

GRADE tables for review question: Is there an association between sleep position on going to sleep and still birth or having a small for gestational age baby? – evidence from primary studies

Table 9: GRADE table for independent association between going-to-sleep position on last night and stillbirth in comparison to left lateral going-to-sleep position on last night

Phase of investigation	<p>No restrictions were placed on phase of investigation. Given the relatively low frequency of stillbirth, a phase 3 prospective cohort study that aims to examine the role of sleep position and its effect on still birth is not feasible. Therefore no restrictions were placed on the phase of investigation.</p> <p>Prone going-to-sleep position One phase 2 prospective population-based case control study^a was included in the review of prone going-to-sleep position on last night and the quality of evidence was thus initially rated as high.</p> <p>Right lateral, supine going-to-sleep position One phase 2 retrospective nested case-control study in a cohort of known size^b and two phase 2 prospective population-based case control studies^{a,c} were included in the review of right lateral going-to-sleep position or supine going-to-sleep position on last night and the quality of evidence was thus initially rated as high.</p> <p>Sitting/propped, variable-lateral going-to-sleep position One phase 2 retrospective nested case-control study in a cohort of known size^b and one phase 2 prospective population-based case control study^a were included in the reviews of variable-lateral or sitting/propped going-to-sleep position on last night and the quality of evidence was thus initially rated as high.</p>
Study limitations	<p>The three included phase 2 studies were assessed as being at overall low^c, moderate^a and high^b risk of bias. The main sources of bias in these studies were: high^{a,b} or moderate^c risk of selection bias regarding the study population due to study attrition, and moderate risk of recall bias^{a,b,c} for measurement of going-to-sleep position on last night given that there was a delay in all studies between birth outcome (i.e. stillbirth or live birth) and the interview in which sleep data was collected.</p>
Inconsistency	<p>Prone going-to-sleep position There was only one study (N=1024)^a contributing to the evidence of association between prone going-to-sleep position and stillbirth. No serious inconsistency.</p> <p>Right lateral going-to-sleep position</p>

Although none of the studies found a statistically significant association between right lateral going-to-sleep position and stillbirth, there is some inconsistency in the results: two of the studies found positive association between pregnant women who reported right lateral going-to-sleep position on the last night and still birth compared to left lateral going-to-sleep position (aOR 1.11 [95% CI 0.70 to 1.77]^b; aOR 1.74 [95% CI 0.98 to 3.01]^c) whilst one of the studies found negative association between those reporting right lateral going-to-sleep position on the last night and stillbirth (aOR 0.67 [95% CI 0.44 to 1.02]^a); in addition, although each of the 95% confidence intervals associated with the reported adjusted odds ratios crossed the line of no effect, there was minimal overlap in two of the studies^{a,c}. The inconsistency in the results regarding the association between right-lateral going-to-sleep position on the last night and stillbirth was therefore considered to be serious.

Sitting/propped going-to-sleep position

None of the studies reported a statistically significant association between sitting/propped going-to-sleep position and stillbirth and the adjusted odds ratios were similar and there was significant overlap of 95% confidence interval between the two (aOR 0.44 [95%CI 0.13 to 1.49]^a; aOR 0.71 [95%CI 0.22 to 2.30]^b). Thus, the inconsistency in the results regarding the association between variable going-to-sleep position on the last night and stillbirth was considered to be minimal and the evidence was not downgraded.

Supine going-to-sleep position

Two studies^{a,c} reported a statistically significant association between supine going-to-sleep position and stillbirth compared to left lateral going-to-sleep position whereas another study^b did not find any significant association. There was inconsistency in the results: two of the studies^{a,c} reported a statistically significant association between supine going-to-sleep position and stillbirth compared to left lateral going-to-sleep position (aOR 2.31 [95% CI 1.04 to 5.11]^a; aOR 2.54 [95% CI 1.04 to 6.18]^c) whereas another study^b showed a positive but not a statistically significant association (aOR 1.05 [95% CI 0.32 to 3.50]^a). The inconsistency in the results regarding the association between supine going-to-sleep position on the last night and stillbirth was therefore considered to be serious.

Variable-lateral going-to-sleep position

None of the studies reported a statistically significant association between variable-lateral going-to-sleep position and stillbirth and the adjusted odds ratios were similar and there was significant overlap of 95% confidence interval between the two (aOR 0.93 [95%CI 0.51 to 1.69]^a; aOR 0.75 [95%CI 0.34 to 1.64]^b). Thus, the inconsistency in the results regarding the association between variable-lateral going-to-sleep position on the last night and stillbirth was considered to be minimal and the evidence was not downgraded.

Indirectness

Two of the included studies were multi-centre studies and included all consenting pregnant women who experienced stillbirth in high-income countries (New Zealand^a and the UK^c) and can therefore be

	<p>considered to be representative of the target population. One of the included studies^b was an anonymous international online survey that recruited participants through the use of web-based advertising, social media, and word of mouth. This study, unlike the other two studies^{a,c}, also restricted participants to those who were at least 18 years old. The evidence was therefore downgraded for serious indirectness in the population of interest. The evidence regarding indirectness in the studied prognostic factor (i.e. going-to-sleep position) and outcome of interest (i.e. stillbirth) was not considered to be serious.</p>
<p>Imprecision</p>	<p>Prone going-to-sleep position</p> <p>One study^a examined the relationship between prone going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. The confidence interval around the estimated effect size was wide (0.13 to 7.81), not indicating an association between prone going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. Therefore, the imprecision was considered to be very serious.</p> <p>Right lateral going-to-sleep position</p> <p>Three studies^{a,b,c} examined the association between right lateral going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. No significant effect of right lateral going-to-sleep position on the last night on stillbirth compared to left lateral going-to-sleep position was found and the 95% confidence intervals were relatively wide ([0.44 to 1.02]^a, [0.70 to 1.77]^b and [0.98 to 3.01]^c) with none of the studies indicating an association between right lateral going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. The evidence was therefore downgraded for serious imprecision due to substantial uncertainty in the effect estimate of each included study.</p> <p>Sitting/propped going-to-sleep position</p> <p>Two studies^{a,b} evaluated the association between sitting/propped going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. No significant association was found in either study and the 95% confidence intervals were wide ([0.13 to 1.49]^a and [0.22 to 2.30]^b), not indicating an association between sitting/propped going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. Therefore, the imprecision of the effect was considered to be very serious.</p> <p>Supine going-to-sleep position</p> <p>The 95% confidence intervals in all studies were wide^{a,b,c} ([1.04 to 5.11]^a, [0.32 to 3.50]^b and [1.04 to 6.18]^c), with 2 studies^{a,c} finding a statistically significant positive association between supine going-to-sleep position and stillbirth, and one study^b not finding a significant association, compared to left lateral going-to-sleep position. Thus, the results are inconclusive regarding the association and the imprecision was considered to be very serious.</p> <p>Variable-lateral going-to-sleep position</p>

	<p>No significant association was found in either study between variable-lateral going-to-sleep position and stillbirth and the 95% confidence intervals around the effect estimates were relatively wide [(0.51 to 1.69)^a and (0.34 to 1.64)^b], not indicating an association between variable-lateral going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. Therefore, the imprecision was considered to be very serious.</p>
<p>Publication bias</p>	<p>Although these studies were not ‘pure’ cohort studies, the use of a case control design is appropriate given the low frequency of stillbirth. All three studies used multivariate analysis to adjust for potential confounders such as age, BMI, ethnicity and smoking status during pregnancy. However, since the association between any going-to-sleep position on the last night stillbirth compared to left lateral going-to-sleep position was only explored in 3 studies, the evidence was downgraded for publication bias.</p>
<p>Moderate/large effect size</p>	<p>Prone going-to-sleep position The estimated adjusted effect size in the study was small (aOR=1.01)^a and the 95% confidence interval around the estimate crossed the line of no effect, therefore the evidence was not upgraded.</p> <p>Right-hand going-to-sleep position The estimated adjusted effect sizes in the three studies were all small with two studies favouring left lateral going-to-sleep position (aOR=1.11^b; aOR=1.74^c) compared to right-side position, and one study favouring right-side going-to-sleep position compared to left lateral position (aOR 0.67^a), therefore the evidence was not upgraded.</p> <p>Sitting/propped going-to-sleep position The odds of stillbirth for sitting/propped going-to-sleep position in two included studies were small compared to left lateral going-to-sleep position (aOR=0.44^a; aOR=0.71^b) and the 95% confidence intervals crossed the line of no effect, therefore the evidence was not upgraded.</p> <p>Supine going-to-sleep position The odds of stillbirth for supine going-to-sleep position in two studies were moderate to large (aOR=2.31^a; aOR=2.54^c) whereas the odds in another study was found to be small (aOR=1.05^b). In the first two studies^{a,c}, the 95% confidence intervals did not cross the line of no effect, indicating the positive association between supine going-to-sleep position and stillbirth, whilst the 95% confidence interval in another study^b crossed the line of no effect. Thus, because of variability in the results, the evidence for an independent effect of supine going-to-sleep position on stillbirth was not upgraded.</p> <p>Variable-lateral going-to-sleep position The estimated going-to-sleep position in two included studies were small (aOR=0.93^a; aOR=0.75^b) and the 95% confidence intervals crossed the line of no effect, therefore the evidence was not upgraded.</p>

Overall quality	<ul style="list-style-type: none"> • Prone: VERY LOW • Right-lateral: VERY LOW • Sitting/Propped: VERY LOW • Supine: VERY LOW • Variable-lateral: VERY LOW
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Notes: ^aHeazell 2018; ^bO'Brien 2019; ^cStacey 2011. Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

Table 10: GRADE table for independent association between going-to sleep position on last month of pregnancy and late stillbirth in comparison to left lateral going-to-sleep position on last month

Phase of investigation	<p>No restrictions were placed on phase of investigation. Given the relatively low frequency of stillbirth, a phase 3 prospective cohort study that aims to examine the role of sleep position and its effect on still birth is not feasible. Therefore no restrictions were placed on the phase of investigation.</p> <p>Right-lateral going-to-sleep position, supine going-to-sleep position One phase 1 prospective case control study^a and one phase 2 nested case-control studies in a cohort of known size^b were included in the review of right lateral or supine going-to-sleep position on last month and the quality of evidence was thus initially rated as moderate.</p> <p>Variable-lateral going-to-sleep position, sitting/propped going-to-sleep position One phase 2 nested case-control study in a cohort of known size^b was included in the review of variable-lateral or sitting/propped going-to-sleep position on last month and the quality of evidence was thus initially rated as high.</p>
Study limitations	<p>The included phase 1 study and phase 2 study were all assessed as being at overall low^a and high^b risk of bias. The main sources of bias in these studies were: high risk of selection bias due to unclear information on study population^b, and incomparable baseline characteristics between cases and controls; moderate risk of recall bias^{a,b} for measurement of going-to-sleep position on last night given that there was a delay in all studies between birth outcome (i.e. stillbirth or live birth) and the interview in which sleep data was collected.</p>
Inconsistency	<p>Right-lateral going-to-sleep position None of the studies found a statistically significant association between right-lateral going-to-sleep position and stillbirth. There is minimal inconsistency in the results (aOR 1.1 [95% CI 0.43 to 2.6]^a; aOR 1.14 [95% CI 0.70 to 1.85]^b). The inconsistency in the results of these two studies was therefore not considered to be serious.</p>

	<p>Sitting/propped going-to-sleep position, variable-lateral going-to-sleep position</p> <p>There was only one study^b (N=633^b) contributing to the evidence of association between going-to-sleep position on last month and stillbirth. No serious inconsistency.</p> <p>Supine going-to-sleep position</p> <p>One study reported a statistically significant positive association between supine going-to-sleep position and stillbirth (aOR 6.26 [95%CI 1.15 to 34.00])^a whereas another study reported negative association although the result was not statistically significant (aOR 0.37 [95%CI 0.04 to 3.12])^b. Thus, the inconsistency of the results between these two studies was considered to be very serious.</p>
Indirectness	<p>One of the included studies was a multi-centre study and included all consenting pregnant women who experienced stillbirth in high-income countries (Australia^a) and can therefore be considered to be representative of the target population. Another study^b was an anonymous international online survey that recruited participants through the use of web-based advertising, social media, and word of mouth. This study, unlike the other study^a, also restricted participants to those who were at least 18 years old. The evidence was therefore downgraded for serious indirectness in the population of interest. The evidence in this study regarding indirectness in the studied prognostic factor (i.e. going-to-sleep position) and outcome of interest (i.e. stillbirth) was not considered to be serious.</p>
Imprecision	<p>Right-lateral going-to-sleep position</p> <p>Two studies^{a,b} examined the relationship between right-lateral going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. The 95% confidence intervals around the estimated effect size crossed the line of no effect and were considered to be wide^b (0.70 to 1.85)^b and very wide^a (0.43 to 2.6)^a, not indicating an association between right-lateral going-to-sleep position and stillbirth compared to left lateral going-to-sleep position. Overall the imprecision was considered to be serious.</p> <p>Sitting/propped going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate in this study crossed the line of no effect and was considered to be very wide (0.39 to 3.68)^b therefore, the imprecision was considered to be very serious.</p> <p>Supine going-to-sleep position</p> <p>One study (N=295)^a reported statistically significant positive association (aOR=6.26)^a although the 95% confidence interval was considered to be very wide (1.15 to 34.00)^a. However, another study (N=542)^b did not find an association and the 95% confidence interval ranged from negative association (0.04)^b to positive association (3.12)^b. Thus, the imprecision was considered to be very serious.</p> <p>Variable-lateral going-to-sleep position</p>

	The 95% confidence interval around the effect estimate in this study crossed the line of no effect and was considered to be wide (0.48 to 1.55) ^b therefore, the imprecision was considered to be serious.
Publication bias	Although these studies were not 'pure' cohort studies, the use of a case control design is appropriate given the low frequency of stillbirth. Both studies used multivariate analysis to adjust for potential confounders such as age, BMI, ethnicity and smoking status during pregnancy. However, since the association between any going-to-sleep position on the last month and late stillbirth compared to left lateral going-to-sleep position was only explored in 2 studies, the evidence was downgraded for publication bias.
Moderate/large effect size	<p>Right-lateral going-to-sleep position The estimated adjusted effect sizes in the two studies^{a,b} were small (aOR=1.1^a; aOR=1.14^b) and therefore not upgraded.</p> <p>Sitting/propped going-to-sleep position The estimated adjusted effect size in the study^b was small (aOR=1.20^a) and therefore not upgraded.</p> <p>Supine going-to-sleep position There were significant differences in the effect estimates reported by two included studies^{a,b} where the estimated adjusted effect size in one study was large (aOR=6.26)^a and showed positive association whereas the adjusted effect estimate in another study was moderate (aOR=0.37)^b and showed negative association. Given the inconsistency, the evidence was not upgraded.</p> <p>Variable-lateral going-to-sleep position The estimated adjusted effect size in the study was small (aOR=0.87)^b and therefore not upgraded.</p>
Overall quality	<p>Right-lateral going-to-sleep position: VERY LOW</p> <p>Sitting/propped going-to-sleep position: VERY LOW</p> <p>Supine going-to-sleep position: VERY LOW</p> <p>Variable-lateral going-to-sleep position: VERY LOW</p>

Notes: ^aGordon 2015; ^bO'Brien 2019. Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

Table 11: GRADE table for independent association between going-to-sleep position on last night or last week of pregnancy and preterm stillbirth (28 to 36 weeks gestation) in comparison to left lateral going-to-sleep position on last night or last week

Phase of investigation	No restrictions were placed on phase of investigation. Given the relatively low frequency of stillbirth, a phase 3 prospective cohort study that aims to examine the role of sleep position and its effect on still birth is not feasible. Therefore no restrictions were placed on the phase of investigation.
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	One phase 2 prospective population-based case-control study ^a was included in the review of the association between going-to-sleep position on last night or last week and preterm stillbirth (defined as fetal death between 28 to 36 weeks gestation). Thus, the quality of evidence was initially rated as high.
Study limitations	The included phase 2 study was assessed as being at overall moderate ^a risk of bias. The main sources of bias in this study were: moderate risk of selection bias regarding the study population due to study attrition ^a , and moderate risk of recall bias for measurement of going-to-sleep position on last night or last week ^a given that there was a delay in all studies between birth outcome (i.e. stillbirth or live birth) and the interview in which sleep data was collected.
Inconsistency	There was only one study (N=733) ^a contributing to the evidence of association between going-to-sleep position on last night or last week and preterm stillbirth (defined as fetal death between 28 and 36 weeks gestation). No serious inconsistency.
Indirectness	The included study was a multi-centre study and included all consenting pregnant women who experienced stillbirth in high-income country (New Zealand ^a) and can therefore be considered to be representative of the target population. In addition, the evidence regarding indirectness in the studied prognostic factor (i.e. going-to-sleep position) and outcome of interest (i.e. preterm stillbirth) was not considered to be serious.
Imprecision	<p><u>Going-to-sleep position on last night</u></p> <p>Restless going-to-sleep position^b The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.61 to 19.97)^a therefore the imprecision was considered to be very serious.</p> <p>Right-lateral going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be wide (0.48 to 1.94)^a therefore the imprecision was considered to be serious.</p> <p>Sitting/propped going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.11 to 178.86)^a, therefore, the imprecision was considered to be very serious.</p> <p>Supine going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be wide (0.97 to 10.05)^a, therefore, the imprecision was considered to be serious.</p> <p><u>Going-to-sleep position on last week</u></p>

	<p>Prone going-to-sleep position The 95% confidence interval around the effect estimate^a crossed the line of no effect and was considered to be very wide (0.45 to 278.58)^a, therefore the imprecision was considered to be very serious.</p> <p>Right-lateral going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be wide (0.34 to 1.54)^a, therefore the imprecision was considered to be serious.</p> <p>Sitting/propped going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.08 to 210.43)^a, therefore the imprecision was considered to be very serious.</p> <p>Supine going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.65 to 7.84)^a, therefore the imprecision was considered to be very serious.</p> <p>Variable-lateral going-to-sleep position The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.18 to 2.19)^a, therefore the imprecision was considered to be very serious.</p>
Publication bias	Although the included study was not a 'pure' cohort study, the use of a case control design is appropriate given the low frequency of stillbirth. This study used multivariate analysis to adjust for potential confounders such as age, BMI, ethnicity and smoking status during pregnancy. However, since the association between any going-to-sleep position on the last night or last week and preterm stillbirth compared to left lateral going-to-sleep position is only explored in 1 study, the evidence was downgraded for publication bias.
Moderate/large effect size	<p><u>Going-to-sleep position on last night</u></p> <p>Restless going-to-sleep position^b The estimated adjusted effect size in this study was moderate (aOR=3.50)^a however this was not statistically significant and was therefore not upgraded.</p> <p>Right-lateral going-to-sleep position The estimated adjusted effect size in this study was small (aOR=0.96)^a and was therefore not upgraded.</p>

	<p>Sitting/propped going-to-sleep position The estimated adjusted effect size in this study was moderate (aOR=4.37)^a however this was not statistically significant and was therefore not upgraded.</p> <p>Supine going-to-sleep position The estimated adjusted effect size in this study was small (aOR=2.25)^a and was therefore not upgraded.</p> <p><u>Going-to-sleep position on last week</u></p> <p>Prone going-to-sleep position The estimated adjusted effect size in this study was large (aOR=10.71)^a however this was not statistically significant and was therefore not upgraded.</p> <p>Right-lateral going-to-sleep position The estimated adjusted effect size in this study was small (aOR=0.73)^a and was therefore not upgraded.</p> <p>Sitting/propped going-to-sleep position The estimated adjusted effect size in this study was moderate (aOR=4.01)^a however this was not statistically significant and was therefore not upgraded.</p> <p>Supine going-to-sleep position The estimated adjusted effect size in this study was small (aOR=2.25)^a and therefore not upgraded.</p> <p>Variable-lateral going-to-sleep position The estimated adjusted effect size in this study was small (aOR=0.63)^a and therefore not upgraded.</p>
Overall quality	<p><u>Going-to-sleep position on last night</u> Restless going-to-sleep position: VERY LOW Right-lateral going-to-sleep position: VERY LOW Sitting/propped going-to-sleep position: VERY LOW Supine going-to-sleep position: VERY LOW</p> <p><u>Going-to-sleep position on last week</u></p>

	Prone going-to-sleep position: VERY LOW Right-lateral going-to-sleep position: VERY LOW Sitting/propped going-to-sleep position: VERY LOW Supine going-to-sleep position: VERY LOW Variable-lateral going-to-sleep position: VERY LOW
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Notes: ^aMcCowan 2018; 'Restless' going-to-sleep position refers to women who frequently change positions when going to sleep and could not remember the position they had just before falling asleep. Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

Table 12: GRADE table for independent association between going-to-sleep position on last night or last week of pregnancy and term stillbirth (≥37 weeks gestation) in comparison to left lateral going-to-sleep position

Phase of investigation	<p>No restrictions were placed on phase of investigation. Given the relatively low frequency of stillbirth, a phase 3 prospective cohort study that aims to examine the role of sleep position and its effect on still birth is not feasible. Therefore no restrictions were placed on the phase of investigation.</p> <p>One phase 2 prospective population-based case-control study^a was included in the review of the association between going-to-sleep position on last night or last week and term stillbirth (defined as fetal death after 36 weeks gestation). Thus, the quality of evidence was initially rated as high.</p>
Study limitations	<p>The included phase 2 study was assessed as being at overall moderate risk of bias.^a The main sources of bias in this study were: moderate risk of selection bias regarding the study population due to study attrition, and moderate risk of recall bias for measurement of going-to-sleep position on last night or last week given that there was a delay in all studies between birth outcome (i.e. stillbirth or live birth) and the interview in which sleep data was collected.</p>
Inconsistency	<p>There was only one study (N=733)^a contributing to the evidence of association between going-to-sleep position on last night or last week and term stillbirth (defined as fetal death after 36 weeks gestation). No serious inconsistency.</p>
Indirectness	<p>The included study was a multi-centre study and included all consenting pregnant women who experienced stillbirth in a high-income country (New Zealand^a) and can therefore be considered to be representative of the target population. In addition, the indirectness in the studied prognostic factor (i.e. going-to-sleep position) and outcome of interest (i.e. term stillbirth) was not considered to be serious.</p>
Imprecision	<p><u>Going-to-sleep position on last night</u></p> <p>Restless going-to-sleep position^b</p> <p>The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.64 to 6.21)^a therefore the imprecision was considered to be very serious.</p> <p>Right-lateral going-to-sleep position</p>

	<p>The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be wide (0.48 to 1.99)^a, therefore the imprecision was considered to be serious.</p> <p>Sitting/propped going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.17 to 5.97)^a, therefore the imprecision was considered to be very serious.</p> <p>Supine going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate did not cross the line of no effect but was considered to be wide (3.01 to 35.04)^a therefore the imprecision was considered to be serious.</p> <p><u>Going-to-sleep position on last week</u></p> <p>Right-lateral going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be wide (0.47 to 1.89)^a therefore the imprecision was considered to be serious.</p> <p>Sitting/propped going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be very wide (0.47 to 14.81)^a therefore the imprecision was considered to be very serious.</p> <p>Supine going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate did not cross the line of no effect but was considered to be very wide (2.92 to 55.46)^a therefore, the imprecision was considered to be serious.</p> <p>Variable-lateral going-to-sleep position</p> <p>The 95% confidence interval around the effect estimate crossed the line of no effect and was considered to be wide (0.49 to 3.01)^a therefore, the imprecision was considered to be serious.</p>
Publication bias	<p>The included study used multivariate analysis to adjust for potential confounders such as age, BMI, ethnicity and smoking status during pregnancy.^a Although this study was a non-nested case control study, this design is appropriate given the low frequency of stillbirth. However, this is the only study to have reported results relative to time of stillbirth. The association between any going-to-sleep position on the last night or last week and term stillbirth compared to left lateral going-to-sleep position was therefore considered to not be adequately explored by the identified study and the evidence was downgraded for publication bias.</p>

<p>Moderate/large effect size</p>	<p><u>Going-to-sleep position on last night</u></p> <p>Restless going-to-sleep position^b The estimated adjusted effect size in this study was small (aOR=2.0)^a and was therefore not upgraded.</p> <p>Right-lateral going-to-sleep position The estimated adjusted effect size in this study was small (aOR=0.98)^a and was therefore not upgraded.</p> <p>Sitting/propped going-to-sleep position The estimated adjusted effect size in this study was small (aOR=1.02)^a and was therefore not upgraded.</p> <p>Supine going-to-sleep position The estimated adjusted effect size in this study was large (aOR=10.26)^a. In addition, this adjusted effect estimate was statistically significant. The evidence was therefore upgraded.</p> <p><u>Going-to-sleep position on last week</u></p> <p>Right-lateral going-to-sleep position The estimated adjusted effect size in this study was small (aOR=0.95)^a and was therefore not upgraded.</p> <p>Sitting/propped going-to-sleep position The estimated adjusted effect size in this study was moderate (aOR=2.64)^a however this adjusted effect estimate was not statistically significant and was therefore not upgraded.</p> <p>Supine going-to-sleep position The estimated adjusted effect size in this study was large (aOR=12.73)^a. In addition, this adjusted effect estimate was statistically significant. The evidence was therefore upgraded.</p> <p>Variable-lateral going-to-sleep position The estimated adjusted effect size in this study was small (aOR=1.11)^a and was therefore not upgraded.</p>
<p>Overall quality</p>	<p><u>Going-to-sleep position on last night</u></p> <p>Restless going-to-sleep position: VERY LOW Right-lateral going-to-sleep position: VERY LOW Sitting/propped going-to-sleep position: VERY LOW Supine going-to-sleep position: LOW</p> <p><u>Going-to-sleep position on last week</u></p> <p>Right-lateral going-to-sleep position: VERY LOW Sitting/propped going-to-sleep position: VERY LOW Supine going-to-sleep position: LOW Variable-lateral going-to-sleep position: VERY LOW</p>

Notes: ^aMcCowan 2018; ^b, 'Restless' going-to-sleep position refers to women who frequently change positions when going to sleep and could not remember the position they had just before falling asleep. Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.