# Use of a Three Rapid HIV Test Algorithm at Point-of-care Settings: County of Los Angeles, Department of Public Health Experience

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## Acronyms

 OAPP – County of Los Angeles Department of Public Health Office of AIDS Programs and Policy

- RTA HIV rapid testing algorithm
- POC point-of-care setting
- HCT HIV counseling and testing





## **Evolution of Rapid HIV Testing**

- 1989 CDC and APHL two-test algorithm for HIV testing: EIA/WB
  - considered "gold standard"
- 1994 UNAIDS and WHO
  - 3 types of rapid HIV testing algorithms
- 1994 present: development of rapid testing technology
  - FDA approved CLIA-waived tests
  - Sensitivity and specificity of tests exceed that of "gold standard"
  - Tests permit use in multi-test algorithms





### Los Angeles County

Square Miles: 4,086 Population<sup>1</sup>: 10.3 Million

Latino/a 47%
White 28.9%
Asian/Pl 12.6%
African-American 9.0%
Native American 0.3%

#### Proportion of:

California Population<sup>2</sup>: 29%

California AIDS Cases<sup>3</sup>: 36%

• U.S. AIDS Cases<sup>3</sup>: 5%

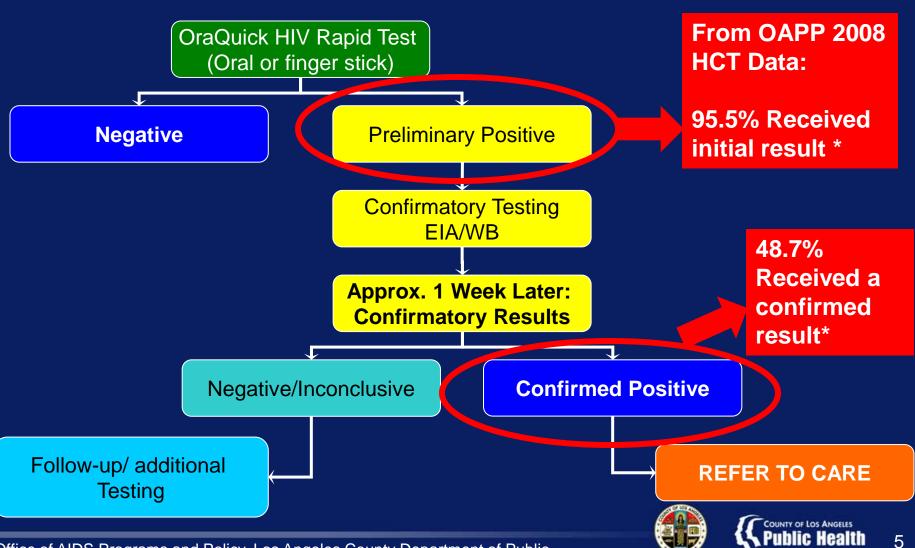
Living with HIV/AIDS<sup>3</sup>: 60,000 (Estimated)

<sup>1</sup>United Way, Los Angeles (2008)
 <sup>2</sup>U.S. Department of Commerce (2008)
 <sup>3</sup>Los Angeles County HIV Epidemiology Program (2008)





## Background: Rapid HIV Testing in Los Angeles



\*Office of AIDS Programs and Policy, Los Angeles County Department of Public Health, HIV Counseling and Testing Annual Report, January through December 2008, June, 2009, 1-35.

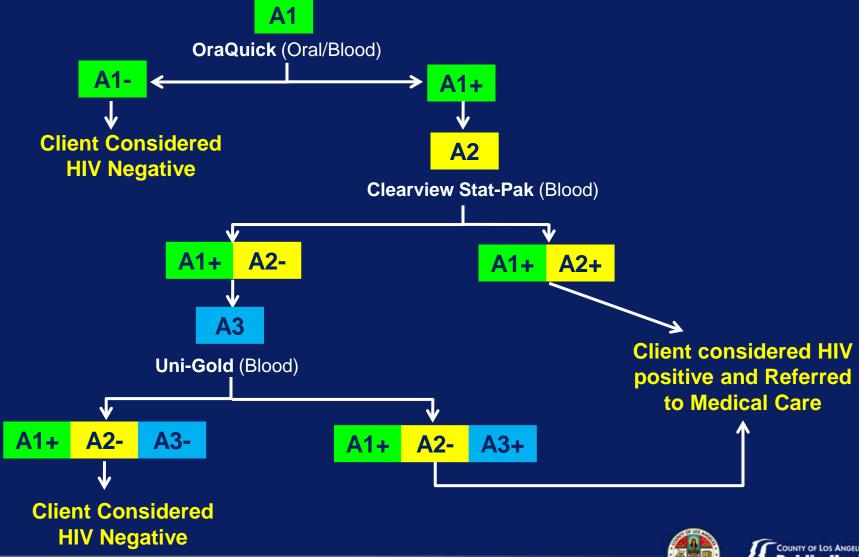
# HIV Rapid Testing Algorithm (RTA) Study

- Centers for Disease Control and Prevention (CDC) funded study
- Goal: Evaluate the impact and feasibility of using a sequence of up to 3 HIV rapid tests, to provide clients with information about their HIV status within 1 hour and link into care
- Los Angeles Sites: OAPP-funded rapid HCT sites
  - RTA Intervention sites: 4 OAPP-funded rapid HCT sites consisting of mobile testing units, store fronts, community based clinics
  - Comparison sites: All other OAPP-funded rapid HCT sites (n=12)
- Project period = August 2007 March 2009





### RTA at Intervention Sites

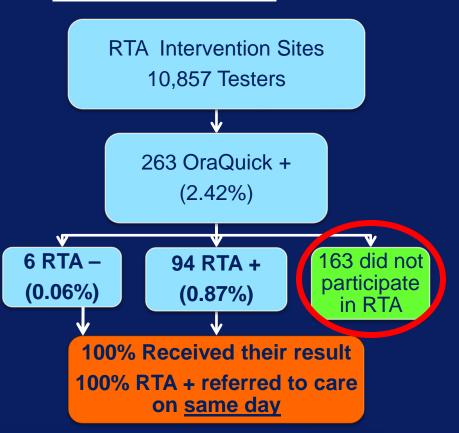




# Results: RTA Intervention vs. Comparison Sites

Study Time Period: August 1, 2007 – March 31, 2009

#### **Intervention Sites**



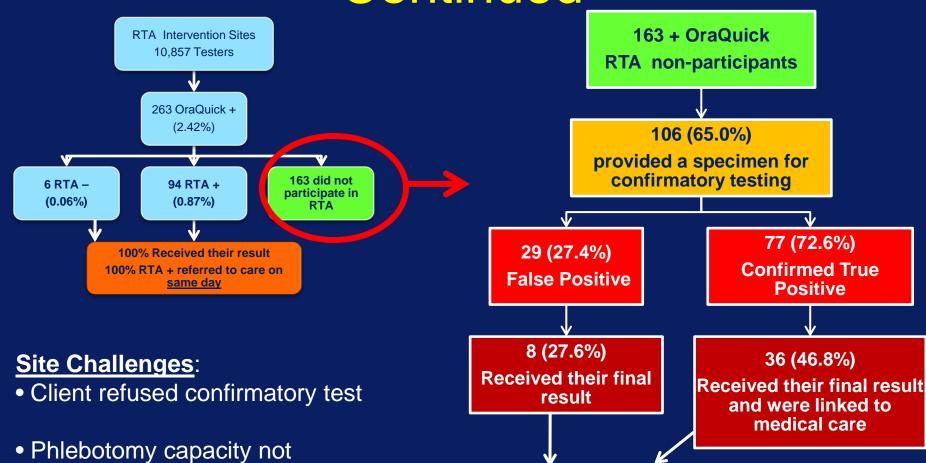
#### **Comparison Sites**

Characteristic	N (%)
# Tested	32,929
# Screened Reactive	487 (1.48%)
# False Positive	41 (0.12%)
# Received Confirmatory Test Results	206 (42.3%)
Median # Days Referred to Medical Care (range)	8 days (1 – 55 days)





# Results: RTA Intervention Sites Continued



Consistently available

Receipt of final results = Median

of 8 days

(range = 4 - 54 days)



## Results Summary

- At RTA Intervention Sites:
  - 100% RTA clients received their test results on the same day
  - All RTA reactive clients were referred to medical care on the same day
  - 6 false positive results resolved on the same day
  - Receipt of confirmed results among non-RTA participants was similar to those at comparison sites (~42%)
- Comparison Sites:
  - 42% received confirmatory results
  - Median 8 days till referral to medical care
- Linkage to care? Which worked better? Site specific?
  - analysis currently ongoing



### Lessons Learned

- Phlebotomy capacity was not consistently available in order to offer the RTA
  - Solution: Fingerstick law (AB 221) passed in California in September 2009
- Significant time investment at start up
  - Slow roll out of an RTA program is important
- Rarely used the third test in the RTA (n=6)
  - More cost effective to use a two-test algorithm



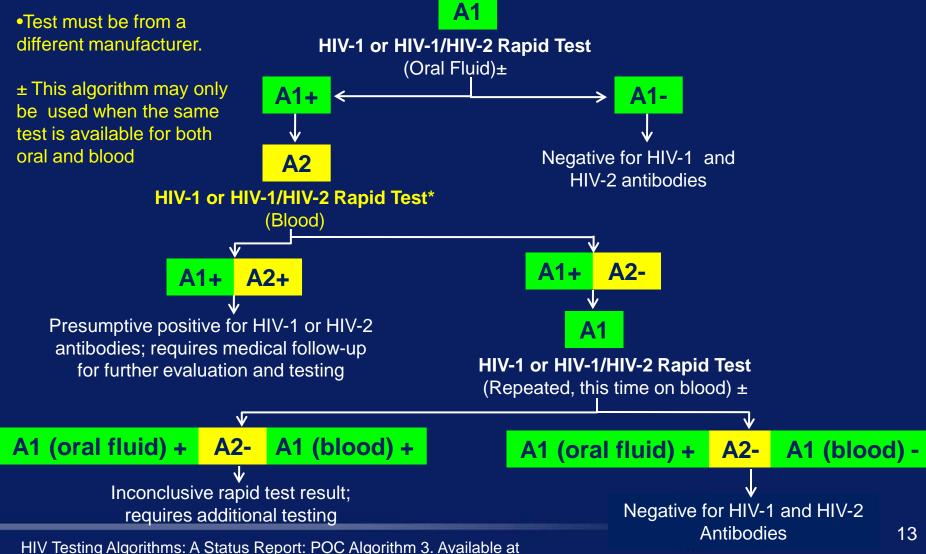
## Los Angeles DPH: Next Steps

- Modified RTA Algorithm POC Algorithms\* 2 and 3 using 2 types of rapid HIV test kits
- RTA will be offered at select POC sites post-study
  - Mobile testing units,
  - commercial sex venues (bath-houses),
  - testing at homeless shelters,
  - jail settings,
  - high testing volume events e.g. test fest, HCT week
- Offer RTA at routine testing clinics
  - Emergency Departments, STD clinics, jail medical centers
  - RTA is currently part of the routine testing training curriculum





# Los Angeles DPH: Next Steps Continued – 2 Test POC Algorithm



http://www.aphl.org/aphlprograms/infectious/hiv/Pages/HIVStatusReport.aspx

# Los Angeles DPH: Needs for a Successful RTA Program

### **Federal**

- Clear guidelines/recommendations regarding:
  - Use of an RTA at POC settings
  - Include case reporting with an RTA result at POC without confirmatory testing (EIA/WB or IFA) as an option

# Los Angeles DPH: Needs for a Successful RTA Program Continued

#### **State**

- Change language in the California Code of Regulations (CCR Title 17 § 1230. HIV Screening Testing by Laboratories.).
  - Currently states "Confirm all reactive or indeterminate HIV test results by following the HIV confirmation protocols recommended by the federal Centers for Disease Control and Prevention as published in the Mortality and Morbidity Weekly Report prior to reporting the result as positive"
- Inclusion of other CLIA-waived HIV rapid HIV tests as part of the testing portfolio at publicly funded testing sites
- Standardized fingerstick training for rapid HIV testing



# Los Angeles DPH: Needs for a Successful RTA Program Continued

### Local

- Implement RTA training as part of basic counselor training
- Establish criteria for sites offering an RTA
  - Rapid testing and quality assurance history
  - Sustainability for offering an RTA
  - Site testing volume
- Standardize order of tests in an RTA or not?





## Thanks!

#### **Kevin Delaney**

**Project Officer** 

Centers for Disease Control and Prevention (CDC)

#### Los Angeles Project Team

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and

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