Interpreting Drug Test Levels (Excluding THC)

Interpretation of urine drug levels is highly complex. Given that most people are not experts in biomedical, pharmacologic, or toxicological fields, they are not qualified to interpret drug testing levels. Random urine drug tests are used to determine the presence or the absence of a drug in a urine sample being tested - nothing more.

Some laboratories do not report the levels even if requested, understanding that the urine drug concentration serves no useful purpose or could result in the misapplication of the result. When asked about the practices of reporting urine drug concentrations, most laboratories admit that these values are not useful for interpretation; however, numerical results continue to be reported because of customer demand.

There are many technical issues affecting the interpretation of drug levels. Drug concentrations in the urine are present in proportion to the total amount of liquid in the sample. If the urine is diluted, the concentration of the drug is reduced and when the urine is more concentrated the drug concentration is increased. Drug levels may vary within a day or between days even with no additional drug exposure as a result of fluid intake alone.

Due to the fact that drugs are eliminated from the body at different rates, thus varying the overall test response, any attempt to evaluate changing urine drug levels becomes extremely problematic. Decisions based entirely on either positive or negative results removes the ambiguity associated with manipulating numbers. Eliminating the interpretation of levels will eliminate both the inappropriate and unfair rewards and sanctions for participants.

If there are any questions or concerns please contact the TASC Laboratory at (602) 257-7588

References