

Laboratory standard— upper limit of normal range for microalbumin, total micrograms per minute N[NN].N

Identifying and definitional attributes

Metadata item type:	Data Element
Short name:	Microalbumin level—upper limit of normal range (micrograms per minute)
METEOR identifier:	270341
Registration status:	<ul style="list-style-type: none">• Health, Standard 01/03/2005
Definition:	The laboratory standard for the value of microalbumin measured in micrograms per minute (µg/min), that is the upper boundary of the normal reference range.

Data element concept attributes

Identifying and definitional attributes

Data element concept:	Laboratory standard—upper limit of normal range for microalbumin
METEOR identifier:	269772
Registration status:	<ul style="list-style-type: none">• Health, Standard 01/03/2005
Definition:	Laboratory standard for the value of microalbumin that is the upper boundary of the normal reference range.
Context:	Public health, health care and clinical settings.
Object class:	Laboratory standard
Property:	Upper limit of normal range for microalbumin

Value domain attributes

Identifying and definitional attributes

Value domain:	Total micrograms per minute N[NN].N
METEOR identifier:	270922

Registration status: • [Health](#), Standard 01/03/2005

Definition: Total number of micrograms per minute ($\mu\text{g}/\text{min}$).

Representational attributes

Representation class: Total

Data type: Number

Format: N[NN].N

Maximum character length: 4

Supplementary values:

Value	Meaning
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999.9	Not stated/inadequately described
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Unit of measure: Microgram per minute ($\mu\text{g}/\text{min}$)

Unit of measure precision: 1

Data element attributes

Collection and usage attributes

Guide for use: Record the upper limit of the microalbumin normal reference range for the laboratory.

Collection methods: Microalbumin is not detected by reagent strips for urinary proteins, and requires immunoassay.

Measurement of microalbumin levels should be carried out by laboratories, or practices, which have been accredited to perform these tests by the National Association of Testing Authority.


As urinary albumin varies with posture and exercise it is important to collect the urine under very standard conditions; short-term (2 hours) during rest, overnight (approximately 8 hours) or an early morning sample. For screening purposes an early morning urine specimen is adequate.


Source and reference attributes

Submitting organisation: National Diabetes Data Working Group

Origin: National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary

Relational attributes

Related metadata references: Supersedes  [Microalbumin - units, version 1, DE, NHDD, NHIMG, Superseded 01/03/2005.pdf](#) (16.3 KB) *No registration status*

Supersedes  [Microalbumin - upper limit of normal range, version 1, DE, NHDD, NHIMG, Superseded 01/03/2005.pdf](#) (15.8 KB) *No registration status*

Implementation in Data Set Specifications:

[Diabetes \(clinical\) DSS Health](#), Superseded 21/09/2005

DSS specific information:

Microalbuminuria is a strong predictor of macrovascular disease and diabetic nephropathy. Incipient diabetic nephropathy can be detected by urine testing for microalbumin. Incipient diabetic nephropathy is suspected when microalbuminuria is detected in 2 of 3 samples collected over a 6-month period in patients in whom other causes of an increased urinary albumin excretion have been excluded.

Diagnosis of microalbuminuria is established if 2 of the 3 measurements are abnormal. A small amount of protein (albumin) in the urine (microalbuminuria) is an early sign of kidney damage.

If microalbuminuria is present:

- review diabetes control and improve if necessary
- consider treatment with Angiotensin-converting enzyme (ACE) inhibitor
- consider referral to a physician experienced in the care of diabetic renal disease

If macroalbuminuria is present:

- quantitate albuminuria by measuring 24-hour urinary protein.
- refer to a physician experienced in the care of diabetic renal disease.

[Diabetes \(clinical\) NBPDS Health, Standard 21/09/2005](#)

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