

Supplementary file 6: Summary of findings of studies included in meta-analysis for preterm delivery [d=day, wk=week]

Report	Exposure	Developed countries and study period > 1975	Response rate ≥ 80%	Prospective assessment of exposure	Quantitative definition of lifting (weight / frequency)	Adequate control of personal factors	Adequate control of other occupational exposures	Validity score	Risk estimates ^a (95% CI)
1) Lifting < 12 kg									
Ahlborg 1990 [19]	< 12 kg, ≥ 10 x /wk	•	•	•	•	•		15.50	0.83 (0.37 – 1.86)
Berkowitz 1983 [41]	< 11.3 kg	•	•					10.00	1.05 (0.55 – 2.00) ^b
Croteau 2007 [2]	1-6 kg	•	•			•	•	14.00	1.06 (0.86 – 1.31)
Fortier 1995 [70]	1-9 kg	•	•			•	•	13.50	0.96 (0.66 – 1.41)
2) Lifting unspecified weight or ≥ 5 kg									
Ahlborg 1990 [19]	any weight, < 10 x /wk	•	•	•		•		14.50	1.02 (0.62 – 1.67)
Croteau 2007 [2]	≥ 7 kg	•	•			•	•	14.00	1.05 (0.83 – 1.32)
El-Gilany 2016 [68]	5-20 kg		•				•	12.00	0.98 (0.18 – 5.34)
Poyen 1981 [36]	lifting +	•						6.50	1.62 (0.84 – 3.11) ^b
Saurel-Cubizolles 2004 [28]	> 5-20 kg	•						9.00	1.00 (0.9 – 1.1)
3) Heavy lifting or ≥ 10 kg - ≤ 10 x per day (≤ 50 x /wk) or rarely									
Agbla 2006 [29]	≥ 12 kg, < 10 x /d		•		•			10.00	1.46 (0.60 – 3.54)
Ahlborg 1990 [19]	≥ 12 kg, 10-50 x /wk	•	•	•	•	•		15.50	0.69 (0.41 – 1.17)
Bodin 1999 [30]	≥ 10 kg, ≤ 50 x /wk	•	•		•			9.75	0.68 (0.42 – 1.10) ^b
Henrich 2003 [31]	> 20 kg, rarely	•						7.50	0.78 (0.20 – 3.00) ^b
Henriksen 1994 [32]	≥ 12 kg, < 10 x /d	•	•	•	•			12.75	0.72 (0.45 – 1.17) ^b
Lawson 2009 [33]	≥ 11.3 kg, 1-5 x /d	•			•	•	•	12.50	1.0 (0.8 – 1.2)
Lerman 2001 [27]	heavy lifting, 5-25 x /wk							5.00	0.65 (0.33 – 1.29)
Pompeii 2005 [51]	≥ 11.3 kg, 1-12 x /wk	•	•	•	•	•		12.00	0.9 (0.7 – 1.2) ^c
Runge 2013 [37]	11-20 kg or > 20 kg, 1-10 x /d	•	•	•	•			12.50	1.04 (0.79 – 1.38) ^d
Snijder 2012 [39]	≥ 25 kg, occasionally	•	•			•		11.00	1.26 (0.70 – 2.26)
Tuntiseranee 1998 [40]	>12 kg, 1-10 x /d		•	•	•		•	14.50	0.9 (0.4 – 2.1)
4) Heavy lifting or ≥ 10 kg - unspecified frequency or ≥ 1 x per day (≥ 5 x /wk)									
Berkowitz 1983 [41]	≥ 11.3 kg	•	•					10.00	0.43 (0.16 – 1.21) ^b
Bonzini 2009 [48]	≥ 25 kg	•		•		•		11.50	1.10 (0.33 – 3.63)
El-Gilany 2016 [68]	> 20 kg		•				•	12.00	2.76 (0.87 – 8.74)
Estry 1980 [69]	heavy lifting							5.50	1.47 (0.65 – 3.33) ^b
Fortier 1995 [70]	≥ 10 kg	•	•			•	•	13.50	0.87 (0.52 – 1.45)
Knudsen 2017 [72]	heavy lifting	•	•			•		11.00	1.40 (0.88 – 2.23)

^a Odds ratios or relative risks

^b RE and 95% CI calculated using Epi Info[77] with data provided in the report.

^c RE for women exposed at 7th month : 1.0 (0.6 – 1.5)

^d RE obtained by combining the results corresponding to the two following exposure categories: (11-20 kg, 1-10 x /d and > 20 kg 0 x /d) and (11-20 kg, 0 x /d and > 20 kg 1-10 x /d), assuming non independence for the 95% CI.

Report	Exposure	Developed countries and study period > 1975	Response rate \geq 80%	Prospective assessment of exposure	Quantitative definition of lifting (weight / frequency)	Adequate control of personal factors	Adequate control of other occupational exposures	Validity score	Risk estimates ^a (95% CI)
Lawson 2009 [33]	\geq 11.3 kg, 6-15 x /d	•			•	•	•	12.50	1.0 (0.7 – 1.2)
Lerman 2001 [27]	heavy lifting, > 25 x /wk							5.00	0.49 (0.18 – 1.30)
Mamelle 1984 [73]	> 10 kg	•						7.50	1.0 (0.7 – 1.7)
Misra 1998 [74]	heavy lifting		•	•				10.00	1.33 (0.73 – 2.44)
Nurminen 1989 [75]	\geq 10 kg or moving a patient	•	•					10.00	0.44 (0.10 – 1.89)
Pompeii 2005 [51]	\geq 11.3 kg, > 12 x /wk	•		•	•	•		12.00	1.3 (0.8 – 2.1) ^e
Runge 2013 [37]	11-20 kg and > 20 kg, 1-10 x /d	•		•	•			12.50	1.19 (1.04 – 1.36)
Saurel-Cubizolles 1987 [52]	heavy lifting	•						7.00	1.33 (0.83 – 2.12) ^b
Saurel-Cubizolles 2004 [28]	> 20 kg	•						9.00	1.02 (0.8 – 1.2)
5) Heavy lifting or \geq 10 kg - \geq 10 x per day (> 50 x /wk) or often									
Agbla 2006 [29]	\geq 12 kg, \geq 10 x /d		•		•			10.00	2.25 (0.84 – 6.05)
Ahlborg 1990 [19]	\geq 12 kg, > 50 x /wk	•	•	•	•	•		15.50	1.29 (0.69 – 2.40)
Bodin 1999 [30]	\geq 10 kg, > 50 x /wk	•	•		•			9.75	1.08 (0.48 – 2.40) ^b
Henrich 2003 [31]	> 20 kg, often-very often	•						7.50	0.89 (0.33 – 2.39) ^b
Henriksen 1994 [32]	\geq 12 kg, \geq 10 x /d	•	•	•	•			12.75	0.99 (0.52 – 1.86) ^b
Lawson 2009 [33]	\geq 11.3 kg, > 15 x /d	•			•	•	•	12.50	1.2 (0.9 – 1.7)
Magann 2005 [34]	\geq 11 kg, > 6 x / hour		•	•	•	•	•	14.75	1.14 (0.32 – 4.04)
McDonald 1988 b [35]	heavy lifting, \geq 15 x /d	•	•			•	•	13.00	1.25 (1.03 – 1.50)
Poyen 1981 [36]	lifting + +	•						6.50	1.99 (0.89 – 4.42) ^b
Runge 2013 [37]	11-20 kg or > 20 kg, > 10 x /d	•		•	•			12.50	1.41 (0.88 – 2.27) ^f
Saurel-Cubizolles 1991 [38]	heavy lifting, often or always	•	•					9.25	1.29 (0.70 – 2.37) ^b
Snijder 2012 [39]	\geq 25 kg, often	•		•		•		11.00	0.55 (0.13 – 2.28)
Tuntiseranee 1998 [40]	>12 kg, > 10 x /d		•	•	•		•	14.50	1.6 (0.1 – 20.4)

^e RE for women exposed at 7th month : 1.3 (0.9 – 1.8)

^f RE obtained by combining the results corresponding to the five following exposure categories : (11-20 kg, > 10 x /d and > 20 kg 0 x /d), (11-20 kg, > 10 x /d and > 20 kg 1-10 x /d), (11-20 kg, 0 x /d and > 20 kg > 10 x /d), (11-20 kg, 1-10 x /d and > 20 kg > 10 x /d) and (11-20 kg, > 10 x /d and > 20 kg > 10 x /d), assuming non independence for the 95% CI.