

# Important Considerations in the Interpretation of Forensic Urine Drug Test Results<sup>a</sup>

**REFERENCE:** Liu R[J]H: Important considerations in the interpretation of forensic urine drug test results; *Forensic Sci Rev* 4:51–65; 1992.

**ABSTRACT:** With sound analytical methodology, good laboratory practice, and intact specimen chain-of-custody, test result interpretation is the final element dictating the action to be taken following drug urinalysis. From a technical viewpoint, false test results may be reported as a result of adulteration, including the alteration of metabolic process through the intentional use of foreign material, or the outright addition of adulterants to specimens. Unintended exposure through contact or inhalation may result in the detection of targeted drug analytes at low levels, while the use of certain licit food and medicinal items, such as a salad dressing, a bagel containing poppy seeds, and Tylenol® III, may produce positive results using commonly reporting cutoff levels. For those specimens that test positively, the following factors should be considered when interpreting the meaning of a quantitative result: analyte stability, urine water content, and time lapse between drug exposure and specimen collection.

**KEY WORDS:** Adulterant, adulteration, creatinine, drug testing, immunoassay, nasal inhaler, passive inhalation, poppy seeds, stability, urinalysis.