

# Laboratory standard—upper limit of normal range for microalbumin, albumin/creatinine ratio N[NN].N

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# Laboratory standard—upper limit of normal range for microalbumin, albumin/creatinine ratio 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 (albumin/creatinine ratio)
<b>Synonymous names:</b>	Albumin/creatinine ratio
<b>METEOR identifier:</b>	270344
<b>Registration status:</b>	<a href="#">Health</a> , Standard 01/03/2005
<b>Definition:</b>	The laboratory standard for the value of microalbumin measured as an albumin/creatinine ratio 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="#">Albumin/creatinine ratio N[NN].N</a>

## Value domain attributes

### Representational attributes

<b>Representation class:</b>	Ratio	
<b>Data type:</b>	Number	
<b>Format:</b>	N[NN].N	
<b>Maximum character length:</b>	4	
	<b>Value</b>	<b>Meaning</b>
<b>Supplementary values:</b>	999.9	Not stated/inadequately described
<b>Unit of measure:</b>	Milligram per millimole (mg/mmol)	

## 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>	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 and if the albumin/creatinine ratio is found to be greater than 3.5mg/mmol then a timed overnight sample should be obtained for estimation of the albumin excretion rate.


### 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, NHMG, 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, NHMG, Superseded 01/03/2005.pdf](#) (15.8 KB)  
*No registration status*

See also [Person—microalbumin level \(measured\), albumin/creatinine ratio N\[NN\].N](#)  
[Health](#), Standard 01/03/2005

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