



STERLING NEWS & NOTES

A Technical Update from Sterling Reference Laboratories
Your Complete Drug Testing Resource!



First Quarter 2010

Technical Questions of the Quarter

Why do my on-site urine drug testing devices have separate tests for amphetamine and methamphetamine, but the lab tests for both of them with a single test?

Previous newsletters have highlighted some of the general differences between on-site tests and lab based testing. This specific question points to the difficulty of testing for amphetamine class drugs. Screening tests for this class of drugs have the highest overall rate of false positive screens among the available tests. The amphetamine screens used in the laboratory are designed to screen for amphetamine and/or methamphetamine in a single assay. This approach works because the machine based reagent systems are precisely controlled and confirmation testing is readily available. By using a separate test strip for methamphetamine, the manufacturers of on-site devices can provide devices with enhanced sensitivity and specificity for that target drug. This allows them to minimize false positives due to other substances and at the same time maximize the detection of methamphetamines when present (i.e. minimizes potential for false negatives).

Why do my oral fluid devices or tests have separate tests for amphetamine and methamphetamine?

The low positive cutoff needed to detect the lower levels of drug present in oral fluid testing requires this approach to maximize the probability of detecting drug when it is present. If your primary concern is documenting methamphetamine use, it is acceptable to only use the methamphetamine test. Using both allows for better detection of individuals who may be using prescription amphetamines. The sensitivity/specificity issues are also why specific screening tests are available and recommended for documenting Ecstasy (MDMA) use.

My on-site urine drug testing devices have options for tests labeled OPI 300 or OPI 2000. Which one should I use? My devices have a test labeled MOP (or MOR) – is that different from the OPI tests?

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Technical Questions of the Quarter (continued)

All devices are designed to primarily detect heroin use so they are calibrated against morphine, the primary metabolite of heroin so the ones labeled MOP or MOR are a more precise label for what the device is testing for. However, all devices will have some cross reactivity with codeine, hydrocodone and hydromorphone allowing them to detect drugs other than heroin. Using the OPI 300 (MOP, MOR) test improves the window of detection for heroin and the other drugs mentioned. OPI 2000 is best used if you only want to document heroin use. None of the OPI, MOP or MOR devices are appropriate for detecting oxycodone or oxymorphone. There is a separate test available for that purpose.

My strips or devices do not test for adulterants. Why should I spend the extra money for this feature?

The most common method used to defeat a drug test is dilution by over hydrating or by adding water or other substances directly to a specimen. Even a directly observed specimen collection can not prevent dilution by over hydration, and relying on visual inspection is not enough. If a person is taking certain vitamins even a very dilute specimen will appear yellow. It is especially useful to check for dilution (Creatinine and Specific Gravity) and other adulterants when collections are not observed.

For more detail on these topics, please consult past newsletters. Past issues are available online at <http://www.sterlingreflabs.com/corpnews.php>

80-Hour Alcohol Cost-Effective Options Tests & Screens



EtG Screen as low as \$6.00!

We can now combine your EtG Test or with your Drug Test or Screen to offer you further savings!

Call our Sales Department today for more information on which option is best for you!

Numerous Dilute Urine specimens?

Frequent claims of "Shy Bladder"?

Can't provide "same sex" observed collections?

TRY ORAL FLUID DRUG SCREENING!

Customize from 4 to 11 Drugs: Amphetamine, Methamphetamine, Benzodiazepines, Barbiturates, Cocaine, Cannabinoids (marijuana), Methadone, Opiates, Oxycodone, Propoxyphene, Phencyclidine (PCP).

- ✓ Fast and Simple Collection Procedure
- ✓ Recent Drug Use Detected
- ✓ Substitution Difficult in Oral Fluid
- ✓ Lack of Required Urine Specimen Production – i.e. Renal Dialysis Patients
- ✓ Gender Neutral Collection
- ✓ Adulteration Difficult in Oral Fluid
- ✓ Saliva Drug Levels Correlate with Blood Drug Levels
- ✓ Negative **AND** Positive Screen results within 24 hours from receipt at the lab!
 - **Confirmation - By Request or Automatic**
 - **Collection Device purchased separately.**
 - **No minimum purchase quantity required.**

SPECIALITY TESTS **NOW AVAILABLE!**

Flunitrazepam - (Rohypnol®) a hypnotic drug that has sedative, anticonvulsant, anxiolytic, amnestic, hypnotic and skeletal muscle relaxant properties. It acts as a short/intermediate acting benzodiazepine.

It is illegal in the United States. It is however used as an illicit "date rape" drug.

Tramadol - (Ultram®) a centrally acting analgesic used for treating moderate to severe pain.

Meperidine - (Demerol®) a fast-acting opioid analgesic drug indicated for the treatment of moderate to severe pain.

Carisoprodol - (Soma®) a muscle relaxer that works by blocking pain sensations between the nerves and the brain.

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Fentanyl – A synthetic primary μ -opioid agonist commonly used to treat chronic breakthrough pain and is commonly used in pre-surgical procedures.

It is approximately 100 times more potent than morphine.

6-Acetylmorphine (6-AM) – A unique metabolite of heroin. This is significant because on a urine immunoassay drug screen, the opiate test typically tests for morphine, which is a metabolite of a number of legal and illegal opiates/opioids such as codeine, morphine sulfate, and heroin. 6-AM remains in the urine for approximately 12-16 hours so a urine specimen must be collected soon after the last heroin use, but the presence of 6-AM is conclusive evidence that heroin was recently used.

As always, if you have any technical questions, a consulting scientist is available at (800) 442-0438, (253) 552-1551, or via e-mail at certifying@regtox.com.

Prior to ordering - All Tests must be set up on your account, by an authorized account contact. Call the Sales Department today for details and pricing.

Are you buying your Onsite Drug Screening Devices / Field Kits from another source?

We have numerous brands of Onsite Screening Devices and Collection Supplies, priced competitively, in multiple drug screening configurations.

Cups – Dip Cards – Cassettes – Saliva Swabs – Alcohol Saliva Strips – Digital Breath Alcohol Detectors (Breathalyzers) – Collection Cups – Specimen Pans (Hats) – Bluing Tablets – Gloves, and more!

Call our Sales Department Today, to see if we can save you money!

STERLING Reference Laboratories commitment to quality and service provides great opportunities for well qualified and skilled people. If you know of anyone who would compliment our team, please refer them to us. Thank you!

STERLING Reference Laboratories is full-service, nationally renowned toxicology laboratory, testing for drugs of abuse, which has been serving its clients with superior service and unsurpassed quality since 1987. SRL is certified by Health and Human Services (SAMHSA) and the College of American Pathologists Laboratory Accreditation Program (CAP) – rigorous laboratory standards designed to ensure quality testing.

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