2013

Buncombe County Community Health Improvement Plan



2013 BUNCOMBE COUNTY

COMMUNITY HEALTH IMPROVEMENT PLAN

August 2013

ACKNOWLEDGEMENTS

The development of this document was led by Buncombe County Health and Human Services along with many partners as part of a community-wide collaborative process.

Our Community Health Improvement Process (CHIP) and plan were also supported by the technical assistance and tools available through our participation in WNC Healthy Impact, a partnership between hospitals and health departments in western North Carolina to improve community health: www.WNCHealthyImpact.com.

Please contact Marian Arledge at (828) 250-5094 if you have any questions or would like to get involved in the strategies currently included in our CHIP plan.

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EXECUTIVE SUMMARY

Overview of the Community Health Improvement Process

Vision: To build and sustain a healthy Buncombe County.

Mission: Individuals, families, and local leaders come together to make Buncombe County a community in which healthy choices are easy to make and are supported by the environment around them.

The Community Health Improvement Process (CHIP) creates collective impact among diverse organizations and individuals in order to improve the priorities identified through our Community Health Assessment (CHA).

Community Health Assessment Priorities for 2012 – 2015:

- Healthy Living Physical Activity, Nutrition and Healthy Weight
- Tobacco Prevention and Cessation
- Preconception Health
- Early Childhood Development
- Access to Care Clinical Community Connections

For more information on the Buncombe County 2012 CHA and the data that supports these priorities, visit our www.BuncombeCounty.org/HealthReports.

Large-scale social change for complex issues requires broad cross-sector coordination - not the isolated intervention of individual organizations. The CHIP uses a collective impact framework as we work with partners to create these keys to success:

- Common Agenda
- · Shared measurement system
- Mutually reinforcing activities
- Continuous communication
- Backbone support

The CHIP is driven by two primary groups of individuals and organizations: the Public Health Advisory Council and the Priority Area Workgroups.

The Public Health Advisory Council:

The Public Health Advisory Council will serve as a catalyst for providing leadership, support, and coordination to assist the community in reaching its health goals. Council members will consider the data and information available through the CHA, provide guidance for the workgroups during the planning process, and oversee the implementation and evaluation of the plan. Members will be responsible for advocating for systems, policy, and environmental

change in the community. The Council members will also serve in an advisory capacity to submit recommendations to the Buncombe County Health and Human Services Board on topics such as public health policy, fee structure changes, and more.

Public Health Advisory Council 2013 Members:

Allison Jordan Children First – Communities in Schools

Ann Von Brock United Way of Asheville and Buncombe County

Beth Maczka YWCA of Asheville

Carrie Runser-Turner Land of Sky Regional Council

Charlie Jackson ASAP (Appalachian Sustainable Agriculture Project)

Christina Carter Smoky Mountains Center

David Gardner NC Center for Health and Wellness
Don Locke, Co-Chair Center for Diversity Education

Hank Dunn AB Tech

Kit Cramer The Asheville Area Chamber of Commerce Nicole Hinebaugh Asheville Buncombe Food Policy Council

Paul Vest, Co-Chair YMCA of Western North Carolina

Richard Hudspeth Community Care of WNC
Richard Oliver NC Regional Vet Laboratory

Robert Wagner Western NC Alliance Sonya Greck Mission Hospital Stephanie Kiser Mission Hospital

Terry Bellamy Arc of Buncombe County

Priority Area Workgroups:

Workgroups are composed of representatives from organizations that are currently working on the priority areas: community members and interested Public Health Advisory Council members. Department of Health staff provide support in convening and facilitating the process for the Workgroups. The Workgroups harness existing resources to develop a unique community approach and achieve results beyond the scope of one single institution or organization. Representatives from the Workgroups will report regularly to the Public Health Advisory Council to share actions, emerging issues, and policy recommendations.

The first product of their work together is this CHIP plan.

We will be continuously engaging with new partners as they come to our attention.

Currently engaged partners include:

- Addiction, Recovery, Prevention (ARP)
- Arc of Buncombe County
- ASAP (Appalachian Sustainable Agriculture Project)
- Asheville Area Bike & Pedestrian Task Force
- Asheville Buncombe Community Christian Ministries
- Asheville Buncombe Food Policy Council (and member organizations)
- Asheville Buncombe Institute for Parity Achievement
- Asheville Buncombe Youth Soccer Association
- Asheville City Schools
- · Asheville Greenworks
- BCHHS Economic Services
- BCHHS Innovative Approaches
- BCHHS Nurse Family Partnership
- BCHHS Outreach and Wellbeing
- BCHHS School Health
- BCHHS Triple P-Positive Parenting Program
- BCHHS Under Six
- BCHHS- Family Planning Clinic
- BCHHS- Nurse Family Partnership
- BCHHS- Youth Educators and Advocates for Health
- Blue Ridge Bicycle Club
- Bountiful Cities Project
- Buncombe Bike Ed Network
- Buncombe County Parks, Greenways and Recreation
- Buncombe County Schools
- CarePartners Health Services
- Child Abuse Prevention Services
- Child Care Health Consultation
- Children First-Communities in Schools
- Children's Developmental Services Agency of WNC
- City of Asheville
- Community Action Opportunities
- Community Care of WNC
- Community Transformation Grant Project -Region 2

- FEAST/ Slow Food Asheville
- FIRST
- Healthy Buncombe Eat Smart Move More Coalition
- Innovative Approaches
- Land of Sky Regional Council
- MAHEC
- MAHEC Family Medicine
- MANNA Foodbank
- Mission Health
- Mount Zion Community Development,
 Inc
- Mountain Area Child & Family Center
- NC Cooperative Extension-Buncombe County Center
- North Carolina Center for Health and Wellness
- North Carolina Preconception Health Campaign/ Mission Health
- Park Ridge Health
- Pisgah Legal Services
- Planned Parenthood Health Systems
- Rainbow in My Tummy
- Smart Start
- The Success Equation
- Town of Black Mountain
- United Way of Asheville and Buncombe County
- V.A. Medical Center: Charles George
- Western North Carolina AIDS Project
- Western North Carolina Community Health Services
- WNC Alliance
- WNC Health Network
- WNC Pediatric Care Collaborative
- WNC Trips for Kids
- Women's Wellbeing & Development Foundation
- YMCA of Western North Carolina
- Youth Empowered Solutions
- YWCA of Asheville

CHIP Plan Outline

Healthy Living - Physical Activity, Healthy Eating, and Healthy Weight

- **Goal 1:** Increase consumption of nutritious, whole foods and beverages that support good health including fruits and vegetables among all residents of Buncombe County through improved access, availability, and education
 - Strategy 1.1: Access to foods from local farms
 - Strategy 1.2: Access to free, open, public food sources
 - Strategy 1.3: Retail sources of nutritious foods in low-access communities
 - Strategy 1.4: Financial access to nutritious foods among low-income residents
 - Strategy 1.5: Education about local sources for nutritious foods
 - Strategy 1.6: Organizational policy and environmental support for healthy food access
- Goal 2: Increase physical activity and healthy eating among students and staff by creating environments in all school settings that promote healthy active lifestyles
 - Strategy 2.1: Policy and environmental supports for physical activity and healthy eating in schools
- **Goal 3:** Increase daily physical activity through policy and environmental change to support active transportation
 - Strategy 3.1: Complete streets
 - Strategy 3.2: Organizational environments and policies that support active transportation
 - Strategy 3.3: Community support for active transportation
- Goal 4: Increase physical activity by creating safe, supportive, and encouraging environments for fitness
 - Strategy 4.1: Community recreational and fitness resources
 - Strategy 4.2: Organizational environments to support physical activity
- Goal 5: Increase the number of infants in Buncombe County that are breastfed by creating supportive, encouraging policies and environments for breastfeeding
 - Strategy 5.1: Breastfeeding policies
 - Strategy 5.2: Outreach and education
- **Goal 6:** Increase the percent of Buncombe County residents at a healthy weight through community and clinical supports and linkages
 - Strategy 6.1: Clinical weight management
 - Strategy 6.2: Community resources to support physician-directed clinical weight management

Tobacco Prevention and Cessation

- **Goal 1:** Reduce tobacco use by increasing services and policies that support tobacco cessation
 - Strategy 1.1: Evidence-based practice in clinical settings
 - Strategy 1.2: Employer support for cessation
 - Strategy 1.3: QuitlineNC
 - Strategy 1.4: Access to cessation therapies
- Goal 2: Reduce exposure to tobacco-use and secondhand smoke by increasing tobacco-free and smoke-free policies
 - Strategy 2.1: Tobacco-free ordinances and laws
 - Strategy 2.2: Tobacco-free worksites
 - Strategy 2.3: Tobacco-free housing
- **Goal 3:** Prevent and reduce tobacco use among youth and young adults by increasing services and compliance with regulations
 - Strategy 3.1: Compliance with tobacco regulations among institutions that serve youth
- Goal 4: Increase public will for tobacco-related policy and environmental changes
 - Strategy 4.1: Influence community culture/norms around tobacco use
 - Strategy 4.2: Mass media campaigns that target youth and young adults

Preconception Health

- Goal 1: Increase awareness of the importance of health before pregnancy
 - Strategy 1.1: Preconception health trainings for health care providers
 - Strategy 1.2: Preconception health trainings for consumers
 - Strategy 1.3: Community ambassador peer trainings in preconception health
- Goal 2: Increase reproductive health education and awareness among teens
 - Strategy 2.1: Making Proud Choices curriculum
 - Strategy 2.2: Promotional and educational activities by youth peer educators
 - Strategy 2.3: Growth and development and reproductive health and safety curriculum in schools
- **Goal: 3:** Increase access to reproductive health services
 - Strategy 3.1: Expedited protocol for birth control prescription
 - Strategy 3.2: Enrollment of eligible women in the Be Smart Family Planning Medicaid Waiver
 - Strategy 3.3: School nurse family planning/STI case management
 - Strategy 3.4: Women's healthcare at methadone clinics
 - Strategy 3.5: Integrated Targeted HIV and STD Testing Services (ITTS)

- **Goal 4:** Increase opportunities for interconception care
 - Strategy 4.1: Case management, nursing assessment, and care plans for pregnant and postpartum women
 - Strategy 4.2: Postpartum visits
 - Strategy 4.3: Integrated interconception care

Early Childhood Development

- Goal 1: Increase availability and sustained access to high quality early care and learning
 - Strategy 1.1: Training and technical assistance to support early educators and child-care providers in maintaining and increasing program quality
 - Strategy 1.2: Advocate for increased investment and ensure access to subsidized child-care though vouchers, NC Pre-K, Early Head Start, and Head Start
 - Strategy 1.3: Child care co-ops for low-income families
- Goal 2: Support and strengthen families
 - Strategy 2.1: Parenting education that supports effective parenting practices, healthy interaction with children, appropriate developmental expectations, and provides child development referral resources
 - Strategy 2.2: Parent support groups in the community for families to help them build on their strengths and enhance social support systems
 - Strategy 2.3: Community education and case management/care coordination for families experiencing or at risk for child maltreatment
- **Goal 3:** Increase early identification of and intervention/treatment for special healthcare and developmental needs
 - Strategy 3.1: High quality trainings for early educators to screen and for health care providers to identify young children with special health care and developmental needs
 - Strategy 3.2: Case management/care coordination for children with special health care and developmental needs
- Goal 4: Improve policies, systems, and environments for children through advocacy
 - Strategy 4.1: Education and advocacy initiatives to reduce the incidence of poverty and its impact on children and early childhood development

Access to Care

- Goal 1: Improve the connection between community programs and clinical providers
 - Strategy 1.1: Create workgroup of clinical providers and community program directors to map out and make systems improvements between their fields

Monitoring and Accountability

Monitoring and accountability are essential for a successful CHIP. As we use a collective impact framework, we are committed to advancing the use of shared measurements across agencies with related strategies. Buncombe County Health and Human Services staff are available to track key data, develop quality improvement projects with partners to enhance data sharing, and regularly communicate findings to partners and the public. Part of this ongoing tracking and transparency will involve the creation of an online dashboard of key health data and an online version of this CHIP plan, which will be updated regularly to reflect the progress of each strategy.

CHAPTER 1 - INTRODUCTION

What is a Community Health Improvement Plan (CHIP Plan)?

A successful Community Health Improvement Process (CHIP) is documented in a "CHIP plan" that outlines the priority health issues for a defined community and how these issues will be addressed. This plan was created through a community-wide, collaborative process that engages partners and organizations to develop, support, and implement the plan. It is intended to serve as a vision for the health of the community and a framework for organizations to use in leveraging resources, engaging partners, and identifying their own priorities and strategies for community health improvement.

This shared plan is intended to help focus and solidify each of our key partner agencies' commitment to improving the health of the community in specific areas. The goal is that, through sustained, focused effort on this overarching framework, a wide range of public health partners and stakeholders engaged in assessment, planning, and action will be able to document measured improvement on these key health issues over the coming years.

The next phase will involve broad implementation of the action plan details included here and monitoring/evaluation of the short-term and long-term outcomes and indicators.

This 2013 CHIP plan is focused on a six-month to three-year timeline. The CHIP is iterative and involves continuous monitoring; we plan to release an annual update of this document in December 2013 and again in December 2014. The next Community Health Assessment (CHA) will be conducted in 2015.

How to Use this CHIP Plan

This CHIP plan is designed to be a broad, strategic framework for community health and will be a "living" document that will be modified and adjusted as conditions, resources, and external environmental factors change. It has been developed and written in a way that engages multiple voices and multiple perspectives. We are working toward creating a unified effort that helps improve the health and quality of life for all people who live, work, and play in our county.

We encourage you to review the priorities and goals, reflect on the suggested intervention strategies, and consider how you can join this call to action individually, within your organizations, and collectively as a community.

To get involved or for questions about this document, please contact Marian Arledge at (828) 250-5094.

Connection to the 2012 Community Health Assessment

Community Health Assessment (CHA) is a core step in the larger CHIP for improving and promoting the health of a community. The role of CHA, as a process and product, 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.

The 2012 Buncombe County CHA investigated and described the current health status of the community, what has changed since the 2010 CHA, and what still needs to change to improve the health of the community. The process involved the collection and analysis of a large range of secondary data, including demographic, socioeconomic and health statistics, environmental data, as well as primary data such as personal self-reports and public opinion collected by survey, listening sessions, and other methods.

In the 2012 CHA, priorities were chosen by a diverse group of community stakeholders who drew from data and information gathered during the CHA process to make their decisions. The selected priorities do not negate the importance of other health topics, and they do offer opportunities for dramatically improving health outcomes based on the data that was collected and analyzed. Because it took place after only two years of community action since the 2010 assessment, the 2012 CHA did not involve an extensive re-prioritization process. The guiding principles of equity, access to resources, prevention, assets-based approach, and results, impact, and outcomes set by the 2010 CHA Steering Committee were used to clarify and focus 2012 priorities.

Community Health Assessment Priorities for 2012 – 2015:

- Healthy Living: Physical Activity, Healthy Eating, and Healthy Weight
- Tobacco Prevention and Cessation
- Preconception Health
- Early Childhood Development
- Access to Care Clinical Community Connections

The Buncombe County 2012 CHA and past assessments can be found at www.BuncombeCounty.org/HealthReports.

WNC Healthy Impact

WNC Healthy Impact is a partnership between hospitals, health departments, and their partners, in western North Carolina to improve community health. As part of a larger, continuous community health improvement process, these partners are collaborating to conduct Community Health (Needs) Assessments across western North Carolina. See www.WNCHealthyImpact.com for more details about the purpose and participants of this regional effort. The regional work of WNC Healthy Impact is supported by a steering committee, workgroups, local agency representatives, and a public health/data consulting team.

Did you know?

Only 36 percent of adults and 64 percent of children in grades K-5 are at a healthy weight.

62 percent of Buncombe County residents report meeting the recommended level of weekly physical activity of 30 minutes of moderate physical activity most days of the week.

Less than 10% of residents report eating on average 5 daily fruit and vegetable servings.

Over a quarter (26%) of residents tell us that during the past year they have been worried about having food run out before they had money to buy more.

Sources: WNC Healthy Impact Buncombe County School Health

CHAPTER 2 – HEALTHY LIVING: PHYSICAL ACTIVITY, HEALTHY EATING, AND HEALTHY WEIGHT

Situational Analysis

Overweight and obesity is a challenging public health issue. And while the "obesity epidemic" is a term frequently seen in the press, the health concern is not weight in and of itself, but rather the long list of

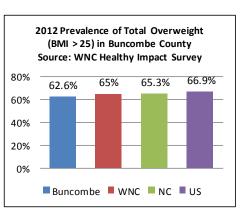
The social, environmental, and behavioral factors that contribute to the epidemic of obesity and other chronic diseases are deeply embedded in our society. Identifying and dislodging these factors will require deliberate, persistent action. Making these changes will require individual commitment, tools to help individuals and families make better decisions, policy changes, environmental changes, and ultimately a cultural change. North Carolina's Plan to Address Obesity: Healthy Weight and Healthy Communities 2013-2020.

chronic disease and disabilities associated with unhealthy weight. Overweight and obesity is a very complex issue to address given the many factors that influence eating behavior and physical activity, not to mention genetic factors associated with unhealthy weight. Research strongly links the social and built environment

to unhealthy weight and, while it may seem counter intuitive, food insecurity is strongly associated.

Overweight is defined as having a Body Mass Index (BMI) of 25 or greater and is associated with chronic disease conditions, including

coronary heart disease, type 2 diabetes, cancer, hypertension, stroke, liver disease, sleep apnea, respiratory problems, osteoarthritis, gynecological problems, and poor health status. While Buncombe County is less overweight than the region and the state, the majority (62.6%) of our adult population still has a BMI of

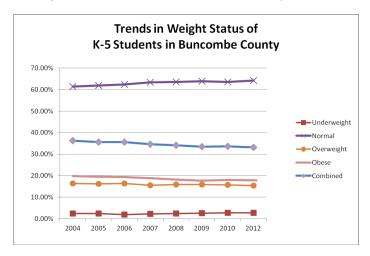


greater than 25. Of those adults who are overweight, almost half have a BMI of greater than 30, pushing them into the obese category. The percentage of the population that is overweight or obese increases with age. Although these rates do meet the Healthy People 2020 goal of adult obesity rates less than 30.6%, we are still far from meeting the

Healthy People 2020 goals for both elevated cholesterol and high blood pressure.

Promisingly, trends in BMI-for-age data (which has been collected by Buncombe County School Health since 2004) show unhealthy weight among school-age children at a very slight downward trajectory.

The good news is that Buncombe County residents want to see their county become a healthier



place to live. More than 9 out of 10 respondents to the CHA telephone survey said they thought it was important that our communities make the following changes:

- Make it easier for people to access farmer's markets, including mobile farmer's markets and tailgate markets;
- Increase the public's access to physical activity spaces at local organizations during off-times; and
- Improve access to trails, parks, and greenways.

Buncombe County has started to make these changes by expanding bike lanes, improving parks, enhancing sidewalks and street lighting, implementing a City Complete Streets Policy, expanding access to local fresh fruits and vegetables for low-income residents, and forming the Asheville Buncombe Food Policy Council to bring individuals and organizations together to address food insecurity.

Key Community-Level Indicators

Indicator	Source	Baseline	Target	Target Date
% Buncombe adults engaging in	WNC Healthy Impact primary	62.1%	62.6%	December 2015
recommended physical activity	data survey	(2012)		
% Buncombe adults consuming	WNC Healthy Impact primary	9% (2012)	9.5%	December, 2015
recommended daily servings of	data survey			
fruits and vegetables				
% Buncombe adults at healthy	WNC Healthy Impact	36.2 (2012)	36.5%	December, 2015
weight				
% of Buncombe students in K-5	Buncombe County School	64.15%	64.65%	December, 2015
public schools at healthy weight	Health BMI Assessment	(2012)		
(BMI > 5th percentile BMI-for-age				
and less than 85 th percentile)				

Spotlight on Success

Asheville Buncombe Food Policy Council

Buncombe County is used to showing up on national "best of" lists. However, over the past few years it has had the unwelcome distinction of being on the top ten list of most food insecure communities. This high degree of food insecurity is in stark contrast to the growing local food movement and increasing support for area farmers. To address food insecurity and the much broader issue of a sustainable food system, the Asheville Buncombe Food Policy Council (ABFPC) was formed in 2011. The ABFPC has brought together a diverse group of community partners to identify and propose innovative solutions to spur local economic development and create environmentally-sustainable and socially-just food systems in Buncombe County. More than 150 community organizations and city/county residents came together to develop its mission and governance structure. By its first birthday, the ABFPC had successfully collaborated with the City of Asheville's Office of Sustainability to develop the city's first Food Action Plan and quickly assisted in getting zoning regulations changed to allow farmers' markets in residentially zoned areas in Asheville. Since passage, three new markets have emerged. The ABFPC has also helped raise community awareness of food policy and food security issues across the county. Darcel Eddins, ABFPC co-founder, says, "We've done some really big, awesome things in the past year. And we've done it in a way that the community is paying attention and is starting to get engaged in a way that is respectful...[the ABFPC has] been unbelievably successful in elevating food in the community awareness."

Active Transportation

Awareness and support for active transportation in Buncombe County is an example of how steadily building a network of partners and step by step building on successes can lead to big changes and cultural shifts. Claudia Nix, owner of Liberty Bikes and Blue Ridge Bicycle Club's Advocacy Chair, says, "A decade ago we began to see the importance of broadening our work to partner with health and environmental organizations and make the shift to support all forms of active transportation." Bicycle commuters were not a common sight and urban community centers lacked adequate sidewalks and other safety features. The resulting Strive Not to Drive partnership included a diverse group of professionals and community advocates that has broadened far beyond the original focus of an annual community awareness event. They have consistently engaged in the process of moving policy and environmental change forward through grass-roots advocacy as well as partnering with the City of Asheville and Buncombe County. Their focus has broadly addressed the "5 E's": Encouragement - through annual awareness campaigns and walk/bike to school events; Enforcement - by working with Asheville Police Department to make streets safer for all users and collaborating in a bicycle head and tail light give-away program; Education - by using public health funding to support youth and adult bicycle education programs and provide certification for 10 local bicycle education instructors; Evaluation - by beginning efforts to annually count cyclists and pedestrians at key intersections; and Engineering - through policy change, including developing the first City Bicycle Plan (adopted 2008) and revising the City Pedestrian Plan (adopted 2008), adoption of the Buncombe County Greenways Master Plan (2012) achieving designation as a bronze level Bicycle Friendly

Community (2012), and championing adoption of the City of Asheville's Complete Streets Policy (2012). The advocacy continues to expand and local funders in partnership with Quality Bicycle Products recently paid to send community leaders throughout western North Carolina to Minneapolis to learn innovative strategies to continue building a system that supports active transportation. Since 2009 when the partnership began to conduct bicycle and pedestrian counts at key intersections throughout the City of Asheville, the number of bicyclists and pedestrians has increased by 14% and 52% respectively.

The WNC Pediatric Care Collaborative

The Western North Carolina Pediatric Collaborative (the Collaborative) is an example of what can happen when a group of pediatricians, community health providers, and public health partners come together to collaborate, improve practice, and improve community health. "A lot of people feel they're part of this. It's a grassroots, collaborative and consensus model," says Melissa Baker of the Buncombe County Health Department and Innovative Approaches, an integral partner in the Collaborative. The Collaborative aims to work with physicians to implement evidence-based asthma and obesity care for patients in 15 practices. Built upon existing partnerships and expertise among Community Care of WNC, the Mountain Area Health Education Center (MAHEC), and Buncombe County Health and Human Services, and led by a local pediatrician, the Collaborative is developing systems and procedures to assess and manage the practices' patient populations, track and share data related to asthma and obesity care within and among practices, and provide effective patient education and self-management support. The Collaborative also has a strong prevention focus and is partnering with WNC Healthy Kids to expand social marketing around the "5-2-1-Almost None" pediatric obesity messaging campaign (5 fruits and vegetables, 2 hours or less of screen time, 1 hour of physical activity and almost no sugar-sweetened beverages), as well as to develop and pilot a screening tool for patient engagement/motivational interviewing. Additionally, school nurses are involved to ensure their efforts to provide care to children/youth through the school setting aligns with primary care.

Carrier Pettler, Quality Improvement Specialist for Community Care of WNC, says the process "helps providers glean a population health perspective." They are able to do this in a "collaborative environment where they can bounce ideas off other providers, learn from people who are having successes, learn from other people's challenges, and implement these things into a practice in a seamless way. Their time in the office is more focused on the patient and the lessons they've learned from the Collaborative and less focused on trying to do that work individually in their practice on their provider time."

Partners

Addressing physical activity, healthy eating, and healthy weight is complex and will require the collaborative planning, action, and coordination of multiple partners in our community. The following partner agencies and organizations are engaged in efforts to increase physical activity, healthy eating, and healthy weight in our community. As new partners are identified, we will continuously work to bring them into the process.

Organizations:	Website or Contact Information
Asheville Buncombe Community Christian Ministries	http://www.abccm.org/
Asheville Buncombe Food Policy Council (and member organizations)	http://www.abfoodpolicy.org/
Asheville Buncombe Institute for Parity Achievement	http://abipa.org/
Asheville Buncombe Youth Soccer Association	http://abysa.org/
Arc of Buncombe County	http://www.arcofbc.org/
Asheville Greenworks	http://www.ashevillegreenworks.org/
ASAP (Appalachian Sustainable Agriculture Project)	http://www.asapconnections.org
Asheville City Schools	http://www.ashevillecityschools.net/Pages/default.aspx
Asheville Area Bike & Pedestrian Task Force	http://www.abptaskforce.org/
Blue Ridge Bicycle Club	http://blueridgebicycleclub.org
Buncombe Bike Ed Network	http://fbrmpo.org/bike_and_ped/buncombe_bike_ed
Bountiful Cities Project	http://www.bountifulcities.org/
Buncombe County Cooperative Extension	http://buncombe.ces.ncsu.edu/
Buncombe County Parks, Greenways and Recreation	http://www.buncombecounty.org/governing/depts/parks/Default.aspx

Buncombe County Schools • Child Nutrition	http://www.buncombe.k12.nc.us
Buncombe County Health and Human Services • School Health • Nutrition/WIC • Office of Minority Health Equity Grant	http://www.buncombecounty.org/Governing/Depts/health/SchoolHealth.aspx http://www.buncombecounty.org/Governing/Depts/Health/Nutrition.aspx
CarePartners Health Services	www.carepartners.org
City of Asheville • Parks & Recreation • Transportation	http://www.ci.asheville.nc.us/
Community Care of WNC	http://www.communitycarewnc.org/
Community Transformation Grant Program	ctp.region2@gmail.com
FEAST/ Slow Food Asheville	http://feast.slowfoodasheville.org/
Healthy Buncombe Eat Smart Move More Coalition	http://www.healthybuncombe.org/
Innovative Approaches	
Land of Sky Regional Council	http://www.landofsky.org/
MAHEC	http://www.mahec.net/
MANNA Foodbank	http://mannafoodbank.org/
Mission Health	http://www.mission-health.org/
North Carolina Center for Health and Wellness	http://ncchw.unca.edu/

Rainbow in My Tummy	http://www.rainbowinmytummy.com/
Smart Start – Shape NC	http://www.smartstart-buncombe.org/index.php/shape-nc
Town of Black Mountain • Greenways • Health Initiative	http://www.townofblackmountain.org/ http://www.townofblackmountain.org/greenway.htm http://www.townofblackmountain.org/health.htm
WNC Alliance	http://wnca.org/
WNC Health NetworkWNC Healthy KidsWNC Health Impact	http://www.wnchn.org/
WNC Pediatric Care Collaborative	http://www.tac-consortium.org/western-north-carolina- pediatric-collaborative-an-organic-process/
WNC Trips for Kids	http://tripsforkidswnc.kintera.org
Youth Empowered Solutions (YES!)	http://www.youthempoweredsolutions.org/
YMCA of Western North Carolina	http://www.ymcawnc.org/
YWCA of Asheville	http://www.ywcaofasheville.org/

Healthy Living: Physical Activity, Healthy Eating, and Healthy Weight Plan

Vision of Impact

A county where healthy choices are the everyday choice and are supported by improving access, availability, education, and community support for physical activity and healthy food options in places where community members live, learn, earn, play, pray, and pay.

- Adapted from North Carolina Eat Smart, Move More



Community approaches to promote physical activity, healthy eating, and healthy weight will support all residents of Buncombe County, across the lifespan and of all abilities, with an emphasis on engaging and supporting county residents with greatest need.



State and National Objectives	Baseline/Indicator Source
Related Healthy NC 2020 Objective: Increase the percentage of adults	BRFSS
getting recommended amount of physical activity	
[2011 Baseline: 46.8%; 2020 Target: 60.6%]	
Related NC Plan to Address Obesity 2013-2020 ¹ Objective: By January 1,	BRFSS
2020, at least 61% of North Carolina adults will meet the physical activity	
recommendation for aerobic activities.	
[2011 Baseline: 46.8%; 2020 Target: 61 %]	
Related NC Plan to Address Obesity Objective: By January 1, 2020, at least	Child Health Assessment and
58% of North Carolina children and youth ages 2 to 17 years will exercise,	Monitoring Program. North
play a sport, or participate in physical activity that makes them sweat or	Carolina State Center for
breathe hard for at least 60 minutes on four or more days per week.	Health Statistics.
[2011 Baseline: 53.5%; 2020 Target: 58%]	
Related Healthy NC 2020 Objective: Increase the percentage of adults who	BRFSS
report they consume fruits and vegetables five or more times per day.	
[2011 Baseline: 13.7%; 2020 Target: 29.3%]	
Related NC's Obesity Plan Objective: By January 1, 2020, at least 29% of	BRFSS
North Carolina adults will consume five or more servings of fruits and	
vegetables per day.	
[2011 Baseline: 13.7%; 2020 Target: 29%]	
Related NC's Obesity Plan Objective: By January 1, 2020, at least 68% of	Child Health Assessment and
North Carolina children and youth ages 1 to 17 years will consume five or	Monitoring Program. North
more servings of fruits and vegetables, including 100% fruit juice, on a	Carolina State Center for
typical day.	Health Statistics.

¹ North Carolina's Plan to Address Obesity: Healthy Weight and Healthy Communities is consistent with and expands on Healthy NC 2020 Objectives.

[2011 Baseline: 64%; 2020 Target: 68%]	
Related NC's Obesity Plan Objective: By January 1, 2020, at least 68% of	Child Health Assessment and
middle school students will be neither overweight nor obese.	Monitoring Program. North
[2020 Target: 68%]	Carolina State Center for
	Health Statistics.
Related NC's Plan to Address Obesity Objective: By January 1, 2020, the	BRFSS
percentage of North Carolina adults who report that their community has	
trails, greenways, bike paths, or sidewalks for biking, walking, or other	
activities will increase by 3.5 percentage points from 2012 baseline.	
[2012 Baseline: Data will be available in the summer of 2013.]	
Related NC's Plan to Address Obesity Objective: By January 1, 2020, the	BRFSS
percentage of North Carolina adults who report that it is easy to purchase	
healthy foods (e.g., whole grain foods, low-fat options, fruits, and	
vegetables) in their neighborhood will increase by 3.5 percentage points	
from 2012 baseline.	
[2012 Baseline: Data will be available in the summer of 2013.]	

Goal 1: Increase consumption of nutritious² whole foods and beverages that support good health, with emphasis on fruits and vegetables, among all residents of Buncombe County through improved access, availability, and education

Strategy 1.1: Access to Foods from Local Farms

Objective 1.1.1:

Increase the number of local and direct farm-to-consumer outlets in Buncombe County (including farm-to-individual, farm-to-organization, and farm-to-institution outlets)

Indicator: Number of farmers' markets, farm stands, and CSAs - North Carolina Fruit and Vegetable Outlet Inventory

Objective 1.1.2:

Increase sales at **existing** local and direct farm-to-consumer outlets by strengthening, supporting, and sustaining community resources and infrastructure that connect Buncombe County residents, organizations, and institutions to local and direct food retail outlets

Indicator: Sales to local and direct farm-to-consumer outlets

Objective 1.1.3:

Establish baseline and process for measuring the percent of individuals in low-access communities who report **transportation** as a barrier to accessing local/direct farm-to-consumer outlets

Indicator: Process for measuring transportation barriers to accessing local/direct farm-to-consumer outlets and indicators identified. (Establish baseline year 1, year 2 increase)

Strategy Background

Evidence Base: Several key sets of recommended strategies for increasing access to healthy foods recommend supporting infrastructure and providing incentives for the production, distribution, and processing of local and regionally grown healthy foods (Khan et al. 2009; Center for Training and Research Translation, Convergence Partnership 2011). Providing incentives to produce, distribute, procure, and consume food from local farms may increase the availability and consumption of locally produced foods by community residents, enhance the capacity of the food system, and increase the viability of local farms and food security for communities (Khan et al. 2009).

Mechanisms for purchasing food directly from farms include farmers' markets, farm stands, community-supported agriculture, "pick your own" farming operations, farm-to-school programs, and other farm-to-institution initiatives (universities, childcare, hospitals, etc.), as well as other community organizations such as food banks and businesses such as grocery stores

² **Nutritious food** for this document is defined as *fruits, vegetables, whole grains and other minimally processed foods low in added sugars and fats.*

and restaurants. Experts suggest these mechanisms have the potential to increase opportunities to consume more nutritious foods, such as fresh fruits and vegetables, by reducing costs of fresh foods through direct sales; making fresh foods available in areas without supermarkets; and harvesting fruits and vegetables at peak ripeness which might improve their nutritional value and taste (Khan et al. 2009).

Increasing linkages to support a direct link between purchasing foods from farms and improved diet is considered a promising strategy but evidence is limited. Two studies of initiatives to encourage participation in the Seniors Farmers' Market Nutrition Program (Kunkel 2003) and the WIC Farmers' Market Nutrition Program (Conrey 2003) report either increased intention to eat more fruits and vegetables or increased utilization of the program; however, neither study reported direct evidence that the programs resulted in increased consumption of fruits and vegetables. However, a North Carolina study has been funded to explore the potential nutritional and health benefits of eating locally grown foods (Khan et al. 2009).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies

Promising Strategies for Creating Healthy Eating and Active Living Environments. Convergence Partnership, 2011. Available at: http://www.convergencepartnership.org/atf/cf/%7B245a9b44-6ded-4abd-a392-ae583809e350%7D/PROMISING%20STRATEGIES-07.18.11.PDF

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm

Type of Change: Policy, Environment, Community

Partner Agencies:

Asheville Buncombe Food Policy Council, ASAP (Appalachian Sustainable Agriculture Project), Bountiful Cities Project, Community Transformation Grant Project, Youth Empowered Solutions, YWCA of Asheville

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
Activity	Resources Needed		Result Verification	_
(what is being done?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Complete annual Fruit	-Staff time	Up-to-date inventory of	Completed inventory	August 30, 2013
and Vegetable Outlet		all Buncombe County	submitted to NC Healthy	
inventory		farmers' markets,	Living	
		tailgate markets, and		
		farm stands		
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities	
shared measures and	participants	roles and	posted in online CHIP	
roles/responsibilities		responsibilities for	document	
		moving work on		
		strategy forward		

Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system	established	
managing data	collaborating/supporting	and timeline for		
	partners	strategy developed		
Develop detailed	-Staff time	Strategy level action	Action plans posted in	Oct/November 2013
action plan for each	-Working group	plans developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-ACS, BCS, SHAC	developed	posted in online CHIP	
strategies to increase	-Working group		document	
collaboration and	participants			
shared information &				
resources				

Strategy 1.2: Access to free, open, public food sources

Objective 1.2.1:

Maintain and/or increase the percent of the population served by **existing** community programs/services to connect Buncombe County residents to free, emergency, and public food sources (e.g., food pantries, community gardens, MANNA Packs, etc)

Indicator: Number of participants in existing programs and/or services (partners still identifying best measure)

Objective 1.2.2:

Increase the number of public food sources in Buncombe County that are accessible to all members of the community (e.g., free community/faith/school gardens, fruit and nut trees on public property)

Indicator: Number of public food sources

Objective 1.2.3:

Increase the percent of eligible residents participating in local emergency food assistance services and programs (e.g., food pantries)

Indicator: Percent of eligible residents participating in local emergency food assistance services/programs

Strategy Background

Evidence Base: Community gardens and edible plantings on public land parcels can help increase access to nutritious foods. Several studies have shown that community gardens and garden-based nutrition intervention programs are associated with increased fruit and vegetable intake among both youth and adults, and may increase willingness to taste fruits and vegetables among youth (Alaimo 2008, Robinson-O'Brien and Heim 2009).

Food insecurity is another important factor to address in improving access to nutritious food sources. More than 1 in 5 (21.8%) of residents of the Asheville Metropolitan Statistical Area experience "food hardship" (defined as not having enough money to buy food for self or family in the past twelve months) (Food Research and Action Center 2013). Emergency food sources such as food pantries can be important resources to alleviate the effects of food insecurity.

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies.

Promising Strategies for Creating Healthy Eating and Active Living Environments. Convergence Partnership, 2011. Available at: http://www.convergencepartnership.org/atf/cf/%7B245a9b44-6ded-4abd-a392-ae583809e350%7D/PROMISING%20STRATEGIES-07.18.11.PDF.

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm.

Type of Change: Policy, Environmental Change

Partner Agencies:

Asheville Buncombe Food Policy Council, ASAP, Women's Wellness Development Foundation, ABIPA, Cooperative Extension, MANNA, BCPGR, YMCA, MSJ Community Benefits, WNC Gardens That Give, Healthy Buncombe

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013
Collaborate with AB Food Policy Asset Mapping Cluster, WNC Gardens that Give, MANNA Food Bank and others to identify baseline measures for nutritious food retail outlets in low-access communities	-Staff time	Up-to-date inventory of all convenience stores, tiendas, and other retail outlets in low-access communities	Completed inventory of public food outlets shared with partners	October/November 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supportin g partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013
Develop communication strategies to increase collaboration and shared information & resources	-Staff time -ACS, BCS, SHAC -Working group participants	Communication plan developed	Communication plan posted in online CHIP document	Sept/October 2013

Strategy 1.3: Retail sources of nutritious foods in low-access communities

Objective 1.3.1:

Increase the number of retail outlets in low-access communities within Buncombe County that offer nutritious, whole foods (e.g., convenience/corner stores, mobile markets)

Indicator: Number of retail outlets

Strategy Background

Evidence Base: Limited availability of healthier food and beverage choices in underserved communities is a significant barrier to improving nutrition and achieving healthy weight (Morland et al. 2002). Many low-access urban and rural communities do not have grocery stores. In Buncombe County, 16.1% of low-income residents live more than one mile from the nearest grocery store and do not own a car (WNC Healthy Impact 2012). Many of these residents may rely on corner stores or convenience stores which tend to stock and serve mostly unhealthy pre-packaged foods, snacks, and sugar-sweetened beverages. Multiple studies examining associations between children's diets and access to different types of food stores found that youth who had greater access to convenience stores consumed fewer fruits and vegetables (Jago 2007, Timperio 2008). In addition, several studies found that greater availability of healthy food in stores was related to increased consumption of healthy foods at home (Bodor et al. 2008, Cheadle et al. 1991, Fisher et al. 1999). Cross-sectional studies indicate that the presence of retail venues offering healthier food and beverage choices is associated with increased consumption of fruits and vegetables and lower BMI (Zenk 2005).

Supporting methods for lower-income communities to access healthy foods through corner store development programs is a recommended strategy (Leadership for Healthy Communities 2011). In addition, mobile produce markets have been shown to increase access to fruits and vegetables. For example, the New York City Green Carts Initiative aims to increase access to fresh fruits and vegetables by issuing permits to street vendors selling fresh fruits and vegetables. New York City's annual Community Health Survey indicates a significant increase in the consumption of healthy foods since the start of the Green Cart Initiative in 2008. In high-poverty neighborhoods served by the Green Carts, the percentage of adults who said they ate no fruits or vegetables in the previous day dropped from 19 percent in 2004 to less than 15 percent in 2010 (Laurie M. Tisch Illumination Fund).

Resources that provide an overview of the evidence for this strategy:

Food Research and Action Center: www.frac.org

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm.

Type of Change: Policy, Environment

Partner Agencies:

Asheville Buncombe Food Policy Council, Community Transformation Grant Project, Youth Empowered Solutions, Buncombe County WIC Program, University of North Carolina Asheville, Healthy Buncombe

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013
Collaborate with Youth Empowered Solutions (YES!), AB Food Policy Asset Mapping group and others to identify baseline measures for nutritious food retail outlets in low-access communities	-Staff time	Up-to-date inventory of all convenience stores, tiendas, and other retail outlets in low- access communities	Completed inventory of food outlets shared with partners	October/November 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013
Develop communication strategies to increase collaboration and shared information & resources	-Staff time -ACS, BCS, SHAC Working group participants	Communication plan developed	Communication plan posted in online CHIP document	Sept/October 2013

Strategy 1.4: Financial access to nutritious foods for low-income residents

Objective 1.4.1:

Increase the number of food retail outlets that accept federal food assistance program benefits (SNAP/EBT, WIC, SFMNP), including farmers' markets, farm stands, CSAs, convenience/corner stores, full-service grocers, and others

Indicator: Retail outlets accepting SNAP/EBT, WIC & SFMNP

Objective 1.4.2:

Increase the number of low-income residents that receive education about enrolling in federal nutrition assistance programs

Indicator: Number of low-income residents receiving education about enrolling in federal nutrition assistance programs

Objective 1.4.3:

Increase percent of eligible residents enrolled in federal food assistance programs

Indicator: % of eligible residents enrolled in federal food assistance programs

Objective 1.4.4:

Increase the consumption of fruits and vegetables by low-income clients of Buncombe County Health and Human Service (those receiving WIC and Nutrition Assistance services)

Indicator: BCDHHS client fruit and vegetable consumption

Strategy Background

Evidence Base: Low-income community members may be challenged to afford more nutritious foods, which tend to be perceived as more expensive than less healthy options. More than 1 in 5 (21.8%) residents of the Asheville Metropolitan Statistical Area experience "food hardship" (defined as not having enough money to buy food for self or family in the past twelve months) (Food Research and Action Center 2013).

Federal nutrition assistance programs support financial access to food for low-income families, who are at greatest risk for food insecurity. These programs include the Supplemental Nutrition Assistance Program (SNAP), the Women, Infants, and Children Program (WIC), and others. Participation in federal nutrition assistance programs has been shown to improve the diets and health of young children (Bitler 2003, Stang and Bayerl 2010, VerPloeg et al. 2009). Research suggests participating in programs that subsidize nutritious foods and meals may reduce obesity risk among young children (Kimbro and Rigby 2010), although these results have not been replicated. Some evidence does suggest a positive association between both food insecurity and long-term SNAP participation and weight gain in women (Ver Ploeg and Ralston 2008). However, it is difficult to infer a causal relationship between SNAP participation and

obesity because there are many other variables that can influence the likelihood of obesity (Ver Ploeg and Ralston 2008).

The Convergence Partnership and others recommend leveraging the purchasing power of WIC and SNAP program participants to encourage small stores and farmers' markets to offer fruits and vegetables in low-income neighborhoods through Electronic Benefit Transfer (EBT) access. Evidence-based examples include the New York City Health Bucks program. The Convergence Partnership also recommends improving outreach and efficiency in SNAP delivery and nutrition education (Convergence Partnership 2011).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies

A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity. Leadership for Healthy Communities, 2011. Available at: http://www.rwjf.org/en/research-publications/find-rwjf-research/2011/02/action-strategies-toolkit.html

Local Government Actions to Prevent Childhood Obesity. Institute of Medicine (IOM), 2009. Available at: http://www.nap.edu/catalog.php?record_id=12674

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm

Type of Change: Policy, Environment, Community, Individual

Partner Agencies:

Asheville Buncombe Food Policy Council, ASAP, Community Transformation Grant Project, Buncombe County DHHS, Community Care of Western North Carolina Healthy Buncombe

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Buncombe Co. DHHS, WC, ASAP & CTG -Other identified working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013

Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-ACS, BCS, SHAC	developed	posted in online CHIP	
strategies to increase	-Working group		document	
collaboration and	participants			
shared information &				
resources				

Strategy 1.5: Education about local sources for nutritious foods

Objective 1.5.1:

Increase the number of individuals (organizations) that receive education about available sources of nutritious whole foods in their community and how to use them, including: local and direct food retail outlets; free, open, public food sources (gardens, fruit/nut trees); nutritious food retail outlets in low-income communities; local emergency food assistance services; and others

Indicator: Number of individuals (organizations) that receive education from working group partners about available sources of nutritious, whole foods

Number of residents that receive media communications

Objective 1.5.2:

Increase the number of residents who receive education about producing and preparing their own food (e.g., home gardening, cooking, preserving, etc.)

Indicator: Number of residents who receive direct education from partners about producing and preparing their own food

Strategy Background

Evidence Base: Nutrition education focused on improving individual knowledge, attitudes, and beliefs about healthy eating is a critical component to improving healthy eating behaviors. Education is most effective when paired with policy and environmental change to support healthy eating behaviors. Education may involve group classes or individual education/counseling. The Center for Training and Research Translation recommends individual counseling as an effective strategy for positively changing an individual's healthy eating behaviors (Center for Training and Research Translation). Group nutrition education programs have also been shown to be effective in improving participants' eating behaviors. For example, data from the USDA Expanded Food and Nutrition Education Program (EFNEP) shows that individuals eat a diet closer to MyPlate recommendations after participating in EFNEP than they did before (U.S. Department of Agriculture 2012).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation. Intervention Strategies website. Available at: http://www.centertrt.org/?p=find_strategies

Type of Change: Individual, Community

Partner Agencies:

Buncombe County WIC Program, Community Care of Western North Carolina, Asheville Buncombe Food Policy Council, University of North Carolina Asheville, Smart Start of Buncombe, Land-of-Sky Regional Council, Mission Health/NC Preconception Health Campaign, FEAST, YWCA of Asheville, NC Cooperative Extension, Healthy Buncombe

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -BCDHHS, WIC, Coop Extension, ASAP, FEAST, Mission Health -Other identified working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013
Develop communication strategies to increase collaboration and shared information & resources	-Staff time -ACS, BCS, SHAC -Working group participants	Communication plan developed	Communication plan posted in online CHIP document	Sept/October 2013

Strategy 1.6: Organizational policy and environmental support for healthy food access

Objective 1.6.1:

Establish baseline for outreach contacts to organizations for encouraging and/or creating organizational environments that support healthy food access

Indicator: Baseline measures identified (Establish baseline year 1, year 2 increase)

Objective 1.6.2:

Increase the number of organizations, institutions, businesses, and workplaces that have environments and/or policies to support nutritious food access

Indicator: Number of organizations, institutions, businesses, and workplaces that have environments and/or policies to support nutritious food access

Strategy Background

Evidence Base: Organizational environments (e.g., worksites, hospitals, schools, childcare programs, recreation facilities) can support healthy food choices. For example, many children spend a significant amount of time in after-school programs, childcare, and recreation centers. Research suggests that the nutritional quality of meals and snacks in childcare settings can be poor and activity levels may be inadequate (Ball et al. 2008, Padget and Briley 2005, Story et al. 2006). Creating strong nutrition policies and practices for publicly-operated facilities and programs that serve children and adults can also support environments for promoting healthy eating choices.

Many of the evidence-based strategies already described may be applied in the organizational setting. For example, hospital cafeterias and school nutrition programs may choose to purchase food from local farms. Work sites can make nutritious foods and beverages more available in vending machines, stores, and canteens. Childcare programs can increase participation in the Child and Adult Care Food Program. In addition, organizations, institutions, businesses, and work sites can implement evidence-based strategies such as comprehensive nutrition programs, point-of-purchase prompts and point-of-decision-making labeling to encourage healthier food choices, pricing food items to favor healthier options, and providing social support for healthy eating (Center for Training and Research Translation).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation. Intervention Strategies website. Available at: http://www.centertrt.org/?p=find_strategies.

Local Government Actions to Prevent Childhood Obesity. Institute of Medicine (IOM), 2009. Available at: http://www.nap.edu/catalog.php?record_id=12674.

Type of Change: Policy, Environment

Partner Agencies:

WNC Health Network, WNC Healthy Kids Initiative, ASAP, University of North Carolina Asheville, Youth Empowered Solutions, Buncombe County Health and Human Services (OMH Grant), Healthy Buncombe

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -WNC Health Network, WNC Healthy Kids, ASAP, UNC Asheville -Other identified working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013
Develop communication strategies to increase collaboration and shared information & resources	-Staff time -ACS, BCS, SHAC -Working group participants	Communication plan developed	Communication plan posted in online CHIP document	Sept/October 2013

Goal 2: Increase physical activity and healthy eating among students and staff by creating environments in all school settings that promote healthy active lifestyles

Strategy 2.1: Policy and environmental supports for physical activity and healthy eating in schools

Objective 2.1.1:

Increase the percent of public schools in Buncombe County (ACS & BCS) that improve their Zone Health Assessment by implementing policy/environmental changes that support physical activity and healthy eating

Indicator: Zone Health Assessment scores

Objective 2.1.2:

Increase the number of opportunities for students to be active in educational settings (before, during, after, and on the way to and from school)

Indicator: TBD – will work with partners to identify indicators

Objective 2.1.3:

Improve the percent of a la cart items offered in public schools that meet USDA guidelines

Indicator: Percent of a la cart items that meet USDA guidelines (approach for this will be identified with consideration of new USDA regulations)

Objective 2.1.4:

Increase the number of partnerships between schools and community organizations to support physical activity and healthy eating

Indicator: Number of community/school physical activity and healthy eating partners

Strategy Background

Evidence Base: Evidence supports building activity into the school day outside of physical education, increasing availability of nutritious foods, and decreasing availability of less healthy foods positively impact healthy weight (Chriqui et al. 2013). Since 2006, federal law has required local school districts participating in federal nutrition programs to develop wellness polices that: include goals for nutrition education; assure school meals meet the minimum federal school meal standards; establish guidelines for foods and beverages sold or served outside of school meal programs; establish goals for physical activity and other school-based activities; and develop plans for implementation. While there has been progress to implement, strengthen, and/or increase the comprehensiveness of these policies, there is still a wide gap in compliance among the mandatory policy provisions (Chriqui et al. 2013). In addition, implementation and enforcement of these policies could be stronger, largely due to inadequate funding.

The Task Force on Community Preventive Services recommends implementing programs that increase the length of or activity levels in school-based physical education classes based on strong evidence of their effectiveness in improving both physical activity levels and physical fitness among school-aged children and adolescents (Guide to Community Preventive Services 2009). By increasing the required amounts of vigorous physical activity in schools, elementary and high school students in 13 studies conducted from 1983 to 1999 had consistently improved fitness levels (Active Living Research 2007). Research has also shown strong snack food and beverage standards can play a significant role in the school food environment (Bridging the Gap 2013). School nutrition environments will be impacted by new USDA guidelines for competitive foods in schools.

Resources that provide an overview of the evidence for this strategy:

Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation. IOM, 2012. Available at: http://www.iom.edu/Reports/2012/Accelerating-Progress-in-Obesity-Prevention.aspx.

School District Wellness Policies: Evaluating Progress and Potential for Improving Children's Health Five Years after the Federal Mandate. School Years 2006–07 through 2010-11. Volume 3. Bridging the Gap, 2013. Available at:

http://www.bridgingthegapresearch.org/asset/13s2jm/WP 2013 report.pdf.

Type of Change: School, policy

Partner Agencies:

Buncombe County Schools, Asheville City Schools, School Health Advisory Council, Blue Ridge Bicycle Club (for SRTS advocacy), Smart Start of Buncombe, Asheville Buncombe Food Policy Council, Buncombe County Parks Greenways and Recreation, Buncombe County Health and Human Services, ASAP, WNC Health Network, WNC Healthy Kids Initiative, Community Transformation Grant Project, Blue Ridge Bicycle Club, Youth Empowered Solutions, University of North Carolina Asheville, YWCA of Asheville, Healthy Buncombe

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Develop community partner inventory	-Staff time -Working group participants -School Wellness Committees	Up-to-date inventory of organizations partnering with schools to assist in promotion of healthy eating and/or physical activity	Completed inventory posted on ACS and BCS websites and CHIP online document	Oct/November 2013
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -WNC Health Network, WNC Healthy Kids, ASAP, UNC Asheville -Other identified working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013
Develop communication strategies to allow schools and supporting organizations to connect and increase physical activity and healthy eating support	-Staff time -ACS, BCS, SHAC -Working group participants	Communication plan developed	Communication plan posted in online CHIP document	Sept/October 2013

Goal 3: Increase daily physical activity through policy and environmental change to support active transportation

Strategy 3.1: Complete Streets

Objective 3.1.1:

Increase the number of city and county policies adopted that promote complete streets policies

Indicator: Percent of Buncombe County governments with complete streets policies

Objective 3.1.2:

Increase the <u>total</u> mileage of bicycle and pedestrian facilities that support safe, active transportation (sidewalks, greenways and bike lanes/routes)

Indicator: Miles of bicycle facilities

Miles of sidewalks & greenways

Objective 3.1.3:

Increase the mileage of <u>continuous</u> bicycle and pedestrian facilities that support safe, active transportation (sidewalks, greenways and bike lanes/routes)

Indicator: Miles of continuous bicycle and pedestrian facilities

Objective 3.1.4:

Increase the number of bicycle transportation routes supported by wayfinding signage

Indicator: Miles of bicycle routes supported by wayfinding signage

Strategy Background

Evidence Base: Comprehensive reviews of research on the impact of active transportation determined that improved bicycling infrastructure, as well as street-scale urban design and land use policies that support walking, are effective in increasing levels of physical activity (Macbeth 1999, Dill and Carr 2003, Nelson and Allen 1997, Heath et al. 2006). The few studies examining the relationship between public transportation and physical activity have found a positive association. For example, one study found transit users have higher levels of physical activity because they walked to transit stops (Zheng 2008).

To support active transportation, communities across the country are adopting "Complete Streets Policies" that ensure transportation planners and engineers consistently design and operate the entire roadway with all users in mind – including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities (National Complete Streets Coalition). A total of 488 Complete Streets Policies are now in place across the nation at all levels of government, including in 42 regional planning organizations, 38 counties, and 379 municipalities in 48 states (SmartGrowth America 2013). The National Complete Streets Coalition

has identified ten elements of a comprehensive Complete Streets Policy that local governments are encouraged to incorporate into their transportation policies.

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies.

National Complete Streets Coalition: http://www.completestreets.org/

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm.

Type of Change: Policy, Environment

Partner Agencies:

City of Asheville Transportation Department, Blue Ridge Bicycle Club, Buncombe County Parks Greenways and Recreation Services, Community Transformation Grant Project, Healthy Buncombe

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities	
shared measures and	participants	roles and	posted in online CHIP	
roles/responsibilities		responsibilities for	document	
		moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system	established	
managing data	collaborating/supporting	and timeline for		
	partners	strategy developed		
Develop detailed	-Staff time	Strategy level action	Action plans posted in	Oct/November 2013
action plan for each	-Working group	plans developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information &				
resources				

Strategy 3.2: Organizational environments and policies that support active transportation

Objective 3.2.1:

Establish baseline for outreach contacts to organizations for encouraging and/or creating organizational environments that support active transportation

Indicator: Outreach contact baseline identified (Establish baseline year 1, year 2 increase)

Objective 3.2.2:

Provide educational programs and opportunities to business, civic, and community organizations and leaders

Indicator: Establish baseline for educational contacts (Establish baseline year 1, year 2 increase)

Objective 3.2.3:

Increase the number of organizations, institutions (schools, universities, hospitals), businesses, and workplaces that have environments and/or policies to support active transportation

Indicator: Inventory of organizations with environments and/or policies that support active transportation (Establish baseline year 1, year 2 increase)

Strategy Background

Evidence Base: Organizational environments can support active transportation among employees and other groups. For example, Walk and Ride programs, rather than Park and Ride, combines active transportation with public transportation. Bike-to-Work Fridays, showers, and bike racks at office buildings can support employees biking to work (Center for Training and Research Translation).

In addition, schools can support students actively traveling to or from school. Children who walk or bicycle to school have higher levels of physical activity and better cardiovascular fitness than children who do not actively commute to school (Davison et al. 2008). Further, riding a bicycle at least two or more days per week is associated with a decreased likelihood of childhood overweight (Dudas and Crocetti 2008). The national percentage of youth ages 5 to 18 who walk or ride a bicycle to school dropped from 42 percent in 1969 to only 16 percent in 2001 (National Household Transportation Survey 2003). Safe Routes to School (SRTS) Programs address infrastructure, education, and safety concerns to support students biking and walking to school. For example, a SRTS program in Marin County, CA that included both safety improvements and encouragement to walk to school, increased the number of children walking to school by 64 percent in two years (Staunton et al. 2003).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies

National Center for Safe Routes to School: http://www.saferoutesinfo.org/

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm

Type of Change: Policy, Environment

Partner Agencies:

Buncombe County Parks Greenways and Recreation Services, Blue Ridge Bicycle Club, Blue Ridge Bicycle Club, City of Asheville Transportation Department, Youth Empowered Solutions, Land-of-Sky Regional Council - Land Use & Transportation, Healthy Buncombe

Activity	Resources Needed	Anticipated Result Result Verification		Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities posted	
shared measures and	participants	roles and responsibilities	in online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system and	established	
managing data	collaborating/supportin	timeline for strategy		
	g partners	developed		
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	Oct/November 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information				
& resources				

Strategy 3.3: Community support for active transportation

Objective 3.3.1:

Increase resident awareness of active transportation options through promotional/informational materials and multimedia

Indicator: Indicator for resident awareness TBD

Number of community/media communications

Objective 3.3.2:

Increase resident perceptions of active transportation as desirable and convenient through promotion and education

Indicator: Indicator of perceptions TBD

Number of promotional messages

Objective 3.3.3:

Increase the number of residents safely using active transportation

Indicator: Number of pedestrians, number of bicyclists, and helmet usage from annual bicycle

and pedestrian count

Pedestrian/bicycle accidents per capita (measurement approach TBD)

Strategy Background

Evidence Base: Community awareness, perceptions, and knowledge about active transportation options impact active transportation behaviors. For example, perceived safety has a significant effect on walking for both children and adults (Carver et al. 2008, Cleland et al. 2008, Weir et al. 2006). The Center for Training and Research Translation recommends comprehensive community-wide campaigns to increase physical activity as an evidence-based strategy. These campaigns include raising awareness, educating, and building support among community members to increase physical activity. Mass media, social support programs, individual education, health fairs, physical activity events, and environmental changes may be components of these comprehensive community-wide campaigns (Center for Training and Research Translation).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies

Local Government Actions to Prevent Childhood Obesity. Institute of Medicine (IOM), 2009. Available at: http://www.nap.edu/catalog.php?record_id=12674

Recommended Community Strategies and Measurements to Prevent Obesity in the United States. CDC, 2009. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm

Type of Change: Community, Individual

Partner Agencies:

Buncombe County Parks Greenways and Recreation Services, Blue Ridge Bicycle Club, Buncombe County Health and Human Service, Office of Minority Health Grant, City of Asheville Transportation Department, Blue Ridge Bicycle Club, Healthy Buncombe

Activity	Resources Needed	ed Anticipated Result Result Verification		Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities posted	
shared measures and	participants	roles and responsibilities	in online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system and	established	
managing data	collaborating/supportin	timeline for strategy		
	g partners	developed		
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	Oct/November 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information				
& resources				

Goal 4: Increase physical activity by creating safe, supportive, and encouraging environments for fitness

Strategy 4.1: Community recreational and fitness resources

Objective 4.1.1:

Increase the number of shared-use agreements for community-based facilities (schools, churches, businesses, etc.) available for recreational physical activity in Buncombe County

Indicator: Number of shared-use agreements

Objective 4.1.2:

Establish baseline for recreational and fitness programs and facilities available to residents of Buncombe County

Indicator: Baseline identified for number of recreational and fitness programs/facilities (Establish baseline year 1, year 2 increase)

Objective 4.1.3:

Develop approach to evaluate and improve opportunities for individuals using/participating in physical activity and establish baseline indicators

Indicator: Evaluation strategy for physical activity participation developed (*Establish baseline year 1, year 2 increase*)

Strategy Background

Evidence Base: Creating or enhancing access to places for physical activity has strong evidence of effectiveness in increasing physical activity and improving physical fitness (The Guide to Community Preventive Services, Creation of or Enhanced Access to Places for Physical Activity). A comprehensive review of 108 studies indicated that access to facilities and programs for recreation near their homes and time spent outdoors correlated positively with increased physical activity among children and adolescents (Sallis et al. 2000). In addition, a 10-study review concluded that increasing access to places for physical activity, when combined with educational activities, can effectively increasing physical activity (Kahn 2002).

Specific strategies to increase the accessibility of existing physical spaces include making sure physical activity facilities are safe, clean, and appealing, and/or extending operation hours to accommodate a variety of daily schedules. This strategy of increasing access is often used in combination with informational and social support strategies or as part of a community-wide campaign (Center for Training and Research Translation). "Joint-use" or "shared-use" agreements are another promising strategy involving a written agreement between two public or private organizations (e.g., a school district and a county parks & recreation department) that establishes terms and conditions for sharing the use of facilities (ChangeLab Solutions 2010). Joint use agreements are being increasingly adopted in communities across the country, and

many states and communities are developing policies that support joint use. North Carolina law allows local school boards to enter into joint use agreements.

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies.

ChangeLab Solutions Joint Use Agreement webpage: http://changelabsolutions.org/childhood-obesity/joint-use

The Guide to Community Preventive Services website. Available at: http://www.thecommunityguide.org/pa/environmental-policy/improvingaccess.html

NC Healthy Schools Joint Use guide: http://www.nchealthyschools.org/docs/home/use-agreements.pdf

Type of Change: Policy, Environment

Partner Agencies:

Buncombe County Parks Greenways and Recreation Services, Asheville Parks, Buncombe County Health and Human Service Office of Minority Health Grant, Community Transformation Grant Project, University of North Carolina Asheville, YWCA of Asheville, Blue Ridge Bicycle Club

Activity	Resources Needed	Anticipated Result Result Verification		Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities posted	
shared measures and	participants	roles and responsibilities	in online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system and	established	
managing data	collaborating/supportin	timeline for strategy		
	g partners	developed		
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	Oct/November 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information				
& resources				

Strategy 4.2: Organizational environments to support physical activity

Objective 4.2.1:

Establish baseline for outreach contacts to organizations for encouraging and/or creating organizational environments that support physical activity and fitness

Indicator: Outreach strategy developed

Baseline for outreach contacts established (Establish baseline year 1, year 2 increase)

Objective 4.2.2:

Inventory organizations, institutions, businesses, and workplaces that have environments, programs, and/or policies to support physical activity (Establish baseline year 1, year 2 increase)

Indicator: Inventory of organizations that have environments, programs, and/or policies to support physical activity completed

Objective 4.2.3:

Develop and implement a comprehensive communication campaign about new and existing physical activity opportunities through community-based networks (e.g. community centers, churches, neighborhood associations, coalitions)

Indicator: Communication campaign developed

Communication campaign implemented

Strategy Background

Evidence Base: Institutions, worksites, child care centers, after-school programs, and other organizations can create environments that support regular physical activity. Changes in institutional practices and the built environment which structurally integrate physical activity into routines can increase automatic physical activity (Bower et al. 2008, Donnelly et al. 2009, Lara et al. 2008). There is also observational evidence that the availability of play equipment increases physical activity in child care centers (IOM 2009). Observational evidence supports developing worksite policies and practices that build physical activity into routines. The Center for Training and Research Translation cites examples including office-wide exercise breaks and walking meetings that provide opportunities for employees to be active during the work day. Point-of-decision prompts such as signs or banners posted near elevators, escalators, moving walkways, and stairwells can encourage individuals to use stairwells or climb/walk rather than taking a more passive option. Such prompts have been evaluated in worksites and community settings, such as malls, airports, and office buildings (Center for Training and Research Translation).

In addition to changing organizational environments and policies, raising awareness, educating, and building support among community members is an important component of comprehensive community-wide campaigns to increase physical activity. Mass media, social support programs, individual education, health fairs, physical activity events, and environmental changes may be components of these comprehensive community-wide campaigns (Center for Training and Research Translation).

Resources that provide an overview of the evidence for this strategy:

Center for Training and Research Translation Intervention Strategies website: http://www.centertrt.org/?p=find_strategies

Early Childhood Obesity Prevention Policies. Institute of Medicine (IOM), 2011. Available at: http://www.nap.edu/catalog.php?record_id=13124

Local Government Actions to Prevent Childhood Obesity. IOM, 2009. Available at: http://www.nap.edu/catalog.php?record_id=12674

Type of Change: Policy, Environment, Community

Partner Agencies:

Buncombe County Parks Greenways and Recreation Services, City of Asheville, Blue Ridge Bicycle Club, Blue Ridge Bicycle Club, City of Asheville Transportation Department, Healthy Buncombe

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date	
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)	
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	Sept/October 2013	
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	Oct/November 2013	
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	Oct/November 2013	
Develop communication strategies to increase collaboration and shared information & resources	-Staff time -Working group participants	Communication plan developed	Communication plan posted in online CHIP document	Sept/October 2013	
Develop inventory of organizations, institutions, businesses, and workplaces that have environments, programs, and/or policies to support physical activity	-Staff time -Working group partners	Inventory of organizations with environments, programs or policies to support physical activity	Completed inventory of organizations	November 2013	
Develop community campaign/outreach strategy to promote organizational support for physical activity	-Staff time -Working group partners	Campaign/ outreach strategy developed	Strategy shared with partners and published on CHIP internet site	Nov/December 2013	

Goal 5: Increase the number of infants in Buncombe County that are breastfed by creating supportive, encouraging policies and environments for breastfeeding

Strategy 5.1: Breastfeeding policies

Objective 5.1.1:

Identify and increase community and government breastfeeding policies that support breastfeeding in the community (i.e. recreation facilities, restaurants, marketplaces)

Indicator: Number of community and government organizations with breastfeeding policies (Establish baseline year 1, increase year 2)

Objective 5.1.2:

Increase the number of workplaces that offer appropriate breastfeeding facilities and policies to allow breastfeeding mothers to pump or feed

Indicator: Number of workplaces with breastfeeding policies (Establish baseline year 1, increase year 2)

Strategy Background

Evidence Base: Policies that create supportive environments for breastfeeding can be established in a variety of settings, including hospitals (e.g., Baby Friendly Hospital initiatives), out-patient medical facilities, community clinics, restaurants, stores, libraries, and other public places. Workplace policies in particular are a key strategy to increase breastfeeding. A mother working outside the home is associated with a shorter duration of breastfeeding, and intentions to work full time are significantly associated with lower rates of breastfeeding initiation and shorter duration (Fein and Roe 1998). Low-income women are more likely than their higher-income counterparts to return to work earlier and to be engaged in jobs that make it challenging for them to continue breastfeeding (Lindberg 1996).

A supportive workplace environment might include written policies, staff training, appropriate breastfeeding facilities, flexible work environments that allow breastfeeding infants to be brought to work, onsite child care services, provision of breast pumps, professional support services, and paid or extended maternity leave (Shealy et al. 2005).

One systematic review analyzing the relationship between environmental interventions to support breastfeeding and childhood obesity-related outcomes could not identify any randomized control trials that have tested the effectiveness of workplace interventions promoting breastfeeding (Abdulwadud and Snow 2007). However, another study demonstrated that women who directly breastfed at work and/or pumped breast milk at work breastfed at a higher intensity than women who did not either breastfeed or pump at work (Fein et al. 2008) . Furthermore, evaluations of individual interventions that support breastfeeding in the workplace

showed increased initiation rates and duration of breastfeeding compared with national averages (Shealy et al. 2005).

Resources that provide an overview of the evidence for this strategy:

The CDC Guide to Breastfeeding Interventions. CDC, 2005. Available at: http://www.cdc.gov/breastfeeding/resources/guide.htm

Type of Change: Policy, Environment

Partner Agencies:

Buncombe County WIC Program, Community Care of Western North Carolina, Mission Health, YWCA of Asheville

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Working group participants	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward Shared measures, roles and responsibilities posted in online CHIP document		Sept/October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supportin g partners	accountability system and established		Oct/November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed Action plans posted in online CHIP document		Oct/November 2013
Develop communication strategies to increase collaboration and shared information & resources	-Staff time -Working group participants	Communication plan developed Communication plan posted in online CHIP document		Sept/October 2013
Develop inventory of community organizations and government policies to support breast feeding	-Staff time -Working group partners			November 2013
Develop inventory of workplaces that have policies to support breast feeding	-Staff time -Working group partners	Inventory of workplaces with environments, programs or policies to support breastfeeding	Completed inventory of workplaces.	Nov/December 2013

Strategy 5.2: Outreach and education

Objective 5.2.1:

Increase the number of individuals and organizations receiving promotional information and education about breastfeeding

Indicator: The number of individuals and organizations receiving promotional information and education about breastfeeding

Strategy Background

Evidence Base: Educating mothers, support networks, and the community at large is important in building support for breastfeeding. A review of 30 controlled trials and 5 systematic reviews determined education on breastfeeding to be the single most effective intervention for increasing breastfeeding initiation and short-term duration (Guise et al. 2003). Another review of 20 controlled trials found that prenatal education in small groups is effective in increasing breastfeeding initiation rates (Sikorski et al. 2003). Social marketing and media campaigns targeting mothers, support systems, care providers, and the general public can help increase acceptance of breastfeeding. A 2000 Cochrane review suggests that media campaigns, particularly television commercials, have been shown to improve attitudes toward breastfeeding and increase initiation rates. The review cited a study demonstrating that a comprehensive social marketing approach including interventions to increase public awareness (through media and other outlets) increased rates of initiation and duration while also improving perceptions of community support for breastfeeding. This same review found that targeting only specific groups such as healthcare providers or the general public have not shown evidence of effectiveness on their own (Fairbank et al. 2000).

Resources that provide an overview of the evidence for this strategy:

CDC Guide to Breastfeeding Interventions:

http://www.cdc.gov/breastfeeding/resources/guide.htm

Type of Change: Community

Partner Agencies:

Buncombe County WIC Program, Community Care of Western North Carolina, Mission Health, YWCA of Asheville, Women's Wellness Development Foundation

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	Oct/November 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information				
& resources				
Develop community	-Staff time	Campaign/ outreach	Strategy shared with	Nov/December 2013
campaign/ outreach	-Working group partners	strategy developed	partners and published on	
strategy to promote			CHIP internet site	
organizational				
support				
breastfeedng				

Goal 6: Increase the percentage of Buncombe County residents at a healthy weight through community and clinical supports and linkages

Strategy 6.1: Clinical weight management

Objective 6.1.1:

Assess and inventory current practices of primary and pediatric practices to determine status of evidenced-based weight management practice in Buncombe County

Indicator: Inventory complete (Establish baseline year 1, increase year 2)

Objective 6.1.2:

Contribute to evidence-based practice through research and funding partnerships

Indicator: TBD

Strategy Background

Evidence Base: The Childhood Obesity Action Network has published guidelines for assessing, preventing, and treating child and adolescent overweight and obesity in a clinical setting. These guidelines focus on incorporating obesity prevention efforts into Well Care Visits. All Well Care Visits should include a BMI percentile-for-age screening, an assessment of physical activity and nutrition behaviors and attitudes, and other screenings for other risk factors such as blood pressure. If a child or adolescent is identified as overweight (BMI between the 85th and 94th percentile-for-age) or obese (BMI greater than the 95th percentile-for-age), a staged approach to treatment is recommended. Stage 1 involves "Prevention Plus" visits with a physician or

health professional trained in pediatric weight management and behavioral counseling, and focuses on behavior changes including decreasing sugar-sweetened beverage consumption, consuming at least 5 servings of fruits and vegetables daily, decreasing screen time to 2 hours per day or less, increasing physical activity to one hour or more daily, preparing meals at home as a family more often, eating a healthy breakfast daily, and involving the entire family in these lifestyle changes. If Stage 1 is not effective, treatment progresses to Stage 2 by recruiting additional support from qualified healthcare professionals and community resources (for example, Registered Dietitians and community fitness programs). Stage 3 involves a comprehensive, multidisciplinary intervention with a multidisciplinary team experienced in childhood obesity, and more frequent (weekly) visits. Stage 4 involves partnering with tertiary care centers and may involve medications, very low calorie diets, or gastric surgery (Childhood Obesity Action Network 2007).

A variety of clinical-based therapies may be used to treat overweight and obesity in adults. A review of randomized clinical trials of various therapies resulted in the following recommendations for clinical treatment: Low-Calorie Diets; physical activity; combining reduced-calorie diets and increased physical activity; behavior therapy in combination with other strategies; understanding that standard approaches may work differently in diverse populations; weight loss drugs as part of a comprehensive weight loss program including diet and physical activity for patients with a BMI of ≥ 30 with no concomitant obesity-related risk factors or diseases or for patients with a BMI of ≥ 27 with concomitant obesity-related risk factors or diseases; and surgical intervention for carefully selected patients with clinically severe obesity (a BMI ≥ 40 or ≥ 35 with comorbid conditions) when less invasive methods of weight loss have failed and the patient is at high risk for obesity-associated morbidity and mortality (NIH/NHLBI 1998).

Resources that provide an overview of the evidence for this strategy:

Childhood Obesity Action Network Guidelines: http://www.nichq.org/documents/coan-papers-and-publications/COANImplementationGuide62607FINAL.pdf

NIH/NHLBI Clinical Guidelines for Adult Obesity: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm

Type of Change: Policy, Environment

Partner Agencies:

Innovative Approaches, Mission Health, Buncombe County Health and Human Services - Office of Minority Health Grant, UNC-Chapel Hill, Mission Health/NC Preconception Health Campaign, Community Care of Western North Carolina, WNC Health Network, WNC Healthy Kids Initiative, MAHEC

Action Plan

Activity	Resources Needed	Anticipated Result Result Verification		Target Date
(what?)	(who? how much?)	(what will happen?) (how will you know?)		(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities posted	
shared measures and	participants	roles and responsibilities	in online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system and	established	
managing data	collaborating/supporting	timeline for strategy		
	partners	developed		
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	Oct/November 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information				
& resources				

Strategy 6.2: Community resources to support physician-directed clinical weight management

Objective 6.2.1:

Assess and inventory community efforts supporting weight management

Indicator: Inventory complete (Establish baseline year 1, increase year 2)

Objective 6.2.2:

Develop community-based intensive PA, nutrition programming for families receiving clinical weight management services

Indicator: Plan developed for intensive PA and nutrition for clinical weight management service

participants

Objective 6.2.3:

Increase the number of clinical providers that actively link patients to community resources to support healthy weight management

Indicator: Assessment of clinical providers completed (Establish baseline year 1, increase year 2)

Strategy Background

Evidence Base: The National Initiative for Children's Healthcare Quality (NICHQ) Care Model for Child Health involves the health care system collaborating with community resources to optimize self-management support by informed, activated patients. The model describes how health care providers can use community partnerships to identify effective programs, encourage

appropriate patient participation, develop evidence-based programs and policies supportive of chronic care, and encourage coordination among health plans of chronic illness guidelines, measures, and care resources (NICHQ).

Resources that provide an overview of the evidence for this strategy:

Community Resources: Key Points. NICHQ. Available at: http://www.nichq.org/childhood_obesity/tools/CommResourcesKeyTips.pdf.

Type of Change: Policy, Environment

Partner Agencies:

Buncombe County Health and Human Services - Office of Minority Health Grant, Community Transformation Grant Project, Community Care of Western North Carolina, Land-of-Sky Regional Council, Mission Health, MAHEC, WNC Health Network, WNC Healthy Kids Initiative

Activity	Resources Needed	Anticipated Result Result Verification		Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles	Sept/October 2013
continue work on	-Working group	identified and clarified	and responsibilities posted	
shared measures and	participants	roles and responsibilities	in online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	Oct/November 2013
develop system for	-Lead and select	accountability system and	established	
managing data.	collaborating/supporting	timeline for strategy		
	partners	developed		
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	Oct/November 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			
Develop	-Staff time	Communication plan	Communication plan	Sept/October 2013
communication	-Working group	developed	posted in online CHIP	
strategies to increase	participants		document	
collaboration and				
shared information				
& resources.				

Works Cited for Healthy Living: Physical Activity, Healthy Eating And Healthy Weight

Abdulwadud OA and ME Snow, 2007. Interventions in the workplace to support breastfeeding for women in employment. *Cochrane Database Systematic Reviews*, (3):CD006177.

Active Living Research, 2007. Designing for Active Living Among Children, Research Summary. Accessed 7/22/13 at: http://www.ncallianceforhealth.org/Media/Obesity/Built%20Environment/Design%20Active%20Children%20ALR%20brief.pdf.

Alaimo KE et al., 2008. Fruit and vegetable intake among urban community gardeners. *Journal of Nutrition Education and Behavior*, 40(2):94–101.

Ball SC, SE Benjamin, and DS Ward, 2008. Dietary intakes in North Carolina child-care centers: Are children meeting current recommendations? *Journal of the American Dietetic Association*, 108(4):718–721.

Bitler MP, J Currie, and JK Scholz, 2003. WIC eligibility and participation. *Journal of Human Resources*, 38(Suppl.):1176-1179.

Bodor J, et al., 2008. Neighborhood fruit and vegetable availability and consumption: the role of small food stores in an urban environment. *Public Health Nutrition*, 11(4): 413-420.

Bower JK, et al., 2008. The childcare environment and children's physical activity. *American Journal of Preventive Medicine*, 34(1):23–29.

Carver A, A Timperio, and D Crawford, 2008. Playing it safe: The influence of neighbourhood safety on children's physical activity—A review. *Health and Place*, 14(2):217–227.

Center for Training and Research Translation. Intervention Strategies website. Accessed 7/22/13 at: http://www.centertrt.org/?p=find.strategies.

ChangeLab Solutions, 2012. Opening School Grounds to the Community After Hours: A toolkit for increasing physical activity through joint use agreements. Accessed 5/18/13 at: http://changelabsolutions.org/sites/default/files/CA Joint Us e Toolkit FINAL %28CLS 20120530%29 2010.01.28.pdf.

Cheadle A, et al., 1991. Community-level comparisons between the grocery store environment and individual dietary practices. *American Journal of Preventive Medicine*, 20(2): 250-261.

Childhood Obesity Action Network, 2007. Expert Committee Recommendations on the Assessment, Prevention and Treatment of Child and Adolescent Overweight and Obesity – 2007. Accessed 7/22/13 at:

http://www.nichq.org/documents/coan-papers-and-publications/COANImplementationGuide62607FINAL.pdf.

Cleland VJ, A Timperio, and D Crawford, 2008. Are perceptions of the physical and social environment associated with mothers' walking for leisure and for transport? A longitudinal study. *Preventive Medicine*, 47(2):188–193.

Conrey EJ, et al., 2003. Integrated program enhancements increased utilization of Farmers' Market Nutrition Program. *Journal of Nutrition*, 133:1841--4.

Convergence Partnership, 2011. Promising Strategies For Creating Healthy Eating and Active Living Environments. Accessed 7/22/13 at:

http://www.convergencepartnership.org/atf/cf/%7B245a9b44 -6ded-4abd-a392-ae583809e350%7D/PROMISING%20STRATEGIES-07.18.11.PDF.

Davison KK, JL Werder, and CT Lawson, 2008. Children's active commuting to school: Current knowledge and future directions. *Preventing Chronic Disease*, 5(3):A100.

Dill J and T Carr, 2003. Bicycle commuting and facilities in major U.S. cities: if you build them, commuters will use them. *Transportation Research Record*, 1829:116--23.

Donnelly JE, et al., 2009. Physical activity across the curriculum (PAAC): a randomized controlled trial to promote physical activity and diminish overweight and obesity in elementary school children. *Preventive Medicine*, 49(2):336–341

Dudas RA and M Crocetti, 2008. Association of bicycling and childhood overweight status. *Ambulatory Pediatrics*, 8(6):392–395.

Fairbank L, et al., 2000. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Technology Assessment*, 4(25):1–171.

Fein SB and B Roe, 1998. The effect of work status on initiation and duration of breastfeeding. *American Journal of Public Health*, 88(7):1042–6.

Fein SB, B Mandal, and BE Roe, 2008. Success of strategies for combining employment and breastfeeding. *Pediatrics*, 122(Suppl 2):S56--62.

Fisher et al., 1999. Community measures of low-fat milk consumptions: comparing store shelves with households. *American Journal of Public Health*, 89(2): 235-237.

Food Research and Action Center, 2013. Food Hardship in America 2012. Accessed 7/22/13 at: http://frac.org/pdf/food_hardship_2012.pdf

Guide to Community Preventive Services, 2009. Behavioral and Social Approaches to Increase Physical Activity: Enhanced School-based Physical Education. Atlanta: Community Guide branch, National Center for Health Marketing, Centers for Disease Control and Prevention. Available at www.thecommunityguide.org/.

Guide to Community Preventive Services website.

Environmental and Policy Approaches to Increase Physical
Activity: Creation of or Enhanced Access to Places for Physical
Activity Combined with Informational Outreach Activities.
Accessed 7/22/13 at:

 $\label{lem:http://www.thecommunityguide.org/pa/environmental-policy/improving access.html$

Guise JM, et al., 2003. The effectiveness of primary carebased interventions to promote breastfeeding: systematic evidence review and meta-analysis for the U.S. Preventive Services Task Force. *Annals of Family Medicine*, 1(2):70–8.

Heath GW, Brownson RC, Kruger J, et al., 2006. The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review. *Journal of Physical and Activity and Health*, 3(Suppl 1):S55--76.

Institute of Medicine (IOM), 2009. *Local Government Actions to Prevent Childhood Obesity*. Washington DC: National Academies Press. Accessed 7/22/13 at: http://www.nap.edu/catalog.php?record_id=12674.

IOM, 2012. Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation. Washington, DC: The National Academies Press. Accessed 7/22/13 at: http://www.iom.edu/Reports/2012/Accelerating-Progress-in-Obesity-Prevention.aspx.

Jago R, Baranowski T, Batanowski J, et al., 2007. Distance to food stores and adolescent male fruit and vegetable consumption: mediation effects. *International Journal of Behavioral Nutrition and Physical Activity*, 4(1):35.

Kahn EB, Ramsey LT, Brownson RC, et al., 2002. The effectiveness of interventions to increase physical activity: A systematic review. *American Journal of Preventive Medicine*, 22(4 Suppl):73--107.

Khan et al., 2009. Recommended Community Strategies and Measurements to Prevent Obesity in the United States. MMWR 58(RR07);1-26. Accessed 7/22/13 at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm.

Kimbro RT and E Rigby, 2010. Federal food policy and childhood obesity: A solution or part of the problem? *Health Affairs*, 29(3):411-418.

Kunkel ME, Luccia B, and Moore AC, 2003. Evaluation of the South Carolina seniors farmers' market nutrition education program. *Journal of the American Dietetic Association*, 103:880--3.

Lara A, AK Yancey, R Tapia-Conye, et al., 2008. Pausa para tu salud: Reduction of weight and waistlines by integrating exercise breaks into workplace organizational routine. *Preventing Chronic Disease*, 5(1):A12.

Laurie M Tisch Illumination Fund. NYC Green Cart website. Accessed 7/22/13 at:

http://www.lmtilluminationfund.org/impact/green-carts/.

Leadership for Healthy Communities, 2011. A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity. Robert Wood Johnson Foundation. Accessed 7/22/13 at:

http://www.rwjf.org/en/research-publications/find-rwjf-research/2011/02/action-strategies-toolkit.html.

Macbeth AG, 1999. Bicycle lanes in Toronto. *Institute of Transportation Engineers Journal*,69:38--46.

Morland K, Wing S, and Diez Roux A, 2002. The contextual effect of the local food environment on residents' diets: the atherosclerosis risk in communities study. *American Journal of Public Health*, 92:1761--7.

National Complete Streets Coalition Website. Accessed 7/22/13 at http://www.smartgrowthamerica.org/complete-streets.

National Household Travel Survey. Washington: Bureau of Transportation Statistics, 2003.

National Initiative for Children's Healthcare Quality (NICHQ). *Community Resources: Key Points*. Accessed 7/22/13 at: http://www.nichq.org/childhood_obesity/tools/CommResourcesKeyTips.pdf.

National Institutes of Health and National Heart, Lung, and Blood Institute (NIH/NHLBI), 1998. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Accessed 5/18/13 at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm.

Nelson A and D Allen, 1997. If you build them, commuters will use them: association between bicycle facilities and bicycle commuting. *Transportation Research Record*, 1578:79-83

Padget A and ME Briley, 2005. Dietary intakes at child-care centers in central Texas fail to meet food guide pyramid recommendations. *Journal of the American Dietetic Association*, 105(5):790–793.

Robinson-O'Brien R, M Story, and S Heim, 2009. Impact of garden-based youth nutrition intervention programs: A review. *Journal of the American Dietetic Association* 109(2):273–280.

Sallis JF, Prochaska JJ, and Taylor WC, 2000. A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32:963—75.

Shealy KR, et al., 2005. *The CDC Guide to Breastfeeding Interventions*. Atlanta, GA: US Department of Health and Human Services, CDC. Accessed 7/22/13 at: http://www.cdc.gov/breastfeeding/resources/quide.htm.

Sikorski J, et al., 2003. Support for breastfeeding mothers (Cochrane review). *The Cochrane Library*, Issue 3.

SmartGrowth America, 2013. *The Best Complete Streets Policies of 2012*. Accessed 7/22/13 at: http://www.smartgrowthamerica.org/complete-streets-2012-analysis.

Stang J, and CT Bayerl, 2010. Position of the American Dietetic Association: Child and adolescent nutrition assistance programs. *Journal of the American Dietetic Association*, 110(5):791-799.

Staunton CE, Hubsmith D, and Kallins W, 2003. Promoting safe walking and biking to school: the Marin County success story. *American Journal of Public Health*, 93:1431--4.

Story M, KM Kaphingst, and S French, 2006. The role of child care settings in obesity prevention. *Future of Children*, 16(1):143–168.

Timperio A, K Ball, R Roberts, et al., 2008. Children's fruit and vegetable intake: Associations with the neighborhood food environment. *American Journal of Preventive Medicine*, 46(4): 331-335.

U.S. Department of Agriculture, Food and Nutrition Service, 2012. 2012 Impacts: The Expanded Food and Nutrition Education Program (EFNEP). Accessed 7/22/13 at: http://www.csrees.usda.gov/nea/food/efnep/pdf/impact_dat_a-report_2012.pdf.

Ver Ploeg MB, et al., 2009. Access to Affordable and Nutritious Food—Measuring and Understanding Food Deserts and Their Consequences: Report to Congress. Washington, DC: USDA Economic Research Service.

Ver Ploeg M, and K Ralston, 2008. Food stamps and obesity: What we know and what it means. *Economic Information Bulletin* No. 34. Washington, DC: Economic Research Service.

Weir LA, D Etelson, and DA Brand, 2006. Parents' perceptions of neighborhood safety and children's physical activity. *Preventive Medicine*, 43(3):212–217.

WNC Healthy Impact, 2012. 2012 WNC Community Health Assessment Report, PART 2B: Regional Secondary Data Workbook. Accessed 7/22/13 at: http://www.wnchealthyimpact.com/uploads/Part 2B. Region al Secondary Data Workbook 11.26.12.pdf.

Zenk SN et al., 2005. Fruit and vegetable intake in African Americans' income and store characteristics. American Journal of Preventive Medicine, 29:1--9.

Zheng Y, 2008. The benefit of public transportation: Physical activity to reduce obesity and ecological footprint. *Preventive Medicine*, 46(1):4–5.

CHAPTER 3 – TOBACCO PREVENTION AND CESSATION

Situational Analysis

Tobacco use remains the leading cause of <u>preventable</u> disease, disability, and death across North Carolina and the nation. It causes lung cancer and many other forms of cancers throughout the body. Additional health risks caused by smoking include heart attacks, strokes, and lung diseases such as emphysema and chronic bronchitis.

It is well known from national research that secondhand smoke is also deadly, containing over 7,000 chemicals - hundreds of which are toxic and at least 69 of them cause cancer. When nonsmokers are exposed to secondhand smoke, they inhale many of the same cancer-causing chemicals that smokers inhale. Therefore breathing secondhand smoke causes similar health effects to smoking. Children who are exposed to secondhand smoke are more likely to have lung problems, ear infections, and severe asthma. It is also a known cause of Sudden Infant Death Syndrome (SIDS).

National evidence-based research has demonstrated that implementing regulations to support tobacco-free lifestyles is an effective strategy for reducing tobacco use and secondhand smoke exposure.

In Buncombe County, we have a successful history of implementing policies and laws that help protect us, our families, our neighbors, and visitors from the health risks caused by tobacco use. During the past two decades, 24 tobacco prevention and control regulations have been adopted. Community efforts have resulted in tobacco free schools, hospitals, community college campuses, prisons, and governmental and municipal buildings, grounds, and vehicles, as well as smoke-free restaurants and bars across the state.

There is still much work to be done. We spend nearly \$31 million every year in Buncombe County on smoking-related Medicaid costs. About 18% of adults in Buncombe County smoke.

Did you know?

Secondhand smoke triggers heart attacks. Smoking bans drastically cut heart attack rates.

If nobody smoked, 1 of every 3 cancer deaths in the United States would not happen.

No amount of tobacco smoke is safe. Any exposure to tobacco smoke – even an occasional cigarette or exposure to secondhand smoke – is harmful to health.

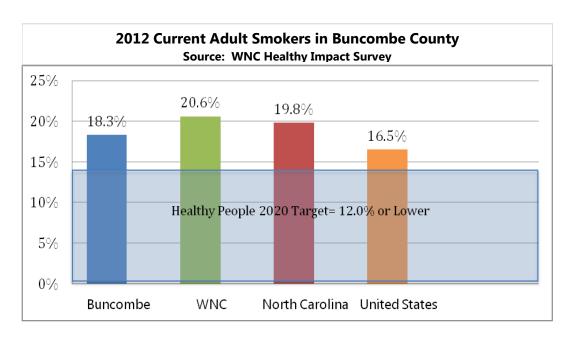
A person does not have to be a heavy smoker or a long-time smoker to get a smoking-related disease or have a heart attack or asthma attack that is triggered by tobacco smoke.

Separate "no smoking" sections do NOT protect anyone from secondhand smoke. Neither does filtering the air or opening a window.

Sources:

U.S. Surgeon General Reports

- 2006 The Health Consequences of Involuntary Exposure to Tobacco Smoke
- 2010 How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease



Our most recent data (2010) for youth smoking rates indicate that 17% of our youth in Buncombe County smoke. Between the years 2005 to 2009, the youth smoking rate in the county decreased by 37%. This significant drop is attributed to the successes our local schools and youth empowerment programs were able to achieve with funding from the Health and Wellness Trust Fund (HWTF) for youth tobacco prevention and cessation programs. Research shows that community-based programs such as these are effective at reducing teen tobacco use. Since the HWTF funds were abolished in 2011, we will very likely begin to see youth rates rise in our county.

Key Community-Level Indicators

Indicator	Source	Baseline	Target	Target Date
% adult smoking	BC CHA	18.3% (2012)	16%	December 2015
% youth smoking	BC CHA	17% (2010)	15%	December 2015
% pregnant women who smoke	NCSCHS	4.1% (2011)	2%	December 2015
% workers exposed to secondhand	BC CHA ?	-	Obtain	December 2015
smoke indoors at workplaces			baseline	
% high school youth exposed to	BC CHA?	-	Obtain	December 2015
secondhand smoke in home			baseline	
% middle school youth exposed to	BC CHA?	-	Obtain	December 2015
secondhand smoke in home			baseline	

Spotlight on Success

Youth advocates who have been formally trained and empowered to become change agents in our community have made valuable contributions in Buncombe County during the past decade.

Their efforts have been a big part of our success in educating policy makers and advocating for policies and laws that protect people from exposure to secondhand smoke and the effects of tobacco use in our community.

These empowered youth of TATU Club (Teens Against Tobacco Use) and YES! (Youth Empowered Solutions) have been involved with holding events, presenting information, and gaining support from



Youth advocates with city, county, and state officials.

key officials including: city, county, and state legislators; the Buncombe County Board of Health; school boards; and others. These youth have helped us move ahead as a model city and county

in working for policies that support tobacco-free lifestyles and smoke-free places.

This year one youth advocate, Tyler Long—a senior at Asheville High School—received national recognition for his achievements. The Campaign for Tobacco Free Kids honored Tyler with the 2013 National Youth Advocate of the Year Award as the top young leader across the nation for his fight

"Personally, my work in tobacco control has improved my public speaking, training, facilitation, and many other skills as well as providing me with many opportunities to expand my work to both a regional and national level."

Tyler Long, Asheville High School Senior 2013 National Youth Advocate of the Year Campaign for Tobacco Free Kids

to promote tobacco prevention legislation, expose tobacco marketing to kids, and keep peers from using tobacco. He received the award in a formal banquet and ceremony in Washington, D.C. See Tyler's brief interview video at:

www.tobaccofreekids.org/what we do/youth initiatives/gala/#long

"In middle school I began to see how some of my peers believed that tobacco would make them 'cool' and I knew that I wanted to become part of the fight against tobacco," said Tyler. "My community has gained awareness, tobacco free parks, restaurants and bars from the work I have done, we have also brought teen smoking rates to an all-time low in North Carolina, saving thousands of lives."

Partners

Addressing tobacco prevention and cessation is complex and will require the collaborative planning, action, and coordination of multiple partners in our community. The following partner agencies and organizations are engaged in efforts to reduce tobacco use in our community. As new partners are identified, we will continuously work to bring them into the process.

Organizations:	Website or Contact Information
Addiction Recovery Prevention (ARP)	http://www.arpnc.org/
Asheville City Schools	http://www.ashevillecityschools.net
Buncombe County Schools	http://www.buncombe.k12.nc.us
Buncombe County Department of Health (BCDH)	https://www.buncombecounty.org/Governing/Depts/Health/HealthEd/Tobacco.aspx
Community Transformation Grant Project - Region 2 (CTGP)	Jill Simmerman (910) 619-7711 ctp.region2@gmail.com
Mission Hospital Nicotine Dependence Program	http://www.missionmd.org/nicotine-dependence-program
NC 2-1-1 / United Way of Asheville and Buncombe County	http://www.unitedwayabc.org/
Park Ridge Health	http://www.parkridgehealth.org/
Teens Against Tobacco Use Club (TATU)	Donna Storrow (828) 231-0959 dstorrow@charter.net
V.A. Medical Center: Charles George (VA)	http://www.asheville.va.gov/

Tobacco Prevention and Cessation Plan

Vision of Impact

A future free of the disease, disability, and death caused by tobacco use

State and National Objectives	Baseline/Indicator Source
Healthy NC 2020 Objective: Decrease the proportion of adults who smoke	BRFSS
[2011 BC Baseline: 21.8%; 2020 Target: 13%]	
Healthy NC 2020 Objective: Decrease teen tobacco use among high school	Youth Tobacco Survey and
students	NC Tobacco Prevention and
[2010 BC Baseline: 17%; 2020 Target: 15%]	Control Branch (TPCB)
Healthy NC 2020 Objective: Decrease exposure to secondhand smoke by	BRFSS and NC TPCB
reducing percentage of workers that are exposed to secondhand smoke indoors	
at their workplaces	
[2010 NC baseline: 7.8%; 2020 Target: 0%]	
Healthy NC 2020 Objective: Decrease the percentage of pregnant women who	SCHS Birth Certificate Data
smoke during pregnancy	
[2009 NC Baseline: 10.2%; 2020 Target: 6.8%]	
NC TPCB Vision 2020 Objective: Decrease exposure of high school youth to	Youth Tobacco Survey and
secondhand smoke in homes	NC TPCB
[2011 NC Baseline: 26.9%; 2020 Target: 16.8%]	
NC TPCB Vision 2020 Objective: Decrease exposure of middle school youth to	Youth Tobacco Survey and
secondhand smoke in homes [2011 NC Baseline: 27.3%; 2020 Target: 17.9%]	NC TPCB

Goal 1: Reduce tobacco use by increasing services and policies that support tobacco cessation

Strategy 1.1: Evidence-based practice in clinical settings

Objective 1.1.1:

Increase the number of health and dental providers who use evidence-based practice to address tobacco use with every patient

Indicator: Number of health and dental providers who use evidence-based practice to address tobacco use with every patient

Objective 1.1.2:

Increase the number of health practices that establish a provider-reminder system to identify, intervene with, and educate tobacco-using patients and in-patients

Indicator: Number of health practices with a provider-reminder system

Strategy Background

Evidence Base: Provider Oriented Interventions: The overarching goals of these recommendations is that clinicians strongly recommend the use of effective tobacco dependence counseling and medication treatments to their patients who use tobacco and that health systems, insurers, and purchasers assist clinicians in making such effective treatments available. The effectiveness of clinical-based strategies to reduce tobacco use is well-documented, and the U.S. Department of Health and Human Services has developed clinical practice guidelines (US DHHS 2008). The Community Guide specifically recommends provider reminder systems as an effective strategy because research shows even brief provider advice has a significant effect on getting clients to quit tobacco use. A systematic review of seven studies found provider reminder systems were effective in: increasing the number of clients who quit smoking by approximately 4 additional clients per 100; increasing the number of clients who providers advise to quit smoking by approximately 13 additional clients per 100; and increasing the determination of client smoking status by providers by approximately 32 additional clients per 100 (Community Guide 2000).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); www.thecommunityguide.org/tobacco/index.html

Type of Change: Policy

Partner Agencies:

Mission, BCDH, VA, CTGP

Action Plan

	Resources			
Activity	Needed	Anticipated Result	Result Verification	Target Date
(what is being done?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Implement an inpatient "Quit Tobacco" system where every patient is asked about tobacco at every visit. Mission is working with NC Prevention partners on this	-Mission staff	All health providers at Mission Hospital will inquire about tobacco use and provide necessary follow-up with each patient and in- patient.	A provider reminder system is implemented that prompts providers to inquire about tobacco use.	July 2014
Assess needs of doctors regarding tobacco cessation, develop programs, and roll out an educational plan for docs	-Mission staff, -Assessment tool, -Educational plan	Identify the needs of hospital doctors, develop a program to support the needs, and train providers	Program developed and doctors educated.	July 2015
Ask every client/veteran ever identified as a tobacco user annually about tobacco use; advise and assist with meds/classes	-VA staff	Veterans who receive VA services and are identified as tobacco users are asked about tobacco use every year and provided with assistance to help quit.	A provider reminder system is in place	July 2014
Encourage primary care practices to work on improving screening and treating of tobacco use	-CTGP tobacco lead	Tobacco users are connected to community supports outside of doctors' offices. Change packets through MAHEC include tobacco prompts for physicians.	Database established of MAHEC physicians who screen patients for tobacco use.	September 2014
Provide 5A Cessation Counseling educational sessions to health and dental providers	-Mission; -BCDH; -Educational Cessation packets	Additional health providers in the community will implement the 5A's Cessation Counseling method.	A database of health providers who implement the 5A's will be in place to establish a baseline.	September 2014

Strategy 1.2: Employer support for cessation

Objective 1.2.1:

Increase the number of employers that offer evidence-based cessation services/resources to employees

Indicator: Number of employers that offer evidence-based cessation services/resources to employees

Strategy Background

Evidence Base: Reducing out-of-pocket costs for evidence-based cessation treatments involves policy or program changes that make evidence-based treatments, including medication, counseling or both, more affordable. To achieve this, new benefits may be provided, or changes may be made to the level of benefits offered that reduce costs or co-payments

(Community Guide 2013). The Community Guide recommends worksite-based incentives and competitions when combined with additional interventions to support individual cessation efforts based on strong evidence of effectiveness in reducing tobacco use among workers. Interventions that were combined with incentives and competitions included: client education, smoking cessation groups, self-help cessation materials, telephone cessation support, workplace smoke-free policies, and social support networks (Community Guide 2005).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); <u>www.thecommunityguide.org/tobacco/index.html</u>

Type of Change: Policy

Partner Agencies: BCDH, Mission

	Resources			
Activity	Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how	(what will happen?)	(how will you know?)	(by when?)
	much?)			
Facilitate worksite policy	-BCDH staff;	Additional employers will	A database of employers	July 2014
changes and determine how to	-Mission staff; -	implement a policy to	that provide cessation	
keep companies engaged.	-Educational	provide cessation services	services or resources will be	
	information on the economic	or resources to	in place to establish a baseline.	
	benefits of a	employees.	baseline.	
	new or			
	improved			
	policy			
Work with internal employees		Mission employees will	A plan is developed and in	July 2015
when insurance plans change:	-Mission	have access to free	place to provide free	
as insurance rates increase (and		cessation support	cessation support to Mission	
cessation is expensive) develop			employees who want to quit using tobacco.	
a plan to provide free cessation			using tobacco.	
benefits				
Educate and encourage	BCDH; Mission;	Additional employers will	Increased number of	December 2014
employers to provide evidence-	educational	provide cessation services	employers, as data collected	
based cessation coverage as a	information on	to employees.	for database	
new benefit.	the economic benefits of			
	providing			
	cessation			
	services to			
	employees			

Strategy 1.3: QuitlineNC

Objective 1.3.1:

Increase the number of calls and referrals to QuitlineNC originating from Buncombe County each year

Indicator: Number of calls and referrals to QuitlineNC originating from Buncombe County

Objective 1.3.2:

Continue advocating for Quitline funding and increase those advocacy efforts

Indicator: Number of local advocacy efforts to increase funding

Strategy Background

Evidence Base: Quitline interventions include the use of telephone contact to provide evidence-based behavioral counseling and support to help tobacco users who want to quit. Three interventions effective at increasing use of quitlines are:

- 1. Mass-reach health communication interventions that combine cessation messages with a quitline number
- 2. Provision of free evidence-based tobacco cessation medications for quitline clients interested in quitting
- 3. Quitline referral interventions for health care systems and providers.

Tobacco cessation quitline interventions—particularly proactive quitlines that offer follow-up counseling calls—are recommended by the Community Guide based on strong evidence of effectiveness in increasing tobacco cessation among clients interested in quitting. Evidence also shows that quitlines can expand the use of evidence-based services by tobacco users in populations with the lowest access to these services (Community Guide 2000).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); <u>www.thecommunityguide.org/tobacco/index.html</u>

Type of Change: Individual, Organizational

Partner Agencies:

BCDH, Mission, VA, CTGP, NC 211/United Way

Action Plan

Activity (what?) Develop and implement a media	Resources Needed (who? how much?) -BCDH;	Anticipated Result (what will happen?) Media placements will	Result Verification (how will you know?) Monthly reports received	Target Date (by when?)
plan to promote tobacco cessation and QuitlineNC (ex. place radio, print, TV ads; submit letters to the editor, etc.)	-CTGP; funding for media placement; Work group participation for LTE's	encourage more tobacco users in Buncombe County to call QuitlineNC to get help quitting.	from NC TPCB will show increased number of callers to QuitlineNC for the year from Buncombe County.	
Promote the use and referral to the Quitline, during 5A Cessation Counseling trainings to health and dental providers.	-BCDH; -Mission; -Educational cessation packets	Health and dental providers will refer patients who are ready to quit.	Monthly reports received from NC TPCB will show increased number of referrals for the year from Buncombe County health providers.	July 2014
When working with employers to offer cessation services, promote the Quitline as an easy resource for employees.	-BCDH staff; -Mission staff; -Quitline materials (brochures, pocket cards, etc.)	Employers promote the Quitline to employees as a free and easy quitting resource for employees.	Monthly reports received from NC TPCB will show increased number of callers to QuitlineNC for the year from Buncombe County.	July 2014
Promote the use of the Quitline to the public	-BCDH; -Mission; -VA; -211; -CTGP, TATU	QuitlineNC promoted to general population as a free and easy resource for help in quitting.	Monthly reports received from NC TPCB will show increased number of callers to QuitlineNC for the year from Buncombe County.	July 2014
Advocate for Quitline funding with public officials	-BCDH, TATU	Funding for Quitline at the state level is secure.	Quitline continues to be supported by NC legislature	July 2015

Strategy 1.4: Access to cessation therapies

Objective 1.4.1:

Increase access to tobacco cessation services and resources by reducing barriers (financial and transportation) to cessation therapies (including meds/cessation groups)

Indicator: Number of organizational changes made to reduce barriers and increase access

Strategy Background

Evidence Base: Reducing out-of-pocket costs for evidence-based cessation treatments involves policy or program changes that make evidence-based treatments, including medication, counseling, or both, more affordable. To achieve this, new benefits may be provided, or changes

may be made to the level of benefits offered that reduce costs or co-payments. The Community Guide recommends policies and programs that reduce tobacco users' out-of-pocket costs for evidence-based cessation treatments. These interventions have strong evidence of effectiveness in increasing the number of tobacco users who quit, based on the results of a systematic review of 18 studies plus 13 additional studies. These studies included both findings from clinic-based trials and population-based policy evaluations of reduced out-of-pocket costs for both cessation counseling and medications (Community Guide 2012).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); www.thecommunityguide.org/tobacco/index.html

Type of Change: Individual, Community, Policy

Partner Agencies:

Park Ridge, Mission, VA, BCDH, ARP, 211/United Way

Action Flan	Resources			Target
Activity		Anticipated Possilt	Result Verification	Target
Activity	Needed	Anticipated Result		Date
(what?)	(who? how	(what will happen?)	(how will you know?)	(by
	much?)			when?)
Provide tobacco cessation to internal	-Mission;	More internal clients	Internal databases will be in	July 2015
clients and employees	-ARP;	and employees to	place to establish a baseline.	
	-educational	Mission and ARP will	Increased number of clients	
	materials	quit tobacco use.	and employees will have quit.	
Offer Freedom From Smoking classes every	-Park Ridge,	FFS cessation classes	Reports from partners will	July 2014
quarter in a variety of locations to reach	-Mission,	offered to reach diverse	show that FFS cessation	
more people. In Buncombe (only in the	-VA; in-kind	populations and	classes were offered in at least	
south part of the county)	funding for	geographies in the	three locations in Buncombe.	
	classes	county		
Work with multi-unit housing complexes	-BCDH;	Cessation services or	Develop a database of multi-	July 2014
(apartments) adopting a smoke-free policy	-Mission;	resources are provided	unit housing complexes that	
to support cessation for residents	-database	to residents who live in	adopt a smoke-free policy.	
		mult-unit complexes	Track number of complexes	
		that are planning to	that provide cessation	
		adopt a smoke free	support.	
		policy		
Expand work within internal business	-VA;	More cessation	Systems expanded; Partner	July 2015
system to establish resources and meet the	-Mission	resources accessible	documentation	
cessation needs of the communities they		within hospital systems		
serve				
Develop an evidence-based tobacco	-Mission;	An updated and	Tobacco cessation program in	December
cessation program to support community	assistance	improved cessation	completed per Mission	2015
members in quitting tobacco.	from	program is put into	reports.	
	cessation	practice at Mission.		
	researchers			

Provide outreach and offer creative		Evidence-based	Reports from VA will show	July 2014
tobacco cessation opportunities to	-VA	cessation classes are	that cessation classes were	551, 251
veterans who otherwise may not be able		offered to reach more	offered to veterans via at least	
to participate, due to disability,		veterans who don't	two venues in Buncombe.	
transportation issues, etc.		have access to tobacco		
Provide clinical video tele-health to		cessation help		
offer FFS series in Rutherford and				
Franklin				
Offer FFS series for veterans and all				
community members at Haywood				
County Health Department				
Provide community outreach for				
veterans in rural counties and conduct				
FFS classes.				
Offer group phone-based classes (based)				
on FFS)				
Reduce out of pocket expense for				
cessation meds for veterans, by				
offsetting costs for NRT (patch, gum,				
or lozenges) and Rx (Chantix and				
Buproprion)				
Provide free cessation classes to				
support person who accompanies				
veteran to classes				
Keep practices and providers abreast of	D D'	Tobacco users are	Database established of health	September
resources that are available for patients in	-Park Ridge;	connected to	providers who screen patients	2014
their communities	-Mission;	community supports	for tobacco use and provide	
	-BCDH;	through the health	resources for quitting.	
	-211	providers.		

Goal 2: Reduce exposure to tobacco-use and secondhand smoke by increasing tobacco-free and smoke-free policies

Strategy 2.1: Tobacco-free ordinances and laws

Objective 2.1.1:

Increase the number of tobacco-free ordinances in public places, and local government buildings, grounds, and vehicles

Indicator: Number of tobacco-free ordinances in public places, and local government buildings, grounds, and vehicles

Strategy Background

Evidence Base: Smoke-free policies are public-sector regulations that prohibit smoking in indoor spaces and designated public areas. State and local ordinances establish smoke-free standards for all, or for designated, indoor workplaces, indoor spaces, and outdoor public places. Public and private organizational smoke-free policies are recommended by the Community Guide. Two systematic reviews indicate smoke-free policies are effective in:

reducing exposure to secondhand smoke; reducing prevalence of tobacco use; reducing tobacco consumption among tobacco users; increasing quit rates among tobacco users; reducing initiation of tobacco use among young people; and reducing tobacco-related morbidity and mortality, including acute cardiovascular events (Community Guide 2012).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); www.thecommunityguide.org/tobacco/index.html

Type of Change: Policy

Partner Agencies: BCDH, CTGP, Mission

Action i ian				
	Resources			
Activity	Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how	(what will happen?)	(how will you know?)	(by when?)
	much?)			
Advocate for smoke free public	-BCDH;	Increased regulations	New polices or laws passed	December 2014
places that are not currently	-CTGP;	that support smoke-	that mandate public places	
covered under any policy or law	-Support from	free public places.	to be smoke-free.	
(ex. laundry mats, convenience	local officials,			
stores, office building lobbies,	-TATU			
bingo halls, etc.)				
Build capacity and support	-BCDH;	Increased support for a	At least 2 elected officials	September 2014
among policy makers and	-CTGP	new or improved	support and help advocate	
elected officials for smoke-free		smoke-free ordinance.	for improved ordinances	
ordinances for the Towns of				
Biltmore Forest and Woodfin				
Provide education and technical	-BCDH staff	Compliance is improved	No additional reports on	On-going
assistance for local	time;	for the restaurants/bars	restaurants/bars.	
establishments to maintain	-compliance	we receive a violation		
compliance with the NC	materials	notice.		
Smokefree Restaurants and				
Bars Law.				

Strategy 2.2: Tobacco-free worksites

Objective 2.2.1:

Increase the number of smoke-free or tobacco-free policies within worksites

Indicator: Number of new or improved smoke-free or tobacco-free policies within worksites

Strategy Background

Evidence Base: Smoke-free policies include private-sector rules that prohibit smoking in indoor spaces and designated public areas. These policies may ban all tobacco use on private property or restrict smoking to designated outdoor locations. Worksites are one setting where evidence supports the effectiveness of smoke-free policies. Research shows smoking bans substantially reduce respiratory symptoms and secondhand smoke exposure among hospitality workers. Smoking prevalence and secondhand smoke exposure may not drop as readily for lower-income workers, especially if bans are not uniformly implemented across worksites (County Health Rankings 2013).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); <u>www.thecommunityguide.org/tobacco/index.html</u>; County Health Rankings, 2013. What Works for Health: Smoking Bans and Restrictions.

http://www.countyhealthrankings.org/policies/smoking-bans-restrictions

Type of Change: Policy

Partner Agencies: BCDH, Mission

Activity	Resources	Anticipated Result	Result Verification	Target Date
(what?)	Needed	(what will happen?)	(how will you know?)	(by when?)
	(who? how			
	much?)			
Educate and encourage	-BCDH staff;	Additional employers	A database of employers	July 2014
employers to implement	-Mission staff;	will implement a policy	with any tobacco-related	
tobacco free policies in their	-educational	that will protect	policy will be in place to	
worksites	information on	employees from	establish a baseline.	
	the economic	secondhand smoke		
	benefits of a new	exposure and encourage		
	or improved	tobacco users to quit.		
	policy			

Strategy 2.3: Tobacco-free housing

Objective 2.3.1:

Increase the number of smoke-free or tobacco free multi-unit housing complexes

Indicator: Number of multi-unit housing complexes that implement a smoke-free policy

Strategy Background

Evidence Base: Smoke-free policies include private-sector rules that prohibit smoking in indoor spaces and designated public areas. These policies may ban all tobacco use on private property or restrict smoking to designated outdoor locations. Public and private organizational smoke-free policies are recommended by the Community Guide. Two systematic reviews indicate smoke-free policies are effective in: reducing exposure to secondhand smoke; reducing prevalence of tobacco use; reducing tobacco consumption among tobacco users; increasing quit rates among tobacco users; reducing initiation of tobacco use among young people; and reducing tobacco-related morbidity and mortality, including acute cardiovascular events (Community Guide 2012).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); <u>www.thecommunityguide.org/tobacco/index.html</u>

Type of Change: Policy

Partner Agencies: BCDH, CTGP, Mission

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Develop an inventory of multi-unit housing (MUH) properties and identify those that are smoke-free	-BCDH in collaboration with CTGP	Identification of MUH properties that are smoke-free	A database of MUH properties with a policy will be established as a baseline	July 2014
Contact managers of MUH properties who are interested and provide technical assistance for implementing smoke-free policies	-BCDH; -CTGP; -Educational materials	Increase the number of properties with a smoke-free policy	A database of MUH properties with a policy will be established as a baseline	July 2014
Provide cessation support to residents and managers of MUH properties	Mission; Cessation materials	Cessation services or resources are provided to residents who live in multunit complexes that are planning to adopt a	Develop a database of multi-unit housing complexes that adopt a smoke-free policy. Track number of complexes that	July 2014

		smoke free policy	provide cessation support.	
Hold a lunch and learn on	-BCDH;	Educate manager/owners	Training completed and	June 2015
smoke-free multi-unit	-CTGP;	of MUH properties and	documented.	
housing in 2015	-Training	increase interest in		
	materials;	adopting a policy.		
	-speakers			
Provide technical assistance	-BCDH	Residents who request	Documentation reports on	June 2015
to residents who live in MUH		information are educated	technical assistance	
that is not smoke-free		about tobacco free homes	provided	
Provide technical support	-BCDH;	Increase the number of	A database of MUH	July 2014
and education to advance	-CTGP	properties with a smoke-	properties with a policy will	
smoke-free policies in MUH,	-Educational	free policy	be established as a baseline	
including market rate,	materials			
affordable housing, and				
subsidized housing.				
Build support for incremental	-BCDH;	Increased community	At least three additional	July 2014
steps toward smoke-free	-CTGP,	support for smoke-free	key community	
MUH policies	-TATU	MUH properties	stakeholders are engaged	
			in these initiatives	

Goal 3: Prevent and reduce tobacco use among youth and young adults by increasing compliance with regulations

Strategy 3.1: Compliance with tobacco regulations among institutions that serve youth

Objective 3.1.1:

Increase the number of stores that are in compliance with the Synar Amendment (restricting minor's access to tobacco products)

Indicator: Number of stores that are in compliance with the Synar Amendment

Objective 3.1.2:

Assure that all City and County Schools meet the requirements of teaching the "Alcohol, Tobacco and Other Drugs" Strand of the NC Healthful Living Essential Standards – for grades 3-9

Indicator: Percentage of City and County Schools that meet the requirements of teaching the

"Alcohol, Tobacco and Other Drugs" Strand of the NC Healthful Living Essential

Standards – for grades 3-9

Objective 3.1.3:

Increase compliance with 100% Tobacco Free School policies

Indicator: Number of schools that make changes to support 100% TF School policies

Strategy Background

Evidence Base: Community mobilization with additional interventions to restrict minors' access to tobacco products. These are community-wide interventions aimed at focusing public attention on the issue of youth access to tobacco products and mobilizing community support

for additional efforts to reduce that access. The Community Guide <u>recommends</u> community mobilization combined with additional interventions —such as stronger local laws directed at retailers, active enforcement of retailer sales laws, and retailer education with reinforcement—on the basis of sufficient evidence of effectiveness in reducing youth tobacco use and access to tobacco products from commercial sources.

The Standard Course of Study adopted by the North Carolina Department of Public Instruction describes the subjects and course content that is taught in North Carolina public schools, and the assessments and accountability model used to evaluate student, school and district success. The Accountability and Reform Effort (ACRE) identifies what students should know and clearly measures whether students are on track for success after high school. It is time for a new generation of K-12 school curricula, student assessment, and school accountability. In 2008, following extensive input from the Blue Ribbon Commission on Testing and Accountability, the State Board of Education crafted the Framework for Change - 27 recommendations to dramatically change the scope of the Standard Course of Study, assessments, and accountability.

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); <u>www.thecommunityguide.org/tobacco/index.html</u>; "Healthful Living Essential Standards" - <u>Standard Course of Study</u>; North Carolina Department of Public Instruction; http://www.ncpublicschools.org/acre/standards/new-standards/

Type of Change: Policy

Partner Agencies:

ARP, Asheville City Schools, Buncombe County Schools, BCDH

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Provide merchant education in stores to decrease minors access to tobacco products (in accordance with a federal-state partnership program [Synar Amendment] aimed at ending illegal tobacco sales to minors)	-ARP; -educational materials	Increased number of stores complying with Synar Amendment	Partner documentation	July 2014
Complete an environmental scan in each store visited (to look for tobacco product placement, location of tobacco signage, number of signs in store, etc.)	-ARP; -Environmental scan tool	Increased number of stores complying with Synar Amendment	Partner documentation	July 2014

Encourage merchants to move ads away from eye level of children	-ARP	Merchants move ads out of direct site of children	Partner documentation	July 2014
Hold merchant events to educate about Synar Amendment	-ARP	Increased number of stores complying with Synar Amendment	Partner documentation	July 2014
Teach the "Alcohol, Tobacco and Other Drugs" strand of the NC Healthful Living Essential Standards – for grades 3-9	-Asheville City Schools; -Buncombe County Schools	Increase the percentage of schools that meet requirements.	Partner documentation	July 2014
Support all schools in the Asheville and Buncombe County School Systems in complying with 100% Tobacco Free School policies (ex. post signage, school announcements, letters to parents, etc.)	-Asheville City Schools; -Buncombe County Schools; -BCDH, TATU	Additional signage and support offered to increase compliance with 100% TFS policies	Additional signage posted at least 3 schools	June 2014

Goal 4: Increase public will for tobacco-related policy and environmental changes

Strategy 4.1: Influence community culture/norms around tobacco use

Objective 4.1.1:

Increase # of mass media campaigns that support policy and environmental changes

Indicator: Number of mass media campaigns that are published or aired

Objective 4.1.2:

Increase communications with community leaders and community members (such as elected officials). Celebrate our and others' successes and advance understanding of those successes.

Indicator: Number of communications with community leader and community members

Strategy Background

Evidence Base: Mass reach health communication interventions target large audiences through television and radio broadcasts, print media (e.g., newspapers), out-of-home placements (e.g., billboards, movie theaters, point-of-sale), and digital media to change knowledge, beliefs, attitudes, and behaviors affecting tobacco use. The Community Guide recommends mass-reach health communications interventions. These interventions are based on strong evidence of effectiveness in decreasing the prevalence of tobacco use, increasing cessation and use of available services such as quitlines, and decreasing initiation of tobacco use among young people. Evidence was considered strong based on findings from studies in which television was the primary media channel (Community Guide).

Resources that provide an overview of the evidence for this strategy:

<u>Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); <u>www.thecommunityguide.org/tobacco/index.html</u>

Type of Change: Individual, Interpersonal

Partner Agencies: BCDH, CTGP, Mission

Action Plan

Activity	Daggurgag	Anticipated Decult	Docult Varification	Torget Date
Activity	Resources	Anticipated Result	Result Verification	Target Date
(what?)	Needed	(what will happen?)	(how will you know?)	(by when?)
	(who? how much?)			
Place media messages that	-BCDH;	Build community support	15 media messages	July 2014
reach targeted audiences to:	-CTGP;	for tobacco-free lifestyles	placed or aired	
 promote QuitlineNC 	-Mission;	and smoke-free		
• promote awareness about	-VA	environments by placing		
secondhand smoke	-Funding for media	media messages		
 support smoke-free air 	placement			
policies and laws				
(ex. place radio, print, TV				
ads; submit letters to the				
editor, etc.)				
Develop and implement a	-BCDH;	Key community	At least 5 key	December 2014
plan to highlight successes	-CTGP;	stakeholders engaged in	stakeholders	
and increase	-Mission;	driving initiatives that		
communications with key		support tobacco-free		
community leaders and		lifestyles and smoke-free		
members		environments		

Strategy 4.2: Mass media campaigns that target youth and young adults

Objective 4.2.1:

Increase the number of mass media campaigns that prevent tobacco use by youth and young adults.

Indicator: Number of mass media campaigns that prevent tobacco use by youth and young adults

Strategy Background

Evidence Base: Mass reach health communication interventions target large audiences through television and radio broadcasts, print media (e.g., newspapers), out-of-home placements (e.g., billboards, movie theaters, point-of-sale), and digital media to change knowledge, beliefs, attitudes, and behaviors affecting tobacco use. Intervention messages are typically developed

through formative testing and aim to reduce initiation of tobacco use among young people, increase quit efforts by tobacco users of all ages, and inform individual and public attitudes on tobacco use and secondhand smoke. Pictorial warning labels on tobacco packages, an additional channel for the dissemination of health information to tobacco users, were not considered in this review (Community Guide).

Resources that provide an overview of the evidence for this strategy:

<u>The Guide to Community Preventive Services</u>; Centers for Disease Control and Prevention (CDC); www.thecommunityguide.org/tobacco/index.html

Type of Change: Individual, Community

Partner Agencies: BCDH, CTGP, Mission

	Resources			
Activity	Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how	(what will happen?)	(how will you know?)	(by when?)
	much?)			
Place media messages that reach	-ARP;	Create awareness of	5 media messages placed	July 2014
youth and young adults to:	-BCDH;	the dangers of tobacco	or aired	
 prevent initiation of tobacco use 	-CTGP;	use among youth and		
 promote quitting and QuitlineNC 	-Mission,	young adults		
promote awareness about	-TATU			
secondhand smoke				
 support smoke-free air policies 				
and laws				
(ex. place radio, print, TV ads;				
submit letters to the editor, etc.)				

Works Cited Tobacco Prevention and Cessation:

Centers for Disease Control and Prevention (CDC). The Guide to Community Preventive Services: Reducing Tobacco Use and Secondhand Smoke Exposure website. Accessed 7/30/13 at: www.thecommunityquide.org/tobacco/index.html

County Health Rankings, 2013. What Works for Health: Smoking Bans and Restrictions. Accessed 7/30/13 at: http://www.countyhealthrankings.org/policies/smoking-bans-restrictions.

"Healthful Living Essential Standards" - <u>Standard Course of Study</u>: North Carolina Department of Public Instruction; http://www.ncpublicschools.org/acre/standards/new-standards/

Leddford M et al. Youth Empowerment: The Theory and Its Implementation. Raleigh NC. Youth Empowered Solutions. Accessed 7/30/13 at:

www.youthempoweredsolutions.org/?page_id=4202

U.S. Department of Health and Human Services, Clinical Practice Guideline: Treating Tobacco Use and Dependence: 2008 Update. Accessed 7/30/13 at: :

http://www.ahrq.gov/professionals/cliniciansproviders/quidelines-

recommendations/tobacco/clinicians/treating tobacco use0 8.pdf

Did you know?

There have been important advances in medicine and prenatal care in recent years.

Despite these advances, birth outcomes are worse in the United States than in many other developed countries.

Many babies are born early or have low birth-weight. Among some groups of people, the problems actually are getting worse.

Preconception health and preconception health care can make a difference

Source: Center for Disease Control and Prevention

CHAPTER 4 – PRECONCEPTION HEALTH

Situational Analysis

Preconception health refers to the health of women and men during their reproductive years, which are the years they can have a child. Preconception health helps men and women think about how their behaviors, lifestyles, and medical conditions affect their ability to live healthy lives and to have healthy children (NCDHHS 2010). However, all women and men can benefit from preconception health, whether or not they plan to have a baby one day. Preconception health is about people getting and staying healthy, throughout their lives (CDC¹ 2012). Since several important components of preconception health (chronic disease, physical activity and nutrition, tobacco use, and access to care) are covered extensively in Chapters 2, 3, and 5 of this CHIP plan, this chapter focuses on sexual and reproductive health in Buncombe County.

Sexually Transmitted Disease

Sexually transmitted diseases (STDs) pose a health threat in Buncombe County. Though most STDs are easily diagnosed and treated, many have no noticeable symptoms. As a result, many infections go undetected. Without treatment, individuals with STDs are at risk of health problems including pelvic inflammatory disease, infertility, increased risk of HIV transmission, preterm birth, and other serious complication for the newborn (WHO 2013).

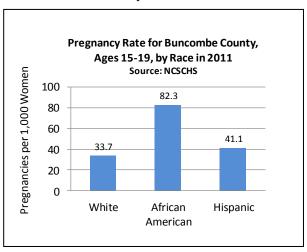
STDs affect people of all races, ages, and sexual orientations, but some individuals experience greater challenges in protecting their health. Everyone should have the opportunity to make choices that allow them to live healthy lives regardless of their income, education, or racial/ethnic background. The reality is that lack of resources or insurance and challenging living conditions make it more difficult to become and stay healthy, and can lead to circumstances that increase the risk of STDs. African Americans in Buncombe County sometimes face these barriers, which contributes to the especially heavy toll STDs take on this community (CDC² 2012). African Americans represent just 6% of the Buncombe County population, yet account for almost a third of all reported chlamydia cases and almost half of all gonorrhea cases (Census 2010; NCDHHS 2011). To ensure that everyone in the community has the opportunity to make healthy decisions, it is essential to address both the individual and social factors that contribute to STD risk.

Unintended Pregnancies

No one expects an unplanned pregnancy. But it happens often and is a barrier to efforts to give every child in Buncombe County the best start possible. Approximately 43% of births in North Carolina are the result of unintended pregnancies (pregnancies that are desired later or not at all) (NCSCHS¹ 2011). Couples with unintended pregnancies may have risk factors or be engaging in behaviors that put their own health and the health of the pregnancy at risk. Unintended pregnancy has been associated with poor outcomes such as late entry into prenatal care, low birth weight, and child abuse and neglect (Brown 1995). Nearly half of new mothers in

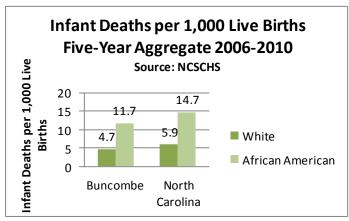
North Carolina reported that they were not trying to get pregnant at the time of conception but were not doing anything to keep from getting pregnant (NCSCHS 2008).

African American and Hispanic women in Buncombe County have significantly higher pregnancy rates than white women, suggesting potential opportunities for preconception health efforts. The racial and ethnic gap is even greater in teen pregnancies, despite the decreasing rates of teen pregnancy for the Buncombe County on average. The large majority of teen pregnancies are unintended.



Infant Mortality

Too many babies are dying in Buncombe County. While the rate of infant deaths has been declining (reaching 5.2 deaths per 1,000 live births in 2011), many of these deaths are still preventable (NCSCHS² 2011). Buncombe County's infant mortality rate is largely attributable to premature births and low birth weights. Each year in Buncombe County, one in seven babies is born too early, and the number is rising (NCSCHS 2013). Prematurity and low birth weight are often connected to the health of the parents before they become pregnant, so we must concentrate on making sure parents have adequate knowledge about healthy choices and



practices before pregnancy. Infant mortality is an issue that affects the county across racial and socio-economic lines but some of our communities suffer more than others. African-American infants in Buncombe County are 2.4 times more likely to die before the age of one than white infants, mirroring a pattern across the state (NCSCHS² 2011). Significant disparities in birth outcomes and women's health have persisted for generations across North Carolina

(NCDHHS 2010). Working to help all women and all men be healthy before, during, and after pregnancy is the best way to save babies' lives and improve the health of our community.

Key Community-Level Indicators

Indicator	Source	Baseline	Target	Target Date
Teen pregnancy	NC State Center for	39.3 (2011)	-	December 2015
rate	Health Statistics			
Chlamydia rate	NC State Center for	308.5 (2010)	-	December 2015
	Health Statistics			
HIV rate of new	NC Dept. of Health	13.0 (2011)	-	December 2015
infections	and Human Services			
Infant Mortality	NC State Center for	5.2 (2011)	-	December 2015
rate	Health Statistics			
Low birth weight	NC State Center for	7.0 (2011)	-	December 2015
rate	Health Statistics			

Spotlight on Success

Making Proud Choices!

Buncombe County Health and Human Services (BCHHS) is participating in a three year *Institute on the Prevention of Teen Pregnancy and Sexually Transmitted Infection*. The Institute is comprised of five state jurisdictions and Buncombe, Wake and Wilson counties and aims to reduce teen pregnancy and sexually transmitted infection (STI) with youth in foster care by utilizing an evidence-based curriculum along with strategic change management efforts within the agency and community that address the unique needs of this population. This project is in association with The National Campaign to Prevent Teen and Unplanned Pregnancy, the American Public Human Services Association (APHSA), and its affiliate, the National Association of Public Child Welfare Administrators (NAPCWA), with support from the Annie E. Casey Foundation.

BCHHS and strategic community partners are working together to implement *Making Proud Choices!*, an evidence-based program that provides youth with the knowledge, confidence, and skills necessary to reduce their risk of STIs, HIV, and pregnancy. The curriculum was adapted to address the specific concerns of youth in foster care; however, the curriculum is not restricted for use only with this population. The adapted curriculum includes LGBT youth inclusion; greater focus on birth control, broader sexuality issues and healthy

Parenthood is the leading reason teen girls drop out of school. 50% of teen mothers never finish high school.

One out of every four sexually active teens has an STD.

A child born to a teen mother who has not finished high school and is not married is nine times more likely to be poor than one who has graduated and is married.

Teen girls in foster care are 2.5 times more likely than their peers not in foster care to get pregnant by age 19.

Half of 21- year- old males leaving foster care report they had gotten someone pregnant, versus 19% of their peers who were not in foster care.

41% of foster youth think the reason teen pregnancy is higher among foster youth is because they want to feel loved.

Source: The National Campaign to Prevent Teen and Unplanned Pregnancy

relationships; and case studies, discussions and role plays that are tailored to youth in foster care. A diverse group of facilitators from community organizations were trained to deliver the program to the community, beginning with foster care youth. Thirty-five foster youth successfully completed the sessions held in May. Caregivers were also given a chance to experience the *Making Proud Choices!* curriculum and provided valuable positive feedback about the program. Participant response indicated that the topics and information shared in



Making Proud Choices! is critical to a successful decision-making path for teenagers when they are in their formative years. Future efforts include expanding the program into the community. In addition to the existing programs at Mt. Zion Community Development and the YWCA, the program will be delivered in the Pisgah View Housing community beginning in August.

Partners

Addressing preconception health is complex and will require the collaborative planning, action, and coordination of multiple partners in our community. The following partner agencies and organizations are engaged in efforts to improve preconception health in our community. As new partners are identified, we will continuously work to bring them into the process.

Organizations	Website or Contact Information
Asheville City Schools	http://www.ashevillecityschools.net/Pages/default.aspx
Buncombe County Schools	www.buncombe.k12.nc.us
Buncombe County Health and Human Services (BCHHS)- Economic Services	http://www.buncombecounty.org/Governing/Depts/DSS/Economics/
BCHHS- Family Planning Clinic	http://www.buncombecounty.org/Governing/Depts/Health/ Family.aspx
BCHHS- Nurse Family Partnership	http://www.nursefamilypartnership.org/locations/North- Carolina/Buncombe-County-NFP
BCHHS – Outreach and Wellbeing	Becky Kessel, MSW Becky.Kessel@buncombecounty.org
BCHHS - School Health	http://buncombecounty.org/Governing/Depts/health/Schoo Health.aspx
BCHHS- Youth Educators and Advocates for Health (YEAH!)	Sara.green@buncombecounty.org
Community Care of Western North Carolina (CCWNC)	http://www.communitycarewnc.org/
MAHEC Family Medicine	http://www.mahec.net/resident/fhca_curriculum.aspx#ob
Mt. Zion Community Development, Inc Project EMPOWER and Project NAF	http://www.mtzionasheville.org/mt zion cdc
North Carolina Preconception Health Campaign/Mission Health	http://everywomannc.com/about-us/nc-preconception- health-campaign
Planned Parenthood Health Systems	http://www.plannedparenthood.org/health- center/centerDetails.asp?f=2626&a=90860&v=details
Western North Carolina AIDS Project (WNCAP)	http://wncap.org/
Western North Carolina Community Health Services (WNCCHS)	http://www.wncchs.org/
YWCA- MotherLove program	http://www.ywcaofasheville.org/site/c.7oIEJQPxGeISF/b.813 1583/k.2A86/MotherLove.htm

Preconception Health Plan

Vision of Impact

All men and women of reproductive age, regardless of pregnancy status or desire, have the knowledge, empowerment and ability to choose healthy behaviors within a community which supports those behaviors. This will lead to improved health outcomes for women, newborns and families.



- All men and women of reproductive age have an informed, comprehensive reproductive life plan and are supported in their plan.
- All pregnancies are intended and planned.
- All men and women of reproductive age have access to health care and are screened and receive evidence-based interventions prior to pregnancy to improve birth outcomes.
- All men and women receive interconception care to reduce their risks for adverse outcomes in subsequent pregnancies.

Adapted from the Center for Disease Control and Prevention, the Global Action Report on Preterm Birth and the Action Plan for the National Initiative on Preconception Health and Health Care 2012-2014 Plan

State and National Objectives:	Baseline/Indicator Source
Healthy NC 2020 Objective : Decrease the percentage of pregnancies that are unintended [2010 NC Baseline: 45.2%; 2020 Target: 30.9%]	PRAMS
Healthy NC 2020 Objective : Reduce the infant mortality rate (per 1,000 live births) [2006-2011 BC Baseline: 5.2; 2020 Target: 6.3]	5-year aggregate NCSCHS
Healthy NC 2020 Objective : Reduce the infant mortality racial disparity between whites and African Americans [2011 BC Baseline: 2.5; 2020 Target: 1.92]	5-year aggregate NCSCHS
Healthy NC 2020 Objective : Reduce the percentage of positive results among individuals aged 15 to 24 tested for chlamydia [2010 BC Baseline: 9.9%; 2020 Target: 8.7%]	NC SCHS
Healthy NC 2020 Objective : Reduce the rate of new HIV infection diagnoses (per 100,000 population) [2020 Target: 22.2]	NC DHHS
Healthy People 2020 Objective : Reduce low birth weight (LBW) [2007-2011 BC Baseline: 8.0%; 2020 Target: 7.8%]	5-year aggregate NCSCHS
Healthy People 2020 Objective : Reduce preterm births. [2007-2011 BC Baseline: 14.7%; 2020 Target: 11.4%]	5-year aggregate NCSCHS

Healthy People 2020 Objective: Reduce pregnancies among adolescent females aged 15-17 [2011 BC Baseline: 19.9 pregnancies per 1,000; 2020 Target: 10% improvement]	NCSCHS
Healthy People 2020 Objective: Reduce pregnancies among adolescent females aged 18-19 [2011 BC Baseline: 66.3 pregnancies per 1,000; 2020 Target: 10% improvement]	NCSCHS

Goal 1: Increase awareness of the importance of health before pregnancy

Strategy 1.1: Preconception health trainings for health care providers

Objective 1.1.1:

Conduct preconception health trainings using evidence-based curriculum for 250 public and private health care providers

Indicator: Number of evidence-based preconception health trainings provided to providers

Strategy Background

Evidence Base: This strategy is aligned with the CDC's recommendation to improve preconception health and health care by integrating preconception health risk assessment and education into primary care visits (CDC 2006). Young Moms Connect is an evidence-based curriculum intended to train health care providers on five maternal health best practices: early entry and effective utilization of prenatal care; establishment and utilization of a medical home (for non-pregnant women); reproductive life planning (including access and utilization of family planning services); tobacco cessation counseling using the 5 A's approach; and promotion of healthy weight (March of Dimes North Carolina Preconception Health Campaign 2012).

Resources that provide an overview of the evidence for this strategy:

North Carolina Preconception Health Campaign Young Mom's Connect program: http://everywomannc.com/public-health-programs/north-carolina-programs/young-moms-connect

Type of Change: Individual, Community

Partner Agencies:

North Carolina Preconception Health Campaign

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Identify providers	-NC preconception	Roster of interested	Review of deliverable	May 2014
interested in	health campaign staff	providers will be developed		
trainings	time			
Provide trainings to	-NC preconception	New providers will be	Training will be held	May 2014
providers	health campaign staff time -Provider staff time -Training materials -Training space	trained on integrating preconception health into their practice	Evaluation of Training	
Create an evaluation	- NC preconception	Established an evaluation	Review of deliverable	May 2014
plan for provider	health campaign staff	protocol for provider		
trainings	time	trainings		

Strategy 1.2: Preconception health trainings for consumers

Objective 1.1.2:

Conduct preconception health trainings using evidence-based curriculum for 463 consumers in 24 counties in Western NC

Indicator: Number of evidence-based preconception health trainings provided to consumers

Strategy Background

Evidence Base: This strategy is aligned with the CDC's recommendations to improve preconception health and health care by increasing public awareness of the importance of preconception health behaviors and preconception care services (CDC 2006). Through Young Moms Connect, preconception health materials have been developed and compiled. These materials include consumer-appropriate material that addresses the establishment and utilization of a medical home (for non-pregnant women), reproductive life planning (including access and utilization of family planning services), tobacco cessation counseling using the 5 A's approach, and promotion of healthy weight (March of Dimes North Carolina Preconception Health Campaign 2012). These materials are distributed online and through trainings.

Resources that provide an overview of the evidence for this strategy:

North Carolina Preconception Health Campaign Young Moms Connect program: http://everywomannc.com/public-health-programs/north-carolina-programs/young-moms-connect

Type of Change: Individual

Partner Agencies:

North Carolina Preconception Health Campaign

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Identify consumers	-NC preconception	Roster of interested	Review of deliverable	May 2014
interested in	health campaign staff	consumers will be		
trainings	time	developed		
Provide trainings to	-NC preconception	Consumers will have	Training will be held	May 2014
consumers	health campaign staff	increased knowledge	Evaluation of Training	
	time	preconception health		
	-Training materials			
	-Training space			
Create an evaluation	- NC preconception	Established an evaluation	Review of deliverable	May 2014
plan for consumers	health campaign staff	protocol for consumer		
trainings	time	trainings		

Strategy 1.3: Community ambassador peer trainings in preconception health

Objective 1.3.1:

Train ten community ambassadors (lay health educators) to train their peers in preconception health

Indicator: Number of community ambassadors trained in preconception health

Strategy Background

Evidence Base: There is evidence indicating the effectiveness of lay community health workers (LCHWs) in several areas related to preconception health. A Cochrane literature review documented the effectiveness of lay health worker programs for increasing immunization uptake, promoting breastfeeding, and reducing morbidity and mortality as the result of childhood illnesses (Lewin et al 2005). The CDC has compiled examples of the growing body of evidence documenting the effectiveness of LCHWs in diabetes care and education efforts (CDC 2011). LCHWs are a component of the CDC's National Breast and Cervical Cancer Early Detection Program. LCHWs have also been shown to be effective in increasing breast and cervical cancer screening in several different populations of women (Bird et al. 1998, Fernández et al 2009).

Resources that provide an overview of the evidence for this strategy:

North Carolina Preconception Health Campaign- The Community Ambassador Program http://everywomannc.com/about-us/nc-preconception-health-campaign

Type of Change: Individual, Community

Partner Agencies:

North Carolina Preconception Health Campaign

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Indentify suitable community	-NC preconception health campaign staff time	Roster of appropriate ambassadors a will be	Review of deliverable	May 201
ambassadors		developed		
Create evaluation	- NC preconception health	Established an evaluation	Review of deliverable	May 2014
plan for trainings for	campaign staff time	protocol for ambassador		
ambassadors and the		trainings and their peer		
peer trainings they		trainings		
will lead				
Hold training for	-NC preconception health	Ambassadors will have	Training will be held	May 2014
ambassadors	campaign staff time	increased knowledge	Evaluation of Training	
	-Training materials	preconception health and		
	-Training space	skills to provide peer trainings		
Track trainings that	-NC preconception health	Each ambassador will have	Tracking sheet and	May 2014
ambassadors hold	campaign staff time	held trained 25 peers	database	
	-Tracking sheets			

Goal 2: Increase reproductive health education and awareness among teens

Strategy 2.1: Making Proud Choices! curriculum

Objective 2.1.1:

Increase the number of teens completing the Making Proud Choices! curriculum.

Indicator: Number of teens completing the Making Proud Choices! curriculum

Strategy Background

Evidence Base: The Making Proud Choices! curriculum is recommended by the NC DHHS Pregnancy Prevention Program and meets the CDC-designated "Best Evidence" criteria. Randomized control trials have shown significant positive attitude and behavior changes among teens who received the curriculum up to four years post-intervention (Jemmott et al. 1998). A modified curriculum for teens in foster care is currently being piloted and evaluated in five states, including in Buncombe County.

Resources that provide an overview of the evidence for this strategy:

Resource Center for Adolescent Pregnancy Prevention- Making Proud Choices! Program http://recapp.etr.org/recapp/index.cfm?fuseaction=pages.ebpDetail&PageID=128

Type of Change: Individual, family, community

Partner Agencies:

BCHHS, Mt. Zion Community Development, Inc- Project EMPOWER, YWCA- MotherLove

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Establish difference in	Meeting held	October 2013
discuss variations on	- Partner staff time	curriculum	Plan set for creation of	
curriculum and	- Meeting space	Comparison of evaluation	common evaluation tool	
evaluation methods		methods		
		Plan set for common		
		evaluation tool		
Create a common	-Staff time	Creation of a common	Review of deliverable	November 2013
evaluation tool	-Partner staff time	evaluation tool		
	-materials for evaluation			
	tools (paper, printing)			
Convene partner to	-Staff time	Establishment of an action	Review of deliverable	January 2013
determine which teens	- Partner staff time	plan to serve the most		
are being served and	- Meeting space	teens through the three		
ways to reach more/		programs		
target high risk teens				
between the programs				

Strategy 2.2: Promotional and educational activities by youth peer educators

Objective 2.2.1:

Increase the number of promotional and educational activities by Y.E.A.H. leaders at high school and community events

Indicator: Number of high schools with promotional activities by Y.E.A.H

Number of community events with promotional activities by Y.E.A.H

Strategy Background

Evidence Base: Y.E.A.H. is modeled after the CDC-funded Gaston Youth Connected's Teen Action Council which combines the Youth Empowerment Model with peer-to-peer education (http://gastonyouthconnected.org/; http://www.youthempoweredsolutions.org/). The research on peer education programs resulting in the prevention of pregnancy is mixed (Resource Center for Adolescent Pregnancy Prevention). However, research suggests that people are more likely to hear and internalize messages, and have corresponding attitude and behavior changes, if they identify the speaker as similar to them (Milburn 1995). A number of studies have demonstrated that young people's health behaviors around sexuality are influenced by their peers. (Sloane and Zimmer 1993; DiClemente 1992). Peer educators model positive youth behavior, affecting social norms and support healthy decisions about sex (DiClemente 1993). An extensive literature review is available at:

http://www.advocatesforyouth.org/publications/444?task=view.

Type of Change: Individual, Community

Partner Agencies:

BCHHS- Y.E.A.H., Asheville City Schools, Buncombe County Schools

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Confirm collaboration with community partner	-Staff time -Proposal and agreement	Partners roles defined	Agreement signed	October 2013
Recruit applicants	-Staff time	Representation from all high schools	Roster of YEAH members	November 2013
Provide orientation and training	-Staff time and training materials	Increased knowledge and skills	Training log and evaluation	December 2013
Conduct youth- driven activities to engage youth in advocacy for behavior and policy change	-Staff time; -Community partner time; -YEAH leader time	high schools with promotions implemented by YEAH members presentations to key leaders	Campaigns/outreach conducted in high schools and community	June 2014

Strategy 2.3: Growth and development and reproductive health and safety curriculum in schools

Objective 2.3.1:

Implement the growth and development and reproductive health and safety curriculum (Healthful Living Essential Standards) in all Asheville City and Buncombe County Schools

Indicator: Percentage of Asheville and Buncombe County schools that have implemented the growth and development and reproductive health and safety curriculum (Healthful Living Essential Standards)

Strategy Background

Evidence Base: The Reproductive Health and Safety Education curriculums are in compliance with the Healthy Youth Act integrating abstinence messaging with comprehensive sex education. Evidence shows that students who complete sexuality education in general wait longer to have sex than students who have no sexuality education. Furthermore, when students do become sexually active, those who complete comprehensive sexuality education are more likely to use condoms and/or contraceptives than students who have no sexuality education or who only receive abstinence-only education (Kohler 2008; Kirby 2008, Chin 2012). While the curricula for Buncombe County and Asheville City Schools have been adapted for these specific student populations, they include activities from evidence-based curricula such as Safe Dates and Making Proud Choices! (http://www.hazelden.org/web/go/safedates; http://recapp.etr.org/Recapp/index.cfm?fuseaction=pages.ebpDetail&PageID=128).

Type of Change: Individual, Community

Partner Agencies:

Asheville City Schools, Buncombe County Schools, BCHSS- School Nurses, WNCAP, Our Voice, HelpMate

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Provide Growth and	-Asheville City and	All 4 th -6 th graders will	Records from Asheville and	June 2014
Development	Buncombe County	receive the curriculum	Buncombe County Schools	
Curriculum to 4 th , 5 th	staff and health			
and 6 th graders	educator time			
	-School Nurse staff time			
	-Activity resources			
Provide	-Asheville City and	All 7 th -9 th graders will	Records from Asheville and	June 2014
Reproductive Health	Buncombe County	receive the curriculum	Buncombe County Schools	
and Safety	staff and health			
Curriculum to 7 th , 8 th	educator time			
and 9 th graders	-School Nurse staff time			
	-Activity resources			

Goal 3: Increase access to reproductive health services

Strategy 3.1: Expedited protocol for birth control prescription

Objective 3.1.1:

Increase number of practices that use a protocol for expedited birth control prescription

Indicator: Number of practices using an expedited birth control prescription

Strategy Background

Evidence Base: Expedited protocol for birth control prescriptions allows patients to begin using birth control more quickly through two different means. One is "quick-start," which allows women to begin using hormonal contraceptives on the day that they visit their provider's office, instead of waiting until a certain point in their menstrual cycle. Protocols that require a woman to wait until the next menses to start hormonal contraceptives have been found to be medically unnecessary and an obstacle to contraceptive initiation. Immediate initiation of a birth control method has been shown to improve short-term continuation of oral contraceptive pills and improved adherence to Depo Provera shot continuation leading to fewer pregnancies (Westoff et al 2007; Vaughn et al 2007).

The second part of expedited birth control prescriptions is requiring only a counseling session to get a birth control prescription. Neither the World Health Organization nor the American College of Obstetrics and Gynecology requires a pelvic exam in advance of birth control prescriptions. Evaluation of programs that offer hormonal contraception and optional pelvic exam found that lower expense and prompt appointment of non-exam visits were reported as very important to patients (Harper 2001; Armstrong 2012)

Type of Change: Individual, Policy

Partner Agencies:

BCHHS Family Planning Clinic, MAHEC Family Medicine, Planned Parenthood

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures identified	Shared measures, roles	October 2013
continue work on shared	-Partner staff time	and clarified roles and	and responsibilities	
measures and		responsibilities for moving	posted in online CHIP	
roles/responsibilities		work on strategy forward	document	
Convene partners to	-Staff time	Data management and	Internet-based system	November 2013
develop system for	-Lead and select	accountability system and	established	
managing data	collaborating/supportin	timeline for strategy		
	g partners	developed		
Convene partners	-Staff time	Detailed action plan will be	Review of deliverable	November 2013
discuss to detailed	-Partner staff time	established		

action item discussed as		
workgroup meeting		
including:		
 Survey practices in 		
the area to see what		
BC prescription		
protocols are being		
used		
- Create a document to		
share the expedited		
BC prescription		
protocol		
- Hold a question and		
answer panel of the		
clinics already		
implementing this		
protocol		

Strategy 3.2: Enrollment of eligible women in the Be Smart Family Planning Medicaid Waiver

Objective 3.2.1:

Increase referrals to Be Smart Family Planning Medicaid Waiver

Indicator: Number of women referred to Be Smart Family Planning Medicaid Waiver

Strategy Background

Evidence Base: This strategy is aligned with the CDC's recommendation to improve preconception health and health care by increasing health insurance coverage for women with low incomes to improve access to preconception care (CDC 2006). Analyses of Behavioral Risk Factor Surveillance System data found that lack of health insurance is associated with reduced use of prescription contraceptives (Culwell and Feinglass 2007). Waivers that expand Medicaid eligibility for family planning coverage allow more women to have health insurance coverage for contraceptive services. Evaluations of these programs found that Medicaid eligibility expansion waivers lowered average annual birth rates in all states (Lindrooth and McCullogh 2007).

Resources that provide an overview of the evidence for this strategy:

NC Be Smart Family Planning Program http://www.ncdhhs.gov/dma/medicaid/familyplanning.htm

Type of Change: Individual, Community

Partner Agencies:

BCHHS Family Planning Clinic and Economic Services, CCWNC

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to explore the practice and recording of Medicaid referrals in different organizations	-Staff time -Partner staff time	Comparison of Medicaid referral practice and recording Plan developed for shared measurement system	Meeting held Review of deliverable	October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	November/ December 2013

Strategy 3.3: School nurse family planning/STI case management

Objective 3.3.1:

Increase the number of youth using BCHHS Family Planning Clinic

Indicator: Number of youth using BCHHS Family Planning Clinic

Strategy Background

Evidence Base: Research has shown that adherence to birth control decreases several months post prescription and discontinuation is common (Westoff et al 2007). Consistent use of any contraceptive method remains a challenge for many sexually active adolescents in particular (American Academy of Pediatrics 2007). This pilot program uses case management from school nurses to in order prevent pregnancy though improved adherence to birth control among sexually active adolescents. School nurses in Buncombe County have historically provided pregnancy case management which has been shown to reduce subsequent pregnancies among parenting teens (Guidry 1989; Brindis and Philliber 1998). Preliminary evaluations of clinic-linked case management programs have shown promising results, including increased consistent condom and hormonal contraceptive use among teen girls at high risk for a first pregnancy (Sieving et al. 2013).

Type of Change: Individual, Community

Partner Agencies:

BCHHS- High School Nurses, BCHHS- Family Planning Clinic

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Receive school	-Staff time	Receive school approval	Existence of approval	November 2013
approval				
Identify and select	-Staff time	Nurses will be selected to	Nurses selected	November 2013
nurses act as case		be trained		
managers				
Train nurses in case	-Staff time	Nurses will receive case	Training post-test and	December 2013
management	-Nurse staff time	management train and be	evaluation	
	-Training materials	prepared to being having		
		a case load		
Track students	-Nurse staff time	Record of the reach of the	Review of deliverable	June 2014
participation in case	-Tracking forms	case management		
management				

Strategy 3.4: Women's healthcare at methadone clinics

Objective 3.4.1:

Increase the use of contraception, including long acting reversible contraception, among female clients of the Mountain Area Recovery Center

Indicator: The percentage of female clients at the Mountain Area Recovery Center who desire family planning that have are using contraception

Objective 3.4.2:

Increase the use of folic acid among female clients of the Mountain Area Recovery Center

Indicator: The percentage of female clients at the Mountain Area Recovery Center taking a multivitamin

Strategy Background

Evidence Base: A study of women attending opioid treatment programs found unaddressed reproductive health issues, particularly around contraception. The study found: high pregnancy rates (with almost a third of women reporting six or more pregnancies); high rates of miscarriage, termination and stillbirth compared with national data; and poor uptake of contraception (with only half of sexually active women not wanting to get pregnant using a method) (Black et al. 2012). An article in Advances in Preventive Medicine on designing interventions for women who inject drug recommends low-cost and accessible sexual and reproductive healthcare programs targeted at women who use drugs and often have insufficient access to care (Pinkham et al. 2012). Most current opioid treatment programs involve referral to external women's health services, but an integrated model of care may increase access and better address the unmet contraceptive needs of these women.

Type of Change: Individual, community

Partner Agencies:

MAHEC, BCHHS Family Planning Clinic

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to explore ways to increase appointments and decrease the noshow rates	-Staff time -Partner staff time -Meeting space	Development of an action plan for increasing appointment and decreasing no-show rates.	Review of deliverable	October 2013
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Partner staff time	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	November 2013

Strategy 3.5: Integrated Targeted HIV and STD Testing Services (ITTS)

Objective 3.5.1:

Increase the number of clients tested for HIV and other STDs in targeted testing settings

Indicator: Number of HIV, hepatitis C, syphilis, Chlamydia, gonorrhea tests

Objective 3.5.2:

Increase the proportion of individuals that are aware of their infection status

Indicator: Number of individuals tested

Strategy Background

Evidence Base: The CDC's Recommendations for Partner Services Programs for HIV Infection, Syphilis, Gonorrhea, and Chlamydial Infection emphasize the importance of program collaboration and service integration and should be used as a model for state and local organizations (NCHHSTP White Paper, 2009). The CDC's NCHHSTP, page 7, defines program collaboration and service integration as a "mechanism for organizing and blending interrelated

health issues, activities, and prevention strategies to facilitate comprehensive delivery of services."

The Integrated Target Testing Services (ITTS) is committed to an integrated approach and relies on program collaboration and service integration. The rationale for ITTS program collaboration is to maximize the benefits participants receive from prevention services such as STD testing by maximizing opportunities to screen, test, and treat those in need of these services. Through program collaboration ITTS can broaden its mission and provide HIV counseling, testing and referral services to high-risk, hard to reach populations in community settings, increase participation in STD testing, and increase the numbers of those who know their status.

Type of Change: Individual, community

Partner Agencies:

Western North Carolina AIDS Project (WNCAP), BCHHS STD clinic, Disease Control Outreach, Universities and Colleges in Western North Carolina, Homeless Support Agencies, Community Centers, Substance Abuse Clinics in Western North Carolina

A ationity	Descures Needed	Auticinated Decult	Decult Verification	Tayant Data
Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners	-Staff time	Development of an	Review of deliverable	October 2013
	-Partner staff time	action		
	-Meeting space			
Convene partners to	-Staff time	Shared measures	Shared measures, roles and	October 2013
continue work on	-Partner staff time	identified and clarified	responsibilities posted in	
shared measures and		roles and responsibilities	online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	November 2013
develop system for	-Lead and select	accountability system	established	
managing data	collaborating/supporting	and timeline for strategy		
	partners	developed		

Goal 4: Increase opportunities for interconception care

Strategy 4.1: Case management, nursing assessment and care plans for pregnant and postpartum women

Objective 4.1.1:

Maintain a case load of 125 first time mothers receiving nursing care and education using the Nurse Family Partnership model to fidelity

Indicator: Number of first time mother receiving case management through NFP

Objective 4.1.2:

All high risk Medicaid-covered births receive case management during pregnancy

Indicator: Percentage of high-risk mother with Medicaid coverage receiving case management

Objective 4.1.3:

Provide 40 African-American women per year with case management and education through the Healthy Beginnings Program

Indicator: Number of women receiving case management through Project NAF

Objective 4.1.4:

Provide 30 pregnant or parenting students per year with case management and education, and an additional 50 parenting students with the education using the Love Notes Curriculum

Indicator: Number of students receiving case management and education though the MotherLove Program

Strategy Background

Evidence Base: There is strong evidence of the effectiveness of case management in pregnant and postpartum women improving maternal outcomes. Three large randomized control trials and numerous follow-up studies have found the Nurse Family Partnership program to decrease high risk pregnancies and unintended pregnancies. It has also been found to result in longer intervals before subsequent pregnancies (http://www.nursefamilypartnership.org/proven-results/published-research). MotherLove's one-on-one sessions are guided by the evidence-based Partners for a Healthy Baby, which is shown to improve birth outcomes (https://cpeip.fsu.edu/PHB/). The group sessions are based on an adaptation of evidence-based Love U2: Relationship Smarts PLUS program, shown to increase knowledge of and develop skills for making good decisions about forming and maintaining healthy relationships (Adler-Baeder et al 2007). Project NAF is guided by the North Carolina Division of Public Health's Healthy Beginnings program.

Type of Change: Individual, Family, Community

Partner Agencies:

BCHHS Nurse Family Partnership, Mt. Zion- Project NAF, YWCA- MotherLove Program, CCWNC OB Case Management

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Staff time	Shared measures	Shared measures, roles and	October 2013
continue work on	-Working group	identified and clarified	responsibilities posted in	
shared measures and	participants	roles and responsibilities	online CHIP document	
roles/responsibilities		for moving work on		
		strategy forward		
Convene partners to	-Staff time	Data management and	Internet-based system	November 2013
develop system for	-Lead and select	accountability system and	established	
managing data	collaborating/supporting	timeline for strategy		
	partners	developed		
Develop detailed	-Staff time	Strategy level action plans	Action plans posted in	December 2013
action plan for each	-Working group	developed	online CHIP document	
strategy	participants			

Strategy 4.2: Post-partum visits

Objective 4.2.1:

Increase the number providers participating as a Pregnancy Medical Homes.

Indicator: Number of providers participating in pregnancy medical homes

Objective 4.2.2:

Increase the percentage of women with Medicaid covered births attending their postpartum visits

Indicator: Increase the percentage of women with Medicaid covered births attending their

postpartum visits

Strategy Background

Evidence Base: This strategy is aligned with the CDC's recommendation to improve preconception health and health care by increasing interconception care. The CDC report identifies postpartum visits as an opportunity promote interconception health (CDC 2006). The pregnancy medical home, based on the successful implementation of the primary care medical home model, requires an evidence-based postpartum visit including, at a minimum, a depression screen using a validated instrument, addressing the patient's reproductive life plan, and a referral for ongoing care beyond the maternity period. (Community Care of North Carolina 2011). The model also provides \$150 incentives to the physicians for conducting each evidence-based postpartum visit. The effectiveness of this pilot incentive is being evaluated.

Type of Change: Individual, Policy

Partner Agencies:

CCWNC- Pregnancy Medical Homes, BCHHS- Nurse Family Partnership, Mt. Zion- Project NAF, YWCA- MotherLove Program

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Partner staff time	Shared measures identified and clarified roles and responsibilities for moving work on strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	October 2013
Convene partners to explore tracking and methods of follow-up for missed post-partum visits	-Staff time -Lead and select collaborating/supporting partners	Creation of a detailed action plan for measuring post-partum visits	Review of deliverable	November 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	December 2013

Strategy 4.3: Integrated interconception care

Objective 4.3.1:

Evaluate the IMPLICIT program's integration of interconception care into well-child visits by 2015.

Indicator: Existence of a completed evaluation for IMPLICIT program site

Strategy Background

Evidence Base: This strategy is aligned with the CDC's recommendation to improve preconception health and health care by increasing interconception care. The incorporation of maternal assessments into well child visits have been found to be achievable and acceptable to women based in a pilot study (Gjerdingen et al. 2009). The four screening areas were chosen based on the literature on multiple interventions suspected of reducing prematurity. The depression pre-screening tool used in the intervention has been validated (Bennett et al. 2008). As a pilot study, the program impact of this program is being evaluated.

Type of Change: Individual, Policy

Partner Agencies:

MAHEC Family Health- IMPLICIT Program

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Collect continuous	-IMPLICIT staff time	Complete pilot project	Review of deliverable	Aug 2014
quality improvement		evaluation		
data for ICC				

Works Cited for Preconception Health

Adler-Baeder F, JL Kerpelman, DG Schramm, B Higginbotham, and A Paulk, 2007. The Impact of Relationship Education on Adolescents of Diverse Backgrounds. *Family Relations*, 56(3):291-303.

American Academy of Pediatrics Committee on Adolescence, 2007. Contraception and Adolescents. *Pediatrics*, 120(5):1135-1148.

Armstrong L, E Zabel, and HA Beydoun, 2012. Evaluation of the usefulness of the 'hormones with optional pelvic exam' programme offered at a family planning clinic. *European Journal of Contraception and Reproductive Health Care*, 17(4):307-13.

Bennett IM, A Coco, JC Coyne, AJ Mitchell, J Nicholson, E Johnson, (2008). Efficiency of a Two-Item Pre-Screen to Reduce the Burden of Depression Screening in Pregnancy and Postpartum: An IMPLICIT Network Study. *Journal of the American Board of Family Medicine*, 21(4):317-325.

Bird JA, SJ McPhee, NT Ha, B Le, T Davis, and CNH Jenkins, 1998. Opening Pathways to Cancer Screening for Vietnamese-American Women: Lay Health Workers Hold a Key, *Preventive Medicine*, 27(6): 821-829.

Black KI, C Stephens, PS Haber, and N Lintzeris, 2012. Unplanned pregnancy and contraceptive use in women attending drug treatment services. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 52:146–150.

Brindis C and S Philliber, 1998. Room to grow: Improving services for pregnant and parenting teenagers in school settings. *Education and Urban Society*, 30(2):242-260.

Brown SS and L Eisenberg, 1995. The Best Intentions: Unintended Pregnancies and Well-being of Children and Families. Washington, DC: National Academy Press. case management. *Journal of Louisiana State Medical Society*, 141(8):37-40.

Centers for Disease Control and Prevention (CDC), 2006. Recommendations to improve preconception health and health care—United States. *MMWR Recommendations and Reports*, 55(RR-06):1–23.

Centers for Disease Control and Prevention (CDC). Preterm Birth website. March 2013. Accessed 7/30/13 at: http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PretermBirth.htm

Centers for Disease Control and Prevention (CDC). Community Health Workers and Promotores de Salud: Critical Connections in Communities website. May 2011. Accessed 7/30/13 at:

http://www.cdc.gov/diabetes/projects/comm.htm

Centers for Disease Control and Prevention¹ (CDC). Preconception Health and Health Care website. May 2012. Accessed 7/30/13 at:

http://www.cdc.gov/preconception/overview.html

Centers for Disease Control and Prevention² (CDC). African Americans and Sexually Transmitted Diseases website. Dec 2012. Accessed 7/30/13 at:

http://www.cdc.gov/nchhstp/newsroom/docs/AAs-and-STD-Fact-Sheet.pdf

Chin HB et al. 2012. The Effectiveness of Group-Based Comprehensive Risk-Reduction and Abstinence Education Interventions to Prevent or Reduce the Risk of Adolescent Pregnancy, Human Immunodeficiency Virus, and Sexually Transmitted Infections: Two Systematic Reviews for the Guide to Community Preventive Services, *American Journal of Preventive Medicine*, 42(3):272-294. Available at: http://www.sciencedirect.com/science/article/pii/S074937971 1009068

Community Care of North Carolina. Module 15: The Pregnancy Medical Home

Background: Medicaid coverage of perinatal care and North Carolina statistics website. Updated June 2011. Accessed 7/30/13 at:

http://commonwealth.communitycarenc.org/toolkit/15/default.aspx

Culwell KR and J Feinglass, 2007. The association of health insurance with use of prescription contraceptives. Perspectives on Sexual and Reproductive Health, 39(4):226-30. Available at: http://www.ncbi.nlm.nih.gov/pubmed/18093039

DiClemente RJ, 1992. Psychosocial determinants of condom use among adolescents. *Adolescents and AIDS: A Generation in Jeopardy*. Newbury Park, CA: Sage Publications.

Fernández PhD ME, A Gonzales MSW, G Tortolero-Luna MD, PhD, J Williams MPH, M Saavedra-Embesi MPH, W Chan PhD, and SW Vernon PhD, 2009. Effectiveness of Cultivando La Salud: A Breast and Cervical Cancer Screening Promotion Program for Low-Income Hispanic Women. *American Journal of Public Health*, 99(5): 936–943.

Gjerdingen et al, 2009. Postpartum Depression Screening at Well-Child Visits: Validity of a 2-Question Screen and the PHQ-9, *Annals of Family Medicine*, 7(1):63-70.

Guidry J, LJ Hebert, and C Stern, 1989. Teen Advocate Program: a unique assessment of

Harper C, E Balistreri, J Boggess, K Leon, and P Darney, 2001. Provision of Hormonal Contraceptives Without a Mandatory Pelvic Examination: The First Stop Demonstration Project. *Family Planning Perspectives*, 33(1).

Jemmott JB, LL Jemmott III, LS, and G Fong, 1998. Abstinence and Safer Sex HIV risk-reduction interventions for African-American adolescents: A randomized control trial. *Journal of American Medical Association (JAMA)*, 279:1529-1536.

Kirby DB, 2008. The impact of abstinence and comprehensive sex and STD/HIV education programs on adolescent sexual behavior. *Sexuality Research & Social Policy*, 5(3):18-27.

Kohler PK, LE Manhart, and WE Lafferty, 2008. Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy, *Journal of Adolescent Health*, 42(4):344-351. Available at:

http://www.sciencedirect.com/science/article/pii/S1054139X07004260

Lewin SA, J Dick, P Pond, M Zwarenstein, G Aja, B van Wyk, X Bosch-Capblanch, and M Patrick, 2005. *Cochrane Database Systematic Reviews*, 25(1):CD004015.

Lindrooth RC and JS McCullough, 2007. The Effect of Medicaid Family Planning Expansions on Unplanned Births. *Women's Health Issues*, 17(2):66-74. Available at: http://www.sciencedirect.com/science/article/pii/S1049386707000370

March of Dimes North Carolina Preconception Health Campaign. Young Moms Connect: Communities Supporting Young Families website. Updated October 2012. Accessed 7/30/13 at: http://everywomannc.com/public-health-programs/north-carolina-programs/young-moms-connect

Milburn K, 1995. A critical review of peer education with young people with special reference to sexual health. *Health Education Research*, 10:407-420.

Mohllajee AP, KM Curtis, B Morrow, et al, 2007. Pregnancy intention and its relationship to birth and maternal outcomes. *Obstet Gynecol*, 109:678–686.

North Carolina Department of Health and Human Services (NCDHHS) and Division of Public Health/State Center for Health Statistics (DPH/SCHS). North Carolina Statewide and County Trends in Key Health Indicators: Buncombe County. North Carolina County Trends Reports. February 2013.

North Carolina Department of Health and Human Services (NCDHHS): Surveillance Unit of the Communicable Disease Branch, 2011. Available at: http://epi.publichealth.nc.gov/cd/stds/figures.html

North Carolina Department of Health and Human Services (NCDHHS): Women's and Children's Health Section and the State Center for Health Statistics, 2010. The State of Preconception Health in North Carolina. Available at: www.schs.state.nc.us/SCHS/pdf/Preconception-WEB 110310.pdf

North Carolina State Center for Health Statistics (NCSCHS), Pregnancy Risk Assessment Monitoring System (PRAMS), 2008. Available at:

www.schs.state.nc.us/SCHS/data/preconception.html.

North Carolina State Center for Health Statistics¹ (NCSCHS), Pregnancy Risk Assessment Monitoring System (PRAMS), 2011. Available at:

www.schs.state.nc.us/SCHS/data/preconception.html.

North Carolina State Center for Health Statistics² (NCSCHS), Selected Vital Statistics for 2011 and 2007-2011 Buncombe County. Available at:

http://www.schs.state.nc.us/schs/vitalstats/volume1/2011/buncombe.html

Resource Center for Adolescent Pregnancy Prevention. With a Little Help From My Friends: Peer Education in Teen Pregnancy Prevention. Accessed 7/30/13 at: http://recapp.etr.org/recapp/index.cfm?fuseaction=pages.Th eoriesDetail&pageID=367&PageTypeID=8#Lezinbio

Rickert VI, L Tiezzi, J Lipshutz, J León, RD Vaughan, and C Westhoff, 2007. Depo Now: Preventing Unintended Pregnancies among Adolescents and Young Adults. *Journal of Adolescent Health*, 40(1):22-28.

Sieving RE, A McRee, BJ McMorris, et al, 2013. Prime Time: Sexual Health Outcomes at 24 Months for a Clinic-Linked Intervention to Prevent Pregnancy Risk Behaviors. *Journal of the American Medical Association Pediatrics*, 167(4):333-340.

Sloane BC and CG Zimmer, 1993. The power of peer health education. *Journal of American College Health*, 41:241-245.

The National Campaign to Prevent Teen and Unplanned Pregnancy website. Accessed 7/30/13 at: http://www.thenationalcampaign.org/default.aspx

U.S. Census Bureau. 2011. Census: Profile of General Population and Housing Characteristics: 2010 (DP-1). Accessed on 7/30/13 from, American FactFinder website: http://factfinder2.census.gov

Westhoff C, S Heartwell, S Edwards, M Zieman, L Cushman, C Robilott, G Stuart, C Morroni, and D Kalmuss, 2007. Initiation of Oral Contraceptives Using a Quick Start Compared With a Conventional Start: A Randomized Controlled Trial. *Obstetrics & Gynecology*, 109(6):1270-1276.

Wilensky S and M Proser, 2008. Community Approaches to Women's Health: Delivering Preconception Care in a Community Health Center Model. *Women's Health Issues Supplement*, 18(6):S52–S60

World Health Organization (WHO). Sexually transmitted infections (STIs) website. May 2013. Accessed 7/30/13 at: http://www.who.int/mediacentre/factsheets/fs110/en/

Did you know?

The best investment is in quality early childhood development from birth to five years of age. Investing in the earliest years of life will yield the greatest return. Investment in early childhood programs produces a 7-10% per year return through increased personal achievement and social productivity.

-The Heckman Equation

High quality early childhood programs increase graduation rates by as much as 44%.

-First 2000 Days

In the first few years of life, 700 new neural connections are formed every second. Early experiences affect the development of the child's brain, and can affect the foundation for learning, health and behavior.

-Center on the Developing Child, Harvard University, 2008

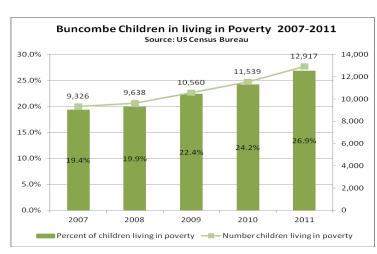
CHAPTER 5 – EARLY CHILDHOOD DEVELOPMENT

Situational Analysis

There are over 13,000 children under the age of five that live in Buncombe County (US Census Bureau 2012). The five years between when a baby is born and when that child shows up for the first day of kindergarten can have lasting impact on that child's later learning, health, and success. The brain is the only organ not fully developed at birth. Therefore, as the First 2000 Days campaign explains, "children's earliest experiences literally determine how their brains are wired; lay the groundwork for future health; and form the foundation of the social and emotional skills needed for academic and workplace success" (First 2000 Days). Since early experiences have such a profound influence on a child's future trajectory, the first five years must be a major focus of our efforts in Buncombe County.

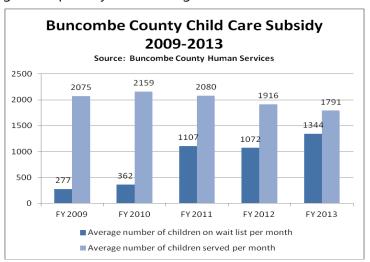
Research shows that high quality early education is a very effective way to improve childhood development. High quality early education has been shown to provide children with important academic and social skills and contribute to higher graduation rates, higher earnings, and better jobs later in life (Schweinhart et al. 2005). The quality of care children receive through regulated care or education programs in Buncombe County has been greatly improved over the last decade. In Buncombe County from 2011 to 2012, 75% of children in regulated early care and education programs were in programs rated as high quality by North Carolina's five-star rating system. This was even higher (88%) for children receiving child care subsidies or other public assistance to help low-income families afford quality early child care or education (North Carolina Partnership for Children 2012).

However, 69% of young children are not enrolled in formalized quality care, including a large portion of children whose families are struggling to make ends meet (First 2000 Days; North Carolina Partnership for Children 2012). The percentage of Buncombe County



children living below the federal poverty level has increased over the last several years, reaching 26.9% in 2011 (US Census Bureau 2011). Though child poverty is increasing, the number of

children served each month by child care subsidies has decreased. In an average month over the past year, more than 1,300 children under the age of five were on the wait list for a child care voucher (BCHHS 2013). The average wait time for families seeking a childcare subsidy in Buncombe County has increased by over two months since 2011 (CHA 2012). This has contributed to a 30% decrease since 2011 in Buncombe County children able to enroll in licensed early care and education programs. (CHA 2012).



The problem of child maltreatment has reached epidemic proportions in North Carolina with over 125,000 children reported abused or neglected in 2012. In Buncombe County last year, the Department of Health and Human Services received 2,362 reports of child maltreatment involving 3,985 children, with _____ substantiated cases. (BCHHS 2012 data)

The local data mirrors national data that half of all abused and neglected children are under six years of age. Male children and children with behavioral or special health care or developmental needs are at increased risk of maltreatment. Other risk factors include multiple children under 3 years of age, and lack of social connections and concrete supports for the parent. Children living in households with adults unrelated to them had 6 to 8 times the risk of dying of maltreatment than children in households with two biological parents. Based on the local need, Buncombe County Health and Human Services initiated the Under Six Outreach program, Nurse Family Partnership and Triple P-Positive Parenting Program to promote healthy parenting practices. (BCHHS)

Children with special health care and developmental needs are a concern in our community. Research indicates that as many as 13% of birth to 3 year olds have delays that would make them eligible for services according to criteria commonly used by the states. There is a need to identify as early as possible those infants and toddlers in need of services to ensure that intervention is provided when the developing brain is most capable of change. (The Importance of Early Intervention for Infants and Toddlers with Disabilities and their Families, The National Early Childhood Technical Assistance Center 2011)

The Children's Developmental Services Agency of WNC (CDSA) which serves ages 0-3, currently has 220 children enrolled in Buncombe County. Their saturation rate for FY 2012-2013 for Buncombe County was 5.7%, which means that the CDSA served 5.7% of the 0-3 population in Buncombe County. There are more children with special health care and developmental needs

than are currently served due to eligibility criteria, parents choosing not to enroll in services, and children with special needs who are not referred to CDSA. (CDSA of WNC 2013)

Key Community-Level Indicators

Indicator	Source	Baseline	Target	Target Date
% of low-income	The North Carolina	50% (2012)	-	December 2015
children enrolled in	Partnership for			
early care and	Children			
education				
programs				
Average number	BC Health and Human	1,300 (2012)	-	December 2015
per month on	Services			
waiting list for child				
care vouchers				
% of children in	The North Carolina	75% (2012)	-	December 2015
regulated early	Partnership for			
care and education	Children			
enrolled in 4 and 5				
star programs				
% of children 0-2	The North Carolina	5.7% (2012)	-	December 2015
years who receive	Partnership for			
early intervention	Children			
or special				
education services				
% of children 3-5	The North Carolina	5.4% (2012)	-	December 2015
years who receive	Partnership for			
early intervention	Children			
or special				
education services				
% of children living	US Census Bureau	26.9% (2011)	-	December 2015
in poverty				
Number of reports	BC Health and Human	2,362 (2012)	-	December 2015
received of child	Services			
maltreatment				
Number of	BC Health and Human	XX (2012)	-	December 2015
substantiated	Services			
cases of child				
maltreatment				

Spotlight on Success

Smart Start Champions for Children

One of the most successful efforts in our community to advocate for the needs of young children is the Champions for Children initiative in Buncombe County. Twenty-one local leaders from the community use the messages of the First 2000 Days campaign to emphasize the importance of early child development. Leaders from law enforcement, schools, business, non-profit organizations, government, and citizen and faith communities advocate for the importance of investment in early childhood development during the crucial 2000 days between birth and kindergarten. Champions spread the message of the value of investment in early care and learning to improve health, education, social and economic outcomes for the individual and society. Champions promote the message through public speaking to organizations and groups, writing letters to the editor of the newspaper, contacting and meeting with local legislators, and promoting the importance of the first 2000 days in their professional and personal networks.

For a list of the local Champions for Children and for more information about the initiative http://www.smartstart-buncombe.org/index.php/champions

Or contact Program Coordinator Stacey Bailey at (828)407-2057, or via email at Stacey@smartstart-buncombe.net. For more information about the First 2000 Days campaign please visit www.first2000days.org.

Success Equation

One in 4 children in Buncombe County lives in poverty. Children in poverty are more likely to experience poorer health, safety, and education outcomes, as well as greater levels of toxic stress, than children from families with more money. In response, the Success Equation works to make our community a place where ALL children can thrive.





In 2010, Children

First/Communities in Schools launched a listening project to document the experience of families facing poverty in Buncombe County. In May 2011, Children First/CIS presented the issues raised by the listening session to a broader community summit attended by 120 participants representing local organizations, community leaders, lowincome individuals, and interested community members. Out of this summit, an action plan was created and committees

were formed to initiate the Success Equation. The 2013 Action Plan focuses on topics identified in the summit: early childhood development; child & family supports; and family economic stability.

The Success Equation inspires and sustains a local movement to reduce the incidence of poverty and its impact on children in Buncombe County through education, collaboration, and public policy advocacy. The Success Equation takes on the following roles:

- **Educator** reporting poverty data, messaging about poverty's impact, and inspiring broader dialogue focused on solutions
- **Advocate** building a local advocacy voice supportive of public policy and investment in effective programs that meet children's basic needs and place them on a path to success
- Convener connecting individuals, businesses, government, schools, faith communities, and organizations to enhance promising strategies, collaborations, and creative/provocative ideas

The Success Equation worked with regional advocates and local legislators in 2012 to preserve over \$1 million in funding for the child care subsidy program in Western NC counties. The Success Equation (through Children First/CIS) has been a long-time advocate for supporting early childhood education and care. Moving forward the Success Equation will continue to partner with regional advocates to build a strong voice for affordable, quality early childhood education and care. This strategy supports childhood health, safety, and education while helping working parents meet a basic need.

Partners

Addressing early childhood development is complex and will require the collaborative planning, action, and coordination of multiple partners in our community. The following partner agencies and organizations are engaged in efforts to improve early childhood development in our community. As new partners are identified, we will continuously work to bring them into the process.

Organizations:	Website or Contact Information
Addiction, Recovery, Prevention (ARP)	www.arpnc.org
Asheville Buncombe Community Christian Ministry (ABCCM) - Our Circle	http://abccm.org/
Asheville City Schools	http://www.ashevillecityschools.net/Pages/default.asp <u>x</u>
Asheville City Schools- Asheville City Preschool	http://www.ashevillecityschools.net/schools/pre/Pages/default.aspx
Asheville City Preschool- Early Head Start	http://www.ashevillecityschools.net/schools/pre/Pages/EarlyHeadStart.aspx
Buncombe County Schools	www.buncombe.k12.nc.us
Buncombe County Health and Human Services (BCHHS)	http://buncombecounty.org/
BCHHS - Innovative Approaches	Melissa Baker Melissa.Baker@buncombecounty.org
BCHHS - Nurse Family Partnership (NFP)	http://www.nursefamilypartnership.org/locations/North-Carolina/Buncombe-County-NFP
BCHHS - School Health	http://buncombecounty.org/Governing/Depts/health/ SchoolHealth.aspx
BCHHS - Triple P-Positive Parenting Program	Deanna LaMotte <u>Deanna.LaMotte@buncombecounty.org</u>
BCHHS - Under Six	Dean Griffin Dean.Griffin@buncombecounty.org
Community Care of Western North Carolina (CCWNC)	http://communitycarewnc.org/
Community Care of Western North Carolina (CCWNC) - Coordinated Care for Children (CC4C)	http://www.communitycarenc.com/emerging- initiatives/care-coordination-children-cc4c/

Child Abuse Prevention Services	http://www.childabusepreventionservices.org/Pages/default.aspx
Child Care Health Consultation	http://www.smartstart- buncombe.org/index.php/tatraininglink/healthconsultl ink
Children First-Communities in Schools	http://childrenfirstbc.org/
Children First-Communities in Schools- Success Equation	http://childrenfirstbc.org/index.php/thesuccessequation
Children First-Communities in Schools-Family Resource Center	http://childrenfirstbc.org/index.php/programs/family-resource-center-at-emma/
Children's Developmental Services Agency of WNC (CDSA)	http://www.beearly.nc.gov/
Community Action Opportunities	www.communityactionopportunities.org
Community Action Opportunities- Head Start	http://www.communityactionopportunities.org/headst art.html
Community Action Opportunities- Life Works	http://www.communityactionopportunities.org/lifeworks.html
FIRST	http://www.firstwnc.org/
FIRST- Circle of Parents	
FIRST- Community Parent Resource Center	http://www.firstwnc.org/cprc.html
FIRST- The Incredible Years	http://www.firstwnc.org/iypc.html
FIRST- The P.L.A.Y. Project	http://www.firstwnc.org/projectPlay.html
FIRST- The SUNSHINE Project	http://www.firstwnc.org/sunshine-project.html
Mission Health- Family Support Network	http://www.missionchildrens.org/education- outreach/family-support-network
Mountain Area Child & Family Center	http://www.macfc.org/
Mountain Area Child and Family Center- Early Head Start	http://www.macfc.org/prospective-families/early-head-start-2/
Mount Zion Community Development, Inc Project NAF	http://www.mtzionasheville.org/mt_zion_cdc
NC Cooperative Extension Buncombe County Center	http://buncombe.ces.ncsu.edu/
Pisgah Legal Services	http://www.pisgahlegal.org/
Smart Start	http://www.smartstart-buncombe.org/

Smart Start- Champions for Children/First 2000 Days Campaign	http://first2000days.org/
Smart Start- Child Care Resource & Referral	http://www.smartstart- buncombe.org/index.php/earlychildhood/tatraininglin k
Smart Start- Play and Learn Groups	http://www.smartstart-buncombe.org/index.php/fam-programs/famplaynlearn
Women's Wellbeing and Development Foundation	www.wwd-f.org
YWCA	http://www.ywcaofasheville.org
YWCA- Mother Love	http://www.ywcaofasheville.org/site/c.7oIEJQPxGeISF/b.8131583/k.2A86/MotherLove.htm
YWCA- New Choices Program	http://www.ywcaofasheville.org/site/c.7oIEJQPxGeISF/b.8131585/k.8ECF/New_Choices.htm

Early Childhood Development Plan

Vision of Impact

From birth to age five, all children in our community will have safe, nurturing and stimulating relationships and environments to support and guide them to achieve their full potential.



State and National Objectives	Baseline/Indicator Source
Healthy NC 2020 Objective: Decrease the percentage of individuals living in poverty. [2020 Target: 12.5%]	CPS, US Census Bureau
Healthy NC 2020 Objective: Increase the four-year high school graduation rate. [2020 Target: 94.6%]	NC DPI, National Center for Education Statistics
Healthy People 2020 Objective: Increase the proportion of children who are ready for school in all five domains of healthy development: physical development, social-emotional development, approaches to learning, language, and cognitive development	National Survey of Children's Health (NSCH), CDC and HRSA/MCH
Healthy People 2020 Objective: Increase the proportion of parents who use positive communication with their child. [2020 Target 76.8%]	National Survey of Children's Health (NSCH), CDC and HRSA/MCH
Healthy People 2020 Objective: Increase the proportion of parents who read to their young child. [2020 Target: 52.6 percent]	National Survey of Children's Health (NSCH), CDC and HRSA/MCH
Healthy People 2020 Objective: Increase the proportion of parents who receive information from their doctors or other health care professionals when they have a concern about their children's learning, development, or behavior. [2020 Target: 52.8 percent]	National Survey of Children's Health (NSCH), CDC and HRSA/MCH

Goal 1: Increase availability and sustained access to high quality early care and learning

Strategy 1.1: Training and technical assistance to support early educators and child-care providers in maintaining and increasing program quality

Objective 1.1.1:

Provide xx technical assistance and training sessions each year

Indicator: Number of technical assistance and training sessions provided each year

Objective 1.1.2:

Create a common evaluation measure to see outcomes of Technical Assistance by June 2014.

Indicator: Existence of a common evaluation measure to see outcomes of Technical Assistance

Strategy Background

Evidence Base: Evidence shows that the education and professional development opportunities for early educators can affect the quality of early care programs and learning experiences for children. Practitioner/teacher preparation, both pre-service and in-service has been found to significantly affect program quality (*Commonwealth of PA 2011*). The Perry Preschool longitudinal study documented that highly trained and qualified practitioners providing high quality early learning and developmental experiences for children resulted in long term economic and social benefits as well as less crime involvement for children as they grew into adulthood (Schweinhart et al. 2005).

Participatory Adult Learning Strategies (PALS) is an evidence-based model of providing technical assistance that is being used by Smart Start Child Care Resource and Referral to improve program quality. It uses techniques that have been found effective in promoting practitioner adoption of different kinds of evidence-based early childhood practices. (Dunst and Trivette, 2009.

Type of Change: Individual, Community

Partner Agencies:

Smart Start - Child Care Resource & Referral, Child Care Health Consultation, FIRST- The SUNSHINE Project, Mission Health- Family Support Network, Asheville City Preschool – Early Head Start, Buncombe County Schools, Mountain Area Child and Family Center

Action Plan

Activity (what is being done?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners to discuss evaluation	-Smart-Start staff planning time and meeting space -Staff time for all partners	Group will meet to discuss how they evaluate TA and measure outcomes. Group will make next steps for creating common evaluation measure.	Meeting will be held. Group will set next steps.	December 2013

Strategy 1.2: Advocate for increased investment and ensure access to subsidized child-care

through vouchers, NC Pre-K, Early Head Start, and Head Start

Objective 1.2.1: TBD

Indicator: TBD

Strategy Background

Evidence Base: Two longitudinal studies have shown the long-range impact early childhood education can have on the lives of children. The HighScope Perry Preschool Study examined the lives of 123 children born in poverty and at high risk of failing in school. The findings of this study showed that participants who received a high-quality preschool program had higher earnings, were more likely to hold a job, had committed fewer crimes, and were more likely to have graduated from high school than adults who did not have preschool (Schweinhart et al. 2005). Children from low-income families in the intervention group in the Abecedarian project received full-time, high quality educational intervention in a childcare setting from infancy through age five. The study showed that children who participated in early education scored higher on cognitive tests through age 21; had higher academic achievement in reading and math through young adulthood; completed more years of education and were more likely to attend a four-year college (Campbell et al. 2002).

The Harvard Center for the Developing Child found that work-based income supplements for parents can increase the achievement of some young children from poverty situations. Positive experiences for children before school will lead to better outcomes than remediation programs as they get older. Although it requires a significant investment, it will be more cost-effective and show a greater return (Center on the Developing Child 2007). The research of James J. Heckman, Nobel Laureate in Economics and expert in the economics of human development, estimates that every dollar invested in early education produces a 7- 10% return on investment through increased personal achievement and social productivity (The Heckman Equation).

Type of Change: Community, Policy

Partner Agencies:

Children First-Communities in Schools, Smart Start- Champions for Children-First 2000 Days Campaign and NC Pre-K, Pisgah Legal Services, Southwestern Child Development Commission, Mountain Area Child and Family Center, Family Support Network – Parent Advocacy group, Asheville City Preschool – Early Head Start, ABCCM, YWCA, Community Action Opportunities-Head Start

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners	-Meeting date, space and contacts -Materials preparation	Discuss plan and review and revise objectives as needed and set measurements	Written objectives and measurements determined and agreed on by partners	December 2013

Strategy 1.3: Child care co-ops for low-income families

Objective 1.3.1: TBD

Indicator: TBD

Strategy Background

Evidence Base: Developing co-operatives is one way local groups or communities join together to address issues or develop solutions to common needs. According to Child Care Cooperatives: A Place in Canada's Universal Child Care Plan, the model recognizes the importance of people and communities in defining their own needs and working together to meet those needs. The co-operative typically depends on parent assistance in the classroom. The model program can foster collaborative and co-operative practices that support healthy childhood development and early learning, particularly among participants who may not have access to other early child education programs. The model also provides opportunities to meet other parents and their children, and allows parents to contribute their skills and abilities to benefit their child and provide learning opportunity for parents, either informally or through more structured training that may be available to parent members. Depending on how the child care co-operative is organized, it can also provide access to experts on child development and early care and education (The Canadian Co-operative Association 2006). Child care co-operatives seem like a practical solution for affordable child care for low-income parents. There is a need for research and evaluation to document the benefits of child care co-operatives as an effective approach for young families facing the challenges of the expense of early child care and learning.

Type of Change: Individual, Community

Partner Agencies:

Children First-Communities in Schools, ABCCM, Mountain Area Child and Family Center, Community Action Opportunities-Head Start, Women's Wellbeing and Development Foundation, Smart Start

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Convene partners to	-Children First	Group will meet and	Group will have met and	October 2013
determine feasibility	Staff time	explore the feasibility of	determined next steps	
of Child Care Co-ops		Child-Care Co-ops and		
and how to proceed		develop ideas/plans		

Goal 2: Support and strengthen families

Strategy 2.1: Parenting education that supports effective parenting practices, healthy interaction with children, appropriate developmental expectations and provides child development referral resources

Objective 2.1.1: Serve 25% of parents of children aged zero to six within the community with parenting education by 2015

Indicator: Percentage of parents of children aged zero to six within the community served by parenting education programs

Strategy Background

Evidence Base: As parenting can have a large impact on a child's development, parent education can be instrumental in supporting children's developmental outcomes and parents' well-being. Effective parent education programs have been associated with decreased rates of child abuse and neglect, better physical, cognitive and emotional development, increased parental knowledge of child development and parenting skills, and improved parent-child communication (Bunting 2004; Small and Mathers 2006). The parenting education curricula offered in Buncombe vary and many are based on, or informed by, research. Triple P- Positive Parenting Program's body of evidence is extensive and can be found here: http://www.pfsc.uq.edu.au/research/evidence/. The Incredible Years and Nurturing Parenting Programs can be found along with other evidence-based programs on Child Welfare's registry https://www.childwelfare.gov/pubs/issue-briefs/parented/programs.cfm.

Type of Change: Individual, Family, Community

Partner Agencies:

Triple P-Positive Parenting Program, BC HHS- Nurse Family Partnership, Mt. Zion Community Development, Inc- Project NAF, FIRST— The P.L.A.Y. Project, The SUNSHINE Project and The Incredible Years, Mountain Area Child and Family Center-Early Head Start, Asheville City Preschool-Early Head Start, Smart Start- Play and Learn Groups, ARP -Nurturing Skills and Strengthening Families, Mission Health- Family Support Network, Child Abuse Prevention Services — Parent/Family Skills Training, Love and Logic, Community Action Opportunities-Nurturing Parents Program and Head Start, Cooperative Extension — Parenting Matters, Family & Children in Transition, Women's Wellbeing and Development Foundation, YWCA — Mother Love, Buncombe County Schools, Child Care Health Consultation, CCWNC

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Strategic Planning meeting	-Full day of staff time for all partners -Triple-P staff planning time	Group will indentify priority trainings for the fall	Training for the fall will be created	July 2013
Compile survey data to create a database of parenting education program	-Triple-P staff time	Creation of a database/manual of parenting education programs offered in the county that will allow organizations and parents to know what is available	Manual will be created and available online	September 2013
Level 3 Primary Care training will be held	-Triple P grant funding to sponsor training -Triple-P staff time -Staff time for those being trained	Train interested workers from community organizations in Level 3 primary care curriculum	Trainings will be held and those trained will pass certification test	September 2013
Level 4 training will be held	-Triple P grant funding to sponsor training -Triple-P staff time -Staff time for those being trained	Train interested workers from community organizations in Level 4 curriculum	Trainings will be held and those trained will pass certification test	October 2013
Second Level 3 Primary care training will be held	-Triple P grant funding to sponsor training -Triple-P staff time -Staff time for those being trained	Train interested workers from community organizations in Level 3 primary care curriculum	Trainings will be held and those trained will pass certification test	November 2013
Training will be held on curriculum identified by partners as a priority	-Triple P grant funding to sponsor training -Triple-P staff time -Staff time for those being trained	Train interested workers from community organizations in priority curriculum	Trainings will be held and those trained will pass certification test	February 2014

Strategy 2.2: Parent support groups in the community for families to help them build on their strengths and enhance social support systems

Objective 2.2.1:

Increase the number of parents served by parenting support groups

Indicator: The number of parents served by parenting support groups

Strategy Background

Evidence Base: According to guidelines established by the Prevent Child Abuse America and National Family Support Roundtable, parent support groups utilize the mutual self-help support model. A trained group facilitator and parent leader facilitate the support groups with open groups meetings most often offered at no cost to any participant. They are driven by parent need and feasibility and provide community resource information that supports healthy family development (Circles of Parents).

The value of parent support groups for children with disabilities and chronic diseases has been explored through research. Support groups provide opportunities for parents to express their feelings, reduce feelings of isolation, and acquire information (Kerr and McIntosh 2000; Law et al. 2002). Evaluations of support groups for a more general population of parents, such as Circle of Parents, have found participants feel supported and connected to other parents, learn how to parent children as they grow, learn about non-violent ways to discipline children, and gain knowledge about meeting family needs from resources and materials that are provided during the support group meetings (Treichel et al. 2002; Gay 2005). Additional research is necessary to evaluate how those parental outcomes impact child development.

Type of Change: Individual, Community

Partner Agencies:

ABCCM – Our Circles, Innovative Approaches, Asheville City Preschool- Father's Group, Smart Start- Play and Learn Groups, Mountain Area Child and Family Center – Mom's Program, Children First - Family Resource Centers, Success Equation, YWCA – Mother Love and New Choices Program, Community Action Opportunities – Life Works, Mount Zion – Project NAF, Mission Health- Family Support Network, FIRST – Circle of Parents and Community Parent Resource Center, Women's Wellbeing and Development Foundation

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Create and distribute a survey to all partners about the parent support groups offered	-BCHHS staff time	Data collected about the parent support groups in the county	Data will have been collected	December 2013
Compile survey results to create database of parenting support groups	-BCHHS staff time	Creation of a database/manual of parenting support groups offered in the county that will allow organizations and parents to know what is available	Manual will be created and distributed	June 2014
Strategic planning meeting	-Staff time from all partners	Group will use the manual to discuss any gaps/ways to research/target specific parents	Meeting will have been held and next steps determined	August 2014

Strategy 2.3: Community education and case management/care coordination for families experiencing or at risk for child maltreatment

Objective 2.3.1:

Increase number of Under Six promotional materials distributed and/or displayed

Indicator: Number of Under Six promotional materials distributed and/or displayed

Objective 2.3.2:

Increase the percentage of families that engage with Under Six services

Indicator: Percentage of families that engage with Under Six services

Objective 2.3.3:

Decrease the percentage of families accepting Under Six case management who have screened-in CPS reports in the year following closure of the case

Indicator: Percentage of families accepting Under Six case management who have screened-in CPS reports in the year following closure of the case

Strategy Background

Evidence Base: The Child Welfare Information Gateway, run by the Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services, identifies case management as an important component of responding to child abuse and neglect, providing case plans created together by child protection staff and families to identify

goals for the family focusing on maximizing children's safety and minimizing their risk of harm (Child Welfare Information Gateway).

Families in great need of support, such as parents experiencing high levels of conflict or violence, have benefited from focused services targeted to the particular sources of their stress, to prevent as well as stop current child maltreatment. Parents at high risk for child abuse have been found to benefit from individualized coaching to increase their awareness of specific child behaviors and to use praise and nonviolent discipline strategies (Center on the Developing Child 2007). Nurse-Family Partnership is an evidence-based prenatal and infancy nurse home visitation and case management program. Evaluations through randomized, controlled trials have found significant reductions in child abuse and neglect among families in the program in comparison to the control group (Olds et a. 1997). The program is recommended by several evidence-based policy groups including Blueprints for Violence Prevention and the RAND Corporation's Promising Practices Network.

Type of Change: Individual, Community

Partner Agencies:

Buncombe County HHS – Under Six, CCWNC- Coordinated Care for Children, Child Abuse Prevention Services, Pisgah Legal Services, Child Care Health Consultation, BCHHS- Nurse Family Partnership, Triple P

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene partners to continue work on shared measures and roles/responsibilities	-Staff time -Working group participants	Shared measures identified and clarified roles and responsibilities for moving strategy forward	Shared measures, roles and responsibilities posted in online CHIP document	October 2013
Convene partners to develop system for managing data	-Staff time -Lead and select collaborating/supporting partners	Data management and accountability system and timeline for strategy developed	Internet-based system established	November 2013
Develop detailed action plan for each strategy	-Staff time -Working group participants	Strategy level action plans developed	Action plans posted in online CHIP document	November 2013

Goal 3: Increase early identification and intervention/treatment of special healthcare and developmental needs

Strategy 3.1: High quality trainings for early educators to screen and for health care providers to identify young children with special health care and developmental needs

Objective 3.1.1:

Increase number of educators trained each year

Indicator: Number of educators trained in the year

Objective 3.1.2:

Increase number of providers trained each year

Indicator: Number of providers trained each year

Objective 3.1.3:

Increase the number of trainings held each year

Indicator: Number of trainings held in the year

Strategy Background

Evidence Base: Young children with special health care and developmental needs should be identified as early as possible so that interventions can be used to improve the future outlook for the child. Current research on the early development of the brain, as summarized by the Center on the Developing Child at Harvard University, shows the neural circuits, which create the foundation for learning, behavior and health, are most flexible or subject to change during the first three years of life (Center on the Developing Child 2008). There is a need to identify as early as possible infants and toddlers in need of services to ensure that intervention is initiated in a timely manner to maximize benefits for the child. For example, research has found that children whose hearing loss is detected in infancy and who receive treatment services have better language outcomes at age 8 than children whose hearing loss is detected later. More children are in need of services than are presently identified. Research indicates that as many as 13% of birth-to-three year olds have delays that would make them eligible for services, according to definitions commonly used by the states (The National Early Childhood Technical Assistance Center 2011).

The Health Resources and Services Administration Maternal and Child Health Bureau identified core outcomes for the community-based system of services mandated for all children with special health care needs under Title V, Healthy People 2010, and the President's New Freedom Initiative. One of the indicators is: Children are screened early and continuously for special health care needs (USDHSS 2013).

According to research, training and support for pediatricians can improve screening rates and practices. The Assuring Better Child Health and Development (ABCD) project, is designed to build developmental screening into pediatric practices and to link pediatricians to referral networks. This project has been shown to increase developmental screening in pediatric offices and has led to the adoption of validated screening tools in the 27 participating states (Zero to Three, 2012).

Type of Change: Individual, Community

Partner Agencies:

Children's Developmental Services Agency, Asheville City Preschool - Early Head Start, Mountain Area Child and Family Center— Early Head Start, Community Action Opportunities-Head Start, Asheville City Schools, Buncombe County Schools, Local Interagency Coordinating Council, Child Care Health Consultation, Innovative Approaches, FIRST – The SUNSHINE Project, Mission Health-Family Support Network

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Survey all partners to establish a baseline number of trainings held, educators trained, and providers trained	-Staff time	Creation of baseline levels for each indicator	Review of deliverables	October 2013

Strategy 3.2: Case management/care coordination for children with special health care and developmental needs (CSHCN)

Objective 3.2.1:

Increase number of CSHCN that have medical homes

Indicator: Number of CSHCN that have medical homes

Objective 3.2.2:

Increase number of practices with standardized treatment for children with asthma or obesity

Indicator: Number of practices with standardized treatment for children with asthma or obesity

Strategy Background

Evidence Base: The Maternal and Child Health Bureau of the Health Resources and Services Administration states that "care coordination and case management are terms used interchangeably to describe an array of activities designed to: link families to clinical, social, and

other services that affect overall health and well-being; strengthen communication between families and providers; avoid duplication of effort; and improve health outcomes" (USDHSS 2011). This strategy is in alignment with national health goals and with the goals of service providers in Buncombe County. The Maternal and Child Health Bureau has further identified core outcomes for the community-based system of services mandated for all children with special health care needs under Title V, Healthy People 2010, and the President's New Freedom Initiative. One of the indicators for this outcome is: "Children and youth with special health care needs receive coordinated ongoing comprehensive care within a medical home" (USDHHS 2013). The importance of involving families in care coordination has been recognized as an important aspect of the practice (Antonelli 2009). According to researchers who have reviewed the literature on care coordination, it is important to expand the evaluation of care coordination interventions for children with special health care needs and document the effectiveness of this recommended practice (Wise et al. 2007).

Type of Change: Individual, Community, Policy

Partner Agencies:

CCWNC, Innovative Approaches, Children's Developmental Services Agency of WNC, FIRST, Local Interagency Coordinating Council, Local Interagency Coordinating Council, Asheville City Schools, Buncombe County Schools, Asheville City Preschool - Early Head Start, Mountain Area Child and Family Center—Early Head Start, Community Action Opportunities-Head Start, BCHHS-Nurse Family Partnership, Child Care Health Consultation, Under Six, Mission Health-Family Support Network

Action Plan

Activity (what?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene meeting of	-Meeting space, date	Identify and agree on	Written objectives and	December 2013
partners engaged in	and materials	objectives and	shared measures to	
care coordination		measurement	capture data	

Goal 4: Improve policies, systems and environments for children through advocacy

Strategy 4.1: Education and advocacy initiatives to reduce the incidence of poverty and its impact on children and early childhood development

Objective 4.1.1:

Provide one Child Watch Tour per year

Indicator: Provision of a Child Watch Tour each year

Objective 4.1.2:

Increase participation in the Child Watch Tour

Indicator: Number of participants in the Child Watch Tours

Objective 4.1.3:

Increase the number of letter campaigns or appeals to legislators

Indicator: Number of letter campaigns or appeals to legislators

Strategy Background

Evidence Base: Extensive research shows that relative to their non-poor peers, children who grow up under conditions of poverty are more likely to experience learning disabilities and developmental delays, to be less successful in school, less productive as adults in the labor market, and more likely to commit crimes. They suffer high incidences of adverse health and emotional and behavioral problems (Duncan et al. 1994; National Institute Of Child Health And Human Development Network 2005; Whitmore-Schanzenbach et al. 2007). Despite the strong and consistent correlations between poverty and diminished child well-being, relatively few studies have focused on determining the adverse impacts on children of low-income parents as a single factor in comparison to the effects of conditions often associated with poverty, such as decreased parent education and high levels of family stress.

For families experiencing poverty, work-based income supplements for working parents have been demonstrated to increase the achievement of some young children. Studies suggest that these benefits are more likely to occur in the preschool years than when children reach adolescence (Center on the Developing Child at Harvard University, 2007). Two sets of studies have shown that employment-based increases in family income can produce achievement gains in young children. Using data from random-assignment program evaluations of welfare-to-work initiatives, one study found that earnings supplements that increased family income by \$1,000 to \$1,500 per year were consistently associated with small, positive impacts on the achievement of preschool-aged children. This influence did not hold for adolescents (Duncan and Clark-

Kauffman 2006). Another study estimating the impacts of the Earned Income Tax Credit also found small benefits for younger children's achievement (Dahl and Lochner 2005).

Type of Change: Community, Policy

Partner Agencies:

Children First-Communities in Schools – Success Equation, Pisgah Legal Services, ABCCM, YWCA, Mountain Area Child and Family Center, Smart Start, Women's Wellbeing and Development Foundation

Action Plan

Activity	Resources Needed	Anticipated Result	Result Verification	Target Date
(what?)	(who? how much?)	(what will happen?)	(how will you know?)	(by when?)
Partners convene to	-Staff time	Partners will meet and	Review of deliverable	December 2013
create advocacy plan	-Meeting space	create advocacy plan		
Organize and provide	-Staff time	Community members will	Child Watch Tour Held	June 2014
2014 Child Watch	-Advertising funds	attend the Child Watch		
tour		tour		

Other strategies in the Early Childhood Development plan include advocacy:

Goal 1, Strategy 1.2: Advocate for increased investment and ensure access to subsidized child-care through vouchers, NC Pre-K, Early Head Start, and Head Start (includes advocacy for healthy experiences in birth to 5 years)

Goal 2, Strategy 2.3: Community education and case management/care coordination for families experiencing or at risk for child maltreatment (includes advocacy for safe and nurturing environments for young children)

Works Cited for Early Childhood Development

Antonelli RC, JW McAllister, and J Popp, 2009. Making Care Coordination a Critical Component of the Pediatric Health System: A Multidisciplinary Framework. The Commonwealth Fund.

Buncombe County Health and Human Services, 2012. Community Health Assessment. Accessed 7/30/13 at: http://www.buncombecounty.org/Governing/Depts/Health/Health Reports.aspx

Buncombe County Health and Human Services, 2013. Economic Services Morbidity and Mortality Report. Asheville, NC

Bunting L, 2004. Parenting programmes: The best available evidence. *Child Care in Practice*, 10(4):327-343.

Campbell, FA, CT Ramey, EP Pungello, J Sparling, and S Miller-Johnson, 2002. Early Childhood Education: Young Adult Outcomes from the Abecedarian Project. *Applied Developmental Science*, 6:42-57.

Center on the Developing Child at Harvard University, 2007. A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children. Accessed 7/30/13 at: www.developingchild.harvard.edu/index.php/download-file/view/63

Center on the Developing Child at Harvard University, 2008. InBrief: The Science of Early Childhood Development. Accessed 7/30/2013 at:

http://developingchild.harvard.edu/download file/-/view/64/

Child Welfare Information Gateway. Case Management in Child Protection website. Accessed 7/30/13 at: https://www.childwelfare.gov/responding/casemgmt.cfm

Circles of Parents. About Circle of Parents: What We Do website. Updated 2008. Accessed 7/30/2013 at: http://circleofparents.org/about_us/what_we_do.html

Commonwealth of Pennsylvania: Office of Child Development and Early Learning, 2012. Early Childhood Education Teacher Quality: Recognizing High Quality Core Content in Pennsylvania. Accessed 7/30/13 at: http://www.pakeys.org/uploadedContent/Docs/PD/ECE%20Teacher%20Quality.pdf

Dahl G and L Lochner, 2005. The impact of family income on child achievement. NBER Working paper No. 11279. Cambridge MA National Bureau of Economic Research.

Duncan GJ, J Brooks-Gunn, and PK Klebanov, 1994. Economic Deprivation and Early Childhood Development. *Child Development*, 65(2):296–318.

Dunst CJ and CM Trivette, 2009. Let's be PALS: An evidence-based approach to professional development. *Infants and Young Children*, 22:163-175.

First 2000 Days. Why the First 2,000 Days Matter website. Accessed 7/30/13 at: http://first2000days.org/beta/why-first-2000-days-matter

Gay K, 2005. The Circle of Parents Program: Increasing Social Support for Parents and Caregivers. *North Carolina Medical Journal*.

Holzer H, D Whitmore-Schanzenbach, G Duncan and J Ludwig, 2007. The economic costs of poverty in the United States: Subsequent effects of children growing up poor. Center for American Progress Washington DC.

Kerr, SM and JB McIntosh, 2000. Coping when a child has a disability: Exploring the impact of parent-to-parent support. *Child: Care, Health and Development*, 26:309–322.

Law M, et al, 2002. The perceived effects of parent-led support groups for parents of children with disabilities. *Physical & Occupational Therapy in Pediatrics*, 21(2-3): 29-48.

Morris P, G Duncan, and E Clark-Kauffman, 2006. Child well-being in an era of welfare reform: The sensitivity of transition in development to policy change. *Developmental Psychology*, 41(6): 919-932.

National Institute Of Child Health and Human Development Early Child Care Research Network, 2005. Duration and developmental timing of poverty and children's cognitive and social development from birth through third grade. *Child Development*, 76:795–810.

Olds DL, J Eckenrode, CR Henderson Jr, H Kitzman, J Powers, R Cole, K Sidora, P Morris, LM Pettitt, and D Luckey, 1997. Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial. *Journal of American Medical Association*, 278(8):637-43.

Schweinhart LJ, J Montie, Z Xiang, WS Barnett, CR Belfield, and M Nores, 2005. Lifetime effects: The HighScope Perry Preschool study through age 40. Ypsilanti, MI: HighScope Press. Available at:

http://www.highscope.org/Content.asp?ContentId=219

Small SA and RS Mather, 2009. What works: Wisconsin evidence-based parenting program directory. Madison, WI: University of Wisconsin – Madison/Extension. Available at: http://www.uwex.edu/ces/flp/families/whatworks.cfm

The Heckman Equation. Invest in early childhood development: Reduce deficits; strengthen North Carolina's economy. Accessed 7/30/13 at:

http://www.heckmanequation.org/content/resource/invest-early-childhood-development-means-deficit-reduction-north-carolina

The Canadian Co-operative Association, 2006. Child Care Cooperatives: A Place in Canada's Universal Child Care Plan. Presented to Social Development Canada as part of the Child Care Spaces Initiative. Accessed 7/30/13 at: http://www.coopzone.coop/files/ChildCareCoops-PartoftheUniversalChildCarePlan.pdf

The National Early Childhood Technical Assistance Center, 2011. The Importance of Early Intervention for Infants and Toddlers with Disabilities and their Families. Available at: http://www.nectac.org/~pdfs/pubs/importanceofearlyintervention.pdf

The North Carolina Partnership for Children, Inc. 2012 . Performance-Based Incentive System (PBIS) Final Results for Years Ending June 30, 2012 and June 30, 2011. Accessed 7/30/13 at: http://www.smartstart-buncombe.org/images/linkeddocs/buncombe%2011-12.pdf

Treichel CJ, C Bjournson, K Dando, H Hagel, E Siegel, C Skillingstad, and D Thompson, 2002. Family Support Network Parent Outcomes Study. *Prevent Child Abuse Minnesota*.

US Census Bureau, 2011. Selected Economic Characteristics: Buncombe County, North Carolina. Washington, DC.

U.S. Census Bureau, 2012. State and County QuickFacts: Buncombe County, North Carolina. Accessed 7/30/13 at: http://quickfacts.census.gov/qfd/states/37/37021.html

U.S. Department of Health and Human Services (USDHSS), Health Resources and Services Administration, Maternal and Child Health Bureau, 2011. Collaboration and Action to Improve Child Health Systems: Toolkit for State Leaders.

U.S. Department of Health and Human Services (USDHSS), Health Resources and Services Administration, Maternal and Child Health Bureau, 2013. The National Survey of Children with Special Health Care Needs Chartbook 2009–2010.

Wise PH, LC Huffman, and GA Brat, 2007. A Critical Analysis of Care Coordination Strategies for Children With Special Health Care Needs. Technical Review No. 14. *AHRQ Publication* No. 07-0054. Rockville, MD: Agency for Healthcare Research and Quality.

Zero to Three, 2012. Achieving a Bright Future:
Developmental Screening of Infants and Toddlers. Available at: http://www.zerotothree.org/public-policy/policy-toolkit/devscreensingmar5.pdf

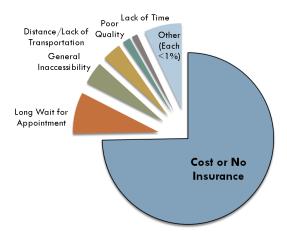
CHAPTER 6 – ACCESS TO CARE

Situational Analysis

The WNC Healthy Impact survey showed mixed results for access to care in Buncombe County. Buncombe County residents were more likely than WNC residents on average to agree that "considering cost, quality, number of options and availability, there is good health care in my county" when asked on the WNC Healthy Impact survey (72% in Buncombe County and 67% across WNC). However, Buncombe County residents on average were also slightly more likely to report

that there was a time in the past year that they were unable to get needed medical care (12% in Buncombe County and 11% across WNC). Three quarters of respondents who were unable to get needed medical care cited cost or lack of insurance as the primary reason. Cost or lack of insurance was also the most common reason cited for those unable to

Primary Reason for Inability to Get Medical Care
(WNC Healthy Impact)



get mental health services. Additionally, 15% of Buncombe County residents reported that they were unable to get a desired prescription at some point in the past year.

Access to care is a very complex issue with numerous approaches. Given the current county resources and interests and regional efforts, our work in this area is to focus on increasing connectivity between clinical care and community programs in order to increase the effectiveness and accessibility of the overall system of care in Buncombe County.

Partners

Addressing access to primary and mental health care is complex and will require the collaborative planning, action, and coordination of multiple partners in our community. The following partner agencies and organizations are engaged in efforts to improve access to care in our community. As new partners are identified, we will continuously work to bring them into the process.

Organizations:	Website or Contact Information	
Buncombe County Health and Human Services (BCHHS)	http://buncombecounty.org/	
CarePartners Health Services	www.carepartners.org	
Community Care of Western North Carolina (CCWNC)	http://www.communitycarewnc.org/	
Community Transformation Grant (CTG)	Jill Simmerman 828-250-6510 ctp.region2@gmail.com	
Land-of-Sky Regional Council	www.landofsky.org	
Mission Health	http://www.mission-health.org/	
MAHEC	http://www.mahec.net/	
WNC Healthy Impact	http://wnchealthyimpact.com/	
YMCA	http://www.ymcawnc.org/	
YWCA	http://www.ywcaofasheville.org	

Access to Care Plan

State and National Objectives	Baseline/Indicator Source
Related Healthy NC 2020 Objective Reduce the cardiovascular disease mortality rate (per 100,000 population)	SCHS, CDC WONDER
Related Healthy People 2020 Objective: Decrease the percentage of adults with diabetes	BRFSS

Goal 1: Improve the connection between community programs and clinical providers

Strategy 1.1: Create workgroup of clinical providers and community program directors to map out and make systems improvements between their fields

Objective 1.1.1:

By October, 2013, at least five community programs and five clinical practitioners will be actively engaged with each other in the workgroup

Indicator: Number of participants from both fields at meetings

Objective 1.1.2:

By December, 2014 there will a measurable decrease in inappropriate ED utilization from baseline

Indicator: AHRQ prevention quality indicators within Mission Hospital ED

Strategy Background

Evidence Base: Part of the project will be to identify current programs available in the county, including the evidence-based Chronic Disease Self-Management Program from Stanford University. See http://patienteducation.stanford.edu/programs/cdsmp.html

Type of Change: Community

Partner Agencies:

Community Transformation Grant, Community Care of Western North Carolina, MAHEC, BCHHS, WNC Healthy Impact, Innovative Approaches, Land-of-Sky Regional Council, YMCA, YWCA

Action Plan

Activity (what is being done?)	Resources Needed (who? how much?)	Anticipated Result (what will happen?)	Result Verification (how will you know?)	Target Date (by when?)
Convene workgroup to determine full plan	-MAHEC and HHS staff time	Full plan created with timeline to outline process for improving connections between clinical and community care	Full plan complete and disseminated	December 2013
Complete inventory of community supports for chronic disease self management (particularly hypertension and high cholesterol)	-CTG staff time and resources	The group will have a comprehensive list of the current community programs with which we need to connect clinical providers	Full inventory complete and accessible	July 2013
Assessment of the community navigators in Buncombe County	-CTG and HHS staff time	Full list of current navigators	List exists, with all contact and survey results	September 2013

CHAPTER 7 – NEXT STEPS

We will continue to work with a wide range of community partners to modify this CHIP plan in the months and years ahead in Buncombe County. This shared plan will be used by partner organizations to complete agency-specific reporting of roles and responsibilities (e.g., our health department and local hospitals), as well as inform agency strategic plans across the county where appropriate.

This document will be widely disseminated electronically to partner organizations and used as a community roadmap to monitor and evaluate our collective efforts. Dissemination of this document will also include making it publicly available on the Buncombe County website (www.BuncombeCounty.org/HealthReports), the WNC Healthy Impact website (www.WNCHealthyImpact.com), and through local libraries.

Moving forward, the CHIP plan will be updated to provide the framework for the annual State of the County's Health Report, which will be submitted and made publicly available in December 2013.