Abstract

BACKGROUND: Current CDC recommendations for HIV rapid testing are critical in improving access to early diagnosis of HIV infection among high-risk populations. Among these recommendations, confirmatory testing of a positive rapid test is critical. Respondents to the 2003 Model Performance Evaluation Program (MPEP) survey reported variability in practice when confirming rapid test results.

OBJECTIVES: To further evaluate confirmatory testing practices among respondents to the CDC's Model Performance Evaluation Program (MPEP). This survey included the following questions regarding confirmatory testing practices:

1. For the rapid HIV test kit you specified in question #1, what confirmatory testing does your facility require to confirm a preliminary positive rapid test result? (reactive) samples before reporting a final "positive" result, and if so, what confirmatory test(s) does your facility require to confirm a preliminary positive (reactive) HIV Rapid Test result?" (reactive) samples before reporting a final "positive" result, and if so, what confirmatory test(s) does your facility require to confirm a preliminary positive (reactive) HIV Rapid Test result?"

METHODS: This survey was administered as part of the MPEP survey tool via a web-based survey. Data were collected between November 2003 and March 2004. The survey was disseminated to approximately 2000 laboratories and clinics, and 513 completed responses were received.

RESULTS: Forty-nine percent (252/513) of respondents reported performing confirmatory testing of from 1 to 7 different test kits. In all, 63% of respondents stated that confirmatory testing was required prior to reporting a positive result. Respondents were also asked to describe their confirmatory testing practices. Overall, 82% of respondents required confirmatory testing of reactive samples before reporting a final "positive" result. Additional analysis indicated that respondents who responded from the United States were more likely to require confirmatory testing than non-U.S. respondents (92% vs. 66%). Respondents reporting testing at different sites were also more likely to require confirmatory testing than those testing a single site (95% vs. 82%).

CONCLUSIONS: The findings of this survey indicate that confirmatory testing of reactive samples is required. Additionally, many respondents indicated that they use confirmatory testing patterns that do not include either WB, EIA, or IFA. Further research is needed to evaluate whether these confirmatory testing practices are being used appropriately and whether they lead to unnecessary testing costs.

Patterns of Confirmatory Testing

Survey of Confirmatory Testing Practices

The survey included the following question regarding confirmatory testing practices:

1. For the rapid HIV test kit you specified in question #1, what confirmatory testing does your facility require to confirm a preliminary positive rapid test result? (reactive) samples before reporting a final "positive" result, and if so, what confirmatory test(s) does your facility require to confirm a preliminary positive (reactive) HIV Rapid Test result?"

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CONFIRMATORY TESTING PRACTICES

Patterns of Confirmatory Testing

U.S. Respondents

Patterns of Confirmatory Testing Non-U.S. Respondents

Conclusions

- Participants reported a variety of confirmatory testing practices among U.S. and non-U.S. respondents.
- U.S. testing sites were more likely to perform confirmatory testing of reactive samples before reporting a final "positive" result compared to non-U.S. respondents.
- 3 (36%) testing sites reported "no confirmatory testing required." 4 (7%) testing sites reported "confirmatory testing required before reporting a final "positive" result." 19 (35%) testing sites reported performing confirmatory testing of reactive samples before reporting a final "positive" result; of these sites, 15 (79%) used a confirmatory test different from the rapid HIV test used to report a final "positive" result. 20 (38%) testing sites used a confirmatory test(s) identical to the rapid HIV test used to report a final "positive" result.
- The reason for U.S. testing sites using alternative confirmatory testing practices, other than those currently recommended by CDC, is unclear.

Recommendations

- U.S. testing sites are recommended to use confirmatory testing of reactive samples before reporting a final "positive" result. This recommendation should be followed until current recommendations are clarified.
- U.S. testing sites should be encouraged to follow current confirmatory testing practices to improve compliance with current recommendations.
- Further research is needed to evaluate the effectiveness of confirmatory testing practices and to determine the most appropriate confirmatory testing practices for use in different settings.

Patterns of Confirmatory Testing

U.S. Respondents

Patterns of Confirmatory Testing Non-U.S. Respondents