



“DILUTE URINE SPECIMEN FOLLOW-UP”

Protocol Recommendations for Follow-Up After One or More Dilute Negative Urine Specimens

When a specimen tests negative for all drugs and when that specimen is also dilute, a concern exists about the accuracy of the test result. As specimen concentration decreases so does the concentration of the drugs that are being tested for in that specimen. One research paper indicated that when the concentration of dilute specimens is normalized, the positive rate for those specimens may increase from 20% to as much as 150% for certain drugs. Clearly this puts the validity of the testing programs at risk. FSSolutions has addressed this issue with two previous FSSolutions reports, one intended for program participants addressing ways to avoid producing a dilute specimen, and one for programs addressing the issue of creatinine and specific gravity interpretation.

The purpose of this report is to suggest a protocol for actions that may be taken when a participant produces one or more dilute negative specimens. This protocol may be followed for all dilute negative specimens or only on a case by case basis at the program's request. Electing to follow this protocol for all specimens will allow laboratories to automate the process and will help to hold down the costs. We suggest costs be paid by the participant as a financial disincentive for that participant to produce any future dilute specimens.

Here are FSSolutions' recommendations upon receipt of a dilute negative result:

1. Notify your FSSolutions Account Coordinator to contact the laboratory, via the RMS Medical Department, to inquire whether or not there appeared to be any data for a particular analyte at 50% of the screening cutoff.
2. If the laboratory reports that there is no screening data below cutoff, then there is nothing more to do with this specimen. The program *may* elect to test by using an alternative specimen, specifically hair or oral fluid.
3. If the laboratory reports that there is suspected analyte present at 50% of cutoff, then authorize the laboratory to do an immediate confirmation of that analyte at the laboratory's lower limit of quantitation (LOQ).
4. If this LOQ confirmation is positive, this will produce a confirmed and actionable result.

FSSolutions wants to do as much as possible to maintain the credibility of our programs; this protocol is a good start. Please contact your Account Coordinator for further information on protocol set-up.

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