

Units and systems of measurement 2

Units and systems of measurement

In this section: [Standard units](#) | [Commonly used units](#) | [Prefixes for SI units](#) | [General guidance on SI units](#) | [Currencies](#)

Standard units

The International System of Units/Le Système International d'Unités (SI) is the standard metric system of measurement. This system is made up of SI base units (the foundation units, e.g. metre), derived units (e.g. square metre), and non-SI units that are accepted for use within the SI (e.g. minute).

Commonly used units

This table lists SI units and other units that are often used in Cochrane Reviews. The full list of SI units and further information is available from the [International Bureau of Weights and Measures](#) (BIPM) and the [NIST Reference on Constants, Units, and Uncertainty](#).

Unit name	Symbol	Type
kilogram	kg	base unit
microgram	µg	base unit
metre	m	base unit
second (unit of time)	s	base unit
cubic metre	m ³	derived unit
degree Celsius	°C	derived unit
metre per second	m/s	derived unit
square metre	m ²	derived unit
day	d	non-SI unit
degree	°	non-SI unit
hour	h	non-SI unit
litre Note: the BIPM adopted the symbol 'l' in 1879; it then adopted the alternative 'L' in 1979 in order to avoid the risk of confusion between the letter 'l' and the number '1'.	L	non-SI unit
minute (unit of time)	min	non-SI unit
minute (measurement of angle)	'	non-SI unit
second (measurement of angle)	"	non-SI unit

Prefixes for SI units

This table includes the SI prefixes commonly used in Cochrane Reviews.

Factor	Name and symbol	Example
10 ⁻¹	deci (d)	decilitre (where 'litre' is the base unit)
10 ⁻²	centi (c)	centimetre (where 'metre' is the base unit)

Factor	Name and symbol	Example
10 ⁻³	milli (m)	milligram (where 'gram' is the base unit)
10 ⁻⁶	micro (μ)	microlitre
10 ⁻⁹	nano (n)	nanogram

General guidance on SI units

SI units and their derivatives should follow the style conventions listed below. Unlike most [abbreviations and acronyms](#), it is not necessary to define the full unit name on first use.

These are a selection of style conventions from NIST and BIPM (see links above). Cochrane Reviews may deviate from some of the style conventions due to the nature of Cochrane Review production; for example, Cochrane Reviews use commas to separate digits into groups of three (e.g. 150,739) instead of thin, fixed spaces (150 739).

Guidance	Correct	Incorrect
Unit symbols are unaltered when plural	10 mg	10 mgs
Unit symbols are not followed by a full stop, except when followed by normal sentence punctuation	I added 60 μg of salt.	I added 60 μg. of salt.
The unit symbol to which a numerical value belongs, and the mathematical operation that applies to the value of a quantity, should be clear.	20 °C to 30 °C 123 g ± 2 g	20 °C-30 °C 20 to 30 °C 123 ± 2 g (123 ± 2) g
Values of quantities: use Arabic numerals plus symbols for units	m = 5 kg the current was 15 A	m = five kilograms m = five kg the current was 15 amperes
Put one space between the numerical value and the unit symbol. Do not put a space between a prefix and the unit symbol. Note: except in the case of superscript units for angles or degrees (e.g. 2° 3').	2 s 25 nL	2s 25 n L
When a value with unit is used as a modifier before a noun, write out the name of the metric quantity and use a hyphen between the numeral and unit.	a 2-second delay a 20-liter container	a 2-s delay a 20 L container
When combining units, use 'per' rather than ⁻¹	mg/kg	mg kg ⁻¹
Do not mix information with unit symbols or names	the water content is 20 mL/kg	20 mL H ₂ O/kg 20 mL of water/kg
Informal references to non-SI units, such as a historical quotes using inches, are acceptable depending on the context.	It took five hours to travel 10 miles in 1945.	It took five hours to travel 10 miles (16.09 km) in 1945.

Currencies

Currencies are expressed using the standard three-letter codes ([ISO-4217](#)). For guidance on when to use these see: [Common abbreviations: currency abbreviations](#).

Guidance	Correct	Incorrect
Currency codes go before the amount.	USD 4 million 4 million US dollars	4 million USD US dollars 4 million
Add a space between the code and the amount.	EUR 300 300 euros	EUR300 300euros
Currencies (dollars, euros) are do not have a capital letter, but any associated nations or regions will be capitalized as normal.	15 euros 30,000 Canadian dollars	15 Euros 30,000 Canadian Dollars