

# Laboratory standard— upper limit of normal range for microalbumin, total milligrams per litre N[NN].N

## Identifying and definitional attributes

<b>Metadata item type:</b>	Data Element
<b>Short name:</b>	Microalbumin level—upper limit of normal range (milligrams per litre)
<b>METEOR identifier:</b>	270334
<b>Registration status:</b>	<ul style="list-style-type: none"><li>• <a href="#">Health</a>, Standard 01/03/2005</li></ul>
<b>Definition:</b>	The laboratory standard for the value of microalbumin measured in milligrams per litre (mg/L), that is the upper boundary of the normal reference range.

## Data element concept attributes

### Identifying and definitional attributes

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

## Value domain attributes

### Identifying and definitional attributes

<b>Value domain:</b>	<a href="#">Total milligrams per litre N[NN].N</a>
<b>METEOR identifier:</b>	270921

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

**Definition:** Total number of milligrams per litre (mg/L).

## Representational attributes

**Representation class:** Total

**Data type:** Number

**Format:** N[NN].N

**Maximum character length:** 4

**Supplementary values:**

Value	Meaning
999.9	Not stated/inadequately described

**Unit of measure:** Milligram per litre (mg/L)

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 - upper limit of normal range, version 1, DE, NHDD, NHIMG, Superseded 01/03/2005.pdf](#) (15.8 KB) *No registration status*

Supersedes [Microalbumin - units, version 1, DE, NHDD, NHIMG, Superseded 01/03/2005.pdf](#) (16.3 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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