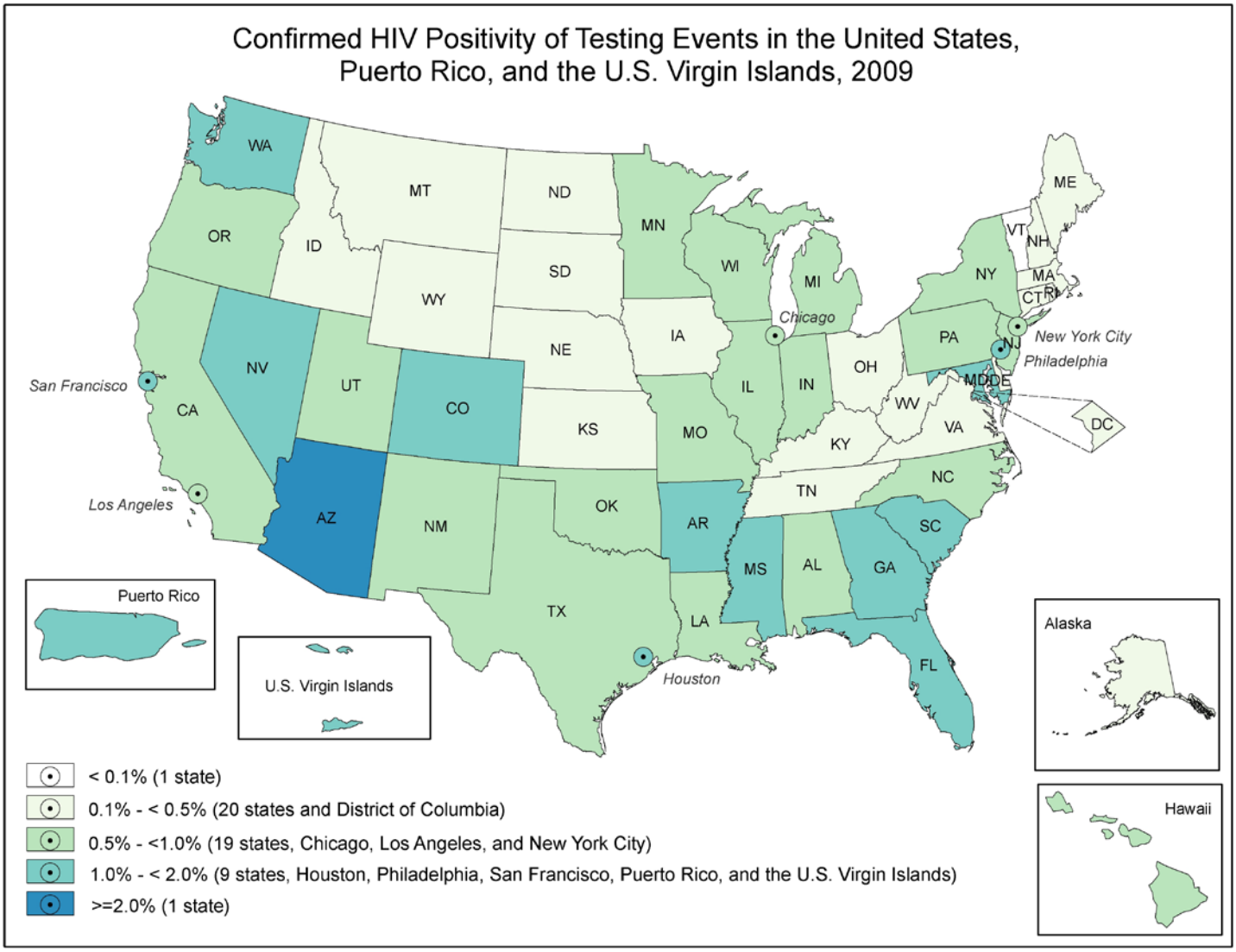
HIV Testing at CDC-Funded Sites, United States, Puerto Rico, and the U.S. Virgin Islands, 2008-2009



National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention

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INTRODUCTION

Human immunodeficiency virus (HIV) testing is essential for improving the health of people living with HIV and reducing new HIV infections. HIV testing improves the health of people living with HIV by identifying undiagnosed HIV infection and linking persons with HIV to medical care, treatment, and prevention services. HIV testing also significantly reduces the risk of HIV transmission among those who learn they are living with HIV. Studies have shown that the prevalence of high-risk sexual behavior is reduced substantially after people become aware of their HIV positive status.[1] Of the estimated 1.1 million adults and adolescents living with HIV in the United States at the end of 2006, 21% were unaware of their infection.[2] Among all persons diagnosed with HIV infection in 2008, 33% progressed to the acquired immunodeficiency syndrome (AIDS) within one year after HIV infection was diagnosed.[3] Most of these persons were likely infected with HIV for years before they were diagnosed. Early diagnosis of HIV, which relies on HIV testing, allows infected persons to benefit from medical care that helps reduce disease progression and from interventions that help prevent further HIV transmission. Although the percentage of U.S. adults who have ever been tested for HIV has increased slightly in recent years, approximately 55% in 2009 have never been tested for HIV.[4]

To increase the number of persons who are aware of their HIV status, CDC issued recommendations in 2006 to implement HIV screening as part of routine medical care for all persons aged 13-64 years in health-care settings.[5] Major revisions from previously published guidelines included HIV screening after the patient is notified that testing will be performed unless the patient declines (opt-out screening), HIV screening at least annually for persons at high risk for HIV, and not requiring prevention counseling as part of HIV screening. CDC is currently updating guidelines from 2001 for persons seeking HIV testing services in non-health-care settings (i.e., HIV testing sites, outreach).[6]

CDC began funding health departments to provide HIV counseling and testing (CT) services in 1985, when the first HIV tests became available.[7] Beginning in 1989, the national HIV Counseling and Testing System (CTS) has been used to monitor CDC-funded HIV CT services.[8] These services are provided at sexually transmitted disease (STD) clinics, family planning clinics, prenatal clinics, hospitals, community health centers, correctional facilities, drug treatment centers, tuberculosis (TB) clinics, HIV CT centers, and field (including street outreach) settings. Staff at these sites collect information about the persons tested (e.g., demographic information, behavioral risk factors), current and prior test results, receipt of test results, and referrals. Information about clients is collected by a service provider for each HIV testing episode, sent to an appropriate health department, and then assessed for completeness and accuracy. This information is then reported by the appropriate health department to CDC on a quarterly basis and can be used to determine whether HIV testing program goals are being achieved.

On a quarterly basis, health departments have had the option in the past to submit to CDC either test-level, standardized data (i.e., data files with data on individual tests) or aggregate data (i.e., tables of summary counts of information). Health departments providing test-level data submit standardized variables, using the CDC HIV CT form or a compatible health department-specific form. Health departments providing aggregate-level data submit a minimal number of variables (e.g., number of HIV tests, number of HIV positive tests).

Beginning in the fourth quarter of 2007, CDC introduced a set of National HIV Prevention Program Monitoring and Evaluation (NHM&E) variables that include a number of new and revised HIV testing variables, and revised the HIV testing form for use beginning January 2008. CDC encouraged health departments to use one of two CDC developed data systems for reporting NHM&E HIV testing variables to CDC: the web-based Centralized Program Evaluation and Monitoring System (CPEMS) or a scanning system that requires reporting to CDC with an encrypted XML file via the Secure Data Network (SDN). Health departments who do not use

either of these two systems are provided data specifications for reporting variables to CDC in encrypted XML files from their own systems, which are considered external to PEMS (and known as "XPEMS").

During 2004-2009, CDC funded 59 health departments to provide HIV testing services under the HIV Prevention Projects Program Announcement 04012 (PA 04012).[9] The 59 health departments included in this report are 50 state health departments, six municipal or county health departments (Chicago, Houston, Los Angeles, New York City, Philadelphia, and San Francisco), the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. In September, 2007, CDC funded 23 health departments (California, Chicago, Connecticut, District of Columbia, Florida, Georgia, Houston, Los Angeles, Louisiana, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York City, New York State, North Carolina, Ohio, Pennsylvania, Philadelphia, South Carolina, Tennessee, and Virginia) for a three-year expanded HIV testing initiative entitled, "Expanded and Integrated Human Immunodeficiency Virus (HIV) Testing for Populations Disproportionately Affected by HIV, Primarily African Americans."[10] In 2008, CDC funded an additional two health departments (Mississippi and Texas). Under this initiative, CDC's goal is each year to test 1.5 million persons for HIV and identify 20,000 HIV-infected persons who are unaware of their status. CDC strongly encouraged these health departments to focus at least 80% of their expanded program activities in health-care settings and in non-health-care settings that have a history of a greater than or equal to 2% rate of HIV-positive test results. All CDC-funded HIV testing programs including the expanded HIV testing initiative should monitor the yield of newly diagnosed HIV infections and the linkage of clients to medical care.[5] Programmatic activities that health departments planned and implemented under expanded HIV testing initiative have been assessed for the first and second years of funding.[11]

Monitoring and evaluation, which includes data quality assurance, is critical to the success of local HIV prevention and clinical care programs. Health departments are encouraged to develop and use data quality assurance protocols and procedures to improve and maintain high-quality data.[12] Additionally, as required in CDC program announcements that support CDC-funded testing activities, all CDC grantees must put in place processes to ensure program quality (e.g., providing HIV test results to clients and linking confirmed HIV-positive clients to medical care, HIV prevention services, and partner services).[9,10]

PURPOSE OF REPORT

This report is intended to be used in conjunction with other relevant information (e.g., progress reports, surveillance data, and census data) by HIV program managers and policy makers, HIV testing service providers, CDC Project Officers, evaluators, researchers, and others interested in the public health implications of HIV prevention program activity. HIV testing data should be utilized as a tool to learn systematically from our work, inform program practice, and more rigorously and credibly document our program progress. Finally, the ultimate goal of any data collection and utilization should be to contribute to greater program effectiveness. HIV testing data have been used at the national and local levels for HIV prevention policy, program decision-making, program monitoring, evaluation activities, research, presentations, and reports.[8,13-23] This report provides data related to all three primary goals of the "National HIV/AIDS Strategy for the United States:" 1) reduce the number of persons who become HIV infected, 2) increase access to care and improve health outcomes for persons living with HIV, and 3) reduce HIV-related health disparities,[24] and answers the following national HIV testing monitoring and evaluation questions from NHM&E testing data received by CDC from health departments through June 2011 for HIV testing events conducted in 2008-2009:

1. What is the total number of testing events that have been conducted?

    a. nationally and by health department — Tables 1a and 1b

    b. by gender (i.e., female, male, and transgender) — Tables 2a and 2b
    c. by age group
    d. by race/ethnicity
    e. by testing site type
    f. by use of rapid tests
    g. by gender (i.e., female, male, and transgender) and age group
    h. by gender (i.e., female, male, and transgender) and race/ethnicity
    i. by gender (i.e., female, male, and transgender) and testing site type
    j. by gender (i.e., female, male, and transgender) and use of rapid tests

2. What is the total number of newly identified confirmed HIV-positive testing events that have been conducted?

    a. nationally and by health department — Tables 1a and 1b

    b. by gender (i.e., female, male, and transgender) — Tables 3a and 3b
    c. by age group
    d. by race/ethnicity
    e. by testing site type
    f. by use of rapid tests
    g. by gender (i.e., female, male, and transgender) and age group
    h. by gender (i.e., female, male, and transgender) and race/ethnicity
    i. by gender (i.e., female, male, and transgender) and testing site type
    j. by gender (i.e., female, male, and transgender) and use of rapid tests

3. Of all confirmed and preliminary HIV-positive testing events, for what percentage did the clients receive the results?

    a. nationally — Tables 4a and 4b
    b. by gender (i.e., female, male, and transgender)

c. by age group
d. by race/ethnicity
e. by testing site type
f. by use of rapid tests

4. Of all confirmed HIV-positive testing events, what is the percent distribution by risk category?

    a. nationally — Tables 5a and 5b
    b. by gender (i.e., female and male)

5. For both confirmed and newly identified confirmed HIV-positive testing events, for what percentage were clients linked to HIV medical care?

    a. nationally — Tables 6a and 6b

6. For both confirmed and newly identified confirmed HIV-positive testing events, for what percentage were clients referred to HIV prevention services?

    a. nationally — Tables 6a and 6b

7. For both confirmed and newly identified confirmed HIV-positive testing events, for what percentage were clients referred to partner services?

    a. nationally — Tables 6a and 6b

CDC-funded HIV testing services are monitored with data reported by grantees in aggregate through Annual Progress Reports (APRs) and at the individual test level through the NHM&E data. These NHM&E data, which are a subset of all HIV tests reported in the APRs, are submitted to CDC quarterly using a standardized format. This report includes data from all health departments, but primarily focuses on NHM&E test-level data from 53 health department in 2008 and 54 health departments in 2009. Six health departments (Alabama, Delaware, Los Angeles, Mississippi, North Carolina, and West Virginia) in 2008 and five health departments (Alabama, Delaware, Los Angeles, Mississippi, and North Carolina) in 2009 submitted only aggregate-level data to CDC. In 2008, some grantees submitted a portion of their testing data through the HIV CTS before their transition to submitting NHM&E data. Aggregate-level are included in Tables 1a and 1b and HIV CTS data are included in Table 1a; analyses for all other tables and figures in this report exclude aggregate-level and HIV CTS data. Newly identified confirmed HIV-positive results are not available for aggregate-level data.

Compared to previously published CDC annual HIV testing reports,[8,13-17] this report includes test-level data from more health departments (n=54) than ever before since CDC annual reporting on CDC-funded HIV testing began in 1993 and documents the highest number of HIV testing events (3.2 million in 2009). This report supports an increasing trend of HIV testing from 2006 to 2009, which is consistent with the increase in testing from another data source.[4] Additionally, for the first time, data are included on transgender persons, multi-racial persons, rapid testing and preliminary HIV-positive testing events, linkage to HIV medical care, referral to HIV prevention services, and referral to partner services.

RESULTS

Number of HIV Testing Events and HIV Positivity

In 2008, 59 health departments reported to CDC 2,775,464 HIV testing events, of which 2,185,251 (79%) were available as test-level data (Table 1a). The overall confirmed HIV positivity of testing events was 0.9%. The newly identified confirmed HIV positivity of testing events reported by the 53 health departments providing test-level data was 0.7%.

Of the 53 health departments providing test-level data in 2008, the highest newly identified confirmed HIV positivity was in Arizona (2.1%), followed by Houston (1.8%) and San Francisco (1.5%); the lowest newly identified confirmed HIV positivity was in North Dakota (<0.1%), followed by District of Columbia (0.1%), Maine (0.1%), Montana (0.1%), Vermont (0.1%), and Wyoming (0.1%) (Table 1a).

In 2009, 59 health departments reported to CDC 3,190,732 HIV testing events, of which 2,620,877 (82%) were available as test-level data (Table 1b). The overall confirmed HIV positivity of testing events was 0.8%. The newly identified confirmed HIV positivity of testing events reported by the 54 health departments providing test-level data was 0.6%.

Of the 54 health departments providing test-level data in 2009, the highest newly identified confirmed HIV positivity was in Arizona (1.6%) and Houston (1.6%), followed by San Francisco (1.4%); the lowest newly identified confirmed HIV positivity was in Vermont (0.0%), followed by Chicago (0.1%), Montana (0.1%), New Hampshire (0.1%), North Dakota (0.1%), and Wyoming (0.1%) (Table 1b).

Number of HIV Testing Events by Select Characteristics

Age group

In 2008 and 2009, the highest percentage of all HIV testing events conducted was among persons aged 20-29 years (41% and 40%, respectively), followed by persons aged 30-39 years (21%); the lowest percentage of all HIV testing events conducted was among persons less than 13 years old (<1%) (Tables 2a and 2b).

Gender

In 2008 and 2009, a similar percentage of all HIV testing events conducted was among females and males (49% vs. 50% and 49% vs. 51%, respectively) (Figures 2a and 2b).

Age group and gender

Among females in 2008 and 2009, the highest percentage of all HIV testing events conducted was among those aged 20-29 years (43%), followed by those aged 30-39 years (20%); the lowest percentage of all HIV testing events conducted was among females less than 13 years old (<1%) (Tables 2a and 2b).

Among males in 2008 and 2009, the highest percentage of all HIV testing events conducted was among those aged 20-29 years (38%), followed by those aged 30-39 years (21%); the lowest percentage of all HIV testing events conducted was among males less than 13 years old (<1%) (Tables 2a and 2b).

Among transgender persons in 2008 and 2009, the highest percentage of all HIV testing events conducted was among those aged 20-29 years (46%), followed by those aged 30-39 years (24% and 25%, respectively); the lowest percentage of all HIV testing events conducted was among transgender persons less than 13 years old (<1%) (Tables 2a and 2b).

Race/Ethnicity

In 2008 and 2009, the highest percentage of all HIV testing events conducted was among blacks/African Americans (42% and 44%, respectively), followed by whites (31% and 29%, respectively) and Hispanics (18% and 19%, respectively); the lowest percentage of all HIV testing events conducted was among Native Hawaiians or Pacific Islanders (0.3%), followed by American Indians or Alaska Natives (0.5%) and multi-racial persons (0.9% and 1.1%, respectively) (Tables 2a and 2b).

Race/Ethnicity and gender

Among females in 2008 and 2009, the highest percentage of all HIV testing events conducted was among blacks/African Americans (44% and 45%, respectively), followed by whites (29% and 27%, respectively) and Hispanics (19%); the lowest percentage of all HIV testing events conducted was among Native Hawaiians or Pacific Islanders (0.2% and 0.3% , respectively), followed by American Indians or Alaska Natives (0.5%) and multi-racial persons (0.9% and 1.1%, respectively) (Tables 2a and 2b).

Among males in 2008 and 2009, the highest percentage of all HIV testing events conducted was among blacks/African Americans (41% and 42%, respectively), followed by whites (32% and 30%, respectively) and Hispanics (18% and 19%, respectively); the lowest percentage of all HIV testing events conducted was among Native Hawaiians or Pacific Islanders (0.4% and 0.3%, respectively), followed by American Indians or Alaska Natives (0.6% and 0.5%, respectively) and multi-racial persons (0.9% and 1.1%, respectively) (Tables 2a and 2b).

Among transgender persons in 2008 and 2009, the highest percentage of all HIV testing events conducted was among blacks/African Americans (29% and 33%, respectively), followed by Hispanics (27% and 26%, respectively) and whites (26% and 24%, respectively); the lowest percentage of all HIV testing events conducted was among American Indians or Alaska Natives (1.3% and 1.6%, respectively), followed by Native Hawaiians or Pacific Islanders (1.8% and 1.6%, respectively) (Tables 2a and 2b).

Testing site type

In 2008 and 2009, the highest percentage of all HIV testing events conducted was at health-care facilities (61% and 64%, respectively), followed by non-health-care facilities (27% and 25%, respectively); the lowest percentage of all HIV testing events conducted was at correctional facilities (7.2% and 8.2%, respectively) (Tables 2a and 2b).

Rapid test used in testing event

In 2008 and 2009, a higher percentage of all HIV testing events included rapid tests (56% and 61%, respectively) than testing events that did not include rapid tests (44% and 39%, respectively) (Tables 2a and 2b).

HIV Positivity by Select Characteristics

Age group

In 2008 and 2009, the highest newly identified confirmed HIV positivity was among persons aged 40-49 years (1.1% and 1.0%, respectively), followed by persons aged 30-39 (0.9% and 0.7%, respectively), greater than or equal to 50 years old (0.9% and 0.7%, respectively), and less than 13 years (0.7% and 0.6%, respectively); the lowest newly identified confirmed HIV positivity was among persons aged 13-19 years (0.2%), followed by persons aged 20-29 years (0.5%) (Tables 3a and 3b). In both years, persons aged 20-39 years accounted for the highest percentage of all HIV tests conducted (62% and 61%, respectively) and the highest percentage of all newly identified HIV-positive tests (58%) (Figures 1a and 1b).

Gender

In 2008 and 2009, the highest newly identified confirmed HIV positivity was among transgender persons (2.4% and 2.6%, respectively); the lowest newly identified confirmed HIV positivity was among females (0.4% and 0.3%, respectively), followed by males (1.0% and 0.9%, respectively) (Tables 3a and 3b). In both years, a similar percentage of all HIV tests conducted was among females and males (49% vs. 50% and 49% vs. 51%, respectively); however, males accounted for the majority (74% in 2008 and 75% in 2009) of all newly identified HIV-positive tests (Figures 2a and 2b).

Age group and gender

Among females in 2008 and 2009, the highest newly identified confirmed HIV positivity was among those aged 40-49 years (0.8% and 0.7%, respectively), followed by those greater than or equal to 50 years old (0.7% and 0.6%, respectively); the lowest newly identified confirmed HIV positivity was among females aged 13-19 years (0.1%), followed by females aged 20-29 years (0.2%) (Tables 3a and 3b). In both years, females aged 20-39 years accounted for the highest percentage of all HIV tests conducted among females (63%) and the highest percentage of all newly identified HIV-positive tests among females (51% and 50%, respectively) (Figures 3a and 3b).

Among males in 2008 and 2009, the highest newly identified confirmed HIV positivity was among those aged 40-49 years (1.3% and 1.2%, respectively), followed by those aged 30-39 years (1.2% and 1.0%, respectively) and greater than or equal to 50 years old (1.1% and 0.9%, respectively); the lowest newly identified confirmed HIV positivity was among males aged 13-19 years (0.4%) (Tables 3a and 3b). In both years, males aged 20-39 years accounted for the highest percentage of all HIV tests conducted among males (59%) and the highest percentage of all newly identified HIV-positive tests among males (59% and 61%, respectively) (Figures 3a and 3b).

Among transgender persons in 2008, the highest newly identified confirmed HIV positivity was among those aged 40-49 years (3.2%), followed by those greater than or equal to 50 years old (3.0%), (Table 3a). Among transgender persons in 2009, and using denominators with numbers that provide a relatively reliable percentage (see Technical Notes), the highest newly identified confirmed HIV positivity was among those aged 30-39 years (3.4%), followed by those aged 20-29 years (2.5%) (Table 3b).

Race/Ethnicity

In 2008 and 2009, the highest newly identified confirmed HIV positivity was among blacks/African Americans (0.9% and 0.8%, respectively), followed by Hispanics (0.7% and 0.6%, respectively); the lowest newly identified confirmed HIV positivity was among American Indians or Alaska Natives (0.4%), Native Hawaiians or Pacific Islanders (0.4%), and Asians (0.4% in 2009) (Tables 3a and 3b). In both years, blacks/African Americans accounted for the highest percentage of all HIV tests conducted (42% and 44%, respectively) and the highest percentage of all newly identified confirmed HIV-positive tests (54%) (Figures 4a and 4b).

Race/Ethnicity and gender

Among females in 2008 and 2009, the highest newly identified confirmed HIV positivity was among blacks/African Americans (0.5%); the lowest newly identified confirmed HIV positivity was among Asians (0.1%), American Indians or Alaska Natives (0.1% in 2009), and Native Hawaiians or Pacific Islanders (0.1% in 2009) (Tables 3a and 3b). In both years, black/African American females accounted for the highest percentage of all HIV tests conducted among females (44% and 45%, respectively) and the highest percentage of all newly identified confirmed HIV-positive testing events among females (65% and 67%, respectively) (Figures 5a and 5b).

Among males in 2008 and 2009, the highest newly identified confirmed HIV positivity was among blacks/African Americans (1.2% and 1.1%, respectively) and multi-racial persons (1.2% in 2008), followed by

Hispanics (1.1% and 1.0%, respectively); the lowest newly identified confirmed HIV positivity was among Native Hawaiians or Pacific Islanders (0.6%) and American Indians or Alaska Natives (0.6% in 2008) (Tables 3a and 3b). In both years, black/African American males accounted for the highest percentage of all HIV tests conducted among males (41% and 42%, respectively) and the highest percentage of all newly identified confirmed HIV-positive testing events among males (50%) (Figures 5a and 5b).

Among transgender persons in 2008 and 2009, the highest newly identified confirmed HIV positivity was among blacks/African Americans (4.5% and 4.4%, respectively), followed by Hispanics (2.7% and 2.5%, respectively) (Tables 3a and 3b).

Testing site type

In 2008, the highest newly identified confirmed HIV positivity was at non-health-care facilities (0.9%); the lowest newly identified confirmed HIV positivity was at health-care facilities (0.6%) and correctional facilities (0.6%) (Table 3a). In 2009, the highest newly identified confirmed HIV positivity was at non-health-care facilities (0.8%); the lowest newly identified confirmed HIV positivity was at correctional facilities (0.4%) (Table 3b). In both years, health-care facilities accounted for the highest percentage of all HIV testing events conducted (61% and 63%, respectively) and the highest percentage of newly identified confirmed HIV-positive testing events (57% and 62%, respectively) (Figures 6a and 6b).

Rapid test used in testing event

In 2008, the newly identified confirmed HIV positivity was similar (0.7%) among testing events that did not include rapid tests and testing events that did include rapid tests (Tables 3a and 3b). In 2009, the newly identified confirmed HIV positivity was slightly higher among testing events that did not include rapid tests (0.7%) than among testing events that did include rapid tests (0.6%).

Receipt of HIV Test Results

In 2008 and 2009, the percentages of testing events that were followed up with receipt of HIV test results were 80% and 79%, respectively, among all HIV testing events and 91% and 93%, respectively, among testing events of persons with newly identified HIV (Tables 4a and 4b).

Age group

In 2008 and 2009, the percentage of all testing events that were followed up with receipt of HIV test results was highest among persons greater than or equal to 40 years old (86%-87% and 85%-87%, respectively) and lowest for persons aged 13-19 years (73% and 71%, respectively) (Tables 4a and 4b). In 2008, for persons with newly identified confirmed HIV, the percentage of testing events that were followed up with receipt of HIV test results was similar for all age groups (90%-93%). In 2009, for persons with newly identified confirmed HIV, the percentage of testing events that were followed up with receipt of HIV test results was highest among persons less than 13 years old (97%) and lowest among persons aged 13-19 years (91%).

Gender

In 2008 and 2009, the percentage of all testing events that were followed up with receipt of HIV test results was highest among transgender persons (92% and 94%, respectively) and lowest among females (77% and 74%, respectively), followed by males (84% and 83%, respectively) (Tables 4a and 4b). In 2008, for persons with newly identified confirmed HIV, the percentage of testing events that were followed up with receipt of HIV test results was highest among females (92%), followed by males (91%), and lowest among transgender persons (90%). In 2009, for persons with newly identified confirmed HIV, the percentage of testing events that were followed up with receipt of HIV test results was highest among transgender persons (97%) and lowest among females (93%) and males (93%).

Race/Ethnicity

In 2008 and 2009, the percentage of all testing events that were followed up with receipt of HIV test results was highest among Asians (88%) and Native Hawaiians or Pacific Islanders (88% in 2009), and lowest among blacks/African Americans (77%) and whites (77% in 2009) (Tables 4a and 4b). In 2008, for persons with newly identified confirmed HIV, the percentage of testing events that were followed up with receipt of HIV test results was highest among Native Hawaiians or Pacific Islanders (100.0%), followed by American Indians or Alaska Natives (96%), and lowest among multi-racial persons (87%). In 2009, for persons with newly identified confirmed HIV, the percentage of testing events that were followed up with receipt of HIV test results was highest among Asians (97%), followed by American Indians or Alaska Natives (96%) and Hispanics (96%), and lowest among blacks/African Americans (92%).

Testing site type

In 2008, the percentage of all testing events that were followed up with receipt of HIV test results was highest at correctional facilities (92%), followed by non-health-care facilities (90%), and lowest at health-care facilities (74%) (Table 4a). In 2009, the percentage of all testing events that were followed up with receipt of HIV test results was highest at non-health-care facilities (91%), followed by correctional facilities (84%), and lowest at health-care facilities (73%) (Table 4b). For persons with newly identified confirmed HIV in 2008, the percentage of testing events that were followed up with receipt of HIV test results was highest at non-health-care facilities (95%), followed by correctional facilities (94%), and lowest at health-care facilities (90%) (Table 4a). For persons with newly identified confirmed HIV in 2009, the percentage of testing events that were followed up with receipt of HIV test results was highest at non-health-care facilities (97%), followed by health-care facilities (91%), and lowest at correctional facilities (86%) (Table 4b).

Rapid test used in testing event

In 2008 and 2009, the percentage of all testing events that were followed up with receipt of HIV test results was higher among testing events that included rapid tests (95% and 93%, respectively) than testing events that did not include rapid tests (60% and 54%, respectively (Tables 4a and 4b). For persons with newly identified confirmed HIV in 2008 and 2009, the percentage of testing events that were followed up with receipt of HIV test results was higher among testing events that included rapid tests (99%) than testing events that did not include rapid tests (80% and 84%, respectively).

Confirmed HIV-Positive Testing Events by Risk Category

In 2008 and 2009, the highest percentage of all confirmed HIV-positive testing events was among persons reporting male-to-male sexual contact (35%), followed by persons reporting high-risk heterosexual contact (29% and 26%, respectively); the lowest percentage of all confirmed HIV-positive testing events was among persons reporting both male-to-male sexual contact and injection drug use (IDU) (1.5% and 1.4%, respectively) (Tables 5a and 5b).

Risk category and gender

Among females in 2008 and 2009, the highest percentage of all confirmed HIV-positive testing events was among those reporting high-risk heterosexual contact (53% and 51%, respectively); the lowest percentage of all confirmed HIV-positive testing events was among females with no acknowledged risk (2.8% and 4.5%, respectively) (Tables 5a and 5b).

Among males in 2008 and 2009, the highest percentage of all confirmed HIV-positive testing events was among those reporting male-to-male sexual contact (48% and 47%, respectively); the lowest percentage of all confirmed HIV-positive testing events was among those reporting both male-to-male sexual contact and IDU (2.0% and 1.9%, respectively) (Tables 5a and 5b).

Linkage to HIV Medical Care, Referral to HIV Prevention Services, and Referral to Partner Services

In 2008, of persons with a confirmed HIV-positive testing event, 63% were linked to medical care; 57% were referred to HIV prevention services; and 68% were referred to partner services (Table 6a). In 2009, of persons with a confirmed HIV-positive testing event, 71% were linked to medical care; 58% were referred to HIV prevention services; and 69% were referred to partner services (Table 6b).

TABLES AND FIGURES

Table 1a. Number of HIV testing events and HIV positivity by health department, United States, Puerto Rico, and the U.S. Virgin Islands, 2008

Health department	Total No. of HIV testing events	No. of confirmed HIV-positive testing events (all)	(%)	No. of newly identified confirmed HIV-positive testing events[a]	(%)
Alabama[b]	112,440	570	(0.5)	----	----
Alaska	841	4	(0.5)	4	(0.5)
Arizona	10,331	237	(2.3)	219	(2.1)
Arkansas	40,346	361	(0.9)	63	(0.2)
California[c]	157,857	1,706	(1.1)	1,084	(0.9)
Los Angeles[b]	36,192	466	(1.3)	----	----
San Francisco	15,318	254	(1.7)	230	(1.5)
California (excludes Los Angeles and San Francisco)	106,347	986	(0.9)	854	(0.8)
Colorado	15,756	211	(1.3)	127	(0.8)
Connecticut	18,032	33	(0.2)	30	(0.2)
Delaware[b]	13,260	50	(0.4)	----	----
District of Columbia[c]	72,846	939	(1.3)	26	(0.1)
Florida	372,883	5,543	(1.5)	3,230	(0.9)
Georgia	136,712	1,534	(1.1)	1,046	(0.8)
Hawaii	7,136	24	(0.3)	21	(0.3)
Idaho	4,438	22	(0.5)	22	(0.5)
Illinois[c]	92,737	648	(0.7)	212	(0.3)
Chicago[c]	74,218	529	(0.7)	107	(0.2)
Illinois (excludes Chicago)	18,519	119	(0.6)	105	(0.6)
Indiana	29,617	207	(0.7)	128	(0.4)
Iowa	8,427	30	(0.4)	28	(0.3)
Kansas[c]	23,024	79	(0.3)	25	(0.2)
Kentucky	10,174	47	(0.5)	36	(0.4)
Louisiana	70,133	600	(0.9)	535	(0.8)
Maine	2,475	2	(0.1)	2	(0.1)
Maryland[c]	89,286	1,290	(1.4)	593	(1.0)
Massachusetts	121,034	591	(0.5)	434	(0.4)
Michigan	52,432	429	(0.8)	374	(0.7)
Minnesota[d]	9,325	80	(0.9)	71	(0.8)
Mississippi[b]	92,223	864	(0.9)	----	----
Missouri	27,350	237	(0.9)	205	(0.7)
Montana	4,992	3	(0.1)	3	(0.1)
Nebraska	10,378	24	(0.2)	19	(0.2)
Nevada	23,365	272	(1.2)	175	(0.7)
New Hampshire	3,192	13	(0.4)	12	(0.4)
New Jersey[d]	78,591	629	(0.8)	496	(0.6)
New Mexico	6,398	30	(0.5)	23	(0.4)
New York	285,720	3,141	(1.1)	2,186	(0.8)
New York City	137,247	1,254	(0.9)	957	(0.7)
New York State (excludes New York City)	148,473	1,887	(1.3)	1,229	(0.8)
North Carolina[b]	214,644	1,027	(0.5)	----	----
North Dakota	2,415	2	(0.1)	1	(0.0)
Ohio[d]	63,709	315	(0.5)	277	(0.4)
Oklahoma	22,465	176	(0.8)	116	(0.5)
Oregon[d]	15,970	152	(1.0)	72	(0.5)

Health department	Total No. of HIV testing events	No. of confirmed HIV-positive testing events (all)	(%)	No. of newly identified confirmed HIV-positive testing events[a]	(%)
Pennsylvania	107,288	850	(0.8)	645	(0.6)
Philadelphia	62,137	562	(0.9)	414	(0.7)
Pennsylvania (excludes Philadelphia)[d]	45,151	288	(0.6)	231	(0.5)
Rhode Island	2,784	27	(1.0)	25	(0.9)
South Carolina	57,341	564	(1.0)	563	(1.0)
South Dakota	1,414	9	(0.6)	8	(0.6)
Tennessee	84,528	452	(0.5)	347	(0.4)
Texas	62,769	1,049	(1.7)	927	(1.5)
Houston	20,074	364	(1.8)	356	(1.8)
Texas (excludes Houston)	42,695	685	(1.6)	571	(1.3)
Utah	7,887	37	(0.5)	28	(0.4)
Vermont	3,986	3	(0.1)	3	(0.1)
Virginia[d]	52,476	294	(0.6)	220	(0.4)
Washington	20,513	213	(1.0)	143	(0.7)
West Virginia[b]	7,672	51	(0.7)	----	----
Wisconsin	9,319	80	(0.9)	75	(0.8)
Wyoming	4,956	10	(0.2)	5	(0.1)
Puerto Rico	26,233	406	(1.5)	213	(0.8)
U.S. Virgin Islands	3,344	9	(0.3)	8	(0.2)
Total	**2,775,464[e]**	**26,176**	**(0.9)**	**15,105[f]**	**(0.7)**

[a] Newly identified confirmed HIV-positive testing event is defined as a testing event for which there is a current confirmed HIV-positive test result and no history of a previous HIV-positive test. Newly identified confirmed HIV-positive results cannot be calculated from aggregate-level data.
[b] Submitted only aggregate-level data.
[c] Total numbers of HIV testing events and confirmed HIV-positive testing events are based on both test-level and aggregate-level data. Newly identified confirmed HIV-positive testing events are calculated only for test-level data (121,665 HIV testing events for California, 54,561 HIV testing events for Chicago, 20,067 HIV testing events for District of Columbia, 73,080 HIV testing events for Illinois, 10,572 HIV testing events for Kansas, and 60,392 HIV testing events for Maryland).
[d] Total numbers of HIV testing events and confirmed HIV-positive testing events include data submitted via the HIV Counseling and Testing System (CTS) (3,183 and 56, respectively, for Minnesota; 5,909 and 31, respectively, for New Jersey; 13,437 and 116, respectively, for Ohio; 1,138 and 26, respectively, for Oregon; 5,848 and 37, respectively, for Pennsylvania; and 4,262 and 20, respectively, for Virginia).
[e] Includes 2,185,251 test-level (2,151,474 in NHM&E format and 33,777 from the HIV CTS) and 590,213 aggregate-level data testing events.
[f] Newly identified confirmed HIV-positive testing events calculated for 2,185,251 test-level HIV testing events.

Table 1b. Number of HIV testing events and HIV positivity by health department, United States, Puerto Rico, and the U.S. Virgin Islands, 2009

Health department	Total No. of HIV testing events	No. of confirmed HIV-positive testing events (all)	(%)	No. of newly identified confirmed HIV-positive testing events[a]	(%)
Alabama[b]	100,981	628	(0.6)	----	----
Alaska[c]	1,107	3	(0.3)	3	(0.4)
Arizona	10,307	311	(3.0)	170	(1.6)
Arkansas	44,876	519	(1.2)	278	(0.6)
California[c]	146,478	1,379	(0.9)	907	(0.9)
Los Angeles[b]	40,601	330	(0.8)	----	----
San Francisco	16,244	251	(1.5)	227	(1.4)
California (excludes Los Angeles and San Francisco)	89,633	798	(0.9)	680	(0.8)
Colorado	14,550	142	(1.0)	121	(0.8)
Connecticut	25,171	80	(0.3)	70	(0.3)
Delaware[b]	14,983	60	(0.4)	----	----
District of Columbia	94,854	239	(0.3)	208	(0.2)
Florida	395,066	5,186	(1.3)	2,948	(0.7)
Georgia	142,890	1,670	(1.2)	1,113	(0.8)
Hawaii	7,796	45	(0.6)	38	(0.5)
Idaho	4,324	10	(0.2)	8	(0.2)
Illinois[c]	111,732	870	(0.8)	213	(0.3)
Chicago[c]	92,274	693	(0.8)	57	(0.1)
Illinois (excludes Chicago)	19,458	177	(0.9)	156	(0.8)
Indiana	29,979	187	(0.6)	145	(0.5)
Iowa	8,204	35	(0.4)	31	(0.4)
Kansas	26,786	70	(0.3)	61	(0.2)
Kentucky	26,094	104	(0.4)	91	(0.3)
Louisiana	102,231	795	(0.8)	719	(0.7)
Maine	3,641	12	(0.3)	12	(0.3)
Maryland[c]	102,841	1,425	(1.4)	380	(0.7)
Massachusetts	99,103	341	(0.3)	263	(0.3)
Michigan	60,529	401	(0.7)	346	(0.6)
Minnesota	12,251	99	(0.8)	93	(0.8)
Mississippi[b]	98,053	1,103	(1.1)	----	----
Missouri	31,246	226	(0.7)	205	(0.7)
Montana	4,132	6	(0.1)	6	(0.1)
Nebraska	10,500	20	(0.2)	19	(0.2)
Nevada	25,590	287	(1.1)	193	(0.8)
New Hampshire	3,130	3	(0.1)	3	(0.1)
New Jersey	103,421	648	(0.6)	548	(0.5)
New Mexico	10,697	70	(0.7)	51	(0.5)
New York	336,542	2,729	(0.8)	2,077	(0.6)
New York City	171,088	1,218	(0.7)	1,023	(0.6)
New York State (excludes New York City)	165,454	1,511	(0.9)	1,054	(0.6)
North Carolina[b]	231,368	1,144	(0.5)	----	----
North Dakota	2,956	2	(0.1)	2	(0.1)
Ohio	66,805	235	(0.4)	215	(0.3)
Oklahoma	23,534	177	(0.8)	132	(0.6)
Oregon	14,530	105	(0.7)	74	(0.5)
Pennsylvania	149,883	1,151	(0.8)	948	(0.6)
Philadelphia	74,220	710	(1.0)	590	(0.8)
Pennsylvania (excludes Philadelphia)	75,663	441	(0.6)	358	(0.5)

Health department	Total No. of HIV testing events	No. of confirmed HIV-positive testing events (all)	(%)	No. of newly identified confirmed HIV-positive testing events[a]	(%)
Rhode Island	2,811	9	(0.3)	8	(0.3)
South Carolina	54,034	571	(1.1)	571	(1.1)
South Dakota	1,241	4	(0.3)	4	(0.3)
Tennessee	100,308	315	(0.3)	240	(0.2)
Texas	196,569	2,348	(1.2)	2,164	(1.1)
Houston	79,587	1,304	(1.6)	1,288	(1.6)
Texas (excludes Houston)	116,982	1,044	(0.9)	876	(0.7)
Utah	6,775	39	(0.6)	35	(0.5)
Vermont	3,288	1	(0.0)	0	(0.0)
Virginia	53,653	233	(0.4)	176	(0.3)
Washington	19,305	218	(1.1)	156	(0.8)
West Virginia	5,721	18	(0.3)	16	(0.3)
Wisconsin	9,287	82	(0.9)	69	(0.7)
Wyoming	6,837	15	(0.2)	9	(0.1)
Puerto Rico	29,611	446	(1.5)	245	(0.8)
U.S. Virgin Islands[c]	2,131	28	(1.3)	2	(0.3)
Total	**3,190,732[d]**	**26,844**	**(0.8)**	**16,386[e]**	**(0.6)**

[a] Newly identified confirmed HIV-positive testing event is defined as a testing event for which there is a current confirmed HIV-positive test result and no history of a previous HIV-positive test. Newly identified confirmed HIV-positive results cannot be calculated from aggregate-level data.
[b] Submitted only aggregate-level data.
[c] Total numbers of HIV testing events and confirmed HIV-positive testing events are based on both test-level and aggregate-level data. Newly identified confirmed HIV-positive testing events are calculated only for test-level data (837 HIV testing events for Alaska, 105,877 HIV testing events for California, 55,574 HIV testing events for Chicago, 75,032 HIV testing events for Illinois, 57,311 HIV testing events for Maryland, and 762 HIV testing events for the U.S. Virgin Islands).
[d] Includes 2,620,877 test-level HIV testing events in NHM&E format and 569,855 aggregate-level HIV testing events.
[e] Newly identified confirmed HIV-positive testing events calculated for 2,620,877 test-level HIV testing events.

Table 2a. Number and percentage of HIV testing events by characteristics of persons tested and gender, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008

Characteristics	No. of HIV testing events[a]	(Column %)	Female		Male		Transgender	
			No. of HIV testing events	(Column %)	No. of HIV testing events	(Column %)	No. of HIV testing events	(Column %)
Age at test (years)								
<13	6,116	(0.3)	3,010	(0.3)	3,029	(0.3)	13	(0.4)
13-19	256,350	(11.9)	155,168	(14.7)	99,237	(9.2)	255	(8.1)
20-29	875,279	(40.7)	456,026	(43.1)	412,480	(38.3)	1,457	(46.1)
30-39	443,190	(20.6)	211,619	(20.0)	228,622	(21.2)	745	(23.6)
40-49	325,822	(15.1)	138,698	(13.1)	185,341	(17.2)	401	(12.7)
≥50	216,256	(10.1)	82,059	(7.8)	133,099	(12.3)	231	(7.3)
Invalid/missing	28,461	(1.3)	11,346	(1.1)	15,924	(1.5)	56	(1.8)
Race/Ethnicity								
White	658,851	(30.6)	307,098	(29.0)	348,725	(32.4)	824	(26.1)
Black/African American	909,128	(42.3)	464,527	(43.9)	440,367	(40.9)	929	(29.4)
Hispanic	391,951	(18.2)	199,958	(18.9)	189,784	(17.6)	863	(27.3)
Asian	35,902	(1.7)	16,723	(1.6)	18,930	(1.8)	106	(3.4)
American Indian or Alaska Native	11,826	(0.5)	5,549	(0.5)	6,185	(0.6)	42	(1.3)
Native Hawaiian or Pacific Islander	6,493	(0.3)	2,574	(0.2)	3,834	(0.4)	56	(1.8)
Multi-race[b]	20,345	(0.9)	9,968	(0.9)	10,229	(0.9)	83	(2.6)
Declined/don't know	107,812	(5.0)	48,500	(4.6)	54,350	(5.0)	246	(7.8)
Invalid/missing	9,166	(0.4)	3,029	(0.3)	5,328	(0.5)	9	(0.3)
Testing site type								
Health-care facilities	1,321,609	(61.4)	739,990	(69.9)	574,353	(53.3)	1,276	(40.4)
Non-health-care facilities	585,336	(27.2)	242,919	(23.0)	339,048	(31.5)	1,682	(53.3)
Correctional facility[c]	154,963	(7.2)	33,625	(3.2)	120,322	(11.2)	106	(3.4)
Other facilities	26,507	(1.2)	11,051	(1.0)	15,284	(1.4)	62	(2.0)
Invalid/missing	63,059	(2.9)	30,341	(2.9)	28,725	(2.7)	32	(1.0)
Rapid test used in testing event								
Yes	1,196,812	(55.6)	524,169	(49.5)	666,532	(61.8)	2,459	(77.9)
No	936,919	(43.5)	526,720	(49.8)	403,512	(37.4)	669	(21.2)
Invalid/missing	17,743	(0.8)	7,037	(0.7)	7,688	(0.7)	30	(0.9)
Total	**2,151,474[d]**	**(100.0)**	**1,057,926**	**(100.0)**	**1,077,732**	**(100.0)**	**3,158**	**(100.0)**

[a] Includes 12,658 HIV testing events with a missing, invalid, or other value for gender.
[b] HIV testing events for which more than one race was selected and ethnicity was not Hispanic or Latino.
[c] May be a health-care or non-health-care facility (CDC did not require distinction for reporting).
[d] Test-level HIV testing events in NHM&E format only. See footnote “e” in Table 1a.

Table 2b. Number and percentage of HIV testing events by characteristics of persons tested and gender, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009

Characteristics	No. of HIV testing events[a]	(Column %)	Female		Male		Transgender	
			No. of HIV testing events	(Column %)	No. of HIV testing events	(Column %)	No. of HIV testing events	(Column %)
Age at test (years)								
<13	6,387	(0.2)	3,172	(0.2)	3,084	(0.2)	15	(0.4)
13-19	289,900	(11.1)	172,126	(13.5)	115,320	(8.7)	343	(8.3)
20-29	1,056,037	(40.3)	542,417	(42.6)	503,740	(38.0)	1,891	(46.0)
30-39	544,423	(20.8)	258,489	(20.3)	281,191	(21.2)	1,020	(24.8)
40-49	400,218	(15.3)	169,708	(13.3)	227,567	(17.2)	522	(12.7)
≥50	300,374	(11.5)	116,704	(9.2)	181,631	(13.7)	279	(6.8)
Invalid/missing	23,538	(0.9)	10,127	(0.8)	12,104	(0.9)	42	(1.0)
Race/Ethnicity								
White	750,879	(28.6)	349,357	(27.4)	396,993	(30.0)	998	(24.3)
Black/African American	1,144,208	(43.7)	574,071	(45.1)	562,067	(42.4)	1,375	(33.4)
Hispanic	496,868	(19.0)	246,643	(19.4)	247,243	(18.7)	1,074	(26.1)
Asian	43,058	(1.6)	20,332	(1.6)	22,417	(1.7)	142	(3.5)
American Indian or Alaska Native	12,726	(0.5)	6,211	(0.5)	6,403	(0.5)	64	(1.6)
Native Hawaiian or Pacific Islander	7,836	(0.3)	3,382	(0.3)	4,362	(0.3)	66	(1.6)
Multi-race[b]	28,170	(1.1)	13,581	(1.1)	14,342	(1.1)	126	(3.1)
Declined/don't know	105,367	(4.0)	48,992	(3.8)	50,549	(3.8)	204	(5.0)
Invalid/missing	31,765	(1.2)	10,174	(0.8)	20,261	(1.5)	63	(1.5)
Testing site type								
Health-care facilities	1,662,991	(63.5)	914,120	(71.8)	736,041	(55.6)	1,784	(43.4)
Non-health-care facilities	661,850	(25.3)	274,266	(21.5)	382,960	(28.9)	2,131	(51.8)
Correctional facility[c]	215,541	(8.2)	42,914	(3.4)	170,889	(12.9)	94	(2.3)
Other facilities	31,208	(1.2)	13,821	(1.1)	17,251	(1.3)	60	(1.5)
Invalid/missing	49,287	(1.9)	27,622	(2.2)	17,496	(1.3)	43	(1.0)
Rapid test used in testing event								
Yes	1,596,900	(60.9)	708,752	(55.7)	876,131	(66.1)	3,440	(83.7)
No	1,010,589	(38.6)	558,085	(43.8)	444,344	(33.5)	657	(16.0)
Invalid/missing	13,388	(0.5)	5,906	(0.5)	4,162	(0.3)	15	(0.4)
Total	**2,620,877[d]**	**(100.0)**	**1,272,743**	**(100.0)**	**1,324,637**	**(100.0)**	**4,112**	**(100.0)**

[a] Includes 19,385 HIV testing events with a missing, invalid, or other value for gender.
[b] HIV testing events for which more than one race was selected and ethnicity was not Hispanic or Latino.
[c] May be a health-care or non-health-care facility (CDC did not require distinction for reporting).
[d] Test-level HIV testing events in NHM&E format only. See footnote “d” in Table 1b.

Table 3a. HIV positivity by characteristics of persons tested and gender, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008

	Confirmed HIV-positive testing events (all)		Newly identified confirmed HIV-positive testing events[a]		Confirmed HIV-positive testing events[b]						Newly identified confirmed HIV-positive testing events[a,c]					
					Female		Male		Transgender		Female		Male		Transgender	
Characteristics	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**	**No.**	**(% positive)[d]**
Age at test (years)																
<13	62	(1.0)	45	(0.7)	17	(0.6)	45	(1.5)	0	(0.0)	11	(0.4)	34	(1.1)	0	(0.0)
13-19	763	(0.3)	588	(0.2)	244	(0.2)	509	(0.5)	7	(2.7)	153	(0.1)	427	(0.4)	6	(2.4)
20-29	5,982	(0.7)	4,720	(0.5)	1,318	(0.3)	4,568	(1.1)	58	(4.0)	914	(0.2)	3,744	(0.9)	37	(2.5)
30-39	5,325	(1.2)	3,814	(0.9)	1,506	(0.7)	3,769	(1.6)	25	(3.4)	997	(0.5)	2,785	(1.2)	14	(1.9)
40-49	5,546	(1.7)	3,560	(1.1)	1,625	(1.2)	3,876	(2.1)	17	(4.2)	1,045	(0.8)	2,485	(1.3)	13	(3.2)
≥50	3,074	(1.4)	2,012	(0.9)	882	(1.1)	2,163	(1.6)	8	(3.5)	596	(0.7)	1,399	(1.1)	7	(3.0)
Invalid/missing	199	(0.7)	141	(0.5)	50	(0.4)	133	(0.8)	0	(0.0)	27	(0.2)	100	(0.6)	0	(0.0)
Race/Ethnicity																
White	4,598	(0.7)	3,270	(0.5)	937	(0.3)	3,629	(1.0)	11	(1.3)	607	(0.2)	2,642	(0.8)	5	(0.6)
Black/African American	11,082	(1.2)	7,968	(0.9)	3,621	(0.8)	7,363	(1.7)	62	(6.7)	2,436	(0.5)	5,471	(1.2)	42	(4.5)
Hispanic	3,868	(1.0)	2,596	(0.7)	796	(0.4)	3,024	(1.6)	30	(3.5)	492	(0.2)	2,074	(1.1)	23	(2.7)
Asian	224	(0.6)	180	(0.5)	33	(0.2)	188	(1.0)	1	(0.9)	20	(0.1)	157	(0.8)	1	(0.9)
American Indian or Alaska Native	79	(0.7)	51	(0.4)	18	(0.3)	60	(1.0)	1	(2.4)	10	(0.2)	40	(0.6)	1	(2.4)
Native Hawaiian or Pacific Islander	37	(0.6)	27	(0.4)	5	(0.2)	32	(0.8)	0	(0.0)	5	(0.2)	22	(0.6)	0	(0.0)
Multi-race[e]	195	(1.0)	142	(0.7)	31	(0.3)	161	(1.6)	2	(2.4)	16	(0.2)	125	(1.2)	1	(1.2)
Declined/don't know	809	(0.8)	591	(0.5)	178	(0.4)	571	(1.1)	8	(3.3)	137	(0.3)	409	(0.8)	4	(1.6)
Invalid/missing	59	(0.6)	55	(0.6)	23	(0.8)	35	(0.7)	0	(0.0)	20	(0.7)	34	(0.6)	0	(0.0)
Testing site type																
Health-care facilities	11,949	(0.9)	8,434	(0.6)	3,435	(0.5)	8,378	(1.5)	53	(4.2)	2,338	(0.3)	5,999	(1.0)	35	(2.7)
Non-health-care facilities	6,908	(1.2)	5,109	(0.9)	1,561	(0.6)	5,266	(1.6)	56	(3.3)	1,072	(0.4)	3,983	(1.2)	38	(2.3)
Correctional facility[f]	1,185	(0.8)	877	(0.6)	357	(1.1)	818	(0.7)	4	(3.8)	274	(0.8)	594	(0.5)	3	(2.8)
Other facilities	224	(0.8)	191	(0.7)	44	(0.4)	177	(1.2)	1	(1.6)	37	(0.3)	151	(1.0)	1	(1.6)
Invalid/missing	685	(1.1)	269	(0.4)	245	(0.8)	424	(1.5)	1	(3.1)	22	(0.1)	247	(0.9)	0	(0.0)
Rapid test used in testing event																
Yes	9,863	(0.8)	8,195	(0.7)	2,382	(0.5)	7,379	(1.1)	66	(2.7)	1,853	(0.4)	6,263	(0.9)	51	(2.1)
No	11,088	(1.2)	6,685	(0.7)	3,260	(0.6)	7,684	(1.9)	49	(7.3)	1,890	(0.4)	4,711	(1.2)	26	(3.9)
Invalid/missing[g]	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Total	**20,951[h]**	**(1.0)**	**14,880[i]**	**(0.7)**	**5,642**	**(0.5)**	**15,063**	**(1.4)**	**115**	**(3.6)**	**3,743**	**(0.4)**	**10,974**	**(1.0)**	**77**	**(2.4)**

[a] Newly identified confirmed HIV-positive testing event is defined as a testing event for which there is a current confirmed HIV-positive test result and no history of a previous HIV-positive test.
[b] Excludes 131 confirmed HIV-positive testing events with a missing, invalid, or other value for gender.
[c] Excludes 86 newly identified confirmed HIV-positive testing events with a missing, invalid, or other value for gender.
[d] Denominators for calculating "% positive" are from Table 2a.
[e] HIV testing events for which more than one race was selected and ethnicity was not Hispanic or Latino.
[f] May be a health-care or non-health-care facility (CDC did not require distinction for reporting).
[g] Not applicable.
[h] Excludes 4,939 confirmed HIV-positive testing events from aggregate-level data and 286 confirmed HIV-positive testing events from the HIV Counseling and Testing System (CTS).
[i] Excludes 225 newly identified confirmed HIV-positive testing events from HIV CTS.

Table 3b. HIV positivity by characteristics of persons tested and gender, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009

Characteristics	Confirmed HIV-positive testing events (all)		Newly identified confirmed HIV-positive testing events[a]		Confirmed HIV-positive testing events[b]						Newly identified confirmed HIV-positive testing events[a,c]					
					Female		Male		Transgender		Female		Male		Transgender	
	No.	(% positive)[d]	No.	(% positive)[d]	No.	(% positive)[d]	No.	(% positive)[d]	No.	(% positive)[d]	No.	(% positive)[d]	No.	(% positive)[d]	No.	(% positive)[d]
Age at test (years)																
<13	49	(0.8)	36	(0.6)	14	(0.4)	34	(1.1)	1	(6.7)	9	(0.3)	26	(0.8)	1	(6.7)
13-19	771	(0.3)	622	(0.2)	191	(0.1)	571	(0.5)	4	(1.2)	127	(0.1)	490	(0.4)	3	(0.9)
20-29	6,767	(0.6)	5,563	(0.5)	1,261	(0.2)	5,426	(1.1)	61	(3.2)	895	(0.2)	4,603	(0.9)	48	(2.5)
30-39	5,438	(1.0)	3,991	(0.7)	1,487	(0.6)	3,884	(1.4)	47	(4.6)	1,025	(0.4)	2,916	(1.0)	35	(3.4)
40-49	5,560	(1.4)	3,829	(1.0)	1,623	(1.0)	3,900	(1.7)	16	(3.1)	1,126	(0.7)	2,674	(1.2)	13	(2.5)
≥50	3,256	(1.1)	2,238	(0.7)	934	(0.8)	2,305	(1.3)	4	(1.4)	654	(0.6)	1,569	(0.9)	4	(1.4)
Invalid/missing	137	(0.6)	107	(0.5)	33	(0.3)	98	(0.8)	1	(2.4)	24	(0.2)	78	(0.6)	1	(2.4)
Race/Ethnicity																
White	4,716	(0.6)	3,419	(0.5)	852	(0.2)	3,842	(1.0)	8	(0.8)	553	(0.2)	2,846	(0.7)	7	(0.7)
Black/African American	11,726	(1.0)	8,899	(0.8)	3,628	(0.6)	8,001	(1.4)	73	(5.3)	2,592	(0.5)	6,229	(1.1)	60	(4.4)
Hispanic	4,129	(0.8)	2,960	(0.6)	785	(0.3)	3,290	(1.3)	38	(3.5)	508	(0.2)	2,412	(1.0)	27	(2.5)
Asian	228	(0.5)	182	(0.4)	31	(0.2)	194	(0.9)	1	(0.7)	27	(0.1)	155	(0.7)	0	(0.0)
American Indian or Alaska Native	74	(0.6)	55	(0.4)	14	(0.2)	59	(0.9)	0	(0.0)	9	(0.1)	45	(0.7)	0	(0.0)
Native Hawaiian or Pacific Islander	39	(0.5)	30	(0.4)	7	(0.2)	32	(0.7)	0	(0.0)	4	(0.1)	26	(0.6)	0	(0.0)
Multi-race[e]	232	(0.8)	172	(0.6)	35	(0.3)	191	(1.3)	6	(4.8)	23	(0.2)	143	(1.0)	6	(4.8)
Declined/don't know	685	(0.7)	540	(0.5)	145	(0.3)	507	(1.0)	8	(3.9)	108	(0.2)	408	(0.8)	5	(2.5)
Invalid/missing	149	(0.5)	129	(0.4)	46	(0.5)	102	(0.5)	0	(0.0)	36	(0.4)	92	(0.5)	0	(0.0)
Testing site type																
Health-care facilities	13,589	(0.8)	10,137	(0.6)	3,642	(0.4)	9,852	(1.3)	51	(2.9)	2,637	(0.3)	7,425	(1.0)	37	(2.1)
Non-health-care facilities	6,700	(1.0)	5,174	(0.8)	1,386	(0.5)	5,220	(1.4)	75	(3.5)	948	(0.3)	4,149	(1.1)	64	(3.0)
Correctional facility[f]	1,135	(0.5)	827	(0.4)	309	(0.7)	816	(0.5)	4	(4.3)	232	(0.5)	589	(0.3)	2	(2.1)
Other facilities	221	(0.7)	172	(0.6)	37	(0.3)	180	(1.0)	3	(5.0)	31	(0.2)	139	(0.8)	1	(1.7)
Invalid/missing	333	(0.7)	76	(0.2)	169	(0.6)	150	(0.9)	1	(2.3)	12	(0.0)	54	(0.3)	1	(2.3)
Rapid test used in testing event																
Yes	11,263	(0.7)	9,625	(0.6)	2,441	(0.3)	8,688	(1.0)	103	(3.0)	1,989	(0.3)	7,523	(0.9)	88	(2.6)
No	10,715	(1.1)	6,761	(0.7)	3,102	(0.6)	7,530	(1.7)	31	(4.7)	1,871	(0.3)	4,833	(1.1)	17	(2.6)
Invalid/missing[g]	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Total	**21,978[h]**	**(0.8)**	**16,386**	**(0.6)**	**5,543**	**(0.4)**	**16,218**	**(1.2)**	**134**	**(3.3)**	**3,860**	**(0.3)**	**12,356**	**(0.9)**	**105**	**(2.6)**

[a] Newly identified confirmed HIV-positive testing event is defined as a testing event for which there is a current confirmed HIV-positive test result and no history of a previous HIV-positive test.
[b] Excludes 83 confirmed HIV-positive testing events with a missing, invalid, or other value for gender.
[c] Excludes 65 newly identified confirmed HIV-positive testing events with a missing, invalid, or other value for gender.
[d] Denominators for calculating "% positive" are from Table 2b.
[e] HIV testing events for which more than one race was selected and ethnicity was not Hispanic or Latino.
[f] May be a health-care or non-health-care facility (CDC did not require distinction for reporting).
[g] Not applicable.
[h] Excludes 4,866 confirmed HIV-positive testing events from aggregate-level data.

Table 4a. Receipt of HIV test results by characteristics of persons tested and test results, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008

Characteristics	HIV testing events			HIV-negative testing events			Confirmed HIV-positive and preliminary HIV-positive testing events			Confirmed HIV-positive testing events			Newly identified confirmed HIV-positive testing events[a]		
	No.	Results received	(%)	No.	Results received	(%)	No.	Results received	(%)	No.	Results received	(%)	No.	Results received	(%)
Age at test (years)															
<13	5,738	4,545	(79.2)	5,542	4,411	(79.6)	81	74	(91.4)	58	51	(87.9)	44	40	(90.9)
13-19	228,351	166,824	(73.1)	225,128	164,567	(73.1)	967	899	(93.0)	670	614	(91.6)	565	516	(91.3)
20-29	785,252	606,725	(77.3)	770,124	595,309	(77.3)	7,212	6,560	(91.0)	5,585	5,017	(89.8)	4,539	4,087	(90.0)
30-39	402,861	332,013	(82.4)	391,609	323,191	(82.5)	6,396	5,877	(91.9)	5,041	4,586	(91.0)	3,659	3,329	(91.0)
40-49	299,387	256,500	(85.7)	288,279	247,505	(85.9)	6,919	6,393	(92.4)	5,351	4,914	(91.8)	3,457	3,181	(92.0)
≥50	198,903	172,895	(86.9)	192,122	167,515	(87.2)	3,925	3,649	(93.0)	2,980	2,742	(92.0)	1,961	1,821	(92.9)
Invalid/missing	26,468	21,914	(82.8)	25,610	21,330	(83.3)	308	273	(88.6)	180	151	(83.9)	140	117	(83.6)
Gender															
Male	982,861	820,430	(83.5)	952,285	796,042	(83.6)	18,390	16,786	(91.3)	14,409	13,009	(90.3)	10,607	9,634	(90.8)
Female	952,667	732,111	(76.8)	935,253	719,325	(76.9)	7,117	6,661	(93.6)	5,224	4,855	(92.9)	3,595	3,307	(92.0)
Transgender	3,030	2,773	(91.5)	2,816	2,596	(92.2)	158	144	(91.1)	115	102	(88.7)	77	69	(89.6)
Invalid/missing	8,402	6,102	(72.6)	8,060	5,865	(72.8)	143	134	(93.7)	117	109	(93.2)	86	81	(94.2)
Race/Ethnicity															
White	589,087	467,504	(79.4)	576,293	458,764	(79.6)	5,494	5,113	(93.1)	4,240	3,908	(92.2)	3,124	2,892	(92.6)
Black/African American	809,872	624,396	(77.1)	787,867	605,677	(76.9)	13,843	12,585	(90.9)	10,592	9,519	(89.9)	7,685	6,871	(89.4)
Hispanic	367,234	311,509	(84.8)	358,761	304,818	(85.0)	4,583	4,286	(93.5)	3,737	3,470	(92.9)	2,527	2,376	(94.0)
Asian	34,275	30,214	(88.2)	33,783	29,818	(88.3)	260	251	(96.5)	214	205	(95.8)	176	167	(94.9)
American Indian or Alaska Native	11,139	9,363	(84.1)	10,916	9,220	(84.5)	101	97	(96.0)	70	67	(95.7)	50	48	(96.0)
Native Hawaiian or Pacific Islander	6,148	5,368	(87.3)	6,016	5,260	(87.4)	49	45	(91.8)	36	33	(91.7)	27	27	(100.0)
Multi-race[b]	19,588	15,413	(78.7)	19,177	15,088	(78.7)	248	216	(87.1)	192	160	(83.3)	142	123	(86.6)
Declined/don't know	100,961	89,769	(88.9)	97,205	87,512	(90.0)	1,143	1,051	(92.0)	726	661	(91.0)	579	538	(92.9)
Invalid/missing	8,656	7,880	(91.0)	8,396	7,671	(91.4)	87	81	(93.1)	58	52	(89.7)	55	49	(89.1)
Testing site type															
Health-care facilities	1,204,604	890,848	(74.0)	1,181,125	872,698	(73.9)	13,760	12,579	(91.4)	11,399	10,341	(90.7)	8,055	7,229	(89.7)
Non-health-care facilities	544,553	490,127	(90.0)	523,574	474,123	(90.6)	9,713	9,114	(93.8)	6,821	6,370	(93.4)	5,059	4,818	(95.2)
Correctional facility[c]	151,504	139,697	(92.2)	148,270	136,849	(92.3)	1,688	1,586	(94.0)	1,168	1,085	(92.9)	863	811	(94.0)
Other facilities	26,344	23,146	(87.9)	25,944	22,786	(87.8)	304	278	(91.4)	223	197	(88.3)	190	168	(88.4)
Invalid/missing	19,955	17,598	(88.2)	19,501	17,372	(89.1)	343	168	(49.0)	254	82	(32.3)	198	65	(32.8)
Rapid test used in testing event															
Yes	1,124,481	1,066,375	(94.8)	1,101,122	1,043,603	(94.8)	15,756	15,391	(97.7)	9,813	9,741	(99.3)	8,159	8,103	(99.3)
No	810,832	488,892	(60.3)	794,502	477,977	(60.2)	10,052	8,334	(82.9)	10,052	8,334	(82.9)	6,206	4,988	(80.4)
Invalid/missing	11,647	6,149	(52.8)	2,790	2,248	(80.6)	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]
Total	**1,946,960[e]**	**1,561,416**	**(80.2)**	**1,898,414**	**1,523,828**	**(80.3)**	**25,808**	**23,725**	**(91.9)**	**19,865**	**18,075**	**(91.0)**	**14,365**	**13,091**	**(91.1)**

[a] Newly identified confirmed HIV-positive testing event is defined as a testing event for which there is a current confirmed HIV-positive test result and no history of a previous HIV-positive test.
[b] Includes HIV testing events for which more than one race was selected and ethnicity was not Hispanic or Latino.
[c] May be a health-care or non-health-care facility (CDC did not require distinction for reporting).
[d] Not applicable.
[e] Excludes 176,795 HIV testing events with missing values and 27,719 HIV testing events with invalid values for variables required to determine whether the client received test results.

Table 4b. Receipt of HIV test results by characteristics of persons tested and test results, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009

	HIV testing events			HIV-negative testing events			Confirmed HIV-positive and preliminary HIV-positive testing events			Confirmed HIV-positive testing events			Newly identified confirmed HIV-positive testing events[a]		
Characteristics	**No.**	**Results received**	**(%)**	**No.**	**Results received**	**(%)**	**No.**	**Results received**	**(%)**	**No.**	**Results received**	**(%)**	**No.**	**Results received**	**(%)**
Age at test (years)															
<13	6,019	4,777	(79.4)	5,894	4,681	(79.4)	58	53	(91.4)	49	44	(89.8)	36	35	(97.2)
13-19	257,728	181,826	(70.5)	255,649	180,358	(70.5)	905	833	(92.0)	701	642	(91.6)	607	553	(91.1)
20-29	948,491	713,590	(75.2)	936,794	703,864	(75.1)	7,851	7,244	(92.3)	6,477	5,956	(92.0)	5,411	4,978	(92.0)
30-39	493,687	396,777	(80.4)	485,147	389,263	(80.2)	6,507	6,102	(93.8)	5,243	4,907	(93.6)	3,878	3,627	(93.5)
40-49	367,127	312,217	(85.0)	358,858	304,784	(84.9)	6,847	6,410	(93.6)	5,429	5,076	(93.5)	3,753	3,503	(93.3)
≥50	277,550	241,774	(87.1)	272,320	237,064	(87.1)	4,145	3,911	(94.4)	3,159	2,969	(94.0)	2,186	2,056	(94.1)
Invalid/missing	19,856	14,248	(71.8)	19,405	13,890	(71.6)	176	154	(87.5)	124	107	(86.3)	103	89	(86.4)
Gender															
Male	1,204,297	999,740	(83.0)	1,180,069	978,216	(82.9)	19,434	18,129	(93.3)	15,731	14,620	(92.9)	12,061	11,201	(92.9)
Female	1,150,788	854,443	(74.2)	1,139,115	845,066	(74.2)	6,765	6,312	(93.3)	5,250	4,896	(93.3)	3,754	3,493	(93.0)
Transgender	3,920	3,670	(93.6)	3,710	3,475	(93.7)	192	182	(94.8)	133	128	(96.2)	104	101	(97.1)
Invalid/missing	11,453	7,356	(64.2)	11,173	7,147	(64.0)	98	84	(85.7)	68	57	(83.8)	55	46	(83.6)
Race/Ethnicity															
White	670,893	515,992	(76.9)	662,005	508,633	(76.8)	5,563	5,248	(94.3)	4,472	4,216	(94.3)	3,315	3,128	(94.4)
Black/African American	1,026,025	789,107	(76.9)	1,008,109	773,516	(76.7)	14,396	13,270	(92.2)	11,315	10,395	(91.9)	8,677	7,955	(91.7)
Hispanic	462,543	381,121	(82.4)	455,843	375,276	(82.3)	4,763	4,556	(95.7)	4,032	3,848	(95.4)	2,902	2,774	(95.6)
Asian	40,502	35,646	(88.0)	40,118	35,296	(88.0)	268	256	(95.5)	224	214	(95.5)	181	175	(96.7)
American Indian or Alaska Native	11,494	9,392	(81.7)	11,308	9,265	(81.9)	91	87	(95.6)	73	70	(95.9)	54	52	(96.3)
Native Hawaiian or Pacific Islander	7,360	6,454	(87.7)	7,213	6,322	(87.6)	44	40	(90.9)	38	34	(89.5)	29	27	(93.1)
Multi-race[b]	27,180	21,651	(79.7)	26,742	21,286	(79.6)	279	257	(92.1)	228	207	(90.8)	168	158	(94.0)
Declined/don't know	96,506	83,885	(86.9)	95,395	82,869	(86.9)	890	853	(95.8)	657	628	(95.6)	524	500	(95.4)
Invalid/missing	27,955	21,961	(78.6)	27,334	21,441	(78.4)	195	140	(71.8)	143	89	(62.2)	124	72	(58.1)
Testing site type															
Health-care facilities	1,521,653	1,111,586	(73.1)	1,499,802	1,093,293	(72.9)	15,546	14,324	(92.1)	13,185	12,088	(91.7)	9,840	8,981	(91.3)
Non-health-care facilities	606,589	548,938	(90.5)	594,853	538,212	(90.5)	8,981	8,649	(96.3)	6,603	6,379	(96.6)	5,110	4,965	(97.2)
Correctional facility[c]	202,726	170,671	(84.2)	200,642	168,862	(84.2)	1,573	1,383	(87.9)	1,112	988	(88.8)	808	698	(86.4)
Other facilities	30,759	26,766	(87.0)	30,277	26,390	(87.2)	299	271	(90.6)	218	190	(87.2)	169	154	(91.1)
Invalid/missing	8,731	7,248	(83.0)	8,493	7,147	(84.2)	90	80	(88.9)	64	56	(87.5)	47	43	(91.5)
Rapid test used in testing event															
Yes	1,491,608	1,391,148	(93.3)	1,470,914	1,371,139	(93.2)	16,513	16,097	(97.5)	11,206	11,091	(99.0)	9,579	9,481	(99.0)
No	874,860	470,745	(53.8)	859,482	459,631	(53.5)	9,976	8,610	(86.3)	9,976	8,610	(86.3)	6,395	5,360	(83.8)
Invalid/missing	3,990	3,316	(83.1)	3,671	3,134	(85.4)	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]	----[d]
Total	**2,370,458[e]**	**1,865,209**	**(78.7)**	**2,334,067**	**1,833,904**	**(78.6)**	**26,489**	**24,707**	**(93.3)**	**21,182**	**19,701**	**(93.0)**	**15,974**	**14,841**	**(92.9)**

[a] Newly identified confirmed HIV-positive testing event is defined as a testing event for which there is a current confirmed HIV-positive test result and no history of a previous HIV-positive test.
[b] Includes HIV testing events for which more than one race was selected and ethnicity was not Hispanic or Latino.
[c] May be a health-care or non-health-care facility (CDC did not require distinction for reporting).
[d] Not applicable.
[e] Excludes 171,432 HIV testing events with missing values and 78,987 HIV testing events with invalid values for variables required to determine whether the client received test results.

Table 5a. Number and percentage of confirmed HIV-positive testing events by risk category and gender, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008

			Female		Male	
	No. of confirmed HIV-positive testing events[a]	(Column %)	No. of confirmed HIV-positive testing events	(Column %)	No. of confirmed HIV-positive testing events	(Column %)
Risk category						
Male-to-male sexual contact and injection drug use	307	(1.5)	----[b]	----[b]	307	(2.0)
Male-to-male sexual contact	7,241	(35.0)	----[b]	----[b]	7,241	(48.1)
Injection drug use	939	(4.5)	354	(6.3)	585	(3.9)
High-risk heterosexual contact	5,973	(28.8)	2,972	(52.7)	3,001	(19.9)
Low-risk heterosexual contact	2,133	(10.3)	1,011	(17.9)	1,122	(7.4)
Other[c]	116	(0.6)	116	(2.1)	----[b]	----[b]
No acknowledged risk[d]	509	(2.5)	160	(2.8)	349	(2.3)
Unknown[e]	533	(2.6)	172	(3.0)	361	(2.4)
Invalid/missing	2,954	(14.3)	857	(15.2)	2,097	(13.9)
Total	**20,705**	**(100.0)**	**5,642**	**(100.0)**	**15,063**	**(100.0)**

[a] Excludes 246 confirmed HIV-positive testing events with missing (111), invalid (20), or transgender (115) values for the gender variable.
[b] Not applicable.
[c] See Box on page 40 in the Technical Notes.
[d] Client was asked, but no risk was identified.
[e] Client was not asked about risk factors or client declined to discuss risk factors.

Table 5b. Number and percentage of confirmed HIV-positive testing events by risk category and gender, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009

			Female		Male	
	No. of confirmed HIV-positive testing events[a]	(Column %)	No. of confirmed HIV-positive testing events	(Column %)	No. of confirmed HIV-positive testing events	(Column %)
Risk category						
Male-to-male sexual contact and injection drug use	309	(1.4)	----[b]	----[b]	309	(1.9)
Male-to-male sexual contact	7,618	(35.0)	----[b]	----[b]	7,618	(47.0)
Injection drug use	855	(3.9)	310	(5.6)	545	(3.4)
High-risk heterosexual contact	5,647	(26.0)	2,836	(51.2)	2,811	(17.3)
Low-risk heterosexual contact	1,764	(8.1)	782	(14.1)	982	(6.1)
Other[c]	105	(0.5)	105	(1.9)	----[b]	----[b]
No acknowledged risk[d]	955	(4.4)	248	(4.5)	707	(4.4)
Unknown[e]	1,640	(7.5)	517	(9.3)	1,123	(6.9)
Invalid/missing	2,868	(13.2)	745	(13.4)	2,123	(13.1)
Total	**21,761**	**(100.0)**	**5,543**	**(100.0)**	**16,218**	**(100.0)**

[a] Excludes 217 confirmed HIV-positive testing events with missing (62), invalid (21), or transgender (134) values for the gender variable.
[b] Not applicable.
[c] See Box on page 40 in the Technical Notes.
[d] Client was asked, but no risk was identified.
[e] Client was not asked about risk factors or client declined to discuss risk factors.

Table 6a. Linkage to HIV medical care, referral to HIV prevention services, and referral to partner services among confirmed and newly identified confirmed HIV-positive testing events, 53 health departments in the United States, 2008

	Confirmed HIV-positive testing events		Newly identified confirmed HIV-positive testing events	
	No.	**(Column %)**	**No.**	**(Column %)**
Linkage to HIV medical care				
Yes	4,996	(63.1)	3,472	(60.8)
No	2,920	(36.9)	2,240	(39.2)
Total	**7,916**[a]	**(100.0)**	**5,712**[b]	**(100.0)**
Referral to HIV prevention services given				
Yes	5,839	(57.4)	4,369	(58.4)
No	4,334	(42.6)	3,110	(41.6)
Total	**10,173**[c]	**(100.0)**	**7,479**[d]	**(100.0)**
Referral to partner services given				
Yes	8,872	(67.9)	5,893	(65.4)
No	4,187	(32.1)	3,117	(34.6)
Total	**13,059**[e]	**(100.0)**	**9,010**[f]	**(100.0)**

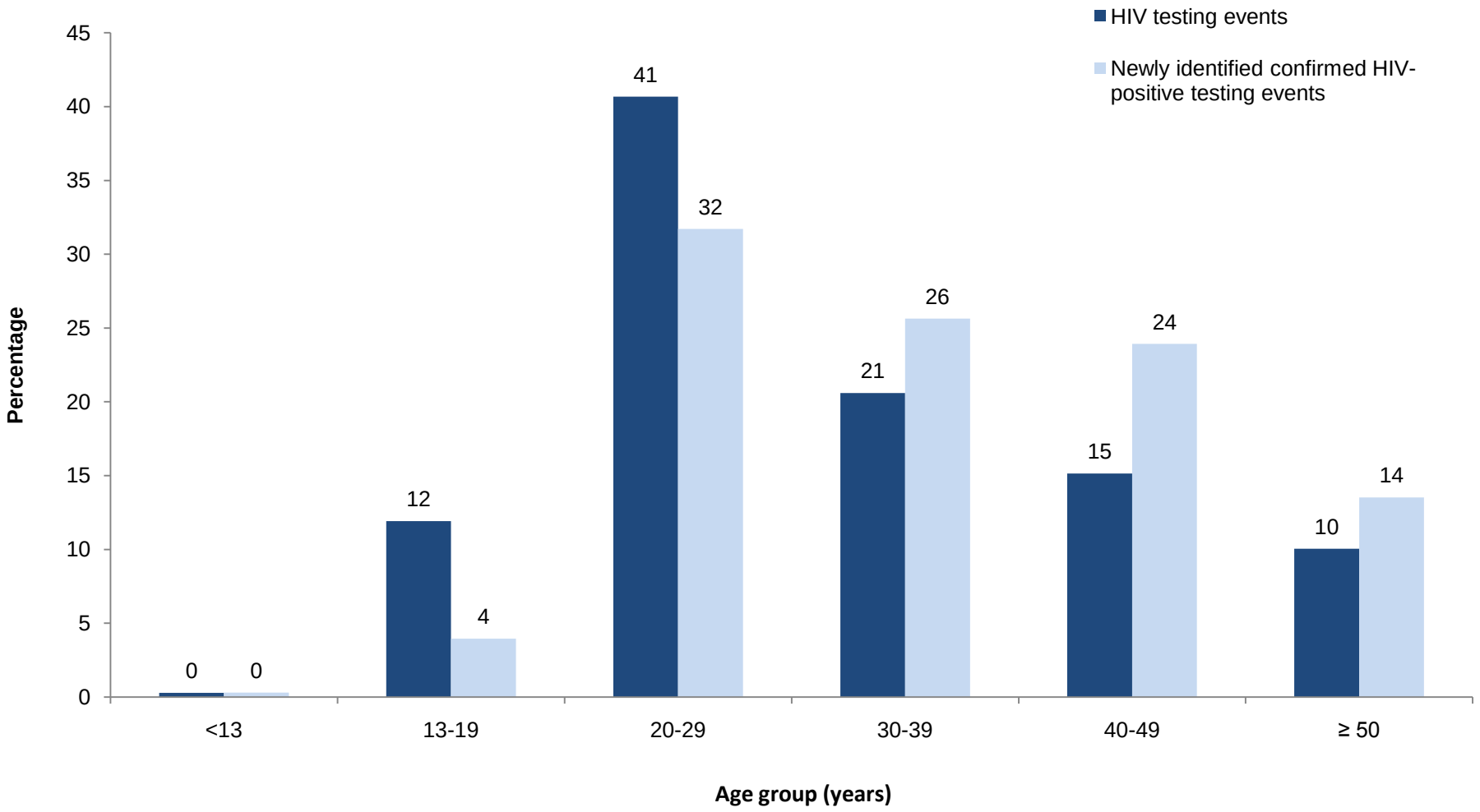
[a] Excludes 62% (13,035/20,951) of HIV testing events with a missing, invalid, or "don't know" value for the linkage to HIV medical care variables.
[b] Excludes 62% (9,168/14,880) of HIV testing events with a missing, invalid, or "don't know" value for the linkage to HIV medical care variables
[c] Excludes 51% (10,778/20,951) of HIV testing events with a missing or invalid value for referral to HIV prevention services variable.
[d] Excludes 50% (7,401/14,880) of HIV testing events with a missing or invalid value for referral to HIV prevention services variable.
[e] Excludes 38% (7,892/20,951) of HIV testing events with a missing or invalid value for referral to partner services variable.
[f] Excludes 39% (5,870/14,880) of HIV testing events with a missing or invalid value for referral to partner services variable.

Table 6b. Linkage to HIV medical care, referral to HIV prevention services, and referral to partner services among confirmed and newly identified confirmed HIV-positive testing events, 54 health departments in the United States, 2009

	Confirmed HIV-positive testing events		Newly identified confirmed HIV-positive testing events	
	No.	**(Column %)**	**No.**	**(Column %)**
Linkage to HIV medical care				
Yes	6,852	(71.4)	4,769	(68.5)
No	2,746	(28.6)	2,193	(31.5)
Total	**9,598**[a]	**(100.0)**	**6,962**[b]	**(100.0)**
Referral to HIV prevention services given				
Yes	6,467	(57.8)	4,856	(57.1)
No	4,727	(42.2)	3,647	(42.9)
Total	**11,194**[c]	**(100.0)**	**8,503**[d]	**(100.0)**
Referral to partner services given				
Yes	9,840	(69.4)	6,815	(67.1)
No	4,346	(30.6)	3,343	(32.9)
Total	**14,186**[e]	**(100.0)**	**10,158**[f]	**(100.0)**

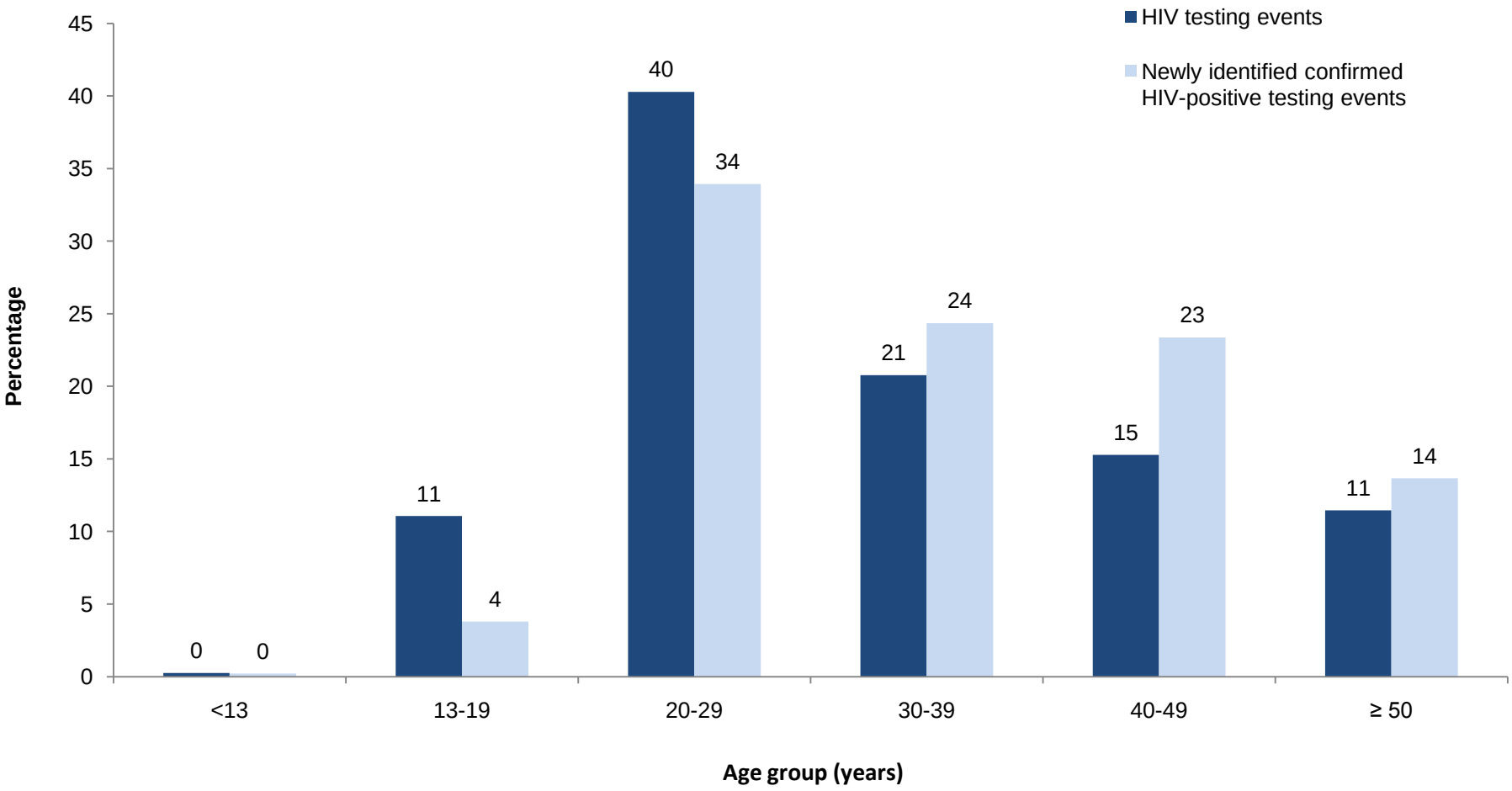
[a] Excludes 56% (12,380/21,978) of HIV testing events with a missing, invalid, or "don't know" value for the linkage to HIV medical care variables.
[b] Excludes 58% (9,424/16,386) of HIV testing events with a missing, invalid, or "don't know" value for the linkage to HIV medical care variables
[c] Excludes 49% (10,784/21,978) of HIV testing events with a missing or invalid value for referral to HIV prevention services variable.
[d] Excludes 48% (7,883/16,386) of HIV testing events with a missing or invalid value for referral to HIV prevention services variable.
[e] Excludes 35% (7,792/21,978) of HIV testing events with a missing or invalid value for referral to partner services variable.
[f] Excludes 38% (6,228/16,386) of HIV testing events with a missing or invalid value for referral to partner services variable.

Figure 1a. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by age group, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008



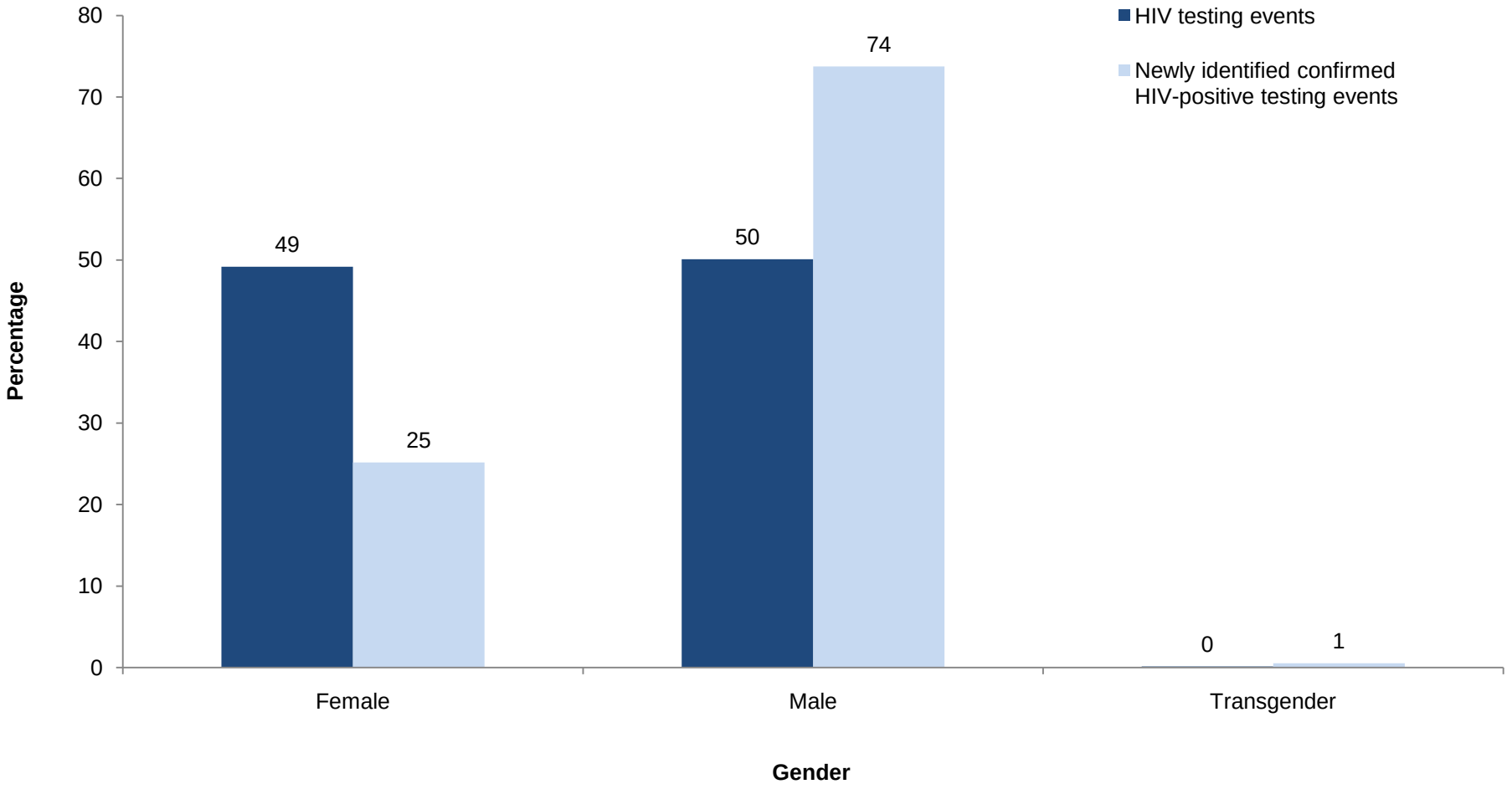
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 1b. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by age group, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009



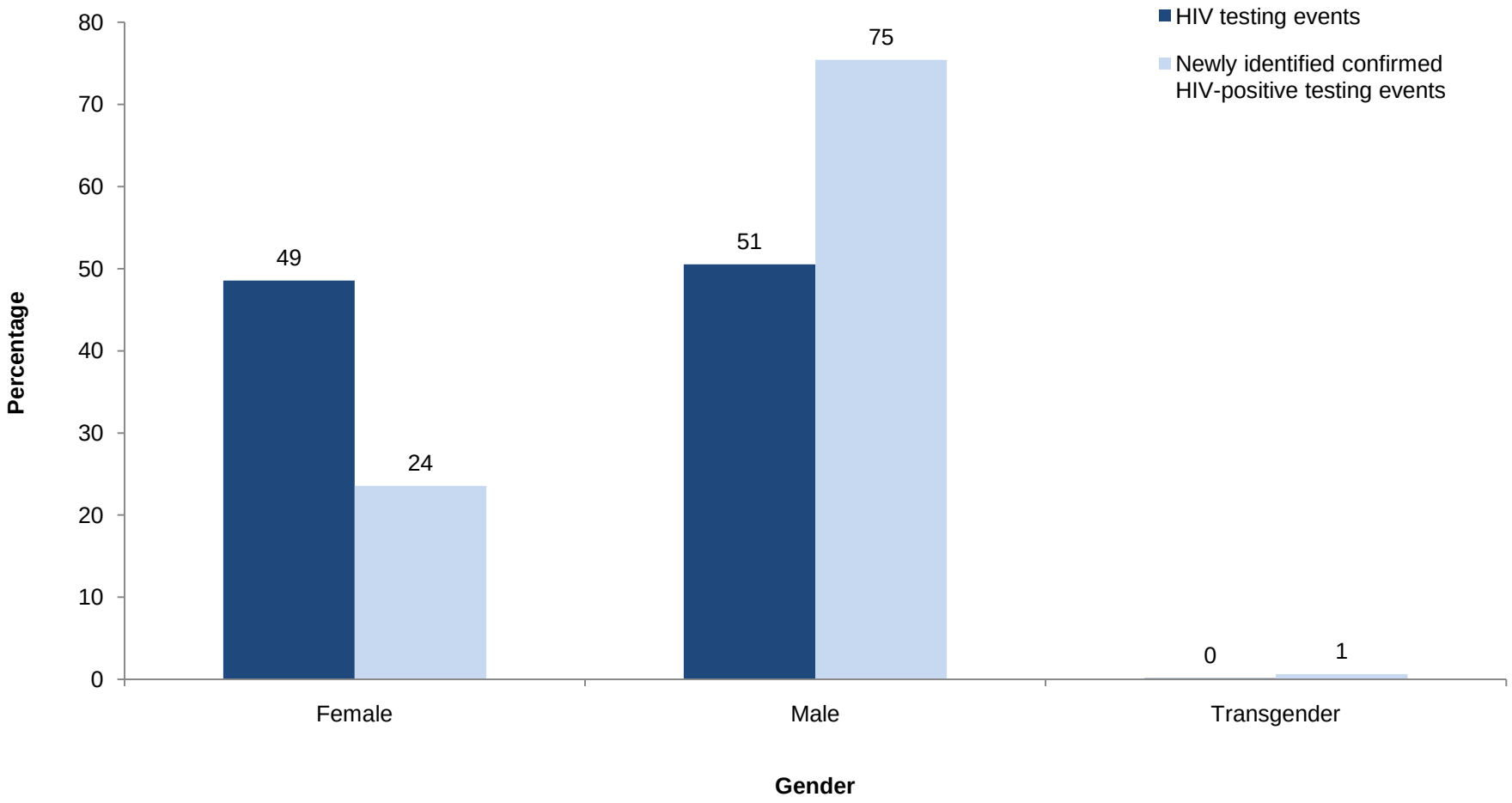
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 2a. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by gender, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008



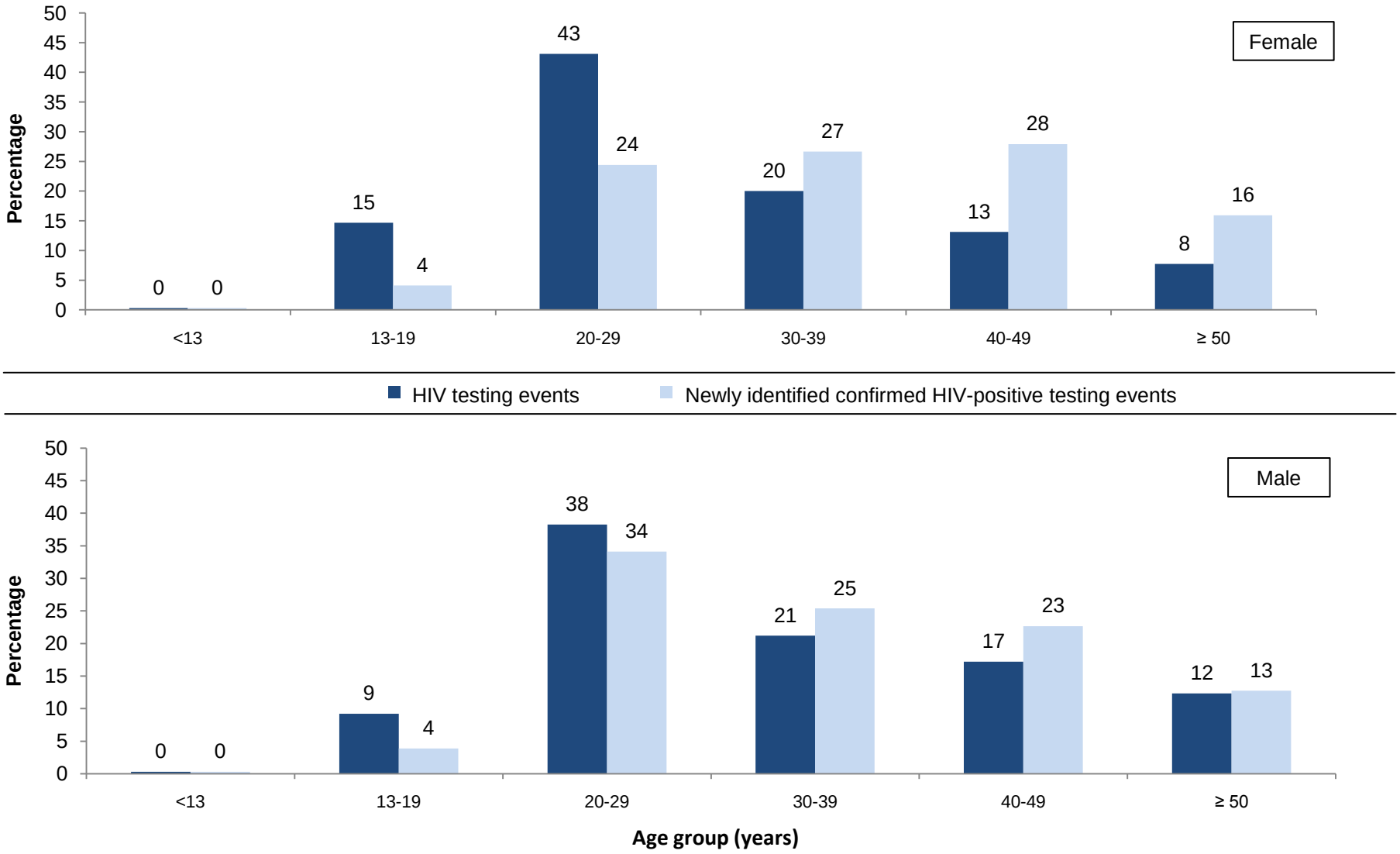
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 2b. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by gender, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009



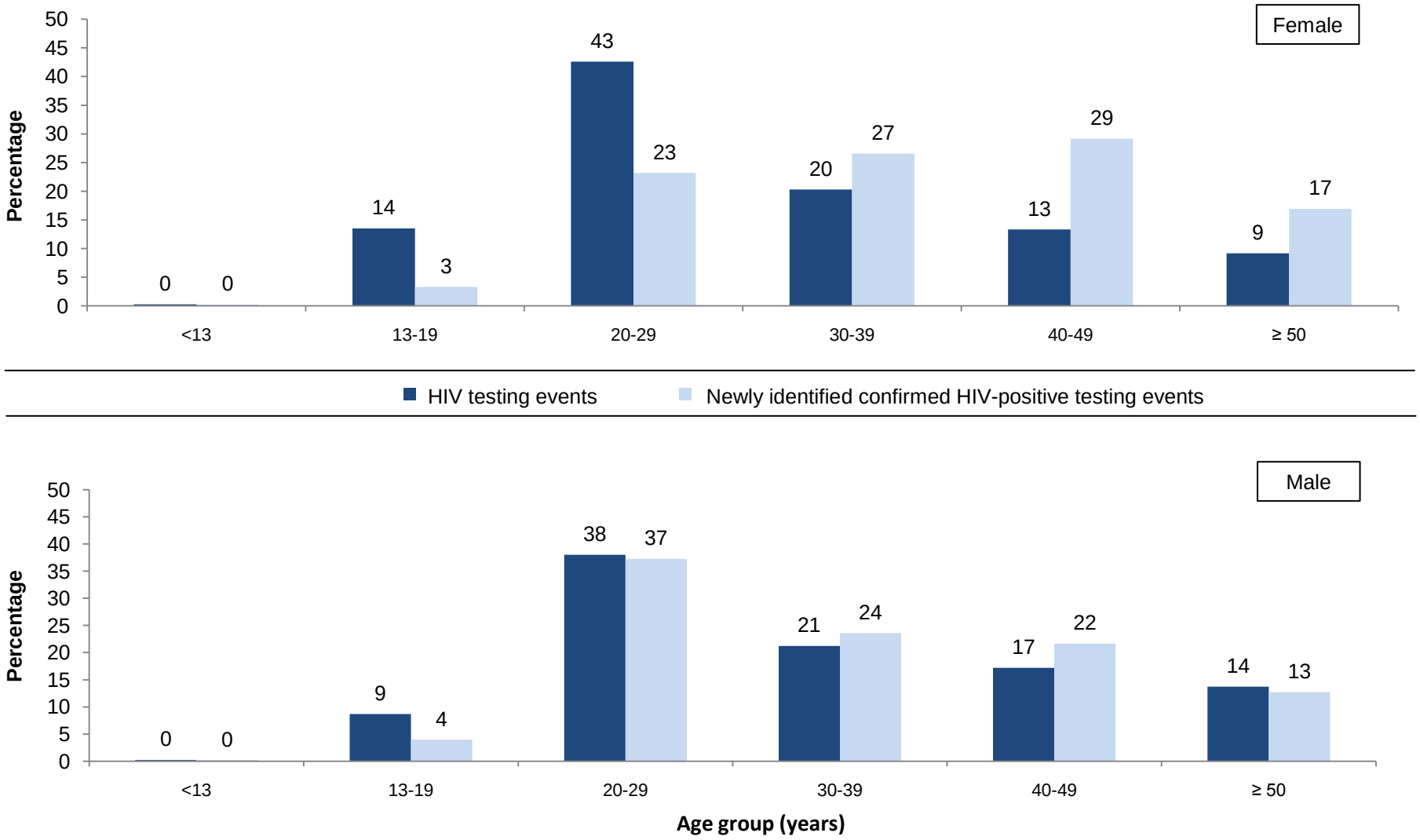
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 3a. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by age group and gender, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008



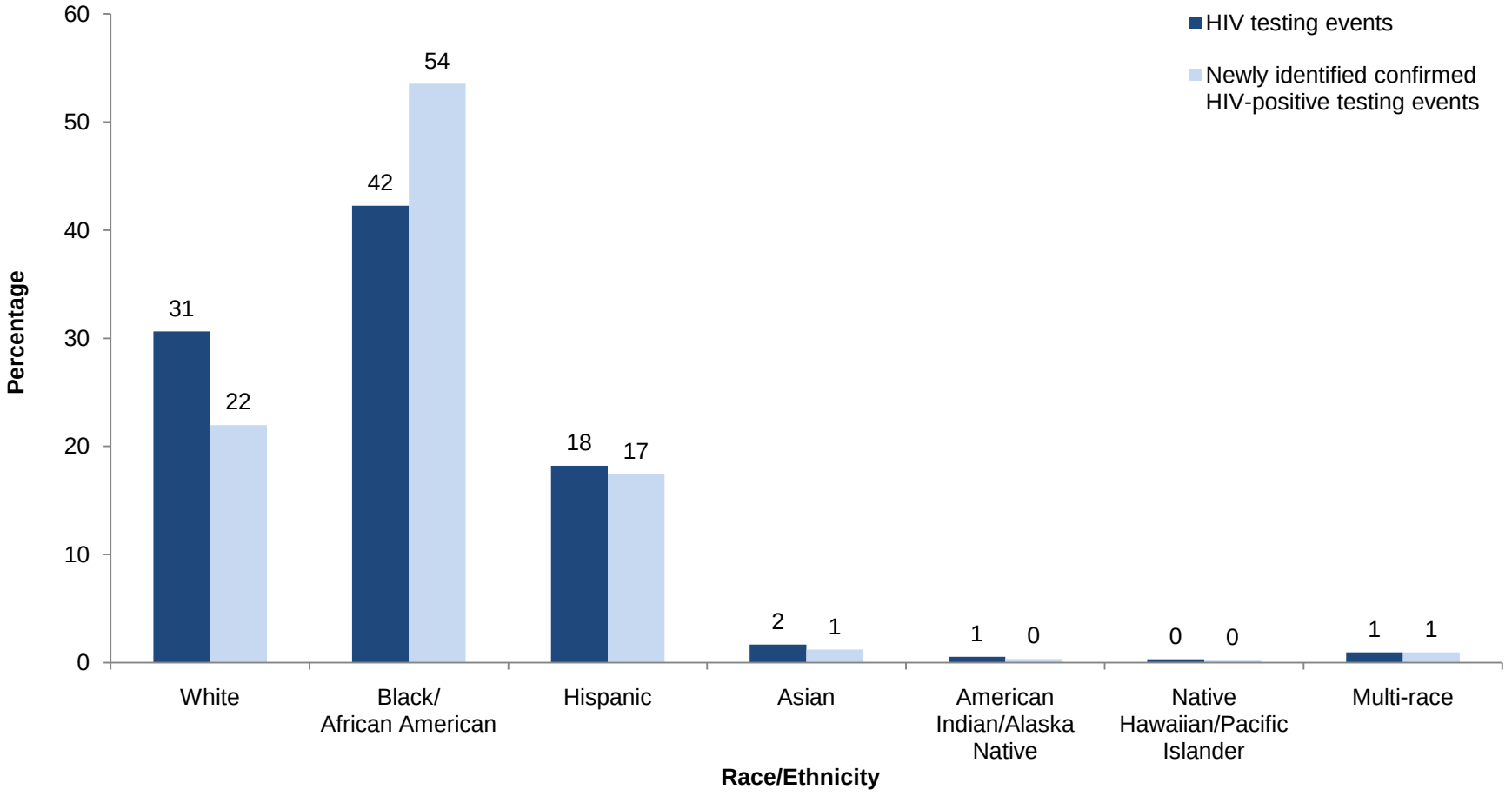
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 3b. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by age group and gender, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009



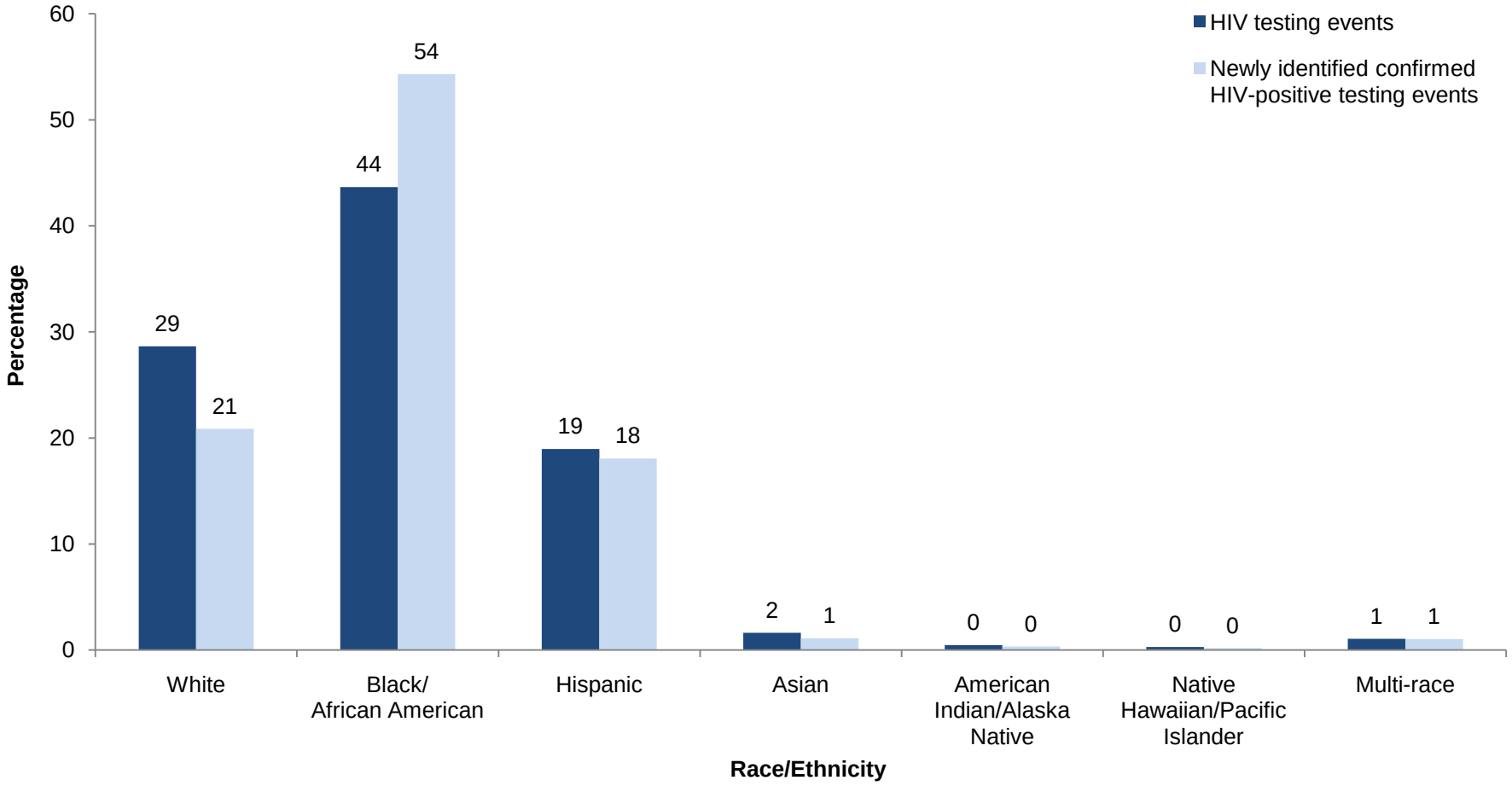
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 4a. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by race/ethnicity, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008



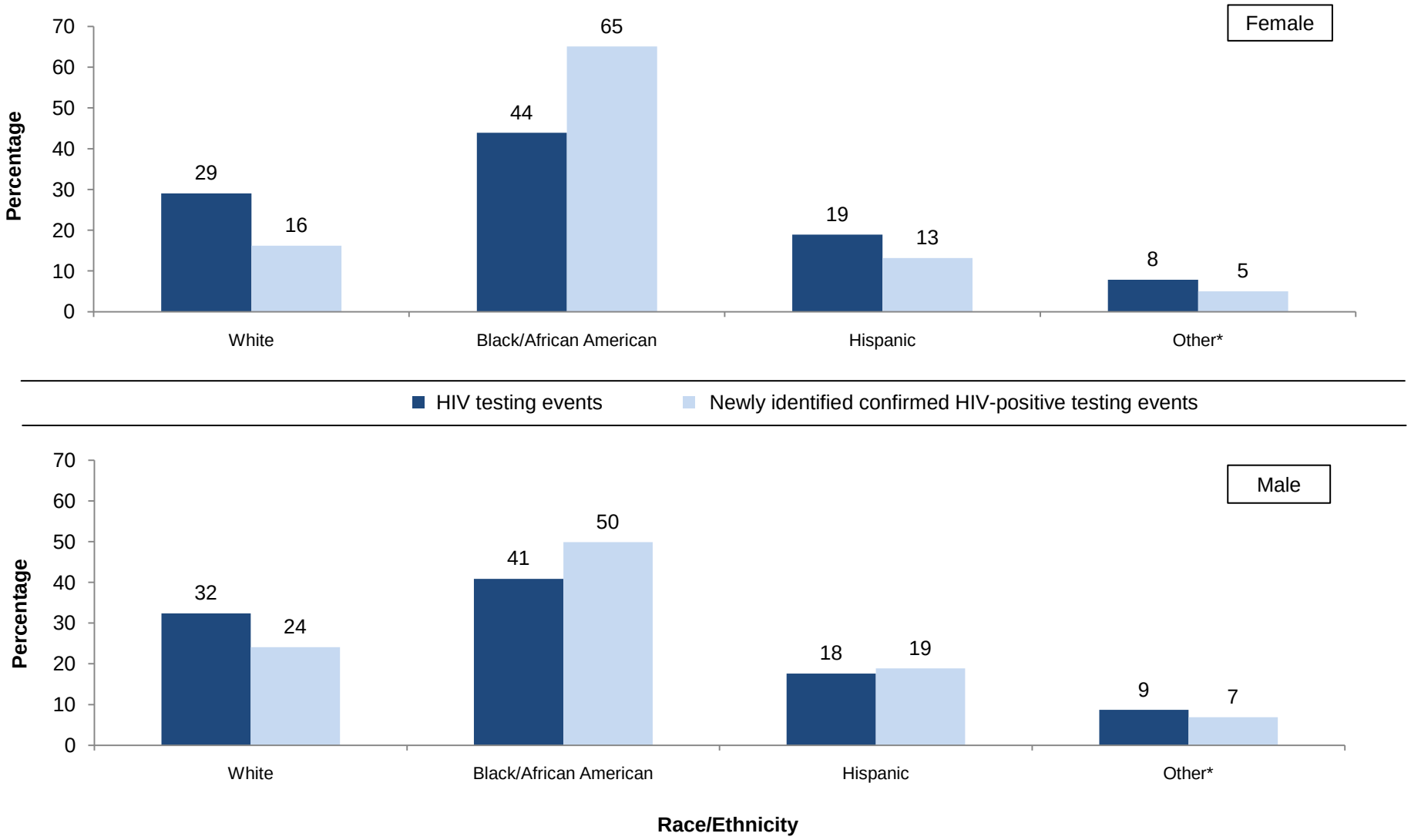
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 4b. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by race/ethnicity, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009



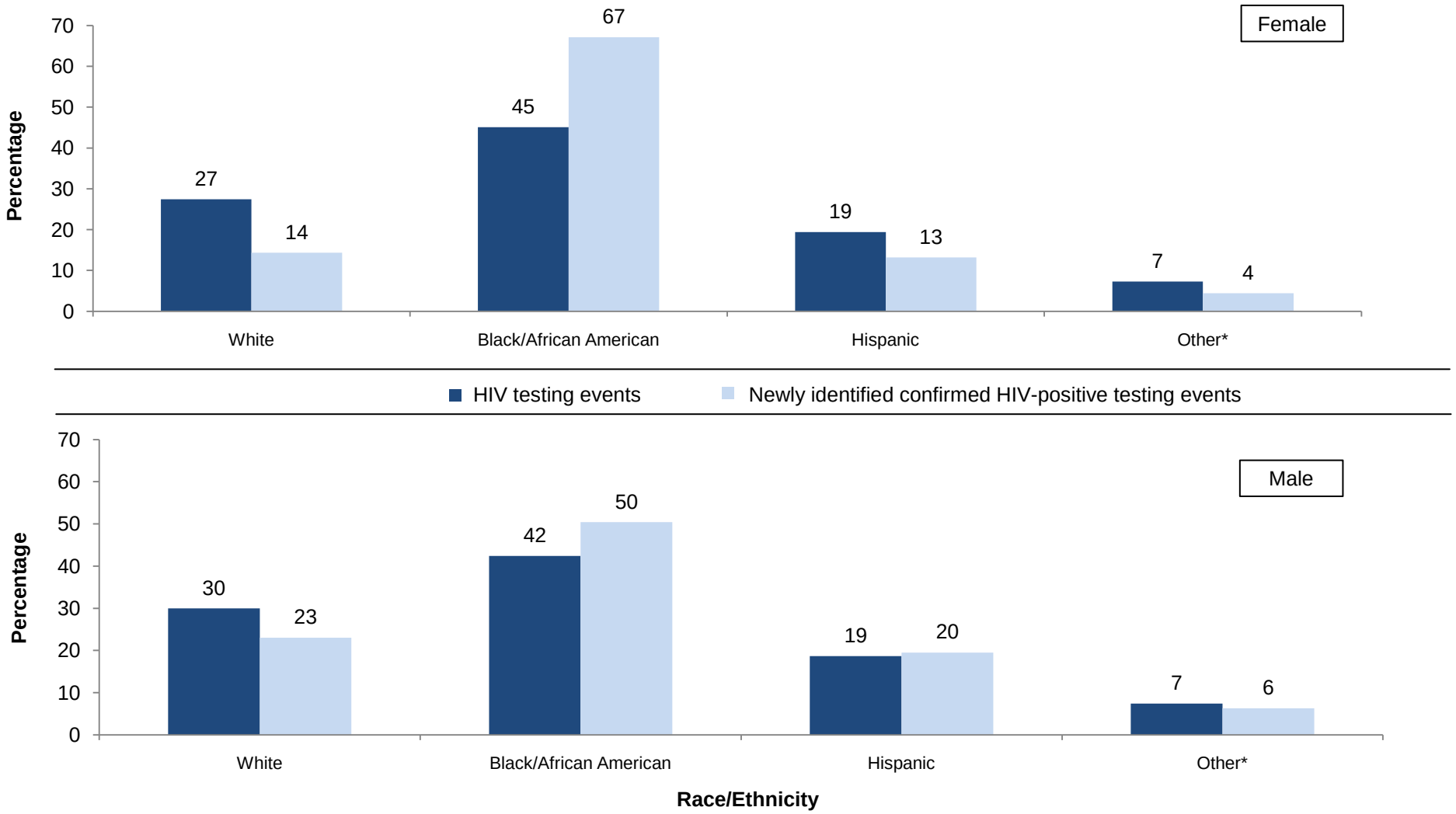
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 5a. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by race/ethnicity and gender, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008



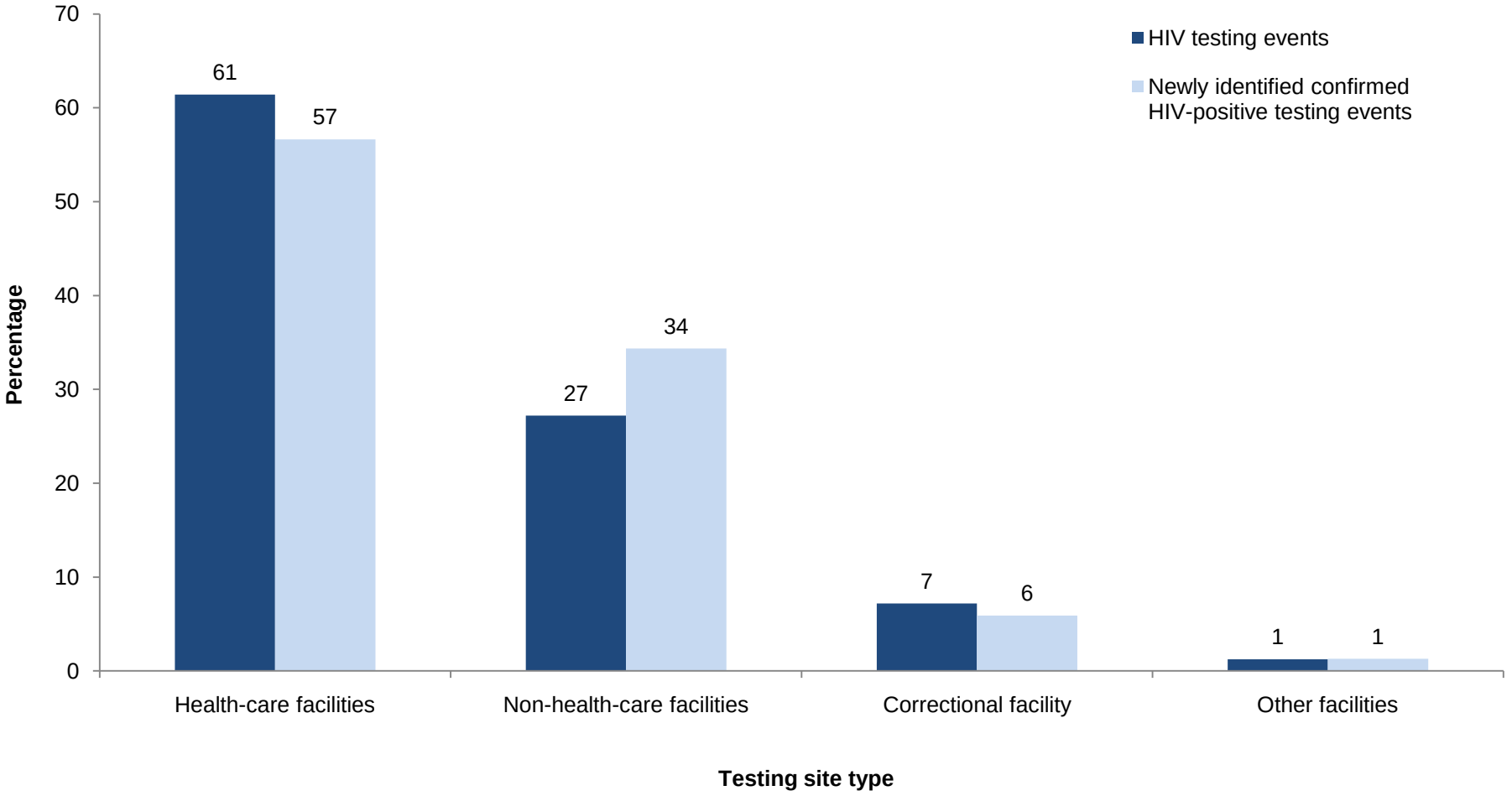
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.
* All other race/ethnicity categories, including "declined/don't know".

Figure 5b. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by race/ethnicity and gender, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009



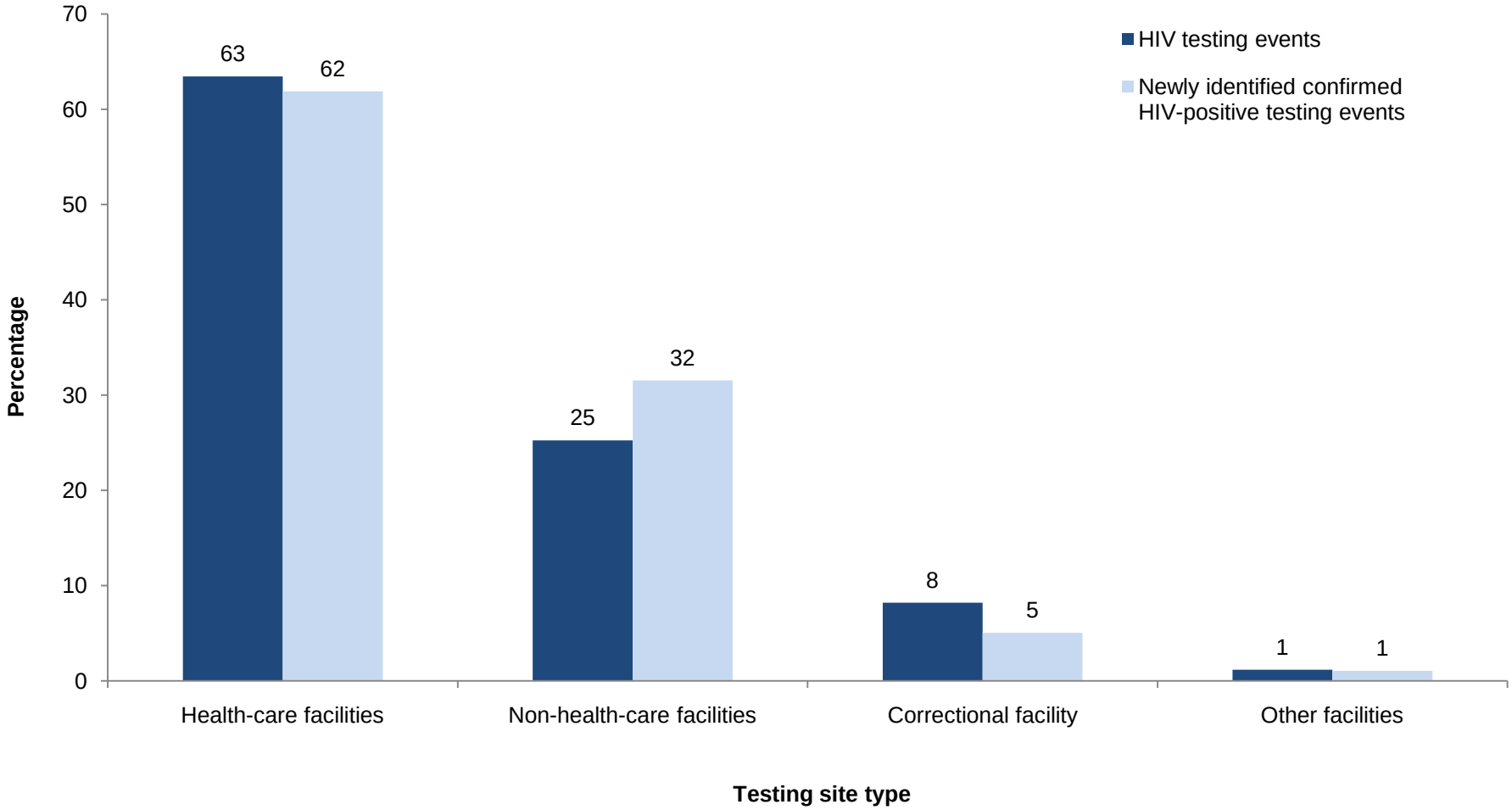
Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.
* All other race/ethnicity categories, including "declined/don't know".

Figure 6a. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by testing site type, 53 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008



Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

Figure 6b. Distributions of all HIV testing events and all newly identified confirmed HIV-positive testing events by testing site type, 54 health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2009



Note: Percentages may not add to 100 because of rounding and/or missing data. Bar height reflects unrounded values.

TECHNICAL NOTES

Interpretation of HIV Testing Data

When interpreting data output in this report, several points should be considered. First, some data findings may be influenced by whether testing sites promoted and followed policies of routine or targeted HIV testing. For example, the number of testing events may be lower in geographic locations or sites with targeted testing; and correspondingly, the HIV positivity in these locations or sites may be higher. Second, the population of persons using CDC-funded sites or other publicly funded sites for HIV testing is not necessarily representative of all persons who are tested in the United States. For example in 2006, 17% of an estimated 17.7 million persons who reported being tested for HIV in the preceding 12 months were tested at sites that were primarily publicly funded.[25] Also, this report does not include information about HIV testing services that were supported by the Departments of Defense, Justice, Labor, and Veterans Affairs; Health Care Finance Administration; Health Resources and Services Administration; Substance Abuse and Mental Health Services Administration; agencies of the U.S. Public Health Service other than CDC; state and local health departments; and the private sector. Third, it is not possible to link the results of repeat testing events for the same person if, for example, a person has more than one testing event that is represented in these 2008-2009 data. However, the definition of newly identified confirmed HIV positivity used in this report minimizes this limitation for persons who are newly identified, because records for which there is a current HIV-positive test result and a history of a previous HIV-positive test are excluded. Fourth, the HIV testing data are collected for HIV prevention program activities in conjunction with a health service delivery, which means the information collected by service providers is not routinely validated through research or epidemiologic investigation. Fifth, because testing events with missing data for the variable "results received" are excluded from analysis for Tables 4a and 4b, the percentages in these tables may not be representative of the true percentages of persons who received HIV test results. In some health departments, for example, it has been standard practice to equate a missing value with a client not returning for follow-up. Sixth, for this report, when small denominators were used to calculate percentages that were considered "relatively unreliable" (i.e., 1 divided by 10 equaling 10% that compared to other percentages does not seem reliable or accurate), then the percentage was not mentioned in the narrative. Finally, the comparability of these data across health departments may be limited due to differences in data collection, quality assurance, and quality improvement activities that occur at the state or local levels. Comparability within a health department may be limited as well. For example, in the District of Columbia, the HIV positivity was 0.2% in 2009, in contrast to 1.3%-2.5% during 2005-2008.[8, 22, unpublished data] In Chicago, the newly identified HIV positivity was 0.1%-0.2% during 2008-2009, in contrast to 0.8%-1.5% during 2005-2007. [8, unpublished data] In South Carolina, the number of confirmed HIV-positive testing events and the number of newly identified events are the same (n=571) in 2009, because the values for the "previous test result" variable are 100% missing. In Kentucky, the total number of HIV testing events has fluctuated from 2005 to 2009 (i.e., 16,361 to 15,189 to 9,571 to 10,174 to 26,094), [8, unpublished data] which is most likely due to incomplete reporting to CDC.

Missing and Invalid Data

The Appendix shows the number and percentage of missing and invalid data for 13 characteristics included in this report. Data were considered to be missing if a response was expected but no data value was found. For some characteristics, expected denominators for calculating the percentage of missing values are dependent on responses to previous questions (e.g., only the number of records marked "yes" for the "previous HIV test" variable are used in the denominator for calculating the percentage missing for the previous test result) or a combination of questions (e.g., the algorithm used to calculate the "test result" variable is based on responses to the "test technology" and "test result" variables). Of 13 characteristics, eight had less than 5.0% missing data in both 2008 and 2009. The highest percentages of missing data were observed for the "referral to HIV prevention services" (51% in 2008 and 49% in 2009), "linkage to HIV medical care" (50% in 2008 and 45% in 2009), and

"referral to partner services" (38% in 2008 and 36% in 2009) variables. Invalid data values were identified based on CDC-provided data value codes, logical ranges, and skip patterns. All 13 characteristics had less than 5.0% invalid data in both 2008 and 2009.

Definitions

HIV testing event

An HIV testing event is a sequence of one or more HIV tests conducted with the client to determine his or her HIV status. During one testing event, a client may be tested once (e.g., one rapid test or one conventional test) or multiple times (e.g., one rapid test followed by one conventional test to confirm a preliminary HIV-positive test result). Analyses of data for this report are limited to a maximum of three tests for each testing event (a brief assessment in 2009 indicated that more than three tests in an HIV testing event occurred in only 0.01% of all testing events).

Invalid HIV test

An HIV test is considered invalid if all of the following variables have missing data: test election (i.e., anonymous or confidential), test technology (i.e., conventional, rapid, or "other"), specimen type (e.g., blood, oral mucosal transudate, or urine), test result (i.e., negative, positive, indeterminate, "invalid," or "no result"), and results received (i.e., yes or no).

Invalid HIV testing event

A record without a valid HIV test is considered an invalid HIV testing event. Such records (1.1% of the total records for 2008 and 2009) are not included in this report.

Confirmed HIV-positive result

A testing event with a positive test result for a conventional HIV test (positive EIA test confirmed by supplemental testing, e.g., Western Blot) or a nucleic acid amplification test (NAAT).

Newly identified confirmed HIV-positive result

A confirmed HIV-positive test result associated with a client who does not self-report having previously tested HIV positive.

Preliminary HIV-positive result

A testing event with a positive test result from a rapid HIV test.

Age

The age of the client at the testing event and determined by calculating the difference between the year of a client's birth and the year of the HIV testing event.

Gender

The client's self-reported current gender identity. This may include one's social status, self-identification, legal status, and biology. Current gender identity is submitted to CDC as Male, Female, Male-to-Female Transgender (an individual whose physical or birth sex is male, but whose gender expression and/or gender identity is female), and Female-to-Male Transgender (an individual whose physical or birth sex is female, but whose gender expression and/or gender identity is male). For this report, gender is reported as Male, Female, and Transgender.

Race/Ethnicity

Race is defined as a client's self-reported classification of the biological heritage with which they most closely identify. Ethnicity is defined as a client's self report of whether they are Hispanic or Latino. Up to five races and one ethnicity (i.e., Hispanic or Latino) for a client are allowed and submitted to CDC as separate variables. For this report, a "race/ethnicity" variable was created by combining the race and ethnicity variables using the following categories and hierarchy:

- Hispanic ("Hispanic or Latino" in the ethnicity variable regardless of the race variables)
- Remaining clients who selected "Not Hispanic or Latino" for the ethnicity variable were categorized as:
    - White
    - Black/African American
    - Asian
    - American Indian or Alaska Native
    - Native Hawaiian or Pacific Islander
    - Multi-race (clients who selected more than one race)
- Declined
- Don't know
- Invalid
- Missing

Testing site type

Testing site type is defined as the setting at which HIV testing is provided, and for this report, classified into the following categories:

- Health-care facilities (includes inpatient facilities, outpatient facilities, and emergency rooms)
- Non-health-care facilities (includes HIV counseling and testing sites and community settings)
- Correctional facility (for reporting, CDC did not require whether health-care or non-health-care)
- Other facilities (includes blood banks/plasma centers and other facilities)
- Invalid
- Missing

Rapid test used in testing event

This calculated variable indicates whether a rapid test technology was used in the testing event. The value "yes" includes all testing events that used a rapid test alone or in combination with additional HIV tests.

Results received

This calculated variable indicates whether the client received HIV test results from the initial testing site or obtained the results from another agency for at least one HIV test in the testing event, irrespective of the HIV test technology or how many tests were conducted.

Risk category

Risk factor information for NHM&E data are collected from the client for risks during the 12 months prior to the testing event. For this report, mutually exclusive risk categories are created for confirmed HIV-positive testing events using a combination of risk factors and gender of the client (males and females only). In a two step process, the risk categories are ordered hierarchically based on the most likely presumed risk for exposure to HIV (see step 2 in the Box for the hierarchical order of risk categories). For example, a male reporting having sex with a male and sex with an anonymous partner is assigned to the risk category "male-to-male sexual contact."

"High-risk heterosexual contact" category includes clients who reported heterosexual contact and at least one risk factor (other than IDU). Similarly, "low-risk heterosexual contact" includes clients who reported heterosexual contact but did not report any other risk factors. "No acknowledged risk" indicates that the client was asked about risk factors, but no risk factors were identified. Clients who declined to discuss risk factors or were not asked about risk factors are categorized into the "unknown" category. The "other" category includes female-to-female sexual contact with no history of IDU.

Linkage to HIV medical care

This calculated variable indicates whether a client with confirmed HIV-positive test results was linked to HIV medical care.

Referral to HIV prevention services

This variable indicates whether a client with confirmed HIV-positive test results was given a referral to HIV prevention services.

Referral to partner services

This variable indicates whether a client with confirmed HIV-positive test results was given a referral to partner services.

Box. Process used to categorize reported risk factors

Step 1 **Risk factors reported by client** *The provider documents each risk factor reported. More than one risk factor may be applicable to one client.*	**Step 2** **Risk categories assigned through a hierarchy** *Each client is classified into a risk category by using a combination of reported risk factor(s) and client's gender. This classification is based on a presumed hierarchy of risk for exposure to HIV.*
• Sex with male • Sex with female • Injection drug use (IDU) • Sex without using a condom • Sex with a person who is an IDU • Sex with a man who had sex with a man • Sex with a person who is HIV-positive • Exchange of sex for drugs/money/or something they need • Sex while intoxicated and/or high on drugs • Sex with a person of unknown HIV status • Sex with a person who exchanges sex for drugs/money • Sex with an anonymous partner • Sex with a person who has hemophilia or is a transfusion/transplant recipient • Sex with a transgender person • Client was asked, but no risk was identified • Client was not asked about risk factors • Client declined to discuss risk factors	**Male-to-male sexual contact and injection drug use** **Male-to-male sexual contact** **Injection drug use** **High-risk heterosexual contact** (Heterosexual contact and at least one sex related risk factor identified) **Low-risk heterosexual contact** (Heterosexual contact but no sex related risk factor identified) **Other** (Female-to-female sexual contact with no history of IDU) **No acknowledged risk** (Client was asked, but no risk was identified) **Unknown** (Client was not asked about risk factors or client declined to discuss risk factors)

REFERENCES

1. Marks G, Crepaz N, Senterfitt JW, Janssen RS. Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the United States: Implications for HIV prevention programs. J Acquir Immune Defic Syndr 2005;39:446-453.
2. CDC. HIV Prevalence Estimates -- United States, 2006. MMWR 2008;57:1073-1076.
3. CDC. *HIV Surveillance Report, 2009* ; vol. 21 [p36]. http://www.cdc.gov/hiv/topics/surveillance/resources/reports/. Published February 2011.
4. CDC. Vital Signs: HIV testing and diagnosis among adults-- United States, 2001-2009. MMWR 2010;59:1-6.
5. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR 2006;55(No. RR-14).
6. CDC. Revised guidelines for HIV counseling, testing, and referral and revised recommendations for HIV screening of pregnant women. MMWR 2001;50(No. RR-19).
7. Valdiserri RO. HIV counseling and testing: Its evolving role in HIV prevention. AIDS Educ Prev 1997;9, Suppl B, 2-13.
8. CDC. HIV Counseling and Testing at CDC-Funded Sites, United States, Puerto Rico, and the U.S. Virgin Islands, 2005. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; June 2010.
9. CDC. HIV Prevention Projects Program Announcement 04012, Notice of availability of funds for fiscal year 2004. Department of Health and Human Services, Centers for Disease Control and Prevention. 2003.
10. CDC. HIV Prevention Activities for Health Departments, PS 07-768, Expanded and integrated human immunodeficiency virus (HIV) testing for populations disproportionately affected by HIV, primarily African Americans. Department of Health and Human Services, Centers for Disease Control and Prevention. 2007.
11. CDC. Programmatic Activities Report: First Year of Funding (9/30/07-9/29/08). PS 07-768: Expanded and Integrated Human Immunodeficiency Virus (HIV) Testing for Populations Disproportionately Affected by HIV, Primarily African Americans. May 2010.
12. CDC. *2009 Quality Assurance Standards for HIV Counseling, Testing, and Referral Data*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; September 2009. Available at http://www.cdc.gov/hiv/testing/resources/guidelines/qas/.
13. CDC. HIV counseling and testing at CDC-supported sites — United States, 1999-2004. 2006.
14. CDC. HIV counseling and testing in publicly funded sites annual report 1997 and 1998. Atlanta (GA): Centers for Disease Control and Prevention; 2001.
15. CDC. HIV counseling and testing in publicly funded sites: 1996 annual report. Atlanta: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention, May 1998.
16. CDC. HIV counseling and testing in publicly funded sites: 1995 summary report. Atlanta: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention, September 1997.
17. CDC. HIV counseling and testing in publicly funded sites: 1993-1994 summary report. U.S. Department of Health and Human Services. Atlanta: Centers for Disease Control and Prevention, March 1996.
18. CDC. National HIV Monitoring and Evaluation Testing Data, 2008-2009: Quarterly Report for the Prevention Program Branch. June 2010.
19. CDC. Quarterly Monitoring Report for the Prevention Program Branch: National HIV Monitoring and Evaluation Testing Data, 2008-2009: November 2010.
20. Habarta N, Stein R, Gern R, and Beltrami J. Monitoring and evaluation of HIV testing services in the United States [Abstract]. XVIII International AIDS Conference, Vienna, Austria. July 18-23, 2010.
21. Duran D, Usman HR, Beltrami J, Alvarez ME, Valleroy L, Lyles CM. HIV counseling and testing among Hispanics at CDC-funded sites in the United States, 2007. Am J Public Health. 2010;100:S152-S158.
22. CDC. Expanded HIV testing and trends in diagnoses of HIV infection – District of Columbia, 2004-2008. MMWR 2010;59:737-741.

23. CDC. Impact of PS 07-768 on overall national HIV testing trends in the US: a rapid assessment project. Report for the Division of HIV/AIDS Prevention Office of the Director. December 2010.
24. White House Office of National AIDS Policy. *National HIV/AIDS Strategy for the United States*. July 2010.
25. CDC. Persons Tested for HIV – United States, 2006. MMWR 2008;57:845-849.

APPENDIX

Appendix. Number and percentage of missing and invalid data values, health departments providing test-level data in the United States, Puerto Rico, and the U.S. Virgin Islands, 2008-2009

	2008				2009			
	Total testing events (2,151,474) (53 health departments)				Total testing events (2,620,877) (54 health departments)			
Characteristics	Missing		Invalid		Missing		Invalid	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Date of HIV testing	0	(0.0)	36	(0.0)	0	(0.0)	23	(0.0)
Age at test	12,682	(0.6)	15,779	(0.7)	13,477	(0.5)	10,061	(0.4)
Gender	10,536	(0.5)	2,122	(0.1)	13,113	(0.5)	6,272	(0.2)
Race/Ethnicity	9,064	(0.4)	102	(0.0)	31,685	(1.2)	80	(0.0)
Testing site type	60,067	(2.8)	2,992	(0.1)	46,118	(1.8)	3,169	(0.1)
Test technology	17,735	(0.8)	8	(0.0)	13,375	(0.5)	13	(0.0)
Test result	18,408	(0.9)	148	(0.0)	11,053	(0.4)	283	(0.0)
Results received	176,795	(8.2)	27,719	(1.3)	171,432	(6.5)	78,987	(3.0)
Previous test result[a]	46,416	(3.8)[b]	700	(0.1)[b]	48,897	(3.3)[c]	393	(0.0)[c]
Risk category	2,466	(11.9)[d]	488	(2.4)[d]	2,499	(11.5)[e]	369	(1.7)[e]
Linkage to HIV medical care	10,375	(49.5)[f]	80	(0.4)[f]	9,794	(44.6)[g]	16	(0.1)[g]
Referral to HIV prevention services	10,778	(51.4)[f]	0	(0.0)[f]	10,784	(49.1)[g]	0	(0.0)[g]
Referral to partner services	7,892	(37.7)[f]	0	(0.0)[f]	7,792	(35.5)[g]	0	(0.0)[g]

[a] Based on self-reported result variable and only when a previous HIV test was indicated.
[b] Based on 1,227,225 testing events with a history of a previous HIV test.
[c] Based on 1,475,631 testing events with a history of a previous HIV test.
[d] Based on 20,705 confirmed HIV-positive testing events.
[e] Based on 21,761 confirmed HIV-positive testing events.
[f] Based on 20,951 confirmed HIV-positive testing events.
[g] Based on 21,978 confirmed HIV-positive testing events.