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**AN ASSESSMENT OF THE HEALTH NEEDS OF THE TRANSGENDER  
COMMUNITY IN MONTANA**

by

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**Thesis**

**presented in partial fulfillment of the requirements  
for the degree of**

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An Assessment of the Health Needs of the Transgender Community in Montana

Chairperson: Dr. Annie Sondag

Transgender individuals face a unique set of challenges in their day to day lives. While issues regarding stigma and discrimination are well documented in the literature, most of the information about transgender people has been gathered in urban settings. The purpose of this study, therefore, was to explore factors that influence quality of life and risk of infection with Human Immunodeficiency Virus (HIV), Hepatitis C (HCV), Sexually Transmitted Diseases (STD's) among transgender people living in Montana. A questionnaire was developed after a thorough review of the literature as well as a review of existing assessments. The questionnaire was reviewed by a panel of experts and pilot tested with a small sample of the transgender population. To recruit participants to complete the questionnaire, the link was posted on various websites that are frequented by transgender people. In addition, the questionnaire link was sent via email to individuals who are either transgender, or work in communities with transgender people. A descriptive analysis was used to describe various factors asked about on the questionnaire and an analytical cross-sectional approach was used to investigate the association between risk factors and specific health outcomes. One hundred and eleven individuals responded to the questionnaire. One person reported being HIV positive and no one reported being infected with HCV. The relatively small sample size makes it difficult to draw conclusion about rates of these two infections, although STD's prevalence rates were high. High rates of suicide and mental health disorders were also found, in addition to stigma and discrimination experienced by our participants. Results from this study provided a first glimpse into the lives of transgender people living in Montana. The Montana Department of Public Health and Human Services and other health care organizations used this information to create interventions that are tailored to the unique needs of this population.

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# Chapter 1: Introduction

Transgender people are highly stigmatized. Their quality of life is impeded by the many cultural obstacles they encounter. According to the Presidential Advisory Council on HIV/AIDS (2012), transgender individuals confront discrimination in a wide array of settings including healthcare, housing, employment, education, and legal recognition. The *National Healthcare Disparities Report* suggests that transgender people are also disproportionately more likely to experience violence in the home, on the street, and even in health care settings because of their gender orientation. Furthermore, they are four times more likely than the general population to live in extreme poverty, more likely to be uninsured, and less likely to access preventative healthcare that can result in early identification and treatment of disease (National Healthcare Disparities Report, 2015).

The consequences of stigmatization can be devastating. Transgender literature reveals higher rates of depression and suicide (Clements-Nolle et al., 2008, Clements-Nolle et al., 2001, Nemoto et al., 2004). Transgender individuals also claim higher incidences of substance abuse (Sivadon et al., 2014, Fallin et al., 2014, Newcomb et al., 2014, Livingston et al., 2014), and face various social and health issues like high unemployment rates and high-risk sex work for both income and gender validation (Presidential Advisory Council on HIV/AIDs, 2013, Auer et al., 2014, Fletcher et al., 2014). There is also evidence revealing that transgender individuals are not only denied equal access to healthcare, but lack culturally competent healthcare (Sanchez et al., 2009, Grant et al., 2010). Because of the many discriminatory hurdles the transgender community faces, they engage in risky behaviors such as transitioning on their own or with the help of friends, drug and alcohol abuse, sex work, and sharing injection drug paraphernalia. Due to the prevalence of risky behaviors in the transgender community, some researchers have concluded that the transgender community is at a very high risk of HIV infection, as well as Hepatitis C (HCV), and various STD's (PACHA, 2013, Karuna et al., 2014, Clements-Nolle et al., 2001, Reisner et al., 2013, Hill et al., 2011, Herbst, 2007).

The Centers for Disease Control and Prevention (CDC) identify the following groups as having the highest rates of HIV infection: white men who have sex with men (MSM), black men who have sex with men (MSM), Hispanic/Latino men who have sex with men (MSM), black heterosexual women, white heterosexual women, Hispanic/Latina heterosexual women, black male injection drug users (IDUs) and black female injection drug users (IDUs) (CDC, 2013). Unfortunately, governmental agencies like the CDC have not collected information specific to the incidence and prevalence of HIV among the transgender communities. However, a meta-analysis of 29 studies conducted within

multiple transgender communities from various parts of the United States suggests that of all the segments of the population affected by HIV, the transgender population could be at the greatest risk (Herbst et al., 2007).

According to the Montana Department of Public Health and Human Services (MDPHHS), there have been 1,126 cases of HIV reported since 1985 (MDPHHS, 2013). Currently, male-to-male sexual contact (MSM) and injection drug use (IDU) are the highest risk behaviors leading to HIV transmission in Montana. Although epidemiological data has been collected in Montana for the last 30 years, the transgender population has not been assessed singularly.

This study was the second part of a two-phase study aiming at assessing HIV prevention needs and quality of life issues among transgender people living in Montana. The first phase of the study used a grounded theory approach with in-depth interviews and Photovoice methods to explore the current issues facing the transgender community in Montana (von Gohren, 2014). Information obtained from the interviews and Photovoice methods in the first phase were used to inform the second phase of the study; specifically to establish the content for the questionnaire.

## Purpose

The purpose of this study was to assess the HIV, HCV and STD status and risk factors contributing to these diseases, as well as the quality of life of the transgender population living in the state of Montana. Information collected in this study will increase understanding of the effect that intrapersonal, interpersonal, community and environmental factors related to gender identity and gender expression have on HIV/HCV/STD risk and other quality of life issues.

## Statement of the Problem

Information from the Centers for Disease Control and Prevention (CDC) showed that new HIV infections among transgender people occur at almost three times that of non-transgender men and almost nine times that of non-transgender women (CDC, 2011). While several studies have examined the factors that contribute to HIV infection among transgender people living in urban areas, virtually no studies have been conducted in rural, sparsely populated states. This study intended to diminish that void.

## Significance

This study aimed to address the lack of information about transgender individuals living in rural areas by providing public health workers, policymakers, researchers, and health care providers with a greater understanding of the obstacles and issues facing this largely invisible population. More specifically, the Montana Department of Public Health and Human Services' (MDPHHS) HIV Planning Group (HPG) will use the information from this study to increase awareness regarding the HIV/STD/HCV prevention needs of transgender individuals and to develop better and more optimally targeted prevention interventions.

## Research Questions

Based on existing literature and themes that surfaced in phase one of this study, the following questions were developed.

### 1) HIV/HCV/STD Related Questions:

- What is the HIV/HCV/STD status of study participants?
- What are the HIV/HCV/STD testing practices of study participants?
- What sexual, substance abuse and drug injection behaviors put study participants at risk of HIV/HCV/STD?
- Is there a relationship between STD's and penetrative sex, condom use, and type of sex partners?
- Is there are relationship between STD's and stigma, discrimination and social support?

### 2) Transition Related Questions:

- What transition related medical procedures have participants undergone or plan to undergo?
- What are the barriers to obtaining desired transition procedures?
- Have participants had negative or positive experiences while transitioning in Montana?

### 3) Stigma and Discrimination Related Questions:

- Do study participants feel they face discrimination and stigma from the legal system, employers, law enforcement, housing and/or health care professionals?

- Do study participants perceive social support from family, friends or their community?

4) Mental Health Related Question:

- Have participants contemplated or attempted suicide?
- Have participants been diagnosed with a mental illness?
- Is there a relationship between suicide attempts and social support, mental illness, discrimination and stigma?

5) Health Care Related Questions:

- Do study participants trust their medical providers regarding their unique needs?
- What experiences have participants faced when seeking health care?

6) Are there differences among MtF, FtM, and non-binary individuals in regard to the following behaviors:

- attempted suicide
- penetrative sex
- condom use
- HIV testing
- STD's
- type of sexual partner

7) Are there differences among MtF, FtM, and non-binary individuals in regard to the following social factors:

- being mis-gendered
- social support
- stigma
- discrimination
- rejection by medical profession

## Limitations & Delimitations

### Delimitations

The delimitations of the study were:

1. The study was delimited to self-identified male-to-female (MtF) and female-to-male (FtM) transgender and gender non-conforming individuals aged 18 or older who live in Montana.
2. Data was collected through an online questionnaire from individuals in the transgender and gender non-conforming community.
3. Data collected from participants was restricted to self-reports.
4. Participants in the study were volunteers who may discontinue involvement at any time, at their own discretion.

### Limitations

The limitations of the study were:

1. Data collected was limited to the experiences of the participants.
2. Data collected was limited to the participants' honesty, openness, and willingness to share.
3. Data collected was limited to individuals whose e-mail addresses were known to the Gender Expansion Project or who visited websites on which the questionnaire was posted or were recruited by key informants and gatekeepers.

## Definition of Terms

### **Cisgender**

“People who are cisgender are not transgender; their gender identity matches up with the sex they were assigned at birth. The vast majority of people are cisgender” (Teich, 2010).

### **FtM**

“The shortened form of female-to-male: transgender people who are assigned female at birth and transition to male” (Teich, 2010).

### **Gender binary**

“The gender binary is a social system whereby people are thought to have either of two genders: man or woman” (Teich, 2010).

### **Gender nonconforming/genderqueer**

“A term that describes people who feel that they are in between male and female and/or are neither male nor female, or reject the gender binary altogether. It is a term that should be used only if a person self-identifies as such” (Teich, 2010).

### **MtF**

“The shortened form of male-to-female: transgender people who are assigned male at birth and transition to female” (Teich, 2010).

### **Out**

A term for being open about one’s identity, with oneself and others, whereby one comes to terms with one’s own self-identity. The word “out” is sometimes tied to a person’s sexual orientation, so occasionally in transgender literature this is referred to as “openness,” since a transgender individual is being open with their gender identity as well (Zians, 2006).

### **Rural**

“Territory, population, and housing units located outside of urbanized areas or urban clusters. Rural areas have fewer than 2,500 people or areas where people live in open country” (Rural Institute of Montana, 2010).

**Trans\***

“It expands the boundaries of (the transgender) category to be radically inclusive. It can be understood as the most inclusive umbrella term to describe various communities and individuals with nonconforming gender identities and/or expressions en masse” (Jones, 2013).

**Transgender**

“An umbrella term for many different identities. People who are transgender have a gender identity, sex, and/or gender expression that does not line up with the sex they were labeled with at birth” (Teich, 2010).

**Transition**

“The process that some transgender people undergo to live as the gender and/or sex that they feel they are, rather than the sex they were assigned at birth” (Teich, 2010).

**Urban**

“Territory, population and housing units located within urbanized areas and urban clusters: areas with a Census population of at least 50,000 and are densely populated, typically with more than 500 people per square mile; and any densely settled area with a Census population of 2,500 to 49,999” (Rural Institute of Montana, 2010).

**LGBT**

Stands for lesbian, gay, bisexual and transgender and along with heterosexual, it describes people's sexual orientation or gender identity.

**Two-spirit**

Term refers to Native American/Alaska Native Lesbian, Gay, Bisexual, and/or Transgender (LGBT) individuals. It means having both female and male spirits within one person, and can have a different meaning in different communities (Naswood, 2010).

## Chapter 2: Review of Related Literature

This chapter is divided into six sections. The first section provides an overview of the Socio-Ecological Model that served as a framework for questionnaire development. The second section provides an overview of the language used to describe individuals who identify as transgender. Sections three and four provide information about the incidence and prevalence of HIV/HCV and STD's in the transgender population, as well as a discussion of risk factors, including information about discrimination. Mental health issues comprise section five. The last section provides a summary of the Photovoice project which comprised phase one of the study.

### The Socio-Ecological Model

To ensure that all levels of influence on the health and well-being of transgender people were being examined during this study, the socio-ecological model (SEM) was utilized.



FIGURE 1: THE SOCIO-ECOLOGICAL MODEL

The socio-ecological model takes into consideration that to adequately understand a populations' complex health status and its quality of life, multiple levels of influence must be examined. These multiple levels of influence impact health behaviors which ultimately affect health outcomes. There are five levels of influence of the SEM, starting with the individual level and ending with public policy. Factors associated with each level are described below.

- *Individual-* Factors that influence health status at the individual level include knowledge, attitudes, behavior, self-concepts, and skills.
- *Interpersonal-* Factors that influence health status at the interpersonal level include the formal and informal social networks and social support systems, as well as family, work group, and friendship networks.
- *Organizational-* Factors that influence health status at the organizational level include social institutions with organizational characteristics and formal (and informal) rules and regulations for operations.
- *Community-* Factors that influence health status at the community level. Includes relationships among organizations, institutions, and informational networks within defined boundaries.
- *Public Policy-* Factors that influence health status at the public policy level include the local, state, national, and global laws and policies.

## Introduction to the Transgender Community

There is a unique and varied vocabulary surrounding transgender individuals. For the purpose of this study, transgender will be used as an “umbrella” term to describe any individual who has a gender identity, sex, and/or gender expression that does not line up with the sex with which they were labeled at birth (Teich, 2010). The prefix trans defines any word that begins with it, such as transgender or transsexual. The terms trans man, trans woman, and trans person are considered correct, as opposed to transman, etc. It is also used to refer to people that identify as queer or in the Native American culture, two-spirit. Trans people could fit into both masculine and feminine categories, or fit into neither category, calling themselves androgynous. Definitions within this community have not yet been fully agreed upon, as many transgender people use their own self-identifying terms. (“Understanding Transgender”, n.d.)

Lack of reporting options on paperwork and/or forms for transgender people has been common practice. Governmental data collection such as the U.S. Census and general epidemiological information should request transgender status so this can be remedied. However, collecting this data can be challenging because some members of the transgender community do not wish to be identified, and for that reason, are hesitant to indicate their transgender status on official forms. (“Understanding Transgender”, n.d.)

The reasons some people identify as transgender are not fully understood. There are currently multiple theories, but scientifically, no consensus. Looking across cultures, there is a wide range of beliefs about gender. Also, there is the matter of biology. In our current binary system a person with XX chromosomes is considered to be a female, while a person with XY chromosomes is considered to be a male. However, people have variations of these chromosomes, such as XXY and XYY. Medical research also exists to explain the phenomenon of transgender individuals. Hormone fluctuation or imbalance or use of certain medications may cause transgender conditions (National Center for Transgender Equality, 2015). In addition, there is research that suggests brain structure is linked with transgender identity (“Understanding Transgender,” n.d).

Though progress has been made within the last few years, the transgender community has not yet gained equality in American society. For example, a review of 17 articles citing nurses’ attitudes about transgender patients, revealed some evidence of negative attitudes (Dorsen, 2012). In addition, transgender people are often fired from their jobs as a result of their transgender status. The following is a story about a trans female in the mid-1990’s that faced discriminatory practices:

*“Kristine Holt was fired from her job at a Pennsylvania social services agency after she began a medically supervised male-to-female transition. In denying her claim, the Commonwealth Court of Pennsylvania held that state law did not protect individuals who were discriminated against because of their transsexual status” (Holt, 1997).*

American opinions, however, have changed since then. In 2002, the Human Rights Campaign (HRC) conducted a poll on the attitudes of American voters on transgender issues. Surprisingly, 70% of people polled stated they were familiar with the term transgender. In addition, 61% of those polled believed that we need anti-discrimination laws for transgender people, and 77% believed that transgender students should be allowed to attend public schools. More than two thirds stated there should be federal hate crime laws covering transgender people (Moulton, 2008). This research reveals the general population is starting to become more aware of this community and their needs.

Transgender people attempt to live normal lives. The literature, however, suggests they face multiple obstacles that impact quality of life. A review of literature reveals that transgender individuals have much higher rates of depression, anxiety, and attempted suicide rates compared with the general population (Clements-Nolle, 2001; Clements-Nolle, 2008; Nemoto, 2004). In addition, individuals in this population report consistently engaging in behaviors, like alcohol abuse, substance abuse and sex work, that raise the risk of contracting HIV, Hepatitis C (HCV), and STD’s. The Presidential Advisory Council on HIV/AIDs (PACHA) meets annually to update their report that provides

advice, information, and recommendations for HIV prevention. In 2013, PACHA included a section specific to the transgender population in which they concluded that transgender people are, in fact, at a much higher risk for many dangerous conditions like contracting HIV. The report proposed the development of initiatives to connect transgender individuals with “lifesaving HIV prevention and treatment services (PACHA, 2013, pg. 1).”

A study published in *AIDS Research and Human Retroviruses* evaluated demographic data collection forms to better understand how to serve transgender individuals. They found that, while sexual orientation has become a standard part of vocabulary (i.e. people generally understand what words like bisexual and queer mean), gender identity remains poorly understood (Broder, 2014). Progress in curbing the HIV epidemic among transgender populations will require a wide scope of players, who are each instrumentally important in their own way. Policymakers, researchers, health advocates, and health care providers are all necessary to make “long-term investments in the value of transgender lives and to commit to working with transgender community members to prioritize the fight against HIV and AIDS” (PACHA, 2013). This process of discovery, commitment, and change requires a basic understanding of the problems engulfing the transgender community. The following sections highlight the available literature related to assessing the HIV, HCV and STD status and risk factors contributing to these diseases, as well as transgender quality of life issues.

## HIV/STD/HCV Status

### HIV Status

According to the CDC, there were 1.2 million people living with HIV in the United States in 2011, with the total population being 311,700,000. A simple calculation confirms the HIV rate for the general population as 0.38%. Literature suggests the incidence of HIV infection, however, within the transgender population is elevated. The Presidential Advisory Council on HIV/AIDS states, “...new HIV infections among transgender people occur at almost three times that of non-transgender men and almost nine times that of non-transgender women” (PACHA, 2013, pg. 1).

Information from a 2001 study of 137 male to female transgender people sheds light on the HIV status in the transgender population. They recruited transgender persons through targeted sampling, respondent-driven sampling, and agency referrals. Thirty-five percent of the participants had positive HIV test results, of whom 20% learned their status through study participation (Clements-Nolle, 2001). It is also interesting to note that of the 35% of HIV positive participants, 52% thought it was “unlikely” or “there was

no chance" that they were HIV infected (Clements-Nolle, 2001). Clearly, the perception of risk of contracting HIV may not be high in this segment of the population, but the actual rates show otherwise. Future interventions are needed to procure information regarding the discrepancy between perception of risk and actual rates of HIV.

In another study that examined the HIV risk behaviors among male to female transgender persons of color in San Francisco, researchers found that among the 332 participants, the rate of HIV was 7.8 for every 100 people (Nemoto, 2004). The participants for this study were referred by four San Francisco AIDS service organizations with transgender-specific programs. The rate they found is very high compared to the previously calculated HIV rate of the general population (0.38%). Lack of employment and poverty because of discrimination and stigma leads to engaging in high-risk sex work, researchers stated, suggesting the reasons why the HIV rate was so high in this study. They also stated that the psychosocial consequences of stigma, which are depression and poor self-esteem, leads to low negotiation power in relationships with primary partners and low self-efficacy to negotiate safe sex. Focus group findings from this study suggested that some male to female transgender persons engage in casual sex with multiple partners to affirm their female gender identities and engage in substance use to cope with stress associated with sex work and depression (Nemoto, 2004). They concluded that socioeconomic and psychological adversity contributed to the high prevalence of HIV-related risk behaviors (Nemoto, 2004).

## STD Status

The most common STD's in the US are chlamydia, gonorrhea, syphilis, human papilloma virus (HPV), and herpes. In 2013, a total of 1,401,906 chlamydial infections were reported to CDC in 50 states and the District of Columbia, and a total of 333,004 cases of gonorrhea were reported in the United States, yielding a rate of 106.1 cases per 100,000 population. Although the rate of syphilis in the United States declined 89.7% during 1990–2000, the rate increased annually during 2001–2009 before decreasing in 2010 and remaining unchanged during 2011. The rate again increased during 2012 and 2013. Unfortunately, the CDC does not keep data about the STD rates of the transgender population. Such information is badly needed to determine whether prevention interventions are needed for this population. The information below explores the literature surrounding STD's and the transgender population.

In one of the few studies exploring the sexual health of female to male transgender people, electronic medical records of the 23 female to male participants, whose mean age was 32, were screened for sexually transmitted diseases (STD's) between July and December 2007 at a Boston, Massachusetts area health center. One individual was

HIV-infected (4.3%) and two (8.7%) had a history of STD's (all laboratory-confirmed) (Reisner, 2013). Another study with a total sample of 145 participants compared female to male transgender youth between the ages of 12-29 years with male to female of the same demographic. Fifty-seven percent of the participants were female to male transgender people, and forty three percent were male to female. The prevalence of STD's were: 4.8% HIV, 2.8% herpes simplex virus, 2.8% syphilis, 2.1% chlamydia, 2.1% gonorrhea, and 1.4% human papilloma virus. Only gonorrhea prevalence significantly differed by gender identity (MTF 2.1% vs. 0.0% FTM;  $p = 0.046$ ) (Reisner, 2015). The participants most at risk to have unprotected anal or vaginal sex were male to female youth who were younger in age, white non-Hispanic, and reported a primary sex partner. However, within the female to male youth, reporting a casual sex partner and current alcohol use increased their odds of unprotected anal or vaginal sex (Reisner, 2015). Clearly, factors associated with sexual risk differ for male to female and female to male youth. Partner type appears pivotal to understanding sexual risk factors in transgender adolescents and young adults. These sexual risk factors can increase the likelihood of contracting STD's.

In another study, Hill and associates looked at Transgender Sex Workers (TSW). Among the 24 participants, they found 16 had been diagnosed with at least one STD. Additionally, 7 participants reported intentional unprotected anal or vaginal intercourse, which may explain the high prevalence of HIV (37.5%) in the cohort (Hill, 2011). The rates for STD's and HIV within the TSW population are extremely high compared to the general transgender population, due to the fact that sexual activity with multiple partners is higher.

### Risk Factors for HIV/STD's

Several risk factors have been suggested for HIV infection and STD's in the transgender population. More than one-half of male to female transgender people report a history of commercial sex partners (sex work) which is widely thought to put them at risk for HIV infection and STD's. Because of difficulties in maintaining employment, male to females may be financially compelled to pursue sex work, which then puts them at risk for HIV infection and STD's. Lifetime numbers of non-commercial sex partners are much higher among male to females compared to general population, and these partnerships may likewise contribute to HIV/STD's. Non-injection substance use may also broadly increase HIV/STD vulnerability (Nuttbrock, 2009).

### HCV Status

The CDC states that there was an estimated 21,870 cases of acute HCV (Hepatitis C virus) infections reported in the United States in 2012. There are no estimations of the HCV infection rate for the transgender population and there are a very small number of studies that evaluated the HCV status of transgender people. Reisner et al. found that among their total sample size of 145, the HCV rate was 2.8% (Reisner, 2015). This illustrates the need to further explore the HCV rate among the transgender population to determine an accurate rate for the United States, as well as each state in the country. One study does show the HCV infection prevalence among HIV positive trans sex workers as 6.5% (Carobene, 2014). However, this study was conducted in Argentina and does not necessarily represent the rate in the United States.

### HIV/STD/HCV Status in Montana

While the HIV, STD, and HCV status has been evaluated across the general population, this study focused on the HIV, STD, and HCV status in Montana. As of December 2012, over a thousand cases of HIV infection have been reported in Montana, across the whole population, not just transgender people. More than 400 of these are known to have died. Of the total cases, fifty-eight percent were Montana residents at the time of the diagnosis, with 70% of them living in one of the six most populous counties at the time of diagnosis (Cascade, Flathead, Gallatin, Lewis & Clark, Missoula, and Yellowstone). The Montana Department of Public Health and Human Services (MDPHHS) does ask transgender status on their HIV testing forms, however, we have no data on HIV and gender from the state. For this reason, no data exists on the incidence or prevalence of HIV infection for transgender people living in Montana, so we can only assume the transgender population, based on the trends reported previously, accounts for a discernable percentage of infections.

In the case of STD's, a total of 4,000 cases were reported in Montana in 2012. All but 4 counties in Montana reported at least one STD. Epidemiological reports have shown that chlamydia is the most commonly reported disease in Montana and the United States. In the last 12 years, counts of chlamydia have more than doubled in Montana, and numbers have increased in the United States as well. The MDPHHS suggest that the rate of chlamydia may have increased due to the fact that there is now increased screening, improved test sensitivity and reporting, and increased burden of disease. Gonorrhea is the second most commonly reported STD in Montana and the United States. There was an increase of 25% (from 85 to 108) in the rate of gonorrhea from 2011 to 2012 in Montana. In 2012, three syphilis cases were reported compared with nine in 2011. Because Herpes, HPV, Pubic Lice, and Scabies are not reportable conditions, the MDPHHS does not have data available for these STD's.

It is estimated that 3.2 million persons in the United States are currently living with past or present Hepatitis C (HCV) infection, the majority of which are 50-70 years of age. There were a total of 1,251 confirmed cases (acute and chronic) of HCV reported in Montana.

## HIV/STD/HCV Risk Behaviors

### Economic Risk Behaviors

An association between housing status and HIV risk behaviors was examined in a study which contained over 500 transgender women. Seven variables (including socio-demographics, HIV status, housing status, and sexual partner type) were used to estimate associations the researchers were attempting to explore (Fletcher, 2014). Results demonstrated that homeless and marginally housed trans women engaged in significantly higher rates of illicit drug use than housed trans women. Marginally housed and housed trans women, however, engaged in significantly higher rates of illegal hormone injections than homeless trans women (Fletcher, 2014). Rates of sex work were high in the sample as a whole, though sex with an exchange partner was most common among the marginally housed trans women. The marginally housed trans women exhibited the greatest risk profile for HIV acquisition or transmission (Fletcher, 2014). This study demonstrates the fact that high homelessness rates correlate with higher drug use, therefore reducing homelessness in this population might reduce injection drug use and likely reduce transmission of HIV.

### Sexual Violence and Risk Behaviors

Hill and associates discovered high rates of STD's in female to male Transgender Sex Workers (TSW). Reasons that the prevalence of STD's is high in this group is that the participants disclosed high rates of substance misuse, violence and sexual assault (Hill, 2011). Future research in this area is needed to understand the myriad of social, behavioral, and biological factors that contribute to HIV and STD vulnerability for female to male transgender individuals. The following paragraphs outline the different risk behaviors that might contribute to HIV and STD's in the transgender population.

*“Transgender people, especially transgender people of color, experience life-threatening situations, including violence, higher rates of HIV and AIDS, homelessness, and extreme poverty. There is an urgent need for protections so transgender people can live safe, healthy, and thriving lives.” - Mara Keisling, executive director of the National Center for Transgender Equality*

## Sexual Risk Behaviors

In a study conducted in 2013, 23 participants completed a survey regarding their sexual risk behaviors. Twenty-six percent of female to male transgender people engaged in sexual risk behaviors in the prior three months (i.e., unprotected sex with a non-transgender male, condom breakage, or anonymous sex). The majority, 61% had previously diagnosed mental disorders (52% depression, 52% anxiety, and 26% adjustment disorder), and regular alcohol use was common (65%). Alcohol use, psychosocial distress histories, and sex with males only (versus with males and females) were associated with sexual risk in the past three months. The study concluded that “transgender men have concomitant psychosocial health vulnerabilities which may contribute to sexual risk behaviors” (Reisner, 2013).

## Discrimination

*“In some cases, employment discrimination, lower wages, and lack of legal protections make it harder for transgender people to cover basic necessities like rent, food, clothing, and healthcare, let alone save for the future. In other instances, legal inequalities mean that transgender people are forced to pay higher costs for needs like housing, healthcare, and education.” - Kris Hayashi, executive director of the Transgender Law Center (2015).*

According to the 2011 National Healthcare Disparities Report, transgender people are disproportionately more likely to experience violence in the home, on the street, and even in health care settings. In addition, they are four times as likely as the general population to live in extreme poverty, more likely to be uninsured, and less likely to get preventive care that can catch diseases such as cancer early in disease progression (PACHA, 2013).

In 2011, the National Center for Transgender Equality and the National LGBTQ Task Force teamed up to release the first and only national study specifically for transgender Americans. Called The National Transgender Discrimination Survey, it was able to quantify the discrimination and violence transgender people faced. Interviews were conducted with 6,400 transgender and gender non-conforming people. Their key findings were:

- Discrimination was pervasive throughout the entire sample, yet the combination of anti-transgender bias and persistent, structural racism was especially devastating. People of color in general fare worse than white participants across

the board, with African American transgender respondents faring worse than all others in many areas examined.

- Respondents lived in extreme poverty. Their sample was nearly four times more likely to have a household income of less than \$10,000/year compared to the general population.
- A staggering 41% of respondents reported attempting suicide compared to 1.6% of the general population, with rates rising for those who lost a job due to bias (55%), were harassed/bullied in school (51%), had low household income, or were the victim of physical assault (61%) or sexual assault (64%) (Grant, 2010).

The following is a summary of their findings, which encompass a wide range of the areas of life transgender people face discrimination: education, employment, housing, public accommodations, updating ID documents, abuse by police in prison, and healthcare.

### Harassment in Education

Those who expressed a transgender identity or gender non-conformity while in grades K-12 reported alarming rates of harassment (78%), physical assault (35%) and sexual violence (12%); harassment was so severe that it led almost one-sixth (15%) to leave a school in K-12 settings or in higher education. Respondents who have been harassed and abused by teachers in K-12 settings showed dramatically worse health and other outcomes than those who did not experience such abuse. Peer harassment and abuse also had highly damaging effects (Grant, 2010).

### Employment Discrimination

Participants in the NTDS experienced unemployment at twice the rate of the general population at the time of the survey, with rates for people of color up to four times the national unemployment rate. Also, widespread mistreatment at work was cited, as 90% of those surveyed reported experiencing harassment, mistreatment or discrimination on the job or took actions like hiding who they are to avoid it. Another 47% stated that they had experienced an adverse job outcome, such as being fired, not hired or denied a promotion because of being transgender or gender non-conforming. Over one-quarter (26%) reported that they had lost a job due to being transgender or gender non-conforming and 50% were harassed. Large majorities attempted to avoid discrimination by hiding their gender or gender transition (71%) or delaying their gender transition (57%).

However, the vast majority (78%) of those who transitioned from one gender to the other reported that they felt more comfortable at work and their job performance improved, despite high levels of mistreatment. Overall, 16% said they had been compelled to work in the underground economy for income (such as doing sex work or selling drugs). Respondents who were currently unemployed experienced debilitating negative outcomes, including nearly double the rate of working in the underground economy (such as doing sex work or selling drugs), twice the homelessness, 85% more incarceration, and more negative health outcomes, such as more than double the HIV infection rate and nearly double the rate of current drinking or drug misuse to cope with mistreatment, compared to those who were employed. Respondents who had lost a job due to bias also experienced ruinous consequences such as four times the rate of homelessness, 70% more current drinking or misuse of drugs to cope with mistreatment, 85% more incarceration, more than double the rate working in the underground economy, and more than double the HIV infection rate, compared to those who did not lose a job due to bias (Grant, 2010).

## Housing Discrimination

Respondents reported various forms of direct housing discrimination — 19% reported having been refused a home or apartment and 11% reported being evicted because of their gender identity/expression. One-fifth (19%) reported experiencing homelessness at some point in their lives because they were transgender or gender non-conforming; the majority of those trying to access a homeless shelter were harassed by shelter staff or residents (55%), 29% were turned away altogether, and 22% were sexually assaulted by residents or staff. Almost 2% of respondents were currently homeless, which is almost twice the rate of the general population (1%). Respondents reported less than half the national rate of home ownership: 32% reported owning their home compared to 67% of the general population. Respondents who have experienced homelessness were highly vulnerable to mistreatment in public settings, police abuse and negative health outcomes (Grant, 2010).

## Public Accommodations Discrimination

The NTDS indicated that fifty-three percent (53%) of respondents reported being verbally harassed or disrespected in a place of public accommodation, including hotels, restaurants, buses, airports and government agencies. Respondents experienced widespread abuse in the public sector, and were often abused at the hands of “helping” professionals and government officials. One fifth (22%) were denied equal treatment by a government agency or official; 29% reported police harassment or disrespect; and 12% had been denied equal treatment or harassed by judges or court officials.

Another study conducted in Massachusetts in 2014 mirrored these findings. 65% of transgender people reported experiencing discrimination in a place of public accommodation in the past 12 months (Reisner, 2014). The study revealed that bathrooms in restaurants, libraries, cinemas, shopping malls, airports, and other public places were also locations of frequent, sometimes serious harassment and abuse of transgender people. Transgender people who reported discrimination in public accommodations often had increased physical and emotional health problems as a result. The study found that discrimination caused transgender people to postpone health care, while simultaneously increasing negative health outcomes. Only 17 states and D.C. prohibit discrimination in public accommodations on the basis of gender identity, covering just 36% of Americans (Movement Advancement Project, 2015).

### Updating ID Documents Discrimination

Of those who have transitioned gender, only one-fifth (21%) have been able to update all of their IDs and records with their new gender. One-third (33%) of those who had transitioned had updated none of their IDs/records. Fifty-nine percent reported updating the gender on their driver's license/state ID, meaning 41% live without ID that matches their gender identity. Forty percent (40%) of those who presented ID (when it was required in the ordinary course of life) that did not match their gender identity/expression reported being harassed, 3% reported being attacked or assaulted, and 15% reported being asked to leave (Grant, 2010).

### Abuse by Police and in Prison

One-fifth (22%) of respondents who have interacted with police reported harassment by police, with much higher rates reported by people of color. Almost half of the respondents (46%) reported being uncomfortable seeking police assistance. Physical and sexual assault in jail/prison is a serious problem: 16% of respondents who had been to jail or prison reported being physically assaulted and 15% reported being sexually assaulted (Grant, 2010).

### Discrimination in Health Care and Poor Health Outcomes

Health outcomes for all categories of respondents show the appalling effects of social and economic marginalization, including much higher rates of HIV infection, smoking, drug and alcohol use and suicide attempts than the general population. With regards to refusal of care, 19% of our sample reported being refused medical care due to their transgender or gender non-conforming status, with even higher numbers among people

of color in the survey. Also, 50% of the sample reported having to teach their medical providers about transgender care. The HIV rate reported was over four times the national average of HIV infection, with rates higher among transgender people of color. Survey participants reported that when they were sick or injured, many postponed medical care due to discrimination (28%) or inability to afford it (48%) (Grant, 2010).

Another study conducted by Sanchez et al. outlines what challenges transgender people face in a healthcare setting. They found that over 25% of the 101 male to female participants perceived the cost of medical care, access to specialists, and a scarcity of transgender-friendly and transgender-knowledgeable providers as barriers to accessing healthcare (Sanchez, 2009). The ramifications for not having adequate and knowledgeable health care providers only accentuates the risk factors for disease, namely, HIV, HCV and STD's. This study also stated transgender persons who lacked stable housing were less likely than their counterparts to have access to a general practitioner or mental health professional.

## Familial Acceptance

Forty-three percent (43%) maintained most of their family bonds, while 57% experienced significant family rejection. In the face of extensive institutional discrimination, family acceptance had a protective affect against many threats to well-being including health risks such as HIV infection and suicide. Families were more likely to remain together and provide support for transgender and gender nonconforming family members than stereotypes suggest.

While the National Transgender Discrimination Survey found many negative aspects of discrimination within this population they surveyed, the following is a summary of the positive aspects they found. In the face of adversity, study participants described findings that put an optimistic light on the lived experiences of transgender people (Grant, 2010).

## Resilience

Despite all of the harassment, mistreatment, discrimination and violence faced by respondents, study participants also demonstrated determination, resourcefulness and perseverance: Although the survey identified major structural barriers to obtaining health care, 76% of transgender respondents have been able to receive hormone therapy, indicating a determination to endure the abuse or search out sensitive medical providers. Despite high levels of harassment, bullying and violence in school, many respondents were able to obtain an education by pursuing higher education. Although

fewer 18 to 24-year olds were currently in school compared to the general population, respondents returned to school in large numbers at later ages, with 22% of those aged 25-44 currently in school (compared to 7% of the general population). Over three-fourths (78%) reported feeling more comfortable at work and their performance improving after transitioning, despite reporting nearly the same rates of harassment at work as the overall sample. Of the 26% who reported losing a job due to bias, 58% reported being currently employed and of the 19% who reported facing housing discrimination in the form of a denial of a home/apartment, 94% reported being currently housed (Grant, 2010).

## Conclusion

The NTDS concluded by stating, “sixty-three percent (63%) of our participants had experienced a serious act of discrimination — events that would have a major impact on a person’s quality of life and ability to sustain themselves financially or emotionally.” These events included the following:

- Lost job due to bias
- Eviction due to bias
- School bullying/harassment so severe the respondent had to drop out
- Teacher bullying
- Physical assault due to bias
- Sexual assault due to bias
- Homelessness because of gender identity/expression
- Lost relationship with partner or children due to gender identity/expression
- Denial of medical service due to bias
- Incarceration due to gender identity/expression

Almost a quarter (23%) of the respondents experienced a catastrophic level of discrimination — having been impacted by at least three of the above major life-disrupting events due to bias. These compounding acts of discrimination — due to the prejudice of others or lack of protective laws — exponentially increase the difficulty of bouncing back and establishing a stable economic and home life (Grant, 2010).

In addition to the NTDS, The Palette Fund, True Colors Fund, and the Williams Institute conducted a survey called The Lesbian, Gay, Bisexual, and Transgender (LGBT) Homeless Youth Provider Survey. It was web-based, and conducted from October 2011 through March 2012. The survey was designed to assess the experiences of homeless youth organizations and the services they provide LGBT youth. It also assessed the prevalence of LGBT youth within the homeless populations being served by these

organizations. Of all the organizations they surveyed, respondents suggested that about 3,100 of their clients were transgender youth who were homeless. Less than half of respondents said they served homeless transgender clients ten years ago, but in the past year, more than three-quarters of respondents indicate that they work with homeless transgender youth (Durso, 2012). This is very telling about the status of transgender youth currently and compared to ten years ago, perhaps due to inefficiency in collecting data. The most commonly cited factor contributing to their homelessness was rejection by their families on the basis of sexual orientation and gender identity. These agencies did not locate the primary barriers to improving services for LGBT homeless youth in their competency or willingness to provide such services, but in the lack of government, foundation, and private funding to develop them (Durso, 2012).

## Mental Health Issues

In the literature, there is evidence to show transgender people suffer from acts of violence and also have high rates of depression and suicide. Many factors including negative self-image, chronic low self-esteem, being mis-gendered in their daily interactions with others and having Gender Identity Dysphoria (GID) lead to depressive symptoms and serious contemplations of suicide, as well as high rates of attempted suicide.

There are many documented cases of repeated acts of violence against transgender people. Lombardi et al. distributed a questionnaire to transgender people, to assess their experienced levels of violence. In a sample of 402 cases, they found that over half the people within this sample experienced some form of harassment or violence within their lifetime, with a quarter experiencing a violent incident. (the previous sentence is not clear – what is the difference between experiencing violence and a violent incident?). Further investigation found that experiencing economic discrimination because of their transgender status had the strongest association with experiencing a violent incident (Lombardi, 2002). Another study published in *Aggression and Violent Behavior* looked at self-report surveys, hot-line call and social service records, and police reports to discern the rates and types of violence transgender people face. All three sources indicated violence against transgender people starts early in life, that transgender people are at risk for multiple types and incidences of violence, and that this threat lasts throughout their lives. In addition, transgender people seem to have particularly high risk for sexual violence (Stotzer, 2009). When multiple or constant violent acts permeate a population of people, rates of depression, contemplating or attempting suicide, and other mental health disorder rates increase.

In a recent study of more than 6,400 transgender people in the United States, 41% of respondents reported attempting suicide—a rate 25 times higher than the general population (PACHA, 2013). A study conducted by Clements-Nolle, et al., in San Francisco assessed 392 male to female and 123 female to male transgender people. Their results showed that 55% of female to male transgender people and a whopping 62% of male to female transgender people report being depressed (Clements-Nolle, Marx, Guzman & Katz, 2001). Clearly, depression and suicide interventions need to be tailored for this specific population by state and federal health departments.

The same researchers conducted a related study seven years later, where they examined the influence of gender-based discrimination and victimization. They found that the prevalence of suicide among transgender individuals is very high, 32%, compared to the general population (Clements-Nolle, 2008). Interventions for suicide prevention among transgender people are urgently needed, particularly for young people. Increasing societal acceptance of the transgender community and decreasing gender-based prejudice may help prevent suicide in this highly stigmatized population. In addition, suicidal behaviors can be reduced if medical, mental health, and social service providers addressed depression, substance abuse, and forced sex (Clements-Nolle, 2008).

## Transgender in Montana

The first phase of this study involved conducting several interviews with transgender individuals in Montana and using Photovoice methods to explore the contextual factors that define and shape the lives of people in Montana who identify as transgender, and specifically to explore factors that influence their risk of infection with HIV/AIDS. Ten major themes emerged from the interviews as well as the discussions surrounding the photographs. Sense of self was identified as a core category related to the overall health and risk behavior of the transgender community in Montana. The other nine major categories, including 1) age of transition, 2) the importance of love, 3) availability of support, 4) passing as your identified gender, 5) normalization in society, 6) ignorance surrounding gender variance, 7) health care, 8) legal issues, and 9) life in Montana, were seen as contributing to the development of a stronger or weaker sense of self. The findings from this study will be used by the Montana Department of Public Health and Human Services to increase awareness of the lived experience and health needs of the transgender community in Montana. A brief descriptions of those themes follow.

The first theme found was “sense of self.” A common thread throughout the interviews showed the importance of embracing and respecting your own identity, as a trans\*

individual, because then other people would respect you for that, too. It was also shown that when people respect themselves and embrace their own identity, they take better care of themselves, because they have more self-worth. It was noted that when someone first transitions, they can feel vulnerable. But, as time passes, they can establish a stronger sense of self-identity and self-worth. This sense of self is imperative to the importance you place on self-care. So, when people are in the early stages of their transition, they may be more likely to participate in risky behaviors.

The second theme found was “age of transition.” People who transition at an older age often face problems related to having been seen as their first identity for longer, and having established a life that now needs to be revalidated or, often times, recreated. It was also mentioned that a person transitioning at an older age can experience a second adolescence after they begin to live as their correct gender. Several interviewees mentioned that people are transitioning at younger ages than they previously were. This was seen as a result of society becoming more open and more aware of the existence of gender variant individuals. However, the interviews found that if there are not resources available to children, it can cause a lot of pain later on in life. The longer an individual goes without acknowledging their true identity, and without being supported in that identity, the more difficulty they can face.

The third theme found was “the importance of love.” All of the interviewees discussed losing relationships with friends, colleagues, and family members (be they parents, siblings, or children) because of their transgender status. It was mentioned that the people who know the transitioning individual, must transition as well. Some people experienced that transitional process more smoothly than others. For some people, loss of a job or of their status in their community was mentioned as well. Being rejected by friends, family, or by romantic partners can create potential for participating in risky behaviors. Some interviewees described how being rejected by support systems can lead to personal resource insecurity, as in financial or housing troubles, which can in turn lead to risky behaviors. It was also found that rejection can also lead to searching for anyone who accepts you, which can open up possibility for participation in risky behaviors. Also, searching for love can feel difficult for a transgender individual.

The fourth theme found was the “availability of support.” The interviewees mentioned that if someone feels supported, they will participate in healthier behaviors. The more support that an individual has throughout their transition, the more they will respect themselves, which has been demonstrated above to be critical in their health and well-being. This support can be in the form of a church group, family, friends, or in available community resources. It is important to mention that the availability of the internet has made finding a supportive community easier in recent years, especially in a rural state

like Montana. One key informant mentioned that the availability of information on the internet could actually cause problems for the Trans\* community in Montana. This key informant was concerned that individuals on a self-directed path could end up in risky situations without being fully informed, either because they are starting to transition without going through the appropriate amount of counseling or without enough support, or possibly getting their hormones and supplies off the internet. Of particular concern was the danger of potential violence. Having a support network is not a given for trans individuals. As discussed earlier, they often face rejection from people who were once close friends or family members. Because of this, they sometimes have to actively choose to move away from a support network, and take steps to building a new one on their own. Also, some Photovoice participants mentioned the important role their pets play in their support network, due to the unconditional love they provide.

The fifth theme found was “passing as your identified gender.” It was found that there are many benefits of being able to pass as the gender you identify with. One that is commonly mentioned is that you experience less discomfort surrounding the fact that you were assigned a sex at birth that corresponds with a gender that you don’t see yourself representing. People also don’t want to be seen as a “trans” man or woman, they want to be seen simply as a man or a woman. While some people try to hide the fact that they are a member of the Trans\* community, either because they find it to be too stressful or because they simply no longer identify as “trans,” there was a sentiment expressed by the interviewees that the Trans\* community needs people to participate, and to be open about their identity, in order to help the community move forward. Being able to afford the surgical interventions that can help a transgender person pass is an indicator of a degree of financial stability, and can lead to less discrimination in other areas of their life. It was also mentioned by some interviewees that they are afforded a sense of security in being able to pass as the gender with which they identify.

The sixth theme found was “normalization in society.” This study found that transgender individuals and their stories are normalized through pop culture, we can see a shift in attitudes towards the gender variant community. Even though we see this change happening, it is happening slowly and over time. So, while the interviewees were optimistic about change, they also emphasized the need for more patience. This phase of the study found that people need a chance to learn that transgender individuals are just regular people; that they aren’t so different from anyone else, and they want to be treated just like any other person. Interviewees also stated that as society has an opportunity to learn more about the Trans\* community, hopefully they will become better understood and accepted.

The seventh theme found was “ignorance surrounding gender variance.” Lack of knowledge was mentioned throughout the interviews as being a major barrier to overall good health and well-being, particularly in regards to HIV risk. Lacking quality comprehensive sex education was seen as a problem because people weren’t receiving knowledge about different types of sex, or even about different types of gender and sexual orientation, either at all or until much later in life. Several interviewees mentioned the fact that there is a perception in society that HIV is the gay disease. This makes prevention challenging, because traditional prevention messages may not be reaching the Trans\* community. It was noted that there is a lack of understanding in society about the gender spectrum, and that the Trans\* community exists in the first place. This creates a lack of identity for an individual who identifies as gender variant, because they might not know what they are feeling, or that there is a word to describe how they feel.

The eighth theme found was “health care.” Having informed and caring trans-inclusive medical professionals was seen as a necessity, and they are also rare. Dealing with unsupportive medical professionals was identified as a barrier to good health and self-care. Even when quality health care has been found, it was mentioned that people don’t always communicate openly with them for fear of confidentiality laws, or simply because you no longer wish to identify as a member of the trans\* community. Also, not all medical providers and pharmacists caring for gender variant individuals are created equal. There was a lot of confusion in the medical settings and among the interviewees about where to get a clean needle supply and how to properly dispose of those needles. In order to get a reliable system in place, people needed to do a lot of research on their own. Some Photovoice participants took a picture of their injection supplies, and discussed their needle disposal techniques. Also, it was mentioned that it is either too expensive to get testosterone from local pharmacies or they feel too uncomfortable dealing with the pharmacies, and so many people order their testosterone and needles through the mail from pharmacies outside of the state. It was also mentioned that the Trans\* community often needs to be advocates for their own care, and be knowledgeable about the care they require, especially if they have limited access to finding medical supplies or a trans-inclusive health care provider. This self-directed path can lead to dangerous situations when a patient might “go rogue.”

The ninth theme found was “legal issues.” This phase of the study found changing your legal name and your gender on various governmental documents can be a complicated process if you don’t know where to start. It was also mentioned that if your documentation doesn’t match, it can be a barrier when you are looking for work or starting at a new place of employment; if you hand in a driver’s license or passport with your old photo, gender, and name on it, and you show up in person asking to be called a different name and gender, you are forced to put yourself in a potentially awkward

situation from the beginning. Also, the lack of a state-wide non-discrimination ordinance is another barrier to practicing healthy behaviors. A non-discrimination ordinance protects people from being fired or denied housing due to their sex or gender orientation. At the time of publication, NDOs have passed in Missoula, Helena, and Butte. Activists are working to pass one in Bozeman next.

The tenth and last theme is “life in Montana.” In general, our interviewees expressed a lot of pride in Montana and the strength of its trans\* community and trans-inclusive nature. It was expressed that Montana is on the forefront of the trans\* movement, and has an opportunity to be a leader for other states. Some interviewees expressed surprise at finding a very “live and let live” attitude in Montana, a state in which they thought originally transitioning would be very difficult, making it actually a very positive experience. Some interviewees mentioned moving to Montana with the specific goal of transitioning here.

# Chapter 3: Design and Methodology

## Introduction

This study represented the second phase of a two-phase study aimed at assessing HIV/HCV/STD prevention needs and quality of life issues among transgender people living in Montana. The first phase of the study utilized a grounded theory approach (in-depth interview and Photovoice methods) to establish the framework for questionnaire (found in Appendix A) development and further quantitative research. The purpose of this second phase was to further inform the MDPHHS (Montana Department of Public Health and Human Services) about the HIV/HCV/STD status of transgender people, and risk factors contributing to infection. The quality of life of the transgender population living in the state of Montana was also explored. This information will help create awareness of the issues facing the transgender population so that health programs can be tailored toward their needs.

## Description of Target Population

The target population for this study consisted of any person over the age of 18, living in Montana, who identified as transgender or gender non-conforming. For the purposes of this study, the term transgender was used as an “umbrella” term to describe any person who has a gender identity, sex, and/or gender expression that does not match the sex they were labeled with at birth (Teich, 2010). An effort was made to include MtF and FtM transgender individuals, as well as those who consider themselves to be gender nonbinary or two-spirit.

The exact number of transgender individuals who are currently living in the United States is not known. Consequently, the population of transgender individuals living in Montana is not known. According to the American Psychiatric Association (APA), one in every 30,000 persons is MtF and one in every 100,000 is FtM (Keller, 2009). However, these estimates were determined from questionnaires conducted in smaller European countries examining the number of transgender persons seeking some form of health care. These types of studies could lead to an underestimation of true population size, especially since many transgender persons often choose not to self-identify as transgender in a health care setting for fear of discrimination (Kirk & Kulkarni, 2001). The National Center for Transgender Equality (NCTE) suggests a slightly larger percentage, ranging from .25% to 1% of the U.S. population (NCTE, 2009). Given that

the population of Montana is about one million, a conservative estimate of the number of transgender people living in the state would range from 2,500 to 10,000.

## Protection of Human Subjects

This study was completed in accordance with the University of Montana Institutional Review Board (IRB) guidelines for the protection of human subjects. The IRB approval form is located in Appendix B.

## Study Design

This study utilized a cross-sectional design. Cross sectional studies typically use a one-time data collection effort and a self-report format. These types of studies can be used to assess the burden of disease or health needs of a population - in this case, the needs of the transgender population in Montana, and are therefore particularly useful in informing the planning and allocation of health resources.

Cross-sectional studies have several advantages. They are relatively quick and easy to conduct because no follow-up is needed, data on all variables is only collected once, and prevalence for all factors under investigation are able to be measured. In addition, multiple outcomes and exposures can be studied (Barratt, 2009).

Two types of analyses were used in this study- descriptive and analytical. Descriptive analysis was used to assess the frequency and distribution of the variables under consideration. Analytical cross-sectional approach was used to investigate the association between variables, such as types of gender identity and behavioral risk factors; suicide and experiences of stigma and discrimination.

## Procedures

### Primary Data Collection

#### Questionnaire

#### Instrument Development

The socio-ecological model was used during the conceptual phase of questionnaire development as a framework, ensuring that all levels of influence on the health and

well-being of transgender people were being examined. These levels of influence include: 1) individual level- the influence of the person's knowledge, beliefs, and behaviors; 2) interpersonal level- the influence of relationships with family, friends and co-workers; 3) organizational level- the influence of communities and social networks; and 4) public policy level- the influence of laws and policy on the quality of health services and other needed resources. A more in-depth description of the model can be found in chapter two.



Three additional sources guided the development of the questionnaire for this study:

- Recent literature
- Results from the 2014 Montana Transgender Photovoice Project
- Other existing transgender needs assessment questionnaires

The questionnaire consisted of 9 sections:

- Demographic information (i.e. age, race, income level)
- HIV/HCV/STD status and testing practices
- Sexual risk behaviors
- Drug injection and substance abuse risk behaviors
- Transgender experience
- Stage of transition
- Stigma, discrimination, and social support
- Mental health
- Access to transgender inclusive health care

In the development of the questionnaire, every effort was made to ask relevant questions and avoid being repetitive. Also, we intended to lessen the psychological

impacts of answering potentially traumatic questions by using proper phrasing and eliminating harsh verbiage.

Before making the questionnaire live online and starting data collection, the questionnaire was reviewed by an expert panel consisting of the director of the Gender Expansion Project (GEP) and University of Montana faculty. In addition, key informants in the transgender community were also sought to provide feedback. The key informants were either activists in the transgender community in Montana; or healthcare providers well-versed in the transgender health needs in Montana.

Once suggestions for revisions from this group were incorporated into the questionnaire, the questionnaire was pilot tested in three different sessions with a total of ten individuals who belong to the transgender community. These individuals were contacted via email and asked to assist in the final phase of the questionnaire development. Two of the pilot testing groups were facilitated by the research assistant, and one was facilitated by the director of the GEP. The pilot testers received a hard copy of the questionnaire, and were asked to participate in an open discussion on each question. Finally, decisions were made whether or not to revise the questions that the pilot testers suggested be altered.

## Sample Selection

In rural states such as Montana, access to high-risk groups poses a challenge. This study, therefore, utilized a convenience sample and a primarily electronic means of recruiting participants.

After the questionnaire was fully completed and entered online on the survey platform Qualtrics, the recruitment phase began. Individuals were invited to complete the questionnaire in one of three ways:

First, invitations appeared on a variety of websites that are frequently visited by people who identify as transgender. A copy of the social media invitation is located in Appendix C. Below is a list of the websites:

### Social Networking Websites

- Twitter
- Tumblr
- Google +
- Facebook

- Gender Expansion Project website: [www.genderexpansionproject.org](http://www.genderexpansionproject.org)
- Gender Expansion Project Conference website: [www.genderexpansionconference.org](http://www.genderexpansionconference.org)
- Gay Men's Task Force website: [www.mtgayhealth.org](http://www.mtgayhealth.org)
- Western Montana Community Center website: [www.gaymontana.org](http://www.gaymontana.org)
- FTM Magazine website: [www.ftmmagazine.com](http://www.ftmmagazine.com)
- WPATH (World Professional Association for Transgender Health) listserv
- Ingersoll Gender Center listserv
- Ingersoll Gender Center Website: [www.ingersollcenter.org](http://www.ingersollcenter.org)
- Centerlink listserv
- Centerlink website: [www.lgbtcenters.org](http://www.lgbtcenters.org)

Second, invitations to participate in the study were sent via e-mail to individuals who have shared their e-mail addresses with the Gender Expansion Project. The body of the e-mail included a brief description of the study and the link to the online questionnaire. A copy of the email invitation to take the questionnaire is located in Appendix D.

Third, the director of the Gender Expansion Project, along with several other leaders in the transgender community, invited transgender individuals with whom they came in contact, either through work or social events, to complete the questionnaire. Leaders provided potential participants with the website address where the questionnaire could be accessed.

Whether the participants accessed the questionnaire through any of the above means (posted on a website, emailed to them, or invited personally), the invitation to complete the questionnaire included a brief description of the study along with a link to the secure Qualtrics survey platform. If individuals chose to click on the link, they were presented with a question regarding consent. After reading the consent statement, participants were asked whether they did or did not agree. If they did not agree, the questionnaire automatically ended and the participant was taken to a list of resources. If they agreed to the question regarding consent, they were sent ahead to complete the questionnaire. Participants could exit the questionnaire at any time without negative consequences. Participants who completed the full questionnaire found the list of resources on the final page of the questionnaire. A copy of the list of resources is located in Appendix E.

## Data Collection

The questionnaire took participants approximately 20 minutes to complete. Participants who completed the questionnaire remained completely anonymous. Qualtrics uses SSL

technology and does not collect any information other than the data participants enter (i.e., no IP addresses are collected).

Data was collected from December 4<sup>th</sup>, 2015 to April 8, 2015. After the questionnaire expired online, no responses were collected from Qualtrics.

## Data Analysis

Once data collection ceased, the data from Qualtrics was imported into the SPSS statistical package. Basic descriptive statistics such as frequencies and cross tabs were reported.

Because there is evidence of a connection between HIV/HCV/STD infection and a variety of risk behaviors (sexual behaviors; substance abuse; mental illness; access to culturally competent and access to medical care providers) (Broder et al., 2014, Karuna et al., 2014, Clements-Nolle et al., 2001, Reisner et al., 2013, Hill et al., 2011, Sivadon et al., 2013, Fallin et al., 2014, Newcomb et al., 2014, Livingston et al., 2014, Clements-Nolle et al., 2008, Nemoto et al., 2004, Sanchez et al., 2009, Grant et al., 2010), researchers planned to test the relationship between those variables. However, because of the low prevalence of HIV and HCV in the sample, the only dependent variable used in the analysis was STD infection. Binary logistic regression was used to examine differences between individuals with no diagnosed STDs and those with at least one STD in relationship to both behavioral risk factors and social risk factors.

The link between suicide attempts and depression, isolation, stigma and discrimination (Lombardi, 2002; Stotzer, 2009; Clements-Nolle, Marx, Guzman & Katz, 2001; Clements-Nolle, 2008) led the researchers to examine the relationship between attempted suicide and a variety of social risk factors. Binary logistic regression was used to examine differences between individuals who had attempted suicide and those who had never attempted suicide in relationship to risk factors such lack of social support, experiences of stigma and experiences of discrimination.

CDC (2015) reports that compared to transgender women, little is known about HIV risk and sexual health of transgender men. This study attempted to explore differences among MtF, FtM and gender-non-conforming individuals through chi-squared tests. Specifically, differences among gender identities and the following behaviors were explored: attempted suicide, HIV testing, condom use, STDs, and type of sexual partner. Differences among gender identities and social factors such as social support, stigma, discrimination and rejection by medical profession were also explored.

# Chapter 4: Results

In this chapter, data collected by means of an online questionnaire are presented. Results are organized as they relate to the research questions posed in Chapter one.

A total of 1,083 questionnaires were completed from participants across the United States. Delaware was the only state that was not represented in this study. Of the 1,083 questionnaires completed, 111 were completed by participants living in Montana. The 111 questionnaires completed by Montanans are the focus of this study.

## Demographic characteristics of study participants

Table 4.0- Age of study participants (n=111)

Age	# of respondents	Percentage
18-25 years old	49	44%
26-35 years old	36	32%
36-45 years old	11	10%
46-55 years old	11	10%
56-65 years old	4	4%
66 +	0	0%

Table 4.0 shows the age range of the participants. Over 75% of the participants were between 18 and 35 years of age. The majority (45%) of participants belong to the 18-25 age range. No one over 65 years of age completed the questionnaire.

Table 4.1- Race of study participants (n=111)

<b>Race</b>	<b># of respondents</b>	<b>Percentage</b>
Caucasian/Northern European	106	95%
American Indian/Alaskan Native	12	11%
Black or African American	2	2%
Hispanic or Latino	4	4%
Asian	1	1%
Native Hawaiian or Pacific Islander	2	2%
Other	2	2%

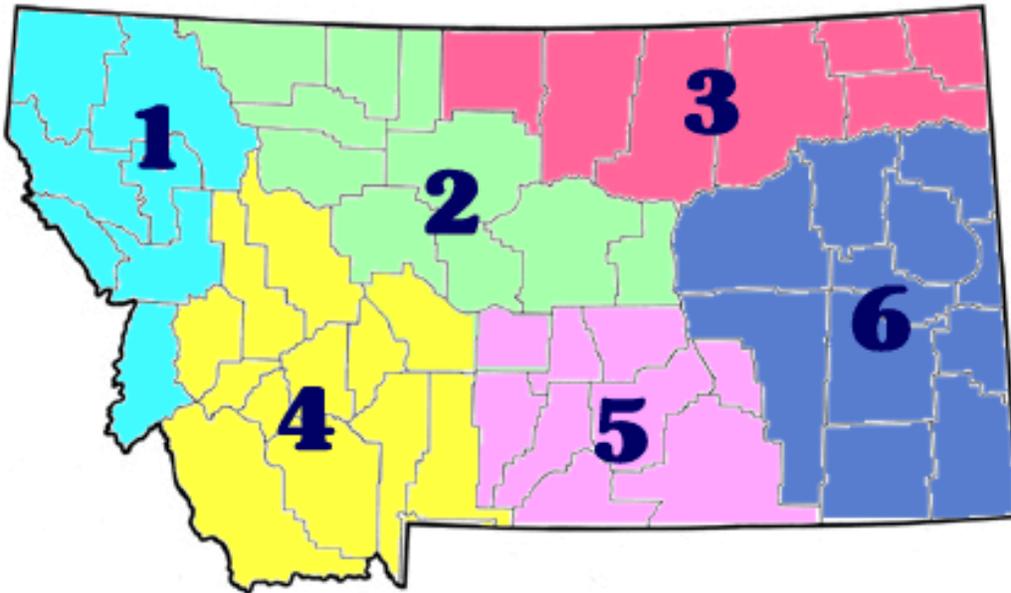
Participants were allowed to check more than one response for this question. The two responses in the “Other” category were from Turkish and East Indian descent. The racial composition of this sample is not dissimilar from the racial composition of Montana. According to the 2013 U.S. Census Bureau, Montana’s racial composition is 89.5% Caucasian/Northern European, 6.5% American Indian/Alaskan Native, 0.6% black or African American, 3.3% Hispanic or Latino, 0.8% Asian, and 0.1% Native Hawaiian or Pacific Islander.

Table 4.2- Length of time living in Montana (n=111)

<b>Length of time</b>	<b># of respondents</b>	<b>Percentage</b>
Less than 1 year	7	6%
1-2 years	6	5%
3-5 years	12	11%
5-10 years	11	10%
11 years or more	75	68%

The majority of participants have been living in Montana for 11 years or more.

Table 4.3- Region in which Montana participants live (n=111)



Region	# of respondents	Percent
REGION 1: North West- Lincoln, Flathead, Lake, Sanders, Mineral, Missoula, Ravalli Counties	54	48%
REGION 2: North Central- Glacier, Toole, Liberty, Pondera, Teton, Choteau, Cascade, Judith Basin, Fergus, Petroleum Counties	7	6%
REGION 3: North East- Hill, Blain, Phillips, Valley, Daniels, Sheridan, Roosevelt Counties	3	3%
REGION 4: South West- Powel, Lewis and Clark, Granite, Deer Lodge, Jefferson, Broadwater, Silver Bow, Beaverhead, Madison, Gallatin, Park Counties	25	23%
REGION 5: South Central- Wheatland, Golden Valley, Musselshell, Sweet Grass, Stillwater, Yellowstone, Treasure, Carbon, Big Horn Counties	21	19%
REGION 6: South East- Garfield, McCone, Richland, Dawson, Rosebud, Custer, Prairie, Wibaux, Fallon, Powder River, Carter Counties	1	1%

Region 1, 4, and 5 comprise most (90%) of the state’s population. According to the U.S. Census data for 2014, the total population for Region1 is 312,483 people; Region 4 is 267,382 people; Region 5 is 200,505 people. In total, there are 780,370 people living in Regions 1, 4 & 5.

Table 4.4- Population of city/town (n=111)

<b>Population</b>	<b># of respondents</b>	<b>Percentage</b>
Unsure	24	22%
1-500 people	2	2%
501-2,000 people	2	2%
2,001-10,000 people	11	10%
10,001-50,000 people	24	22%
50,001 +	48	43%

A total of 63% of respondents are from a city/town with a population greater than 10,000. A substantial portion of the participants (22%) were unsure about the population of the city/town they live in.

Table 4.5- Annual income category (n=111)

<b>Income Category</b>	<b># of respondents</b>	<b>Percentage</b>
\$0-\$10,000	40	36%
\$10,001-\$25,000	33	30%
\$25,001-\$40,000	22	20%
\$40,001-\$55,000	13	12%
\$55,001-\$80,000	3	2%
\$80,001 +	0	0%

Over one-third of the participants (36%), fall under the lowest income category of \$0-\$10,000, while only 2% reported earning more than \$55,000 per year. The per capita median annual income in for Montana is \$25,373. Therefore, 34% of the study

participants make the average or above, while 66% make less than the median income for individuals in Montana.

Table 4.6- Level of education participants have completed (n=111)

<b>Education level</b>	<b># of respondents</b>	<b>Percentage</b>
Grades 1-8 (Elementary)	0	0%
Grades 9-11 (Some High School)	2	2%
Grade 12 or GED (High School Graduate)	23	21%
College 1 year-3 years (Some College or Technical School)	51	46%
College 4 years or more (College Graduate)	29	26%
Graduate School	6	5%

Nearly three-quarters of the participants (72%) have either some college or technical school experience, or are a college graduate.

Table 4.7- Participants' relationship status (n=111)

<b>Relationship status</b>	<b># of respondents</b>	<b>Percentage</b>
Not in a relationship	45	41%
In a relationship with a man	13	12%
In a relationship with a woman	34	31%
In a relationship with a gender non-conforming individual	2	2%
In a relationship with a trans female (MtF)	4	4%
In a relationship with a trans male (FtM)	1	1%
I am in a relationship with more than 1 person (polyamorous)	12	11%

By far, the most common relationship status was “not in a relationship” (41%). Of those participants who were in a relationship, 30% were in a relationship with a woman, while only 12% reported being in a relationship with a man.

Table 4.8- Gender Identity (n=103)

<b>Gender Identity</b>	<b># of respondents</b>	<b>Percentage</b>
Trans male (Female to Male-FtM)	28	27%
Trans female (Male to Female-MtF)	41	40%
Gender non-conforming, gender fluid, non-binary	24	23%
Questioning	6	6%
Other	4	4%

Out of the 102 participants who answered this question, 27% self-identify as trans male (FtM), 39% as trans female (MtF), and 24% label their gender identity as gender nonconforming, gender fluid or non-binary. Of the four “Other” responses, people stated: Queer femme; Two Spirit; Female (I hate the term trans); and bigender.

**Summary:**

The questions that were asked relating to demographic characteristics of participants reveals most are 18-35 years old, of Caucasian descent, have lived in Montana 11 years or more, reside in health planning regions 1, 4 & 5, live in cities with a population greater than 10,000 people, earn an annual income of less than \$25,000, have completed high school and have some college or technical school experience, are not in a relationship, and identify as trans female.

**Research Question # 1: HIV/HCV/STD Related Questions:**

- a. What is the HIV/HCV/STD status of study participants?
- b. What are the HIV/HCV/STD testing practices of study participants?
- c. What sexual, substance abuse and drug injection behaviors put study participants at risk of HIV/HCV/STD?
- d. Is there a relationship between STD’s and penetrative sex, condom use, and type of sexual partners?
- e. Is there a relationship between STD’s and stigma, discrimination, and social support?

Table 4.9- Participants’ HIV status (n=69)

<b>HIV status</b>	<b># of respondents</b>	<b>Percentage</b>
Negative	68	99%
Positive	1	1%

Table 4.10- Participants' HCV status (n=109)

<b>HCV status</b>	<b># of respondents</b>	<b>Percentage</b>
Yes	0	0%
No	80	73%
I didn't return for my results	2	2%
I have never been tested for Hepatitis C	27	25%

One quarter of the participants have never been tested for HCV. Of those tested, two did not return for their results, all others who were tested reported negative results.

Table 4.11- Participants' STD status (n=108)

<b>STD status</b>	<b># of responses</b>	<b>Percentage</b>
I have never been tested for STD's	30	28%
Chlamydia	4	4%
Gonorrhea	4	4%
Herpes	3	3%
Human Papillomavirus (HPV) and Genital Warts	5	5%
Pubic "Crab" Lice	1	1%
Scabies	0	0%
Syphilis	5	5%
Other (Trich and HIV)	2	2%
I have not tested positive for any of the above STD's	66	61%

About one third of the participants have never been tested for STD's, and the majority have not tested positive for any STD's. In the general population of Montana, chlamydia is the most commonly reported disease. In 2013, there were 3,818 people in the state of Montana with chlamydia. The national rate of chlamydia in 2012 was 457/100,000 population, an increase of 0.7 % since 2011. In 2013, there were 225 people with gonorrhea infections in Montana, doubling from 2012 compared with the U.S. rate of 108/100,000 population in 2012.

Table 4.12- When participants were last tested for HIV (n=111)

<b>Last tested</b>	<b># of respondents</b>	<b>Percentage</b>
I have never been tested	37	33%
Within the last 1 year	39	35%
About 1-2 years ago	13	12%
About 2-5 years ago	15	14%
More than 5 years ago	7	6%

Approximately a third of the participants have never been tested. Another third of the participants were tested within the last 1 year.

Table 4.13- Participants engaging in penetrative sex (n=109)

<b>Times engaged in penetrative sex in the past 12 months</b>	<b># of respondents</b>	<b>Percentage</b>
None	53	49%
1-2	12	11%
3-4	11	10%
5-6	6	5%
7 or more times	27	25%

Approximately half of the participants have not engaged in penetrative sex in the past 12 months.

Table 4.14- Participants' role during penetrative sex (n=55)

<b>Role during penetrative sex</b>	<b># of respondents</b>	<b>Percentage</b>
Insertive only	8	15%
Receptive only	20	36%
Both insertive or receptive	27	49%

Eighty-five percent of the 55 participants who were sexually active reported engaging in penetrative sex.

Table 4.15- Participants engaging in oral sex (n=107)

<b>Times engaged in oral sex in the past 12 months</b>	<b># of respondents</b>	<b>Percentage</b>
None	39	36%
1-2	10	9%
3-4	10	9%
5-6	5	5%
7 or more times	43	41%

Almost two-thirds of the participants reported engaging in oral sex at least one time in the past year.

Table 4.16- Condom use (n=106)

<b>Condom Use</b>	<b># of respondents</b>	<b>Percentage</b>
I am not sexually active	17	16%
Always	17	16%
Sometimes	21	20%
Rarely	17	16%
Never	34	32%

Of the 89 sexually active participants, only 25% use condoms all the time.

Table 4.17- Type of sexual partner(s) (n=107)

<b>Type of sexual partner</b>	<b># of respondents</b>	<b>Percentage</b>
I do not have a sexual partner	23	21%
Primary	62	58%
Regular	25	23%
Casual	23	21%
Anonymous	8	7%

Less than one-third (28%) of participants report having casual or anonymous sexual partners.

Table 4.18- Rates of sex work (n=107)

<b>Sex work</b>	<b># of respondents</b>	<b>Percentage</b>
Yes, currently engage	3	3%
Yes, have in the past	6	6%
No, but would do it if needed	28	26%
No, would never do it	70	65%

A majority (91%) have not engaged in sex work.

Table 4.19- Substance use among participants (n=104)

<b>Drug use</b>	<b># of respondents</b>	<b>Percentage</b>
Alcohol	77	74%
Tobacco	28	27%
Marijuana	40	38%
Cocaine	6	6%
Methamphetamine	0	0%
Heroin	1	1%
PCP	0	0%
Ecstasy	7	7%
Nonmedical use of pain relievers	8	8%
LSD	6	6%
Recreational use of medicine	3	3%
Poppers	19	18%
Other	10	10%
I do not use any of these substances	1	1%

Table 4.20- Hormone or silicone injection rates (n=107)

<b>Injection rates</b>	<b># of respondents</b>	<b>Percentage</b>
Yes	33	31%
No	74	69%
I prefer not to answer	0	0%

A majority of the respondents (69%), do not inject hormones or silicone.

Table 4.21- Use of sterile needles (n=32)

<b>Use of sterile needles</b>	<b># of respondents</b>	<b>Percentages</b>
Yes	31	97%
No	1	3%
I prefer not to answer	0	0%

All but one of the 32 individuals that used needles to inject hormones or silicone used sealed, sterile, new needles.

Table 4.22- Methods of acquiring syringes among participants (n=103)

<b>Methods of acquiring syringes</b>	<b># of respondents</b>	<b>Percentage</b>
New from doctor's office	34	33%
New from friends	4	4%
New from syringe exchange programs	6	6%
New from online	7	7%
Reused (can't afford new ones)	0	0%
Reused (don't know how to get new ones)	0	0%
Share with friends	0	0%
Not listed	2	2%
I do not use syringes	68	66%

All of the participants who reported using syringes also reported using new syringes.

Table 4.23- Relationship between presence of at least one STD and risk behaviors (penetrative sex, condom use, sex with a low or high risk partner)

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Q24_2(1)	.479	.454	1.113	1	.292	1.614
	Q27_2(1)	-.436	.474	.847	1	.357	.646
	Q28_6(1)	.227	.477	.226	1	.634	1.255
	Constant	-.630	.445	2.002	1	.157	.533

A logistic regression was performed to ascertain the association between risk behaviors (Q24 - penetrative sex (yes or no), Q27 - condom use (always or not always), and Q28 - type of sexual partner (lower or higher risk)) on the likelihood that participants have at least one STD (yes or no). The logistic regression model was not statistically significant,  $\chi^2(2, N=110) = 2.46, p = .23$  or  $p > .0005$ .

Table 4.24- Relationship between presence of at least one STD and social factors (social support, experiences of stigma and discrimination)

		Logistic Regression: Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Q50_9	.178	.193	.849	1	.357	1.195
	Q53_8	-.049	.178	.075	1	.784	.952
	Q54_10	-.094	.149	.396	1	.529	.910
	Constant	-.185	.507	.132	1	.716	.831

Logistic regression was run with dependent variable STD (yes or no) and ordinal level independent variables; Q50 –total # of types of discrimination, Q53 – total # of types of social support, and Q54 – total # of types of stigma. No significant differences were found.

**Summary:**

Looking at the results from this section of questions, researchers are shown that, overall, study participants are not engaging in high risk behaviors, as seen in the literature. Rates of HIV and HCV are extremely low. Among the study participants, three STD's (gonorrhea, syphilis, and chlamydia) were higher than the average national rates. Furthermore, no relationship was found between the presence of an STD and the following risk behaviors: penetrative sex, condom use, and sex with a low or high risk partner. No relationship was also found between presence of an STD and the following social factors: social support, experiences of stigma, and discrimination.

**Research Question # 2: Transition Related Questions:**

- a. What transition related medical procedures have participants undergone or plan to undergo?**
- b. What are the barriers to obtaining desired transition procedures?**
- c. Have participants had negative or positive experiences while transitioning in Montana?**

Table 4.25- Stage of medical transition (n=102)

<b>Medical transition</b>	<b># of respondents</b>	<b>Percentage</b>
Do not plan to transition medically	25	25%
I have not started my medical transition	22	22%
I am somewhere in the middle of my medical transition	42	41%
I have finished my medical transition	13	13%

Nearly one-half of the participants do not plan to transition or have not started their medical transition.

Table 4.26- Medical transition planned or desired by participants (n=95)

<b>Medical transition</b>	<b># of respondents</b>	<b>Percentage</b>
I do not want to get any medical transition procedures	19	20%
Hormone blockers	17	18%
Hormones	26	27%
Chest surgery	45	47%
Abdominal surgery	21	22%
Gender Reassignment Surgery (GRS)/Sexual Reassignment Surgery (SRS)	42	44%
Facial Feminization Surgery (FFS)	26	27%
Trachial Shave	17	18%
Permanent Hair Removal	29	31%
Voice Surgery	13	14%
Other	3	3%

The most frequently desired medical transition procedure that participants desired is chest surgery followed closely by Gender Reassignment Surgery (GRS). There were three responses reported in the other category: revisional genital surgery- labiaplasty; manscaping; voice only if procedures improve.

Table 4.27- Barriers to medical transition procedures (n=98)

<b>Barriers</b>	<b># of respondents</b>	<b>Percentage</b>
Already undergone surgeries I need	3	3%
Not currently seeking surgeries	20	20%
Health-related barriers	3	3%
Financial barriers	53	54%
Do not qualify for surgeries according to insurance	10	10%
Other	9	9%

Of the 75 respondents who are seeking medical transition procedures, 71% reported the largest barrier to medical transition procedures is financial. There were nine other responses reported in the other category: societal; work; social stigma; family/partner expectations; family; age; current line of work expects conforming white cis men only; financial, and my family will refuse to let me see my siblings if I begin; my kids and I live in a small town.

Table 4.28- Participants who transitioned in Montana vs. another state (n=103)

<b>Transition state</b>	<b># of respondents</b>	<b>Percentage</b>
Do not plan to transition	18	17%
Yes, I plan to transition or have transitioned in Montana	66	64%
No, I plan to transition or have transitioned in another state	10	10%
I prefer not to answer	9	9%

Two-thirds of the participants either plan to transition or have transitioned in Montana.

Table 4.29- Experience of community support while transitioning in Montana (n=66)

<b>Community support</b>	<b># of respondents</b>	<b>Percentage</b>
Have not transitioned	5	8%
Very positive experience	22	33%
Somewhat positive experience	29	44%
Somewhat negative experience	10	15%
Very negative experience	0	0%

Of the participants who plan to or have transitioned in Montana, over three-quarters of them had a very or somewhat positive experience of community support.

Table 4.30- Experience of access to medical services while transitioning in Montana (n=66)

<b>Access to medical services</b>	<b># of respondents</b>	<b>Percentage</b>
Have not transitioned	10	15%
Very positive experience	14	21%
Somewhat positive experience	28	42%
Somewhat negative experience	12	18%
Very negative experience	2	3%

When asked about the experience of access to medical services while transitioning in Montana, two-thirds stated they had a somewhat or very positive experience.

**Summary:**

Of those who wanted to transition, chest surgery and Gender Reassignment Surgery were the most desired procedures. The largest barrier reported to get medical transition procedures was financial. Furthermore, positive experiences were reported by the participants in regards to transitioning in Montana, both in community support and access to medical services.

**Research Question # 3: Stigma and Discrimination Related Questions:**

- a. Do study participants feel they face discrimination and stigma from the legal system, employers, law enforcement, housing and/or health care professionals?
- b. Do study participants perceive social support from family, friends or their community?

Table 4.31- Participants' experience with discrimination with the legal system (n=100)

<b>Discrimination from legal system</b>	<b># of respondents</b>	<b>Percentage</b>
Employer	22	22%
Housing	10	10%
Changing documents	22	22%
Law enforcement	19	19%
Other	5	5%
Have not experienced any discrimination with the legal system	61	61%

A majority of participants have not experienced any discrimination with the legal system. Five participants reported responses in the other category: Medical; Schools, DPHHS, clinics; credit bureaus, some doctors, insurance not covering surgery.

Table 4.32- Participants' experiences of stigma (n=101)

<b>Stigma</b>	<b># of respondents</b>	<b>Percentage</b>
Employer(s)	38	38%
Housing	13	13%
Law enforcement	30	30%
Members of the LBG community	38	38%
Local community	49	49%
Other	10	10%
I don't feel stigma	28	28%

Approximately half of the participants stated that they experience stigma from the local community. Over one-third felt stigma from the LGB community.

Table 4.33- Perceptions of social support (n=102)

<b>Support</b>	<b># of respondents</b>	<b>Percentage</b>
Family (spouse, partner)	51	50%
Family (parents, siblings)	48	47%
Friends	88	86%
Coworkers	39	38%
Neighbors	19	19%
Other	6	6%
I do not feel supported	6	6%

Nearly 90% of participants reported experiencing support from their friends, while approximately one-half reported support from spouse/partner and family.

**Summary:**

Of the stigma and discrimination reported in this study, most participants reported experiencing it most in areas of workplace, local community and changing documents. Overall, most participants did not report experiencing discrimination in the legal system or stigma. Social support was reported most from friends and family.

**Research Question # 4: Mental Health Related Questions:**

- a. Have participants contemplated or attempted suicide?**
- b. Have participants been diagnosed with a mental illness?**
- c. Is there a relationship between suicide attempts and social support, mental illness, discrimination or stigma?**

Table 4.34- Participants' contemplation of suicide (n=101)

<b>Contemplated suicide</b>	<b># of respondents</b>	<b>Percentage</b>
0	17	17%
1-5 times	26	26%
5 + times	54	53%
I prefer not to answer	4	4%

Table 4.35- Participants' attempted suicide rate (n=101)

<b>Attempted suicide</b>	<b># of respondents</b>	<b>Percentage</b>
Yes, more than 1 time	36	36%
Yes, 1 time	17	17%
No	44	44%
I prefer not to answer	4	4%

Over one-half of participants have attempted suicide one or more times. Three-quarters of the participants have seriously contemplated suicide one or more times.

Table 4.36- Participants' diagnosed mental health disorders (n=101)

<b>Diagnosed mental health disorders</b>	<b># of respondents</b>	<b>Percentage</b>
Depression	59	58%
Schizophrenia	3	3%
Bipolar Disorder	15	15%
Obsessive Compulsive Disorder (OCD)	10	10%
Panic Disorder	16	16%
Social Anxiety Disorder (SAD)	27	27%
Generalized Anxiety Disorder	27	27%
Attention Deficit Hyperactivity Disorder (ADHD)	17	17%
Other	28	28%
I have not been diagnosed with any mental health disorders	21	21%
I prefer not to answer	2	2%

Three-quarters of the participants reported one or more mental health disorders. Among conditions that were written in the “other” category, PTSD was the most common.

Table 4.37- Relationship between suicide attempts and types of mental illness

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Q57_1(1)	-.280	.520	.290	1	.590	.756
	Q57_2(1)	-1.079	21466.091	.000	1	1.000	.340
	Q57_5(1)	-34.239	9450.999	.000	1	.997	.000
	Q57_6(1)	16.540	5768.749	.000	1	.998	15252541.436
	Q57_7(1)	-36.976	10368.155	.000	1	.997	.000
	Q57_8(1)	-.479	.710	.456	1	.500	.619
	Q57_9(1)	1.429	.896	2.545	1	.111	4.174
	Q57_10(1)	-1.405	.814	2.979	1	.084	.245
	Constant	.592	.351	2.842	1	.092	1.808

Logistic regression was run with dependent variable Attempted Suicide (yes or no) and dichotomous independent variables; Q57\_1 depression, Q57\_2 schizophrenia, Q57\_5 bipolar, Q57\_6 OCD, Q57\_7 panic disorder, Q57\_8 social anxiety disorder, Q57\_9 generalized anxiety disorder, Q57\_10, ADHD.

No significant differences were found, although ADHD approached significance.

Table 4.38- Relationship between suicide attempts and types of support

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Q53_1(1)	-.136	.434	.099	1	.754	.873
	Q53_2(1)	.880	.731	1.447	1	.229	2.410
	Q53_3(1)	.977	.475	4.228	1	.040	2.657
	Q53_4(1)	-1.139	.608	3.504	1	.061	.320
	Q53_6(1)	.265	.452	.343	1	.558	1.303
	Constant	-1.203	.669	3.238	1	.072	.300

Logistic regression was run with dependent variable attempted suicide (yes or no) and dichotomous independent variables; Q53\_1 support from spouse/partner, Q53\_2 support from friends, Q53\_3 support from co-workers, Q53\_4 support from neighbors, Q53\_6 support from parents and siblings.

Significant difference was found for support from co-workers. Support from neighbors and from parents and siblings approached significance.

Table 4.39- Relationship between suicide attempts and the total number of social supports, mental illnesses, types of discrimination and types of stigma experienced

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Q53_8	.434	.217	3.978	1	.046	1.543
	Q54_10	-.109	.177	.382	1	.537	.896
	Q50_9	-.087	.224	.150	1	.698	.917
	Q57_12	-.603	.160	14.247	1	.000	.547
	Constant	.079	.632	.015	1	.901	1.082

Logistic regression was run with the dependent variable attempted suicide (yes or no) and ordinal level independent variables; Q53\_8 total # of social supports, Q54\_10 total # of types of stigma, Q50\_9 total # of types of discrimination, Q57\_12 total # of mental health disorders.

Significant differences were found for total # of social supports and total # of mental health disorders.

**Summary:**

Contemplation of suicide and attempts of suicide reported by participants were very high in this population. Additionally, mental illnesses reported were very high compared to the general population. No relationship was found between suicide and types of mental illness, however, there was a relationship between suicide attempts and support from coworkers. There were also relationships found between suicide attempts and total number of social supports and total number of mental illness reported.

**Research Question # 5: Health Care Related Questions:**

- a. Do study participants trust their medical providers regarding their unique needs?
- b. What experiences have participants faced when seeking health care?

Table 4.40- Participants' confidence in their medical care providers' knowledge (n=99)

<b>Confidence in medical care provider's knowledge</b>	<b># of responses</b>	<b>Percentage</b>
Yes	36	36%
No	28	28%
Unsure	35	35%

Nearly two-thirds of participants do not have confidence or are unsure regarding their medical care provider's knowledge.

Table 4.41- Refusal of treatment in a healthcare setting (n=99)

<b>Refusal of treatment from healthcare setting</b>	<b># of respondents</b>	<b>Percentage</b>
I have never seen a doctor or healthcare provider	3	3%
Yes	17	17%
No	79	80%

Approximately 80% of participants have never been refused treatment in a healthcare setting.

Table 4.42- Participants' healthcare experiences (n=83)

<b>Healthcare experiences</b>	<b># of respondents</b>	<b>Percentage</b>
I have not needed nor sought medical care in the past 12 months	28	34%
I postponed or did not try to get medical care when I was sick or injured because I could not afford it	31	37%
I postponed or did not try and get check-ups or other preventative medical care because I could not afford it	32	39%
I postponed or did not try and get medical care when I needed it, and this resulted in a medical emergency where I had to go to the Emergency Room (ER) or an urgent care clinic to get immediate help	10	12%
I had to teach my doctor or other medical care provider about transgender or gender nonconforming people in order to get appropriate care	26	31%
I was not able to access transition related care	16	19%
Due to my transgender identity or nonconforming gender expression, I postponed or did not try to get medical care when I was sick or injured because of disrespect or mistreatment from doctors or other healthcare providers	15	18%
Due to my transgender identity or nonconforming gender expression, I postponed or did not try to get check-ups or other preventative medical care because of disrespect or mistreatment from doctors or other healthcare providers	11	13%

Approximately one third of the participants felt they have not needed or sought medical care in the past 12 months. Over one-third of the respondents could not afford preventive health care or care for an injury or illness.

**Summary:**

Most participants reported being unsure about their medical providers' knowledge about transgender inclusive health care, although most also reported not being refused healthcare.

**Research Question # 6: Differences among MtF, FtM and Gender Non-Conforming Participants in Regard to the Following Behaviors:**

- **Attempted suicide**
- **Penetrative sex**
- **Condom use**
- **HIV testing**
- **STD's**
- **Type of sexual partner**

Table 4.43- Differences among MtF, FtM and Gender Non-Conforming Participants and at Least One Suicide Attempt (n=101)

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.232 <sup>a</sup>	2	.890
Likelihood Ratio	.232	2	.890
Linear-by-Linear Association	.027	1	.869
N of Valid Cases	101		

No significant differences were found among the three groups.  $X^2(2, N = 101) = .232, p = .890$ .

Table 4.44- Differences among MtF, FtM and Gender Non-Conforming Participants and Penetrative sex (n=113)

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.616 <sup>a</sup>	2	.164
Likelihood Ratio	3.664	2	.160
Linear-by-Linear Association	3.414	1	.065
N of Valid Cases	113		

No significant differences were found among the three groups.  $X^2 (2, N = 113) = 3.616$ ,  $p = .164$ .

Table 4.45- Differences among MtF, FtM and Gender Non-Conforming Participants and HIV Testing (n=114)

**Crosstab**  
**Count**

		Tested for HIV-yes or no		Total
		No	Yes	
FtM or MtF or Non-binary	Trans Male (FtM)	15	14 (48%)	29
	Trans Female (MtF)	10	34 (77%)	44
	Non-Binary	14	27 (66%)	41
Total		39	75 (66%)	114

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.530 <sup>a</sup>	2	.038
Likelihood Ratio	6.496	2	.039
Linear-by-Linear Association	1.670	1	.196
N of Valid Cases	114		

Significant differences were found among the three groups.  $X^2 (2, N = 114) = 6.530$ ,  $p = .038$ .

Table 4.46- Differences among MtF, FtM and Gender Non-Conforming Participants and a Positive Test for at Least One STD (n=114)

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.339 <sup>a</sup>	2	.844
Likelihood Ratio	.338	2	.844
Linear-by-Linear Association	.279	1	.597
N of Valid Cases	114		

No significant differences were found among the three groups.  $X^2(2, N = 114) = .399, p = .844$ .

Table 4.47- Differences among MtF, FtM and Gender Non-Conforming Participants and Sex with a Low or High Risk Partner (n=114)

**Crosstab**

Count

		Sexual partner-Low or High Risk		Total
		Low Risk Partners	Higher Risk Partners	
FtM or MtF or Non-binary	Trans Male (FtM)	28	1 (3%)	29
	Trans Female (MtF)	32	12 (27%)	44
	Non-Binary	30	11 (27%)	41
Total		90	24 (21%)	114

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.255 <sup>a</sup>	2	.027
Likelihood Ratio	9.390	2	.009
Linear-by-Linear Association	4.846	1	.028
N of Valid Cases	114		

Significant differences were found among the three groups.  $X^2(2, N = 114) = 7.255, p = .027$ .

**Summary:**

No differences were found when comparing three groups: MtF, FtM, and gender non-conforming with engaging in penetrative sex, having at least one STD, and attempting suicide at least one time. A relationship was found between these three groups, however, on HIV testing and engaging in sex with a high or low risk partner.

**Research Question #7: Differences among MtF, FtM and Gender Non-Conforming Participants in Regard to the Following Social Factors:**

- **Being mis-gendered**
- **Social support**
- **Stigma**
- **Discrimination**
- **Rejection by medical profession**

Table 4.48- Differences among MtF, FtM and Gender Non-Conforming Participants and Frequency of being Mis-gendered (n=107)

**Crosstab**

Count

		Mis-gendered					Total
		All of the time	Most of the time	Some of the time	Rarely	Never	
FtM or MtF or Non-binary	Trans Male (FtM)	0	6	6	9	7	28
	Trans Female (MtF)	3	7	18	11	5	44
	Non-Binary	8	12	7	5	3	35
Total		11	25	31	25	15	107

Rarely or never mis-gendered: FtM – 57%; MtF – 36%; Non-binary – 23%

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.921 <sup>a</sup>	8	.007
Likelihood Ratio	22.077	8	.005
Linear-by-Linear Association	13.168	1	.000
N of Valid Cases	107		

Significant differences were found among the three groups.  $X^2(8, N = 107) = 20.921, p = .007$ .

Table 4.49- Differences among MtF, FtM and Gender Non-Conforming Participants and Experience of Social Support (n=114)

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.093 <sup>a</sup>	2	.129
Likelihood Ratio	5.486	2	.064
Linear-by-Linear Association	.399	1	.527
N of Valid Cases	114		

No significant differences were found among the three groups.  $X^2(2, N = 114) = 4.093$ ,  $p = .129$ .

Table 4.50- Differences among MtF, FtM and Gender Non-Conforming Participants and Experience of Stigma (n=110)

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.538 <sup>a</sup>	2	.764
Likelihood Ratio	.542	2	.763
Linear-by-Linear Association	.062	1	.803
N of Valid Cases	110		

No significant differences were found among the three groups.  $X^2(2, N = 110) = .538$ .  $p = .764$ .

Table 4.51- Differences among MtF, FtM and Gender Non-Conforming Participants and Experience of Discrimination (n=104)

**FtM or MtF or Non-binary \* Discrimination -yes or no Crosstabulation**

Count		Discrimination -yes or no		Total
		Yes	No	
FtM or MtF or Non-binary	Trans Male (FtM)	11 (41%)	16	27
	Trans Female (MtF)	22 (51%)	21	43
	Non-Binary	7 (21%)	27	34
Total		40 (38%)	64	104

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.579 <sup>a</sup>	2	.023
Likelihood Ratio	7.925	2	.019
Linear-by-Linear Association	3.096	1	.078
N of Valid Cases	104		

Significant differences were found among the three groups.  $X^2(2, N = 104) = 7.579, p = .023$ .

Table 4.52- Differences among MtF, FtM and Gender Non-Conforming Participants and Experience of Being Refused Medical Care (n=105)

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.816 <sup>a</sup>	4	.431
Likelihood Ratio	5.284	4	.259
Linear-by-Linear Association	.057	1	.811
N of Valid Cases	105		

No significant differences were found among the three groups.  $X^2(4, N = 105) = 3.816, p = .431$ .

**Summary:**

A relationship was found between the three groups: MtF, FtM, and gender non-conforming and frequency of being mis-gendered, and well as their experience of discrimination. No relationship was found with the three groups and their experiences of stigma, experience of social support, and experience of being refused medical care.

**Miscellaneous Charts From Questions Not Directly Related to Research Questions:**

Table 4.53- Respondents' perceptions of their HIV/HCV/STD risk (HIV n=111, HCV n=108, STD's n=107)

<b>Disease</b>	<b>1=no risk</b>	<b>2=some risk</b>	<b>3=high risk</b>
HIV	87	23	1
HCV	86	21	1
STD's	72	33	2

While approximately one-third of the participants believed they were at some risk of contracting an STD, the majority of participants did not perceive any risk of contracting all three diseases; HIV, HCV, and STD's.

Table 4.54- Participants taking anti-retroviral drugs (n=2)

<b>Taking anti-retroviral drugs</b>	<b># of respondents</b>	<b>Percentage</b>
Yes	1	50%
No	1	50%
Unsure	0	0%

Table 4.55- Hormone or silicone injection rates (n=107)

<b>Injection rates</b>	<b># of respondents</b>	<b>Percentage</b>
Yes	33	31%
No	74	69%
I prefer not to answer	0	0%

A majority of the respondents (69%), do not inject hormones or silicone.

Table 4.56- Stage of social transition among participants (n=103)

<b>Social transition</b>	<b># of respondents</b>	<b>Percentage</b>
Do not plan to transition socially	12	12%
Want to transition socially, but have not started	13	13%
Somewhere in the middle of my social transition	40	39%
Finished my social transition	38	37%

Over three-quarters of the participants are somewhere in the middle or have completed their social transition. Just over one-third have finished their social transition.

Table 4.57- Participants' opinions of alleviating GID with medical transition treatments (n=99)

<b>Alleviate GID with transition</b>	<b># of respondents</b>	<b>Percentage</b>
Do not experience GID	12	12%
Procedures very necessary to alleviate GID	59	60%
Procedures somewhat necessary to alleviate GID	20	20%
Procedures not necessary to alleviate my GID	8	8%

A majority of the participants believe that medical transition procedures are very necessary to alleviate GID.

Table 4.58- HIV positive who visit a healthcare provider (n=2)

<b>HIV positive who visit healthcare provider</b>	<b># of respondents</b>	<b>Percentage</b>
Every 6 months	1	50%
Every 1 year	1	50%
Every 2 years	0	0%
Every 3 years	0	0%
I have not visited a healthcare provider in the last 5 years	0	0%

Table 4.59- Knowledge about PrEP medication (n=109)

<b>Knowledge of PrEP</b>	<b># of respondents</b>	<b>Percentage</b>
Yes	41	38%
No	64	59%
Unsure	4	4%

Over half of the participants (n=64) had never heard of PrEP medication.

Table 4.60- Perception of alcohol use among participants (n=103)

<b>Perception of alcohol use</b>	<b>I don't drink alcohol</b>	<b>Not a problem in my life</b>	<b>Poses a small problem in my life</b>	<b>Poses a big problem in my life</b>
Alcohol	17 (17%)	72 (70%)	11 (10%)	3 (3%)

Approximately three-fourths of the participants reported that alcohol did not pose a problem in their lives.

Table 4.61- Perception of drug use among participants (n=103)

<b>Perception of drug use</b>	<b>I don't use drugs</b>	<b>Not a problem in my life</b>	<b>Poses a small problem in my life</b>	<b>Poses a big problem in my life</b>
Drug use	51 (50%)	41 (40%)	10 (9%)	1 (1%)

Approximately half of the participants did not use drugs, and of those who used drugs, only one reported that drugs posed a big problem in his/her life.

Table 4.62- Gender assigned at birth (n=102)

<b>Gender</b>	<b># of respondents</b>	<b>Percentage</b>
Male	55	54%
Female	46	45%
Intersex	1	1%

Approximately half of the participants were identified as male and approximately half were identified as female at birth.

Table 4.63- Where participants identify on gender spectrum (n=102)

<b>Gender spectrum</b>	<b># of respondents</b>	<b>Percentage</b>
Completely feminine	15	15%
Mostly feminine	25	25%
Somewhat feminine	14	14%
Androgynous	12	12%
Somewhat masculine	5	5%
Mostly masculine	20	20%
Completely masculine	6	6%
Neither feminine nor masculine	5	5%

On the gender spectrum, approximately half of the participants identify on the feminine side, while approximately one-third identify on the masculine side.

Table 4.64- Age participants recognized their gender identity (n=103)

<b>Age</b>	<b># of respondents</b>	<b>Percentage</b>
0-5 years old	43	42%
6-12 years old	26	25%
13-19 years old	19	18%
20-29 years old	13	13%
30-2739 years old	1	1%
40-49 years old	1	1%
50 +	0	0%

Approximately two-thirds of the participants recognized their gender diversity between the ages of 0 and 12 years old.

Table 4.65- Age participants came out as transgender to another person (n=102)

<b>Age</b>	<b># of respondents</b>	<b>Percentage</b>
I have not come out to any other person	6	6%
0-5 years old	2	2%
6-12 years old	5	5%
13-19 years old	29	28%
20-29 years old	46	45%
30-39 years old	7	7%
40-49 years old	5	5%
50 +	2	2%

Approximately three-quarters of participants came out as transgender to another person between the ages of 13 and 29 years old.

Table 4.66- Age participants started living outwardly as identified gender (n=102)

<b>Age</b>	<b># of respondents</b>	<b>Percentage</b>
I have never lived outwardly as my identified gender	18	18%
0-5 years	3	3%
6-12 years old	1	1%
13-19 years old	17	17%
20-29 years old	34	33%
30-39 years old	6	6%
40-49 years old	11	11%
50 +	1	1%
I've switched back and forth	11	11%

Over a third of the participants were between the ages of 20-29 years old when they began to live outwardly as their identified gender.

Table 4.67- Age participants first sought out medical care for transition (n=103)

<b>Age</b>	<b># of respondents</b>	<b>Percentage</b>
I have not sought out any transition-related medical care	39	38%
0-5 years old	0	0%
6-12 years old	0	0%
13-19 years old	11	11%
20-29 years old	31	30%
30-39 years old	11	11%
40-49 years old	9	9%
50 +	2	2%

Nearly 40% of the participants have not sought out any transition related medical care.

Table 4.68- Sexual orientation among participants (n=103)

<b>Sexual orientation</b>	<b># of respondents</b>	<b>Percentage</b>
Heterosexual/straight	13	13%
Gay/Lesbian/Same-gender attraction	16	16%
Bisexual	13	13%
Asexual	4	4%
Queer	10	10%
Questioning	4	4%
Pansexual	21	20%
I do not label my sexual orientation	17	17%
Other	5	5%

Only 13% of the participants identified as heterosexual or straight.

Table 4.69- Participants' experience of being mis-gendered (n=101)

<b>Mis-gendered</b>	<b># of respondents</b>	<b>Percentage</b>
All of the time	10	10%
Most of the time	23	23%
Some of the time	29	29%
Rarely	25	25%
Never	14	14%

Nearly two-thirds of the participants stated they are mis-gendered some, most, or all of the time.

Table 4.70- Participants' acceptance of their own gender identity (n=102)

<b>Positive sense of self</b>	<b># of respondents</b>	<b>Percentage</b>
All of the time	32	31%
Most of the time	53	52%
Some of the time	13	13%
Never	4	4%

Eighty-five percent of the participants state they have acceptance of their own gender identity most, or all of the time.

Table 4.71- Participants' experience of gender dysphoria towards their gender assigned at birth (n=101)

<b>Gender dysphoria</b>	<b># of respondents</b>	<b>Percentage</b>
All of the time	29	29%
Most of the time	29	29%
Some of the time	33	33%
Never	10	10%

Ninety percent of participants report that they experience gender dysphoria towards their gender assigned at birth some, most, or all of the time.

Table 4.72- Participants' experiences of verbal harassment (n=101)

<b>Verbal harassment</b>	<b># of respondents</b>	<b>Percentage</b>
Frequently	10	10%
Sometimes	39	39%
Rarely	40	40%
Never	11	11%
I prefer not to answer	1	1%

Approximately half of the participants frequently or sometimes get verbally harassed.

Table 4.73- Participants' most visited healthcare facilities (n=99)

<b>Most visited healthcare facilities</b>	<b># of respondents</b>	<b>Percentage</b>
I do not go to any health care providers	16	16%
Emergency room	1	1%
Doctor's office	32	32%
Health clinic/health center (services not free)	37	37%
Free health clinic/health center	4	4%
V.A. (Veteran's) clinic or hospital	1	1%
Alternative medical provider	3	3%
Other	5	5%

Most participants visit either a health clinic/health center (where services are not free) or go to a doctor's office. There were five responses in the other category: Naturopath; Native American clinic; Campus health center; webmd and essential oils.

Table 4.74- Participants' health insurance coverage for medical transition procedures (n=98)

<b>Insurance coverage</b>	<b># of respondents</b>	<b>Percentage</b>
Mental health care to support the transition process	12	12%
Coverage for reconstructive surgical procedures related to Gender Reassignment Surgery (GRS)	2	2%
Facial and other feminization or masculinization procedures	0	0%
Permanent hair removal of the face, neck, genitals and/or other areas	1	1%
Other	1	1%
I do not have health insurance	19	19%
Hormone replacement therapy	16	16%
I am unsure	39	40%
My health insurance DOES NOT cover any transition-related procedures and services	28	29%

Most of the participants are either unsure whether or not their insurance covers any sort of medical transition procedures or report their insurance does not cover those types of procedures. The one other response reported was Predetermination basis.

Table 4.75- Participants' health care coverage (n=99)

<b>Health care coverage</b>	<b># of respondents</b>	<b>Percentage</b>
Medicare or Medicaid	14	14%
Veteran's Administration	3	3%
Employer provided insurance	45	45%
School-based insurance	5	5%
Montana co-op	2	2%
Privately insured	15	15%
No insurance	19	19%
Unsure	4	4%
Other	3	3%

Less than one-quarter of participants reported having no type of health care coverage.

Table 4.76- Comments from participants (n=30)

<b>Comments from participants</b>
I think there should have been an opt out question for the assigned gender at birth. I also thought the gender "spectrum" questions sucked because there are other identities that exist beyond a Masculine/Feminine binary spectrum. I thought the transitioning questions were insensitive & directed to people seeking to alter or modify their bodies. There was a question about gender disphoria & I don't think everyone knows what that is. & I think these questions should be available for Trans Montanans of all age to have a voice in. Aside from that I'm happy to see DPHHS finally taking this issue to heart & recognizing a need... or maybe that is what you are figuring out now. Anywho, goodluck.
I'm still pretty early in the transition process, so my answers only reflect my experience thus far.
The social stigma of GID being defined as a mental disorder (DSM) is highly ridiculous and denegrating. If a ciswoman wants breast augmentation, she goes and gets it. If I do, I have to get 'permission' from a mental health provider first. WHY? I can make my own decisions regarding my body! Why do there have to be gatekeepers? My body, my choice. Thanks for caring about us!
Most of these questions didn't apply to me. i would like to point out that gender is not a spectrum and doesn't fit into the clean catagories. As a gender fluid person, I had no idea what to select for that question since it changes.
Montana has starting requiring a certified birth certificate to renew a drivers license. This will mean that non-op and pre-op people will have their marker changed back to their gender assigned at birth.
My experience is much better now that I pass easily. However, I would have answered many of the healthcare questions differently prior to fully socially transitioning. Also, have had to refrain from using veterans preference for hiring due to name and gender on records causing discrimination. In addition, I have had previous co-workers out me to new employers. Thanks so much for doing this, its long overdue!
I'm surprised that self-medicating hasn't been an option once. I think that's important information.
no.
just so expensive to do anything, it's hard to afford any of it
Insurance should be required to cover genser confirmation surgery
I don't think the authors of this survey have a clear handle on the differences between transgender and transexual.

In lake county the thought of being trans is really hard for many to bear. There for they descriminate a lot we could really use some help up hear.
I feel it is relevant to tell you that I live with my nonbinary significant other, and my MtF roommate.
It is difficult to live as a gender non conforming person in a world that puts us in two boxes. Male or female
I've come to embrace my identity late, after a lifetime of "boys will be boys" persecution, humiliation, and shame. But it is just that history that's helped me meet those attitudes with defiance. There's nothing they can do that hasn't been done before. That sucks foe me and all others, but it's also liberating.
Though I am trans, I have decided not to transition or live as the gender I identify with. I am more concerned with being mentally, physically, and spiritually whole than appearing as I am. I have more concern for other people's needs than my own.
My worst experience, and what drove me to attempting suicide, was being sexually assaulted by a police officer because he perceived me as gay. He felt me up while calling me "gay boy" and asking if I "enjoyed it" while his partner had a gun pointed at my head and his finger on the trigger to make it clear resistance would mean my death.
The only people I am out to are siblings and significant other. I do not bother telling others about my identity because of complications it would add to my life. I worry about having to explain what non binary is and seeing people deny it's legitimacy. As for age discrimination, mostly what I mean is people see me as a young, impulsive person who doesn't actually know what I want for my body- i.e. a hysterectomy.
Montana is likely the worst social environment in which to transition in, combined with my line of work and the individuals i work with.
It is really really hard to be trans in this society. I wish people didn't make me feel like a freak for being this way.
It would be nice to have more gender non-conforming bathrooms. As a transman without an STP device, I am forced to wait to use the only stall in the men's room if it is occupied. I should be able to use the restroom any time it is needed.
court related name change under sealed record. bathroom anxiety
lots of problems regarding bathrooms or locker rooms.
I like cheese
I would have loved the option that I am uninterested in gender reassignment surgeries to be an option.
would like more community events and groups in the Helena area for Trans people
So far, I've pretty much learned that any of the surgeries necessary for most to fill they fill the gender the identify most with are paid for out of pocket in the U.S, it's getting better, but it seems a way off still

# Chapter 5: Discussion, Limitations, Recommendations and Conclusions

## Discussion

This study had two purposes. The first purpose was to assess the HIV, HCV and STD status of transgender people living in Montana, as well as to examine the various behavioral factors that put them at risk for infection. The second purpose was to explore the intrapersonal, interpersonal, community and environmental factors related to gender identity and gender expression that affect quality of life and therefore may influence risk behaviors.

Data was collected by means of an electronic survey. The survey was developed and distributed through e-mail, posted on websites frequented by transgender individuals and on social media outlets like Twitter and Facebook. The most common way participants reported hearing about the questionnaire was through Facebook.

### **Who responded to the survey?**

One hundred and eleven transgender individuals living in Montana completed the electronic survey. Over 75 percent of the participants were between the ages of 18 and 35. The high percent of younger participants may be due, in part, to the online nature of the survey. Participants racial composition mirrored the racial composition of the state with approximately 95 percent of individuals indicating they were Caucasian and 11 percent indicating they were of Native American descent or Native American/mixed race, and another 11 percent divided among a variety of other races (participants could check more than one answer). The majority of study participants were from state health planning regions one, four and five where the larger cities of Kalispell, Billings and Missoula lie.

The National Transgender Discrimination Survey (2011) reveals that many transgender people live in extreme poverty, with people of color faring worse than their white counterparts. Similar evidence of poverty can be seen in this study. Only one-third of participants reported earning more than the median per capita annual income for Montana, \$25,373. This means that two-thirds of the participants earned less than \$25,000 a year despite the fact that the educational level in our sample was comparable

to the general population. According to the 2009-2013 American Community Survey 5-year Profiles, 86% of Americans have graduated high school and pursued higher education (Educational Attainment, (n.d.)). In our study, 98% of participants graduated high school and pursued higher education. In part, the lower incomes seen across the board could be attributed to employment discrimination or the high rates of depression and other mental health disorders that make sustained employment difficult. The fact that our participants were in the younger demographic might also explain the low annual earnings. Regardless of the causes, living at or near the poverty line can have multiple repercussions. Several studies have concluded that poverty might force transgender individuals to engage in illegal behaviors like sex work or selling drugs as a means of income (Auer et al., 2014; Fletcher et al., 2014; Nemoto, 2004; Hill, 2011; Nuttbrock, 2009; National Transgender Discrimination Survey, 2011).

When asked about relationship status, over 40 percent of the participants reported that they were not in a relationship. This finding supports the notion that it often is difficult for transgender individuals to establish intimate relationships (Nemoto, 2004; Von Gohren, 2014). Of those who reported being in a relationship, half were in a relationship with a woman, while one-fifth were in a relationship with a man. The remaining 30 percent reported relationships with trans individuals or polyamorous relationships. Interestingly, only 13 percent reported their sexual orientation as heterosexual, while 29 percent indicated they identified as gay, lesbian or bisexual. Pansexuality and not labeling sexual orientation comprised nearly 40 percent of responses.

As is common in past research, the largest percentage (40%) of participants in this study reported their gender identity as trans male (FtM). However, a substantial proportion of our participants (27%) identified as trans female, while another 23 percent reported being gender non-conforming. This mix of gender identities allowed the researchers to make comparisons among the groups as we examined HIV risk related behaviors and quality of life issues.

### **What is the HIV/STD/HCV status of study participants?**

The literature emphasizes the higher rates of HIV, HCV, and STD's within the transgender population (PACHA, 2013; Clements-Nolle, 2001; Nemoto, 2004; Reisner, 2013; Reisner, 2015; Hill, 2011; Nuttbrock, 2009; Carobene, 2014) and this study confirmed past findings. STD rates of chlamydia, gonorrhea and syphilis appeared to be much higher in this trans population than in the general population. However, this study was not able to confirm past findings for HIV and HCV. Only one study participant reported being HIV positive and no one reported being HCV positive. Unfortunately, it is

not possible to make inferences about rates of infection of HIV and HCV from the data gathered in this study.

It is possible, however, to examine testing data. Two-thirds of study participants reported having been tested for HIV. Testing rates for this population of trans individuals are nearly twice the rates for the general population (BRFFS, 2013). The high rate of HIV testing is somewhat surprising given that 80 percent of participants reported perceiving that they are at “no risk” of contracting HIV, while 19 percent reported perceiving themselves at some risk and less than 1 percent at high risk. Indeed, this perception of no or low risk may be grounded in reality due to the fact that of 95 percent of the participants who reported not getting tested, also reported either not being sexually active or engaging in sexual activity with lower-risk sexual partners (defined in this study as “regular” or “primary” partners). The remaining five percent of untested individuals reported engaging in sex with a higher-risk partner (defined as “casual” or “anonymous partner”).

Nearly three-quarters of study participants reported being tested for at least one STD. Of those tested, only 15 percent reported testing positive for an STD. While the small sample size and the existence of prevalence rather than incidence data make comparisons with national data difficult, it appears that rates of reportable STD’s such as chlamydia, gonorrhea and syphilis are substantially higher than the national prevalence rates. This finding supports previous reports in the literature of elevated rates of STD’s among transgender individuals (Reisner, 2015; Hill 2011; Nuttbrock, 2009). One possible explanation for these high rates might be that 90% of individuals who reported engaging in penetrative sex did not always use condoms, although this explanation is complicated by the fact that nearly 80% of the sexually active participants also reported engaging in sex with lower risk partners; in other words, a primary or regular sexual partner.

Logistic regression was used to examine the differences between participants that reported the presence of at least one STD and those who had no STD’s. While one might expect that the group that has not been diagnosed with an STD might engage in less penetrative sex, use condoms consistently, or engage in sex with lower risk partners, that expectation was not supported by the data. Not only did the analysis reveal no difference between the two groups regarding risk behaviors, but also the analysis revealed no differences between the groups in regard to social factors such as the experience of stigma, the experience of discrimination and the type of social support.

Three-quarters of study participants also reported being tested for HCV. Despite these fairly high testing rates, no positive results were reported. This is surprising due to the fact that HCV infections have been on the rise in recent years, and the assumption that rates are higher among transgender people than they are in the general population (CDC, 2014; Reisner, 2015; Carobene, 2014). This unexpected finding may be explained, in part, by the fact that behaviors believed to put an individual at increased risk for HCV (such as sex work and sharing injection needles) are currently not prevalent in this sample of trans individuals. Indeed, only 3% of participants reported currently engaging in sex work. Furthermore, only 31 percent reported injecting hormones or silicone, and of those injectors, 97 percent used sterile needles. Additionally, when asked about drug use, the overwhelming percentage of participants reported using alcohol (74%), tobacco (27%) and marijuana (38%) rather than injection drugs such as heroin (1%) and methamphetamine (0%).

### **What issues affect the quality of life for trans individuals?**

Stigma and Discrimination: The International Center for Research on Women (ICRW) states stigma is when others devalue a person or a group of people because they are associated with a certain disease, behavior or practice (Stigma and Discrimination, n.d.). Multiple studies highlight the pervasive degree of stigma faced by transgender individuals (Reisner 2013; Stotzer, 2009; Clements-Nolle, 2001, Nemoto, 2004, Grant, et. al., 2011). When participants in this study were asked about stigma, approximately three-quarters of the respondents reported feeling stigmatized. Stigma arose from a variety of sources including the local community, their employers, members of the LBG community and law enforcement. Interestingly, far fewer participants reported experiencing discrimination. Less than one-fourth of the participants reported discrimination in any one of the following areas - employment, housing, law enforcement and document changing. These rates of discrimination are not dramatically different from rates found in other studies, although comparisons are approximations as the manner in which the questions are worded are not consistent from one survey to another, (NTDS, 2011).

Mental Health and Suicide: Consistent with other studies (Clements-Nolle, 2001; Clements-Nolle, 2008; Nemoto, 2004, Grant et al., 2010; Stotzer, 2009), the attempted suicide rate in this study was extremely high. Slightly over half of the participants reported attempting suicide. Although a high rate of suicide attempts was expected, it is extremely disconcerting considering the national rate for attempted suicide is 1.6 percent (Grant et al., 2010). Mental illness, particularly depression, has been cited as a contributing factor in suicide attempts. When logistic regression was used to examine the differences between individuals who had attempted and those who had not attempted suicide in regard to the type of mental illness reported, none of the factors,

including depression, emerged as significant. In other words, no one type of mental disorder was more indicative of suicide attempts than another.

The literature also points to the importance of family and social support in the prevention of suicide. In this study, logistic regression revealed that individuals who reported having the support of co-workers and neighbors appeared to be significantly less likely to attempt suicide than those who did not have that support. Interestingly, there were no significant differences among those who attempted and those who did not attempt suicide in regard to support from parents, siblings, spouses and friends. It may be that feeling safe in one's neighborhood and workplace are more critical protective factors than family acceptance.

In an attempt to further understand factors that may contribute to suicide attempts in this population, logistic regression was used to determine if the total number of types of social support, mental illnesses, types of discrimination and/or sources of stigma differed among those who attempted and those who did not attempt suicide. No differences were found in regard to the number of types of discrimination or the number of sources of stigma reported. This finding is somewhat unexpected given that high degrees of stigma and discrimination are often thought of as contributing factors in suicide. We did find, however, that individuals who reported a greater number of social supports were less likely to attempt suicide. While individuals who reported a greater number of mental health disorders were more likely to attempt suicide. Given the high rates of mental disorders reported by this population and the importance of social support as a protective factor, the lack of access to mental health professionals in Montana may contribute to the high rate of suicide attempts. Only 12 percent of participants reported having mental health care to support the transition process.

Transitioning in Montana: There is a lack of information in the literature regarding individuals' experiences of transitioning in rural states such as Montana. Although most of the participants in this study recognized their gender identity before their 13<sup>th</sup> birthday, the vast majority of individuals did not come out to another person until their teen and early adult years. As might be expected, more individuals in Montana have begun transitioning socially than medically. Transitioning socially means changing aspects of one's outward appearance like dressing or wearing a wig consistent with the gender identity you choose to be, or changing mannerisms to align with desired gender. Medical transition means pursuing surgeries and other medical procedures like laser hair removal to present as a desired gender. Three quarters of the participants reported being in the middle of, or having completed, their social transition, while just over half of the participants reported being in the middle of, or having completed, their medical transition. The other half either did not plan to transition medically or had not started

their transition. It is important to note that although nearly half of the participants have not transitioned medically, 80% felt that medical transition procedures were necessary for alleviating their gender identity dysphoria.

Gender Reassignment Surgery and chest surgery were the most desired type of medical transition. Both of these medical interventions are costly and so it is not surprising that the most frequently cited barrier to undergoing medical transition procedures was financial. While only 19 percent reported being uninsured (the national rate in 2014 was 15%) (ASPE, 2015), most participants reported that their health insurance did not cover medical transition procedures, or that they were unsure what procedures were covered by their insurance.

Despite the challenges associated with transitioning, only 10% of these Montana residents planned to transition in a state other than Montana. When asked about community support during their transition in Montana, most participants (84%), reported a very or somewhat positive experience. Similarly, nearly three quarters of the participants who began or completed their medical transition process in Montana reported a somewhat or very positive experience of accessing medical care. Only 16% reported a somewhat negative experience and no one reported a very negative experience. It appears that while access to medical services can be challenging for trans people, the vast majority find their communities supportive of their transition process.

### **What are the differences among MtF, FtM and non-binary identities?**

The literature points to the fact that more information exists regarding MtF than FtM, and even less information exists about individuals who identify only as non-binary. Participants in this study identified in all three groups in fairly equal numbers, and provided the opportunity to examine differences among these groups.

Pearson Chi Square calculations were used to determine differences among individuals who identified as MtF, FtM and non-binary in regard to risk related behaviors such as penetrative sex, type of sex partner (lower or higher risk), STD infection, suicide attempts and testing for HIV. Two significant differences were found among the three groups. Rates of HIV testing were highest among MtF and lowest for non-binary individuals. Sex with higher risk partner was significantly higher for MtF and non-binary participants than for trans males. This finding confirms past research that identifies MtF as being at the highest risk for HIV and other sexually transmitted diseases.

Pearson Chi Square calculations also were used to determine differences among gender types in regard to social factors such as the frequency of being mis-gendered, discrimination, stigma, social support and refusal of medical care. Significant differences were found in frequency of being mis-gendered. Non-binary individuals reported the highest rates of being mis-gendered while FtM reported the lowest rates. Despite their high rates of being mis-gendered, non-binary individuals experiences of discrimination were reported at half the rate reported by MtF females and FtM individuals.

## Limitations

When interpreting the results from this study, several limitations are important to keep in mind. First, data were collected electronically and therefore were limited to individuals who visited social media sites on which the questionnaire was posted, or were recruited by key informants and gatekeepers. The most common way participants reported hearing about the questionnaire was through Facebook. Montana has only a 43% penetration rate for Facebook users (United States Internet and Facebook Usage State by State, 2014), which suggests researchers could have reached a broader audience by using other methods of data collection, for example, paper copies.

Second, as is evident from the method of data collection, this sample was a non-random sample. Results cannot be generalized to the entire population of transgender individuals living in Montana. And, while the racial composition of the sample closely represented the racial composition of the state, the vast majority of participants were Caucasian and therefore it was difficult to make comparisons among different racial groups.

And finally, categorical data and a relatively small sample size made it difficult to perform sophisticated statistical analyses. A larger sample size may have revealed additional relationships among variables.

## Recommendations

The following recommendations are provided to the Montana Department of Public Health and Human Services (MDPHHS) with the hope that by increasing information and general awareness about the transgender population living in Montana, we will be able develop interventions that improve the quality of life and reduce rates of HIV, HCV and STD's.

First of all, it is important to note that several positive results were found in this study. Overall, the results that were collected were contradictory to what is found in the literature. The following is a compilation of the positive results of this study: there was a low rate of HIV and HCV infected individuals, most had graduated high school and had some college or technical school experience, there were high testing rates for HIV and HCV compared to the general population, most participants had a primary sexual partner versus casual or anonymous, almost 100% of people of those using needles reported using new, sterile needles, there was an extremely low use of injection drugs reported, most participants reported positive experiences of transitioning in Montana in relation to community support and access to medical services, over half reported having not experienced any discrimination with the legal system, almost all felt social support from friends and family, and most had not been refused treatment in a healthcare setting. This indicates that current programs are working well and perhaps the MDPHHS does not need to go forth with interventions that center on the list above. Therefore, the first recommendation is to continue with the strengths of this study, which indicate positive aspects are happening in this community, in this state.

Our second recommendation to the MDPHHS is to work to provide trans individuals with access to transgender-inclusive mental health services. In this study, over 50% of the participants reported attempting suicide – and 80% reported being diagnosed with a mental health disorder. The high rate of mental health issues is also seen in the literature (Lombardi, 2002; Stotzer, 2009; Clements-Nolle et al., 2001; Clements-Nolle, 2008). Providing trainings to current mental health professionals across the state to increase their cultural sensitivity and knowledge about transgender issues would be a step in the right direction. In addition, the MDPHHS needs to collect and analyze data from transgender individuals who request an HIV, STD or HCV test. While Montana's standard HIV testing form asks individuals to indicate their gender identity, this data has not been available in the state's annual epidemiologic report. We recommend that MDPHHS include information about transgender individuals in their annual report. Furthermore, the HCV and STD testing forms do not request information about gender identity. We recommend that the MDPHHS ask every person filling out an official HCV, and/or STD testing form to indicate whether they are transgender or non-binary (gender non-conforming), so that we can know, not only the incidence and prevalence of disease among trans and non-binary people, but so we also can collect information about risk behaviors and testing practices. In addition, this would allow us to determine incidence rates of reportable HCV and STD's so that comparisons can be made to national data. The MDPHHS should advocate for culturally sensitive medical care for trans people – nearly half of the participants could not access transition related care or had to teach their medical provider about transgender people in order to get appropriate care. In addition, MDPHHS should advocate for insurance coverage of transition related

procedures which are important in reducing gender dysphoria. Lambda Legal, a legal organization dedicated to break new ground for LGBT people and people living with HIV, states that a growing number of employers are offering trans-inclusive coverage as part of diversity initiatives. Aetna, Cigna, and Blue Cross/Blue Shield are among providers now including coverage of transition-related health care, but it is up to each employer to make sure that a plan is inclusive.

Our last recommendation is for future research. Several topics that were covered on this survey need to be explored further, using both qualitative and quantitative research methods. These are:

- What environmental factors contribute to the high suicide rate?
- What are the main barriers for this population to use condoms?
- What about their community support and access to medical services while they were transitioning was positive?
- Are the results the same for transgender individuals in Montana who are under the age of 18 or do they have different needs in regards to behavioral and social factors?

## Conclusions

This study represents one of the first attempts to gather information about the HIV/STD/HCV prevention needs and quality of life issues faced by transgender people living and transitioning in rural states like Montana. The small sample size and low or non-existent cases of HIV and HCV made it difficult to form assumptions about prevalence rates and risk behaviors for this group of transgender people living in Montana. Nevertheless, several important issues related to quality of life are worthy of mention. Rates of attempted suicide were extremely high; 53% of study participants reported attempting suicide at least once. Individuals who did not attempt suicide reported higher levels of social support, particularly from people outside the family unit. Co-workers and neighbors were especially important in reducing the risk of suicide. Also worth mentioning were the high rates of mental health disorders. Not only do these disorders affect quality of life, but in this study, mental disorders are also associated with a higher rate of suicide attempts. Educating people in the community about the importance of supporting their transgender neighbors and co-workers, and advocating for increased access to mental health services are two interventions that could greatly improve the lives of transgender individuals living in Montana. And finally, it is worth noting that despite the hardships associated with access to medical procedures for transitioning in Montana, all but 10% of participants in this study transitioned or plan to transition in Montana. Despite Montana's reputation as a socially and politically

conservative state, most transgender individuals (84%) in this study, who have transitioned or are in the process of transitioning, reported that they had a positive or somewhat positive experience in Montana.

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## Appendix A: Questionnaire

Q1 You are invited to participate in a research project sponsored by the Montana Department of Public Health and Human Services (HIV/STD/HCV Section), the University of Montana, and The Gender Expansion Project. The purpose of this questionnaire is to assess the quality of life and the risk of HIV infection among transgender individuals living in Montana. We welcome, however, participation from individuals living in all regions of the country. This online questionnaire should take approximately 20 minutes to complete. Participation is entirely voluntary, and responses are completely ANONYMOUS. You have the option to not respond to any question that you choose. Participation or nonparticipation will not impact your relationship with the University of Montana. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age. This project has been approved by the Institutional Review Board at the University of Montana. If you have any questions about the research, please contact the Principle Investigator, Dr. Annie Sondag, phone (406) 243-5215 or via email at [annie.sondag@umontana.edu](mailto:annie.sondag@umontana.edu). If you have any questions regarding your rights as a research subject, contact the UM Institutional Review Board (IRB) at (406) 243-6672. Please print or save a copy of this page for your records.\* I have read the above information and agree to participate in this research project.

- Yes (1)
- No (2)

If No Is Selected, Then Skip To End of Survey

Q2 Do you consider yourself, or have you considered yourself in the past to be transgender, two-spirit, or gender nonconforming in any way?

- Yes - Transgender (1)
- Yes - Two-spirit (2)
- Yes - Gender nonconforming/non-binary (3)
- No (4)

If No Is Selected, Then Skip To End of Survey

Q3 Are you age 18 or older?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To End of Survey

Q4 How did you hear about this needs assessment survey? (Check all that apply)

- E-mail (1)
- Social Networking Site (2)
- Organization Website (3)
- Approached in Person (at an event or support group, or by friends/family) (4)
- Word of Mouth (5)
- Other (Please Specify) (6) \_\_\_\_\_

Q5 What age are you?

- 18-25 years old (1)
- 26-35 years old (2)
- 36-45 years old (3)
- 46-55 years old (4)
- 56-65 years old (5)
- 66 + (6)

Q6 Which one or more of the following would you say is your race? (Check all that apply)

- Caucasian/Northern European (1)
- American Indian/Alaskan Native (2)
- Black or African American (3)
- Hispanic or Latino (4)
- Asian (5)
- Native Hawaiian or Pacific Islander (6)
- Other (Please specify) (7) \_\_\_\_\_

Q7 In which state do you currently live?

- Alabama (1)
- Alaska (2)
- Arizona (3)
- Arkansas (4)
- California (5)
- Colorado (7)
- Connecticut (6)
- Delaware (8)
- Florida (9)
- Georgia (10)
- Hawaii (11)
- Idaho (12)
- Illinois (13)
- Indiana (14)
- Iowa (15)
- Kansas (16)
- Kentucky (17)
- Louisiana (18)
- Maine (19)
- Maryland (20)
- Massachusetts (21)
- Michigan (22)
- Minnesota (23)
- Mississippi (24)
- Missouri (25)
- Montana (26)
- Nebraska (27)
- Nevada (28)
- New Hampshire (29)
- New Jersey (30)
- New Mexico (31)
- New York (32)
- North Carolina (33)
- North Dakota (34)
- Ohio (35)
- Oklahoma (36)
- Oregon (37)
- Pennsylvania (38)
- Rhode Island (39)
- South Carolina (40)
- South Dakota (41)
- Tennessee (42)
- Texas (43)

- Utah (44)
- Vermont (45)
- Virginia (46)
- Washington (47)
- West Virginia (48)
- Wisconsin (49)
- Wyoming (50)

Q8 How long have you been living in Montana?

- Less than 1 year (1)
- 1-2 years (2)
- 3-5 years (3)
- 5-10 years (4)
- 11 years or more (5)

Q9 In which REGION of Montana do you reside?

- REGION 1: North West- Lincoln, Flathead, Lake, Sanders, Mineral, Missoula, Ravalli Counties (2)
- REGION 2: North Central- Glacier, Toole, Liberty, Pondera, Teton, Choteau, Cascade, Judith Basin, Fergus, Petroleum Counties (3)
- REGION 3: North East- Hill, Blain, Phillips, Valley, Daniels, Sheridan, Roosevelt Counties (4)
- REGION 4: South West- Powel, Lewis and Clark, Granite, Deer Lodge, Jefferson, Broadwater, Silver Bow, Beaverhead, Madison, Gallatin, Park Counties (5)
- REGION 5: South Central- Wheatland, Golden Valley, Musselshell, Sweet Grass, Stillwater, Yellowstone, Treasure, Carbon, Big Horn Counties (6)
- REGION 6: South East- Garfield, McCone, Richland, Dawson, Rosebud, Custer, Prairie, Wibaux, Fallon, Powder River, Carter Counties (7)

Q10 What is the population of the city/town in which you live?

- Unsure (1)
- 1-500 people (2)
- 501-2,000 people (3)
- 2,001-10,000 people (4)
- 10,001-50,000 people (5)
- 50,001 + (6)

Q11 With which annual income category do you identify?

- \$0-\$10,000 (1)
- \$10,001-\$25,000 (2)
- \$25,001-\$40,000 (3)
- \$40,001-\$55,000 (4)
- \$55,001-\$80,000 (5)
- \$80,001 + (6)

Q12 What level of education have you completed?

- Grades 1-8 (Elementary) (1)
- Grades 9-11 (Some High School) (2)
- Grade 12 or GED (High School Graduate) (3)
- College 1 year-3 years (Some College or Technical School) (4)
- College 4 years or more (College Graduate) (5)
- Graduate School (6)

Q13 What is your relationship status?

- I am not in a relationship (1)
- In a relationship with a man (2)
- In a relationship with a woman (3)
- In a relationship with a gender non-conforming individual (4)
- In a relationship with a trans male (FtM) (6)
- In a relationship with a trans female (MtF) (5)
- I am in a relationship with more than 1 person (poly-amorous) (8)

Q14 On a scale of 1-3, 1= no risk and 3= high risk, do you believe you are at risk for contracting HIV, HCV and STD's?

	1= no risk (1)	2=some risk (2)	3=high risk (3)

Q15 When were you last tested for HIV?

- I have never been tested (1)
- Within the last 1 year (2)
- About 1-2 years ago (3)
- About 2- 5 years ago (4)
- More than 5 years ago (5)

If I have never been tested Is Selected, Then Skip To Have you heard about PrEP, that is Pr...

Q16 What is your current HIV status?

- Negative (1)
- Positive (2)
- Unsure (3)

If Negative Is Selected, Then Skip To Have you heard about PrEP, that is Pr...If Unsure Is Selected, Then Skip To Have you heard about PrEP, that is Pr...

Q17 How often do you visit with a health care provider for HIV care?

- I have not visited a health care provider in the last 5 years (5)
- Every 6 months (1)
- Every 1 year (2)
- Every 2 years (3)
- Every 3 years (4)

Q18 Are you taking anti-retroviral drugs (treatment drugs for HIV)?

- Yes (1)
- No (2)
- Unsure (3)

Q19 Have you heard about PrEP, that is Pre-Exposure Prophylaxis, a medication taken daily to protect against HIV infection?

- Yes (1)
- No (2)
- Unsure (3)

Q21 Are you Hepatitis C positive?

- I have never been tested for Hepatitis C (4)
- Yes (1)
- No (2)
- I didn't return for my results (3)

Q23 For which of the following STD's have you tested positive? (Check all that apply)

- I have never been tested for STD's (1)
- Chlamydia (2)
- Gonorrhea (3)
- Herpes (4)
- Human Papillomavirus (HPV) and Genital Warts (5)
- Pubic "Crab" Lice (6)
- Scabies (7)
- Syphilis (8)
- Other (Please specify) (9) \_\_\_\_\_
- I have not tested positive for any of the above STD's (10)

Q24 How many times have you engaged in PENETRATIVE SEX and did not use a condom, or other barrier device in the past 12 months?

- None (1)
- 1-2 (2)
- 3-4 (3)
- 5-6 (4)
- 7 or more times (5)

If None Is Selected, Then Skip To How many times have you engaged in OR...

Q25 What is your role during PENETRATIVE SEX?

- Insertive only (1)
- Receptive only (2)
- Both insertive or receptive (3)

Q26 How many times have you engaged in ORAL SEX and did not use a condom, or other barrier device in the past 12 months?

- None (1)
- 1-2 (2)
- 3-4 (3)
- 5-6 (4)
- 7 or more times (5)

Q27 How frequently do you use condoms?

- I am not sexually active (1)
- Always (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

Q28 What type of sexual partner(s) do you have? (Check all that apply)

- I don't have a sexual partner (1)
- Primary (significant other) (2)
- Regular partner(s) (someone with whom I have sex on a regular basis) (3)
- Casual partner(s) (an acquaintance with whom I have had one or more sexual encounters) (4)
- Anonymous partner(s) (a stranger to me at the time of the sexual encounter) (5)

Q29 Do you currently engage in or have engaged in sex work presenting as a transgender, transsexual, trans, or gender nonconforming person? (Sex work includes exchanging sex for money, drugs, or services)

- No, I have not engaged in sex work and have never thought about it/ wouldn't do it (4)
- No, I have not engaged in sex work, but have thought about doing it/ would do it if I needed to (3)
- Yes, I currently engage in sex work (1)
- Yes, I engaged in sex work in the past, but not currently (2)

If No, I have not engaged in s... Is Selected, Then Skip To Have you ever injected yourself or so...

Q30 Have you ever injected yourself or someone else with hormones or silicone?

- Yes (1)
- No (2)
- I prefer not to answer (3)

If No Is Selected, Then Skip To Have you ever or do you currently use...If I prefer not to answer Is Selected, Then Skip To Have you ever or do you currently use...

Q31 When you injected hormones and/or silicone or were injected by someone else, did you use SEALED, STERILE, NEW needles?

- Yes (1)
- No (2)
- I prefer not to answer (3)

Q32 Do you currently use any of the following substances? (Check all that apply)

- Alcohol (beer, wine, hard liquor) (1)
- Tobacco (cigarettes, cigars, snuff, chewing tobacco) (2)
- Marijuana, Pot, Weed, Hashish (3)
- Cocaine, Coke, Crack, Ice (4)
- Methamphetamine, Tina (5)
- Heroin, Dope (6)
- Poppers (amyl nitrate) (17)
- PCP, Dippers (a marijuana cigarette dipped in PCP) (7)
- Ecstasy, E, Adam, XTC, Clarity, Essence, Hug Drug, Love Drug, Molly (8)
- Nonmedical use of Pain Relievers (Oxycodone, Oxycontin) (9)
- Recreational use of medicine (ex. Nyquil when one does not have a cold) (13)
- LSD, Acid (10)
- Other substance(s) (Please specify) (11) \_\_\_\_\_
- I do not use any of these substances (12)

Q33 Please tell us about your perception of your alcohol use.

	I don't drink alcohol (1)	Not a problem in my life (2)	Poses a small problem in my life (3)	Poses a big problem in my life (4)

Q34 Please tell us about your perception of your drug use.

	I don't use drugs (1)	Not a problem in my life (2)	Poses a small problem in my life (3)	Poses a big problem in my life (4)

Q35 How do you get your syringes?

- I do not use syringes (9)
- New, unused, sterile syringes from pharmacy or doctor's office (1)
- New, unused, sterile syringes from friends (2)
- New, unused, sterile syringes through syringe exchange programs (3)
- New, unused, sterile syringes purchased online (4)
- Reused syringes because I can't afford new ones (5)
- Reused syringes because I don't know how to get new ones (6)
- Share used syringes with friends (7)
- Not listed above (Please specify) (8) \_\_\_\_\_

Q36 What gender were you assigned at birth?

- Male (1)
- Female (2)
- Intersex (3)

Q37 What is your gender identity?

- Trans male (Female to Male-FtM) (1)
- Trans female (Male to Female-MtF) (2)
- Gender nonconforming, gender fluid, non-binary (8)
- Questioning (9)
- Other (Please specify) (10) \_\_\_\_\_

Q38 Where do you currently identify on the gender spectrum?

- Completely feminine (1)
- Mostly feminine (2)
- Somewhat feminine (3)
- Androgynous (4)
- Somewhat masculine (5)
- Mostly masculine (6)
- Completely masculine (7)
- Neither feminine nor masculine (8)

Q39 At what age did you question/recognize your gender identity?

- 0-5 years old (1)
- 6-12 years old (2)
- 13-19 years old (3)
- 20-29 years old (4)
- 30-39 years old (5)
- 40-49 years old (6)
- 50 + (7)

Q40 What age did you first come out as transgender to another person?

- I have not come out to any other person (1)
- 0-5 years old (2)
- 6-12 years old (3)
- 13-19 years old (4)
- 20-29 years old (5)
- 30-39 years old (6)
- 40-49 years old (7)
- 50 + (8)

Q41 What age did you begin to live outwardly/socially as your identified gender?

- I have never lived outwardly as my identified gender (1)
- I've switched back and forth (9)
- 0-5 years old (2)
- 6-12 years old (3)
- 13-19 years old (4)
- 20-29 years old (5)
- 30-39 years old (6)
- 40-49 years old (7)
- 50 + (8)

Q42 At what age did you first seek out any form of MEDICAL care for transition? (puberty suppression, hormones/silicone, surgical interventions, etc.)

- I have not sought out any transition-related MEDICAL care (1)
- 0-5 years old (2)
- 6-12 years old (3)
- 13-19 years old (4)
- 20-29 years old (5)
- 30-39 years old (6)
- 40-49 years old (7)
- 50 + (8)

Q43 How would you currently describe your sexual orientation?

- Heterosexual/Straight (1)
- Gay/Lesbian/Same-gender attraction (2)
- Bisexual (3)
- Asexual (4)
- Pansexual (9)
- Queer (5)
- Questioning (6)
- I do not label my sexual orientation (7)
- Other (Please specify) (8) \_\_\_\_\_

Q44 Where are you in your MEDICAL transition?

- At this time, I do not plan to transition medically (1)
- I want to transition medically, but I haven't started (2)
- I am somewhere in the middle of my medical transition (3)
- I have finished my medical transition (7)

Q45 Where are you in your SOCIAL transition?

- At this time, I do not plan to transition socially (1)
- I want to transition socially, but I haven't started (2)
- I am somewhere in the middle of my social transition (3)
- I have finished my social transition (4)

Q46 Do you plan to or have transitioned in the state of Montana?

- I do not plan to transition (1)
- Yes, I plan to transition or have transitioned in the state of Montana (2)
- No, I plan to transition or have transitioned in another state (3)
- I prefer not to answer (4)

If I do not plan to transition Is Selected, Then Skip To End of Block  
If No, I plan to transition in...  
Is Selected, Then Skip To End of Block  
If I prefer not to answer Is Selected, Then Skip To End of Block

Q47 What is your experience of COMMUNITY SUPPORT while transitioning in Montana?

- I have not transitioned (1)
- Very positive experience (2)
- Somewhat positive experience (3)
- Somewhat negative experience (4)
- Very negative experience (5)

Q48 What is your experience of ACCESS TO MEDICAL SERVICES while transitioning in Montana?

- I have not transitioned (1)
- Very positive experience (4)
- Somewhat positive experience (5)
- Somewhat negative experience (2)
- Very negative experience (3)

Q49 Are you mis-gendered in your daily interactions with others?

- All of the time (1)
- Most of the time (2)
- Some of the time (3)
- Rarely (4)
- Never (5)

Q50 Have you experienced any struggles or discrimination with the LEGAL system related to being transgender?

- I have not experienced any struggles or discrimination with the LEGAL system (7)
- Employer (1)
- Housing (2)
- Changing documents like driver's licence, birth certificate, social security card, filling out forms, etc. (3)
- Law Enforcement (5)
- Other (Please specify) (4) \_\_\_\_\_

Q51 Do you feel comfortable/ good/ and accept your gender identity? (Have a positive sense of self)

- All of the time (1)
- Most of the time (2)
- Some of the time (3)
- Never (4)

Q52 How often do you experience gender dysphoria towards your gender assigned at birth?

- All of the time (1)
- Most of the time (2)
- Some of the time (3)
- Never (4)

Q53 Who do you feel supports you in your gender identity? (Check all that apply)

- Family (spouse, partner) (1)
- Family (parents, siblings) (6)
- Friends (2)
- Coworkers (3)
- Neighbors (4)
- Other (Please specify) (5) \_\_\_\_\_
- I do not feel supported in my gender identity (7)

Q54 Do you ever feel stigma from: (Check all that apply)

- I don't feel stigma (8)
- Employer(s) (1)
- Housing (2)
- Law Enforcement (3)
- Members of the LBG community (4)
- Local Community (6)
- Other (Please specify) (5) \_\_\_\_\_

Q55 Have you ever attempted suicide?

- Yes, more than 1 time (1)
- Yes, 1 time (4)
- No (2)
- I prefer not to answer (3)

Q56 How often have you seriously thought about committing suicide?

- 0 (1)
- 1-5 times (2)
- 5 + times (3)
- I prefer not to answer (4)

Q57 Which of the following mental health disorders have you been diagnosed with?

- I have not been diagnosed with any mental health disorders (4)
- Depression (1)
- Schizophrenia (2)
- Panic Disorder (7)
- Bipolar Disorder (5)
- Generalized Anxiety Disorder (9)
- Social Anxiety Disorder (SAD) (8)
- Obsessive Compulsive Disorder (OCD) (6)
- Attention Deficit Hyperactivity Disorder (ADHD) (10)
- Other (Please specify) (11) \_\_\_\_\_
- I prefer not to answer (3)

Q58 How often have you experienced being verbally harassed or disrespected by anyone because they knew you to be or perceived you to be transgender, transsexual, trans, or gender nonconforming?

- Frequently (1)
- Sometimes (2)
- Rarely (3)
- Never (4)
- I prefer not to answer (5)

Q59 What kind of place do you go to MOST OFTEN when you are sick or need medical treatment?

- I do not go to any health care providers (1)
- Emergency room (2)
- Doctor's office (3)
- Health clinic or health center (services not free) (4)
- Free health clinic or health center (5)
- V.A. (Veteran's) clinic or hospital (6)
- Alternative medicine provider (acupuncture, herbalist, etc.) (7)
- Other (Please specify) (8) \_\_\_\_\_

Q60 Has a doctor or other health care provider refused to treat you because you are, or perceived to be, transgender, transsexual, trans, or gender nonconforming?

- I have never seen a doctor or healthcare provider (1)
- Yes (2)
- No (3)

Q61 What procedures HAVE YOU COMPLETED toward a medical transition? (Check all that apply)

- I have not sought out any medical transition procedures (1)
- Hormone blockers (E.G., spironolactone, anti-androgens) (8)
- Hormones (estrogen and testosterone) (2)
- Chest surgery (FtM chest reconstruction, MtF breast augmentation or implants, etc.) (3)
- Abdominal surgery (oophorectomy, hysterectomy, etc.) (4)
- Gender Reassignment Surgery (GRS), Sexual Reassignment Surgery (SRS) (5)
- Facial Feminization Surgery (FFS) (6)
- Trachial Shave (9)
- Permanent hair removal (laser or electrolysis) (10)
- Voice surgery (11)
- Other (Please specify) (7) \_\_\_\_\_

Q62 What procedures do you PLAN OR WANT TO GET toward a medical transition? (Check all that apply)

- I do not plan or want to get any medical transition procedures (1)
- Hormone blockers (E.G., spironolactone, anti-androgens) (2)
- Hormones (estrogen and testosterone) (3)
- Chest surgery (FtM chest reconstruction, MtF breast augmentation or implants, etc.) (4)
- Abdominal surgery (oophorectomy, hysterectomy, etc.) (5)
- Gender Reassignment Surgery (GRS), Sexual Reassignment Surgery (SRS) (6)
- Facial Feminization Surgery (FFS) (7)
- Trachial Shave (8)
- Permanent hair removal (laser or electrolysis) (9)
- Voice surgery (10)
- Other (Please specify) (11) \_\_\_\_\_

Q63 How necessary do you feel these procedures are to alleviate your Gender Identity Dysphoria (if you experience GID)?

- I do not experience GID (1)
- These procedures are very necessary to alleviate my GID (2)
- These procedures are somewhat necessary to alleviate my GID (3)
- These procedures are not necessary to alleviate my GID (4)

Q64 What is your MAIN barrier to any procedures you feel you need for your transition?

- I have already undergone surgeries I feel I need (1)
- I am not currently seeking surgeries for transition (2)
- Health-related barriers (3)
- Financial barriers (4)
- I do not currently qualify for surgeries according to my insurance/medical provider(s) (5)
- Other (Please specify) (6) \_\_\_\_\_

Q65 In the past 12 months, have you had any of the following experiences? (Check all that apply)

- I have not needed nor sought medical care in the past 12 months (1)
- I postponed or did not try to get medical care when I was sick or injured because I could not afford it (2)
- I postponed or did not try and get check-ups or other preventative medical care because I could not afford it (3)
- I postponed or did not try and get medical care when I needed it, and this resulted in a medical emergency where I had to go to the Emergency Room (ER) or an urgent care clinic to get immediate help (4)
- I had to teach my doctor or other medical care provider about transgender or gender nonconforming people in order to get appropriate care (5)
- I was not able to access transition related care (6)
- Due to my transgender identity or nonconforming gender expression, I postponed or did not try to get medical care when I was sick or injured because of disrespect or mistreatment from doctors or other healthcare providers (7)
- Due to my transgender identity or nonconforming gender expression, I postponed or did not try to get check-ups or other preventative medical care because of disrespect or mistreatment from doctors or other healthcare providers (8)

Q66 Are you confident that your medical provider will give you accurate information regarding transgender/gender nonconforming health needs?

- Yes (1)
- No (2)
- Unsure (3)

Q67 Do you have any of the following types of health care coverage? (Check all that apply)

- Medicare or Medicaid (1)
- Veteran's Administration (2)
- Employer provided insurance (i.e. Blue Cross) (3)
- Privately insured (9)
- School-based insurance (4)
- Montana Co-op (5)
- No insurance (6)
- Unsure (7)
- Other (Please specify) (8) \_\_\_\_\_

Q68 Does your health insurance cover any transition-related procedures and services? (Check all that apply)

- I do not have health insurance (8)
- I am unsure (16)
- My health insurance DOES NOT cover any transition-related procedures and services (24)
- Hormone replacement therapy (9)
- Mental health care to support the transition process (2)
- Coverage for reconstructive surgical procedures related to Gender Reassignment Surgery (GRS) (3)
- Facial and other feminization or masculinization procedures (i.e. Facial Feminization Surgery (FFS), voice modification surgery, liposuction, etc.) (4)
- Breast and chest surgeries (5)
- Permanent hair removal of the face, neck, genitals and/or other areas (through electrolysis or laser treatments) (6)
- Other (Please specify) (7) \_\_\_\_\_

Q69 Would you like to elaborate on anything that we have mentioned, or bring up anything that we haven't touched on related to your experiences as a transgender person?

- Please write them here: (1) \_\_\_\_\_

# Appendix B: IRB Approval Form

Form RA-108  
(Rev. 08/14)



**THE UNIVERSITY OF MONTANA-MISSOULA**  
Institutional Review Board (IRB)  
*for the Protection of Human Subjects in Research*  
CHECKLIST / APPLICATION

IRB Protocol No.:

27-15

At the University of Montana (UM), the Institutional Review Board (IRB) is the institutional review body responsible for oversight of all research activities involving human subjects outlined in the U.S. Department of Health and Human Services' Office of Human Research Protection and the National Institutes of Health, Inclusion of Children Policy Implementation.

**Instructions:** A separate application form must be submitted for each project. IRB proposals are approved for no longer than one year and must be continued annually (unless Exempt). Faculty and students may email the completed form as a Word document to [IRB@umontana.edu](mailto:IRB@umontana.edu), or submit a hardcopy to the Office of the Vice President for Research & Creative Scholarship, University Hall 116. Student applications must be accompanied by email authorization by the supervising faculty member or a signed hard copy. *All fields must be completed. If an item does not apply to this project, write in: n/a.* Questions? Call the IRB office at 243-6672.

### 1. Administrative Information

Project Title: An Exploration of Factors that Influence HIV Risk and the Quality of Life of Transgender and Gender-Diverse People Living in Montana	
Principal Investigator: Dr. Annie Sondag	UM Position: Professor
Department: Health and Human Performance	Office location: McGill 209
Work Phone: 406-243-5215	Cell Phone:

### 2. Human Subjects Protection Training *(All researchers, including faculty supervisors for student projects, must have completed a self-study course on protection of human research subjects within the last three years and be able to supply the "Certificate(s) of Completion" upon request. If you need to add rows for more people, use the Additional Researchers Addendum.)*

All Research Team Members (list yourself first)	PI	CO-PI	Faculty Supervisor	Research Assistant	DATE COMPLETED Human Subjects Protection Course
Name: Karishma Chainani Email: karishma.chainani@umontana.edu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2/23/2014 ✓
Name: K. Ann Sondag Email: annie.sondag@mso.umt.edu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12/2/2013 ✓
Name: Bree Sutherland Email: bree.sutherland@genderexpansionproject.org	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/18/2014 Consultant ✓
Name: Email:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 3. Project Funding *(If federally funded, you must submit a copy of the abstract or Statement of Work.)*

Is grant application currently under review at a grant funding agency? <input type="checkbox"/> Yes <i>(If yes, cite sponsor on ICF if applicable)</i> <input checked="" type="checkbox"/> No		Has grant proposal received approval and funding? <input checked="" type="checkbox"/> Yes <i>(If yes, cite sponsor on ICF if applicable)</i> <input checked="" type="checkbox"/> No	
Agency	Grant No.	Start Date	End Date
MT DPHHS - HIV/STD/HCV Section		2/15/15	12/31/15
		PI on grant	
		Annie Sondag	

*e-Prop 2015-304 Jeff Conley*

For UM-IRB Use Only

#### IRB Determination:

- Not Human Subjects Research  
 Approved by Exempt Review, Category # \_\_\_\_\_ *(see memo)*  
 Approved by Expedited Review, Category # 7 *(see Note to PI) with Waiver*  
 Full IRB Determination  
 Approved *(see Note to PI)*  
 Conditional Approval *(see memo)* - IRB Chair Signature/Date: \_\_\_\_\_  
 Conditions Met *(see Note to PI)*  
 Resubmit Proposal *(see memo)*  
 Disapproved *(see memo)*

**Note to PI:** Non-exempt studies are approved for one year only. Use any attached IRB-approved forms (signed/dated) as "masters" when preparing copies. If continuing beyond the expiration date, a continuation report must be submitted. Notify the IRB if any significant changes or unanticipated events occur. When the study is completed, a closure report must be submitted. Failure to follow these directions constitutes non-compliance with UM policy.

Risk Level: Minimal

Final Approval by IRB Chair/Manager: Paul R. Baker Date: 2/9/2015 Expires: 2/8/2016



**INSTITUTIONAL REVIEW BOARD**  
*for the Protection of Human Subjects in Research*

FWA 0000078  
Research & Creative Scholarship  
University Hall 116  
University of Montana  
Missoula, MT 59812  
Phone 406-243-6672 | Fax 406-243-6330

**Date:** February 9, 2015  
**To:** Dr. K. Annie Sondag, Health and Human Performance  
**From:** Paula A. Baker, IRB Chair and Manager   
**RE:** IRB #27-15: "An Exploration of Factors that Influence HIV Risk and the Quality of Life of Transgender and Gender-Diverse People Living in Montana"

Your IRB proposal cited above has been **APPROVED** under **expedited review** by the Institutional Review Board in accordance with the Code of Federal Regulations, Part 46, section 110. Expedited approval refers to research activities that (1) present no more than minimal risk to human subjects, and (2) fit within the following category for expedited review as authorized by 45 CFR 46.110 and 21 CFR 56.110:

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

A waiver for the obtainment of written informed consent is granted for this project, as online consent will be obtained and all of the following conditions apply:

1. Participation involves no more than minimal risk to the subjects; and
2. No procedures are involved for which written consent is normally required outside of the research context.

Amendments: Any changes to the originally-approved protocol must be reviewed and approved by the IRB **before** being made (unless extremely minor). Requests must be submitted using [Form RA-110](#).

Unanticipated or Adverse Events: You are required to timely notify the IRB if any unanticipated or adverse events occur during the study, if you experience an increased risk to the participants, or if you have participants withdraw from the study or register complaints about the study. Use [Form RA-111](#).

Continuation: Federal and University of Montana IRB policy requires you to file an annual Continuation Report ([Form RA-109](#)) for expedited studies. You must file the report within 30 days prior to the expiration date, which is **February 8, 2016**. *Tip: Put a reminder on your calendar now.* A study that has expired is no longer in compliance with federal or University IRB policy, and all project work must cease immediately.

Study Completion or Closure: Finally, you are also required to file a Closure Report ([Form RA-109](#)) when the study is completed or if the study is abandoned. See the directions on the form.

Please contact the IRB office with any questions at (406) 243-6672 or email [irb@umontana.edu](mailto:irb@umontana.edu).

# Appendix C: Social Media Invitation

Title: "Montana Trans\* Health Survey"

**Are you interested in learning more about the challenges facing Transgender and Gender Diverse people living in Montana?** Do you identify as transgender or gender diverse? Are you 18 years of age or older? The Gender Expansion Project and the Montana Department of Public Health and Human Services need your help to increase awareness of the health needs of the gender diverse community. Take our ANONYMOUS 15 minute survey! Results of the survey will be posted on the Gender Expansion website Spring 2015 at <http://genderexpansionproject.org/>.

# Appendix D: E-mail Invitation

**Be a part of the prevention of HIV/STI/HCV infections in rural environments!**

**Do you identify as transgender or gender diverse?**

Are you 18 years of age or older? The Gender Expansion Project and the Montana Department of Public Health & Human Services need your help to increase awareness of the health needs of the gender diverse community. Take our ANONYMOUS 20 minute survey - [Click HERE](#)

# Appendix E: Resource List

## THANK YOU FOR TAKING OUR SURVEY!

If needed, we have provided a list of resources here:

- Free hotline: <http://translifeline.org> (877) 565-8860
- National Suicide Prevention Lifeline 1-800-273-8255 (TALK)
- Western Montana Mental Health Center (Psychiatric Crisis Line) (406) 532-9710
- Montana Gender Alliance, <http://genderexpansionproject.org/montana-gender-alliance/>, (406)848-1220 or email: [genderalliance@genderexpansionproject.org](mailto:genderalliance@genderexpansionproject.org)
- Open Aid Alliance: 500 N Higgins, Ste 100, Missoula, MT, (406) 543-4770
  - <http://openaidalliance.org/>
- Gender Expansion Project: 127 N. Higgins, Suite 202, Missoula, MT 59801, (406) 848-1220, [www.genderexpansionproject.org](http://www.genderexpansionproject.org)
- Montana Gay Men's Task Force- GMTF, PO Box 7984, Missoula, MT 59807
  - <http://www.mtgayhealth.org>
  - 406-829-8075
- The Western Montana Community Center, 127 N. Higgins Ave, Suite 202, Missoula, MT 59802, (406) 543-2224, [info@gaymontana.org](mailto:info@gaymontana.org), [www.gaymontana.org](http://www.gaymontana.org)