

CHAPTER 7: Case Study Analysis of Disparities in Mental Health Status and Substance Abuse Prevalence in the Appalachian Region and Access to Mental Health and Substance Abuse Treatment Services

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7.1 Introduction

To supplement the quantitative findings presented in the previous chapters, NORC and East Tennessee State University conducted case studies using a “Socioeconomic Twins” methodology. The studies were purposively selected and bracketed with “twin” counties in Kentucky, Virginia, and West Virginia. Two counties in each state were selected that were socioeconomically similar, yet varied on measures of substance abuse and mental health. An in-depth discussion of the selection process is provided below. The case study approach provides for a comprehensive understanding of a complex instance or instances that is acquired by extensive description and analysis. Appropriate selection is crucial to internal consistency and the plausible comparison of the evidence in context. One unique feature of case studies is that data is concurrently collected and analyzed leading to “thick” descriptions from multiple data sources, particularly first hand observations.

The goals of the case studies were to:

- Determine if community perceptions of substance abuse/mental health (MH/SA) issues match available data;
- Identify additional data sources used at the community level;
- Learn first hand about the community’s response to substance abuse and mental health concerns including statistical presentations of local data; and
- Identify potential explanations for variance in community MH/SA indicators.

The purpose of the study was to determine the extent of local assessments of the mental health and substance abuse situation as well as the perceived validity of nationally available quantitative data to serve as an index of the severity of local substance abuse prevalence, mental health status and access to treatment services.

7.2 Case Study Process

ETSU and NORC developed and piloted a five phase process for the socioeconomic twins case study:

1. Identification of potential data sets/sources using a Dephi process.
2. Selection of the 6 paired Appalachian counties using a socio-economic twins methodology.
3. On-site focus group and key informant interviews with community leaders to:
 - Respond to secondary data identified by NORC that led to the initial selection of the county with respect to accuracy, reliability and validity of how the standard measures reflected the nature of the community’s issues; and
 - Assess overall impressions of substance abuse and mental health problems including community issues, systems capacities, recent incidents and community reaction and response to the research issues.
4. Development of a community resource inventory to identify available services for prevention and treatment.
5. Development of key findings based on an analysis of the textural data derived from the interviews and focus groups. Using an induction method the analysis focused on the organization of broad conceptual categories and then more refined coding for underlying themes. Finally, the textural data was triangulated with secondary data profiles, and county descriptors with researcher’s field notes to produce an understanding of the incidence of and

explanation for disparities in mental health status, substance abuse prevalence and access to treatment services in these Appalachian communities.

The following sections describe the identification of potential data sources, selection of the pairs of counties for the case study, descriptions of each pair of case study sites, the community responses to the county data profiles and focus group/key informant interview questions, and conclusions. The tables include county model programs, strength and treatment gaps, and in-depth descriptions of the model programs listed.

7.3 Phase 1: Identification of Potential Data Sets/Sources

A Delphi process with an expert panel was used to identify the data elements they considered to be most useful as key indicators in differentiating levels of substance use/abuse in Appalachian communities. The Delphi process created another tier of possible or ideal data sources.

In late spring of 2007, the following two questions were emailed to members of the Coalition on Appalachian Substance Abuse Policy (CASAP), a regional coalition of substance abuse practitioners, educators and researchers:

1. What do you believe are the most critical data elements (indicators) needed in determining high/low substance use/abuse in a community (list as many as appropriate)?
2. How readily available and reliable are these data elements (indicators)?

CASAP members were given two weeks to reply to Round One of the Delphi process. Round Two consisted of CASAP members ranking each data element received in Round One as: 1 = very important; 2 = somewhat important; or 3 = not important. From the Delphi process, the following substance use/abuse indicators were identified.

- Socio-economic status
- Poverty rates
- Per capita incarceration rate for drug offense
- Substance abuse related arrests per capita/1,000
- Drunk & impaired driving arrests
- Suicide rate
- Overdose death rates
- Child abuse and neglect reports
- Drug related child protective services interventions/ social service investigations
- Birth certificate data on maternal smoking and substance abuse
- Prescription rates of abused drugs
- Service utilization rates for substance abuse /mental health treatment
- Mortality from alcohol or drug related causes
- Accident rates from AOD related causes
- Substance abuse screening tests conducted by schools and employers
- Behavioral Risk Factor Survey

Once identified, data sets and elements were analyzed by the NORC team to assess sources available across the Appalachian region that could be integrated into community profiles for use in case study analyses.

7.4 Phase 2: Selection of Pairs of Counties for Case Study

This section describes the process used to select pairs of counties for inclusion in the qualitative component of this study. Counties were ranked in terms of socio-demographic characteristics and substance abuse and mental health characteristics. Databases of counties were developed accordingly. The objective was to select pairs of counties that are similar in terms of socio-demographic characteristics, but relatively dissimilar overall in terms of their mental illness and substance abuse indicators, medical care, and mental health professional shortage area statuses, using existing or derived measures. Selection involved a three step process:

1. Pertinent measures were identified and retrieved as the source variables;
2. Statistical procedures were performed and matrices developed to calculate socio-demographic similarity/dissimilarity and MH/SA similarity/dissimilarity for all Appalachian counties within each state. Then, these “distance matrices” were transformed into pairs which were subsequently ranked and sorted based on the distance values; and
3. Selection criteria were set up to identify pairs that were socio-demographically similar, but dissimilar on MH/SA indicators, and the final pairs were selected accordingly.

Data Sources

Measures utilized for the case study analyses were primarily from three major sources: the Appalachian Regional Commission (ARC); the Area Resource File (ARF); and the National Survey on Drug Use and Health (NSDUH).

1. County-level Socio-demographic Characteristics

The following county-level measures of socio-demographic characteristics are selected as the basis upon which to compare the similarities among counties.

- a. The *2003 population size* estimates are from the 7/1/2003 County Population Estimates File for Internet Display from the U.S. Bureau of the Census.
- b. The *2000 population density per square mile* estimates are from the 2000 Census.
- c. The *2000 percentage of urban population* is from the 2000 Census.
- d. The *2003 Urban Influence Codes* divide the counties, county equivalents, and the independent cities in the U.S. into 12 groups based on population and commuting data from the 2000 Census of the population, in the case of Metropolitan counties, and adjacency to metro area in the case of non-metropolitan counties.²³
- e. The *2000 median home value* is from the 2000 census.
- f. The *2004 economic development level codes* are provided by the Appalachian Regional Commission.

²³ The codes were originally from the U.S. Department of Agriculture’s Economic Research Service (ERS) website at <http://www.ers.usda.gov/Data/UrbanInfluenceCodes/>.

2. County-level Substance Abuse, Mental Health, and Service Delivery Statuses

The selected measures²⁴ and their original sources are listed in the following:

- a. *Alcohol abuse or dependence in past year* is from the 2002-2004 pooled National Survey on Drug Use and Health.
- b. *Abuse or dependence of any illicit drugs in past year* is from the 2002-2004 pooled National Survey on Drug Use and Health.
- c. *Non-prescription use of painkillers in past year* is from the 2002-2004 pooled National Survey on Drug Use and Health.
- d. The *percentage of persons having serious psychological distress problems in past year* is from the 2002-2004 pooled National Survey on Drug Use and Health.
- e. The *percentage of persons in correctional or juvenile institutions in past year* is calculated using measures from the Area Resource File
- f. The *percentage of persons in mental health hospitals or institutions* is calculated using measures from the Area Resource File
- g. The *suicide rate* is calculated using the average numbers of suicides in the past three years and population size from the Area Resource File.
- h. An *index on the Health Professional Shortage Area status* is created based on two measures – the 2003 codes for Health Professional Shortage Area (HPSA) for Primary Medical Care¹¹⁴ and the 2003 codes for Health Professional Shortage Area (HPSA) for Mental Health.¹¹⁵ Both were originally from the Bureau of Primary Health Care (BPHC) and are available in the Area Resource File.

Measuring the Similarities of County Pairs

The similarities between counties in terms of various pertinent county-level characteristics are measured quantitatively using the DISTANCE procedure in the Statistical Analysis System (SAS). Distance matrices are constructed to list the degree of similarity among all possible pairs of counties within each state¹¹⁶ based on source variables listed earlier. To address the potential issue that variables with large variances tend to have more of an effect than those with small variances, input variables with different measurement levels (interval, ordinal) have been taken into account through standardization before the similarity measures are computed. In order to rank the pairs of counties, the matrices are then transformed into a rectangular data structure in which all county-pairs are listed one by one within each state. The distance matrices were obtained separately through socio-demographic characteristics and through the substance abuse, mental health and service coverage measures. As a result of this procedure, two ranking indexes were created, namely, soc_rank and samh_rank, indicating the socio-demographic and substance abuse and mental health related similarities, separately. The lower the value from the ranking index, the more similarities the pair of counties shared.

²⁴ More measures were considered, including: cigarettes use, binge drinking, past month marijuana use, perceptions of risks of drinking and smoking from household surveys. After preliminary statistical analyses to identify patterns of variations (i.e., via factor analysis), these variables were dropped from being used to construct the similarity matrices.

Composite Ranking Scale and Selection of Final Pairs

We calculated a composite ranking scale by subtracting soc_rank from samh_rank. The resulting value was used to rank pairs of counties in such a way that the higher value would indicate greater dissimilarity on substance abuse and mental health related measures and greater similarity on socio-demographic characteristics. Through the composite ranking scale, three or four pairs of counties from each of the Appalachian states were selected as the candidates of case study sites (see Table 7.1).

After conferring among all NORC team partners, the top three pairs from Kentucky, Virginia, and West Virginia, with each pair having the highest composite ranking scale score in the corresponding state, were selected as the final sites for the case studies. Counties ultimately selected for inclusion in the study were:

Monroe County and Hardy County from West Virginia;
Bland County and Bath County from Virginia; and
Wayne County and Morgan County from Kentucky.

The detailed county-pairs selected at the final stage from the 11 Appalachian States are listed in the following.²⁵

Table 7.1. Selected Four Pairs of Counties Per State in the Appalachian Region Based on the Composite Ranking Score						
County Pairs		Distance		Index Rank		Composite Rank
County 1	County 2	Soc-demo	SAMH	Soc-demo	SAMH	
Alabama						
Tallapoosa	Talladega	0.09399	0.63828	58	662	604
Talladega	Marshall	0.10589	0.60212	75	651	576
Lawrence	Chilton	0.07074	0.53362	25	575	550
Georgia						
Stephens	Chattooga	0.086763	0.60025	76	654	578
Jackson	Gilmer	0.061062	0.46431	34	579	545
Jackson	Fannin	0.091484	0.52175	86	617	531
Kentucky						
Wayne	Morgan	0.041546	0.52521	23	1206	1183
Morgan	Monroe	0.059565	0.50804	42	1172	1130
Morgan	Adair	0.037319	0.48774	19	1115	1096
Mississippi						
Montgomery	Chickasaw	0.09058	0.64941	11	266	255
Winston	Montgomery	0.08435	0.49241	10	245	235
Noxubee	Montgomery	0.12209	0.4788	22	242	220
Winston	Tippah	0.12187	0.46412	21	240	219
New York						
Chautauqua	Allegany	0.56845	0.15715	84	14	70
Tioga	Steuben	0.19801	0.60495	21	87	66
Cattaraugus	Allegany	0.41395	0.0828	68	4	64
Tioga	Cattaraugus	0.17875	0.53048	16	73	57
North Carolina						
Surry	Rutherford	0.04658	0.65497	10	386	376
Yadkin	Madison	0.05974	0.64618	14	377	363
Davie	Alexander	0.06306	0.62176	16	366	350
Surry	McDowell	0.10259	0.67956	48	395	347
Ohio						
Morgan	Meigs	0.09381	0.41246	25	367	342
Noble	Monroe	0.09847	0.41375	28	368	340
Washington	Hocking	0.11086	0.40282	39	359	320
Ross	Hocking	0.11931	0.41563	50	369	319
Pennsylvania						

²⁵ As there are only 3 Appalachian counties in Maryland and 6 Appalachian counties in South Carolina, the “distance” values are not calculated and thus no county pairs are set up for these two states.

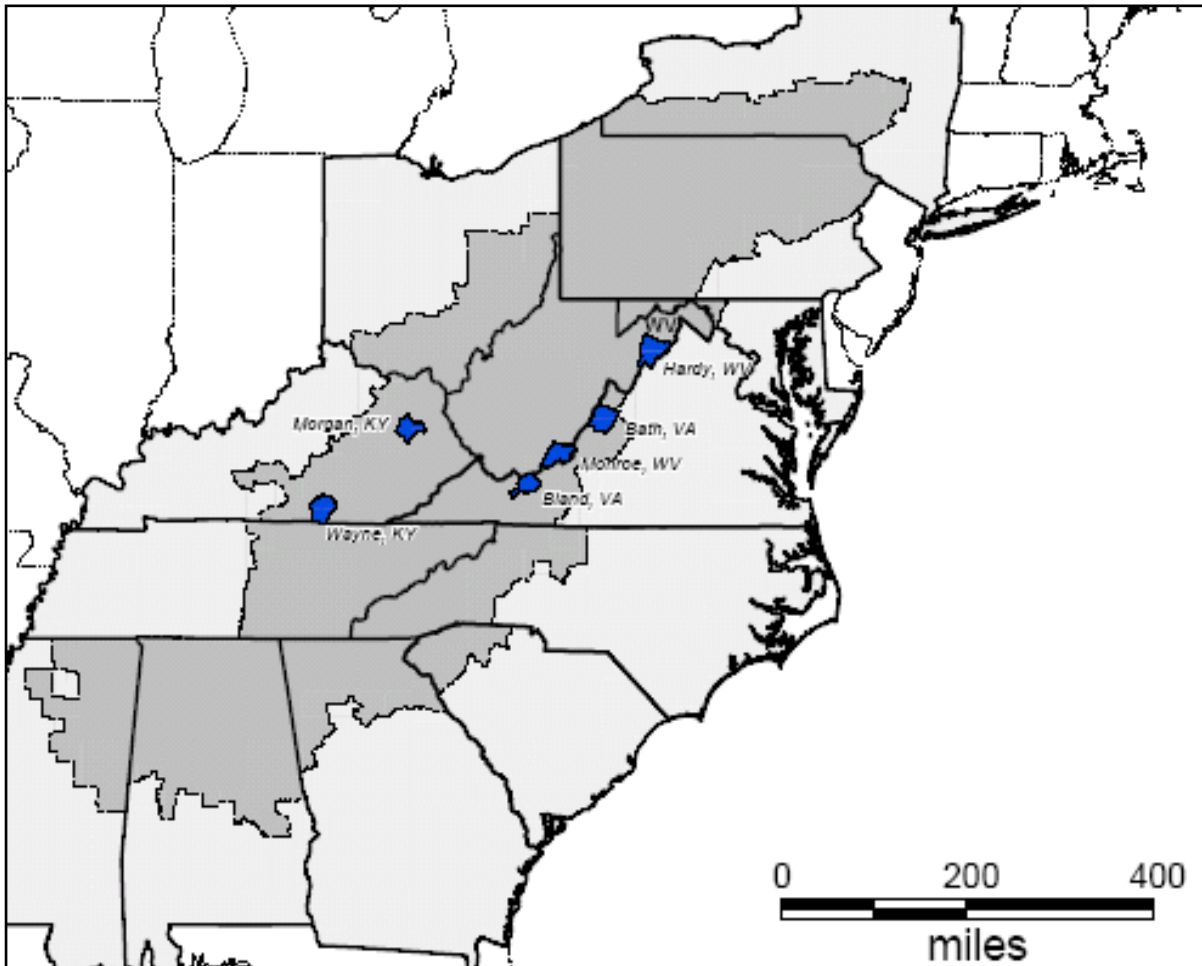
Table 7.1. Selected Four Pairs of Counties Per State in the Appalachian Region Based on the Composite Ranking Score						
County Pairs		Distance		Index Rank		Composite Rank
County 1	County 2	Soc-demo	SAMH	Soc-demo	SAMH	
Somerset	Crawford	0.024427	0.44986	14	1294	1280
Snyder	Juniata	0.045775	0.48158	39	1311	1272
Somerset	Bradford	0.01667	0.42379	6	1263	1257
Huntingdon	Crawford	0.016052	0.41279	5	1246	1241
Tennessee						
Franklin	Claiborne	0.055416	0.58012	32	1123	1091
Overton	Morgan	0.066463	0.58349	56	1130	1074
Scott	Grundy	0.070694	0.58661	64	1136	1072
Roane	Putnam	0.070714	0.58204	65	1126	1061
Virginia						
Bland	Bath	0.06587	0.78649	14	259	245
Highland	Bland	0.08249	0.72867	17	256	239
Highland	Floyd	0.0928	0.65025	20	240	220
Floyd	Bath	0.07618	0.61837	15	231	216
West Virginia						
Monroe	Hardy	0.043199	0.60952	23	1472	1449
Pendleton	Monroe	0.054856	0.61336	35	1475	1440
Lewis	Barbour	0.043253	0.54555	24	1416	1392
Wyoming	Barbour	0.045604	0.53389	26	1402	1376

Site Descriptions

The twinned county sites were selected from the lists above by consensus among ETSU, CASAP and NORC based upon the statistically twinned rankings produced by NORC and modified by local/regional knowledge of local situations.

The following brief descriptions paint a picture of each selected county that accents its uniqueness while illustrating the commonalities among the locations. Information about each county was procured from the County Profiles prepared by NORC (See Appendix D) from Epodunk.com and from maps and other county data available on-line. Figure 7.1 shows the geographic placement of the case study counties in Appalachia.

Figure 7.1 Map of Case Study Counties



MORGAN and WAYNE COUNTIES, KENTUCKY

Of the three sets of county twins selected, the two Kentucky counties, Morgan and Wayne were farthest apart geographically – one in the north central part of the state and one bordering Tennessee. Despite the relative distance, both contain portions of the Daniel Boone National Forest, part of a designated High Intensity Drug Trafficking Area by the Office of National Drug Control Policy. Both counties are non-metropolitan counties, not adjacent to a metropolitan area. Both are classified as economically distressed by the Appalachian Regional Commission. Morgan County is the location of a state medium/minimum correctional facility with a population of 1690 males and staff of 377, with another large facility in neighboring Elliott County.

Wayne County has a larger available labor force (8,767 vs. 5,043 persons) than Morgan County with manufacturing as the largest employment sector and lower unemployment for 2006 (6.7 vs. 8.8). Both Wayne County and Morgan County have a higher unemployment rate than the state rate of 5.7, with higher personal income and almost two thirds as many households. The high school graduation rates and median household income in Wayne County are nearly the same as in Morgan County. Both counties have lower graduation rates (Wayne County at 57.8% and Morgan at 56.4%) than the 74.1% state average in 2000. Both counties have experienced below average population growth (2.9% for

Wayne County and 2.6% for Morgan County) compared to the state of Kentucky. The percentage of persons below the poverty level for 2004 was 27.0% for Morgan County, compared to 24.3 % for Wayne County contrasting with 16.3 for the state.

Neither county is crossed by an interstate highway; transportation into and out of each county is through a rural landscape primarily via state or federal roads. Each county is served by a branch campus of state higher education and counts the local technical facility as a community center for training and education. Monroe County's facility, run by Morehead State University, also houses the public library. Wayne County's ASPIRE Center is a multipurpose community program center.

The state does not report crime on a county-by-county basis but Morgan County had almost twice as many juvenile court referrals in 2005 (33 vs.15). Morgan County has fewer low birth weight babies (7% vs. 10%). The 2004 Area Resource file data on the County Profile listed 11.93% of Morgan County's population in correctional or juvenile institutions vs. 0.1410% for Wayne County. In addition 0.0208% of Morgan County's population was reported to have used mental health hospitals or institutions while Wayne County's rate was 0.0251% contrasting with 0.0485% for the state. All of Morgan County is designated as both a mental health professional shortage area and a primary care health professional shortage area. Wayne County has no mental health professional shortage area designation. Both counties have only outpatient mental health or substance abuse treatment facilities within the county, and both have access to the same number of regional facilities.

Although Wayne County reported slightly more alcohol use or dependence (6.03% vs. 5.95%), both reported rates lower than the state average of 6.47%. Morgan County had greater abuse or dependence of any illicit drugs (3.37% vs. 2.74%), non-prescription use of painkillers (6.83% vs. 5.85%), serious psychological distress problems (12.61% vs. 11.49%) and a higher suicide rate (0.0215 vs. 0.0153) as compared to Wayne County. Morgan County also demonstrated higher rates of tobacco use and cigarette smoking, alcohol use in the past month by 12-20 year olds, binge alcohol use, and illicit drug use including marijuana and cocaine use. Both counties have active federally funded anti-drug coalitions and local programs targeting youth in the schools and community, though impressions from Wayne County indicated fewer extracurricular programs. Morgan County planned to host a rotating regional drug court by the end of the 2007.

BLAND and BATH COUNTIES, VIRGINIA

Bath County is located along the northern portion of Virginia's border with West Virginia. Bland County occupies a similar position on the border about three hours south. In 2003, the USDA classified Bath County as a non-metro, completely rural county with less than 2,500 urban population. Neither county has more than 7,000 people according to 2006 U.S. Census estimates. The Appalachian Regional Commission classifies Bland County as economically transitional and Bath County as competitive. Bland is bisected by I-77 which brackets access to the county by tunnels. Bath is served by one U.S. highway intersecting a state highway. Both counties contain portions of national forests and much forested recreational land. The Appalachian Trail crosses Bland County.

Personal income appears higher in Bath County (\$31,520 vs. \$22,200) with a greater proportion of the public with high school diplomas (74% v. 70.9%) and college degrees (11.1% vs. 9.2%) than Bland County. Poverty levels were higher in Bland County (11.9% vs. 7.3%). Bath County reported a population change of 4.6% in the 2000-2006 period while Bland had a slight change of 0.5%. Median home values in 2000 in Bath County were \$79,700 vs. \$71,500 in Bland County. There were slightly

more households in Bland County (2,568 vs. 2,053) and the labor force was larger (3,211 vs. 2,935) than in Bath County in 2006. USDA 2006 unemployment figures are similar at 3.6 for Bland County and 3.2 for Bath County compared to 3.0 for Virginia. Employment is mostly in the light manufacturing sector in Bland County and in the construction sector in Bath County, boosted by new luxury homes building. A major employer in the county is a nationally known luxury resort that provides high-end tourism activities.

The County Profile shows that Bland County has a greater percentage of its population in correctional/juvenile institutions (8.59% vs. 0.12% for Bath County), but neither county records anyone being treated in mental health institutions. Bland County is also the home of the Bland Correctional Center, a level 2, male-only prison. Bland County is wholly designated as both a mental health shortage area and a primary care health professional shortage area; Bath County has no designated mental health professional shortage areas, though it is wholly designated as a primary care health professional shortage area. There are over 100 substance abuse treatment facilities within a 100 mile radius of Bland County, but only 42 within 100 miles of Bath County. Bath County is served by two substance abuse out-patient offices, while Bland County has four.

Alcohol abuse or dependence rates are similar at 7.82% for Bath County and 7.52% for Bland County (7.67% is the average for Virginia). Rates are also similar for abuse or dependence of any illicit drugs (3.06% for Bath County vs. 2.95% for Bland County) and for the nonprescription use of painkillers (5.16% for Bath County vs. 4.94% for Bland County). Rates of serious psychological distress, however, are higher for Bland County (9.22%) versus Bath County (8.59%). Bath County shows slightly more people needing but not receiving treatment for alcohol use (7.36% vs. 7.05%) and needing but not receiving treatment for drug use (2.61% vs. 2.57%) than Bland County. Bland County residents used more past month tobacco (33.43% vs. 31.67%) and cigarettes (28.22% vs. 26.61%) as reported in 2002-2004, but Bath County showed more alcohol use (50.48% vs. 42.15%) though Bland was a little higher on past month binge drinking by 12-20 year olds at (23.61% vs. 23.22%). Bland County had slightly more past month marijuana use (5.84% vs. 5.65%), past year use (10.06% vs. 9.58%), and first use (2.14% vs. 1.82%). Cocaine use was also slightly higher in Bland County (2.37% vs. 2.31%). Bath County had a greater use of any illicit drug other than marijuana (3.92% vs. 3.79%).

Bath County reports some in-school drug prevention programs and the support of churches. The county administration, schools, the National Guard and the community services board have taken the lead in Bland County to provide in-school and after school programs. Bland County schools have an assigned sheriff's officer while Bath County schools are actively served by the sheriff's department. Bland County has a drug prevention coalition. Efforts to pull Bath County into the Rockbridge Area Community Service Board's Prevention Services have not been successful to date, especially since it is administered from an office over an hour away. Neither county has inpatient mental health or residential treatment facilities. Long term residential treatment is located 29 miles from Bland County and over 53 miles away for Bath residents. Both counties are served by regional community services offices which supply outpatient treatment and referrals.

MONROE and HARDY COUNTIES, WEST VIRGINIA

Hardy and Monroe Counties occupy comparable positions on the West Virginia border to the Virginia counties, also within national forest land. Neither is served by a limited access interstate highway, but Hardy County is well-linked about an hour each way to I-68 and I-81. Hardy County has a large proportion of residents of German ancestry and occupies a broad fertile swath of agricultural land in

the valley of the South Branch of the Potomac River. Monroe County is located only a half hour south from I-64 and the Greenbrier resort area.

While both counties have agricultural bases, Monroe County counts the public administration sector as its chief employer. Hardy County has several retail and natural resource production and processing plants, resulting in a larger labor force (7,271 persons vs. 5,962 persons) and a lower rate of unemployment for 2006 (3.9 vs. 5.5) compared to Monroe County. Virginia's unemployment rate is 4.9% by comparison. The poverty rate in Monroe County is higher at 14.3% vs. 12.5% for Hardy County. The counties have nearly identical populations (13,420-13,510), and are classified as economically transitional by the Appalachian Regional Commission.

Hardy County exhibits greater overall median home value (\$74,700 vs. \$64,700 for Monroe County) and median household income (\$35,361 vs. \$31,069 for Monroe County). While Hardy County experienced a 5.9% change in population, Monroe grew at 2.4%, both below the average for West Virginia as a whole in the 2000-2006 period. Monroe County has a greater percentage of high school graduates (73.7% vs. 70.3%), but Hardy County has a higher percentage of college graduates (9.4% vs. 8.2%). Representatives from Hardy County reported a growing influx of retirees and second home builders on its eastern border which is within two hours of Washington, D.C.

Monroe County's Profile reported that 9.53% of its population was housed in correctional or juvenile institutions while Hardy County showed no figures in that category according to the 2004 Area Resource File. Neither county reported any residents in mental health hospitals. Hardy County is wholly designated as mental health professional shortage area and partially designated as a primary care professional shortage area. Monroe County is wholly designated as primary care professional shortage area, but has no mental health professional shortage designation. More Monroe County residents needed but did not receive treatment for alcohol use (6.53% vs. 6.0%) and needed but did not receive treatment for drug use (2.91% vs. 2.35%) according to the National Survey on Drug Use and Health, 2002-2004. Monroe County had a greater proportion of residents reporting serious psychological problems (13.66% vs. 11.07%) and a greater suicide rate (0.014% vs. 0.0079%) than Hardy County. Hardy County has 135 substance abuse treatment facilities within a 100 mile radius while Monroe County has about 52. Neither has an in-patient facility located in the county though Monroe County's out-patient facility treats co-occurring mental health and substance abuse disorders and offers detoxification. Both counties have programs that treat adolescents.

Data for Monroe County show that 6.88% of residents exhibit alcohol abuse or dependence vs. 6.39% for Hardy County, both less than the 6.93% for the state. Monroe County has a 3.33% rate of abuse or dependence on any illicit drugs (compared to 2.77% for Hardy), which is greater than the state average of 3.08%. Monroe County also has a higher rate of past month nonprescription painkiller use (6.58% vs. 4.54%), past month tobacco use (39.45% vs. 37.88%) and past month cigarette smoking (31.58% vs. 29.74%) than Hardy County. However, Hardy County showed greater past month use of alcohol (39.05% vs. 28.58%) and past month binge alcohol use (19.65% vs. 17.39%). Monroe County had more past month use of marijuana (5.08% vs. 4.83%), greater past year use of marijuana (10.01% vs. 9.26%), greater past month use of illicit drugs (7.08% vs. 6.51%), greater past month illicit drug use other than marijuana (4.04% vs. 3.48%) and greater past year cocaine use (2.48% vs. 2.05%) than Hardy County.

Both counties have prevention coalitions and applied for funds through the state's Substance Abuse and Mental Health Services Administration Strategic Prevention Framework-State Incentive Grant

(SPF-SIG) initial planning program, though neither county was selected to receive funding for 2007-2008. Hardy County has a dedicated sheriff's deputy present in its schools. The 4-H program through the county extension offices organizes activities for youth in both counties. Both counties indicate that the faith community also provides support for prevention of substance abuse.

7.5 Phase 3: Onsite Focus Group and Key Informant Interviews

Community members were identified in the target counties using key leaders or contacts. Key contacts were the researcher's essential link "inside" the population of interest and were used to facilitate the recruitment of participants who could provide meaningful data. Identities of key leaders in each community were provided by members of the Coalition on Appalachian Substance Abuse Policy (CASAP). These leaders were asked to provide contact information for community members who were associated with substance abuse and mental health education, prevention, treatment, etc. as well as concerned citizens. All community members lived and/or worked in the targeted county and represented at least one predetermined stakeholder group. Multiple stakeholders are essential to integrating a broad-based coalition with values diversity for long-term effectiveness. Seeking out multiple community stakeholders was a condition of the methodology to ensure depth of data.

Focus groups were comprised of a diverse set of community members, including representatives of multiple stakeholder groups such as law enforcement, medical and mental health practitioners, school personnel, business representatives, county extension agents, social service providers and county administrators. These stakeholders were presumed to be aware of the county's substance abuse and mental health issues. Participants were contacted initially by mail. The letter was followed within a week by a personal telephone confirmation. In a few instances, email was used for contact when no address or phone number were supplied.

Six focus group interviews were conducted between July and September of 2007 in Kentucky, Virginia, and West Virginia. The six focus groups were conducted at neutral sites in the selected counties including county libraries, community colleges and, in one case, the county courthouse. Prior to data collection, the focus group moderator explained the purpose of session, ground rules for confidentiality, and conduct and methods that would assure anonymity of the participants. Each focus group discussion was audio-taped and transcribed with identifiers removed prior to analysis. Trained facilitators used structured focus group moderator guides that were developed specifically for the study. All discussions followed the predetermined format of the guides. Each of the focus groups lasted between 45 and 75 minutes with an average of 5.5 participants (range 4 to 7 persons). Following focus group interviews, key informant interviews were conducted by phone with selected members from each of the six counties. Key informant interviews were conducted with representatives of stakeholder groups that were underrepresented at the county's focus group. Key informant interviews also followed a structured interview guide and lasted between 25-35 minutes. The methodology was reviewed and approved by the ETSU Institutional Review Board to assure appropriate informed consent for participation.

The sections below provide a composite of the responses to questions from the focus group interview guides, supplemented by responses from the key informant interviews. Themes were captured around each question discussed in the focus group interviews. Each of the focus groups' notes was also classified and compared according to general themes within each state and between all the states. The concept of community dialog was incorporated into the focus group reports. The discussion among focus group participants who were deeply involved in the life of the communities indicated their

firsthand knowledge of the issues. Descriptions of the substance abuse or mental health issues or “themes” in the counties demonstrated familiarity with the topics. Key informant interviews reiterated many of these themes.

Prior to focus group and key informant interviews, county data profile sheets prepared by NORC (see Appendix D) were provided to each participating individual. The county profile sheet provided data on socio-economic characteristics, substance abuse and mental health problems, access to treatment, institutional characteristics (i.e., mental health institutions, correctional facility, etc), cigarette smoking and tobacco use, alcohol use and binge drinking, and marijuana and other illicit drug use.

Reactions to Secondary Data in County Profiles Provided by NORC

Four out of the six counties said the profiles (see Appendix D) were fairly accurate, but all expressed uncertainty about the definitions and data collection methods used. Both West Virginia counties noted inaccuracies in the population and population density numbers and raised questions about these specific numbers. The following are comments from the groups about the data profiles that were distributed and discussed.

Item #1: Socio-demographic characteristics

Median home value may not be a good indicator in rural counties with relative proximity to large urban areas (e. g., Washington DC) because of the influx of new residents for retirement or a second home. These individuals tend to be older, more educated and more affluent. Some may build homes with higher property values. One county representative noted: “People who retire here skew the county income data. The true local residents are poor.” Another person suggested that a different poverty indicator may provide a more reliable picture, such as the percentage of county students participating in the free lunch program at school: “Fifty percent of all students in the county are on the free or reduced school lunch program.” The high school graduation rate was questioned in two counties because the inclusion of individuals receiving a GED was not known.

Item #2: Overview of substance abuse and mental health

Some county representatives had questions about where and how the data were obtained for the county profiles. Some people expressed concern over how the measures were defined. For example, one measure looks at alcohol abuse and dependence as a single data element. One respondent mentioned that these are two distinctively different measures: “Alcohol abuse and alcohol dependence are two different things, so the data doesn’t reflect that.”

Item #3: Access to treatment

Questions were raised about how the access to treatment data was procured and the sources of the data. Sources for this item were not identified on the profiles. The difference between those needing help and those seeking help were stated as a simple percentage of the total population.

Item #4: Institutional characteristics

Representatives from each of the counties expressed confusion about what was meant by “institutional characteristics.” The presence of a correctional facility is a local determinant that

does not indicate if persons were incarcerated outside the county, and thus may have disproportionately increased the county percentage of persons in correctional/juvenile institutions when a correctional facility was located within county borders. The designation “health professional shortage area” was not understood by most respondents.

Item #5: Cigarette smoking and tobacco use/ Items #6: Alcohol use and binge drinking/ and Item #7: Marijuana and other illicit drug use

Respondents from most of the counties indicated that the data were fairly accurate, and the high perceived great risk of tobacco use was not a surprise. One respondent asked if the numbers included smokeless tobacco use. Some respondents questioned the data collection methods, citing the unreliability of self reporting known to be used in some data sources.

Most counties expressed a desire to be compared to other Appalachian counties in their states or to regional data.

Overall Impressions of Substance Abuse and Mental Health Problems in their Communities

All communities indicated that prescription drug abuse was prevalent. The use, acquisition, and distribution of the non-prescribed pain relievers contributed to criminal behavior and involved community social networks and created an alternative economic layer to the community. In addition, most communities believed that prescription drug use was a result of the relative ease of access to dealers or other procurement methods. One respondent noted that drugs are acquired or stolen from family members: “Prescription abusers first deplete the family. They empty out the medicine cabinets before seeking other sources for drugs.” Other common drugs of choice included alcohol, tobacco, marijuana, inhalants, and methamphetamine. Law enforcement officers and counselors confirmed a smaller presence for heroin, cocaine, ecstasy, and other illegal drugs but said use and choice was a function of ease of access, cost, and cultural preference.

Respondents from most of the communities indicated that drugs were easy to obtain and could be obtained locally. Participants reported that students seem to have a great deal of knowledge regarding drugs and many could identify local drug dealers. People from all of the communities indicated that in a small county “everyone knows everyone,” and as such, discretion was difficult. One respondent noted: “Drug dealers are on every street corner and we tend to know who they are.”

Some people discussed the procurement of drugs out-of-county and out-of-state. People from all of the counties reported that their emergency rooms, pharmacies, dentists and doctors have experienced people with habitual and extensive drug-seeking behaviors. Some counties’ offices and institutions have taken steps to curb this behavior through specific prescription dispensing management practices. The Kentucky counties were somewhat familiar with the Kentucky All Schedule Electronic Reporting System (KASPER) procedures. KASPER tracks controlled substance prescriptions dispensed within the state and shows all scheduled prescriptions for an individual over a specified time period, the prescriber, and the dispenser. Designed to be a source of information for practitioners and pharmacists, and an investigative tool for law enforcement, KASPER has some lag (real time) between filing and access by other system users that has been initially exploited by drug seekers.

Some community leaders indicated that substance abuse was underreported. Participants perceived a collective denial of substance abuse, contrasted with individual awareness of specific dealers, users, habits and behaviors. Multiple factors were identified that influence this finding:

Cultural and family factors contribute to the denial of the existence of substance abuse and its severity.

Small communities reported the existence of stigma for seeking help and that many parents reject complicity or accountability for the behavior of children or other family members.

Substance use is often seen as a coping mechanism and is sometimes accepted as a normal behavior in many communities.

Substance use is often not acknowledged as abuse until the behavior becomes harmful or criminal. As indicated by one focus group participant: "Substance abuse is significantly underreported and indication of abuse comes out in different kinds of ways such as unemployment."

All counties expressed knowledge of regional substance use problems and knew that other nearby counties experienced similar issues. Participants from counties were aware of national trends and noted that their area mirrored what was happening in the nation. The regional news media reach across state boundaries in most cases so that rural and urban people receive and share the same information.

No community was informed in advance of its status of being selected because of high or low county substance abuse indicators. Interestingly, all communities perceived that their own substance abuse was high. The following is a list of factors contributing to substance abuse cited by communities:

Substance abuse can often be the result of self-medication for underlying factors such as depression, anxiety, and deeper psychological trauma, such as child abuse;

Geographical isolation (limited transportation, rurality) and distance from services;

Societal and cultural factors like stoicism, self-reliance or pride;

Economic stressors like loss of community resources and scarcity of worthwhile employment;

The use of substances to escape from problems;

Intergenerational modeling of substance use behavior by parents engaging in the behavior, having a positive attitude towards the behavior, and/or allowing child substance use;

Societal factors including peer pressure, poor family values, expectations, and media marketing of prescription drugs as a "cure all";

The break-down of family and community values;

Boredom;

Limited recreational opportunities for youth; and

Few positive adult role models.

Participants in one focus group noted that children today lack goal-setting skills and that hope is in short supply. One person noted: "Our kids have generational poverty and they don't have a clue about how to achieve goals." On the other hand, participants from a few communities indicated that residing in a small rural community can also serve as a protective factor against substance use and creates a cohesive, self-aware unit where people are likely to know and help each other. One community representative noted the "presence of a lot of traditional 'moral people'" and that "families are close and churches are abundant." These were factors thought to contribute to lower rates of substance use. Conversely "poor moral fiber" was believed to be a factor that promotes substance abuse and

addiction. The availability of fulfilling employment and greater relative wealth was thought to be a deterrent in a few of the communities. Communities that reported broader educational opportunities, more after school programs (including sports and music), and awareness of the consequences of drug abuse were less likely to indicate higher levels of substance abuse.

Some state and local data are collected by counties or entities within counties, especially in preparing funding applications. Purchased or state-provided school youth surveys are primary sources of data that communities can use to gauge local situations and benchmark to national trends. The following is a list of surveys being used to collect primary data on substance use, as well as personal factors affecting substance use.

Parents' Resource Institute for Drug Education (PRIDE) Survey from National Survey Associates - the PRIDE survey measures the prevalence of alcohol, tobacco, and drug use by students in grades 6-12 and was reportedly used by one county in West Virginia and both Virginia counties in the last two years. Available at: <http://www.pridesurveys.com>

Kentucky Incentive for Prevention Survey (KIPS) - KIPS measures substance use among 6th, 8th, 10th, and 12th grade students. School specific data is provided to local school administrators and is publicly available in regional aggregated data sets. Available at: http://mhmr.ky.gov/MHSAS/sa_kipsurvey.asp

Search Institute's 40 Developmental Assets Survey - this survey measures such factors as positive relationships, skills enhancement, and health promoting activities among school aged children and was used by one county in West Virginia within the past four years. Available at: <http://www.search-institute.org>

In addition to surveys, some communities rely on other secondary data. The following are additional data items that were suggested.

Emergency Management Services - overdose response calls, overdose deaths.

Local Police Reports - DUI arrests, drug related arrests.

In most cases, the case study counties did not seem to seek out and use locally available data. While communities presumed a problem with substance abuse, additional data did not seem to be a valuable resource except for grant application purposes. One person from a Department of Social Services summarized this attitude, saying: "We need to get away from wasting money collecting and looking at data, and use this money on prevention."

In looking at mental health problems in their communities, most county groups observed that preexisting mental health issues often manifest as substance abuse problems; that is, people often abuse substances as a way to cope with a mental health issue. One focus group participant noted: "Mental health problems are often a result of a situation in one's life that results in substance use and abuse as a way to cope with one's problems." This "self-medication" is perceived to occur especially when depression and anxiety are the underlying issues. In one county, a treatment specialist reported that the majority of people seen for addiction have underlying depression. This complex relationship is seen to be affected both by the long term and often severe economic issues faced by mountain

communities and their resident families, and the documented prevailing Appalachian cultural attitudes of self-reliance.

Individuals from most counties indicated that they lacked adequate mental health services and that access to care was a contributing problem to the prevalence of mental health issues. None of the counties had inpatient treatment and most reported a limited scope of mental health services. Often treatment was provided by psychologists/psychiatrists practicing in the county for a few days per week. One individual noted: “For every 1,000 people who have trouble with alcohol, we have one bed. Their insurance card will tell you how long it will take to detox because that is how long they can stay.”

According to focus group participants, a cultural stigma is attached to seeking mental health care. Some people would not seek treatment even if the services were available because of fear of being observed, and judged, by family and peers. One person noted: “We are a proud people and do not typically ask for help.” Treatment costs were also reported to be a major barrier in most counties. Many Appalachian communities have large numbers of residents with no insurance or limited insurance benefit packages that prevent them from seeking or receiving services. One best practice strategy was identified in Kentucky: some anti-drug coalition groups provide one-time referrals and payment for substance abuse treatment with funding from federal sources. Transportation issues, parental denial of children’s mental health conditions, and multi-generational acceptance of mental health issues were mentioned as barriers in all counties.

Among mental health and substance abuse treatment services most often cited as missing was a lack of residential treatment facilities within the counties. Residential placement in other counties was difficult but was the typical avenue for people requiring residential treatment. Additionally, counties indicated that additional school prevention programs would be desirable. Only two of the six counties had well developed prevention programs. These counties were using nationally based model programs such as “Lifeskills Training” by Gilbert Botvin. Other counties had limited programs which were more modest in scope. Dearth of funding or state restrictions sometimes limited the institutional purchases of science-based classroom prevention packages.

The need for greater law enforcement resources was cited in several counties. Individuals across counties perceived that in rural areas, local, county and even state police presence are overwhelmed with day to day operations. Specifically, it was noted that police have insufficient funding for adequate law enforcement to address and control criminal activities related to substance use and distribution. For example, one county had two officers to patrol 575 square miles. Additionally, law enforcement professionals acknowledged that only a small percentage of criminal activity due to substance use was curbed due to their efforts. One individual noted: “We can’t keep up with the calls we do get, let alone prevent anything.” In one county, law enforcement facilities were used as a last resort for mental health emergencies (i.e., holding an individual in a county jail) when appropriate treatment was not immediately available.

7.6 Phase 4: Development of Community Resource Inventory

As part of the case study process, each county was asked to identify existing community programs that it considered “exceptional” or “best practices.” Existing research defines best practices as a technique, activity or methodology that, through research, experience and replication, reliably provides:

Effective and desired result(s);
Ethical and equitable outcome(s);
Adaptability to similar environments; and
Opportunities for innovation.

While few counties felt they provided adequate services to their communities, all were able to list mental health and substance abuse programs and services in their counties that met these criteria for “best practices.” However, some respondents noted that the use of best practice programs and services is limited by financial and other constraints.

Model services and program activities varied due to state and local financial and human resources. All counties but one had some form of anti-drug coalition comprised of concerned stakeholders. The presence of program activities by churches, schools and community groups also contributed to a sense that positive alternatives to substance abuse were available. Treatment services varied, but all counties had access to outpatient treatment. However, the degree of community utilization and perceived competence varied (see Tables 7.2 and 7.3).

The following programs were mentioned as available within the participating counties:

Mental Health

All counties in the study have access to outpatient treatment facilities within the county. However, individuals felt these facilities were underused and that the drug problem within the county was greater than reported. Only two counties (Wayne County, KY and Bland County, VA) had additional independent substance abuse/mental health providers within the county. No county had inpatient facilities for either substance abuse or mental health and most reported difficulty placing those needing long term outpatient treatment. Special programs include the Rockbridge Community Services Board *PACE* (Parenting Assessment Consultation and Education), which models appropriate parenting. The FMRS Health System in Monroe County (WV), a not-for-profit behavioral health organization, offers the Mother Program, a women’s substance abuse treatment program and ADAPT for adolescents.

Schools

Individuals across counties noted that the schools were integral to the dissemination of prevention programs and activities. In some counties, adolescent and family outpatient counseling took place at the schools because it was the most accessible environment for students and parents. Most school systems are bound to use evidence-based, proven prevention programs that may be purchased if funds are available. Only one school system reported using the DARE activities. Wayne County (KY) and Bland County (VA) were using LifeSkills4Kids. Beginning Alcohol and Addictions Basic Education Studies (BABES) is a classroom-based primary alcohol prevention program for children 5-8 years of age that is being implemented in Wayne County (KY). Other counties use Protecting Me/Protecting You from the Mothers Against Drunk Driving (MADD), a 5-year classroom alcohol prevention program for grades 1-5. Too Good for Drugs (Wayne County, KY) for elementary and middle school students and Parenting Wisely (Bland County, VA), for children 9-18 years, are both science-based, field-tested SAMHSA model programs. Monroe County (WV) touted having a school-based wellness center in each county school.

Justice and Law Enforcement

One county (Morgan County, KY) anticipated a drug court which will rotate regionally to ameliorate judicial overload. Wayne County also participates in the Kentucky Drug Court Program. Bath County (VA) combines its family and juvenile courts and Bland County (VA) has a youth case management worker. Bland County (VA) and Hardy County (WV) have had representatives of the sheriff's department in the schools; individuals in both counties indicated that they made a substantial contribution with respect to providing a needed law enforcement presence.

Faith Community Programs

Representatives from all counties said that church and faith-based programs were important to the quality of life and health in the community. Morgan County (KY) has an after school program called Lifeline that was considered an outstanding contribution, as was Bath County's (VA) Camp ACCOVAC, administered by the Adventist Christian church. Morgan County (KY) respondents said that the many vacation bible schools were a deterrent to drug activity. Both West Virginia counties actively use their ministerial association for referrals. Bland County (VA) worked with Hope Ministries Center, a Southern Baptist mission which provides some health and dental care.

Other Community Programs

Youth mentoring programs were present in all communities, provided by local community agencies and organizations such as Kiwanis clubs and county extension service 4-H programs. These programs often work through the schools or offer summer and weekend programs to alleviate boredom and provide esteem-building activities for youth. In Hardy County (WV), the school counselors actively partnered with county extension agencies involved extensively in youth programs to provide wellness activities including substance use prevention, wellness, health, and self-esteem activities.

Drug coalitions also play a visible role in attracting attention and money to address substance use issues and provide a focus for program activities in communities. Kentucky has received federal money to organize Operation UNITE anti-drug coalitions through the efforts of Congressman Hal Rogers. These coalitions are well-supported in the state and work closely with law enforcement agencies. In Virginia, Bland County has the advantage of a progressive county administration that has been assertive in organizing and seeking funding for prevention activities, while Bath County has relied on prevention efforts through the schools. The Hardy County (WV) Prevention Partnership and the Monroe County (WV) Prevention Coalition include tobacco, alcohol, and drug use prevention as part of their agendas, with funding from the West Virginia Tobacco Settlement Foundation. Wayne County (KY) and Bath County (VA) mentioned the presence of Assistance for Alcohol and Substance Abuse Prevention (ASAP) programs, a workplace education, prevention and testing service offered through employers, though only Virginia offers workmen's compensation for ASAP program use. The presence of an active multi-stakeholder prevention coalition is a function of community interest in the issues, but acquires significance and weight through state and federal recognition and funding. The degree of prevention awareness and treatment availability may be functions of that recognition (see Tables 7.2 and 7.3).

7.7 Phase 5: Key Findings

Key findings were developed based on an analysis of the textual data derived from the interviews and focus groups. Using an induction method, the analysis focused on the organization of broad conceptual categories and then more refined coding for underlying themes. Finally, the textual data was triangulated with secondary data profiles, and county descriptors with the researcher's field notes to produce an understanding of the incidence of and explanation for disparities in mental health status, substance abuse prevalence and access to treatment services in these Appalachian communities.

Key Findings

The national data sets used in the County Profiles painted a different picture of county problems than county representatives felt were important because the profiles did not clearly illustrate local factors. Local data sets are essential to understanding the depth of the substance use and mental health issues faced by residents at the county level. However, focus groups stated that local data is not always sought or used effectively in education or planning. Some stakeholders said that local data collection is not as important or useful as other applications because the issues are assumed to be well-understood and money used for data collection is more urgently needed for basic services. With better coordinated data collection, documentation and analysis, localities may be better equipped to access resources at state and federal levels.

Several common themes emerged from the case studies regarding barriers to use of services including social stigma for those who seek care, lack of transportation, non-recognition of roots of substance use behaviors, multi-generational patterns of substance abuse behaviors, and erosion of the power of family and community networks to assist in personal coping skills. These multiple factors must be taken into account when prescribing ways to increase access to mental health treatment and reduce the prevalence of substance abuse in Appalachia.

Appalachian communities have a sense of regional awareness of mental health and substance abuse issues and express willingness to share facilities and solutions. None of the six focus group sites had residential treatment facilities and those seeking treatment had to travel over 30 miles to receive even short term residential treatment. Individuals in these communities felt that substance use and mental health disparities were issues not only in their community but also throughout the rest of the state, and region.

Focus groups members were concerned with destruction of community social infrastructure, family values and workforce viability due to substance abuse, and wanted better conditions for all citizens of their counties. The well being of youth was of paramount importance to rural counties as evidenced by the emphasis on prevention and awareness of substance abuse in schools and youth-programs settings.

Solutions to mental health and substance use issues were understood by communities to be community-based and family-based; solutions were thought to be more effective when actively supported by other local institutions like schools, churches and courts. Communities with more diverse programs to address substance abuse and mental health seemed more confident that they were able to have a positive impact on their citizens.

Moral and cultural decline in general was noted most often as the reason for substance use. Factors such as irresponsible parenting, effects of the media, two-income families, decreased personal expectations, poverty, poor job prospects, easy access to prescription drugs, peer pressure, boredom and curiosity about drugs were cited as causes of this decline. Communities

saw solutions to substance use in programs or activities that addressed one or more of these issues.

Each of the sites reported that substance use and mental health problems were the result of co-occurrence and not the result of a single cause.

The following are some of the limitations or special considerations related to the case studies.

Respondents

The respondents who participated in the focus groups and key informant interviews were provided by contacts within the substance abuse/mental health arena in each county. Most respondents were members of local antidrug coalitions, treatment facilities or other public figures in the county. Focus groups met during the work day. Some potential respondents were unable to participate because of the time or personal schedules. While a comparable representation was sought from similar stakeholders or constituents in each county, not every stakeholder group was represented.

Counties

In this report the terms “county” and “community” are often used interchangeably. Both terms refer an Appalachian concept of cultural identity which defines the parameters of place identity. A community exhibits membership boundaries within a pattern of beliefs and behavior for the dominant cultural group. The unit of identity in a rural setting is the county where the largest “urban area” may be the county seat. In this study, all county seats were towns of fewer than 6,000. In Appalachian counties, the social constructs of a county seat seem to be representative of the county as a whole. The attachment is to the county “community.” Attachment to the Appalachian portion of the state or surrounding counties and to regional Appalachian affiliations which may cross state lines was evident in the focus groups when participants mentioned the desire for comparison to other counties in the region.

Though the counties selected for inclusion in the case study pilot were based on objective rankings, in fact, the four counties on the border of Virginia and West Virginia were close in geographic proximity and had similar demographic profiles with similarities in attitudes, concerns, issues, barriers, and services. The two Kentucky counties were farther apart in geographic proximity. Individuals from all counties expressed the desire to be measured against comparable rural Appalachian counties. Individuals from all six counties felt that the uniqueness of the Appalachian region made an accurate comparison of an Appalachian region to a non-Appalachian region difficult.

Substance abuse concentration

The problems associated with substance use seemed to be of greater importance to focus group participants than did problems associated with mental health. Substance abuse was the opening topic of discussion and featured in seven of the twelve survey protocol questions. It was a problem that touched more stakeholders in the community notwithstanding the interrelatedness of the issues.

Data sets comparison

Three sources of potential data emerged from the study: The data sets used by NORC to compile the County Profiles, the sets suggested by CASAP through a Delphi Process, and the data used by the counties in the case studies. NORC used nationally available, proven and accessible data sets to prepare the county profiles. Some of these numbers were calculated based on county population size. Not all of the data sets suggested by CASAP through the Delphi process are available nationally or state by state at the county level. Data is also not collected or reported consistently from state to state. However, these suggestions – gathered from Appalachian researchers, educators and practitioners – were examples of ideal data to use to measure high/low substance abuse prevalence and mental health access.

The county/community data postulated by local decision makers was reported in focus groups and key information interviews in the six Appalachian county case studies. While other data sets may also be used by counties, these were reported as being useful or desirable. Some data sets corresponded to sets from other sources and are grouped on the same line.

The use of secondary data, collected at state and local levels, is being encouraged by the Community Anti-Drug Coalitions of America (CADCA), the Robert Wood Johnson Foundation, Join Together, and Substance Abuse and Mental Health Services Administration's Strategic Prevention Framework-State Incentive Grant program as the most reliable way for local agencies to assess current need and project the scope of substance abuse issues and treatments. The reality is that finding and using local data in a coherent way is difficult for some local groups because of cost, cooperation, presumptions of knowledge and small sample size. Table 7.4 below also demonstrates the gaps in available data for planning at the local level.

Researchers from ETSU drew the following conclusions about the case studies data:

Regional substance abuse and mental health leaders do not have uniformly available county and state data sets from which to draw conclusive measurements, but they do know what types of data would be useful to formulate a local response to the issues.

National researchers do not have enough reliable county-level data from which to draw conclusive analyses. This conclusion is based on questions and reactions to county profiles in the case study.

Appalachian counties and communities do not report using nationally-available data sets to make decisions about local responses to substance abuse and mental health issues. They may use state data, especially when it supports applications for grant funding of prevention programs, but anecdotal evidence informs decision making.

Assessing the Communities' Dialogues: Strengths and Gaps in Prevention and Treatment

Each of the six focus groups and sets of key informant interviews represents a community's dialogue about its substance abuse and mental health issues. Profiled below is the commentary regarding community perceptions of their own strengths and treatment gaps with regard to substance abuse and mental health needs and services. The final section summarizes elements of the six separate dialogues and offers conclusions.

In relation to prevention and treatment services available to address substance abuse and mental health issues, the counties chosen for this case study exhibited many strengths. These strengths are

characteristics of the counties that can be seen as deterrents to substance abuse behavior or those that promote local treatment options. These strengths are essentially features that contribute to preventive and protective factors in the community. The model programs listed in Table 7.2 represent some of these strengths. Additionally, a listing of strengths is provided in Table 7.3. The focus groups, informants and the inventories also identified areas of need and gaps in the prevention and treatment continuum. In Table 7.3, the gaps in the prevention/treatment continuum are concentrated under the “gaps identified from the interviews” and “gaps identified from the focus groups.”

Each community discussion demonstrated cognizance of both the protective factors and the disposition to risk associated with rurality and the Appalachian culture. Small town culture was mentioned as an asset by people representing each of the case study counties. One individual described the benefits of a rural community: “We look out for each other.” Another individual noted the close-knit nature of the community: “If you do something, [your] parents will know before you get home.” Additionally, focus group participants noted that other factors may affect a community’s disposition to risk, including the demands of single-parent households, dual-income families, poor parental examples, and normative risk behaviors in the media, music, films and television. Others noted that the propensity for youth to use drugs was exacerbated by the small town atmosphere, moral decline, peer pressure and proliferation of outside influences like television and the internet. According to participants, individuals and the community face internal and external realities that create tension and uncertainty, and may contribute to the use of drugs and alcohol.

Distance between the county and illicit drug distribution sources was not always seen as a protective factor, as the nearest medicine cabinet could be a pharmacopeia of useable or saleable drugs.

Poverty in rural areas was discussed as a potential protective factor to substance abuse. One focus group participant commented that relative rural poverty was a protective factor because it limited the purchase of drugs.

All communities saw a relationship between employment and substance abuse, whether the use was caused by addiction to painkillers resulting from job-related injury, recreational habituation, or the numbing depression from a dead end job. In one community with adequate employment opportunities, county officials said that employers learned to look the other way and only required drug testing when a safety violation or accident occurred, preferring a workforce that was functional regardless of substance use.

The risks posed by place are related to the perception of relative isolation from legal consequences, covert use of substances, lack of a range of activities for youth, and diminished employment opportunities. These risks were not listed as gaps but were seen as a conditional quality of the nature of the rural setting.

Common strengths among all the counties surveyed were the state-supported networks of behavioral health treatments services. These multi-county agencies furnish both mental health and substance abuse treatment on an outpatient basis. No county had any in-county residential treatment facility and relied on referrals to residential facilities at distances of at least 30 to 50 miles. Transportation to treatment on a sustainable basis was difficult for those with limited means.

Faith-based prevention activities and some informal counseling for substance abuse and mental health were provided in each of the counties. Stakeholders from each county mentioned that the presence of

churches, youth programs, a strong faith community, and positive adult and family models were factors that contributed to the moral fiber of the community and offered protective qualities.

The presence of school-based prevention activities, curriculum, after-school youth activities, and multi-generational events were central to the perception of a positive community atmosphere. Stakeholders from counties that had such activities noted that they felt the community was committed to creating a positive environment where drugs are not the answer to boredom, lack of jobs, and despair. Parenting classes, agricultural extension programs, wellness classes, health camps, mentoring programs, sports, and recreation were some ways that communities worked to prevent drug use and promote mental health.

The array of anti-drug coalition activities is an important strength of the rural communities surveyed. Operation UNITE, an organization that is active in both Kentucky counties, seeks to prevent illegal drug use, coordinate treatment, provide support to families and friends of substance abusers, and educate the public about the dangers of drugs. UNITE was started with federal funding. Bland, Hardy and Monroe Counties each had multi-stakeholder coalitions supported by state and regional agencies that functioned to raise awareness about the dangers of drug use.

Outstanding local leadership was a positive asset in several communities. Local “champions” mobilized action and coordinated prevention activities. Individuals working in the school systems, county governance, and public health noted that local leadership was a positive asset to their communities. Leaders became apparent as participants talked about the issues and solutions in their communities. These individuals could be a local county extension agent, the county executive, the school resource officer, a concerned counselor, or a public health official. Common to these individuals was recognition of the necessity to involve others from all parts of the community to tackle the problem on many fronts.

Access to treatment, including transportation, payment options, privacy issues, stigma, choice of facilities and cultural or family bias, were uniformly identified as gaps in the continuum of care for substance abuse and mental health. The paucity of long term care residential treatment facilities and after-care programs was also discovered. The continuity of treatment modalities was a concern. Counties recognized that treatment constituted a long term commitment to recovery and recovery maintenance. Some modalities are provided in volunteer settings (e.g. Alcoholics Anonymous and Narcotics Anonymous and local drop in centers). Counties lacked reliable volunteers and locations for the groups to meet, and experienced cultural barriers for women and youth.

The need for treatment options for women was suggested in two county focus groups, while the need for more school intervention and action prevention programs was mentioned in three county focus groups. Individuals from both Virginia counties noted the need for better emergency mental health plans because their counties are geographically situated far from appropriate emergency mental health care; county providers were often forced to improvise in emergency mental health situations. One county said that another access to treatment issue was that employed individuals had difficulty securing time off during work hours which added to the stigma attached to seeking care; thus, another gap to mental health treatment are the service hours available for treatment.

These Appalachian communities have strengths and assets within their counties and some gaps in services that are not evident from national data sets. Generalizing strengths and gaps in treatment and prevention from these six counties to other Appalachian counties may be speculative at this time.

Definitive descriptions can only be made through individual assessments of each Appalachian county's response to the substance abuse and mental health issues. However, we recognized from these communities that:

Substance abuse resulting from the distribution of prescription drugs as much or more than alcohol and tobacco is a prime concern to government officials, law enforcement and justice personnel, health departments, educators and the public.

Nearly every person interviewed admitted they had been touched in some way by substance abuse issues among family and friends.

Socioeconomic realities and community culture are two factors that affect substance abuse and mental health issues.

Individuals from case study communities indicated the need to address local problems locally. They are trying to implement successful new strategies to restore their communities and to help individuals to engage in healthy behaviors and lead productive lives.

7.8 Discussion and Conclusions

The case studies revealed that the deeper story about Appalachian substance abuse and mental health disparities cannot be captured using nationally available data sets only. Analyses of substance use prevalence and mental health status using national data must be supplemented by additional local data that contains information about the institutional populations, law enforcement, EMS, etc.

Through direct participation in focus groups and interviews, key respondents described the diversity of the rural Appalachian counties – despite their similarities across socio-economic indicators. The on-site visits to the six counties were important to understanding the variety of local substance abuse and mental health issues found in each county. Some leaders acknowledged that there are insufficient resources to cope with the effects of substance distribution, abuse, and addiction. Other leaders appeared to be in denial of the substance abuse and mental health issues in their communities.

Findings from the focus groups revealed that the steps needed to ameliorate substance use and mental health treatment access issues are largely dependent on the local community's recognition of these problems. In addition, other factors that also have an influence on access to treatment include state resources, local economic conditions, the community's culture and commitment to resolving the issues, transportation options, viable payment alternatives, and mobilization of key community members.

Individuals from each of the county sites reported that substance abuse and mental health issues are often co-occurring. These issues are complex and any approach must consider the relationship between mental health and substance abuse, as some people may abuse substances to deal with anxiety or other serious mental health problems. In other situations, substance abuse may precipitate or exacerbate mental health issues. Policy makers must address prevention and access to treatment issues as well. This research suggests that substance abuse and mental health issues are typically co-occurring disorders that impact the community at large. Additional research in other areas of Appalachia should be conducted to test the reliability of these results.

Table 7.2. Model Programs (Best Practices) from Appalachian Twinned-County Focus Groups

	Kentucky		Virginia		West Virginia	
	Morgan	Wayne	Bath	Bland	Hardy	Monroe
School	Champions for Drug-Free Kentucky Too Good for Drugs	LifeSkills4Kids BABES Second Step Too Good for Drugs Champions Against Drugs	Safe and Drug Free Schools program After Prom activities	LifeSkills4Kids Parenting Wisely DARE Protecting Me/Protecting You Character Education Tobacco Prevention	Health Choices Camp Drug and alcohol education K-12 Tobacco programs	School Partnerships School-based wellness center Sports After school activities Tobacco programs
Faith-based	Lifeline after school program Ministerial Association Church VBS programs	Church activities	Camp Kovacs Churches	Hope Ministries Churches	Ministerial Association Churches	Ministerial Association Churches
Law Enforcement			ACCESS emergency mental health care	School Enforcement Officer	Officer in Schools	
Community Prevention	Operation UNITE Hooked on Fishing School programs and clubs Summer activities Morgan Co. ASAP	Operation UNITE – DAAD Hooked on Fishing Celebrate Recovery Neighbors United Wayne Co. ASAP	Prevention Task Force ASAP alcohol prevention	Operation CADDY Family Resource Center Strengthening Families program	Hardy Co. Prevention Partnership Family Resource Center Community Action	Monroe Co. Prevention Coalition
Medical						
Mental Health	Pathways, Inc.	Adanta Behavioral Health Services Phoenix Preferred Health Care Narcotics Anonymous AA	Rockbridge Community Services Board: PEPPACE	Mt. Rogers Community Services Board. AA	Potomac Highlands Guild AA	FRMS Health Systems: Mother Program ADAPT for adolescents AA
Judicial	Drug court (rotating)	Drug Court	Bath Co. Combined Courts	Mt. Rogers Youth Case Mgt.		
Other	Kiwanis Club	Wayne Co. Hotline Youth Empowerment Network 4-H clubs Kiwanis Club	Parks and outdoor recreation 4-H	Virginia National Guard activities 4-H	Parks 4-H	4-H Summer programs West Virginia Prevention Resource

Table 7.3. Strengths and Treatment Gaps for Twinned Counties Study

	Kentucky		Virginia		West Virginia	
	Wayne	Morgan	Bath	Bland	Hardy	Monroe
Strengths (See also Model programs)	Strong faith community; school drug testing; nuclear families; small town culture	Church programs; positive adult and family models; after school programs; publicizing drug mortalities	Recreation opportunities; churches; youth programs; rurality; lack of jobs(income to buy drugs)	Parental involvement; churches; outreach programs; teachers who listen; lack of gang activity; small town atmosphere	Relative wealth; employment opportunities; education; strong rural families; churches; small community culture; mandatory employee drug screening	Summer youth programs; strict medication controls at health centers and mental health facilities; ruralness; small community setting and culture
Strengths from Inventories	Adanta Behavior Health Services including adolescent and female treatment; Phoenix Preferred Care services; UNITE coalition activities; in-school prevention programs; AA; county extension youth programs; community center; state Champions program	Pathways, Inc. mental health and counseling services, drug court; church involvement; state Champions program; UNITE coalition activities; school prevention programs; after school care; Kiwanis community programs	Rockbridge Community Services Board services; school prevention efforts; knowledgeable sheriff's drug officer; recreation facilities; concerned DHS personnel	Mt. Rogers Community Services Board services; school enforcement officer; classroom prevention programs; VA National Guard programs; vigorous county administration involvement; drug coalition activities	Potomac Highlands Guild services including adolescent treatment; sheriff officer in schools; Making Healthy Choices 4-H/ school camp; AA, county extension youth programs	FRMS Health System Mother program and adolescent program; school partnerships; school-based wellness centers; after school activities; concerned county health department; county extension youth programs
Profiles: Needing but not receiving treatment for alcohol use	5.81% of population	5.67% of population	7.36% of population	7.05% of population	6.00% of population	6.35% of population
Profiles: Needing but not receiving treatment for drug use	2.45% of population	2.91% of population	2.61% of population	2.575% of population	2.35% of population	2.91% of population
Gaps identified from focus groups	Residential treatment; more school prevention programs	30-day + Residential treatment; faith-based youth residence; half-way houses; treatment for women; Action programs in schools; more state involvement	Drug coalition; Prevention programs in schools; local residential beds; adequate emergency mental health plan	Local hot line that is not tied to 911; better total health care	More AA programs, more law enforcement; prevention programs for adults; treatment options for women	More treatment facilities; specific local data
Gaps identified from Inventories	Access* to residential treatment	Access* to residential treatment	Access* to residential and outpatient treatment; school prevention programs	Access* to treatment, residential treatment	Access* to treatment, residential treatment	Access* to treatment, residential treatment

*Access to treatment: transportation, payment options, privacy issues in rural community, and treatment choice within the community.

Table 7.4. Gaps In Available Data For Planning At the Local Level		
NORC** DATA SOURCES Used for Preparation of County Profiles and as measure of high/low substance abuse prevalence/mental health status in Appalachian counties	CASAP* DELPHI PROCESS DATA SETS suggested as measures of high/low substance abuse prevalence/mental health status in Appalachian counties	COMMUNITY/COUNTY DATA (from case studies) as measure of county level substance abuse prevalence/mental health status
2000 median home value from US Census*	Socio-economic status	
	Poverty rates	
Percentage of persons in correctional or juvenile institutions from Area Resource file (calculated)*	Per capita incarceration rate for drug offense	
	Substance abuse related arrests per capita/1,000	
	Drunk & impaired driving arrests	
Area Resource File (calculated from past 3 years and population size)	Suicide rate	
	Overdose death Rates	(Partial correlation) local EMS data (response calls, ODs)
	Child Abuse and Neglect reports	
	Drug related Child Protective Services interventions/ Social Service investigations	
	Birth Certificate data on maternal smoking and substance abuse	
	Prescription rates of abused drugs	
	Service utilization rates for Substance Abuse /Mental Health treatment	
	Mortality from alcohol or drug related causes	
	Accident rates from AOD related causes	
	Substance abuse screening tests conducted by schools and employers	
	Behavioral Risk Factor Survey	
Alcohol abuse or dependence in past year from 2002-2004 National Survey on Drug Use and Health (pooled)		
Abuse or dependence of any illicit drugs in past year from 2002-2004 National Survey on Drug Use and Health(pooled)		
Non-prescription use of pain killers in past year from 2002-2004 National Survey on Drug Use and Health(pooled)		
Percentage of persons having serious psychological distress problems in past year from 2002-2004 National Survey on Drug Use and Health (pooled)		

Table 7.4. Gaps In Available Data For Planning At the Local Level		
NORC** DATA SOURCES Used for Preparation of County Profiles and as measure of high/low substance abuse prevalence/mental health status in Appalachian counties	CASAP* DELPHI PROCESS DATA SETS suggested as measures of high/low substance abuse prevalence/mental health status in Appalachian counties	COMMUNITY/COUNTY DATA (from case studies) as measure of county level substance abuse prevalence/mental health status
Percentage of persons in mental health hospitals or institutions from Area Resource file (calculated)		
Index on Health Professional Shortage Area status from 2003 codes of HPSA for Primary Medical Care and for Mental Health from the Area Resource file		
		School Surveys: KIPS, PRIDE, Search Institute's 40 Developmental Assets
		Community Planning Assessments
		Local Police Reports
		Anecdotal information from teachers, churches, community members
Note: Variables marked with an asterisk (*) indicate that the variable used is a proxy for the variable suggested by CASAP through the Delphi process.		

Case Study Appendix of Model Programs

Model programs or best practices demonstrate a technique, activity or methodology that through research, experience and replication, reliably provides:

- Effective and desired result(s);
- Ethical and equitable outcome(s);
- Adaptability to similar environments; and
- Opportunities for innovation.

Through the National Registry of Evidence-based Programs and Practices (NREPP) (<http://nrepp.samhsa.gov>), the Substance Abuse and Mental Health Services Administration (SAMHSA) has designated the following programs as effective models to address substance abuse and mental health: Too Good for Drugs; Parenting Wisely; Life Skills Training; Protecting Me/Protecting You; and Strengthening Families.

The following are examples of programs being used in the focus group counties:

KY-ASAP (Agency for Substance Abuse Policy)

KY-ASAP was created in 2000 by the Kentucky General Assembly to promote the reduction of alcohol, tobacco and other drug use in Kentucky by working with communities to help them identify

existing needs and resources. There are currently 72 local ASAP boards that cover 111 of 120 counties in the Commonwealth. The local boards consist of stakeholders in each county or multi-county jurisdiction. ASAP has become a vital part of substance abuse prevention and treatment efforts in many of Kentucky's communities. <http://odcp.ky.gov/kyasap.htm>

Champions for a Drug Free Kentucky – Kentucky Office of Drug Control Policy

Champions for a Drug-Free Kentucky was established in 1986. The Champions coalitions promote the prevention of alcohol, tobacco and other drugs along with the reduction of violence in Kentucky communities. The Champions program provides assistance for communities desiring to form a coalition and provides state oversight and funding opportunities for established coalitions. Ninety-five Champions coalitions have been established in 104 counties throughout the state. Champions coalitions function as a substance abuse prevention catalyst. The coalitions are comprised of people who care about the quality of life in their communities. <http://odcp.ky.gov/champions.htm>

Life Skills 4 Kids

Life Skills 4 Kids from The Million Dollar Machine (MDM) is a comprehensive Life Skills Enrichment Program designed to benefit children in grades K-6 with Robot-Taught Assembly Programs. The program includes major components that also address the learning objectives of Character Education, Health Education and Drug Prevention. <http://www.lifeskills4kids.com>

BABES

The Beginning Alcohol and Addictions Basic Education Studies (BABES) is a primary prevention program designed to teach children how to live a happy, healthy, drug and tobacco free life. Trained volunteers using puppets impart information designed to enable children to grasp the importance of good decision making skills. This program is designed to help children understand and develop skills necessary to cope with unhappy situations, promote self-esteem, define peer pressure and make good choices. <http://www.aodc.org/BABES.html>

Second Step

Based on more than 15 years of classroom application and the most current academic, social, and emotional research, the Second Step curriculum focuses on three essential competencies: empathy, impulse control and problem solving, and anger management. The *Second Step* program teaches Elementary students how to deal with emotions, resist impulsive behavior, resolve conflict, solve problems and understand the consequences of their actions. Teachers model and reinforce the skills taught in the lesson. <http://www.cfchildren.org/programs/ssp/overview>

Too Good for Drugs

Too Good For Drugs[™] (K-8) is a school-based prevention program designed to reduce risk factors and enhance protective factors related to alcohol, tobacco and other drug (ATOD) use among students. *Too Good For Drugs*[™] (K-8) has a separate, developmentally-appropriate curriculum for each grade level. Each curriculum builds on earlier grade levels with an instructional design to enable students to learn and retain skills. <http://www.mendezfoundation.org/educationcenter/tgfd/index.htm>

Safe and Drug Free Schools

The Office of Safe and Drug-Free Schools (OSDFS) administers, coordinates, and recommends policy for improving quality and excellence of programs and activities that are designed to provide financial assistance for drug and violence prevention activities and activities that promote the health and well being of students in elementary and secondary schools, and institutions of higher education.

<http://www.ed.gov/about/offices/list/osdfs/index.html>

D.A.R.E.

D.A.R.E. (Drug Abuse Resistance Education) is a collaborative program between local law enforcement and local schools to educate students about the personal and social consequences of substance abuse and violence. D.A.R.E.'s primary mission is to provide children with the information and skills they need to live drug-and-violence-free lives, to equip them with tools to enable children to avoid negative influences, and to allow them to focus on their strengths. It seeks to establish positive relationships between students and law enforcement, teachers, parents, and other community leaders.

<http://www.dare.com>

Parenting Wisely

Parenting Wisely is a self-administered, interactive, multimedia CD-ROM program that reduces family conflict and child behavior problems by improving parenting skills and enhancing family communication and mutual support, supervision, and discipline. Parents can use it alone, in a group, or with a practitioner. The program targets parents with children 9 to 18 years of age.

Parenting Wisely, developed at Ohio University, is an alternative or complement to existing family interventions. The developer used his knowledge of the Functional Family Therapy model and experience with program dissemination to create a program that would reduce or eliminate many of the barriers that keep at-risk families from receiving good family interventions. The resulting prototype, an interactive computer disk, was field-tested in 11 southern (Appalachia) Ohio counties under an Office of Juvenile Justice and Delinquency Prevention Formula Grant. <http://www.familyworksinc.com/>

Protecting Me/Protecting You

Protecting You/Protecting Me® (PY/PM®) is an alcohol use prevention curriculum for children in grades 1-5. *PY/PM* works to reach children before they have fully shaped their attitudes and opinions about alcohol use and educates them about their role in preventing it. The curriculum focuses on the effects of alcohol on the developing brain during the first 21 years of life. <http://www.pypm.org>

Virginia Tobacco Settlement

Funds from the Virginia Tobacco Settlement Foundation fund programs like All Stars, Al's Pals, Creating Lasting Families, Not On tobacco, Positive Action, Project Alert, Project EX, Project Toward No Tobacco Use, Ending Nicotine Dependence, Helping Teens Stop Using Tobacco (TAP),

Intervening with Teen Tobacco Users (TEG), Know Your Body, Life Skills Training, Project Toward No Drug Use, Skills for Adolescence, and Too Good for Drugs. <http://www.vtsf.org>

Virginia National Guard Drug Demand Reduction Program (DDRP)

The Virginia National Guard supports coordinated community education and prevention programs and works with at-risk youth to develop values, skills and self discipline.

<http://vko.va.ngb.army.mil/VirginiaGuard>

Drug Coalitions

Operation UNITE

Launched in April 2003 by Fifth District Congressman Harold “Hal” Rogers, Operation UNITE serves 29 counties in southern and eastern Kentucky. It is divided into five coalition service regions. Every county has at least one UNITE coalition and conducts its own program activities. Morgan and Wayne Counties each have a volunteer coalition. Operation UNITE’s mission is to rid communities of illegal drug use through undercover narcotics investigations and the coordination of treatment for substance abusers; the goal is to provide support to families and friends of substance abusers and public education about the dangers of drug use. UNITE educates and activates individuals by developing and empowering community coalitions to refuse to accept or tolerate drug culture.

Wayne County Operation UNITE: Sponsors Neighbors UNITED, a community watch activity; Celebrate Recovery, a faith-based support program; Hooked on Fishing Not on Drugs and Kid’s Fishing Derby (<http://www.futurefisherman.org>), a copyrighted program of the Future Fisherman Organization; three school anti-drug clubs; Red Ribbon Week at the schools; a Back-to-School Bash fair; the safe and drug-free graduation bowling activity; safe Halloween activities; and a Christmas parade.

Morgan County UNITE: Sponsors six school anti-drug clubs; Hooked on Fishing; various speakers; joint activities with other community groups and schools and the Kentucky Drug Endangered Children network; EMT training about drugs; neighborhood watch training; Red Ribbon Week activities; and safe Halloween activities. Morgan County UNITE also helps to fund a local adult circuit drug court. <http://www.operationunite.org>

Bland County (VA) CADDY: Organized in 2006 with help from a matching grant from the Appalachian Regional Commission as a result of participation in a regional Appalachian substance abuse conference, Operation CADDY (Coalition Against Drugs Destroying Youth) in Bland County (VA) seeks to increase the knowledge of community leaders about the importance of providing positive alternatives and protective factors for youth, young adults and their families and effective implementation of comprehensive prevention programs.

Hardy County (WV) Prevention Partnership: A function of the West Virginia Prevention Resource Center Office community development initiative, the partnership counts over 50 stakeholders from education, medicine, law enforcement, county extension offices, the media, mental and behavioral treatment, churches, and government as members.

Monroe County (WV) Prevention Coalition: A community wide partnership dedicated to reducing substance abuse, underage use, and associated risky behaviors through effective prevention strategies that include: policy setting; education; communication; programming; mentoring; and role modeling.

Community Services

ASAP programs

Alcohol and Substance Abuse Prevention (ASAP), a workplace substance abuse and prevention program available in Kentucky and Virginia, was developed to implement and maintain programs which aim to reduce the incidence of drug and alcohol abuse in the workplace and deter drug and alcohol use. <http://www.asap-programs.com>

County Extension Services

State county extension services with offices in each U.S. county function as agencies within the U.S. Department of Agriculture through state land grant colleges. Children and families at risk for negative outcomes such as infant mortality, malnourishment, child abuse and neglect, poor health, substance abuse, teenage pregnancy, crime, violence, and academic underachievement are served by these agencies. 4-H clubs and activities are [youth organizations](#) administered by the [Cooperative Extension System](#) with the mission of "engaging youth to reach their fullest potential while advancing the field of youth development."

While all counties in the study have active cooperative extension services, Hardy County (WV) cooperative extension co-sponsors a Health Choices camp for elementary and middle school youth during the school day, in conjunction with school staff, that reinforces healthy behaviors including alcohol, substance use and tobacco prevention activities. <http://www.csrees.usda.gov/Extension>

Alcoholics Anonymous (AA)

Alcoholics Anonymous® groups are locally organized and based on a fellowship of men and women who share experiences to support each other to solve common problems and help others recover from alcoholism. Bath, Bland, Hardy, Monroe, and Wayne counties all have active AA meetings. Narcotics Anonymous is a similarly organized community-based association of recovering drug addicts. Only Wayne County (KY) has meetings of Narcotics Anonymous. <http://www.alcoholics-anonymous.org>

County Profiles

The county profiles used during the site visits are included as Appendix D.