

Substance-Exposed Newborns in Arizona: An Analysis of Medically, Ethically,
and

Legally Appropriate Federal and State Responses

by

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ABSTRACT

Intake of alcohol, tobacco, and illicit substances such as marijuana and methamphetamine during pregnancy can have significant deleterious effects on a developing fetus and the resulting infant. The existence of substance-exposed newborns also has negative impacts on society as a whole; these include financial burdens placed on taxpayers and the additional time and resources required by health care professionals, social workers, and law enforcement authorities to properly care for such infants. Existing literature show a strong correlation between prenatal care and improved birth outcomes, including abstinence from or reduction of prenatal substance abuse. The Health Start Program in the state of Arizona attempts to mitigate the incidence of substance-exposed newborns, among other goals, by employing community health workers who identify high-risk pregnant and postpartum women, inform these women about how to receive prenatal care services, educate them on appropriate prenatal and neonatal care, and provide program and referral services to both pregnant and postpartum women. Community health workers interact directly with women most at-risk for prenatal substance abuse and should be well-versed in the understanding of the complex issues related to substance-exposed newborns. In an attempt to discover, analyze, and compile those complex issues with which community health workers should be knowledgeable, this project explores existing federal regulations regarding substance-exposed newborns, compares Arizona's regulations to Minnesota's, Virginia's, and Washington's, and analyzes prevailing literature in the field about the various implications associated with screening and reporting substance-exposed newborns to law enforcement authorities. After an intensive literature review, this

project concludes that the Health Start Program needs a comprehensive resource document which enumerates federal and select state policies, landmark cases involving substance-abusing pregnant women and the precedence set by each, and recommendations from medical and public health experts. The document should also provide clear guidelines by which each stakeholder should abide and why, and recommend potential best practices the state of Arizona could adopt into law based on other state policies which have proven to be effective.

This thesis is dedicated to my mother and father, both of whom have sacrificed tremendously for my sake. I am eternally grateful.

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Chapter 1: Introduction

Brief Overview

Prenatal intake of alcohol, tobacco, and illicit substances such as cocaine and methamphetamine pose significant threats to a fetus' well-being. Teratogenic effects that can result from prenatal exposure to such substances include, but are not limited to, spontaneous abortions, prematurity, low birth weight, delayed motor development, and a wide variety of structural defects such as microcephaly, spina bifida, and phocomelia. Adverse effects of prenatal substance abuse also go beyond physical deformities and can include neurobehavioral abnormalities and long-term outcomes such as an inclination to hyperactivity and delinquent behavior (Behnke and Smith 2013). The March of Dimes cites prenatal substance abuse as the leading preventable cause of mental, physical, and psychological difficulties in infants and children (Maier and West 2001).

The negative effects associated with substance-exposed newborns (henceforth referred to as SEN) are abundant and complex. Infants may be born with a range of physical and mental deficiencies caused by such exposure, many of which affect the infant for the rest of his/her life. For example, infants prenatally exposed to marijuana sometimes develop behavioral and developmental problems later on in life such as the inability to perform tasks that require long attention spans (Kuczkowski 2007). The birth of SEN also has profound effects on society at large; health care professionals must dedicate additional time and services to treating these infants and their mothers, and child protective services and law enforcement authorities must be wary of whether the infants' well-being are threatened to the point of taking legal action against the mother. Furthermore, the collective society

must bear the burden of funding the cost of treatment, hospitalization, and other publicly funded services needed by these infants and their mothers. One study which examined the neonatal costs of maternal cocaine use found that cocaine exposure increased an infant's hospital costs by \$2,610 and the length of hospital stay by four days. When the costs of the infant remaining in the hospital while waiting for social evaluation and foster care placement were included, hospital costs increased to \$4,876 and hospital stays increased to eleven days as compared to infants who were not prenatally exposed to cocaine. A similar study conducted by the US Government Accountability Office in 1990 found that the median charges for drug-exposed infants were anywhere from \$1,100 to \$4,100 higher than charges for infants who were not exposed to drugs (Phibbs, Bateman, and Schwartz 1991).

A recent review of twenty-seven studies regarding the prevalence rates of illegal drug exposure among pregnant women published or presented on or after 1980 estimated that each year, 739,200 women in the United States use one or more illegal substances while pregnant; 4.5% of these women use cocaine, 17.4% use marijuana, 3.0% use other illegal drugs other than cocaine, marijuana, and opiates, and 73% drink alcohol sometime during their pregnancy. An estimated 350,000 to 625,000 infants born each year are exposed to one or more such illegal substances (Gomby and Shiono 2014).

Literature demonstrates that early intervention and access to adequate preconception care, including counseling and education, is effective in reducing or eliminating negative behaviors during pregnancy such as abusing illicit substances, alcohol, and tobacco. The Health Start Program in the state of Arizona is one program which aims to mitigate the incidence of SEN by sending community health

workers out into the community to recruit and enroll at-risk pregnant and postpartum women. Community health workers inform clients about how to receive prenatal care services, educate clients on appropriate prenatal and neonatal care, and provide program and referral services, among other things (*Arizona Health Start Program Policy & Procedure Manual* 2010). Currently, the Health Start Program lacks resources which clearly outline existing federal and Arizona policies regarding SEN. Critical information on the medical, legal, and ethical complexities associated with screening for and reporting SEN to child welfare agencies and law enforcement authorities has also never been compiled and analyzed for these community health workers.

This project answers a number of questions regarding SEN nationally and in the state of Arizona for the purpose of discovering and compiling relevant knowledge needed by Health Start Program workers. First, the project explores whether, and what, specific national and state standards and regulations exist for identifying, screening, and reporting SEN. Arizona laws are then compared and contrasted to Minnesota's, Virginia's, and Washington's. The ethical, legal, and medical implications of screening for the detection of substance abuse, as well as those for reporting results to law enforcement officials, are also examined. Legal concepts of informed consent, search and seizure, confidentiality, and intent are examined for the legal chapter, with resources including relevant statutes, landmark cases, and legal opinions from peer-reviewed law journals. Evidence from leading legal and medical experts are provided in the examination of medical and ethical implications; research from select case studies in peer-reviewed reproductive health journals, official opinions released by various medical organizations, such as The American

College of Obstetricians and Gynecologists and The American Medical Association, *amici curiae* for cases such as *State v. Martinez*, and other landmark cases involving substance-abusing pregnant women are used to better understand the medical and ethical implications.

This exploratory study finds that the state of Arizona and the Health Start Program is in need of a comprehensive resource document in which health care professionals, child welfare administrators, and law enforcement authorities can refer to on the issues of identifying, screening, and reporting cases of SEN. Such a resource document should, as this study has, enumerate relevant federal and state laws regarding reporting substance-exposed newborns, and detail the medical, legal, and ethical complexities associated. Such a resource document should also provide possible best practices the state of Arizona could adopt based on other state policies which have proven to be efficient and effective, such as universal screening employed in Virginia and Washington.

Prevalence of Substance Abuse During Pregnancy and by Non-Pregnant Women of Childbearing Age

In 2011, the US Substance Abuse and Mental Health Services

Administration found that:

- 9.4% of pregnant women and 55.1% of non-pregnant women of childbearing age (age 15-44) reported alcohol use
- 17.6% of pregnant women and 25.4% of non-pregnant women of childbearing age reported tobacco use
- 5.0% of pregnant women and 10.8% of non-pregnant women of childbearing age reported using illicit drugs (*The Prevention of Substance-Exposed Pregnancies Collaborative Report 2013*) (*Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings 2013*)

In 2013, Arizona’s population consisted of 1,286,457 females of childbearing age (*Arizona Health Status and Vital Statistics 2013*). The number of non-pregnant women of childbearing age is significant for the purposes of preconception care, which identifies and improves behavioral and social risk factors that can impact infant mortality and morbidity, and includes education of the risks related to prenatal abuse of illicit substances and alcohol (Dean, Imam, Lassi, and Bhutta 2013). As explained by the American Congress of Obstetricians and Gynecologists (ACOG), “Because pregnancy intention and other behavioral health risks—including the use of alcohol, tobacco, and other drugs—occur across all socioeconomic groups, the target group for reproductive education must be all women of childbearing age” (*Guidelines for Perinatal Care 2012*). A recent review of 516 studies on preconception interventions and their efficacy found that preconception care led to a 3-fold increase in women quitting smoking before pregnancy. If preconception care has a similar impact on reducing or eliminating other harmful behaviors during pregnancy, then the significance of including all women of childbearing age, not just pregnant women, in statistics for consideration, cannot be ignored (Dean, Imam, Lassi, and Bhutta 2013).

Arizona Health Status and Vital Statistics 2013, which is comprised of mothers’ self-reported data on alcohol, tobacco, and illicit substance consumption during pregnancy, shows that out of 98,762 total pregnancies:

- 328 pregnant women in Arizona reported prenatal alcohol use
- 3,748 pregnant women in Arizona reported prenatal tobacco use
- 1,758 pregnant women in Arizona reported prenatal illicit drug use

Of the 98,762 total pregnancies, there were 84,963 total live births. The table below further categorizes these births by a variety of negative birth outcomes that may be attributable to prenatal substance or alcohol abuse.

Table 1

Rates of Occurrence for Selected Characteristics and Newborns and Mothers Giving Birth, Arizona 2013 (*Arizona Health Status and Vital Statistics 2013*)

Characteristics	Rates of Occurrence (per 100 live births)
Births with complications of labor and/or delivery reported	32.0
Births with medical risk factors reported	41.7
Preterm births (gestational age <37 weeks)	9.0
Births with abnormal conditions reported	9.1
Low birth weight births (<2,500 grams)	6.9
Very low birth weight births (<1,500 grams)	1.1
Births with congenital anomalies reported	0.7

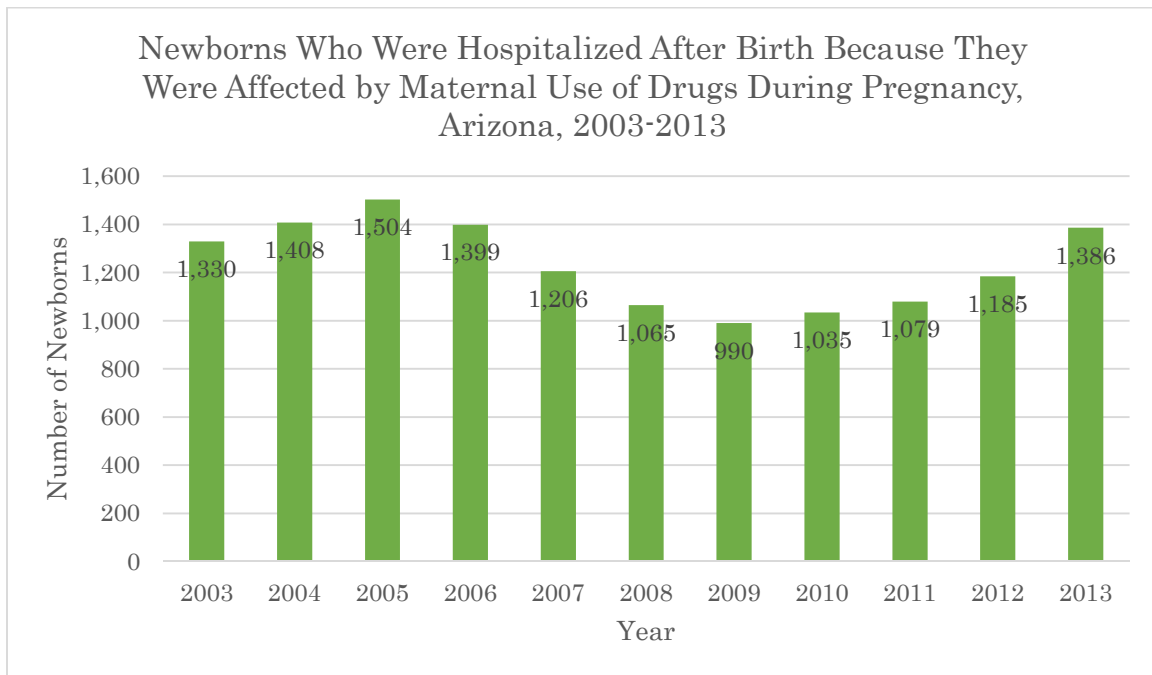
While no data exists to show which and how many of the problematic births listed resulted from prenatal intake of illicit substance, alcohol, and tobacco, a number of studies do show that birth outcomes such as preterm births and low birth weights are indeed attributable to a mother’s intake of illicit substances and alcohol. For example, one retrospective cohort study of 247 drug-using women and 741 controls from 1997-2000 found that women who abused cocaine, heroin, methadone, or any other addictive drug during pregnancy experienced a significantly higher proportion of preterm births and low birth weights. 25.9% of drug-abusing women

had preterm births and 30.8% had low birth weights as compared to 7.7% and 8%, respectively, for those who did not abuse drugs during pregnancy (Pinto, Dodd, Walkinshaw, Siney, Kakkar, and Mousa 2010).

Arizona Health Status and Vital Statistics clearly show that in 2013, of the 5,834 pregnant women who self-reported using either alcohol, illicit substances, or tobacco during pregnancy, 1,386 of all live births resulted in newborn hospitalization due to maternal drug use during pregnancy. As Figure 1 below demonstrates, the number of such newborns has steadily increased after four years of decline from 2005 to 2009, and the trend appears to continue moving upwards. In 2009, the rate of newborns hospitalized after birth due to maternal substance abuse was 10.7/1,000 live births, and in 2013, the rate increased to 16.3/1,000 live births, representing a 52.3% increase over four years.

Figure 1

Number of Newborns Hospitalized After Birth Due to Maternal Drug Use During Pregnancy (*Arizona Health Status and Vital Statistics 2013*)



Negative Impacts of Substance and Alcohol Use During Pregnancy

This increase in maternal substance and alcohol abuse during pregnancy is problematic for a number of reasons, first and foremost being the potential physical harms placed on the conceptus and the newborn. During the embryonic stage when major organs are in the process of developing, drugs can have impactful teratogenic effects such as cleft lip and palate, intrauterine growth retardation, spina bifida, anencephaly, cerebral hemorrhage, cardiac anomalies, and biliary atresia (Kuczkowski 2007). During the fetal stage of development, illicit substances and alcohol more subtly affect the fetus with potential abnormal growths and alterations in neurotransmitters and receptors.

Furthermore, not only do illicit substances and alcohol affect development within the womb, but they sometimes have a negative lasting effect well beyond the infant's early years of life as well. Studies show that maternal alcohol abuse is linked to lower IQ scores, poor language development and use, and attention problems later on in the child's life such as delinquent, criminal behavior, impulsivity, and substance abuse. Similarly, prenatal intake of cocaine can have long-term effects on the child in the form of poor alertness and orientation, and opiates are linked with hyperactivity, short attention spans, and memory and perception problems (Behnke and Smith 2013). Marijuana's active ingredient, THC, crosses the placental barrier freely and directly affects the fetus by potentially causing deficits in problem-solving skills which require attention and visual memory (Kuczkowski 2007) (Behnke and Smith 2013). Table 2 below summarizes the numerous short and long-term effects various drugs can have on an infant.

Table 2

Summary of Negative Effects of Prenatal Drug Exposure (*Arizona Health Status and Vital Statistics 2013*)

	Nicotine	Alcohol	Marijuana	Opiates	Cocaine	Methamphetamine
Short-term effects/birth outcomes						
Fetal growth	Effect	Strong effect	No effect	Effect	Effect	Effect
Anomalies	No consensus on effect	Strong effect	No effect	No effect	No effect	No effect
Withdrawal	No effect	No effect	No effect	Strong effect	No effect	❖
Neurobehavior	Effect	Effect	Effect	Effect	Effect	Effect
Long-term effects						
Growth	No consensus on effect	Strong effect	No effect	No effect	No consensus on effect	❖
Behavior	Effect	Strong effect	Effect	Effect	Effect	❖
Cognition	Effect	Strong effect	Effect	No consensus on effect	Effect	❖
Language	Effect	Effect	No effect	❖	Effect	❖
Achievement	Effect	Strong effect	Effect	❖	No consensus on effect	❖

❖ Limited or no data available

Maternal intake of illicit substances and alcohol, in addition to the direct negative short and long-term impacts it might have on the developing fetus and newborn, can also cause harm by complicating labor and delivery. Research shows that in 2002, maternal complications were the third leading cause of infant death after congenital anomalies and low birth weight/preterm labor (Atrash, Johnson, Adams, Cordero, and Howse 2006). Cocaine, for example, can lead to an increased risk for placental abruption (Kuczkowski 2007). Other maternal complications include miscarriage and stillbirth (Atrash, Johnson, Adams, Cordero, and Howse 2006). Furthermore, women who abuse illicit drugs and alcohol are at an increased risk for poverty, lack of stable housing, co-occurring health disorders, poor nutrition, sexually transmitted infections, domestic violence, and urinary tract infections, all of which may also harm the fetus (Pinto, Dodd, Walkinshaw, Siney, Kakkar, and Mousa 2010) (“Perinatal Substance Use Statistics and Funding”).

Proven Efficacy of Public Health Interventions

Existing literature shows that pregnant women who receive early, comprehensive prenatal care starting in the first trimester achieve better birth outcomes (Young, Gardner, Otero, Dennis, Earle, and Amatetti 2009). While prenatal care is comprised of many pieces, the three core tenants of prenatal care are defined as “early and continuing risk assessment, health promotion, and medical and psychosocial interventions and follow-up,” all of which aim to improve birth outcomes (Fiscella 1995). Prenatal care seeks to improve the following birth outcomes: reduced infant mortality (the number of infant deaths in the first year of life per 1,000 live births); reduced neonatal mortality (number of infant deaths in

the first twenty-eight days of life per 1,000 live births); reduced perinatal mortality (sum of fetal deaths of at least twenty weeks' gestation and neonatal deaths from birth to twenty-seven days of age); reduced rates of low birth weight (infant born weighing <2,500 grams); reduced rates of very low birth weight (infant born weighing <1,500 grams), and; reduced preterm birth rates (the number of infants born before 37 weeks' gestation per 1,000 live births). Low birth weights and very low birth weights are the leading determinant of infant mortality and the leading cause of childhood morbidity.

Aside from the obvious benefit of improved birth outcomes, prenatal care also benefits society as a whole financially; one study estimated that for every dollar spent on prenatal care, \$3.38 is saved on medical care costs for low birth weight infants (Fiscella 1995). It is estimated that each low birth weight birth costs \$15,000 in newborn intensive care unit stays and services, rehospitalization, and long-term morbidity. Another study of all infants delivered at Harlem Hospital in New York City, New York between 1985 and 1986 found that the length of hospital stay needed for infants whose mothers received any level of prenatal care was, on average, 9.9 days shorter than infants whose mothers did not receive any prenatal care. Furthermore, having received any level of prenatal care led to a cost reduction of between \$4,300 and \$5,000 (Phibbs, Bateman, and Schwartz 1991). Studies show that early and adequate prenatal care can prevent low birth weight, thereby reducing rates of infant mortality and childhood morbidity, as well as reducing financial costs (Gorsky and Colby, Jr. 1989).

Due to the strong correlation between early and adequate prenatal care and improved birth outcomes, early entry into prenatal care has been monitored

nationally since 1998 and is a target of improvement for Healthy People 2020, which “provides science-based, ten-year national objectives for improving the health of all Americans” (Young, Gardner, Otero, Dennis, Earle, and Amatetti 2009) (“Healthy People 2020”). On December 2, 2010, Healthy People launched Healthy People 2020, with Maternal, Infant, and Child Health Objective 10 as “Increase the proportion of pregnant women who receive early and adequate prenatal care” (“Healthy People 2020”). In terms of frequency of office visits, the American Congress of Obstetricians and Gynecologists (ACOG) defines adequate prenatal care as an initial visit at 8-10 weeks of pregnancy, a visit every four weeks for the first twenty-eight weeks, a visit every two to three weeks until thirty-six weeks gestation, and a visit every week after thirty-six weeks gestation (*Guidelines to Perinatal Care* 2012).

In 2013, roughly 17,000 women (20% of all women giving birth in Arizona), received prenatal care after the 1st trimester, when start of prenatal care is most effective, or did not receive prenatal care at all (*Arizona Health Status and Vital Statistics* 2013)

Table 3

Trimester in Which Arizona Women Began Prenatal Care (*Arizona Health Status and Vital Statistics 2013*)

Start of Prenatal Care	Rate of Occurrence
Women giving birth who received prenatal care in the 1st trimester	81.3
Women giving birth who received prenatal care in the 2nd trimester	13.5
Women giving birth who received prenatal care in the 3rd trimester	3.6
Women who did not receive any prenatal care	1.4

Table 4 below shows Arizona’s recent progress towards select Healthy People 2020 objectives regarding infant mortality, infant morbidity, early start of prenatal care, and maternal behavior. The data show that Arizona is well on or above target for all of the selected Healthy People 2020 objectives; this may indicate that Arizona’s efforts to reduce rates of infant mortality and morbidity, reduce risky maternal behaviors, and increase rates of women who receive prenatal care during the first trimester, have been effective. Programs such as Health Start which seek to educate women on risky behaviors and increase early prenatal care may be partially responsible for Arizona’s success in terms of meeting or exceeding Healthy People 2020’s objectives thus far.

Table 4

Monitoring Progress Toward Arizona and Selected Healthy People 2020 Objectives:

Statewide Trends (*Arizona Health Status and Vital Statistics 2013*)

Focus areas and selected objectives (in parentheses are Healthy People 2020 objective numbers)	Baseline for the US/AZ	Arizona Rates, Ratios or Cases by Year:			US/AZ 2020 Target
		2011	2012	2013	
Reduce fetal deaths at 20 or more weeks of gestation	6.2	5.5	5.5	6.4	5.6
Reduce fetal and infant deaths during perinatal period	6.6	5.4	5.7	5.7	5.9
Reduce infant deaths	6.7	5.9	5.8	5.3	6.0
Reduce neonatal deaths	4.5	3.9	3.9	3.4	4.1
Reduce postnatal deaths	2.2	2.0	1.9	1.9	2.0

Reduce infant deaths due to birth defects	1.4	1.3	1.4	1.2	1.3
Reduce sudden infant death syndrome (SIDS)	0.55	0.3	0.1	0.2	0.50
Increase the proportion of pregnant women who receive prenatal care in the first trimester	70.8%	81.7%	82.6%	81.3%	77.9%
Reduce low birth weight	8.2%	7.0%	6.9%	6.9%	7.8%
Reduce very low birth weight	1.5%	1.2%	1.2%	1.1%	1.4%
Reduce preterm births	12.7%	9.3%	9.2%	9.0%	11.4%
Increase abstinence from cigarette smoking among pregnant women	89.6%	95.7%	95.8%	95.6%	98.6%

Notes: Fetal and perinatal death rates include only spontaneous fetal losses and exclude induced abortions. The fetal death rate is 1,000 live births plus spontaneous

fetal losses of 20 or more weeks of gestation. The perinatal death rate is 1,000 live births plus spontaneous fetal losses of 28 or more weeks of gestation. Infant, neonatal and postnatal deaths are measured per 1,000 live births. Infant deaths due to birth defects, congenital birth defects and SIDS are measured per 1,000 live births. All other proportions and ratios are measured per 100 live births.

Table 4 demonstrates that Arizona is well on or above target in meeting Healthy People 2020's nationwide objectives, and in combination with other public health interventions launched by the state of Arizona, the Health Start Program has played a role in helping improve these birth outcomes. The Health Start Program is unique for its use of community health workers, which interact directly with at-risk pregnant and postpartum women. Community health workers are lay workers and are not required to have any post-high school education, which suggests that not all may have a skill set in early childhood education, social work, nursing, or any other similar field which provides additional knowledge on the intricacies related to the needs of at-risk pregnant and postpartum women in high-need communities (*Arizona Health Start Program Policy & Procedure Manual 2010*). This project seeks to explore, analyze, and compile legal, ethical, and medical information relevant to Health Start Program workers in the event that they encounter a SEN or suspect a pregnant woman of abusing illicit substances, alcohol, or tobacco.

Health Start Program in the Arizona Department of Health Services
In 1990, Arizona ranked 45th in the nation for the number of women receiving adequate prenatal care. In an attempt to increase access to prenatal care, the state

of Arizona created the Health Start Program in 1992 to address the needs of pregnant/postpartum women and their infants. The program's mission is to address health, environmental, and stress factors that can impact birth outcomes and infant development by sending community health workers to women's homes. Pregnant and postpartum women with at least one of the following risk factors are eligible for Health Start:

- Anemia
- Sickle cell disease
- Kidney disease
- Diabetes
- Heart problems
- High blood pressure
- Vaginal bleeding
- HIV/AIDS or other sexually transmitted disease
- Previous low birth weight
- Previous preterm birth/labor
- Previous miscarriage
- Previous birth complications
- Current multiple birth
- Maternal age less than 19 years or greater than 35 years
- Tobacco use, alcohol use, and/or substance use
- Domestic violence
- No access to regular medical care
- Chronic debilitating illness
- Depression
- Lack of social/family support
- Less than high-school education
- Lack of basic needs
- Low birth weight
- Preterm birth
- Genetic abnormality
- Substance exposure during pregnancy

Community health workers paid by the Arizona Department of Health Services provide education, support, and advocacy services, as well as referral to other services as needed.

Community health workers represent the ethnic, cultural, and socioeconomic makeup of the neighborhoods they serve and work to identify pregnant women and

postpartum women who can be enrolled in the program, inform clients about how to receive prenatal care services, educate clients on appropriate prenatal and neonatal care, and provide program and referral services, among other things. Each site contractor designs and implements their own outreach and recruitment system to reach eligible pregnant and postpartum women residing in their targeted service area program site. Potential clients may elect to enroll after hearing about the program directly from a community health worker in the home or in a community or group setting. Community health workers also follow families for up to two years after birth and provide services such as education on normal child development and parenting skills as needed. As defined by the State Statute 36-697, the program's overall goals are to:

1. Increase prenatal care services to pregnant women
2. Reduce the incidence of infants who at birth weigh less than one thousand five hundred grams (1,500 grams, 3 lbs. 4 oz.) and who require more than 72 hours of neonatal intensive care
3. Reduce the incidence of children affected by childhood diseases
4. Increase the number of children receiving age appropriate immunizations by two years of age
5. Increase awareness by educating families:
 - On the importance of good nutritional habits to improve the overall health of their children
 - On the need for developmental assessments to promote the early identification of learning disabilities, physical handicaps or behavioral health needs
 - Of the benefits of preventative health care and the need for screening examinations such as hearing and vision

In 2011, forty-three community health workers enrolled 3,770 women in the Health Start Program and completed 12,478 visits.

While the Arizona Department of Health Services is the state agency responsible for ensuring that program goals are met and expenditures accounted for, as well as providing the criteria, policies, and requirements for developing and

implementing the Health Start Program in a neighborhood, the local public and private agencies (contractors) are responsible for recruiting, training, and managing the community health workers at the ground level.

Each contractor is responsible for establishing its own criteria for selecting community health workers. At minimum, community health workers must have a high school diploma or equivalent, be fluent in written and oral English, and preferably be bilingual in the non-English language that is prevalent in the site in which they will work. Each contractor also establishes requirements and protocols for conducting background checks on potential community health workers. The requirements and protocols established by each contractor varies by the unique socioeconomic, cultural, and health needs of the community which each contractor serves (*Arizona Health Start Program Policy & Procedure Manual 2010*).

Lack of Literature for Community Health Workers

In 2003, Congress enacted the Keeping Children and Families Safe Act, which required states to have policies and procedures to notify child protective services of SEN and to establish a plan of safe care for newborns per the Child Abuse Prevention and Treatment Act (CAPTA) (*The Child Abuse Prevention and Treatment Act As Amended by The Keeping Children and Families Safe Act of 2003*).

Under the direction of then-Governor Janet Napolitano, Arizona's Substance-Exposed Newborn Committee created and published *Guidelines for Identifying Substance-Exposed Newborns* for identifying SEN in 2005 in accordance to CAPTA's requirement (*Guidelines for Identifying Substance-Exposed Newborns 2008*). The

thirteen-page guideline outlines how health care professionals within the state of Arizona should identify SEN, standardize guidelines for maternal and neonatal screening, and improve the health and well-being for women and their at-risk newborns. The guide includes maternal screening criteria, neonatal screening criteria, and a brief discussion on the legal, ethical, and medical implications of reporting suspected substance abuse (U.S. Department of Health and Human Services, Children's Bureau).

Within ninety days of employment in the Health Start Program, community health workers are trained on eleven Core Training topics: Program Overview, Emotional Support, Pregnancy and Prenatal Care, Nutrition, Labor and Delivery, New Mother, Well-Woman Care, Infant and Child Development, Families with Special Needs, Elements of Case Management, and Safety. Each core topic has anywhere from four to eight subtopics. Substance abuse is listed as the sixth and last subtopic under "Families with Special Needs."

Aside from any literature provided during their Core Training, *Guidelines for Identifying Substance-Exposed Newborns* is the most comprehensive piece of literature which specifically addresses the issue of substance-abusing pregnant women and SEN (*Arizona Health Start Program Policy & Procedure Manual* 2010).

The current thirteen-page guideline is extremely broad in scope and merely recommends that health care professionals be aware of relevant state and local legislation regarding mandatory reporting of illegal drug detection in pregnant women and infants. The guideline does not provide the exact legislation that health care professionals should be aware of, nor does it provide detailed ethical, legal, or medical context on the issue at a national level.

It is essential that community health workers are aware of the complex and overlapping ethical, legal, and medical issues associated with screening for and reporting SEN; such awareness is necessary to appropriately respond to encounters with SEN. Currently, there is a lack of analyses in regards to existing state and federal policies which dictate how health care professionals, social workers, and law enforcement authorities must respond to SEN. There is also a lack of analyses in regards to what ethical, legal, and medical implications exist in screening for and reporting SEN. An intensive study of these issues is required to determine possible best practices and next steps.

Need for Analysis of Policies and Implications

This project examines relevant state and federal policies in regards to discovering, screening, and reporting SEN. The project also analyzes legal, ethical, and medical implications associated with such actions for the purpose of providing vital background information to community health workers in Arizona's Health Start program. Since the Health Start program deals directly with at-risk infants and mothers at risk for substance abuse who most often come from disadvantaged circumstances and according to research are therefore statistically more likely to be prenatally exposed to drugs, alcohol, or illicit substances, the program should have more extensive resources, tailored specifically to the program's structure and needs, on the issues of identifying, screening, and reporting SEN (Gortmaker and Wise 1997).

This project analyzes the relationship between federal policies and state policies, as well as compares and contrasts Arizona's protocols for identifying,

screening, and reporting SEN to Minnesota, Virginia, and Washington. Minnesota, Virginia, and Washington were chosen for comparison to Arizona due to the ability to compare two samples of each state policy initiatives on intervention at the time of birth. Additionally, the project explores the legal, ethical, and medical implications of screening and reporting such cases to law enforcement authorities.

After an extensive analysis, this project found a need for the Arizona Department of Health Services to develop a comprehensive resource document in which health care professionals, child welfare administrators, and law enforcement authorities can refer to on the issues of identifying, screening, and reporting cases of SEN. Such a resource document should contain the following: 1) relevant federal and state laws regarding reporting SEN; 2) medical, legal, and ethical implications of screening for and reporting SEN; 3) clear guidelines by which each stakeholder must abide when encountering a SEN, including detailed explanation explaining why such actions must be taken (whether in accordance with the law or based on recommendations from leading medical and ethical experts), and; 4) possible best practices the state of Arizona could adopt based on other state policies which have proven to be efficient and effective, such as universal screening.

Chapter 2: National Policies

Prior to 2003, no federal policy regarding the issue of how health officials should best handle cases of SEN existed. On February 11, 2003, the Keeping Children and Families Safe Act of 2003 (KCFS), sponsored by New Hampshire Senator Judd Gregg, was introduced. Enacted on June 25, 2003, the act reauthorized the Adoption Opportunities Act, the Abandoned Infants Assistance Act,

the Family Violence Prevention and Services Act, and the Child Abuse Prevention and Treatment Act (CAPTA) (*The Child Abuse Prevention and Treatment Act As Amended by The Keeping Children and Families Safe Act of 2003*).

The Child Abuse Prevention and Treatment Act (CAPTA)

First signed into law in 1974, CAPTA serves as the key federal legislation addressing child abuse and neglect. Congress reauthorized CAPTA in 1978, 1984, 1988, 1992, 1996, 2003, and most recently, 2010. For the purposes of this thesis, however, only its 2003 reauthorization is discussed.

CAPTA's reauthorization by KCFS in 2003 totaled \$200 million for fiscal year 2004 with "such sums as necessary" for fiscal years 2005-2008. Among other things, one of KCFS' key amendment to CAPTA mandated that states create "Policies and procedures to address the needs of infants born and identified as being affected by prenatal drug exposure" in order to be eligible for CAPTA grants, which go towards states' child protective service systems. By mandating that states create such policies, CAPTA became the first federal legislation to address SEN (U.S. Department of Health and Human Services, Children's Bureau).

More specifically, CAPTA required that states create:

"Policies and procedures (including appropriate referrals to child protection service systems and other appropriate services) to address the needs of infants born and identified as affected by illegal substance abuse or withdrawal symptoms resulting from prenatal drug exposure, including a requirement that health care providers involved in the delivery or care of such infants notify the child protective services system of the occurrence of such condition in such infants, except that such notification shall not be construed to--

(I) establish a definition under Federal law of what constitutes child abuse; or
(II) require prosecution for any illegal action" (*The Child Abuse Prevention and Treatment Act As Amended by The Keeping Children and Families Safe Act of 2003*)

By July 2004, states had to have such protocols in place for CAPTA grant eligibility. The extent of federal oversight on these protocols, however, is unclear. Furthermore, there are no federal policies in place on how to identify SEN and states are granted discretion on such practices (Drescher-Burke and Price 2005). While CAPTA provides states with guidance on the issue of SEN, it does not establish a definition of child abuse or neglect, nor does it suggest or require legal action to be taken to prosecute substance-abusing pregnant women. CAPTA also does not provide recommendations on the identification of SEN or how to best, if at all, intervene when a SEN is identified (*Substance Exposed Infants: Noteworthy Policies & Practices 2006*).

State Variation

Due to the lack of federal regulation, state policies on the identification, screening, and reporting of SEN vary widely. As of July 2012, nineteen states and the District of Columbia had reporting procedures for SEN, and twelve states and the District of Columbia included this exposure in their definitions of child abuse or neglect.

An example of a variation between state policies is mandatory screening at the prenatal stage. Screening tools are questionnaires physicians use to determine whether a patient may be at risk for a substance abuse problem and to refer patients to resources such as a more comprehensive evaluation. A variety of screening tools exist, the most popular being Audit, the BNI-ART Institute Intervention Algorithm, the 4Ps, the National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Questionnaire, T-ACE, TWEAK, and the Ten-Question Drinking History (TQDH) (“At Risk Drinking and Illicit Drug Use: Ethical Issues in Obstetric and Gynecologic Practice”) (Morse, Geshan, and Hutchins 1997).

Minnesota, Iowa, Kentucky, North Dakota, and Virginia require health practitioners to administer toxicology tests to the mother if they suspect prenatal use of illicit substances. However, hospitals, clinics, and health centers are the institutions that truly determine post-delivery testing and screening policies and procedures. This further complicates the inconsistent policies across states. Advocates of universal screening state that the practice eliminates bias and increases accurate identification prenatal abuse (Drescher-Burke and Price 2005). In a 2005 study, more than 7,800 women were screened for substance use in one of five selected prenatal care clinics, and 32.7% had a positive screen. Advocates of universal screening may argue that such success in identifying prenatal abuse demonstrates the need for mandatory screening by all hospitals, clinics, and health centers (Young, Gardner, Otero, Dennis, Earle, and Amatetti 2009). Opponents of universal screening, however, argue that the practice places unnecessary burdens on health practitioners by effectively requiring they act both as state authorities and health professionals, may deter women from receiving prenatal care, and is too costly (Drescher-Burke and Price 2005).

In 2005-2006, the National Center on Substance Abuse and Child Welfare performed a preliminary survey of all fifty states and the District of Columbia and found that thirty-nine states had legislation, policies, or programs in place that addressed at least one of the five designated intervention points: 1) pre-pregnancy

interventions; 2) prenatal interventions; 3) identification at birth; 4) immediate postnatal interventions, and; 5) postnatal services to children and their parents.

Of those thirty-nine states, the researchers chose ten states (California, Hawaii, Illinois, Maryland, Massachusetts, Minnesota, Rhode Island, South Carolina, Virginia, and Washington) for an extensive analysis of policies regarding prenatal exposure to illicit substances and alcohol. The study's purpose was to determine how states responded to CAPTA, how policies between each state differed, and how responsibilities are disseminated and carried out by departments and agencies in each state. The review found that although each of the ten states had policies in place that addressed at least one of the aforementioned five intervention points, practices varied significantly. None of the states required prenatal screening, seven states defined prenatal exposure to illicit substances as child abuse or neglect, and only two had strong links between the Individuals with Disabilities Act and CPS agencies. The study also found a lack of uniformity in child welfare assessments used by each state, a lack of up-to-date statistics for each state's SEN prevalence, and a need for better coordination and interagency collaboration between the five aforementioned points of intervention (Young, Gardner, Otero, Dennis, Earle, and Amatetti 2009).

A study conducted by the Office of the Inspector General in 1990 which reviewed child welfare laws for all fifty states and the District of Columbia, in addition to an in-depth review of twelve states (including Minnesota, which is used in this project), found results similar to Young, Gardner, Otero, Dennis, Earle, and Amatetti's. The study found that laws have little actual effect on hospital testing practices and welfare agencies' willingness to receive reports of SEN, which is

echoed in the more recent review of state policies; this demonstrates that over the course of two decades, not much has changed in terms of federal and state policies regarding SEN (U.S. Department of Health and Human Services, Office of the Inspector General).

The Individuals with Disabilities Improvement Act of 2004 (IDEA 2004)

Another federal policy which has yet to be thoroughly examined for its effect on state policies regarding the identification, screening, and reporting of SEN is The Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). Signed into law by President George W. Bush on December 3, 2004, the law mandates “equity, accountability and excellence in education for children with disabilities” (*Individuals With Disabilities Education Improvement Act*).

On September 6, 2011, the US Department of Education announced Part C of IDEA 2004. Part C serves as the early intervention portion of the act and is intended to help improve services and outcomes for children from birth up to the age of two years. Part C is a \$436 million program which serves infants and toddlers through age two with developmental delays or who have been diagnosed with physical or mental conditions with high probabilities of resulting in developmental delays.

Per Part C Section 637 subsection (6)(b) of IDEA 2004, states which hope to receive a grant under Section 663 of IDEA 2004 must submit an application to the Secretary which includes “a description of the State policies and procedures that require the referral for early intervention services under this part of a child under the age of 3 who is identified as affected by illegal substance abuse, or withdrawal

symptoms resulting from prenatal drug exposure” (*Individuals With Disabilities Education Improvement Act*).

The National Center on Substance Abuse and Child Welfare’s 2005-2006 study of state policies found that only a few states require a developmental assessment under IDEA. This lack of uniformity in child welfare-referred developmental assessments makes it difficult to assess states’ status in the provision and impact of immediate postnatal services (Young, Gardner, Otero, Dennis, Earle, and Amatetti 2009).

In conclusion, there is a strong lack of federal policies regarding SEN. CAPTA’s 2003 reauthorization and requirement that states create policies and procedures to address SEN in order to receive grants is the most direct addressing of SEN on a nationwide level. Other federal policies mentioned such as IDEA 2004 are merely supplementary to CAPTA 2003 and do not mandate specific actions from states.

Chapter 3: State Policies

As previously mentioned, per CAPTA’s 2003 reauthorization, nineteen states and the District of Columbia have procedures for handling SEN in place as of 2012. For the scope and purpose of this thesis, however, Arizona’s procedures will be compared to Minnesota, Virginia, and Washington’s. This selection of states allows for the examination and analysis of two samples of each state policy initiatives on intervention at the time of birth (see table below).

Table 5

Summary of State Policy Initiatives on Intervention at the Time of Birth, 2007

(Young, Gardner, Otero, Dennis, Earle, and Amatetti 2009)

	Maternal and/or Newborn Drug Testing Policy	Hospital and/or State Protocols to Handle Newborn Exposure	Prenatal Exposure Defined as Abuse/Neglect	Reporting Requirements	Screening and Referral Policies
Arizona			X	X	
Minnesota			X	X	
Virginia		X	X	X	X
Washington		X			X

Arizona

In 2013, there were 98,762 total pregnancies in the state of Arizona. Of these, 328 women reported prenatal alcohol use, 3,748 reported prenatal tobacco use, and 1,758 reported prenatal illicit drug use.

While Minnesota, Virginia, and Washington all have a number of state-distributed brochures and guidelines available to both pregnant women and health care providers, Arizona only offers one piece of literature on the topic of SEN: *Guidelines for Identifying Substance-Exposed Newborns*. Under former governor Janet Napolitano’s direction, an interdisciplinary team of medical and public health professionals, hospital social services departments, and CPS worked together to create *Guidelines* per CAPTA’s requirement.

Per Arizona Revised Statutes (A.R.S.) § 13-3620, health care professionals who suspect that a pregnant woman is abusing illicit substances or suspects a SEN must report the case to the Arizona Department of Child Safety (DCS) (*Guidelines for Identifying Substance-Exposed Newborns* 2005). Arizona is one of only twelve

states to have enacted specific reporting procedures for SEN. In general, these policies make drug exposure, or a positive drug test alone, the basis for reporting (“Neonatal & Newborn Substance Exposure”).

Any infant prenatally exposed to a drug or substance as defined in § 13-3401 in which the mother was not prescribed is defined as neglected per A.R.S. § 8-201.22(c) & (d). Arizona does not utilize universal screening and newborn toxicology screens are performed only if results will “influence medical care for mother and newborn, and/or to confirm maternal pattern of drug use.” The *Guidelines* discourage a punitive approach (*Guidelines for Identifying Substance-Exposed Newborns* 2005).

The guidelines recommend that a pregnant woman be tested and referred for further assessment only if she exhibits one or more of the below maternal risk indicators:

- History of substance abuse, history of previous delivery of SEN
- Non-compliance to prenatal care
- Evidence of unexplained poor weight gain during pregnancy
- Medical non-compliance
- Medical symptoms of withdrawal in mother
- Signs of substance use/abuse
- Maternal history of Hepatitis B, Hepatitis C, HIV, or two or more STDs
- Previous or current history of placental abruption or unexplained vaginal bleeding
- Cardiovascular accident of mother
- Pre-term labor in association with substance use or abuse (*Guidelines for Identifying Substance-Exposed Newborns* 2005)

Similarly, the guidelines only recommend newborn testing and referral to social services if one or more of the below newborn risk indicators are present:

- Unexplained apnea
- Signs of neonatal abstinence syndrome
- Microcephaly
- Birth weight is below the 5th percentile

- Cerebral vascular accident in newborn
- Other vascular accident
- Necrotizing enterocolitis
- Positive maternal drug screen (*Guidelines for Identifying Substance-Exposed Newborns 2005*)

Per Arizona Revised Statutes § 8-201.22(c) & (d), if an infant is reported to the DCS, hotline specialists will utilize standardized SEN interview questions and medical neglect interview questions the individual who made the report and make a thorough assessment of the infant's needs. The specialist also assigns a high risk neglect allegation, as well as the substance abuse tracking characteristic. If a SEN allegation is made, but the child dies shortly after the birth, a DCS report must still be made (*Guidelines for Identifying Substance-Exposed Newborns 2005*).

If a SEN is found to be at risk for abuse or neglect, he/she may be taken into temporary custody by a peace officer or DCS worker to protect the child from imminent abuse or neglect. However, it is encouraged that the peace officer or DCS worker consider alternatives and services available such as the provision of day care, a parent aid, medical and psychological examinations and evaluations, and shelter care to prevent or eliminate the need for removal of the child (*Guidelines for Identifying Substance-Exposed Newborns 2005*).

Minnesota

In 2013, there were 69,183 live births in the State of Minnesota (*2013 Minnesota Health Statistics Annual Summary*). In Minnesota, congenital anomalies were the leading cause of infant death and accounted for 27.6% of all infant deaths from 2001-2005. Complications resulting from prematurity were the second leading cause of death, accounting for 17.5% of all infant deaths during the same years.

Similarly to Arizona, the data does not indicate how many of these were due to prenatal intake of illicit substances, tobacco, and alcohol. It must be noted, however, that as of 2009, Minnesota's overall infant mortality rate was the lowest in the nation (*Disparities in Infant Mortality*).

First enacted in August 1989, Minnesota Statutes § 626.5561-626.5562 amended the Mandatory Reporting Act to facilitate early identification and provision of voluntary services to drug abusing pregnant women. The amendment responded to the prevalence of SEN by rejecting calls for the prosecution of substance-abusing pregnant women and instead emphasizing the importance of early intervention. The amendment emphasized intervention by mandating reports of SEN to local welfare agencies, requiring an investigation and assessment, providing women with prenatal care and drug treatment services, and providing welfare agencies with the option of civilly committing these women (Steven and Ahlstrom 1991). Civil commitment is the obtainment of a court order to place an individual with a mental illness into treatment when they are unable or unwilling to seek treatment voluntarily (*Understanding the Minnesota Civil Commitment Process*). Minnesota has provided civil commitment of individuals suffering from inebriety since 1917, however, Minnesota Statute 253B.02 subd. 2 amended the law in 1976 to define a "chemically-dependent person" as one who is incapable of self-management. Recent legislation further amended civil commitment laws to include pregnant women who habitually or excessively use substances during pregnancy (*Children's Protective Services: Social Services Manual 2000*).

Minnesota Statute § 626.5561 mandates that health care and social service professionals are required to report suspicion that a pregnant woman is abusing a

controlled substance to a local welfare agency. It is up to each hospital, however, to create protocols to guide physicians on when it is appropriate to administer tests. The local welfare agency must then perform an immediate assessment and if appropriate, refer the woman to prenatal care or drug treatment. If the woman is non-compliant, the local welfare agency must seek an emergency civil commitment of the woman for chemical dependency.

Per Minnesota Statute § 626.556, subd. 2 (f) (6), an infant who has been prenatally exposed to a non-prescribed controlled substance used by the mother is defined as medically neglected. This neglect is evidenced by:

1. Withdrawal symptoms of child at birth
2. Positive toxicology screen on mother
3. Positive toxicology screen on infant
4. Medical effects or developmental delays during first year of life
5. Presence of fetal alcohol spectrum disorder

Per Minnesota Statute § 253B.02, subd. 2, the following substances and their derivatives are considered controlled substances: opium, cocaine, heroin, phencyclidine, methamphetamine, amphetamine, tetrahydrocannabinol, or alcohol.

Physicians who suspect that a pregnant woman has ingested a controlled substance must administer a toxicology test within eight hours of delivery to determine whether evidence of such an action exists. A toxicology test should only be administered to a newborn if there is evidence of exposure. If a toxicology test is administered to a woman within eight hours of delivery or within the infant's first month of life, the physician is immune from liability if the test was performed in good faith. The term "good faith" is used in Minnesota Statute § 626.556, subd. 4 titled "Immunity from liability," though the statute does not specifically define what is required for an action to be considered as performed in good faith.

If the toxicology test returns positive, the physician must report to the local welfare agency. By separately categorizing reports during pregnancy so they only go to social services and not law enforcement, Minnesota's statutes encourage treatment for the woman and her infant rather than fostering a punitive environment. Furthermore, Minnesota law does not allow for prosecution based solely on drug use during pregnancy, thereby making referral to appropriate treatment services the main focus of any testing for drug use during pregnancy services (Steven and Ahlstrom 1991).

Although Minnesota state law requires that any suspicion of a SEN be reported, in practice, data show that hospitals ultimately determine testing practices. An in-depth 1990 review of child welfare laws by the Office of the Inspector General in twelve states, including Minnesota, found that of the four Minnesota hospitals contacted, practices varied widely (U.S. Department of Health and Human Services, Office of the Inspector General).

Virginia

Out of 129,787 pregnancies in the state of Virginia in 2012, there were 102,811 live births. Of these births, 617 used alcohol during pregnancy. Statistics on the use of illicit substances and tobacco cannot be found, nor can statistics on the number of fetuses and infants who were negatively affected by prenatal intake of such substances (*Virginia Health Statistics* 2012). However, back in 2006, a survey found that 105,890 babies were born in Virginia to women aged fifteen through forty-four. Of those, 12,283 were exposed to alcohol in utero, 6,353 were exposed to

non-medical use of prescription medications, and 4,553 were exposed to illicit substances (“Perinatal Substance Use”).

In 1991, General Assembly of Virginia requested that the Secretary of Health and Human Resources and Secretary of Education convene a task force to study the impact of perinatal substance abuse and how to best address the problem. In 1992, the task force issued a report recommending programs to provide early identification of SEN, link women and children to appropriate services, collect information about demographics, and determine the need and costs of services. The task force emphasized that the threat of punitive action could be a serious deterrent for substance abusing pregnant women to seek prenatal care. Based on the task force’s recommendations, Senate Bill 557 and House Bill 803 amended Code of Virginia § 63.1-248.3 to require the attending to physician to file a report with the local department of social services whenever a SEN is detected (“Final Report on Substance Exposed Newborn Infants”). Controlled substances are defined as the following and their derivatives: cocaine, heroin, phencyclidine, methamphetamine, or amphetamine.

Per Code of Virginia § 54.1-2403.1, all pregnant women are screened for substance abuse once per trimester and practitioners are responsible for establishing and implementing an appropriate medical history protocol to do so. Physicians must counsel all pregnant women with positive screens and/or evaluations on the adverse consequences of continued substance abuse and options for treatment. The results of screens and/or evaluations cannot be admissible in any criminal proceedings; by taking this stance, Virginia law opposes a punitive approach to handling substance-abusing pregnant women. If the physician would

like to perform a urine or blood toxicology on the mother, he/she must receive informed consent.

Code of Virginia § 63.2-1509 mandates attending physicians or other medical providers to report suspected cases to the local social services department or the Child Abuse and Neglect Hotline. Hospitals are responsible for creating assessment and screening procedures. The following four facts may indicate the presence of a controlled substance and are sufficient to suspect that a child is abused or neglected:

1. If a positive toxicology test on the mother or infant is returned within forty-eight hours of birth
2. A medical finding of newborn dependency or withdrawal symptoms is made within forty-eight hours of birth
3. An illness, disease, or condition attributable to in utero substance exposure is diagnosed within seven days of birth
4. Fetal Alcohol Syndrome is diagnosed within seven days of birth

These facts alone, however, are not sufficient to “render a founded disposition of abuse or neglect.” “The local department must establish, by a preponderance of the evidence, that the infant was abused or neglected according to the statutory and regulatory definitions of abuse and neglect” (“Perinatal Substance Use: Promoting Healthy Outcomes”). If any of the four above situations occur, the attending physician or a designated hospital staff member must report the findings to CPS within seventy-two hours. However, a drug test is not necessarily required to make a report to CPS. Per Code of Virginia § 63.2-1512, health care providers reporting in good faith are immune from civil and criminal liability. Such liability is important because health care providers may be hesitant to report under the threat of litigation. Referrals to CPS are then placed in either the Investigation or Family Assessment track. Exposure to a controlled substance prior to birth is not sufficient evidence for a founded claim of abuse or neglect, so a family assessment is

oftentimes deemed more appropriate (“Perinatal Substance Use: Promoting Healthy Outcomes”).

Upon receiving a report, the local social services department must immediately conduct an assessment of the infant’s circumstances and the level of threat the infant faces; if circumstances call for it, the department may petition a juvenile and domestic relations district court for services or court orders (“Perinatal Substance Use”). The report may be invalidated, however, if there is proof that the mother sought substance abuse or treatment during pregnancy prior to the child’s birth (proof must be given within five days of report) and if there is no evidence of child abuse and/or neglect by the mother after birth. However, the pregnant woman did not have to actually receive counseling or treatment for the report to be invalidated; a good faith effort to receive counseling or treatment is sufficient.

The State Department of Social Services is required by Code of Virginia § 63.1-248.6 to arrange for necessary protective and rehabilitative services for the affected child and his/her family (“Final Report on Substance Exposed Newborn Infants”). A court may enter any order which is deemed necessary to protect the health and welfare of infant such as removal from custody or compelling mother to seek treatment (“Perinatal Substance Use: Promoting Healthy Outcomes”)

Similar to Arizona’s Health Start Program, Project LINK was created in Virginia to coordinate and enhance community services for substance using and at-risk pregnant, postpartum and parenting women and their children. The Virginia legislature provided \$900,000 for Project LINK’s creation and implementation. In 2007, Project LINK served more than 2,120 women and 771 children by providing support services such as childcare and transportation assistance, referrals to

appropriate resources, educational workshops, and parenting groups (Perinatal Substance Use: Promoting Healthy Outcomes”) (“Project Link”).

Washington

The state of Washington encounters an estimated 8,000-10,000 SEN each year. In a survey by the Department of Health & Human Services which measured substance use among women in 2010 and 2011, 5% of pregnant women aged fifteen through forty-four in Washington used illicit substances and 9.4% used alcohol (*Washington’s Substance Abuse During Pregnancy: Guidelines for Screening* 2013)

In compliance with CAPTA, Washington State’s Department of Health and Department of Social and Health Services created “Guidelines for Testing and Reporting Drug Exposed Newborns in Washington State” in 2013. Its content and format is extremely similar to Arizona’s *Guidelines for Identifying Substance-Exposed Newborns*.

Similar to Virginia, Washington law adopts a universal screening approach and mandates that all pregnant women are screened for substance abuse in order to eliminate educated guessing and bias. Screening can be performed through interview, self-reports, and clinical observation. Urine and blood toxicology are not included in universal screening, but are only recommended if a positive interview, self-report, or clinical observation is obtained (*Washington’s Substance Abuse During Pregnancy: Guidelines for Screening* 2013).

In Washington, each hospital offering perinatal and neonatal services is responsible for developing its own policy for identifying women and newborns for substance abuse. The guidelines recommend that hospitals write these policies in

collaboration with local and regional CPS guidelines, as well as address informed consent and reporting issues. (*Guidelines for Testing and Reporting Drug Exposed Newborns in Washington State*)

While no uniform policy or state law exists in regards to consent for testing, testing can only be performed for the purpose of determining appropriate medical treatment, not for punitive purposes, and newborns may only be tested with evidence of specified risk indicators. These risk indicators, created with guidance from the American Congress of Obstetricians and Gynecologists, are:

- Positive maternal toxicology screen
- Jittery with normal glucose level
- Marked irritability
- Preterm birth
- Unexplained seizures or apneic spells
- Unexplained intrauterine growth restriction
- Neurobehavioral abnormalities
- Congenital abnormalities
- Atypical vascular incidents
- Myocardial infarction
- Necrotizing enterocolitis in otherwise healthy term infants
- Signs of neonatal narcotic abstinence syndrome: marked irritability, tremors, increased wakefulness, hyperactive deep tendon reflexes, exaggerated Moro reflex, seizures, high pitched cry, feeding disorders, excessive sucking, vomiting, diarrhea, rhinorrhea, diaphoresis. (*Guidelines for Testing and Reporting Drug Exposed Newborns in Washington State*)

Maternal risk indicators that may warrant a request for testing include:

- No prenatal care
- Previous unexplained fetal demise
- Precipitous labor
- Abruptio placentae
- Hypertensive episodes
- Severe mood swings
- Cerebrovascular accidents
- Myocardial infarction
- Repeated spontaneous abortions (*Guidelines for Testing and Reporting Drug Exposed Newborns in Washington State*)

Physicians who request testing from pregnant women with one or more of the listed maternal risk indicators must inform women of the test's nature and purpose and how the results will guide her care. If the pregnant woman refuses testing, maternal screening should not be performed. Hospitals are encouraged to report a positive screen to CPS, but not as an allegation of abuse or neglect; Washington's guidelines emphasize that "The healthcare team acts as advocate for mother and newborn." If the hospital has reasonable cause to believe that the child has been abused or neglected, however, CPS must be notified immediately (*Guidelines for Testing and Reporting Drug Exposed Newborns in Washington State*).

After a report is made to CPS, CPS officials determine whether the circumstances reported meet the legal definition of child abuse or neglect. After assessing the situation, CPS may offer protective services and treatment such as home support specialist, day care, foster care, or parent aides, etc. If the report is determined to not be abuse or neglect, CPS documents the report as an "information only" referral (*Washington's Substance Abuse During Pregnancy: Guidelines for Screening and Management* 2013).

Analysis

The following points can be concluded from Arizona, Minnesota, Virginia, and Washington's state summaries on identifying, screening, and reporting SEN:

- States discourage prosecuting and punishing pregnant women for substance abuse
- States encourage early intervention
- Generally, in the prenatal period, positive screens for substance abuse during is treated as a service intervention. In the neonatal period, a positive screen may warrant a child neglect or abuse report.
- Arizona is most like Minnesota in that both states define prenatal exposure as neglect and have reporting requirements in place

Looking at the SEN statistics provided for each state, Virginia seems to have the greatest prevalence of SEN. Virginia's statistics are noticeably higher than those of Arizona, Minnesota, and Washington's; at first glance, the statistics indicate that Virginia has a larger problem of SEN than other states. However, the higher statistics may be due to the extensive prenatal screening Virginia employs. Due to Virginia's protocol for universal prenatal screening, perhaps more SEN are identified than in states that do not employ universal screening. The same can be said for Washington, which also mandates universal prenatal screening.

Opponents of universal screening argue that the practice is not cost effective and it takes up too much of a physician's time. Both the American Medical Association and the American Congress of Obstetricians and Gynecologists, however, endorse universal screening, and estimate that screening would only take five additional minutes for each patient ("At-Risk Drinking and Illicit Drug Use: Ethical Issues in Obstetric and Gynecologic Practice"). In addition to minimal additional time needed for a physician to administer screening for each patient, the financial savings associated with preventing SEN are significant. Estimates show that for each case of Fetal Alcohol Syndrome prevented, \$860,000 is saved in lifetime direct and indirect costs and for every infant prenatally exposed to cocaine, more than \$5,000 can be saved in medical costs alone ("At-Risk Drinking and Illicit Drug Use: Ethical Issues in Obstetric and Gynecologic Practice") (Morse, Geshan, and Hutchins 1997).

Further analysis of Arizona's, Minnesota's, Virginia's, and Washington's policies regarding SEN find that although prenatal exposure is defined as abuse or neglect by every state except Washington, it remains unclear how often CPS in each

state actually accepts reports as constituting abuse or neglect. To reiterate findings from a previously discussed study, it appears that laws have little effect on welfare agencies' willingness to even receive reports of prenatal substance exposure, let alone accept such reports and deem them as constituting abuse or neglect (U.S. Department of Health and Human Services, Office of the Inspector General).

Chapter 4: Legal Implications

Attempts to prosecute pregnant women for ingesting illegal substances began in the late 1970s. Although none of the states enacted a law which directly criminalized maternal conduct (in this case, intake of illicit drugs and alcohol), prosecutors attempted to criminalize pregnant women through a variety of other actions (Mohapatra 2011). In these early cases, prosecutors attempted to apply child abuse or endangerment, sometimes even drug trafficking or providing drugs to a minor, statutes to pregnant substance abusers (Stone-Manista 2009). According to the Center for Reproductive Law and Policy, at least 200 women in more than thirty states have been arrested and criminally charged for their alleged drug use or other actions during pregnancy. In twenty-two of those states, the women appealed; twenty-one of those states eventually rejected the original charges or reversed penalties (Tillett and Osborne 2001). These cases highlight a number of legal issues which hold a large variety of ethical, medical, and public health implications.

This chapter reviews a number of key cases in which state prosecutors charged pregnant substance abusers with various statutes not originally intended to be read in the context applied. Issues of fetal versus maternal rights, bodily

autonomy, consent, fair notice, and discrimination based on these cases are discussed.

Charging Pregnant Substance Abusers Under Child Abuse or Child Endangerment Laws

In 1977, a superior court in California indicted Margaret Reyes for felony child endangerment due to heroin use during pregnancy. Although the court did not prosecute her, the indictment earned Reyes the title of the first woman in US indicted for drug use during pregnancy (Mohapatra 2011).

In 1990, a twenty-nine-year-old Wyoming woman named Diane Pfannenstiel went to the emergency room after her husband beat her. Upon drug testing, the hospital found alcohol in Pfannenstiel's system and she was charged with felony child abuse. Ultimately, the state trial judge dismissed charges against Pfannenstiel due to lack of evidence that her alcohol intake actually caused the fetus any injury (Stone-Manista 2009). *Reyes v. Superior Court* and *Wyoming v. Pfannenstiel* were the first of a series of cases where prosecutors attempted to charge pregnant illicit drug and alcohol users under child abuse laws and the first of cases where prosecutors attempted to charge addicts under child abuse or child endangerment laws (Adams 2014).

In general, courts have held such prosecutions of pregnant women who ingest illicit substances or alcohol for criminal child abuse or endangerment as impermissible (Stone-Manista 2009). To rule otherwise, courts would either have to allow the definition of the word 'child' to include fetuses or assert that injury is

caused after birth, when the baby is born with defects caused by the drugs or alcohol.

In general, statutory interpretation of the word 'child' does not include the time prior to the infant's birth. In statutory analysis, courts must determine whether a statute is ambiguous or if the words have a plain meaning by examining interpretations in other statutes; in general, courts uphold the common usage of the term to mean the period of a child's life from birth and onward (Stone-Manista 2009). Although courts uphold the aforementioned definition of 'child,' legal experts still disagree on the constitutionality of prosecuting pregnant women who use drugs and alcohol. Thus, when a criminal statute is ambiguous, courts must resolve the ambiguity in favor of the criminal defendant; this is called the rule of lenity.

When courts choose to bypass the controversial issue of deciding whether a fetus counts as a child under certain statutes, they charge the pregnant women for injury, or the potential for injury, that is caused after the infant's birth. This action effectively analogizes child abuse to the common law rule that an assault upon a pregnant woman could be prosecuted as manslaughter if the baby died only after being born alive (Horn 2008).

Charging Pregnant Substance Abusers Under Criminal Homicide or Assault Laws

In the late 1990s, prosecutors began prosecuting pregnant substance abusers under criminal homicide or assault laws, which were originally intended to protect fetuses from harm, which, for example, may be caused by an abusive partner (Mohapatra 2011).

In *McKnight v. State*, a homeless, twenty-two-year-old pregnant woman in South Carolina with an IQ of seventy-two gave birth to a stillborn child estimated to be between thirty-four and thirty-seven weeks old in 2001 (Stone-Manista 2009). Unaware that positive results would lead to prosecution, McKnight consented to drug testing of both her system and her fetus'. When the results returned as positive for crack cocaine, McKnight became the first woman in the US to be charged with homicide by child abuse for substance abuse during pregnancy. She was convicted and sentenced to twenty years in prison (Mohapatra 2011).

McKnight appealed and made the following three main claims to argue that her prosecution violated the Fourteenth Amendment's Equal Protection Clause: 1) the prosecution unlawfully distinguishes between pregnant women and non-pregnant women; 2) it discriminates based on gender, and; 3) it discriminates based on race (Stone-Manista 2009).

In 2008 South Carolina's Supreme Court reviewed and reversed the lower court's earlier decision to deny her petition for post-conviction relief. However, the Court only reversed because "prosecutors never proved that McKnight's drug use caused the miscarriage," but not based on any acceptance of McKnight's arguments (Stone-Manista 2009).

Violation of the Equal Protection Clause

The claim that prosecution of pregnant women for substance abuse violates the Equal Protection Clause is a common one and requires further analysis. Such prosecutions are discriminatory to pregnant women in particular because of their unique physiological connection to the fetus that non-pregnant women do not face.

Furthermore, the physical reality of pregnancy which is not applicable to men, calls for the argument of gender discrimination. Since only women may become pregnant, only women, not men, can be convicted of harming the fetus or infant. In essence, this places greater restrictions upon women and not men simply due to the physiological reality of a pregnancy (Horn 2008).

Finally, such prosecutions may be discriminatory by race because the majority of women targeted for prosecution are black (Stone-Manista 2009). For example, a study found that 72% of regular drug users are white, 15% are African American, and 10% are Latino. However, 45% of those incarcerated in state prisons on drug charges are black, 21% are Latino, and 26% are white. In theory, these statistics extend to similar ratios of black pregnant women who are prosecuted for drug uses versus white pregnant women who commit the same offense.

Furthermore, physicians in private hospitals which more affluent, predominantly white pregnant substance abusers go to, are less likely to test for drug use than physicians in public hospitals, which more low-income, black pregnant substance abusers go to. Even when bias based on the location in which women receive prenatal care is ruled out, general bias by physicians still adversely affects black women who abuse substances during pregnancy. A Casey Family Report found that both public and private hospitals over-report abuse and neglect among black women and under-report white women (Mohapatra 2011).

Violation of Fair Notice and Right to Privacy

Additional issues related to prosecuting pregnant substance abusers under laws not originally intended for application in the context of potential fetal or

newborn harm caused include fair notice and the right to privacy. *State of Hawaii v. Aiwohi* provides a clear example of these issues.

In 2001, Tayshea Aiwohi gave birth to son Treyson Aiwohi. Treyson died two days later from the toxic effects of methamphetamine. The Chief Investigator for the Department of the Medical Examiner later testified at the grand jury proceeding that Aiwohi admitted to smoking crystal methamphetamine days prior to Treyson's birth, as well as the morning he was born. Aiwohi was then indicted for manslaughter in 2003 for recklessly causing her son's death in violation of Hawaii Revised Statute 707-702(1)(a), which states that "[a] person commits the offense of manslaughter if...[h]e recklessly causes the death of another person" (Lowe 2006).

In 2004, Aiwohi filed the following three motions with the circuit court: 1) "Motion to Dismiss Indictment Based on Insufficient and/or Impermissible Evidence Presented at the Grand Jury Proceedings"; 2) "Motion to Dismiss Based on the Unconstitutionally Vague and/or Overbroad Nature of the prosecution as Applied to the Defendant and/or the Unconstitutional Failure to Provide Fair Notice to the Defendant"; and 3) "Motion to Dismiss Indictment Based on Violation of the Defendant's Constitutional Right to Privacy." The circuit court denied all three motions and sentenced her to a ten-year term of probation without incarceration.

In 2004 Aiwohi appealed to Hawaii's Supreme Court and raised six issues: 1) whether her prosecution for manslaughter was within the plain meaning of the state's manslaughter statute under which she was prosecuted; 2) whether that statute as applied to Aiwohi, failed to provide fair notice and is therefore unconstitutionally vague in violation of the Hawaii Constitution; 3) whether HRS § 707-702(1)(a), as applied to Aiwohi, fails to provide fair notice and is therefore

unconstitutionally vague in violation of the fourteenth amendment to the United States Constitution; 4) whether her prosecution for manslaughter interferes with an expectant mother's fundamental right to procreate; 5) whether her prosecution for manslaughter is an unconstitutional, retroactive expansion of the statute, in violation of the fourteenth amendment to the United States Constitution; and 6) whether she was denied her right to present a defense, in violation of the sixth and fourteenth amendments to the United States Constitution, when the circuit court rejected Aiwohi's common law defense of immunity for an expectant mother's prenatal conduct.

Ultimately, the Supreme Court concluded that Aiwohi's manslaughter prosecution was not consistent with the state's penal code plain meaning, which requires that the defendant's conduct occur at a time when the victim is within the class contemplated by the legislature. Essentially, the Court ruled that Hawaii's statute was not applicable to Aiwohi because Treyson was still a fetus when Tayshea smoked, and not a child. The lower court's ruling failed due to statutory interpretation and legislative, but not due Aiwohi's constitutional objections (Lowe 2006).

In her motions to both the circuit court and the state supreme court, Aiwohi included the motion of "unconstitutional failure to provide fair notice to the defendant." The fair notice defense argues that according to the statute applied for prosecution, the conduct was not forbidden, and that due process prohibits courts from "applying a novel construction of a criminal statute to conduct that neither the statute nor any prior judicial decision has fairly disclosed to be within its scope" (Stone-Manista 2009). The Due Process Clause guarantees that "[n]o State

shall...deprive any person of life, liberty, or property, without due process of law,” as well as “prohibits prosecutors and courts from interpreting or applying an existing law in an unforeseeable or unintended manner” (Horn 2008). While Aiwahi is expected to know that manslaughter is illegal, she cannot be expected to know that use of controlled substances during pregnancy could constitute manslaughter, as it is not what the statute is intended for.

The issue of fair notice was also present in *Reinesto v. State. Court of Appeals of AZ*, which held that Arizona’s child abuse statute would not allow the prosecution of a woman whose newborn experienced heroin withdrawal symptoms at birth. Doing so, the court held, would require interpreting the state’s child abuse statute broadly enough to cover prenatal drug use, which would be unconstitutionally vague (Stone-Manista 2009).

Common Rationales for Prosecuting Pregnant Substance Abusers

Despite the numerous statutory and constitutional arguments that prohibit the prosecution of pregnant substance abusers under statutes such as child abuse, child endangerment, drug trafficking, delivering drugs to a minor, manslaughter, and homicide, prosecutors continue to do so due using the three following rationales: 1) prosecution will have a deterrent effect and women will be less likely to use drugs during future pregnancies, as well as serve as a warning to other pregnant substance abusers; 2) prosecution is retribution because the women are deserving of punishment, and; 3) prosecutions will improve maternal and fetal health outcomes as a result of greater prenatal medical care (Stone-Manista 2009) (Adams 2014).

However, studies of these three rationales find that they are unfounded.

Firstly, as the rate of drug use in pregnant women has remained fairly consistent throughout the years, it would indicate that prosecution is not a particularly strong deterrent (Mohapatra 2011). Oftentimes, women who face the fear of prosecution avoid receiving medical care or end their pregnancies rather than end their addictions (Stone-Manista 2009). If the women do continue receiving prenatal care, they are more likely to be dishonest about their addiction(s) and are less likely to have a trusting relationship with their health care providers; this raises ethical issues which are discussed in greater detail in the next chapter. Such evidence of this decline in prenatal care and drug treatment is demonstrated in a report from the South Carolina Association of Alcoholism and Drug Abuse Counselors, which found that when the state of South Carolina aggressively prosecuted women who used drugs when pregnant, the state as a whole experienced an 80% decrease in pregnant women enrolling into drug treatment programs (Mohapatra 2011).

The second rationale favored by prosecutors, that the women deserved punishment, ignores the large variety of social and cultural factors which lead to drug use (Stone-Manista 2009). These factors include poverty, domestic violence, education, and lack of access to effective treatment options (Mohapatra 2011). This ignorance of factors which undoubtedly contribute to a pregnant woman's substance abuse is contradictory to the bioethical principle of justice, which would have stakeholders take such factors into consideration and be sympathetic of these women's circumstances.

Finally, the third rationale generally used to justify attempts at prosecuting substance-abusing pregnant women is that prosecutions will improve maternal and fetal health outcomes as a result of greater prenatal medical care. However,

research has found the exact opposite to be true, largely because prosecution is not a deterrent, but actually causes women to avoid receiving prenatal care entirely. A number of medical, public health, and legal organizations have released official statements condemning such prosecutions. These organizations and statements are discussed in further detail in chapter six, which examines the medical implications of such prosecutions.

Aside from the fear of prosecution and incarceration, keeping pregnant substance abusers from seeking prenatal care or being honest with health care providers, incarceration itself may actually be detrimental to the pregnant woman and her fetus. This goes against prosecutors' intended goal to protect the fetus. For example, in 2005, the state of Maryland jailed a pregnant Kari Parsons for failing a drug test while on probation. While in prison, Parsons went into labor. Despite her pleas for help, guards essentially ignored her and placed her in a solitary cell, where she gave birth. Her son later developed an infection from the unsanitary jail conditions and died (Adams 2014).

In an amicus brief filed on behalf of Cynthia Martinez in *New Mexico State v. Martinez*, where Martinez was charged with felony drug abuse after her newborn's urine tested positive for cocaine, the parties assert that "The policy of seeking criminal arrests and prosecutions of pregnant women with drug dependency or other health problems is contrary to law, scientific research, and the consensus judgment of medical practitioners and their professional organizations" (Brief for Sutin, Thayer & Browne, P.C., Drug Policy Alliance, National Advocates for Pregnant Women, *State of New Mexico v. Martinez*).

Chapter 5: Ethical Implications

As evidenced in the previous chapter which discussed the legal implications of prosecuting substance abusers, a number of ethical dilemmas arise in such considerations, namely those concerned with patients' relationships with health care professionals.

This chapter examines health care providers' ethical responsibilities when faced with such cases, whether these responsibilities are in conflict with existing state and federal policies regarding the identification, screening, and reporting of SEN, how such conflicts may be addressed, and how bioethical principles such as autonomy, nonmaleficence, and beneficence are relevant to handling SEN.

Violation of Patient-Physician Relationship

To begin, it must be recognized that in general, health care professionals have a responsibility to save or preserve life, relieve or minimize suffering, and avoid harm (Tillett and Osborne 2001). This responsibility is rooted in the principles of beneficence, which states that health care providers must do only good unto patients, and nonmaleficence, which states that health care providers must do no harm unto the patient. These principles can be applied to both the pregnant woman and to her fetus.

In the view of nearly all medical and health associations, reporting drug use violates these principles because of the adverse consequences which may result from reporting, such as the woman's arrest, incarceration, and/or removal of the child from its mother (Mohapatra 2011).

Furthermore, reporting essentially burdens health professionals with serving as both a state agent and as a health care professional, which is contradictory because it interferes with health care professionals’ ethical and legal obligation to protect confidence (Moss 1990). Studies show that addicted women hide their drug use from providers when faced with the fear of prosecution and incarceration (Mohapatra 2011).

In an amicus brief filed on behalf of Cynthia Martinez in *New Mexico State v. Martinez*, the filers insist that “Trust and confidence in health care providers lie at the core of every doctor-, nurse-, or counselor-patient relationship...prosecution... however, erodes such a trust” (Brief for Sutin, Thayer & Browne, P.C., Drug Policy Alliance, National Advocates for Pregnant Women, *State of New Mexico v. Martinez*). The filers go on to state that when a positive relationship exists and patients are honest with their health care providers, “important medical benefits accrue.”

Table 6

Various Medical, Health, and Legal Organizations’ Views on the Issue of Prosecuting Substance-Abusing Pregnant Women (Mohapatra 2011)

Organization	Statement
American Academy of Pediatrics	<p>“The public must be assured of nonpunitive access to comprehensive care which will meet the needs of the substance-abusing pregnant woman and her infant”</p> <p>Arresting drug addicted women who become pregnant “may discourage mothers and their infants from receiving the very medical care and social support systems that are crucial to their treatment”</p>
American Medical Association	<p>“Pregnant women will be likely to avoid seeking prenatal or other medical care for fear that their physicians’</p>

	knowledge of substance abuse or other potentially harmful behavior could result in a jail sentence rather than proper medical treatment.”
American Nurses Association	“ANA...opposes any legislation that focuses on the criminal punishment of the mothers of drug-exposed infants. ANA recognizes alcohol and other drug problems as treatable illnesses. The threat of criminal prosecution is counterproductive in that it prevents many women from seeking prenatal care and treatment for their alcohol and other drug problems.”
American Public Health Association	<p>“Recommends that no punitive measures be taken against pregnant women who are users of illicit drugs when no other illegal act, including drug-related offenses, have been committed.”</p> <p>“Women who might want medical care for themselves and their babies may not feel free to seek treatment because of fear of criminal prosecution related to illicit drug use”</p>
Center for Substance Abuse Treatment, US Health and Human Services Consensus Panel on Pregnant, Substance-Using Women	“The Consensus Panel strongly supports the view that the use of alcohol and other drugs by women during pregnancy is a public health issue, not a legal problem...The panel does not support the criminal prosecution of pregnant, substance-using women. Furthermore, there is no evidence that punitive approaches work.”
The March of Dimes	“The March of Dimes is concerned that legal action, which makes a pregnant woman criminally liable solely based on the use of drugs during pregnancy, is potentially harmful to the mother and to her unborn children...We call upon the American people to work together to support efforts that will...make comprehensive therapeutic interventions which meet the specific needs of the pregnant woman suffering from the disease of addiction.”
National Council on Alcoholism and Drug Dependence	“A punitive approach is fundamentally unfair to women suffering from addictive diseases and serves to drive them away from seeking both prenatal care and treatment for their alcoholism and other drug addictions. It thus works against the best interests of infants and children.”
American Congress of Obstetricians and Gynecologists	“ACOG...believes that...policy violates basic principles of medical practice and actually harms the potential to care for a drug-dependent woman and her fetus during pregnancy...The policy so intrudes on the relationship and confidentiality between providers and patients that it undermines, rather than furthers, the health of women and children.”

“Punitive approaches [to maternal behavior] threaten to dissuade pregnant women from seeking health care and ultimately undermine the health of pregnant women and their fetuses”

Punitive Approaches Are Unjust

Research shows that punitive approaches such as mandatory reporting disproportionately affect women of color and poor women who are statistically at a greater risk of abusing illicit substances during pregnancy. A number of studies have found that women receiving care from government-subsidized facilities are more often labeled as high-risk and are more routinely tested than more affluent women who receive prenatal care from private practices (Moss, 1990). In addition to racial and economic influences, studies also show that there is a strong relationship between violence or childhood abuse and subsequent drug use. (Benfield 1991)

Instead, health professionals advocate a public health approach to focus more on factors such as economic status and insurance coverage that affect health to better assess “how the laws relating to reporting of drug use and pregnant women are enforced—whether they are enforced fairly or in a way that leads to disparities” (Mohapatra, 2011).

In taking a public health approach rather than a punitive approach, the differences in health between populations rather than individuals are emphasized; for example, public health and law officials can work together to collect and analyze demographic information about which group(s) of women use drugs and alcohol during pregnancy to determine what laws and policies are appropriate (Mohapatra 2011).

Violation of Autonomy

Health care professionals must uphold the ethical principle of autonomy, which holds that physicians must respect the pregnant patient's ability to make her own health care decisions. The health care provider's role in respecting the principle of autonomy is to educate the woman about the detrimental effects of substance abuse during pregnancy and encourage her to lessen or eliminate use to the best of her ability. Ultimately, however, the woman holds the right to decide what she wants to do with her body, and that includes the continuation of ingesting illicit substances and/or alcohol.

In general, the law holds that individuals have the right to make personal life choices, and that includes the right to consent or refuse treatment. To override a pregnant woman's personal choice would be to violate her personal liberty and bodily integrity in the greater interest of her unborn child. In the landmark case *Roe v. Wade*, it was ruled that a woman has the right to bodily autonomy and to control her own reproductive decisions (Stone-Manista 2009). However, this is not always the case, as the state, under certain circumstances, also has a right to protect the fetus' well-being. The legal and ethical space surrounding a pregnant woman's autonomy is often complicated by concern for the fetus' well-being.

Violation of Informed Consent

Finally, to have greater concern for the fetus' well-being than respect for the pregnant woman's autonomy would also mean violating the need for informed consent from the woman. Intertwined with the principle of autonomy, informed consent views the pregnant woman as the patient and assumes that she is capable of

making decisions regarding her health care. It is required of all health care providers to obtain informed consent for treatment and procedures; since the woman's body is the one in which a procedure would be performed or treatment be given, the woman must provide informed consent before a health care provider may initiate the procedure or treatment in question, and "forcing a woman to submit to treatment denies her right to informed consent" (Tillett and Osborne 2001).

Duty of Care

Those who argue that a pregnant woman's behavior could harm her fetus based it on a doctrine known in ethics as "duty of care," which assumes that once a woman 'decides' to bear a child, she has the moral and legal responsibility to ensure a healthy birth. However, this duty of care is rooted in the false assumption that every woman competently and willingly chose pregnancy, is well-educated about the risks associated with substance abuse during pregnancy, and has access to adequate prenatal care (Tillett and Osborne 2001). Unfortunately, this is not the case for the majority of pregnant women. To assume that it ignores the social and cultural factors which contribute to a woman's actions during pregnancy and may adversely affect her fetus.

Furthermore, to take the position that a pregnant woman is morally and legally responsible for how her personal actions might adversely affect her fetus would create a legal slippery slope. Although it is commonly accepted that illicit substances and alcohol may produce a detrimental effect on the fetus, the spectrum of effects is broad and there is no consensus or guarantee on what kind of detriment, if any, is caused each time a woman ingests such substances (Tillett and Osborne

2001). To confound matters further, women who abuse illicit substances and alcohol during pregnancy often do not abuse a substance exclusively, but usually abuse multiple substances at once. This adds an additional layer of difficulty in determining what negative effects, if any, are caused from prenatal substance abuse (Behnke and Smith 2013). This line of reasoning may be extended broadly to greatly limit a woman's actions during pregnancy, such as the amount and extent of exercise performed, maintenance of a proper diet, working in conditions that are safe for the woman but potentially unsafe for the fetus, violating traffic laws, and much more (Horn 2008). This argument is backed by the umbrella argument that a punitive approach to handling cases of substance-abusing pregnant women is not grounded in science. Multiple studies show that a number of legal drugs actually pose a greater risk to the developing fetus than illegal drugs. If the foundation of the argument to prosecute women for [potential] harm done to a fetus through abuse of illicit drug, it should follow that ingestion of anything which may pose equal or greater harm should also be criminalized (Mohapatra 2011). This line of reasoning could then criminalize intake of anything from legal prescription drugs to excess vitamins.

One appellate court wrote the following opinion on the matter of this slippery slope and stated that "Allowing the state to define the crime of child abuse according to the health or condition of the newborn child would subject many mothers to criminal liability for engaging in all sorts of legal or illegal activities during pregnancy. We cannot, consistent with the dictates of due process, read the statutes that broadly" (Tillett and Osborne 2001).

Chapter 6: Medical Implications

Similarly to the ethical implications considered in the previous chapter, existing literature shows a general consensus from the medical community that punitive approaches to substance-abusing pregnant women are damaging to both the women's and infants' health and do not achieve the intended effect of reducing or eliminating harm to the fetus or infant. Instead, research shows that punitive approaches actually have a negative effect on the fetus' or infant's health, as well as the mother's.

A number of arguments against punitive approaches exist, but can generally be categorized under the following: 1) addiction is a disease and must be treated as one rather than as a wrongdoing by choice; 2) education, preventative measures, and voluntary drug treatment are more effective; and 3) access to voluntary drug treatment is most effective and must be increased.

Addiction is a Disease

In 1994, the American Psychiatric Association diagnosed drug addiction as a mental disorder. Additionally, "Substance-Related and Addictive Disorders" are included in the Diagnostic and Statistical Manual of Mental Disorders. Because of these facts, health care professionals urge that addiction be treated as a mental illness which requires treatment rather than a personal fault which requires punishment. To do the latter, health professionals argue, would be a form of discrimination. In *Robinson v. California* (1962), the Supreme Court of the United States (SCOTUS) held it was unconstitutional to criminalize the status of addiction (Mohapatra 2011). At the time, a California statute which criminalized addiction

convicted Lawrence Robinson. After the appellate court upheld Lawrence's conviction, Lawrence appealed to SCOTUS and the conviction was overturned on the basis that such a conviction inflicts cruel and unusual punishment in violation of the Eighth and Fourteenth Amendments. The Court held that the state could not punish persons for their "status" of addiction, and that such punishment would make it a "criminal offense for a person to be mentally ill, or a leper, or to be afflicted with a venereal disease" (*Robinson v. California*, 1962).

It should follow, then, that the law should not be able to convict a pregnant substance abuser for her status of addiction, or any variation of supposed crime based on her addiction. As stated by Benfield, one should "See the issue of substance abuse not as pregnancy complicated by substance abuse but substance abuse complicated by pregnancy" (Benfield 1991).

Education, Preventative Measures, and Voluntary Treatment

In addition to shifting the focus from individual health to population health and employing evidence-based research for creating policies, health professionals emphasize the necessity and impact of education and preventative measures. Rather than creating policies which will punish women when SEN are identified, literature suggest that public health and law officials "move upstream" and focus more on preventing illicit substance and alcohol abuse (Benfield 1991).

The most effective way of doing so is to increase women's access to education, support through referral to appropriate resources and family-friendly policies, among other things, and voluntary drug treatment options (Mohapatra 2011).

Early intervention prior to and during pregnancy in the form of education might improve women's knowledge of the damaging effects various drugs and alcohol might have on her fetus. When presented in a non-threatening manner for the fetus' best interests, the pregnant substance abuser might be more receptive and willing to reduce or cease use (Horn 2008).

In addition to education, studies also show that increased access to drug treatment centers for pregnant women is more effective in reducing or stopping illicit substance abuse than arrest and prosecution.

However, literature show that drug treatment centers often do not allow pregnant women due to fear that the treatment process might damage the fetus or end the pregnancy. Furthermore, even when drug treatment centers do accept pregnant women, there is often a lack of child care options for the woman who may currently have children. The pregnant woman is then unjustly made to choose between caring for her current children or attending treatment for the well-being of her unborn child (McNulty 1987-1988).

Although the funds needed to build, adequately staff, and run drug treatment centers which accommodate pregnant women are significant, studies show that the treatment ultimately pays for itself in reducing resources needed to care for the woman and infant later on, and even in reducing the costs of crime. One study of 439 pregnant substance-abusing women in Massachusetts between 1992 and 1996 evaluated the financial costs of investing in treatment versus the financial costs of crime. These costs of crime included victimization costs, impaired productivity, and criminal justice expenditures. The researchers found that an investment in treatment significantly pays for itself through reductions in costs of crime (Daley,

Argeriou, McCarty, Callahan Jr., Shepard, and Williams 2000). Five treatment options and their costs were studied, and all five options paid for themselves.

Chapter 7: Conclusion

In conclusion, this exploratory study found that the state of Arizona and the Health Start Program is in need of a comprehensive resource document which health care professionals, child welfare administrators, and law enforcement authorities can refer to on the issues of identifying, screening, and reporting cases of SEN. Currently, Arizona's 13- page *Guidelines for Identifying Substance-Exposed Newborns* is the most comprehensive piece of literature available to health professionals, social workers, and law enforcement authorities to refer to on the issue of SEN. The document lacks a listing of the federal and state laws which require specific actions regarding identifying, screening, and reporting SEN, lacks a detailed explanation of the numerous medical, legal, and ethical complexities associated with SEN, and does not look forward for ways in which the state might improve in adopting laws and guidelines that can effectively reduce the incidence of SEN, such as Virginia's and Washington's universal screening policies.

Because community health workers in the Health Start Program interact directly with at-risk pregnant and postpartum women who are more likely to abuse illicit substances during pregnancy, it is vital that these health workers are aware of the laws which govern their actions when encountering a woman who they suspect of abusing drugs, alcohol, or tobacco while pregnant, as well as be provided context of the legal, ethical, and medical implications related to the issue. As evidenced by chapters 4-6 of this thesis, it is clear that the numerous concerns regarding SEN are

complex and involve multiple variables and stakeholders. To simply know the laws and regulations regarding SEN is not sufficient; a community health worker must be aware of the issue's multiple contexts in order to respond to it appropriately.

Similarly, to only possess knowledge of the ethical and medical implications associated with identifying, screening for, and reporting SEN is not sufficient; Health Start workers must supplement this knowledge with familiarity with the law in order to reach a decision that will benefit their clients while still respecting the confines of the legal system. A well-informed decision is one guided by knowledge from multiple sources and perspectives.

A comprehensive resource document which enumerates and analyzes the above would be most useful for Health Start Program community health workers to have available for reference when unsure of what legal courses of actions are available when encountering a SEN. A compilation and brief analysis of the key ethical, medical, and legal implications related to SEN could also prove valuable to community health workers, many of whom may lack advanced knowledge or prior training in early childhood education, social work, nursing, or a related field where such implications are covered more extensively as part of the curriculum. Although it could not substitute years of earning advanced knowledge or experience in the field, the resource document could condense pertinent knowledge that would have been gained through those avenues into one convenient point of reference and help community health workers quickly learn about the most important issues regarding SEN.

For community health workers employed directly following their high school graduation or employed with a lack of relevant experience with high-risk pregnant

and postpartum women in lower-demographic communities, a resource document which synthesizes all of the necessary information on SEN in an easily accessible manner would do well to thoroughly highlight and discuss vital information that is generally learned through intensive studying or years of experience. For the more experienced community health worker, a resource document would be most useful for its format, which would ideally be easily navigable and concise for a quick refresher when needed.

Resource documents which outline procedures and strategies for any particular organization, as well as rationale to support them, are valuable for the audience to reference when in need of decision-making guidance. As previously mentioned, the only resource document currently available to Health Start workers does not provide enough information for its intended purpose. A more comprehensive document which enumerates the Arizona and federal laws regarding SEN, addresses the key ethical dilemmas associated with taking or withholding legal action, and details the proven medical consequences certain actions may have on the pregnant woman and her fetus would be valuable to clarify Health Start workers' options when encountering a SEN. The new resource document would: 1) inform Health Start workers of possible paths of action based on state and federal laws; 2) give workers a history of what legal actions have been taken in the past; 3) discuss the ethical dilemmas that exist with taking certain actions or inaction, and; 4) provide what medical and public health experts suggest should be done based on peer-reviewed studies.

Beyond its primary use as a tool to educate Health Start workers, the resource document could also indirectly encourage the crafting of policies which

benefit prenatal substance abusers and society as a whole. For example, this thesis found that a number of medical and public health associations recommend universal prenatal screening for substance abuse. The comparison between states which employ such a policy and states which do not further that suggest that universal prenatal screening has more advantages than disadvantages, and should be considered for adoption in the state of Arizona. This and similar suggestions could be provided in the resource document in question. The existence of the resource document, then, could lend for more open and interdisciplinary collaboration between health care professionals and policy makers.

Looking forward, promising avenues of research based on this thesis include examining the socioeconomic factors which influence prenatal substance abuse and exploring public health efforts which directly target improving those factors in an attempt to decrease the prevalence of SEN. Another potential research route includes exploring the various risk factors prenatal substance abusers are often simultaneously exposed to, such as domestic violence and sexually transmitted infections as mentioned earlier in this thesis, and how those are intertwined.

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