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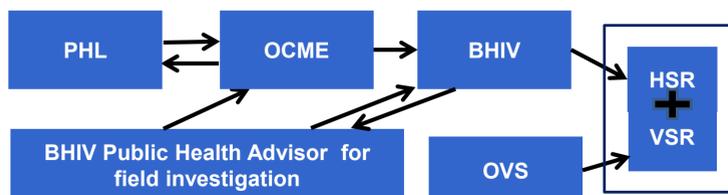
Abstract #40132

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Background

- Late diagnosis of HIV leads to increased mortality, worse treatment outcomes, and increased costs
- There is little information on the most extreme example of late diagnosis: new HIV diagnosis at death
- Since 1991, all autopsies performed by the Office of Chief Medical Examiner (OCME) in New York City (NYC) are tested for HIV by the Public Health Laboratory (PHL) of the NYC Department of Health and Mental Hygiene (DOHMH)
 - All positive HIV test results are reported by PHL to OCME who reports them to the Bureau of HIV (BHIV), NYC DOHMH
- The BHIV maintains a HIV/AIDS Surveillance Registry (HSR) that includes all cases of HIV/AIDS diagnosed and reported in NYC
- The Office of Vital Statistics (OVS) of NYC DOHMH maintains a Vital Statistics Registry (VSR) that includes all deaths reported in NYC (including OCME autopsies)

Figure 1. HIV reporting and the field investigation within the NYC DOHMH



Objectives:

- To characterize persons aged ≥ 13 years newly diagnosed with HIV at OCME autopsy, 2006-2010
- To determine the factors independently associated with new HIV diagnosis at OCME autopsy among all HIV-positive OCME autopsies

Methods

- We merged data from HSR with data from VSR
- Primary outcome: New HIV diagnosis at OCME autopsy

Definition of new HIV diagnosis at OCME autopsy:

A HIV diagnosis date on or after death among decedents who had an OCME autopsy

- To reduce misclassification of new diagnosis at OCME autopsy among the out of NYC residents not known to the NYC HSR, we confirmed the new diagnosis with the respective health departments
- We constructed a logistic regression model to identify factors independently associated with new HIV diagnosis at OCME autopsy among all HIV-positive autopsies

Results

Figure 2. Deaths, autopsies, and new HIV diagnoses in NYC, 2006-2010

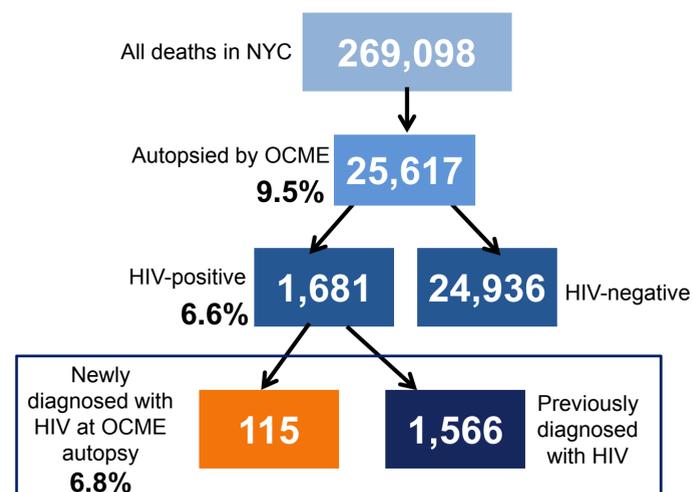


Figure 3. All new HIV diagnoses, New HIV diagnoses at OCME autopsy, and all HIV-positive OCME autopsies in NYC, 2006-2010

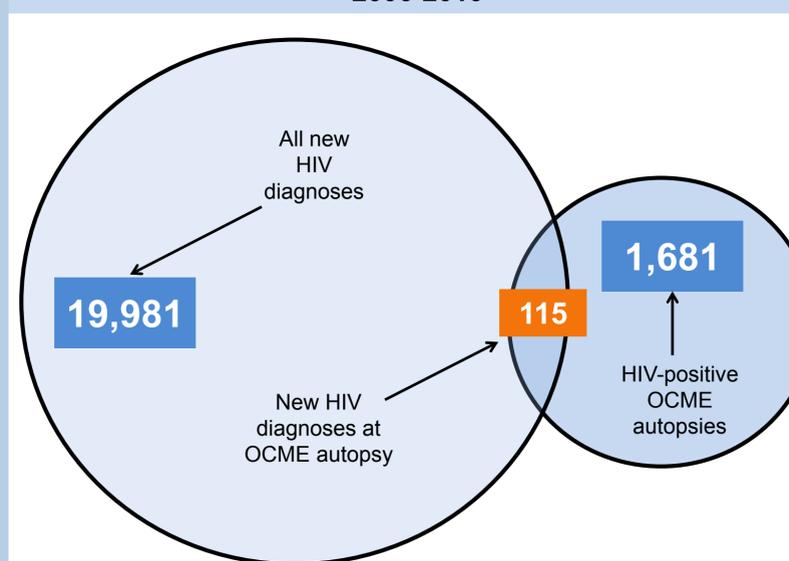
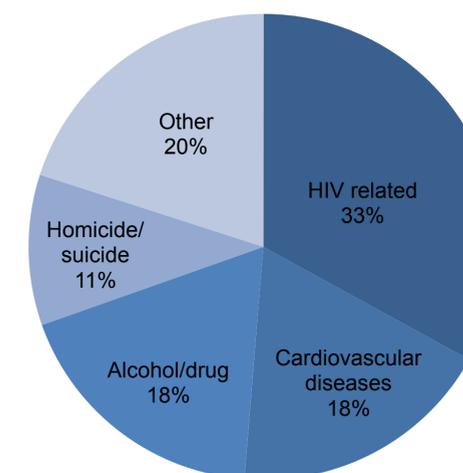


Table 1. Multivariable model of new HIV diagnosis at OCME autopsy among all HIV-positive OCME autopsies in NYC, 2006-2010

	Total HIV OCME autopsies		HIV diagnosis before OCME autopsy		New HIV diagnosis at OCME autopsy		AOR (95% CI)
	N	%	N	%	N	%	
Total	1,681	100	1,566	100	115	100	--
Sex							
Male	1,219	72.5	1,136	72.5	83	72.2	1.05 (0.67, 1.64)
Female	462	27.5	430	27.5	32	27.8	ref
Age group							
65+	24	1.4	12	0.8	12	10.4	20.53 (8.69, 48.49)
13-64	1,657	98.6	1,554	99.2	103	89.6	ref
Race/ethnicity							
All others	1,446	86	1,343	85.8	103	89.6	1.09 (0.73, 1.61)
White	235	14	223	14.2	12	10.4	ref

Figure 4. Causes of death among those newly diagnosed with HIV at OCME autopsy in NYC, 2006-2010



Conclusions

- Despite scale-up of HIV testing and increased HIV awareness, about 20 people in NYC each year are first found to have HIV infection at OCME autopsy
 - Similar to all HIV-positive OCME autopsies, the newly diagnosed at OCME autopsy were primarily male (72%) and non-white (90%)
- Among all HIV-positive OCME autopsies, senior adults are significantly more likely than those aged 13-64 to be first diagnosed at OCME autopsy
 - Half of all HIV-positive persons ≥ 65 autopsied by OCME were newly diagnosed at OCME autopsy

Recommendation: These results support the continued expansion of testing to increase early diagnosis. The findings also suggest that, in high prevalence jurisdictions such as NYC, HIV testing should be considered regardless of age

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