Guideline on Dilute and Low Creatinine Specimen Results

Guideline: The Health Professionals’ Services Program (HPSP) will follow the standard established by the Federal Department of Transportation (DOT) for dilute specimens. The DOT defines a specimen as a dilute if the specimen has a creatinine of less than 20mg/dl and a specific gravity less than 1.003.

Most normal urine creatinine will fall within the range of normal with normal water consumption. Normal creatinine ranges for females are about 37-300 mg/dl and males 44 - 250 mg/dl. Normal Specific Gravity is 1.002 - 1.030. There are specimens that have a normal specific gravity but a creatinine level that is less than 20 mg/dl. This can be a normal physiological variant (if the creatinine is above 5) or may be due to attempts to dilute the urine. For the purposes of the Health Professionals Services Program, the following procedures should be followed in the case of a specimen with a creatinine result less than or equal to 15mg/dl referred to below as a “low creatinine”. Lab results often report tests with abnormally low creatinines as having a “positive creatinine” but we are reserving the term positive for drug and ETG test result.

The following actions will be taken if a licensee has a dilute or a low creatinine specimen.

1. The first time the licensee has a dilute specimen or a low creatinine, the agreement monitor will contact the licensee and educate the licensee again regarding how to avoid having a dilute or low creatinine specimen. The licensee will be sent a letter with a copy of the Guidelines on dilute and low creatinine specimens and will be scheduled for another toxicology test within 24 hours from the date that the Health Professionals’ Services Program received the dilute or low creatinine test result from the laboratory.

2. If a licensee has a second negative dilute specimen the following will occur:
   
   a. This information will be shared with the licensee’s treatment providers, and the HPSP medical director.
   
   b. The specimen sample will be tested to the lowest level of detection for drugs and/or ETG. The medical director and the agreement monitor will determine what lowest level of detection tests will be run on the specimen. There will be an additional charge to the licensee for these tests. If there is detection of a drug of abuse, the licensee will be reported substantially non-compliant and may be required to have an evaluation by a third party evaluator.
   
   c. The licensee will be recommended to have a medical evaluation to determine why s/he is producing dilute or low creatinine specimens.
   
   d. Licensee will be scheduled for an additional test.

3. When testing to the LOD for ETG due to a dilute or low creatinine, the level will be corrected for the low creatinine and further action will be dependent on the ETG level. Action can be initiated
on any level including a request for a third party evaluation and notification to licensee’s providers. The result will NOT be reported as a positive test, regardless of level.

4. If there is a medical issue causing the dilute or low creatinine results, and if that medical issue cannot reasonably be resolved, this will be noted, and further dilute or low creatinine specimens will be randomly tested to lowest level of detection. If there is a medical problem that can be addressed, the specimen results will be reviewed according to the general policy for all specimens once the medical issue has resolved.

5. If no medical problem is found, and the dilute tests or the low creatinine specimens are negative on at least three occasions when tested to the lowest level of detection, the licensee’s record will be reviewed for other behaviors that may indicate possible drug and/or alcohol use. Licensee may be required to have an increased testing schedule or a third party evaluation.

6. If a licensee has a third dilute specimen within any one year time period, the specimen will be tested to the lowest level of detection and licensee will be required to have a medical evaluation to determine why s/he is producing dilute or low creatinine specimens.

7. If a licensee has a positive dilute or low creatinine specimen, the specimen is reported as a positive test by the Medical Review Officer and the licensee will be reported as substantially non-compliant to the licensee’s Board.