

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

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# Laboratory standard—upper limit of normal range for microalbumin, total micrograms per minute 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 (micrograms per minute)
<b>METEOR identifier:</b>	270341
<b>Registration status:</b>	<a href="#">Health</a> , Standard 01/03/2005
<b>Definition:</b>	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.
<b>Data Element Concept:</b>	<a href="#">Laboratory standard—upper limit of normal range for microalbumin</a>
<b>Value Domain:</b>	<a href="#">Total micrograms per minute N[NN].N</a>

## Value domain attributes

### Representational attributes

<b>Representation class:</b>	Total				
<b>Data type:</b>	Number				
<b>Format:</b>	N[NN].N				
<b>Maximum character length:</b>	4				
<b>Supplementary values:</b>	<table><thead><tr><th>Value</th><th>Meaning</th></tr></thead><tbody><tr><td>999.9</td><td>Not stated/inadequately described</td></tr></tbody></table>	Value	Meaning	999.9	Not stated/inadequately described
Value	Meaning				
999.9	Not stated/inadequately described				
<b>Unit of measure:</b>	Microgram per minute (µg/min)				

## Data element attributes

### Collection and usage attributes


<b>Guide for use:</b>	Record the upper limit of the microalbumin normal reference range for the laboratory.
<b>Collection methods:</b>	<p>Microalbumin is not detected by reagent strips for urinary proteins, and requires immunoassay.</p> <p>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.</p> <p>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.</p>


### Source and reference attributes

<b>Submitting organisation:</b>	National Diabetes Data Working Group
<b>Origin:</b>	National Diabetes Outcomes Quality Review Initiative (NDOQRIN) data dictionary

## Relational attributes

### Related metadata references:

Is re-engineered from  [Microalbumin - units, version 1, DE, NHDD, NHIMG, Superseded 01/03/2005.pdf](#) (16.3 KB)  
*No registration status*

Is re-engineered from  [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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- refer to a physician experienced in the care of diabetic renal disease.