

Comparison: Supine (back) sleep position compared with non-supine (prone or side) sleep position

Source: Priyadarshi M, Balachander B, Sankar MJ. Effect of sleep position in term healthy newborns on neonatal mortality and sudden infant death syndrome (SIDS): a systematic review (submitted).

Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Sleeping in a supine position	Sleeping in a non-supine (prone or side) position	Relative (95% CI)	Absolute (95% CI)		
Sudden infant death syndrome (SIDS) in infants < 1 year of age – supine vs non-supine												
26	observational studies	very serious ^a	serious ^b	not serious	not serious	publication bias strongly suspected ^c	4720 cases, 54 612 controls		OR 0.51 (0.42 to 0.61)	48 fewer per 1000 (from 58 fewer to 38 fewer)	⊕○○○ VERY LOW	CRITICAL
Sudden unexpected death in infancy (SUDI) – supine vs non-supine												
1	observational study	very serious ^d	not serious	not serious	not serious	none	126 cases, 258 controls		OR 0.39 (0.23 to 0.65)	219 fewer per 1000 (from 313 fewer to 106 fewer)	⊕⊕○○ LOW	CRITICAL
Unexplained SIDS or severe-ALTE in the neonatal period – supine vs non-supine												
1	observational study	very serious ^a	not serious	not serious	serious ^e	none	29 cases, 90 controls		OR 0.16 (0.03 to 0.82)	232 fewer per 1000 (from 282 fewer to 39 fewer)	⊕○○○ VERY LOW	CRITICAL
Gross motor development at 6 months of age – supine vs prone (odds of being 0.5 SD below mean on the Gross Motor Scale, assessed with DDST at 6 months of age)												
1	observational studies	serious ^g	not serious	not serious	not serious	none	-/1777	-/320	OR 1.67 (1.22 to 2.27)	0 fewer per 1000 (from 0 fewer to 0 fewer)	⊕⊕⊕○ MODERATE	CRITICAL
Gross motor development at 6 months of age – supine vs side (odds of being 0.5 SD below mean on the Gross Motor Scale, assessed with DDST at 6 months of age)												
1	observational studies	serious ^g	not serious	not serious	not serious	none	-/1777	-/6235	OR 1.02 (0.91 to 1.15)	0 fewer per 1000 (from 0 fewer to 0 fewer)	⊕⊕⊕○ MODERATE	CRITICAL

Certainty assessment							No of patients		Effect		Certainty (GRADE)	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Sleeping in a supine position	Sleeping in a non-supine (prone or side) position	Relative (95% CI)	Absolute (95% CI)		

Gross motor development at 18 months of age – supine vs prone (odds of being 0.5 SD below mean on the Gross Motor Scale, assessed with DDST at 18 months of age)

1	observational studies	serious ^g	not serious	not serious	serious ^h	none	-/1611	-/308	OR 1.16 (0.96 to 1.43)	0 fewer per 1000 (from 0 fewer to 0 fewer)	⊕⊕○○ LOW	CRITICAL
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Gross motor development at 18 months of age – supine vs side (odds of being 0.5 SD below mean on the Gross Motor Scale, assessed with DDST at 18 months of age)

1	observational studies	serious ^g	not serious	not serious	serious ^h	none	-/1611	-/5892	OR 1.12 (0.86 to 1.45)	0 fewer per 1000 (from 0 fewer to 0 fewer)	⊕⊕○○ LOW	CRITICAL
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Hospital admissions related to ALTE within 6 months of age – supine vs non-supine

1	observational study	very serious ^a	not serious	not serious	very serious ^{f,h}	none	1/1745 (0.1%)	5/1984 (0.3%)	OR 0.230 (0.005 to 2.040)	2 fewer per 1000 (from 3 fewer to 3 more)	⊕○○○ VERY LOW	CRITICAL
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Positional plagiocephaly within 28 weeks of age – supine vs non-supine

2	observational studies	very serious ^a	not serious	not serious	not serious	none	185/364 (50.8%)	17/107 (15.9%)	OR 6.53 (3.39 to 12.57)	393 more per 1000 (from 231 more to 545 more)	⊕⊕○○ LOW	CRITICAL
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ALTE: apparently life-threatening event; CI: confidence interval; DDST: Denver Developmental Screening Test; OR: odds ratio.

a. Most of the pooled effect provided by studies "C".

b. Statistical heterogeneity ($I^2 \geq 60\%$ or $\text{Chi}^2 \geq 0.05$).

c. Evident asymmetry in funnel plot.

d. The included study used unadjusted OR and was considered as having very serious risk of bias.

e. Less than 300 newborns in continuous outcomes or less than 400 newborns in dichotomous outcomes.

f. Less than 30 events.

g. The pooled effect provided by study "B".

h. Wide confidence interval crossing the line of no effect.