Assessment and Intervention for the

Community of Sidney, Ohio 45365

WSU-MVH College of Nursing

NUR 422

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I completed my Associates Degree in nursing in 1997 from the University of Toledo, and have been a nurse for almost 15 years. Through the years, I have developed many of the leadership characteristics necessary of a community health nurse. I am able to recognize human need and have vision in the health improvement and well-being of individuals, families, and communities (Maurer & Smith, 2009).

I chose Sidney Ohio, 45365 as my area of community assessment and intervention.

I based my community practice on Neuman's total person approach; and its incorporation of interrelated parts with a common purpose (Anderson & McFarlane, 2011). I find this approach interesting as it reminds me of several Biblical truths. For instance, 1Cor. 12:12-28 (New Living Translation) discusses the different parts of the church body, and how they interact and are interrelated. The Bible illustrates this as the human body and its parts in relationship to the body of Christ, the church, and its parts. Every part of the body has an effect on the other parts of the body. It speaks of the importance of all parts of the body and their ability to strengthen or weaken others. I believe this to be true of a community, and that is why I have an appreciation for Neuman's approach. Neuman's model applied to a community is the basis for the Community as Partner Model.

The basis of a community assessment is to determine strengths and weaknesses of a community in relation to health, wellness, and safety; and to develop an intervention or plan to address these issues. The community as partner (CAP) model incorporates a community assessment wheel that has separate but co-existing parts. The demographics, values, history, and beliefs are all represented in the population core. This core is influenced by, and in turn influences, the eight subsystems. These include recreation, physical environment, education,

safety and transportation, politics and government, health and social services, communication, and economics (Figure 1). Assessment and data collection show areas of strengths and weaknesses (Anderson & McFarlene, 2011).

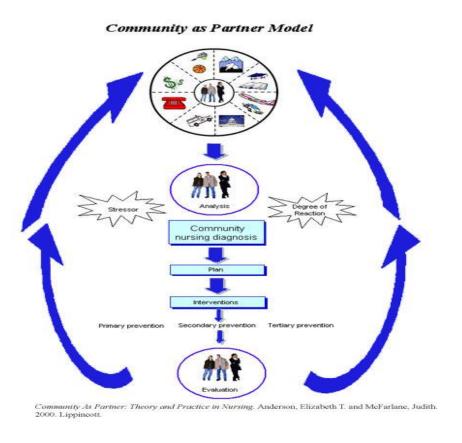


Figure 1. Assessment Wheel (Community as Partner) Consisting of Eight Subsystems. Source: Community as Partner Model retrieved on 02/16-2012 from http://www.georgiahealth.edu/itss/edtoolbox/7100/2007%20Module%20CAA%20Overview%20

Content/2007\_ModuleCAA%20folder/2007\_CA\_Model.htm

Through the CAP Model framework and the assessment techniques of a windshield survey, key informant interviews, and vital statistics, a nursing care plan can be formulated with the use of the nursing process. This will allow intervention within a subsystem(s) that will have a ripple affect into other subsystems of the model, and will then have an impact on the

community as a whole. Although the Sidney community seems healthy and stable at this time, there are several areas that can be improved upon. Many of these areas will be discussed. A nursing diagnosis, intervention, and care plan will be created.

### **Community Core**

### History/Demographic Overview/Values

Historically, Sidney has been a manufacturing and production town since the 1800's, and serves as the county seat of Shelby County. The age range in Sidney varies widely, and can be found in Table 1 of the Appendix. The population demographics by race or ethnicity for the city, county, and state; are found in Table 2 of the Appendix. The values and beliefs are primarily of the Christian church, and 56.3% of the population affiliates with a Christian congregation.

## **Subsystems**

### **Physical Environment**

Table 3 in the Appendix shows the land area in square miles for Shelby County, the city of Sidney in square miles, as well as the land and water coverage in square miles of Ohio. The physical environment of Sidney is crucial to its subsystems and core characteristics. Also important are the suprasystems just outside the boundary of this community. The nearest suprasystems are the smaller villages and towns within Shelby County. These include Houston, Botkins, Jackson Center, Port Jefferson, Lockington, and Fort Loramie; all towns or villages sharing Shelby County. Larger cities also with an impact on Sidney are Dayton to the south and Lima to the north. These suprasystems are all important as no community is in isolation (Maurer & Smith, 2009). Figure 2 shows the city of Sidney, and the surrounding suprasystems.

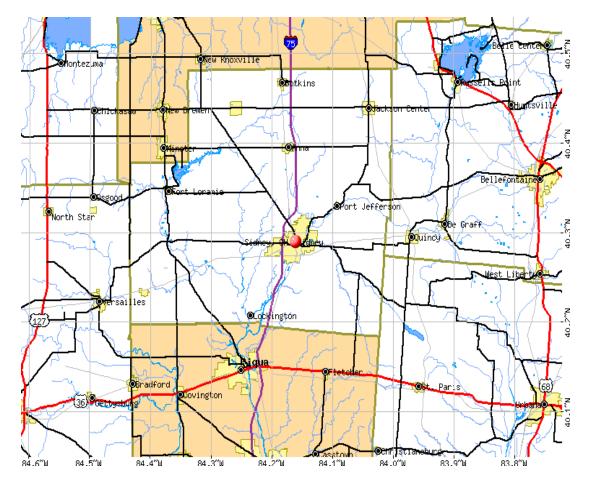


Figure 2. The City of Sidney, Ohio. Source: City Data retrieved on 01/24/2012 from http://www.city-data.com/city/Sidney-Ohio.html

## **Transportation**

According to the city of Sidney website (Sidneyoh.com, 2012) data, over 90% of people drive to work in private vehicles, and 5% carpool. The remainder work at home or walk. The streets and sidewalks are in good repair throughout the city, with handicap accessible parking.

#### **Health and Social Services**

Wilson Memorial Hospital is the community hospital within Sidney providing healthcare services to the public, and has an on-site helipad for transports to major medical centers (Wilson Memorial Hospital, 2012). Other community offerings are a health department, a WIC program, and an income based free clinic. There are also several nursing homes, assisted living, and

senior living centers available. There is a 24 hour paid fire department, city police department, and county sheriff's department.

#### **Politics and Government**

Sidney has a council-manager system of government (Sidneyoh.com, 2012) consisting of a mayor and six members. Three members are elected at large by the city voters, while the remainders are elected from the four wards. According to the website, 68% of the community voted for the Republican Party Presidential candidate in 2008.

#### **Economy**

The economy in Sidney is at a standstill presently. Unemployment is at 9.8%, equaling the unemployment rate in Ohio, and surpassing the unemployment rate in Shelby County. Table 4 in Appendix A shows the unemployment statistics by age for the years 2007-2009, according to the U.S. Census Bureau statistics.

#### Communication

People in the city generally communicate by cell phone. Public forms of published communication include the newspapers *The Sidney City News*, and the *Dayton Daily News*. Bulletin boards are present in many buildings, offering community programs, help wanted ads, and job offerings. The city also offers 105.5 WMVR-FM, a radio station with a modern mix of music, entertainment, and local and national news information (Sidneyoh.com website, 2012).

#### **Education**

City schools are rated effective by the state (Sidneyoh.com, 2011). The district is composed of four public elementary schools, a public middle school, and a public high school. The high school shows an enrollment of 1158 students for grades 9-12. In addition, there is a catholic elementary and high school, consisting of 266 and 261 students respectively. A

Christian Academy school also accounts for 261 students enrolled in K-12. There is no college or university within the city. There are however, eight colleges or universities within 35 minutes of driving from Sidney (Sidneyoh.com, 2011).

#### Recreation

There are 14 city parks within the city limits of Sidney, and 20 parks within Shelby County. The largest is Tawawa Park with over 9 miles of walking or biking trails, several fishing ponds, soccer fields, and baseball and softball complexes (Sidneyoh.com, 2011). The city also offers a YMCA with numerous recreation and activity services (Sidney-ymca.org, 2012).

## **Windshield Survey**

On January 10th, 2012, a windshield survey was conducted. The windshield survey shows a town that is overall pleasing to the senses. The buildings appeared in fair condition and the homes appeared in fair repair. Older homes built in the late 1800's and early 1900's were present in the downtown area, and newer homes were present as the drive moved out from the center of town into the surrounding streets and suburban areas. The lawns are taken care of and the noise level was low.

The parks and waterways were visually pleasing and appear clean and sanitary. There is no foul odor in the air or near the waterways. Sidewalks, alleys, and roadways were in good repair. Transportation in the area appeared to be by private vehicle primarily as no public buses or taxis were noted. There were more than a dozen churches of the Christian denomination seen from the center of town.

The people within the community appeared to be between the ages of 30 and 60 years old, and only a few teens or young adults were seen. Most people were dressed nicely, and

appeared to be working, or walking to work. There were several people smoking downtown and a few overweight individuals were seen. However, most individuals appeared healthy and well kept.

The general impression of the health and safety in the area was good. There was no evidence of loitering, crime, or drug dealing. The parking lots of the businesses were full and several school buses were driving through town. The community appeared to be healthy and safe. At no time did the community feel dangerous or threatening.

#### **Key Informant Interviews**

#### **Interviews**

The Community as Partner Model contains eight subsystems that have a direct and reciprocal impact on the population core (Anderson & McFarlane, 2011). Members for interviewing were chosen based on their roles or relationship within these subsystems. These included an unemployed 58 year old white, male patient (G.R.) at the free clinic, a 51 year old white, female Family Nurse Practitioner (W.Y.) that has two grandchildren within the Sidney City School system, and a 62 year old white, male elementary school principal (G.J.). Also interviewed was a 38 year old white, male counselor, fitness trainer, and father of five (D.O.), and a 45 year old black, male police sergeant (M.W.) and father of two teens.

## **Needs Interpretation**

The informants were generally pleased with the physical appearance of the community, maintenance of homes and structures, and cleanliness of parks and waterways. The informants believe the community to be safe and healthy for the most part. The informants also voiced knowledge of the community economic situation and its impact on programs.

9

The overall needs interpretations by these informants were both felt and normative needs. The unemployed man felt jobs to be a priority to ensure a safer and healthier community. The nurse practitioner, on the other hand, feels school aged children and their health to be of primary concern, including teen promiscuity, childhood obesity, and a poor school system. The school principal interviewed feels the school system is adequate, but is concerned with the pregnancies, obesity, and the drug culture within the community. He feels the children of the community are the number one priority for issues of safety and health. The counselor and fitness trainer interviewed feels the school system is adequate. His concern lies with the behavioral choices made by teens as he navigates from school to school for fitness instruction. The sergeant interviewed feels the area of most concern for the community involves its children. He stated that, "kids are out smoking, skipping school, breaking laws, and getting into all kinds of trouble. There are a lot of teen pregnancies within this area. I think the future health of a community lies in the children." He feels these all play a major factor in the health and safety needs of the community. The normative needs for health and safety were based primarily on the children.

The key informants generally feel there are adequate resources and facilities available to the community in regards to health, safety, and wellness. For example, the community offers many parks and recreation areas, along with a DARE program in the schools. In addition, the YMCA offers parenting classes, and there is also a pregnancy crisis center. The overall sense gained from the informants was that programs are available for the community, just not utilized.

Areas of health and safety concerns noted most by the key informants were teen pregnancy, obesity amongst school-aged children, smoking and drug use, and the economy. The aggregate in most need of intervention according to the key informants, are the children and teens within the community. Unfortunately, the windshield survey was conducted on a weekday

morning not allowing much observation of the youth within the community. It appears the community is well as a whole, with a gap in the education of the youth in regards to behavioral health choices. A community forum would be helpful in gathering more information in regards to potential gaps, and an open forum at a school would likely prove beneficial. Due to barriers of identification and possible embarrassment of individuals, a confidential blog or forum would also be beneficial in collecting data. Most informants feel that education in these areas is the primary need for the health and safety of the Sidney community as a whole.

#### **Vital Statistics**

Vital statistics contain recorded information about the community. This information can be used to monitor for specific diseases, disease patterns, trends in morbidity and mortality, health statistics, and other statistical demographical data that may contribute to health status or behaviors; and the health services that may be needed for a community (Rowe, 2009).

Two national services used for data collection in the evaluation of Sidney, Ohio were the U.S Census Bureau and the National Center for Health Statistics. As noted in Tables 1 and 2 of the Appendix, the U.S. Census Bureau provides statistics on demographics such as population by age, sex, race, or ethnicity. The National Center for Health Statistics provides statistical information on adult smoking data and can be found in Table 4 of the Appendix. As noted, the percent of adult smokers in Shelby County is 4% higher than in Ohio on average. When comparing neighboring counties, Shelby is 12% higher than Auglaize County, and 7% higher than Logan County in its percentage of adult smokers.

The Healthy People 2020 website was useful in collecting data for the Sidney community. The website provided information on the 2020 topics and objectives through an easy to use index guide. Areas explored were adolescent health, sexually transmitted diseases,

obesity, and tobacco use. One of the Healthy People 2020 objectives considered for focus was the leading health indicator of reproductive and sexual health. According to this site, over half of all pregnancies are unintended. Unintended pregnancies are at an increased risk of low birth weight babies, postpartum depression, delays in receiving prenatal care, and family stress. The statistics go on to say that more than 400,000 teen girls age 15 to 19 give birth each year in the United States (Healthypeople.gov, 2012). The statistics related to this health indicator along with informant interviews encouraged further investigation into the Sidney community's pregnancy statistics.

Two state sources of statistical information were the Ohio Department of Health, Center for Public Health Statistics and Informatics; and the Ohio Department of Health, report on the Prevalence of Childhood Obesity amongst third graders in Ohio. For example, Table 5a of the Appendix shows the morbidity numbers and mortality rates for Shelby County as reported by the Center for Public Health Statistics and Informatics. This information was used to view statistics in Shelby County that exceed the state average. Infant mortality rates may be viewed in table 5b. This table shows much better infant mortality statistics in Shelby County than Ohio in general. Lastly, a report from the Ohio Department of Health is represented in Table 6, and shows the prevalence of childhood obesity. This data was all collected and investigated to view the health and safety of the Sidney community.

There were also numerous local data sources to view the Sidney community. The most easily assessable were the city and county websites. The website <a href="http://www.sidneyoh.com/">http://www.sidneyoh.com/</a> offers historical data, population data, and demographic information to name just a few. The site also steers one to additional resources and information that may be assessed. The county website <a href="http://co.shelby.oh.us/">http://co.shelby.oh.us/</a> offers similar information and is crucial in comparing Sidney City

statistical information to county wide information. These may then be compiled into tables that have a statistical comparison to state or national data. Table 7 in Appendix A is a good example of a comparison table of city, state, and national unemployment rates. This data is used in viewing possible employment deficiencies in a community through a comparable manner.

### **Detailed Demographics**

The demographic data of Sidney, Ohio including age, sex, race, ethnicity, morbidity, mortality, and education attainment will be discussed. Income, primary employers, home valuation, and familial constitution will also be detailed. Tables will be referred to throughout this portion of the paper.

## Population by Age/Sex/Race/Ethnicity

The population of Sidney is 21, 229 people per the 2010 government census. Shelby County is comprised of 49,423 people. The population under age 18 is 5,771, while the population of elderly over the age of 65 is 2,631. The U.S. Census Bureau statistical data for population by sex and age for the city, county, and state of Ohio is represented in Table 1 of the Appendix. Those claiming to be white, account for 90% of the Sidney community, with African Americans accounting for four percent. Other races or ethnicity population percentages are also noted in Table 2 of the Appendix.

#### **Mortality and Morbidity**

Table 5a in the Appendix shows the mortality rates per morbidity conditions, as reported in 2009 for Ohio and Shelby County. In order of occurrence by number and average age adjusted death rates, conditions included are heart disease, cancer, chronic lower respiratory disease, stroke, unintentional injuries or accidents, and Alzheimer's disease. Mortality statistics for Shelby County that exceed the state average are chronic lower respiratory disease, stroke, and

unintentional accidents. Table 5b shows the infant mortality rates for Shelby County and the state of Ohio in number, and rates of occurrence per 1,000 live births.

## Income/Education/Employment

Table 8 in the Appendix compares the median household income levels for the city of Sidney, Shelby County, and for the state of Ohio, as retrieved from the U.S. Census Bureau (2000, 2010). As noted, the average household income was \$38,663 in 2000 and \$41,608 in 2010. This was approximately \$5,000 dollars less in those years for a Sidney household than the average household in Shelby County. The 2010 Sidney income was nearly \$4,000 less than the average income for an Ohio household.

Educational statistics are noted in Table 9 of the Appendix. The table shows the highest levels of education attained in Sidney, Ohio, and Nationally. Areas to note are the percentage of those attending secondary educational facilities. Sidney ranks lower in the percentage of graduates that attend some college, those that earned an Associate Degree, those that earned a Bachelor's Degree, or those that earned a graduate degree. The only educational attainment that exceeds the state or national percentage, were those that graduated high school.

Employment by industry is shown in Table 10 of the Appendix. Employment percentages by industry for the city of Sidney, state of Ohio, and National are all listed. Manufacturing is a very strong industry in Sidney, accounting for 37.53% of the populations' employment. In contrast, the state of Ohio shows 17.08% and the nation shows a percentage of 11.93% in this area of employment. As earlier noted, the Sidney community has relied heavily on manufacturing since its establishment in the 1800's.

## Home Valuation/Family

According to the Sidneyoh.com website, the estimated house or condo value for the city

of Sidney was \$108.080 in 2009. The average house or condo value for the state of Ohio at that time was \$134,600. Figure 3 shows the 2009 house values distribution for the Sidney area. Figure 4 shows home sales for the past five years in Sidney, according to Sidneyoh.com (2012).

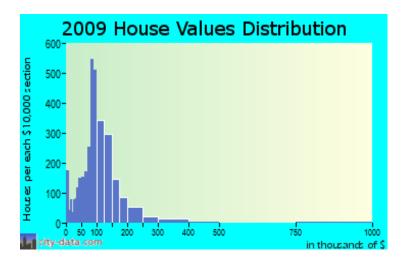


Figure 3. House Values Distribution. Source: City Data retrieved on 02/16/2012 from http://www.city-data.com/city/Sidney-Ohio.html



Figure 4. Home Sales in Sidney, OH. Source: City Data retrieved on 02/16/2012 from http://www.city-data.com/city/Sidney-Ohio.html

The average family household size in Sidney is 2.5 people. This is also true for the state of Ohio on average according to the website Sidneyoh.com (2012). However, the percentage of unmarried partners in a Sidney household is at 7%, while the number in Ohio on average is 5.2%. The percentage of self-reported gay or lesbian unmarried partner households was at 0.2% each. The percentage of children residing in a single family household within Shelby County is at 31%, which is 33% higher than the state average for Ohio (Shelby, Ohio, 2011).

## At Risk Group

When compiling the key informant interview information, the Healthy People 2020 Health Indicators and Objectives, as well as the vital statistic information, the most at-risk group within the Sidney community are its adolescents and teens. These concerns are based primarily on obesity, the lack of post-secondary education, and foremost; the numbers of teen pregnancies.

## **Analysis of Community Safety and Healthcare Needs**

Strengths noted within the community are the overall aesthetics of the area. People are pleased with the parks, green space, cleanliness, and upkeep. The numbers of health, safety, and social services available were also noted as strengths. However, there are inconsistencies in data gathered from the Windshield Survey, Key Informant Interviews, and Vital Statistics.

There is a growing gap in the median household income of individuals in Sidney when compared to the county and state. Diet, living conditions, and occupational hazards, are affected by income. Access to health care is also affected, as well as the time frame in which medical care is sought. This all affects an individual's health. As income levels slip, some families are pushed closer to the poverty level (Maurer, 2009)

Another potential area of concern is the rates of chronic lower respiratory disease and stroke. According to the National Center for Health Statistics, the Shelby County population

reports 27% of its adults as smokers. The Ohio general population is reported at 23%. Sidney has a 7% higher rate of adult smokers than neighboring Logan County, and a 12% higher rate of adults smoking than Auglaize County. This substantiates a need for possible interventions, such as education about behavioral factors that increase the risks of respiratory diseases and stroke.

The most consistent weaknesses when compiling the Key Informant Interviews and statistical data include the behavioral choices of adolescents and teens, including the primary concern of pregnancies, and a secondary concern of obesity among the youth. Also evident and consistent are educational deficiencies within the city, especially the lack of post-secondary education in Sidney.

## **Priority Diagnosis**

Potential problems for the Sidney community may include an increasing unemployment level, affecting diet, living conditions, crime, and access to care (Maurer, 2009). Other potential problems are the mortality and morbidity statistics for respiratory disease and stroke, and the probable correlation with the numbers of adults smoking. Childhood obesity is also a potential problem for consideration, despite an improving trend (Appendix, Table 6). Possible diagnoses and interventions could be initiated for any of these. However, the highest priority diagnosis assessed through the interviews and data involve teen pregnancies and the interrelated risks of STDs. Teen pregnancies also may cause educational deficiencies and financial implications to the individual, family, and community. There are several diagnoses that would be appropriate. For teens with pregnancy, an Omaha system diagnosis might be as follows. Teens with pregnancy, with potential for developing parenting and coping skills; this potential related to a desire to learn about community resources and agencies committed to providing information and services. As another example, a NANDA diagnosis of high risk for infection for teens of Shelby

County related to unprotected sex as evidenced by a rising number and rate of teen pregnancies and STDs in the county would be specific to this aggregate and problem.

## **Teen Pregnancy and STDs**

This problem is rooted in a lack of education and unsafe sex practices. The problem of teen pregnancy presents itself in the data. As noted in Tables 11a and 11b in the Appendix, the numbers and rates of teen pregnancy are higher for Shelby County among teens of nearly every age group, than the number and rates of pregnancies in Ohio; according to the National Vital Statistics System at the National Center for Health Statistics, at the Center for Disease Control (2011). As noted in Table 12 of the Appendix, sexually transmitted disease statistics in 2007 were worse for Shelby County, than neighboring Logan and Auglaize Counties (CDC, 2009).

There are numerous ways teen pregnancies and sexually transmitted diseases may affect the Sidney community. In addition to the possible spread of the sexually transmitted diseases within the community, teen pregnancy has a huge financial toll on a community also. The CDC (2009) reports teen pregnancy costing the tax payers \$9 billion dollars per year. These monies may be available for other community services and programs, if measures are taken place to increase the education among this aggregate. These pregnancies and births also play a significant role in high school dropout among girls. According to the study, only 50% of these teen mothers receive a diploma by age 22. This will then have a direct effect on employment, income, available resources, etc. When this aggregate and subsystem is stressed, it has a reciprocal effect on the other subsystems, the population core, and the community as a whole (Anderson & McFarlane, 2011).

The public health nurse can play an integral role in this concern, primarily in the areas of education and screening. Primary, secondary, and tertiary prevention measures should be

implored, and are within the scope of a community health nurse. In addition, there are several specialists to address then concern of teen pregnancy and STDs. These may include school nurses, crisis intervention specialists, and infectious disease nurses.

### **Planning and Intervention**

MAP-IT is a model to implement Healthy People 2020. It is an effort to mobilize, assess, plan, implement, and track areas of concern, in an effort to meet objectives. *Healthy People* 2020 contains objectives for preventing unintended pregnancies, HIV and STD testing, and nutritional counseling. According to *Healthy People* 2020, publicly funded family planning services help prevent 1.94 million unintended pregnancies, including 400,000 teen pregnancies. For every one dollar spent on these preventative services, four dollars in Medicaid expenditures for pregnancy-related care is saved (Healthy People 2020, 2011).

## **Education and Implementation**

There are numerous ways to provide health education in regards to teen pregnancy and sexually transmitted diseases. Resources necessary to carry out implementations would include collaboration between community health providers and the Sidney City School administrators, parental permission and consent, and the cooperation of the student body; to name a few. Other possible resources might include a pregnancy crisis counselor and nutritional counselor. An internet forum or blog may also be a useful resource for students to post questions or concerns in a confidential manner. An overall plan and assessment would be initiated with the establishment of long-term goals, short-term goals, interventions, rationale for the implementation, outcome measures and evaluation. The following would be an appropriate care plan for the NANDA diagnosis of, high risk for infection related to unprotected sex as evidenced by a rising number and rate of teen pregnancies in Shelby County, Ohio.

#### Care Plan

## **Long-Term Goal**

By May 31st, 2012, there will be increased education and awareness among members of Sidney Middle and High School of the increased rates of pregnancies, means of protection, risks of STD's, and community resources available. Awareness will be measured by comparing pre and post-test. Correct responses will increase by 20 percent.

With continued yearly sex education, the numbers and rates of teen pregnancy in Shelby County will decrease 20 percent by 2015. Also by 2015, the rates of STDs among teens in the county will fall below the Ohio average.

#### **Short-Term Goal**

Sidney High School will host a voluntary discussion topic on May 3<sup>rd</sup>, and May 17<sup>th</sup>, and May 31<sup>st</sup>, 2012 about sex among the teen population, along with discussion of community information and resources available for students, parents, and the community. Teens must bring signed parental consent form to attend, and parents are welcome.

## **Primary Intervention**

The community health nurse will present information that discusses teen sex behaviors, pregnancy, STD transmission, county statistics on pregnancy and STDs, and means of protection.

#### **Rationale**

A Pennsylvania study by the CDC (2009) found that students who participated in a teen pregnancy prevention class showed significant improvements in knowledge, skills, attitudes, and intentions related to preventing pregnancy and STDs. The study concluded that before the class 79% of students agreed that abstinence was the best way to prevent an STD. After the class,

89% agreed. Also, before the class, 81% of students answered that a person could have an STD and not know it. After the class, 94% answered correctly. Prior to the class, 46% of students answered correctly in regards to condoms preventing an STD. After the class, 80% answered this question correctly. And finally, before the class, 86% of students felt it important not to get an STD. After the class, 94% felt it important not to get a STD.

## **Secondary Intervention**

The community health nurse will work with parents to refer students for STD tests, pregnancy counseling and nutritional counseling if necessary, through the education of community resources available, and referral services provided.

#### Rationale

This will allow detection of disease or pregnancy early in the process so that treatment or care is appropriate (Maurer & Smith, 2009).

#### **Outcome Measures and Evaluation**

A pretest will administered to the Sidney Middle and High School students at the beginning of the discussion meeting on May 3<sup>rd</sup>, 2012 at the Sidney High School. The discussion on teen sexual behaviors, STD transmission and risk factors, and means of protection will be discussed, with information and educational material provided, on this day and May 17<sup>th</sup>.

A posttest will be conducted at the conclusion of the discussion meeting on May 31<sup>st</sup>. The results of the post test will show a 20 percent increase in knowledge regarding sexual behaviors among teens, teen pregnancy statistics, STD transmission, and means of protection. Knowledge of available screenings and community programs will also increase by 20 percent.

With continued yearly sex education, the numbers and rates of teen pregnancy in Shelby

County will fall below the average Ohio rates of teen pregnancy by 2015, as well as the cases and rates of STDs among teens in the county.

## **Summary**

Sidney, Ohio was assessed through the use of a windshield survey, the Community as Partner Model, key informant interviews, and vital statistics. This information and data was evaluated and discussed. Strengths and weaknesses for the health and safety of the community were identified. The teen aggregate was identified as the priority group at risk, primarily for increased pregnancy and STD statistics. A diagnosis was made, and a plan of care was formulated with rationale for the implementation, outcome measures, and evaluation criteria.

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# Appendix

Table 1

Population by Sex and Age, 2010

	Ohio	Shelby County	Sidney, Ohio_
	Number Percent	Number Percent	Number Percent
Total Population	11,536,504 (100%)	49,423 (100%)	21,229 (100%)
Male	5,632,156 (48.8%)	24,649 (49.9%)	10,422 (49.1%)
Female	5,904,348 (51.2%)	24,774 (50.1%)	10,807 (50.9%)
Under 18	2,730,751 (23.7%)	13,502 (27.3%)	5,771 (27.2%)
18 & over	8,805,753 (76.3%)	35,921 (72.7%)	15,458 (72.8%)
20-24	763,116 (6.6%)	2,494 (5.0%)	1,255 (5.9%)
25-34	1,409,959 (12.2%)	5,687 (11.5%)	2,729 (12.9%)
35-49	2,334,965 (20.2%)	10,275 (20.8%)	4,149 (19.5%)
50-64	2,339,323 (20.3%)	9,836 (19.9%)	4,119 (19.4%)
65& over	1,622,015 (14.0%)	6,362 (12.9%)	2,631 (12.4%)

 $U.S.\ Census\ Bureau\ (2010).\ Census\ interactive\ population\ search\ (2010).\ OH-Shelby\ County.\ Retrieved\ from $$http://2010.census.gov/2010census/popmap/ipmtext.php?fl=39$$ 

 $U.S.\ Census\ Bureau\ (2010).\ Census\ interactive\ population\ search\ (2010).\ OH-Sidney.\ Retrieved\ from\ \underline{http://2010.census.gov/2010census/popmap/ipmtext.php?fl=39}$ 

Table 2

Population by Race/Ethnicity, 2010

Race/Ethnicity	Ohio	Shelby County	Sidney, Ohio
	Number Percent	Number Percent	Number Percent
Total Population	11,536,504 (100%)	49,423 (100%)	21,229 (100%)
White	9,539,437 (82.6%)	46,793 (94.7%)	19,165 (90.0%)
African American	1,407,681 (12.2%)	935 (2.0%)	778 (4.0%)
Hispanic/Latino	354,674 (3.0%)	661 (1.0%)	463 (1.7%)
Asian	192,233 (1.6%)	423 (0.8%)	350 (1.5%)
American Indian/Alaskan Nati	ive 25,292 (0.2%)	78 (0.2%)	43 (0.2%)
Native Hawaiian/Pacific Island	der 4,066 (0.03%)	48 (0.1%)	32 (0.15%)
Other	130,030 (1.0%)	228 (0.8%)	169 (0.8%)
Identified by Two or More	237,765 (2.0%)	918 (2.0%)	692 (3.0%)

From: U.S. Census Bureau (2010). Census interactive population search (2010). OH-Ohio. Retrieved from <a href="http://2010.census.gov/2010census/popmap/ipmtext.php?fl=39">http://2010.census.gov/2010census/popmap/ipmtext.php?fl=39</a>

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 $U.S.\ Census\ Bureau\ (2010).\ Census\ interactive\ population\ search\ (2010).\ OH-Sidney.\ Retrieved\ from $$\underline{ttp://2010.census.gov/2010census/popmap/ipmtext.php?fl=39}$$ 

Table 3

Total Square Miles

	Ohio	Shelby County	Sidney, Ohio
Total	44,828 square miles	411 square miles	10.5 square miles
Land	40,953 square miles	409 square miles	10.4 square miles
Water	3.875 square miles	2 square miles	0.1 square miles

From: City of Sidney (2009). Retrieved from <a href="http://www.sidneyoh.com/">http://www.sidneyoh.com/</a>

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The Geography of Ohio (2011). Retrieved from <a href="http://www.netstate.com/states/geography/oh\_geography.htm">http://www.netstate.com/states/geography/oh\_geography.htm</a>

Table 4

Adult Smoking, 2003-2009 Data

	Auglaize County	Shelby County	Logan County
Sample Size	176	139	123
% smokers	15%	27%	20%
Error Margin	9-24	18-37	12-31
Z-score	-1.39	0.84	-0.46

Note. Z-score=Average of Ohio Counties (Standard Deviation). Ohio Average = 23%.

From: National Center for Health Statistics (2011). Shelby, Ohio. Adult Smoking. Retrieved from  $\underline{\text{http://www.countyhealthrankings.org/ohio/shelby/9}}$ 

Table 5a

Mortality Rates per Conditions of Morbidity in Number, Ohio and Shelby County, 2009

	<u>Ohio</u>		Shelby County	
	Number	Rate	Number	Rate
Heart Disease	25,898	193.2	90	169.7
Cancer	25,076	190.3	82	155.8
Chronic Lower Respiratory Disease	6,646	50.4	34	64.1
Stroke	5,563	41.7	22	44.5
Unintentional Injury (Accident)	4,707	38.8	23	47.5
Alzheimer's Disease	3,867	28.3	9	16.3

Note. Leading Causes of Death, Number and Average Age Adjusted Death Rates per 100,000 Population.

From: Ohio Department of Health, Center for Public Health Statistics and Informatics (2009). *Leading causes of death, number and average age adjusted death rates per 100,000 population, Ohio and counties 2009.* Retrieved from <a href="http://www.odh.ohio.gov/ASSETS/BC76EF2DA6B94497A9B8FED4A8524DFE/2009Aleading.pdf">http://www.odh.ohio.gov/ASSETS/BC76EF2DA6B94497A9B8FED4A8524DFE/2009Aleading.pdf</a>

Table 5b

Infant Mortality Rates in Number/Rate, Ohio and Shelby County 2008

	<u>Ohio</u>		Shelby C	County_
Year	Number	Rate	Number	Rate
2008	1,144	7.7	2	2.8

Note. Rate per 1,000 Live Births.

 $From: Ohio \ Department \ of \ Health-Vital \ Statistics \ (April 15, 2010). \ Retrieved \ from \ \underline{http://dwhouse.odh.ohio.gov/datawarehousev2.htm}$ 

Table 6

Prevalence of Childhood Obesity, 2004-2005, 2009-2010

	Ohio	Shelby County_
Years	Overweight/Obesity (95% Cl)	Overweight/Obesity (95%Cl)
2004-2005	35.6% (95% CI: 33.9-37.3)	46.8% (95% Cl: 44.7-48.8)
2009-1010	34.7% (95% Cl: 32.9-36.5)	31.7% (95%Cl: 28.1-42.2)

Note. Cl=Confidence Interval. Overweight/Obesity Prevalence Among Ohio 3<sup>rd</sup> Graders.

 $From: Oza-Frank, R., Norton, A., Scarpitti, H., Wapner, A., \& Conrey, E. (2010). \ \textit{A report on the body mass index of Ohio's third graders}. \ Ohio Department of Health. Retrieved from <math display="block"> \frac{\text{http://www.odh.ohio.gov/ASSETS/7D0AD631548D49008340E62FA0C9F586/BMI% 20Report2011.pdf} {\text{http://www.odh.ohio.gov/ASSETS/7D0AD631548D49008340E62FA0C9F586/BMI% 20Report2011.pdf} } \\$ 

Table 7

Estimated Unemployment Rates by Age, 2007-2009

	Ohio	(M.E.)	Sidney, Ohi	io (M.E.)	Nationa	l_(M.E.)
Population over 16	9.8%	+/-0.1	9.8%	+/-2.6	7.5%	+/-0.1
16-19 years	27.6%	+/-0.7	23.5%	+/-15.5	22.9%	+/-0.2
20-24 years	15.8%	+/-0.4	10.8%	+/-8.2	12.8%	+/-0.1
25-44 years	9.1 %	+/-0.2	11.5%	+/-5.5	6.7%	+/-0.1
45-54 years	7.2%	+/-0.2	6.9%	+/-4.9	5.5%	+/-0.1
55-64 years	6.8%	+/-0.2	4.5%	+/-3.0	5.1%	+/-0.1
65-74 years	5.3%	+/-0.3	5.6%	+/-8.6	4.7%	+/-0.1
75 years and over	4.8%	+/-0.9	0.0%	+/-54.0	4.5%	+/-0.2

Note. M.E.=Margin of Error.

 $U.S.\ Census\ Bureau\ (2010).\ Census\ interactive\ population\ search\ (2010).\ OH-Shelby\ County.\ Retrieved\ from\ \underline{http://2010.census.gov/2010census/popmap/ipmtext.php?f1=39}$ 

 $U.S.\ Census\ Bureau\ (2010).\ Census\ interactive\ population\ search\ (2010).\ OH-Sidney.\ Retrieved\ from\ \underline{http://2010.census.gov/2010census/popmap/ipmtext.php?fl=39}$ 

Table 8

Median Household Income 2000, 2010

<u>Years</u>	Ohio	Shelby County	Sidney, Ohio
2000	\$40,956	\$44,507	\$38,663
2010	\$45,151	\$46,062	\$41,608

Table 9

Highest Educational Level Attained, 2010

Highest Level Attained	Ohio	Sidney, Ohio	National_
Did Not Complete High School	12.88%	15.98%	15.35%
Completed High School	36.65%	42.20%	29.24%
Some College	19.24%	16.92%	20.56%
Associate Degree	7.05%	8.29%	7.50%
Bachelor's Degree	15.77%	11.51%	17.52%
Graduate Degree	8.42%	5.09%	9.84%

Note. Population (Age 25+).

From: City of Sidney (2009). Retrieved from  $\underline{\text{http://www.sidneyoh.com/}}$ 

Table 10

Employment by Industry, 2010

Employment Industry	Ohio	Sidney, Ohio	National
Ag, Forestry, Fishing, Hunting, and Mining	0.87%	0.81%	1.49%
Construction	6.23%	4.83%	6.97%
Manufacturing	17.08%	37.53%	11.93%
Wholesale Trade	3.07%	2.70%	3.05%
Retail Trade	10.24%	6.02%	10.02%
Transportation, Warehousing, and Utilities	5.33%	3.07%	5.58%
Information	2.29%	1.73%	2.94%
Finance, Insurance, Real Estate, and Leasing	6.43%	3.61%	6.91%
Professional, Scientific, Mgmt., Administrative, etc.	9.18%	6.80%	10.43%
Educational, Health, and Social Services	22.25%	16.63%	22.14%
Arts, Entertainment, Accommodation, and Food Services	8.03%	9.45%	8.46%
Other Services	4.77%	3.98%	5.15%
Public Administration	4.23%	2.85%	4.92%

Note. Civilian Population (Age 16+).

City of Sidney (2009). Retrieved from <a href="http://www.sidneyoh.com/">http://www.sidneyoh.com/</a>

Table 11a

Estimated Teenage Pregnancies and Rates, 2004

	Ohio 2004		Shelby County 2004	
	Number	Rate	Number	Rate
Age 10-14	590	1.5	3	1.6
Age 15-17	9384	39.5	42	38.9
Age 18-19	16444	103.3	82	145.1
Age 15-19	25828	65.1	124	75.4
Age 10-19	26418	33.2	127	35.7

Note. Number of Pregnancies and Rates per 1,000 Females.

Shelby, Ohio (2011). Teen birth rate. Retrieved from <a href="http://www.countyhealthrankings.org/ohio/shelby">http://www.countyhealthrankings.org/ohio/shelby</a>

Table 11b

Estimated Teenage Pregnancies and Rates, 2008

	Ohio 2	Ohio 2008		Shelby County 2008_	
	Number	Rate	Number	Rate	
Age 10-14	491	1.3	2	1.1	
Age 15-17	9258	38.7	54	46.4	
Age 18-19	16805	108.0	71	146.1	
Age 15-19	26063	66.0	125	75.8	
Age 10-19	26554	34.6	127	37.2	

Note. Number of Pregnancies and Rates per 1,000 Females.

Shelby, Ohio (2011). Teen birth rate. Retrieved from <a href="http://www.countyhealthrankings.org/ohio/shelby">http://www.countyhealthrankings.org/ohio/shelby</a>

Table 12

Rates of Reportable STD's, Ages 15-24, 2007

	Logan County	Shelby County	Auglaize County
Chlamydia	1000.1-3000	1000.1-3000	< or $= 1000$
Gonorrhea	< or $= 300$	300.1-600	< or $= 300$
Syphilis	< or $= 2.2$	< or $= 2.2$	< or = 2.2

Note. Rate per 100,000 Population

 $From: CDC \ (Oct\ 2009).\ National\ Electronic\ Telecommunications\ System\ for\ Surveillance.\ Retrieved\ from $$\underline{http://www.cdc.gov/std/stats/by-age/15-24-all-STDs/state/2007/OH07.pdf}$$