

# Person—cholesterol level (measured), total millimoles per litre N[N].N

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## Identifying and definitional attributes

Metadata item type:	Data Element
Short name:	Cholesterol—total (measured)
METEOR identifier:	359245
Registration status:	<a href="#">Health!</a> , Standard 01/10/2008
Definition:	A person's total cholesterol (TC), measured in millimoles per litre.
Data Element Concept:	<a href="#">Person—cholesterol level</a>
Value Domain:	<a href="#">Total millimoles per litre N[N].N</a>

## Value domain attributes

## Representational attributes

Representation class:	Total	
Data type:	Number	
Format:	N[N].N	
Maximum character length:	3	
	Value	Meaning
Supplementary values:	99.9	Not stated/inadequately described.
Unit of measure:	Millimole per litre (mmol/L)	

## Data element attributes

## Collection and usage attributes

Guide for use:	Measurement in mmol/L to 1 decimal place.  Record the absolute result of the total cholesterol measurement. When reporting, record whether or not the measurement of Cholesterol-total - measured was performed in a fasting specimen.
Collection methods:	When reporting, record absolute result of the most recent Cholesterol-total - measured in the last 12 months to the nearest 0.1 mmol/L.  Measurement of lipid levels should be carried out by laboratories, or practices, which have been accredited to perform these tests by the National Association of Testing Authorities. <ul style="list-style-type: none"><li>• To be collected as a single venous blood sample, preferably following a 12-hour fast where only water and medications have been consumed.</li><li>• Prolonged tourniquet use can artefactually increase levels by up to 20%.</li></ul>

**Comments:** In settings where the monitoring of a person's health is ongoing and where a measure can change over time (such as general practice), the Service contact—service contact date, DDMMYYYY should be recorded.

High blood cholesterol is a key factor in heart, stroke and vascular disease, especially coronary heart disease.

Poor nutrition can be a contributing factor to heart, stroke and vascular disease as a population's level of saturated fat intake is the prime determinant of its level of blood cholesterol.

Large clinical trials have shown that people at highest risk of cardiovascular events (e.g. pre-existing ischaemic heart disease) will derive the greatest benefit from lipid lowering drugs. Recent trials have suggested that there should be no cholesterol level threshold for the initiation of treatment in this group of patients. In October 2006, the PBS criteria for lipid-lowering drugs was expanded to include all patients identified as high-risk (based on PBS criteria) regardless of their cholesterol level.

## Source and reference attributes

**Submitting organisation:** Cardiovascular Data Working Group

**Origin:** National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand, Lipid Management Guidelines - 2001, MJA 2001; 175: S57-S88

National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand, Position Statement on Lipid Management - 2005, Heart Lung and Circulation 2005; 14: 275-291.

National Health Priority Areas Report: Cardiovascular Health 1998. AIHW Cat. No. PHE 9. HEALTH and AIHW, Canberra.

The Royal College of Pathologists of Australasia web based Manual of Use and Interpretation of Pathology Tests. Version 4.0.

## Relational attributes

**Related metadata references:** Supersedes [Person—cholesterol level \(measured\), total millimoles per litre N\[N\].N Health!](#), Superseded 01/10/2008

**Implementation in Data Set Specifications:** [Acute coronary syndrome \(clinical\) DSS Health!](#), Superseded 01/09/2012

[Acute coronary syndrome \(clinical\) DSS Health!](#), Superseded 02/05/2013

[Acute coronary syndrome \(clinical\) NBPDS 2013- Health!](#), Standard 02/05/2013

**Implementation start date:** 01/07/2013

[Cardiovascular disease \(clinical\) DSS Health!](#), Superseded 01/09/2012

**DSS specific information:**

Scientific studies have shown a continuous relationship between lipid levels and coronary heart disease and overwhelming evidence that lipid lowering interventions reduce coronary heart disease progression, morbidity and mortality. Studies show a positive relationship between an individual's total blood cholesterol level and risk of coronary heart disease as well as death (Kannel & Gordon 1970; Pocock et al. 1989).

Many studies have demonstrated the significance of blood cholesterol components as risk factors for heart, stroke and vascular disease.

Several generalisations can be made from these cholesterol lowering trials:

- that the results of the intervention trials are consistent with the prospective population studies in which (excluding possible regression dilution bias) a 1.0 mmol/L reduction in plasma total cholesterol translates into an approximate 20% reduction in the risk of future coronary events.
- It should be emphasised, however, that this conclusion does not necessarily

apply beyond the range of cholesterol levels which have been tested in these studies.

- That the benefits of cholesterol lowering are apparent in people with and without coronary artery disease.

There is high level evidence that in patients with existing coronary heart disease, lipid intervention therapy reduces the risk of subsequent stroke

[Cardiovascular disease \(clinical\) NBPDS](#)

[Health!](#), Superseded 17/10/2018

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