



Massachusetts HIV/AIDS Data Fact Sheet

Who is most at risk of HIV infection?

Fast Facts

- HIV infection diagnoses have decreased over the past decade in Massachusetts, but gender, sexual orientation, and racial/ethnic disparities persist.
- Despite the decreasing rate of HIV infection diagnosis, male-to-male sex has predominated and has accounted for an increasing proportion of cases.
- Although black non-Hispanic and Hispanic/Latina women are diagnosed with HIV infection at rates 34 and 12 times that of white non-Hispanic women, there has been a dramatic decrease in newly diagnosed HIV infection cases among women in all demographic groups.
- The second largest risk group consists of those with no reported risk behavior.
- The most dramatic decrease in HIV infection diagnoses has been in persons who inject drugs.

Overview

Although newly diagnosed HIV infections during a recent three-year time period is not a direct measure of newly acquired HIV infections during that time, recent HIV infection diagnoses are the best available indicator for who is most at risk for HIV infection. While the relative frequencies of diagnosis of HIV infection by gender, race/ethnicity, and place of birth have remained fairly stable over the past ten years, there has been a shift in the distribution of HIV infection diagnoses by reported risk. The proportion of cases with injection drug use as the reported risk decreased from 16% in 2004 to 6% in 2013. During the same time period, the proportion of all HIV infection diagnoses with male-to-male sex as a reported risk increased from 32% to 46%. Among men, the proportion of HIV infection diagnoses with male-to-male sex as the reported risk increased from 45% in 2004 to 60% in 2013.

Trends in HIV Infection Diagnoses from 2004 to 2013:

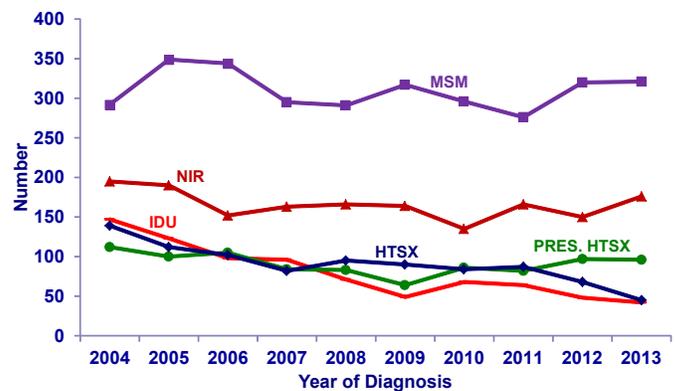
- The number of HIV diagnoses reported annually decreased by 20% from 922 in 2004 to 742 in 2008.ⁱⁱ

- In the past five years (2009 to 2013), reports of HIV diagnosis have stabilized at around 700 per year.

Reported Risk:

- From 2004 to 2013, male-to-male sex remained the predominant reported risk, accounting for the largest proportion of HIV infection diagnoses each year, and increasing from 32% to 46% of the total.
- From 2004 to 2013, the second largest risk group was no reported risk, at 22% of all cases during this time period.
- The proportion of cases with injection drug use as the reported risk decreased from 16% in 2004 to 6% of new diagnoses in 2013.
- From 2004 to 2013, the number of individuals diagnosed with HIV infection with male-to-male sex as a reported risk remained fairly level with an increase of 10% (from 292 to 321) while the number of cases with:
 - undetermined risk decreased by 10% (from 195 to 176).
 - presumed heterosexual reported riskⁱⁱⁱ decreased by 14% (from 112 to 96); and
 - heterosexual sex reported risk decreased by 68% (from 139 to 45);
 - injection drug use (IDU) reported risk decreased by 71% (from 147 to 42); and
 - MSM/IDU reported risk decreased by 42% (from 26 to 15).

Figure 1. Individuals Diagnosed with HIV Infection by Selected Reported Risk and Year of Diagnosis: Massachusetts, 2004–2013



Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15



For detailed data tables and technical notes see Appendix
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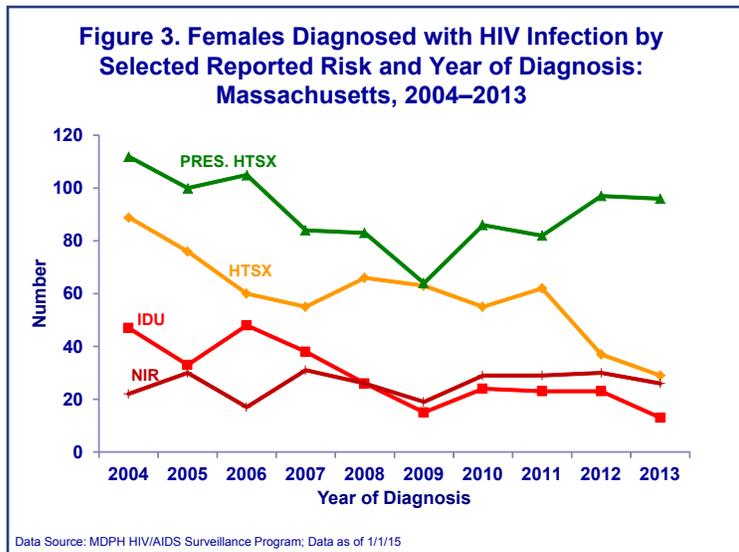
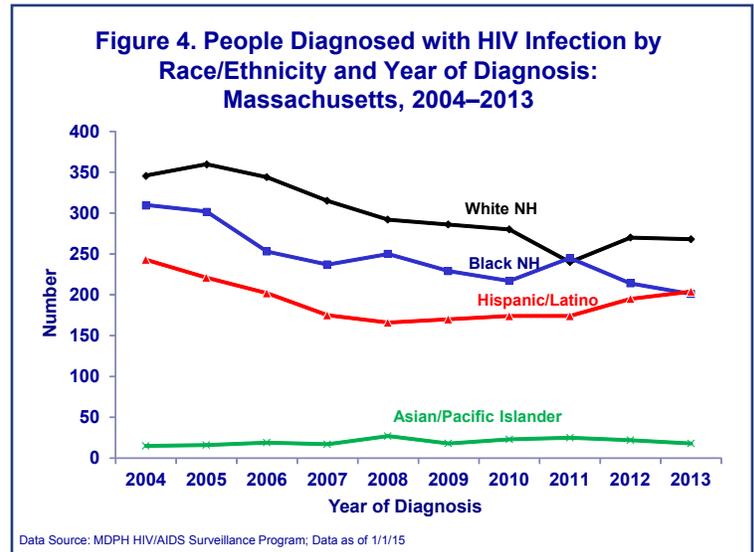
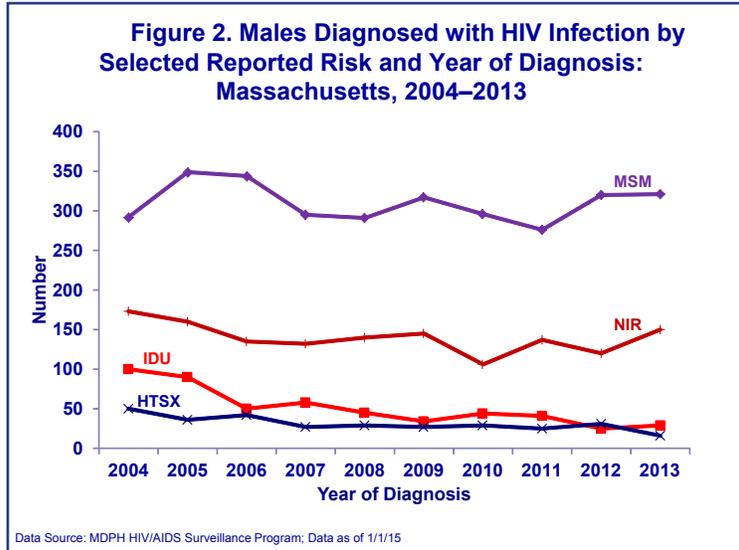




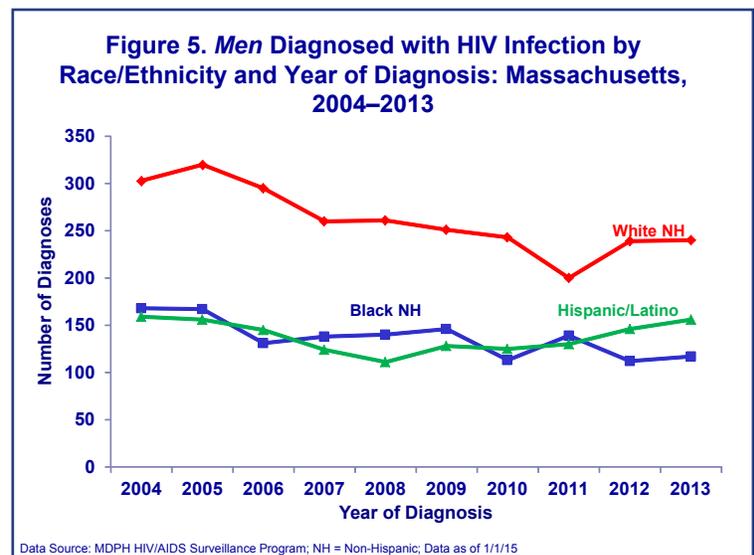
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Reported Risk and Gender:



Gender and Race/Ethnicity:



Race/Ethnicity:

- From 2004 to 2013, the number of white (non-Hispanic) individuals diagnosed with HIV infection decreased by 23% (from 346 to 268); the number of black (non-Hispanic) individuals decreased by 35% from (310 to 201); and the number of Hispanic/Latino individuals decreased by 16% (from 243 to 204).



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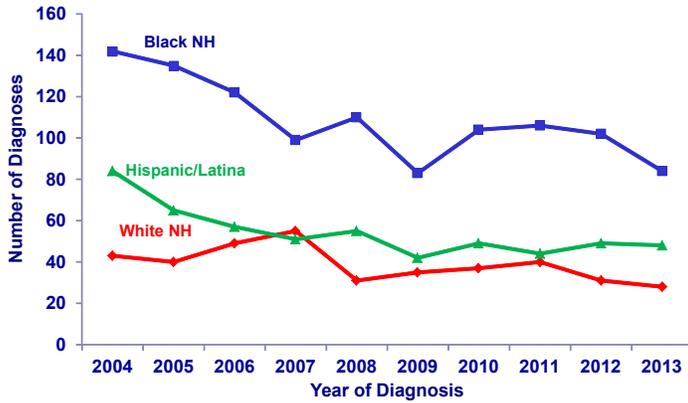




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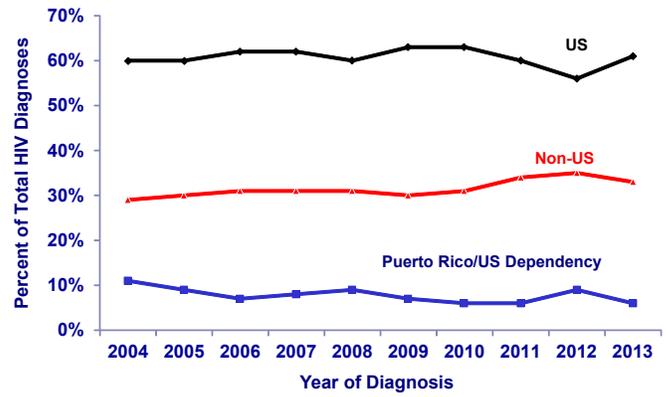
Who is most at risk of HIV infection?

Figure 6. Women Diagnosed with HIV Infection by Race/Ethnicity and Year of Diagnosis: Massachusetts, 2004–2013



Data Source: MDPH HIV/AIDS Surveillance Program; NH = Non-Hispanic; Data as of 1/1/15

Figure 7. Percentage Distribution of People Diagnosed with HIV Infection by Place of Birth and Year of Diagnosis: Massachusetts, 2004–2013



Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

Age at HIV Infection Diagnosis:

- The proportion of HIV diagnoses reported in people age 24 years or younger at the time of diagnosis increased from 9% in 2004 to 14% in 2013.
- During the same time period, the proportion of HIV diagnoses reported in people between the ages of 25 and 44 years old decreased from 63% to 48%.
- The proportion of HIV diagnoses reported in people age 45 years or older increased from 28% in 2004 to 39% in 2013.

Gender:

- From 2004 to 2013, the number of men diagnosed with HIV infection decreased by 17% (from 646 to 533) while the number of women diagnosed with HIV infection decreased by 40% (from 276 to 165).

Place of Birth and Gender:

- The proportion of individuals born outside the US was relatively stable from 2004 to 2013.

- The proportion of individuals born outside the US among women increased from 46% in 2004 to 55% in 2010 and then decreased to 49% in 2013.

A Profile of People Recently Diagnosed with HIV Infection:

Race/Ethnicity and Reported Risk:

- The predominant reported risk among white (non-Hispanic) individuals diagnosed with HIV infection within the years 2011 to 2013, was male-to-male sex (66%); for 13% risk was undetermined.
- Risk was undetermined in 33% of black (non-Hispanic) individuals recently diagnosed with HIV infection. Woman reporting sex with man of unknown risk and HIV status (presumed heterosexual sex) was the reported risk for 27%, male-to-male sex for 19% and heterosexual sex with partners of known risk and/or HIV status for 15%.
- Among Hispanic/Latino individuals, male-to-male sex was the most frequently reported HIV risk within the years 2011 to 2013 (39%) followed by heterosexual sex (11%), presumed heterosexual sex (11%) and injection drug use (11%); for 26% risk was undetermined.



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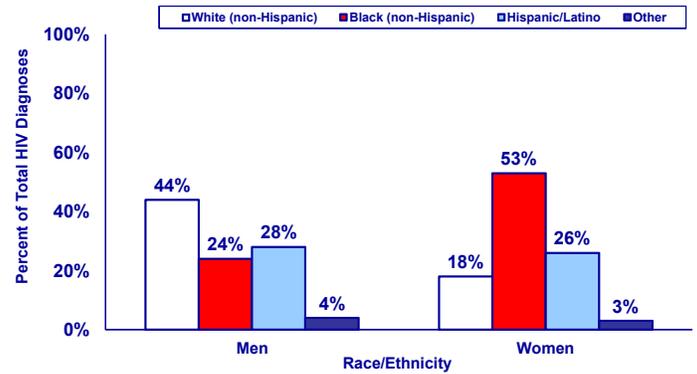
Race/Ethnicity, Reported Risk and Gender:

- Among white (non-Hispanic) men, male-to-male sex was the predominant reported risk, accounting for 75% of HIV infections; for 12% risk was undetermined.
- Risk was undetermined in 49% of black (non-Hispanic) men and male-to-male sex was the most frequently reported risk accounting for 35% of all HIV infections, followed by heterosexual sex at 9%, and injection drug use at 5% of reported risk.
- Among Hispanic/Latino men, male-to-male sex was the most frequently reported risk accounting for 52% of HIV infections, followed by injection drug use at 11% and heterosexual sex at 6% of HIV infections. For 29% of Hispanic/Latino men, risk was undetermined.
- Among white (non-Hispanic) women diagnosed with HIV infection, injection drug use was the most frequently reported risk accounting for 37% of HIV infections, followed by sex with men of unknown risk and HIV status (presumed heterosexual) at 24%, and heterosexual sex (with partners of known risk and/or HIV status) at 18% of HIV infections.
- The predominant reported risk among black (non-Hispanic) women was sex with men of unknown risk and HIV status (presumed heterosexual sex) (61%), followed by heterosexual sex at 22%.
- Among Hispanic/Latina women, sex with men of unknown risk and HIV status (presumed heterosexual sex) and heterosexual sex (with partners of known risk and/or HIV status) were the most frequently reported risks accounting for 45% and 28% of HIV infections, respectively, followed by injection drug use at 11% of HIV infections.

Race/Ethnicity and Gender:

- The distribution of race/ethnicity among persons diagnosed with HIV infection within the years 2011 to 2013 was different among men and women. While 44% of men diagnosed with HIV infection within the years 2011 to 2013 were white (non-Hispanic), 53% of women diagnosed during this time period were black (non-Hispanic).

Figure 8. People Diagnosed with HIV Infection Within the Years 2011–2013 by Gender and Race/Ethnicity: Massachusetts

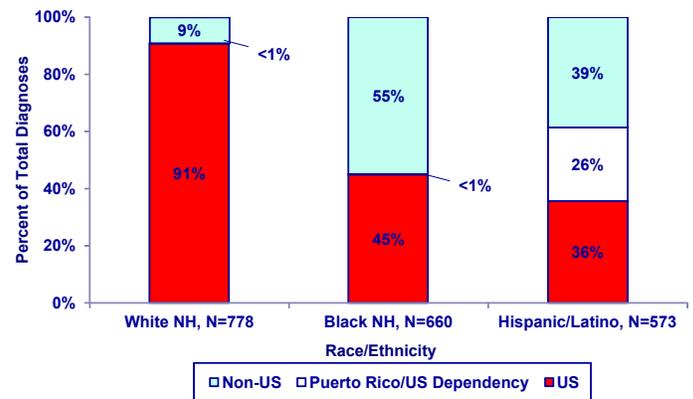


Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Race/Ethnicity and Place of Birth:

- During the three-year period 2011 to 2013, 55% of black (non-Hispanic) individuals diagnosed with HIV infection were born outside the US, compared to 39% of Hispanic/Latino individuals and 9% of white (non-Hispanic) individuals. An additional 26% percent of Hispanic/Latino individuals diagnosed with HIV infection during this time period were born in Puerto Rico or another US Dependency, compared to less than one percent of both black (non-Hispanic) and white (non-Hispanic) individuals.

Figure 9. People Diagnosed with HIV Infection Within the Years 2011–2013 by Race/Ethnicity and Place of Birth: Massachusetts



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15 NH = Non-Hispanic



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- The majority of non-US born black (non-Hispanic) individuals diagnosed with HIV infection within the three-year period 2011 to 2013 were from sub-Saharan Africa (58%), and the Caribbean (37%); the majority of non-US born Hispanic/Latino individuals were from Central and South America (66%), and the Caribbean (30%). The majority of non-US born white (non-Hispanic) individuals were from North America, and Europe (44%) and Central and South America (30%).
- Forty-nine percent of women diagnosed with HIV infection within the three-year period 2011 to 2013 were born outside the US compared to 28% of men. Among black (non-Hispanic) women diagnosed with HIV infection, the proportion born outside the US was 68% compared to 39% of Hispanic/Latina women and 6% of white (non-Hispanic) women. Among black (non-Hispanic) men, the proportion born outside the US was 45% compared to 39% of Hispanic/Latino men and 10% of white (non-Hispanic) men.

Distribution by Reported Risk and Health Service Region (HSR):^{iv}

- Male-to-male sex was the most frequently reported risk in all regions among people diagnosed with HIV infection within the years 2011 to 2013, accounting for 51% of HIV infections in the Boston HSR, 37% in the Central HSR, 47% in the Metro West HSR, 39% in the Northeast HSR, 43% in the Southeast HSR, and 37% in the Western HSR.
- The Western and Central HSRs had the highest proportions of reported injection drug use risk, at 11% and 10%, respectively. Injection drug use accounted for 3% to 7% of HIV infection diagnoses in the remaining regions.

Distribution by Race/Ethnicity and Health Service Region (HSR):

- White (non-Hispanic) individuals constitute the largest proportion of people recently diagnosed with HIV infection in the Southeast (49%), Metro West (44%) and Northeast (38%) HSRs.
- In the Boston HSR, black (non-Hispanic) individuals constitute the largest proportion of recent diagnoses at 35%, followed by white (non-Hispanic) individuals (31%).
- In the Central HSR, white (non-Hispanic) individuals account

for 34%, black (non-Hispanic) individuals 33%, and Hispanic/Latino individuals 28% of recent diagnoses.

- In the Western HSR, Hispanic/Latino individuals (43%) account for the largest proportion of people recently diagnosed with HIV infection, followed by white (non-Hispanic) individuals (30%).

Distribution by Gender and Health Service Region (HSR):

- The Boston HSR has the highest proportion of men among those with HIV infection diagnosed within the three-year period 2011 to 2013, at 79%, followed by the Metro West HSR at 73%.
- The Central HSR has the highest proportion of women among people diagnosed with HIV infection within the three-year period 2011 to 2013 at 33%, followed by the Northeast HSR at 32%.

People at Risk for HIV Infection:

State-funded HIV Counseling, Testing and Referral:

- In 2013, 0.6% of 71,216 HIV tests performed at publicly funded HIV Counseling, Testing and Referral (CTR) sites were positive. Testing identified 326 new diagnoses, representing 45% of individuals newly diagnosed with HIV infection (N=698) in the state.
- In 2013, more HIV tests were performed on men (57%, N=40,788) than women (42%, N=29,830) at publicly funded sites.
- A similar proportion of HIV tests was performed on white (non-Hispanic) (34%, N=24,261), black (non-Hispanic) (31%, N=22,241), and Hispanic/Latino clients (28%, N=19,849).
- The percentage of positive HIV tests was highest among black (non-Hispanic) clients at 0.8%, followed by Hispanic/Latino clients at 0.6%, Asian clients at 0.5%, and white (non-Hispanic) clients at 0.4%.
- By age category, the highest percentage of positive HIV tests was among clients between the ages of 55 and 59 years at 1.3%, followed by clients between the ages of 50 and 54 years at 1.0%.



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Behavioral Risk for HIV Infection

Number of Sexual Partners:

- Among 5,438 respondents to the 2012 and 2013 Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) surveys, 18–64 years of age, 9% reported two or more sexual partners in the previous year, 72% reported one partner, and 20% reported no sexual partners.
- A larger proportion of men reported two or more partners in the previous year (13% of men compared to 4% of women), as well as 18 to 24 year olds (27% of 18 to 24 year olds reported two or more partners compared to 11% of 25 to 34 year olds, 4% of 35 to 44 year olds, and 3% of 45 to 64 year olds).

Male-to-Male Sex:

- Among 1,702 male respondents to the 2012 and 2013 BRFSS 18–64 years of age, 4.4% reported having sex with other men in the previous 12 months.

Condom Use:

- Of 3,976 18–64 year old sexually active respondents to the 2012 and 2013 BRFSS, 25% reported using a condom at last sexual encounter (28% of male respondents and 21% of female respondents).
- Thirty-six percent of black (non-Hispanic) respondents reported condom use at last sexual encounter, compared to 29% of Hispanic/Latino individuals and 23% of white (non-Hispanic) individuals.
- Fifty-five percent of those reporting three or more sexual partners in the previous year also reported condom use at last sexual encounter, compared to 61% of those reporting two partners and 21% of those reporting one partner.

Data Sources

HIV/AIDS Case Data: Massachusetts Department of Public Health, HIV/AIDS Surveillance Program, all data as of 1/1/15

Counseling and Testing Data: Massachusetts Department of Public Health, Office of HIV/AIDS, Office of Research and Evaluation

BRFSS Data: Massachusetts Department of Public Health, Bureau of Health Statistics, Research and Evaluation, Behavioral Risk Factor Surveillance System

ⁱ Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=23 children living with HIV/AIDS under age 13 as of 1/1/15).

ⁱⁱ Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

ⁱⁱⁱ The category of presumed heterosexual is used exclusively for women, to define HIV risk in cases when sex with men is the only reported risk factor for HIV infection.

^{iv} Reflects the health service region of a person’s residence at the time of report (not necessarily current residence). HSRs are regions defined geographically to facilitate targeted health service planning. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at <http://www.mass.gov/eohhs/docs/dph/aids/2006-profiles/app-hrs-maps.pdf> for configuration of health service regions.



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