2006

Is Safe Haven Legislation an Efficacious Policy Response to Infant Abandonment: A Biopsychosocial Profile of the Target Population

Stephanie Mayes Gruss
Virginia Commonwealth University

Acknowledgement

I would like to sincerely thank Drs. Marilyn Biggerstaff, Robert Holsworth, Janet Hutchinson, and Laura Moriarty for their time and effort in serving on my dissertation committee. The content of this dissertation has been enhanced by their critique and recommendations. I would especially like to recognize and thank Dr. Holsworth for his indefatigable support of my work. His mentorship and guidance have made this dissertation process a more rewarding experience.

Is Safe Haven Legislation an Efficacious Policy Response to Infant Abandonment: A Biopsychosocial Profile of the Target Population

Stephanie M. Gruss, Ph.D.

Virginia Commonwealth University

Center for Public Policy

August 15, 2006

Advisor: Dr. Robert Holsworth

Outline

Abstract

This study represents an attempt to describe the extent and features of safe haven legislation in the United States, discuss implementation issues, and to examine if the legislation is reaching its intended target audience in order to answer the question, "Is safe haven legislation an efficacious response to infant abandonment?"

Safe havens are designated locations where infants can be anonymously abandoned without fear of prosecution or incarceration. As of May of 2006, forty-seven states have passed such legislation, citing the need for an alternative to unsafe infant abandonment leading to an infant's death, and an alternative to infanticide (the killing of an infant within one year of its birth). Since the initial passage of this legislation in Texas in 1999, there have been more unsafe infant abandonments than accounts of safe haven abandonments.

As this legislation provides for anonymous infant abandonment researchers cannot study the population of women actually utilizing safe havens. Therefore, the study of women seeking connection with safe havens in comparison to the population of women who have engaged in infant abandonment resulting in an infant's death is considered the sole viable sources of insight into this problem. The scope of the research is exploratory in nature and analyses are considered preliminary due to the lack of data that exists in this area and the relative newness of the legislation.

A quantitative analysis of women likely to utilize safe havens suggests that they tend to have a mean age of 19, are unmarried, have entered into prenatal care late, have disclosed their pregnancy to someone, and are currently dating the birthfather. The findings from this analysis were compared to those from a national linked birth and infant death dataset to ascertain if

women seeking safe havens have similar biopsychosocial characteristics as those engaging in unsafe abandonment leading to an infant's death. Similar biopsychosocial characteristics were found including mother's age, marital status, late entry into prenatal care, disclosure of pregnancy, and dating status. A regression analysis was used to construct a biopsychosocial profile of women likely to abandon an infant.

Findings suggest that legislators and those involved with safe havens have some knowledge of their target population, but are not effectively reaching this audience, nor promoting the existence of safe havens. They also appear to be utilizing research findings on infanticide inappropriately in order to profile their target audience. This effectively limits the promulgation of education and early identification services that could prevent both safe haven and unsafe infant abandonments. This study concludes with policy reform recommendations.

Chapter I. Introduction

Safe haven legislation in the United States (U.S.): In response to news reports and public outcry over infants being found abandoned in public places forty-seven states have enacted legislation in the past seven years allowing for the establishment of "safe havens." At state-designated safe haven locations, infants can be anonymously abandoned by parents without fear of incarceration, but not necessarily fear of prosecution. In states allowing for prosecution an affirmative defense is permitted, ultimately not holding the defendant liable for her actions. As a result, there is no evidence to date of a parent being prosecuted for the safe abandonment of their infant at a safe haven.

Safe haven legislation has been heralded by legislatures as an attempt to prevent infanticide or the unsafe abandonment of an infant leading to its death. Evidence indicates that these situations occur infrequently, and are occurring at similar rates as they did prior to the inception of safe haven legislation. However, the negative political impact of not addressing the issue of infants dying needlessly would be monumental. Thus, state legislatures across the U.S. have felt compelled to enact safe haven legislation.

In states permitting safe haven abandonment, infants must be relinquished to safe havens in good health and fall within the legal age-limit promulgated by the statute. The legislation allows infants to be abandoned anywhere from age 0 to 72-hours old, to age one-year, depending upon each state's code. Designated safe havens are typically a hospital emergency room, emergency services provider site, police department, or a fire station. Safe haven legislation provides that individuals abandoning infants in decent health are free from prosecution or are allowed an affirmative defense eventually leading to an acquittal. Upon receipt of an abandoned infant, all state-approved safe havens must proceed as they normally would by contacting their

local child welfare agency or law enforcement authority to take custody of the child. Infants are placed into foster care through each State's Department of Social Services and eventually adopted into families. Staff members receiving infants at safe havens are free from prosecution and are either not permitted to obtain parental information, or can ask individuals dropping off infants to volunteer a brief medical history. Parental rights are terminated upon relinquishment in most states.

No component of state legislation supports research efforts geared towards the early identification of women at risk for abandoning their infant, or for services to support them while in crisis. Safe haven laws are based, in part, on the beliefs of public officials about who they feel are likely to abandon infants. Such evidence includes newspaper accounts of infant abandonment that led to an infant's death, mortality statistics looking at infanticide rates, and limited research studies on bio-demographic characteristics of women who have committed infanticide (the act of killing an infant up to age one). Research on women likely to abandon an infant safely has not existed until very recently when the Los Angles County safe haven published a report in 2006 on safe haven drop-offs in their area. The findings of this report will be discussed in a later chapter.

One notion is that safe haven legislation, though well intended, does not accurately target the population at risk for committing infant abandonment, a population which might differ significantly from women who commit infanticide. Research indicates that the latter population is in crisis, suffering from postpartum depression, postpartum psychosis, or a pre-existing mental illness. It is clear that more research is needed to identify the biological, psychological, and social characteristics of women abandoning infants. The core issue is whether the target audience is actually being targeted, and what are the appropriate mechanisms to do so. Do individuals who

unsafely abandon infants, or kill infants have similar characteristics as those who choose to safely abandon an infant?

This current analysis is exploratory in nature and represents a description of the extent and features of safe haven legislation in the U.S., details the positions of affected parties, and discusses implementation issues. This study also asks the question, is safe haven legislation reaching its intended target audience? In order to answer this question an attempt is made to construct a biopsychosocial profile of women likely to utilize safe havens and compares that profile to women who have unsafely abandoned an infant, leading to the infant's death. Such profiles serve to lend a better understanding of women who may need safe haven services and, perhaps more importantly, illuminate early identification and prevention services that might limit the need for safe haven abandonment entirely. The potential biopsychosocial profiles come from analyses of two, available datasets. Two datasets are being analyzed and findings combined due to the fact that data in the area of safe haven utilization is almost non-existent and the scope of the problem is difficult to assess. As a result of the analyses, policy reform options and intervention recommendations are ultimately proposed.

Worldwide legislation: Prior to discussing the details of U.S. safe haven legislation, a brief overview of worldwide infant abandonment legislation will be conducted. This overview will demonstrate the fact that "safe havens" for abandoned infants is not a concept unique to the United States. In various countries in Europe, nonprofit organizations or hospitals decided to start infant abandonment programs without any legislation. For example, in France, anonymous, free births in hospitals have been legal in the country since 1941 (Henley, 2001). The legislation, known as *Sous X* law ("born under the X"), allows a mother to simply sign her infant's birth certificate with an "X". The father's name is not listed on the birth certificate and

all other hospital documents bearing the mother's name are later blackened (Henley, 2001). Since 1996, the French law has included a provision that a woman who chooses *Sous X* can provide the government with her personal information in a sealed envelope to be given to her child at adulthood; however, there is no requirement to do so. French sources estimate the number of infants legally abandoned since passage of the *Sous X* law at 400,000 (Steiner, 2003).

In the recent court case of *Odièvre v. France* (2002), a women who had been born under the *Sous X* law, sought the right to obtain her birth records in an effort to identify her parents and her twin brother, also born under *Sous X*. Ms. Odièvre asserted that the French law violated her right to respect for private and family life and discriminated against her under the European Convention on Human Rights. The European Court of Human Rights heard the case in 2002 and subsequently upheld the French *Sous X* law**.** The Court maintained that the law does not discriminate against a French citizen who was adopted as a child and is currently trying to obtain information on her own background. The reasoning is that many children are placed for adoption outside of the *Sous X* law and do night have any guarantee of birth record access. Adoption in this manner has not been considered a violation of human rights in the past. The Court's opinion included the view that all adoptions involve the interests of two sets of adults, which are not easily reconciled- the adult children and the birth parents. The Court found that *Sous X* is not in violation of the right to respect for private and family life nor is it discriminatory under the European Convention on Human Rights (Steiner, 2003).

In Germany, a social welfare organization called Sternipark introduced "Project Foundling" in March of 2000 (Karacs, 2000). A woman can anonymously abandon her infant through a slot in the outside wall of a daycare center, which has a heated crib and blanket on the inside. Receiving hospitals care for infants until they are placed in adoptive homes.

Austria opened its first "baby nest" in private hospitals in October 2000, following Germany's example. This occurred after several infants were found abandoned in city parks and public toilets (Walker, 2000). Mothers can anonymously abandon their infants through a slot in a wall of a hospital and an alarm in the crib on the other side of the wall is triggered. In the event that parents change their minds, mothers have eight weeks in which to reclaim their infants. An inkpad and paper is accessible near the slot so that mothers can take the handprints and footprints of their infants in order to reclaim them at a later date (Walker, 2000). Austria eventually passed legislation, but only after such private programs had been introduced. Other privately established programs occur in Belgium, Hungary, and South Africa.

Unlike the U.S., the infant abandonment programs in other countries are truly anonymous. In the U.S. the person relinquishing the infant must physically hand over the child to another person, risking positive identification. In other countries the person relinquishing the infant may place the child through a slot, so that no contact with the persons receiving the infant is made. The negative side to such procedures is that few foreign countries have a process by which parents can reclaim their infants, in the event they change their minds. However, this current research will illuminate that parents abandoning infants in the U.S. have limited options for reclaiming their infants as well.

Chapter II. Literature Review

Impetus for U.S. legislation: Legislation in the U.S. pertaining to the legal ramifications of abandoning infants is not a new phenomenon. In 1988, Congress passed the Abandoned Infants Assistance Act (P.L. 100-105) to address "border babies", or abandoned babies living in hospitals for indefinite periods of time while efforts are made to seek permanent placement

(Abandoned Infants Assistance Resource Center, 1999). States also have passed legislation dealing with parental rights and the relinquishment of such rights after children under age 18 have been willfully abandoned. In the recent past, states have enforced harsh penalties such as incarceration upon parents who safely abandon their infants, unless this has occurred during the birth process at a hospital. Abandonment outside of a hospital has been legally defined as child neglect. However, since 1999, via safe haven laws, states have legislated a less punitive approach to infant abandonment in exchange for the safe abandonment of infants.

The initial impetus for the passage of legislation resulted in a grassroots effort from citizens in support of safe options for infant abandonment after thirteen infants in Houston were abandoned in ten months in 1998; three of whom were found dead (Nurseweek.com, 2000; Administration for Children & Families, 2004). Public outcry likened the issue of infant abandonment and resulting deaths to a nationwide epidemic. Thus, under the guidance of Representative Geanie Morrison (R) in 1999, Texas became the first state to officially enact legislation permitting the safe and anonymous abandonment of infants at designated sites (HB 3423); termed the "Baby Moses Law." Simultaneously, citizens and non-profit agencies in Alabama were examining the feasibility of creating safe havens for abandoned infants without the passage of legislation. But it was Texas that opened the door to the promulgation of safe havens.

As the title of the Texas law suggests- "Baby Moses"- religious leaders and organizations were initially part of a grassroots effort to enact safe haven laws across the country. Religious organizations lobbied legislators in Texas, Minnesota, and New York, and were fundamental to offering resources towards the implementation of safe havens in their states. Arizona, New Hampshire, Wyoming, and now Vermont as of May 2006, have directly involved their state's

churches by designating them as safe havens. Nationally known Christian organizations such as the Family Research Council and Religious Tolerence.org have released statements on their websites in support of safe haven laws.

Public officials have played a role in swaying legislation one way or the other in their state. For example, Hawaii is the sole state whose legislature passed a safe haven bill, but the Governor vetoed it. Upon doing so, Governor Linda Lingle released a statement to the AP wire asserting, "Any good that might be accomplished by this bill is likely to be outweighed by the harm it would cause" (www.capitol.hawaii.gov). Her main concern was the absence of a requirement of any state safe haven to prove parenthood; a concern that members' of Hawaii's legislature eventually echoed, despite their initial approval of safe havens. Governor Lingle's concerns were published in newspapers across the county, offering one of the few dissenting voices on this issue coming from public officials.

On the opposite end of the political spectrum is Lt. Governor, Brian Dubie, of Vermont. In 2005, he first lobbied the Vermont legislature for the passage of a safe haven bill, stating,

> "I know the members of this committee may hear the arguments of critics of safe haven legislation, who raise concerns about the legal rights of biological fathers, and the fact that abandoned children may never learn of their medical histories or genealogical background. While these concerns are valid, they pale in importance when compared to the act of preserving an infant's life by providing a parent with a safe alternative to abandonment. Vermont is surrounded by states that have Baby Safe Haven laws" (www.ltgov.state.vt.us).

In his statements, Lt. Governor Dubie further argued that Vermont should pass safe haven legislation in an effort not to present as a "negative statistic" to the nation. Meaning, so

many other states have passed safe haven laws, it is not politically appealing to opt out of doing so.

This rationale is presumed to be an additional concern for state legislators. The majority of states do not wish to be seen as one of the few who did not support safe options for unwanted infants, regardless of the stated lack of research on the issue of infant abandonment and deaths. If there was ever an issue where the phenomenon of political epidemic could provide the driving force for the passage of legislation, the promise of staving off the senseless deaths of infants is that issue.

An additional impetus behind the passage of safe haven legislation is the idiosyncratic interpretation of what few statistics exist on infant abandonment and infant deaths. Whether intentional or unintentional, this process escalates the problem to a perceived epidemic level. The most frequently cited statistic is the 1998 U.S. Department of Health and Human Services report on infant abandonment that found that 30,000 babies were left in hospitals to be placed for adoption (i.e., "border babies"). This is a legal process available to any mother safely giving birth in a hospital. There are several state safe haven and political officials' websites that report this statistic as the number of "abandoned babies," with no mention of the infants being born safely in a hospital setting, awaiting adoption. One such example is the Mobile County District Attorney's web page (www.mobile-da.org). In terms of reports of infant deaths, these tend to include infants that are murdered by individuals other than parents, such as caregivers or strangers. This inflates the rates of infant deaths due to parents- rates that safe havens attempt to lower.

Lastly, newspapers are not the lone media source in terms of addressing the issue of safe havens. Several popular television shows have dedicated episodes to unsafe infant abandonment

and the alternative of safe havens. These shows are NBC's "Law & Order: SVU," CBS's "Joan of Arcadia," NBC's "ER," and WB's "Seventh Heaven."

Basic legal characteristics of safe haven laws: Statutory legislation permitting the voluntary abandonment of infants by parents or guardians quickly became known as "abandoned baby" legislation or "safe haven" legislation. After the passage of HB 3423 in Texas, fifteen states followed suit and passed safe haven legislation in 2000 according to the National Conference of State Legislatures. In 2001, nineteen additional states enacted legislation, six states in 2002, four states in 2003, one in 2004, and one in 2006. All total, forty-seven states have enacted safe haven legislation (see Appendix A). These State legislatures have cited that current punitive laws are not effective in staving off infant abandonment. Three remaining states (Alaska, Hawaii, and Nebraska) and the District of Columbia have not enacted safe haven legislation as of July 2006. Hawaii is the sole state whose legislature introduced and passed a safe haven bill (H.B. 133). The bill was vetoed by the Governor in June of 2003 and has not been re-introduced. In Nebraska, a state committee has been commissioned by the legislature to study whether such a law is needed. A full report is expected by the opening of the 2008 legislative session.

In most states with safe haven legislation, a parent may relinquish an infant to the safe haven. Only in four states (Georgia, Maryland, Minnesota, and Tennessee) is the relinquishment limited solely to the mother. In most states, a parent, agent of the parent, or any person having custody of the infant may surrender it at a safe haven. Idaho is the sole state that specifies that only a custodial parent may relinquish an infant. Five states (Delaware, Maine, New Jersey, New Mexico, and New York) do not specify who may relinquish an infant at a safe haven (Administration for Children & Families, 2005).

In terms of age of the infant, safe haven legislation allows infants to be abandoned from age 0 to 72-hours old, up to the age of one-year old, depending upon state code (Appendix A). The majority of states permit receipt of abandoned infants from age 0 to 72-hours old up to age 30 days old. Indiana and Kansas are an exception as they allow receipt of infants up to 45 days old, as is New Mexico at 90 days old, and South Dakota at 60 days old. North Dakota is the sole state that permits receipt of infants from birth to one year of age.

The infant must be left unharmed in a designated "safe haven," typically a hospital emergency room, emergency services provider site, or a fire station where staff is available 24-hours per day (Appendix A). There are several exceptions. Arizona, New Hampshire, Vermont, and Wyoming permit churches as safe havens. Arizona and New York allow "caregivers" to receive infants, and Maryland simply allows "responsible adults" to receive infants. Caregivers are defined as any family member or friend of the parent abandoning the infant that is willing to take the child into temporary custody and then contact the appropriate authorities. A responsible adult is simply an individual willing to take custody of the infant and then call 9-1-1 emergency services.

The majority of states (n= 39) legally guarantee the anonymity of the parent, simply permitting medical personnel to ask for medical background information to be volunteered (Appendix A). Or, in these states the statutes imply anonymity by stating that the safe haven cannot compel the parent or agent of the parent to provide any identifying information. In addition to a guarantee of anonymity, twenty-two states offer immunity from prosecution, provided there is no evidence of neglect and abuse (Appendix A). There are seven states (Arizona, Connecticut, Illinois, Louisiana, Nevada, Pennsylvania, and South Dakota) whose statutes state that safe haven relinquishment is not a violation of any law.

Seventeen State statutes provide for an "affirmative defense" in the unlikely event that a local district attorney chooses to prosecute on child abuse, child endangerment, abandonment, or neglect charges (Appendix A). An affirmative defense is a guarantee of freedom from incarceration, provided the infant is free of harm and a safe haven was utilized. Affirmative defenses are in place to allow for acquittals. Upon receipt of an abandoned infant, all state-approved safe havens must proceed as they normally would by contacting their local child welfare agency or law enforcement authority to take custody of the child. Ultimately, the State's Department of Social Services has the responsibility of placing the infant.

Staff members receiving infants at safe havens are free from prosecution in all states and are either not permitted to obtain parental information, or can ask individuals dropping off infants to volunteer a brief medical history. For instance, an identification number is assigned to the infant, allowing parents to anonymously provide medical or social information via a toll free number at a later date if they so choose. Three states, Michigan, Montana, and Tennessee, require that safe haven providers ask for both the parents' identities and medical information pertinent to the infant. However, the parent does not have to comply with the request. In Georgia the mother is required to show proof of her identity, "if available", and "the mother is asked to provide her name and address and the identity of the father;" again, compliance is not required.

Sixteen states (California, Connecticut, Delaware, Florida, Idaho, Illinois, Iowa, Kentucky, Louisiana, Michigan, Missouri, Montana, New Mexico, Rhode Island, Tennessee, and Wyoming) have addressed the issue of a parent's right to reclaim their infant. This occurs usually within a thirty-day period and prior to an official order to terminate parental rights being filed. Four states (Louisiana, South Dakota, Tennessee, and Utah) also include provisions to allow a non-relinquishing father to petition for parental rights, provided he is aware of the

relinquishment and can file a petition within a stringent time period (Administration for Children & Families, 2004).

Added features of safe haven laws: Most state safe haven laws offer some level of added benefit either for the relinquishing party, for potential fathers, or for the general public in terms of making the law known via the media. The added characteristics include: the institution of medical questionnaires, public notice of abandoned infants, putative father's registries, mandatory reporting of abandoned infants to a national clearinghouse for missing children, and media campaigns announcing the existence and parameters of safe havens (Appendix B).

In terms of the medical information questionnaire, the parent is to complete the medical questionnaire at a later time and mail it in a stamped, addressed envelope that is included with the questionnaire. For example, the medical questionnaire developed by the Minnesota-based organization, Safe Place for Newborns, requests the infant's date of birth, information concerning the pregnancy and delivery, drug and alcohol use of the mother, medical conditions (diabetes, asthma, allergies, seizures, cancer heart disease high blood pressure, mental illness) of the mother and father, and asks for the parents' age, race, religion, hair color, and body build (www.safeplacefornewborns.org, 2002). The questionnaire also notes that the parents may leave a message for the infant or for future adoptive parents on the back of the form.

In states requiring notice of an abandoned infant in local newspapers, it is the responsibility of the State Department of Social Services to publish such notice. Five states offer a putative father's registry (i.e., a database), allowing fathers of missing infants, or men who have had unprotected sex which could have led to a birth, to register. Thus, each time an infant is abandoned, all men on the registry can be contacted for blood tests and further DNA analysis. In the event that a man on the registry is found to be the parent, he may engage in parental rights

proceedings for custody of the abandoned infant. Otherwise, parental rights are voluntarily terminated between 28-30 days post-abandonment and parents are not given notice of later custody hearings when the infant is placed for adoption.

Fifteen states require that a search of the Missing Children's Information Clearinghouse or similar database be completed after an infant is relinquished to a safe haven (Appendix B). This process takes into consideration that a non-custodial parent or other person may abduct an infant and then later change his/her mind and relinquish the infant anonymously to a safe haven. The infant may be reconnected to his/her parent after performing a missing children's search. In states where no search is required, the infant might be placed into an adoptive home, under the assumption that the infant is being placed for adoption by his/her custodial parents.

Twenty states require a "media campaign" to promote safe havens, or the public notice thereof (Appendix B). None of the other states require that the public be informed of safe haven laws or of their locations. Of the states that require a media campaign, only a few are funded by their state's legislature, the rest by private foundations and corporations. Those states with significant funding for media campaigns, are conducting the following activities: New Jersey uses its $500,000 annual appropriation to produce public service announcements, posters, pocket cards and brochures and has advertised the program in local and college newspapers, on billboards and on buses. Michigan's legislation initially included a $200,000 appropriation to establish a toll-free information line and distribute press releases, a brochure and a poster targeting youth. Connecticut developed a brochure for distribution in high schools, middle schools, homeless shelters and drug treatment centers. The New York legislature allocated $1.5 million in 2001 for public service announcements (PSAs), but according to Timothy Jaccard, President of AMT Children of Hope Foundation Baby Safe Haven, only $500,000 was actually

appropriated. Additional funding in New York came from donations by corporate sponsors. California's legislature, despite the absence of statutory mandate, allocated $1 million for public education after experiencing more unsafe abandonments in 2002 than legal safe haven abandonments.

The majority of media campaigns are limited to websites, billboards, brochures, 1-800 numbers, and identification stickers on safe haven locations. No state has conducted research-based social marketing campaigns, which have become the "gold standard" for promoting and impacting social service issues. Social marketing campaigns consist of target audience research on attitudes and beliefs regarding the social issue that is being addressed, as well as an assessment of marketing preferences. Unless properly assessed, one cannot know if a target audience of 15 to 25 year-old women would prefer television and radio PSAs to brochures and websites on the issue of safe haven utilization. One also cannot know if a consequences-oriented message resonates with this audience (e.g., without safe haven utilization you could be prosecuted for child abuse or neglect) versus a benefits-approach message (e.g., if you use a designated safe haven you will be free from prosecution).

Funding of safe havens: According to the National Conference of State Legislatures (2001), the majority of funding for the administration of safe havens, medical care of infants, court proceedings for termination of parental rights, and adoption placement services is either directly funded by state general funds or local agencies are reimbursed by the state once costs are incurred. Typically, compliance with safe haven laws do not result in increased state costs as federal and state funding mechanisms are already in place to support "border baby" adoptions in hospitals, Department of Social Service-initiated adoptions, and foster care placements. Each of these services already entails court proceedings to terminate parental rights. Given the small

number of safe haven abandonments per state, providing the aforementioned services is not perceived as too additionally burdensome on a financial level. The advertising and promotion of safe haven legislation is another issue, however.

States desiring additional financial support for safe haven programs, and who meet certain criteria under Section 2 (b) of HR 2018, are eligible to apply for Temporary Assistance of Needy Families (TANF) funds. Under HR 2018, such programs must allow for an affirmative defense, provide a designated toll-free information number directing people to safe haven locations, receive infants up to age 30 days old, provide education and training to safe haven staff accepting newborns, and recruit and train social services staff that will ultimately handle the adoption procedures (U.S. House of Representatives, 2001). These criteria significantly limit the number of state safe haven programs that are eligible to apply for and receive TANF funding.

Additional federal funding was appropriated under Section 145 of HR 3839 that amends the Child Abuse Prevention and Treatment Act to include the Abandoned Infants Assistance Act of 2002. This act authorized $45 million in FY 04 and "such sums as may be necessary for the next four fiscal years for the Abandoned Infants Assistance program" (www.thomas.loc.gov/, 2005). The Abandoned Infants Assistance program provides funds to public and private organizations for programs that prevent the abandonment of infants. However, such funding is primarily earmarked for abandoned infants with HIV/AIDS and provisions for the funding of such infants received by safe havens is not specified.

States requiring media campaigns do have a need for additional funding. Statewide media campaigns, when conducted effectively, are costly. In 2003, federal legislation was passed to allow "Promoting Safe and Stable Families" (PSSF) funds under Title IV of the Social Security

Act to be used, in part, for state safe haven programs. This legislation does not, however, earmark a specific dollar amount for this program. There are no known states that have utilized PSSF funds for media campaigns, opting instead for state general funds, where appropriated, and private funds.

Incidence of infant abandonment: Measuring the incidence of infant abandonment is difficult, as the National Center for Health Statistics (NCHS) is not prescribed this task, and no national database system exists to which states could report. Furthermore, research attempting to profile an individual who has safely abandoned an infant has never been conducted. Section three of HR 2018 does have a provision, requiring that states utilizing TANF funds report estimates of infants abandoned at their designated safe haven sites. However, as previously mentioned, very few states qualify for TANF funding of safe havens.

Additionally, HR 2018 calls for a study of the "characteristics and demographics of parents who have abandoned an infant in the U.S. within one year after birth" (NCHS, 2001). Methodology is not specified, as studying the characteristics of individuals utilizing safe havens is impossible, due to the guarantee of anonymity. Once again, the collection and reporting of these data only occur in states receiving TANF funding for safe haven programs and meet the definition of an infant safe haven program under Section 2 (b). Thus, most states are exempt from reporting the incidence of safe haven abandonments.

The U.S. Department of Health and Human Services' (HHS) Administration for Children and Families (2000) conducted a review of major newspapers for stories regarding unsafe infant abandonment in an effort to measure the incidence. They compared these data to similar findings collected in 1991. They found that in 1998, 105 infants were abandoned in public areas throughout the U.S., an increase from 65 infants in 1991. Of the 105 infants abandoned in 1998,

33 were found dead as compared to eight in 1991. Teen mothers between the ages of 17 and 19 were, in almost every case, responsible. There were a couple cases where fathers assisted mothers.

Abandoned infants, however, do not represent an actual percentage of those infants that are legally abandoned in hospitals and placed for adoption, or legally placed into foster care each year. Health and Human Services, as part of its study in 2000, compared such data to infant abandonment data (Table 1).

Table I- Legal and Illegal Infant Abandonment Totals, U.S. 1998

Children	**1998**	**Percentage Children Placed/Abandoned Outside of Birth Parents' Home, 1998**
Infants legally abandoned in hospitals and placed for adoption	30,800	5.59%
Infants and Children legally placed into foster care	520,000	94.4%
Infants illegally abandoned in public places	105	.01%
	TOTAL: 550,905	

Source: U.S. Department of Health and Human Services (2000)

An additional attempt to measure the incidence of infant abandonment was conducted by the Child Welfare League of America in 2000. They developed a survey instrument and mailed it to 150 child welfare agencies across the country. Only 40 surveys were returned; thus, the data were found to be a limited representation of the problem and therefore inconclusive. It is interesting to note, however, that they found in 71.1% of reported cases, the age of the mother was between 20 and 25 years. In 32.4% of the cases, the mother was between 16 and 19 years of age (Child Welfare League of America, 2000). The latter findings tend to support the newspaper story review conducted by Health and Human Services. Both surveys found that there is no

difference in risk for abandonment based on race, ethnicity, or economic status. Additional literature indicated that the mothers are typically young, living at home with parents, physically healthy, and fear disclosure of a non-marital birth (Abandoned Infants Assistance Resource Center, 2000).

There is only one known database that collects infant mortality data from each state and can be used to illuminate the incidence of *unsafe* infant abandonment leading to an infant's death. The Centers for Disease Control and Prevention (CDC), in conjunction with NCHS, maintain a database containing mortality statistics by International Classification of Disease-10 (ICD-10) codes. The database is called, "CDC WONDER" and is free and available to the public (www.wonder.cdc.gov).

Neglect and abandonment deaths of children by parents can be queried, by age in days, for each state in the U.S. and the District of Columbia, using the International Classification of Disease, Tenth Revision, (ICD-10) codes Y06.1, Y06.9, Y07.1, and Y07.9. All codes for both neglect and abandonment are used due to states' reporting infants that are found dead as deaths due to either neglect or abandonment. These classifications are mutually exclusive and no deaths are counted twice.

In 2002 (the most recent year of data), ninety-six total deaths were reported in the U.S. due to the neglect and abandonment of infants up to 364 days (one year) old. It is interesting to note that Texas, the state whose high infant abandonment mortality rates in 1999 led to the initial passage of safe haven legislation, had seventeen such deaths in 2002. Texas led the nation in infant abandonment deaths in 2002, followed by California who had eight such deaths.

Of the ninety-six infant deaths in 2002, 48% were female (n=46) and 52% (n=50) were male. Fifty-nine percent of the infants that died as a result of abandonment were white (n=57).

Thirty-nine percent were black (n=37) and only two infants were listed as "other" in terms of their racial/ethnic origin. In terms of U.S. regions in which the infants were found dead, 45% (n=43) were from the South, 30% (n=29) were from the mid-West, 16% (n=15) were from the West, and 9% (n=9) were from the North.

Safe haven utilization: The federal government does not currently require data collection on safe haven utilization rates, unless receiving TANF funds, and only eight states (Arizona, California, Colorado, Indiana, Illinois, Louisiana, New Jersey, and Rhode Island) have mandated some form of data collection on the number of infants surrendered to safe havens. These data are reported to each States' Department of Social Services agency. Each safe haven follows state legislative and child welfare procedures for accepting an infant, terminating parental rights, and placing the infant into foster care or for adoption.

It should be noted that, although the federal government does not currently require data reporting except by state safe havens utilizing TANF funding, the House of Representatives has not ignored this need. The bill to reauthorize the Child Abuse Prevention and Treatment Act, HR 3839, passed in 2002, requires a study to determine the number of abandoned infants both in and outside of safe havens.

Subtitle B of HR 3839, "Amendments to Other Child Abuse Prevention and Related Programs," requires the Secretary of Health to study and report to Congress with respect to:

> "(1) An estimate of infants and young children relinquished, abandoned, or found dead in the United States and the number of them infected with human immunodeficiency virus, perinatally exposed to the virus or dangerous drugs, have life threatening illnesses, or other special medical needs; (2) an estimate of the annual number of infants and young children who are victims of homicide; (3)

> characteristics and demographics of parents who have abandoned an infant within one year of birth; and (4) an estimate of the annual cost to the Federal, State, and local governments in providing housing and care for abandoned infants and young children" (www.thomas.loc.gov/, 2005).

Additionally, HR 3839 requires the Secretary of Health to evaluate and report on effective methods of intervention prior to the abandonment of an infant or young child so as to prevent such abandonments from occurring. Appropriations are authorized through FY 2007, when all reports are due.

One methodology for measuring the incidence of safe haven utilization, and determining its efficacy, is to look at reported state safe haven abandonment numbers and compare them to the same state's illegal abandonment numbers, where available. The illegal abandonment numbers include infants found in places other than state-designated safe havens. These data are only available from a few sources and numbers sometimes vary. The sources include the National Conference of State Legislatures website, newspaper accounts as cited by The Evan B. Donaldson Adoption Institute, and data collected by state safe haven programs, themselves (Table II).

Table II- Reported State Infant Abandonments, 1999-2006

State	Safe Haven Abandonments	Illegal Abandonments
Alabama	2	Unknown
Arizona	3	Unknown
California	51	91*
Colorado	2	8
Connecticut	2	1
Florida	11	14
Iowa	3	Unknown
Illinois	3	Unknown
Indiana	1	Unknown
Kentucky	1	Unknown
Louisiana	1	5
Michigan	5	9
Missouri	3	Unknown
Nevada	1	Unknown
New Jersey	7	7
New Mexico	5	Unknown
New York	10	11
North Carolina	1	Unknown
Ohio	8	Unknown
Texas	5	100
Wisconsin	4	4
TOTAL	**129**	**250**

[Sources: The Evan B. Donaldson Adoption Institute (2002), NCSL (2001), Safe Arms for Newborns (2002), AMT Children of Hope Foundation (2002), Safe Place for Newborns, Minnesota (2004); babysafela.org (2006); *indicates the average estimate from all sources.]

As seen in Table II, most states that have collected safe haven utilization data have experienced more illegal abandonments than safe haven abandonments. Not all of the illegal abandonments reported take into account those that resulted death. Meaning, some of the 250

reported illegal abandonments include those of infants who died as a result. Texas and California have the highest number of illegal abandonments. These findings are similar to the infant mortality findings discussed earlier.

The only known, comprehensive report by a state safe haven on the incidence of infant abandonment and safe haven utilization is one recently published by "Baby Safe LA," a Los Angeles County safe haven in California. In their 2006 report entitled, "Safely Surrendered and Abandoned Infants in Los Angeles County, 2002-2005," they document sociodemographic characteristics of the relinquishing mothers and their infants.

Baby Safe LA found that forty-one infants had been surrendered at safe havens from January 2005 to April 2006. During the same timeframe, forty-nine infants were found illegally abandoned and of the 49, only ten infants survived. In all cases the individual relinquishing the infant was the mother. For the safe haven group, the average age across the four-year period was 23.6 years. For the illegal abandonment group, the average age was 21.4; there was no statistical difference in age found between groups, according to the report.

Many mothers who utilized safe havens were married and stated their motivation for abandonment was because they were caring for other children and could not care for an additional child. They also stated that their pregnancies were unplanned. Most of the mothers in the illegal abandonment group were single, and also had other children at home. The status of their pregnancies was not known.

Both groups of mothers did not differ significantly by race, ethnicity, and socioeconomic status. The report did note that many infants that were abandoned, and died as a result, were found in economically depressed neighborhoods. Baby Safe LA attributes the higher incidence of unsafe abandonment as compared to safe haven utilization to a lack of awareness of safe

haven laws. As a result, they have formed a task force and a speaker's bureau utilizing public venues, materials, and other methods for promoting the existence of safe havens to young women.

Chapter III. Potential Legal/Constitutional Challenges

Affected parties: The passage of safe haven legislation has primarily affected four groups: concerned citizens, adoption rights advocates, Civil Rights attorneys, and social services professionals. To illustrate why citizens are concerned, one only needs to place him or herself in the scenario of the construction worker in Bear County, Delaware who on March 27, 2000 found a deceased, 8-pound infant girl wrapped in towel inside of a portable toilet. The mother, Abigail Caliboso, a 19-year old nursing student of James Madison University in Virginia, told police she and her 18-year old boyfriend feared parental retribution for their "out-of-wedlock" birth and therefore, "decided to take the baby somewhere to drop it off" (Daily News-Record, 2000). The intent of the couple was for someone to later discover the infant alive. Both mother and father are now incarcerated for murder. Almost every state in the U.S. has a similar story being told in the headlines of its' newspapers. Public concern has been the strongest catalyst for legislative action on this issue, prompted by significant media coverage.

Violation of open adoption laws: In terms of adoption rights advocates, they do not tend to favor safe haven legislation. For instance, The American Adoption Congress, The Evan B. Donaldson Adoption Institute and Bastard Nation, three of the strongest lobbying organizations in support of adoption rights, have been outspoken in their disapproval of current safe haven legislation for a number of reasons. These groups feel that safe haven legislation is in direct conflict with several states' open records adoption laws. Anonymous infant abandonment does

not permit adoptees' access to birth records and is seen to violate established laws in several states. Furthermore, it is asserted that anonymous infant abandonment contributes to the "maintenance of a sealed records system" (Grenier, 2003).

In 1998, Bastard Nation, an organization founded by adoptees, successfully lobbied the Oregon legislature to pass Measure 58. This law provides adoptees with unconditional access to their original birth certificates (stateline.org, 2001). Similar legislation has been passed in Alabama, Alaska, Kansas and Tennessee. New Hampshire most recently passed an open records law that went into effect January 2005, and several other states offer restricted access. Restrictions include vetoes, required parental permission even for adults, mandatory intermediaries, and open records for adoptees born in certain years.

All of the aforementioned states, except Alaska, currently have enacted safe haven laws that would ultimately preclude an adoptee access to his birth information, due to lack of information. Information that Bastard Nation contends is vital for understanding one's medical, genetic, and social history. More conservative adoption organizations such as the National Council for Adoption, have issued counterarguments stating, "There are no consequences for health that could be as dire as death" (Pierce, 2003).

Concern with anonymity: Adoption rights advocates further argue that systems are in place in every state to allow for easy and confidential adoption processes, including border baby procedures allowing a mother to give birth in a hospital and leave her baby for adoptive placement. Those states with open records for adoptees provide individuals with identification of their birth parents and all states provide some brief medical history information during a legal adoption. Safe havens, in contrast, cannot require a parent to provide medical information only

that it be volunteered. Amy Brauer of the American Adoption Congress (2001) publicly contended, "These laws assume that anonymity will save children's lives…they accept as 'necessary' that a child will be permanently deprived of medical and social history information. This lack of medical information creates a health risk that is multi-generational."

However, there exists a counterargument echoed by private citizens and legislators that safe haven legislation permits the adoption of unwanted infants who might otherwise be found dead. Also, that most states do not currently permit open records access. Thus, safe haven adoptions are no different than any other private or state-initiated adoption process via the Department of Social Services.

Termination of parental rights: Adoption advocates are also concerned that safe haven legislation further violates fathers' rights and parental rights granted under the guise of civil liberty. Many safe haven statutes (n=13) provide for the automatic termination of parental rights between 28-30 days post-abandonment, with no legal recourse for reclaiming the infant once relinquished. An additional eighteen states do not mention the parents' right to reclaim their infant at all. Only sixteen states permit a mother to petition for parental rights post-abandonment and only four states include provisions for father's to petition for parental rights. These laws vary from 14 to 90 days. Such laws overlook the rights of fathers to petition for custody or to consent for adoptive placement. Thus, adoption rights advocates feel safe haven laws either ignore or diminish a parent's right to reclaim their infant after the parent has been treated for the original crisis leading to the abandonment.

Civil Rights attorneys have echoed many of the same concerns as adoption rights advocates. They have utilized past case histories as ammunition in which to fight the passage of legislation in various states, albeit unsuccessfully. For example, noted attorney and law

professor, Dr. Joan Hollinger of the Berkley School of Law has been outspoken in California regarding the passage of safe haven legislation and its constitutionality. She contends that such legislation "creates a disincentive for State officials to locate and inform fathers of the possibility of the termination of their parental rights as required by [jurisprudential] precedence" (Alan Guttmacher Institute, 2001).

However, no federal government agency has intervened in terms of influencing the content of state safe haven laws and its protection of parents' rights. This is due to the fact that, according to the Administration of Children and Families (2005), the federal government does not have the authority to intervene in child welfare matters. "State, local agencies, and courts make the decisions regarding issues such as child custody, child removal from the home, child placement in foster care, and the termination of parental rights in each state according to State law" (http://www.acf.dhhs.gov/acf_services.html#aafc).

An example of State code regarding the termination of parental rights is the Code of Virginia, § 16.1-228 (www. leg1.state.va.us/000/lst/LS203539.HTM). The Code of Virginia outlines the procedures taken if physical abuse or neglect of children is suspected. An "abused or neglected child" is also defined as one whose parents or "other responsible person *abandoned* him." A preliminary removal order or protective order hearing is held, typically within 24 hours, then, a dispositional hearing, including a decision about termination of parental rights, is held within 75 days. If a child is found to be abused or neglected, at risk of the same, or abandoned without parental care due to the parent's absence or incapacity, the court may: allow the child to remain with the parent under certain conditions; prohibit or limit contact between the child and parent; allow the Department of Social Services or another similar agency to place the child in foster care temporarily, leaving legal custody with the parent. If none of these are possible, then

legal custody of the child will be transferred to another relative, a child welfare agency, or the local social services board, and parental rights are terminated.

Citing Virginia abuse and neglect law illustrates that most states still have codes intact where child abandonment is defined as "abuse or neglect." In most states there exists concurrent safe haven laws permitting abandonment up to a certain age. The legal contradiction is obvious, according to Civil Rights attorneys. Most safe haven laws permit the termination of parental rights within 15 to 30 days post-abandonment, or immediately upon abandonment. When, concurrently, other State abuse and neglect codes permit termination of rights after 60 to 75 days.

Although state law promulgates procedures for the termination of parental rights, the U.S. Supreme Court, has made constitutional interpretations in terms of laws passed by states that impact parental rights. The Court found in *Stanley v. Illinois* (1972), that fathers have a constitutional right under the Fourteenth Amendment to due process that requires the state to make every effort to locate the father when an infant is abandoned prior to the termination of parental rights. Additionally, *Stanely* held that Illinois could not assume that a putative (absent) father was unfit, simply because he was not married to the mother. The Court stated that, "Illinois' interest in convenience [adoptive placement of an infant without locating the father] did not justify denying a putative father a hearing on fitness" (U.S. Supreme Court, 1972).

The Court has further protected parental rights, in general. For example, *Santosky v. Kramer* (1982) reaffirmed that the relationship between parents and children is fundamental and should fall within the guises of liberty rights protected by the Fourteenth Amendment. In *M.L.B. v. S.L.J.* (1996) and *Troxel v. Granville* (2000), the Court ruled that states must provide due

process and waive fee requirements to parents, including indigent parents, prior to the termination of parental rights (Shepherd, 2001).

An adoption attorney, Erik L. Smith, an opponent of safe haven legislation, notes that safe haven relinquishment raises a presumption of abandonment, or a presumption of lack of caring on behalf of a father due to a lack of knowledge. Such a presumption is not one a mother or a safe haven worker can adjudicate outside a court of law. Smith argues that only a court can make such a finding and, subsequently, order an adoption. Courts can terminate the father's right only after finding that due process was afforded the father and that the evidence supported termination of his parental rights. Smith further notes that, "Doing nothing to determine the identity of the father except ask the mother for his name, or allowing the father to remain 'in the dark' does not satisfy due process" (Erik L. Smith, About.com, 2004).

However, even in states where putative fathers' registries exist, an assumption of knowledge of the pregnancy is being made. It is highly probable that many men are not even aware of the pregnancy, nor have they been contacted regarding the safe haven abandonment decision. Thus, these fathers do not know to have their names added to a registry or to contact a Civil Rights attorney. Under these circumstances, it would be equally difficult for a State's Department of Social Services to attempt to contact an anonymous father prior to initiating a court procedure for termination of parental rights.

Lack of addressing root causes: Social services professionals, particularly social workers and mental health workers, are another group whose opinions have shaped the safe haven legislation debate. They are opponents of the current legislation, arguing that allowing a safe haven for abandoned infants does not address the root causes of why a woman wishes to abandon or to harm her infant. They feel that individuals who commit such acts are in a state of extreme

emotional distress and are not likely to have knowledge of, or concern about safe havens, regardless of "penalties or exemptions" in a state's criminal code (American Adoption Congress, 2000). Thus, making safe havens available to a woman experiencing a crisis pregnancy is not an effective use of resources because the woman will not research such services, nor utilize them.

Social workers and mental health professionals suggest the establishment of early detection and intervention programs for pregnant women that entail education services around symptoms of postpartum depression and where to obtain help. Also advocated has been the promotion of adoption services via media campaigns in local communities, so pregnant teens and young women are aware of alternatives to abandonment.

However, proponents of the current legislation counter-argue that the inherent problem in early identification programs is that most women at risk for abandonment will not be known because these women do not disclose their pregnancies instead, they actively conceal them. Adoption promotion is also questioned because most adoption agencies require parental consent of one parent when a teenager under the age of 18 is pregnant. A distraught pregnant teen at risk for infant abandonment is not likely to seek such consent, especially when she has willfully concealed the pregnancy from her parent(s).

Safety concerns: Social services professionals further assert that the "safe havens" intended for the allowance of safe abandonment of infants are, in fact, detrimental to the health and safety of the infant. For example, Arizona, New Hampshire, Wyoming, and now Vermont in 2006, have designated churches as safe havens, under the presumption that they are open and willing to receive infants 24-hours a day. Church staff would need to be medically trained in case an abandoned infant is in need of medical care, but the legislation does not provide for such training. Arizona and New York permit caregivers to receive infants. Caregivers clearly could

lack medical training, and are themselves anonymous; thus, they could potentially keep the infant for themselves or engage in an illegal, for-profit adoption process. Kansas has designated local health departments as safe havens; however, these agencies do not have 24-hour on-call staff to receive infants. Infants being left at such facilities risk exposure to heat and cold while waiting to be discovered.

Chapter IV. Targeting of Population by Legislation

Newspaper accounts and surveys: After the Texas legislature passed the first bill to establish state-based safe havens in 1999, HHS made the decision to conduct its 2000 newspaper review to determine the scope of infant abandonment. Concurrently in 2000, the Child Welfare League of America (CWLA) conducted its survey research to determine the scope of the problem. Between the two efforts, it was determined that teens between the ages of 17 to 19 and young women between the ages of 20 to 25 should be targeted. These are women that conceal pregnancies and fear the social stigma of having a non-marital birth. They are of no particular race or ethnicity predominantly. These studies, coupled with newspaper accounts of infanticide and unsafe infant abandonment, have been seen as the catalysts for the passage of legislation in states other than Texas.

Research on infanticide and infant abandonment: Another source of information for states that have passed safe haven legislation is the limited research conducted on neonaticide (the killing of an infant within 24 hours of birth) and infanticide (the killing of an infant up to age one). Literature on the characteristics and motivations of the women who kill or abandon their infants has been reviewed. In 1969 and 1970, Phillip J. Resnick published his study of neonaticide. It was the first systematic consideration of the problem. Resnick's study included a

review of world literature on the subject from 1751 to 1968, plus three cases he had treated. A total of 168 cases were reviewed. Resnick found that the most common reason given for committing neonaticide was that the child was the result of an unwanted pregnancy. Like the findings of the HHS and CWLA studies, the stigma of having an illegitimate child was the primary reason for killing a newborn through the entire period of his study. Also, a significant common denominator across subjects was their inability to reveal their pregnancy to their mother.

A similar study conducted by Michelle Oberman (1996), examined 96 cases of infanticide by searching the Lexis-Nexis database for the years 1988-1995. Almost half (47) of these cases involved neonaticide. The circumstances surrounding the neonaticides were consistent with patterns discerned in the homicide deaths of older infants. The women were young and single (average age was 17 years), mostly lived with parents or relatives, and concealed their pregnancies; thus, giving birth alone without assistance. The majority of women were suffering from postpartum depression, leading to postpartum psychosis; many experienced auditory hallucinations. Thus, triggers and psychosocial characteristics of women committing neonaticide and infanticide are seen as similar. In later analyses within this paper, neonaticide and infanticide will not be treated differently, as women who commit such acts have characteristics. Also, infanticide cases are comprised of neonaticide cases, by definition.

To further illuminate the Oberman finding, in 2001, Margaret Spinelli investigated 16 cases of neonaticide in the United States. All 16 women had concealed or denied their pregnancy and had delivered alone and unassisted. Results of her investigation show that all of the women displayed similar denials of pregnancy until delivery, which precluded them from seeking prenatal care. Additionally, the women experienced dissociative hallucinations and a history of

abuse, with 56% having been victims of sexual abuse. Each were said to have childlike demeanor, and awareness of the physical changes of pregnancy was denied by both the women and their significant others.

One study, examining both neonaticide and infanticide cases, Overpeck et al. (1998) found that these acts are prompted by similar psychological states and are not premeditated. The researchers concluded that these are acts that occur as a result of "fear, shame, and guilt" that "motivate [women] to conceal or deny their pregnancy, leading to a complete absence of any healthy psychological and physical bonds between mother and child" (p. 1214). They are triggered by postpartum depression, a state that can last up to one year after delivery of an infant. Overpeck reports that over 60% of women incarcerated for infanticide had suffered from postpartum depression, and that most women suffering from postpartum depression have never experienced any signs of depression in the past. This form of depression can manifest into postpartum psychosis, a serious psychiatric illness leading to suicidal and homicidal ideation.

In an infant mortality study utilizing secondary data, Paulozzi and Sells (2002) detail a CDC analysis of death certificates for 1989-1998 to determine variance in risk for homicide in infancy. In comparing homicide rates for the first day of life with rates during later stages of infancy (up to age one), the rate on the first day of life was at least ten times greater than during any other time in infancy. A second peak in risk was during week eight of life, which the researchers concluded could be due to increased crying in normal infants. All state safe haven laws permit infant abandonment up to one day of age when an infant is at greatest risk.

In the most recent study of infanticide, Herman-Giddens, Smith, Mittal et al. (2003), reviewed the case records of deaths to all live-born infants in North Carolina from 1985-2000. Of these cases, 34 were identified as homicide or abandonment by a parent. In each case where a

perpetrator was positively identified, the mother was the perpetrator. The majority of infants involved were black males. About one-third of the mothers were 21 or older. Approximately one-fifth of the mothers were married. Thirty-five percent of the infants were second or third children. Other variables, such as mental state of the mother, mental health or substance abuse history of the mother, and socioeconomic profile, were not available for this study. The authors concluded that educational efforts regarding safe haven legislation need to cover all ages, not just pregnant teens, and family planning and prenatal clinics need special attention in this area. The relevance of this study to safe haven legislation is that it supports further education of women regarding safe haven legislation and helps to establish a profile of who is at-risk for infant abandonment and infanticide.

Safe haven advocates cite infanticide studies in an effort to support safe haven efforts. The literature tends to show that infanticide risk is greater in the first 24 hours of life. Thus, it is argued that women in crisis need an immediate option for abandoning their infant safely. That being stated, the infanticide literature indicates that women in fragile emotional and psychological states commit infanticide. It is, therefore, uncertain if safe havens are known as an option, they would be chosen by these women.

While there is a fair amount of information available on neonaticide and infanticide, there is very little on child abandonment. What literature does exist on this subject indicates that many mothers abandon their infants with the hope that the infant will be discovered and adopted (Schwartz, 2000), unlike the infanticide cases. The newspaper reviews conducted by the U.S. HHS in 2000 revealed that the average age of women abandoning their infants is 17 and that there are no common racial, ethnic, or economic trends. Thus, like the infanticide cases, the triggers for infant abandonment are considered to be more biological, psychological, and social

in nature. Many women reported that a fear of reprisal from parents in discovering a non-marital birth was their primary reason for abandoning their infant. However, studying women abandoning infants, and their rationale for doing so or state of mind after-the-fact, is very difficult given the anonymous nature of safe haven abandonment. Also, studying women incarcerated for infant abandonment is difficult due to the nature of these women being a protected class. Institutional Review Boards (IRBs) are very careful about approving research focused on prisoners, especially where the potential for mental or emotional harm is likely.

A hopeful study for women who are at risk for abandoning their infants took place in Russia. In an effort to reduce the abandonment of infants, Maternity Hospital 11 in St. Petersburg undertook an intervention to encourage early mother-infant contact with suckling and rooming-in. Lvoff, Lvoff, and Klaus (2000), conducted a longitudinal study to determine if the initiative had been effective. Data was collected for the six years prior to implementing the intervention and for six years following the intervention. The results showed a dramatic reduction in the number of infants abandoned by their mothers. During the six years prior to the intervention, the average abandonment rate per 10,000 live births was 50 (1987-1992). By the final two years of the study (1997-1998), the rate of abandonment had dropped to 17 per 10,000 live births.

It should be noted that in stark contrast to the practice in the U.S., the average length of stay for mother and child in the St. Petersburg maternity hospital was over one week. According to Lvoff, Lvoff, and Klaus (2000), by Russian law an infant is considered abandoned if the mother leaves the hospital after signing a release transferring custody of the infant to the state. While this is not the same process as safe haven abandonment, it is still an informative study. By helping women bond with their newborn while they are still in the hospital, later abandonment can be dramatically reduced. Given that safe haven legislation allows infant abandonment well

past the first day of life in most states, it can be presumed that many infants were initially born in hospitals.

Lack of evidence-based targeting: There are databases maintained by the Bureau of Justice Statistics and the CDC that house statistics on infanticide and unsafe infant abandonment, including biodemographic data on women who commit such acts. However, a thorough literature review on the topic of state safe haven legislation has not revealed any state that utilizes such databases as a means to either construct a profile or to target the population likely to commit infanticide or abandonment. Nonetheless, this database does contain pertinent data on the subject.

For example, the Bureau of Justice Statistics maintains crime data for the Department of Justice. Among the statistics that are available to the public on their website (www.ojp.usdoj.gov/search97cgi/s97_cgi) are data on infanticide from years 1976-1999. The Bureau uniquely defines infanticide as a parent killing a child four years old or younger. Their statistics are reported in categories "under 1 year, 1 year, 2 years, 3 years, and 4 years." Cumulative rates include all categories, but raw numbers within each category can be obtained. In the latest year for which the Bureau has statistics, 1999, they list 256 infants under the age of one year who were killed by a parent (this includes infants neglected and abandoned who died). The 256 infants represent 42.2% of all children four years or under that were killed by a parent. Meaning, a child under the age of one is more likely to be a victim of infanticide at the hands of a parent than two, three, or four-year olds. These data lend some credence to state safe haven legislation targeting infants age one and under.

In terms of crime area, infanticide rates were higher in urban than in rural areas. The breakdown of infanticides from 1976-1999 by area is: large city- 48.1%, small city- 14.7%,

suburban- 25.5%, and rural- 11.7%. Interestingly, these data follow the same pattern as data for total homicides involving intimate adult partners in the United States during the same time period. Meaning, most people, regardless of age, are more likely to be killed by someone they know while living in a large urban or suburban area.

A database housing similar information to that of the Bureau of Justice Statistics is the CDC's Linked Birth /Infant Death Dataset (http://wonder.cdc.gov/lbdj.html). This database provides death counts and calculated mortality rates (per 1,000 population) for each state for deaths occurring to legal residents under one year of age within the U.S. and links this information to other information contained on the infant's birth certificate. Certain variables linked to birth certificates can be queried such as maternal race, maternal age, maternal education, gestation period, birth order, prenatal care, and marital status. These variables can provide a profile of a woman who commits infanticide.

An initial review of linked infant births and deaths for the most recent years of available data (1995-1998), show that the majority of infant deaths (59%) occurred to mothers aged 20-24 years. However, when taking population-based, age-adjusted rates into consideration the 15-19 year-olds had the highest rate of infanticides at .53/1,000. In terms of mother's education, 44% of infant deaths were to mothers with nine to 11 years of education, 37% were to mothers with 12 years of education (a high school diploma), 10% were to mothers with 13 to 15 years of education, 8% were to mothers with zero to eight years of education, and 1% were to mothers with 16 years or more of education. Age-adjusted rates for mother's education reveal a similar trend. Basically, women with an education significantly greater than a high school diploma were less likely to commit infanticide. In terms of infanticide and the month that prenatal care began rates increase as the month increases. Meaning, the later a woman enters prenatal care the more

likely it is that the infant will die due to infanticide. The highest rate was .76/1,000 to women entering prenatal care in the ninth month of pregnancy. Those who did not receive prenatal care had an even higher rate of infanticide at 1.02/1,000.

Chapter V. Theoretical Perspective

Biopsychosocial theory is the perspective from which this current study is rooted. It is sometimes called social ecology theory. Biopsychosocial theory focuses on the interaction between people and their internal and external systems- biologically, psychologically, and socially. These systems incorporate constructs such as family, school, work, church, and community that are influential in their own distinct ways on one's actions and behaviors. According to Orcutt (1990), biopsychosocial theory looks at the impact of hermeneutics (i.e., the study of texts, language, concepts, constructs, and other human-created "things") on behavior.

In assessing the behavior of individuals, a more thorough assessment considers biological (including medical), cognitive, emotional, behavioral, and social factors that might lead to a particular behavior. Biopsychosocial functioning is significantly impaired when one or more of these factors are negatively impacted. This is often the case when single women are pregnant, particularly at a young age. In the case of safe haven legislation hoping to stave off unsafe infant abandonment and infanticide, research suggests that the biological state of pregnancy is, in and of itself, a trigger. Meaning, that pregnancy hormones can cause an altered state postpartum, resulting in depression and even psychosis. In other words, a biological factor can cause a psychological issue.

Other factors that can impact a pregnant woman's psychological state are social in nature. Such as, anecdotal evidence found in newspapers and surveys, that suggest fear of parental

reprisal from having a non-marital birth as a reason for abandonment and infanticide. The concept of a "non-marital birth" being less desirable or less legitimate than a birth outside of the institution of marriage is a socially created concept. Perceptions of support and whether or not physical support during pregnancy exists are also factors that can influence feelings and behaviors. A women's level of education, age, or marital status might also impact her feelings and behaviors. When considered in combination, a more accurate profile (a biopsychosocial profile) of a woman likely to utilize safe haven or to commit infanticide can be ascertained.

The biopsychosocial model is also an example of general systems theory. Cowles (2003) describes it as the examination of "individuals' attitudes, feelings, beliefs, values, mental and physical health status, and functioning in social roles" (p. 12). The social roles are the systems in which we choose to place ourselves (i.e., family, workplace, church, etc.). Cowles purports that because we actively choose participation in such systems, then we subsequently adopt the beliefs and practices of those systems, often without question. When an event occurs that threatens one's place within a system, such as an unwanted pregnancy, steps are often taken to conceal, change, or to eliminate the event.

Hepworth and Larsen (1993) in their book, *Direct Social Work Practice*, highlight studies that show individuals' views of pregnancy entails their perception of their support systems, their own personal attitude about the pregnancy, the biological state of the pregnancy (morning sickness and depression versus an "easy" pregnancy), and social stigma regarding pregnancy (i.e. non-marital birth versus one within marriage). They contend that when a woman's perception of any of these variables is negative, the overall experience is often considered negative.

Generally speaking, social work and other disciplines dealing with child welfare have conducted social science research utilizing a biopsychosocial perspective. For example, Barth

(2002) conducted the first national study of a child welfare system that relates child and family well being to family characteristics, experience with the system, community environment, and other biopsychosocial factors. The study, commissioned by the U.S. Department of Health and Human Services, examines the connections between family history and dynamics, experience with the child welfare system, and well-being outcomes, using depression and medical inventories. The study concludes that this research process, essentially an examination of biopsychosocial factors, represents the greatest hope for ascertaining what happens to children and families who receive child welfare services across the country.

In Garrison's, *Parents' rights vs. children's interests: The case of the foster child* (1996), the author examines whether the interests of foster children are really different from those of children separated from parents outside the foster care system, and whether a policy favoring severance or preservation of the parent-child relationship best serves children's interests. Garrison concludes that children's interests must be evaluated on what is essentially a biopsychosocial continuum such as emotional security, permanence of placement, and preservation of membership in a biological family.

In terms of this current study, an exploratory analysis of women likely to utilize safe havens may reveal similar or dissimilar biopsychosocial characteristics than those engaging in an unsafe abandonment leading to an infant's death, or from those committing infanticide. Biopsychosocially, women who engage in unsafe infant abandonment or infanticide may be a different population from those who seek a "safe haven" for their infant. If measurable characteristics are similar (i.e. age, marital status, lack of receiving prenatal care, etc.), it could be concluded that safe havens are targeting those at risk of committing unsafe abandonment or infanticide, as the legislation intends. If characteristics are dissimilar, than safe havens might be

targeting those who do not wish to parent, do not pursue other options such as adoption, or do not feel they have the support systems in place to parent, not necessarily those at risk to harm an infant. Other supportive services could be beneficial, such as crisis pregnancy counseling or adoption, with safe haven as a last resort.

Basically, this study attempts to answer the question: Is safe haven legislation an efficacious policy response to infant abandonment? Additionally, this study attempts to construct a biopsychosocial profile of a woman likely to utilize a safe haven and a biopsychosocial profile of a woman likely to abandon an infant leading to its death, in an effort to see if these two groups have similar biopsychosocial characteristics. The overall null hypothesis is that there is no difference in biopsychosocial characteristics between the group of women seeking safe havens and the group of women who have abandoned an infant leading to its death.

Chapter VI. Methodology

Research design: The overall scope of the current research is exploratory in the sense that attempting to construct a biopsychosocial profile of a woman likely to utilize a safe haven has never been conducted. Analyses are considered primarily due to the lack of data that exists in this area and the relative "newness" of the legislation. The specific design of this study is a combined design. Meaning, findings from two separate sets of data are being utilized in an effort to describe the current population likely to utilize safe havens. Furthermore, two different research designs are utilized to analyze each dataset. Where variables are similar across datasets, results from each design will be compared in an effort to describe the population of women likely to utilize a safe haven.

The first dataset (Dataset 1) is a convenience sample of the entire population of callers to the Newborn Lifeline Network (NLN) hotline who completed a survey and report seeking connection with crisis pregnancy services, including safe havens. The specific research design is a pre-experimental design used for pre-testing a few hypotheses. The approach is a one-shot case study examining independent variables at one point in time (i.e., the two-year period in which the NLN survey was implemented), and statistically assessing relationships between those variables and a woman's choice to be connected to a safe haven (the dependent variable). Results serve to provide insight into this population of women for consideration in future studies. Due to the limited nature of Dataset 1, in terms of scope and sample size, causal relationships are not assessed.

The second dataset has a broader range of variables, is a known dataset for quantitative research endeavors, and has a much larger sample size. It is the NCHS Linked Birth and Infant Death dataset (Dataset 2). The research design employed in analyzing data from Dataset 2 approximates a quasi-experimental design in the sense that variables within an intervention group (cases of infant deaths due to neglect or abandonment) can be statistically compared to the same variables within a control group (other causes of infant deaths). The infant death is the dependent variable of interest- one due to neglect or abandonment. The dataset is large enough to permit the random sampling of the overall population of infant deaths due to other causes for the control group. Thus, analyses from Dataset 2 come closer to suggesting a biopsychosocial profile of the intended target audience with a greater level of external validity.

In an effort to determine if safe haven legislation is reaching its intended target audience, findings from Dataset 1 were compared to those from Dataset 2. Results are useful for informing

policy decisions regarding safe haven legislation, but not for ascertaining causal relationships with great certainty; hence, the overall exploratory nature of this research.

Sample: Dataset 1 contains 30 total surveys completed from 2002 to 2003. The unit of analysis for this dataset is women who call NLN, complete the caller survey, and are linked to one of three types of agencies: safe haven, adoption, or a crisis pregnancy center. NLN received calls from 75 women from 2002 through 2003, but has only completed surveys on 30 women. It should be noted that due to the limited number of calls and of surveys completed, NLN discontinued the use of the survey tool in 2004.

The entire population of women completing the survey is being used and not a representative sample. The reason for using the entire population is that the sample size is too small to allow for random sampling. Although the sample size is small it does represent an adequate sample of the number of safe haven abandonments that occur in a two-year time period across the United States. Meaning, the number of individuals calling NLN and requesting information about safe havens (n=17) is most likely a representative sample of the total number of individuals utilizing safe havens. As seen earlier in Table II, the total number of known safe haven abandonments in the U.S. was 129 in a seven-year period from 1999 to 2006; an average of 18 abandonments per year.

Dataset 2 contains 268 total cases of infant deaths. There are 133 infants up to age one that were born in the U.S. in 2000 and died as a result of neglect or abandonment in 2000 or 2001. This is the intervention group, or "neglect or abandonment" group. The control group is comprised of a random sample of 135 cases from the 27,586 other cases of infant deaths up to age one that are not a result of neglect or abandonment. The majority of the "other" deaths are a

result of genetic conditions, disease, accidents, or being born prematurely. This control group sample size is comparable to the size of the abandonment group.

The NCHS code for a death due to neglect and abandonment is 155. It should be noted that deaths due to "homicide" are not included due to the fact that they include all cases of homicide, and are not limited to those committed by parents. The neglect and abandonment cases were compared to an equivalent sample of all other infant deaths (i.e., the control group) in order to ensure that the neglect and abandonment population is unique across certain variables. It should be noted that infant deaths due to abandonment are frequently coded by states as "neglect" deaths and are, thusly, combined by NCHS into one category with other deaths coded as "abandonment."

Data collection instruments: Dataset 1 contains survey data from Newborn Lifeline Network (NLN), the sole national hotline with a database of 3,000 agencies prepared to help women at risk for infant abandonment that is linked to many state safe havens. Specifically, data from the NLN "Caller Questionnaire" was utilized (Appendix C). NLN collects qualitative responses and such responses have not been previously analyzed. Thus, this analysis represents a secondary analysis of NLN's primary data. These data include questions regarding the callers' state of origin, age, month pregnant or delivery mode if delivered, whether the pregnancy has been disclosed, whether the birth father is aware of the pregnancy, if prenatal care has been received, and the decision made at the end of the call (i.e., being linked to a safe haven, crisis pregnancy center, adoption agency, or to keep the child).

To discuss NLN briefly, their database of agencies includes information on providers of the following: crisis nurseries (temporary respite for mother and infant), adoption services, mental health services, safe havens, and crisis pregnancy counseling (supportive services for

pregnant women including prenatal care linkage, hospital linkage for labor and delivery, welfare and Medicaid support where applicable, and clothes and food services for the infant once born; typically affiliated with church organizations and do not make abortion referrals). In addition to serving as a national resource, NLN also serves as the sole 1-800 number for seven state safe haven programs, Georgia, Illinois, Indiana, Minnesota, North Dakota, Washington and Wisconsin. However, individuals can call NLN from any state of origin. Callers in crisis can be linked directly to operators of safe haven programs in participating states, or to general safe haven sites (i.e. hospitals) in non-participating states.

States utilizing NLN as their sole hotline provider vary in terms of their added legislative characteristics. In looking at the states geographically in terms of safe haven characteristics, the west coast states (California and Washington) legislatively require media campaigns and California uses a medical information questionnaire. The northern central states (Minnesota and Wisconsin) have no added characteristics, but the southern central state of Oklahoma provides a media campaign and requires a search of the Missing Children's Information Clearinghouse. The eastern states (Michigan and Indiana) appear to offer the most added characteristics, with Indiana offering a putative father's registry and a search of the missing children's clearinghouse. Michigan requires the publication of abandoned infants in newspapers, a search of the clearinghouse database, and a media campaign. Although, there appears to be a greater locus of added characteristics on the coastal states, both east and west, no hypotheses are being generated based on geography as the literature review indicates that this is most likely a non-contributing variable. Data on location will be recorded and analyzed in an effort to descriptively compare the findings to the second dataset.

Dataset 2 is the 2001 “Linked Birth and Infant Death Data” database from the National Center for Health Statistics (NCHS). This dataset contains the death certificate information of all infants age one and under in the U.S who were born in 2000 and died in the year 2000 or 2001. The death certificate information is linked to each infant’s exact birth certificate record. Therefore, matching several maternal and paternal biopsychosocial variables to the infant’s death. The dataset is free to the public and available by mail in disc format from NCHS. The year 2001 is the most current year of available data. According to the corresponding documentation from NCHS, 98.7% of all U.S. infant death records were linked to their corresponding birth certificates in 2001. To describe NCHS briefly, the organization is a component of the CDC and is one of the Federal statistical agencies belonging to the Interagency Council on Statistical Policy (ICSP).

NCHS disseminates a variety of statistical and analytic data products. These include: statistical reports on topics such as births, deaths, life tables, health status, health services utilization and the provision of health care; statistical tabulations; publications in its "Healthy People 2010" series; "Health, United States," the Secretary's annual report to the Congress; and public and restricted use data files. NCHS also disseminates the results of epidemiologic, demographic, and methodological research.

The NCHS “Linked Birth and Infant Death Data” dataset falls under the federal mandate for health data standards: *Section 306 of the Public Health Service Act, as amended, 1996-Health Insurance Portability and Accountability Act*. This Act mandates the collection and reporting of uniform health data, including birth and death certificate data, to NCHS. It also mandates that these data be accessible to the public, provided data is disseminated in a confidential format with non-identifying information.

Data collection: For Dataset 1, the NLN director was provided with an Excel spreadsheet that corresponds to NLN's Caller Questionnaire survey (Appendix C), containing variables of interest for this study. The NLN director has been solely responsible for entering compiled data into the spreadsheet. However, other NLN staff have implemented the survey and notated responses on separate forms.

Independent variables take on the following values: x_1 = *State* (coded as, 1 = Georgia, 2 = Illinois, 3 = Indiana, 4 = Minnesota, 5 = North Dakota, 6 = Washington, 7 = Wisconson); x_2 = *Disclose* pregnancy to anyone (coded as binary variable, 1 = yes, 0 = no); x_3 = *Status* with Birthfather (coded as, 1 = dating, 2 = married, 3 = no relationship), x_4 = *Birthfather Know* Pregnant (coded as binary variable, 1 = yes, 0 = no), x_5 = *Received Prenatal Care* (coded as binary variable, 1 = yes, 0 = no), x_6 = *Number of Months Pregnant* (coded as actual number 1 –9; 10 is delivered infant), x_7 = *Age* (coded as actual number per range of sample, e.g. 12 – 25 years), and x_8 = *Referral Requested* (coded as, 1 = safe haven, 2 = adoption, 3 = crisis pregnancy center). The spreadsheet containing the above variables was entered into SPSS via syntax and value labels were assigned accordingly.

The SPSS statistical package was utilized for all analyses. In terms of the actual analyses, descriptive statistics such as frequencies and cross tabulations were used to describe the population of women who have called NLN and to look for patterns. Where possible, cross-tabulations with Chi-square tests in 2 X 2 tables were conducted in an effort to determine if any one variable significantly contributes to the decision to choose a safe haven versus a non-anonymous option such as an adoption process or a crisis pregnancy center. Statistical tests are reported as significant at the $p<.05$ level. Independent t-tests were used in cases where a scale

variable (i.e., age) is compared to a nominal variable. Likewise, t-tests were used where mean differences were analyzed (e.g., age of one group by age of a second group).

To further assess strength of association between variables in predicting the dependent variable, lambda values (i.e., the Guttman coefficients of predictability) are reported. This is a proportionate reduction in error statistic where only the value of 1.0 represents a perfect association. Thus, lambda values should be interpreted as predictive but not causal. When looking at lambda (λ) values, a Fisher's exact test is reported in the place of Chi-square, as this test is more sensitive to low cell counts, especially in cells with fewer than five cases. The findings serve to illustrate a potential biopsychosocial profile of women seeking safe haven services, but one that may not be generalized to the overall population of women using safe havens.

In order to run tests for relationships between variables, several nominal variables were recoded into binary variables with values of 0 and 1 in order to increase the sample sizes and allow for analyses- trimester pregnant into early v. late, referral requested and action taken into safe haven v. non-anonymous option, status with birthfather into married v. not married, age into under 18 years v. 18 years and older, and state was recoded into regions- east, west, Midwest.

The following hypotheses are based on the literature review that reveals that women who unsafely abandon infants are young, unmarried, likely to conceal their pregnancies and are unlikely to seek prenatal care. Hypotheses based on women who have utilized safe havens are limited to LA County safe haven report and are otherwise impossible to construct at this time due to the anonymous nature of the safe haven abandonment. Therefore, the hypotheses are as follows:

H1: Women seeking adoption or crisis pregnancy counseling received prenatal care on average more than women seeking safe havens.

H2: A higher percentage of women seeking adoption or crisis pregnancy counseling are married compared to women seeking safe havens.

H3: Women seeking adoption or crisis pregnancy counseling are older on average than women seeking safe havens.

H4: Women seeking adoption or crisis pregnancy counseling are more likely to be dating or married to the birth father than women seeking safe havens.

H5: Women seeking adoption or crisis pregnancy counseling are more likely to have disclosed their pregnancy to the birth father than women seeking safe havens.

For Dataset 2, the NCHS "Linked Birth and Infant Death Data" codebook that accompanied the data disc was used to determine the variables that would be included in this study and their locations within the database. Variables of interest were written into SPSS syntax and retrieved in order to create a subset of the full, linked infant birth and death database that contains only those cases of neglect and abandonment deaths up to age one. Additionally, the control group dataset was retrieved using the same variables, truncated from the original full database and merged with the intervention dataset. This merged dataset contains the following twenty-four variables of interest: Matched infant birth/death case, birth year, resident status at birth, birth state, age of mother, race/ethnicity of mother, mother's education, marital status of mother, total birth order, live birth order, month prenatal care began, number of prenatal visits, age of father, place of delivery, gestation in weeks, infant's sex, birth weight, delivery method,

tobacco use during pregnancy, alcohol use during pregnancy, presence of congenital anomaly at birth, age of infant at death, state of death, and year of death.

Value labels were given to each variable to match the codebook. Several variables were recoded for ease of analysis and reporting. For example, congenital anomaly, tobacco use, alcohol use, and marital status were recoded into binary "yes" (value 1) or "no" (value 0) variables instead of a number that matched the medical name of the actual anomaly, or a range of categorical responses. Age of infant at death was recoded into mutually exclusive quartiles instead of days (i.e. 0-3 months, 3-6 months, 6-9 months, 9-12 months). Mother's education was recoded from years into categories (i.e. less than high school, high school education/GED, some college, and college graduate or higher). Birth weight of infant was recoded from actual weight in grams to a binary variable that represents the medical definition of pre-term (less than 2,500 grams) and full-term (2,500 or more grams).

Frequencies and cross tabulations were conducted in order to describe the intervention and control groups. Chi-square analyses were conducted in order to determine relationships between independent variables and committing neglect or abandonment leading to the infant's death. The independent variables are treated as the biopsychosocial factors of interest in this study.

Similar analyses using the same variables were conducted on the merged dataset. Within the merged dataset a binary "cause of death" variable is treated as the dependent variable, where the value "1" represents deaths due to neglect or abandonment (intervention group) and the value "0" represents deaths due to other causes (control group). The purpose for utilizing a control group is to ensure that the biopsychosocial profile of the intervention group is truly unique to that

group. Meaning, analyses should reveal a statistically significant difference between variables when comparing the intervention group to the control group.

Chi-square tests of significance were conducted on nominal variables at the $p<.05$ level. Independent t-tests were used in cases where a scale variable (i.e., age) is compared to a nominal variable. Likewise, t-tests were used where mean differences were analyzed. Independent variables that have p-values of <.05, when tested against the cause of death variable, were further examined via relative risk analysis. Relative risk was calculated to determine certain variables' individual contributions to an infant's death due to neglect or abandonment. Those variables with positive associations (>1.0 overall, with a lower bound value >1.0) were then added to a logistic regression model to determine overall variance in predicting an infant's death due to neglect and abandonment. This methodology will permit conclusions regarding which factors within the model are the greatest predictors of the commission of an infant death in this manner and will comprise the biopsychosocial profile.

Hypotheses are based on the infanticide literature and a preliminary analysis of the CDC Linked Birth/Infant Death dataset that reveals women in the 20-24 age range cause an infant's death in greater frequency than other age groups, have less than a high school education, commit infanticide after a second or third birth, and enter late into prenatal care (second trimester or later), or not at all. Also, infanticide literature reveals that women conceal their pregnancies and do not enter into prenatal care. Other relationships were examined to further determine if safe haven legislation is efficacious, such as age of infant at death. The majority of safe havens allow infants to be relinquished between ages 0 to 72-hours old and 30 days old. However, no hypothesis is being generated for age of infant at death based on a lack of information in the literature on these issues. Hypotheses generated are as follows:

H1: A higher percentage of women in the abandonment group were between the ages of 20-24 than in the control group.

H2: Women in the abandonment group have a lower level of education on average than women in the control group.

H3: Women in the abandonment group enter into prenatal care later on average than women in the control group.

H4: Women in the abandonment group have a higher percentage of no prenatal care than women in the control group.

H5: Women in the abandonment group are less likely to be married than women in the control group.

H6: Women in the abandonment group have a higher number of total live births than women in the control group.

Ultimately, where similar variables exist, the findings from Dataset 1 were compared to those from Dataset 2 to ascertain if women seeking safe havens have similar biopsychosocial characteristics as those committing unsafe infant abandonment resulting in an infant's death. If so, it is possible that state safe haven legislation is reaching its intended target audience. Regardless of the outcome, these analyses will surely prompt a discussion of possible early intervention strategies in an effort to utilize safe havens as a last resort.

Validity and reliability: There are several significant limitations to Dataset 1 that impact its reliability and validity. The first being that the questionnaire utilized is not a validated survey instrument and resulting variable errors could be contained within the instrument. Secondly, multiple NLN operators entered data onto caller questionnaires, as opposed to the same

individual each time. This can affect the reliability of the resulting database in terms of consistency in coding responses. Additionally, tests for intra-rater reliability were not conducted. To address potential intra-rater reliability and coding issues, the NLN director assumed responsibility for reviewing completed questionnaires and for entering data into the final spreadsheet.

External validity, in terms of the ability to generalize findings to the population of women likely to utilize safe havens, is probably low due to the sample size and an inability to compare this group of women to those actually utilizing safe havens. However, given the fact that data from Dataset 1 are unique, and cannot be found elsewhere at this time, the measurement instrument does appear to have some construct validity. Meaning, the questionnaire appears to gather information on variables discussed in the general theoretical framework of women likely to abandon infants. Also, when results from analyses on Dataset 1 are compared to those from Dataset 2, they tend to have similar findings across like variables; thus, some predictive validity is present.

A factor potentially compromising the external validity of Dataset 1 is the self-selective nature of callers to the NLN hotline. These are women who have learned of the NLN hotline through an internet search or through their state's safe haven media campaign. These women have taken an active roll to seek out supportive services and to contact such services. They may not be experiencing a crisis pregnancy with the same level of impact as others who do not actively seek supportive services. Nonetheless, it can be assumed that these women behave in a manner similar to those who actively seek out and utilize safe havens.

In terms of validity and reliability of Dataset 2, a random sample is being used for the control group across the same variables as the intervention group. This process achieves some

level of sampling validity that Dataset 1 cannot approximate. Also, the cited biopsychosocial factors that contribute to an infant abandonment and to infanticide are present as variables in the dataset. Thus, the dataset appears to have construct validity. However, there does exist research on the limitations of using birth certificate data that needs to be considered, as these limitations can impact overall reliability of the dataset.

For example, Gould, Chavez, et al. (2002), studied the relationship between incomplete birth certificates and infant mortality reporting, affecting the reliability of using linked birth and death certificates. Gould et al. analyzed birth certificates from California to determine if there was a presence of underreporting of 13 predictors of perinatal outcomes and whether this underreporting effected infant mortality reporting. They found that of the birth certificates studied, 7.25% were incomplete and were dropped from infant mortality reports.

Underreporting was most common in cases of women at high risk for poor perinatal outcomes. Because data "cleansing" may result in the removal of mothers and infants at highest risk, birth certificate analyses should include incomplete records. However, the NCHS linked birth and infant death dataset does not include incomplete records. Thus, it is possible that an actual percentage of vulnerable infants that were victims of unsafe infant abandonment might not be included in the current dataset. That being said, it is still assumed that the sample size of 133 is sufficient in order to draw preliminary research conclusions.

The other concern regarding the use of birth certificate data that affects its reliability is the underreporting of certain minority populations. Watson, Bennett, et al. (1993) summarize studies conducted in California and Montana that measure the magnitude of differences in the recording of race for minorities on birth and infant death certificates. They found that the

accuracy of infant mortality rates and other indices of the health depend on the consistency of information collected from separate sources (e.g., birth and death certificates). Inconsistent recording of basic information such as race and ethnicity has resulted in underestimation of infant mortality among minority populations. Blacks reported incorrectly frequently, with American Indians/Alaskan Natives having the most inconsistencies in reporting across data sources. It is possible that analyses of linked birth and infant death data by race are not as accurate as they are by other variables.

Findings: Results from Dataset 1 indicate that the age range of callers was from 13 to 32 years with the mean age of 19 years and a median age of 17 years. The majority if callers (61.9%) called late in their pregnancies- third trimester or after delivery (Appendix D). Geographically, there was no particular pattern found. Callers were from Wisconsin, Washington, Indiana, Minnesota, Oklahoma, California, Illinois, Louisiana, Maryland, Michigan, New Jersey, New Mexico, and Ohio (Appendix D).

In terms of relationship status with the birthfather, 50% reported having no relationship, 42.9% reported currently dating the birthfather, and 7.1% reported currently being married to the birthfather. The majority of callers (85.7%) disclosed their pregnancy to someone, but not necessarily the birthfather, as 55% reported not disclosing their pregnancy to the birthfather. Fifty-nine percent of callers had not received any prenatal care by the time of the call (Appendix D). Although it seems counterintuitive that a woman would report disclosing her pregnancy to someone and not having received prenatal care, that occurred in the majority of cases (56.5%). Only, 43.5% disclosed their pregnancy to someone and received prenatal care.

The majority of callers within Dataset 1 (56.7%) initially requested information about safe havens at the onset of the call; whereas, 23.3% requested information about crisis pregnancy

centers, 16.7% requested information about adoption, and 3.3% requested information about the nearest emergency room in her state (Appendix D). Although the majority of callers initially requested information on safe havens, only 36.7% asked to be connected to a safe haven by the end of the call. This represents a 20% drop in callers who initially requested information about safe havens. Of the remaining callers, 16.7% requested connection to an adoption agency in their area, 3.3% requested connection with a crisis pregnancy center, and 6.7% stated they would keep their infant. An interesting finding is that 36.7% decided not to be connected to any services at all after being counseled by NLN operators on options (Appendix D).

Examination of disclosure of pregnancy reveals that the average age of those who disclosed their pregnancy to someone is 18.8 years and 15.5 years for those who did not. The mean difference between these two groups, however, is not significant (p-value .130). In looking at receipt of prenatal care more closely, the average age of those having received prenatal care is 19.9 years. The average age of those who did not receive prenatal care is 18.8 years. There is no significant difference between these two groups (p-value .573).

In terms of the relationship between callers and their status with the birthfather, 54.5% of the teens under 18 years report a current relationship with the birthfather (dating or married) as compared to 36.4% of adults 18 years and older reporting a current relationship. This finding is contrary to the literature review that indicates that a younger age is inversely related to being in a relationship with the birthfather (e.g., LA County's safe haven report). This difference, however, is not significant (p-value .392).

Table III shows results of tests for relationships between independent variables and the dependent variable (choice of safe haven v. non-anonymous option). Relationships between these variables were assessed in order to test the hypotheses. An additional test was conducted

examining the relationship between information requested (safe haven v. non-anonymous option) at the onset of the call and action taken at the end of the call, due to the previously noted attrition rate and its potential impact on this relationship. Regardless of attrition, the relationship tended to be significant and the λ value of .333 suggests that one who requests information about a safe haven tends to choose to be connected to a safe haven about 33% of the time.

Table III- Predictor Variables by Action Taken (Safe Haven v. Non-anonymous Option)

Variable	χ^2 p-value	λ value	Fisher's p-value
Prenatal care	.353	.000	.337
Age (Under 18, Over 18)	.280	.231	.050
Dating or married to birthfather	.486	.067	.419
Disclose pregnancy to birthfather	.250	.063	.500
Disclose pregnancy to anyone	.303	.111	.444
Info. requested at onset of call	.008	.333	.018

In terms of hypothesis testing, H1 states that women seeking non-anonymous options (i.e., adoption or crisis pregnancy counseling) receive prenatal care on average more than women seeking safe havens. The results show that 45.5% of women seeking safe havens received prenatal care as compared to only 25% of women seeking non-anonymous options. A significant t-test of mean differences does not support H1 and λ value of .000 suggests that there is no predictive relationship (Table III).

Descriptive statistics tend to support H2, in that a higher percentage of women seeking non-anonymous options are married compared to women seeking safe havens. H2 cannot be statistically supported, in terms of a test for association, due to the fact that no callers seeking safe havens also reported being married. Likewise, there were no callers seeking crisis pregnancy services who reported being married. There were two callers seeking adoption services who reported being married.

H3 states that women seeking non-anonymous options are older on average than women seeking safe havens. Results show that women seeking non-anonymous options have an average age of 20 years and women seeking safe havens have an average age of 18 years. A significant t-test of mean differences does not support this hypothesis (p-value .147). An independent t-test was performed to test for a relationship between age and action taken by the end of the call and no relationship was found. There was no relationship found either between the binary age variable (teen or adult) and action taken. However, a lambda test for strength of relationship between age (teen or adult) and action taken was significant with a λ value of .231 (Table III). This value suggests that age is a predictor of the choice of a safe haven about 23% of the time.

H4 states that women seeking non-anonymous options are more likely to be dating or married to the birthfather than women seeking safe havens. The majority of callers who report being in a current relationship with the birthfather are dating. Results show that 57.1% of women seeking non-anonymous options are dating or married to the birthfather as compared to 40% of women seeking safe havens. When examining the relationship between these groups using a Chi-square test H4 is not supported. Additionally, the λ value of .067 suggests that there is a weak predictive relationship (Table III).

H5 states that women seeking non-anonymous options are more likely to disclose their pregnancy to the birthfather than women seeking safe havens. Results appear to support this hypothesis as 57.1% of women seeking non-anonymous options disclosed their pregnancy to the birthfather as compared to 45.5% of women seeking safe havens. However, a Chi-square test suggests that this difference is not significant and the λ value of .063 indicates there is a weak predictive relationship (Table III).

Dataset 1 represents a small, convenience sample and findings should be considered preliminary. Tests for relationships between variables were not found to be significant in most cases. It is not surprising that only one significant relationship was found statistically. That relationship being a caller's initial request for safe haven services is associated with choosing such services by the end of the call. This relationship also had a stronger predictive value (λ) than other independent variables. The binary variable of age under 18 years v. over 18 years also had a positive predictive value.

Regardless of significance testing, there are other findings that are worthy of consideration when attempting to construct a profile of a woman likely to utilize a safe haven. First, the average age of callers to NLN was 19 years. This tends to support the literature review, including anecdotal newspaper stories on unsafe infant abandonment. In terms of pregnancy disclosure, the majority of callers did disclose their pregnancy to someone, but not necessarily the birthfather. This finding is contrary to the infanticide literature and indicates that the safe haven population could be unique in terms of this variable. However, the disclosure of pregnancy to someone does not correlate with receipt of prenatal care. This finding tends to support both the unsafe abandonment and the infanticide literature that asserts that women in crisis pregnancies are not likely to seek prenatal care.

An interesting finding that does not appear to be explored in the literature is that after receiving counseling on different pregnancy support services, about 37% of callers decided not to take any action. It is possible that they decided to keep their infant simply after a phone counseling session. This finding potentially speaks to the influence of counseling services during a crisis pregnancy.

Teens within this dataset tended to be in relationships with the birthfather more often than the adults. The relationship tends to be dating and not marriage. Marriage does not appear to be a contributing variable. This is contrary to the literature review that reveals that young women in crisis pregnancies tend to be alone and without significant partnerships.

Though findings from Dataset 1 are exploratory, a potential biopsychosocial profile of a woman utilizing a safe haven is that of an unmarried, 19-year-old woman, with late or no prenatal care, who does disclose her pregnancy to someone other than the birthfather, and is currently dating the birthfather. These findings also suggest that the initiation of supportive counseling services late in her pregnancy might be of benefit in terms of avoiding a safe-haven abandonment. Again, results are based on a small sample size and should be interpreted as a preliminary analysis of the safe haven population.

Findings from Dataset 2 (Appendix E) tend to show that within the intervention group (cases of infant deaths due to neglect and abandonment), 58.6% of infant deaths occurred in 2000 and 41.4% occurred in 2001. The majority of infants were male (57%) as compared to females (43%), but a significant relationship between genders was not found. The mean live birth order was five. In terms of mother's race and ethnicity the findings were: white (46.6%), Black (35.1%), Hispanic (16.8%), and other (1.5%). Findings for father's race and ethnicity had a similar distribution. Mother's education was reported as less than high school in 40% of cases, high school graduate (41.5%), and some college or more (18.5%). Father's education was not reported, as it is not a required field on birth certificates. The majority of mother's (66.9%) were not married.

The mean age of mothers in the intervention group was 24 years. The mean age was 27 years for fathers. The mother's age group with the highest frequency of cases was the 15 to 19 year-old-group with 31.1% of cases, followed by the 20 to 24-year-old group with 27.1% of cases. The father's age group with the highest frequency of cases was the 20 to 24 year-old-group with 39.3% of cases, followed by the 25 to 29-year-old group with 25.4% of cases. It should be noted that father's age is not a required field on birth certificates and is missing in 54 cases. Missing cases were removed from all analyses; thus, limiting the sample size significantly when considering father's age.

In examining factors that could impact an infant's birth weight or medical status, results show that the majority of infants were of normal weight (79.4%). Tobacco use during pregnancy was reported in 9.8% of cases and alcohol use was reported in only 1.2% of cases. Congenital anomalies at birth were found in only 3.8% of cases. The majority of mother's entered into prenatal care in the first trimester (59.6%), with 21% entering into care in the second trimester, and 9.7% entering in the third trimester. Additionally, 9.7% reported no entry into prenatal care. The majority of mother's (94.7%) delivered infants at a hospital. Seventy-five percent of births were a result of a vaginal delivery and 25% a result of a C-section (Appendix E).

When examining relationships between variables within the intervention group, two significant relationships were found. An independent t-test found that mother's education and age were associated (p-value <.001). A significant t-test of mean differences found that age of father and age of mother were associated (p-value <.001). Specifically, fathers who were under the age of 30 years and mothers under the age of 25 years were associated with an infant death due to neglect or abandonment. Infant's age at death was a stated variable of interest, although a hypothesis was not generated. Findings indicate that the mean age of an infant at death was 139

days, or 4 ½ months, within the intervention group. A t-test of mean differences between groups was significant (p-value <.001).

Table IV- Significance of Relationships of Predictor Variables Between Groups

Variable & Related Hypothesis	Percent or # Intervention Group	Percent or # Control Group	p-value
H1: Mother's age 20-24	27.1%	23%	.001
H2: Less than HS education	40%	34.6%	.375
H3: Late/no prenatal care	40.3%	18.3%	.001
H4: No prenatal care	9.5%	7.1%	.494
H5: Married	33%	52.6%	.001
H6: Mean # of live births	5	3	.195

In terms of hypothesis testing and Dataset 2; H1 states that a higher percentage of women in the abandonment (intervention) group were between the ages of 20-24 years as compared to the control group. Results indicate that 27.1% of women were between the ages of 20-24 in the intervention group as compared to 23% in the control group. A Chi-square test for significance between groups using a binary coded variable for ages 20-24 (value 1) and other ages (value 0) supports this hypothesis (Table IV).

H2 states that women in the abandonment group have a lower level of education on average than women in the control group. Findings show that 40% of women in the intervention group have less than a high school education as compared to 34.6% in the control group. A Chi-square test for significance did not support this hypothesis (Table IV).

H3 states that women in the abandonment group enter into prenatal care later on average than women in the control group. In terms of late (2nd trimester or later) or no entry into prenatal care, 40.3% mothers in the intervention group entered at that point in their pregnancies as compared to 18.3% of mothers in the control group. A Chi-square test for significance supports this hypothesis (Table IV).

H4 states that women in the abandonment group have a higher percentage of no prenatal care than women in the control group. The intervention group reported no entry into prenatal care at a rate of 9.5%, as compared to the control group at 7.1%. This hypothesis is not supported by a Chi-square test for significance (Table IV).

H5 states that women in the abandonment group are less likely to be married than women in the control group. Thirty-three percent of women in the intervention group reported being married as compared to 52.6% of women in the control group. A Chi-square test for significance supported this hypothesis (Table IV).

H6 states that women in the abandonment group have a higher number of total live births than women in the control group. The total mean number of live births is five for the intervention group and three for the control group. A significant t-test of mean differences does not support this hypothesis (Table IV).

Relative risk analyses were conducted on all variables found to have significant p-values of <.05 when assessing relationships across groups, including infant's age (Table V page 70). All variables being tested were recoded as binary variables in order to calculate odds ratios. The first variable was infant's age, coded as a binary variable, where value "1" is three months old or older and value "0" is less than three months old. The resulting odds ratio showed a positive contribution at 3.57. In other words, infants tend to be 3.6 times more likely to die from neglect or abandonment at the age of three months or older.

A relative risk analysis of the variable for mother's age where 20-24 years is value "1" and all other age groups is value "0", had an odds ratio of 1.18, but the 95% confidence interval lower bound was <1.0 at .78. Thus, the limited age range of 20-24 years was not found to contribute significantly to an infant death due to neglect or abandonment. However, when

recoded into a binary variable where '24 years of age or under' is value "1" and 'over 24 years of age' is value "0", a positive contribution was found. The resulting odds ratio was 1.57 (Table V). Meaning, findings suggest that a mother aged 24 years or under is about 1.6 times more likely to have an infant die from neglect or abandonment than a mother over age 24 years.

The relative risk analysis of late or no entry into prenatal care by groups suggested a positive contribution with an odds ratio of 2.21 (Table V). Women entering into prenatal care late or not at all tend to be 2.2 times more likely to have an infant die from neglect or abandonment than women entering into prenatal care in the first trimester.

A relative risk analysis of not being married by groups had a positive contribution with an odds ratio of 1.4 (Table V). This suggests that unmarried women are 1.4 times more likely to have an infant die from neglect or abandonment.

Live birth order was recoded into a binary variable in order to determine an odds ratio. The recode was based on findings that the intervention group had a mean live birth order of five with a median of four. The live birth order variable that was tested had a value of "1" as 'four births or more' and a value of "0" for 'three births or less.' The resulting odds ratio was <1.0 and did not show a positive contribution (Table V).

Table V- Relative Risk of Individual Variables in an Infant Death Due to Neglect or Abandonment

Biopsychosocial Factor (i.e., independent variable)	**Category of Variable Tested**	**Adjusted Relative Risk (odds ratio) of Infant Death Due to Neglect/ Abandonment**	**95% Confidence Interval- Lower, Upper Bounds**
Infant's age	3 months or older	3.57	2.4, 5.3
Mother's age	20-24 years	1.18	.78, 1.8
Mother's age	24 years or under	1.57	1.2, 2.0
Entry into prenatal care	Late or no entry (combined)	2.21	1.4, 3.4
Mother's marital status	Not married	1.41	1.1, 1.75
Live birth order	4 births or more	.779	.48, 1.25

Independent variables with odds ratios of >1.0, and 95% lower bound confidence intervals >1.0, were entered into a binary logistic regression model- infant's age, mother's age, late/no entry into prenatal care, and not being married. The dependent variable within the model is the 'cause of death' variable, where value "1" represents a death due to neglect or abandonment and value "0" represent a death from any other cause. A forward stepwise model was used and the model was tested at a significance level of p-value<.05. This model allows for weighting all the predictive variables together in order to assess their collective association with an infant death due to neglect or abandonment. In other words, the percent of variance of the dependent variable is explained by the combined contribution of the independent variables.

Of the 268 total cases within Dataset 2, the logistic regression model took into consideration 93.3% of all cases. The remaining 6.7% of cases contained fields where missing values existed and were not included in the model. The Wald statistic for significance of the overall model is significant at p-value .016, with a Nagelkerke R-square of .31. Meaning, this

model explains about 31% of variance of the dependent variable (i.e., an infant death due to neglect or abandonment) when looking at the biopsychosocial factors in combination. The resulting odds ratios [Exp(B)] indicate that mother's age of 24 years or under has the highest likelihood of association with an infant death due to neglect or abandonment- 3.35 times more likely to be associated with such a death than other biopsychosocial factors (Table VI). Late to no entry into prenatal care has the second highest odds ratio indicating that this biopsychosocial factor is associated with an infant death due to neglect or abandonment at a rate 3.2 times more than other factors. A mother not being married is 2.45 times more likely to be associated with such a death than other factors. An infant's age of three months or older does not appear to be strongly associated with the dependent variable in this model, when talking into consideration other factors in combination- odds ratio of .132 (Table VI).

Table VI- Variance Associated with an Infant Death Due to Neglect or Abandonment

Biopsychosocial Factor (i.e., independent variable)	**Odds Ratio Exp(B)**
Infant's age 3 months or older	.132
Mother's age 24 years or under	3.35
Late or no entry into prenatal care	3.20
Mother not married	2.45

Findings from Dataset 2 tend to show that most women delivered their infants in a hospital and the majority of infants were abandoned after the age of three months. Infant age is an important factor to consider because safe haven legislation promulgates the age at which an infant can be relinquished. The majority of state safe havens permit abandonment from birth up to age 72-hours old, 14 days old, or up to 30 days old. Relative risk analysis suggests that infants ages three months and older do appear to have some positive association with a death due to neglect or abandonment. But, as the logistic regression model indicates, when infant age is taken

into consideration with other variables its contribution decreases. Nonetheless, the legal promulgation of safe haven abandonments at a later age might be warranted.

The regression model suggests that women ages 24 years and under are most likely to be associated with an infant death due to neglect or abandonment. This finding supports both the CWLA study in 2000 and preliminary findings from the infanticide data reported by the Bureau of Justice statistics. Of the women under age 24, the 15 to 19 year-old-group had the highest frequency of neglect or abandonment deaths. This age range is comparable to findings from the NLN dataset where the mean age of women seeking safe havens was 19 years. The majority of the infanticide literature and the 2000 HHS study had similar findings, as well. These analyses make a strong case for safe havens, and their accompanying media campaigns, to target 15 to 24 year-old women. These findings also lend support to legislators promulgating safe haven law in an effort to reach teens and young adults, though very few states have actual strategies in place for doing so.

Results tend to show that late (2nd trimester or later) to no entry into prenatal care is associated with an infant death due to neglect or abandonment more so than no entry into prenatal care, alone. Analysis from Dataset 1 supports this finding, as well. When looking at the results of the regression model, late combined with no entry into prenatal care, has the second highest association with an infant death due to neglect or abandonment.

The majority of literature on infanticide, and some anecdotal newspaper stories on unsafe infant abandonment, assert that women who commit infanticide have actively concealed their pregnancies and have not received any prenatal care. Results from both datasets are contrary to the literature review on prenatal care and suggest that women whose infants die by neglect or abandonment have a different biopsychosocial profile than those who kill their infants.

A finding that supports the majority of literature on infanticide and unsafe infant abandonment, and was found in analyses from both datasets, is that women tend to be unmarried. The regression model used in Dataset 2 reveals that unmarried women are at two and a half times the risk for an infant death due to neglect or abandonment than married women. Marriage does appear to be a protective biopsychosocial factor. However, newspaper interviews with women convicted of unsafe infant abandonment state that marriage is such a significant factor that it actually serves as the motive for infant abandonment.

Summary: The NLN group of women seeking connection to safe havens (Dataset 1) and the NCHS group of women who have unsafely abandoned an infant causing its death (Dataset 2), do appear to have similar biopsychosocial profiles. Thus, the overall null hypothesis regarding no difference between these groups is accepted. Also, both datasets contain several biopsychosocial factors that support the targeting of women that the literature review indicates are likely to abandon an infant unsafely (i.e., ages 15 to 24 years, unmarried, with late entry into prenatal care). In addition to these factors, the two groups share the relationship status of dating, and the act of having disclosed their pregnancy to someone. Although Dataset 2 does not contain a disclosure variable, it can be interpreted that the 90.5% of women in the intervention group who reported receiving prenatal care clearly disclosed their pregnancy to their provider of such care.

A suggested biopsychosocial profile of a woman likely to utilize a safe haven and a woman likely to unsafely abandon an infant contains the following biopsychosocial factors: Age between 15 and 24 years, unmarried, late entry into prenatal care, currently is dating, and has disclosed her pregnancy to someone. This profile offers some hope in terms of preventing both

safe haven abandonments and unsafe abandonments in the sense that a medical provider is aware of the pregnancy and can perhaps intervene.

Analyses of both datasets have findings that are contrary to those in studies focused on infanticide. Such studies reveal that most women who commit infanticide are suffering from post-partum depression and psychosis, are not in relationships, and have received no prenatal care at all. Thus, it is suggested that the demographic of women who commit infanticide have a different biopsychosocial profile than those who engage in safe or unsafe infant abandonment. Attempting a profile of women who commit infanticide is beyond the scope of this current study.

Results from both Dataset 1 and Dataset 2 indicate that the majority of women are currently dating, have received prenatal care, and have disclosed their pregnancy to someone. Thus, legislators who purport that safe haven laws are in place to prevent infanticide are misinformed on the medical and biological ramifications of post-partum depression. Strategies should be in place for the early recognition and treatment of post-partum depression in order to effectively prevent infanticide and unsafe infant abandonment.

Study limitations and future areas of consideration: The likelihood of the model to predict an infant death due to neglect or abandonment indicates that additional biopsychosocial factors may be associated with such a death, as the model only predicts for 31% of variance. Future studies utilizing the NCHS Linked Birth and Infant Death dataset should consider examining additional variables and aggregating previous years of data in an effort to increase the sample size of infant deaths from neglect or abandonment. As the literature review found, in most cases of infant abandonment, mother's education and race/ethnicity have little to no association.

A variable not included in either Dataset 1 or Dataset 2 is mother's income. It is possible that databases containing such information could be useful in determining if socioeconomic

status (SES) is a key biopsychosocial factor in infant abandonment. This does not appear to be a factor often examined in similar studies. The LA County safe haven abandonment report did indicate that the majority of infants that were unsafely abandoned, and died as a result, were found in low-SES neighborhoods. It was not reported as to whether the mothers actually lived in those neighborhoods.

Future studies should also consider examining biopsychosocial factors collected by other surveys such depression inventories, the Pregnancy Risk Assessment Monitoring System (PRAMS), and abuse assessment inventories. These factors would serve to illustrate a more comprehensive profile of how pregnant women perceive their support systems, the impact of social support, and how they are coping with their pregnancies. This would allow for an earlier identification of a crisis pregnancy.

Also, as analyses of Dataset 2 suggest that a majority of women who neglect and abandon their infants have had several other pregnancies resulting in live births. PRAMS data and depression inventories would assess not only current depression in pregnancy, but depression during and after previous pregnancies. Previous prenatal and post-partum depression is predictive of future pregnancy-related depression, according to the infanticide literature.

Additionally, father's age appears to be a contributing factor to infant abandonment in terms of fathers being less than age 30 years but greater than age 24 years. It is not clear how future studies could incorporate this variable, especially given that there are no data sources where father's age is a required field. It is interesting to consider, however, in terms of educational services and media campaigns targeting men in this age range.

Chapter VII. Policy Recommendations

A basic response to safe haven laws by legislators is well summarized by the National Conference of State Legislatures (2001). Which is, the feeling that "the legislation is probably a good idea, but it needs to be a part of a larger reform to enhance services for women at risk [for abandonment] and increase accessibility to programs that counsel pregnant women about other options" (pp. 6). Little is known about the biopsychosocial aspects of young women at risk for abandoning their infants. This study, though limited in scope, does suggest that safe haven legislation is well intended in its efforts to target women appropriately- young, unmarried women who receive little to no prenatal care. The legislation falls short, however, in its mechanisms for targeting these women, and for promoting early identification and supportive services as an alternative to safe havens. Thus, understanding these women and their risk factors is of crucial importance prior to the passage or reauthorization of further legislation.

At this point in the seven-year political and legislative history of safe haven law, it would be naïve to propose the repeal of the legislation in 47 states. Therefore amendments to current laws and other policy recommendations are proposed. Most states safe haven laws are up for reauthorization in 2007 or 2008; thus, the following recommendations are timely:

1. Improved data collection: As long as safe haven legislation provides for anonymous infant abandonment and the occasional volunteering of background information, researchers cannot adequately study the population of women utilizing the safe havens. Thus, one recommendation for improved data collection is to profile young women currently incarcerated for unsafe infant abandonment in an effort to determine the biopsychosocial indicators of abandonment. This can be done either via structured interviews conducted in prisons or, preferably, by researching Pre-Sentencing Investigation (PSI) data to determine common

variables. Such data are available via review of records housed within each States' Department of Criminal Justice Services. Review of PSI data would not require face-to-face contact with women in prison; thereby, reducing the level of Institutional Review Board scrutiny and potential emotional harm inflicted upon the women.

Also, in states where parents have volunteered non-identifying medical or psychosocial information, such data should be collected by each States' Department of Social Services and made available nationally. These data would help researchers in better determining a profile of those individuals actually utilizing safe havens.

2. Enhancement of educational efforts: State safe haven programs with funding allocations for media campaigns should be encouraged to incorporate a social marketing approach to determine the marketing preferences of unmarried women between the ages of 15 and 24 years. A social marketing campaign involves target audience focus group research in order to determine what messages and types of media reach these individuals. Such an approach would be helpful in assuring the target population is reached effectively and actually learns of safe havens, and other state-specific resources to support them while in crisis pregnancies.

States should also encourage broad-based education efforts to teenagers, college students, teachers, guidance counselors, parents, clergy and social workers on pregnancy planning, warning signs of pregnancy-related depression, supportive resources, and on alternative placement options (i.e. confidential adoption, crisis nurseries, and foster care). Education on the existence, location, and legal ramifications of safe havens should be included as well.

3. Enactment of putative father's registries or some other mechanism for reaching fathers: In order to avoid potential due process-violation lawsuits, and pitfalls with the Fourteenth

Amendment, states with safe haven legislation that fail to include provisions for putative father's registries should establish registries. It is recognized that registries operate on a father's presumption of knowledge of the pregnancy. The current research suggests that some fathers are aware of the pregnancy, and some are not. The lack of a father's registry does not offer any hope that a father could petition for parental rights and is not seen as a reasonable alternative.

Additionally, states could amend current legislation to compel safe haven staff to ask, but not require, a father's name, in order to allow for a petition of parental rights. It is recognized that a woman relinquishing an infant might not wish to name a father for fear of the father later revealing her identity. In such cases, safe haven staff can reiterate that neither a woman's name nor description will be provided to the father or in any legal document.

4. Appropriation of funding for media campaigns: According to the National Center for State Courts' 2003 publication, "Infant Abandonment and Safe Haven Legislation," states with media campaigns saw a decrease in infant abandonments on average more than states without media campaigns. State legislatures should consider allocating resources towards the development and promotion of media campaigns aimed at young women. State legislatures can encourage safe havens to apply for and use federal "Promoting Safe and Stable Families" (PSSF) funds under Title IV of the Social Security Act for media campaigns. The federal government can further support this effort by appropriating TANF funds for media campaigns in a less restrictive manner.

5. Amend legislation to require a search of the Missing Children's Information Clearinghouse: Safe haven personnel have no mechanism in place for ensuring an infant is being relinquished by a biological parent or legal caregiver. The search of a national database of missing and exploited children should be required of all states. This can be conducted by State

Departments' of Social Services once the infant is in their custody. There is little to no cost involved, and this procedure would help to ensure that any infant abducted and later relinquished to a safe haven, is reunited with his parents.

6. Provider screening for prenatal depression: Obstetricians, nurse practitioners, nurses, nurse midwives, and any other medical professional, coming into contact with an unmarried women between the ages of 15 and 24 years, who enters into prenatal care in the second trimester or later, have the opportunity to screen for prenatal depression. Simple screening tools are available to the public via the American College of Obstetricians and Gynecologists (AGOG) organization. Legislation should be amended to encourage providers to utilize screenings tools and to make appropriate referrals for supportive services, where a potential crisis pregnancy is found. Women in the NLN and NCHS datasets tend to seek prenatal care, albeit late, and do disclose their pregnancy to someone. These medical providers are on the front line of defense against a crisis pregnancy and may be able to avert a potential unsafe infant abandonment, safe haven drop-off, or, worst-case scenario, an infanticide.

Safe haven legislation appears to have proliferated across the U.S. in response to public outcry and a wave of media coverage that tended to exacerbate the scope of unsafe infant abandonment. The passage of the legislation from one state to another over the past seven years does not appear to be rooted in research nor supportive of early identification and intervention services. Instead, the legislation was a natural diffusion of good intentions and the fear of a negative public image for not offering alternatives to unsafe infant abandonment.

As previously stated, most of the 47 states that have enacted safe haven legislation are up for reauthorization of this legislation in the 2007 or 2008 fiscal years. The consideration of the

above policy recommendations are perhaps important to reauthorizing legislation in a manner that allows for a primary prevention approach to a crisis pregnancy versus the secondary intervention that is currently in place. Though it is considered a "negative statistic" not to pass safe haven legislation, it should be considered equally negative not to attempt to recognize and intervene with a crisis pregnancy prior to any type of infant abandonment. The current exploratory analysis, though limited in scope, offers hope that women in crisis pregnancies are using medical services and are disclosing their pregnancies to someone and, thusly, could be identified early.

Bibliography

1. Abandoned Infants Assistance Resource Center (August 2000). Brief summary: Information related to discarded infants. Available FTP: www.socrates.berkley.edu/.

2. About Adoption (2003). Legalized abandonment: State safe haven laws & programs. Available FTP: www.adoption.about.com/library/weekly/aa011700b.htm.

3. Administration for Children & Families (2004). Infant safe haven laws- state statute series 2004, National Adoption Information Clearinghouse.

4. Agrawal, P., Bhatia, M.S., & Malik, S.C. (1997). Postpartum psychosis: A clinical study. The International Journal of Social Psychiatry, 43 (3) 217-221.

5. Agovino, T. (1996). Drop-off incubator offers new hope to unwanted babies. Chicago Tribune, 1. Retrieved November 4, 2002, from Global NewsBank database.

6. Alan Guttmacher Institute. The Guttmacher Report on Public Policy (2001). The drive to enact infant abandonment laws- a rush to judgement? Available FTP: www.agiusa.org.

7. American Adoption Congress (2001). States rush to pass "abandoned baby" legislation despite widespread concerns. "Good cause", the membership newsletter of the American Adoption Congress.

8. Austria delivers first anonymous birth (2001). Agence France-Presse. Retrieved November 7, 2002, from LexisNexis database.

9. Barth, Richard, P. (2002). Methodological lessons from the national survey of child and adolescent well-being: The first three years of the USA's first national probability study of children and families investigated for abuse and neglect. Children and Youth Services Review, 24 (6/7), 513-541.

10. Boyes, R. (2000). German baby bank registers first arrival. Statesman. Retrieved November 5, 2002, from InfoTrac database.

11. Bureau of Justice Statistics (2002). Homicide trends in the United States. Available FTP: www.ojp.usdoj.gov/bjs/homicide.

12. CNN.com (1999). 'Door of hope' opens for South African babies: Unwanted infants placed in hole in church wall. Retrieved October 21, 2002, from http://europe.cnn.com/workd/africa/9911/30/s.africa.babies/index.html.

13. Catalog of Federal Domestic Assistance. 93.551: Abandoned infants. Available FTP: www.aspe.hhs.gov/cfda/p93551.htm.

14. Child Welfare League of America (2000). List of enacted state safe haven legislation. Available FTP: www.cwla.org.programs/pregprev/flocrittsafehaven.htm.

15. Code of Virginia, § 16.1-228, Definitions- Abused or neglected child. Available FTP: http:// leg1.state.va.us/000/lst/LS203539.HTM.

16. Coffey, R.M., Ball, J.K., Johantgen, M., Elixhauser, A., Purcell, P., & Andrews, R. (1997). The Case for National Health Data Standards, Health Affairs, Vol. 16, No. 5.

17. County of Los Angeles (2006). Safely surrendered and abandoned infants in Los Angeles County, 2002-2005. Available FTP: www.babysafela.org/data.htm.

18. Cowles, Lois A., (2003). Social work in the health field: A care perspective, Social Science, 345-407.

19. Dailard, C. (2000). The Drive to Enact 'Infant Abandonment' Laws- A rush to judgement? The Guttmacher Report on Public Policy, 1-11.

20. Daily News-Record (2000). Should the state create drop-offs for unwanted newborns? Daily News-Record, 103, (163). Harrisonburg, VA.

21. Garrison, Marsha (1996). Parents' rights vs. children's interests: The case of the foster child. Review of Law & Social Change, 22 (347), 371-396.

22. Gould, J. B., G. Chavez, A. R. Marks, & Liu, H. (2002). "Incomplete birth certificates: a risk marker for infant mortality," American Journal of Public Health 9279-81.

23. Governor of Hawaii Vetoes Safe Haven Legislation (Press Release, June 2003). Available FTP: www.capitol.hawaii.gov/sessioncurrent/gms/hb0133.htm.

24. Grenier, Marley E. (March 14, 2003). Response to 'unintended consequences: safe haven laws are causing problems not solving them'. Available FTP: www.bastards.org/activism/EBDreport.html.

25. H.B. 1633, SB 785, HB 1891, HB 2154, SB 1204, HB 2553, HB 2581 (2001). Legislation dealing with abandoned infants and provisions for their safety. Virginia General Assembly. Available FTP: www.legis.state.va.us.

26. Henley, Jon (February 14, 2003). Children given up at birth lost fight to find parents. The Guardian. Available FTP: www.guardian.co.uk.

27. Hepworth, Dean H. and Larsen, JoAnn (1993). Direct social work practice: Theory and skills, 4th Ed. Brooks/Cole publishing Company. Grove, CA.

28. Herman-Giddens, Marcia E., Smith, Jamie B., Mittal, M., Carlson, M., & Butts, John D. (2003). Newborns killed or left to die by a parent: A population-based study. Journal of American Medical Association, 289 (11), 1425-1429.

29. H.R. 2018 (2001). Legislation to authorize States to sue TANF block grant funds to support infant safe haven programs. U.S. House of Representatives.

30. H.R. 3839 (2002). Legislation to reauthorize the Child Abuse Prevention and Treatment Act. U.S. Senate.

31. Illinois Department of Children and Family Services (2002). What is a putative father? Retrieved December 1, 2002, from http://www.state.il.us/dcfs/a_adoption_putative.shtml.

32. Illinois Department of Children and Family Services (2002). Notice to relinquishing person under abandoned newborn infant protection act. Available FTP: www.state.il.us/dcfs/notabandoned.htm.

33. Illinois Department of Public Health (2002). Illinois adoption registry medical questionnaire. Available FTP: www.idph.state.il.us/vital/pdf/Adoptmedinfo.pdf.

34. Jaccard, Timothy (personal communication, November 11, 2002). A.M.T. Children of Hope Foundation. Mineola, NY.

35. Legal Lexicon Institute (2002). Available FTP: www.law.cornell.edu/lexicon/ Affirmative_defense.htm.

36. Lvoff, N., Lvoff, V., & Klaus, Marshall H. (2000). Effect of the baby-friendly initiative on infant abandonment in a Russian hospital. Archives of Pediatrics & Adolescent Medicine. v154 i5 p.474.

37. M. L. B. v. S. L. J., 519 U.S. (1996), 102, 117 S. Ct. 555, 136 L. Ed. 2d 473.

38. Mobile County District Attorney (2006). Secret safe place for newborns- for district attorneys. Available FTP: www.mobile-da.org.

39. Moll, E. Christine (2002). In defense of TJ's mother: Neonaticide and the implications for counselors. Journal of Humanistic Counseling, Education and Development 41, 150-158.

40. Montana State Senate (2001). Senate bill 132. Available FTP: www.data.opi.state.mt.us/bills/2001/billhtml/SB0132.htm.

41. Nachmias, Chava and Nachmias, David (2000). Research methods in the social sciences 6th Ed. Worth Publishers. New York, NY.

42. National Center for State Courts (2003). Adoption trends in 2003: infant abandonment and safe haven legislation. Available FTP: www.ncsconline.org/WC/Publications/KIS_Adopt_Trends03Haven.pdf.

43. National Conference of State Legislatures (2001). Abandoned infant legislation 2000-2001. Available FTP: www.ncsl.org/programs/cyf/ABSL2001.htm.

44. National Conference of State Legislatures (2001). Safe havens for abandoned infants. Williams-Mbengue, N., September, Vol. 26, 8, Denver, CO.

45. Newborn Lifeline Network (2003). Available FTP: www.newbornlifelinecom.

46. Nurseweek.com (March 16, 2000). Abandoned babies- Legislators, health officials unite to curb recent trend. Available FTP: www.nurseweek.com/features/00-03/abandon.html

47. Oberman, Michelle (1996). Mothers who kill: coming to terms with modern American infanticide. American Criminal Law Review, 34 (1), 1-110.

48. Orcutt, Ben A. (1990). Science and inquiry in social work practice, Social Science, Columbia University Press, NY, 200-315.

49. Overpeck, Mary (1998). Risk factors for infant homicide in the United States, The New England Journal of Medicine, 339, 1211-1216.

50. Paulozzi, L. & Sells, M. (2002). Variation in Homicide Risk During Infancy--United States, 1989-1998. Morbidity and Mortality Weekly Report, 51 (09), 187-9. Available FTP: www.cdc.gov/mmwr/preview/mmwrhtml/mm5109a3.htm.

51. Pierce, William L. (2003). Institute debunks Donaldson report on safe haven laws. Adopting.org 1995-2006.

52. Resnick, Phillip J. (1970). Murder of the newborn: a psychiatric review of neonaticide. American Journal of Psychiatry, 126, 1414-1420.

53. Roy, Mathew (October 19, 2002). Why do parents kill their children? The Virginian-Pilot.

54. Safe Place for Newborns Foundation (2000). Sample hospital procedure, provided to Safe Place for Newborns, courtesy of Riverview Healthcare Association, MN. Available FTP: www.safeplacefornewborns.com/ProcRiverview.doc.

55. Safe Place for Newborns Foundation (2002). Medical Questionnaire. Available FTP: http://www.safeplacefornewborns.org/Questionnaire.doc.

56. Santosky v. Kramer, 455 U.S. (1982), 745, 769, 71 L. Ed. 2d 599, 102 S. Ct. 1388.

57. Satow, Kathy (personal communication, November 7, 2002; December 10, 2003). Newborn Lifeline Network. Pekin, Indiana.

58. Save the Abandoned Babies Foundation (2002). Is there anything being done at the national level? Available FTP: www.saveabandonedbabies.org/qa.html.

59. S.B. 1368. California State Senate (2000, January 19). Available FTP: www.info.sen.ca.gov/pub/9900/bill/sen/sb_13511400/sb_1368_bill_20000831_enrolled.html.

60. Shepherd, Robert E. Jr.(2001). Constitutional issues presented by "abandoned babies" legislation. Brief, University of Richmond School of Law.

61. Spinelli, Margaret G. (2001). A systematic investigation of 16 cases of neonaticide. American Journal of Psychiatry, 158 (5), 811-813.

62. Stanley v. Illinois, 405 U.S. (1972), 645, 651, 31 L. Ed. 2d 551, 92 S. Ct. 1208.

63. Stateline.org (June 1, 2001). Reporter's query begets safe havens for abandoned infants. Available FTP: www.stateline.org/story.cfm?storyid=131005

64. Steiner, E. (2003). *Odièvre v France* - Desperately seeking mother - anonymous births in the European Court of Human Rights, Child and Family Law Quarterly, Vol. 15, Number 4, October 2003, pp. 425-448 (24).

65. The Evan B. Donaldson Adoption Institute (October 22, 2002). Issue brief: "safe havens" are not the answer to infant abandonment- Executive summary. Available FTP: www.adoptioninstitute.org.

66. U.S. Department of Health and Human Services (2000). Administration for Children and Families. Abandoned babies- Preliminary national estimates. Available FTP: www.acf.dhhs.gov/news/stats/abandon.htm.

67. Venable, Tammie (personal communication, October 31, 2002). Garden of Angels, Inc., Safe Arms for Newborns. Yucaipa, CA.

68. Virginia General Assembly (2001). HB 1633, SB 785, HB 1891, HB 2154, SB 1204, HB 2553, HB 2581. Legislation dealing with abandoned infants and provisions for their safety.

69. Walker, Q. (2000). Austrian clinic opens baby hatch for unwanted new-borns. Deutsche Press-Agentur. Retrieved November 4, 2002, from Global NewsBank database.

70. Watson, C. C., Bennett, T., Reed, R.W., McBroom, W.H., & Helgerson, S.D. (1993). Classification of American Indian race on birth and infant death certificates- California and Montana. MMWR. 4220-4223.

71. Weibley, S. (2002). States implement 'safe surrender' laws for people who give up their babies. Siecus Report, 30, 13-16.

72. Williamson, G. L. (1993). Postpartum depression syndrome as a defense to criminal behavior. Journal of Family Violence, 8, 151-165.

State	Legislation	Date Enacted	Max. Age of Child in Days	Type of Safe Haven*	Type of Prosecution
Alabama	H.B. 115	5/11/00	3	EMS, hospital	Affirmative defense
Alaska	**No legislation**	**N/A**	**N/A**	**N/A**	**N/A**
Arizona	H.B. 2001 Chapter 223	4/23/01	3	Church, CWA, EMS, hospital, FD	Immunity
Arkansas	H.B. 1070, H.B. 1766	2/13/01	30	Hospital, PD	Affirmative defense
California	S.B. 1368 Chapter 824	9/28/00	3	Hospital	Immunity
Colorado	S.B. 171 Chapter 384	6/3/00	3	FD, hospital	Affirmative defense
Connecticut	Public Act 00-207	10/1/00	30	Hospital	Affirmative defense
Delaware	H.B. 120	7/9/01	14	Hospital	Affirmative defense
Florida	S.B. 2080 Chapter 213	6/2/00	3	FD, hospital	Immunity
Georgia	H.B. 360	5/15/02	7	Any medical facility	Immunity
Hawaii	**H.B. 133**	**Vetoed by Governor**	**N/A**	**N/A**	**N/A**
Idaho	Title 39 Chapter 82	4/9/01	30	Any medical facility	Immunity
Illinois	H.B. 0632, S.B. 21	8/20/01	3	EMS, FD, hospital	Immunity
Indiana	S.B. 330, H.B. 182	3/17/00	45	EMS	Affirmative defense
Iowa	Senate File 355	4/24/01	14	Hospital	Immunity
Kansas	H.B. 2838 Chapter 38	7/1/00	45	FD, hospital, PD	Immunity
Kentucky	H.B. 45	4/9/02	3	EMS, FD, PD	Immunity
Louisiana	HCR 85 Act 109	4/17/00	30	FD, any medical facility, PD	Affirmative defense
Maine	L.D. 1670	3/22/02	31	EMS, FD, hospital, PD,	Affirmative defense
Maryland	H.B. 74, S.B. 82	5/16/02	3	Responsible adult	Immunity
Massachusetts	MGL c.119 sec.39-1/2	7/30/04	7	Hospital, PD, FD	Immunity
Michigan	S.B. 1053	6/26/00	3	FD, hospital, PD	Affirmative defense
Minnesota	Senate File 2615	4/1/00	3	Hospital	Immunity
Mississippi	H.B. 169	3/23/01	3	Adoption agency, hospital	Affirmative defense
Missouri	H.B. 1433	7/2/02	30	FD, hospital, PD	Immunity if child 5 days old or less, Affirmative defense if child 6 to 30 days
Montana	S.B. 0132	4/19/01	30	FD, hospital, PD	Immunity
Nebraska	**No legislation**	N/A	**N/A**	**N/A**	**N/A**
Nevada	S.B. 191	5/31/01	30	FD, hospital, PD	Affirmative defense
New Hampshire	H.B. 104-FN	06/04/03	7	Church, hospital, EMS, PD, FD	Immunity
New Jersey	Chapter 58	7/7/00	30	Hospital, PD	Affirmative defense
New Mexico	H.B. 251 Chapter 132	3/14/01	90	Any medical facility	Immunity
New York	S.B. 6688	6/18/00	5	Caregiver	Affirmative defense
North Carolina	H.B. 275 Chapter 291	7/19/01	7	EMS, hospital, PD, social services worker	Immunity
North Dakota	S.B. 2129	3/28/01	365	Hospital	Immunity
Ohio	H.B. 660	1/5/01	3	EMS, hospital, PD	Immunity
Oklahoma	H.B. 1122	4/30/01	7	CWA, FD, hospital, PD	Immunity
Oregon	S.B. 199	6/1/01	30	Any medical facility, PD	Affirmative defense
Pennsylvania	S.B. 654	02/01/03	28	Hospital	Immunity
Rhode Island	H.F. 5131 Chapter 53	7/9/01	30	EMS, FD, hospital, PD	Immunity
South Carolina	H.B. 4743	6/6/00	30	Hospital	Immunity
South Dakota	S.B. 92	3/3/01	60	EMS, FD, PD	Immunity
Tennessee	Statute 68-11-255	7/19/01	3	Any medical facility	Immunity
Texas	H.B. 3423	9/1/99	60	CWA, EMS	Affirmative defense
Utah	H.B. 0012 Chapter 134	3/15/01	3	Hospital	Affirmative defense
Vermont	H. 27	05/02/06, effect. 07/01/06	30	FD, hospital, PD, church	Immunity
Virginia	S.B. 1151	07/01/03	14	FD, hospital, EMS	Affirmative defense
Washington	S.B. 5236	4/3/02	3	FD, hospital	Immunity
West Virginia	H.B. 4300	3/11/00	30	Any medical facility	Affirmative defense
Wisconsin	Assembly Bill 54 Act 2	4/6/01	3	EMS, hospital, PD	Immunity
Wyoming	H.B. 0056	07/01/03	14	Church, hospital, FD, CWA	Affirmative defense
District of Columbia	**No legislation**	**N/A**	**N/A**	**N/A**	**N/A**

Sources: About Adoption (2003). FTP: www.adoption.about.com/library/weekly/aa011700b.htm; Child Welfare League of America (2000). FTP: www.cwla.org.programs/pregprev/flocrittsafehaven.htm; National Conference of State Legislatures (2006). FTP: www.ncsl.org/programs/cyf/ABSL2001.htm; The Evan B. Donaldson Adoption Institute (2006). FTP: www.adoptioninstitute.org; Administration for Children & Families (2005). FTP: www.naic.acf.hhs.gov/general/legal/statutes/safehaven.cfm. *Key: EMS- Emergency Medical Services provider, CWA- Child Welfare Agency, FD- Fire Department, PD- Police Department

Added Characteristics of State Safe Haven Laws- Appendix B

State	Medical Information Questionnaire	Publish Notice of Abandonment in Newspaper	Putative Father's Registry	Search Missing Children's Information Clearinghouse	Media Campaign- **Does not mean that funding was appropriated**
Alabama					
Alaska	**No legislation**	**N/A**	**N/A**	**N/A**	**N/A**
Arizona					
Arkansas				X	
California	X				X
Colorado					
Connecticut					X
Delaware	X	X		X	X
Florida				X	X
Georgia					X
Hawaii	**H.B. 133**	**Vetoed by Governor**	**N/A**	**N/A**	**N/A**
Idaho					
Illinois	X		X		X
Indiana				X	
Iowa			X		X
Kansas					
Kentucky	X			X	X
Louisiana				X	
Maine					
Maryland					
Massachusetts	X				X
Michigan		X		X	X
Minnesota					
Mississippi					
Missouri		X		X	
Montana			X		X
Nebraska	**No legislation**	**N/A**	**N/A**	**N/A**	**N/A**
Nevada		X			
New Hampshire				X	
New Jersey				X	X
New Mexico					X
New York					X
North Carolina					X
North Dakota	X				
Ohio	X				X
Oklahoma				X	X
Oregon					X
Pennsylvania					
Rhode Island					X
South Carolina	X	X		X	
South Dakota					
Tennessee		X			X
Texas					
Utah	X		X	X	
Vermont					
Virginia					
Washington					X
West Virginia					
Wisconsin					
Wyoming				X	
District of Columbia	**No legislation**	**N/A**	**N/A**	**N/A**	**N/A**

Sources: About Adoption (2003). FTP: www.adoption.about.com/library/weekly/aa011700b.htm; Child Welfare League of America (2000). FTP: www.cwla.org.programs/pregprev/flocrittsafehaven.htm; National Conference of State Legislatures (2006). FTP: www.ncsl.org/programs/cyf/ABSL2001.htm; The Evan B. Donaldson Adoption Institute (2006). FTP: www.adoptioninstitute.org; Administration for Children & Families (2005). FTP: www.naic.acf.hhs.gov/general/legal/statutes/safehaven.cfm.

NEWBORN LIFELINE NETWORK

Newborn Lifeline Network Caller Questionnaire- Appendix C

(Reproduction from hard copy- electronic copy not available from NLN)

1. What city and state are you calling from?

2. How old are you?

3. How many months pregnant are you, or have you delivered your baby?

4. During your pregnancy, did you receive prenatal care?

5. Is the birthfather aware that you are (were) pregnant?

6. Are you dating, married, or separated from the birthfather?

7. Does any one else know about your pregnancy?

8. What type of services are you interested in learning about at this time- adoption, crisis pregnancy counseling, safe havens, or do you need to be connected with a hospital in your state?

*NLN staff- Describe all services offered to caller in their state.

9. What type of services would you like to be connected with at this time- adoption, crisis pregnancy counseling, safe havens, a hospital, or none at this time?

Appendix D- Frequencies of Biopsychosocial Variables, NLN Dataset

Biopsychosocial Variable	Frequency	Percent
State		
Wisconsin	8	27%
Washington	6	20%
Indiana	3	10%
Minnesota	2	7%
Oklahoma	2	7%
California	2	7%
Illinois	1	3%
Louisiana	1	3%
Maryland	1	3%
Michigan	1	3%
New Jersey	1	3%
New Mexico	1	3%
Ohio	1	3%
Disclose Pregnancy to Anyone		
Yes	24	85.7%
No	4	14.3%
Status with Birthfather		
No relationship	15	50%
Currently dating	13	42.9%
Married	2	7.1%
Birthfather Knows Pregnant		
Yes	13	44.8%
No	16	55.2%
Received Prenatal Care		
Yes	12	41.4%
No	17	58.6%
Trimester Pregnant		
1st	4	19%
2nd	4	19%
3rd	8	38.1%
Delivered by time of call	5	23.8%
Referral Requested Initially		
Safe haven	17	56.7%
Crisis pregnancy center	7	23.3%
Adoption services	5	16.7%
Emergency room	1	3.3%
Action Taken		
Safe haven	11	36.7%
Crisis pregnancy center	1	3.3%
Adoption services	5	16.7%
Emergency room	0	0.0%
Keep infant	2	6.7%
Take no action	11	36.7%

Appendix E- Frequencies of Biopsychosocial Variables, NCHS Linked Birth and Infant Death Dataset, 2000-2001

		Cause of Death			
		Neglect or abandonment Death		Death from Other Cause	
		Frequency	Percent	Frequency	Percent
Age Grouped of Mother	Under 15 years	3	2.3%	1	0.7%
	15-19 years	40	30.1%	19	14.1%
	20-24 years	36	27.1%	31	23.0%
	25-29 years	29	21.8%	42	31.1%
	30-34 years	12	9.0%	20	14.8%
	35-39 years	11	8.3%	16	11.9%
	40-44 years	2	1.5%	6	4.4%
	45-54 years	0	0.0%	0	0.0%
Mother's Education	Less than High School Grad	52	40.0%	44	34.6%
	High School Grad	54	41.5%	42	33.1%
	Some College or College Grad	24	18.5%	41	32.3%
Month Prenatal Care Began	1st Trimester	74	59.7%	103	81.7%
	2nd Trimester	26	21.0%	11	8.7%
	3rd Trimester	12	9.7%	3	2.4%
	No Prenatal Care	12	9.7%	9	7.1%
Marital Status of Mother	Married	44	33.1%	71	52.6%
	Not Married	89	66.9%	64	47.4%
Mother's Race/Ethnicity	Hispanic	22	16.8%	32	23.9%
	White	61	46.6%	56	41.8%
	Black	46	35.1%	38	28.4%
	Other	2	1.5%	8	6.0%
Age of Infant at Death	0-3 Months Old	52	39.1%	112	83.0%
	Over 3 Months Old	81	60.9%	23	17.0%
Father's Race/Ethnicity	Hispanic	14	17.3%	20	19.6%
	White	38	46.9%	47	46.1%
	Black	23	28.4%	29	28.4%
	Other	6	7.4%	6	5.9%
No Prenatal Care	No Prenatal Care	12	9.5%	9	7.1%
	Received Prenatal Care	114	90.5%	117	92.9%
Late or No Prenatal Care	Prenatal Care Within 1st Trimester	74	59.7%	103	81.7%
	Late or No Prenatal Care	50	40.3%	23	18.3%
Father's Age	Under 15 years	0	0.0%	0	0.0%
	15-19 years	8	10.1%	6	6.0%
	20-24 years	31	39.2%	20	20.0%
	25-29 years	20	25.3%	23	23.0%
	30-34 years	6	7.6%	30	30.0%
	35-39 years	11	13.9%	12	12.0%
	40-44 years	2	2.5%	4	4.0%
	45-49 years	0	0.0%	5	5.0%
	50-54 years	1	1.3%	0	0.0%
Year of Death	Death occurred in 2000	78	58.6%	113	83.7%
	Death occurred in 2001	55	41.4%	22	16.3%
Weight of Infant at Birth	Less than 2500 Grams	27	20.6%	91	68.4%
	Normal Birth weight-2500 Grams+	104	79.4%	42	31.6%