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Repeating Low-Positive Nucleic Acid Amplification Test Results for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*: Assessment of Current Practice in Selected California Public- and Private-Sector Laboratories

Routine repeat testing of specimens with a low-positive result for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* by nucleic acid amplification test (NAAT) is not recommended (5) because of the following. (i) The majority of positive specimens that are negative on confirmatory testing are true positives. (ii) Infected patients will go untreated. In August 2010, the Centers for Disease Control and Prevention (CDC) disseminated a Laboratory Outreach Communication System (LOCS) advisory specifying that low-positive NAAT results should be reported as positive (3). In September 2010, we conducted a follow-up online survey of licensed laboratories respondents to the 2007 California Clinical Laboratory Survey (2) that reported routine repeat testing of specimens with low-positive *C. trachomatis* and *N. gonorrhoeae* NAAT results.

Of 108 laboratories contacted, 63% responded (15 public laboratories and 53 private laboratories). Of 52 laboratories repeating low-positive results, 22 (42%) reported the unconfirmed results as negative; 19 of these laboratories were private-sector laboratories. At least 40 (77%) did not report cases for public health surveillance. Public health laboratories were more likely than private-sector laboratories to have received the LOCS advisory (14/15 [93%] versus 11/53 [21%]; $P < 0.0001$).

These results are troubling, since most laboratories that repeat low-positive specimens are not reporting a disease that is reportable in all states. The public health implications are that chlamydia control efforts are undermined, as cases go untreated and continue to transmit infections to sex partners. The magnitude of this practice is amplified by private-sector laboratories that test the vast majority of specimens for *C. trachomatis* and *N. gonorrhoeae* in California; specifically, among the 108 laboratory respondents that reported repeating low-positive specimens, the private-sector test volume was over 3 million chlamydia tests compared with the public health test volume of 158,000 chlamydia tests, an order of magnitude smaller (2). Although we did not quantify the number of low-positive tests that were not confirmed and we did not determine the proportion of all positives that were low positives and repeated in this survey, the proportion of all positives that fall into the low-positive range as indicated by the manufacturer is likely very low (1, 4), particularly if clinicians are testing higher-prevalence populations according to national screening guidelines.

Failure to correctly inform patients of positive results due to repeat testing practices is related to the failure to reach all laboratories with current guidelines. We have a public health obligation to address these failures by expanding the LOCS to include private-sector laboratories and state sexually transmitted disease (STD) program promotion of best laboratory practices across public-private laboratory sectors.

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