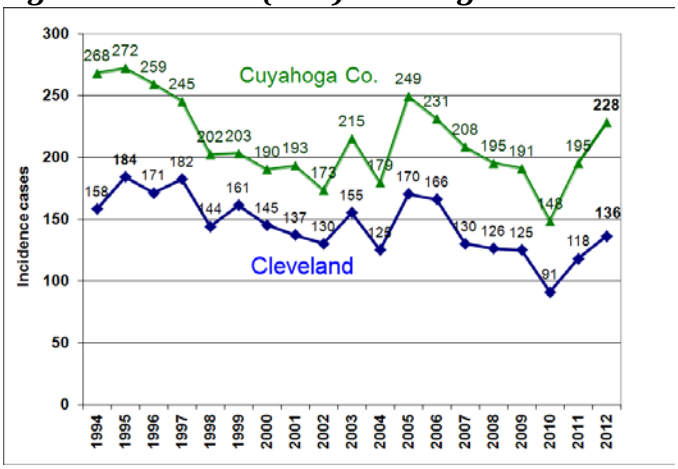
2012 Preliminary HIV/AIDS and Syphilis Surveillance Summary for HIV/AIDS/STD prevention and care services and Ryan White planning

CDPH Office of Biostatistics, March 2013

Prevalence: 4,591 Cuyahoga County residents are living with HIV/AIDS of whom about 70%, or 3,182, are Cleveland residents. Over half (53%, or 2,305/4,591) have AIDS at last report.

Incidence: HIV incidence reflects those persons newly diagnosed with HIV-only or having HIV-with-AIDS. 228 county and 136 city residents were newly diagnosed with HIV in 2012, the highest level in six years. See Fig. 1. For the county, about 15% of them had AIDS when diagnosed (18% for city).

Figure 1. Incident (new) HIV diagnoses



Non-Cleveland: 40% of all 2012 HIV incidence were not Cleveland residents, the highest proportion ever. See Fig. 10 (last page) for incidence by municipality.

Males: 82% (county) and 76% (city) were male.

Race/ethnicity: Over two-thirds of 2012 incident cases were Black/African American, consistent with past trends. See Fig. 2.

- About 53% of incident cases were Black/African American males. See Figs. 3 and 4.
- Black males were significantly younger than White males when diagnosed, with almost 58% of Black males being under age 30. See Fig. 5.
- About 21% of White males were under age 30 when diagnosed. See Fig. 5.

Teens with HIV: All eleven teens, age 16-19 when diagnosed with HIV in 2012, were Black/African American males. See Figs. 5 & 6.

Figure 2: Race and ethnicity

	Cuy. Co.	Cleveland
Black/Afr. Am non-Hispanic	67%	71%
White non-Hispanic	22%	18%
Asian, non-Hispanic	<1%	0%
Hispanic/Latino ethnicity	7%	9%
Other races or unknown	3%	2%

Figure 3. Annual percent of incident HIV in Cuyahoga County, by race/ethnicity/sex

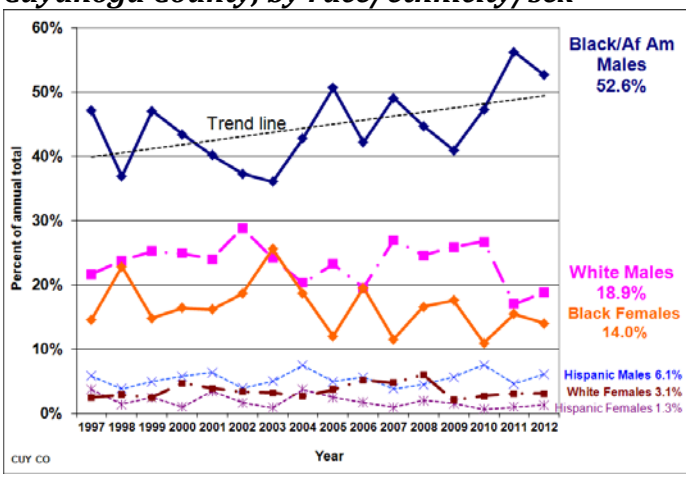


Figure 4. Annual percent of incident HIV in Cleveland, by race/ethnicity/sex

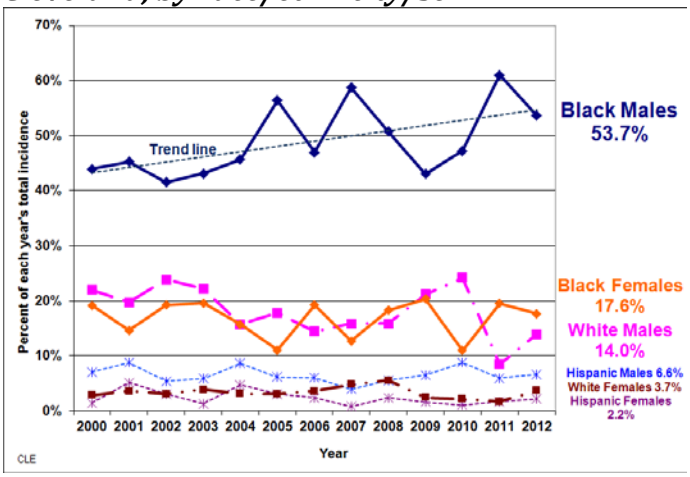
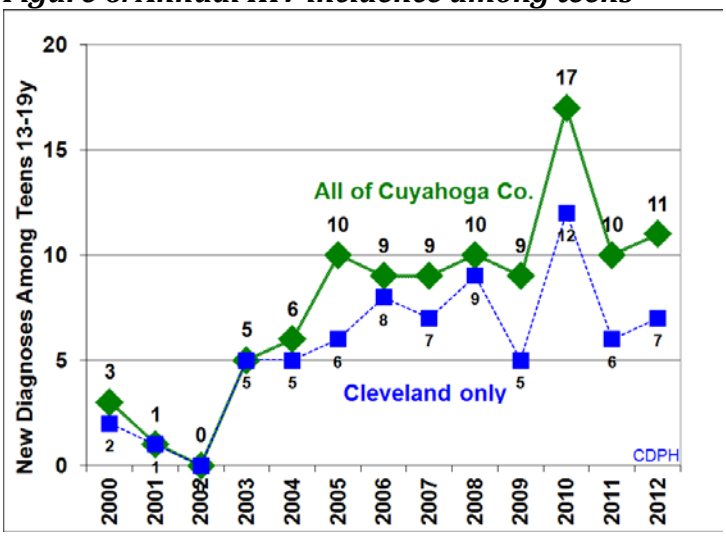


Figure 5. Age at Diagnosis among males in Cuyahoga County, by race (*non-Hispanic)

	Black*	White*	Hispanic
Teens, 16-19y	9%	0%	0%
20-24	28%	12%	21%
25-29	20%	9%	0%
30-39	17%	40%	36%
40-49	17%	19%	21%
50 and older	9%	21%	21%

Figure 6. Annual HIV incidence among teens



Transmission risk: The majority of HIV transmission to men is through sex with other men (60%) See Fig. 7. Seven cases of HIV associated with injection drug use were reported, totaling almost 5% of all cases, their highest level in six years.

Figure 7: Mode of HIV transmission, Cuy. Co. cases

	Males	Females
Men who have sex with men	60%	---
Bisexual contact	11%	5%
Heterosexual contact	20%	86%
Any injection drug use	3%	2%
Unknown/risk not reported	6%	7%
Congenital cases	0%	0%

Distribution of cases: Figure 9 (map) shows the number of new HIV/AIDS diagnoses across Cleveland neighborhoods.

Highest incidence is concentrated along neighborhoods bordering Lake Erie, from Edgewater to Downtown to South Collinwood. A second area is in the southeast/Mt. Pleasant area, and a third is centered around Brooklyn Centre.

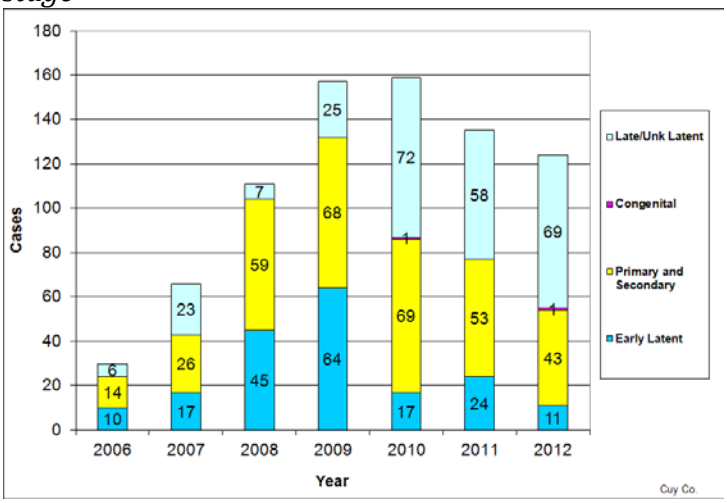
An additional table (Fig. 10) displays the number of new HIV/AIDS diagnoses across all county municipalities in the two-year periods, 2009-2010 and 2011-2012.

Cleveland, Lakewood, East Cleveland, Euclid, Parma and Cleveland Heights had the largest number of new HIV/AIDS diagnoses in the past four years.

Syphilis:

Decreasing trends, but most acute infections are among males, most of whom are HIV positive.

*Figure 8. Total syphilis for **Cuyahoga County**, by stage*

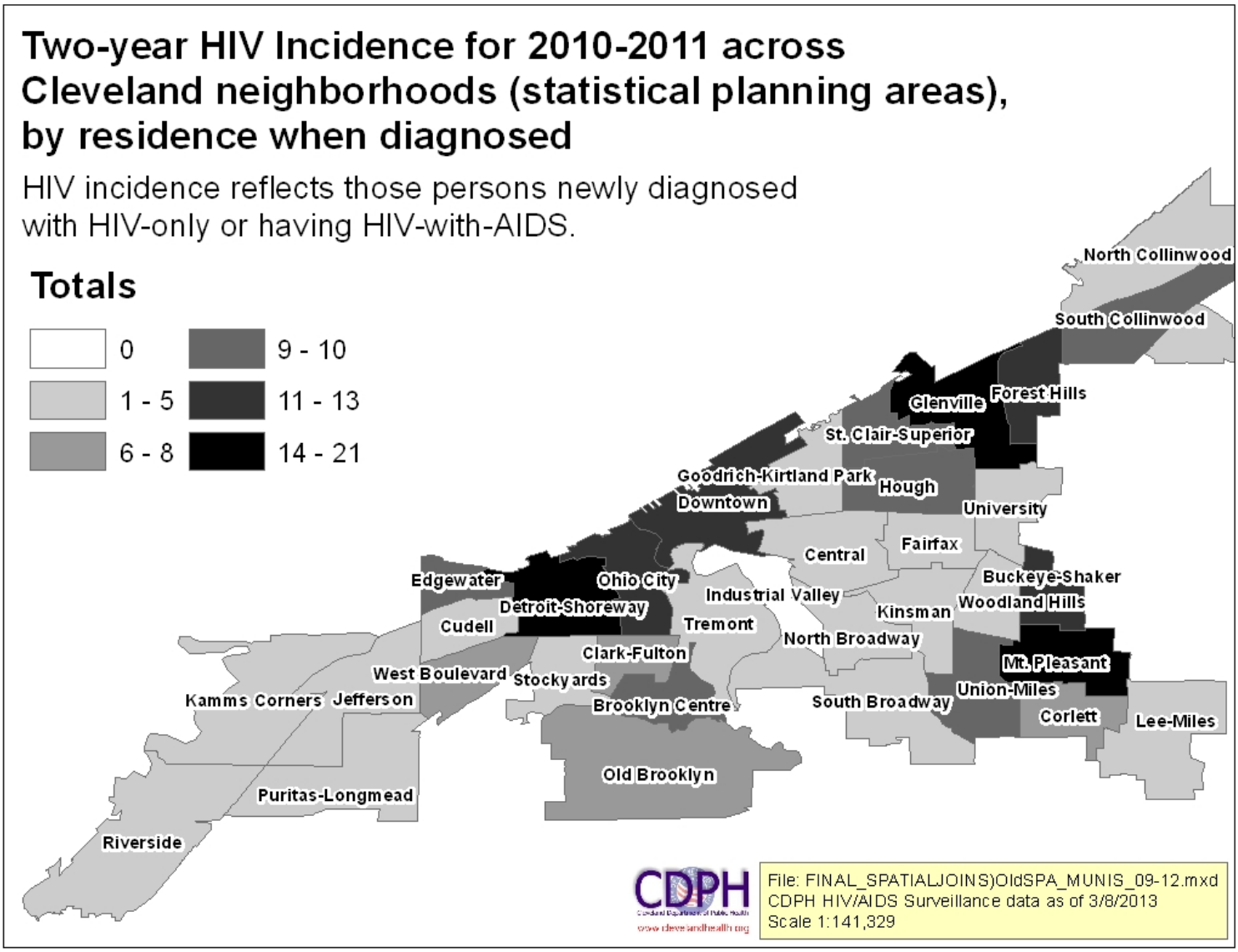


- Total syphilis (all stages) decreased from 135 case in 2011 to **124 cases in 2012 for Cuyahoga County.** Only a third (43/124 = 35%) were primary or secondary syphilis, the most infectious stages, a decreasing trend since 2008.
- Of the 124 cases in Cuyahoga County, **only 70 (56%) were Cleveland residents, a new low since the outbreak began in 2007.**
- Of the 43 primary/secondary syphilis cases,
  - 88% were male (n=38), of which 63% (n=24) were co-infected with HIV, much higher than in 2009-2011.
- Also, one congenital case was reported in 2012.

CDPH Action Plan: We will share these findings with our community prevention partners and service organizations to promote risk reduction strategies for those at highest risk (i.e. males with HIV & prenatal testing to all mothers and tailor service delivery strategies.

CDPH is responsible for all data herein. HIV data presented in this report are from the CDPH Confidential HIV/AIDS Surveillance Registry. Syphilis data were provided by the Ohio Department of Health and analyzed by CDPH. Please contact David Bruckman in the CDPH Office of Biostatistics for more information, (216) 664-4353.

Figure 9. Two-year HIV incidence by the Cleveland neighborhood of residence at the time of diagnosis. The map uses the 2000 statistical planning areas (SPAs) conflated to the 2010 census blocks.



The ArcGIS layer of Cleveland SPA conflated to 2010 census tracts was obtained courtesy of CSU/NODIS through Mark Salling.

Figure 10. Change in two-year HIV incidence for 2009-2010 to 2011-2012, listed by residence of municipality at the time of diagnosis.

Muncipality	New HIV Diagnoses		Difference (increase or decr.)
	2009-2010	2011-2012	
Bay Village	0	1	1
Beachwood	1	0	-1
Bedford	2	4	2
Bedford Heights	3	7	4
Berea	3	1	-2
Broadview Heights	1	0	-1
Brook Park	2	0	-2
Brooklyn	1	2	1
Cleveland	207	252	45
Cleveland Heights	4	14	10
East Cleveland	17	14	-3
Euclid	11	21	10
Fairview Park	1	2	1
Garfield Heights	5	3	-2
Lakewood	20	27	7
Lyndhurst	1	3	2
Maple Heights	7	8	1
Mayfield Heights	1	1	0
Middleburg Heights	1	1	0
Newburgh Heights	1	0	-1
North Olmsted	6	6	0
North Randall	0	2	2
North Royalton	2	4	2
Olmsted	1	3	2
Parma	9	13	4
Parma Heights	1	3	2
Richmond Heights	3	2	-1
Rocky River	0	4	4
Shaker Heights	0	2	2
Solon	0	3	3
South Euclid	5	7	2
Strongsville	2	2	0
University Heights	4	0	-4
Warrensville Heights	5	4	-1
Westlake	1	5	4
Unable to locate	11	2	-9
Two-year totals	339	423	84