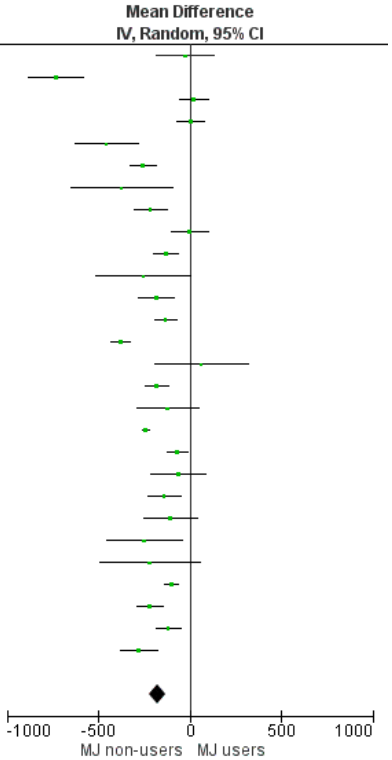
Neonatal weight outcomes

A) Birth weight

Study or Subgroup	MJ users Mean	MJ users SD	MJ users Total	MJ non-users Mean	MJ non-users SD	MJ non-users Total	Weight	Mean Difference IV, Random, 95% CI
Barros et al, 2006	3,095	405	26	3,120	409	535	3.0%	-25.00 [-184.49, 134.49]
Brik et al, 2022	2,556	533	60	3,288	438	198	3.2%	-732.00 [-880.02, -583.98]
Day et al, 1991	3,236.79	389.47	174	3,215	382.57	210	4.2%	21.79 [-55.84, 99.42]
Dotters-Katz et al, 2016	1,358.33	423.39	135	1,352.67	549.77	1732	4.2%	5.66 [-70.31, 81.63]
Dunn et al, 2023	2,880	611	49	3,336.67	519.16	3037	2.9%	-456.67 [-628.74, -284.60]
El Marroun et al, 2009	3,190.08	536.63	214	3,446.81	554.83	5785	4.2%	-256.73 [-330.04, -183.42]
El Marroun et al, 2010	3,178.09	621.06	23	3,553	532	85	1.8%	-374.91 [-652.78, -97.04]
Fergusson et al, 2002	3,214	517.7	129	3,430	536.1	11464	4.0%	-216.00 [-305.87, -126.13]
Fried et al, 1984	3,490	405.31	84	3,490	523	499	3.9%	0.00 [-98.07, 98.07]
Gabrhelik et al, 2020	3,432.32	534.33	272	3,564	588	10101	4.3%	-131.68 [-196.21, -67.15]
Gray et al, 2010	3,161	689	41	3,417	504	45	1.9%	-256.00 [-513.22, 1.22]
Grzeskowiak et al, 2020	3,225.91	740.26	217	3,409.91	579.75	5393	3.9%	-184.00 [-283.70, -84.30]
Hatch and Bracken, 1986	3,258.58	558.1	367	3,392.8	524.7	3490	4.4%	-134.22 [-193.91, -74.53]
Hayatbakhsh et al, 2011	2,940	678.6	647	3,319.2	687.8	24227	4.4%	-379.20 [-432.20, -326.20]
Hayes et al, 1988	3,137.35	420.02	30	3,074.08	528.98	25	2.0%	63.27 [-192.83, 319.37]
Jones et al, 2022	3,130	560	483	3,310	590	1057	4.3%	-180.00 [-241.31, -118.69]
Klebanoff et al, 2020	2,698	712	111	2,820	796	223	2.9%	-122.00 [-290.70, 46.70]
Koto et al, 2022	3,210	584	3144	3,450	545	103138	4.6%	-240.00 [-260.68, -219.32]
Ku et al, 2018	3,291.7	568.06	463	3,361	591.78	4550	4.4%	-69.30 [-123.83, -14.77]
Mark et al, 2015	3,026	725.3	116	3,089	573.8	280	3.2%	-63.00 [-211.12, 85.12]
Rodriguez et al, 2019	2,966	627.52	211	3,108	517.32	995	4.0%	-142.00 [-232.57, -51.43]
Sasso et al, 2021	3,008.55	759.07	151	3,114.38	608.32	192	3.2%	-105.83 [-254.36, 42.70]
Serino et al, 2018	3,100	460	36	3,350	500	48	2.5%	-250.00 [-456.37, -43.63]
Sherwood et al, 1999	3,150	1,060	75	3,370	970	213	1.8%	-220.00 [-492.98, 52.98]
Straub et al, 2019	3,193.81	584.72	1268	3,295.66	610.34	4075	4.6%	-101.85 [-139.09, -64.61]
Straub et al, 2020	2,874	665	531	3,092	580	531	4.2%	-218.00 [-293.05, -142.95]
Witter and Niebyl, 1990	2,991	687	417	3,110	755	7933	4.3%	-119.00 [-187.00, -51.00]
Zuckerman et al, 1989	2,980	662	202	3,260	616	895	3.9%	-280.00 [-379.81, -180.19]
Total (95% CI)			**9676**			**190956**	**100.0%**	**-177.81 [-224.72, -130.91]**

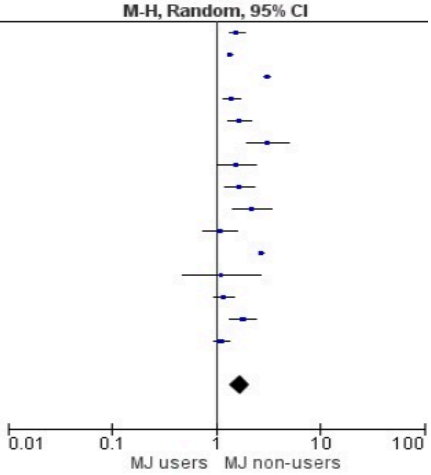
Heterogeneity: Tau² = 12216.48; Chi² = 274.72, df = 27 (P < 0.00001); I² = 90%
Test for overall effect: Z = 7.43 (P < 0.00001)



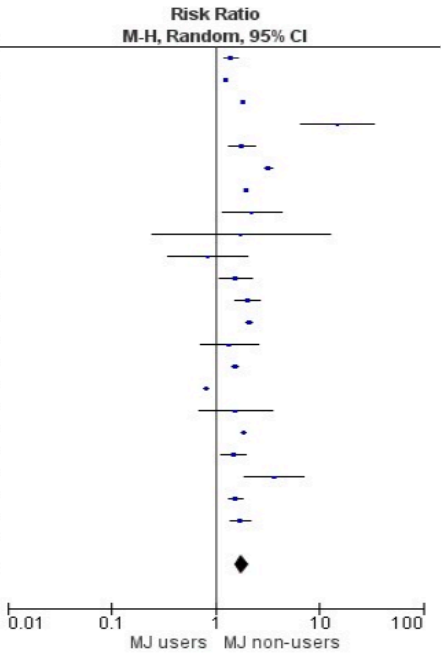
B) Low birth weight

Study or Subgroup	MJ users Events	MJ users Total	MJ non-users Events	MJ non-users Total	Weight	Risk Ratio M-H, Random, 95% CI
Alhusen et al, 2013	50	60	105	198	7.3%	1.57 [1.32, 1.87]
Avalos et al, 2023	1487	22599	16419	341928	7.6%	1.37 [1.30, 1.44]
Burns et al, 2006	638	2172	39429	412731	7.5%	3.07 [2.88, 3.28]
Coleman-Cowger et al, 2018	42	60	177	354	7.2%	1.40 [1.15, 1.70]
Conner et al, 2015	58	680	380	7458	6.9%	1.67 [1.28, 2.18]
Dunn et al, 2023	13	49	256	3037	5.8%	3.15 [1.95, 5.09]
Hatch and Bracken, 1986	23	367	140	3490	6.1%	1.56 [1.02, 2.40]
Jones et al, 2022	59	483	77	1057	6.6%	1.68 [1.22, 2.31]
Kharbanda et al, 2020	23	279	114	3090	6.1%	2.23 [1.45, 3.44]
Ku et al, 2018	27	463	453	8549	6.4%	1.10 [0.75, 1.60]
Luke et al, 2022	1292	20410	23942	1031360	7.6%	2.73 [2.58, 2.88]
Mark et al, 2015	7	116	15	280	3.7%	1.13 [0.47, 2.69]
Straub et al, 2019	110	1268	297	4075	7.2%	1.19 [0.97, 1.47]
Straub et al, 2020	111	531	61	531	6.8%	1.82 [1.36, 2.43]
Witter and Niebyl, 1990	122	687	1261	7933	7.3%	1.12 [0.94, 1.32]
Total (95% CI)		**50224**		**1826071**	**100.0%**	**1.69 [1.34, 2.14]**
Total events	4062		83126			

Heterogeneity: Tau² = 0.19; Chi² = 633.07, df = 14 (P < 0.00001); I² = 98%
Test for overall effect: Z = 4.37 (P < 0.0001)



C) Small for gestational age

Study or Subgroup	MJ users Events	MJ users Total	MJ non-users Events	MJ non-users Total	Weight	Risk Ratio M-H, Random, 95% CI
Alhusen et al, 2013	50	60	116	198	5.6%	1.42 [1.21, 1.67]
Avalos et al, 2023	2640	22575	31488	341671	5.9%	1.27 [1.22, 1.32]
Bandoli et al, 2021	4585	29112	262385	3037957	5.9%	1.82 [1.78, 1.87]
Barros et al, 2006	8	26	11	535	2.3%	14.97 [6.58, 34.02]
Bruno et al, 2022	34	136	1264	9027	5.0%	1.79 [1.33, 2.40]
Burns et al, 2006	409	2172	24046	412731	5.8%	3.23 [2.96, 3.53]
Corsi et al, 2019	1712	9427	60360	652190	5.9%	1.96 [1.88, 2.05]
Dotters-Katz et al, 2016	8	48	116	1562	3.0%	2.24 [1.16, 4.33]
Dunn et al, 2023	1	49	35	3037	0.6%	1.77 [0.25, 12.67]
Gabrhelik et al, 2020	5	272	218	10101	2.2%	0.85 [0.35, 2.05]
Hatch and Bracken, 1986	31	357	192	3424	4.6%	1.55 [1.08, 2.23]
Kharbanda et al, 2020	53	279	290	3090	5.1%	2.02 [1.55, 2.64]
Koto et al, 2022	503	3144	7838	103138	5.8%	2.11 [1.94, 2.29]
Leemaqz et al, 2016	45	315	10	95	3.1%	1.36 [0.71, 2.59]
Luke et al, 2019	587	5801	15463	237339	5.9%	1.55 [1.44, 1.68]
Luke et al, 2022	1547	20410	95430	1031360	5.9%	0.82 [0.78, 0.86]
Mark et al, 2015	9	116	14	280	2.4%	1.55 [0.69, 3.48]
Prewitt et al, 2023	1459	9144	201152	2371302	5.9%	1.88 [1.79, 1.97]
Rodriguez et al, 2019	54	211	170	995	5.1%	1.50 [1.15, 1.96]
Sasso et al, 2021	32	151	11	192	3.0%	3.70 [1.93, 7.09]
Straub et al, 2019	188	1268	384	4075	5.6%	1.57 [1.34, 1.85]
Warshak et al, 2015	67	361	648	6107	5.3%	1.75 [1.39, 2.20]
Total (95% CI)		**105434**		**8230406**	**100.0%**	**1.79 [1.52, 2.10]**
Total events	14027		701641			

Heterogeneity: Tau² = 0.11; Chi² = 1491.10, df = 21 (P < 0.00001); I² = 99%
Test for overall effect: Z = 7.03 (P < 0.00001)