

Benzodiazepines (urine)

Description	A benzodiazepine is a psychoactive drug that enhances the effect of the neurotransmitter gamma-aminobutyric acid, which results in sedative, hypnotic, anxiolytic, anticonvulsant, muscle relaxant and amnesic action. These properties make benzodiazepines useful in treating anxiety, insomnia, agitation, seizures, muscle spasms, alcohol withdrawal and as a premedication for medical or dental procedures.
Indication	To assess if benzodiazepine has been taken
Additional Info	<p>Several benzodiazepines are measured by the screening assay and include: Oxazepam, Triazolam, Lorazepam (short acting), Temazepam, Chloridiazepoxide (intermediate acting) and Diazepam, Nitrazepam (long acting).</p> <p>Urinary creatinine levels of <2mmol/L suggests dilute urine and may result in a false negative screen.</p> <p>Sample referred to external laboratory for analysis.</p>
Concurrent Tests	Urine drugs of abuse screen
Dietary Requirements	N/A
Interpretation	A positive screen result will be produced if concentrations in the urine are >200ng/mL. The half life of benzodiazepines varies (short acting 4-11 hours; intermediate 6-27 hours and long 20-50 hours). A positive screen may be seen up to 24 hours (short acting); 4 days (intermediate acting) and 7 days (long acting) after the drug has been taken.
Collection Conditions	Fresh urine
Frequency of testing	<p>Re-testing is not indicated in the same acute episode when investigating toxicity.</p> <p>Expert opinion for the Association for Clinical Biochemistry and Laboratory Medicine.</p>