

Master of Public Health
Integrative Learning Experience Report

***CONDOM DISTRIBUTION STUDY: TN DEPARTMENT OF
HEALTH***

by

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submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Abstract

According to the Centers for Disease Control and Prevention (CDC), sexually transmitted diseases (STD) including chlamydia, gonorrhea and syphilis have been on the rise since 2013. Certain prevention programs have been implemented in order to lower these STD rates. One program in specific is condom distribution. This is a public health concern because STDs are increasing steadily in the state of Tennessee. I constructed a study to find the most effective way to distribute condoms to hopefully lower the new and reoccurring STD rates. Within three local county health departments I set up distribution sites and recorded condom uptake by counting each site weekly. Open containers with loose condoms available in restrooms and waiting areas with a “free condoms” sign showed to be the most successful form of distribution in these clinics. The traditional prepackaged brown paper bags of condoms displayed in easily accessible areas is another form of distribution compared to asking nurses for condoms. After 10 weeks of recording data within the health departments I gave the clinics recommendations on how to distribute condoms effectively and how many condoms should be ordered quarterly from the Tennessee Department of Health for their specific clinic.

Subject Keywords: Condoms, STD/HIV, distribution, public health, Tennessee, health department

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Chapter 1 - Literature Review

In the article “Implementing condom distribution programs in the United States: Qualitative insights from program planners” (2019) five core categories developed from the qualitative data: 1) Identification of target population, 2) distribution channels, 3) type of condom distribution, 4) messaging/promotion, and 5) monitoring/evaluation. Condom Distribution Programs (CDP) used these core categories to determine the best way to improving availability, accessibility and acceptability of condoms.

The target population was selected through evidence from surveillance data with high-risk populations (high cases of STDs) in given populations. The planners used site-based distribution through conventional, non-conventional sites, and web-based distribution of condoms. The conventional sites were health departments, doctors’ offices, STD testing sites, and hospitals. Non- conventional sites included bars, tattoo parlors, churches, and motels (etc.) Uber and sending free condoms through the mail was considered web-based distribution. The universities used the campus mail system to keep costs low and IT services were important to streamline the process and packaging. Unfortunately the web-based distribution services involved multiple steps before condoms could be sent out to the appropriate addresses. The delivery time was set back to eight weeks due to the overwhelming demand.

CDP planners used a variety of types of condoms. Name brand condoms, XL condoms, program- branded, internal condoms, and dental dams were included in this variety. Planners expressed positive and negative feedback. The program-branded condoms were perceived as “second-class, government-made, and discounted” therefore individuals did not ask for those even though these condoms were free. The name brand and XL condoms were considered preferred but also more costly to the program. Messaging/ promotion were a fundamental part within the CDPs which were promoted on websites, social media platforms, and describing where the condoms were located within the sites specifically, e.g. bathrooms, pamphlets, printed materials. To influence the acceptability of condoms, social marketing campaigns used candid messages such as “put it on” slogans or billboards with sex-positive communication to encourage individuals to use condoms as well as get tested. Again, a disadvantage to this process and promotion was cost.

Finally, the evaluation of the CDPs data included number of sites, supplies, program awareness and the demographics of the users. The sites reported an increase in site based distribution but had a challenge of registration requirements that led to sites actually discontinue distribution. This was a problem because individuals that would visit certain sites would learn

that condoms were not available. All programs reported an increase of sexual health supplies (male condoms, internal condoms, lubricant) distributed year to year. Program awareness was based on surveys at the events or clinics. Demographic representation was able to be recorded in conventional sites but harder to evaluate at non-conventional sites because of how many patrons visited each site.

Multiple ways to distribute condoms according to program planners were aimed to collect experiences and strategies from other CDP planners to gain more of an understanding on how to distribute condoms effectively to adolescents and young adults. There is a strong belief that the web-based distribution strategy has a greater appeal to young adults compared to visiting a conventional distribution site. Web-based sites require extensive IT support, planning, organization, and the ability to respond to high levels of orders. This avenue of distribution would not be ideal for sexual spontaneity. CDPs used social media platforms to inform younger populations of distribution sites within the demographic area. Google maps was considered in this study to help individuals see where the distribution sites were located. Limiting factors included funding and marketing for most CDPs but using free platforms and working directly with the community these programs did have an impact when increasing condom distribution.

Condoms still remain an effective, inexpensive, and safe method for the prevention of sexual transmitted infections and unplanned pregnancy. "Free condoms at public sex venues could reduce the transmission of HIV and other sexually transmitted infections. Condom distribution is an affordable and easily implemented intervention that could reduce the burden of disease in men who have sex with men substantially" (Bom 2019). Condom distribution programs play a vital role in reducing the stigma associated with condoms, improving knowledge about condom use, and lowering the rates of STDs. Adolescents and young adults benefit from these programs and the CDPs will improve availability, accessibility and acceptability of condoms.

My role as an intern for the Mid-Cumberland Regional Office was to find the most effective way to distribute condoms. I reviewed scientific research articles for successful condom distribution programs to create ideas and strategies specifically for the health departments that would be included within my study. After reading and researching I wanted to have visible loose condoms and traditional prepackaged brown paper bags easily accessible and available for patients to grab at their convenience. This included privacy options, variety of condom style and multiple sites in the clinics.

The Tennessee Department of Health (TDH) services Tennessee's 95 counties that are divided into thirteen public health regions. Six of the most populous counties operate as stand-

alone metropolitan public health regions, including Nashville/Davidson (NDR) and Memphis/Shelby (MSR). The remaining 89 counties are divided into 7 rural health regions, including West (WTR), Upper Cumberland (UCR), and Northeast (NER). Mid-Cumberland consists of 13 counties. (Figure 1.1) Each county has at least one local health department where multiple services are offered to the public.

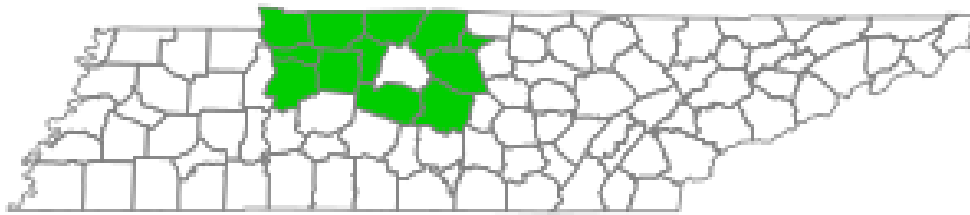


Figure 1.1 Tennessee Mid-Cumberland Region

I worked specifically with Kenisha Johnson, MSPH, and HIV Surveillance Coordinator for this project. Teresa Vantrease, PHNC2, is the Communicable Disease Director at the Mid-Cumberland Regional Office and was my mentor during my Tennessee Leaders of Tomorrow Internship. Teresa is a registered nurse with over 26 years' experience with 8 years of Public Health Communicable Disease focus. The Mid-Cumberland Regional Office is located east of Nashville next door to the Tennessee State Lab.

For my internship project I created a condom distribution study within the STD/HIV Surveillance department focusing on 3 local county health departments. Surveillance data is critical to monitor the HIV epidemic and a resource for prevention programs. According the Tennessee Department of Health (TDH) chlamydia, gonorrhea, primary and secondary syphilis have increased from 2013-2017. One way to help prevention of STDs/HIV is distribution of condoms. Currently the way of distributing condoms in some local health departments include; patients asking nurses for condoms, brown bagged condoms in rooms, or a basket on the counter in exam rooms. A concern that has been brought up to the regional office is that local health departments are not in need of condoms when it comes to ordering more from the central

office. My primary focus for this project was to increase the availability, accessibility and acceptability of condoms by comparing visible loose condoms to prepackaged condoms in multiple sites. Using restrooms, lobby areas, and laboratories at different health departments will allow me to observe if patients prefer privacy when obtaining condoms.

Chapter 2 - Learning Objectives and Project Description

Learning objectives from my Tennessee Leaders of Tomorrow Internship include: investigation of new and emerging infectious diseases, communicate and collaborate with the local health departments to increase awareness, provide a solution to upcoming concerns and problems, learn education and training policies within the TN health department. Another expectation was to understanding multiple aspects of the health departments on a local, regional, and state level. Participate in opportunities provided by TDH such as intern events, community outreach events, and networking with other young professionals.

I had the opportunity to attend and participate in many activities throughout my time interning for TDH. I toured the Tennessee State Lab located in east Nashville. This public health state lab monitors and detects health threats ranging from rabies and dengue fever to radiological contaminants, genetic disorders in newborns and terrorist agents. The state lab serves as a first line of defense to protect the public against diseases and other health hazards. They also provide emergency response support, perform applied research, and provide training for laboratory personnel. Labs provide many public health functions, such as screening all newborn babies for different diseases and conditions. I did not know before touring the lab that all newborns in the state of Tennessee are screened through this one laboratory.

As an intern group we toured Williamson County Health Department in Franklin, TN. This health department was unique to me because this is my health department in my community. We sat down with Cathy Montgomery the County Director. She gave us an amazing presentation on how the local health department functions and the services offered to children and adults. Children services include Women, Infants, and Children Nutrition Programs (WIC), immunizations, Children's Special Services (CSS) and Child Passenger Safety. Passenger safety is a new program that the department offers which allows individuals to check the safety and proper installation of children's car seats. Adult services include family planning, primary care, TB control, and STD screening. Dental services are also provided to children and emergency dental care for adults. After the tour of the facility we had the chance to meet with the faculty members and ask questions. I met Tiffany Rugless-Thompson the Disease

Intervention Specialist (DIS) in the Communicable Disease division. A DIS is responsible for investigating and following up with patients who are suspected of have had a confirmed reportable illness reported by a physician, laboratory or other source. The DIS works with the local health department physicians, local physicians and health groups to ensure proper treatment, maintenance and care of patients who have confirmed cases of reportable illness. I enjoyed my experience touring a local health department and learning all the services they had to offer the community.

In the middle of my study I presented some of my findings to the county health department nursing supervisors. Each county of the Mid-Cumberland Region had a nurse represented and attended my presentation. Three of the nurses in the meeting participated in my study and I was glad I could show them my results and constructive criticism on how to distribute condoms effectively. My findings and results opened the conversation with all the county nurses on how condoms should be distributed within their own health departments. After presenting my data and suggestions the nurses seemed willing to try alternative ways to give their patients condoms. Similar to the nurse supervisor meeting, I presented my findings during the Statewide Communicable and Environmental Diseases and Emergency Preparedness (CEDEP) Conference Call and had a PowerPoint that everyone could follow along during the phone call. I had never experience a conference call before especially with individuals throughout the entire state.

Networking events were conducted through the internship and I met some amazing people during this process. The final event that was offered was a tour of the Tennessee Residence Grounds and luncheon. Kimberly Mantlo the Executive Director of Recruiting led this event with special guest speaker State Chief Learning Officer Dr. Trish Holliday. Dr. Holliday encouraged us to go beyond what we had learned during our time interning for the TN State Government. She taught us behaviors of high leadership potential, how to think above us as an individual and strive for superior levels of performance as an organization. At the end of our residence tour Dr. Holliday gave every intern a book about leadership and going above being a high performer. I chose the book "Open to Think" by Dan Pontefract because it is about creative thinking, which is needed for the generation of new ideas, critical thinking for the analysis of the ideas and applied thinking to transform ideas to a product.

A community outreach event I experienced was handing out prepackaged condom bags with pre-exposure prophylaxis (PrEP) information to PFLAG (Parents, Families, Friends and Allies United with LGBTQ+ People). PFLAG's mission is to promote the health and well-being of lesbian, gay, bisexual, transgender, and queer persons, their families and friends through:

support, to cope with an adverse society; education, to enlighten an ill-informed public; and advocacy, to end discrimination and to secure equal civil rights. PFLAG (formerly "Parents, Families and Friends of Lesbians and Gays") provides opportunity for dialogue about sexual orientation and gender identity, and acts to create a society that is healthy and respectful of human diversity. We reached out to this group because of our target population. Giving out our information and contacts could help this target population when looking for resources such as condoms, lubricant, female condoms, and PrEP. Through this event I met a woman who was in another support group called Latent Lesbians. She is a retired nurse and asked Kenisha and me if we could get her some resources/ supplies such as dental dams and female condoms for educational purposes. The state does not provide dental dams to the local health departments so we acquired these resources from Family Planning. Outreach programs and networking events have been the best part of my experience during this internship.

My project at the Mid-Cumberland Regional Office was to find best methods for condom distribution within the local health departments. When it came time for a quarterly order of condoms from the central office the regional office asked each of the health departments how many condoms their facility needed. Regional office was surprised when the local health departments reported they did not need any to restock because they had plenty. This was a problem because health departments should be distributing and reordering condoms consistently. Regional office asked me to conduct a condom distribution for the health departments in order to find the best methods to increase condom uptake by individuals.

When deciding how to start this study I read condom distribution program articles and research journals. Then I identified a target population. In the Mid-Cumberland Region I found counties with high STD/HIV rates and decided on three health departments off of those numbers. Montgomery, Sumner, and Robertson County Health Departments are the three that participated in the study. Each health department had a similar set up and vital role to determine the best way to distribute condoms. I reached out to asked each nurse supervisor what concerns they had about their current condom distribution and if I could count on their staff to not alter my findings.

In each department I set up "sites" where I counted condoms, restocked and recounted weekly. At Montgomery County Health Department I set up three sites. A clear open container filled with loose condoms above the paper towel dispenser clearly labeled "free condoms" in the men's and women's restroom. (Figure 2.1, 2.2)



Figure 2.1 Men's Restroom Container Figure 2.2 Women's Restroom Container

The third site was in the sub waiting room located on a book shelf. Prepackaged condoms in brown paper bags were placed in an orange flower container labeled “free condoms”. (Figure 2.3)



Figure 2.3 Sub waiting Prepackaged Container

At Sumner County Health Department three sites were established similar to Montgomery County. The first site was an open container with loose condoms in the STD

restroom inside the clinic where those specific patients can access free condoms. The second site was an open container of loose condoms in the general public restroom again labeled free condoms. Finally the third site was a tiered shelving unit in the laboratory waiting room. Prepackaged condoms in traditional brown papers were placed in the top shelf and on the second shelf I placed loose condoms with a free condom sign. (Figure 2.4)



Figure 2.4 Laboratory Tiered Shelf for Condoms

Robertson County had two sites; men's restroom and women's restroom. In each restroom contained two different types and styles of containers. The supplies used were one open container with loose condoms on a top shelf about the toilet and then another open bucket on the floor with prepackaged condoms in brown paper bags. (Figure 2.5, 2.6)



Figure 2.5 Prepackaged Container

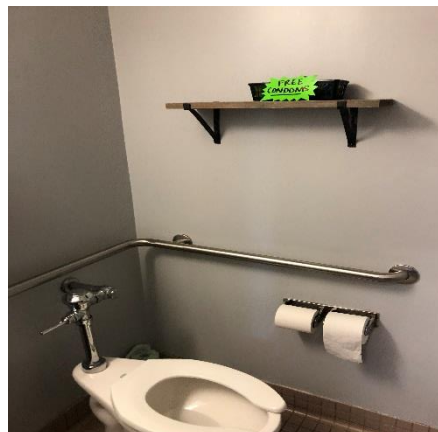


Figure 2.6 Visible Loose Container

Included with the Robertson County Health Department is the Comprehensive Care Clinic (CCC). The CCC in Springfield, TN is a HIV/AIDs specific clinic that gives patients extensive medical care and resources. In this clinic I set up two sites; one open container with loose condoms in the open lobby on the coffee table available to anyone that walks into the clinic (patients, partners, family, etc.). The other site was located inside the clinic in the laboratory where the nurses draw blood from the patients and give medicine. The laboratory site had an open container with loose condoms easily accessible to the patients. No prepackaged condoms in brown paper bags were used at this site.

Every week I went to each clinic to count and restock the site spots. On Tuesdays I went to Sumner County Health Department and on Thursdays I went Montgomery as well as Robertson County Health Departments. Once I counted each distribution site I recorded my findings in an Excel spreadsheet. After counting I would restock each site if needed. My responsibility during this study was provide condoms for each clinic, communicate with the nurses about the study (feedback, concerns, not refilling sites), and provide information for the regional office about how many condoms each clinic should be distributing quarterly. With the data collected I am responsible for relaying the results to each health department, regional office, and central office.

Chapter 3 - Results

My study population consisted of the residents that lived in the specific county correlating with the county local health departments. I chose counties that showed increasing rates of chlamydia, gonorrhea, and syphilis. In these clinics I specifically set up different condom sites around waiting areas and restrooms. The restrooms and waiting areas included visible loose condoms and/or prepackaged brown paper bags options for the patients. I asked the nurses to not refill any of the containers in the sites in order to maintain a true count each week. Based on the amount taken weekly I increased the amount given in each site to accommodate the needs of the patients. In the prepackaged brown paper bags the number of condoms in each bag ranged from 7-15 condoms due to the condom amount available from the Regional Office.

3.1 Montgomery Health Department

Each week I counted how many condoms were left in each site. Table 3.1 shows the percent of condoms taken within a week. For example, during week 1 in the men's restroom 70 out of 80 condoms were taken compared to the women's restroom where 76 out of 80 condoms were taken. Figure 3.1 shows a visual representation of each site compared to one another.

Table 3.1 Condoms Acquired per Site in Montgomery County Health Department

	Men's	Women's	Sub waiting	Number of Patients
May 9th-16	88% (70/80)	95% (76/80)	31% (52/169)	266
May 16th-23d	93% (74/80)	99% (79/80)	89% (99/117)	297
May 23rd-30th	38% (38/100)	74% (74/100)	80% (96/120)	223
May 30th-June 6th	100% (100/100)	100% (100/100)	100% (108/108)	258
June 6th-13th	64% (64/100)	93% (93/100)	100% (160/160)	274
June 13th-20th	63% (63/100)	89% (89/100)	100% (192/192)	271
June 20th-27th	45% (45/100)	89% (89/100)	40% (72/180)	238
June 27th- July 11th	100% (100/100)	100% (100/100)	100% (180/180)	635
July 11th-July 18th	29% (29/100)	100% (100/100)	53% (96/180)	443
July 18th-July 25th	37% (37/100)	100% (100/100)	100% (180/1800)	302

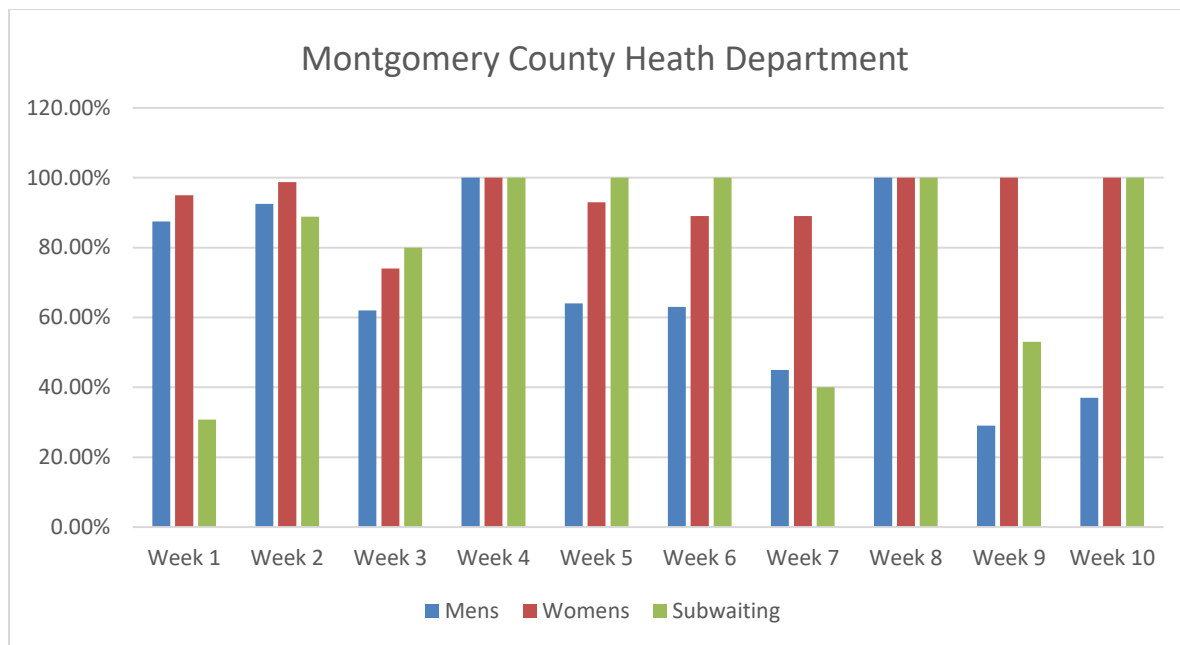


Figure 3.1

The total amount of condoms taken by patients from Montgomery County Health Department was 2,755 condoms. 1,520 condoms that were loose in the men's and women's restroom and 85 prepackaged brown paper bags (equaling 1,235 condoms) from the sub waiting area.

3.2 Sumner County Health Department

Similar to Montgomery County I collect data from each site based on loose condoms and prepackaged condoms. Table 3.2 demonstrates the amount of condoms taken during the week compared to how many condoms were available. Figure 3.3 compares each site to one another. Figure 3.4 compares all loose condom sites to each other. Figure 3.5 states the percentages of prepackaged and loose condoms taken per week.

Table 3.2 Condoms Acquired per Site in Sumner Health Department

	STD Visible	General Bathroom	Lab Visible	Lab Bagged	Number of Patients
May 14th- 21st	57% (27/47)	67% (40/60)	100% (75/75)	12% (52/169)	76
May 21st-28th	0% (0/124)	16% (18/110)	6% (10/175)	13% (24/180)	48
May 28th- June 4th	2% (3/124)	12% (11/92)	19% (31/165)	62% (96/156)	50
June 4th- 11th	2% (2/121)	11% (16/150)	4% (6/134)	60% (36/60)	90
June 11th-18th	13% (13/100)	7% (11/150)	9% (11/128)	18% (24/132)	80
June 18th-25th	5% (4/87)	21% (29/139)	9% (10/117)	53% (96/180)	74
June 25th-July 2nd	11% (9/83)	2% (2/110)	0% (0/107)	50% (35/70)	73
July 2nd-9th	46% (34/74)	6% (7/108)	11% (12/107)	80% (28/35)	64
July 9th-16th	23% (9/40)	21% (21/101)	26% (25/95)	100% (7/7)	92
July 16th-23rd	30% (12/40)	9% (7/80)	47% (33/70)	0% (0/0)	101

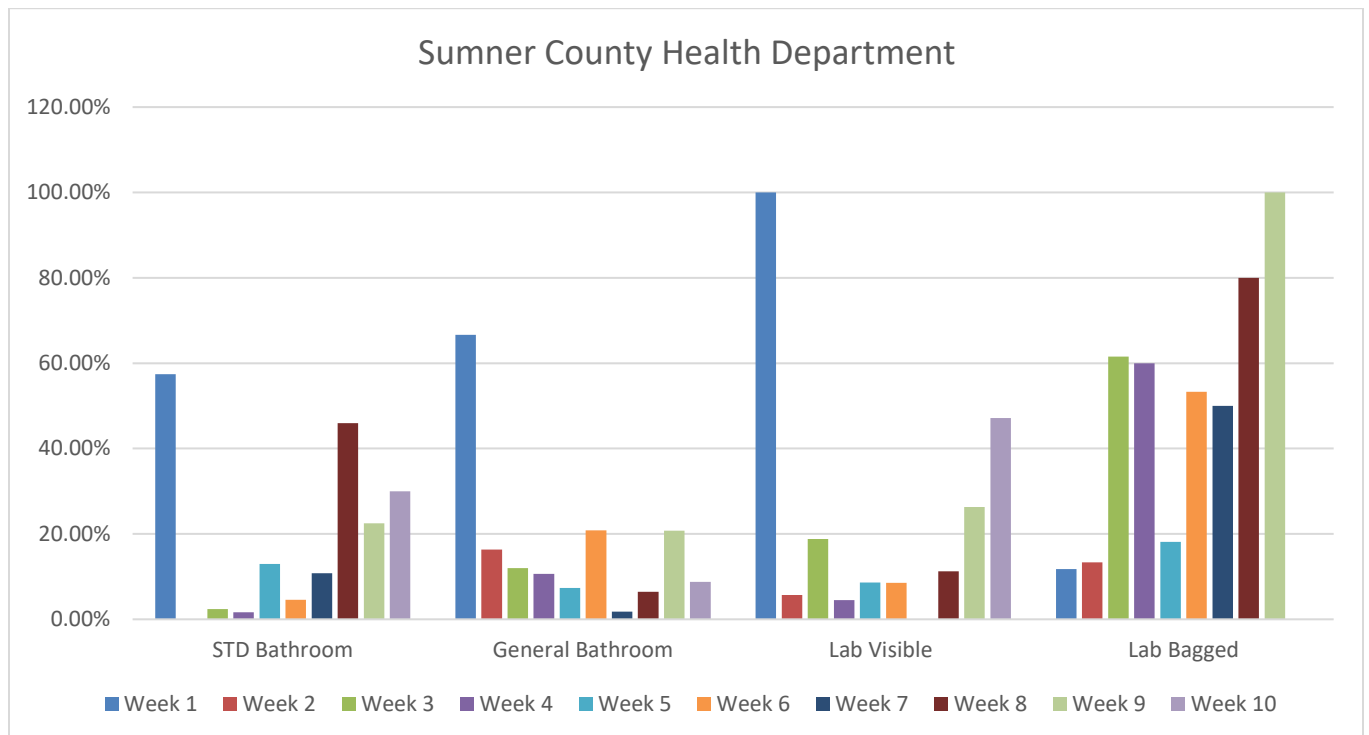


Figure 3.2 Condom uptake at each site

After observing this clinic for 10 weeks the prepackaged brown paper bags seemed to be taken more often than the loose condoms in either restroom. The general bathroom had more loose condoms taken compared to the STD restroom.

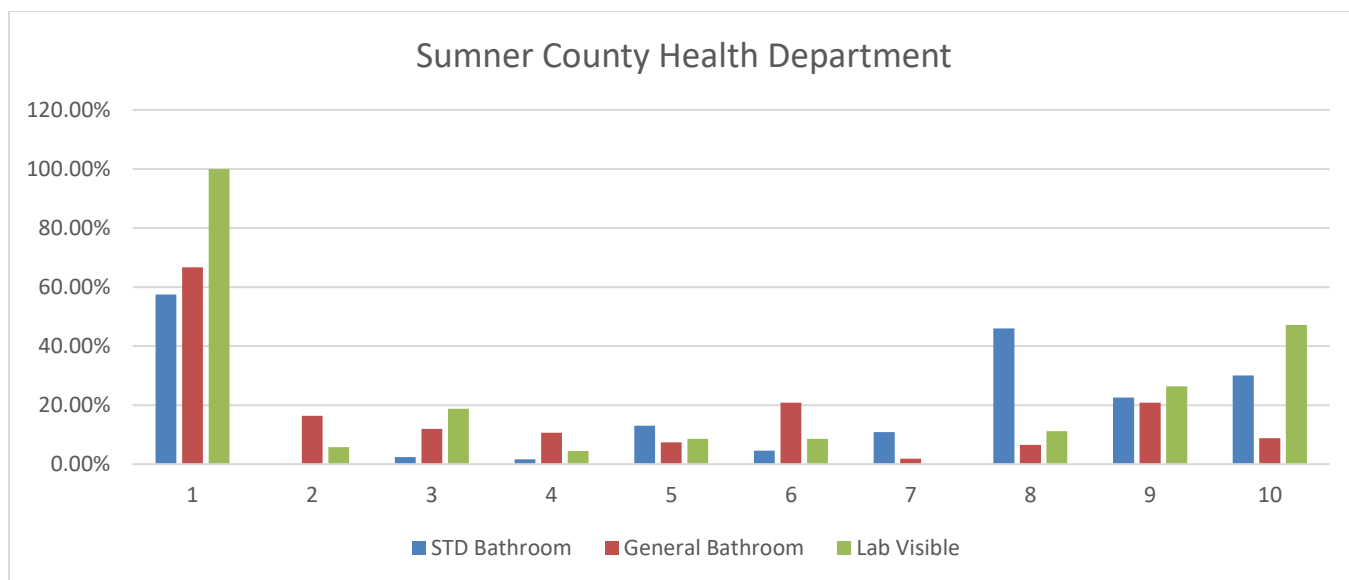


Figure 3.3 Visible Loose Condom uptake during each week

The site that received the most uptake during the 10 weeks was the general restroom. The laboratory waiting area seemed to respond better to the prepackaged brown paper bagged condoms.

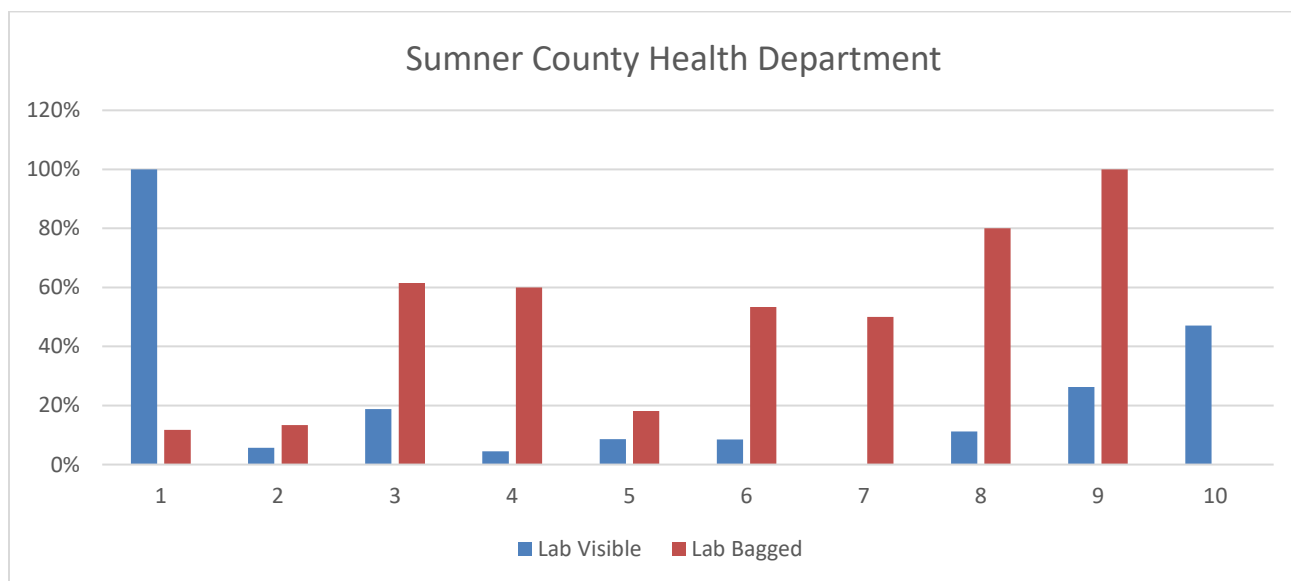


Figure 3.4 Laboratory Distribution Visible vs. Prepackaged

The Laboratory site showed more uptake of prepackaged brown paper bagged condoms compared to the loose condoms that were readily available on the second shelf of the tiered shelving unit placed in the waiting area.

The total amount of condoms taken by patients from Sumner County Health Department was 858 condoms. 488 condoms were loose in the STD bathroom, general bathroom and second shelf in the laboratory area. 35 prepackaged brown paper bags (equaling 370 condoms) from the top shelf laboratory area.

3.3 Robertson County Health Department

Data collected came from two sites; men's restroom both loose and prepackaged as well as women's restroom both loose and prepackaged condoms. Table 3.3 demonstrates the amount of condoms taken during the week compared to how many condoms were available. Figure 3.5 compares each site to one another.

Table 3.3 Condoms Acquired per Site in Robertson County Health Department

	Men's Visible	Men's Bagged	Women's Visible	Women's Bagged	Number of Patients
May 28th-June 6th	92% (46/50)	50% (28/56)	46% (23/50)	100% (49/49)	118
June 6th-13th	62% (31/50)	83% (35/42)	46% (23/50)	67% (28/52)	78
June 13th-20th	76% (38/50)	33% (14/42)	78% (39/50)	100% (42/42)	76
June 20th-27th	100% (50/50)	100% (28/28)	100% (50/50)	100% (49/49)	95
June 27th- July 11th	41% (31/75)	86% (42/49)	100% (75/75)	100% (56/56)	217
July 11th-18th	64% (64/100)	86% (42/49)	88% (88/100)	100% (56/56)	136
July 18th-25th	0% (0/100)	0% (0/96)	27% (27/100)	44% (48/108)	90

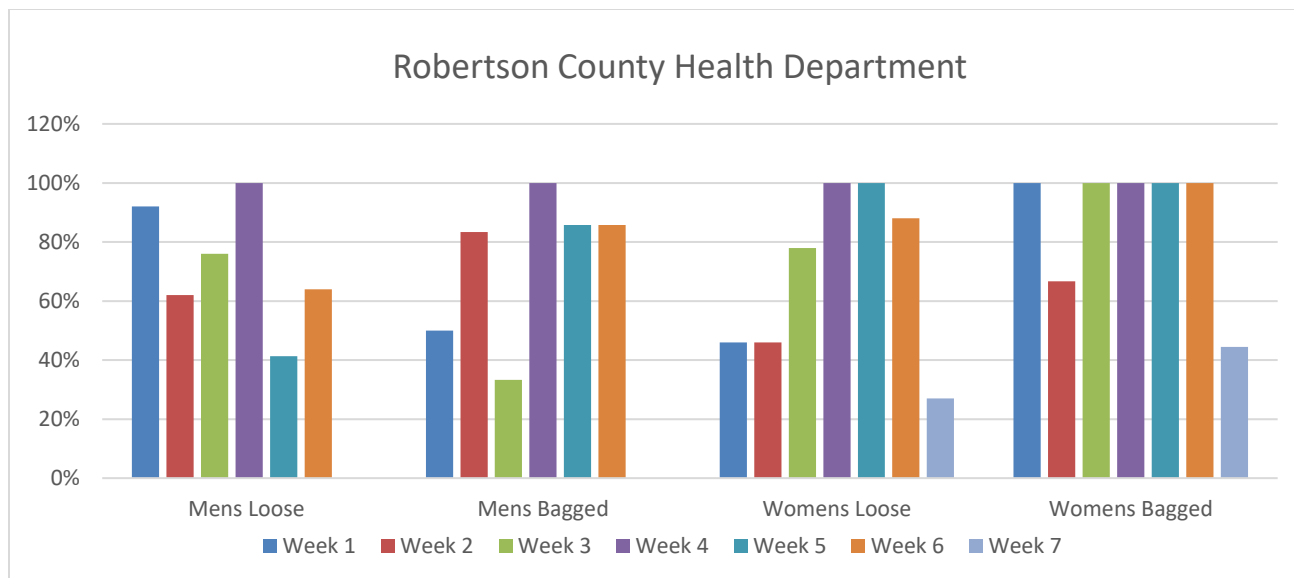


Figure 3.5 Comparing each Site Visible vs Prepackaged

Figures 3.6 and 3.7 compare men's vs. women's loose condom uptake and men's vs. women's prepackaged condom uptake. I did this comparison to observe each site and the preference the patients had for visible loose condoms and prepackaged condoms.

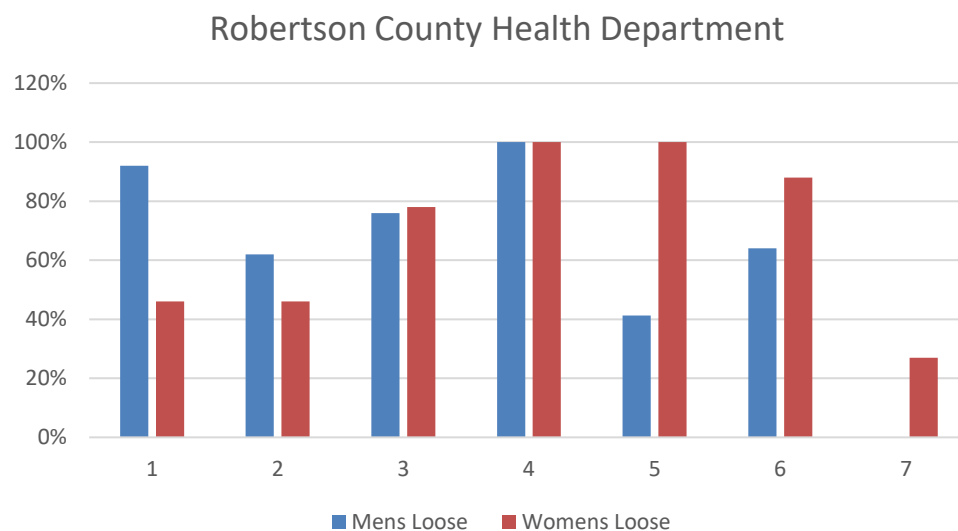


Figure 3.6 Men's Restroom Loose vs. Women's Restroom Loose

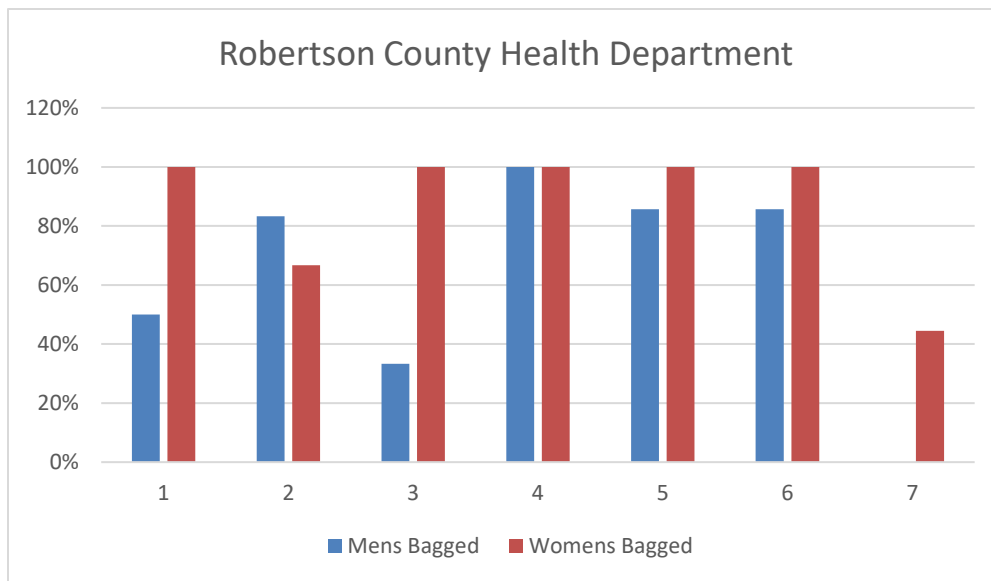


Figure 3.7 Men’s Restroom Prepackaged vs. Women’s Restroom Prepackaged.

The total amount of condoms taken by patients from Robertson County Health Department was 1,102 condoms. 585 loose condoms from both the men’s and women’s restroom. 71 prepackaged brown paper bags (equaling 517 condoms) from each restroom.

3.4 CCC

This clinic was only opened to patients Monday’s and Thursday’s from 8am-12pm. The total number of patients that came through this facility was in combination with Robertson County Health Department patient numbers. No prepackaged condoms where given out at this clinic and I only counted two sites in total. Table 3.10 demonstrates the amount of condoms taken during the week compared to how many condoms were available. Figure 3.14 compares each site to one another.

Table 3.4 Condoms Acquired per Site at CCC

Column1	Lobby	Lab	Number of Patients
May 28th-June 6th	1% (1/108)	32% (20/62)	53
June 6th-13th	16% (17/107)	17% (7/42)	55
June 13th-20th	26% (23/90)	38% (19/50)	48
June 20th-27th	19% (19/100)	0% (0/60)	61
June 27th- July 11th	17% (17/100)	27% (20/75)	115
July 11th-18th	5% (4/83)	32% (24/75)	83
July 18th-25th	5% (4/79)	29% (22/75)	56

I choose these two sites for loose condoms only because of the target population and the current distribution method implanted by nurses. Prepackaged brown paper bags were not being used as a method of distribution so I did not want to include that method in my study. Also all of the exam rooms offered patients condoms next to the exam chair. I did not count those condoms because I wanted to see the uptake rate of the laboratory and lobby areas.

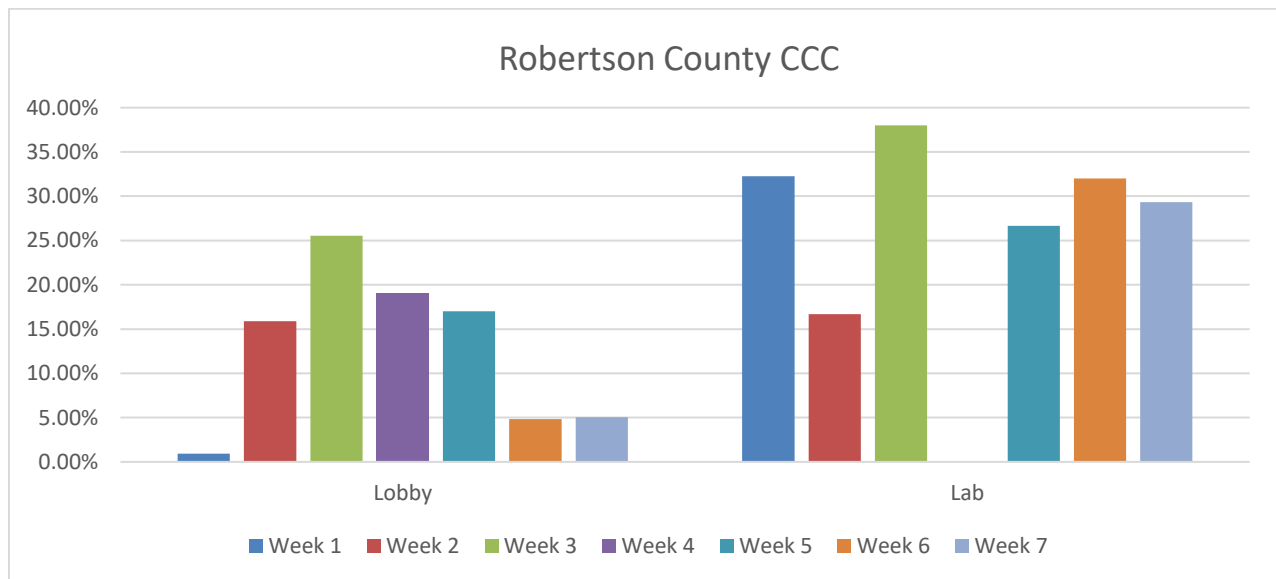


Figure 3.8 Lobby vs. Laboratory

Table 3.4 shows how many patients entered the clinic during that given week and what percent of condoms where taken. Figure 3.8 is a graph that compares how many condoms were taken compared to how many patients' ages 13+ entered the general clinic during each week by date.

The total amount of condoms taken by patients from CCC Health Department was 197 condoms.

Between all three counties a grand total of all condoms taken by the public equaled out to be 4,912.

Chapter 4 - Discussion

I found valuable information when doing this distribution study as a whole and in each individual county health department. Some techniques and strategies work well for certain clinics and did not work at all in others. During this process I used condom amounts, site placing, and presentation. In this discussion I will interpret my findings for each specific county health department. If this study were to continue in the future I would include more factors such as demographics, gender, condom variety, population type, and income level.

Montgomery County Health Department was the first location I set up the condom distribution study. I talked with the nurses about what bathrooms were readily used by the patients to allow the most interaction with the free condom containers. Then the men's and women's restroom were established as the open loose condom site. The sub waiting room was another recommendation from the nurses because this was a common area where patients waited for results, to be seen, or to check out of the facility. The sub waiting area became the site for the prepackaged condoms.

One of the concerns before starting this study was that children would be able to easily access the condoms and destroy or play with the condoms. I purposely put the open container with the loose condoms above the paper towel dispenser so that children could not reach the condoms. This was a limitation as well because the container could be overlooked or not noticed if the patient didn't use their hands to use the paper towels. Each week when refilling the containers I noticed that the women's restroom was less full compared to the men's restroom. I started with 80 condoms in each container and after the first couple of weeks I increased the amount to 100 condoms. I decided to increase the amount because we had a high percent of uptake. Another change I made was giving each restroom a variety of condom styles instead of only Lifestyles and Magnum Trojans. In the sub waiting area I originally had the orange flower container with the prepackaged condoms on the window seal but when I came to count the following week it had been moved. I asked the nurses why the container was moved and they said that patients were complaining that it was an "eye sore" and didn't want to see it. The nurses put the container behind their counter and only gave patients a bag if the individual specifically asked for a bag. This decreased my count dramatically so I reevaluated the site option and compromised with the nurses to place the container on a book shelf that blended in with the surroundings. After the container was placed on the bookshelf more bags were taken during the week. Each week I would fill the container between 10-15 prepackaged brown bags and the results stayed consistent.

The interactions with the nurse supervisors gave me great feedback and helped me think of other ways to implement the condom distribution study even further. Different site placements, timing of condom counts and other privacy options were discussed all together as a team. The comments and concerns from the nurses allowed other nurses from other county health departments gather information to begin to start their own condom distribution program. The nurses also stated that the exam rooms were a great way to not only talk about condom use but to give patients as many condoms as they needed.

My recommendations for Montgomery County Health Department for a successful condoms distribution within their clinic are to offer free condoms on an elevated surface in the restrooms and to provide prepackaged condoms in an “easy grab” open area of the clinic. The previous method of distribution was for the patients to ask for condoms from the nurses either in the exam room or up at the check in counter. If the patient asked a prepackaged brown paper bag would be given. It is clear that patients enjoy the privacy and a judgement free environment when taking condoms. With a total of 2,755 condoms taken over 10 weeks I recommend that Montgomery County order at least 3,000 condoms quarterly to maintain the needs of their patients. The feedback that I received from the nurses was positive and they have stated that they will continue this distribution process.

Sumner County was also another clinic that agreed to participate early on in the process. This clinic had a unique set up which made the decision difficult when deciding where to set up our sites for the condoms. The nurses recently started a form of distribution of their own giving patients the option to grab visible loose condoms in the exam rooms only. This container was displayed on the doctor’s counter away from the exam table restricting the patient from access to easily grab the condoms available.

Having a STD specific restroom I thought it would be interesting to see what results would come from a certain target population. We set up a small open basket with 40 loose condoms on the handicap metal railing next to the toilet. After the first week when recounting I noticed only 9 were taken. I had asked the nurses why they thought the count was low since I was expecting all of the condoms to be gone. They expressed that not many patients use that restroom and maybe having the condoms close to the toilet was a limiting factor due to the possibility of condoms falling in the toilet or germs in close contact with the condoms. From the feedback that the nurses offered I placed a three tiered stand to put in the corner of the restroom with an open container instead of a basket near the toilet. The results stayed consistent but I felt better about eliminating the cross contamination factor. Another site that we set up was in the general unisex restroom. I placed an open container of loose condoms above

the baby changing table with a clear sign labeled “free condoms”. This site had the most condoms taken because patients had easy access and privacy to take condoms if they wanted. In the laboratory area where the wooded three tiered shelf was located was inconsistent with the results week to week. I had placed prepackaged brown bags of condoms on the top shelf and loose condoms on the second shelf. The prepackaged condoms were taken more often than the loose condoms so each week I did not restock the loose condoms just counted them.

After reviewing the results from Sumner County Health Department I recommend having open containers with loose condoms in the restrooms away from the toilets if available. Patients do take condoms if in privacy. I did not notice a condom style preference at this specific clinic but a variety of styles may be beneficial. For the laboratory I recommend only having prepackaged condoms available since more were taken compared to the loose condom option. Having loose condoms in this area may cause children to play or open the condoms since they are closer to the ground and easy to grab. Sumner County should order around 1,200 condoms quarterly based on the results gathered from this condom distribution study.

Robertson County Health Department already had a condom distribution program in progress but still allowed me to come in and add them to the study. I only wanted to set up two sites which were the men’s restroom and women’s restroom. The nurses stated that they had a container with prepackaged condoms on top of the water fountain outside the restrooms. We did not alter the established site they already had in place. In the restrooms the nurses hung a shelf above the toilets where I put an open container of loose condoms and in the corner a bucket was filled with prepackaged condoms in the brown bags. After the first recount I increased both amounts of loose condoms and prepackaged bags due to the volume of uptake. During one of the recounts I noticed that the prepackaged condoms had been tampered with so I changed the way I wrapped the bags for this specific clinic. I was using staples previously and saw that patients were opening the bags and choosing what condoms they wanted. I switched to a taping technique and using this strategy eliminated the tampering from patients. This clinic responded well to both options of loose and prepackaged condoms in the privacy of the restrooms.

The CCC at Robertson County had some limitations within this study because of the target population, hours of operations, and variety of condom styles. Since this clinic is HIV/AIDs specific the target population is restricted to that certain audience. The hours of operation are regulated to two days a week only between the hours of 8 a.m. to 12 p.m. which showed in the results of this study. Around the third and fourth week I switched the variety of condoms to see if the uptake would increase. I added MSM (men having sex with men) condoms to each site to encourage and offer patients another condom option. These condoms

had creative graphic images and embraced the sexual culture. The results did not change because to the MSM addition but I did receive feedback from the nurses that the patients liked the graphic condoms. For each of these clinics I recommend having loose condoms available and easily accessible for patients. Robertson County Health Department was giving out around 150 condoms weekly. 2,100 condoms should be ordered quarterly in order to meet the needs of their patients. CCC could benefit from MSM condoms and increasing amount of available sites for patients to take condoms. During CCC's participate in this study of 7 weeks 197 condoms were taken from the two established sites I created. Based on the results of this study I would order around 375 condoms during the quarterly order.

I used clear visible containers in restrooms with clearly labeled "free condoms" signs. I filled each container with a variety of condom types in easy accessible spot that all patients would notice. In the public areas I also had a container with a "free condoms" sign where patients could take prepackaged brown paper bags filled with a variety of condoms at their free will. This study could be replicated in any health department and could benefit from adding addition sites such as exam rooms, all restrooms, and other public waiting areas.

To conclude, this condom distribution study allowed the TDH to some insight on how effective visual representation, availability, and accessibility of condoms are vital in a local health department. I was able to give recommendation of how to improve the uptake of condoms such as condom variety, privacy sites, and noting that condoms are "free". At the end of this study I was able to give the regional office an awareness of how many condoms should be ordered.

This process of starting a condom distribution study has taught me so many valuable experiences. I have learned how to communicate, network, adapt, serve others, and gather information to better the community. Tennessee Department of Health's mission is to protect, promote and improve the health and prosperity of people in Tennessee. The people that helped me through this journey have made me excited to start me career in public health.

Chapter 5 - Competencies

Student Attainment of MPH Foundational Competencies

#2 Select quantitative and qualitative data collection methods appropriate for a given public health context

I created an Excel spread sheet documenting how many condoms I gave each county local health department at each specific site indicating whether the condoms were loose or prepackaged. I also specified how many condoms were put into each individual prepackaged brown paper bag to keep count consistently for a grand total condom distribution number. In the spread sheet the data collected included week, county, visible start count, visible recount, taken, and percent rate. For Montgomery and Sumner counties it was a total of 10 weeks and for Robertson/ CCC a total of 7 weeks. Then I created an individual spread sheet for each county where I included patient numbers, graphs and charts to compare site values. When counting the condoms at each clinic I would count loose and prepackaged condoms then Kenisha would recount the same sites in order to confirm the recount number. We used a variety of condoms for each site so that not one clinic was receiving all lifestyles or Trojan condoms. Examples of qualitative data are record keeping and process of observation. If I noticed an increase in uptake at one specific site I adjusted the supply list in order to accommodate the patients' needs. For quantitative data collection I took the percentages of how many patients entered the clinic to how many condoms were taken.

#4 Interpret results of data analysis for public health research, policy or practice

I had the opportunity to present my findings to the nurse supervisors of each county local health department in the Mid-Cumberland region. Each county was represented and I had the chance to show the women how effective my condom distribution program was within three counties. We had an open discussion of thoughts and concerns regarding each of their clinics. I also was on the agenda for the state conference call for CEDEP meeting. I presented my findings and gave

recommendations to decrease STD rates and increase uptake of condoms. Visual representation and privacy are the two factors I pushed verbally in the call.

#7 Assess population needs, assets and capacities that affect communities' health

When I first came to intern under the Communicable and Environmental Diseases and Emergency Preparedness (CEDEP) team specifically with HIV surveillance the regional office faced the problem of local health departments not needing to reorder condoms when the quarterly order approached. The problem I needed to solve was "Why do the local health departments have so many condoms?" I figured out pretty quickly from talking to the nurses that condoms were not being distributed to the patients unless the patients asked for condoms individually. Tennessee has a high rate of STDs/HIV and not giving out condoms effectively could be a contributing factor to this public health crisis. After talking to the nurses and strategizing more effective ways of distribution we set up the sites for this study. With the nurses help we made condoms for available, accessible and acceptable for the patients.

#9 Design a population-based policy, program, project or intervention

The condom distribution study included three counties all ranking high on the STD/HIV high risk target population of the Mid-Cumberland Region in Tennessee. I designed a program that is easy to maintain with minimal effort from the local health department employees. Once the study was complete I gave my recommendations to the clinics, regional office, and central office about how to improve condom distribution and uptake. Data is not updated often for STD rates within the state of Tennessee but I hope to see that this program will sustain and results of lowered STD/HIV rates will show in the Mid-Cumberland Region during the yearly report. If the results do show a decrease in STD rate this could be a great example of preventative care compared to reactive response in the local health departments. From this program I was able to gage how many condoms each clinic should be giving out every three months based on the

amount of patients entering and taking the condoms I set out during the stent of the study.

#17 Apply negotiation and mediation skills to address organizational or community challenges

Working directly with the health department nurses helped me truly understand the problems and concerns the clinics were having with condom distribution. Over coming barriers between the patients and staff of the clinic was a vital role in finding a solution to distribute condoms effectively and easiest way possible. When deciding on location sites for my study I worked next to the staff and would ask for advice or feedback weekly. Open communication and guidelines helped this study become successful. Presenting my findings to the nurse supervisor meeting in July helped other nurses from different county health departments set up a similar program within their clinics. Most importantly all agreeing that condoms should be out and offered to every patient was a step in the right direction compared to the previous distribution plan. Allowing patients to now acquire condoms in privacy and easily accessible areas around the clinic compared to asking nurses for condoms as a form of distribution will increase the amount of condom uptake.

#21 Perform effectively on interprofessional team

Not only did I work with multiple nurses throughout the Mid-Cumberland region I had the best support team in the regional office. Collaborating ideas and strategies to better the community as a whole was encouraging and rewarding. Having a common goal and working towards making a successful condom distribution program as a team was inspiring and motivating. I never felt less than a team player if anything my team let me lead this entire study. A positive work environment is important and I can say the TDH is one of the best places I have ever worked.

Table 5.1 Summary of MPH Foundational Competencies

Number and Competency		Description
#2	Select quantitative and qualitative data collection methods appropriate for a given public health context	Placing condoms in multiple areas within a health department and recording the amount taken weekly.
#4	Interpret results of data analysis for public health research, policy or practice	Present findings to nursing supervisors during yearly meeting and state conference call
#7	Assess population needs, assets and capacities that affect communities' health	Finding a successful way to distribute condoms effectively to lower STD rates.
#9	Design a population-based policy, program, project or intervention	Find the top three counties with the highest STD/HIV rates and implement a condom distribution study for local health departments to use.
#17	Apply negotiation and mediation skills to address organizational or community challenges	Communicate effectively to the nurse staff that condoms need to be readily available for the patients.
#21	Perform effectively on interprofessional team	Work closely with the nurse staff in local health departments to distribute condoms in hopes to lower STD/HIV rates in the state of TN.

Table 5.2 MPH Foundational Competencies and Course Taught In

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		
Public Health and Health Care Systems					
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings		x			

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			
Communication					
18. Select communication strategies for different audiences and sectors	DMP 815, FNDH 880 or KIN 796				
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content		x			x
Interprofessional Practice					
21. Perform effectively on interprofessional teams		x			x
Systems Thinking					
22. Apply systems thinking tools to a public health issue			x	x	

Table 5.3 Summary of MPH Emphasis Area Competencies

MPH Emphasis Area: Infectious Disease/ Zoonoses		
Number and Competency		Description
1	Pathogens/pathogenic mechanisms	Sexually transmitted diseases are transferred to individuals because condoms are not being used in risky behaviors.
3	Environmental/ecological influences	Placement and visual representation of condoms can influence patients to take condoms.
4	Disease surveillance	Selecting county health departments based on high STD rates allows compatible surveillance data to be collected effectively.

#1 Pathogens/pathogenic mechanisms

After researching the STDs that the health departments test for and what clinics have the most positive tests I wanted to include those clinics in the condom distribution study. Implementing a successful condom distribution program in local health departments that have high STD rates will lower the amount of positive tests as well as decrease risky behavior. Having condoms readily available for patients without them asking and in the privacy of the restrooms will decrease the STD rates.

#3 Environmental/ecological influences

The environmental influences in this study was determined after a tour of the health departments. Based on the placement of the condom containers resulted whether or not the condoms would be successfully taken. Understanding the flow and most populated areas of a clinic helps when deciding where to place condoms. In this study privacy was a favoring factor. Patients tended to take more condoms if they were

in the restrooms with the privacy and non-judgmental stigma of others watching them. The first couple of weeks we observed the pattern of the patients and moved containers accordingly with the nurses' help and feedback.

#4 Disease surveillance

Once the study was in place and data was collected I started to form trends regarding condom uptake in individual sites. Over time the numbers displayed increased amount of condom uptake and certain sites allowed me to increase the amount of condoms given to each clinic weekly. The initial distribution number for each clinic increased over the first couple of weeks because patients were grabbing all of the condoms allotted to each site. I will not know the outcome of STD positive test results until a later date but hopefully my distribution study will correlate to a decrease in STD rates in those three individual county local health departments.

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Appendix

Below is a hyperlink to the data collected over the 7-10 weeks including a sheet for each county. Charts are also included as reference points from the data projected with Excel.

[CondomDistributionTN_2019.xlsx](#)

I completed a Civil Rights Compliance Training while in the Tennessee Leaders of Tomorrow Internship. The certificate is hyperlinked below.

[TNPHTC_Certificate \(1\).pdf](#)

I was on the agenda for the State CEDEP Conference Call for the state of Tennessee presenting my findings of the condom distribution study program.

[July 2019 Statewide CEDEP Call Agenda.pdf](#)