

DO EMERGENCY DEPARTMENTS REPRESENT A WINDOW OF OPPORTUNITY TO IDENTIFY OTHERWISE UNDIAGNOSED HIV INFECTIONS?

Carolyn Nganga-Good, RN, MS, CPH

Baltimore City Health Department

Bureau of HIV/STD Services



Presenter Disclosure

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Carolyn Nganga-Good

- There is no relationship to disclose

Outline

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- Learning objectives
- The state of the HIV epidemic in Maryland and Baltimore City
- The local response to the national plans and the global epidemic
- BCHD emergency departments (ED) testing program
- Significance of ED testing in identifying new HIV infections
- Conclusions

Learning Objectives

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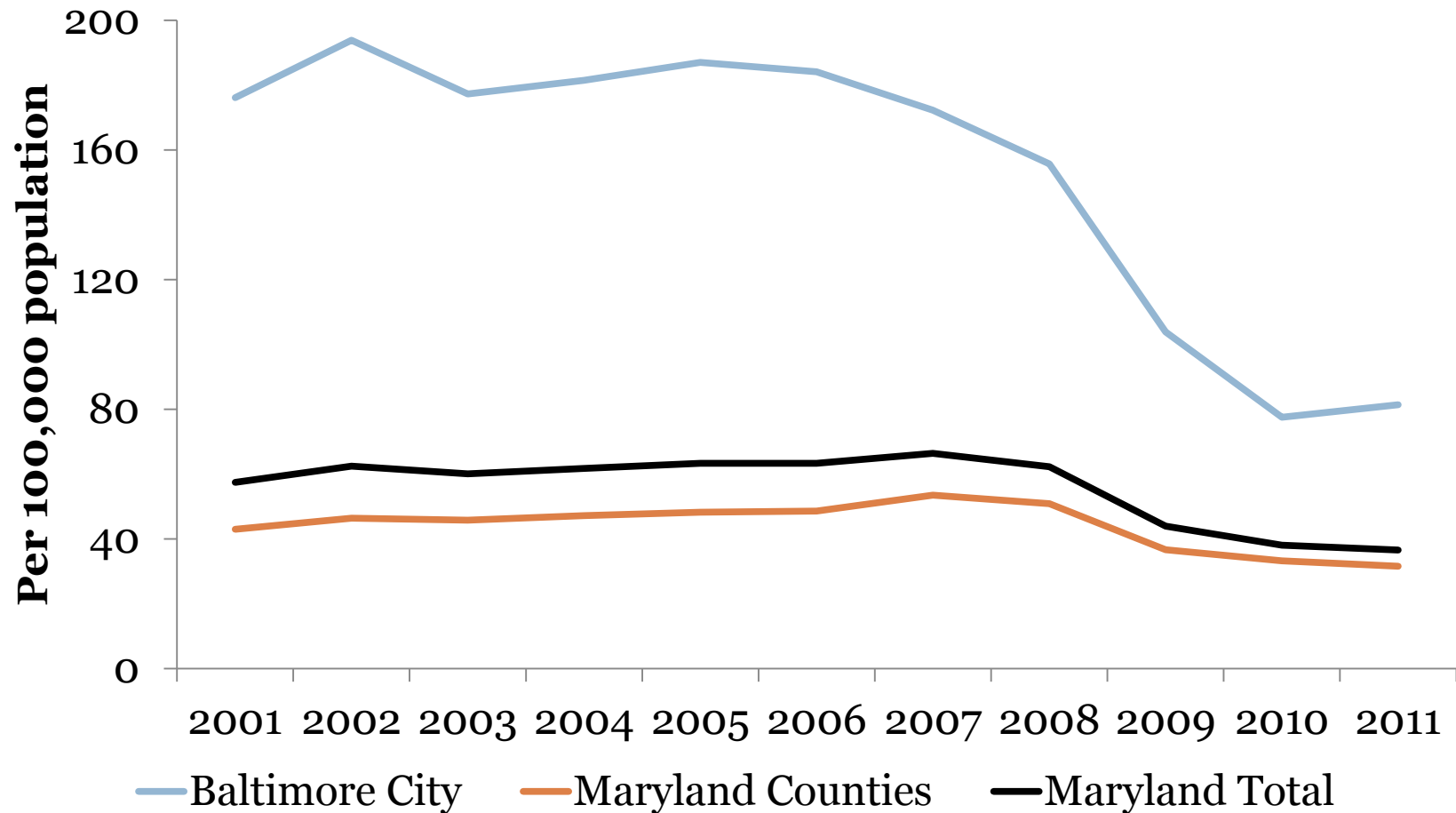
- Discuss the importance of emergency departments in identifying new HIV infections
- Demonstrate the feasibility of providing comprehensive services such as testing, linkage to care, partner services, referrals to prevention and support services in healthcare settings
- Demonstrate the importance of routine HIV testing and the need to engage healthcare providers at all levels and settings

HIV Trends in Maryland

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- Third-highest HIV incidence rates in the US in 2011
 - ▣ Estimated HIV diagnoses: 1,311; incidence rate: 30.6/100,000
- 44% of these cases were diagnosed in Baltimore City
- Leading HIV exposure: Men who have Sex with Men (MSM) - 2009-2012
- Fastest growing risk group: young African American MSM
- Estimated 18% are undiagnosed

Trends in Rates of Adult/Adolescent HIV Diagnoses



Data Source: Maryland DHMH PHPA

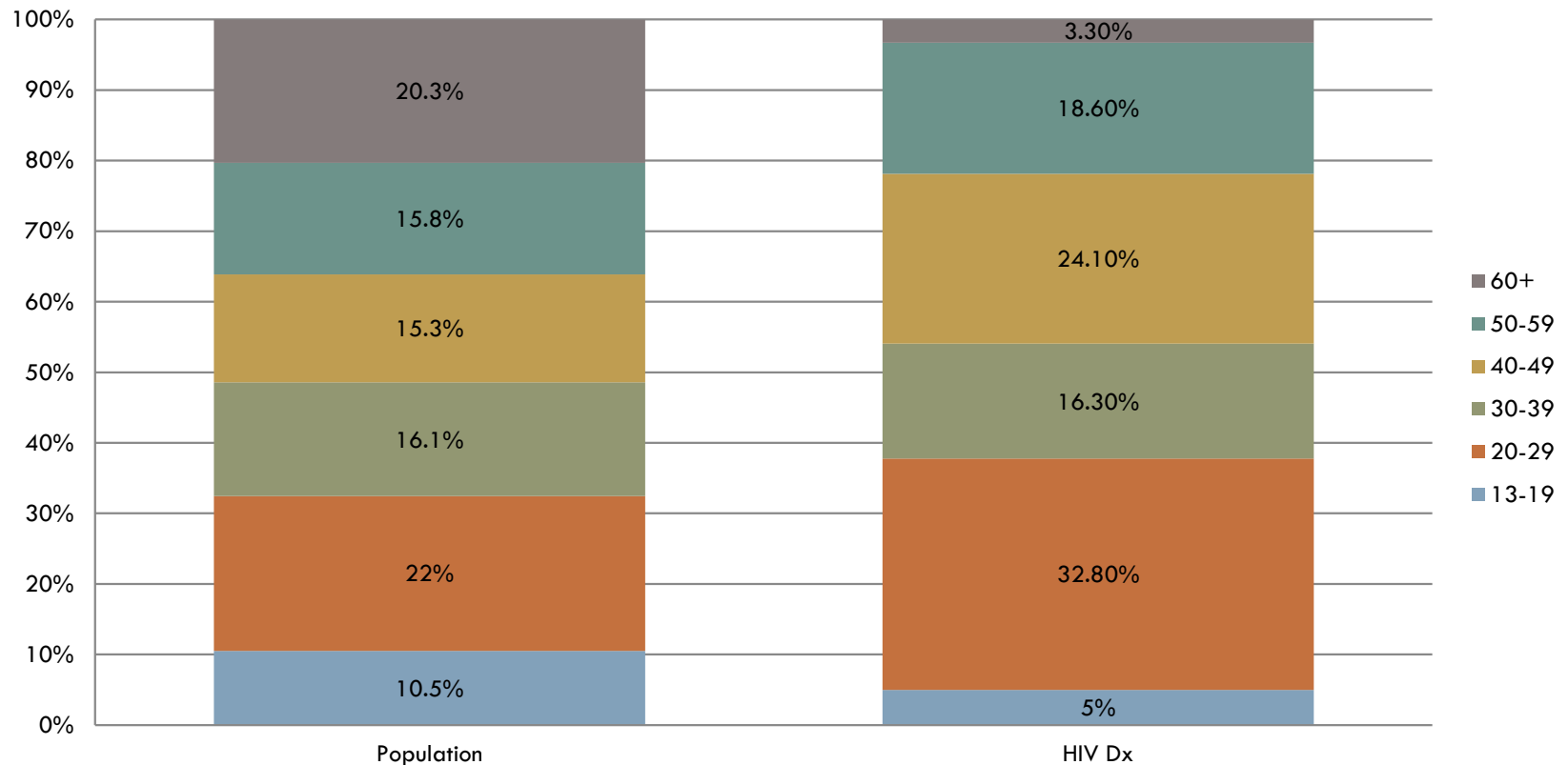
2011 Adult/Adolescent HIV/AIDS Baltimore City and Maryland

<u>Indicator</u>	<u>Baltimore City</u>		<u>Maryland</u>	
	No.	Rate/ 100,000	No.	Rate/ 100,000
Reported Diagnoses (during 2011)				
HIV	424	81.4	1,311	26.9
AIDS	303	58.2	759	15.6
Living Cases (on 12/31/2011)				
HIV without AIDS	5,333	1,024.1	12,162	249.8
HIV with AIDS	6,739	1,294.1	15,548	319.3
Total HIV	12,072	2,318.1	27,710	569.1

Data Source: Maryland DHMH PHPA, reported through 12/31/2012

Population and HIV Diagnosis by Age

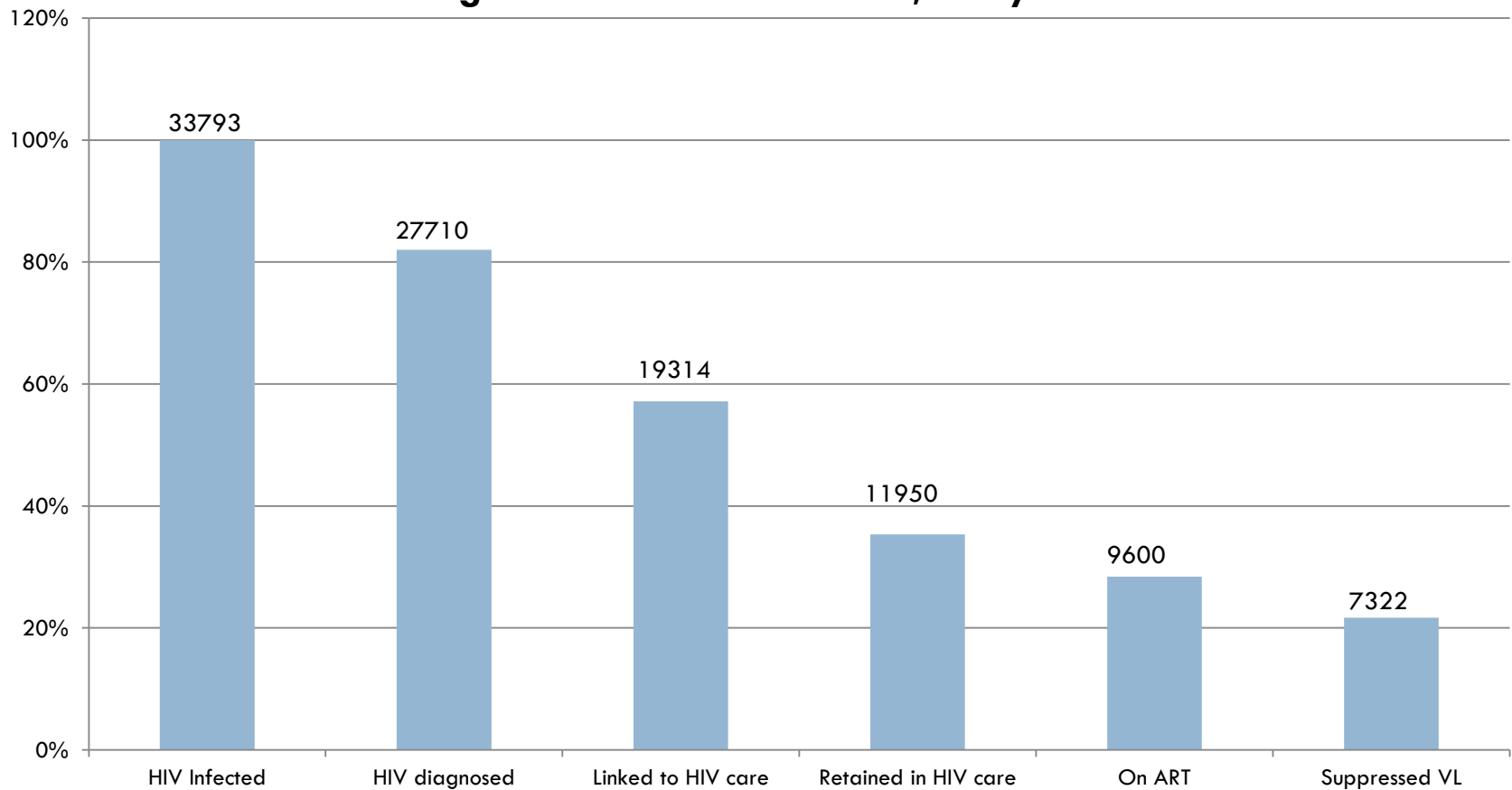
Population and Reported HIV diagnosis by age, Baltimore City 2011



Data Source: Maryland DHMH PHPA

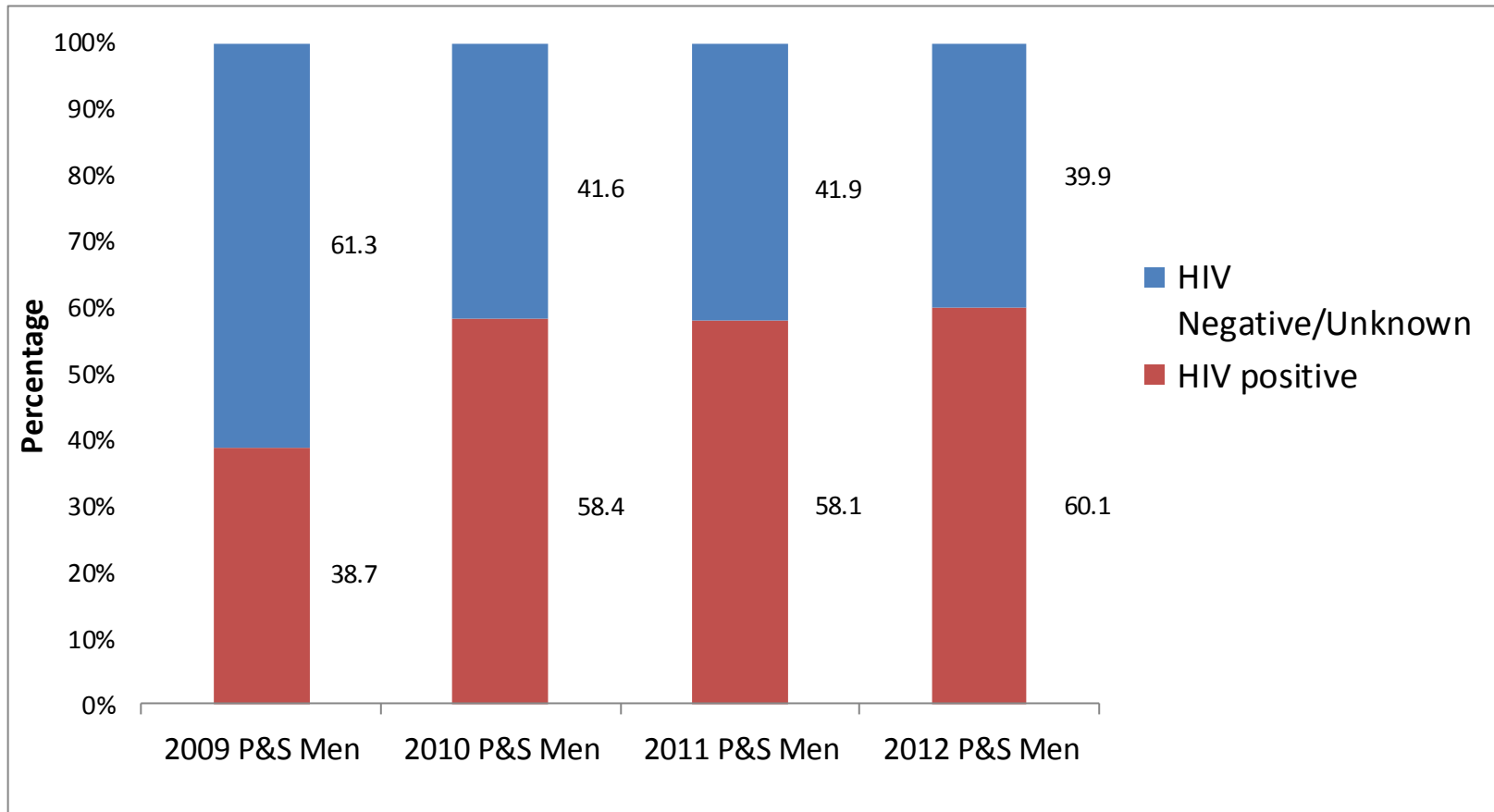
Continuum of Care in Maryland, 2011

Number and % of HIV infected adults/ adolescents engaged in selected stages of continuum of care, Maryland 2011



Data Source: Maryland DHMH PHPA

Syphilis/HIV Co-Infection Among Men, 2009-2012



*P&S = Primary and Secondary Syphilis

Local Response to the National Plan

	Reduce new HIV infections	Reduce transmission rate	Know your HIV status	Linkage to care	Reduce HIV Disparities: undetectable Viral Load
National HIV/AIDS Strategy Goals (2010)	25%	30%	79% -> 90%	65-85% 73-80% 82-86%	MSM 20% AAs 20% Latinos 20%
Baltimore City Commission on HIV/AIDS (2011) & Healthy Baltimore 2015 (2011)	25%	30%	79 -> 90%	65 -> 85% 73 -> 80% 82 -> 86%	MSM 20% AAs 20% Latinos 20%

BCHD HIV/STD Prevention Efforts

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- BCHD supports HIV/STD testing programs in various healthcare and non-healthcare settings
 - ▣ STD clinics, EDs, community health centers, FQHCs, CBOs, Dental clinics, mobile van testing programs, and schools-based clinics
- BCHD HIV and STD services are integrated
- Both rapid testing and conventional testing technologies are utilized
- Western Blot is used for confirmatory testing
- 4th generation conventional testing has been implemented in two of the partner hospital settings
- Public health lab services are offered at the BCHD and DHMH labs
- Linkage to care and partner services

Why Routine HIV Testing in the EDs?

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- HIV testing is the entry point to the continuum of HIV care
- Opportunity for early diagnoses and linkage to care
- Opportunity to capture acute HIV cases
- Routine HIV testing increases the proportion of people who know their HIV status
- Often reaches persons who don't perceive themselves to be at risk
- EDs are often the only access to health care for the urban poor who utilize the ED as a source of their primary care
- A positive HIV diagnosis may help the clinicians in making accurate diagnosis and treatment decisions
- Provides an opportunity for risk reduction education and referrals

BCHD Supported ED-Based Routine HIV Testing Program

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- Began testing in 2008 with 5 EDs and expanded to 7EDs
 - ▣ 5 EDs are currently participating
 - ▣ Attempts to further expand beyond the 7 EDs have not been successful
- All the EDs utilize rapid testing with the exception of one that recently added conventional 4th generation testing
- Providers report new positives based on self-report
- BCHD determines new positivity by record-searching the HIV surveillance systems including the Ryan White care database
- EDs are responsible for linking the new positives to care and re-engaging previous positives back to care

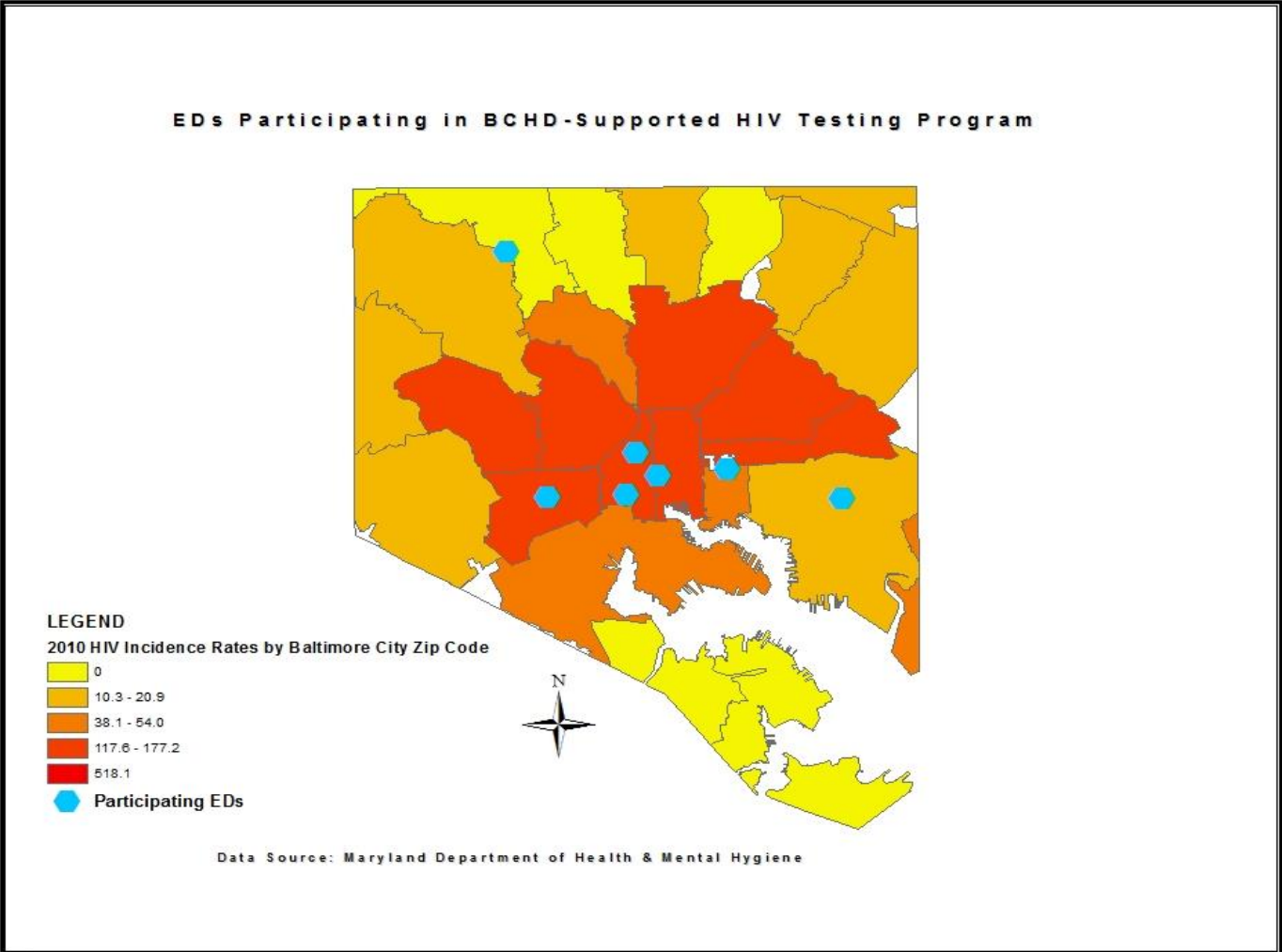
Linkage to Care & Partner Services

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- Those who do not attend their first medical appointment are referred to BCHD
- BCHD care linkage team
 - ▣ Field visits to locate patients and link them to care
 - ▣ Provide transportation
 - ▣ MOUs with local providers for same-day appointment
- BCHD partner services/Disease Intervention Specialist team
 - ▣ Interviews – partner solicitation, notification, and testing
 - ▣ Linkage to care
 - ▣ Health education

Participating ED Locations

EDs Participating in BCHD-Supported HIV Testing Program



Testing Summary: 2008-2012

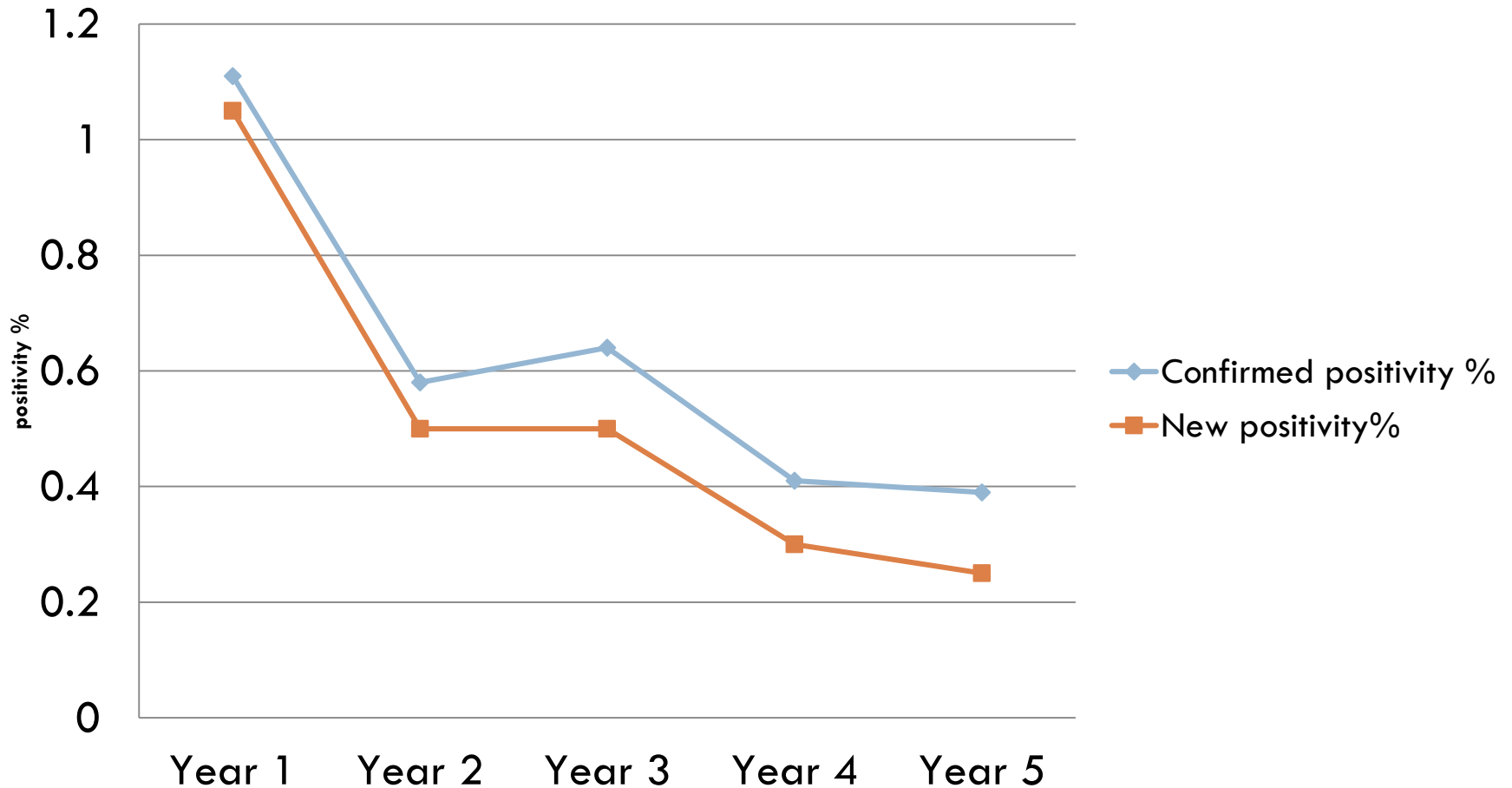
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#EDs, clinics	#Tests	Confirmed Positives	% Positivity	New positives	% New Positivity	Linkage to Care (New)	Linkage to Care %
Year 1	5066	56	1.11%	53	1.05%	25	47%
Year 2	14958	87	0.58%	68	0.5%	42	62%
Year 3	18221	116	0.64%	83	0.5%	53	64%
Year 4	18355	75	0.41%	57	0.3%	51	89%
Year 5	19095	74	0.39%	48	0.25%	34	71%
TOTALS	75695	408	0.54%	309	0.41%	205	66%

Positivity Trends

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Trends in HIV positivity in ED testing program, 2008-2012



Significance of ED Testing in Identifying New HIV Infections

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- Record searches were conducted on the 47 positives identified via EDs from **January to June 2013** to assess if they had been previously tested elsewhere
- n=47: 24 newly diagnosed, 20 previously diagnosed, and 3 discordant
- 58% (14/24) of the new positives had not been previously tested elsewhere based on the BCHD surveillance records and morbidity reports*
- Limitation – small sample size

Significance of ED Testing in Identifying New HIV Infections

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	Previously tested (%)	Not previously tested (%)	Total
New	10 (42%)	14 (58%)	24
Previous	20 (100%)	0 (0%)	20
Discordant	3 (100%)	0 (0%)	3
Total	33 (70%)	14 (30%)	47

Conclusions

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- EDs play a significant role in identifying undiagnosed HIV infection that would have otherwise been missed or those who would probably have not been tested elsewhere
- Recommendation & future studies:
 - ▣ Identify and address barriers for integrating routine HIV testing to ED and hospital standards of care
 - ▣ Cost-benefit analysis of routine testing in EDs and expand the evaluation on the significance of ED testing in identifying new positives
- Implications related to program sustainability
 - ▣ The provisions of the Affordable Care Act
 - ▣ The revised US Preventative Services Task Force recommendations for routine HIV testing to Grade “A”

Acknowledgements

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- CDC, Division of HIV/AIDS Prevention
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- Partnering EDs:
 - Bon Secours Hospital
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 - University of Maryland Medical Center
 - Maryland General (UM Midtown Campus)
 - Johns Hopkins Bayview Medical Center
- BCHD and Bureau of HIV/STD Prevention Staff

Contact Information

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Carolyn Nganga-Good
Baltimore City Health Department
Bureau of HIV/STD Services
1001 East Fayette Street,
Baltimore, MD 21202
1-410-396-4448
carolyn.nganga-good@baltimorecity.gov
www.baltimorehealth.org

