti Universi-ty of Medical Sciences, Tehran, Iran	April 1, 2004 - March 31, 2009	The mean age and standard deviation for users was 26.2(4.9) and for non-users 26.5(5.6).	Self-report	526 (7 users)	5-minute Apgar	9.3(1.9) users; 9.8(0.5) non-users	Crude Numbers.
							Anomaly	0% users; 1.5% non-users	
							Birth weight (g)	2763(829) users; 3001(608) non-users	
							Gestational age (wks)	37.5(3.5) users; 37.9(2.3) non-users	
							Head circumfer-ence (cm)	31.2(6.8) users; 34.3(1.9) non-users	
							Length (cm)	48.2(8.1) users; 49.2(3.0) non-users	
							Maternal anemia	0% users; 5.2% non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
							Neonatal death	5.9% users; 1.9% non-users	
							Neonate days in hospital	2.9(2.2) users; 2.9(1.8) non-users	
							NICU/ICU	64.7% users; 31.7% non-users	
							Postpartum hemorrhage	0% users; 2.5% non-users	
							Prenatal Care	28.6% users; 28.9% non-users	
							Preterm birth (<37wks)	18.2% users; 22.3% non-users	
							Rupture of the membranes prior to labor	41.2% users; 28.9% non-users	
							Small for gestational age	9.1% users; 12.1% non-users	
Greenland, 1982	Prospective cohort	Prenatal clinics of the University of California, Los Angeles (UCLA) Center for the	Unknown	Maternal mean age is 23.7 users, 24.2 non-users, age range 18-35, with 61% White, 31% Black, and 8%	Self-report with serum and urine screening for validation	71 (35 users)	Resuscitation	41% users; 22% non-users	Matching based on the following characteristics: age, gravidity, ethnicity and center of care. The authors do
							5-minute Apgar (≤6)	0% users; 6% non-users	
							Abnormal Fetal Tests	11% users; 0% non-users	
							Gestational age (<34wks)	3% users; 0% non-users	
							Hyperemesis gravidarum	17% users; 11% non-users	
							Late anemia (af-	11% users; 12%	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
		Health Sciences, the Kaiser-Permanente Medical Care Program, San Fernando Valley Center, USA		Hispanic.			ter 34wks)	non-users	state that matching on ethnicity was sometimes relaxed. Alcohol and tobacco were allowed.
							LBW (<2500g)	9% user, 6% non-users	
							Manual removal of the placenta	17% users; 8% non-users	
							Maternal anemia (<11g/dL)	12% users; 8% non-users	
							Maternal bleeding (after 20wks)	3% users; 3% non-users	
							Poor maternal weight gain (≤15lbs)	12% users; 3% non-users	
							Precipitate labor (≤3hrs)[b]	29% users; 3% non-users	
							Prolonged /protracted/ arrested labor	31% users; 19% non-users	
							Respiratory distress syndrome	14% users; 11% non-users	
							Suspected IUGR	11% users; 8% non-users	
Greenland, 1983	Prospective cohort	Enrolled for home delivery at Los Angeles Childbirth	Unknown	Mean age for users was 26.2 for users and 26.7 for non-users. The sample	Self-report	313 (41 users)	Elevated blood pressure	0% users; 4% non-users	Crude Numbers.
							Hyperemesis gravidarum	2% users; 3% non-users	
							Jaundice	15% users; 155 non-users	
							Labor ≥20hrs	13% users; 11% non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
		Center (LACC) in West Los Angeles, CA, USA		was primarily White (95%), all other women were classified as Hispanic or Black (4% and 1%, respectively). Women were recruited from a home-birthing center.			LBW (<2500g)	5% user, 2% non-users	
							Manual removal of the placenta[b]	10% users; 3% non-users	
							Maternal anemia (<11g/dL)	12% users; 17% non-users	
							Maternal bleeding (after 20wks)	0% users; 2% non-users	
							Postpartum hemorrhage (≥500ml)	7% users; 7% non-users	
							Precipitate labor	13% users; 8% non-users	
							Primary dysfunctional labor	43% users; 35% non-users	
							Prolonged latent phase of labor	13% users; 17% non-users	
							Resuscitation	17% users; 16% non-users	
							Ruptures of the membranes prior to labor	23% users; 19% non-users	
							Secondary arrest of labor	5% users; 6% non-users	
Hayat-bakhsh, 2011	Prospective cohort	Mater Mothers' Hospital, Brisbane,	2000-2006	The mean age and standard deviation of the	Self-report	24874 (637 users)	Length (cm)	48.0(9.1) users; 49.3(9.7) non-users	Adjusted for mother's age, parity, ethnicity, weight, cig-
							LBW (<2500g)	AOR: 1.7(1.3-2.2)	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
		Australia		sample was 28.4 (5.8). Their sample comprised of 75% White, 4% Indigenous, 12% Asian and 9% Other.			NICU/ICU	AOR: 2(1.7-2.4)	arette smoking, alcohol consumption, and use of other illicit drugs during pregnancy.
							Preterm birth (<37wks)	AOR: 1.5(1.1-1.9)	
							Small for gestational age	AOR: 2.2(1.8-2.7)	
Hayes, 1991	Prospective cohort	Designated communities of St. Thomas parish, Jamaica	Infants born between October 1983 - May 1985	The mean age and standard deviation for users was 22.9(5.7) and 22.6(7.13) for non-users, ranging 16-38yrs.	Self-report	56 (30 users)	Autonomic Stability, NBAS, Day 1	3.56(1.2) users; 3.06(1.0) non-users	Study not confounded by poly-drug, alcohol, tobacco, or LBW for NBAS.
							Birth weight (g)	3060(0.42) users; 3130(0.45) non-users	
							Gestational age (wks)	40.0(2.3) users; 39.2(2.6) non-users	
							Habituation, NBAS, Day 1	6.50(1.0) users; 6.66(1.3) non-users	
							Motor, NBAS, Day 1	4.85(0.9) users; 4.90(0.6) non-users	
							Orientation, NBAS, Day 1	4.68(1.6) users; 5.10(1.0) non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
							Preterm birth	0% users; 3.3% non-users	
							Range of State, NBAS, Day 1	3.08(0.6) users; 3.99(0.5) non-users	
							Reflexes, NBAS, Day 1	12.17(3.1) users; 13.38(2.2) non-users	
							Regulation of State, NBAS, Day 1	5.17(0.8) users; 5.22(0.8) non-users	
Kline, 1991	Case-control	Three New York City Hospitals in New York City, NY, USA	August 1979 - May 1986	The mean age and standard deviation for combined spontaneous abortion group was 26.5(6.6) and 26.5(6.2) for controls. Ethnicities of the group included	Self-report	3002 (960 users)	Spontaneous abortion of known karyotype	No association	Adjusted for maternal age, ethnicity and cigarette smoking.
							Chromosomally aberrant combined	Karotype groups vs controls AOR: 1.2(0.7-1.9)Chromosomally aberrant vs normal: 1.1(0.6-1.9)	
							Chromosomally normal	Karotype groups vs controls AOR: 1.1(0.7-1.5)	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
				23% USA-born Black, 41% Dominican, 17% other Hispanic, and 19% Other.					
Lozano, 2007	Cohort	Hospital del Mar, Barcelona, Spain	October 2002 - February 2004	Maternal age with standard deviation is 28.9(6.4) users and 29.3(6.2) non-users. The sample included 50% Spanish, 6% European (non-Spanish), 23% American, 11% African, and 10% Asian.	Meconium drug analysis	928 (52 users)	Birth weight (g)	3281.7(3108.9-3454.4) users; 3212.4(3174.1-3250.8) non-users	Adjusted for cigarette smoking, sex, maternal age and gestation weeks.
							Head circumference (cm)	34.3(33.8-34.8) users; 34.1(33.9-34.2) non-users	
							Length (cm)	48.9(48.3-49.6) users; 48.8(48.6-49.0) non-users	
							Preterm birth (<37wks)	0% user, 7.6% non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
Ostrea, 1997	Prospective cohort	Hutzel Hospital, Children's Hospital of Michigan and Wayne State University, Detroit, MI, USA	November 1988 - September 1989	Sample comprised of 83% Black and 17% Other.	Anonymous meconium drug analysis of every other baby born, analyzed for cannabinoid only	1815 (157 users)	1-minute Apgar ($\leq$6)	8.3% users; 8.7% non-users	Crude numbers.
							2-minute Apgar ($\leq$6)	0.6% users; 1.0% non-users	
							Head circumference (<34cm)	62.3% users; 57.1% non-users	
							LBW (<2500g)	15.9% users; 13.6% non-users	
							Length (<45cm)	9.6% users; 11.9% non-users	
							Prenatal care	8.3% users; 6.0% non-users	
							Preterm birth (<37wks)	15.9% users; 18.3% non-users	
Quinlivan, 2002	Prospective cohort	Multi-center: 3 metro Australian hospitals	July 1998 - June 2000	Median age and interquartile range was 16.4 (16-17) for users and 16.3 (16-17) for non-users. The age range was 12-17yrs old, with 69% White	Self-report	425 (62 users)	1-minute Apgar	7.6(7-9) users; 7.6(7-9) non-users	Model was adjusted for: maternal height, pre-pregnancy weight, age and race, newborn gestational age and gender, and significant predictors of illegal
							5-minute Apgar	9(8-9) users; 9(8-9) non-users	
							Antenatal problems	18% users; 30% non-users	
							Antepartum hemorrhage	13% users; 10% non-users	
							Birth weight (g)	3068(96) users; 3113(37) non-users	
							Gestational age (wks)	37.9(0.4) users; 38.2(0.2) non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
				and 31% classified as Aboriginal.			Gestational hypertension	10% users; 17% non-users	drug use such as smoking and alcohol use.
							Head circumference (cm)	33.3(0.3) users; 33.7(0.1) non-users	
							Length (cm)	48.6(0.5) users; 48.3(0.2) non-users	
							Maternal anemia	52% users; 53% non-users	
							Maternal days in hospital	3.5(0.2) users; 3.8(0.1) non-users	
							Maternal postnatal problem	55% users; 51% non-users	
							Neonate days in hospital	6.5(1.4) users; 6.4(0.5) non-users	
							Postnatal problems	53% users; 53% non-users	
							Preterm birth (<37wks)	18% users; 16% non-users	
							Rupture of the membranes prior to labor	5% users; 9% non-users	
Shankaran, 2004	Cohort	Four National Institute of Child	May 1993 - May 1995	The mean age and standard deviation	Self-report	144 (3 users)	Birth weight (g)	2949(454) users; 3266(468) non-users	Crude numbers.
							Head circumfer-	34(0.9) users;	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
		Health and Human Development Neonatal Research Network Centers: Brown University (Providence, RI), University of Miami (Miami, FL), University of Tennessee (Memphis, TN), and Wayne State University (De-		was 25.7(5.7), and included 76% Black, 15% White, 9% Other.			ence (cm)	34(1.4) non-users	
							Length (cm)	51.2(4.2) users; 50.3(2.5) non-users	

Author, Year	Type of study	Location of Study	Recruitment Period	Participants	Cannabis Analysis	Sample Size[a]	Outcome	Study Findings	Confounding
		troit, MI), USA							
Witter, 1990	Retrospective cohort	The Johns Hopkins Hospital, Baltimore, MD, USA	1983-1985	The sample included 32% White and 68% non-White.	Self-report	8350 (417 users)	Abruptio	1.2% users; 0.9% non-users	Crude numbers.
							Anomaly	5.52% users; 4.59% non-users	
							Birth weight (g)	2991(687) users; 3110(755) non-users	
							Duration of labor (min)	594(392) users; 611(457) non-users	
							Fetal distress	6.5% users; 5.5% non-users	
							LBW (<2500g)	17.8% user, 15.9% non-users	
							Maternal anemia	21.3% user, 14.9% non-users	
							Maternal weight gain (lbs.)	29.4(14.5) users; 31.2(14.8) non-users	
							Perinatal mortality (per 1000)	24.0 users; 19.8 non-users	
							Preterm birth (<37wks)	19.4% users; 17.1% non-users	

Notes:
[a] significance was calculated using number of subjects for each outcome, which may have differed from total sample size
[b] this outcome was reported as significant by the authors in the original paper
[c] this outcome was significant when calculated from the crude numbers listed in the original paper