

Evaluation of Cocaine results

Cut-off value

300 ng/mL

Cross-reactivity

This assay detects cocaine, benzoylecgonine, and cocaethylene, but not other metabolites.

Metabolism

Less than 5% is excreted as cocaine.

Metabolites are detectable in urine for up to 2 days for light users and up to 14 days for heavy users.

Cocaine (half-life = 0.7–1.5 hours) is metabolised in the liver to benzoylecgonine (half-life = 7.5 hours) and ecgonine methyl-ester. If taken orally, cocaine is extensively hydrolysed in the gut, making it less toxic.

Cocaethylene (half-life = 1–4 hours) is a metabolite present when ethanol is used concurrently with cocaine. It has been hypothesised that cocaethylene is a toxic metabolite responsible for the cardiac effects suffered by some users.

Interferences

High levels of quinine appear to produce false positive results.