

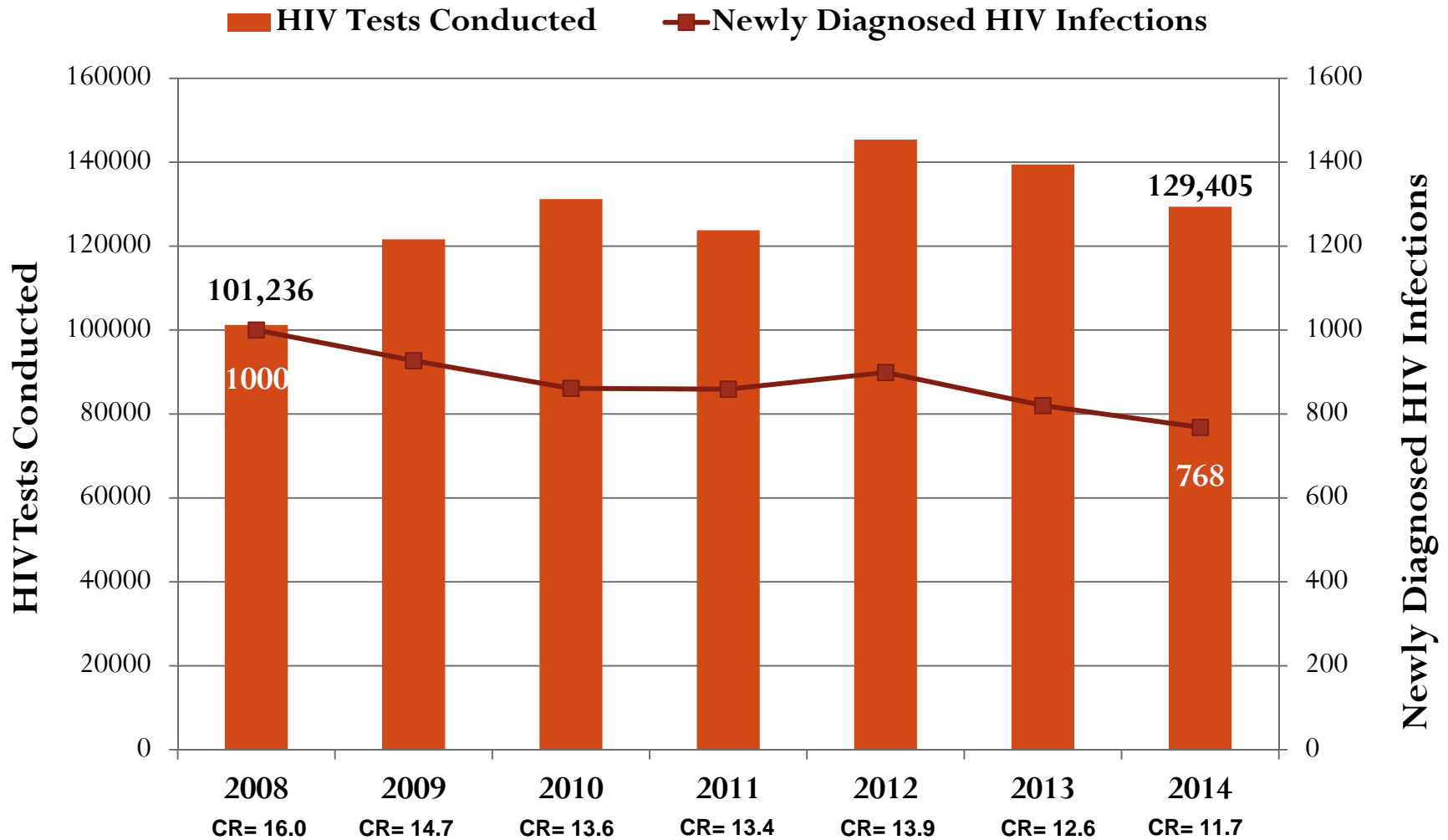
# Tennessee Department of Health

## The Impact of 4th Generation HIV Testing in Tennessee: Identification and Linkage to Care of Individuals with Acute HIV Infection

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# HIV Testing in Tennessee



(Case rates calculated per 100,000 population)

# TN's 4<sup>th</sup> Gen HIV Testing: Progress

Tests (April 6, 2013 – December 31, 2014)			# Clients
<b># Clients undergoing 4<sup>th</sup> generation HIV-1/2 immunoassay</b>			<b>140,245</b>
	# clients negative for HIV-1 & HIV-2 Abs and p24 Ag		138,729
	# clients positive for HIV-1 and HIV-2 Abs or p24 Ag		1,516 (1.1%)
<b>Of clients undergoing HIV-1/HIV-1 Ab differentiation assay</b>			
	# clients with <u>only HIV-1</u> Abs detected		1373 (90.6%)
	# clients with <u>only HIV-2</u> Abs detected		2 (0.1%)
	# clients with <u>both HIV-1 &amp; HIV-2</u> Abs detected		0
	# clients testing <u>negative or indeterminate</u> for HIV-1 or HIV-2 Abs		141 (9.3%)
<b>Of the clients undergoing HIV-1 RNA Testing</b>			
	# clients <u>with</u> HIV-1 RNA detected		<b>16 (11.3%)</b> (0.01% of all samples)
	# clients <u>without</u> HIV-1 RNA detected		124 (87.9%)
	# clients with HIV-1 RNA <u>QNS</u>		1 (0.7%) (repeat unavailable)

QNS = Quantity not sufficient

# 4<sup>th</sup> Gen Testing: Lessons Learned

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- Of samples going to Step 2
  - ❖ ~90% were confirmed positive
  - ❖ 2 cases of HIV-2 detected
- Of samples going for RNA testing
  - ❖ ~90% were negative
  - ❖ ~10% were determined to be acutely infected
- Follow-up 14 (of 16) acutely infected clients
  - ❖ 2 without follow-up (1 OOI, 1 HR but refuses linkage)
  - ❖ 14 confirmed HIV (+) and linked to care
    - 2 subsequent determined to be HIV (-)
      - 1 with undetectable VL & negative WB
      - 1 with EIA neg, HIV qual neg, and second EIA neg
- Considering utility of quantitative vs qualitative HIV-1 RNA for Step 3

**Thank you!**