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

Exported from METEOR (AIHW's Metadata Online Registry)

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

Identifying and definitional attributes

Metadata item type:	Data Element
Short name:	Cholesterol—total (measured)
METEOR identifier:	270403
Registration status:	Health, Superseded 01/10/2008
Definition:	A person's total cholesterol (TC), measured in mmol/L.
Data Element Concept:	Person—cholesterol level
Value Domain:	Total millimoles per litre N[N].N

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.

- To be collected as a single venous blood sample, preferably following a 12-hour fast where only water and medications have been consumed.
- Prolonged tourniquet use can artefactually increase levels by up to 20%.

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. For this group of patients, the optimum threshold plasma lipid concentration for drug treatment is still a matter of research. In May 1999 the PBS threshold total cholesterol concentration, for subsidy of drug treatment, was reduced from 5.5 to 4.0 mmol/L. (Australian Medical Handbook).

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 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

Relational attributes

Related metadata references:

Has been superseded by Person—cholesterol level (measured), total millimoles per litre N[N].N
Health, Standard 01/10/2008

Is used in the formation of Person—low-density lipoprotein cholesterol level (calculated), total millimoles per litre N[N].N
Health, Standard 01/10/2008

Is used in the formation of Person—low-density lipoprotein cholesterol level (calculated), total millimoles per litre N[N].N
Health, Superseded 01/10/2008

Is re-engineered from Cholesterol-total - measured, version 1, DE, NHDD, NHIMG, Superseded 01/03/2005.pdf (21.4 KB)
No registration status

Implementation in Data Set Specifications:

Acute coronary syndrome (clinical) DSS
Health, Superseded 07/12/2005

Acute coronary syndrome (clinical) DSS
Health, Superseded 01/10/2008

Cardiovascular disease (clinical) DSS
Health, Superseded 15/02/2006

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) DSS
Health, Superseded 04/07/2007
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).

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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) DSS
Health, Superseded 22/12/2009
DSS specific information:

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

Diabetes (clinical) DSS
Health, Superseded 21/09/2005
DSS specific information:

The risk of coronary and other macrovascular disorders is 2-5 times higher in people with diabetes than in non-diabetic subjects and increases in parallel with the degree of dyslipidaemia.

Following Principles of Care and Guidelines for the Clinical Management of Diabetes Mellitus, the targets for lipids management are:

- To reduce total Cholesterols to less than 5.5 mmol/L
- To reduce triglyceride levels to less than 2.0 mmol/L
- To increase high density lipoprotein Cholesterols to more than or equal to 1.0 mmol/L.

If pre-existing cardiovascular disease (bypass surgery or myocardial infarction), total cholesterol should be less than 4.5 mmol/L

Diabetes (clinical) NBPDS
Health, Standard 21/09/2005
DSS specific information:

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If pre-existing cardiovascular disease (bypass surgery or myocardial infarction), total cholesterol should be less than 4.5 mmol/L