

# Urine drug screening

## Factors affecting a valid specimen

Urine creatinine concentration is assayed to detect diluted specimens. This can be caused by surreptitious addition of tap water or excessive fluid intake before the collection. A urine creatinine level  $< 1.76$  mmol/L indicates a dilute specimen. A repeat specimen should be considered.

The temperature of the specimen indicates if it is freshly passed. If the specimen is fresh, the temperature should fall in the range of 33–38°C. If the temperature is not in this range, specimen substitution should be suspected.

Adulteration can affect the final results. Smell, visual, and automated checks are performed to check for these possibilities.

## Factors affecting detection time

- Usage pattern
- Drug and dose of drug used
- Urine concentration
- Assay method and cut-off value used

## Storage time

- Chain-of-custody samples with positive results: 3 months
- Chain-of-custody samples with negative results: 1 month
- All non-Chain-of-custody samples: 1 month

## Confirmation

Where confirmation is required (e.g. if results are to be used as medico-legal evidence in court), please contact laboratory on (07) 3377 8326.

## Chain-of-custody

As we are a NATA-accredited laboratory, our specimens are processed as per NATA requirements.

Results are confidential.

We do not witness specimen collection, but collections at our collection centres are supervised, and urine temperature is taken immediately after collection. Chain-of-custody forms are completed and specimens are sealed.

## Cut-off values

Cut-off values used are as recommended in Australian Standard AS/NZ 4308-2008.