
The Financial Burden of Substance Abuse in West Virginia:

The Welfare System



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The Financial Burden of Alcohol and Substance Abuse in West Virginia: The Welfare System



The cost of drug and alcohol use is astronomical in every societal sector. This report is a continuation of a series initially funded by the Federal Office of Juvenile Justice & Delinquency Prevention Block Grant Funds and administered by the WV Division of Justice and Community Services. The present work is funded by the U.S. Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention's *Prevention as Community Development: Projects of Regional and National Significance Grant* and is the fourth in a series that examines the cost of drug and alcohol abuse to the criminal justice, healthcare, education, welfare, and workforce systems in West Virginia. A comprehensive report, incorporating estimates from all these sectors, will be produced at the end of the project. The present report attempts to capture the impact of drug and alcohol abuse on West Virginia's child and family welfare sector, which includes the child and adult welfare system and those programs that provide income support and other social services programs to families. For both systems, the present report estimates that, in 2009, **substance abuse consumed over \$95 million in West Virginia (Table 1).**

Because children who are neglected and abused by a substance abusing parent are also more likely to abuse their own children and to develop substance abuse disorder (McNichol & Tash, 2001; Mucowski & Hayden, 1992; Sheridan, 1995), when these future considerations are included the cost of substance abuse to West Virginia's welfare system goes well beyond **\$95 million**. Given that abuse can be cyclical when left unchecked, future costs of substance abuse to the WV welfare system are guaranteed to increase if urgent intervention is not taken. Other costs excluded from this \$95 million figure include the productivity losses that will accrue from substance abusing public assistance recipients who do not receive the intensive case management services needed to turn them into productive citizens (The National Center on Addiction and Substance Abuse (CASA) at Columbia University, 2009a). For example, this study estimates that the lack of intensive case management services to substance abusing adult welfare recipients in 2009 will cost about \$60 million annually in avoided health care, welfare, and criminal justice cost, and in gains contributed to society as productive and employed members. Several other indirect and future costs are excluded from the present study, but excluding these costs will not prevent increases in the cost of substance abuse to the welfare system in West Virginia. The present study estimates that that substance abuse will cost West Virginia's welfare system \$346 million by 2017 if current trends persist and urgent intervention does not occur.

The present study provides a breakdown of the cost of substance abuse in the child and adult welfare system and in the family support welfare system. To obtain these estimates, this report adopts a mix of methodologies from two previous studies that estimated the cost of drug and alcohol use. The first, "Shoveling Up: The Impact of Substance Abuse on State Budgets," was first released by the National Center on Addiction and Substance Abuse (CASA) at Columbia University in 2001 and was updated in

2009. The second study, titled “Integrated Funding Analysis of Mental Health and Substance Use in West Virginia,” was released by the Public Consulting Group (PCG) in 2007.

The present study makes some unique contributions to these two reports. First, it provides more recent estimates of the cost of drug and alcohol use in the state. Second, this report was initiated with the intent of producing annual updates; consequently, only data that are available annually were used. Finally, it provides cost trends over available years and, based on those trends, makes projections for costs in year 2017. This year was chosen to coincide with the projections made by the Department of Corrections; the Department, which estimated that substance abuse related crimes are the reason why 60% of its new inmates are incarcerated, has argued that the state will need a new prison by 2017 if current trends persist¹. To circumvent this need urgent action is needed. The best fitting trend line for each data was used for the 2017 projections.

Table 1: Financial Burden of Substance Abuse on West Virginia’s Welfare System, FY 2007 to 2017

	2005	2006	2007	2008	2009	2017*
Child and Adult Welfare	N/A	\$119,410,129.00	\$99,358,634.00	\$41,238,687.50	\$41,238,687.50	\$41,238,687.50
Family Welfare:						
TANF and Related Programs	\$24,795,336.00	\$23,009,934.80	\$21,310,149.00	\$23,036,367.40	\$29,473,898.60	\$180,000,000.00
Food Stamp	\$15,483,018.96	\$15,984,155.82	\$16,493,072.22	\$18,247,364.64	\$24,507,386.04	\$125,000,000.00
Total	N/A	\$158,404,219.62	\$137,161,855.22	\$82,522,419.54 ²	\$95,219,972.14	\$346,238,687.50

*Projections

Prior Studies Estimating the Cost of Substance Abuse in West Virginia

As mentioned earlier, two previous studies provided some guidance in estimating the cost of drug and alcohol use in the present study. CASA’s most recent figures estimated that, in 2005, West Virginia spent about \$68 million on drug- and alcohol-related problems in the child, adult, and family welfare systems; this was up from \$38 million in 1998 (The National Center on Addiction and Substance Abuse (CASA) at Columbia University, 2009b). CASA also estimated that, in 2005, the state spent about \$768 million on substance abuse-related issues in all sectors, an increase of \$430 million from 1998. CASA obtained the data for these two reports from surveys sent to state agency officials in September 1998 and July 2006.³ The survey asked state government officials working in eight main areas, including justice, healthcare, child and family welfare, education, workforce, public safety, mental health/developmentally disabled, and regulation/compliance, to provide their total budgets and estimate the amounts that went, directly or indirectly, towards substance abuse-related programs in 1998 and 2005, respectively. CASA’s researchers also included data on prevention and research funds.

CASA’s estimates are lower than the present study, but that is not surprising. The present study includes both federal and state spending whereas, in the first report, CASA focused only on state spending and, in the second report, it focused on only state and local spending. Although CASA included the cost of addressing tobacco abuse in its estimates, including tobacco costs does not make up for excluding federal expenditures. A major critique of CASA’s reports, in fact, was that they relied heavily on

¹ <http://www.wvpubcast.org/newsarticle.aspx?id=7862&terms=prison>

² Decline is likely artificial; issue is addressed on page 14

³ Officials were to report on previous year’s budget.

estimates from individual government officials who may have the potential to introduce some level of error.

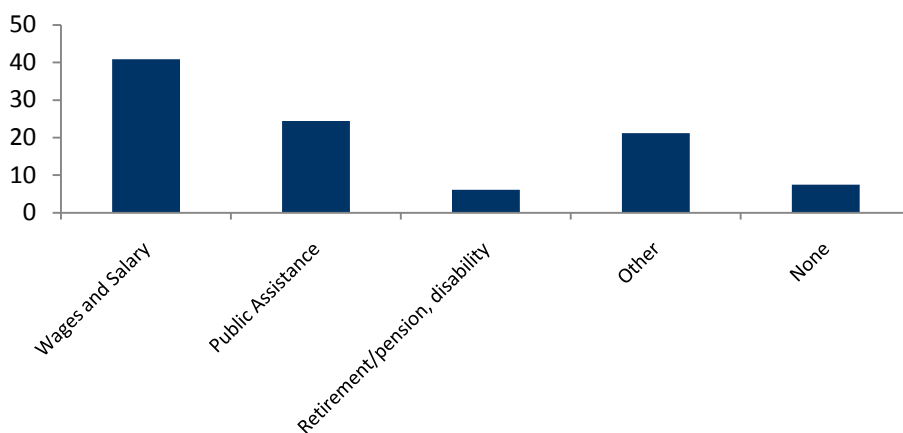
The second study by PCG did not include the cost of substance use to the child, adult, and family welfare systems. It did focus, at least to some extent, on the cost of mental health to the welfare system. For other areas of focus, PCG used mostly state-level statistics to estimate West Virginia's substance abuse issues cost \$1.9 million in fiscal year 2006 (Public Consulting Group (PCG), 2007). Like the PCG report, the present report also uses state level statistics when available. However, there are key differences between this and the PCG report. First, this study estimates the cost of drug- and alcohol-related issues to the child, adult, and family welfare systems, systems that were excluded from PCG's report. Second, this study provides costs for more than one year and projects those costs out to 2017.

The Current Project to Estimate the Cost of Substance Abuse in West Virginia

Substance abuse is a serious problem in West Virginia. Based on data from 2005 and 2006 National Survey on Drug Use and Health, the Substance Abuse and Mental Health Services Administration (2009) estimates that 8% of the state's population was drug- or alcohol-dependent in 2006. The situation is likely worse for the population receiving public assistance (Office of Applied Studies, 2002).

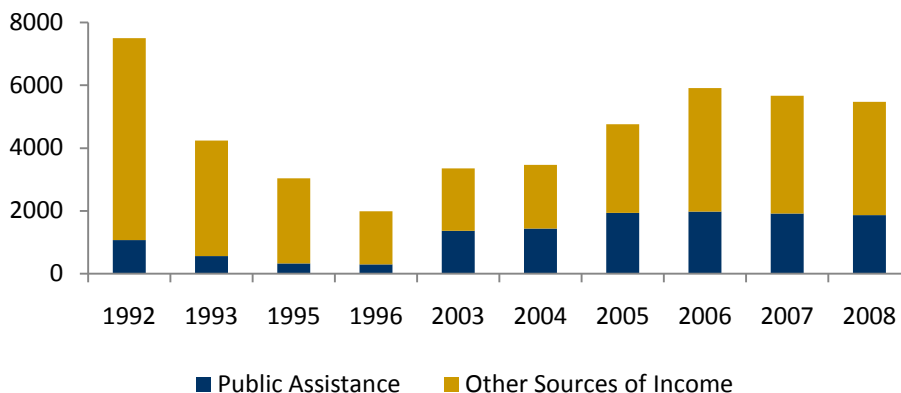
The Treatment Episode Data Set (TEDS), an administrative data system providing descriptive information about the national flow of admissions to providers of substance abuse treatment, confirms that between 1992 and 2008, 24.4% of persons admitted for substance abuse treatment in West Virginia received or had parents who received some sort of public assistance income (Office of Applied Studies, 2009). Specifically, the question asked about the principal source of financial support for respondents above age 18. For children under 18, the question asked about parents' primary source of income/support. Chart 1 shows that respondents who mentioned public assistance as the principal source of income for themselves or their parents constitute the second largest group admitted between 1992 and 2008, the first being those for whom wages/salary were the principal source of income/support.

Chart 1: Sources of Income for Persons Admitted for Substance Abuse Treatment in WV, 1992 to 2008



The proportion of respondents admitted to West Virginia substance abuse treatment services who mentioned public assistance as their principal source of income/support has also increased over the years (Chart 2), going from 14.2% in 1992 to 34.2% in 2008. This proportion peaked in 2004 when 41.7% of individuals admitted to treatment services were individuals receiving public assistance, but the absolute number peaked in 2006 when 1,977 of those admitted into substance abuse treatment programs claimed public assistance as their principal source of income/support. This increase in the proportions of public welfare recipients admitted for substance abuse treatment is likely a selection effect due to the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PWRORA). The law requires that individuals with little apparent hindrance to employment be employed, leaving a high proportion of people who are severely impaired and have multiple barriers to employment on the welfare rolls. Many of these may have substance abuse problems in addition to other mental and physical impairments, and social problems (Office of Applied Studies, 2002; The National Center on Addiction and Substance Abuse (CASA) at Columbia University, 2009a; United States General Accounting Office (GAO), 2003).

Chart 2: Trends in Admitted Individuals Who Receive Public Assistance



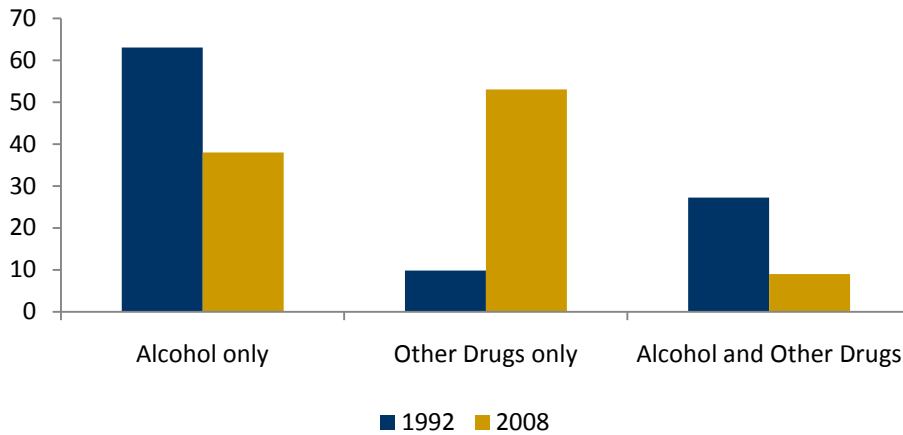
Additionally, the primary substance abused by public assistance recipients changed between 1992 and 2008 (Table 2). Over 80% of the admissions were alcohol-related in 1992 whereas less than half of 2008 admissions were alcohol-related. Admissions for marijuana, cocaine, heroin, and opiate use increased significantly between 1992 and 2008 (Table 2). Table 2 shows that this shift mirrors the trend in the general population (West Virginia Partnership to Promote Community Well-being, 2010). Consequently, public assistance recipients' admissions for drugs only, as opposed to admissions for alcohol only or alcohol and drug combinations, have increased significantly (Chart 3).

With public assistance recipients constituting an increasing proportion of persons admitted for substance abuse treatment, it is not surprising that the cost of drug and alcohol use in West Virginia's welfare system is high: in 2009, substance abuse cost West Virginia's welfare system over \$95 million. This amount will only increase over time if urgent interventions are not implemented. Table 1 and Chart 4 present the estimated cost of substance abuse to West Virginia's welfare system. If current trends persist, it is estimated that costs will triple by 2017.

Table 2: Number (and Percent) of Public Assistance Recipients and General Population Who Were Admitted for Substance Abuse Treatment in West Virginia

	Public Assistance (PA) Recipients		General Population (including PA Recipients)	
	1992	2008	1992	2008
Alcohol	887 (82.8%)	795 (42.5%)	7595 (87.5%)	3408 (49.2%)
Marijuana	48 (4.5%)	267 (14.3%)	326 (3.8%)	919 (13.3%)
Cocaine and Heroin	53 (4.9%)	152 (8.1%)	349 (4.0%)	539 (7.8%)
Opiates and Other	14 (1.3%)	546 (29.2%)	101 (1.2%)	1714 (24.7%)
Non Prescription	0 (0%)	6 (0.3%)	2 (0.0%)	17 (0.2%)
Others	70 (6.5%)	104 (5.6%)	310 (3.6%)	332 (4.8%)
Total Including Alcohol	1072	1870	8683	6929
Total Excluding Alcohol	185	1075	1088	3521

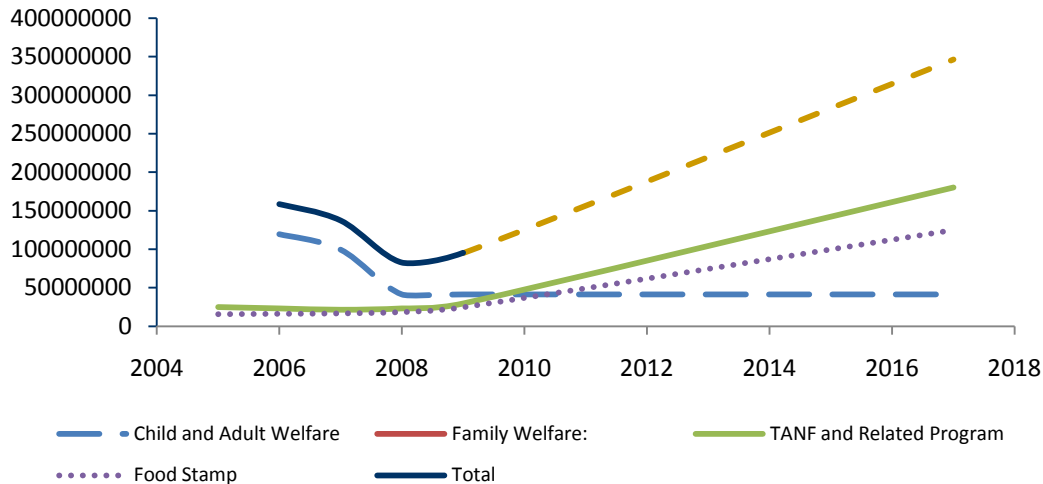
Chart 3: Primary Substance Problem of Public Assistance Recipients Receiving Treatment



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. TREATMENT EPISODE DATA SET (TEDS), 1992 [Computer file]. Prepared by Synectics, Incorporated. ICPSR02184-v8. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 2006-12-08. doi:10.3886/ICPSR02184

The pervasive nature of drug and alcohol abuse and its accompanying consequences are readily evident in West Virginia. The magnitude of these costs and the rapid rate of increase suggest that the state needs to take urgent actions to address drug and alcohol abuse. The estimates provided by the present report also suggest that West Virginia cannot afford to adopt a “wait and see” approach. Rather, the state should direct urgent attention to preventing drug and alcohol abuse at all ages. The comprehensive approach to the problem of substance abuse advocated by the *Governor’s Comprehensive Strategic Plan to Address Substance Abuse in West Virginia* is the state’s only viable option for stemming this tide (West Virginia Partnership to Promote Community Well-being, 2008). Stemming the tide of substance abuse will also lessen the financial burden facing the welfare system and free up resources for other much-needed programs. The next sections present in-depth discussion about each sector included in the estimates displayed in Table 1, as well as provide the methodology for arriving at the cost estimates.

Chart 4: Actual and Projected Cost of Substance Abuse to WV's Welfare System



The Present Study

The present study examines costs related to drug- and alcohol-related activities in the welfare system. Specifically, this involves the cost of substance abuse to programs in the child and adult welfare system and the family welfare system. The first section focuses on the child and adult welfare system whereas the second section provides estimates for the family welfare system. In both sections, detailed discussion is provided on the services clients receive, the needs of the clients, and the number of clients served so as to further illustrate what are constituted in the estimated costs.

Child and Adult Welfare System

An estimated 8.3 million children under age 18 (11.9 percent) in the U.S. lived with at least one substance abusing or substance dependent parent between 2002 and 2008. Of these, about 7.3 million lived with a parent that abused or was dependent on alcohol, whereas approximately 2.1 million lived with a parent who abused or was dependent on illicit drugs. These data are from the National Survey on Drug Use and Health (NSDUH), which does not currently provide state-by-state estimates on parental drug abuse. Thus, similar estimates could not be calculated for West Virginia. However, if the 11.9% were applied to this state, it can be estimated that 170,000 children under 18 lived with a substance abusing parent in the same period. The actual count is likely higher because prescription drug abuse, a major problem in West Virginia, was not included in these estimates.

Substance abuse often co-occurs with domestic violence and child abuse. Hence, the reason for the present study's focus on the child welfare system which is often the first point of contact for children who are maltreated. The *Federal Child Abuse Prevention and Treatment Act (CAPTA)*, (42 U.S.C.A. §5106g), as amended by the *Keeping Children and Families Safe Act of 2003*, defines child abuse and neglect, otherwise referred to as maltreatment as:

- Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or
- An act or failure to act which presents an imminent risk of serious harm.

Child and Adult Welfare Investigations, Victims, and Clients Served in West Virginia

Within the minimum standards set by CAPTA, each State is responsible for providing its own definitions of child abuse and neglect (Administration for Children and Families, 2010a). West Virginia recognizes five major types of maltreatment: physical abuse, neglect, medical neglect, sexual abuse, and psychological maltreatment. Although any of these forms of maltreatment may be found separately, multiple forms of abuse often co-occur.

Table 3 presents the number of CPS workers in West Virginia between 1999 and 2008. Clearly, CPS workers have increased significantly over the years. CPS Workers are thus often contacted to investigate cases in which children have allegedly been maltreated. Child Protective Services (CPS) are designed to prevent or remedy abuse, neglect, or exploitation of children who may have been harmed through physical or emotional injury, sexual abuse or exploitation, or a lack of adequate food, clothing, shelter, or medical care. According to the US Administration for Children and Families (2010a), CPS workers' roles include the following:

- Conducting investigations and assessments;
- Providing emergency medical services and shelter;
- Developing case plans;
- Initiating legal action;
- Counseling for the child and the family;
- Assessing and evaluating family circumstances;
- Arranging alternative living arrangements, including foster care; and
- Case management and referral to service providers.

These CPS services are funded by federal and state dollars. At the federal level, there are three main sources of funds. The Social Services Block Grant (SSBG) program provides funds to assist States with the delivery of social services to adults and children. States have substantial discretion in the use of SSBG funds and may decide how to determine eligibility, what services to provide, and how funds are used. Apart from SSBG, states also may transfer up to 10% of their annual Temporary Assistance for Needy Families (TANF) block grant allocation into their SSBG programs. CAPTA also provides federal funds based on the number of children age 18 years and younger in each state.

Table 3: Child Protective Service Workforce: Screening, Intake, and Investigation Officers

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Number of CPS Workers	185	279	235	119	n/a	n/a	395	403	401	465

Source: Child Maltreatment Annual Reports (<http://www.acf.hhs.gov/programs/cb/pubs/cm08/index.htm>)

There are several other indicators of the services provided in the child and adult welfare system. The following paragraphs and tables provide detailed information on the child and adult welfare system in West Virginia. Table 4 presents the trends in the number of CPS maltreatment investigations, beginning with whether cases were screened in or out. For those cases screened in, further investigations either

substantiated or did not substantiate the alleged maltreatment. Some investigations were closed with no findings; the outcomes of others were unknown. Table 4 shows that the number of maltreatment investigations increased significantly between 1999 and 2008; 23,065 cases were investigated in 1999 compared to 33,327 in 2008. By contrast, the percent of investigations that were substantiated appears to have declined. About 33 were substantiated in 1999 but only 16% were substantiated in 2008; the total number of substantiated investigations also declined, falling from 5,587 to 3,705. By contrast, the proportion of investigations that were unsubstantiated rose dramatically, from about 56% to 75%; the absolute number of unsubstantiated investigations nearly doubled.

Table 4: Number of CPS Investigations by Results

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Screened Out	5791	6175	6696	7072	7128	7688	21746	26575	9851	10224
Screened In	17274	16525	16467	15052	19604	18508	22400	23210	21962	23103
Total Investigations	23065	22700	23163	22124	26732	26196	44146	49785	31813	33327
Unsubstantiated Investigations	9752	9649	9704	9213	12004	11456	14011	15879	15636	17430
Investigation Closed with No Finding	1014	1212	1203	1337	1704	1496	2374	2033	1862	1955
Unknown	921	174	208	58	60	51	39	27	26	13
Substantiated Investigations	5587	5490	5352	4444	5636	5505	5976	5271	4438	3705
Total Investigations	17274	16525	16467	15052	19604	18508	22400	23210	21962	23103
Child Victims of Maltreatment	8609	8244	7907	6635	8875	8446	9511	8345	7856	6077

Source: Child Maltreatment Annual Reports (<http://www.acf.hhs.gov/programs/cb/pubs/cm08/index.htm>)

Although no specific numbers are available in West Virginia, national estimates are that between 50% to 80% of maltreatment cases are associated with the parental substance use (Besinger, Garland, Litrownik, & Landsverk, 1999; Famularo, Kinscherff, & Fenton, 1992; K. McCurdy & D. Daro, 1994; Murphy et al., 1991; U. S. General Accounting Office, 1994, 1998). The situation is likely not much different in West Virginia. Although no hard data currently exist on the issue in this state, according to a staff at the Bureau of Children and Family (BCF Staff, 2010), substance abuse is an underlying issue in most maltreatment cases in which the bureau is involved. A new database system is being proposed for later in the year that may be able to capture this information (BCF Staff, 2010).

Research has shown that substance abuse plays a critical role in families involved with the child welfare system (Besinger et al., 1999; Curtis & McCullough, 1993; Dore, Doris, & Wright, 1995; Famularo et al., 1992; K. McCurdy & D. Daro, 1994; Murphy et al., 1991; U. S. General Accounting Office, 1994, 1998). Substance abusing adults were twice as likely to abuse or neglect their children compared to non-substance abusing parents (Chaffin, Kelleher, & Hollenberg, 1996). Children of substance abusing parents are more likely to be physically, sexually, or emotionally abused than children of parents who do not abuse drugs and alcohol (U.S. Department of Health and Human Services Administration for Children and Families, 2002). Alcohol abuse is often associated with physical abuse whereas cocaine abuse is associated with sexual abuse (Famularo et al., 1992). Abusing illicit drugs is also associated with higher rates of permanent removal from home. Murphy et al. (1991) estimate that in cases of permanent child removal from the home, approximately 90% of cases involving parental drug abuse result in removal, whereas approximately 60% of parental alcohol abuse cases result in removal. Substance use, in general, also plays an important role in the re-occurrence of child maltreatment (McNichol & Tash, 2001) and re-referrals (English & Marshall, 1999). The family members in homes with substance abusing parents have both lower levels of functioning and dysfunctional internal and external boundaries,

possible means through which substance use leads to child maltreatment (Flanzer, 1990; Mucowski & Hayden, 1992; Petersen-Kelley, 1985; Preli, Protinsky, & Cross, 1990; Sheridan, 1995; Sheridan & Green, 1993). For example, parents who are intoxicated with drugs are likely to exhibit dysfunctional external boundaries with family members which could perpetuate improper body contact between family members and result in sexual abuse.

Box 1

According to West Virginia Bureau for Children and Families (2005), the following services are provided:

Adoption Services: “Are undertaken by social workers to provide a permanent home and legal parents to children whose ties to their biological parents have been legally severed” (BCF 2007, p.3).

Foster Care: “Supervision and nurturing of children in an approved family home or a licensed child care facility, when their biological parents are unable to provide for their care” (p. 6).

Protective Services for Children: “Specialized services to families on behalf of children who are at risk of becoming, or are, neglected, abused or exploited by their parents, guardians, or custodians” (p. 8).

Protective Services for Adult: “assist individuals to maintain or develop a level of competence and functioning that will enable them to manage their own affairs or, if required, to assist in developing the method of handling their affairs which is least restrictive to their rights and freedom while at the same time safeguarding the individual” (p. 7).

Services to Domestic Violence Victims: “Specialized services to adults and their children who have been physically or emotionally harmed or threatened with harm as a result of domestic violence. This service seeks to provide a protective situation for victims and to provide assistance in developing alternatives to prevent the recurrence of violence” (p. 9).

Social Support Services: “Educational, counseling and case management type services to meet a wide range of needs. Social Support Services provide individuals with assistance in coping with or overcoming basic life problems that might otherwise become life-disturbing problems” (p. 11).

Despite the very central role that substance abuse plays in the child welfare system, it is the least likely factor to be assessed or recorded (Dore et al., 1995; McNichol & Tash, 2001). In West Virginia, information on parental substance abuse is not currently kept in the database or made available to researchers. In two studies on the child and adult welfare systems in other states, CPS workers agreed that parental substance abuse played important role in referrals. They also reported that it was the risk factor least likely to be assessed because CPS workers found it difficult to screen parents or lacked necessary trainings to do so (Dore et al., 1995; English & Marshall, 1999; K. McCurdy & D. Daro, 1994; McNichol & Tash, 2001). Even in West Virginia, where there are independent agencies which assess substance abuse, no current data exist on the proportion of cases in which substance abuse is an underlying issue. Thus, 50%, the lower estimate of the proportion of maltreatment cases that are due to substance abuse will be used to estimate the cost of substance abuse to the child welfare system in this study.

Table 5 presents the number of cases for each type of maltreatment in West Virginia. Most cases were due to neglect, but physical abuse and psychological maltreatment also constituted significant proportions. Table 4 also shows the number of maltreatment victims and non-victims who were removed from the home, as well as the number who received services or had court petitions or actions.

Box 2

The following are the youth services* provided by BCF (2007):

Residential Support Service: This Service provides short-term placement during a crisis situation. The purpose of this service is to provide a supportive environment designed to minimize stress and emotional instability which may have resulted from family dysfunction, transient situational disturbance, physical or emotional abuse, neglect, sexual abuse, loss of family or other support system or the abrupt removal of a child from a failed placement or other current living situation. Services include: group/individual counseling, basic needs (food, clothing, and shelter), group/individual problem solving, medication administration, 24 hour awake-staff, and the availability of 1:1 staffing (p. 12).

Runaway Shelters: Runaway shelters provide short-term residential shelter for youth in crisis, with a primary focus on street youth who are at risk of being sexually abused or exploited. Youth are supported in a safe environment in which they can identify their situation, explore appropriate and available options, and work toward resolving a specific problems or conflict. These services are available 24 hours a day, 7 days a week. Services are voluntary, confidential and provided free of charge (p. 14).

Residential Children Service (Level I): A structured 24 hour group care setting that targets youth with a confirmed DSM-IV diagnosis that manifests itself through moderate to severe adjustment difficulties in school, home, and/or community. It is designed for youth whose needs can best be met in a community-based setting where the child can remain involved in community-based school and recreational activities. These youth usually can function in public school and in a group residential setting with a minimal amount of supportive services and behavior interventions (p. 16).

Residential Children Service (Level II): A structured group care setting targeting youth with a confirmed DSM-IV diagnosis that manifests itself in the form of moderate to severe adjustment difficulties in school, home, and/or community. Children served at this level are characterized by persistent patterns of disruptive behavior and exhibit disturbances in age-appropriate functioning and social problem solving. Disturbances in psychological functioning are common and may then present some risk of causing harm to self or others. These youth cannot function in a public setting without significant psycho-social and psycho-educational support (p. 18).

Residential Children Service (Level III): A highly structured and intensively staffed 24 hour group care setting targeting youth with a confirmed DSM-IV diagnosis which manifests itself in severe disturbances in conduct and emotions and as a result is unable to function in multiple areas of their lives. Residential treatment facilities provide a highly structured program with formalized behavioral programs and therapeutic interventions designed to create a therapeutic environment whereby all planned activities and applied interventions are designed with the goal of stabilizing the child's mental condition (p. 20).

Psychiatric Residential Treatment Facilities: A freestanding or physically distinct part facility that provides to children and adolescents under the age of 21 medically supervised interdisciplinary program of behavioral health treatment. A program of individualized treatment which addresses the psychiatric needs of each individual and his/her family and is provided by qualified behavioral health professionals. These facilities are appropriate for children and adolescents whose predominant symptom presentation is essentially stabilized, although not resolved, and who have persistent dysfunction in several major life areas (p. 22).

*BCF officials indicated there are currently no data on whether youth receiving these services are also receiving other BCF services

The West Virginia Bureau of Children and Families (BCF) provides and pays for services that will prevent a child from being removed from the home or facilitate a child's return to the home (BCF Staff, 2010). Substance abuse diagnosis and treatment is often part of the services provided; as substance abuse is the underlying issue in most CPS cases, a substantial proportion of even the non-treatment services provided are also linked or directly attributable to substance abuse.

Table 5: Maltreatment in West Virginia and Some Outcomes

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Physical Abuse	2165	2395	2260	2040	2838	2335	2588	2045	1166	1468
Neglect	3774	3918	3726	3641	4762	4622	5223	4635	3005	3331
Medical Neglect	124	98	68	85	97	127	112	124	37	88
Sexual Abuse	743	634	556	514	588	451	448	382	224	320
Psychological Maltreatment	853	855	914	1272	1865	1764	2169	2046	1083	1524
Multiple Maltreatment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	513	N/A
Other	1610	1545	1861	426	474	629	751	668	2033	625
Total Maltreatment*	9269	9445	9385	7978	10624	9928	11291	9900	7109	7356
Number of non-victims kids removed from the home	108	51	900	N/A	1590	457	517	581	700	915
Number of Child Victims Removed from the Home	1081	1283	987	968	1459	665	820	788	973	1083
Number of Children Who Received Services	6531	7087	9955	4201	9920	8541	10992	15487	15538	14246
Number of Victims with Court Petition	50	1502	1209	1177	1804	499	685	758	947	1055

*Multiple maltreatments may have been recorded for one victim.

Box 1 shows the types of services provided for victims of maltreatment in West Virginia. Table 6 shows the number of clients served by the different types of services including youth services. The data was provided by the Administration for Children and Families (2008). The Bureau also provides special services to at-risk youth. These services are defined in Box 2. The number of facilities providing each of these services and the number of counties in which the facilities are located in the state is shown in Table 7. Table 7 also shows the capacity of the facilities, as measured by the number of beds, and the number of youths served at the facilities from 2003 to 2007, the latest year for which there was publicly available data. The number of youth served appears to have declined in 2007 for each type of service; it is unknown whether this indicates a decline in need or in the number approved for services.

Table 6: Bureau of Children and Families Service Recipients by Services Received

	2006			2007			2008		
	KIDS	Adults	Total	KIDS	Adults	Total	KIDS	Adults	Total
Adoption	4103	0	4103	4278	0	4278	4640	0	4640
Daycare Children	17453	0	17453	16962	0	16962	16194	0	16194
Foster Adults	0	1086	1086	0	1139	1139	0	879	879
Foster Children	6474	0	6474	6744	0	6744	2692	0	2692
Protective Adults	0	28525	28525	0	43728	43728	0	8934	8934
Protective Children	18202	0	18202	26973	0	26973	26825	0	26825
Youth Special Services	6382	0	6382	6145	0	6145	2760	0	2760
Counseling	1307	196	1503	1329	252	1581	0	0	0

Source: Social Services Block Grant Program Annual Report 2006 – 2008

Table 7: Statistics on Youth Services

	2003	2004	2005	2006	2007
Residential Support Services					
Number of Facilities	19	15	15	15	15
Number of Counties	17	14	14	14	14
Number of Beds	170	153	153	153	153
Number of Youth Served	1452	1326	1104	1104	1074
Runaway Shelter					
Number of Facilities	2	2	1	1	2
Number of Counties	2	1	1	1	1
Number of Beds	16	10	10	10	10
Number of Youth Served	N/A	N/A	N/A	N/A	N/A
Residential Children Services (Level I)					
Number of Facilities	13	13	11	11	10
Number of Counties	11	10	7	8	8
Number of Beds	109	115	81	83	82
Number of Youth Served	108	148	112	112	62
Residential Children Services (Level II)					
Number of Facilities	22	20	21	21	20
Number of Counties	13	13	13	13	13
Number of Beds	363	334	334	341	347
Number of Youth Served	684	880	970	970	637
Residential Children Services (Level III)					
Number of Facilities	6	6	6	8	9
Number of Counties	6	6	6	8	8
Number of Beds	227	205	215	252	262
Number of Youth Served	494	614	678	678	546
Psychiatric Residential Treatment Facilities					
Number of Facilities	4	4	4	3	3
Number of Counties	4	3	3	2	2
Number of Beds	N/A	N/A	N/A	N/A	N/A
Number of Youth Served	N/A	N/A	N/A	N/A	N/A

Cost of Substance Abuse to West Virginia's Child and Adult Welfare System

CASA estimates that U.S. states spent \$10.6 billion on child welfare programs and that 74.5% of this amount was caused or exacerbated by substance abuse. These figures do not capture the cost of substance abuse to the child welfare system in its entirety, as children who are neglected or abused by a parent with substance abuse problem will likely abuse their own children and will, in the future, likely abuse drugs and/or alcohol themselves. Further, not all the effects of maltreatment can be treated. For example, untreatable brain injuries resulting from maltreatment may result in negative quality of life, the cost of which cannot be estimated. There are also likely to be other indirect and future costs that cannot be currently estimated. In West Virginia, CASA estimated that substance abuse cost the child welfare system about \$57 million in 2005.

As shown in Tables 1 and 8, there were no total expenditure data for 2005 but the present study estimates that substance abuse cost a total of \$119 million in 2006 when both state and federal funds are considered (Table 1). However, this cost includes expenditures of both federal and state funds unlike CASA which mainly captured state spending. The total amount spent on child and adult welfare declined by \$86 million in 2008, thus, resulting in a decline of \$43 million in the amount attributable to substance abuse in 2008. However, the decline is likely artificial. Additional investigation revealed that the discrepancy in expenditures between the years is likely due to changes in the agencies reporting and the expenditure categories included in the total.

As a result of this artificial decline due to reporting problems, this study could not project how much substance abuse would cost the child and adult welfare system in the future. Rather, the current cost in 2008 was used as the least cost estimate for 2009 and 2017. Future data will be needed to unravel the current problem. Additionally, TANF transfers were excluded from the final substance abuse cost in Table 8 to prevent double counting since a subsequent section in the present report is dedicated to examining how much substance abuse cost the TANF program in West Virginia.

Table 8: Cost of Substance Abuse in the Child and Adult Welfare System

	2006				2007				2008			
	SSBG	TANF Transfer	Other Federal, State, And Local	Total	SSBG	TANF Transfer	Other Federal, State, And Local	Total	SSBG	TANF Transfer	Other Federal, State, And Local	Total
Adoption	\$695,207	\$1,092,830	\$23,015,620	\$24,803,657	\$920,258	\$2,496,572	\$20,114,735	\$23,531,565	\$1,007,526	\$387,038	\$3,104,028	\$4,498,592
Day Care - Children	\$832,818	\$1,309,149	\$56,297,665	\$58,439,632	\$400,000	\$0	\$52,960,780	\$53,360,780	\$120,836	\$0	\$40,948,585	\$41,069,421
Foster Services - Adults	\$521,614	\$819,951	\$7,678,484	\$9,020,049	\$690,444	\$0	\$6,103,737	\$6,794,181	\$190,865	\$73,320	\$568,026	\$852,211
Foster Services - Children	\$1,130,025	\$1,776,341	\$89,176,869	\$92,083,235	\$1,495,287	\$0	\$86,566,167	\$88,061,454	\$584,539	\$224,549	\$1,800,871	\$2,609,959
Protective Services-Adults	\$1,043,228	\$1,639,902	\$11,794,552	\$14,477,682	\$1,380,885	\$0	\$8,071,241	\$9,452,126	\$1,939,921	\$745,214	\$5,976,592	\$8,661,727
Protective Services - Children	\$3,129,685	\$4,919,705	\$27,719,940	\$35,769,330	\$4,140,640	\$11,243,318	\$8,709,759	\$24,093,717	\$5,824,758	\$2,237,562	\$17,945,162	\$26,007,482
Special Services - Youth-at-risk	\$869,635	\$1,367,022	\$10,962,267	\$13,198,924	\$1,151,078	\$3,123,994	\$5,573,647	\$9,848,719	\$599,304	\$230,221	\$1,846,362	\$2,675,887
Counseling	\$261	\$410,631	\$1,912,012	\$2,322,904	\$345,222	\$937,854	\$93,388	\$1,376,464	\$0	\$0	\$0	\$0
Administrative Costs	\$2,040,376	\$3,207,366	\$0	\$5,247,742	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$10,262,849	\$16,542,897	\$228,557,409	\$255,363,155	\$10,523,814	\$17,801,738	\$188,199,454	\$216,519,006	\$10,267,749	\$3,897,904	\$72,209,626	\$86,375,279
Amount Attributable to Substance Abuse				\$127,681,578				\$108,259,503				\$13,187,640

Source: Table F-1, Allocations and Expenditures by State, 2008; Social Services Block Grant Program Annual Report 2006-2008

Table 9: Substance Abuse Cost to the Child and Adult Welfare System

	2006	2007	2008	2009	2017
Total Expenditure	\$255,363,155.00	\$216,519,006.00	\$86,375,279.00	N/A	N/A
TANF Transfer	\$16,542,897.00	\$17,801,738.00	\$3,897,904.00	N/A	N/A
Total minus TANF Transfer	\$238,820,258.00	\$198,717,268.00	\$82,477,375.00	N/A	N/A
Amount Attributable to SA	\$119,410,129	\$99,358,634	\$41,238,687	\$41,238,687	\$41,238,687

Source: Social Services Block Grant Program Annual Report 2006 – 2008

Family Welfare System

Substance abuse highly impacts the family welfare system (Office of Applied Studies, 2002; The National Center on Addiction and Substance Abuse (CASA) at Columbia University, 2009a; United States General Accounting Office (GAO), 2003); this system provides assistance in form of cash, food, transportation, and other needed services for families who are unemployed or in a short-term crisis situation. Drug and alcohol abuse may hinder individual’s ability to be employed and self-supporting, which could cause them to need income assistance. However, this situation does not have to be permanent. The review of CASA’s Substance Abuse Research Demonstration (CASASARD) revealed that providing intensive case management approach to individuals receiving income support programs is cost effective (2009a) and may provide the support they need to stop substance abuse and become productive citizens.

CASASARD, conducted in collaboration with the New Jersey Department of Human Services, Rutgers University, and the National Council on Alcohol and Drug Dependence provided a number of services as part of the overall project to TANF recipients in the experimental group. Those services included outreach, screening, assessment, services to enhance motivation and increase engagement in treatment, providing treatment, coordinating support services, monitoring and advocacy, aftercare follow-up, peer support, relapse monitoring and crisis management. Those in the control group received the usual care or standard practice. Post-program analysis showed that only 25% and 24% of those who received the intensive services had a substance abuse problem at the end of 1 and 2 years, respectively, compared to 41% and 47% of respondents who received the standard program provided to the control group. Additionally, 22% of those who received CASASARD’s intensive services were employed fulltime 2 years later compared to 9% of those who received the standard program. Several other programs have shown effectiveness similar to CASASARD. CASA has estimated that “for each unemployed female welfare recipient with a substance use disorder who becomes substance-free and self-supporting, the economic benefit to society is about \$48,000 annually in avoided welfare, health care and criminal justice costs, and contribution to the economy in employment” (CASA, 2009a, p. ii).

The present study examines several programs providing income and other social services to families: the Temporary Assistance to Needy Families (TANF), Supplemental Support Program (SSP), and Emergency Assistance Program. For these TANF and related programs, this study estimates how much substance abuse has cost in West Virginia in the past years and how much it will cost in 2017. The final subsection examines the Supplemental Nutrition Assistance Program, also known as food stamps; it presents the numbers of recipients, the total expenditure in the program, and how much substance abuse costs the program.

Temporary Assistance to Needy Families Program

Research has found that substance abuse is a critical obstacle to employment for many welfare recipients (The National Center on Addiction and Substance Abuse (CASA) at Columbia University, 2009b). However, because of differences in the substance of focus, there are significant variations in the estimates of the proportion of welfare recipients who are affected by substance abuse. National estimates range from 11% to 27% (Metsch & Pollack, 2009). The U.S. Department of Health and Human Services (DHHS) found 10.5% of Aid to Families with Dependent Children (AFDC) recipients above age 15 reported illicit drug use. A similar percentage of female adults in the surveyed homes reported “some impairment” relating to substance abuse that necessitated receiving treatment alongside work activities. By contrast, CASA estimated that 27% of females over age 14 receiving AFDC were abusing drugs and alcohol. More specifically, 37% of those 18 and 24 years in the AFDC population reported binge drinking or use of illicit drugs.

Apart from such national estimates, some states have conducted studies attempting to measure this phenomenon; but even then, the issue has been approached in different ways. Moreover, West Virginia is not one of the states that have attempted to measure the impact of this phenomenon. In the absence of a local estimate, this study adopts a substance abuse cost of 20% of TANF and general assistance funds, an approximate average of national estimates. This percentage will be later applied to the total expenditure for West Virginia’s TANF and related programs. The goals of West Virginia’s TANF or WV WORKS program are to: “achieve more efficient and effective use of public assistance funds, reduce dependency on public programs by promoting self-sufficiency, and structure assistance to emphasize employment and personal responsibility” (West Virginia Department of Health and Human Resources, 2010a). Table 10 shows WV WORKS’ expenditures over the years. Although the cost in 2009 is lower than in 2006 and previous years, the number of recipients, and therefore the expenditures, have been increasing in the last three years.

Table 10: TANF Recipients and Benefits Received in West Virginia

	2003	2004	2005	2006	2007	2008	2009
TANF Expenditure	\$5,914,098	\$6,124,706	\$3,907,585	\$3,233,391	\$2,849,893	\$2,801,911	\$3,110,146
Total TANF Recipients*	40,485	41,123	32,725	27,170	22,811	21,317	23,254
Adult TANF Recipients	13,018	13,141	9,779	7,672	5,931	5,452	6,291

*Includes both adults and children

Source: Office of Accountability and Management Reporting, WV DHHR

Support Service Program

Some current and previous TANF recipients are also eligible for support service benefits. These support services assist individuals in securing or maintaining employment, or participating in other activities that they would otherwise be unable to participate in. Services provided include payment for clothing, car repair, collateral, contract training, driver’s license, GED examination, professional examination, relocation, self sufficiency bonus, tools, transportation, DUI related expenses, and vehicle insurance. Table 11 shows the number of individuals receiving support service payment and the total benefit received in West Virginia. As discussed earlier, substance abuse is likely responsible for at least 20% of these expenses.

Table 11: Support Service Recipients and Payment

	2007	2008	2009
Total SSP Expenditure	\$325,363	\$278,301	\$447,446
Number of Recipients*	1,994	1,658	2,019

Source: Office of Accountability and Management Reporting, WV DHHR

Emergency Assistance Program

Compared to SSP, the Emergency Assistance Program (EAP) is for emergency situations and for shorter period of time. This type of assistance is limited to one 30 consecutive day period during any 12 consecutive months (West Virginia Department of Health and Human Resources, 2010b). EAP is used to assist individuals and families in meeting a financial crisis when they are without available resources. The program is designed to provide short-term emergency financial assistance with which eligible individuals and families may obtain items or services needed to meet an emergency or crisis. Items of need include rent, utilities, food, household supplies, clothing, transportation and medical services (West Virginia Department of Health and Human Resources, 2010b).

Table 12 shows the total number of individuals who received emergency assistance and the total cost of the assistance they received. Although data suggest increase in overall emergency assistance expenditure, the figures provided by the state have fluctuated and data have not been publicly available for most years. As a result, the present study relied on state-level data provided by the national agency, the Administration for Children and Families, in estimating the overall cost of substance abuse to the family welfare system.

Table 12: Emergency Assistance Benefits

	2007	2008	2009
Total Emergency Assistance (EA) Expenditure	\$134,274	\$123,949	\$157,798
Number of EA Recipients	2,589	2,335	2,838

Source: Office of Accountability and Management Reporting, WV DHHR

Total TANF and Related Service Costs

To estimate how much substance abuse cost the state, this study uses the total cost by state of TANF and TANF-related services provided by the Administration for Children and Families (2010b). This total cost includes (1) Temporary Assistance for Needy Families (TANF) and (2) program expenditure data. Program expenditures include: (1) expenditures for administrative costs and (2) expenditures on transitional services to families that have ceased to receive cash assistance because they have found employment. The transitional services include work-related activities and expenses, child care, transportation, individual development accounts, prevention of out-of-wedlock pregnancies, two-parent family formation and maintenance, non-recurrent short term benefits, non-monetary assistance solely under prior law, etc.

Table 13 shows that over \$147 million was expended on the TANF and TANF-related programs in 2009. Using the 20% substance abuse estimate, it is likely that substance abuse cost West Virginia \$29 million in 2009, and that it will only increase in the future. Using polynomial projections to the 6th power, the line that fitted the data best, it is estimated that substance abuse will cost West Virginia close to \$180 in public assistance spending by 2017 if current trends prevail. If a continuum of care is provided, public

assistance recipients with substance abuse problems can be rehabilitated to become productive members of the society and TANF cost will be reduced. Further, prevention for today’s non-users and early intervention for individuals’ experimenting with substance abuse today will prevent them from being on public assistance programs in the future because of underlying substance abuse problems.

Table 13: TANF Cost and Cost Attributable to Substance Abuse

	State Expenditure	Federal Expenditure	Total	Amount Attributable to SA
1997	\$28,801,496	\$52,546,797	\$81,348,293	\$16,269,659
1998	\$43,526,202	\$12,058,878	\$55,585,080	\$11,117,016
1999	\$34,881,108	\$51,997,083	\$86,878,191	\$17,375,638
2000	\$39,167,699	\$94,874,660	\$134,042,359	\$26,808,472
2001	\$29,725,185	\$175,241,076	\$204,966,261	\$40,993,252
2002	\$34,446,442	\$179,748,041	\$214,194,483	\$42,838,897
2003	\$34,446,442	\$122,414,606	\$156,861,048	\$31,372,210
2004	\$34,446,445	\$115,408,714	\$149,855,159	\$29,971,032
2005	\$34,446,444	\$89,530,236	\$123,976,680	\$24,795,336
2006	\$34,446,446	\$80,603,228	\$115,049,674	\$23,009,935
2007	\$34,446,446	\$72,104,299	\$106,550,745	\$21,310,149
2008	\$34,442,446	\$80,739,391	\$115,181,837	\$23,036,367
2009	\$34,446,446	\$112,923,047	\$147,369,493	\$29,473,899
2017	N/A	N/A	N/A	\$180,000,000

Source: TANF Financial Data at <http://www.acf.hhs.gov/programs/ofs/data/index.html>

Food Stamps

Substance abuse also places an enormous burden on the Supplemental Nutrition Assistance Program, otherwise known as food stamps (McConnell, Czajka, Cody, & Rodriguez, 2002; Rangarajan & Gleason, 2001). Several reports mention that substance abuse is a key hindrance, along with mental health and homelessness, to able-bodied adults without dependent (ABAWD) food stamp recipients’ ability to access and participate in employment and training activities (McConnell et al., 2002; Rangarajan & Gleason, 2001; United States General Accounting Office (GAO), 2003). Consequently, substance abuse is an important reason why the population of able-bodied adults without dependents receives food stamp. In a study of food stamp recipients who had reached their time limits for leaving the program, Rangarajan and Gleason (2001) reported that 6% of all leavers sought alcohol or other substance abuse treatment; 10% of ABAWDs also reported seeking treatment. In another study, Colorado TANF officials estimated that at least 40% of their food stamp employment and training participants had substance abuse problems (United States General Accounting Office (GAO), 2003).

The conservative 6% prevalence rate for seeking substance abuse treatment reported by Rangarajan and Gleason (2001) is used here as an estimate of recipients receiving food stamp who have substance abuse problem. This is likely a conservative estimate, as Rangarajan and Gleason (2001) suggest this rate underestimated substance use prevalence because not all those affected sought treatment.

Using 6% as the attribution ratio, substance abuse cost the food stamp program an estimated \$24 million in 2009. This figure has increased by over 50% since 2005 and the situation will only get worse with time. Using polynomial projection with order 2, the best fitting line for the data, substance abuse will cost the food stamp program about \$125 million in 2017 if current trends persist.

Table 14: Food Stamp Expenditure and Recipients in West Virginia

	2005	2006	2007	2008	2009	2017
Expenditure	\$258,050,316	\$266,402,597	\$274,884,537	\$304,122,744	\$408,456,434	N/A
Recipients	262,442	267,630	269,343	276,800	305,960	N/A
\$ Attributable to SA	\$15,483,019	\$15,984,156	\$16,493,072	\$18,247,365	\$24,507,386	\$125,000,000

Source: The Food and Nutrition Service (2010)

Conclusion on Cost to the Welfare System

In all, this study estimates that substance abuse cost over \$95 million in West Virginia in 2009 (Table 1). An estimated \$41 million of this was in the child and adult welfare system, \$29 million and \$24 million were related to how much substance abuse costs TANF and related programs, and the food stamp program, respectively. This amount will rise to at least \$346 million in 2017 (Table 6) if current trends persist and urgent actions are not taken.

These cost are not inevitable, however. Research suggests that intensive treatment, recovery, and support services would enable affected TANF recipients to obtain and retain stable employment. This cost was not included in the final estimate but was estimated to demonstrate what is being lost when the society fails to provide an intensive case management approach and a comprehensive continuum of care. CASA has shown that each unemployed welfare recipient with a substance abuse disorder who becomes substance-free, employed, and self-supporting yields a net benefit of \$48,000 annually in avoided health care, welfare, and criminal justice cost, and in gains contributed to society as productive and employed members. Assuming 20% of West Virginia's adult TANF population is receiving aid due to an underlying substance abuse problem, then it can be estimated that over \$60 million will be lost annually because of TANF adult recipients who are abusing drugs and alcohol and did not receive intensive case management approach in 2009. Table 15 shows the estimate for the past years. Many of the individuals represented in Table 15 face multiple, but not insurmountable, physical, social, and health obstacles to employment. Providing an intensive case management approach benefits society, individuals, and families. According to CASA (2009a), such an approach also appears to be a cost-effective option.

Table 15: Annual Avoidable Cost of TANF

	2003	2004	2005	2006	2007	2008	2009
TANF Adult Recipients	13,018	13,141	9,779	7,672	5,931	5,452	6,291
Avoidable cost*	\$124,972,800	\$126,153,600	\$93,878,400	\$73,651,200	\$56,937,600	\$52,339,200	\$60,393,600

*Avoidable cost = (0.20 * number of recipients) * \$48,000

Currently, society is losing the benefit of having productive citizens who do not burden the system by not allowing intensive case management approach to dealing with substance abuse issues. In the future, the financial burden of substance abuse will only increase if current treatment approach continues and current trends persist. The present study estimates that today's cost of \$95 million will increase to \$346 million in less than a decade if current trends persist and if urgent action is not taken. This is an unacceptable and unsustainable option for West Virginia. Therefore, there is urgent need for a

continuum of care with the option of an intensive case management approach for substance abuse clients in the state's welfare system. This is the only way to both stem the increases in the financial burden of substance abuse and, perhaps, to cope with the non-financial impact as well.

References

- Administration for Children and Families (2008). Social Services Block Grant Program Annual Report 2006 - 2008. Retrieved August 30, 2010, from <http://www.acf.hhs.gov/programs/ocs/ssbg/reports/reports.html>
- Administration for Children and Families (2010a). *Child maltreatment 2008*. Washington, DC: Administration on Children, Youth and Families, Children's Bureau, U.S. Department of Health and Human Services.
- Administration for Children and Families (2010b). TANF financial data. Retrieved September 1, 2010, from <http://www.acf.hhs.gov/programs/ofc/data/index.html>
- BCF Staff (2010). *Phone conversation with a staff at the Bureau of Children and Families at 9am on August 11*.
- Besinger, B. A., Garland, A. F., Litrownik, A. J., & Landsverk, J. A. (1999). Caregiver substance abuse among maltreated children placed in out-of-home care. *Child Welfare, 78*.
- Chaffin, M., Kelleher, K., & Hollenberg, J. (1996). Onset of physical abuse and neglect: Psychiatric, substance abuse, and social risk factors from prospective community data. *Child Abuse and Neglect, 20*, 191-203.
- Curtis, P., & McCullough, C. (1993). The impact of alcohol and other drugs on the child welfare system. *Child Welfare, 72*, 533-542.
- Dore, M. M., Doris, J. M., & Wright, P. (1995). Identifying substance abuse in maltreating families: A child welfare challenge. *Child Abuse & Neglect, 19*, 531-543.
- English, D. J., & Marshall, D. B. (1999). Characteristics of repeated referral to child protective services in Washington state. *Child Maltreatment, 4*, 297-307.
- Famularo, R., Kinscherff, R., & Fenton, T. (1992). Parental substance abuse and the nature of child maltreatment. *Child Abuse & Neglect, 16*, 475-483.
- Flanzer, J. P. (1990). Alcohol and family violence: Then to now-who owns the problem. *Alcoholism Treatment Quarterly, 3*, 61-79.
- McConnell, S., Czajka, J. L., Cody, S., & Rodriguez, N. (2002). *Food stamp time limits: A burdensome policy that weakens the safety net*. Princeton, NJ: Mathematical Policy Research, Inc.
- McCurdy, K., & Daro, D. (1994). *Current trends in child abuse reporting and fatalities: The results of the 1993 annual fifty state survey*. Chicago: National Committee to Prevent Child Abuse.
- McCurdy, K., & Daro, D. (1994). *Current trends in child abuse reporting and fatalities: The results of the 1993 annual fifty state survey*. Chicago: National Committee to Prevent Child Abuse.
- McNichol, T., & Tash, C. (2001). Parental substance abuse and the development of children in family foster care. *Child Welfare, 80*, 239-255.
- Metsch, L., & Pollack, H. (2009). Substance abuse and welfare reform knowledge asset. Retrieved April 25, 2010, from http://saprp.org/knowledgeassets/knowledge_detail.cfm?KAID=5
- Mucowski, R. J., & Hayden, R. (1992). Adult children of alcoholics: Verification of role typology. *Alcoholism Treatment Quarterly, 9*, 127-140.
- Murphy, J. M., Jellinek, M., Quinn, D., Smith, G., Poitras, F. G., & Goshko, M. (1991). Substance abuse and serious child maltreatment: Prevalence, risk, and outcome in a court sample. *Child Abuse and Neglect, 15*, 197-211.
- Office of Applied Studies (2002). Substance use among persons in families receiving government assistance. Retrieved from <http://www.oas.samhsa.gov/2k2/GovAid/GovAid.htm>
- Office of Applied Studies (2009). Treatment Episode Data Set (TEDS) Series. Retrieved December 15, 2009, from <http://www.icpsr.umich.edu/cocoon/SAMHDA-SERIES/00056.xml>

- Official at the West Virginia Department of Health and Human Resources (2010). *Email response on September 9, 2010: Re: Another follow up question*
- Petersen-Kelley, A. (1985). Family environment and Alateens: A note on alcohol abuse potential. *Journal of Community Psychology, 13*, 75-76.
- Preli, R., Protinsky, H., & Cross, L. (1990). Alcoholism and family structure. *Family Therapy, 17*, 1-8.
- Public Consulting Group (PCG) (2007). *Integrated funding analysis of mental health and substance use in West Virginia*. Charleston, WV: Public Consulting Group.
- Rangarajan, A., & Gleason, P. M. (2001). *Food stamp leavers in Illinois - How are they doing two years later?* Princeton, NJ: Mathematica Policy Research, Inc.
- Sheridan, M. (1995). A proposed intergenerational model of substance abuse, family functioning, and abuse/neglect. *Child Abuse and Neglect, 519-530*.
- Sheridan, M., & Green, R. G. (1993). Family dynamics and individual characteristics of adult children of alcoholics: An empirical analysis. *Journal of Social Service Research, 17*, 73-97.
- Substance Abuse and Mental Health Services Administration (SAMHSA) (2009). Substance abuse treatment facility locator. Retrieved September 9, 2009, from <http://dasis3.samhsa.gov/PrxInput.aspx?STATE=West%20Virginia>
- The Food and Nutrition Service (2010). Supplemental Nutrition Assistance Program. Retrieved September 5, 2010, from [http://www.fns.usda.gov/pd/17SNAPfyBEN\\$.htm](http://www.fns.usda.gov/pd/17SNAPfyBEN$.htm)
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University (2009a). CASASARDSM: Intensive Case Management for Substance-Dependent Women Receiving Temporary Assistance for Needy Families Retrieved from <http://www.jointogether.org/resources/pdf/casasard-white-paper.pdf>
- The National Center on Addiction and Substance Abuse (CASA) at Columbia University (2009b). *Shoveling up II: The impact of substance abuse on federal, state, and local budgets*. New York, NY: The National Center on Addiction and Substance Abuse.
- U. S. General Accounting Office (1994). *Foster care: Parental drug abuse has alarming impact on young children. (GAO 13: HEHS-94-89)*. Washington, DC: U. S. Government Printing Office.
- U. S. General Accounting Office (1998). *Foster care: Agencies face challenges securing stable homes for children of substance abusers. (GAO 13: HEHS-98-182)*. Washington DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services Administration for Children and Families (2002). *Substance abuse and child maltreatment: National Clearing House on Child Abuse and Neglect Information*.
- United States General Accounting Office (GAO) (2003). *Food stamp employment and training program: Better data needed to understand who is served and what the program achieves*. Washington, DC: United States General Accounting Office.
- West Virginia Department of Health and Human Resources (2010a). *WV income maintenance manual*. Charleston, WV: West Virginia Department of Health and Human Resources.
- West Virginia Department of Health and Human Resources (2010b). *WV income maintenance manual*. Charleston, WV: West Virginia Department of Health and Human Resources.
- West Virginia Partnership to Promote Community Well-being (2008). *The West Virginia comprehensive statewide prevention plan*. Charleston, WV: West Virginia Prevention Resource Center.
- West Virginia Partnership to Promote Community Well-being (2010). *Cost of substance abuse in West Virginia: The Education System*. Charleston, WV: West Virginia Prevention Resource Center.
- WV Bureau of Children and Families (2005). *State of West Virginia report on intended expenditures for the title XX social services block grant July 1, 2007 - June 30, 2008*.
- WV Bureau of Children and Families (2007). *2007 West Virginia Youth Annual Report: West Virginia Department of Health and Human Resources*.