

2012 Profile of HIV in Michigan (Statewide)

Unmet Need and Time to Care

Data from enhanced HIV/AIDS Reporting System (eHARS)

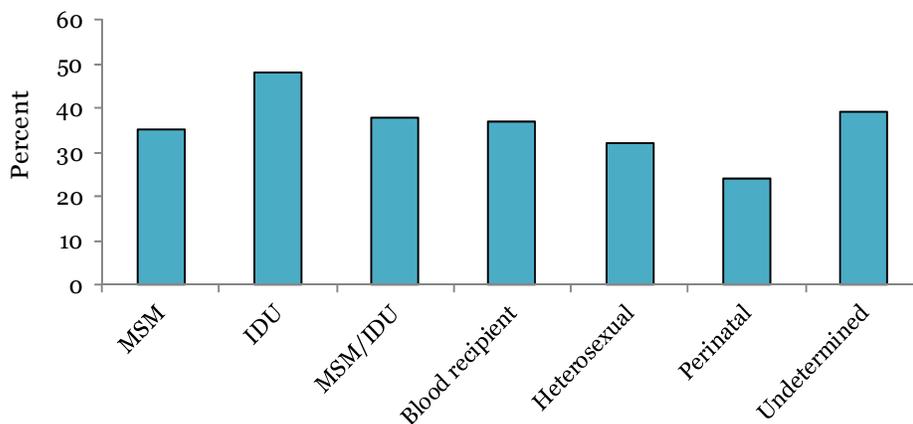
Overview:

Primary Medical Care (PMC) for persons living with HIV infection is having a laboratory result for a CD4 count and/or CD4 percent and/or a viral load (VL) test during a 12-month time period. Those who did not receive PMC were considered to have unmet need. For this report, unmet need was calculated by determining the number of persons living with HIV infection in Michigan who were diagnosed prior to October 1, 2010 and had not received a VL or CD4 test between October 1, 2010 and September 30, 2011 (fiscal year 2011). Table 15 on page 109 shows the overall proportion of unmet need for various demographic groups. In total, 36 percent of HIV-positive persons in Michigan had unmet need. The highest levels of unmet need were among persons with HIV non-stage 3 (44 percent), Hispanics (50 percent), American Indians/Alaska Natives (46 percent), injection drug users (IDU) (48 percent), persons who were 20-24 years at diagnosis (45 percent), persons 65 years of age and older as of November 2011 (44 percent), and persons currently living in Berrien County and Genesee County (excluding prisoners).

Risk:

Injection drug users (IDU) had the highest proportion of unmet need (48 percent), followed by persons with undetermined risk (39 percent) (figure 56). The lowest proportion of unmet was among persons infected perinatally or through blood products (24 percent and 37 percent, respectively).

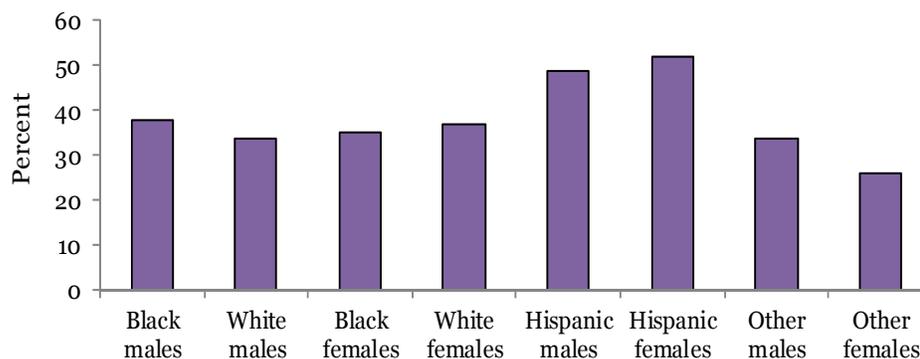
Figure 56: Persons living with HIV in Michigan with unmet need, by risk transmission category, November 2011



Race/ethnicity and sex:

Hispanics had the highest proportion of unmet need of any racial/ethnic group (50 percent), followed by American Indians/Alaska Native (46 percent). Overall, males and females had equivalent levels of unmet

Figure 57: Persons living with HIV in Michigan with unmet need, by race/sex, November 2011



2012 Profile of HIV in Michigan (Statewide)

Unmet Need and Time to Care

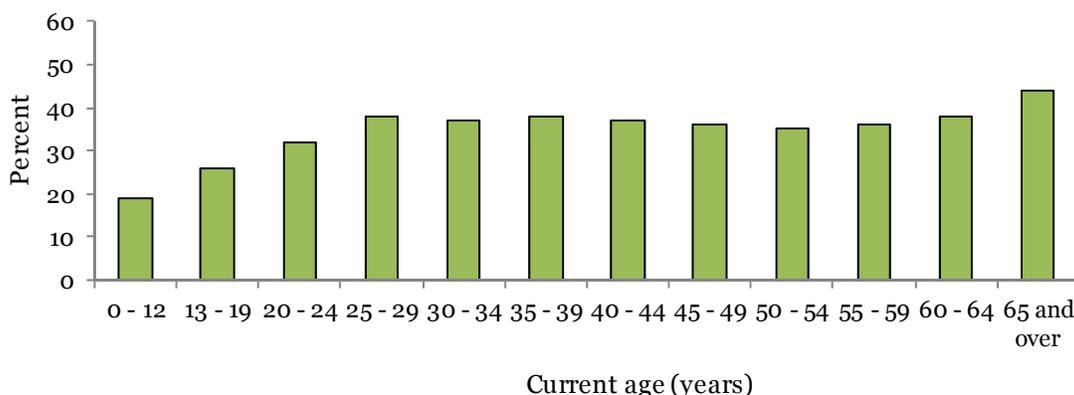
Data from enhanced HIV/AIDS Reporting System (eHARS) & Medical Monitoring Project (MMP)

need (36 percent). Examining race/sex breakdowns, however, reveals the disproportionate levels of unmet need among different groups (figure 57). The highest proportion of unmet need during this period was among Hispanics of both sexes, with 52 percent of HIV-positive Hispanic females and 49 percent of Hispanic males not having received care during FY 2011. The lowest proportion of unmet need was among females of multi-, other, or unknown race/ethnicity (26 percent).

Current age:

The highest proportion of unmet need was among persons who were 65 years of age and older as of November 2011, while the lowest proportion was among persons who were 0-12 years (figure 58). Children may be eligible to receive care through their parents' insurance or may qualify for government-funded health care, such as Medicaid, reducing the likelihood of unmet need (data not shown in tables).

Figure 58: Persons living with HIV in Michigan with unmet need, by current age, November 2011



Age at diagnosis:

Persons who were diagnosed between the ages of 20 and 24 years had the highest proportion of unmet need (45 percent), with 25-29 year olds having the second highest proportion at 42 percent. Persons who were diagnosed when they were 0-12 years had the lowest proportion of unmet need (24 percent) (table 15, page 109).

Geographic distribution:

In Michigan, 63 percent of HIV-positive persons reside in the Detroit Metro Area (DMA), 34 percent reside in Out-State Michigan, and the remaining three percent are in prison or have an unknown residence (table 8, page 101). The level of unmet need in the DMA was 35 percent, which is comparable to the unmet need in Out-State Michigan (38 percent). When broken down by county, Berrien had the highest proportion of unmet need at 46 percent, followed by Genesee County at 43 percent. Washtenaw had the lowest proportion (33 percent) (table 15).

2012 Profile of HIV in Michigan (Statewide)

Clinical Outcomes of Persons in Care

Data from Medical Monitoring Project (MMP)

Entry into care:

Among HIV-positive persons in care and interviewed for the medical monitoring project (MMP), five percent could not recall the year they received an HIV diagnosis. Seventy-four percent received an HIV diagnosis over five years prior to the interview date while 21 percent received their diagnosis within five years of the interview. Among persons who received their HIV diagnosis within five years of the interview, 82 percent entered HIV care within three months following diagnosis, nine percent entered HIV care between three and twelve months following diagnosis, and nine percent could not recall when they entered HIV care (data not shown in tables).

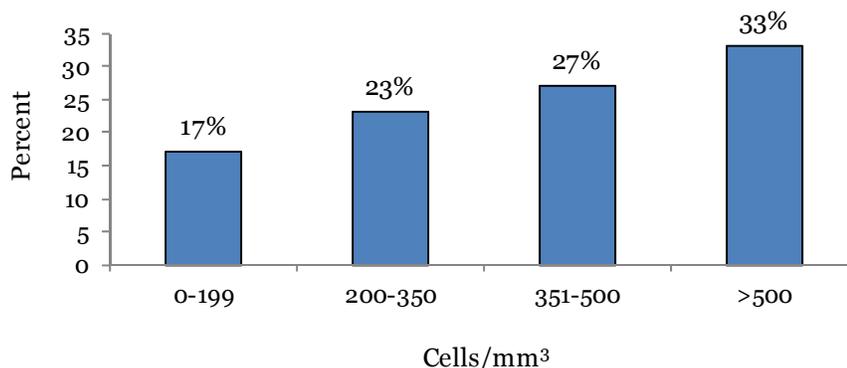
CD4 and viral load tests:

The Department of Health and Human Services recommends that CD4 count and viral load tests for HIV-positive persons be conducted every 3-4 months. In the 12 months before the Medical Monitoring Project (MMP) interview, five percent of persons did not have a CD4 count test documented in their medical record, 14 percent did not have a documented CD4 percentage test, and nine percent did not have a documented viral load test.

Of the 141 persons who had a CD4 count test documented during the surveillance period, 17 percent had values below 200 cells/mm³ (a criterion for stage 3 HIV infection (AIDS) diagnosis) (figure 59). Twenty-three percent of participants had CD4 counts in the range of 200-350. The majority (33 percent) had CD4 counts above 500, indicating little immunosuppression.

Of the 136 persons with a viral load test result during the surveillance period, 48 percent had viral load results below the level of detection, indicating adequate HIV suppression (figure 60). Twenty-three percent had values that were detectable but less than 5,000 copies/ml, and 29 percent had one or more viral load test values of $\geq 5,000$ copies/ml (indicating inadequately suppressed and rapidly progressing HIV infection). Seventy-five percent of those persons (n=30) had documentation of ARV prescription(s) prior to the viral load test value of $\geq 5,000$. Of the 10 remaining persons, nine had no documentation of ARV prescriptions at any time (during the medical history period or the surveillance period), and one person had documentation of receiving an ARV prescription during the visit with the viral load value of $\geq 5,000$.

Figure 59: Lowest CD4 count in medical records of HIV-positive persons in care (MMP, 2009) (n=141)*



*Excludes persons with no documentation of a CD4 count value during the surveillance period (n=8).

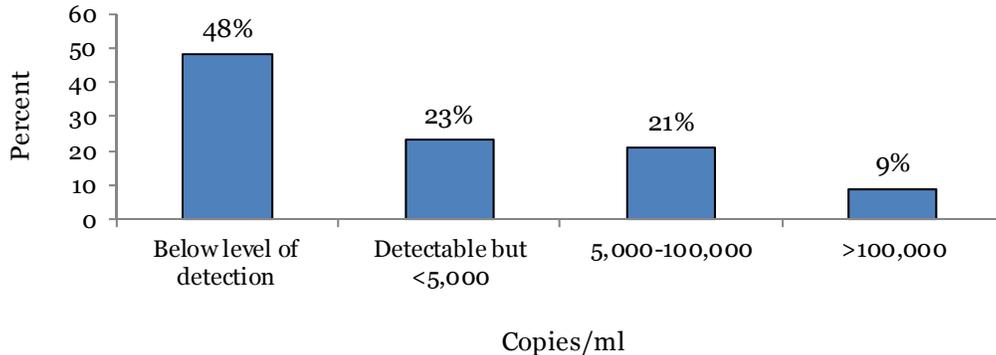
†Not all persons with a CD4 count documented had a CD4 percent, but all persons with a CD4 percent had a CD4 count (due to differences in laboratory testing). For this reason, only CD4 counts are shown.

2012 Profile of HIV in Michigan (Statewide)

Clinical Outcomes of Persons in Care

Data from Medical Monitoring Project (MMP)

Figure 60: Highest viral load value noted in medical records of HIV-positive persons in care (MMP, 2009) (n=136)*

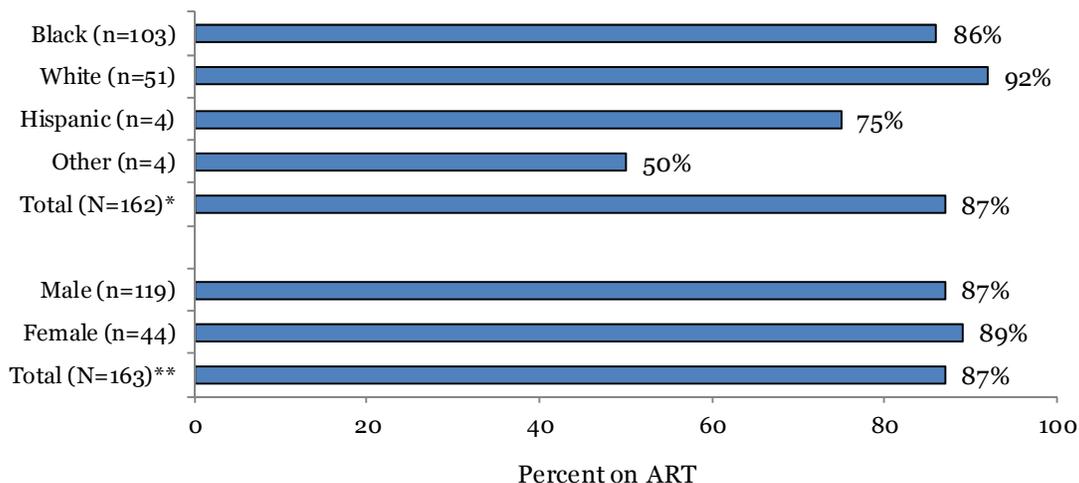


*Excludes persons with no documentation of a viral load test during the surveillance period (n=13); summarizes the highest viral load result for outpatient and inpatient visits during the surveillance period.

ART use:

About 92 percent of persons had documentation of a prescription for antiretroviral (ART) medication, while nine percent had no documentation of a ART prescription. The main reason why persons were not currently on ART was that the doctor advised a delay or discontinuation of treatment. Figure 61 shows ART use by demographic characteristics. A slightly larger proportion of white persons reported current ART use during the interview than did black persons. Numbers for Hispanics and persons of other race are small and should therefore be interpreted with caution. A roughly equivalent proportion of males and females reported current ART use.

Figure 61: Current ART use by sex and race/ethnicity among HIV-positive persons in care (MMP, 2009) (N=164)



*Two participants refused to answer and were excluded.

**One participant identified as transgender and so was excluded from this analysis.

2012 Profile of HIV in Michigan (Statewide)

Clinical Outcomes of Persons in Care

Data from Medical Monitoring Project (MMP)

Among persons who were on ART, 65 percent achieved consistent viral suppression (viral load tests ≤ 200 copies/ml); 35 percent of persons had one or more viral loads of >200 copies/ml.

One third of persons interviewed for MMP reported never skipping any ART medicine (34 percent); however, 51 percent reported skipping their ART medication within the past 3 months (figure 62).

Figure 62: Last time missed any ART medication among HIV-positive persons in care (MMP, 2009) (n=143)

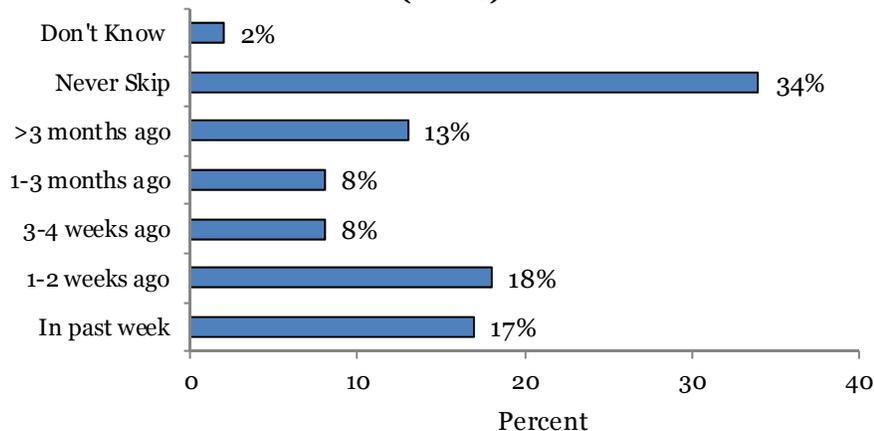
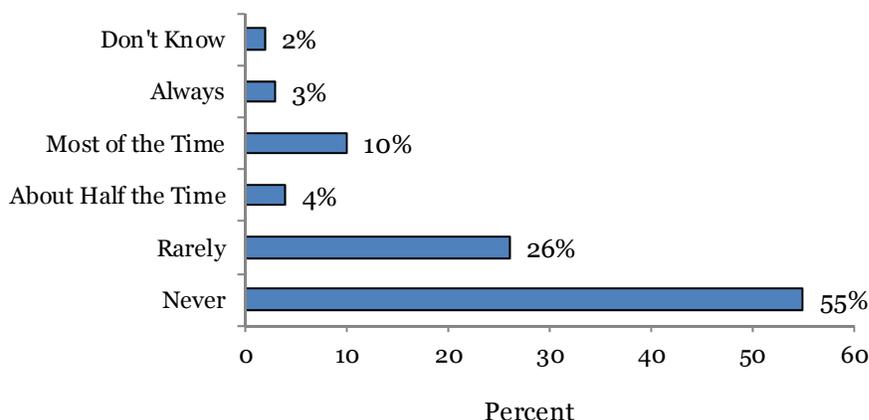


Figure 63: How frequently troubled by side effects of ART medications in the past 30 days among HIV-positive persons in care (MMP, 2009) (n=143)



Most persons (55 percent) interviewed for MMP reported never being troubled by the side effects of ART medication during the past 30 days (figure 63). Twenty-six percent of those interviewed reported rarely being troubled by side effects, and 10 percent said they were troubled by side effects of ART “most of the time”.

Opportunistic illnesses (OIs):

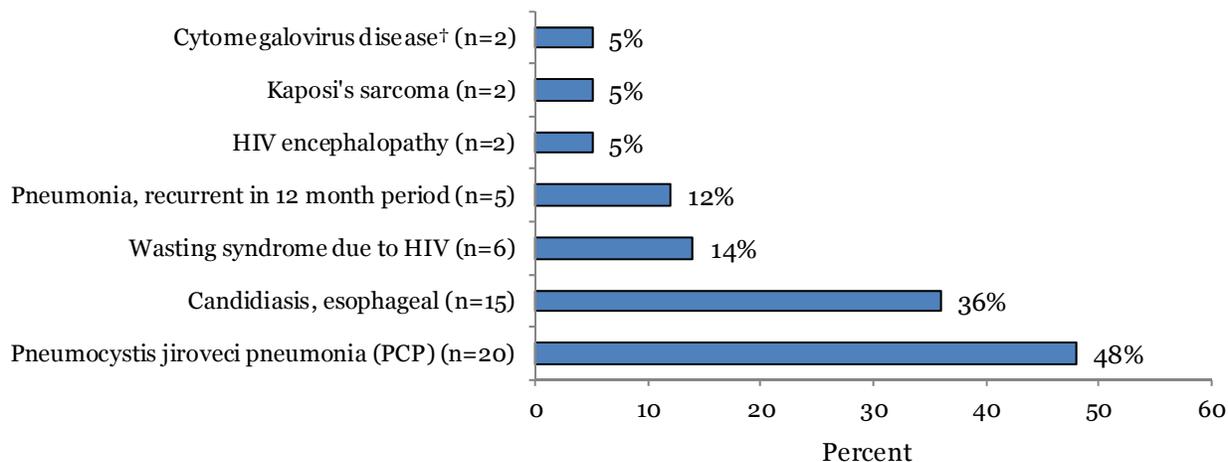
In order to be classified as stage 3 HIV infection (AIDS), persons must either meet immunologic criteria (determined by CD4 test values) or be diagnosed with one of the AIDS-defining opportunistic illnesses (OIs). About 28 percent (n=42) of persons whose medical records were reviewed for MMP had documentation of at least one OI, and 31 percent were diagnosed with two or more. Figure 64 shows the distribution of OIs for persons with at least one OI documented in their medical records. The most common OI was pneumocystis jiroveci pneumonia, or PCP, at 48 percent, followed by esophageal candidiasis at 36 percent. Cytomegalovirus (CMV) disease, Kaposi’s sarcoma, and HIV encephalopathy were the least commonly documented.

2012 Profile of HIV in Michigan (Statewide)

Clinical Outcomes of Persons in Care

Data from Medical Monitoring Project (MMP)

Figure 64: Opportunistic illnesses noted in medical records of HIV-positive persons in care (MMP, 2009) (n=42)*



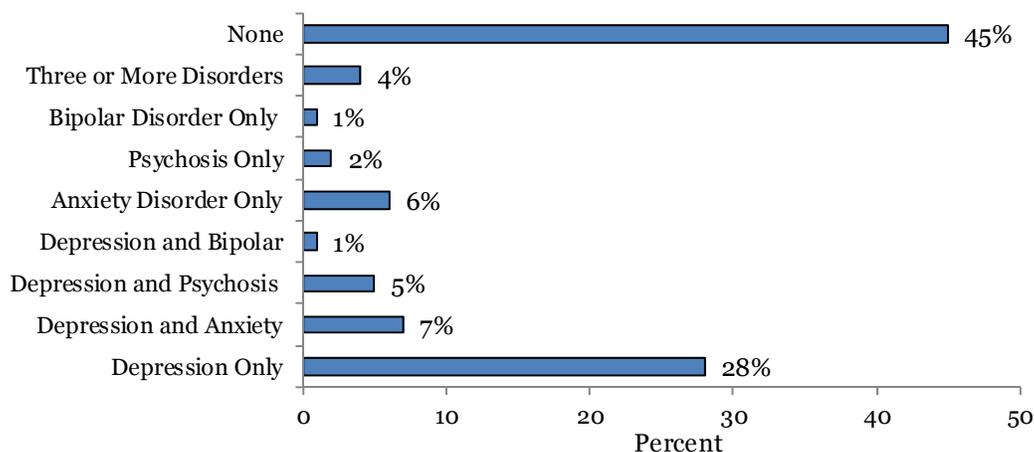
*Categories are not mutually exclusive.

†Other than in liver, spleen, or node.

Psychiatric illnesses:

About 55 percent of persons whose medical records were reviewed for MMP had a documented diagnosis of at least one of the four psychiatric disorders abstracted from medical records (anxiety disorder, bipolar disorder, depression, and psychosis) (figure 65). Forty-six percent of persons (n=68) had documentation of a diagnosis of depression (major depression, depressive disorder); this is compared with a 16.5 percent lifetime prevalence of major depression in the U.S. adult general population (Kessler et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). Archives of General Psychiatry 62(6):593-602.).

Figure 65: Psychiatric disorders* noted in medical records of HIV-positive persons in care (MMP, 2009) (N=149)



*Any documentation of physician-diagnosed anxiety disorder, depression, bipolar disorder, or psychosis (including schizophrenia) during the medical history period and/or the surveillance period that required treatment (e.g. counseling, medications, hospitalization).