Literature Critique Criteria for Case-control studies-tabular form

Criteria	Green	Yellow	Red	Comments
Outcome	Assessed by examiner	Symptom patterns reported	Symptoms not clearly	If cases defined by
(definition of	using history, physical	which are generally	diagnostic of the condition,	symptoms alone are
cases)	exam, and ancillary	recognized as sensitive and	but suggestive of regional	included in the case series,
	diagnostic tests when	specific for the condition	pain	this will dilute the case
	appropriate		• \ O'	series with many people
				who should be non-cases,
			23	tending to bias the results
				toward the null value. This
				must be balanced against
				the consideration that cases
				defined by ancillary tests
				may slant the cases
				towards those with more
		, , , , , , , , , , , , , , , , , , ,		advanced or severe disease
Exposure	Some measure of exposure	Exposure data in addition	Self-report alone of a scale	Recall bias is the major
	in addition to interview or	to self-report, but lacking a	that lacks validation or	information bias that
	self-report; existing	quantitative measure; self-	quantitative measurement	threatens the validity of
	objective records	report of a validated		case-control studies; it may
	assembled prior to the	quantitative scale		be mitigated if the
	beginning of the study,			questionnaire or interview
	recording work activities			includes extraneous items
	and work environmental			not related to the exposure
	variables quantitatively			under study
	(e.g., length of			
	employment)			

Criteria	Green	Yellow	Red	Comments
				70
Participation rates	Clear reporting of the number of eligible participants, the numbers who did participate, the numbers of refusals, and the reasons for refusal	Reporting of participation rates, with refusals to participate, and at least some descriptive (demographic) information on those who refuse participation	Participation rates are lacking	Participants in a study may differ from non- participants, especially if participation is time- consuming, requires time outside work, or is otherwise inconvenient
Selection of cases	Incident cases (newly diagnosed)	Mix of incident and prevalent cases, with clear delineation of which cases are which and how long the prevalent cases have had the condition	Undefined mix of prevalent and incident cases, with a large number of prevalent cases	Variables associated with prevalent cases may be predictors of survival and may be mistaken for predictors of disease occurrence; prevalence data may be useful for estimating burden of disease but do not provide evidence of disease onset. If reliable data is available on potential exposures prior to the onset of incident cases, there may be some evidence of temporality in a casecontrol study.

Criteria	Green	Yellow	Red	Comments
				10
Selection of	Description of selection	Description of selection is	Description of selection is	Control selection should
controls	is clear, and consists of	clear, but consists of	not clear enough to	reflect the exposure
	controls drawn from the	controls drawn from	determine which source	distribution of the
	source population of the	populations that may differ	population the controls	hypothetical cohort from
	cases (e.g., both drawn	from the source of the	may represent.	which the cases arose
	from the general	cases (e.g., cases drawn		
	population, or both	from a single factory and		
	drawn from the same	controls from a general	A-10-7	
0.1 6	industrial facilities)	population)		TC 1 1
Selection of	Selection (including	Selection of participants	Selection of participants is	If cases and controls
both cases and	recruitment) of	may be influenced by	likely to be influenced by	volunteer for the study,
controls	participants is unlikely to	exposure	exposure	exposed cases may
	influenced by exposure			volunteer at higher rates than exposed non-cases
Confounders	See cohort study	-7		than exposed non-cases
Sponsorship	See cohort study			
and competing	See conort study			
interests				
Reporting of	See cohort study			
precision of	j			
main results		7)		
Biological	See cohort study	19		
plausibility				
Statistical	See cohort study			
power	7.00			
Statistical	See cohort study			
assumptions				
Statistical	See cohort study			
analysis				