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Statistical and mathematical presentation

This section provides general guidance on the presentation of statistical and mathematical terms and values. Please also refer to the [Cochrane Handbook for Systematic Reviews of Interventions](#).

For guidance on abbreviating statistical terms commonly used in Cochrane Reviews see [Common abbreviations](#).

	Guidance	Correct	Incorrect
Decimal places	Odds ratios, risk ratios, and standardized mean differences should usually be quoted to two decimal places. For very large or very small values, use judgement to determine whether fewer or more decimal places should be used to express the appropriate level of precision.	12.26	12.3
Decimal points	Use full stops, not commas.	15.51	15,51
Equals sign	For values that are represented by a mathematical symbol (e.g. P and I ²) use an equal sign and do not include the word "value" when used to present a value. For terms that are represented as abbreviations (e.g. RR, OR, MD) do not use an equals sign.	P = 0.015 I ² = 20% RR 0.05	P value = 0.015 P 0.015 I ² 20% RR value 0.05 RR = 0.05
Mathematical equations	Avoid building equations or formulae spaced over two or more lines in the text of the review, as text formatting will change during publication process.	2 = 10/5	10 2 = --- 5
	Use spaces either sides of '=', '+', and '-' symbols in mathematical equations. See also: Guidance on spacing around commonly used symbols	SE = sqrt((1/r1) + (1/(n1 - r1)) + (1/r2) + (1/(n2 - r2)))	SE = sqrt((1/r1)+(1/(n1-r1))+(1/r2)+(1/(n2-r2)))
Number needed to treat (NNT)	Express all NNTs as positive whole numbers, all decimals being rounded up. Use 'number needed to treat for an additional beneficial outcome' and its abbreviation 'NNTB', not 'number needed to treat' or 'NNT'. Similarly, use 'number needed to treat for an additional harmful outcome' (NNTH) to specify a	NNTB or NNTH NNTB 10	NNT or NNH NNT 10.5

	Guidance	Correct	Incorrect
	harmful event.		
P value	P values should be stated exactly, apart from values less than 0.001, which should be expressed as $P < 0.001$.	$P = 0.03$ $P < 0.001$	$P < 0.05$ $P = 0.0005$
	Use the phrase 'P value' in text if referring to the statistic, but use 'P = ' when presenting a value.	We calculated the P value. $P = 0.05$	We calculated P. P value = 0.05
	Use an upper-case 'P' (not italic), and do not add hyphen between the 'P' and the value	P value	p value <i>P</i> value P-value p-value
	P values should be expressed with two significant figures and up to three decimal places.	$P = 0.23$ $P = 0.051$ $P = 0.003$ $P = 0.001$	$P = 0.232$ $P = 0.05$ $P = 0.0025$ $P = 1.3 \times 10^{-3}$
Sample and population sizes	For dichotomous outcomes, use the headings n/N within each intervention arm, where n denotes the number of events and N is the sample size. It is preferable to standardize the use of n/N for these where possible.	—	—
Summary statistic and confidence interval	Only use abbreviations for summary statistics (e.g. RR or MD) and confidence interval (CI) if they have already been defined (see Abbreviations and acronyms for further guidance).	The risk ratio (RR) was 0.38 (95% confidence interval (CI) 0.30 to 0.49)	—
	Separate summary statistic from its CI using a comma if inside a single set of brackets.	...was statistically significant (RR 0.09, 95% CI 0.02 to 0.38)	—
	Define the CI (e.g. 95% or 99%).	(odds ratio 1.11, 95% CI 0.98 to 1.20)	(odds ratio 1.11, CI 0.98 to 1.20)
	Separate the CIs with 'to' instead of using a hyphen.	(mean difference –11.11 hours, 95% CI –20.04 to –2.18)	(mean difference –11.11 hours; 95% CI –20.04– –2.18)
Order of presentation of information in results brackets	Where multiple pieces of information are presented within a bracket, use this order and punctuation: (summary statistic, CI; P	(MD –11.11 hours, 95% CI –20.04 to –2.18; $P = 0.01$, $I^2 = 20\%$; 6 studies, 3011 participants; moderate-certainty evidence; Analysis 1.1)	(MD –11.11 hours; 95% CI –20.04– –2.18, $P = 0.01$; $I^2 = 20\%$, six studies, $n = 3011$; <i>moderate certainty evidence</i>) Analysis 1.1

	Guidance	Correct	Incorrect
	<p>value, I^2; number of studies, number of participants; level of evidence; link to analysis).</p> <p>Note: it is permissible to use numerals for numbers under 10 in results brackets.</p> <p>Note: it is not necessary to include all these parameters for every result.</p>		