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	Risk of bias						
	D1	D2	D3	D4	D5	D6	Overall
Bruce, 2001	!	+	X	+	+	-	!
Cookson, 1998	!	+	X	+	+	-	!
Fischer, 1997	X	+	X	+	+	-	X
Harrison, 2008	!	+	X	+	+	-	!
Mandal, 2013	!	+	!	+	+	-	!
McCall, 2004	!	+	X	+	+	-	!
Robinson, 2001: participating in "smoky indoor activities"	!	+	X	X	+	-	!
Robinson, 2001: having a "smoker amongst intimate contacts"	X	+	X	X	+	-	X
Tully, 2006	!	+	X	+	+	-	!

D1: Bias due to confounding
D2: Bias due to selection of participants
D3: Bias in classification of exposures
D4: Bias due to missing data
D5: Bias in measurement of outcomes
D6: Bias in selection of the reported result

Judgement
! Critical
X Serious
- Moderate
+ Low

Supplementary Figure 3: Domain-level risk of bias assessments for passive tobacco smoking effect estimates.^a

^aThe domain "Bias due to deviations from intended interventions" (Domain 4 in original tool) was not assessed in the adapted version of the ROBINS-I tool.

	Risk of bias						Overall
	D1	D2	D3	D4	D5	D6	
Bruce, 2001	!	+	X	+	+	-	!
Cookson, 1998	!	+	X	+	+	-	!
Fischer, 1997	X	+	X	+	+	-	X
Harrison, 2008	!	+	X	+	+	-	!
Hodgson, 2001	!	+	!	+	+	-	!
Imrey, 1996	!	+	!	+	+	-	!
Křížová, 1999	!	+	X	?	+	-	!
Mandal, 2013	!	+	!	+	+	-	!
McCall, 2004	!	+	X	+	+	-	!
Ridpath, 2015	X	+	!	+	+	-	!
Robinson, 2001	!	+	X	+	+	-	!
Stuart, 1988	!	+	!	+	+	-	!
Tully, 2006	!	+	X	+	+	-	!

Study

D1: Bias due to confounding
D2: Bias due to selection of participants
D3: Bias in classification of exposures
D4: Bias due to missing data
D5: Bias in measurement of outcomes
D6: Bias in selection of the reported result

Judgement
 Critical
 Serious
 Moderate
 Low
 No information

Supplementary Figure 2: Domain-level risk of bias assessments for active tobacco smoking effect estimates.^{a,b}

^aThe domain “Bias due to deviations from intended interventions” (Domain 4 in original tool) was not assessed in the adapted version of the ROBINS-I tool.

^bThe domain-level assessments for *Stuart, 1988* apply to both calculated effect estimates. The domain-level assessments for *Křížová, 1999* also apply to both extracted effect estimates.

Ovid MEDLINE:

- 1 exp Meningococcal Infections/
- 2 neisseria meningiti*.mp.
- 3 (meningococcal adj (disease or infect* or invas* or invad*)).mp.
- 4 meningococc*.mp.
- 5 or/1-4
- 6 risk factor*.ti.
- 7 (smok* adj5 (active or passive or tobacco or cigarette or (second hand) or secondhand or involuntary or cigar)).mp.
- 8 tobacco.mp.
- 9 Tobacco Smoke Pollution/
- 10 exp Smoking/
- 11 or/6-10
- 12 5 and 11

EMBASE:

- 1 exp Meningococcal Infections/
- 2 neisseria meningiti*.mp.
- 3 (meningococcal adj (disease or infect* or invas* or invad*)).mp.
- 4 meningococc*.mp.
- 5 or/1-4
- 6 risk factor*.ti.
- 7 (smok* adj5 (active or passive or tobacco or cigarette or (second hand) or secondhand or involuntary or cigar)).mp.
- 8 tobacco.mp.
- 9 Tobacco Smoke Pollution/
- 10 exp Smoking/
- 11 or/6-10
- 12 5 and 11

Web of Science:

- 1 TS=(meningococcal infections)
- 2 TS=("neisseria meningiti*")
- 3 TS=(meningococcal NEAR (disease or infect* or invas* or invad*))
- 4 TS=meningococc*
- 5 or/1-4
- 6 TI=("risk factor*")
- 7 TS=(smok* NEAR/5 (active or passive or tobacco or cigarette or ("second hand") or secondhand or involuntary or cigar))
- 8 TS=(tobacco)
- 9 TS=(tobacco smoke pollution)
- 10 TS=(smoking)
- 11 or/6-10
- 12 5 and 11

Supplementary Figure 1: Full electronic search strategies.