Cumberland District Community

Themes and Strengths Assessment

November 24, 2009

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Background

The Cumberland District Community Themes and Strengths Assessment is one of the four assessments in the Mobilizing for Action Through Planning and Partnerships (MAPP) process. The Community Themes and Strengths Assessment (CTSA) is a means of determining the health of a community through the thoughts, opinions, and concerns of residents.

The Cumberland District used two methods for its CTSA. The first was a community survey that asked residents what they thought were the most important health assets and concerns in their community. Over 1,800 surveys were completed. The second method used was Photovoice. This strategy involves participants documenting health assets and concerns in their community through photography and text. Mini-grants were offered to high schools and youth groups, and two local high schools completed this project

Cumberland County Municipal Health Survey

Background

A survey was created and distributed to community members with the goal of understanding what Cumberland County residents identify as areas of strength and need regarding the health of their community. The survey inquired about the top three assets in each person's municipality that help people live healthy lives, as well as the top three health problems in their municipality and potential solutions.

Survey Methods

Beginning in May 2008, the survey was made available in hard copy and online through surveymonkey.com. The following venues and events were selected for administering the survey:

- Southern Maine Pride (Portland)
- Cumberland County Fair (Cumberland)
- South Portland Housing Authority's 40th Anniversary Celebration
- University of Southern Maine Lesbian, Gay, Bisexual, Transgender, and Intersex Resource Fair (Portland)
- Maine Public Health Association Annual Meeting (Augusta)
- WinteRush (Portland)
- Gray/New Gloucester District Wellness Committee meeting
- Beach to Beacon 10K Race (Cape Elizabeth)
- Green Streets events (Portland)
- Hilltop Cafe (Portland)
- YMCA (Freeport and New Gloucester)
- Maine Medical Center (Portland)
- Southern Maine Area Agency on Aging (Scarborough)
- People's Regional Opportunity Program (Portland)

Health fairs held at area businesses were also used to distribute surveys. Participating businesses included Anthem Blue Cross and Blue Shield, Sysco Corporation, TD Bank, Hannaford Brothers, Mercy Hospital, and two US Post Office locations. Eight local libraries were recruited

to help reach areas that were less accessible—Bridgton, Casco, Chebeague Island, Gray, Harrison, Naples, Raymond, and Sebago. Finally, all city and town offices in Cumberland County received surveys.

Using a prize wheel, participants won reflectors, lunch bags, t-shirts, and first aid kits, among other prizes, for completing the survey at a health fair or community event. Names of participants were also entered into a weekly drawing for another chance to win water bottles or gift cards.

In November 2008, the survey was revised to include multiple choice answers based on the most frequent results received thus far (Appendix 1). By March 2009, we achieved our goal of one thousand surveys. The additional surveys are attributed to the changes made with the survey's format, as well as utilizing personal and professional contacts to extend the reach of the survey.

Concurrently, a Minority Health Assessment (MHA) was also undertaken, specifically to reach those Cumberland County residents who had difficulty communicating in English. Surveys were administered orally by one of the Portland Public Health Division's Community Health Outreach Workers. As with the CTSA survey, the MHA used a convenience sample, which means only residents who were available and eligible completed the survey. See Appendix 2 for results.

During the analysis phase, results from the CTSA survey were combined with MHA findings. Because of the skewed demographic distribution (as detailed below), and to better represent the Cumberland County population as whole, both survey results were combined and adjusted for gender, age, and Healthy Maine Partnership (HMP) where they reside.

Demographics

A total of 1,819 residents of Cumberland County participated in the survey. As shown in Table 1, almost half of the respondents (49%) live in Portland, followed by South Portland (13%) and Windham (7%). The remaining towns only comprise 5% or less of responses. With regard to gender, the majority of respondents are female (65%). Almost half of all respondents are between 30 to 49 years of age (46%). In contrast, approximately one-third of respondents are 50 or older, while 22% are under 30.

Using a convenience sample is one limitation of the survey, since the results do not accurately depict the demographic composition of Cumberland County. For instance, respondents from Portland represent 49% of the survey sample, yet Portland residents comprise only 24% of Cumberland County (Table 1). Additionally, 65% of survey respondents are female, but in actuality the male to female ratio in the county is closer to 50:50. The same holds true for age distribution. For a more accurate representation, results from other towns and cities must be adjusted according to their actual percentage in Cumberland County, while responses from male residents must be given more weight to correctly represent the gender distribution, and the age distribution must also be weighed accordingly. Therefore, results were adjusted for gender, age group, and HMP, which allows stronger generalizations to be formed about the county population as a whole.

Table 1. Distribution of Demographic Characteristics[1]

	Count	Percent of sample	Percent of Cumberland County
Gender			
Female	1,176	64.7	51.6
Male	643	35.3	48.4
Age group			
<30	397	21.8	29.3
30 to 39	411	22.6	18.5
40 to 49	420	23.1	19.1
50+	591	32.5	32.9
Municipality			
Portland HMP	**892**	**49.0**	**24.2**
Portland	892	49.0	24.2
Lakes HMP	**220**	**12.1**	**16.9**
Baldwin	0	0.0	0.5
Bridgton	5	0.3	1.8
Casco	9	0.5	1.3
Harrison	2	0.1	0.9
Naples	12	0.7	1.2
Raymond	11	0.6	1.6
Sebago	9	0.5	0.5
Standish	36	2.0	3.5
Windham	136	7.5	5.6
Casco Bay HMP	**207**	**11.4**	**18.9**
Cumberland[2]	35	1.9	2.7
Falmouth	34	1.9	3.9
Freeport	15	0.8	2.9
Gray	34	1.9	2.6
Long Island	2	0.1	0.1
New Gloucester	20	1.1	1.8
North Yarmouth	34	1.9	1.2
Pownal	3	0.2	0.6
Yarmouth	30	1.6	3.1
Rivers HMP	**477**	**26.2**	**30.0**
Cape Elizabeth	31	1.7	3.4
Gorham	36	2.0	5.3
Scarborough	68	3.7	6.4
South Portland	245	13.5	8.8
Westbrook	97	5.3	6.1
Brunswick/ Harpswell HMP	**23**	**1.3**	**10.0**
Brunswick	21	1.2	8.0
Harpswell	2	0.1	2.0

[1]2000 US Census.

[2]Includes Chebeague Island.

Community Assets

County residents identify numerous assets in their communities that make it easier to live healthy lives (Table 2). Twenty-nine percent of residents report nutrition as a high priority by naming healthy food choices as number one on the list. Secure housing and employment (28%) and sidewalks and trails (25%) rank second and third, respectively. Next, 23% of respondents view health education campaigns as an asset that contribute to the health of their community. Rounding out the top five are parks, open spaces, and bodies of water.

Table 2. Most Important Factors for a Healthy Community

Overall		
Rank	**Factor**	**Percent**
1	Healthy food choices	29.2%
2	Secure housing & employment	28.0%
3	Sidewalks and trails for walking and running	24.6%
4	Health education campaigns	23.0%
5	Parks, open spaces, & bodies of water	22.6%
6	Low crime rate	22.5%
7	Access to quality health care	19.8%
8	Clean environment	17.7%
9	Physical activity	17.3%
10	Biking lanes, paths, and trails	15.5%

When looking at results by gender, there are three common assets found in the top five, but rank differently in terms of importance (Table 3). For instance, the availability of healthy food choices is the top community asset for women, but third for men. Additionally, men rank secure housing and employment number one, while women place it at number four. In contrast, both genders rank access to quality health care fifth.

Table 3. Most Important Factors for a Healthy Community, by Gender

	Women			Men	
Rank	**Factor**	**Percent**	**Rank**	**Factor**	**Percent**
1	Healthy food choices	30.8%	1	Secure housing & employment	33.4%
2	Sidewalks & trails for walking & running	29.6%	2	Health education campaigns	27.9%
3	Parks, open spaces, & bodies of water	25.4%	3	Healthy food choices	27.5%
4	Secure housing & employment	23.1%	4	Low crime rate	26.3%
5	Access to quality health care	20.0%	5	Access to quality health care	19.6%

Secure housing and employment is a top community asset for all age groups, especially for residents under 50 (Table 4). With the exception of the 30 to 39 age group, healthy food choices is another highly ranked factor for a healthy community. An additional top five asset common to all age groups is sidewalks and trails for walking and running.

Table 4. Most Important Factors for a Healthy Community, by Age

	<30	
Rank	**Factor**	**Percent**
1	Secure housing & employment	35.6%
2	Healthy food choices	31.0%
3	Health education campaigns	30.0%
4	Sidewalks & trails for walking & running	24.7%
5	Low crime rate	23.3%

	30 to 39	
Rank	**Factor**	**Percent**
1	Secure housing & employment	29.2%
2	Low crime rate	26.0%
3	Parks, open spaces, & bodies of water	25.3%
4	Access to quality health care	25.2%
5	Sidewalks & trails for walking & running	22.0%

	40 to 49	
Rank	**Factor**	**Percent**
1	Healthy food choices	30.6%
2	Secure housing & employment	26.3%
3	Sidewalks & trails for walking & running	23.3%
4	Health education campaigns	22.6%
5	Parks, open spaces, & bodies of water	22.5%

	50+	
Rank	**Factor**	**Percent**
1	Healthy food choices	30.8%
2	Sidewalks & trails for walking & running	26.7%
3	Clean environment	23.9%
4	Access to quality health care	22.7%
5	Secure housing & employment	21.7%

Survey results were also analyzed according to HMP (Table 5). Cumberland County has a total of four HMPs: Portland, Casco Bay, Rivers, and Lakes. While Brunswick and Harpswell are physically located in Cumberland County, the Midcoast HMP, AccessHealth, includes these towns in their HMP programs. As a result, AccessHealth is given a portion of Cumberland County HMP funds. For the purpose of this survey, Brunswick and Harpswell have been included as an additional HMP area.

With regard to HMP regions, secure housing and employment is not only ranked high according to age group, but is also number one for three out of the five HMPs (Portland, Rivers, and Brunswick/Harpswell). The Lakes, Rivers, and Casco Bay regions all place healthy food choices and sidewalks and trails for walking and running within their top five assets. The answers found

in the Brunswick/Harpswell region differ the most from other HMPs, especially with factors like religion and strong family life rating highly.

Table 5. Most Important Factors for a Healthy Community, by Healthy Maine Partnership

	Portland	
Rank	**Factor**	**Percent**
1	Secure housing & employment	47.2%
2	Health education campaigns	36.3%
3	Low crime rate	30.3%
4	Good place to raise children	26.5%
5	Access to quality health care	23.3%

	Lakes	
Rank	**Factor**	**Percent**
1	Healthy food choices	39.0%
2	Parks, open spaces, & bodies of water	38.5%
3	School and recreational sports leagues	32.7%
4	Physical activity	24.1%
5	Sidewalks & trails for walking & running	23.6%

	Casco Bay	
Rank	**Factor**	**Percent**
1	Sidewalks & trails for walking & running	43.9%
2	Parks, open spaces, & bodies of water	39.4%
3	Healthy food choices	34.6%
4	Biking lanes, paths, & trails	27.4%
5	Clean environment	23.0%

	Rivers	
Rank	**Factor**	**Percent**
1	Secure housing & employment	33.3%
2	Healthy food choices	32.3%
3	Sidewalks & trails for walking & running	24.4%
4	Physical activity	21.0%
5	Health education campaigns	20.2%

	Brunswick/Harpswell	
Rank	**Factor**	**Percent**
1	Secure housing & employment	44.2%
2	Low crime rate	35.2%
3	Religion	31.4%
4	Strong family life	31.4%
5	Access to quality health care	28.4%

Community Challenges

Residents are more unanimous when identifying the problems in their towns that make living healthy lives more challenging (Table 6). The top three answers, by a large margin, are lack of exercise (59%); poor nutrition and associated diseases (57%); and alcohol and drug use (48%). Additionally, 40% of residents identify smoking and associated diseases as a problem, which places it fourth. These factors have a positive correlation with a number of chronic health conditions, like heart disease, lung disease, diabetes, and obesity.

With regard to the prevalence rate of answers, there is a wide gap between the first and tenth problems that are identified as challenges to healthy living. There is a 26% difference between the top answer and the number five answer alone. At number five is STDs and unplanned pregnancies (33%). The prevalence rate decreases further with mental health (17%), cancer (13%), and lack of health and recreation options for seniors (11%), which rank sixth, seventh, and eighth, respectively. The last two of the top ten problems relate to violence. Ten percent of residents identify domestic violence and bullying as a problem, while 10% of residents believe rape and sexual assault is another serious issue in their community.

Table 6. Most Important Health Problems in the Community

	Overall	
Rank	**Problem**	**Percent**
1	Lack of exercise and associated diseases	58.9%
2	Poor nutrition and associated diseases	56.8%
3	Alcohol and drug use	48.3%
4	Smoking and associated diseases	39.7%
5	STDs and unplanned pregnancies	32.7%
6	Mental health	16.8%
7	Cancer	12.7%
8	Lack of health and recreation options for seniors	10.9%
9	Domestic violence and bullying	10.4%
10	Rape and sexual assault	10.1%

Interestingly, nutrition is seen as both an asset and a problem. The availability of healthy food choices is number one on the list of assets that make it easier to live healthy lives. Yet poor nutrition and associated diseases are the number three problem that makes living healthy lives a challenge for Cumberland County residents. This anomaly may relate to the higher cost of healthier food choices. While healthier food options are available, those who cannot afford such foods are denied access to better nutrition.

A similar inconsistency is found regarding access to quality health care. Respondents feel that they have good access to health care and rank it eighth on their list of community assets. However, some respondents feel differently and rank lack of access to health care twelfth on the list of challenges to healthy living. This is a possible indication of the gap between the insured and uninsured residents of Cumberland County. The results regarding nutrition and access to health care potentially exhibit the relationship between socioeconomic status and health.

When stratified by gender, the top five health problems are identical with only a slight difference in rankings (Table 7). Women rank lack of exercise and associated diseases as number one, while the same problem is ranked second among men. Additionally, poor nutrition and associated diseases is number one among men, but second for women. In contrast, both genders rank alcohol and drug abuse, smoking and associated diseases, and STDs and unplanned pregnancies third through fifth, respectively.

Table 7. Most Important Health Problems in the Community, by Gender

	Women			Men	
Rank	**Problem**	**Percent**	**Rank**	**Problem**	**Percent**
1	Lack of exercise and associated diseases	57.7%	1	Poor nutrition and associated diseases	63.8%
2	Poor nutrition and associated diseases	50.3%	2	Lack of exercise and associated diseases	60.2%
3	Alcohol and drug use	45.0%	3	Alcohol and drug use	51.9%
4	Smoking and associated diseases	37.4%	4	Smoking and associated diseases	42.1%
5	STDs and unplanned pregnancies	30.0%	5	STDs and unplanned pregnancies	35.6%

Alcohol and drug abuse is the number one health problem for residents under 30 years of age, with poor nutrition and lack of exercise next on the list (Table 8). Residents age 30 and above rank lack of exercise, poor nutrition, and alcohol and drug use as the top three health problems in their communities. Similar to the results by gender, all age groups identify smoking and associated diseases and STDs and unplanned pregnancies as the fourth and fifth health problems, respectively.

Table 8. Most Important Health Problems in the Community, by Age

	<30			30 to 39	
Rank	**Problem**	**Percent**	**Rank**	**Problem**	**Percent**
1	Alcohol and drug use	63.6%	1	Lack of exercise and associated diseases	62.2%
2	Poor nutrition and associated diseases	53.3%	2	Poor nutrition and associated diseases	58.2%
3	Lack of exercise and associated diseases	52.7%	3	Alcohol and drug use	45.0%
4	Smoking and associated diseases	50.3%	4	Smoking and associated diseases	42.0%
5	STDs and unplanned pregnancies	47.2%	5	STDs and unplanned pregnancies	27.5%

	40 to 49			50+	
Rank	**Problem**	**Percent**	**Rank**	**Problem**	**Percent**
1	Lack of exercise and associated diseases	58.1%	1	Lack of exercise and associated diseases	63.0%
2	Poor nutrition and associated diseases	54.8%	2	Poor nutrition and associated diseases	60.2%
3	Alcohol and drug use	45.8%	3	Alcohol and drug use	38.1%
4	Smoking and associated diseases	33.6%	4	Smoking and associated diseases	32.4%
5	STDs and unplanned pregnancies	28.5%	5	STDs and unplanned pregnancies	25.0%

Lack of exercise and associated diseases is ranked high by all HMPs, with the Lakes, Rivers, and Casco Bay regions ranking it number one (Table 9). Also rated highly among all HMP areas is alcohol and drug abuse. With the exception of Brunswick/Harpswell, the HMPs identify smoking and associated diseases as another important health issue.

Table 9. Most Important Health Problems in the Community, by Healthy Maine Partnership

	Portland	
Rank	**Problem**	**Percent**
1	Poor nutrition and associated diseases	79.6%
2	Alcohol and drug use	73.9%
3	Lack of exercise and associated diseases	68.2%
4	STDs and unplanned pregnancies	58.1%
5	Smoking and associated diseases	51.3%

	Lakes	
Rank	**Problem**	**Percent**
1	Lack of exercise and associated diseases	35.2%
2	Poor nutrition and associated diseases	34.2%
3	Alcohol and drug use	33.7%
4	Smoking and associated diseases	23.0%
5	Lack of access to health care	14.4%

	Casco Bay	
Rank	**Problem**	**Percent**
1	Lack of exercise and associated diseases	44.2%
2	Poor nutrition and associated diseases	27.5%
3	Smoking and associated diseases	22.6%
4	Mental health	21.0%
5	Alcohol and drug use	19.0%

	Rivers	
Rank	**Problem**	**Percent**
1	Lack of exercise and associated diseases	68.9%
2	Poor nutrition and associated diseases	64.6%
3	Smoking and associated diseases	49.7%
4	Alcohol and drug use	47.5%
5	STDs and unplanned pregnancies	33.2%

	Brunswick/Harpswell	
Rank	**Problem**	**Percent**
1	STDs and unplanned pregnancies	76.6%
2	Lack of exercise and associated diseases	73.5%
3	Poor nutrition and associated diseases	69.5%
4	Alcohol and drug use	66.1%
5	Rape and sexual assault	41.5%

Potential Solutions

Along with identifying challenges to healthy living, Cumberland County residents were asked to list potential solutions to such challenges. One solution common to all top five health problems was education (Table 10). In fact, education was the most prevalent answer among the leading health problems, with "lack of exercise" as the only exception.

Table 10. Prevalence of Education as a Solution to Health Problems

	Overall	
Rank	**Problem**	**Percent**
1	STDs and unplanned pregnancies	79.4%
2	Alcohol and drug use	39.7%
3	Poor nutrition and associated diseases	37.4%
4	Smoking and associated diseases	33.1%
5	Lack of exercise and associated diseases	15.2%

With regard to lack of exercise, education (15%) was second to community programs (16%) focused on physical activity (Table 11). Bike paths and walking trails (12%), and exercise in general (9%), were other solutions frequently listed. Specifically, walking (6%) as a means to becoming more physically active was a popular answer as well.

After education, tobacco cessation programs (18%) were the second most common solutions for smoking and associated diseases. Additionally, many community members felt that raising tobacco taxes (9%), encouraging people to quit tobacco use (7%), and increasing the number of smoke-free areas (7%) would help address this particular health problem.

Making better food choices (11%) was another common solution for poor nutrition and associated diseases. Access to affordable healthy food and exercise were almost equally prevalent at approximately 7%. Community programs (5%), such as community gardens or community activities around nutrition and exercise, were popular answers as well.

Many respondents suggested treatment programs (11%) as a solution to the prevalence of alcohol and drug use. The next most common answers were suggestions for increased police involvement (10%) and stricter laws (5%). Also, alternatives to using alcohol and drugs (5%), such as youth oriented recreational programs, after school activities, and social functions, may be another approach to decreasing substance abuse rates.

Education was by far the prevailing solution for STDs and unplanned pregnancies (79%). Other solutions, while not as prevalent, include making contraceptives available in schools (9%), financially supporting more educational campaigns (6%), and expanding STD clinic services and support programs (3%).

Table 11. Most Prevalent Solutions According to Health Problem

	Lack of Exercise & Associated Diseases	
Rank	**Solution**	**Percent**
1	Community programs	16.2%
2	Education	15.2%
3	Bike paths & walking trails	12.1%
4	More physical activity	9.0%
5	Walking	6.4%

	Smoking & Associated Diseases	
Rank	**Solution**	**Percent**
1	Education	33.1%
2	Tobacco cessation programs	17.5%
3	Increase taxes on tobacco	8.9%
4	Encourage people to quit	7.4%
5	More smoke-free areas	7.0%

	Poor Nutrition & Associated Diseases	
Rank	**Solution**	**Percent**
1	Education	37.4%
2	Making better food choices	10.9%
3	Exercise	6.9%
4	Affordable healthy food	6.6%
5	Community programs	4.9%

	Alcohol & Drug Use	
Rank	**Solution**	**Percent**
1	Education	39.7%
2	Treatment programs	10.5%
3	Increase police involvement	9.5%
4	Stricter laws	5.4%
5	Alternatives to alcohol & drug use	5.1%

	STDs & Unplanned Pregnancies	
Rank	**Solution**	**Percent**
1	Education	79.4%
2	Contraceptives in schools	8.8%
3	Financial support of education campaigns	5.9%
4	Expand STD clinic services	2.9%
5	More support groups	2.9%

Overall, the Municipal Health Survey and Minority Health Assessment provide broad insight as to what community members feel are the areas of strength and need in their town or city. Having such understanding will help influence public health efforts in Cumberland County.

Photovoice: Picturing the Health of Cumberland County

Background

Photovoice is a participatory action research method designed to give a voice to those typically unheard. In practice, participants are given cameras to document their everyday realities. These images are then used to identify social issues, create dialogue, and promote community change.

Photovoice was created by Caroline Wang and Mary Ann Burris during a visit to China in 1992, when 62 women from the Yunnan Province were given cameras to document their daily lives. What emerged was an education in the life of these women. The photographs captured farming women heading home from work with hoes resting on their shoulders, a woman working farm land as her baby rested on a blanket a few feet away, and a woman in a car she could not yet afford. These photos not only informed the larger community, but also prompted changes. For instance, officials from the province began to provide child care services after viewing photos of children playing alone or unsupervised as their mothers worked the fields.

From rural Chinese women to homeless persons in Michigan to youth peer educators in South Africa, this is a methodology that has been used with various populations to identify social issues and promote policy change. The HMPs wanted to understand how young community members felt about the health issues in their town or city. Thus, Photovoice was an ideal project to engage the youth of Cumberland County and have their voices heard as part of the Community Themes and Strengths Assessment.

Methods

A Request for Applications (RFA) was released in October 2008 with a December 1 deadline. A $500 mini-grant was made available through the RFA. With the help of school health coordinators, HMP directors, and Youth Advocacy Program group coordinators, the RFA was disseminated to Cumberland County high school classes, health promotion clubs, photography clubs/classes, and youth groups.

Three different consent forms were also created: a *Parent/Guardian* form for participants, an *Acknowledge and Release* form for people chosen as photograph subjects, and a *Release of Creative Materials* form for the purpose of allowing participants' photographs to be used in this project (Appendices 3 to 5). The forms were reviewed and approved by the City of Portland's legal department.

A Grant Review Team convened to review applications on December 10. Two applications were submitted by the December deadline. The Gifted and Talented Program at Westbrook High School expressed interest in Photovoice, along with a health class from Windham High School. Both applications were accepted. Having received only two applications, the RFA was reopened with a new February 1, 2009 deadline. A Company of Girls, an organization dedicated to empowering young girls through the arts, submitted an application and was accepted as the third group participating in Photovoice.

Next, each group scheduled at least two meetings with the Project Coordinator. The first meeting familiarized students with Photovoice. A PowerPoint presentation was used to describe the

project's background, process steps, and expectations regarding conduct and final photographs. Pictures and accompanying captions from other Photovoice projects were also shown to students as examples. Additionally, consent forms were explained and distributed to participants.

After the first session, disposable cameras were made available to students. However, students also had the option of using their own digital cameras. There was interest in using camera phones, but such cameras were not permitted due to limited picture quality. Participants were then given several weeks to take photographs of their town and surrounding community to capture the health-related strengths and weaknesses in the places they live, work, play, and learn. The pictures were then developed in a digital format for project purposes and shared with the rest of the class during the second meeting.

The second session involved a reflection and dialogue exercise. The students viewed the class photographs as a collection and identified issues or themes that emerged from the photos. Each student then selected two photographs for which they would write accompanying captions. To guide them, the students were instructed to answer certain questions in the narratives they wrote. Some of the questions included: What do you see in the photo?, How does it affect your life?, and What should be done about it?

Once each student completed their tasks, the photos and captions were consolidated into a PowerPoint presentation. In addition to the PowerPoint presentation, each group was required to write a final report. The report included such information as the number of students participating,

the health issues identified in the community, the overarching themes of such issues, as well as challenges and successes.

Westbrook High School

The Westbrook High School Art Department partnered with the Gifted and Talented Program for the Photovoice Project. Art Director Carol Connor, Gifted and Talented Program Director Kathleen Leggett, and School Health Coordinator Sandra Hale, coordinated the project along with six students, ranging from freshmen to seniors.

The students and advisors felt that this project was very successful and hope to continue their work with Photovoice through the next school year. According to their final report, "Most eye-opening to advisors were the insightfulness of the students and their ability to capture a mood or emotion through their photography. A number of the images were beautifully artistic and compelling. Students were able to elicit their feelings regarding the health limitations winter brings through lack of outdoor activities (Figure 1). While the typical topics of litter, drugs, graffiti, and smoking came out as well, the participants noted positive aspects within the community of Westbrook including their high school, the humane society, Riverbank Park (Figure 2), and the local skate park. The students' enthusiasm for the project and their follow-through has been most rewarding for all involved."

Figure 1. Winter brings everyone inside. The resources we normally use are abandoned in the wintertime, and there aren't many winter activities available for youth.

Figure 2. The Westbrook community has many signs to promote health and safety.

While the Westbrook High School group had many successes, one challenge was scheduling meetings to work as a group on the project. However, advisors were flexible and accommodating

to students' schedules so that participants were afforded many opportunities to work on Photovoice in smaller groups.

Ms. Connor created the PowerPoint presentation to highlight the students' work. This format allowed the students to easily present the project to community stakeholders. One presentation has already been made to Westbrook's School Health Committee, with more presentations currently in the works.

Windham High School

Melissa Dubois, a Health Education teacher, coordinated the project with eleven of her upper level health class students. The remaining eight students elected to be involved in another activity; however, they still participated in classroom brainstorming sessions and discussions surrounding the photographs taken by their fellow classmates.

The group felt that Photovoice was a "huge success." According to their final report, a theme that emerged from their photographs was "access for teens." "For example, we have healthy snacks at our high school and yet we enter a sporting goods store and 'junk' is a la carte at the register. Another is with fitness. Windham has a wonderful weight room [at the High School] (Figure 3) and Mountain Division Trail, yet the roads are so dangerous you cannot access these fitness spots unless you have a car (Figure 4)." Teens found themselves fortunate to live where they do, but were disappointed there were not more places for them to hang out. The abandoned building on the Gorham/Windham line and the restaurant for sale in Raymond were two areas teens wish they had for themselves.

Figure 3. Windham High School provides a facility for students and community members to work out and have a healthy lifestyle. It is also a great resource for the students to use during study halls and it helps out our athletes.

Figure 4. This is route 202 in front of Windham High school. This road is traveled heavily by bikers and walkers everyday. Where are the sidewalks? This is very dangerous for pedestrians walking on the side of the road. Sidewalks should be put in immediately.

In fact, when the students presented Photovoice to their community in June, they planned to start a roundtable discussion on the feasibility of creating a teen center. While this has been an eye-opening experience for the students, they did encounter a few challenges along the way. Since

Photovoice was not written into the syllabus, Ms. Dubois could not require participation in the project. Thus, not as many students participated as she would have liked. Additionally, computer problems slowed down their progress, along with some reimbursement issues. Nonetheless, the Photovoice Project went well for the Windham High School students.

Overall, the students have found the response to Photovoice to be “extremely positive.” They presented their Photovoice PowerPoint at their District’s Art Show, where a discussion was held about the project and how the students hoped to use what they have learned. The project was also presented at a Windham High School faculty meeting. The faculty had a strong reaction to the slide show and became “emotionally charged.” With such great responses, the students have more planned for the project. A Photovoice presentation has been scheduled for the school board as well as for a meeting with the Town Manager Tony Plante. There is even talk of showcasing Photovoice at Summerfest, and plans to invite community stakeholders to an informal meeting to discuss what the students have learned about their community from their Photovoice experience.

A Company of Girls (ACOG)

Odelle Bowman, Executive Director for ACOG, and Meghan Lannon, an intern at ACOG, organized the project. Unfortunately, ACOG was unable to complete Photovoice due to a lack of involvement. Before ending their participation, two meetings were held to introduce the participants to the goals and expectations of Photovoice. One session was conducted for the Ensemble I and II group, comprised of 5th through 8th graders, while another meeting was held for the Touring Company, comprised of 9th through 12th graders. The young girls seemed very enthusiastic about the project, and even thought of several great ideas for photographs during these sessions.

Approximately 35 disposable cameras were handed out to participants, but only four were returned with only one role of film completely used. After multiple attempts to schedule meetings and numerous cancellations, a letter was sent by Ms. Lannon expressing her inability to move forward with the project despite her many attempts to engage the ACOG youth in Photovoice. Efforts have been made to recover funds remaining from the original $500.

Summary

Not only has the Photovoice Project been a means to collect information for the CTSA, but it has also been an opportunity for youth to be represented in this process. This project afforded participants the chance to build a sense of social responsibility and use what they learned to communicate with policy makers and advocate for improvements in their respective communities. Furthermore, Photovoice provided a creative means to capture the strong and weak aspects of community health so as to better shape future public health efforts in Cumberland County.

Appendix 1. Cumberland County Municipal Health Survey

Cumberland County Municipal Health Survey

Help the City of Portland's Public Health Division focus its efforts on the health issues in your corner of Cumberland County by participating in our Municipal Health Survey. This brief survey will ask you about health issues in your city or town. Please answer all questions. Your answers will be kept anonymous. Thank you.

1. In what city or town do you live? _____

2. What is your gender? _____

3. How old are you? _____

4. ***IN YOUR CITY OR TOWN***, what do you think helps people live healthy lives? List your top 3 answers.

   A.

   B.

   C.

5. ***IN YOUR CITY OR TOWN***, what do you think are the top 3 health problems?

   A.

   B.

   C.

6. What do you think it would take to help solve each of these health problems in your city or town? (Use back of paper if needed.)

   Health Problem A:

   Health Problem B:

   Health Problem C:

Thank you for taking the time to complete this survey. If you would like a chance to win a prize, including gift cards, water bottles, and edible fruit arrangements, please enter your contact information below.

Name:

E-mail Address:

Your contact information will not be placed on any mailing lists.

Appendix 2. 2009 Minority Health Assessment Report

The Portland Public Health Division's Minority Health Program administered a Minority Health Assessment to 899 members of the racial and ethnic minority health communities between September 6, 2008, and May 5, 2009.

A convenience sample was used for this survey, which means that whoever was available and eligible to take the survey did. As a result, the distribution of respondents likely differs from the true distribution of the total population, especially in terms of ethnic group. However, United States Census Bureau does not have recent data that enumerate the populations being surveyed, most notably that which reflects the recent influx of refugees. Therefore, we cannot adjust for ethnicity, but have stratified results by ethnicity when possible.

Section 1. Demographics

97% of respondents listed their zip code of residence, and these were grouped by county, except for Portland residents, which were placed in their own group due to large numbers (Table 1). Again, because this is a convenience sample, we do not know if this distribution accurately reflects the true geographic distribution of these communities.

Table 1. Place of Residence

Residence	Count	Percent
City of Portland	622	72%
Cumberland County (excluding Portland)	142	16%
York County	55	6%
Kennebec County	27	3%
Androscoggin County	15	2%
Penobscot County	7	1%

94% of surveys had an ethnic group listed (Table 2). The most frequently listed were Cambodian, Latino, and Sudanese, with each accounting for more than 10% of the total.

Table 2. Ethnicity

Ethnic Group	Count	Percent
Cambodian	174	21%
Latino	158	19%
Sudanese	96	11%
Somali	70	8%
Bosnian	55	7%
Vietnamese	51	6%
Congolese	47	6%
Rwandese	41	5%
Russian	35	4%
Other	118	14%

Additional analyses were conducted among the nine most common ethnic groups in the survey. Table 3 displays data related to participants' age and acculturation levels. The average age among the various groups ranges from 29.8 years for Somalis to 52.8 years for Russians. Mirroring this is the fact that only 36% of Somalis surveyed are unable to read and write in English, while all the Russians cannot read or write in English.
The two Asian ethnic groups (Cambodian and Vietnamese) have the greatest number of years living in the United States at 17.8 and 19.0 years, respectively. Likewise, they also record the highest percent of time spent in the United States, each averaging 47%.

Table 3. Age and Acculturation Indicators

Ethnic Group	Median Age	Average Number of Years Living in the United States	Average Percent of Life in the United States	Percent unable to read and write in English
Somali	28	6.4	29%	36%
Sudanese	29.5	8.0	29%	55%
Congolese	31.5	3.4	13%	47%
Overall	**36**	**10.9**	**34%**	**50%**
Latino	35	10.1	27%	63%
Rwandese	40	3.0	8%	59%
Cambodian	41	17.8	47%	57%
Bosnian	46	9.4	25%	61%
Vietnamese	43	19.0	47%	71%
Russian	56	7.9	16%	100%

Russians have the highest proportion of college graduates among their sample (Table 4). However, because none of them report the ability to read and write in English, it begs the question of how their academic backgrounds are being used in their current employment situation. Occupation type was not asked in this survey, but should be looked at in future assessments.

Table 4. Highest Level of Education Attained.

Ethnic Group	Less than high school	High school diploma/GED	Some college	College degree or higher
Russian	11%	34%	11%	43%
Sudanese	25%	22%	27%	25%
Bosnian	24%	39%	17%	20%
Latino	45%	24%	11%	20%
Congolese	32%	23%	28%	17%
Overall	**39%**	**29%**	**17%**	**15%**
Rwandese	42%	32%	18%	8%
Vietnamese	53%	27%	12%	8%
Cambodian	58%	18%	17%	7%
Somali	48%	41%	9%	3%

Regarding household size and income (Table 5), it is noteworthy that the four African ethnic groups have the largest average household sizes, while also having the lowest household incomes, with over 89% in each group earning less than $30,000.

Table 5. Household Size and Income

Ethnic Group	Average Household Size	Less than $20,000	$20,000 to $29,999	$30,000 to $49,999	$50,000 and Over
Somali	5.9	76%	16%	5%	3%
Congolese	5.3	88%	2%	7%	2%
Sudanese	5.0	48%	41%	9%	1%
Rwandese	3.9	83%	8%	6%	3%
Overall	**3.8**	**49%**	**25%**	**19%**	**7%**
Cambodian	3.6	34%	33%	33%	1%
Bosnian	3.0	14%	16%	43%	27%
Latino	3.0	55%	29%	11%	5%
Vietnamese	2.9	41%	35%	24%	0%
Russian	2.9	58%	21%	9%	12%

Rwandese have the highest rate of volunteerism, with 85% volunteering at least some time, and 43% contributing at least six hours per month (Table 6). Conversely, the Vietnamese respondents report the fewest hours spent volunteering, with 96% reporting no time spent volunteering at all.

Table 6. Monthly Hours Spent Volunteering

Ethnic Group	None	1 to 5 hours	6 to 10 hours	More than 10 hours
Rwandese	15%	41%	41%	2%
Congolese	43%	39%	11%	7%
Russian	53%	32%	15%	0%
Sudanese	58%	32%	3%	6%
Latino	65%	22%	6%	6%
Overall	**70%**	**20%**	**7%**	**3%**
Somali	80%	17%	3%	0%
Bosnian	81%	9%	7%	2%
Cambodian	87%	10%	1%	2%
Vietnamese	96%	0%	4%	0%

Section 2. Health

Lack of health insurance is an issue for 19% of respondents (Table 7). More staggering is that more than half of Latinos report not having any health insurance.

Table 7. Health Insurance Status (multiple answers possible)

Ethnic Group	Uninsured	Private Insurance	Medicaid/MaineCare	Medicare
Latino	54%	20%	21%	5%
Rwandese	35%	16%	35%	14%
Overall	**19%**	**42%**	**32%**	**9%**
Cambodian	9%	63%	26%	2%
Congolese	9%	12%	47%	33%
Russian	9%	33%	52%	6%
Vietnamese	9%	55%	34%	2%
Somali	8%	8%	56%	30%
Bosnian	8%	79%	12%	2%
Sudanese	7%	32%	57%	14%

When asked to rate the health of their community and their own health on a five-point scale, where 1 equals “Very unhealthy” and 5 equals “Very healthy,” an interesting pattern emerges. All nine ethnic groups, as well as the overall sample, rate their personal health higher than that of their community. Overall, respondents rate their personal health with a 15% higher score than that of their community, with the Sudanese having the greatest difference at 23% (Table 8).

Additionally, Latinos have the highest average ratings for both community health (3.52) and personal health (4.01), while Rwandese consistently report the lowest average ratings in both categories (2.74 for community health and 3.27 for personal health).

Table 8. Perceptions of Community and Personal Health

Ethnic Group	Average Community Health Rating	Average Personal Health Rating	Difference Between Personal and Community Health Ratings
Sudanese	2.94	3.61	23%
Rwandese	2.74	3.27	19%
Cambodian	3.20	3.70	16%
Overall	**3.21**	**3.69**	**15%**
Latino	3.52	4.01	14%
Russian	3.00	3.38	13%
Somali	3.19	3.58	12%
Bosnian	3.09	3.37	9%
Vietnamese	3.49	3.78	8%
Congolese	3.39	3.55	5%

When asked to identify the most important factors that contribute to a health community, good schools are selected by the most respondents (Table 9). Four ethnic groups also list it as their most important factor (Cambodian, Rwandese, Somali, and Sudanese), and all others except Bosnians place it among their top five. Related to this, the second most popular answer is "good place to raise children." All but the Vietnamese rank it in their top five.

Good jobs and a healthy economy rank third among respondents, and five ethnic groups also rate it highly. Low crimes and safe neighborhoods rank fourth, and rank in the top five among six ethnic groups. Finally, affordable housing is cited as the fifth most popular factor overall, and figures into the top five among five ethnic groups.

Table 9. Most Important Factors for a Healthy Community

Overall		
Rank	**Factor**	**Percent**
1	Good schools	44%
2	Good place to raise children	38%
3	Good jobs and healthy economy	35%
4	Low crime/safe neighborhoods	34%
5	Affordable housing	29%

Cambodian		
Rank	**Factor**	**Percent**
1	Good schools	57%
2	Strong family life	54%
3	Good jobs and healthy economy	47%
4	Good place to raise children	43%
5	Religious or spiritual values	34%

Latino		
Rank	**Factor**	**Percent**
1	Affordable housing	47%
2	Good place to raise children	39%
3	Good jobs and healthy economy	37%
4	Low crime/safe neighborhoods	31%
5	Good schools	26%

Sudanese		
Rank	**Factor**	**Percent**
1	Good schools	49%
2t	Good place to raise children	35%
2t	Strong family life	35%
4	Low crime/safe neighborhoods	26%
5	Clean environment	25%

Somali		
Rank	**Factor**	**Percent**
1	Good schools	74%
2	Affordable housing	66%
3	Good place to raise children	47%
4	Good jobs and healthy economy	39%
5	Low crime/safe neighborhoods	29%

Bosnian		
Rank	**Factor**	**Percent**
1	Low crime/safe neighborhoods	65%
2	Affordable housing	56%
3	Strong family life	47%
4	Healthy behaviors and lifestyles	36%
5	Good place to raise children	35%

Vietnamese		
Rank	**Factor**	**Percent**
1	Strong family life	51%
2	Low crime/safe neighborhoods	47%
3	Good jobs and healthy economy	41%
4	Good schools	39%
5	Religious or spiritual values	25%

Congolese		
Rank	**Factor**	**Percent**
1	Access to health care	57%
2	Good place to raise children	40%
3	Clean environment	30%
4	Good schools	28%
5t	Affordable housing	23%
5t	Religious or spiritual values	23%

Rwandese		
Rank	**Factor**	**Percent**
1	Good schools	76%
2	Clean environment	49%
3	Good place to raise children	44%
4	Low crime/safe neighborhoods	39%
5	Access to health care	22%

Russian		
Rank	**Factor**	**Percent**
1	Good jobs and healthy economy	63%
2	Low crime/safe neighborhoods	40%
3	Good place to raise children	34%
4	Affordable housing	29%
5	Good schools	26%

High blood pressure is cited as the most important health problem among all respondents, and all nine ethnic groups also have it in their top five, with Cambodians listing it as number one. Mental health problems rank second, and are among the top five of four ethnic groups, with Vietnamese listing it as their top problem. Aging problems such as arthritis and hearing loss are third, and in the top five of five ethnic groups, with Bosnians citing it as their top health problem. Other top ranking health problems are cancer (Russian), dental problems (Somali), diabetes (Congolese and Sudanese), domestic violence (Latinos), and HIV/AIDS (Rwandese).

Table 10. Most Important Health Problems in the Community, by Ethnicity

Overall		
Rank	**Problem**	**Percent**
1	High blood pressure	34%
2	Mental health problems	27%
3	Aging problems	23%
4	Diabetes	22%
5	Teenage pregnancy	19%

Cambodian		
Rank	**Problem**	**Percent**
1	High blood pressure	66%
2	Mental health problems	61%
3	Lung disease/asthma	41%
4	Aging problems	35%
5	Teenage pregnancy	28%

Latino		
Rank	**Problem**	**Percent**
1	Domestic violence	25%
2	High blood pressure	19%
3	Mental health problems	18%
4	Dental problems	17%
5	Teenage pregnancy	16%

Sudanese		
Rank	**Problem**	**Percent**
1	Diabetes	36%
2t	Domestic violence	30%
2t	HIV/AIDS	30%
4t	High blood pressure	29%
4t	Sexually transmitted diseases	29%
4t	Teenage pregnancy	29%

Somali		
Rank	**Problem**	**Percent**
1	Dental problems	61%
2	Diabetes	41%
3	High blood pressure	33%
4	Heart disease/stroke	31%
5t	Mental health problems	21%
5t	Sexually transmitted diseases	21%

Bosnian		
Rank	**Problem**	**Percent**
1	Aging problems	53%
2	Heart disease/stroke	44%
3t	Cancer	40%
3t	Dental problems	40%
3t	High blood pressure	40%

Vietnamese		
Rank	**Problem**	**Percent**
1	Mental health problems	59%
2	High blood pressure	47%
3	Lung disease/asthma	45%
4	Domestic violence	39%
5	Aging problems	29%

Congolese		
Rank	**Problem**	**Percent**
1	Diabetes	57%
2	Cancer	34%
3	High blood pressure	30%
4	Sexually transmitted diseases	28%
5t	Child abuse/neglect	21%
5t	HIV/AIDS	21%

Rwandese		
Rank	**Problem**	**Percent**
1	HIV/AIDS	73%
2	Cancer	66%
3	Diabetes	63%
4t	Aging problems	17%
4t	Dental problems	17%
4t	High blood pressure	17%

Russian		
Rank	**Problem**	**Percent**
1	Cancer	51%
2t	Aging problems	46%
2t	Heart disease/stroke	46%
2t	HIV/AIDS	46%
5	High blood pressure	26%

More than half of all respondents select alcohol abuse as one of the most important risky behaviors in their community (Table 11). Six of the nine ethnic groups also have it as their top risky behavior. Similarly, drug abuse ranks second overall, and in the top five for six ethnic groups. Being overweight is third overall and the top ranked problem among Cambodians, tobacco use is fourth and top among Russians, and Vietnamese cite unsafe sex as their community's most important risky behavior.

Table 11. Most Important Risky Behaviors in the Community, by Ethnicity

Overall		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	52%
2	Drug abuse	36%
3	Being overweight	34%
4	Tobacco use	34%
5	Lack of exercise	34%

Cambodian		
Rank	**Behavior**	**Percent**
1	Being overweight	54%
2	Lack of exercise	40%
3	Poor eating habits	39%
4	Unsafe sex	38%
5	Tobacco use	35%

Latino		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	61%
2	Racism	35%
3t	Being overweight	32%
3t	Tobacco use	32%
5	Drug abuse	28%

Sudanese		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	67%
2	Dropping out of school	44%
3	Drug abuse	42%
4	Racism	38%
5	Unsafe sex	24%

Somali		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	46%
2	Lack of exercise	44%
3	Drug abuse	37%
4t	Dropping out of school	36%
4t	Tobacco use	36%

Bosnian		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	65%
2t	Being overweight	60%
2t	Lack of exercise	60%
4	Poor eating habits	53%
5	Tobacco use	47%

Vietnamese		
Rank	**Behavior**	**Percent**
1	Unsafe sex	57%
2	Alcohol abuse	39%
3	Drug abuse	33%
4	Being overweight	29%
5	Racism	27%

Congolese		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	74%
2	Drug abuse	55%
3t	Lack of exercise	30%
3t	Poor eating habits	30%
5	Tobacco use	21%

Rwandese		
Rank	**Behavior**	**Percent**
1	Alcohol abuse	88%
2	Drug abuse	71%
3	Unsafe sex	56%
4	Poor eating habits	24%
5t	Racism	20%
5t	Tobacco use	20%

Russian		
Rank	**Behavior**	**Percent**
1	Tobacco use	63%
2t	Being overweight	60%
2t	Lack of exercise	60%
4	Alcohol abuse	46%
5	Poor eating habits	23%

When asked to indicate the health problem or risky behavior most important to them personally, a lack of exercise emerges as the top answer overall, as well as for Congolese and Latinos. It is also in the top five for three other ethnic groups. Dental problems rank second, and all ethnic groups except Cambodians and Vietnamese have it in their respective top five. Other top answers are aging problems (Bosnians), alcohol abuse (Sudanese), cancer (Russians and Rwandese), and poor eating habits (Cambodians and Vietnamese).

Table 12. Most Important Health Problems and Risky Behaviors for the Individual, by Ethnicity

Overall		
Rank	**Factor**	**Percent**
1	Lack of exercise	24%
2	Dental problems	22%
3	High blood pressure	22%
4	Poor eating habits	21%
5	Alcohol abuse	19%

Cambodian		
Rank	**Factor**	**Percent**
1	Poor eating habits	41%
2	Lack of exercise	39%
3	Being overweight	30%
4	High blood pressure	29%
5	Alcohol abuse	27%

Latino		
Rank	**Factor**	**Percent**
1	Lack of exercise	22%
2	Alcohol abuse	20%
3	Dental problems	19%
4t	Being overweight	17%
4t	Tobacco use	17%

Sudanese		
Rank	**Factor**	**Percent**
1	Alcohol abuse	34%
2t	Diabetes	33%
2t	HIV/AIDS	33%
4	High blood pressure	26%
5t	Being overweight	18%
5t	Dental problems	18%
5t	Mental health problems	18%

Somali		
Rank	**Factor**	**Percent**
1	Dental problems	67%
2	Diabetes	31%
3	High blood pressure	29%
4	Lack of exercise	21%
5	Poor eating habits	20%

Bosnian		
Rank	**Factor**	**Percent**
1	Aging problems	44%
2	Mental health problems	40%
3	Dental problems	36%
4t	High blood pressure	20%
4t	Tobacco use	20%

Vietnamese		
Rank	**Factor**	**Percent**
1	Poor eating habits	53%
2	Mental health problems	47%
3	Lack of exercise	39%
4	Alcohol abuse	31%
5t	High blood pressure	27%
5t	Tobacco use	27%

Congolese		
Rank	**Factor**	**Percent**
1	Lack of exercise	36%
2	Cancer	32%
3	Diabetes	30%
4t	Dental problems	23%
4t	HIV/AIDS	23%

Rwandese		
Rank	**Factor**	**Percent**
1t	Cancer	59%
1t	Diabetes	59%
3	HIV/AIDS	54%
4	Dental problems	32%
5	Poor eating habits	20%

Russian		
Rank	**Factor**	**Percent**
1	Cancer	71%
2	Heart disease and stroke	54%
3t	Aging problems	31%
3t	Diabetes	31%
5	Dental problems	26%

Table 13. Health Ratings, by Gender

Gender	Personal Health	Community Health	Difference
Male	3.74	3.19	17%
Female	3.65	3.24	13%

Table 14. Health Ratings, by Relationship Status

Gender	Personal Health	Community Health	Difference
Married/cohabitating	3.70	3.29	12%
Unmarried/single	3.69	3.14	18%

Table 15. Health Ratings, by Highest Education Level

Gender	Personal Health	Community Health	Difference
Less than high school	3.60	3.20	12%
High school diploma/GED	3.77	3.23	17%
Some college	3.75	3.18	18%
College degree or higher	3.74	3.26	14%

Table 16. Health Ratings, by Annual Household Income

Gender	Personal Health	Community Health	Difference
Less than $20,000	3.57	3.19	12%
$20,000 to $29,999	3.80	3.24	17%
$29,999 to $49,999	3.78	3.19	18%
$50,000 and over	3.94	3.09	27%

Table 17. Health Ratings by, Insurance Status

Gender	Personal Health	Community Health	Difference
Uninsured	3.89	3.15	24%
Government insurance	3.46	3.24	7%
Private insurance	3.83	3.20	20%

Table 18. Most Important Factors for a Healthy Community, by Gender

Men (n = 409)		
Rank	**Factor**	**Percent**
1	Good schools	43%
2	Good jobs and healthy economy	38%
3	Good place to raise children	36%
4	Low crime/safe neighborhoods	34%
5	Affordable housing	30%

Female (n = 471)		
Rank	**Factor**	**Percent**
1	Good schools	45%
2	Good place to raise children	41%
3	Good jobs and healthy economy	33%
4	Low crime/safe neighborhoods	33%
5	Affordable housing	29%

Table 19. Most Important Factors for a Healthy Community, by Relationship Status

Married/cohabitating (n = 446)		
Rank	**Factor**	**Percent**
1	Good place to raise children	48%
2	Good schools	44%
3	Good jobs and healthy economy	35%
4	Affordable housing	31%
5	Low crime/safe neighborhoods	30%

Not married/single (n = 412)		
Rank	**Factor**	**Percent**
1	Good schools	43%
2	Low crime/safe neighborhoods	37%
3	Good jobs and healthy economy	36%
4	Strong family life	29%
5	Good place to raise children	28%

Table 20. Most Important Factors for a Healthy Community, by Highest Education Level

Less than high school (n = 344)		
Rank	**Factor**	**Percent**
1	Good schools	49%
2	Good jobs and healthy economy	37%
3	Good place to raise children	36%
4	Low crime/safe neighborhoods	33%
5t	Affordable housing	30%
5t	Strong family life	30%

High school diploma or GED (n = 252)		
Rank	**Factor**	**Percent**
1	Good schools	42%
2	Good jobs and healthy economy	38%
3	Good place to raise children	34%
4	Low crime/safe neighborhoods	33%
5	Affordable housing	33%

Some college (n = 152)		
Rank	**Factor**	**Percent**
1t	Good place to raise children	41%
1t	Good schools	41%
3	Strong family life	36%
4	Low crime/safe neighborhoods	31%
5	Good jobs and healthy economy	30%

College degree or higher (n = 130)		
Rank	**Factor**	**Percent**
1	Good place to raise children	50%
2	Low crime/safe neighborhoods	38%
3	Good schools	37%
4	Good jobs and healthy economy	33%
5	Strong family life	27%

Table 21. Most Important Factors for a Healthy Community, by Annual Household Income

Less than $20,000 (n = 406)		
Rank	**Factor**	**Percent**
1	Good schools	44%
2	Low crime/safe neighborhoods	35%
3t	Good jobs and healthy economy	34%
3t	Good place to raise children	34%
5	Affordable housing	33%

$20,000 to $29,999 (n = 209)		
Rank	**Factor**	**Percent**
1	Good schools	44%
2	Good jobs and healthy economy	36%
3	Strong family life	34%
4	Good place to raise children	31%
5	Low crime/safe neighborhoods	29%

$30,000 to $49,999 (n = 158)		
Rank	**Factor**	**Percent**
1	Good place to raise children	52%
2	Good schools	44%
3	Strong family life	41%
4	Good jobs and healthy economy	34%
5	Low crime/safe neighborhoods	32%

$50,000 and over (n = 56)		
Rank	**Factor**	**Percent**
1	Low crime/safe neighborhoods	50%
2	Good place to raise children	46%
3	Good jobs and healthy economy	39%
4t	Good schools	30%
4t	Strong family life	30%

Table 22. Most Important Factors for a Healthy Community, by Insurance Status

Uninsured (n = 155)		
Rank	**Factor**	**Percent**
1	Low crime/safe neighborhoods	41%
2	Good schools	39%
3	Affordable housing	37%
4	Good jobs and healthy economy	34%
5	Good place to raise children	30%

Government insurance (n = 344)		
Rank	**Factor**	**Percent**
1	Good schools	48%
2	Good place to raise children	38%
3	Affordable housing	35%
4	Good jobs and healthy economy	33%
5	Low crime/safe neighborhoods	31%

Private insurance (n = 348)		
Rank	**Factor**	**Percent**
1	Strong family life	41%
2	Good schools	41%
3	Good place to raise children	41%
4	Good jobs and healthy economy	40%
5	Low crime/safe neighborhoods	35%

Table 23. Most Important Health Problems in the Community, by Gender

Men (n = 395)		
Rank	**Factor**	**Percent**
1	High blood pressure	35%
2	Mental health problems	27%
3	Aging problems	25%
4	Diabetes	24%
5	Heart disease and stroke	22%

Female (n = 456)		
Rank	**Factor**	**Percent**
1	High blood pressure	36%
2	Mental health problems	31%
3	Aging problems	23%
4	Teenage pregnancy	22%
5	Diabetes	21%

Table 24. Most Important Health Problems in the Community, by Relationship Status

Married/cohabitating (n = 426)		
Rank	**Factor**	**Percent**
1	High blood pressure	44%
2	Aging problems	32%
3	Mental health problems	31%
4	Heart disease and stroke	26%
5	Diabetes	25%

Not married/single (n = 403)		
Rank	**Factor**	**Percent**
1	Teenage pregnancy	28%
2	Mental health problems	27%
3	High blood pressure	27%
4	Lung disease and asthma	24%
5	Sexually transmitted diseases	24%

Table 25. Most Important Health Problems in the Community, by Highest Education Level

Less than high school (n = 333)		
Rank	**Factor**	**Percent**
1	High blood pressure	38%
2	Mental health problems	38%
3	Aging problems	27%
4	Lung disease and asthma	24%
5	Dental problems	21%

High school diploma or GED (n = 244)		
Rank	**Factor**	**Percent**
1	High blood pressure	28%
2	Aging problems	25%
3	Teenage pregnancy	24%
4t	Diabetes	24%
4t	Mental health problems	24%

Some college (n = 150)		
Rank	**Factor**	**Percent**
1	High blood pressure	40%
2	Mental health problems	26%
3	Lung disease and asthma	23%
4t	Diabetes	23%
4t	HIV/AIDS	23%

College degree or higher (n = 122)		
Rank	**Factor**	**Percent**
1	High blood pressure	39%
2t	Cancer	29%
2t	Heart disease and stroke	29%
4	Diabetes	27%
5	Domestic violence	21%

Table 26. Most Important Health Problems in the Community, by Annual Household Income

Less than $20,000 (n = 395)		
Rank	**Factor**	**Percent**
1	High blood pressure	33%
2	Diabetes	30%
3	Teenage pregnancy	25%
4	Mental health problems	22%
5	Dental problems	22%

$20,000 to $29,999 (n = 199)		
Rank	**Factor**	**Percent**
1	High blood pressure	37%
2	Mental health problems	34%
3	Aging problems	27%
4	Lung disease and asthma	25%
5t	Sexually transmitted diseases	18%
5t	Teenage pregnancy	18%

$30,000 to $49,999 (n = 156)		
Rank	**Factor**	**Percent**
1	High blood pressure	47%
2	Mental health problems	42%
3	Aging problems	37%
4	Heart disease and stroke	28%
5	Lung disease and asthma	25%

$50,000 and over (n = 55)		
Rank	**Factor**	**Percent**
1	Cancer	44%
2	Heart disease and stroke	36%
3	HIV/AIDS	31%
4t	Dental problems	27%
4t	High blood pressure	25%

Table 27. Most Important Health Problems in the Community, by Insurance Status

Uninsured (n = 143)		
Rank	**Factor**	**Percent**
1	Domestic violence	24%
2	Diabetes	22%
3t	Child abuse and neglect	21%
3t	Dental problems	21%
3t	Teenage pregnancy	21%

Government insurance (n = 336)		
Rank	**Factor**	**Percent**
1	High blood pressure	37%
2	Diabetes	29%
3	Dental problems	24%
4	Mental health problems	23%
5	Aging problems	22%

Private insurance (n = 340)		
Rank	**Factor**	**Percent**
1	High blood pressure	41%
2	Mental health problems	39%
3	Aging problems	33%
4	Lung disease and asthma	26%
5	Heart disease and stroke	23%

Table 28. Most Important Risky Behaviors in the Community, by Gender

Men (n = 406)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	58%
2	Tobacco use	39%
3	Drug abuse	36%
4	Lack of exercise	34%
5	Being overweight	33%

Female (n = 457)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	48%
2	Being overweight	37%
3	Drug abuse	37%
4	Lack of exercise	34%
5	Tobacco use	31%

Table 29. Most Important Risky Behaviors in the Community, by Relationship Status

Married/cohabitating (n = 436)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	55%
2	Lack of exercise	42%
3	Being overweight	39%
4	Tobacco use	35%
5	Drug abuse	33%

Not married/single (n = 405)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	50%
2	Drug abuse	39%
3	Tobacco use	35%
4	Unsafe sex	33%
5	Being overweight	32%

Table 30. Most Important Risky Behaviors in the Community, by Highest Education Level

Less than high school (n = 339)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	53%
2	Being overweight	39%
3	Drug abuse	38%
4	Tobacco use	32%
5	Lack of exercise	31%

High school diploma or GED (n = 248)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	47%
2t	Lack of exercise	38%
2t	Tobacco use	38%
4	Drug abuse	35%
5	Being overweight	33%

Some college (n = 149)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	54%
2	Lack of exercise	39%
3	Drug abuse	36%
4	Being overweight	34%
5	Tobacco use	33%

College degree or higher (n = 125)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	60%
2	Tobacco use	39%
3	Lack of exercise	34%
4t	Being overweight	33%
4t	Drug abuse	33%

Table 31. Most Important Risky Behaviors in the Community, by Annual Household Income

Less than $20,000 (n = 397)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	52%
2	Drug abuse	41%
3	Tobacco use	33%
4	Lack of exercise	31%
5	Being overweight	30%

$20,000 to $29,999 (n = 206)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	52%
2	Tobacco use	36%
3	Being overweight	35%
4	Lack of exercise	33%
5	Drug abuse	33%

$30,000 to $49,999 (n = 158)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	47%
2	Being overweight	46%
3	Lack of exercise	45%
4	Poor eating habits	43%
5	Drug abuse	33%

$50,000 and over (n = 56)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	59%
2	Being overweight	48%
3t	Lack of exercise	43%
3t	Tobacco use	43%
5	Poor eating habits	27%

Table 32. Most Important Risky Behaviors in the Community, by Insurance Status

Uninsured (n = 150)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	63%
2	Drug abuse	47%
3	Tobacco use	39%
4	Racism	33%
5	Being overweight	29%

Government insurance (n = 336)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	49%
2	Drug abuse	39%
3	Lack of exercise	36%
4	Tobacco use	32%
5	Being overweight	30%

Private insurance (n = 343)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	48%
2	Being overweight	44%
3	Lack of exercise	41%
4	Tobacco use	34%
5	Poor eating habits	34%

Table 33. Most Important Health Problems and Risky Behaviors for the Individual, by Gender

Male (n = 382)		
Rank	**Factor**	**Percent**
1	Tobacco use	26%
2	Alcohol abuse	25%
3	Lack of exercise	24%
4	High blood pressure	23%
5	Dental problems	20%

Female (n = 445)		
Rank	**Factor**	**Percent**
1	Lack of exercise	27%
2	Dental problems	27%
3	Poor eating habits	24%
4	High blood pressure	24%
5	Being overweight	22%

Table 34. Most Important Health Problems and Risky Behaviors for the Individual, by Relationship Status

Married/cohabitating (n = 419)		
Rank	**Factor**	**Percent**
1	Dental problems	30%
2	High blood pressure	28%
3	Lack of exercise	27%
4	Diabetes	21%
5	Cancer	21%

Not married/single (n = 384)		
Rank	**Factor**	**Percent**
1	Poor eating habits	27%
2t	Alcohol abuse	25%
2t	Lack of exercise	25%
4	Being overweight	21%
5	Tobacco use	21%

Table 35. Most Important Health Problems and Risky Behaviors for the Individual, by Highest Education Level

Less than high school (n = 330)		
Rank	**Factor**	**Percent**
1	High blood pressure	28%
2	Lack of exercise	28%
3	Mental health problems	25%
4	Poor eating habits	24%
5t	Dental problems	23%
5t	Tobacco use	23%

High school diploma or GED (n = 236)		
Rank	**Factor**	**Percent**
1	Dental problems	28%
2	High blood pressure	22%
3	Tobacco use	21%
4	Lack of exercise	21%
5	Poor eating habits	20%

Some college (n = 142)		
Rank	**Factor**	**Percent**
1	Lack of exercise	28%
2	Alcohol abuse	25%
3	Poor eating habits	24%
4	Cancer	22%
5	HIV/AIDS	21%

College degree or higher (n = 116)		
Rank	**Factor**	**Percent**
1	Diabetes	28%
2	Lack of exercise	28%
3t	Cancer	25%
3t	Heart disease	25%
5	High blood pressure	24%

Table 36. Most Important Health Problems and Risky Behaviors for the Individual, by Annual Household Income

Less than $20,000 (n = 382)		
Rank	**Factor**	**Percent**
1	Dental problems	29%
2	High blood pressure	25%
3	Diabetes	24%
4	Lack of exercise	23%
5t	Mental health problems	21%
5t	Poor eating habits	21%

$20,000 to $29,999 (n = 196)		
Rank	**Factor**	**Percent**
1	Alcohol abuse	28%
2	Poor eating habits	25%
3	Lack of exercise	24%
4	Being overweight	24%
5	Tobacco use	20%

$30,000 to $49,999 (n = 154)		
Rank	**Factor**	**Percent**
1	Lack of exercise	36%
2	Poor eating habits	28%
3	Mental health problems	23%
4	Alcohol abuse	23%
5t	Being overweight	21%
5t	Dental problems	21%

$50,000 and over (n = 51)		
Rank	**Factor**	**Percent**
1	Cancer	47%
2	High blood pressure	31%
3	Heart disease	25%
4	Diabetes	24%
5	Being overweight	22%

Table 37. Most Important Health Problems and Risky Behaviors for the Individual, by Insurance Status

Uninsured (n = 134)		
Rank	**Factor**	**Percent**
1t	Alcohol abuse	28%
1t	Tobacco use	28%
3	Lack of exercise	24%
4	Dental problems	23%
5	Cancer	21%

Government insurance (n = 333)		
Rank	**Factor**	**Percent**
1	Dental problems	31%
2	High blood pressure	28%
3	Diabetes	27%
4t	Lack of exercise	22%
4t	Mental health problems	22%

Private insurance (n = 327)		
Rank	**Factor**	**Percent**
1	Lack of exercise	29%
2	Poor eating habits	29%
3	Being overweight	26%
4t	Alcohol abuse	21%
4t	Mental health problems	21%

Appendix 3. Photovoice Parent/Guardian Consent Form

PHOTOVOICE

Parent/Guardian Consent Form

Project Title

Photovoice: A Youth Perspective on the Health of Cumberland County

Introduction

The Photovoice Project is being conducted on behalf of the Communities Promoting Health Coalition (CPHC) and Eastern Cumberland County Health Coalition (ECCHCO) to give youth the opportunity to contribute to the Community Themes and Strengths Assessment (CTSA) for Cumberland County.

Through the CTSA we hope to better understand how county residents feel about the health issues in their town or city. While adults are well represented in the assessment, there is a lack of information from the youth perspective. As a result, the Photovoice Project is being implemented to give young members of the community an opportunity to share their thoughts and ideas via photography.

The following are answers to general questions about the project and roles of participants.

What is my child's role?

As a Photovoice participant your child will be a *photographer* and *storyteller*.

- Participants will take pictures of the health related strengths and weaknesses of their community. In other words, students will take pictures of the aspects of their community that make it *easy* to be healthy and the aspects of their community that make it *difficult* to be healthy. For example, bike lanes are a strength that allows people to be more active and healthy, while the lack of sidewalks on a busy street is a weakness that makes walking difficult and dangerous.
- Participants will discuss the photos with their class, club, or group and identify the health related strengths and weaknesses.
- Participants will select two photos they feel most accurately depict their community and write a short narrative about why they took the pictures and how the pictures relate to the health of their community.

Additionally, your child is expected to act in an ethical manner when participating in Photovoice. Each participant will act accordingly by:

- Respecting people's privacy.

- Not taking anyone's picture without prior consent to do so.
- Not taking pictures that may result in harm to themselves or others.
- Not using photographs that reveal true but embarrassing facts about individuals, when such facts are not a legitimate concern to the public.
- Not writing stories about the photographs that are untrue or misrepresent the intentions, character, or actions of the person(s) in the photograph.

How will the photographs be used?
The photographs will be used to encourage discussion about the positive and negative health aspects of the participants' community. A final written product containing photographs and accompanying narratives will be used as part of the Community Themes and Strengths Assessment. Photographs and narratives may also be used for public exhibits, presentations, publications, and/or other educational purposes at a future date.

Can my child's photographs be used without my permission?
You and your child are the explicit owners of any negatives and photographs (including digital images) resulting from the Photovoice Project. Before your child's photographs can be used for the project, we must first obtain your express written consent.

How will my child's name or identifying information be used?
Your child's name or identifying information (e.g., age, school, hometown, etc.) will not be used with his/her photographs and stories without your express written consent.

How will photographs and additional project information be stored?
Photographs and all other project information will be stored in computer files designated for this research project or secured in a locked storage file. All data stored in computers will be password protected.

Can my child withdraw from participation at anytime during the project?
Your child is participating on a purely voluntary basis. Therefore, if at any time and for whatever reason you or your child decides to no longer participate in Photovoice, he/she may do so without consequence. The only requirement is that Marice Reyes Tran be notified of the withdrawal at mtran@portlandmaine.gov or (207) 541-6952. Additionally, a written request for the removal of photographs and narratives from the project is required if written consent was already given for the use of such materials.

What if I have additional questions about the project or my child's participation?
If you have any questions about Photovoice, please contact Marice Reyes Tran at mtran@portlandmaine.gov or (207) 541-6952. Also, if you consent to your child's participation in this project you will receive a copy of the signed form for your reference.

Your signature below indicates that you have read and understand all the information included in this form and consent to your child's participation in Photovoice.

Participant's Name (please print):_____ Age:_____

Parent/Guardian's Name (please print):_____

Parent/Guardian's Signature:_____ Date:_____

Parent/Guardian signature required if participant is under 18 years of age.

Appendix 4. Photovoice Acknowledgement and Release Form

PHOTOVOICE

Acknowledgement and Release Form

Project Title

Photovoice: A Youth Perspective on the Health of Cumberland County

Introduction

The Photovoice Project is being conducted on behalf of the Communities Promoting Health Coalition (CPHC) and Eastern Cumberland County Health Coalition (ECCHCO) to give youth the opportunity to speak out about the health issues in their city or town. By doing so, we hope to improve future health efforts in their community.

If you are asked to have your photograph taken as part of the project and agree to do so, please read the following and sign the next page:

- **What is the purpose of the photographs?** If selected, the photograph(s) you appear in will be used to identify the positive and negative health aspects of your community (e.g., bikers riding in a bike lane = positive; poorly maintained public park = negative).

- **What is involved?** Your participation will take less than five minutes. During this time the photographer(s) will take pictures containing images of you. Your name and any identifying information will be kept confidential and will not be used with the photographs or reports. Your decision to be photographed is voluntary and you may decline to participate.

- **What happens to the photographs?** Photographs become the property of the Photovoice photographer. Not all photographs will be used in the project. Those that are selected may be used in presentations, publications, or exhibits. All photographs and information used in the project will be maintained in a confidential manner by storing data in a password protected computer file and/or locked storage file.

- **What if I have other questions?** You may contact Marice Reyes Tran at (207) 541-6952 or mtran@portlandmaine.gov.

PHOTOVOICE

Acknowledge and Release Form

Agreement Statement

By signing this consent form, I agree to voluntarily have my picture or my child's picture taken. I understand and agree that unless otherwise notified in writing, Communities Promoting Health Coalition and Eastern Cumberland County Health Coalition assumes that permission is granted to use my photograph(s) for public exhibits, presentations, exhibits, and/or other educational purposes and that no identifying information will be used.

If the individual being photographed is a minor, parental/guardian permission must be provided.

Child's Name_____ Child's Age_____

Parent/Guardian's Name (please print)_____

Parent/Guardian's Signature_____ Date_____

OR

Adult's Name (please print)_____

Adult's Signature_____ Date_____

Photographer's Name_____

Thank you for your time and help!

Appendix 5. Photovoice Release of Creative Materials

PHOTOVOICE

Release of Creative Materials

Project Title Photovoice: A Youth Perspective on the Health of Cumberland County

The Communities Promoting Health Coalition (CPHC) and Eastern Cumberland County Health Coalition (ECCHCO) thank you for participating in Photovoice. To move forward, CPHC and ECCHCO need your permission to use the pictures you have taken and narratives you have written. If you agree to the use of your materials for the purposes of Photovoice, please complete this form and sign the next page.

1. I give CPHC and ECCHCO permission to use my photographs that are identified by the following titles or labels. If permitted to use all photographs, please check "ALL Photographs" below.

Photograph #1:_____

Photograph #2:_____

Additional Photographs:_____

_____

_____

___ ALL Photographs

2. I give CPHC and ECCHCO permission to use the narratives I wrote about the photographs identified in Section 1 (One) of this form.

3. I give CPHC and ECCHCO permission to use my photographs and narratives for the following purposes. Check all that apply.

___Publications
___Presentations
___CPHC/ECCHCO websites
___Exhibits
___Any/all other educational purposes

4. I give CPHC and ECCHCO permission to use limited identifying information with my photographs and narratives as indicated below. Check all that apply and provide information, if applicable.

___First name ___School name:_____

___Age ___City/town you live in:_____

___Do not use any identifying information

Agreement Statement

Your signature below indicates that you have read and understand all the information included in this form and consent to the use of your or your child's photographs and narratives in the Photovoice Project.

Participant's Name (please print):_____ Age:_____

Participant's Signature:_____ Date:_____

Parent/Guardian's Name (please print):_____

Parent/Guardian's Signature:_____ Date:_____

Parent/Guardian signature required if participant is under 18 years of age.