Transylvania County Community Health Assessment

2012

TRANSYLVANIA
REGIONAL HOSPITAL

Public Health
Prevent. Promote. Protect.
Transylvania County
Department of Public Health

EXECUTIVE SUMMARY

Overview of CHA Purpose and Process

Community health assessment (CHA) is the foundation for improving and promoting the health of county residents. Community-health assessment is a key step in the continuous community health improvement process and is one of the three core functions of public health (assessment, policy development, and assurance). The objective of any CHA is to identify factors that affect the health of a population and determine the availability of resources within the county to adequately address these factors in order to improve health outcomes.

A community health assessment (CHA), refers both to a process and a document, investigates and describes the current health status of the community, what has changed since a recent past assessment, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a large range of secondary data, including demographic, socioeconomic, health, environment, and primary data such as personal self-reports and public opinion collected by surveys, listening sessions, or other methods. The *document* is a summary of all the available evidence and serves as a resource until the next assessment. Together they provide a basis for prioritizing the community's health needs and planning to meet those needs.

In North Carolina, local health departments are required to conduct a comprehensive community health assessment at least every four years as part of a consolidated agreement with the NC Division of Public Health for local public health department accreditation. As part of the Affordable Care Act, non-profit hospitals are also now required to conduct a community health (needs) assessment at least every three years. In Transylvania County, the most recent CHA was completed in 2009; however, in order to align with the new hospital requirements, the decision was made to transition the Transylvania County CHA timeline. For this reason, our local CHA process was advanced a year to integrate and synchronize the mutual obligations for Transylvania Regional Hospital and the Transylvania County Department of Public Health.

Transylvania County Department of Public Health and Transylvania Regional Hospital are also part of a larger partnership in Western North Carolina (WNC). WNC Healthy Impact is a partnership between hospitals and health departments in North Carolina to improve community health. As part of a larger, and continuous, community health improvement process, these partners are collaborating to conduct community health (needs) assessments across western North Carolina. WNC Healthy Impact continues to support the local and regional CHA effort through consultation, data collection, and technical assistance. See www.WNCHealthyImpact.com for more details about the purpose and participants of this region-wide effort.

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The Free Clinic of Transylvania County
Land-of-Sky Regional Council
Land of Waterfalls Partnership for Health
Project TRAIN
Project TRAIN Roundtable Committee
Rise & Shine Freedom School
Smart Start of Transylvania County
Transylvania County Board of Commissioners
Transylvania County Board of Education
Transylvania County Board of Health
Transylvania County Cooperative Extension
Transylvania County Council on Aging
Transylvania County Department Directors
Transylvania County Dept of Public Health
Transylvania County Dept of Social Services
Transylvania County Mental Health Group
Transylvania County Schools
Transylvania Regional Hospital
United Way of Transylvania
Western Carolina Community Action
WNC Healthy Impact

List of Health Priorities

The 2009 Community Health Assessment resulted in the following priorities:

- Access to Care
  - Mental health, substance abuse, chronic illness, dental health
- Healthy Lifestyles/Wellness
  - Mental health, substance abuse, chronic illness, dental health
- Basic Needs
  - Education, housing, employment, food security

The Transylvania County 2012 Community Health Assessment Priority Areas are:

1. **Obesity**
2. **Dental Health**
3. **Mental Health/Substance Abuse**

General Review of Data and Trends

The following key data and trends helped support the determination of each of the three health priorities. Note that this is only a snapshot of each area and that more detail, source information, and additional analysis can be found in the full report.

1. Obesity

Overweight and obesity pose significant health concerns for both children and adults. Excess weight increases an individual's risk of developing type 2 diabetes, high blood pressure, heart disease, certain cancers, and stroke. Because weight is influenced by energy (calories) consumed and expended, interventions to improve weight can support changes in diet or physical activity. Body Mass Index (BMI), which describes relative weight for height, is significantly correlated with total body fat content. (NC Institute of Medicine – Healthy NC 2020: Physical Activity and Nutrition http://www.publichealth.nc.gov/hnc2020/)

Based on self-reported heights and weights, the data below displays 2012 estimates for the prevalence of healthy weight, overweight, and obesity in adults. Transylvania County self-reported rates mirror regional, state, and national estimates that roughly 1 in 3 children and 2 in 3 adults are overweight or obese. While Transylvania County is less obese than the region, state, and country; the majority (65%) of our adult population has a BMI of greater than 25.

Self-Reported Height and Weight (WNC Healthy Impact Survey)

	Healthy Weight	Prevalence of Total Overweight	Prevalence of Obesity (subset of Overweight)
	Percent of Adults With a Body Mass Index Between 18.5 and 24.9	Percent of Overweight or/Obese Adults; Body Mass Index of 25.0 or Higher	Percent of Obese Adults; Body Mass Index of 30.0 or Higher
Transylvania	**31.1%**	**65%**	**23.9%**
WNC	**33.7%**	**65%**	**29.2%**
NC	**----**	**65.3%**	**28.6%**
US	**31.7%**	**66.9%**	**28.5%**

Only 13.3% of Transylvania County residents are eating the recommended minimum fruit and vegetable servings per day.

Had an Average of Five or More Servings of Fruits/Vegetables per Day in the Past Week
(WNC Healthy Impact Survey)

Transylvania County is far from meeting the Healthy People 2020 (www.healthypeople.gov) goals for both high blood pressure and elevated cholesterol.

Prevalence of High Blood Pressure
(WNC Healthy Impact Survey)

Prevalence of High Blood Cholesterol
(WNC Healthy Impact Survey)

Prevalence of Diabetes (Ever Diagnosed)
(WNC Healthy Impact Survey)

Despite these findings, residents in Transylvania County want to see our county become a healthier place to live by improving access to fresh produce and increasing physical activity opportunities. Of those residents that completed the *WNC Healthy Impact* survey, the majority think it is important for our communities to make the following changes:

- Make it easier for residents to access farmer's markets and tailgate markets (75.7%)
- Improve the public's access to physical activity spaces during after-hours (65%)
- Improve access to trails, parks, and greenways (64.9%)
- Need more indoor physical activity spaces such as gyms, recreation centers, or indoor pools (70.7% agree/strongly agree)

2. Dental Health

An individual's oral health plays a very important role in their overall health. Studies have shown direct links between oral infections and other conditions, such as diabetes, heart disease, stroke, and poor pregnancy outcomes. In addition, untreated oral health problems in children and adults can cause severe pain and suffering.

The Cecil G. Sheps Center for Health Services lists 9 active dentists and 20 dental hygienists in Transylvania County during 2010. This number equates to 2.7 dentists per 10,000 population during that same year; a decline from 3.5 dentists per 10,000 population in 2008 and 2009. As indicated in the table below, Transylvania County rates of utilization for dental services in Medicaid populations are lower than regional and state totals in each age group. Generally, access to dental care is more challenging for Medicaid recipients in the far western parts of the state because of the lack of dentists and enrolled Medicaid providers in those areas.

Medicaid Recipients Utilizing Dental Services (by Ages Group)

	Children (aged 1-5) Enrolled in Medicaid Who Received Any Dental Service In the Previous 12 Months			< 21 years old			21 + years old		
	# Eligible For Services	# Receiving Services	% Receiving Services	# Eligible For Services	# Receiving Services	% Receiving Services	# Eligible For Services	# Receiving Services	% Receiving Services
Transylvania	1014	522	51.5%	3446	1581	45.9%	2268	603	26.6%
WNC Total			53.7%			49.2%			29.5%
State Total			51.7%			48.6%			31.6%

Dental decay in children can be measured by the number of teeth affected by decay, the number of teeth that have been extracted (removed), or the number of teeth successfully filled. In 2009, the dental screening results which count the average number of decayed, missing, or filled teeth in kindergarteners was 1.75 per child in Transylvania County. According to data from the NC Oral Health Section, untreated decay rates for kindergarten aged children in the county (from 2000-2010) now exceed the average untreated decay rate for NC kindergarten children for the first time in 10 years (17% for Transylvania County compared to 15% for NC).

The prevalence of decayed, missing, or filled teeth in young children is higher in low-income populations and in rural communities without fluoridated water. Dental caries (tooth decay) is the most common chronic infectious disease among children; if untreated, dental caries can result in problems with speaking, playing, learning, and receiving proper nutrition. (NC Institute of Medicine – Healthy NC 2020: Oral Health http://www.publichealth.nc.gov/hnc2020/)

3. **Mental Health/Substance Abuse**

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses – such as depression and anxiety – affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery. (NC Institute of Medicine – Healthy NC 2020: Mental Health http://www.publichealth.nc.gov/hnc2020/)

Mental disorders contribute to a host of problems that may include disability, pain, or death. Suicide is the 8th leading cause of death in Transylvania County; exceeding the region and state mean.

Suicide Mortality Rate, Deaths per 100,000 Population (Five-Year Aggregates, 2002-2006 through 2006-2010)

Suicide mortality in Transylvania County demonstrates a very pronounced gender disparity. From data shown below it is apparent that the suicide mortality rate for men is several times higher than the rate for women over the span of years cited.

Gender Disparities in Suicide Mortality, Transylvania County (Five-Year Aggregates, 2002-2006 through 2006-2010)

The majority (65.4%) of survey respondents in Transylvania County did not have any days in the past month that their mental health was not good. However, 12.2% of respondents did experience between 8 and 30 days of poor mental health in the last month.

Number of Days in the Past 30 Days on Which Mental Health Was Not Good
(WNC Healthy Impact Survey)

Most Transylvania County residents (91.1%) report being "satisfied" or "very satisfied" with their lives. On the other hand, 8.9% of respondents are "dissatisfied/very dissatisfied with their lives; the highest percentage by county in the region. Population segments more likely to be dissatisfied with their lives in Western North Carolina include women, adults age 40 to 64, and those living in lower income categories.

Satisfaction with Life (WNC Healthy Impact Survey)

Substance use and abuse are major contributors to death and disability in North Carolina. Addiction to illegal and prescription drugs or alcohol is a chronic health problem, and people who suffer from abuse or dependence are at risk for premature death, injuries, and disability. Substance abuse has a major impact on individuals, families, and communities and contributes to social, physical, mental, and public health problems such as motor vehicle crashes, crime rates, and suicide. WNC Healthy Impact survey respondents were asked what they perceive as the top three county issues having the most negative impact on the quality of life. The top three issues identified were (1) Economy/Unemployment (2) Nothing and (3) Substance Abuse.

The Highway Safety Research Center at the University of North Carolina at Chapel Hill tracks information about vehicle crashes across the state on an annual basis, including detail on the fraction of crashes that are alcohol-related. The table below presents trend data on vehicle crashes for the period from 2006 through 2010. The percentage of alcohol-related traffic crashes in the county was above the comparable NC rate in every year cited in the table.

Alcohol-Related Traffic Crashes (2006-2010)

Geography	2006		2007		2008		2009		2010	
	# Crashes	% Alcohol-Related	# Crashes	% Alcohol-Related	# Crashes	% Alcohol-Related	# Crashes	% Alcohol-Related	# Crashes	% Alcohol-Related
Transylvania County	513	7.2	532	5.8	536	7.8	509	5.7	480	6.5
Regional Total	15,004	6.2	15,216	6.5	13,997	7.1	14,075	6.6	14,763	5.8
State Total	220,307	5.1	224,307	5.3	214,358	5.6	209,695	5.4	213,573	5.0

The third leading cause of death in Transylvania County is death due to injuries *not* involving motor vehicles – *all other unintentional injuries*. The county ranking for unintentional injuries is higher than the WNC (#5) and NC (#5) rank. This category includes death without purposeful intent due to poisoning (overdoses included), falls, burns, choking, animal bites, drowning, and

occupational or recreational injuries. This leading cause of death in Transylvania County demonstrates a strong gender disparity; rates for males has increased significantly over the five-year aggregates and are 1.5 to 2.4 times the comparable rate among females.

All Other Unintentional Injury Mortality Rate, Deaths per 100,000 Population

Transylvania County Schools administered the *Communities that Care Youth Survey* to students in 2008 to measure the incidence and prevalence of substance use, delinquency, and related problem behaviors and the risks that predict those problems in the community. Results showed that 51.9% of 6th-12th graders had used alcohol in their lifetime. Additionally, life-time use for tobacco was 65%, 22% for marijuana, 13% for inhalants, and 4.8% for ecstasy. Those numbers dropped by half when asked about use in the past 30 days. Overall, 8.4% reported the use of any illicit drug other than marijuana in the past 30 days.

The Juvenile Risk Assessment instrument is administered by Juvenile Court Counselors after juveniles are referred with a complaint alleging that a delinquent act has occurred and prior to adjudication of the juvenile. The Assessment is an instrument used to predict the likelihood of the juvenile being involved in future delinquent behavior. According to the Transylvania County Risk Factor Observations for 2011-2012, 38% of assessed youth have illegal substance abuse assessment or treatment needs; a 2 year increase trend & higher than state rate for past 3 years. An additional tool, the Juvenile Needs Assessment instrument, is administered by Juvenile Court Counselors prior to court disposition of a juvenile to examine a youth's needs in various domains of life. The Needs Assessment found 46% of assessed youth have substance abuse/use issue. However, this is most likely under-reported and the figure should be interpreted as a measure of the minimum level of occurrence. Additionally, 46% of assessed youth need more mental health assessment, while 38% of assessed youth have mental health needs that are currently being addressed. (Transylvania County Juvenile Crime Prevention Council (JCPC))

All outpatient dispensers of controlled substances are required to report subscriber and provider information to the NC Controlled Substances Reporting System (NC-CSRS) http://www.ncdhhs.gov/mhddsas/controlledsubstance/index.htm. In 2008, Transylvania County ranked #27 in the state for controlled substance prescriptions to residents (21,907 prescriptions per 10,000 residents; 67,381 in total). The rate rose in 2009 to 22,867 per 10,000 residents, but

our rank dropped to 28th (70,868 total prescriptions). In 2011, the number of outpatient dispensed prescriptions for opiods alone in Transylvania County was 8114.

According to the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC Detect) http://ncdetect.org/, the number of drug-related Emergency Department (ED) visits to Transylvania Regional Hospital in 2011 was 219. The number of ED visits from 2010 with Substance Abuse/Dependence or Alcohol Intoxicational Withdrawal diagnosis codes in Transylvania County was 406 with a rate of 12.27 per 1,000 persons. In 2010, the number of ED visits with psychiatric disorder diagnosis codes was 1008 in Transylvania County with a rate of 60.46 per 1,000 persons.

The Emergency Department at Transylvania Regional Hospital has been tracking the number of overdose cases in ED visits over the last few years. In 2008 the ED reported 122 overdoses, 117 in 2009, 120 in 2010, and 131 in 2011. The leading substances contributing to the overdoses were benzodiazepines, followed by opiates, and sedatives/tranquilizers.

Next Steps

Data collection and prioritization are just the beginning steps in understanding and addressing priority health needs in a community. A community health improvement planning process uses CHA data to develop and implement strategies for action and establishes accountability to ensure measurable health improvement. Transylvania County, along with our partners in WNC Healthy Impact, will move forward with information in this CHA to collaborative action planning and determining how we can most effectively impact health in our community. This process will include the possibility of creating a Community Health Improvement Plan (CHIP) to coordinate action and target resources in order to inform our action planning process. Action Plans will be submitted by the Transylvania County Department of Public Health to the NC Division of Public Health in June 2013. Dissemination of this CHA report will include making all reports publicly available on the Transylvania County Department of Public Health and the WNC Healthy Impact website as well as presented to the Transylvania County Board of Health.