

SYRACUSE UNIVERSITY

**Rates of Access to the State/Federal Vocational Rehabilitation Program, Service Provision, Successful Closure, and Reasons for Closure for Persons Living with HIV/AIDS**

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## **Executive Summary**

This descriptive population study was prepared to provide descriptive analysis of the population of vocational rehabilitation (VR) consumers with HIV/AIDS in the years 2002 – 2007, with comparisons made to the population estimates for numbers of persons identified as living with HIV/AIDS and comparison to the larger population of VR service applicants with various disabilities in the 50 states and the District of Columbia. The primary purpose of this report was to contribute key descriptive data to rehabilitation professionals, rehabilitation researchers, and policy makers regarding access to and participation in the VR Program as well as employment outcomes of persons living with HIV/AIDS. Ultimately, by providing these benchmark data, we hope that the population with HIV/AIDS will have greater access to and participation in the VR Program and will receive more appropriate, effective vocational services in the future.

Two primary research questions that guide this report are: (a) what are the population parameters for access and participation in VR and for employment success of people living with HIV/AIDS; and (b) how do people living with HIV/AIDS who apply to the VR program compare in terms of access, participation, and employment outcome to all other VR service applicants/recipients for the years 2002 – 2007. This report consists of the following three sections: (1) rates of access to the VR program, service provision, and successful employment outcome among persons presumed living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS across 50 states and District of Columbia and years for 2002 through 2007; (2) rates of service provision and successful employment outcome among persons with HIV/AIDS who participated in and exited the VR program living with HIV/AIDS across 50 states and District of Columbia

and years for 2002 through 2007; and (3) reasons for closure among VR consumers with HIV/AIDS who exited the VR program without employment.

Four primary data sources used to produce this report are: (a) RSA-911 national data file for fiscal year 2002 through 2007, (b) presumed number of adolescents and adults aged 13 and above living with HIV/AIDS for 2002 through 2007 from 50 states and District of Columbia, (c) the estimated unemployed persons living with HIV/AIDS for 50 states District of Columbia and for years from 2002 through 2007, and (d) the estimated number of persons with disabilities from the Survey of Income and Program Participation (SIPP) for 2002 and 2005.

***I. Rates of Access to the State/Federal Vocational Rehabilitation Program, Service Provision and Successful Employment Outcomes among Persons Living with HIV/AIDS across 50 States and the District of Columbia and Years from 2002 through 2007***

Of the three main sections, this first section provides the rates of access to State/Federal VR services, service provision, and successful employment outcome among the presumed number of persons living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS, respectively.

- The estimated number of persons living with HIV/AIDS (less than 1% of the estimated total U.S. population) had increased over the six years from 2002 through 2007.
- The total number of VR consumers who exited the VR program also increased over the six years by 6% to 20%, whereas total VR population showed a decrease over the six years.

- The rates of VR consumers with HIV/AIDS to the estimated total population of persons living with HIV/AIDS were less than 1% across states and 6 years, except for Kentucky, Kansas, Montana, and Vermont, which showed relatively very low HIV/AIDS prevalence.
- Wyoming and North Dakota were found to have no VR consumers with HIV/AIDS who exited the program for the six years.
- The rates of VR consumers with HIV/AIDS to the estimated number of unemployed persons living with HIV/AIDS slightly increased across years from 6.46% in 2002 to 10.89% in 2007; however, overall rates were still small as a majority of states showed less than 10% of VR access among the potential VR eligible unemployed persons with HIV/AIDS.
- Approximately 0.2% of the estimated total population with HIV/AIDS received VR services, which indicates that only half of the total VR consumers with HIV/AIDS who approached and exited the VR program actually received the services.
- Less than 5% of the estimated unemployed persons living with HIV/AIDS received VR services in more than half of states. A few states that had relatively higher service provision rates (between 11% and 20%) included Kansas, Oklahoma, Vermont, Montana, and New Mexico.
- The rates of service provision among the estimated unemployed persons living with HIV/AIDS were relatively very high in Kentucky. Specifically, 74.34% of the estimated unemployed persons living with HIV/AIDS received VR services from 2004 through 2007.

- The number of VR consumers with an employment outcome at closure accounted for on average less than 0.1% of the estimated total population with HIV/AIDS and on average, 1.92% of the estimated number of unemployed persons living with HIV/AIDS.
- The comparisons of rates of VR access, service provision, and employment outcome between two groups (VR consumers with HIV/AIDS and total VR population) for 2002 and 2005 showed that the estimated unemployed persons living with HIV/AIDS were approximately 4 to 6 times less likely to have access to VR services, receive VR services, and achieve an employment outcome than the estimated unemployed total population with disabilities.

***II. Rates of Service Provision and Successful Employment Outcomes among the Total VR Consumers with HIV/AIDS as Compared to the Total Population of VR Consumers across 50 States and District of Columbia and Years from 2002 through 2007***

In this section, the rates of VR service provision and employment achievement among VR consumers with HIV/AIDS across states and years were provided and compared to those among the total VR population.

- The rate of service provision among the total population of VR consumers with HIV/AIDS who exited the program over the six years was on average less than 50%.
- States with relatively higher rates of service provision (more than 60%) were Oklahoma, Virginia, Alabama, Pennsylvania, New York, and New Mexico.

- VR consumers with HIV/AIDS were less likely to receive VR services than the total population of VR consumers. The only few states where VR consumers with HIV/AIDS were more likely to receive VR services than the average VR consumers were Oklahoma, Virginia, New York, New Mexico, District of Columbia, and Wisconsin.
- In all 50 states and D.C., less than 50% of the total population of VR consumers with HIV/AIDS who exited the program obtained employment. States with relatively higher rates of employment achievement were Alabama, Alaska, Oklahoma, New Hampshire, and Idaho.
- When the employment achievement rates were assessed among the VR consumers with HIV/AIDS who received services, more than half of those who received services obtained employment in 18 states. States ranked in the top five were South Dakota, Alaska, New Hampshire, Alabama, and Nevada.
- In most states, VR consumers with HIV/AIDS were less likely to obtain employment than the total population of VR consumers. Five states with higher rates of employment achievement among the VR consumers with HIV/AIDS than the total population of VR consumers were Alaska, Oklahoma, Idaho, New York, and District of Columbia.
- The rates of VR consumers with HIV/AIDS with an successful employment outcome were not significantly different among African American, White, and Hispanic groups; however, the group of American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander VR consumers were less likely to exit the program with an employment outcome than other race/ethnicity groups of

VR consumers with HIV/AIDS. Thus, this group was apparently more likely to exit the program before eligibility was determined than any other race/ethnicity groups of VR consumers with HIV/AIDS.

- In all of the four race/ethnicity groups – African American, White, Hispanic, and Other -- the rates of employment achievement were lower among VR consumers with HIV/AIDS than the total population of VR consumers.

### ***III. Reasons for Closure of VR Consumers HIV/AIDS who Existed the VR Program without an Employment Outcome by Years and Race/Ethnicity***

This section examined reasons for closure among VR consumers who exited the VR program without an employment outcome for 2002 through 2007. The Rehabilitation Services Administration (RSA) requires the State/Federal VR program to identify the reason for closing the service case for each of all VR consumers who entered and exited the program.

- On average 20% - 25% of VR consumers with HIV/AIDS who exited the VR program obtained employment across six years from 2002 through 2007, which indicates that the rest of VR consumers with HIV/AIDS (approximately 75%-80%) were closed without an employment outcome.
- More than 70% of those with HIV/AIDS who exited the VR program without achieving employment were closed, consistently across the six years, for one of the three reasons; (a) unable to locate or contact (approximately 31% to 36%), (b) failure to cooperate (21% to 25%), and (c) consumers' choice to refuse to participate or continue in the VR program (14% to 17%).

- VR consumers with HIV/AIDS were more likely to be closed for reason of being unable to locate or contact and less likely to be closed as their choice not to participate in the program compared to the total population of VR consumers who were closed unsuccessfully.
- African American VR consumers with HIV/AIDS were significantly more likely to be closed for reason of failure to cooperate than White, Hispanic, or Other VR consumers with HIV/AIDS and total African American VR consumers.

## **Introduction**

Since the introduction of Acquired Immunodeficiency Syndrome (AIDS) in 1981, the number of person living with Human Immunodeficiency Virus (HIV) or AIDS has continued to increase. Thus, because advanced medical treatment has improved health and well-being of persons living with HIV/AIDS, HIV/AIDS is no longer viewed as a terminal illness, but as a chronic, long term condition (Parniak, 2004; Walch, Lezama, & Giddie, 2005). Thus, improved health and life span have increasingly motivated people with HIV/AIDS to consider reentering the workforce or maintaining their job, which is linked to many positive impacts on people's life including economic independence and positive self-perception (Brooks & Klosinski, 1999; Hunt, Jaques, Niles, & Wierzalis, 2003; McReynolds, 2001).

The growing number of people with HIV/AIDS who are attempting to obtain employment is a relatively new phenomenon, and therefore, rehabilitation professionals are facing a need for understanding this phenomenon in order to provide appropriate assistance to successful obtain and maintain employment (Conyers, 2005). In connection with this trend, rehabilitation researchers and professionals have made efforts to improve the quality and quantity of vocational rehabilitation (VR) services for persons living with HIV/AIDS.

This descriptive population study was prepared as part of these endeavors to enhance rehabilitation professionals' understanding of the current status of the population living with HV/AIDS who are contemplating to return to work and seeking for vocational services. Specifically, this is a descriptive study of the population of VR service applicants and consumers with HIV/AIDS in the years 2002 – 2007, with comparisons

made to the population estimates for numbers of persons identified as living with HIV/AIDS and comparison to the larger population of VR service applicants with various disabilities in the 50 states and the District of Columbia.

The broad research questions that motivate this investigation are: (a) what are the population parameters for access and participation in VR and for employment success of people living with HIV/AIDS; and (b) how do people living with HIV/AIDS who apply to the VR program compare in terms of access, participation, and employment outcome to all other VR service applicants/recipients for the years 2002 – 2007.

This report consists of three sections: (1) rates of access to the VR program, service provision, and successful employment outcome among persons presumed living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS across 50 states and District of Columbia and years for 2002 through 2007; (2) rates of service provision and successful employment outcome among persons with HIV/AIDS who participated in and exited the VR program living with HIV/AIDS across 50 states and District of Columbia and years for 2002 through 2007; and (3) reasons for closure among VR consumers with HIV/AIDS who exited the VR program without employment.

This report was produced using four different data sources. First, RSA-911 national data file for fiscal year 2002 through 2007 were obtained, at no cost, through the Rehabilitation Services Administration (RSA), a component of the Office of Special Education and Rehabilitative services (OSERS) in the U.S. Department of Education. The RSA-911 data include comprehensive information on the complete rehabilitation process for each individual whose case is closed in each fiscal year, including demographic information at application, services provided, closure status in rehabilitation

process, and vocational outcomes. These data are collected from all state/federal vocational rehabilitation agencies in U.S. for all consumers who applied to the state vocational rehabilitation program and exited the program with or without receiving services and achieving a successful employment outcome. The data are available to the public through the RSA for which signing a consent form is required. Note that identifying VR consumers with HIV/AIDS in the RSA-911 data became available from the year 2002.

Second, presumed numbers of adolescents and adults aged 13 and above (here after to be cited as “persons” in this report) living with HIV/AIDS for 2002 through 2007 were collected by contacting the Department of Health of 50 states and the District of Columbia. The primary investigator contacted each Department of Health via email or telephone to obtain the most current and best estimated numbers of persons living with HIV/AIDS at the end of each year. As this report is primary related to vocational rehabilitation and employment, children under age 13 are excluded from this report with few exceptions.

Third, the regional and state unemployment annual reports of 2002 through 2007, which were available through the U.S. Bureau of Labor Statistics, were used to calculate the estimated number of unemployed persons living with HIV/AIDS for 50 states District of Columbia and for years from 2002 through 2007. For a minimum estimate, the estimation of unemployment rate among persons living with HIV/AIDS was made based upon the unemployment rate of each state by year, rather than applying estimated unemployment rate for people with disabilities in general.

Last, the estimated numbers of persons with disabilities for 2002 and 2005 were obtained from the reports “Americans with Disabilities: 2002” and “Americans with Disabilities: 2005”. These reports were based upon the data collected from the Survey Income and Program Participation (SIPP) for 2002 and 2005 and are available through U.S. Census Bureau home page.

Although there have been numerous investigations on the predictive components of successful employment outcomes for unemployed persons living with HIV/AIDS, there has, to our knowledge, been no study or report that provides a comprehensive description of the population of VR consumers with HIV/AIDS. Therefore, we hope that this report assists rehabilitation professionals, rehabilitation researchers, and policy makers in improving their understanding of access to and use of VR services and employment outcomes of persons living with HIV/AIDS.

**I. Rates of Access to the State/Federal Vocational Rehabilitation Program, Service Provision, and Successful Employment Outcomes among Persons Living with HIV/AIDS across 50 States and the District of Columbia and Years for 2002 through 2007**

***Overview***

This section provides the rates of access to State/Federal Vocational Rehabilitation services, service provision, and successful employment outcome among the presumed number of persons living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS, respectively as follows:

- (a) Rates of VR consumers with HIV/AIDS who exited the program among the presumed number of persons living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS across states and years.
- (b) Rates of VR consumers with HIV/AIDS who exited the program after receiving services among the presumed number of persons living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS across states and years.
- (c) Rates of VR consumers with HIV/AIDS who exited the program with an employment outcome among the presumed number of persons living with HIV/AIDS and among the estimated unemployed persons living with HIV/AIDS across states and years.

In this section, VR consumers who exited the program with an employment outcome include those who were employed with or without supports in an integrated setting, those who were self employed and unpaid homemakers (RS status 26 closure).

Next, the rates of access to State/Federal Vocational Rehabilitation services, service provision, and successful employment outcome among the presumed number of persons

living with HIV/AIDS were compared to ones among the estimated total number of persons with disabilities in the U.S. The comparisons were conducted for two years 2002 and 2005, utilizing the estimates of disability prevalence collected through the Survey of Income and Program Participation (SIPP). These data were collected from June through September 2002 in the fifth wave of 2001 SIPP and data collected from June through September 2005 during the fifth interview of the 2004 SIPP panel.

***Presumed Numbers of Persons Living with HIV/AIDS for 2002 through 2007***

Findings are reported in tables as well as in graphic format. Table 1-1 and 1-2 provide the raw number of persons with HIV/AIDS who are presumed living at the end of each year for 2002 through 2007 across states. The tables are sorted in descending order by the total number of persons living with HIV/AIDS by December 2007 or by December 2006 for those states where the data for 2007 are not available (i.e., New York, Maryland, and Ohio). The estimated total number of adolescents and adults with HIV/AIDS (13 years and above) presumed living in December 2007 is 791,803.

All of the 50 states and the District of Columbia show the increase in the number of persons living with HIV/AIDS year by year, except for two states. Kentucky shows a decrease of the number of persons living with AIDS from 180 in 2002 to 165 in 2003. California also shows a decrease in the number from 97,269 in 2006 to 68,103 in 2006; however, in the case of California, this does not necessary mean an actual decrease in prevalence as it was due to the change in the report method from code-based to name-based reporting. Note that some states could not provide the data for some years because of no data available (i.e. New York, California, Maryland, District of Columbia, Ohio, South Carolina, Arizona, and Delaware) or provided the presumed number of persons

living with AIDS, but not HIV (i.e., Pennsylvania, Hawaii, and Kentucky). Four states provided numbers including children under age 13 for some or all years (i.e., Utah, Alaska, South Dakota, and Wyoming). The number of persons living with HIV/AIDS varies from 115,417 (New York) to 199 (Wyoming). The five states with the highest numbers of persons living with HIV/AIDS include New York, California, Florida, Texas, and New Jersey. The five states with the lowest numbers of persons living with HIV/AIDS are Wyoming, Kansas, South Dakota, North Dakota, and Vermont.

**Table 1-1. Presumed Number of Persons Living with HIV/AIDS across States and Years**

	2002	2003	2004	2005	2006	2007
New York	87,227	96,920	103,356	109,004	115,417	-
California	-	-	91,210	97,269	68,103	86,550
Florida	58,676	64,136	69,539	74,261	78,645	83,697
Texas	37,230	42,981	47,234	51,506	55,077	59,078
New Jersey	29,639	30,925	32,397	32,570	33,352	34,250
Georgia	20,974	23,127	26,396	28,910	31,562	34,089
Illinois	21,018	23,243	25,669	28,222	30,556	32,833
Maryland	25,347	26,903	28,760	30,748	32,826	-
Pennsylvania <sup>1</sup>	13,786 <sup>1</sup>	15,224 <sup>1</sup>	17,185	18,828	28,130	29,598
North Carolina	16,652	16,895	17,638	18,730	19,819	21,407
Virginia	14,258	15,266	16,306	17,363	18,398	19,419
Massachusetts	14,312	14,892	15,528	16,119	16,584	16,885
Louisiana	14,119	14,714	15,549	14,062	14,652	15,543
Dist. Of Columbia	-	10,255	11,405	12,449	13,731	15,120
Ohio	10,820	11,739	12,625	13,569	14,626	-
Tennessee	11,107	11,559	12,155	12,759	13,482	14,292
South Carolina	-	12,937	13,616	13,442	13,938	14,037
Michigan	10,836	11,444	12,076	12,728	13,367	13,986
Arizona	-	9,638	10,157	10,891	11,566	12,629
Missouri	8,248	8,604	8,999	9,453	9,874	10,343
Connecticut	7,711	8,326	8,849	9,294	9,772	10,234
Colorado	7,406	7,840	8,323	8,888	9,453	9,986
Alabama	6,595	7,123	7,712	8,248	8,933	9,663
Washington	7,710	8,061	8,463	8,820	9,199	9,662
Indiana	6,317	6,839	7,337	7,818	8,313	8,796

*Note.* \* Prevalent numbers include only adolescents and adults aged 13 and above unless noted.

\*\* The table is sorted in descending order by the 2007 data or 2006 data when the 2007 data are not available. \*\*\* “-” indicates data unavailable.

<sup>1</sup> Persons living with AIDS only due to the number of persons living with HIV not available.

**Table 1-2. Presumed Number of Persons Living with HIV/AIDS across States and Years (Continued)**

	2002	2003	2004	2005	2006	2007
Mississippi	6,737	7,363	7,908	8,236	8,451	8,718
Nevada	3,843	4,296	4,911	5,558	6,249	7,141
Oregon	5,338	5,598	5,878	6,138	6,349	6,562
Wisconsin	5,308	5,504	5,725	5,955	6,163	6,403
Minnesota	4,563	4,860	4,972	5,202	5,539	5,917
Arkansas	3,862	4,039	4,289	4,547	4,813	5,075
Oklahoma	2,913	3,174	3,469	3,825	4,171	4,521
New Mexico	2,153	2,464	2,770	3,019	3,241	3,488
Delaware	-	2,636	2,885	3,027	3,184	3,346
Utah <sup>2</sup>	1,349	1,474	1,610	1,751	1,888	2,031
Iowa	1,060	1,127	1,208	1,306	1,406	1,505
Nebraska	1036	1,103	1,187	1,286	1,398	1,485
West Virginia	933	1,074	1,197	1,305	1,382	1,427
Hawaii <sup>1</sup>	1,236	1,304	1,293	1,305	1,201	1,259
Maine	750	862	851	1,083	1,185	1,203
Rhode Island	423	557	733	856	959	1,102
New Hampshire	743	804	878	942	995	1,062
Idaho	744	786	823	861	937	997
Alaska <sup>2</sup>	579	617	669	705	753	789
Kentucky <sup>1</sup>	180 <sup>1</sup>	165 <sup>1</sup>	178 <sup>1</sup>	456	515	589
Montana	380	408	435	460	482	500
Vermont	401	411	427	435	438	482
North Dakota	298	320	340	360	385	410
South Dakota <sup>2</sup>	245 <sup>2</sup>	258 <sup>2</sup>	267 <sup>2</sup>	286	325 <sup>2</sup>	336
Kansas	175	285	293	294	309	290
Wyoming <sup>2</sup>	179	190	201	194	175	199
Total	582,301 <sup>3</sup>	692,097 <sup>3</sup>	687,889	725,343	745,195	791,803 <sup>4</sup>

*Note.* \* Prevalent numbers include only adolescents and adults aged 13 and above unless noted.

\*\* The table is sorted in descending order by the 2007 data or 2006 data when the 2007 data are not available. \*\*\* “-” indicates data not available.

<sup>1</sup> Persons with AIDS only due to the number of persons living with HIV not available.

<sup>2</sup> Children under age 13 are included.

<sup>3</sup> Total numbers for 2002 and 2003 do not include all states.

<sup>4</sup> 2006 data were used for 3 states with no 2007 data (New York, Maryland, and Ohio).

***Proportion of Persons Living with HIV/AIDS in the Estimated U.S. Population across States and Years***

In addition to the raw number of persons living with HIV/AIDS, the proportions of persons living with HIV/AIDS in the estimated U.S. population by states are provided in Table 1-3 and 1-4. These proportions are calculated by dividing the presumed total number of persons living with HIV/AIDS by the estimated U.S. population by states and multiplying by 100. The last columns in Table 1-3 and 1-4 indicate the HIV/AIDS prevalence rank based on 2007 data; for states with no 2007 data, the last columns of these tables reflect 2006 data. District of Columbia was ranked first, indicating the highest percentage of persons living with HIV/AIDS in the estimated population, followed by New York (2nd), Maryland (3rd), Florida (4th), and New Jersey (5th).

With few exceptions, overall states with higher numbers of persons living with HIV/AIDS show higher rates of persons living with HIV/AIDS in the estimated total state population. Delaware, ranked 6th, is an example of states with relatively lower numbers of persons living with HIV/AIDS ( $n = 3,346$  in 2007), but high HIV/AIDS prevalence rate.

**Table 1-3. Percentages of Presumed Numbers of Persons Living with HIV/AIDS among the Estimated U. S. Population by States and Years (%)**

	2002	2003	2004	2005	2006	2007	Prevalence Rank <sup>1</sup>
New York	0.56	0.62	0.66	0.69	0.73	-	2
California	-	-	0.32	0.34	0.23	0.29	18
Florida	0.43	0.46	0.49	0.51	0.52	0.57	4
Texas	0.22	0.25	0.27	0.29	0.30	0.31	16
New Jersey	0.43	0.44	0.46	0.46	0.47	0.49	5
Georgia	0.31	0.34	0.38	0.40	0.42	0.44	8
Illinois	0.21	0.23	0.25	0.28	0.30	0.32	14
Maryland	0.58	0.60	0.64	0.68	0.72	-	3
Pennsylvania	0.14 <sup>1</sup>	0.15 <sup>1</sup>	0.17	0.18	0.27	0.29	17
North Carolina	0.25	0.25	0.26	0.27	0.28	0.29	19
Virginia	0.24	0.25	0.27	0.28	0.29	0.31	15
Massachusetts	0.27	0.28	0.29	0.30	0.31	0.32	13
Louisiana	0.40	0.41	0.43	0.39	0.42	0.45	7
Dist. Of Columbia	-	2.16	2.45	2.70	2.79	3.17	1
Ohio	0.12	0.13	0.14	0.14	0.16	-	31
Tennessee	0.24	0.24	0.25	0.26	0.27	0.29	20
South Carolina	-	0.42	0.39	0.39	0.37	0.39	9
Michigan	0.13	0.14	0.15	0.16	0.16	0.17	29
Arizona	-	0.22	0.22	0.23	0.24	0.25	23
Missouri	0.18	0.19	0.19	0.20	0.21	0.22	26
Connecticut	0.28	0.29	0.31	0.32	0.34	0.36	11
Colorado	0.21	0.21	0.23	0.24	0.25	0.25	22
Alabama	0.18	0.20	0.21	0.22	0.24	0.26	21
Washington	0.16	0.16	0.17	0.17	0.18	0.18	28
Indiana	0.13	0.14	0.15	0.16	0.16	0.17	30

*Note.* \* The estimated total population includes only adolescents and adults 14 years of age or over. \*\* The table order is consistent with that of Table 1-1 and percentages were calculated using the numbers provided in Table 1-1. \*\*\* “-” indicates data not available.

\*\*\*\* Percentages for 2007 were calculated using 2006 data for 3 states with no 2007 data available (New York, Maryland, and Ohio).

<sup>1</sup> The prevalence rank is based on the 2007 data or 2006 data when the 2007 data are not available.

**Table 1-4. Percentages of Presumed Numbers of Persons Living with HIV/AIDS among the Estimated U. S. Population by States and Years (%) (Continued)**

	2002	2003	2004	2005	2006	2007	Prevalence Rank <sup>1</sup>
Mississippi	0.30	0.32	0.34	0.35	0.36	0.37	10
Nevada	0.22	0.24	0.26	0.29	0.31	0.34	12
Oregon	0.19	0.19	0.20	0.21	0.21	0.22	27
Wisconsin	0.12	0.12	0.13	0.13	0.13	0.14	34
Minnesota	0.11	0.12	0.12	0.12	0.13	0.14	35
Arkansas	0.18	0.18	0.19	0.20	0.21	0.22	24
Oklahoma	0.10	0.11	0.12	0.13	0.14	0.15	32
New Mexico	0.15	0.17	0.18	0.19	0.21	0.22	25
Delaware	-	0.40	0.42	0.44	0.46	0.48	6
Utah	0.08	0.08	0.09	0.09	0.10	0.09	43
Iowa	0.04	0.05	0.05	0.05	0.06	0.06	47
Nebraska	0.07	0.08	0.08	0.09	0.10	0.10	39
West Virginia	0.06	0.07	0.08	0.09	0.09	0.10	41
Hawaii	0.12	0.13	0.13	0.13	0.11	0.12	37
Maine	0.07	0.08	0.08	0.10	0.11	0.11	38
Rhode Island	0.05	0.06	0.08	0.10	0.11	0.13	36
New Hampshire	0.07	0.08	0.08	0.09	0.09	0.10	40
Idaho	0.07	0.07	0.07	0.08	0.08	0.08	44
Alaska	0.12	0.12	0.13	0.14	0.14	0.14	33
Kentucky	0.01	0.00	0.01	0.01	0.01	0.02	50
Montana	0.05	0.05	0.06	0.06	0.06	0.06	46
Vermont	0.08	0.08	0.08	0.08	0.08	0.10	42
North Dakota	0.06	0.06	0.06	0.07	0.07	0.08	45
South Dakota	0.04	0.04	0.04	0.05	0.05	0.05	48
Kansas	0.01	0.01	0.01	0.01	0.01	0.01	51
Wyoming	0.04	0.05	0.05	0.05	0.04	0.05	49

*Note.* \* The estimated total population includes only adolescents and adults 14 years of age or over. \*\* The table order is consistent with that of Table 1-2 and percentages were calculated using the numbers provided in Table 1-2. \*\*\* “-” indicates data not available.

<sup>1</sup> The prevalence rank is based on the 2007 data or 2006 data when the 2007 data are not available.

***Number of VR Consumers with HIV/AIDS who Exited the Program across States and Years from 2002 through 2007***

Table 2-1 and 2-2 provide the numbers of VR consumers with HIV/AIDS who exited the program for fiscal year 2002 through 2007 across 50 states and District of Columbia. These numbers include all persons with HIV/AIDS who approached and exited the VR program regardless of whether they received VR services, including those who exited the program as an applicant. The tables are sorted in descending order by each state's accumulated numbers of VR consumers for six years from 2002 through 2007, as shown in the last column in Table 2-1 and 2-2. The last row in Table 2-2 indicates the total number of VR consumers who were served by the VR program in each year for 2002 through 2007. No consistent increase or decrease from year to year in the number of VR consumers served by the VR program was shown across states. The accumulated number of VR consumers with HIV/AIDS who exited the program for all 50 states and the District of Columbia for six years is 12,531. The total number of VR consumers with HIV/AIDS who exited the program in each year range from 1,501 in 2002 to 2,502 in 2007. States with the highest accumulated number of VR consumers with HIV/AIDS for the six years are California ( $n = 2,960$ ), Texas ( $n = 1,114$ ), Maryland ( $n = 773$ ), Florida ( $n = 709$ ), and Illinois ( $n = 566$ ). More than 50 percent or 26 states showed less than 100 accumulated numbers of VR consumers with HIV/AIDS served by the VR program for six years. Two states, North Dakota and Wyoming, are shown to have no VR consumers with HIV/AIDS who exited the VR program for six years from 2002 to 2007. Unlike other states where the numbers are not much different across years, New York shows a large increase in the number of VR consumers with HIV/AIDS from overall fewer than 10 between 2002 and 2006 to 386 in 2007.

Figure 1-1 and Figure 1-2 provide the trend of the total number of VR consumers with HIV/AIDS who exited the VR program across years from 2002 through 2007 and the trend of the total number of VR consumers across years from 2002 through 2007, respectively. The trend lines in Figure 1-1 shows that overall the number of VR consumers with HIV/AIDS has increased over the six years, whereas the total number of VR consumers with disabilities has decreased as the trend line in Figure 1-2 shows. In both groups, VR consumers with HIV/AIDS and total VR population, there was an increase in numbers from 2002 to 2003 and from 2003 to 2004. However, it was noticed that the number of VR consumers with HIV/AIDS greatly increased from 2002 to 2003 (25.58%) and from 2003 to 2004 (20.21%), compared to the total VR population (1.04% from 2002 to 2003 and 0.55% from 2003 to 2004). Both groups showed a decrease from 2004 to 2005 (5.42% and 5.88, respectively). The number of VR consumers with HIV/AIDS, however, increased again from 2005 to 2006 (5.97%) and from 2006 to 2007 (10.88%), whereas the total VR population continued to decrease. Although these are sizable percentage increases for HIV/AIDS, they are relatively small increases in numbers because the numbers are so small to begin with.

**Table 2-1. Total Number of VR Consumers with HIV/AIDS who Exited the Program across States and Years**

States	2002	2003	2004	2005	2006	2007	Total
California	442	412	510	530	594	472	2,960
Texas	199	204	296	149	152	114	1,114
Maryland	127	90	113	110	204	129	773
Florida	40	131	133	136	121	148	709
Illinois	83	89	112	112	84	86	566
New Jersey	89	76	66	81	84	64	460
Missouri	34	56	108	62	79	90	429
New York	7	7	10	6	8	386	424
Georgia	33	54	109	92	51	75	414
Dist. Of Columbia	25	74	54	66	72	66	357
Kentucky	54	50	74	45	35	93	351
Ohio	20	37	68	73	68	76	342
Minnesota	51	63	42	53	48	38	295
Pennsylvania	40	46	43	45	59	61	294
Massachusetts	17	40	40	61	57	70	285
Michigan	16	24	47	46	52	67	252
Oklahoma	42	19	30	54	39	28	212
North Carolina	27	31	35	39	43	31	206
Louisiana	16	22	28	28	41	36	171
Wisconsin	7	35	49	30	26	23	170
South Carolina	19	28	23	24	26	34	154
New Mexico	12	27	28	28	31	16	142
Indiana	7	24	23	30	28	28	140
Washington	7	27	19	24	25	37	139
Oregon	10	28	31	21	20	18	128

*Note.* \* The table is sorted in descending order by the total number of persons served by the VR program.

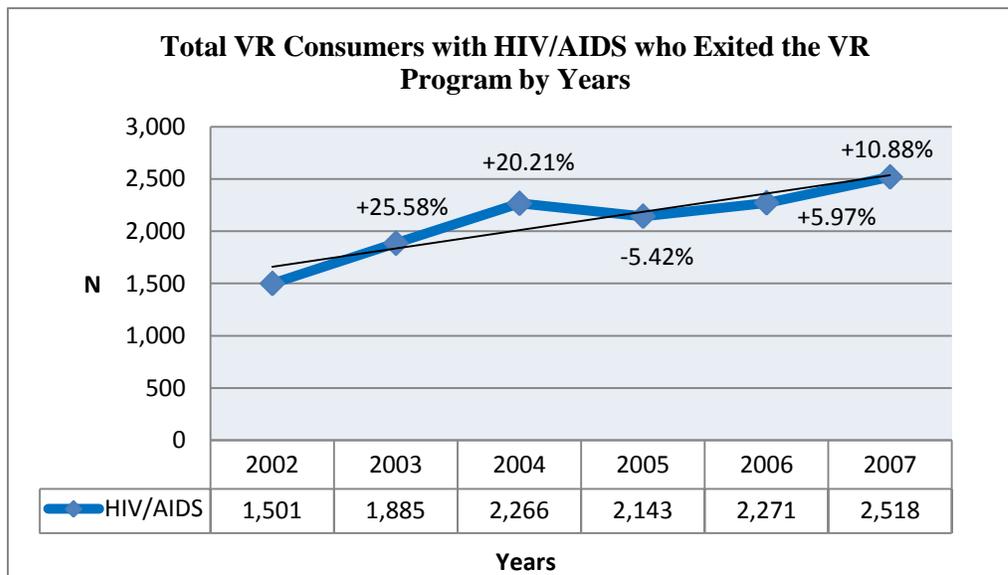
**Table 2-2. Total Number of VR Consumers with HIV/AIDS who Exited the VR Program across States and Years (Continued)**

States	2002	2003	2004	2005	2006	2007	Total
Tennessee	13	36	22	8	18	8	105
Alabama	1	19	11	15	18	19	83
Virginia	3	10	22	14	12	20	81
Arizona	5	11	11	21	19	12	79
Colorado	1	9	11	15	14	15	65
Arkansas	4	15	10	12	7	15	63
Connecticut	4	16	5	9	14	14	62
Delaware	4	16	11	6	6	9	52
Kansas	5	5	6	9	9	15	49
Iowa	7	10	3	8	8	12	48
Mississippi	4	5	16	5	8	10	48
Hawaii	6	2	9	10	8	10	45
Nevada	0	0	0	7	16	15	38
Utah	5	6	5	8	9	5	38
Montana	4	5	8	5	8	4	34
Nebraska	4	10	4	1	9	5	33
Vermont	1	5	4	8	6	2	26
Rhode Island	1	5	2	3	3	5	19
Alaska	3	0	3	1	7	4	18
New Hampshire	2	0	2	3	5	4	16
Idaho	0	1	1	4	2	5	13
Maine	0	0	2	2	5	3	12
West Virginia	0	1	2	0	3	3	9
South Dakota	0	3	1	2	0	2	8
North Dakota	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
<b>Total<sup>1</sup></b>	<b>1,501</b>	<b>1,884</b>	<b>2,262</b>	<b>2,121</b>	<b>2,261</b>	<b>2,502</b>	<b>12,531</b>

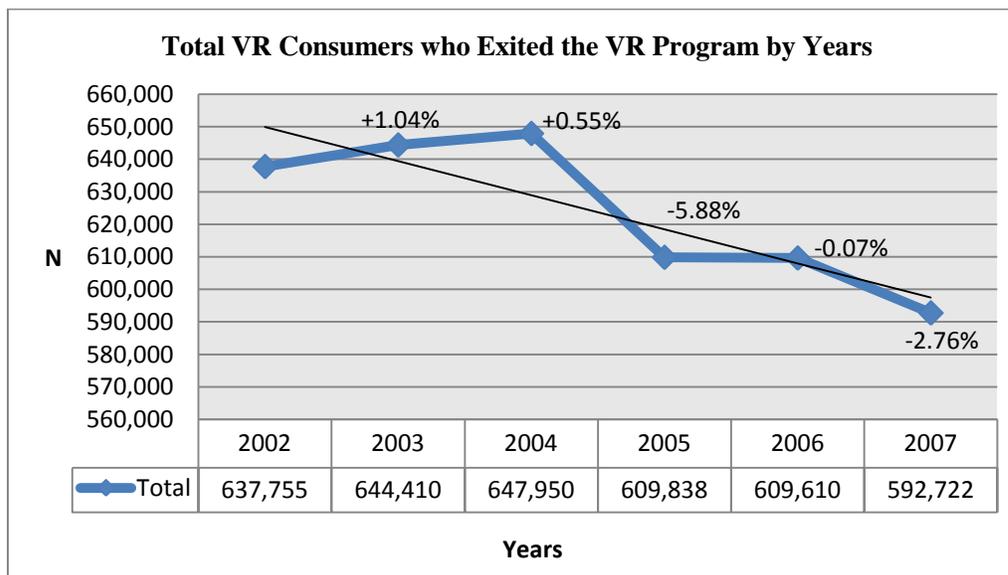
*Note.* \* The table is sorted in descending order by the total number of persons served by the VR program.

<sup>1</sup> See Figure 1-1 for the data in graphic format.

**Figure 1-1. Trend of the Total Number of VR Consumers with HIV/AIDS who Exited the VR Program across Years**



**Figure 1-2. Trend of the Total Number of VR Consumers who Exited the VR Program across Years**



***Rates of Total VR Consumers with HIV/AIDS among the Presumed Number of Persons Living with HIV/AIDS and among the Estimated Unemployed Persons Living with HIV/AIDS across 50 States and the District of Columbia and Years from 2002 through 2007***

Table 3-1 and 3-2 provide the rates of total VR consumers who exited the VR program among the total persons who are presumed living in each year for 2002 through 2007 across states. These rates were calculated by dividing the total VR consumers with HIV/AIDS who exited the VR program by the total presumed persons living with HIV/AIDS and multiplying by 100. This comparison represents a minimum baseline value for access/participation in the VR program by VR consumers with HIV/AIDS.

The average rate of six years for each state is also available in graphic format in Figure 2-1 (Table 3-1) and Figure 2-2 (Table 3-2). The rates of VR consumers for each year are 0.31% (2001), 0.42% (2002, 2003), 0.44% (2005), 0.45% (2006), and 0.44% (2007), which resulted in the overall average of 0.42% for all six years and states. Note that Kentucky is excluded from calculating these average rates across years due to its relatively high rates of VR consumers compared to other states, inclusion of which may greatly affect the overall averages. Other following average calculations for each year also do not include Kentucky for the same reason. The reason that Kentucky is an outlier is possibly because whereas states with lower HIV/AIDS prevalence rates served relatively smaller numbers of person with HIV/AIDS, Kentucky, which was ranked 50th in HIV/AIDS prevalence rates, served relatively high numbers of persons with HIV/AIDS (ranked 11th in the total number of VR consumers with HIV/AIDS;  $n = 351$ ).

Except for Kentucky (10.84%), the average rates of VR consumers across states vary from 2.97% (Kansas) to less than 0.1% (i.e., Virginia 0.08%, New York 0.01%, Wyoming and North Dakota (%)). Note that in calculating the average of all years

(column named average) for each state, two states' averages (Kentucky and Pennsylvania) are calculated for years 2005 through 2007 and for 2004 through 2007, respectively, because the presumed number of persons living with HIV is not available for years excluded (this applies to other following tables). However, all calculations for Hawaii were performed using the numbers of persons living with HIV because no AIDS data were available for all 6 years. As noted previously, New York State showed a dramatic increase in the number of VR consumers in 2007 (from less than 10 in previous years to 386 in 2007); however, the average of the rates of VR consumers for six years among the persons living with HIV/AIDS does not include the 2007 data due to the fact that data for total number of persons living with HIV/AIDS in New York are not available for 2007 at the time of this analysis.

**Table 3-1. Rates of VR Consumers with HIV/AIDS among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%)**

State	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Kentucky	30.00	30.30	41.57	9.87	6.80	15.79	10.82
Kansas	2.86	1.75	2.05	3.06	2.91	5.17	2.97
Montana	1.05	1.23	1.84	1.09	1.66	0.80	1.28
Vermont	0.25	1.22	0.94	1.84	1.37	0.41	1.00
Oklahoma	1.44	0.60	0.86	1.41	0.94	0.62	0.98
Minnesota	1.12	1.30	0.84	1.02	0.87	0.64	0.96
New Mexico	0.56	1.10	1.01	0.93	0.96	0.46	0.83
Missouri	0.41	0.65	1.20	0.66	0.80	0.87	0.76
California	-	-	0.56	0.54	0.87	0.55	0.63
Iowa	0.66	0.89	0.25	0.61	0.57	0.80	0.63
Hawaii	0.49	0.15	0.70	0.77	0.67	0.79	0.59
Dist. Of Columbia	-	0.72	0.47	0.53	0.52	0.44	0.54
Wisconsin	0.13	0.64	0.86	0.50	0.42	0.36	0.48
South Dakota	0.00	1.16	0.37	0.70	0.00	0.60	0.47
Nebraska	0.39	0.91	0.34	0.08	0.64	0.34	0.45
Maryland	0.50	0.33	0.39	0.36	0.62	-	0.44
Alaska	0.52	0.00	0.45	0.14	0.93	0.51	0.42
Rhode Island	0.24	0.90	0.27	0.35	0.31	0.45	0.42
Ohio	0.18	0.32	0.54	0.54	0.46	-	0.41
Texas	0.53	0.47	0.63	0.29	0.28	0.19	0.40
Utah	0.37	0.41	0.31	0.46	0.48	0.25	0.38
Illinois	0.39	0.38	0.44	0.40	0.27	0.26	0.36
Oregon	0.19	0.50	0.53	0.34	0.32	0.27	0.36
Delaware	-	0.61	0.38	0.20	0.19	0.27	0.33
Michigan	0.15	0.21	0.39	0.36	0.39	0.48	0.33
Indiana	0.11	0.35	0.31	0.38	0.34	0.32	0.30

*Note.* \* The table is sorted in descending order by the average rates. \*\* “-” indicates presumed number of persons living with HIV/AIDS is not available. \*\*\* See Figure 2-1 for the individual data for all states in graphic format. \*\*\*\* Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

<sup>1</sup> See Figure 3 for the data in graphic format.

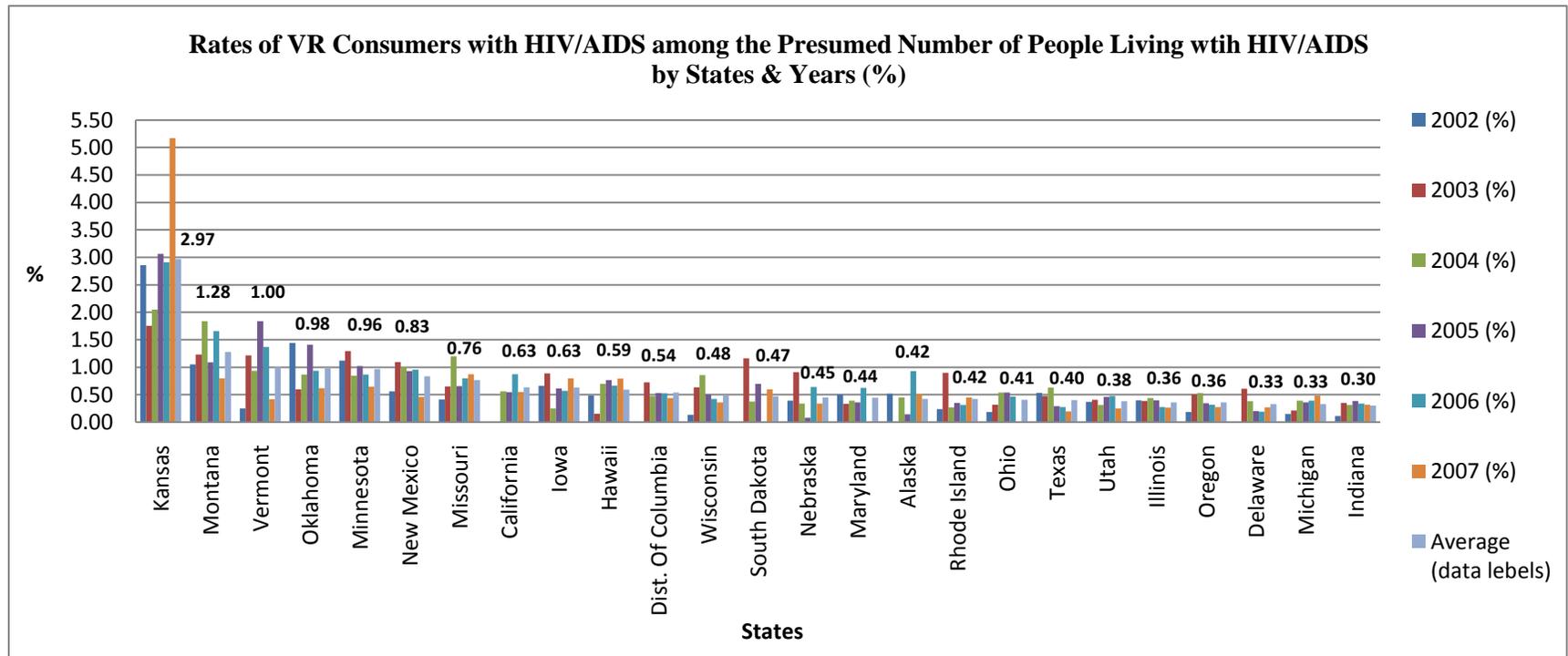
**Table 3-2. Rates of VR Consumers with HIV/AIDS among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Massachusetts	0.12	0.27	0.26	0.38	0.34	0.41	0.30
New Hampshire	0.27	0.00	0.23	0.32	0.50	0.38	0.28
Washington	0.09	0.33	0.22	0.27	0.27	0.38	0.26
Georgia	0.16	0.23	0.41	0.32	0.16	0.22	0.25
New Jersey	0.30	0.25	0.20	0.25	0.25	0.19	0.24
Idaho	0.00	0.13	0.12	0.46	0.21	0.50	0.24
Arkansas	0.10	0.37	0.23	0.26	0.15	0.30	0.24
Pennsylvania	0.29	0.30	0.25	0.24	0.21	0.21	0.23 <sup>3</sup>
South Carolina	-	0.20	0.17	0.18	0.20	0.24	0.20
Louisiana	0.11	0.15	0.18	0.20	0.28	0.23	0.19
North Carolina	0.16	0.18	0.20	0.21	0.22	0.14	0.19
Maine	0.00	0.00	0.24	0.18	0.42	0.25	0.18
Alabama	0.02	0.27	0.14	0.18	0.20	0.20	0.17
Florida	0.07	0.20	0.19	0.18	0.15	0.18	0.16
Tennessee	0.12	0.31	0.18	0.06	0.13	0.06	0.14
Arizona	-	0.11	0.11	0.19	0.16	0.10	0.13
Colorado	0.01	0.11	0.13	0.17	0.15	0.15	0.12
West Virginia	0.00	0.09	0.17	0.00	0.22	0.21	0.11
Connecticut	0.05	0.19	0.06	0.10	0.14	0.14	0.11
Mississippi	0.06	0.07	0.20	0.06	0.09	0.11	0.10
Nevada	0.00	0.00	0.00	0.13	0.26	0.21	0.10
Virginia	0.02	0.07	0.13	0.08	0.07	0.10	0.08
New York	0.01	0.01	0.01	0.01	0.01	-	0.01
Wyoming	0.00	0.00	0.00	0.00	0.00	0.00	0.00
North Dakota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average by year <sup>2</sup>	0.32	0.42	0.42	0.44	0.45	0.44	0.42

*Note.* \* The table is sorted in descending order by the average rates. \*\* “-” indicates presumed number of persons living with HIV/AIDS is not available. \*\*\* See Figure 2-2 for the individual data of all states in graphic format.

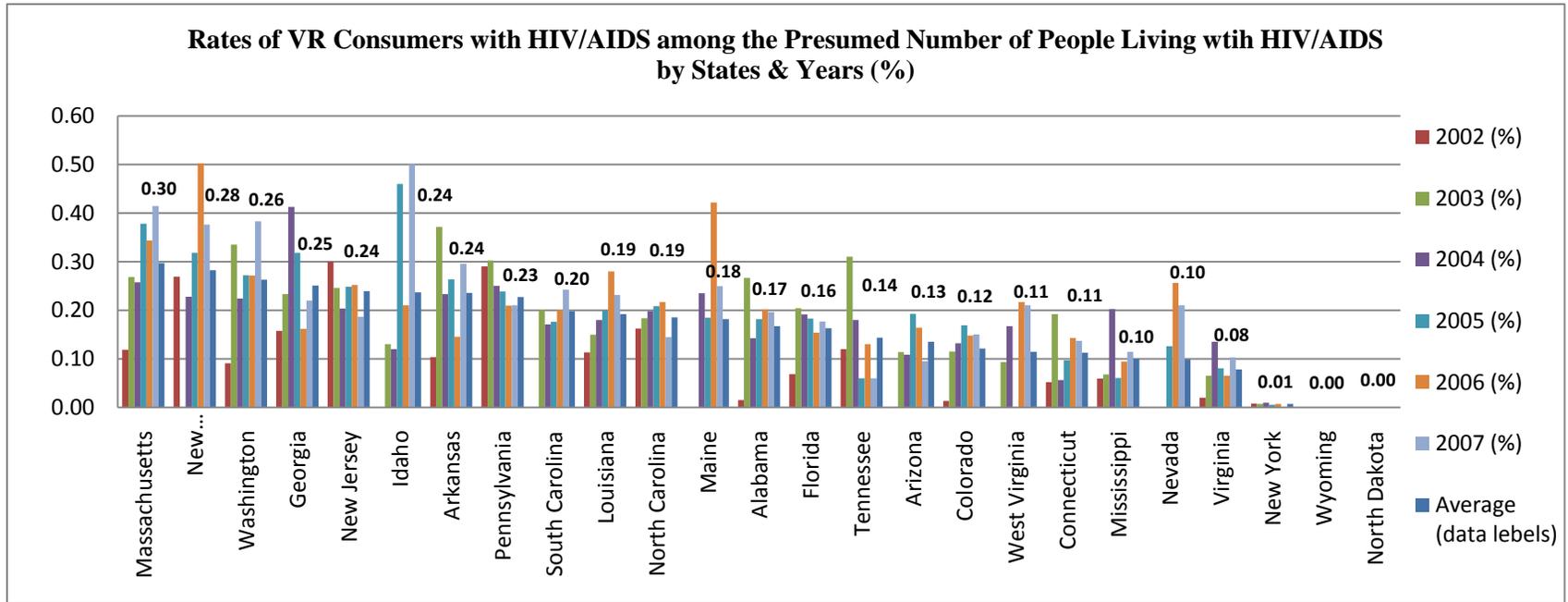
<sup>1</sup> See Figure 3 for the data in graphic format. <sup>2</sup> See Figure 5 for the data in graphic format; Average by year does not include Kentucky due to the data considered outliers. <sup>3</sup> Average for 4 years from 2004 to 2007 (see Table 3-1 footnote).

**Figure 2-1. Rates of VR Consumers with HIV/AIDS among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%)**



*Note.* \* Figure 2-1 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

**Figure 2-2. Rates of Total VR Consumers with HIV/AIDS among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%) (Continued)**



Note. See Figure 2-1 footnote.

Table 4-1 and 4-2 provide the rates of total VR consumers with HIV/AIDS among the estimated unemployed persons with HIV/AIDS presumed living across states and years. The rates were calculated by dividing total VR consumers with HIV/AIDS by the estimated number of unemployed persons living with HIV/AIDS and multiplying by 100. The estimated numbers of unemployed persons living with HIV/AIDS across states and years were calculated by multiplying the total number of persons with HIV/AIDS presumed living by state unemployment rate and dividing by 100 (see Appendix A-1 and A-2).

As shown in Table 4-1 and 4-2, the rates of total VR consumers with HIV/AIDS among the estimated unemployed persons living with HIV/AIDS across states range from 63.08% (Kansas) to 0% (North Dakota and Wyoming). Kentucky was calculated to have more VR consumers with HIV/AIDS than the total estimated number of unemployed people living with HIV/AIDS in the State. This anomalous finding may be due to two factors: 1) the relatively higher rates of VR consumers with HIV/AIDS in the state agency, and 2) the use of a minimum estimation of unemployment rate among people living with HIV/AIDS (We used the overall state unemployment rate rather than the unemployment rate of people with disabilities in the state). The average rates for Kentucky and Pennsylvania were calculated for 3 years (2005 to 2007) and 4 years (2004 to 2007), respectively, because inclusion of years for which only the number of persons living with AIDS is available may overestimate the average rates compared to other states. For example, the rates for 2002 through 2004 of Kentucky were shown to be higher than ones for 2005 through 2007 to a great extent.

The average rates for participation in VR across all states and by years range from 6.46% in 2002 to 10.89% in 2007, resulting in 9.07% average for the six years. This suggests that fewer than 10% of potentially VR eligible and unemployed persons with HIV/AIDS were served in VR agencies in the years 2002 through 2007. Similarly, although some states equaled or exceeded this average rate for the six years, in a majority of states, less than 10% of the estimated unemployed persons with HIV/AIDS approached VR services.

Figure 3 and 4 demonstrate the rates of VR consumers with HIV/AIDS among the presumed number of persons living with HIV/AIDS across states (averages of six years) and among the estimated unemployed persons living with HIV/AIDS across states in graphic format, respectively. Likewise, Figure 5 and 6 show the rates of VR consumers with HIV/AIDS among the presumed number of persons living with HIV/AIDS across years from 2002 through 2007 and among the estimated number of unemployed persons living with HIV/AIDS in graphic format, respectively.

**Table 4-1. Rates of Total VR Consumers with HIV/AIDS among the Estimated Unemployed Persons Living with HIV/AIDS (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Kentucky	526.32	481.00	742.38	164.47	117.17	287.08	189.58
Kansas	56.02	31.33	37.23	60.02	67.74	126.16	63.08
Montana	23.39	28.50	44.86	28.60	50.30	25.81	33.58
Vermont	6.23	27.03	25.32	52.55	37.02	10.64	26.47
Minnesota	24.84	26.46	18.36	24.26	21.66	13.96	21.59
Oklahoma	30.04	10.69	17.30	31.37	22.81	14.40	21.10
Hawaii	12.14	3.93	21.75	28.38	26.64	30.55	20.57
New Mexico	10.13	18.57	17.73	17.84	22.24	13.11	16.60
Iowa	16.93	20.17	5.28	14.25	14.97	20.98	15.43
Missouri	7.93	11.62	20.69	12.15	16.67	17.40	14.41
South Dakota	0.00	33.22	10.12	19.43	0.00	19.84	13.77
Nebraska	10.44	22.67	8.64	1.99	21.46	11.22	12.74
California	-	-	9.02	10.09	17.80	10.10	11.75
Maryland	11.13	7.43	9.14	8.73	16.35	-	10.56
Wisconsin	2.49	11.36	17.12	10.50	8.98	7.33	9.63
Utah	6.39	7.14	6.21	10.88	15.89	9.12	9.27
Delaware	-	14.45	9.78	4.96	5.38	7.91	8.50
Dist. Of Columbia	-	10.31	6.31	8.03	8.89	7.66	8.24
Rhode Island	4.64	16.62	5.25	6.87	6.13	9.07	8.10
New Hampshire	5.98	0.00	5.84	8.85	14.36	10.46	7.58
Idaho	0.00	2.45	2.64	11.91	6.67	18.57	7.04
Ohio	3.24	5.08	8.83	9.12	8.61	-	6.98
Texas	8.35	7.08	10.44	5.36	5.63	4.49	6.89
Alaska	7.30	0.00	6.06	2.06	14.30	8.18	6.32
Illinois	6.08	5.72	7.04	6.84	5.98	5.24	6.15
Massachusetts	2.24	4.63	4.95	7.72	7.16	9.21	5.99

*Note.* \*See Appendix A for estimated number of unemployed persons with HIV/AIDS based on state unemployment rate (%). \*\*The table is sorted in descending order by the average rates. \*\*\*“-” indicates presumed number of persons living with HIV/AIDS is not available. *Note.* \* Figure 2-1 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\*\*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C. and Appendix A and A-1 for the estimated unemployed persons living with HIV/AIDS.

<sup>1</sup> See Figure 4 for the data in graphic format.

**Table 4-2. Rates of Total VR Consumers with HIV/AIDS among the Estimated Unemployed Persons Living with HIV/AIDS (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Indiana	2.13	6.62	5.91	7.11	6.87	7.07	5.95
Oregon	2.46	6.18	7.22	5.52	5.83	5.28	5.41
Georgia	3.28	4.86	8.79	6.12	3.51	5.00	5.26
New Jersey	5.18	4.17	4.16	5.53	5.36	4.45	4.81
Washington	1.24	4.53	3.62	4.95	5.55	8.51	4.73
Michigan	2.38	2.95	5.48	5.24	5.64	6.65	4.72
Pennsylvania	5.18	5.30	4.63	4.78	4.56	4.68	4.66 <sup>3</sup>
Arkansas	1.95	6.40	4.16	5.17	2.74	5.47	4.32
Alabama	0.28	4.94	2.80	4.66	5.76	5.62	4.01
Louisiana	1.92	2.41	3.27	2.97	7.18	6.10	3.97
Maine	0.00	0.00	5.11	3.85	9.17	5.31	3.91
Florida	1.20	3.85	4.07	4.70	4.53	4.42	3.79
North Carolina	2.46	2.82	3.61	3.93	4.62	3.08	3.42
South Carolina	-	3.00	2.52	2.63	3.14	4.11	3.08
Arizona	-	2.00	2.21	4.19	4.01	2.50	2.98
Tennessee	2.21	5.46	3.35	1.12	2.62	1.19	2.66
Colorado	0.24	1.88	2.36	3.31	3.44	3.95	2.53
Connecticut	1.18	3.49	1.15	1.98	3.26	2.97	2.34
West Virginia	0.00	1.55	3.15	0.00	4.62	4.57	2.32
Virginia	0.50	1.60	3.65	2.30	2.17	3.43	2.28
Nevada	0.00	0.00	0.00	3.00	6.10	4.38	2.25
Mississippi	0.89	1.06	3.16	0.78	1.41	1.82	1.52
New York	0.13	0.11	0.17	0.11	0.15	-	0.11
North Dakota	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wyoming	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average by year <sup>2</sup>	6.46	8.20	8.41	9.73	10.92	10.89	9.07

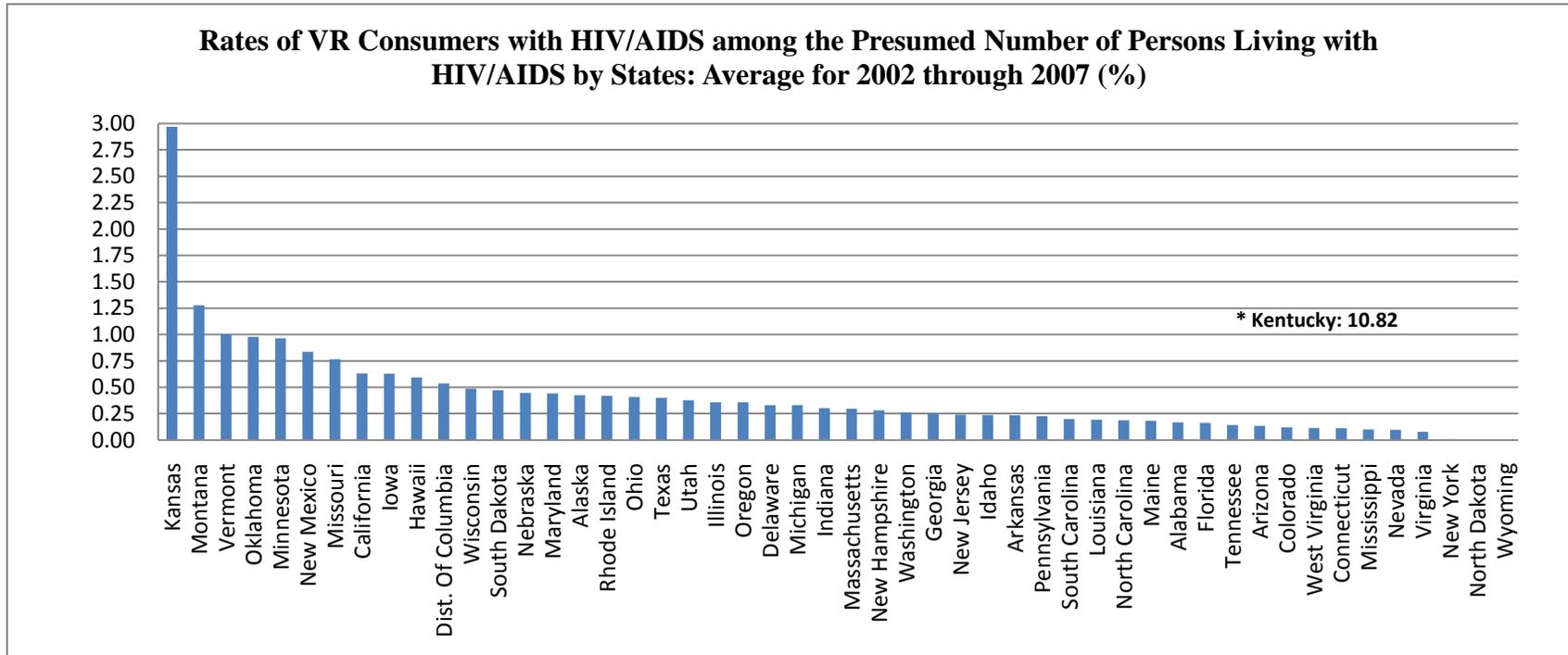
*Note.* \*See Appendix A for estimated number of unemployed persons with HIV/AIDS based on state unemployment rate (%). \*\*The table is sorted in descending order by the average rates. \*\*\*“-” indicates presumed number of persons living with HIV/AIDS is not available.

<sup>1</sup> See Figure 4 for the data in graphic format.

<sup>2</sup> Average by year does not include Kentucky due to the data considered outliers; see Figure 6 for the data in graphic format

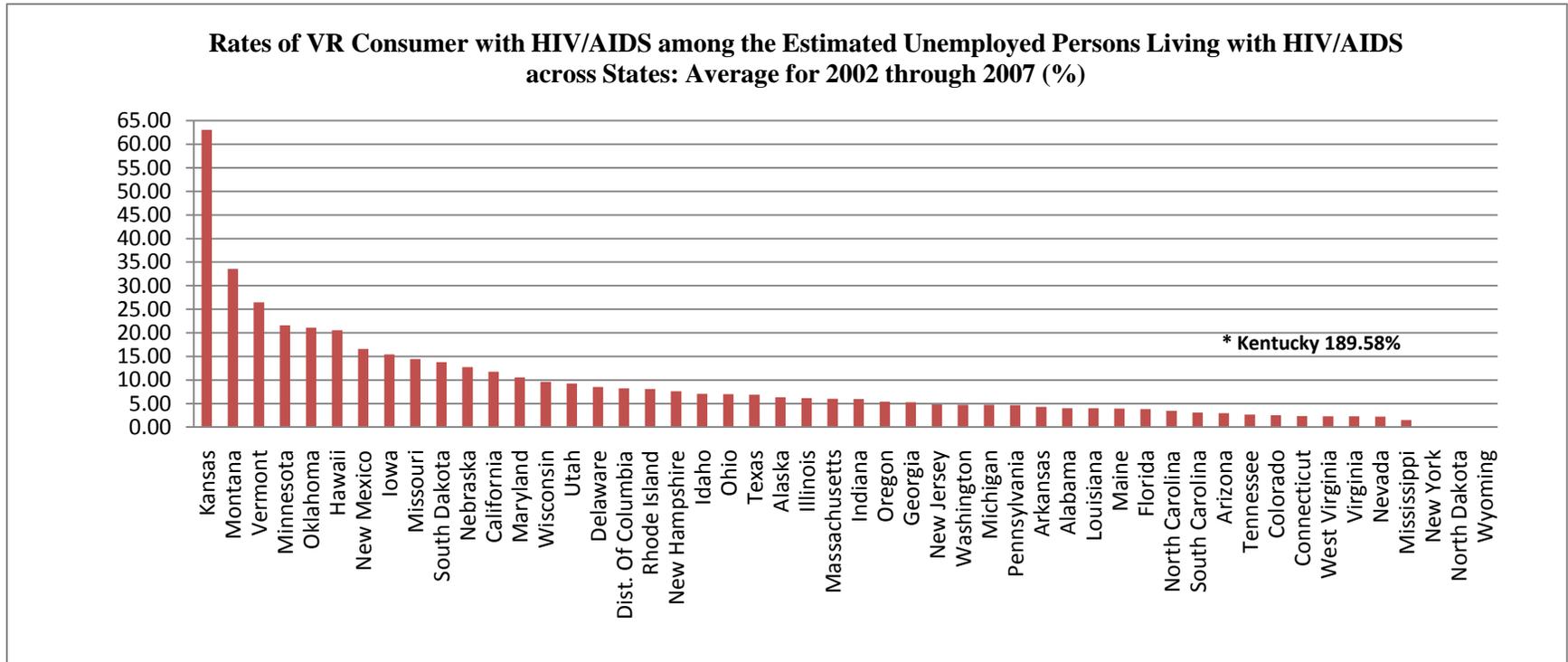
<sup>3</sup> Average of 4 years from 2004 to 2007 (see Table 4-1 footnote).

**Figure 3. Rates of Total VR Consumers with HIV/AIDS Compared to the Presumed Number of Persons Living with HIV/AIDS across States: Average for 2002 through 2007 (%)**



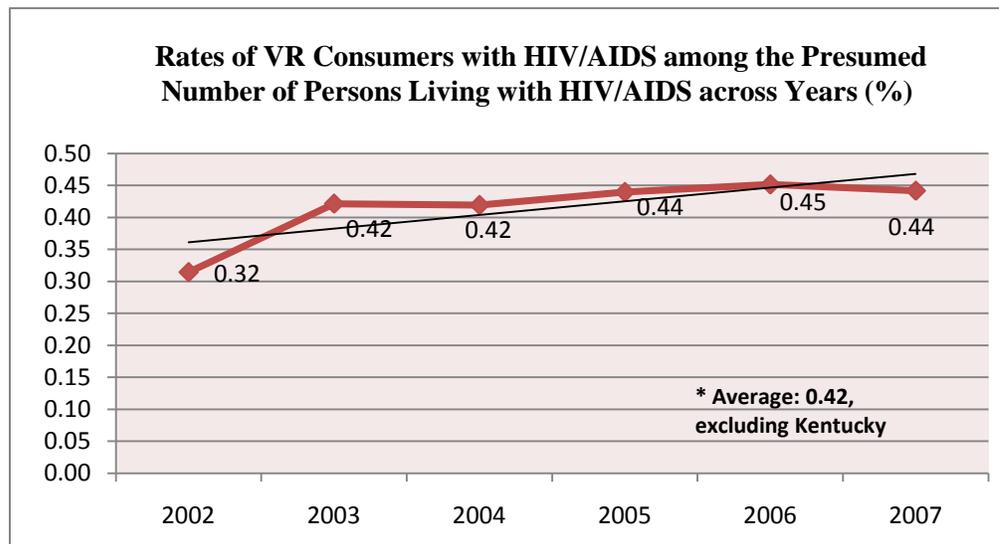
*Note.* \*Figure 3 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

**Figure 4. Rates of VR Consumers with HIV/AIDS Compared to the Estimated Unemployed Persons Living with HIV/AIDS across States: Average for 2002 through 2007 (%)**



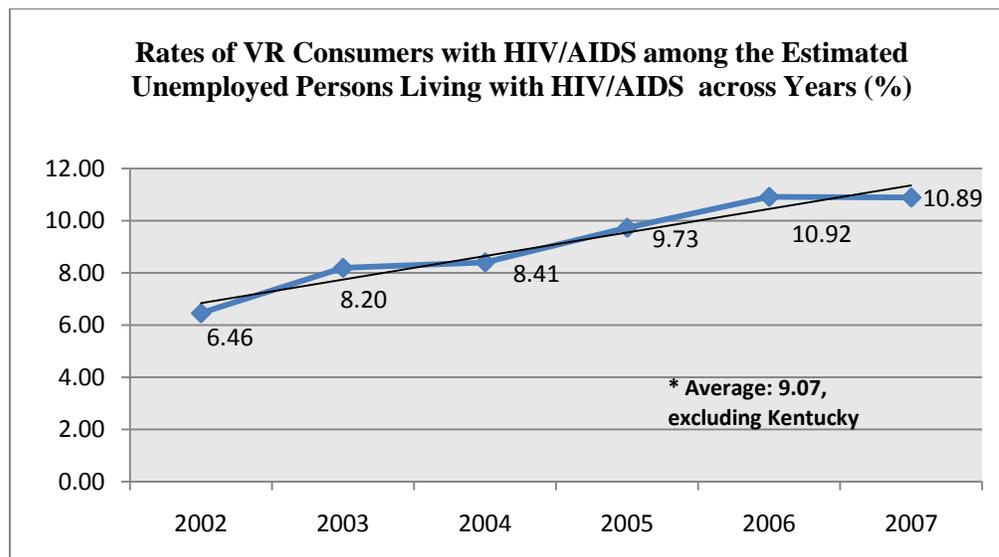
*Note.* \* See Figure 4 footnote. \*\* See Appendix A and A-1 for the number of estimated unemployed persons living with HIV/AIDS. \*\*\* Figure 3 does not include Kentucky with atypical data points that do not fit with the rest of the data.

**Figure 5. Average Rates of VR Consumers with HIV/AIDS among the Presumed Number of Persons Living with HIV/AIDS across Years**



*Note.* The average rates across years were calculated for 49 states and the District of Columbia, excluding Kentucky due to the data considered outliers.

**Figure 6. Rates of VR Consumers with HIV/AIDS among the Estimated Unemployed Persons Living with HIV/AIDS across Years (%)**



*Note.* The average rates across years were calculated for 49 states and the District of Columbia, excluding Kentucky due to the data considered outliers.

***Rates of VR Consumers with HIV/AIDS who Received VR Services among the Presumed Number of Persons Living with HIV/AIDS and among the Estimated Unemployed Persons Living with HIV/AIDS across 50 States and the District of Columbia and across Years from 2002 through 2007***

Tables 5-1 and 5-2 provide the rates of VR consumers with HIV/AIDS who received VR services among the presumed number of people living with HIV/AIDS across states and years. The average rates of VR service receipt among the presumed number of persons living with HIV/AIDS across states range from 0.89% (Kansas) to 0.01% (New York and Mississippi) with exception of Kentucky (9.93%) and North Dakota and Wyoming (0%). The average rate of VR consumers with HIV/AIDS among the persons living with HIV/AIDS for New York does not include data for 2007, in which a dramatic increase appeared in the number of VR consumers with HIV/AIDS ( $n = 386$ ), because the number of persons living with HIV/AIDS was not available for 2007.

Figure 7 shows the average rates for the six years for each state in graphic format. As shown in Table 5-2, the average rates of VR service receipt among the presumed number of persons living with HIV/AIDS for each year are 0.14% for 2002, 0.18% for 2003 and 2004, 0.22% for 2005 and 2006, and 0.20% for 2007. Note that Kentucky was excluded from calculating the average rates.

Tables 6-1 and 6-2 provide the rates of VR consumers with HIV/AIDS who received services among the estimated unemployed people living with HIV/AIDS across states and years from 2002 through 2007. The average rates of VR service receipt among the estimated number of unemployed persons living with HIV/AIDS across states range from 19.16% (Kansas) to less than 1% (i.e., Tennessee, Nevada, Colorado, Mississippi, New York, North Dakota, and Wyoming). Figure 7 shows the average rates for the six years for each state in graphic format. The average rates across years are 2.85% (2002), 3.58%

(2003), 3.55% (2004), 4.81% (2005), 5.37% (2006), and 4.89% (2007). In addition, Figure 9 shows the average rates across the six years for both groups (the total persons with HIV/AIDS presumed living and the estimated unemployed persons living with HIV/AIDS).

**Table 5-1. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Kentucky	20.56	13.94	12.36	2.85	4.27	5.60	4.24
Kansas	0.57	0.35	0.34	1.36	0.97	1.72	0.89
Oklahoma	1.24	0.38	0.72	0.94	0.82	0.44	0.76
Vermont	0.00	0.73	0.70	1.15	0.68	0.21	0.58
New Mexico	0.33	0.73	0.40	0.56	0.77	0.40	0.53
Montana	0.79	0.49	0.23	0.43	0.83	0.40	0.53
Minnesota	0.46	0.60	0.48	0.33	0.43	0.34	0.44
California	-	-	0.29	0.29	0.56	0.29	0.36
Iowa	0.47	0.62	0.08	0.31	0.21	0.27	0.33
Missouri	0.10	0.28	0.50	0.31	0.38	0.35	0.32
Dist. Of Columbia	-	0.32	0.28	0.35	0.28	0.30	0.30
Hawaii	0.16	0.15	0.31	0.31	0.25	0.40	0.26
Wisconsin	0.09	0.25	0.54	0.40	0.13	0.16	0.26
Utah	0.22	0.14	0.19	0.40	0.42	0.00	0.23
Illinois	0.24	0.22	0.29	0.22	0.16	0.13	0.21
Texas	0.28	0.22	0.39	0.13	0.13	0.10	0.21
Nebraska	0.10	0.36	0.08	0.08	0.43	0.07	0.20
Alaska	0.35	x	0.00	0.14	0.40	0.25	0.19
Michigan	0.06	0.10	0.17	0.20	0.22	0.32	0.18
Indiana	0.03	0.16	0.14	0.27	0.22	0.16	0.16
Ohio	0.05	0.07	0.21	0.24	0.22	-	0.16
New Hampshire	0.00	x	0.23	0.11	0.30	0.28	0.15
Pennsylvania	0.20	0.20	0.19	0.16	0.14	0.13	0.15
Rhode Island	0.00	0.54	0.00	0.23	0.00	0.09	0.14
Idaho	x	0.13	0.00	0.23	0.00	0.40	0.13

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed number of persons living with HIV/AIDS. \*\* “x” indicates no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

<sup>1</sup> See Figure 7 for the data in graphic format.

**Table 5-2. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Delaware	-	0.11	0.17	0.07	0.13	0.15	0.13
Maryland	0.15	0.11	0.10	0.11	0.19	-	0.13
New Jersey	0.11	0.14	0.12	0.12	0.14	0.12	0.13
Georgia	0.03	0.11	0.20	0.17	0.09	0.13	0.12
South Carolina	-	0.09	0.09	0.10	0.12	0.19	0.12
Massachusetts	0.05	0.05	0.05	0.16	0.17	0.20	0.11
Oregon	0.04	0.09	0.15	0.18	0.11	0.09	0.11
Alabama	0.02	0.11	0.06	0.10	0.17	0.17	0.10
Arkansas	0.03	0.12	0.09	0.13	0.08	0.12	0.10
North Carolina	0.10	0.09	0.10	0.11	0.12	0.06	0.10
Washington	0.00	0.07	0.13	0.16	0.10	0.11	0.10
Florida	0.02	0.09	0.12	0.11	0.08	0.11	0.09
Louisiana	0.06	0.05	0.06	0.07	0.10	0.10	0.08
Arizona	-	0.05	0.04	0.12	0.07	0.04	0.06
South Dakota	x	0.39	0.00	0.00	x	0.00	0.06
West Virginia	x	0.00	0.17	x	0.07	0.14	0.06
Connecticut	0.01	0.07	0.03	0.06	0.06	0.06	0.05
Maine	x	x	0.12	0.00	0.08	0.08	0.05
Virginia	0.02	0.03	0.09	0.05	0.04	0.08	0.05
Tennessee	0.04	0.05	0.10	0.02	0.01	0.02	0.04
Nevada	x	x	x	0.04	0.05	0.11	0.03
Colorado	0.00	0.03	0.00	0.01	0.05	0.07	0.03
Mississippi	0.00	0.03	0.01	0.00	0.01	0.03	0.01
New York	0.01	0.00	0.01	0.00	0.01	-	0.01
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average by year <sup>2</sup>	0.14	0.18	0.18	0.22	0.22	0.20	0.19

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed number of persons living with HIV/AIDS. \*\* “x” indicates no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\* See Table 5-1 footnote.

<sup>1</sup> See Figure 7 for the data in graphic format.

<sup>2</sup> Average by year does not include Kentucky due to the data considered outliers; see Figure 9 for the data in graphic format.

**Table 6-1. Rates of VR Consumers who Received VR Services among the Estimated Number of Unemployed Persons Living with HIV/AIDS across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Kentucky	360.62	221.26	220.71	47.51	73.65	101.87	74.34
Kansas	11.20	6.27	6.21	26.68	22.58	42.05	19.16
Oklahoma	25.75	6.75	14.41	20.92	19.88	10.29	16.33
Vermont	0.00	16.22	18.99	32.84	18.51	5.32	15.31
Montana	17.54	11.40	5.61	11.44	25.15	12.90	14.01
New Mexico	5.91	12.38	6.97	10.83	17.94	11.47	10.92
Minnesota	10.23	12.18	10.49	7.78	10.83	7.35	9.81
Hawaii	4.05	3.93	9.67	11.35	9.99	15.27	9.04
Iowa	12.09	14.12	1.76	7.12	5.62	6.99	7.95
California	-	-	4.72	5.35	11.42	5.35	6.71
Missouri	1.87	4.98	8.62	5.68	8.02	6.96	6.02
Utah	3.83	2.38	3.73	9.52	14.12	0.00	5.60
Nebraska	2.61	9.07	2.16	1.99	14.31	2.24	5.40
Wisconsin	1.78	4.54	10.83	8.40	2.76	3.19	5.25
Dist. Of Columbia	-	4.60	3.74	5.23	4.69	5.22	4.70
New Hampshire	0.00	x	5.84	2.95	8.61	7.85	4.21
Idaho	x	2.45	0.00	5.96	0.00	14.86	3.88
Texas	4.36	3.26	6.53	2.44	2.70	2.40	3.62
Illinois	3.66	3.34	4.71	3.73	3.41	2.62	3.58
Delaware	-	2.71	4.44	1.65	3.59	4.40	3.36
Indiana	0.61	3.03	2.57	4.97	4.42	3.54	3.19
Maryland	3.33	2.48	2.43	2.70	4.89	-	3.16
Pennsylvania	3.63	3.57	3.45	3.29	2.94	2.92	3.15
Alaska	4.87	x	0.00	2.06	6.13	4.09	2.86
Rhode Island	0.00	10.00	0.00	4.55	0.00	1.82	2.73

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed number of persons living with HIV/AIDS. \*\* “x” indicates that no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C. and Appendix A and A-1 for the estimated number of unemployed persons living with HIV/AIDS.  
<sup>1</sup> See Figure 8 for the data in graphic format.

**Table 6-2. Rates of VR Consumers who Received VR Services among the Estimated Number of Unemployed Persons Living with HIV/AIDS across States and Years (%) (Continued)**

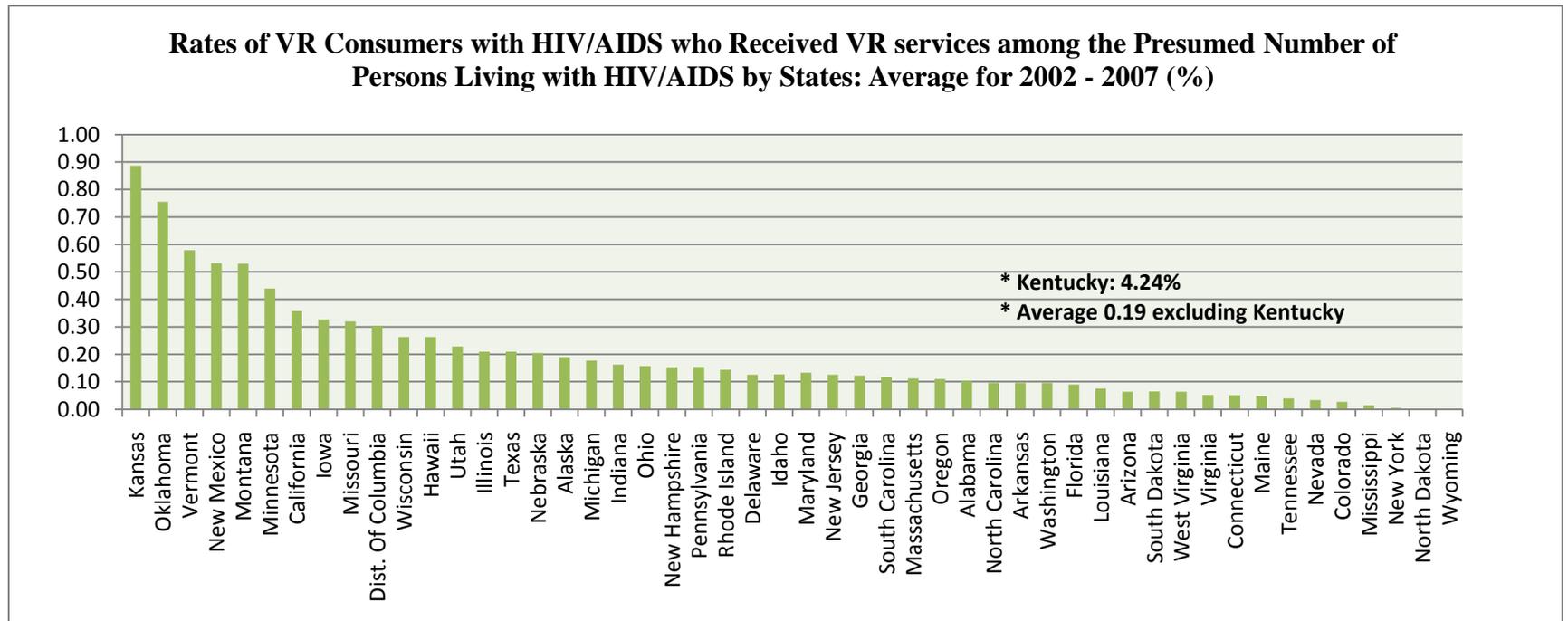
States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Ohio	0.81	1.10	3.51	4.00	4.05	-	2.69
Alabama	0.28	2.08	1.27	2.49	4.80	4.73	2.61
Georgia	0.60	2.34	4.35	3.26	1.86	3.00	2.57
New Jersey	1.98	2.30	2.52	2.73	2.93	2.78	2.54
Michigan	1.04	1.35	2.33	2.85	3.14	4.47	2.53
Massachusetts	0.92	0.81	0.99	3.17	3.52	4.47	2.31
Florida	0.42	1.71	2.63	2.80	2.32	2.81	2.11
South Dakota	x	11.07	0.00	0.00	x	0.00	1.85
South Carolina	-	1.39	1.31	1.53	1.81	3.14	1.84
Arkansas	0.49	2.13	1.67	2.59	1.57	2.19	1.77
North Carolina	1.55	1.46	1.75	2.01	2.58	1.19	1.76
Washington	0.00	1.01	2.10	2.89	2.00	2.53	1.75
Oregon	0.49	1.10	2.10	2.89	2.04	1.76	1.73
Louisiana	0.96	0.88	1.17	1.06	2.63	2.71	1.57
Virginia	0.50	0.80	2.32	1.48	1.27	2.75	1.52
Arizona	-	0.91	0.80	2.59	1.69	1.04	1.41
West Virginia	x	0.00	3.15	x	1.54	3.05	1.29
Connecticut	0.29	1.31	0.69	1.32	1.40	1.27	1.05
Maine	x	x	2.55	0.00	1.83	1.77	1.03
Tennessee	0.68	0.91	1.83	0.42	0.15	0.45	0.74
Nevada	x	x	x	0.86	1.14	2.33	0.72
Colorado	0.00	0.42	0.00	0.22	1.23	1.84	0.62
Mississippi	0.00	0.42	0.20	0.00	0.18	0.55	0.22
New York	0.09	0.06	0.15	0.06	0.11	-	0.10
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average by year <sup>2</sup>	2.85	3.58	3.55	4.81	5.37	4.89	4.17

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed number of persons living with HIV/AIDS. \*\* “x” indicates that no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\* See Table 6-2 footnote.

<sup>1</sup> See Figure 8 for the data in graphic format.

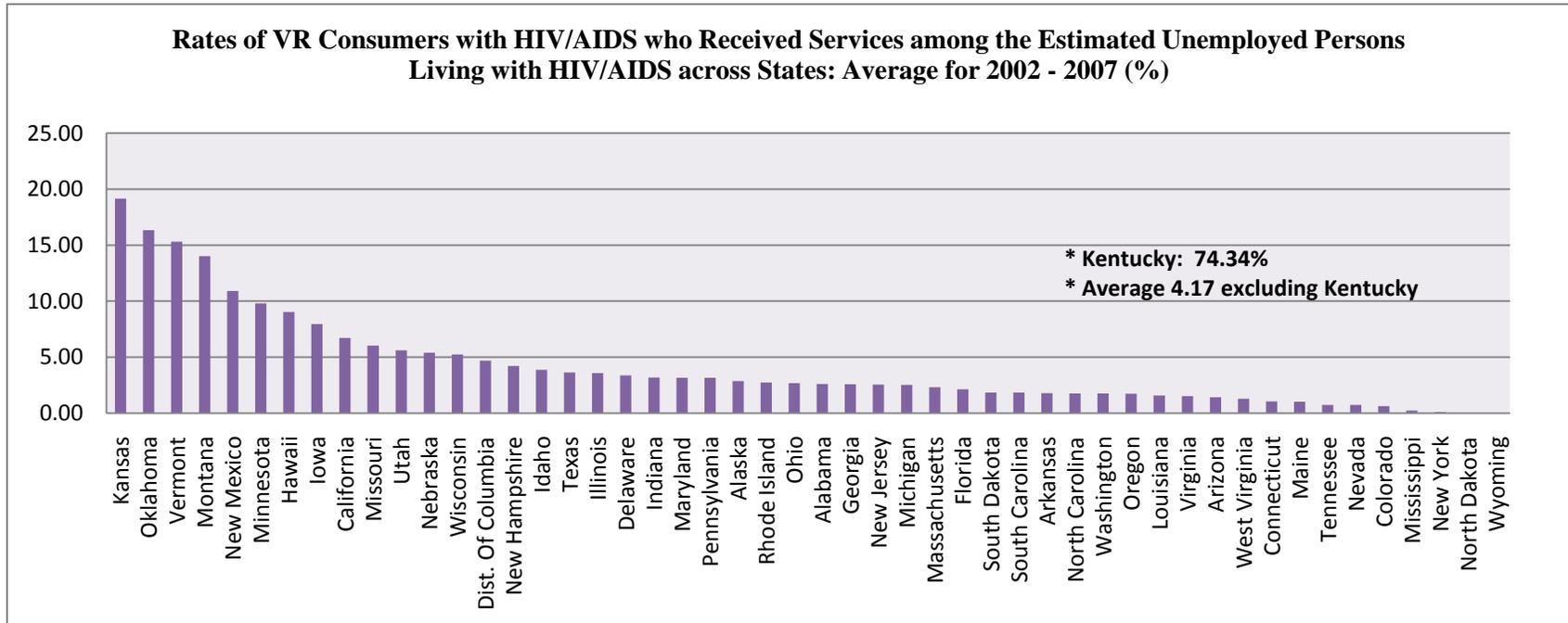
<sup>2</sup> Average by year does not include Kentucky due to the data considered outliers; see Figure 9 for the data in graphic format.

**Figure 7. Rates of VR Consumers who Received VR Services among the Presumed Number of Persons Living with HIV/AIDS across States: Average for 2002 through 2007 (%)**



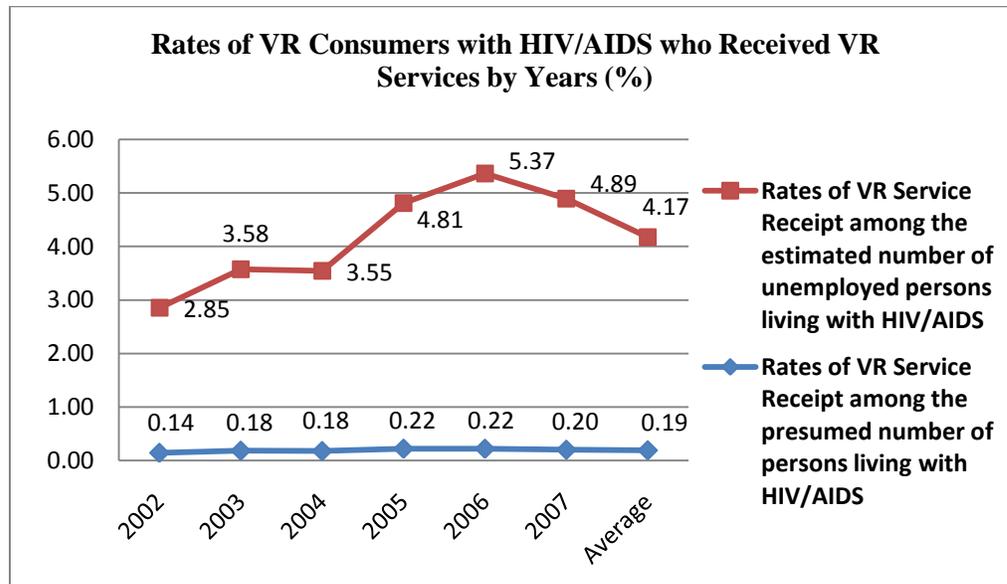
*Note.* \* Figure 7 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

**Figure 8. Rates of VR Consumers who Received VR Services among the Estimated Number of Unemployed Persons Living with HIV/AIDS across States: Average for 2002 through 2007 (%)**



*Note.* \* Figure 8 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\* See Appendix A and A-1 for the estimated number of persons living with HIV/AIDS (Also see Figure 7 footnote).

**Figure 9. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total Number of Persons with HIV/AIDS Presumed Living and the Estimated Number of Unemployed Persons Living with HIV/AIDS across Years (%)**



*Note.* Averages across years do not include Kentucky, but all other 49 states and D.C., due to the data considered outliers that significantly affect the overall averages.

***Rates of VR Consumers with HIV/AIDS who Achieved Employment among the Presumed Number of Persons Living with HIV/AIDS and among the Estimated Unemployed Persons Living with HIV/AIDS across 50 States and the District of Columbia and Years from 2002 through 2007***

Tables 7-1 and 7-2 provide the rates of VR consumers with HIV/AIDS who achieved employment outcome at closure among the total presumed number of persons living with HIV/AIDS across states and years. The average rates of VR consumers with HIV/AIDS who obtained employment for six years from 2002 to 2007 across states range from 0.39% (Kansas) to 0.01% (Mississippi), except for Kentucky (1.86%), New York (0.00%), North Dakota, and Wyoming. These average rates across states are also available in graphic format (see Figure 10). As previously noted, average rates for Kentucky and Pennsylvania were calculated for 3 years (2005 - 2007) and 4 years (2004 - 2007). North Dakota and Wyoming had no VR consumers with HIV/AIDS who exited the program for the six years. Across the states, average rates of VR consumers with an employment outcome among the total number of persons presumed living with HIV/AIDS are 0.06% (2002), 0.09% (2003), 0.08% (2004 and 2005), 0.10% (2006), and 0.11% (2007). These average rates do not include Kentucky.

Tables 8-1 and 8-2 provide the rates of VR consumers with HIV/AIDS who achieved an employment outcome at closure after receiving VR services among the estimated number of unemployed persons living with HIV/AIDS. The average rates of employment achievement among the estimated unemployed persons living with HIV/AIDS across states range from 9.23% (Kansas) to 0.05% (New York) with the overall average rate of 1.90%, not including Kentucky (32.30%). As previously noted, no VR consumers with HIV/AIDS exited the VR program in North Dakota and Wyoming. These average rates across states are also available in graphic format (see Figure 11).

Overall, the average rates of VR consumers who achieved employment among the estimated unemployed persons living with HIV/AIDS increased slightly across years as shown in the last row in Table 8-2 (1.26% in 2002, 1.73% in 2003, 1.62% in 2004, 1.82% in 2005, 2.44% in 2006, and 2.64% in 2007). However, Table 8-2 data suggest that on average across the years 2002 – 2007, only a very small percentage of potentially VR eligible unemployed persons with HIV/AIDS achieved a successful employment outcome following participation in the VR program.

Figure 12 shows the average rates of VR consumers with employment achievement across the six years from 2002 through 2007 as a proportion of the total persons presumed living with HIV/AIDS and as a proportion of the estimated unemployed persons living with HIV/AIDS.

**Table 7-1. Rates of VR Consumers with HIV/AIDS who Achieved Employment at Closure among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Kentucky	10.56	9.09	6.18	1.54	2.52	1.53	1.86
Kansas	0.00	0.00	0.00	0.34	0.65	1.38	0.39
Oklahoma	0.79	0.32	0.46	0.21	0.31	0.20	0.38
Vermont	0.00	0.24	0.23	0.46	0.46	0.21	0.27
Montana	0.53	0.25	0.23	0.00	0.21	0.20	0.23
New Mexico	0.09	0.28	0.25	0.23	0.37	0.14	0.23
Missouri	0.08	0.21	0.31	0.16	0.26	0.21	0.21
Dist. Of Columbia	-	0.22	0.19	0.23	0.17	0.12	0.19
Minnesota	0.13	0.19	0.18	0.15	0.14	0.22	0.17
California	-	-	0.12	0.12	0.25	0.14	0.16
Alaska	0.17	x	0.00	0.14	0.40	0.13	0.14
Iowa	0.19	0.35	0.08	0.08	0.07	0.07	0.14
Illinois	0.13	0.13	0.14	0.08	0.08	0.05	0.10
Michigan	0.04	0.04	0.12	0.12	0.12	0.14	0.10
New Hampshire	0.00	x	0.23	0.11	0.20	0.09	0.10
Idaho	x	0.13	0.00	0.00	0.00	0.40	0.09
Utah	0.00	0.14	0.12	0.11	0.16	0.00	0.09
Wisconsin	0.04	0.15	0.16	0.12	0.03	0.03	0.09
Maryland	0.12	0.06	0.08	0.06	0.09	-	0.08
Texas	0.14	0.07	0.11	0.05	0.04	0.05	0.08
Pennsylvania	0.09	0.05	0.08	0.07	0.07	0.07	0.07
New Jersey	0.07	0.05	0.06	0.07	0.10	0.07	0.07
South Carolina	-	0.06	0.04	0.04	0.07	0.12	0.07
Alabama	0.02	0.06	0.05	0.06	0.11	0.10	0.07
Ohio	0.01	0.03	0.12	0.07	0.10	-	0.07
Oregon	0.02	0.05	0.07	0.11	0.08	0.06	0.07

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed number of Persons living with HIV/AIDS. \*\* “x” indicates that no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

<sup>1</sup>See Figure 10 for the data in graphic format.

**Table 7-2. Rates of VR Consumers with HIV/AIDS who Achieved Employment at Closure among the Presumed Number of Persons Living with HIV/AIDS across States and Years (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Georgia	0.02	0.06	0.10	0.08	0.04	0.05	0.06
Massachusetts	0.01	0.01	0.02	0.09	0.11	0.12	0.06
Rhode Island	0.00	0.36	0.00	0.00	0.00	0.00	0.06
South Dakota	x	0.39	0.00	0.00	x	0.00	0.06
Arkansas	0.00	0.05	0.02	0.09	0.06	0.08	0.05
Hawaii	0.00	0.08	0.00	0.23	0.00	0.00	0.05
Nebraska	0.00	0.00	0.08	0.08	0.14	0.00	0.05
Arizona	-	0.05	0.01	0.09	0.04	0.00	0.04
Delaware	-	0.04	0.00	0.03	0.06	0.09	0.04
Florida	0.01	0.04	0.04	0.05	0.04	0.05	0.04
Indiana	0.02	0.03	0.04	0.03	0.02	0.07	0.03
North Carolina	0.05	0.04	0.02	0.01	0.04	0.02	0.03
Virginia	0.01	0.01	0.04	0.02	0.03	0.04	0.03
Washington	0.00	0.04	0.02	0.06	0.02	0.06	0.03
West Virginia	x	0.00	0.08	x	0.00	0.07	0.03
Connecticut	0.01	0.02	0.01	0.03	0.03	0.03	0.02
Louisiana	0.03	0.01	0.01	0.02	0.00	0.06	0.02
Maine	x	x	0.12	0.00	0.00	0.00	0.02
Nevada	x	x	x	0.04	0.02	0.08	0.02
Tennessee	0.03	0.03	0.03	0.01	0.00	0.01	0.02
Colorado	0.00	0.03	0.00	0.00	0.04	0.02	0.01
Mississippi	0.00	0.01	0.00	0.00	0.01	0.02	0.01
New York	0.00	0.00	0.01	0.00	0.00	-	0.00
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average by year <sup>2</sup>	0.06	0.09	0.08	0.08	0.10	0.11	0.09

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed number of persons living with HIV/AIDS. \*\* “x” indicates that no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\* See Table 7-1 footnote.

<sup>1</sup> See Figure 10 for the data in graphic format.

<sup>2</sup> Average by year does not include Kentucky due to the data considered outliers; see Figure 12 for the data in graphic format.

**Table 8-1. Rates of VR Consumers with HIV/AIDS who Achieved Employment at Closure among the Estimated Number of Unemployed Persons Living with HIV/AIDS across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Kentucky	185.19	144.30	110.35	25.58	43.52	27.78	32.30
Kansas	0.00	0.00	0.00	6.67	15.05	33.64	9.23
Oklahoma	16.45	5.63	9.22	4.65	7.60	4.63	8.03
Vermont	0.00	5.41	6.33	13.14	12.34	5.32	7.09
Montana	11.70	5.70	5.61	0.00	6.29	6.45	5.96
New Mexico	1.69	4.82	4.43	4.46	8.61	4.10	4.68
Missouri	1.63	3.74	5.36	2.94	5.49	4.25	3.90
Minnesota	2.92	3.78	3.94	3.66	3.61	4.78	3.78
Iowa	4.84	8.07	1.76	1.78	1.87	1.75	3.34
California	-	-	1.86	2.21	5.00	2.63	2.93
Idaho	x	2.45	0.00	0.00	0.00	14.86	2.88
New Hampshire	0.00	x	5.84	2.95	5.74	2.62	2.86
Dist. Of Columbia	-	3.20	2.57	3.53	2.84	2.09	2.85
Utah	0.00	2.38	2.48	2.72	5.30	0.00	2.15
Alaska	2.43	x	0.00	2.06	6.13	2.04	2.11
Maryland	2.63	1.24	1.78	1.51	2.41	-	1.91
South Dakota	x	11.07	0.00	0.00	x	0.00	1.85
Hawaii	0.00	1.97	0.00	8.51	0.00	0.00	1.75
Illinois	2.05	1.93	2.20	1.41	1.64	1.10	1.72
Wisconsin	0.71	2.60	3.14	2.45	0.69	0.64	1.70
Alabama	0.28	1.04	1.02	1.55	3.20	2.96	1.67
Nebraska	0.00	0.00	2.16	1.99	4.77	0.00	1.49
Pennsylvania	1.68	0.92	1.40	1.38	1.47	1.54	1.45
New Jersey	1.28	0.82	1.13	1.64	2.11	1.67	1.44
Michigan	0.60	0.62	1.75	1.71	1.73	1.99	1.40

*Note.* \* “-” indicates no data are available due to data unavailable on the presumed Persons living with HIV/AIDS. \*\* “x” indicates that no one with HIV/AIDS exited the VR program. \*\*\*The table is sorted in descending order by the average rates. \*\*\*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C. and Appendix A and A-1 for the estimated number of unemployed persons living with HIV/AIDS.

<sup>1</sup> See Figure 11 for the data in graphic format.

**Table 8-2. Rates of VR Consumers with HIV/AIDS who Achieved Employment at Closure among the Estimated Number of Unemployed Persons Living with HIV/AIDS across States and Years (Continued)**

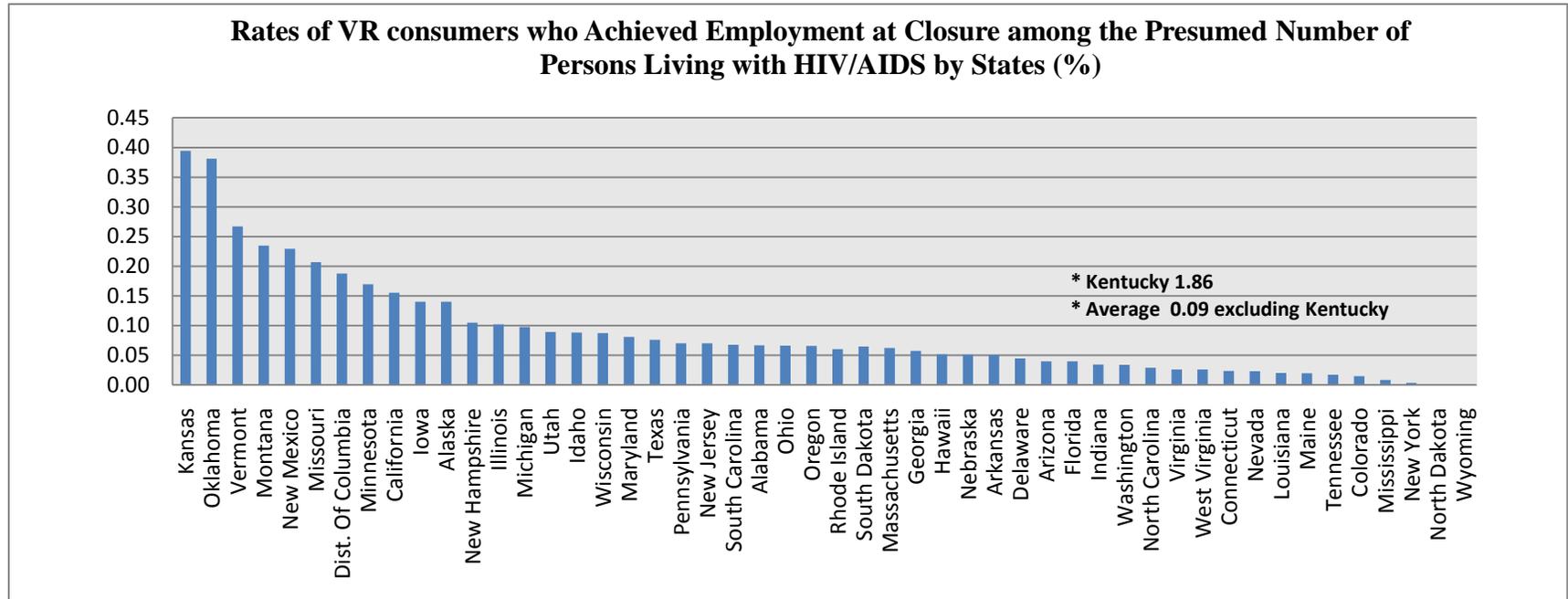
States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>
Texas	2.14	1.08	1.76	0.90	0.82	1.22	1.32
Massachusetts	0.26	0.23	0.37	1.90	2.26	2.76	1.30
Delaware	-	0.90	0.00	0.83	1.79	2.64	1.23
Georgia	0.40	1.17	2.18	1.46	0.83	1.20	1.21
Ohio	0.16	0.41	1.95	1.25	1.90	-	1.13
Rhode Island	0.00	6.67	0.00	0.00	0.00	0.00	1.11
South Carolina	-	0.96	0.55	0.66	1.09	2.05	1.06
Oregon	0.25	0.66	0.93	1.84	1.46	1.17	1.05
Arkansas	0.00	0.85	0.42	1.72	1.18	1.46	0.94
Florida	0.18	0.76	0.92	1.35	1.08	1.31	0.93
Virginia	0.17	0.32	1.16	0.66	0.91	1.37	0.76
Indiana	0.30	0.55	0.77	0.47	0.49	1.52	0.68
Arizona	*	0.00	0.20	2.00	1.05	0.00	0.65
Washington	0.00	0.50	0.38	1.03	0.44	1.38	0.62
West Virginia	x	0.00	1.58	x	0.00	1.52	0.52
North Carolina	0.73	0.64	0.31	0.20	0.75	0.40	0.50
Nevada	x	x	x	0.86	0.38	1.75	0.50
Connecticut	0.29	0.44	0.23	0.66	0.70	0.64	0.49
Maine	x	x	2.55	0.00	0.00	0.00	0.43
Louisiana	0.48	0.11	0.12	0.32	0.00	1.52	0.42
Colorado	0.00	0.42	0.00	0.00	0.98	0.53	0.32
Tennessee	0.51	0.46	0.61	0.14	0.00	0.15	0.31
Mississippi	0.00	0.21	0.00	0.00	0.18	0.36	0.13
New York	0.06	0.05	0.13	0.00	0.04	-	0.05
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average by year <sup>2</sup>	1.26	1.73	1.62	1.82	2.44	2.64	1.92

*Note.* \* “-” indicates no data are available due to data on the presumed Persons living with HIV/AIDS is unavailable. \*\* “x” indicates that no one with HIV/AIDS exited the VR program. \*\*\* See Table 8-1 footnote.

<sup>1</sup> See Figure 11 for the data in graphic format.

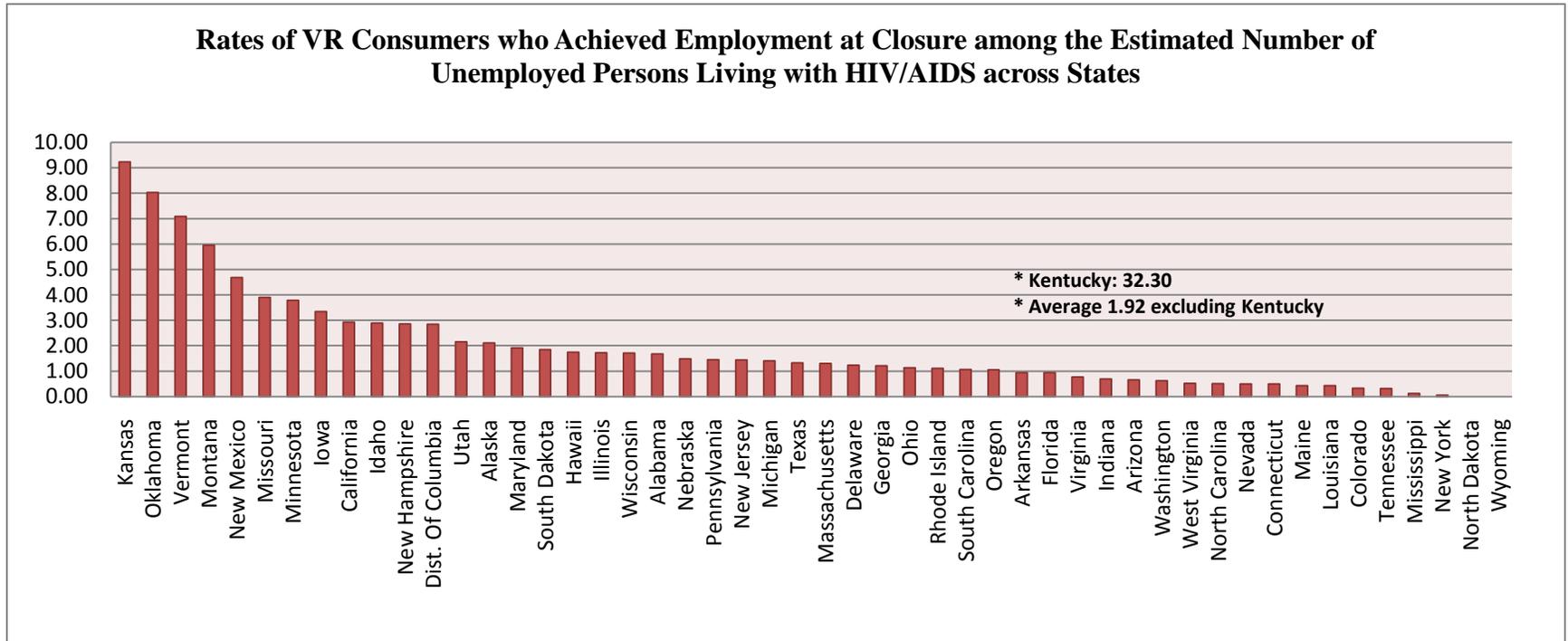
<sup>2</sup> Average by year does not include Kentucky due to the data considered outliers; see Figure 12 for the data in graphic format.

**Figure 10. Rates of VR Consumers with HIV/AIDS with an Employment Outcome at Closure among the Presumed Number of Persons Living with HIV/AIDS across States: Average for 2002 through 2007 (%)**



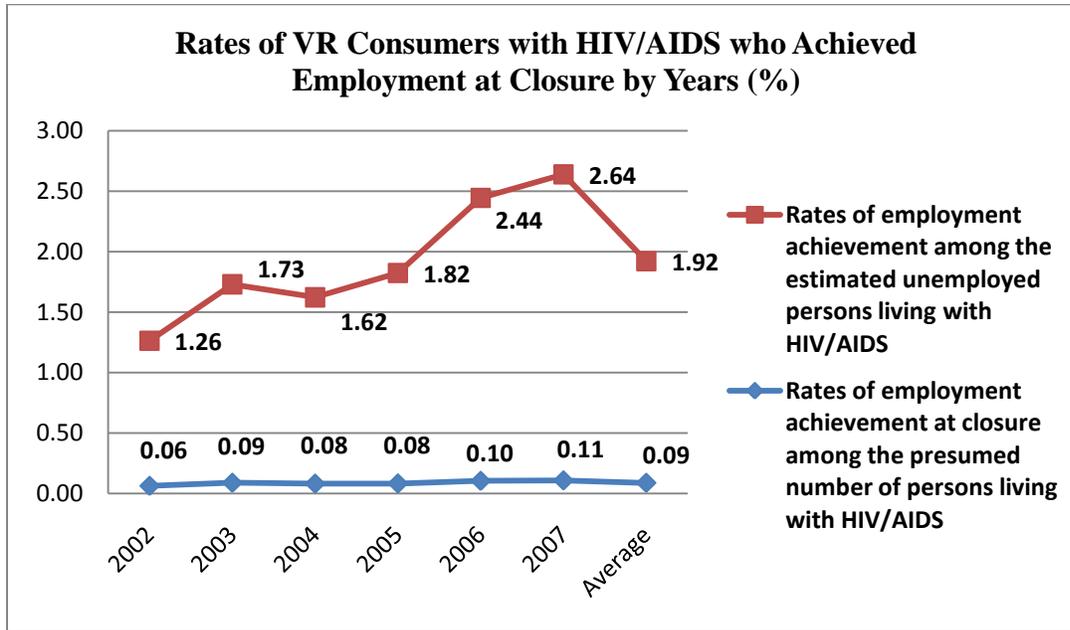
*Note.* \* Figure 10 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\*Averages for Kentucky and Pennsylvania were calculated for 2005 - 2007 and 2004 - 2007, respectively because the presumed number of adolescents and adults aged 13 and above living with HIV is not available for years excluded. However, all calculations for Hawaii for which AIDS data were not available for all 6 years were performed using the number of persons living with HIV. For 3 states where children under age 13 are included in the total numbers of persons living with HIV/AIDS (i.e., South Dakota from 2002 to 2004 and Utah and Wyoming for all 6 years), all calculations were conducted using the numbers available. See Table 1-1 and 1-2 for the raw number of presumed number of persons living with HIV/AIDS collected from 50 states and D.C.

**Figure 11. Rates of VR Consumers with HIV/AIDS with an Employment Outcome at Closure among the Estimated Number of Unemployed Persons Living with HIV/AIDS across States: Average for 2002 through 2007 (%)**



*Note.* \* Figure 11 does not include Kentucky with atypical data points that do not fit with the rest of the data. \*\* See Appendix A and A-1 for the estimated number of unemployed persons living with HIV/AIDS (Also see Figure 10 footnote).

**Figure 12. Rates of VR Consumers with HIV/AIDS who Achieved Employment among the Presumed Number of Persons Living with HIV/AIDS and the Estimated Number of Unemployed Persons Living with HIV/AIDS across Years (%)**



*Note.* Averages across years do not include Kentucky, but all other 49 states and D.C., due to the data considered outliers that significantly affect the overall averages.

***Comparisons of Rates of VR Access, Service Receipt, and Successful Closure: Among the Presumed Number of Persons Living with HIV/AIDS vs. among the Estimated Total Population with Disabilities; Among the Estimated Unemployed Persons Living with HIV/AIDS vs. among the Estimated Unemployed Population with Disabilities: 2002 and 2005***

As shown in Tables 9-1 and 9-2, rates of access to the VR program, service receipt, and successful closure among the presumed persons living with HIV/AIDS were compared to those among the estimated total number of persons with disabilities in the U.S. (comparison group) for 2002 and 2005. Next, the rates of access to the VR program, service receipt, and successful closure were assessed among the estimated unemployed persons living with HIV/AIDS and compared to those among the estimated unemployed persons with disabilities (comparison group).

Regarding the comparison group, the rate of access to the VR program among the estimated total persons with disabilities for 2002 was calculated by dividing the total number of VR consumers ( $n = 637,755$ ) by the total number of persons with disabilities ( $n = 46,124,000$ ) and multiplying by 100 (see Table 9-2). Similarly, the rate of VR service receipt among the estimated persons with disabilities for 2002 was calculated using the same formula, but replacing the total number of VR consumers with the total number of VR consumers who received VR services ( $n = 364,533$ ). When these rates were assessed among the estimated unemployed persons with disabilities instead among the total persons with disabilities, the same formula was used as well, except for the replacement of the total number of persons with disabilities with the estimated number of unemployed persons with disabilities. Specific comparisons are shown in Figure 13 through Figure 18.

**Table 9-1. VR Consumers with HIV/AIDS**

Year	<b>Total N of persons with HIV/AIDS</b>	Total VR consumers with HIV/AIDS		VR consumers with HIV/AIDS who received services		VR consumers with HIV/AIDS successfully closed		<b>Estimated unemployed persons with HIV/AIDS<sup>3</sup></b>	Total VR consumers with HIV/AIDS		VR consumers with HIV/AIDS who received services		VR consumers with HIV/AIDS successfully closed	
	<b>N</b>	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<b>n</b>	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
2002	<b>581,074<sup>1</sup></b>	1,501	0.26%	698	0.12%	318	0.05%	<b>33,702</b>	1,501	4.45%	698	2.07%	318	0.94%
2005	<b>725,343<sup>2</sup></b>	2,143	0.30%	1,082	0.15%	469	0.06%	<b>36,992</b>	2,143	5.79%	1,082	2.92%	469	1.27%

Note. <sup>1</sup> For states with no 2002 data, 2003 data (i.e., Dist. Of Columbia, South Carolina, Arizona, and Delaware) 2004 data (i.e., California) were used.

<sup>1,2</sup> Only the number of persons living with AIDS was included for 3 states with no HIV data available (i.e., Pennsylvania, Hawaii, and Kentucky).

<sup>3</sup> Unemployment rates are for civilian labor force 16 years and over and 5.8% and 5.1% for 2002 and 2005, respectively (Source: the U.S. Bureau of Labor Statistics - [http://www.bls.gov/schedule/archives/all\\_nr.htm#SRGUNE](http://www.bls.gov/schedule/archives/all_nr.htm#SRGUNE)).

**Table 9-2. Total VR Population (Comparison Group)**

Year	<b>Total N of persons with disabilities<sup>1</sup></b>	Total number of VR consumers		VR consumers who received services		VR consumers who achieved employment		<b>Estimated unemployed persons with disabilities<sup>2</sup></b>	Total number of VR consumers		VR consumers who received services		VR consumers who achieved employment	
	<b>N</b>	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<b>n</b>	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
2002	<b>46,124,000</b>	637,755	1.38	364,533	0.79	218,763	0.47	<b>2,675,192</b>	637,755	23.84	364,533	13.63	218,763	8.18
2005	<b>49,073,000</b>	609,838	1.24	352,737	0.72	204,016	0.42	<b>2,502,723</b>	609,838	24.37	352,737	14.09	204,016	8.15

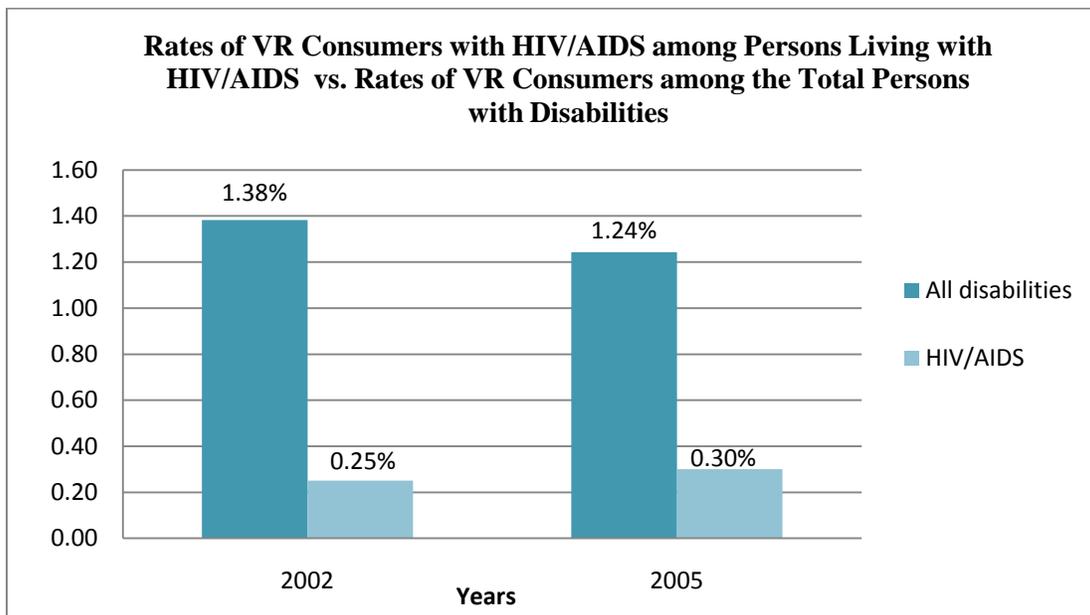
Note. <sup>1</sup> the total number of persons with disabilities and the estimated number of persons with disabilities includes only adolescents and adults aged 15 or older (Source: the Survey of Income and Program Participation (SIPP) for 2002 and 2005).

<sup>2</sup> Unemployment rates are for civilian labor force 16 years and over and 5.8% and 5.1% for 2002 and 2005, respectively (Source: the U.S. Bureau of Labor Statistics - [http://www.bls.gov/schedule/archives/all\\_nr.htm#SRGUNE](http://www.bls.gov/schedule/archives/all_nr.htm#SRGUNE)).

As shown in Figure 13, the rates of VR consumers with HIV/AIDS among the presumed number of persons living with HIV/AIDS for 2002 and 2005 were 0.25% and 0.30%, respectively. The rates of VR consumers to the estimated total populations of people with disabilities were 1.38% for 2002 and 1.24% for 2005. The rates of VR consumers with HIV/AIDS to the total estimated population of persons living with HIV/AIDS were 0.25% for 2002 and 0.30% for 2005. Although the rate of participation in VR of all people with disabilities is very low, Figure 13 indicates that the comparable rate of participation in VR for persons with HIV/AIDS is approximately 6 and 4 times lower in 2002 and 2005, respectively.

Figure 14 shows the rates of access to the VR program among the estimated unemployed persons living with HIV/AIDS, compared to the estimated total number of unemployed persons with disabilities for 2002 and 2005. The rates of VR consumers with HIV/AIDS among the estimated unemployed persons living with HIV/AIDS were lower by 19.39% in 2002 and by 18.58% in 2005 as compared to all VR consumers among the estimated unemployed persons with disabilities.

**Figure 13. Comparisons between Rates of VR Consumers with HIV/AIDS who Exited the VR Program among the Presumed Number of Persons Living with HIV/AIDS and Rates of Total VR Consumers who Exited the VR Program among the Total Number of Persons with Disabilities: 2002 and 2005**



**Figure 14. Comparisons between Rates of VR Consumers with HIV/AIDS who Exited the VR Program among the Estimated Unemployed Persons Living with HIV/AIDS and Rates of Total VR Consumers who Exited the VR Program among the Estimated Unemployed Persons with Disabilities: 2002 and 2005**

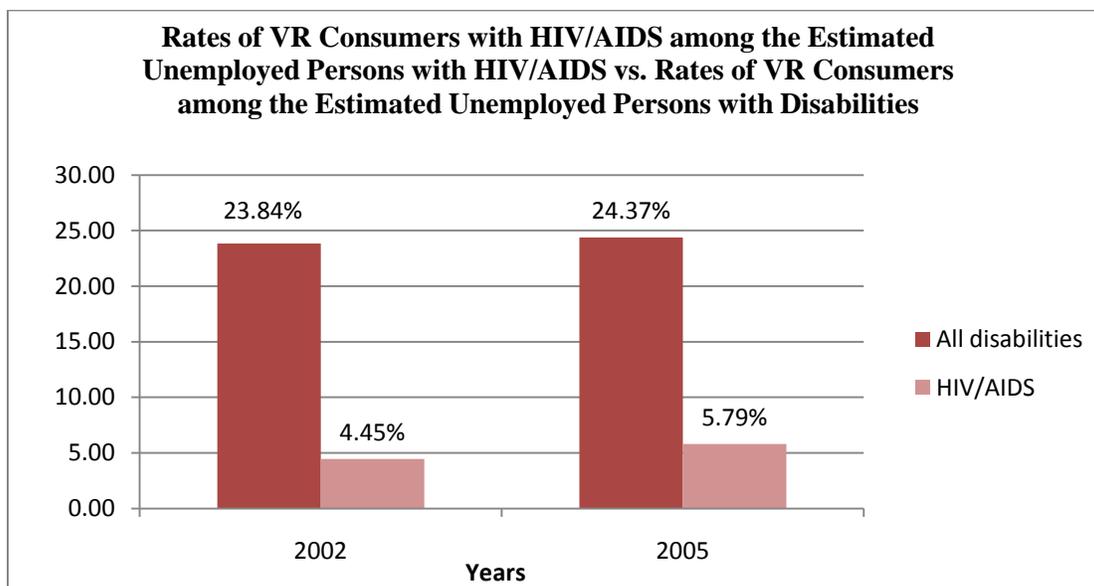
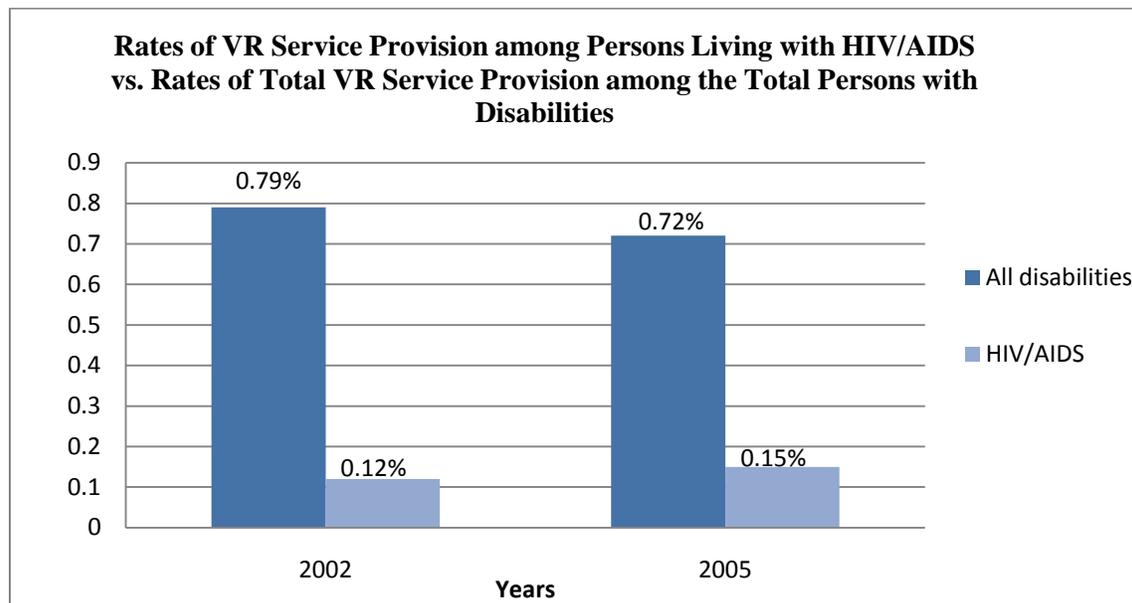


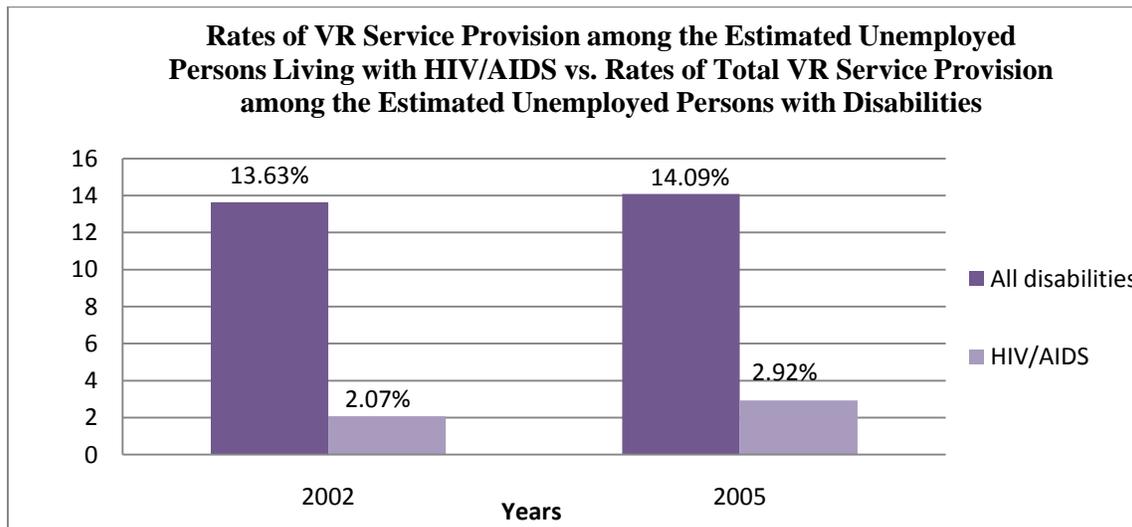
Figure 15 illustrates rates of VR consumers with HIV/AIDS who received VR services among the presumed number of persons living with HIV/AIDS and rates of total VR consumers who received VR services among the estimated total persons with disabilities for 2002 and 2005. This figure indicates a similar pattern of underutilization of VR services among persons living with HIV/AIDS. The rates of VR consumers with HIV/AIDS who received VR services (0.12% in 2002 and 0.15% in 2005) were lower than those of total VR consumers who received VR services by 0.67% (approximately 6.6 times lower) and 0.57% (approximately 4.8 times lower), respectively. As shown in Figure 16, the rates of VR consumers with HIV/AIDS who received VR services among the estimated unemployed persons living with HIV/AIDS were 2.07% in 2002 and 2.92% in 2005. These rates were lower than those of the comparison group by 11.56% in 2002 (6.6 times lower) and by 11.17% in 2005 (4.8 times lower).

In the same vein, the rates of VR consumers with HIV/AIDS who obtained a successful employment outcome at closure among the presumed number of persons living with HIV/AIDS were compared to the rates of VR consumers who achieved a successful employment outcome at closure among the total estimated persons with disabilities for 2002 and 2005 (See Figure 17). The rates of VR consumers with HIV/AIDS who achieved a successful employment outcome (0.05% in 2002 and 0.06% in 2005) were also lower by 0.42% in 2002 (9.4 times lower) and by 0.36% in 2005 (7 times lower) than those of the comparison group. As shown in Figure 18, the rates of VR consumers with a successful employment outcome were assessed among the estimated unemployed persons living with HIV/AIDS and among the estimated unemployed persons with disabilities. The differences between the two groups were 7.24% in 2002 (8.7 times) and 6.88% in 2005 (6.4 times).

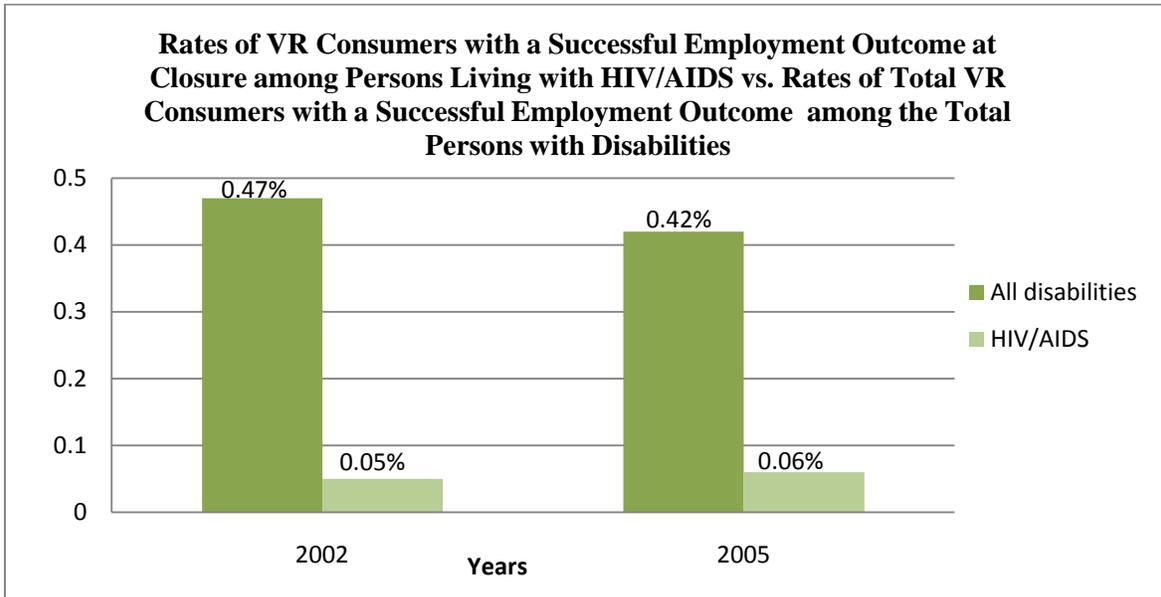
**Figure 15. Comparisons between Rates of VR Consumers with HIV/AIDS who Received VR Services among the Presumed Number of Persons living with HIV/AIDS and Rates of Total VR Consumers who Received VR Services among the Total Number of Persons with Disabilities: 2002 and 2005**



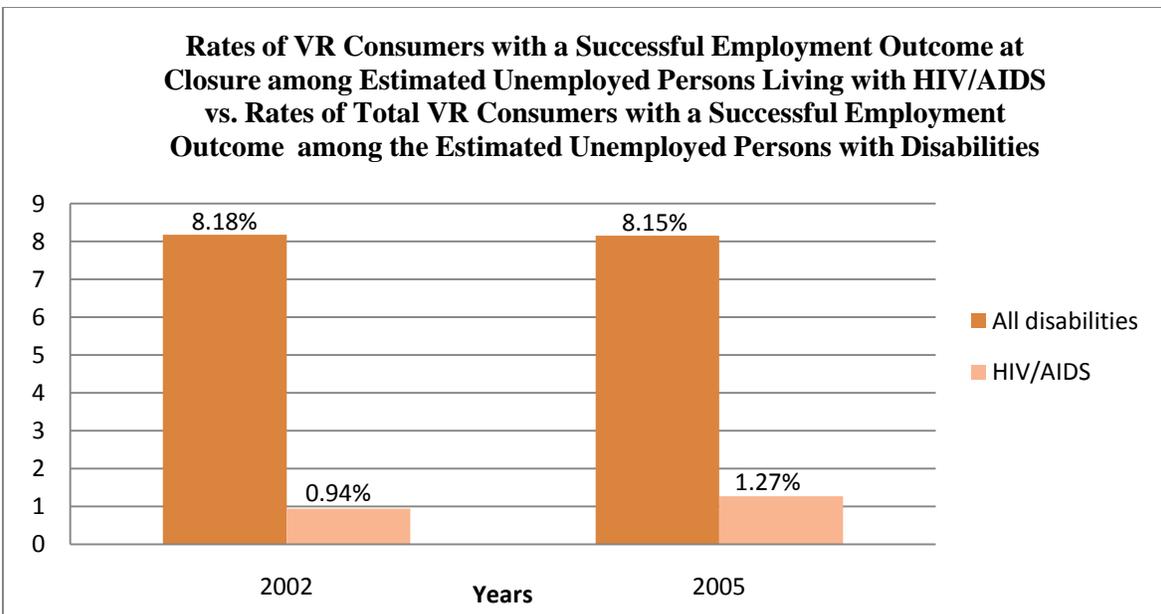
**Figure 16. Comparisons between Rates of VR Consumers with HIV/AIDS who Received VR Services among the Estimated Unemployed Persons Living with HIV/AIDS and Rates of Total VR Consumers who Received VR Services among the Estimated Unemployed Persons with Disabilities: 2002 and 2005**



**Figure 17. Comparisons between Rates of VR Consumers with HIV/AIDS who Achieved a Successful Employment Outcome among the Presumed Number of Persons Living with HIV/AIDS and Rates of Total VR Consumers who Achieved a Successful Employment Outcome among the Total Number of Persons with Disabilities: 2002 and 2005**



**Figure 18. Comparisons between Rates of VR Consumers with HIV/AIDS who Achieved a Successful Employment Outcome among the Estimated Unemployed Persons Living with HIV/AIDS and Rates of Total VR Consumers who Achieved a Successful Employment Outcome among the Estimated Unemployed Persons with Disabilities: 2002 and 2005**



### *Summary*

Overall, the estimated number of persons living with HIV/AIDS has continued to increase over the six years from 2002 through 2007 with the estimated number of 791,803 in 2007 (See Table 1-1 and 1-2). The estimated total population of persons living with HIV/AIDS accounted for less than 1% of the estimated total U.S. populations for the 6 years. The total number of persons living with HIV/AIDS who accessed and exited the VR program has also increased over the six years by 6% to 20%, whereas total VR population showed a decrease over the six years. The rates of VR consumers with HIV/AIDS to the estimated total population of persons living with HIV/AIDS was very low, less than 1% across states and 6 years, with few exceptions (i.e., Kentucky, Kansas, Montana, and Vermont). These four states showed relatively very low HIV/AIDS prevalence. Wyoming and North Dakota also showed very low HIV/AIDS prevalence (ranked 49 and 45, respectively) and were found to serve no VR consumers with HIV/AIDS for the six years. Although there might possibly be some who were currently in the VR program during the six years, no one identified with HIV/AIDS exited the program during those years.

In general, of the 50 states and D.C., states with higher HIV/AIDS prevalence were more likely to serve higher numbers of persons living with HIV/AIDS through VR agencies. However, this finding did not remain consistent when those numbers were computed as percentages of the relevant population: Several states in the group of lowest rate of VR consumers with HIV/AIDS to the estimated total population with HIV/AIDS showed relatively higher HIV/AIDS prevalence (e.g., Connecticut, Mississippi, Nevada, Virginia, and New York). For example, only 0.01% (less than 10 VR consumers) of the estimated total population with HIV/AIDS in New York was served by VR agencies over the five years (most of them were served by agencies for individuals

with visual impairments), except for year 2007 when 386 VR consumers exited the program. Thus, overall the rates of VR consumers with HIV/AIDS to the estimated total population with HIV/AIDS were very small and remained low, with a very slight increase across the six years (less than 0.5%).

The rates of VR consumers with HIV/AIDS to the estimated number of unemployed persons living with HIV/AIDS very slightly increased across years from 6.46% in 2002 to 10.89% in 2007; however, overall rates were still small, particularly considering that the estimated number of persons with HIV/AIDS was calculated using the unemployment rate of U.S. general population. For example, a majority of states provided VR access to less than 10% of the potential VR eligible unemployed persons with HIV/AIDS in the state.

Approximately 0.2% of the estimated total population with HIV/AIDS received VR services, which indicates that only half of the total VR consumers with HIV/AIDS who approached and exited the VR program actually received the services. Thus, in more than half of states, less than 5% of the estimated unemployed persons living with HIV/AIDS received VR services. Some states showed relatively higher rates of service provision among the estimated unemployed persons living with HIV/AIDS (between 11% and 20%). These states are Kansas, Oklahoma, Vermont, Montana, and New Mexico. The rates of service provision among the estimated unemployed persons living with HIV/AIDS were relatively very high in Kentucky. Specifically, 74.34% of the estimated unemployed persons living with HIV/AIDS received VR services from 2004 through 2007.

Of the estimated total population with HIV/AIDS, the number of VR consumers who obtained employment at closure was on average less than 0.1%, which again reflects that only half of the VR consumers who received services actually achieved employment. This rate

showed an increase when calculated among the estimated unemployed persons with HIV/AIDS. On average, 1.92% of the estimated number of unemployed persons living with HIV/AIDS achieved employment after receiving VR services.

The comparisons of rates of VR access, service provision (VR participation), and achievement of employment between two groups, VR consumers with HIV/AIDS and total VR population for 2 years, 2002 and 2005, indicated that the estimated unemployed persons living with HIV/AIDS were less likely to have access to VR services, receive VR services, and achieve an employment outcomes than the estimated unemployed total population with disabilities. Specifically, the total population with disabilities showed approximately 4 to 6 times higher rates of VR access, VR participation, and successful employment achievement than the population with HIV/AIDS for 2002 and 2005. Although these are estimated rates, this report still reflects the need for an increase of VR access as well as VR acceptance among persons living with HIV/AIDS.

## **II. Rates of Service Provision and Successful Employment Outcomes among the Total VR Consumers with HIV/AIDS as Compared the Total Population of VR Consumers across 50 States and the District of Columbia and Years from 2002 through 2007**

### *Overview*

The rates of VR service provision and employment achievement among VR consumers with HIV/AIDS across states and years were compared to those among the total VR population as follows:

- (a) Rates of VR consumers with HIV/AIDS who exited the program after receiving VR services among the total VR consumers with HIV/AIDS across states and years.
- (b) Comparisons of (a) to the rates of total VR consumers who exited the program after receiving VR services among the total VR consumers who exited the program across states and years.
- (c) Rates of VR consumers with HIV/AIDS who exited the program after achieving employment among the total VR consumers with HIV/AIDS across states and years.
- (d) Comparisons of (c) to the rate of total VR consumers who exited the program after achieving employment among the total VR consumers with disabilities who exited the program across years and states.
- (e) Rates of VR consumers with HIV/AIDS who achieved employment among the VR consumers with HIV/AIDS who received VR services across states and years.
- (f) Comparisons of (e) to the rates of total VR consumers who exited the program after achieving employment among the total VR consumers with disabilities who exited the program.

Then, the rates of the four most prevalent types of closures of VR consumers with HIV/AIDS were compared among four race/ethnicity groups, African American, White, Hispanic, and Other

(American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander). The four most prevalent types of closures included: (a) closed with an employment outcome, (b) closed unemployed after receiving services, (c) closed after eligibility, but before an IEP was signed, and (d) closed before eligibility was determined. For comparison purpose, the rates of the four most prevalent types of closure of total population of VR consumers were also provided by race/ethnicity.

***Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total VR Consumers with HIV/AIDS who Exited the Program for 2002 through 2007 and across 50 States and the District of Columbia***

Findings are reported in tables as well as in graphic format. Tables 10-1 and 10-2 provide the rates of VR service provision among the total VR consumers with HIV/AIDS who exited the program across states and years from 2002 through 2007. These rates were calculated by dividing the number of VR consumers with HIV/AIDS who received VR services by the total VR consumers with HIV/AIDS who exited the program and multiplying by 100. The tables are sorted in descending order by average for the six years (column named as average). The last column provides the total number of VR consumers with HIV/AIDS who exited the VR program after receiving services for the six years from 2002 through 2007.

As shown in Tables 10-1 and 10-2, the average rates of VR consumers with HIV/AIDS who received services among the total VR consumers with HIV/AIDS who exited the VR program for the six years vary across states and range from 76.5% ( $n = 163$ , Oklahoma) to 8.33% ( $n = 1$ , South Dakota). Of the 50 states and District of Columbia, 10 states had no VR consumers with HIV/AIDS who received services among those who exited the program in at least one of the six years under study (i.e., Alaska, New Hampshire, Idaho, Colorado, Utah, Vermont, Mississippi, Main, West Virginia, and Washington).

As previously noted, North Dakota and Wyoming had no VR consumers with HIV/AIDS who exited the VR program for the six years. In addition to these two states, seven states had no VR consumers with HIV/AIDS who exited the program in one or more years during the six years (i.e., New Hampshire, Alaska, West Virginia, Idaho, Nevada, Main, and South Dakota).

As shown in the tables, higher average rates of service provision do not necessarily indicate higher total numbers of VR consumers with HIV/AIDS who received VR services for some states. For example, in Maryland, relatively lower proportion of the total VR consumers with HIV/AIDS received VR services (32.85%), but relatively higher numbers of VR consumers with HIV/AIDS received VR services ( $n = 253$ ). On the other hand, Virginia ranked second on the average rate of service provision for 2002 through 2007 (69.38%), but had relatively small numbers of VR consumers with HIV/AIDS who received VR services for the six years ( $n = 54$ ). As shown in the last row in Table 10-2, the rates of VR consumers with HIV/AIDS who received VR services among the total VR consumers with HIV/AIDS who exited the program across years ranged from 46.50% in 2002 to 52.28% in 2007 with overall average of 49.94% ( $n = 6305$ ) (See Figure 20).

**Table 10-1. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total Number of VR Consumers with HIV/AIDS across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>	Total (n) <sup>2</sup>
Oklahoma	85.71	63.16	83.33	66.67	87.18	71.43	76.25	163
Virginia	100.00	50.00	63.64	64.29	58.33	80.00	69.38	54
Alabama	100.00	42.11	45.45	53.33	83.33	84.21	68.07	53
Pennsylvania	70.00	67.39	74.42	68.89	64.41	62.30	67.90	198
New York	71.43	57.14	90.00	50.00	75.00	50.26	65.64	221
New Mexico	58.33	66.67	39.29	60.71	80.65	87.50	65.52	92
Illinois	60.24	58.43	66.96	54.46	57.14	50.00	57.87	329
Dist. of Columbia	52.00	44.59	59.26	65.15	52.78	68.18	56.99	204
Utah	60.00	33.33	60.00	87.50	88.89	0.00	54.95	23
Wisconsin	71.43	40.00	63.27	80.00	30.77	43.48	54.82	92
New Hampshire	0.00	x	100.00	33.33	60.00	75.00	53.67	9
California	47.06	51.94	52.35	53.02	64.14	52.97	53.58	1601
New Jersey	38.20	55.26	60.61	49.38	54.76	62.50	53.45	242
Florida	35.00	44.27	64.66	59.56	51.24	63.51	53.04	395
South Carolina	26.32	46.43	52.17	58.33	57.69	76.47	52.90	85
Alaska	66.67	x	0.00	100.00	42.86	50.00	51.90	8
Michigan	43.75	45.83	42.55	54.35	55.77	67.16	51.57	137
North Carolina	62.96	51.61	48.57	51.28	55.81	38.71	51.49	106
Texas	52.26	46.08	62.50	45.64	48.03	53.51	51.34	585
Hawaii	33.33	100.00	44.44	40.00	37.50	50.00	50.88	20
Indiana	28.57	45.83	43.48	70.00	64.29	50.00	50.36	76
West Virginia	x	0.00	100.00	x	33.33	66.67	50.00	5
Vermont	0.00	60.00	75.00	62.50	50.00	50.00	49.58	15
Iowa	71.43	70.00	33.33	50.00	37.50	33.33	49.27	24
Georgia	18.18	48.15	49.54	53.26	52.94	60.00	47.01	207
Minnesota	41.18	46.03	57.14	32.08	50.00	52.63	46.51	135

*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\* The table is sorted in descending order by average.

<sup>1</sup> See Figure 19 for the data in graphic format.

<sup>2</sup> Total (n) indicates total number of VR consumers who exited the program after receiving services from 2002 through 2007

**Table 10-2. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total Number of VR Consumers with HIV/AIDS across States and Years (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>	Total (n)
Nebraska	25.00	40.00	25.00	100.00	66.67	20.00	46.11	14
Idaho	x	100.00	0.00	50.00	0.00	80.00	46.00	7
Connecticut	25.00	37.50	60.00	66.67	42.86	42.86	45.81	28
Kentucky	68.52	46.00	29.73	28.89	62.86	35.48	45.25	150
Delaware	50.00	18.75	45.45	33.33	66.67	55.56	44.96	21
Montana	75.00	40.00	12.50	40.00	50.00	50.00	44.58	14
Arizona	40.00	45.45	36.36	61.90	42.11	41.67	44.58	37
Arkansas	25.00	33.33	40.00	50.00	57.14	40.00	40.91	26
Missouri	23.53	42.86	41.67	46.77	48.10	40.00	40.49	180
Louisiana	50.00	36.36	35.71	35.71	36.59	44.44	39.80	67
Ohio	25.00	21.62	39.71	43.84	47.06	46.05	37.21	139
Massachusetts	41.18	17.50	20.00	40.98	49.12	48.57	36.23	109
Washington	0.00	22.22	57.89	58.33	36.00	29.73	34.03	51
Nevada	x	x	x	28.57	18.75	53.33	33.55	13
Maryland	29.92	33.33	26.55	30.91	29.90	46.51	32.85	253
Oregon	20.00	17.86	29.03	52.38	35.00	33.33	31.27	40
Tennessee	30.77	16.67	54.55	37.50	5.56	37.50	30.42	29
Kansas	20.00	20.00	16.67	44.44	33.33	33.33	27.96	15
Maine	x	x	50.00	0.00	20.00	33.33	25.83	3
Rhode Island	0.00	60.00	0.00	66.67	0.00	20.00	24.44	6
Colorado	0.00	22.22	0.00	6.67	35.71	46.67	18.54	15
Mississippi	0.00	40.00	6.25	0.00	12.50	30.00	14.79	7
South Dakota	x	33.33	0.00	0.00	x	0.00	8.33	1
North Dakota	x	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x	x
Average by year <sup>3</sup>	46.50	45.54	51.24	51.01	53.07	52.28	49.94	6305

*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\* The table is sorted in descending order by average.

<sup>1</sup> See Figure 19 for the data in graphic format.

<sup>2</sup> Total (n) indicates total number of VR consumers who exited the program after receiving services from 2002 through 2007

<sup>3</sup> See Figure 20 for the data in graphic format.

***Comparisons of Rates of VR Service Provision between Two Groups: VR Consumers with HIV/AIDS and Total VR Participants for 2002 through 2007 and across 50 States and the District of Columbia***

The rates of VR consumers with HIV/AIDS who received VR services among the total number of VR consumers with HIV/AIDS who exited the program from 2002 through 2007 were compared to the rates of total number of VR consumers who received VR services among the total VR consumers who exited the program (comparison group) for the six years. Table 11-1 and 11-2 provide the findings from these comparisons. Negative values (i.e., minus signs) indicate that the rates of VR consumers with HIV/AIDS who received services among the total VR consumers with HIV/AIDS who exited the program are lower than the rates of total VR consumers who received services among the total population of VR consumers who exited the program.

As shown in Table 11-1 and 11-2, in most states, with few exceptions, the rates of service provision among VR consumers with HIV/AIDS were relatively lower than the rates of service provision among the total VR consumers. States with higher average rates of service provision among VR consumers with HIV/AIDS include Oklahoma (18% higher), Virginia (4.43%), New York (7.35%), New Mexico (13.34%), District of Columbia (6.67%), and Wisconsin (9.13%). However, of these six states, only Oklahoma (for all 6 years) and New Mexico (all years except for 2004) consistently showed higher rates of service provision among VR consumers with HIV/AIDS compared to the service provision rates among the total population of VR consumers.

It is worthy of note that Oklahoma and New Mexico have relatively higher rates of access to the VR program among the presumed persons living with HIV/AIDS (see Table 3-1) and also show higher rates of service provision among those who entered the VR program. On the other hand, some states with higher rates of access to the program among persons living with

HIV/AIDS show relatively lower rates of service provision among those who entered the VR program (e.g., Kentucky, Kansas, and Montana).

As shown in the last row in Table 11-2, average rates of service provision among VR consumers with HIV/AIDS were lower than those of the total VR population across all years (-10.66% in 2002, -11.73% in 2003, -7.72% in 2004, -6.83% in 2005, -4.12% in 2006, and -5.30 in 2007). Figure 20 shows the rates of service provision across years for both groups in graphic format.

**Table 11-1. Differences between Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total Number of VR Consumers with HIV/AIDS and Rates of Total VR Consumers who Received VR Services among the Total Number of VR Consumers who Exited the Program across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average
Oklahoma	28.77	4.36	26.22	18.60	21.55	8.50	18.00
Virginia	36.87	-14.15	1.04	-3.98	-7.04	13.83	4.43
Alabama	24.39	-34.39	-35.47	-26.85	4.27	1.82	-11.04
Pennsylvania	-2.48	-4.74	2.87	-1.69	-3.37	-8.83	-3.04
New York	12.04	-0.54	30.48	-7.72	18.09	-8.26	7.35
New Mexico	8.41	16.86	-9.05	6.42	24.54	32.84	13.34
Illinois	-9.07	-8.56	1.60	-3.88	6.26	-3.31	-2.83
Dist. of Columbia	-6.24	-2.67	7.09	15.29	2.78	23.78	6.67
Utah	-2.05	-24.67	4.49	28.56	27.20	-59.69	-4.36
Wisconsin	30.14	-10.25	18.76	23.32	-2.99	-4.17	9.13
New Hampshire	-60.05	x	38.70	-27.99	0.62	8.04	-8.02
California	-10.34	-8.73	-10.30	-9.15	2.42	-4.89	-6.83
New Jersey	-15.42	0.45	7.61	-6.25	-1.54	4.99	-1.69
Florida	-17.06	-8.58	12.09	6.17	-5.05	6.33	-1.02
South Carolina	-46.10	-25.56	-21.68	-14.81	-14.74	3.94	-19.82
Alaska	12.60	x	-53.04	45.92	-8.61	-8.60	-2.57
Michigan	-20.03	-17.69	-23.13	-13.54	-11.36	-0.53	-14.38
North Carolina	5.27	-5.23	-8.46	-6.37	-3.10	-17.29	-5.86
Texas	-8.34	-13.62	-4.20	-12.22	-10.10	-3.30	-8.63
Hawaii	-29.61	39.54	-20.09	-20.90	-22.64	-19.06	-12.13
Indiana	-28.78	-13.48	-17.16	3.95	2.88	-8.05	-10.11
West Virginia	x	-51.61	41.92	x	-30.65	10.76	-7.53
Vermont	-69.36	-9.80	6.72	-7.34	-19.65	-20.06	-19.92
Iowa	13.40	15.92	-13.25	2.45	-11.99	-11.41	-0.81
Georgia	-34.88	-13.82	-13.14	-14.03	-11.92	-3.33	-15.19
Minnesota	-8.13	-4.92	-0.16	-3.89	2.19	3.36	-1.92

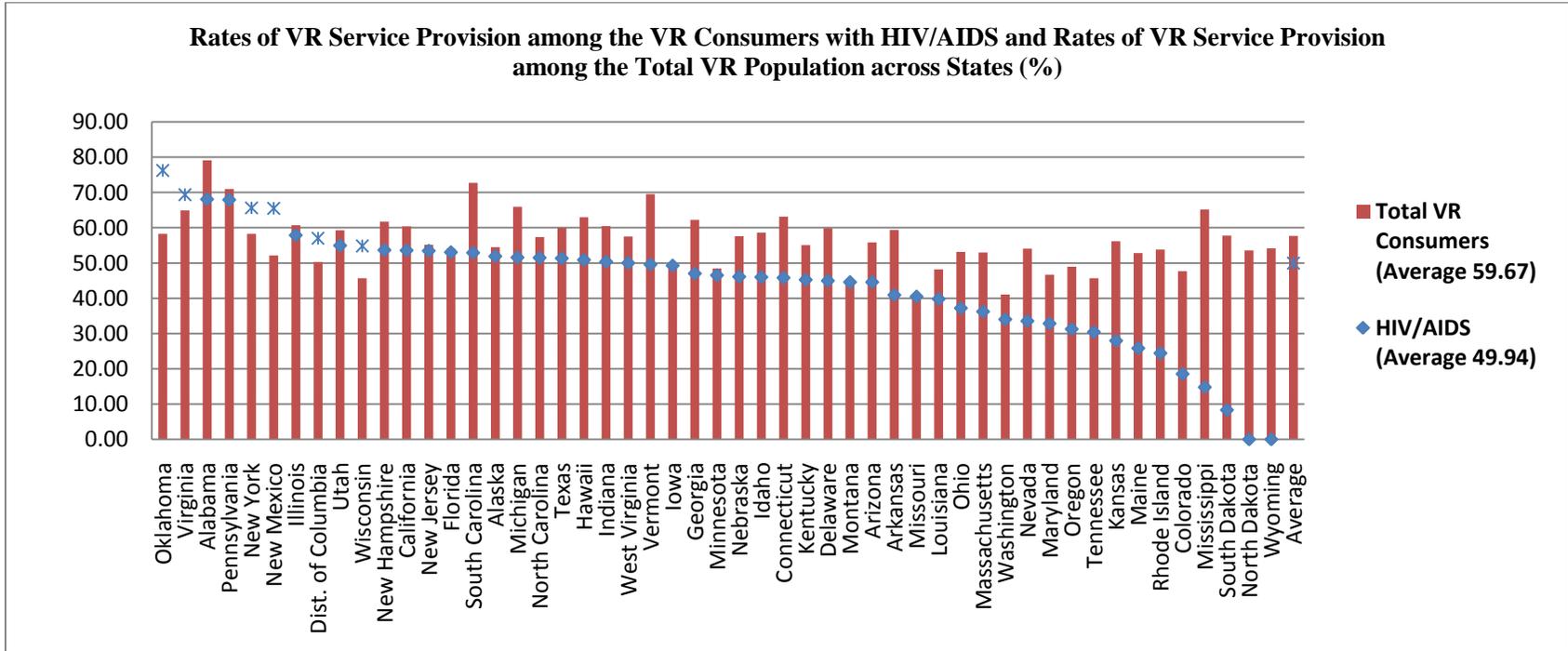
*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\* Negative values (-) indicate that the rates of VR consumers with HIV/AIDS who received services among the total VR consumers with HIV/AIDS who exited the program are lower than the rates of total VR consumers who received services among the total VR consumers who exited the program. \*\*\* The table order is consistent with Table 10-1.

**Table 11-2. Differences between Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total Number of VR Consumers with HIV/AIDS and Rates of Total VR Consumers who Received VR Services among the Total Number of VR Consumers who Exited the Program across States and Years (%) (Continued)**

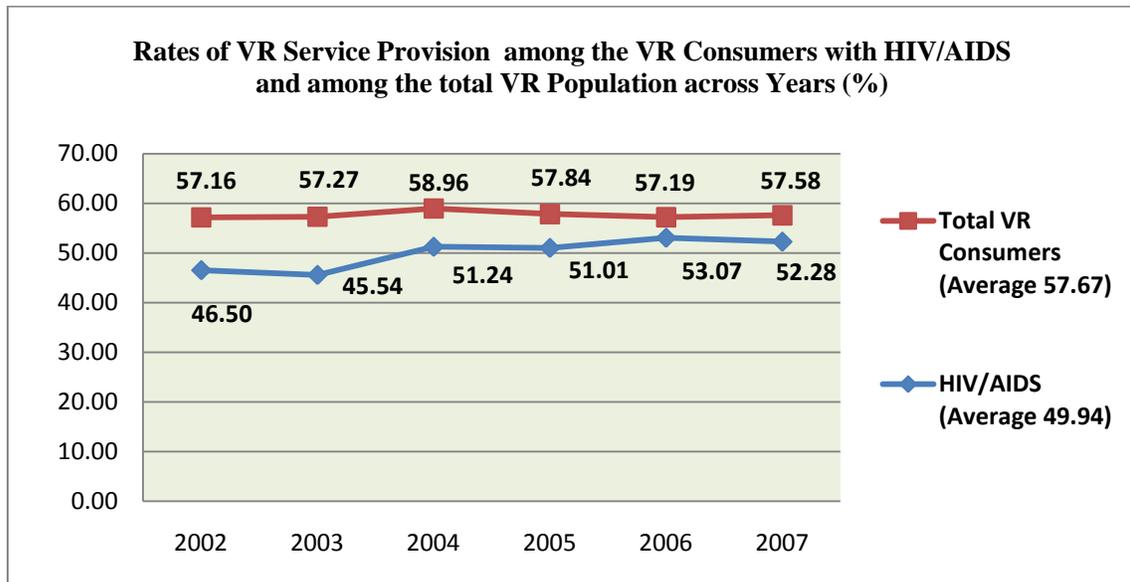
States	2002	2003	2004	2005	2006	2007	Average
Nebraska	-34.12	-17.60	-28.69	42.24	7.77	-38.65	-11.51
Idaho	x	45.68	-57.96	-9.69	-58.12	17.35	-12.62
Connecticut	-38.84	-25.71	-2.88	3.97	-19.47	-21.02	-17.32
Kentucky	12.40	-8.16	-22.00	-27.29	4.89	-19.07	-9.87
Delaware	-10.54	-40.60	-12.83	-28.18	6.17	-3.45	-14.91
Montana	30.53	-3.43	-30.93	-5.96	6.89	3.22	0.05
Arizona	-20.54	-11.86	-17.93	5.28	-12.42	-10.25	-11.29
Arkansas	-28.78	-22.33	-17.03	-11.53	-7.77	-23.18	-18.43
Missouri	-18.08	1.63	-3.96	8.95	10.56	0.11	-0.13
Louisiana	6.18	-12.04	-10.91	-14.37	-10.51	-8.86	-8.42
Ohio	-30.17	-30.21	-13.79	-7.57	-5.33	-8.55	-15.94
Massachusetts	-11.97	-28.93	-30.61	-11.73	-5.41	-11.76	-16.73
Washington	-25.28	-19.92	-0.09	8.78	-6.73	1.15	-7.01
Nevada	x	x	x	-24.41	-36.11	-1.34	-20.56
Maryland	-13.15	-10.30	-15.86	-14.31	-18.78	-10.73	-13.85
Oregon	-27.59	-31.11	-21.22	2.02	-12.42	-15.92	-17.71
Tennessee	-20.00	-27.44	8.96	-8.96	-35.85	-8.20	-15.25
Kansas	-42.13	-39.60	-43.69	-10.08	-18.67	-15.28	-28.24
Maine	x	x	-4.70	-51.76	-26.67	-11.11	-27.00
Rhode Island	-50.62	3.62	-54.94	10.71	-51.06	-33.99	-29.38
Colorado	-50.89	-20.78	-44.14	-38.94	-13.10	-7.14	-29.17
Mississippi	-63.19	-24.86	-56.76	-67.25	-53.68	-36.53	-50.38
South Dakota	x	-23.25	-55.66	-60.64	x	-59.15	-49.43
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average	-10.66	-11.73	-7.72	-6.83	-4.12	-5.30	-7.73

*Note.* \* “x” indicates that no one with HIV/AIDS exited the VR program. \*\* Negative values (-) indicate that the rates of VR consumers with HIV/AIDS who received services among the total VR consumers with HIV/AIDS who exited the program are lower than the rates of total VR consumers who received services among the total VR consumers who exited the program. \*\*\* The table order is consistent with Table 10-2.

**Figure 19. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total VR Consumers with HIV/AIDS who Exited the Program and Rates of VR Consumers who Received Services among the Total VR Consumers who Exited the Program across States (%): Average for 6 Years from 2002 through 2007**



**Figure 20. Rates of VR Consumers with HIV/AIDS who Received VR Services among the Total Number of VR Consumers with HIV/AIDS who Exited the Program and Rates of Total VR Consumers who Received Services among the Total VR Consumers who Exited the Program across Years (%)**



***Comparisons of Rates of Employment Achievement between Two Groups: VR Consumers with HIV/AIDS and Total VR Participants for 2002 through 2007 and across 50 States and the District of Columbia***

Tables 12-1 and 12-2 provide the rates of VR consumers with HIV/AIDS who achieved a successful employment outcome among the total population of VR consumers who exited the program across states and years for 2002 through 2007. Successful closure rates were calculated by dividing the number of VR consumers with HIV/AIDS who achieved a successful employment outcome by the total number of VR consumers with HIV/AIDS who exited the program and multiplying by 100.

The successful closure rates range from 49.82% (Alabama) to 6.67% (Rhode Island), except for North Dakota and Wyoming with no VR consumer with HIV/AIDS who exited the program for the six years. Of 48 states and District of Columbia (excluding North Dakota and Wyoming), 22 states had no VR consumers with HIV/AIDS who achieved a successful employment outcome among the total VR consumers with HIV/AIDS who exited the program in one or more years of the six years (e.g., Idaho, New York, Nebraska, Maine, Colorado, etc. ). As shown in the last row in Table 12-2, the successful closure rates among VR consumers with HIV/AIDS are consistent across years, ranging from 21.19% in 2002 to 24.82% in 2007.

Successful closure rates among the VR consumers with HIV/AIDS were then compared to the successful closure rates among the total VR population. Tables 13-1 and 13-2 show the differences in these successful closure rates between the two groups. Negative values (-) indicate that the rates of successful closure rates among VR consumers with HIV/AIDS are lower compared to those among the total population of VR consumers. Similar to the differences in the service provision rates (Tables 11-1 and 11-2), most states showed lower rates of successful closure among VR consumers with HIV/AIDS compared to the rates of successful closure

among the total VR consumers. Figure 21 shows the differences in the successful closure rates between the two groups across states in graphic format.

The average rates of successful closure for six years (2002 through 2007) among VR consumers with HIV/AIDS were higher than those of the total population of VR consumers in a few states. Specifically, the rates of successful closure of VR consumers with HIV/AIDS were higher by 7.73% in Alaska, by 16.15% in Oklahoma, by 0.72% in Idaho, by 1.52% in New York, and by 2.27% in the District of Columbia than the comparison rates for these states. Although the overall average rate of successful closure for the six years among VR consumers with HIV/AIDS was higher in these five states, the rates of successful closure were not consistently higher across all years, except for Oklahoma and District of Columbia (for 5 years). For example, New York showed lower rates of successful closure among VR consumers with HIV/AIDS compared to the successful closure rates among the total VR consumers for the three years from 2005 through 2007. Figure 22 shows the average rates of successful closure among VR consumers with HIV/AIDS and among the total VR consumers across six years from 2002 through 2007.

**Table 12-1. Rates of VR Consumers with HIV/AIDS who Achieved a Successful Employment Outcome among the Total VR Consumers with HIV/AIDS who Exited the Program across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>	Total (n)
Alabama	100.00	21.05	36.36	33.33	55.56	52.63	49.82	34
Alaska	33.33	x	0.00	100.00	42.86	25.00	40.24	6
Oklahoma	54.76	52.63	53.33	14.81	33.33	32.14	40.17	79
New Hampshire	0.00	x	100.00	33.33	40.00	25.00	39.67	6
Idaho	x	100.00	0.00	0.00	0.00	80.00	36.00	5
New York	42.86	42.86	80.00	0.00	25.00	22.54	35.54	103
Dist. of Columbia	32.00	31.08	40.74	43.94	31.94	27.27	34.50	123
Virginia	33.33	20.00	31.82	28.57	41.67	40.00	32.56	27
South Carolina	15.79	32.14	21.74	25.00	34.62	50.00	29.88	49
New Jersey	24.72	19.74	27.27	29.63	39.29	37.50	29.69	136
Pennsylvania	32.50	17.39	30.23	28.89	32.20	32.79	29.00	86
Michigan	25.00	20.83	31.91	32.61	30.77	29.85	28.50	75
Illinois	33.73	33.71	31.25	20.54	27.38	20.93	27.92	157
New Mexico	16.67	25.93	25.00	25.00	38.71	31.25	27.09	40
Missouri	20.59	32.14	25.93	24.19	32.91	24.44	26.70	116
Vermont	0.00	20.00	25.00	25.00	33.33	50.00	25.56	7
Nevada	x	x	x	28.57	6.25	40.00	24.94	9
Nebraska	0.00	0.00	25.00	100.00	22.22	0.00	24.54	4
Kentucky	35.19	30.00	14.86	15.56	37.14	9.68	23.74	74
Florida	15.00	19.85	22.56	28.68	23.97	29.73	23.30	174
Iowa	28.57	40.00	33.33	12.50	12.50	8.33	22.54	10
Connecticut	25.00	12.50	20.00	33.33	21.43	21.43	22.28	13
Georgia	12.12	24.07	24.77	23.91	23.53	24.00	22.07	96
Utah	0.00	33.33	40.00	25.00	33.33	0.00	21.94	9
California	13.35	19.90	20.59	21.89	28.11	26.06	21.65	652
Arizona	0.00	45.45	9.09	47.62	26.32	0.00	21.41	21

*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\*Total (n) indicates total number of VR consumers who exited the program with employment outcome from 2002 through 2007. \*\*\* The table is sorted in descending order by average.

<sup>1</sup>See Figure 21 for the data in graphic format.

**Table 12-2. Rates of VR Consumers with HIV/AIDS who Achieved a Successful Employment Outcome among the Total VR Consumers with HIV/AIDS who Exited the Program across States and Years (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>	Total (n)
Arkansas	0.00	13.33	10.00	33.33	42.86	26.67	21.03	14
West Virginia	x	0.00	50.00	x	0.00	33.33	20.83	2
Montana	50.00	20.00	12.50	0.00	12.50	25.00	20.00	6
Texas	25.63	15.20	16.89	16.78	14.47	27.19	19.36	210
Oregon	10.00	10.71	12.90	33.33	25.00	22.22	19.03	24
Minnesota	11.76	14.29	21.43	15.09	16.67	34.21	18.91	53
Massachusetts	11.76	5.00	7.50	24.59	31.58	30.00	18.41	61
Maryland	23.62	16.67	19.47	17.27	14.71	18.60	18.39	140
Wisconsin	28.57	22.86	18.37	23.33	7.69	8.70	18.25	30
North Carolina	29.63	22.58	8.57	5.13	16.28	12.90	15.85	31
Delaware	0.00	6.25	0.00	16.67	33.33	33.33	14.93	7
Ohio	5.00	8.11	22.06	13.70	22.06	18.42	14.89	58
Hawaii	0.00	50.00	0.00	30.00	0.00	0.00	13.33	4
Maine	x	x	50.00	0.00	0.00	0.00	12.50	1
Tennessee	23.08	8.33	18.18	12.50	0.00	12.50	12.43	12
Indiana	14.29	8.33	13.04	6.67	7.14	21.43	11.82	16
Louisiana	25.00	4.55	3.57	10.71	0.00	25.00	11.47	18
Washington	0.00	11.11	10.53	20.83	8.00	16.22	11.11	18
Colorado	0.00	22.22	0.00	0.00	28.57	13.33	10.69	8
Kansas	0.00	0.00	0.00	11.11	22.22	26.67	10.00	7
Mississippi	0.00	20.00	0.00	0.00	12.50	20.00	8.75	4
South Dakota	x	33.33	0.00	0.00	x	0.00	8.33	1
Rhode Island	0.00	40.00	0.00	0.00	0.00	0.00	6.67	2
North Dakota	x	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x	x
Average <sup>2</sup>	21.19	20.33	21.62	22.11	24.68	24.82	22.46	2838

*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\*Total (n) indicates total number of VR consumers who exited the program with employment outcome from 2002 through 2007. \*\*\* The table is sorted in descending order by average.

<sup>1</sup> See Figure 21 for the data in graphic format.

<sup>2</sup> See Figure 22 for the data in graphic format.

**Table 13-1. Differences between Rates of VR Consumers with HIV/AIDS who were Successfully Closed among the Total Number of VR Consumers with HIV/AIDS and Rates of Total VR Consumers who were Successfully Closed among the Total Number of VR Consumers who Exited the Program across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average
Alabama	44.93	-33.03	-20.00	-23.29	2.63	-4.33	-5.52
Alaska	1.98	x	-32.85	66.96	12.59	-9.60	7.73
Oklahoma	24.19	26.89	30.45	-3.14	13.92	4.59	16.15
New Hampshire	-45.37	x	55.63	-11.22	1.02	-20.76	-4.73
Idaho	x	67.53	-31.81	-35.07	-36.53	38.99	0.72
New York	6.29	8.76	45.74	-31.92	-7.82	-11.90	1.52
Dist. of Columbia	-9.01	1.53	4.21	14.42	1.46	1.01	2.27
Virginia	-1.35	-13.25	-0.05	-8.07	4.40	0.13	-3.03
South Carolina	-27.06	-16.55	-25.80	-24.23	-10.43	2.96	-16.85
New Jersey	-9.13	-13.92	-4.99	-4.10	4.82	0.00	-4.55
Pennsylvania	-14.59	-27.63	-12.29	-11.77	-7.10	-8.71	-13.68
Michigan	-12.02	-13.52	-5.32	-7.24	-7.77	-7.23	-8.85
Illinois	-12.99	-12.36	-8.20	-10.46	-2.80	-11.02	-9.64
New Mexico	-12.22	-3.71	-2.51	-6.40	3.22	-1.67	-3.88
Missouri	-9.28	0.60	-2.41	-1.60	6.41	-2.72	-1.50
Vermont	-45.85	-22.54	-16.86	-17.92	-8.94	4.11	-18.00
Nevada	x	x	x	-2.34	-28.14	5.12	-6.06
Nebraska	-37.57	-33.17	-4.94	68.82	-14.51	-36.23	-9.60
Kentucky	-2.19	-7.35	-21.89	-23.17	-3.08	-27.20	-14.15
Florida	-12.93	-8.65	-6.35	-2.03	-10.36	-5.78	-7.69
Iowa	-4.52	14.77	4.77	-15.58	-18.25	-18.43	-6.21
Connecticut	-16.64	-24.33	-19.95	-5.74	-17.41	-18.69	-17.13
Georgia	-15.10	-7.27	-10.85	-12.18	-14.14	-12.98	-12.09
Utah	-39.21	-1.58	7.30	-9.30	-6.02	-43.32	-15.35
California	-17.35	-13.22	-12.62	-12.12	-7.42	-7.59	-11.72
Arizona	-21.80	24.00	-16.07	20.17	0.60	-27.36	-3.41

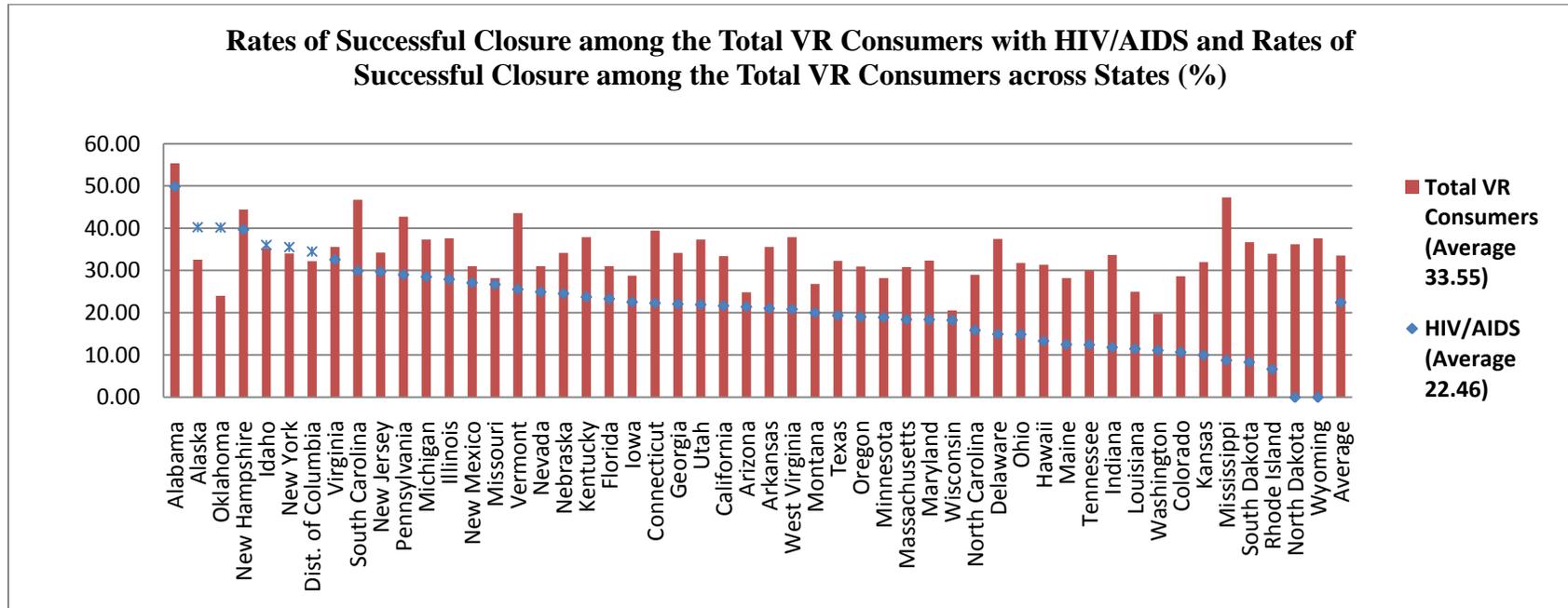
*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\* Negative values (-) indicate that the rates of successful closure among the total VR consumers with HIV/AIDS who exited the program are lower than the rates of successful closure among the total VR consumers who exited the program.\*\*\*The table order is consistent with Table 12-1.

**Table 13-2. Differences between Rates of VR Consumers with HIV/AIDS who were Successfully Closed among the Total Number of VR Consumers with HIV/AIDS and Rates of Total VR Consumers who were Successfully Closed among the Total Number of VR Consumers who Exited the Program across States and Years (%) (Continued)**

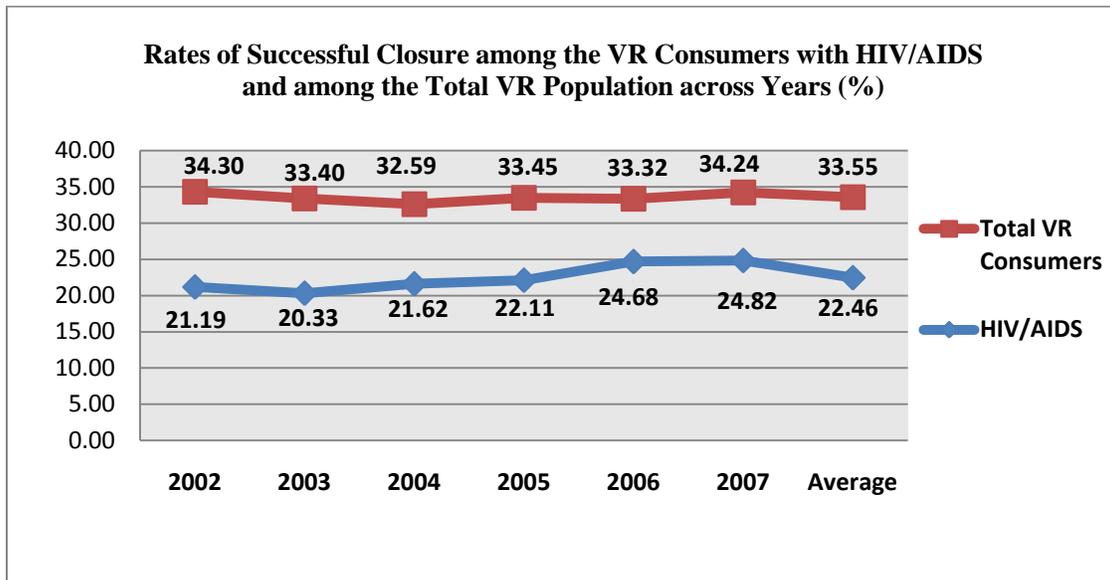
States	2002	2003	2004	2005	2006	2007	Average
Arkansas	-33.68	-17.17	-22.98	-5.49	3.21	-11.23	-14.56
West Virginia	x	-36.41	13.75	x	-40.92	-1.86	-17.06
Montana	20.97	-7.31	-13.21	-26.88	-12.27	-2.07	-6.79
Texas	-10.39	-17.64	-8.06	-16.61	-19.15	-5.57	-12.90
Oregon	-20.17	-18.56	-17.18	0.60	-6.21	-10.09	-11.93
Minnesota	-17.92	-13.15	-10.62	-5.34	-12.09	3.25	-9.31
Massachusetts	-18.98	-19.79	-23.62	-7.83	-1.92	-2.03	-12.36
Maryland	-9.86	-16.89	-12.32	-15.50	-19.03	-9.96	-13.93
Wisconsin	7.96	-0.87	-1.75	-1.16	-6.79	-11.32	-2.32
North Carolina	-1.98	-8.68	-22.33	-24.09	-7.34	-14.42	-13.14
Delaware	-35.65	-32.70	-36.79	-19.39	-5.26	-5.16	-22.49
Ohio	-27.09	-22.67	-10.51	-16.81	-9.67	-14.55	-16.88
Hawaii	-30.78	15.10	-32.55	-5.66	-30.11	-24.19	-18.03
Maine	x	x	23.45	-26.96	-25.48	-24.67	-15.71
Tennessee	-10.43	-16.88	-12.69	-21.96	-27.27	-16.27	-17.58
Indiana	-18.09	-24.79	-20.85	-25.78	-29.20	-12.36	-21.85
Louisiana	4.60	-21.54	-21.11	-13.29	-23.33	-6.42	-13.52
Washington	-13.96	-9.53	-16.17	-1.27	-11.72	0.46	-8.70
Colorado	-29.55	-2.75	-24.36	-27.20	-3.24	-20.55	-17.94
Kansas	-37.36	-31.60	-33.24	-20.14	-6.55	-2.99	-21.98
Mississippi	-49.46	-24.98	-44.05	-49.29	-36.02	-27.29	-38.52
South Dakota	x	-2.91	-35.57	-35.16	x	-38.71	-28.36
Rhode Island	-39.27	6.56	-32.04	-35.97	-30.53	-32.34	-27.26
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average	-13.12	-13.07	-10.97	-11.34	-8.64	-9.42	-11.09

*Note.* \* “x” indicates that no one identified with HIV/AIDS exited the VR program. \*\* Negative values (-) indicate that the rates of successful closure among the total VR consumers with HIV/AIDS who exited the program are lower than the rates of successful closure among the total VR consumers who exited the program.\*\*\*The order of the table is consistent with Table 12-2.

**Figure 21. Rates of VR Consumers with HIV/AIDS who were Successfully Closed among the Total VR Consumers with HIV/AIDS who Exited the Program and Rates of VR Consumers who were Successfully Closed among the Total VR Consumers who Exited the Program across States (%): Average for 6 Years from 2002 through 2007 (%)**



**Figure 22. Rates of VR Consumers with HIV/AIDS who were Successfully Closed among the Total VR Consumers with HIV/AIDS who Exited the Program and Rates of VR Consumers who were Successfully Closed among the Total VR Consumers who Exited the Program across Years (%)**



***Rates of Employment Achievement among VR Consumers with HIV/AIDS who Received VR Services for 2002 through 2007 and across 50 States and the District of Columbia***

Tables 14-1 and 14-2 show the rates of successful closure among VR consumers with HIV/AIDS who received VR services across states and years from 2002 through 2007. These two tables are different from Tables 12-1 through 12-2 in that the rates of employment achievement were calculated only among the VR consumers with HIV/AIDS who actually received VR services whereas Tables 12-1 and 12-2 showed the rates of employment achievement of the total VR consumers with HIV/AIDS who exited the program. For Tables 14-1 and 14-2, employment achievement rates were calculated by dividing the number of VR consumers with HIV/AIDS who achieved a successful employment outcome by the number of VR consumers with HIV/AIDS who received VR services and multiplying by 100. The average rates of successful closure for the six years across states range from 75% (Alaska and New Hampshire,  $n = 6$ , respectively) to 20.83% (Hawaii,  $n = 4$ ), except for South Dakota (100%,  $n = 1$ ) and North Dakota and Wyoming with no VR consumers who exited the program for the six years.

The Average rate for the six years for each state was calculated for those years in which data on VR consumers with HIV/AIDS who received VR services were available. For example, South Dakota had only one VR consumer with HIV/AIDS who received VR services and exited the program with an employment outcome in 2003. No VR consumers with HIV/AIDS exited the program in 2002 and 2006 and no VR consumers with HIV/AIDS received VR services in 2004, 2005, and 2007: that resulted in an average rate of 100% for successful closure for South Dakota. Of 48 states and District of Columbia, excluding North Dakota and Wyoming with no VR consumers with HIV/AIDS, 17 states had at least one or more years for which no VR consumers who received VR services exited the program with a successful employment outcome (e.g., Idaho, Colorado, New York, Montana, Utah, and Delaware). As shown in the last row in

Table 14-2, the successful closure rates among VR consumers who received VR services across six years for 2002 through 2007 are 45.56%, 44.64%, 42.19%, 43.35%, 46.50%, and 47.48%, respectively.

***Comparisons of Rates of Employment Achievement between Two Groups: VR Consumers with HIV/AIDS who Received Services and Total VR Participants who Received Services for 2002 through 2007 and across 50 States and the District of Columbia***

The employment achievement rates among VR consumers with HIV/AIDS who received VR services were compared to the employment achievement rates among the total VR consumers who received VR services. Differences in the successful closure rates between the two groups are shown in Tables 15-1 and 15-2. Negative values (-) indicate that the successful rates among VR consumers with HIV/AIDS who received services are lower than those among the total population of VR consumers who received VR services.

In most states, the average successful closure rates were lower among VR consumers with HIV/AIDS compared to the total VR population, ranging from -0.41% (Michigan) to -40.97% (Rhode Island). The differences in the successful closure rates between the two groups are also provided in graphic format in Figure 23. The successful closure rates among VR consumers with HIV/AIDS who received services and those among the total population of VR consumers who received services across years are shown in Figure 24.

**Table 14-1. Rates of VR Consumers with HIV/AIDS who were Successfully Closed among VR Consumers with HIV/AIDS who Received VR Services across States and Years (%)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>	Total (n)
South Dakota	x	100.00	^	^	x	^	100.00	1
Alaska	50.00	x	^	100.00	100.00	50.00	75.00	6
New Hampshire	^	x	100.00	100.00	66.67	33.33	75.00	6
Alabama	100.00	50.00	80.00	62.50	66.67	62.50	70.28	34
Nevada	x	x	x	100.00	33.33	75.00	69.44	9
Missouri	87.50	75.00	62.22	51.72	68.42	61.11	67.66	116
Idaho	x	100.00	^	0.00	^	100.00	66.67	5
Dist. Of Columbia	61.54	69.70	68.75	67.44	60.53	40.00	61.33	123
Oregon	50.00	60.00	44.44	63.64	71.43	66.67	59.36	24
Maryland	78.95	50.00	73.33	55.88	49.18	40.00	57.89	140
South Carolina	60.00	69.23	41.67	42.86	60.00	65.38	56.52	49
Michigan	57.14	45.45	75.00	60.00	55.17	44.44	56.20	75
New Jersey	64.71	35.71	45.00	60.00	71.74	60.00	56.19	136
Oklahoma	63.889	83.333	64.00	22.22	38.24	45.00	52.78	79
Connecticut	100.00	33.33	33.33	50.00	50.00	50.00	52.78	13
Colorado	^	100.00	^	0.00	80.00	28.57	52.14	8
Kentucky	51.35	65.22	50.00	53.85	59.09	27.27	51.13	74
New York	60.00	75.00	88.89	0.00	33.33	44.85	50.34	103
Georgia	66.67	50.00	50.00	44.90	44.44	40.00	49.33	96
Montana	66.67	50.00	100.00	0.00	25.00	50.00	48.61	6
Virginia	33.33	40.00	50.00	44.44	71.43	50.00	48.20	27
Illinois	56.00	57.69	46.67	37.70	47.92	41.86	47.97	157
Massachusetts	28.57	28.57	37.50	60.00	64.29	61.76	46.78	61
Iowa	40.00	57.14	100.00	25.00	33.33	25.00	46.75	10
Utah	0.00	100.00	66.67	28.57	37.50	^	46.55	9

\* Total (n) indicates total number of VR consumers who exited the program with an employment outcome from 2002-2007. \*\*“x” indicates no one exited the VR program. \*\*\* “^” indicates that no one received VR services. \*\*\*\* The table is sorted in descending order by average.

<sup>1</sup>See Figure 23 for the data in graphic format.

**Table 14-2. Rates of VR Consumers with HIV/AIDS who were Successfully Closed among VR Consumers with HIV/AIDS who Received VR Services across States and Years (%) (Continued)**

States	2002	2003	2004	2005	2006	2007	Average <sup>1</sup>	Total (n)
Arkansas	0.00	40.00	25.00	66.67	75.00	66.67	45.56	14
Vermont	^	33.33	33.33	40.00	66.67	100.00	45.56	7
Arizona	0.00	100.00	25.00	76.92	62.50	0.00	44.07	21
Florida	42.86	44.83	34.88	48.15	46.77	46.81	44.05	174
Pennsylvania	46.43	25.81	40.63	41.94	50.00	52.63	42.90	86
New Mexico	28.57	38.89	63.64	41.18	48.00	35.71	42.66	40
Minnesota	28.57	31.03	37.50	47.06	33.33	65.00	40.42	53
California	28.37	38.32	39.33	41.28	43.83	49.20	40.05	652
Nebraska	0.00	0.00	100.00	100.00	33.33	0.00	38.89	4
Ohio	20.00	37.50	55.56	31.25	46.88	40.00	38.53	58
Texas	49.04	32.98	27.03	36.76	30.14	50.82	37.79	210
Tennessee	75.00	50.00	33.33	33.33	0.00	33.33	37.50	12
Mississippi	^	50.00	0.00	^	100.00	66.67	36.11	4
Wisconsin	40.00	57.14	29.03	29.17	25.00	20.00	33.39	30
Maine	x	x	100.00	^	0.00	0.00	33.33	1
West Virginia	x	^	50.00	x	0.00	50.00	33.33	2
Delaware	0.00	33.33	0.00	50.00	50.00	60.00	32.22	7
North Carolina	47.06	43.75	17.65	10.00	29.17	33.33	30.16	31
Washington	-	50.00	18.18	35.71	22.22	54.55	30.11	18
Kansas	0.00	0.00	0.00	25.00	66.67	80.00	28.61	7
Indiana	50.00	18.18	30.00	9.52	11.11	42.86	26.95	16
Louisiana	50.00	12.50	10.00	30.00	0.00	56.25	26.46	18
Rhode Island	-	66.67	^	0.00	^	0.00	22.22	2
Hawaii	0.00	50.00	0.00	75.00	0.00	0.00	20.83	4
North Dakota	x	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x	x
Average <sup>2</sup>	45.56	44.64	42.19	43.35	46.50	47.48	44.95	2838

\* Total (n) indicates total number of VR consumers who exited the program with employment an outcome from 2002-2007. \*\*“x” indicates no one exited the VR program. \*\*\* “^” indicates that no one received VR services. \*\*\*\* The table is sorted in descending order by average.

<sup>1</sup> See Figure 23 for the data in graphic format.

<sup>2</sup> See Figure 24 for the data in graphic format.

**Table 15-1. Differences between Rates of VR Consumers with HIV/AIDS who were Successfully Closed among VR Consumers with HIV/AIDS who Received VR Services and Rates of total VR Consumers who were Successfully Closed among the Total VR Consumers who Received Services (%)**

States	2002	2003	2004	2005	2006	2007	Average
South Dakota	x	35.95	^	^	x	^	36.44
Alaska	-7.98	x	^	38.91	41.18	-9.04	15.31
New Hampshire	^	x	27.62	27.34	1.01	-35.00	3.00
Alabama	27.16	-20.70	10.35	-8.12	-0.27	-6.63	0.30
Nevada	x	x	x	41.66	-29.35	11.21	12.18
Missouri	15.72	-1.51	0.11	-16.47	-2.16	-7.00	-1.88
Idaho	x	40.24	^	-58.76	^	34.55	6.55
Dist. of Columbia	-8.87	7.18	-1.29	8.23	-0.44	-19.16	-2.39
Oregon	-13.40	0.23	-15.41	-1.36	5.61	1.07	-3.88
Maryland	1.21	-26.93	-1.62	-16.60	-20.11	-9.90	-12.32
South Carolina	0.83	1.59	-22.70	-24.45	-2.20	0.53	-7.73
Michigan	-0.90	-8.61	18.31	1.30	-2.24	-10.33	-0.41
New Jersey	1.59	-25.68	-15.87	-0.63	10.53	-5.20	-5.88
Oklahoma	10.20	39.56	23.94	-15.12	8.66	1.22	11.41
Connecticut	34.78	-24.93	-30.20	-12.32	-12.31	-12.81	-9.63
Colorado	^	41.92	^	-59.64	14.84	-34.41	-7.71
Kentucky	-15.24	-3.74	-21.04	-15.08	-10.29	-40.33	-17.62
New York	-1.58	15.88	31.33	-55.31	-24.33	-14.00	-8.00
Georgia	15.36	-0.57	-6.83	-8.75	-13.63	-18.40	-5.47
Montana	1.39	-12.88	40.81	-58.49	-32.46	-7.87	-11.58
Virginia	-21.60	-11.84	-0.91	-9.23	14.43	-10.26	-6.57
Illinois	-11.42	-11.08	-13.69	-15.42	-11.40	-18.08	-13.51
Massachusetts	-29.27	-24.83	-23.99	-1.51	2.86	8.67	-11.34
Iowa	-17.02	10.49	38.68	-34.06	-28.80	-34.82	-10.92
Utah	-63.19	39.82	7.76	-29.62	-26.30	^	-16.26

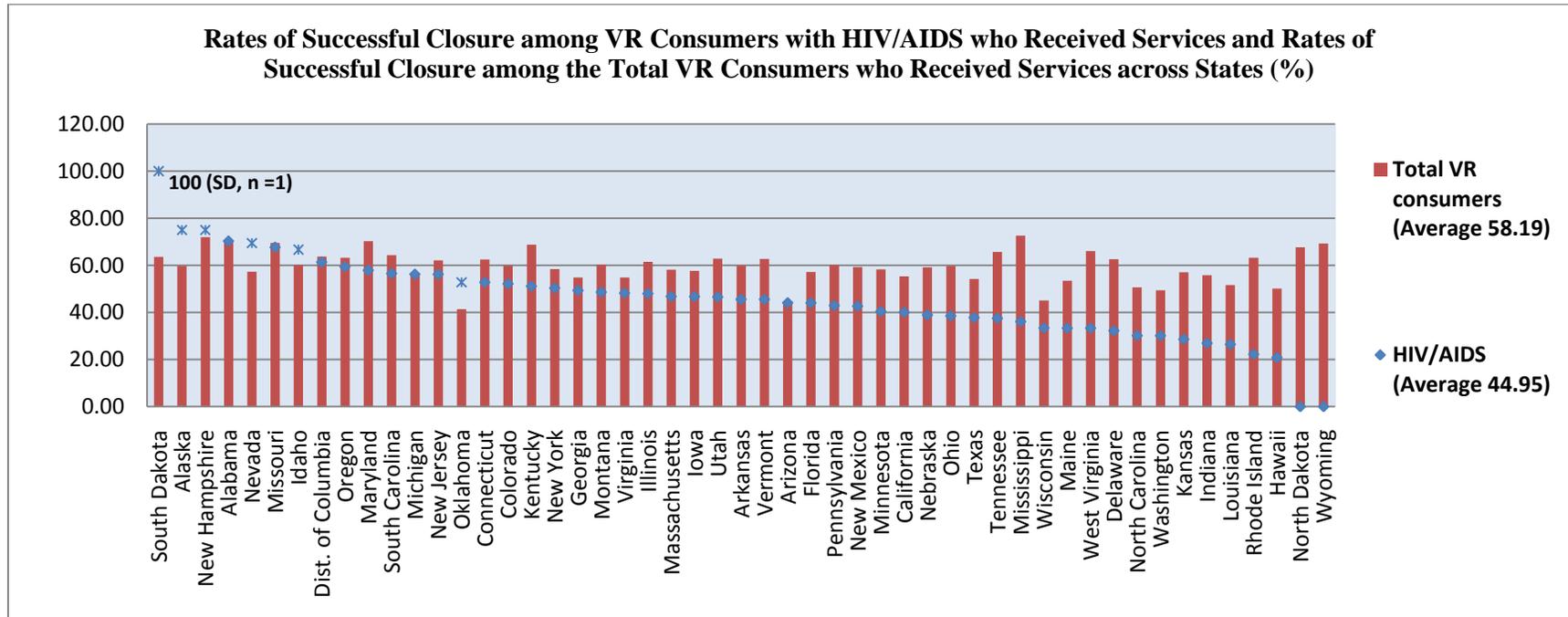
*Note.* \* “x” indicates that no one with HIV/AIDS exited the VR program. \*\* “^” indicates that no one identified with HIV/AIDS received VR services \*\*\* Negative values (-) indicate that the rates of successful closure rates among VR consumers with HIV/AIDS who received services are lower than the rates of successful closure among the total VR consumers who received services. \*\*\*\* The table order is consistent with the order of Table 14-1.

**Table 15-2. Differences between Rates of VR Consumers with HIV/AIDS who were Successfully Closed among VR Consumers with HIV/AIDS who Received VR Services and Rates of Total VR consumers who were Successfully Closed among the Total VR Consumers who Received Services (%) (Continued)**

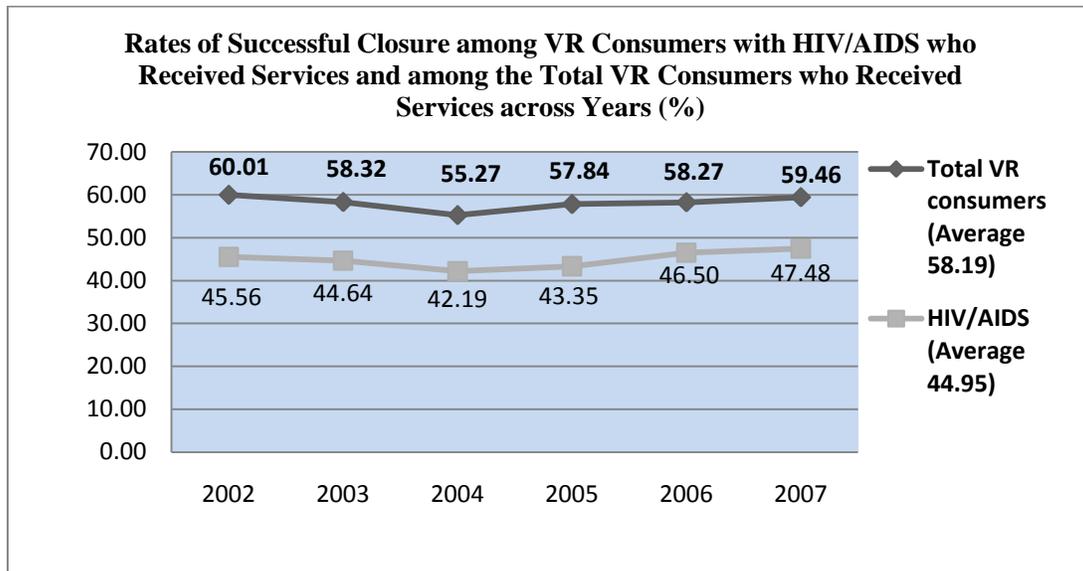
States	2002	2003	2004	2005	2006	2007	Average
Arkansas	-62.63	-14.80	-32.83	3.56	13.93	6.68	-14.35
Vermont	^	-27.61	-27.97	-21.45	5.97	34.50	-17.11
Arizona	-36.01	62.57	-21.35	28.44	15.35	-52.70	-0.62
Florida	-10.80	-9.08	-20.11	-9.38	-14.20	-15.29	-13.14
Pennsylvania	-18.55	-36.62	-18.81	-15.68	-7.99	-5.71	-17.23
New Mexico	-29.29	-20.62	6.73	-16.66	-15.27	-24.51	-16.60
Minnesota	-31.64	-22.82	-18.43	-9.77	-26.82	2.17	-17.88
California	-25.12	-16.28	-13.68	-13.42	-13.73	-8.96	-15.20
Nebraska	-63.55	-57.59	44.23	46.02	-29.03	-61.78	-20.28
Ohio	-38.16	-21.89	-5.33	-28.09	-13.69	-20.38	-21.26
Texas	-10.39	-22.02	-10.38	-20.94	-27.71	-6.86	-16.38
Tennessee	9.01	-7.17	-34.38	-40.83	-65.87	-29.62	-28.14
Mississippi	^	-19.36	-69.92	^	26.68	-4.41	-36.43
Wisconsin	-9.91	9.93	-16.18	-14.04	-17.90	-22.02	-11.69
Maine	x	x	51.46	^	-54.60	-55.51	-20.09
West Virginia	x	^	-12.42	x	-63.96	-12.95	-32.67
Delaware	-58.88	-32.30	-63.13	-8.61	-13.80	-5.23	-30.32
North Carolina	-7.72	-11.25	-36.54	-40.68	-10.93	-15.45	-20.43
Washington	^	1.04	-27.85	-8.88	-23.94	-0.59	-19.24
Kansas	-60.13	-53.01	-55.08	-32.31	11.34	19.01	-28.36
Indiana	-6.45	-37.67	-25.89	-39.61	-48.07	-15.35	-28.84
Louisiana	3.44	-41.39	-42.94	-17.93	-49.55	-2.68	-25.18
Rhode Island	^	7.35	^	-64.28	^	-59.89	-40.97
Hawaii	-48.90	-7.73	-50.44	16.45	-50.08	-35.03	-29.29
North Dakota	x	x	x	x	x	x	x
Wyoming	x	x	x	x	x	x	x
Average	-14.45	-13.68	-13.08	-14.49	-11.77	-11.98	-13.24

*Note.* \* "x" indicates that no one with HIV/AIDS exited the VR program. \*\* "^" indicates that no one identified with HIV/AIDS received VR services \*\*\* Negative values (-) indicate that the rates of successful closure rates among VR consumers with HIV/AIDS who received services are lower than the rates of successful closure among the total VR consumers who received services. \*\*\*\*The table order is consistent with the order of Table 14-2.

**Figure 23. Rates of VR Consumers with HIV/AIDS who Achieved a Successful Employment Outcome among VR Consumers with HIV/AIDS who Received VR Services and Rates of total VR Consumers who Achieved a Successful Employment Outcome among the Total VR Consumers who Received Services (%)**



**Figure 24. Rates of VR Consumers with HIV/AIDS who were Successfully Closed among VR consumers with HIV/AIDS who Received VR Services and Rates of Total VR Consumers who were Successfully Closed among the Total VR Consumers who Received Services across Years (%)**



***Four Most Prevalent Types of Closure among VR Consumers with HIV/AIDS and Total Population of VR Consumers who Exited the Program: By Race/Ethnicity and Year***

VR consumers with HIV/AIDS exited the VR program in different steps in the VR process. More than 90% of VR consumers with HIV/AIDS as well as the total population of VR consumers left the VR program in one of the following statuses: (a) closed with an employment outcome, (b) closed unemployed after receiving services, (c) closed after eligibility, but before an IEP was signed, and (d) closed before eligibility was determined.

The employment achievement rates among different race/ethnicity groups of VR consumers with HIV/AIDS who exited the VR program are shown in Tables 16-1 and 16-2 as well as in Figure 25. The comparisons were performed among four race/ethnicity groups, including African American, White, Hispanic, and Other. The Other category included American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific islander.

No significant differences were found in the rates of employment achievement among the three race/ethnicity groups, African American, White, and Hispanic VR consumers with HIV/AIDS, although White and Hispanic VR consumers with HIV/AIDS were more likely to obtain employment than African American VR consumers with HIV/AIDS across years. However, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander VR consumers with HIV/AIDS were significantly less likely to achieve an employment outcome than other race/ethnicity groups. This group's rates of employment achievement ranged between 7.4% and 18.4% across six years from 2002 through 2007, whereas the rates of employment outcome achievement of African American, White, and Hispanic VR consumers with HIV/AIDS ranged from 20.2% to 29% across the six years. As shown in Figure 24, this group was less likely to receive VR services regardless of employment outcome and significantly more likely to be closed before eligibility was determined than other race/ethnicity groups.

As shown in Figure 26, the rate of employment outcome achievement at closure of the total population of VR consumers was relatively higher among White VR consumers, followed by Hispanic, African American, and Other VR consumers. The lower rates of successful employment achievement shown among VR consumers with HIV/AIDS than the total population of VR consumers were confirmed in the comparison among different race/ethnicity groups: the rates of employment achievement of African American, White, Hispanic, and Other VR consumers with HIV/AIDS were consistently lower than their comparison groups (African American, White, Hispanic, and Other VR consumers).

**Table 16-1. Types of Closure among VR Consumers with HIV/AIDS who Exited the Program by Years and Race/Ethnicity**

	African American		White		Hispanic		Others		Total	
	N	%	n	%	n	%	n	%	n	%
2002										
Closed with an employment outcome	142	20.8	130	20.6	39	26.0	7	18.4	318	21.2
Closed unemployed after receiving services	143	20.9	186	29.5	42	28.0	9	23.7	380	25.3
Closed after eligibility, but before an IEP was signed	212	31.0	223	35.4	41	27.3	9	23.7	485	32.3
Closed before eligibility was determined	116	17.0	69	11.0	27	18.0	11	28.9	223	14.9
Total	683		630		150		38		1501	
2003										
Closed with an employment outcome	186	20.5	146	20.2	43	21.1	8	15.4	383	20.3
Closed unemployed after receiving services	217	23.9	189	26.2	59	28.9	10	19.2	475	25.2
Closed after eligibility, but before an IEP was signed	298	32.8	260	36.1	57	27.9	15	28.8	630	33.4
Closed before eligibility was determined	132	14.5	93	12.9	40	19.6	16	30.8	281	14.9
Total	908		721		204		52		1885	
2004										
Closed with an employment outcome	225	20.9	204	23.5	52	24.3	8	7.4	489	21.6
Closed unemployed after receiving services	315	29.3	262	30.1	69	32.2	24	22.2	670	29.6
Closed after eligibility, but before an IEP was signed	333	31.0	266	30.6	62	29.0	15	13.9	676	29.8
Closed before eligibility was determined	158	14.7	103	11.9	25	11.7	57	52.8	343	15.1
Total	1075		869		214		108		2266	

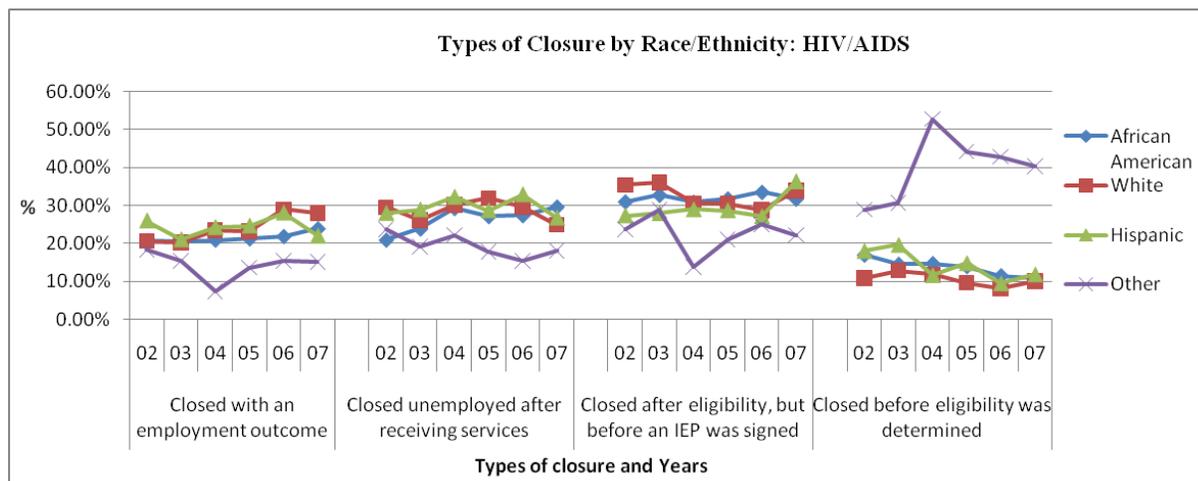
*Note.* See Figure 25 for the data in graphic format.

**Table 16-2. Types of Closure among VR Consumers with HIV/AIDS who Exited the Program by Years and Race/Ethnicity (Continued)**

	African American		White		Hispanic		Others		Total	
	n	%	n	%	n	%	n	%	n	%
2005										
Closed with an employment outcome	217	21.3	187	23.2	55	24.7	13	13.7	472	22.0
Closed unemployed after receiving services	277	27.2	257	31.9	64	28.7	17	17.9	615	28.7
Closed after eligibility, but before an IEP was signed	325	31.9	245	30.4	64	28.7	20	21.1	654	30.5
Closed before eligibility was determined	142	13.9	78	9.7	33	14.8	42	44.2	295	13.8
Total	1020		805		223		95		2143	
2006										
Closed with an employment outcome	257	21.9	233	29.0	59	28.1	13	15.5	562	24.7
Closed unemployed after receiving services	322	27.4	238	29.6	69	32.9	13	15.5	642	28.3
Closed after eligibility, but before an IEP was signed	394	33.6	232	28.9	57	27.1	21	25.0	704	31.0
Closed before eligibility was determined	135	11.5	65	8.1	20	9.5	36	42.9	256	11.3
Total	1174		803		210		84		2271	
2007										
Closed with an employment outcome	308	24.0	235	28.0	65	22.0	15	15.2	623	24.7
Closed unemployed after receiving services	382	29.7	209	24.9	79	26.8	18	18.2	688	27.3
Closed after eligibility, but before an IEP was signed	409	31.8	284	33.9	107	36.3	22	22.2	822	32.6
Closed before eligibility was determined	139	10.8	85	10.1	35	11.9	40	40.4	299	11.9
Total	1286		838		295		99		2518	

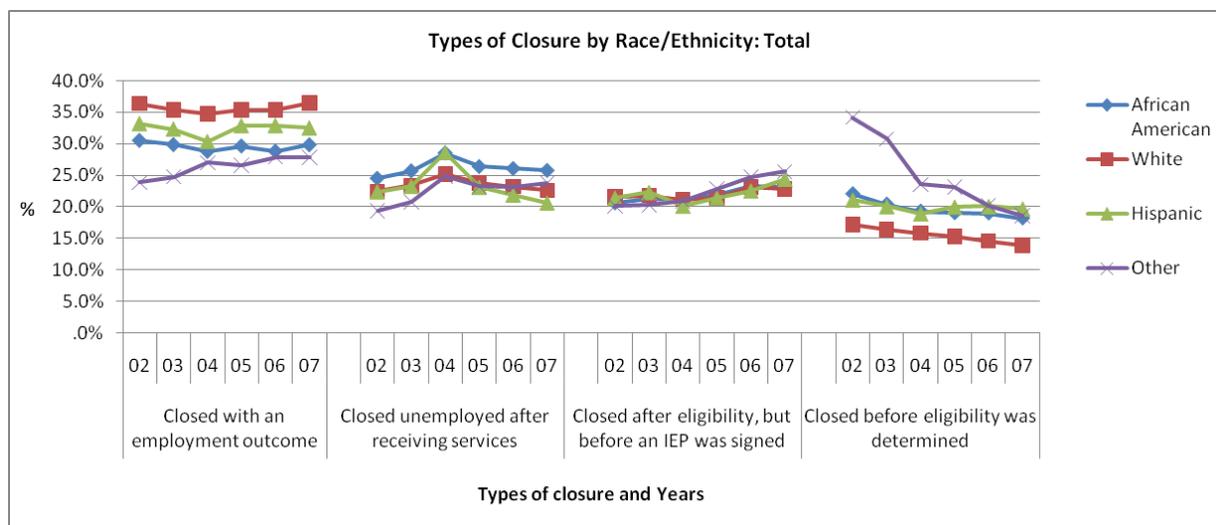
*Note.* See Figure 25 for the data in graphic format.

**Figure 25. Types of Closure by Race/Ethnicity: VR Consumers with HIV/AIDS**



*Note.* See Tables 16-1 and 16-2 for numbers and percentages and see Figure 26 for comparisons with the total population of VR consumers.

**Figure 26. Types of Closure by Race/Ethnicity: Total VR Consumers**



### *Summary*

The rate of service provision (VR participation) among the total number of VR consumers with HIV/AIDS who exited the program over the six years was on average less than 50%. States with higher rates of service provision (more than 60%) were Oklahoma, Virginia, Alabama, Pennsylvania, New York, and New Mexico. Of these states with the highest rates of service provision, only Oklahoma and New Mexico also showed a higher rate of VR consumers with HIV/AIDS (VR consumers with HIV/AIDS who received VR services as well) to the presumed total population with HIV/AIDS as well as to the estimated number of unemployed persons living with HIV/AIDS.

The comparisons of the rates of VR service provision among the total population of VR consumers with HIV/AIDS who exited the program to the rates of VR service provision among the total population of VR consumers who exited the program indicated that in most states, VR consumers with HIV/AIDS were less likely to receive VR services than the total population of VR consumers. The only states where VR consumers with HIV/AIDS were more likely to receive VR services than the general population of VR consumers were Oklahoma, Virginia, New York, New Mexico, District of Columbia, and Wisconsin.

The rates of employment achievement were estimated in two groups: (a) total population of VR consumers with HIV/AIDS and (b) total VR consumers with HIV/AIDS who received VR services. Each of the rates in two groups was then compared to rates of the comparison groups, respectively, which were (a) total population of VR consumers and (b) total population of VR consumers who received VR services.

In all 50 states and D.C., less than 50% of the total population of VR consumers with HIV/AIDS who exited the program obtained employment. States with relatively higher rates of

employment achievement were Alabama, Alaska, Oklahoma, New Hampshire, and Idaho. When the employment achievement rates were assessed among the VR consumers with HIV/AIDS who actually received services, more than half of those who received services obtained employment in 18 states. States ranked in the top five were South Dakota, Alaska, New Hampshire, Alabama, and Nevada. Note that some variances exist in this rank, which require readers' attention to the Table 14-1. Although South Dakota was ranked first, during the 6 years from 2002 through 2007, no VR consumers with HIV/AIDS exited the program in two years and no VR consumers with HIV/AIDS received VR services in 3 years (only a single VR consume with HIV/AIDS received VR services and obtained employment). Also, the total number of VR consumers with HIV/AIDS who obtained employment in these states was relatively low, less than 10 in total for the six years except for Alabama with 34 VR consumers with HIV/AIDS with an employment outcome. One of the potential reasons for this is that these states had relatively low HIV/AIDS prevalence and low VR access rates.

In most states, VR consumers with HIV/AIDS were less likely to obtain employment than the total population of VR consumers. Five states with higher rates of employment achievement among the VR consumers with HIV/AIDS than the total population of VR consumers were Alaska, Oklahoma, Idaho, New York, and District of Columbia. Of these five states, Alaska, Idaho, and Oklahoma still showed higher rates of employment achievement among the VR consumers with HIV/AIDS who received services, compared to the total population of VR consumers who received services. Other states that showed higher rates of employment achievement among VR consumers with HIV/AIDS who received services than the comparison group were South Dakota, New Hampshire, Alabama, and Nevada.

In general, states with higher rates of VR closures among the estimated total number of persons living with HIV/AIDS (i.e., Kentucky, Kansas, Montana, Vermont, Oklahoma, Minnesota, and New Mexico) were not the same states that had higher rates of VR provision (i.e., Oklahoma, Virginia, Alabama) and employment achievement (i.e., Alabama, Alaska, Oklahoma, New Hampshire, and Idaho) among the total population of VR consumers with HIV/AIDS; however, all of these state are low HIV/AIDS prevalence states in common.

The rates of VR consumers with HIV/AIDS with an employment outcome were not significantly different among African American, White, and Hispanic groups; however, the group of American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander VR consumers were less likely to exit the program with an employment outcome than other race/ethnicity groups of VR consumers with HIV/AIDS. Thus, this group was apparently more likely to exit the program before eligibility was determined than any other race/ethnicity groups of VR consumers with HIV/AIDS. In all of the four race/ethnicity groups, the rates of employment achievement were lower among VR consumers with HIV/AIDS than the total population of VR consumers.

### **III. Reasons for Closure of VR Consumers HIV/AIDS who Existed the VR Program without an Employment Outcome by Years and Race/Ethnicity**

This section provides reasons for closure among VR consumers who exited the VR program without an employment outcome for 2002 through 2007. The Rehabilitation Services Administration (RSA) requires the State/Federal VR program to identify the reason for closing the service case for each of all VR consumers who entered and exited the program. There are 13 different categories of reasons for closure and a category for all other reasons.

Tables 17-1 and 17-2 show the number and percentage of VR consumers with HIV/AIDS who exited the VR program without an employment outcome for different reasons across the six years from 2002 through 2007. Of the 14 different reasons, three reasons were consistently prevalent across years, including: (a) unable to locate or contact (approximately 31% to 36% of the total numbers across years), (b) failure to cooperate (21% to 25%), and (c) refused services or further services (14% to 17%).

The RSA defines these reasons as follow:

- (a) Unable to locate or contact: the consumer has moved without a forwarding address or moved out of the state with no intention to continue to participate in the program.
- (b) Failure to cooperate: the consumer's actions or non-actions make it possible to begin or continue a VR program, including repeated failure to keep appointments for assessment, counseling or other services.
- (c) Refused services or further services: the consumer chooses not to participate or continue in the VR program at this time.

Figure 27 shows percentages of each of all reasons for closure among VR consumers with HIV/AIDS who exited the VR program without employment outcome across six years from 2002 through 2007. Figure 28 provides percentages of each reason for closure among total VR

consumers who exited the VR program without employment as a comparison group. Three reasons for closure previously listed appeared to be prevalent among the total population of VR consumers who exited the program without an employment outcome. These three primary reasons for closure for both groups (VR consumer with HIV/AIDS and total VR consumers) across years are provided concurrently in Table 18 (also available in graphic format in Figure 29). Whereas the rates of case closure for reason of not being able to locate or contact were higher among the VR consumers with HIV/AIDS compared to the total population of VR consumers, the rates of case closure due to refused services or further services (those who chose not to participate or continue in their VR program at the time) were higher among the total population of VR consumers. However, the rates of case closure due to failure to cooperate were not much different between the two groups.

Table 19 provides numbers and percentages of the three most prevalent reasons for closure by race/ethnicity (African American, White, Hispanic, and others) among VR consumers with HIV/AIDS who exited the program without an employment outcome for six years from 2002 through 2007 (also see Figure 30 for the data in graphic format). For the purpose of comparisons, the rates of the three prevalent reasons for closure by race/ethnicity among the total population of VR consumers who exited the program without an employment outcome are provided in Figure 31.

As shown in Figure 31, no significant difference in reasons for closure was found among the four race/ethnicity groups in the total population of VR consumers who were unsuccessfully closed. However, White VR consumers in general showed the highest rates of refused services or further services (accounted for more than 27% of all White VR consumers who exited the program without employment), but had the lowest rates of failure to cooperate across the six

years compared to other race/ethnicity groups (accounted for 17% - 18% of all White VR consumers who exited the program without employment). The highest rates of reason for closure listed as failure to cooperate across the six years were shown among African American VR consumers. Specifically, approximately 25% - 27% of all African American VR consumers who exited the program were closed unsuccessfully due to failure to cooperate across the six years from 2002 through 2007.

For VR consumers with HIV/AIDS who exited the program without obtaining employment, more than 30% were closed for a reason of being unable to locate or contact, which was the most prevalent reason, followed by failure to cooperate (21% - 25%) and refused services (14% - 19%) across the six years. However, when race/ethnicity groups were compared, African American VR consumers with HIV/AIDS were more likely to be closed for a reason of failure to cooperate than any other race/ethnicity group of VR consumers with HIV/AIDS (see Table 19 and Figure 30). As shown in Table 19, the rate of closure due to failure to cooperate ranged from 29.06% to 34.07% across the years 2002 through 2007. By comparison, only 15% -17% of White VR consumers with HIV/AIDS without employment were closed for the same reason across these years. Thus, the rate of closure for reason of failure to cooperate for African American VR consumers with HIV/AIDS was consistently and substantially higher each year than the rate of closure for this reason for all other groups, and was also higher for African American VR consumers with HIV/AIDS than the rate for the general population of African American VR consumers (approximately 26%-27% across years).

**Table 17-1. Reasons for Closure of VR Consumers with HIV/AIDS who Exited the Program without an Employment Outcome**

	2002		2003		2004		2005	
	n	%	n	%	n	%	n	%
Unable to locate or contact	424	35.84	469	31.23	581	32.77	560	33.88
Disability too significant to benefit from VR services	51	4.31	65	4.33	49	2.76	53	3.21
Refused services or further services	177	14.96	280	18.64	327	18.44	284	17.18
Death	35	2.96	28	1.86	48	2.71	34	2.06
Individual in institution	21	1.78	17	1.13	28	1.58	17	1.03
Transferred to another agency	4	0.34	10	0.67	8	0.45	12	0.73
Failure to cooperate	259	21.89	374	24.90	398	22.45	350	21.17
No disabling condition	4	0.34	9	0.60	9	0.51	4	0.24
No impediment to employment	10	0.85	16	1.07	28	1.58	21	1.27
Transportation not feasible or available	2	0.17	1	0.07	3	0.17	1	0.06
Does not require VR services	5	0.42	7	0.47	15	0.85	16	0.97
Extended services not available	15	1.27			4	0.23	1	0.06
Extended employment	0	0.00	2	0.13	1	0.06	1	0.06
All other reasons	176	14.88	224	14.91	274	15.45	299	18.09
Total	1183	100.00	1502	100.00	1773	100.00	1653	100

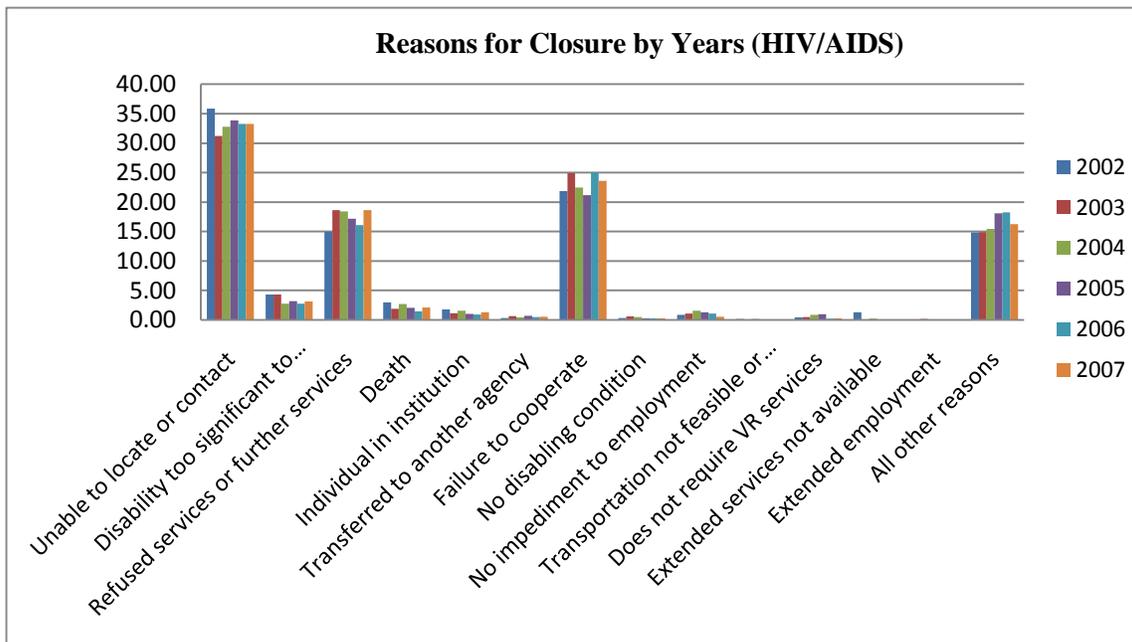
*Note.* See Figure 27 for the data in graph format and Figure 28 for the data of total VR Consumers.

**Table 17-2. Reasons for Closure of VR Consumers with HIV/AIDS who Exited the Program without an Employment Outcome (Continued)**

	2006		2007		Total	
	n	%	n	%	n	%
Unable to locate or contact	566	33.25	626	33.28	3226	33.37
Disability too significant to benefit from VR services	47	2.76	59	3.14	324	3.42
Refused services or further services	274	16.10	350	18.61	1692	17.32
Death	25	1.47	40	2.13	210	2.20
Individual in institution	16	0.94	24	1.28	123	1.29
Transferred to another agency	8	0.47	10	0.53	52	0.53
Failure to cooperate	426	25.03	444	23.60	2251	23.17
No disabling condition	5	0.29	5	0.27	36	0.37
No impediment to employment	18	1.06	10	0.53	103	1.06
Transportation not feasible or available	1	0.06	1	0.05	9	0.10
Does not require VR services	4	0.24	5	0.27	52	0.53
Extended services not available	1	0.06	1	0.05	22	0.28
Extended employment	0	0.00	0	0.00	4	0.04
All other reasons	311	18.27	306	16.27	1590	16.31
Total	1702	100	1881	100	9694	100.00

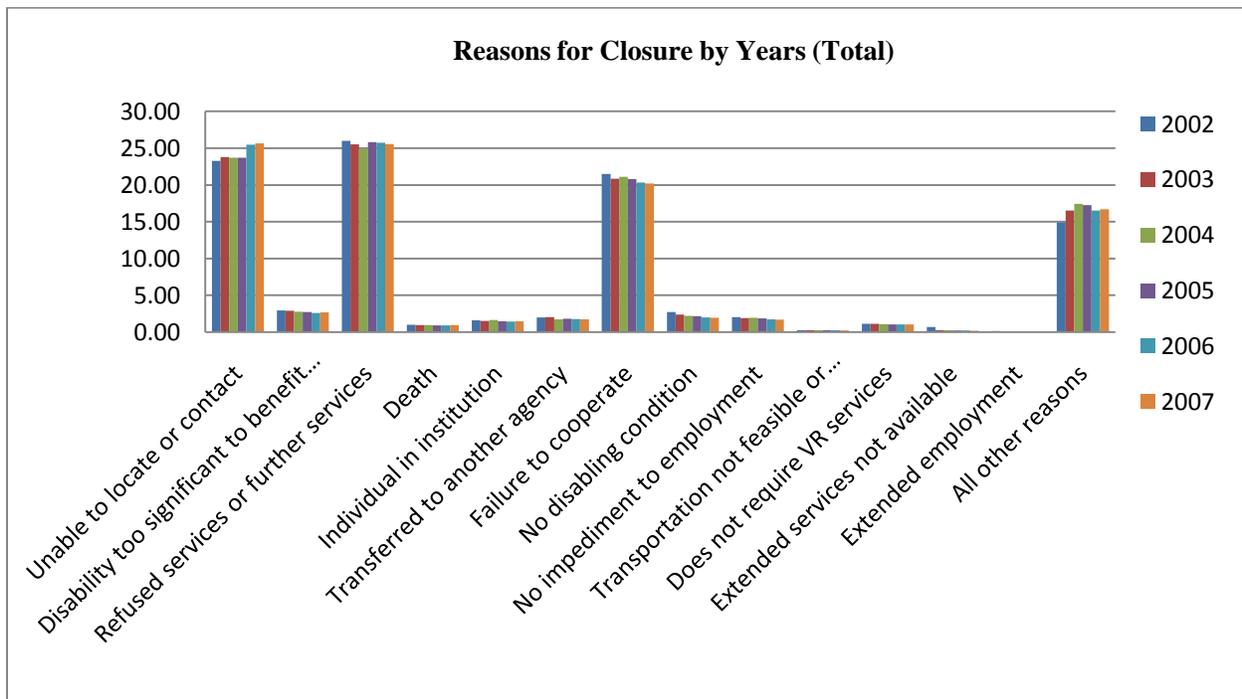
*Note.* See Figure 27 for the data in graph format and Figure 28 for the data of total VR Consumers.

**Figure 27. Reasons for Closure among VR Consumers with HIV/AIDS who Exited the Program without an Employment Outcome for 2002 through 2007 (%)**



Note. See Table 17-1 and 17-2 for numbers and percentages.

**Figure 28. Reasons for Closure among Total Number of VR Consumers who Exited the Program without an Employment Outcome in 2002 through 2007**

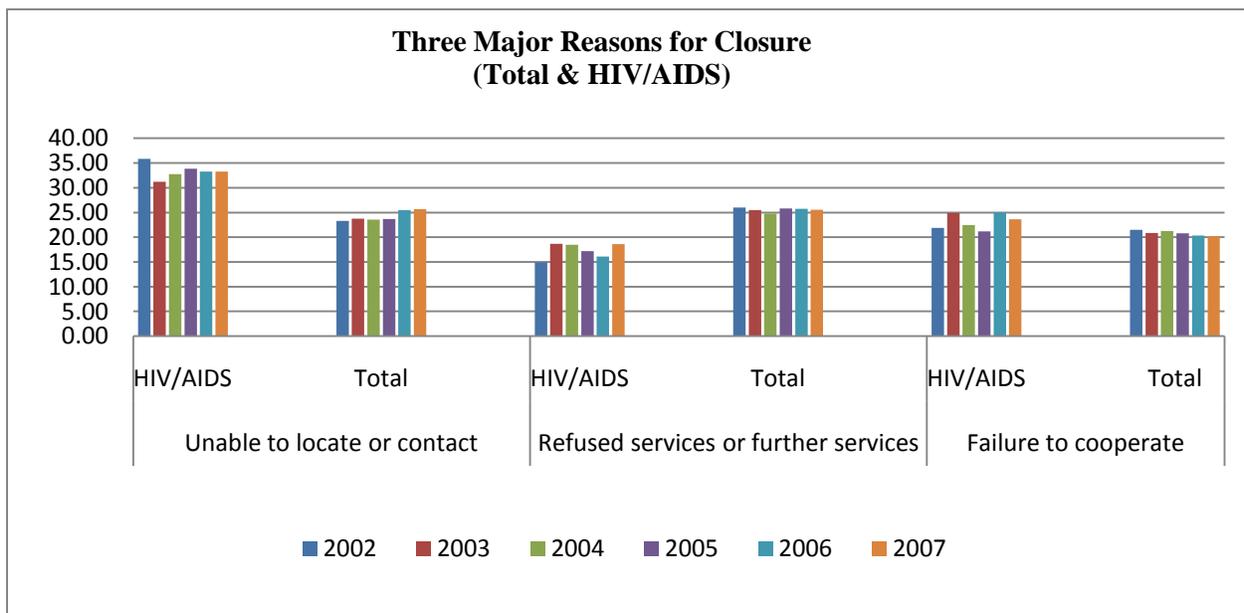


**Table 18. Three Major Reasons for Closure among Consumers with HIV/AIDS and the Total Number of VR Consumers by Years**

Reasons for Closure		2002	2003	2004	2005	2006	2007
Unable to locate or contact	HIV/AIDS	35.84	31.23	32.77	33.88	33.25	33.28
	Total	23.27	23.78	23.59	23.70	25.47	25.66
Refused services or further services	HIV/AIDS	14.96	18.64	18.44	17.18	16.10	18.61
	Total	26.01	25.51	24.81	25.82	25.75	25.57
Failure to cooperate	HIV/AIDS	21.89	24.90	22.45	21.17	25.03	23.60
	Total	21.48	20.83	21.23	20.79	20.32	20.18

*Note.* See Figure 29 for the data in graph format.

**Figure 29. Three Prevalent Reasons for Closure among VR Consumers with HIV/AIDS and the Total Number of VR Consumers who were Unsuccessfully Closed by Years**

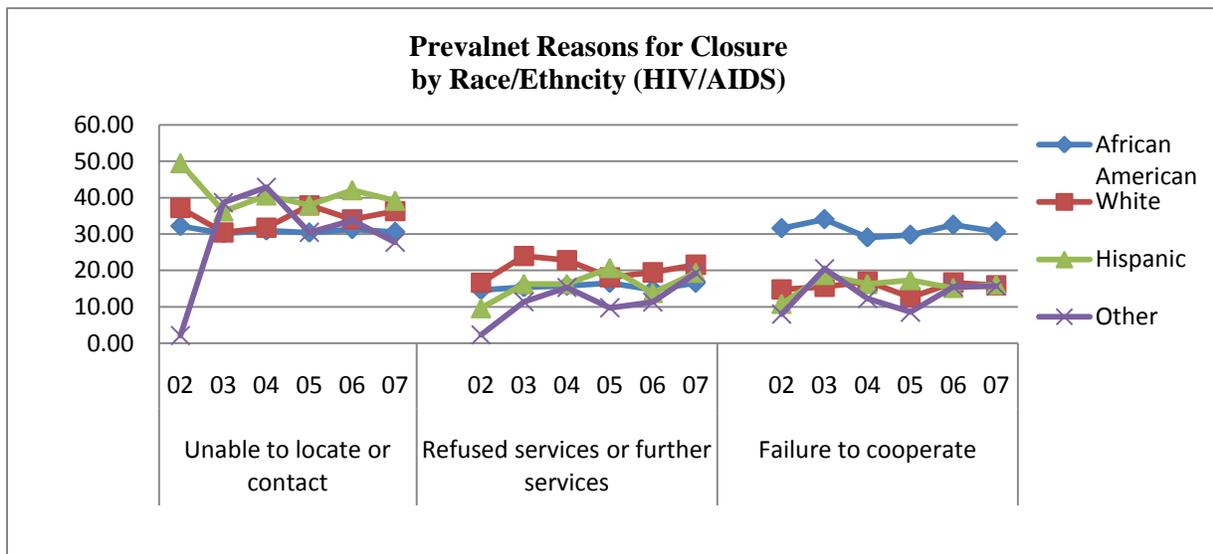


**Table 19. Number and Percentage of Three Prevalent Reasons for Case Closure by Race/Ethnicity among VR Consumers with HIV/AIDS who Exited the Program without an Employment Outcome**

	African American		White		Hispanic		Other		Total
	n	%	n	%	n	%	n	%	n
2002									
Unable to locate or contact	174	32.2	186	37.2	55	49.5	9	2.1	424
Refused services or further services	79	14.6	83	16.6	11	9.6	4	2.3	177
Failure to cooperate	171	31.6	74	14.8	12	10.8	2	8	259
Total	424	78.4	343	68.6	78	69.9	15	12.4	860
2003									
Unable to locate or contact	218	30.19	175	30.43	58	36.25	17	38.64	468
Refused services or further services	111	15.37	138	24	26	16.25	5	11.36	280
Failure to cooperate	246	34.07	89	15.48	30	18.75	9	20.45	374
Total	575	79.63	402	69.91	114	71.25	31	70.45	1122
2004									
Unable to locate or contact	263	30.94	211	31.73	65	40.63	42	42.86	581
Refused services or further services	134	14.6	152	22.86	26	16.25	15	15.31	327
Failure to cooperate	247	29.06	113	16.99	26	16.25	12	12.24	398
Total	644	74.6	476	71.58	117	73.13	69	70.41	1306
2005									
Unable to locate or contact	244	30.39	234	37.86	57	38	25	30.49	560
Refused services or further services	133	16.56	112	18.12	31	20.67	8	9.76	284
Failure to cooperate	239	29.76	78	12.62	26	17.33	7	8.54	350
Total	616	76.71	424	68.6	114	76	40	48.79	1194
2006									
Unable to locate or contact	287	31.33	194	34.04	61	42.07	24	33.8	566
Refused services or further services	135	14.74	111	19.47	20	13.79	8	11.27	274
Failure to cooperate	298	32.53	95	16.67	22	15.17	11	15.49	426
Total	720	78.6	400	70.18	103	71.03	43	60.56	1266
2007									
Unable to locate or contact	299	30.57	219	36.32	85	39.17	23	27.71	626
Refused services or further services	162	16.56	130	21.56	42	19.35	16	19.28	350
Failure to cooperate	300	30.67	96	15.92	35	16.13	13	15.66	444
Total	761	77.8	445	73.8	162	74.65	52	62.65	1420

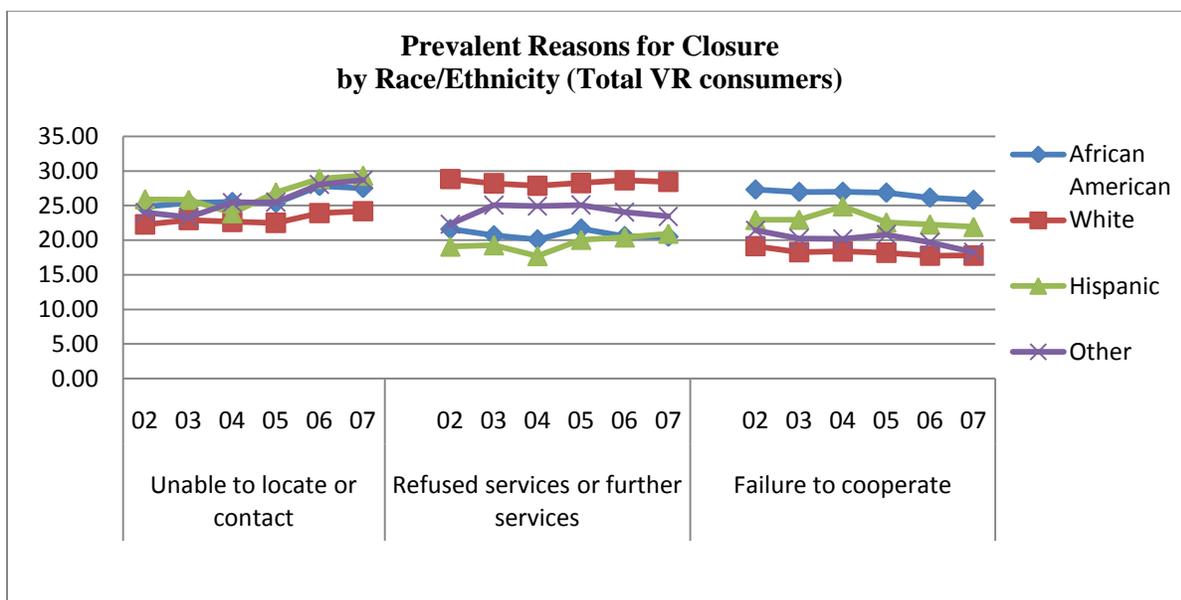
*Note.* See Figure 30 for the data in graphic format and Figure 31 for the data for the total VR consumers.

**Figure 30. Rates of Three Prevalent Reasons for Closure by Race/Ethnicity among VR Consumers with HIV/AIDS who Exited the VR Program without an Employment Outcome**



*Note.* See Table 19 for numbers and Figure 31 for comparison with an average of total VR consumers.

**Figure 31. Three Major Reasons for Closure by Race/Ethnicity for the Total Number of VR Consumers who Exited the Program without an Employment Outcome**



### *Summary*

On average, 20% - 25% of VR consumers with HIV/AIDS who exited the VR program obtained employment across six years from 2002 through 2007. This finding indicated that at minimum 75% of those who applied for the VR program or participated in the program were closed without achieving employment. Although the reasons for case closure varied, more than 70% of those with HIV/AIDS who exited the VR program without achieving employment were closed for reasons of being unable to locate or contact, failure to cooperate, or refused services or further services (i.e., chose not to participate or continue in the program).

This tendency was found to be similar to reasons for unsuccessful closure in the total population of VR consumers who exited the program without obtaining employment. However, those with HIV/AIDS were more likely to be closed for reason of being unable to locate or contact and less likely to be closed for reason of refused services or further services than the total population of VR consumers who were closed unsuccessfully.

Comparisons of the most prevalent reasons among different race/ethnicity groups indicated that African American VR consumers with HIV/AIDS were significantly more likely to be closed for reason of failure to cooperate than VR consumers with HIV/AIDS with other racial or ethnic backgrounds and the total number of African American VR consumers.

**Appendix A. Estimated Number of Unemployed Persons with HIV/AIDS based on State Unemployment Rates (%)**

States	2002	2003	2004	2005	2006	2007
Kentucky	10 (5.7)	10 (6.3)	10 (5.6)	27 (6.0)	30 (5.8)	32 (5.5)
Kansas	9 (5.1)	16 (5.6)	16 (5.5)	15 (5.1)	13 (4.3)	12 (4.1)
Montana	17 (4.5)	18 (4.3)	18 (4.1)	17 (3.8)	16 (3.3)	16 (3.1)
Vermont	16 (4.0)	18 (4.5)	16 (3.7)	15 (3.5)	16 (3.7)	19 (3.9)
Minnesota	205 (4.5)	238 (4.9)	229 (4.6)	218 (4.2)	222 (4)	272 (4.6)
Oklahoma	140 (4.8)	178 (5.6)	173 (5.0)	172 (4.5)	171 (4.1)	194 (4.3)
Hawaii	49 (4.0)	51 (3.9)	41 (3.2)	35 (2.7)	30 (2.5)	33 (2.6)
New Mexico	118 (5.5)	145 (5.9)	158 (5.7)	157 (5.2)	139 (4.3)	122 (3.5)
Iowa	41 (3.9)	50 (4.4)	57 (4.7)	56 (4.3)	53 (3.8)	57 (3.8)
Missouri	429 (5.2)	482 (5.6)	522 (5.8)	510 (5.4)	474 (4.8)	517 (5.0)
South Dakota	8 (3.3)	9 (3.5)	10 (3.7)	10 (3.6)	10 (3.1)	10 (3.0)
Nebraska	38 (3.7)	44 (4.0)	46 (3.9)	50 (3.9)	42 (3)	45 (3.0)
California	-	-	5655 (6.2)	5253 (5.4)	3337 (4.9)	4,674 (5.4)
Idaho	40 (5.4)	41 (5.2)	38 (4.6)	34 (3.9)	30 (3.2)	27 (2.7)
Maryland	1141 (4.5)	1211 (4.5)	1237 (4.3)	1261 (4.1)	1247 (3.8)	-
Wisconsin	281 (5.3)	308 (5.6)	286 (5.0)	286 (4.8)	290 (4.7)	314 (4.9)
Utah	78 (5.8)	84 (5.7)	81 (5.0)	74 (4.2)	57 (3.0)	55 (2.7)
Delaware	-	111 (4.2)	113 (3.9)	121 (4.0)	111 (3.5)	114 (3.4)
Dist. Of Columbia	-	718 (7.0)	855 (7.5)	822 (6.6)	810 (5.9)	862 (5.7)
Rhode Island	22(5.1)	30(5.4)	38(5.2)	44(5.1)	49(5.1)	55(5.0)
New Hampshire	33 (4.5)	36 (4.5)	34 (3.9)	34 (3.6)	35 (3.5)	38 (3.6)
Texas	2383 (6.4)	2880 (6.7)	2834 (6)	2781 (5.4)	2699 (4.9)	2540 (4.3)
Alaska	41 (7.1)	48 (7.7)	50 (7.4)	49 (6.9)	49 (6.5)	49 (6.2)
Illinois	1366 (6.5)	1557 (6.7)	1591 (6.2)	1637 (5.8)	1406 (4.6)	1642 (5.0)
Massachusetts	759 (5.3)	864 (5.8)	807 (5.2)	790 (4.9)	796 (4.8)	760 (4.5)
Indiana	328 (5.2)	362 (5.3)	389 (5.3)	422 (5.4)	407 (4.9)	396 (4.5)

*Note.* Unemployment rates of states were exerted from the U.S. Bureau of Labor Statistics:

[http://www.bls.gov/schedule/archives/all\\_nr.htm#SRGUNE](http://www.bls.gov/schedule/archives/all_nr.htm#SRGUNE) \*\*All calculations were performed using the numbers in Table 1-1 and 1-2.

**Appendix A-1. Estimated Number of Unemployed Persons with HIV/AIDS based on State Unemployment Rates (%) (Continued)**

States	2002	2003	2004	2005	2006	2007
Ohio	617 (5.7)	728 (6.2)	770 (6.1)	801 (5.9)	790 (5.4)	-
Oregon	406 (7.6)	453 (8.1)	429 (7.3)	381 (6.2)	343 (5.4)	341 (5.2)
Georgia	1007 (4.8)	1110 (4.8)	1241 (4.7)	1503 (5.2)	1452 (4.6)	1500 (4.4)
Pennsylvania	772 (5.6)	868 (5.7)	928 (5.4)	941 (5.0)	1294 (4.6)	1302 (4.4)
New Jersey	1719 (5.8)	1825 (5.9)	1587 (4.9)	1466 (4.5)	1568 (4.7)	1439 (4.2)
Washington	563 (7.3)	597 (7.4)	525 (6.2)	485 (5.5)	451 (4.9)	435 (4.5)
Michigan	672 (6.2)	813 (7.1)	857 (7.1)	878 (6.9)	922 (6.9)	1007 (7.2)
Arkansas	205 (5.3)	234 (5.8)	240 (5.6)	232 (5.1)	255 (5.3)	274 (5.4)
Alabama	356 (5.4)	385 (5.4)	393 (5.1)	322 (3.9)	313 (3.5)	338 (3.5)
Louisiana	833 (5.9)	912 (6.2)	855 (5.5)	942 (6.7)	571 (3.9)	591 (3.8)
Maine	33 (4.4)	43 (5.0)	39 (4.6)	52 (4.8)	55 (4.6)	57 (4.7)
Florida	3345 (5.7)	3399 (5.3)	3268 (4.7)	2896 (3.9)	2674 (3.4)	3348 (4)
North Carolina	1099 (6.6)	1098 (6.5)	970 (5.5)	993 (5.3)	931 (4.7)	1006 (4.7)
South Carolina	-	934 (6.7)	914 (6.8)	912 (6.7)	828 (6.4)	828 (5.9)
Arizona	-	549 (5.7)	498 (4.9)	501 (4.6)	474 (4.1)	480 (3.8)
Tennessee	589 (5.3)	659 (5.7)	656 (5.4)	715 (5.6)	688 (5.1)	672 (4.7)
Virginia	599 (4.2)	626 (4.1)	603 (3.7)	608 (3.5)	552 (3)	583 (3.0)
Colorado	422 (5.7)	478 (6.1)	466 (5.6)	453 (5.1)	406 (4.3)	379 (3.8)
Connecticut	339 (4.4)	458 (5.5)	434 (4.9)	455 (4.9)	430 (4.4)	471 (4.6)
West Virginia	55 (5.9)	64 (6.0)	63 (5.3)	65 (5.0)	65 (4.7)	66 (4.6)
Nevada	219 (5.7)	223 (5.2)	221 (4.5)	233 (4.2)	262 (4.2)	343 (4.8)
Mississippi	451 (6.7)	471 (6.4)	506 (6.4)	642 (7.8)	566 (6.7)	549 (6.3)
New York	5408 (6.2)	6203 (6.4)	5995 (5.8)	5450 (5)	5309 (4.6)	-
North Dakota	10 (3.5)	12 (3.6)	12 (3.5)	12 (3.4)	12 (3.2)	13 (3.2)
Wyoming	8 (4.2)	9 (4.5)	8 (3.9)	7 (3.7)	6 (3.3)	6 (3.0)

Note. \* Unemployment rates of states were exerted from the U.S. Bureau of Labor Statistics:

[http://www.bls.gov/schedule/archives/all\\_nr.htm#SRGUNE](http://www.bls.gov/schedule/archives/all_nr.htm#SRGUNE) \*\*All calculations were performed using the numbers in Table 1-1 and 1-2.

## References

- Brooks, R. A. & Klosinski, L.E. (1999). Assisting person living with HIV/AIDS to return to work: Programmatic steps for AIDS service organizations. *AIDS Education and Prevention, 11*, 212-223.
- Conyers, L. (2005). HIV/AIDS as an emergent disability: The response of vocational rehabilitation. *Journal of Vocational Rehabilitation, 22*(2), 67-73.
- Hunt, B., Jaques, J., Niles, S. G., & Wierzalis, E. (2003). Career concerns for people living with HIV/AIDS. *Journal of Counseling and Development, 81*, 55-60
- McReynolds, C. J. (2001). The meaning of work in the lives of people living with HIV disease and AIDS. *Rehabilitation Counseling Bulletin, 44*, 104-115.
- Parniak, M. A. (2004). HIV/AIDS after twenty-five years. *The International Journal of Biochemistry, 36*, 1666-1667.
- Walch, S., Lezama, M., & Giddie, L. (2005). Managing HIV in the Workplace: A Primer for Managers and Supervisors. *Psychologist-Manager Journal, 8*(1), 55-73.

## Data Resources

- Rehabilitation Service Administration (2002, 2003, 2004, 2005, 2006, 2007). *Case Service Report (RSA-911) and Reporting Manual for the RSA-911*. Washington, DC: U.S. Department of Education. Office of Special Education and Rehabilitation Services.
- U.S. Census Bureau, Americans with Disabilities: 2002, Household Economic Studies at <http://www.census.gov/hhes/www/disability/sipp/disable02.html> (visited May 20, 2009).
- U.S. Census Bureau, Americans with Disabilities: 2005, Household Economic Studies at <http://www.census.gov/hhes/www/disability/sipp/disable05.html> (visited May 20, 2009).
- U.S. Bureau of Labor Statistics, Regional and State Unemployment (Annual) at [http://www.bls.gov/schedule/archives/all\\_nr.htm#SRGUNE](http://www.bls.gov/schedule/archives/all_nr.htm#SRGUNE) (visited September 19, 2009)

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