

Australian/New Zealand Standard™

**Procedures for the collection, detection  
and quantitation of drugs of abuse in  
urine**

## **AS/NZS 4308:2001**

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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CH-036, Analysis of Body Fluids and Wastes. It was approved on behalf of the Council of Standards Australia on 16 March 2001 and on behalf of the Council of Standards New Zealand on 9 March 2001. It was published on 29 March 2001.

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The following interests are represented on Committee CH-036:

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# Australian/New Zealand Standard™

## **Procedures for the collection, detection and quantitation of drugs of abuse in urine**

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## PREFACE

This Standard was prepared by the Standards Australia Committee CH-036, the Analysis of Body Fluids and Waste to supersede AS 4308—1995, *Recommended practice for the collection, detection and quantitation of drugs of abuse in urine*.

The objective of this Standard is to specify an appropriate collection procedure for samples and the competence of the laboratory conducting the test. A range of options for the preliminary test is presented but a chromatographic separation coupled to mass spectrometry is the only approved confirmatory test technology at present. The cut-off levels listed for both the preliminary test and confirmatory test are defined. The Standard addresses only the testing of samples for medico-legal purposes. The testing of samples for clinical use is not covered.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE.....	5
1.2 REFERENCED DOCUMENTS.....	5
1.3 DEFINITIONS.....	6
1.4 PRINCIPLE.....	7
1.5 REAGENTS.....	7
1.6 APPARATUS.....	8
<b>SECTION 2 PERSONNEL</b>	
2.1 DAY-TO-DAY MANAGEMENT.....	9
2.2 TEST VALIDATION.....	9
2.3 OPERATION AND SUPERVISION OF ANALYSTS.....	9
<b>SECTION 3 SPECIMEN COLLECTION AND STORAGE PROCEDURES</b>	
3.1 GENERAL.....	10
3.2 COLLECTION SITE.....	10
3.3 INTEGRITY AND IDENTITY OF THE COLLECTED SPECIMEN.....	10
3.4 TRANSPORTATION TO THE LABORATORY.....	12
3.5 SPECIMEN RECEPTION.....	12
3.6 LABORATORY SECURITY.....	13
3.7 STORAGE OF LABORATORY SAMPLES.....	13
<b>SECTION 4 INITIAL TESTING</b>	
4.1 GENERAL.....	14
4.2 METHOD.....	14
4.3 NUMBER OF DETERMINATIONS.....	14
4.4 BLANK DETERMINATION.....	15
4.5 QUALITY CONTROL.....	15
4.6 INITIAL TEST CUT-OFF LEVELS.....	15
4.7 ACCEPTANCE OF RESULTS.....	15
4.8 INTERPRETATION OF RESULTS.....	15
<b>SECTION 5 CONFIRMATORY TESTING PROCEDURES</b>	
5.1 CONFIRMATION OF INITIAL TESTING.....	17
5.2 INSTRUMENT CONDITIONS.....	17
5.3 NUMBER OF DETERMINATIONS.....	17
5.4 BLANK DETERMINATION.....	17
5.5 INSTRUMENT SETUP.....	17
5.6 QUALITY CONTROL.....	17
5.7 CONFIRMATORY TEST CUT-OFF LEVELS.....	18
5.8 CALCULATIONS.....	18
5.9 ACCEPTANCE OF RESULTS.....	18
<b>SECTION 6 REPORTING OF RESULTS</b>	
6.1 TEST REPORT.....	20
6.2 RECORD KEEPING.....	20
6.3 DISPUTED RESULTS.....	20

## APPENDICES

A	EXAMPLE OF CHAIN-OF-CUSTODY FORM .....	21
B	RECOMMENDED PRECAUTIONS FOR HANDLING BIOLOGICAL SPECIMENS .....	23
C	PRINCIPLES OF OPERATION .....	25

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Procedures for the collection, detection and quantitation of drugs of abuse in urine**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out procedures for the sample collection and the detection and quantitation of drugs of abuse in human urine. The method is intended for workplace, medicolegal or court directed detection of any or all of the following classes of drugs:

- (a) Opiates.
- (b) Sympathomimetic amines.
- (c) Cannabis metabolites.
- (d) Cocaine metabolites.
- (e) Benzodiazepines.

NOTE: The detection and reporting of drug classes other than those listed above is not precluded. See Clause 6.1(g).

Aspects of this Standard have relevance to testing for drugs of abuse in urine; however, clinical testing is outside the scope of this Standard. This Standard does not cover the testing of urine samples following excessive intake of therapeutic drugs or vitamins, exogenous hormone intake or ingestion of performance-enhancing drugs which may be used by sports participants.

Procedures for initial testing are set out in Section 4. Procedures for confirmatory testing are set out in Section 5.

NOTE: It is a requirement of this Standard that initial testing and confirmatory testing are performed in the same laboratory (see Clauses 4.1 and 5.1).

**1.2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

**AS**

- 2162 Verification and use of volumetric apparatus
- 2162.1 Part 1: General—Volumetric glassware
- 2162.2 Part 2: Guide to the use of piston-operated volumetric apparatus (POVA)
- 2164 Laboratory glassware—One-mark volumetric flasks
- 2166 One-mark pipettes
- 2167 Graduated straight pipettes

**AS/NZS**

- 2243 Safety in laboratories
- 2243.1 Part 1: General
- 2243.2 Part 2: Chemical aspects
- 2243.3 Part 3: Microbiology

**ISO**

- 3696 Water for analytical laboratory use—Specification and test methods