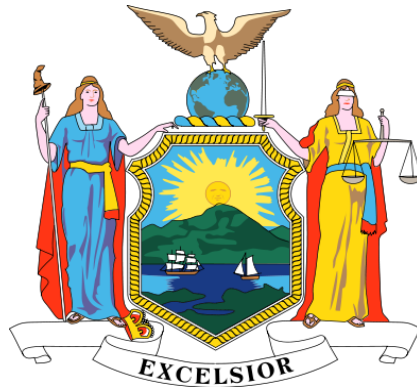


New York State Department of Health

Chapter 308 of the Laws of 2010 HIV Testing Law Mandated Report August 2012



Prepared by:
New York State Department of Health
Corning Tower
Albany, New York 12237
August 20, 2012 **(Corrected)**

I. Introduction

Effective September 1, 2010, Chapter 308 of the Laws of 2010 authorized significant changes in HIV testing in New York State. This report has been created to satisfy the requirement in the law that the department evaluate the impact of the statute with respect to the number of persons tested for HIV infection and the number of persons who access care and treatment.

Background: This law was enacted to increase HIV testing in the state and promote HIV-positive persons entering into care and treatment. Implementation of Chapter 308 is critical since thousands of HIV-positive New Yorkers are unaware of their infection status and 33 percent of persons newly identified with HIV are diagnosed so late in their infection that they are found to have AIDS within one year of HIV diagnosis.

Key provisions of the legislation include:

- HIV testing must be offered to all persons between the ages of 13 and 64 receiving hospital or primary care services with limited exceptions noted in the law. The offering must be made to inpatients, persons seeking services in emergency departments, persons receiving primary care as an outpatient at a clinic or from a physician, physician assistant, nurse practitioner or midwife.
- Consent for HIV testing may be part of a general consent to medical care, though specific opt out language for HIV testing must be included. (Standardized model forms for obtaining informed consent and providing for disclosure have been developed by the New York State Department of Health and posted on the DOH website. Facilities do not need to use these forms, but may create their own without state review or approval as long as the language is consistent with the standardized model forms.)
- Consent for rapid HIV testing can be oral (except in correctional facilities) but must be noted in the medical record.
- Consent can remain in effect for a period of time stipulated by the patient or until revoked by the patient orally or in writing.
- Prior to being asked to consent to HIV testing, patients must be provided information about HIV required by the Public Health Law.
- Health care and other HIV test providers authorizing HIV testing must arrange, with the consent of the patient, an appointment for medical care for those confirmed as positive.
- Anonymous HIV testing of source patients in occupational exposure situations who are unable to provide consent is allowed in certain circumstances, though results cannot be shared with the source patients or included in their medical record.
- Confidential HIV information may be released without a written statement prohibiting re-disclosure when routine disclosures are made to treating providers or to health insurers to obtain payment.

Prior to drafting regulations, the Department conducted webcasts, webinars, regional stakeholder meetings, informational sessions for hospitals, and informational mailings. Regulations developed with the robust input of a wide variety of partners were developed and then published in November 2011. After receiving only three letters with concerns during the public comment period, the regulations were adopted without change in February 2012.

II. Evaluative Process and Limitations

Although the Centers for Disease Control and Prevention (CDC) recommendations for routine testing have been in place since 2006, there has been no national or state-specific evaluation of the impact of adoption of routine testing on the number of persons screened or persons linked to care. Hence, there was no pre-existing framework on which to model an approach to measuring the impact of Chapter 308 or a baseline of expectations in terms of impact to expect.

No single data set is available to measure directly the total number of persons HIV tested in New York State or the number of newly diagnosed persons linked to care and treatment. In preparation for this report, the Department developed a plan and undertook 14 separate evaluation projects to examine various facets of the two questions the law posed. Additional evaluative work was done by New York City Department of Health and Mental Hygiene (NYCDOHMH), which has been an active partner in the implementation of the law as well.

The analyses on which the report is based utilize numerous data systems, each of which has its own limitations. Some data is based on self-report of individuals, and others on numbers of tests rather than unique persons tested. The timeframe for evaluation is a key limitation that spans all individual projects. The bill was signed into law one month before its effective date of September 1, 2010. Most all of the education and technical assistance for implementation of the law occurred after that date, and there are indications that not all hospitals and primary care providers are offering HIV testing the way the law requires. Regulations were adopted in February 2012; a number of hospitals may have waited to change their policies and procedures until the regulations were finalized to ensure any decisions they made would conform with the regulatory requirements. Also, time is required to compile and analyze the data gathered, thus restricting the quantity of the most recent post-enactment data available during the preparation of this report.

Data were collected from laboratories performing HIV tests for New Yorkers; residents between the ages of 18 and 64 from across the state were interviewed by phone; and surveys of physicians, school-based health clinics, community-based health and human service providers, and medical societies were conducted. Medicaid data were examined as well as data from all AIDS Institute contractors and the New York City Health and Hospitals Corporation. Information related to care and treatment was accessed from Medicaid, the AIDS Drug Assistance Program (ADAP) and the New York State and City HIV disease investigation programs. Data from statutorily mandated

routine disease surveillance were examined. A specially designed system modeling project was completed that allowed the Department to examine how the law and various co-occurring external factors will impact the service delivery system over the next decade. Finally, over 130 articles from the professional literature on consumer reactions to HIV testing as a part of routine care were reviewed.

This brief report provides key findings from most of the projects noted. Findings of the various reports will be published to inform interested parties in New York State and nationally. A summary of the evaluative work is appended to this report.

III. Number of Persons Tested for HIV in New York State

Chapter 308 requires that this report address the number of persons who are tested for HIV infection. Since there is not a unified or universal data set to answer this particular question, a number of approaches were utilized, drawing from data sources that would allow an assessment of testing levels in New York State prior and subsequent to the law's effective date of September 1, 2010. These data sets include information from persons self-reporting HIV testing, provider reports of HIV tests ordered, and laboratories reporting HIV tests conducted.

With the routinization of an HIV testing offer in hospitals and primary care settings, one would expect to see an increase in tests being performed. Several data sources do indicate such an increase. From a survey of laboratories doing business in New York State, a 13% increase in HIV tests performed was noted when comparing levels from one year before the law went into effect to one year after. Medicaid testing encounters and claims increased from a combined total of around 30,000 per month the year before the law to approximately 43,000 per month a year after. Similarly, annual testing at AIDS Institute funded primary care programs went from 56,131 to 61,534, a 9.6% increase. Participating health centers and practices in the NYCDOHMH Primary Care Information Project reported an approximate 30% increase in HIV tests ordered when comparing the quarters preceding the law and those immediately following. New York City Health and Hospitals Corporation facilities, which began routinizing HIV screening years before the law went into effect, are now testing nearly 200,000 unique patients per year. The exact impact the law had on these increases is hard to judge since, in some cases, increases were detectable in the years leading up to enactment. However, it does appear that the law has had a positive impact on testing levels.

Other data sources focusing on the percent of New Yorkers testing for HIV such as the Behavioral Risk Factor Surveillance System (BRFSS) and the NYCDOHMH Community Health Survey (CHS) show a mixed picture of results. Preliminarily, BRFSS data demonstrate a higher weighted frequency of New York State adults answering yes to the question "have you ever been tested for HIV?" from 5,582,945 in 2009 to 5,708,711 in 2011 (a 2.2% increase). The analysis of these data are not yet final. Also, BRFSS demonstrates an upward year-to-year trend in testing that predates the enactment of the law, so the increase is unlikely due to the law alone. For New York City, CHS

reports consistently high rates of testing among adults. Approximately 35% of city adults age 18-64 report testing in the last year, while the national average is only around 21%. The study also estimates that over 68% of New York City adults have ever been tested for HIV in 2011, up from 64% in 2008.

A telephone survey conducted in 2011 for NYCDOHMH by Baruch College suggests that full implementation of the law has not yet been achieved. Among New York City residents age 18-64 surveyed, about 32% reported that they had never been tested for HIV. More than three-quarters of these “never tested” individuals had seen a health care provider in the prior 12 months, and only 7% said that they were offered an HIV test at their last health care visit. Those who were not offered an HIV test (93%) were asked if they would get an HIV test if their healthcare provider recommended it, and 77% said “yes.”

Although NYSDOH reached thousands of clinicians and health administrators by conducting stakeholder meetings around the state, holding webinars, and sending letters to all affected healthcare providers, awareness of the law remains uneven. A survey conducted in the fall of 2011 by the University at Albany School of Public Health’s Center for Health Work Force Studies of 979 New York State physicians who fall into the categories included in the law of those needing to make a routine offer of testing shows that, as of late 2011, one-third were still unaware of the amended testing law, and of the two-thirds who were aware, many still had an imperfect knowledge of the law’s requirements. When asked about specific provisions of the law, frequency of correct answers ranged from 29% to 83%. On a number of questions, over 40% of respondents reported they were unsure of the correct answer.

IV. Number of Persons who Access HIV Care and Treatment in New York State

The law requires the department to evaluate the impact of the law with respect to the number of persons who access care and treatment. This follows from the mandate that all persons receiving HIV-positive test results be provided at the same time, with their consent, an appointment for follow-up medical care. Linkage to care upon diagnosis is important since early initiation of antiretroviral (ARV) medication is widely recommended for its health benefits to HIV-infected individuals and for rendering those individuals less infectious to sexual or needle-sharing partners. Without appropriate treatment, diagnosed persons’ health would at some point deteriorate and they would remain much more infectious than if levels of HIV in the blood were decreased through administration of antiretroviral medications.

The main data source regarding linkage to care is the state’s HIV surveillance system which includes information on the diagnosis of new cases as well as ongoing reports of laboratory testing for these persons. Tests required to be reported include viral load (a quantitative measure of HIV nucleic acid in the blood), CD4 (an assessment of immune system functioning), and resistance (which measures to what extent a particular strain

of HIV in a person is responsive to available medications). These tests serve as markers that a person is receiving medical care for HIV infection.

NYSDOH examined the change in the percentage of newly diagnosed HIV cases entering into care before and after the enactment of the HIV Testing Law. Using surveillance data from October 2009 to September 2011, the first recorded viral load or CD4 test among newly diagnosed HIV cases was considered an indicator of entry into care, since these tests are part of the baseline evaluation of newly diagnosed persons. One year before the enactment of the law, 76% of the newly diagnosed cases were estimated to have entered into care within 3 months following diagnosis. One year after enactment of the law, the percentage of cases that entered into care within the 3-month window remained virtually unchanged at 76%. These results are consistent with findings from previous entry to care studies conducted by HIV surveillance staff and somewhat higher than the baseline national value of 65% cited by the National HIV/AIDS Strategy.

Both the New York State and City health departments take active steps to encourage all newly identified HIV-infected persons to seek care immediately. The NYCDOHMH conducts these activities at nine city-operated STD clinics as well as at high volume, clinical and non-clinical settings in New York City. NYSDOH Bureau of Sexually Transmitted Diseases Control (BSTDC) oversees partner services for all nine NYCDOHMH STD clinics. From October 2010 through December 2011, 607 patients were newly diagnosed with HIV in nine STD clinics. Of these 607, 445 (73%) had an appointment for HIV medical care scheduled following their diagnosis. Of these 445 patients, 278 (62%) were confirmed to have attended their first appointment with their medical providers.

NYCDOHMH's Field Services Unit (FSU) conducts partner service interviews in high volume, clinical and non-clinical settings. Between October 2010 and December 2011, FSU approached 1,683 newly diagnosed index patients and newly diagnosed partners for partner services and assistance with linkage to care. Of these patients, 1,542 (92%) had a scheduled appointment within 3 months of their diagnosis and 1,496 (97% of those with an appointment) attended that medical appointment. Of the 46 who did not attend a medical appointment, 11 (24%) could not be located for an interview, 7 (15%) moved to another jurisdiction, 8 (17%) refused to link to medical care, 2 (4%) linked to medical care more than 3 months after their diagnosis, and 18 (39%) did not attend for an unspecified reason.

In NYS outside of NYC, NYSDOH or selected county health departments interview persons newly identified with HIV to determine what sexual or needle sharing partners may need to be notified of possible exposure to the infection. This interview is used as an opportunity to ensure newly diagnosed persons are firmly linked to care. The state's interview form was modified last year to include new questions designed to track the status of medical appointments for newly diagnosed HIV cases assigned to partner services staff. Data from July 1, 2011 to December 31, 2011 were extracted for an appointment analysis. Of the 210 index patients with a scheduled appointment, 161

(77%) attended their appointment, as opposed to 7 (3%) who did not attend, and 8 (4%) who have yet to attend, with the remaining 34 patients (16%) whose attendance is unknown. The number of patients with a follow up appointment for medical care is a conservative estimate that may be affected by the timing of the interview and other practical issues in the interview process. The attendance rate of 77% observed in this study, however, seems to be consistent with findings from other evaluation components.

Surveillance and partner services data show that persons being identified with HIV since the amended law went into effect continue to be linked into care at levels consistent with what had been seen prior to the law going into effect and above the national average. The law does require that an appointment for care be made for any person newly diagnosed who consents for that to happen, and a reasonable assumption is that the proportion demonstrably linked to care would increase due to the appointment mandate. To date such an increase has not been demonstrated, but further analysis will be needed. It is possible that a large percentage of newly diagnosed persons had an appointment made by their providers before the law was enacted. It is encouraging that in the last six months of 2011, 210 of 225 newly diagnosed persons interviewed by NYSDOH (93%) did have an appointment scheduled and the NYCDOHMH Field Services Unit is showing similar success on a larger scale.

In terms of accessing treatment once in care, New York State has strong safety net programs to ensure that HIV infected persons who should be on anti-retroviral medications have access to them. There are 130,000 persons diagnosed with HIV in New York State and presumed to be living, and there are approximately 65,000 HIV-infected persons insured by Medicaid here, a program that provides not only medication, but comprehensive care and care management. Approximately half of HIV-infected NYS Medicaid recipients receive an ARV medication in any given year. Of recipients considered to be regularly engaged in care, the percentage on ARV medications is 89%. For those not eligible for Medicaid, the AIDS Drug Assistance Program has been in existence since 1987, and provides not only coverage for medications and primary care, but also helps cover premiums so persons with their own insurance can maintain it. ADAP enrollment for 2011 was 24,418 with 21,268 receiving ARV medications. In contrast to some assistance programs in the nation NYS has provided ADAP services to all applicants, so a waiting list has not been necessary.

V. Projected Longer Term Impact of the Law

As part of evaluations for this report, the Department collected extensive empirical data to understand various features of the law's implementation and early outcomes. However, traditional quantitative research methods (such as surveys and statistical analyses of medical claims and surveillance data) may not adequately address complexities in the system of HIV testing and care involving multiple public and private payers, facilities, providers, and social services. Furthermore, the law is being implemented in the context of concurrent policies that may affect outcomes.

Some of these related policies, such as national recommendations for HIV testing frequency, have similar goals to the state law, thereby making it harder to distinguish each policy's unique impact. Other actions with policy implications, such as funding cuts from the federal government for supportive services that may improve testing and entry into care, may counteract some of the law's potential positive effects. Also, effects of upcoming changes from health care reform may have additional impacts on testing, entry to care and medical services received. The empirical data used for the other studies described in the report are limited to a short two-year time horizon, whereas the law may take several years to fully implement and its impact may occur over a much longer period. Finally, empirical data are limited to outcomes that can be directly measured (such as new diagnoses, rather than new infections). To help broaden our understanding of the likely long-term impact of the law, NYSDOH contracted with University at Albany researchers to develop a system dynamics simulation model to supplement the other evaluation work.

According to the simulation model, in the absence of the law, the state would have experienced a continuing decline in the annual number of new infections and new diagnoses, as well as the fraction of undiagnosed cases. However, the number of individuals living with HIV infection and the number of cases currently in care would have continued to increase slightly. This somewhat counterintuitive finding is because individuals remain in the model for a long time as a result of large survival benefits from antiretroviral therapy.

If the law is implemented as designed, the simulation predicts it has the potential to reduce further the number of new infections and the fraction of undiagnosed cases than otherwise would be observed. As testing increases, the state could expect an initial surge in the number of newly diagnosed HIV cases per year followed by a decline, and a more pronounced steady decline in the number of newly diagnosed AIDS cases. The initial surge in newly diagnosed HIV cases reflects the rapid identification of individuals who are currently unaware of their infection. The anticipated decline in the number of newly diagnosed AIDS cases is due to individuals being diagnosed earlier in their infection and provided treatment, before they progress to late stage disease.

Even if the law is implemented perfectly, the number of new infections and the fraction of undiagnosed cases do not approach zero. The number of persons linked to care annually only increases in the short-term in the extreme condition of perfect implementation. Comparing scenarios where all persons test only once or every year, there are minimal differences in outcomes because the vast majority of persons tested are HIV-negative. The biggest difference is in the number of tests performed. In contrast, increasing the level of implementation can lead to improvements in outcomes related to the subset of persons tested who are HIV-infected such as reductions in the number of new infections, newly diagnosed cases, the fraction of newly diagnosed cases with concurrent AIDS, and the fraction of cases that are undiagnosed. Varying the time to implementation does not change long-term results significantly. These findings need to be considered as the department decides the most useful activities and approaches to be stressed with providers.

Section VI. Conclusions and Future Directions

A review of multiple public health data sets and other available information indicates that the number of persons being tested in New York State was increasing prior to the law and that this increase appears even greater after the enactment of Chapter 308 of the Laws of 2010. Linkage to HIV care remains above the national average and persons with HIV can readily access ARV treatment. In view of the evaluation limitations previously outlined, the fact that many findings from different sources have consistent conclusions provides a degree of assurance that what is presented in this report is a fair approximation of HIV testing and linkage to care in the state.

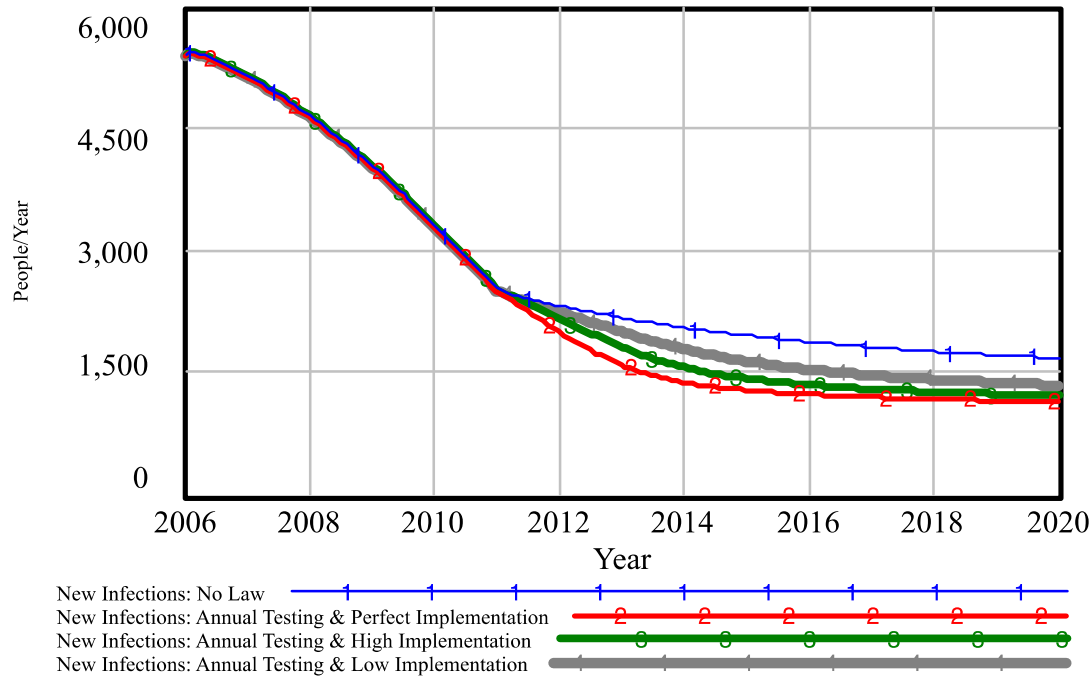
Additional work remains to be done to ensure facilities and practitioners mandated to offer HIV testing and to link newly diagnosed persons to care do so. Data indicate people will accept HIV testing if it is offered, so getting practitioners and facilities to make the offer should significantly reduce the pool of undiagnosed persons. After this has occurred, the law's provisions for repeat offers to those at elevated risk need to be emphasized.

The New York State and City health departments have also created a wide range of technical assistance products, including "toolkits" that provide in one package to clinicians all the materials they need to comply with the requirements of the law. NYSDOH is currently taking steps to assess implementation status through a letter from Commissioner Shah and a survey sent to all hospitals in the state. Findings from this survey will assist the Department in addressing any remaining barriers to full implementation in those settings.

With approximately two-thirds of New Yorkers living with HIV enrolled in Medicaid or ADAP, New York's commitment to ensuring the availability of care and treatment is clear. Identifying those who remain undiagnosed, linking them to care through the appropriate public or private mechanism, and providing support so they remain in care are the challenges that remain and these must be the focus of our ongoing work.

The model of future impact of the law developed for this report indicates the successful implementation will lead directly to fewer new infections.

Projected New Infections per Year under Annual Testing, Comparing No Law to Three Levels of Implementation



Based on the evaluations and this assessment of the potential impact of the law, we also offer suggestions for improving that impact.

- Consider additional steps to streamline and fully routinize the offer for HIV testing. One possibility would be to adopt CDC’s 2006 recommendation for HIV testing to be routine, without specific consent, but with an option for patients to decline to be tested.
- Have health insurance carriers cover HIV testing required by the law in the same manner as the state Medicaid program.
- Allow physicians to notify source patients who test positive of their test results through the anonymous occupational exposure process, if the physician deems that notification to be in the patient’s best interest. While there is wide agreement that the anonymous option was an important step forward in addressing occupational exposures, the inability to inform those source patients with positive results has been identified frequently by hospitals as a barrier to care. The current prohibition may cause harm to source patients by not providing them important health information that would enable them to seek timely access to appropriate care and avoid unnecessary infection of others.

Attachment:

Evaluation Summaries

HIV Laboratory Testing Project

Purpose: To assess changes in the number of HIV antibody screening tests performed before and following the implementation of the HIV Testing Law.

Methodology: All laboratories holding an HIV screening permit from the NYSDOH Wadsworth Center's Clinical Laboratory Evaluation Program were surveyed by mail to assess monthly counts of HIV screening tests performed by the laboratory. The period of analysis was August 2009 through October 2011 with a baseline period of August 2009 – August 2010 compared to the follow up period of October 2010 – October 2011. Testing volume was analyzed by type of test (rapid vs. conventional) and type of laboratory setting (hospital-based, commercial, and public health.)

Findings: A total of 247 of 271 (91%) permitted laboratories completed the survey.

- During the follow up period, testing volume increased 9% overall and 13% among NYS residents.
- Trend analysis of monthly testing volume suggests that testing was stable in the baseline period and increased at a significant rate afterwards. The data suggests that the law boosted the volume of testing by a monthly average of 741 conventional tests and 1,338 overall tests.
- Changes in the volume of testing varied by type of laboratory setting.
 - The volume of rapid screening tests increased in hospital-based and commercial laboratories by 20% and 65% respectively. When results were restricted to those laboratories with nearly complete reporting during the study period, the increase in volume was more dramatic: rapid tests increased 67% within hospital-based labs and 273% in commercial labs. These increases may be indicative of an increased demand for more timely results within healthcare settings.
 - The volume of conventional tests increased only in hospital-based settings by 32% and remained stable in other laboratory settings.
 - Testing volume decreased overall in public health laboratories suggesting a shift in testing to hospital-based and commercial laboratories.

Project Contact: Bridget J. Anderson, PhD
Bureau of HIV/AIDS Epidemiology
(518) 474-4284
e-mail: bja03@health.state.ny.us

Timing of Entry into Care for Newly Diagnosed HIV Cases, NYS, 2009-2011

Purpose: To assess the proportion of newly diagnosed HIV cases that are linked to care and the timing of entry to care before and after the enactment of the HIV Testing Law.

Methodology: HIV/AIDS surveillance data for newly diagnosed HIV cases was analyzed to identify two laboratory indicators of patient contact with the medical care system: Viral Load (VL) and CD4 tests. The first recorded VL or CD4 test following the patient's initial diagnosis was used. Timing of entry into care was calculated as the time elapsed (in months) between the date of the first recorded VL or CD4 test and the date of initial HIV diagnosis. Analysis was conducted for two one-year periods with a baseline period of October 1, 2009 to September 30, 2010 and a follow up period of October 1, 2010 to September 30, 2011.

Findings:

- A total of 3,926 newly diagnosed HIV cases were reported in the year prior to enactment of the law and 3,717 cases in the year following.
- One year before enactment of the law, 75.9% of newly diagnosed cases were estimated to have entered care within 3 months following diagnosis. Eighty four percent of the newly diagnosed cases were presumed to be in care within one year.
- One year after enactment of the law, the percentage of cases entered into care within 3 months of diagnosis remained stable at 76.4%. Similarly, 84% of the newly diagnosed cases were presumed to be in care within one year.
- There were no differences in entry to care before and after the enactment of the law across region (NYC vs. Rest of State), age, sex, race/ethnicity or risk groups.
- These results are consistent with findings from prior entry to care studies conducted by the Bureau of HIV/AIDS Epidemiology.

Project Contact: Daniel Gordon, PhD
Bureau of HIV/AIDS Epidemiology
(518) 474-4284
e-mail: deg02@health.state.ny.us

Survey of Medical Providers on HIV Testing

Purpose: The Office of Program Evaluation & Research and the Center for Health Workforce Studies designed and administered a survey on HIV testing practices and knowledge of the 2010 changes to the HIV Testing Law to a sample of NYS physicians. The survey also elicits attitudes and perceived barriers related to the adoption of HIV testing as part of routine health care.

Methodology: Staff from the Center for Health Workforce Studies developed a sampling frame of 1,900 physicians from the American Medical Association's Masterfile of Physicians who met the following criteria: 1) actively practicing patient care medicine; 2) practice address in New York; and 3) primary specialty in general/family medicine, general pediatrics, general internal medicine, obstetrics/gynecology, or emergency medicine. The sample was selected to provide adequate representation of physicians by specialization, region (NYC, Long Island, Lower Hudson and Rest of State) and practice setting (hospital vs. non-hospital). The first survey packages were mailed to the sample on September 28, 2011, the second mailing of the survey was sent to non-respondents on November 25, 2011 with the final mailing on January 3, 2012. In all, 1,183 surveys were collected, for a response rate of 62.3%. After eliminating surveys which were returned as undeliverable or ineligible due to the respondent not providing direct patient care, the final sample included 976 respondents.

Findings:

- Eighty-seven percent of physicians said that they had offered HIV testing to patients during the 12 months prior to the survey. Of this group, a majority reported "Always" or "Frequently" offering HIV screening as part of routine care to patients between the ages of 18 to 24 years (58.3%) and between the ages of 25 to 49 (52.1%). A smaller proportion said that they regularly offered testing to patients aged 13 to 17 years (44.3%) or to adults aged 50 to 64 years (34.8%). Only 22.9% of respondents offered testing to adults 65 years and older with regularity.
- The most frequently identified barrier to the adoption of routine HIV testing in the physicians' practices, mentioned by more than half (54.7 %) of the sample, was the belief that "Few of my patients are at risk for HIV". The belief that "Patients have more immediate health problems to address" was noted as a barrier for slightly less than half (48.7%) of valid responses.
- A majority (61.4%) of physicians indicated that they had heard about changes to the HIV Testing Law prior to completion the survey. The most frequently selected sources for information about the new law was the NYSDOH or NYCDOHMH Commissioner of Health's "Dear Colleague" letter (45.9%) and from colleagues and/or employers (37.9%).

Project Contact: Mary Zielinski
Office of Evaluation & Research
(518) 402-6814
e-mail: maz01@health.state.ny.us

School Based Health Clinic Staff Survey

Purpose: This report summarizes the findings from a survey of NYS School Based Health Center (SBHC) staff, which was designed to assess awareness of the 2010 amendment to the HIV Testing Law, HIV testing and related practices, perceived barriers to implementing the HIV Testing Law and technical assistance needs relating to implementation of new provisions in the law. The survey was conducted fifteen months after changes to the HIV Testing Law went into effect.

Methodology: The survey was developed by staff from the Office of Program Evaluation and Research (OPER) in the AIDS Institute, in collaboration with members of the NYSDOH Division of Family Health, the Bureau of Maternal and Child Health, the NYS Coalition for SBHCs, Inc., the NYC Department of Health and Mental Hygiene, the NYC Office of School Health, and clinical staff members from a local SBHC. SBHC program managers were asked to invite one clinical staff member (physicians, physician assistants or nurse practitioners) at each of the 128 NYS SBHCs providing services to middle and high school students to participate in the online survey. Data collection began in November, 2011 and ended in February, 2012, with non-respondents contacted up to three times. The final sample included 83 health professionals, a response rate of 65%.

Findings:

- Most of the SBHC medical staff respondents indicated that they were aware of the 2010 Amendment to the HIV Testing Law (87%), that their clinics offered on-site HIV testing (71%) and that they had a number of linkages to age appropriate services for students who tested positive for HIV infection (ranging from 68%-94%).
- Two-thirds of respondents reported that eligible students were offered an HIV test (including referral) as part of routine care at the SBHCs during the 2010-2011 school year.
- More than half (54%) of respondents reported it would be “very” or “somewhat” difficult to offer HIV testing as part of routine primary care.
- Organizational barriers to implementing/practicing routine HIV testing, mentioned by a significant proportion of SBHC staff, included having a lack of time to offer testing, a lack of staff, limited space to dedicate to screening and limited reimbursement for testing.
- Staff from SBHCs located in NYC reported higher levels of implementation and fewer barriers than clinics in the rest of the State.

Project Contact: Christina Peluso, MPH
Office of Program Evaluation & Research
(518) 402-6814
e-mail: cao01@health.state.ny.us

The Behavioral Risk Factor Surveillance System (BRFSS) 2011: NYS HIV Testing Law

Purpose: To assess (1) the percentage of New York State residents aged 18 and over who were offered an HIV test when they received medical care from their health care providers; and (2) the percentage of New Yorkers who accepted an HIV test when offered.

Methodology: The Behavioral Risk Factor Surveillance System (BRFSS) is an annual state-based telephone survey developed by the Centers for Disease Control and Prevention (CDC) and administered by New York State Department of Health. The survey includes questions that assess modifiable risk behaviors and other factors contributing to the leading causes of morbidity and mortality among NYS's non-institutionalized adult population, aged 18 years and older. One of the questions pertaining to respondent's experience with HIV testing is "*Have you ever been tested for HIV? (Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth.)*" In 2011, additional questions related to NYS HIV Testing Law were included in the survey to assess the experience of New York State residents with HIV screening test offers in multiple health care settings since the law took effect.

Findings:

- The number of NYS residents aged 18 - 64 who have ever tested for HIV increases from 5.58 million in 2009 to 5.71 million in 2011, representing a 2.2% increase in the number of New Yorkers ever tested for HIV.
- In 2011, about 50% of NYS residents aged 18 - 64 were reported to have tested for HIV.
- Among NYS residents who received medical care in different care settings, 13% were offered an HIV test in an emergency department; 16% from a primary care provider; and 19% in an inpatient care unit at a hospital. Another 14% were offered HIV tests by care providers not included in care settings specified above.
- Overall, 63% of those who were offered an HIV test in 2011 accepted the test offer.

Project Contact: Shu-Yin John Leung, MA
Office of Program Evaluation and Research
(518) 402-6814
e-mail: sjl04@health.state.ny.us

Awareness of and Technical Assistance Needs related to Implementing the 2010 Amendment to the HIV Testing Law in NYS among a Sample of HIV Testing Providers in Upstate New York

Purpose: Staff from the Office of Program Evaluation & Research and the Division of HIV, STD and Hepatitis Prevention added several questions, designed to assess awareness, adoption and perceived impact of the 2010 HIV Testing Law within their agencies, to a survey of HIV counseling and testing service providers in NYS (excluding NYC).

Methodology: During spring 2011, staff identified 101 HIV counseling and testing service providers in NYS (excluding New York City) and invited them to respond to the “Integrated HIV, STD, and HCV Testing Survey.” The sampling frame was drawn from the AIDS Institute’s Contract Management System Database, the CDC’s National HIV and STD Testing Resources Website and the AIDS Institute HIV Counseling and Testing Resource Directory. Representatives of 40 agencies responded to the online survey, of which 33 respondents indicated that they were aware of the change to the HIV Testing Law in 2010.

Findings:

- Of the 33 respondents, virtually all said that they felt very (76%) or somewhat (21%) well-informed to implement the changes to HIV testing at their agencies.
- A minority of respondents indicated that their agencies required technical assistance to develop a form for documenting an offer of HIV testing (21%), to identify local resources for people living with HIV/AIDS (9%), to amend the general medical consent to include consent for HIV testing (9%) or assistance applying the HIV testing law to their practices (6%).

Project Contact: Shu-Yin John Leung, MA
Office of Program Evaluation & Research
(518) 402-6814
e-mail: sjl04@health.state.ny.us

Medicaid Data Component: HIV Testing Rates and Access to ARV Treatment

Purpose: (1) To assess the HIV screening test counts and rates among Medicaid enrollees who received hospital or primary care before and after enactment of the HIV Testing Law. (2) To assess the number and the percentage of HIV-infected Medicaid enrollees on antiretroviral (ARV) therapy before and after enactment of the HIV Testing Law.

Methodology: New York State Medicaid data from 2009 to 2011 were used to determine counts of recipients and rates of HIV testing (HIV screening tests only) and access to antiretroviral (ARV) treatment.

Findings:

- Before the enactment of the HIV Testing Law (January 2009 to September 2010) the average HIV testing rate among Medicaid managed care recipients was 307 per 10,000 recipients.
- After the enactment of the HIV Testing Law (October 2010 to December 2011), the average HIV testing rate among Medicaid managed care recipients was 388 per 10,000 recipients.
- HIV testing rates among Medicaid fee-for-service recipients showed a similar trend. Before the law, the average testing rate was 262 tests per 10,000 recipients. After the law, the average testing rate was 371 per 10,000 recipients.
- The total number of HIV/AIDS Medicaid recipients identified in 2010 (i.e. before the law) was 69,741. A preliminary, incomplete estimate of HIV/AIDS Medicaid recipients identified in 2011 (i.e. after the law) is 64,197. The percent of HIV/AIDS Medicaid recipients who had any claim or encounter with an indication of an HIV related antiretroviral drug for both years remained virtually unchanged at 51.2%.

Project Contact: Brian Gallagher
Medicaid Policy and Programs
(518) 486-1383
e-mail: bxxg04@health.state.ny.us

System Dynamics Modeling of the Impact of the HIV Testing Law

Purpose: Use a system dynamics simulation model to predict the impact of the NYS HIV testing law five and ten years after adoption on rates of HIV testing, the number of new HIV diagnoses, the proportion of newly-diagnosed cases linked to care, the proportion with late stage diagnoses, the proportion living with HIV infection and future incidence of HIV infections.

Methodology: Researchers from the University at Albany worked with subject matter experts from the AIDS institute to develop a conceptual model of key variables and their relationships. Researchers then transformed the conceptual model into a system of mathematical relationships between variables. Existing datasets, including HIV surveillance, claims data, administrative data, consumer surveys and published literature, were used to identify estimates of the variables which could be used to validate the results from the simulation model.

Findings:

- Based on the model, in the absence of the law, NYS would continue to observe a decline in the number of new HIV diagnoses and number of new infections as well as the fraction of undiagnosed cases. However, persons living with HIV and cases currently in care would continue to increase. While this finding is counterintuitive, the survival benefits afforded by antiretroviral therapy translate to infected persons staying in the system longer.
- Assuming the law is implemented as designed, the model predicts a reduction in the number of new infections as well as the proportion of undiagnosed cases. Furthermore, the model predicts an initial surge in the annual number of newly diagnosed HIV infections followed by a decline, and a steady decline in the number of newly diagnosed AIDS cases. This decline is explained by the identification of persons earlier in the course of infection before progressing to late stage disease.
- The implementation of the law is not expected to result in an increase in the number of persons newly linked to care per year, except in the extreme condition of perfect implementation, where this will increase in the short term. Furthermore, there will be no change in the number of persons living with HIV infection or the number of cases current engaged in care.
- The law by itself will not eliminate New York's HIV epidemic.
- Comparing annual repeat HIV testing to one-time testing scenarios, there are minimal differences in outcomes.
- Increasing the level of implementation predicts improvements in outcomes such as the number of new infections, newly diagnosed

cases, fraction of newly diagnosed cases with concurrent AIDS, and the fraction of cases that are undiagnosed. Varying the time to implementation did not change results significantly.

- The results of this simulation serve as an important resource to the Department when deciding on the most important strategies to promote to providers.

Project Contact: Shu-Yin John Leung, MA
Office of Program Evaluation and Research
(518) 402-6814
e-mail: sjl04@hsalth.state.ny.us

Consumer Reactions to HIV Testing: A Review of the Literature

Purpose: This report summarizes the literature published between January 2000 and February 2012, which identifies barriers and facilitators to the adoption of HIV testing in health care settings. Specifically, the report assesses consumers' reactions to HIV testing as part of routine care and reasons for refusal or acceptance of testing.

Methodology: The report is based on a subset of articles included in a larger annotated bibliography, "HIV Testing: Barriers and Facilitators," compiled during 2012 by staff in the Office of Program Evaluation & Research in the Division of Epidemiology, Evaluation and Research. The bibliography was developed by an extensive search of English-language literature indexed in PubMed (<http://pubmed.gov>) and *Google Scholar* or obtained from distinguished authors in the field of HIV testing and reference lists from key studies and reports. Search terms included, but were not limited to, "barriers to HIV testing," "routine HIV testing," "attitudes towards HIV testing," "physicians and HIV testing" and "routine HIV testing."

Findings:

- Results from the literature suggests that the major reasons for patients to refuse HIV testing include the belief that they are not at risk for HIV, fears of a positive diagnosis and/or of the testing procedure, having recently tested negative for HIV and concerns about confidentiality.
- Important "operational barriers" to the introduction of routine HIV testing into new health care settings includes complaints of a lack of time in health facilities, language barriers with patients and limited staff time, particularly when testing has been accompanied by lengthy informed consent and pretest counseling requirements. Health care providers may also feel uncomfortable providing HIV counseling to patients or delivering a diagnosis of HIV infection.
- Measures which can facilitate the adoption of routine HIV testing by health care providers include the implementation of non-targeted opt-out testing, an increase in the use of rapid testing and the use of general medical consents which include HIV testing.
- Factors which increase the probability that patients will agree to test for HIV include a recommendation by a health care provider that the patient be tested, the patients' perceptions that they may be infected with HIV or live in a community with a high prevalence of HIV and among pregnant women, a concern for the health of their babies.

Project Contact: Kirsten Rowe, MA
Office of Program Evaluation & Research
(518) 402-6814
e-mail: kas11@health.state.ny.us

HIV Testing and Referral to Care by HIV Service Providers

Purpose: To assess the impact of the HIV Testing Law on trends in HIV screening tests performed by AIDS Institute funded providers and referrals of confirmed HIV positive patients into care.

Methodology: The AIDS Institute Reporting System (AIRS) is the primary reporting system for client and service data for NYSDOH funded and managed HIV service contracts and includes data on counseling, testing and referral. For this analysis, AIRS HIV testing data were grouped into quarterly time periods, covering the five quarters prior to implementation of the HIV Testing Law (July 2009 –September 2010) and the five quarters proceeding the enactment of the law (October 2010 – December 2011). Data analyses were limited to funded healthcare agencies with complete HIV testing data for the entire 10 quarters in order to assess outcomes among the same providers and settings across the study period.

Findings:

- A total of 51 agencies were included in the analysis with 117,665 HIV tests performed in the study period (July 2009 – December 2011) with the following findings:
 - 893 confirmed HIV positive tests
 - 595 new HIV positive tests (0.5% of all tests)
 - 454 new HIV cases linked to care (76.3%)
- The number of HIV tests increased 9.6% after the enactment of the law, from 56,131 to 61,534.
- The number of newly diagnosed HIV tests as a percentage of total tests decreased after the enactment of the law, from 0.6% to 0.4%.
- The decreasing seroprevalence rate is consistent with state and national trends and not necessarily related to the new law or the associated increase in HIV tests.
- The percentage of newly diagnosed HIV positive test results linked to medical care also decreased after the enactment of the law, from 80.1% (July 2009 – September 2010) to 71.6% (October 2010 – December 2011).
- Several study limitations should be noted. These data were not collected to assess the impact of the HIV Testing Law and the healthcare providers included in the analysis represent a small percentage of the providers impacted by the law who receive AI funding to conduct or enhance their HIV testing programs; most providers impacted by the law receive no such funding.

- The changes in the number of tests, seroprevalence, and referral to care observed in this analysis may be due to any number of other factors and are not necessarily tied to the implementation of the new law.

Project Contact: James Tesoriero, PhD
Division of HIV, STD, Hepatitis C Prevention
518-486-6066
e-mail: jmt07@health.state.ny.us

Medical Appointment Tracking

Purpose: To assess the extent to which an initial medical appointment has been scheduled and whether or not the appointment has been attended.

Methodology: In 2011, BSTDPE revised the partner services interview record and included three new questions to track the status of medical appointment follow up for newly diagnosed HIV cases. The new questions were: (1) Initial medical appointment made? (2) Date of the medical appointment, (3) Scheduled medical appointment attended? The associated data system which captures HIV partner services information was updated to capture these new questions and launched in July 2011. Data for this analysis is based on cases assigned to partner services from July 1, 2011 to December 31, 2011.

Findings:

- A total of 398 cases¹ were assigned to Partner Services during the study period with the following findings:
 - 210 patients (53%) had a documented scheduled appointment for care
 - 15 patients (4%) had no follow up medical appointment scheduled
 - 173 patients (43%) had no usable information for analysis
 - 20 patients (5%) could not be located for interview
 - 25 patients (6%) refused to answer the question
 - 14 patients (4%) did not know if they had an appointment scheduled
 - 114 patients (29%) had no appointment status information recorded
 - Of the 210 patients with a documented scheduled appointment, 161 patients (77%) attended their appointment, 7 patients (3%) did not attend, 8 patients (4%) had yet to attend, and the attendance status of 34 patients (16%) was unknown.
- The number of patients with a follow up medical appointment is a conservative estimate that may have been affected by factors such as: patients not available for interview; information on appointment status not available at the time of interview; timeframes for closure of the partner services case investigation may result in closure before staff can confirm appointment attendance; and/or the staff learning curve on incorporating the new medical appointment questions into patient interviews (questions were first added in the data system in July 2011).
- The appointment attendance rate of 77% observed in this study, however, seems to be consistent with findings from linkage to care studies included in the HIV Testing law evaluation.

¹ Ineligible cases included patients that are out of jurisdiction, are deceased or are administrative closure cases (e.g., military testing, vaccine trial, proficiency testing, and anonymous testing not converted to confidential) that are not eligible (and therefore are not assigned) for interview by Partner Services.

Project Contact: Rosalind Thomas, MPH
Bureau of STD Prevention and Epidemiology
(518) 474-3598
e-mail: rpt01@health.state.ny.us

National HIV Behavioral Surveillance (NHBS) Project

Purpose: NHBS staff added questions to their interview protocol during the 2011 data collection cycle to assess the experiences of Men who have Sex with Men (MSM) in Long Island, NY with HIV test offers in specific health care settings.

Methodology: The NHBS Project is an ongoing cross-sectional study of people at high risk for HIV infection, with data collection during 2011 focusing solely on MSM. Participants were recruited for interviews and optional HIV testing at 20 different venues in Long Island between July and December 2011. Nine questions, developed from the NYS module of the Behavioral Risk Factor Surveillance System (BRFSS), were included in the interviews to measure the impact of the 2010 Testing Law. Participants were asked about medical care visits to five health care settings (hospital inpatient units, emergency departments, primary care, community health centers and other medical providers) during the year prior to the interview. For each health setting visited, respondents were asked if they were offered HIV testing and whether they subsequently accepted the offer.

Findings:

- The final sample of 345 eligible MSM were predominantly non-Hispanic white (66%), well educated (72%) with some college, Bachelors or higher degree and employed (76% employed full or part time.) The majority (89%) had health insurance that was primarily from private carriers (89%).
- Slightly more than 80% (n=289) of men reported visiting a healthcare provider in the 12 months preceding the NHBS interview. Visits to primary care providers (81%) and emergency departments (36%) were most common. Of those with healthcare visits, 42% (n=118) reported being offered an HIV test after the law took effect in September 2010.
- The proportion offered an HIV test varied by healthcare setting (range 14% to 56%), with the offer of an HIV test most common for those visiting community health centers and least likely for men who visited other medical providers. Only 15% of participants reported receiving an offer for HIV testing while visiting emergency rooms.
- The vast majority of those offered an HIV test accepted the offer (88%), regardless of the type of healthcare setting (range 63% to 89%). Acceptance was highest for those with medical visits to community health centers (89%) or primary care providers (88%), and lowest for those who visited other medical providers (63%) or emergency rooms (69%).

Project Contact: Tyler French, MPH
Bureau of HIV/AIDS Epidemiology
(518) 408-1159
e-mail: ptf01@health.state.ny.us

HIV Testing in Emergency Department Setting, 2006-2009

Purpose: To assess the number of New York State Outpatient Emergency Department (ED) patients who received treatment and an HIV screening test between 2006 and 2009.

Methodology: HIV screening test information was extracted from the Statewide Planning and Research Cooperative System (SPARCS) Outpatient ED Files, 2006 to 2009. The annual number of HIV screening tests among unduplicated ED patients was determined using 17 CPT codes, including 86701, 86702, 86703, and S3645.

Findings:

- The total number of ED visits has increased 11.5% from 5,619,968 in 2006 to 6,265,448 in 2009.
- The total number of unduplicated ED patients has increased 7.7% from 3,793,643 in 2006 to 4,084,119 in 2009.
- The number of HIV screening tests performed in ED's has increased 112% from 14,828 in 2006 to 31,479 in 2009.
- The number of unduplicated ED patients who received an HIV screening test has increased 110% from 14,692 in 2006 to 30,814 in 2009.
- The rate of HIV screening tests among unduplicated ED patients has increased from 39 per 10,000 patients in 2006 to 75 per 10,000 patients in 2009.
- ED patients in New York City accounted for 79% of all NYS ED patients who received an HIV screening test in 2006. This percentage increased to 85% by 2009.

Project Contact: Dennis S. Tsui, PhD
Medicaid Policy and Programs
(212) 417-4524
e-mail: dst02@health.state.ny.us

2011 Baruch College HIV Testing Survey

Purpose: In the summer of 2011, New York City Department of Health and Mental Hygiene's Bureau of HIV/AIDS Prevention and Control collaborated with Baruch College Survey Research to collect baseline data for a multi-year telephone survey of NYC residents. The survey included questions about healthcare use and the medical provider offer of an HIV test and provided a method to evaluate healthcare provider compliance with Chapter 308 of the Laws of 2010.

Methodology: A population-based telephone survey of NYC residents aged 18 and older from all five boroughs was conducted from June – August 2011. The landline sample was based on a random digit dial design, giving all listed and unlisted telephone numbers an equal chance of being selected. This sample was supplemented with a random sample of cell phone numbers selected from a wireless/mobile database. Adults living in houses without telephone service or living in group housing such as college dormitories were not included in the sample. Respondents were screened for residence in NYC and were offered the option of an interview in Spanish. The survey collected information on demographics, HIV testing behavior, healthcare use and sexual risk behavior.

Findings:

- Among 2,078 NYC residents aged 18-64 who were surveyed, 32% reported that they had never been tested for HIV.
- Of those 'never tested', more than three quarters had seen a medical provider in the prior 12 months and 7% had been offered an HIV test at their last healthcare visit.
- Of those who had not been offered an HIV test (93%), 77% reported that they would get an HIV test if recommended by their healthcare provider
- These results indicate that a subset of healthcare providers have not yet implemented the law.

Project Contact: Benjamin Tsoi, MD, MPH
NYCDOHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: btsoi@health.nyc.gov

NYC Department of Health and Mental Hygiene (NYC DOHMH) Community Health Survey

Purpose: The NYC DOHMH Community Health Survey (CHS) is an annual telephone survey conducted among approximately 10,000 non-institutionalized adults (18 years or older) living in NYC, which provides robust data on the health of New Yorkers. Modeled after the Center for Disease Control and Prevention's National Behavioral Risk Factor Surveillance System (BRFSS), the CHS includes questions about HIV testing behavior and other health practices. Specifically, questions about HIV testing include whether respondents have ever been tested for HIV and whether respondents have been tested in the 12 months prior to the survey.

Methodology: The CHS uses a stratified random sample to produce neighborhood and citywide estimates. Strata are defined using the United Hospital's Fund's (UHF) neighborhood designation, modified slightly for the addition of new zip codes since UHF's initial definitions. There are 42 UHF neighborhoods in NYC, each defined by several adjoining zip codes. A computer-assisted telephone interviewing (CATI) is used to collect the survey data. The CHS sampling frame was constructed with a list of telephone numbers provided by a commercial vendor. Houses without telephone service and institutional group housing, i.e., college dormitories, correctional facilities, were excluded from the sampling schema. Starting in 2009, a second sample consisting of cell-only households with New York City exchanges was added to the sample of residents with landline telephones.

Upon agreement to participate in the survey, one adult is randomly selected from the household to complete the interview. The average length of the survey is 25 minutes. Every year, the questionnaire is translated from English into Spanish, Russian, and Chinese, and in some years, live translation services are provided (including Hindi, Arabic, Farsi, and Haitian Creole). Typically, data collection begins in March of the study year and ends in November.

The New York City 2011 Community Health Survey (CHS) was conducted April 2011 through November 2011. With the release of 2011 CHS data, the NYC Department of Health and Mental Hygiene has updated its methodology to incorporate the 2010 Census population numbers. The 2011 CHS data also uses additional demographic variables in the calculation of survey weights that are used to make the data more representative and reduce the potential for bias. An evaluation of the impact of these methodological changes on trends is in progress, but preliminary analysis of the HIV testing data indicate that the methodological changes did not have an impact on the interpretation of trends from 2007-2011.

Findings:

- The NYC DOHMH reviewed CHS data from 2007 to 2010 to examine the trend in the percent of NYC residents aged 18-64 who have ever been tested for HIV. CHS data show that percent of NYC residents who say they have ever been tested increased from 63% in 2007 to 67% in 2010. Preliminary data from 2011 suggests that this increasing trend continues to 68% (CI: 66.0%-70.1%).
- CHS data indicate that the proportion of NYC residents who say they have been tested for HIV during the 12 months prior to the survey is also increasing, from 33% in 2007 to 35% in 2010. Preliminary data from 2011 suggests that this increasing trend also continues to 36%; (95% CI: 34%%-38%).

Project Contact: Blayne Cutler, MD, PhD
NYCDPHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: bcutler@health.nyc.gov

Primary Care Information Project – Community Health Centers and Small Practices

Purpose: To use practice-level electronic health records to assess the number of persons who are tested for HIV infection by primary care clinicians.

Methodology: The New York City Department of Health and Mental Hygiene's (NYC DOHMH) Primary Care Information Project (PCIP) supports the adoption and use of prevention-oriented electronic health records (EHRs) by providers in NYC's underserved communities. EHRs can be programmed to alert providers to screen patients for selected conditions such as HIV. For this evaluation, PCIP EHR data were analyzed from 21 Community Health Centers (CHCs) and 304 small private practices (<10 providers per practice) to count the number of HIV tests ordered for patients 18-64 years of age between January 2009 and March 2012. In addition, NYC DOHMH conducted a sub-analysis of PCIP data comparing HIV testing in small private practices in the Bronx to those in the other four boroughs. This component of the evaluation was conducted to assess the impact of *The Bronx Knows*, a borough-wide pilot scale up of HIV testing involving more than 75 clinical and nonclinical community partners to increase voluntary HIV testing so that all borough residents would learn their HIV status.

Findings:

- In the 21 CHCs, the number of patients for whom an HIV test was ordered increased from over 8,700 patients in the first quarter of 2009 (pre-enactment) to over 33,000 patients in the first quarter of 2012 (post-enactment), a 380% increase.
- During the study period, the percent of HIV tests ordered for eligible patients (aged 18-64) increased from 16% to 46% in CHCs.
- In 304 small private practices, there was a ten-fold increase in HIV tests ordered, from 2,726 tests pre-enactment to 27,211 post-enactment.
- Between 2009 and 2012, the percentage of all eligible patients (aged 18-64) tested across small private practices increased from 3% to 10%.
- *The Bronx Knows* project contributed to increased screening coverage in pilot sites. Between January 2009 and March 2012, the percentage of eligible patients tested for HIV in 38 Bronx small private practices increased from 2% to 16%; the percentage tested in 266 small private practices in other NYC boroughs increased from 3% to 9% during the same interval.
- Limitations: These findings were based on EHR data and may not be generalizable to all practices in the five NYC boroughs.

Project Contact: Benjamin Tsoi, MD, MPH
NYCDOHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: btsoi@health.nyc.gov

New York City Health and Hospitals Corporation

Purpose: Since 2005, New York City Health and Hospitals Corporation (HHC) has promoted HIV testing as a part of routine patient care in its facilities which includes 11 hospitals and six diagnostic and treatment centers (DT&Cs). Following the passage of Chapter 308 of the Laws of 2010, HHC conducted a thorough review of corporate-wide policies and procedures related to HIV testing. Logistical changes were made to implement the new law including: streamlining HIV testing consent; disseminating key features of the law to appropriate hospital staff; and updating corporate-wide HIV testing protocols as well as directing facility staff to implement new policies and procedures such as broadening the integrated inclusion of HIV screening in the electronic medical record system.

Methodology: HHC data on HIV testing in all HHC hospitals and DT&Cs were analyzed for July 2009 – June 2011. Data for July 2009 – June 2010 were compared to July 2010 – June 2011 to assess changes in the proportion of patients tested. HHC data are available on a Fiscal Year basis (July – June) and were not available for 2012 at the time of this report. The data represent unique patients tested during each fiscal year. The data were analyzed in two ways: the first is a comparison of changes in the volume of testing based on the number of unduplicated patients tested between the two time periods in each facility; and second, changes in the rate of testing which is represented by the annual proportion of the age-eligible unduplicated patient population that received an HIV test in each facility.

Findings:

- Comparing July 2009- June 2010 and July 2010-June 2011, there was a 3.68% increase in the volume of HIV testing across the 11 HHC hospitals and 6 D&TCs.
 - The change in testing volume at the 11 hospital facilities ranged widely from a 21.9% increase in one hospital to a 16.3% decrease in another.
 - Testing volume in D&TCs also varied from a 40.9% increase in one D&TC to a 9.1% decrease in another.
- The proportion of age-eligible unduplicated patients reached with an HIV test across the 11 HHC hospitals and 6 D&TCs shows that the testing rate for July 2009- June 2010 was 17.19% and increased to 17.71% for July 2010-June 2011.
 - The change in the rate of patients that received an HIV test varied greatly. The range within the 11 hospitals went from a 19.0% increase in one facility to a 15.6% decrease in another; while in the 6 D&TCs, the range went from a 36.7% increase in one facility to a 1.9% decrease for another facility.

- HHC implemented efforts to routinely offer HIV testing years before the law was passed with increases noted in the years prior to its enactment. While it is difficult to assess the impact of the law on testing increases, it appears to have had a positive impact.

Project Contact: Blayne Cutler, MD, PhD
NYCDPHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: bcutler@health.nyc.gov

Linkage to Care Among Persons with Newly Diagnosed HIV/AIDS, NYC, 2009-2011

Purpose: To assess the proportion of individuals newly diagnosed with HIV who were linked to care within one and three months of their HIV diagnosis.

Methodology: New York City Department of Health and Mental Hygiene (NYC DOHMH) HIV/AIDS surveillance data for individuals newly diagnosed with HIV were used to examine linkage to care rates for the period of October 2009 to June 2011. Due to the lag in surveillance data, data beyond June 2011 were not available at the time of this report. Linkage to care was considered to have occurred if any HIV viral load (VL) or CD4 test performed within one month (31 days) or three months (91 days) of HIV diagnosis, following a seven-day lag, was reported to DOHMH. (The seven-day lag is used to exclude any VL or CD4 test ordered at the time of diagnosis that may not have been followed by a medical visit.) Analysis was conducted for two time periods: October 2009 to September 2010 (baseline, pre-enactment) and October 2010 to June 2011 (follow-up, post-enactment).

Findings:

- Comparison of the pre-law and post-law enactment periods indicates that linkage to care has improved slightly.
 - Linkage within 3 months of diagnosis increased from 66.1% pre-enactment to 68.3% post-enactment, a relative increase of 3.3%.
 - Linkage within one month of diagnosis increased from 54.5% pre-enactment to 59.5% post-enactment, a relative increase of 9.2%.

Project Contact: Benjamin Tsoi, MD, MPH
NYCDOHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: btsoi@health.nyc.gov

New York City Department of Health and Mental Hygiene (NYC DOHMH) Medical Appointment Tracking

Purpose: The NYC DOHMH conducts partner services for persons newly diagnosed with HIV infection at DOHMH STD clinics and high volume, clinical and nonclinical settings in NYC. DOHMH staff provides assistance to patients with scheduling and attending a medical care appointment following their initial diagnosis. For this evaluation, partner services information on medical care appointment status was used as an indicator of the number of patients with newly-diagnosed HIV who accessed medical care following their diagnosis.

Methodology: DOHMH Bureau of Sexually Transmitted Disease Control (BSTDC) conducts partner services in nine DOHMH STD clinics and DOHMH's Field Services Unit (FSU) conducts partner services in high volume, clinical and nonclinical facilities. During interviews and follow up with newly-diagnosed HIV patients, partner services staff collect information on whether the patient made an initial medical appointment and if the patient attended the scheduled medical appointment. The information is collected on standardized partner services interview records. Data for this analysis is based on cases assigned to partner services from October 2010 to December 2011.

Findings:

- During the evaluation period, BSTDC provided partner services to 607 patients newly-diagnosed with HIV in the nine DOHMH STD clinics.
 - 445 (73%) had an appointment for HIV medical care following their diagnosis and of these patients, 278 (62%) were confirmed to have attended their first appointment.
- During the same time period, FSU provided partner services to 1,683 newly diagnosed index patients and newly diagnosed partners.
 - 1,542 (92%) had a documented scheduled appointment for care within three months of diagnosis
 - 1, 496 (97% of those with an appointment) attended the medical appointment
 - Of the 46 who did not attend the medical appointment:
 - 11 (24%) could not be located for an interview;
 - 7 (15%) moved to another jurisdiction and could not be followed;
 - 8 (17%) refused linkage to medical care;
 - 2 (4%) linked to medical care more than three months following diagnosis; and,
 - 18 (39%) did not attend for unspecified reasons.
- These results may underestimate the number of patients who accessed medical care following their initial diagnosis since DOHMH staff were unable to interview all patients or to follow interviewed patients to confirm attendance at the scheduled medical appointment.

Project Contact: Blayne Cutler, MD, PhD
NYCDOHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: bcutler@health.nyc.gov

NYC Department of Health and Mental Hygiene (NYC DOHMH) Employee Survey

Purpose: As a component of an overall effort to evaluate the impact of the 2010 HIV Testing Law, NYC DOHMH conducted a survey among its employees in the summer of 2012 to assess their experiences with the offer of HIV testing when seeking health care at facilities in NYC. The survey questions inquired about respondents' health care use within a one-year recall period and whether they were offered an HIV test in that context.

Methodology: All NYC DOHMH employees with an email address (n=5,321) received a link to the online survey, although analysis was limited to individuals aged 18-64 (n=5,025). Employees were given four days to complete the survey. A total of 923 employees aged 18-64 completed the survey (18% response rate). The response rate varied by age, with respondents aged 18-24 more likely to complete the survey (25%) than individuals in the 25-44 (21%) or 45-64 (16%) age categories. The majority (54%) of respondents were aged 45-64 years.

Findings:

- Among the 822 (89%) individuals who had a medical care visit of any type in New York State since June, 2011, nearly one-third (29%) said they were offered an HIV test without asking.
- The proportion reporting the offer of an HIV test varied by age group: 37% of those aged 25-44 reported being offered an HIV test, compared to only 17% of respondents aged 45-64.
- Of all individuals who were offered a test, the majority reported that they received the offer in a primary care setting (84%), with smaller proportions reporting offers for testing during an emergency room visit (16%) or during an overnight hospitalization (5%).

Project Contact: Blayne Cutler, MD, PhD
NYCDOHMH Bureau of HIV/AIDS Prevention and Control
(347) 396-7649
e-mail: bcutler@health.nyc.gov