

Womb Health = World Health

POSITION PAPER

“Why Birth Matters”

**LOVING BIRTH TASK FORCE
of
THE FOUNDATION FOR LIVING MEDICINE**

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EXECUTIVE SUMMARY

The Loving Birth Task Force, a group of birth and holistic health practitioners working together on behalf of the Foundation for Living Medicine, is dedicated to changing the paradigm of childbirth. The state of birth around the world, in the United States and the state of Arizona, is one that can be improved to increase the health and safety of mothers and babies. The choices that women are making today are influenced by insurance companies, allopathic medical institutions, and pharmacological conglomerates which all have vested interests in promoting the financial benefits of their organizations. Statistics reveal that infant and maternal mortality rates in the United States are higher than most other industrialized countries while costs are the highest in the world. These shocking figures have prompted us to explore the course of events and issues that women face from preconception and conception, through gestation, labor, birth and the postpartum period, while focusing on optimum health and wellbeing for mothers, babies, and families. We offer holistic childbirth educational opportunities and encourage women to investigate their options to retain or regain their own voices in making informed choices and having those choices respected. By “loving birth” we honor the inherent capacity of women to give birth, naturally trusting their bodies to work as Nature designed, to bond with their babies, and to have the wisdom to make informed choices without fear, but with confidence and love.

The Loving Birth Task Force was formed under the Gladys T. McGarey Medical Foundation. Dr. Gladys is known as the *Mother of Holistic Medicine* and as the physician responsible for obtaining policy changes that allowed fathers into delivery rooms in Arizona. Ten years ago the current chairperson of Loving Birth, Alyce-Anne Meadows, MEd, convened a group of childbirth healthcare professionals including doctors and nurses, birthing practitioners and educators at the Maricopa County Health Department and named the group the “Childbirth Think Tank.” Subsequently, the Think Tank evolved into the Loving Birth Task Force under the auspices of the Foundation for Living Medicine as Dr. Gladys shifted the emphasis of her foundation and expanded the role of the Task Force to encompass her philosophy of living medicine. Susan Highsmith was a member of the original Childbirth Think Tank while earning her PhD in Prenatal and Perinatal Psychology and is one of the two authors, along with Alyce-Anne Meadows, of this Position Paper.

The intention of Loving Birth is to promote education in the realm of pre- and perinatal psychology, to raise awareness of the importance of changing the language of childbirth, to support the endeavors of the foundation to establish a Holistic Healthcare Center that includes a Birth Center, and to develop a college curriculum in this vital field. Indeed, this paper will serve as a template from which that curriculum can be created. There is no community college or university curriculum specifically addressing prenatal and perinatal psychology at either an undergraduate or graduate level. The public needs to be aware of the long-term mental, emotional, and behavioral effects of pregnancy and birth. Certainly the physical health of the mother is important and well known, particularly in terms of dietary requirements and the avoidance of alcohol, drugs, smoking, and exposure to environmental toxins. The new curriculum would include these admonitions; combined with research in psychology as well as evidence-based birthing practices, the classes would

be able to be cross-listed with those in Nursing, Anatomy and Physiology, Psychology, Women's Studies, Social Work, Counseling and Guidance, and other related fields. We begin with our vision and mission to change the birthing experiences of women and babies by providing education to improve birth outcomes, both short and long term. The concept of *Why Birth Matters*, particularly due to its little known psychological consequences, is our opening statement. We follow this with our commitment to adhere to a *Code of Ethics* observed among holistic birthing professionals.

The State of Birth provides worldwide, national, and state facts and trends regarding numbers of pregnancies and births, the rates of infant and maternal mortality, and the venues in which births occur. Preterm birth and the March of Dimes Prematurity Campaign, the issues of abortion and teen pregnancy are discussed, supported by associated charts depicting these statistics. *Costs of Giving Birth* specifically deals with the exorbitant expenses associated with the care childbearing women typically receive in this country. The costs of hospital versus midwifery care are compared and contrasted.

Prenatal and Perinatal (PPN) Psychology is defined as it is the field most relevant to the prevention and treatment of mental, emotional, and behavioral disorders that arise from the earliest periods of life. Childbirth education, which includes PPN psychology, is expanded by including and encouraging holistic and evidence-based practices.

Preconception Healthcare looks at unintended pregnancies and the longitudinal research that points out how being unwanted negatively impacts lifelong attitudes and behaviors. It is estimated that half of our pregnancies in the United States are unintended, although not necessarily unwanted. It is an objective of the Task Force to raise awareness of the importance of intention in bringing children into the world. Healthy practices are outlined for those considering becoming pregnant. *Prenatal Opportunities & Challenges* consider optimum health during pregnancy and caution is urged when considering practices and procedures that can potentially be detrimental to the development of the baby in utero.

Labor & Birth explores birthing venues, the benefits of vaginal (physiological) birth, and the hormones associated with giving birth. The Sacred Hour and skin-to-skin contact are discussed in depth as honoring this crucial time and the physical closeness of mother and child during the hour immediately after birth have proven to enhance the bond between them and to promote the child's life-long secure attachment. Bonding and the Foundations of Attachment are explained more fully, as are the benefits of Delayed Cord Clamping. Relaxation, Meditation, and Self Hypnosis for Labor and Birth are elucidated as excellent techniques for pregnant and birthing mothers. The option of Placental Encapsulation is described, and the establishment of a child's Microbiome is examined. A discussion of vaginal birth after Cesarean section (VBAC) concludes *Labor & Birth*.

Birth Interventions includes the many ways in which natural labor and birth can be interrupted. Friedman's Curve is shown to be obsolete and "failure to progress" to be a pejorative term. The lithotomy position is shown to be a position that restricts the movements of a laboring woman to her detriment for the convenience of staff. Electronic fetal monitoring (EFM), labor induction, and epidural analgesia are all questioned as they contribute to the infamous "cascade of interventions." The policy promoting episiotomies is

refuted, and the high numbers of Cesarean sections are revealed to be cause for alarm worldwide.

The use of forceps and vacuum extraction are examined, as is aspirating (suctioning) on the perineum and the administration of eye drops and vitamin K to newborns. Parents are urged to thoroughly consider the advisability of circumcising their newborn sons.

Midwives and Doulas are endorsed. *Postpartum & Newborn Care* are addressed, including a discussion of Paid Parental Leave and the stress that new mothers can experience due to lack of financial support. Of course, *Breastfeeding* is recommended. Our *Beliefs & Recommendations* are enumerated and a short essay on “Love versus Fear” completes our treatise. The Position Paper concludes with *Helpful Definitions* and a comprehensive list of *References & Resources*.

We are grateful to Task Force members, particularly Joni Chanko who designed our logo and cover page, and Dr. Janet Teodori who contributed the section on the microbiome. We are most appreciative for the support of the Foundation for Living Medicine and the leadership of Dr. Gladys McGarey who has demonstrated her trust in the Loving Birth Task Force to produce a Position Paper espousing the principles and values of its members and the organization as a whole. We have faith in the vision of childbirth within a holistic paradigm of love and respect for all mothers, babies, and families.



WHY BIRTH MATTERS

How, When, and Where Birth Happens, Matters

Preconception health, pregnancy, and childbirth have lasting, lifelong physical, psychological, and financial implications for each individual, each family, and society as a whole.

Vision: All women, and their unborn babies, receive respectful, competent, comprehensive, evidence-based healthcare and maternity services that incorporate each woman's preferences, choices, culture, and family values.

Mission: Our mission is to promote education, including informed and timely choices, advocacy, and public policy of childbearing practices that are inclusive, respectful, comprehensive competent, and mother/baby friendly.

This includes understanding the role of preconception, prenatal and postnatal care, informed and conscious choice of procedures, birthing options, community-based quality health care, and culturally sensitive services.

The Foundation for Living Medicine is dedicated to holistic health practices—those that promote natural childbirth, encourage self-responsibility, and foster a new relationship between pregnant women and their healthcare team that provides individualized care. It views pregnant women as inherently healthy, and is, therefore, committed to encouraging women to heed their own “life force within” to experience the healthiest and most natural pregnancy and birth possible. *Loving Birth*, a task force of the Foundation for Living Medicine, respects the innate wisdom of mothers and babies to lead in the birthing process as it was designed by Nature. In accordance with the overall goals of The Foundation for Living Medicine, *Loving Birth* promotes “a paradigm shift” in the realm of childbirth that changes the focus in medicine from treatment of pregnancy as a disorder and pregnant women as patients in need of pharmaceutical and surgical interventions to one that honors women's abilities to “give birth” rather than have their babies “delivered.”

Loving Birth, both concept and task force, promotes holistic health options for women of childbearing age who plan to get pregnant, are currently pregnant, have given birth, or are parenting and desire to learn more about holistic, natural practices that can benefit them, their children, and their families.

CODE OF ETHICS

Members of the Loving Birth Task Force, under the auspices of the Foundation for Living Medicine, adhere to the values, principles, and ethical responsibilities defined in the *Code of Ethics for Lamaze Certified Childbirth Educators* (Lamaze International, 2006).

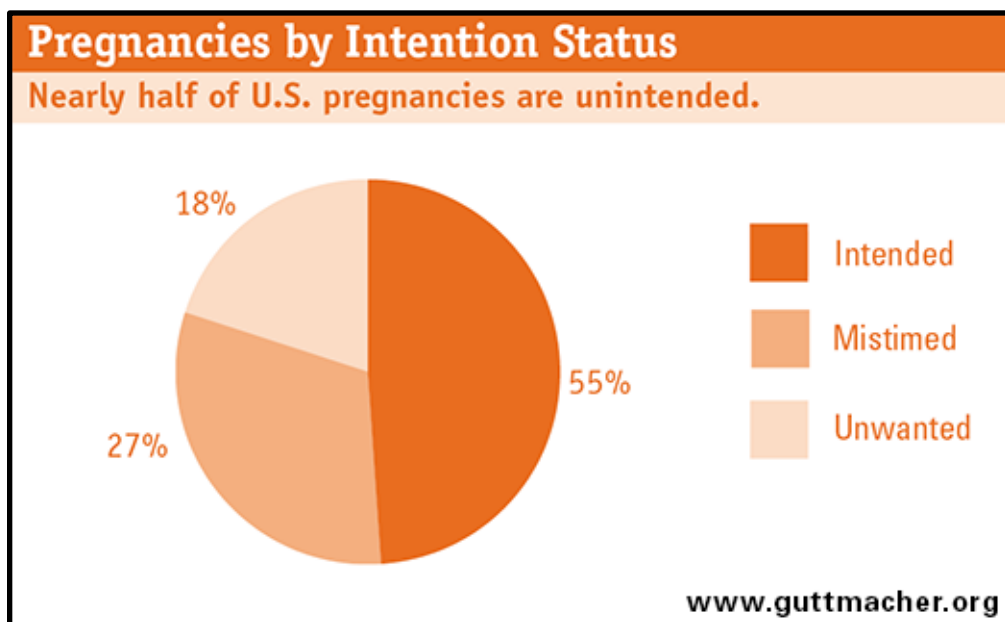
- ✚ Our primary responsibility is to promote the well-being of childbearing women.
- ✚ We respect and promote the right of childbearing women to make informed decisions and assist childbearing women in their efforts to identify and clarify their goals.
- ✚ We are committed to providing full, accurate, up-to-date information upon which childbearing women are able to make informed decisions, whether it be informed consent or informed refusal.
- ✚ We endorse evidence-based maternity care as the best available research on the safety and effectiveness of specific practices to help guide maternity care decisions and to facilitate optimal outcomes in mothers and newborns (childbirthconnection.org).
- ✚ We believe that evidence-based maternity care gives priority to care paths and practices that are effective and least invasive, with limited or no known harm whenever possible, and promote this type of care (childbirthconnection.org).
- ✚ Although we subscribe to the ethical standards and guidelines in all professions that support childbearing women, their babies, and families, we encourage each member to develop an internal locus of control with regard to ethics so that our internal “motivations and values as therapists and caregivers—is the source of what we do and say” (Taylor, 1995, p. 7).

THE STATE OF BIRTH: Facts and Trends

Numbers of Pregnancies and Births

There are approximately 4 million births occurring in the United States each year. Interestingly, there are an estimated 6 million conceptions, indicating that 2 million pregnancies do not reach full term. Miscarriages and abortions account for almost 2 million pregnancies ending prematurely.

Approximately half of all pregnancies in the United States are unintended. Forty percent of those pregnancies are deliberately terminated. The Guttmacher Institute (2016), an organization that promotes reproductive health worldwide, declares: “births resulting from unintended or closely spaced pregnancies are associated with adverse maternal and child health outcomes, such as delayed prenatal care, premature birth and negative physical and mental health effects for children.” The organization also states that unintended pregnancies cost American taxpayers \$21 billion each year.



According to Arizona Department of Health Services statistics, 84,963 births occurred in the state in 2013, a decrease from a high of 102,687 in 2007.

Infant Mortality

The *World Fact Book*, published online by the Central Intelligence Agency (CIA), estimates the infant mortality rate (IMR) to be 5.87 (deaths per 1000 live births the United States) in 2015. This rate is 167th among the 224 countries listed in descending order in the report.

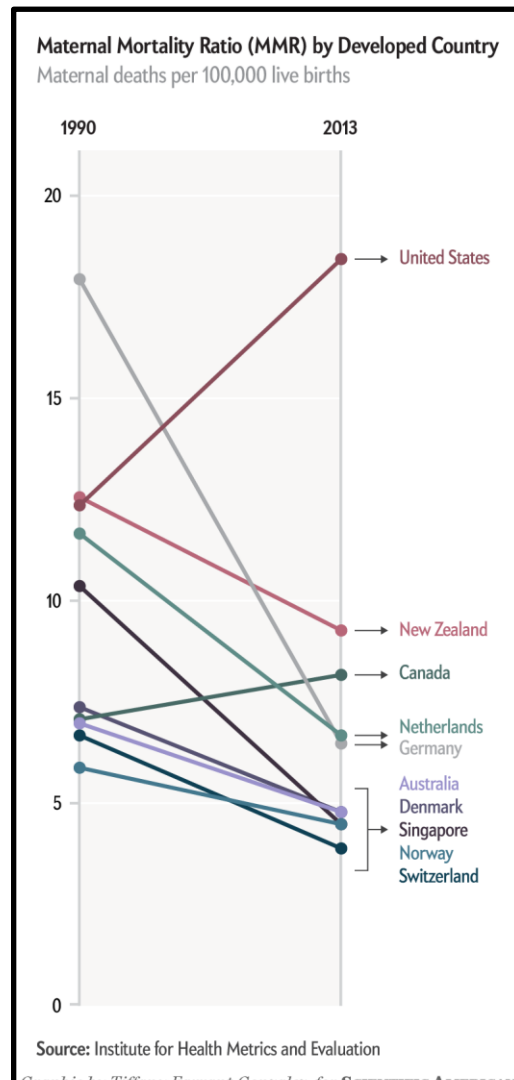
The IMR of a country is an indicator of the health of the nation. Compared to other industrialized (wealthy) countries, the United States lags behind.

Indeed, the costs associated with giving birth in the United States are the highest in the world while the infant mortality rate is significantly higher than in countries like Canada (4.8), France (3.5), or Sweden (2.1). The infant mortality rate in Arizona as of 2015 was 5.5, better than the national average, but 18th when compared to other states (America's Health Rankings, 2016).

Maternal Mortality

In June 2015 *Scientific American* reported:

the rate of maternal mortality in the U. S. has more than doubled in the past few decades. Whereas 7.2 women died per 100,000 births in 1987, that number swelled to 17.8 deaths per 100,000 live births in 2009 and 2011. The uptick occurred even as maternal mortality dropped in less-developed settings around the world. Now women giving birth in the U.S. are at a higher risk of dying than those giving birth in China or Saudi Arabia.



Black women are more likely to die of pregnancy and/or birth complications than women of other races.

“In April of 2011, Arizona passed Senate Bill 1121 amending the child fatality review statute by adding reviews of maternal deaths” (Arizona Department of Health Services, 2013). Although the initial *Arizona Maternal Mortality Review Program Brief*, stated that “the number of pregnancy associated deaths that occur in Arizona during a year’s time” were unknown, 15 maternal deaths were identified during a six-month period in 2011 that met basic criteria as pregnancy-related.

A state-by-state report published by the National Women’s Law Center ranks Arizona 13th with a rate of 7.5 women per 100,000 dying of pregnancy/birth related causes from 2006 to 2011. The Law Center states:

Maternal mortality is a key indicator of health worldwide and reflects the ability of women to secure maternal and other health care services. The maternal mortality ratio in the United States is 12.1 deaths per 100,000 live births. The lifetime risk of maternal death is greater in the U. S. than in 40 other countries, including almost all other industrialized nations.

Arizona receives a grade of U (unsatisfactory) according to this report. The intention of reporting is to reduce and prevent maternal deaths associated with giving birth.

Place and Mode of Delivery

Almost ninety-nine percent of women giving birth in the United States do so in hospitals (MacDorman, Mathews, & Declerq, 2014). One third of those births are surgical deliveries, that is, Cesarean sections. The Cesarean section rate in Arizona is 28%, lower than the national rate, but higher than ten other states. The state of Arizona allows midwives to practice, but across the nation only 1.36% of births in the nation took place out-of-hospital although “the risk profile of out-of-hospital births was lower than for hospital births, with fewer teen mothers, and fewer preterm, low birthweight, and multiple births” (MacDorman, Mathews, & Declerq, 2014).

Preterm Birth & March of Dimes Prematurity Campaign

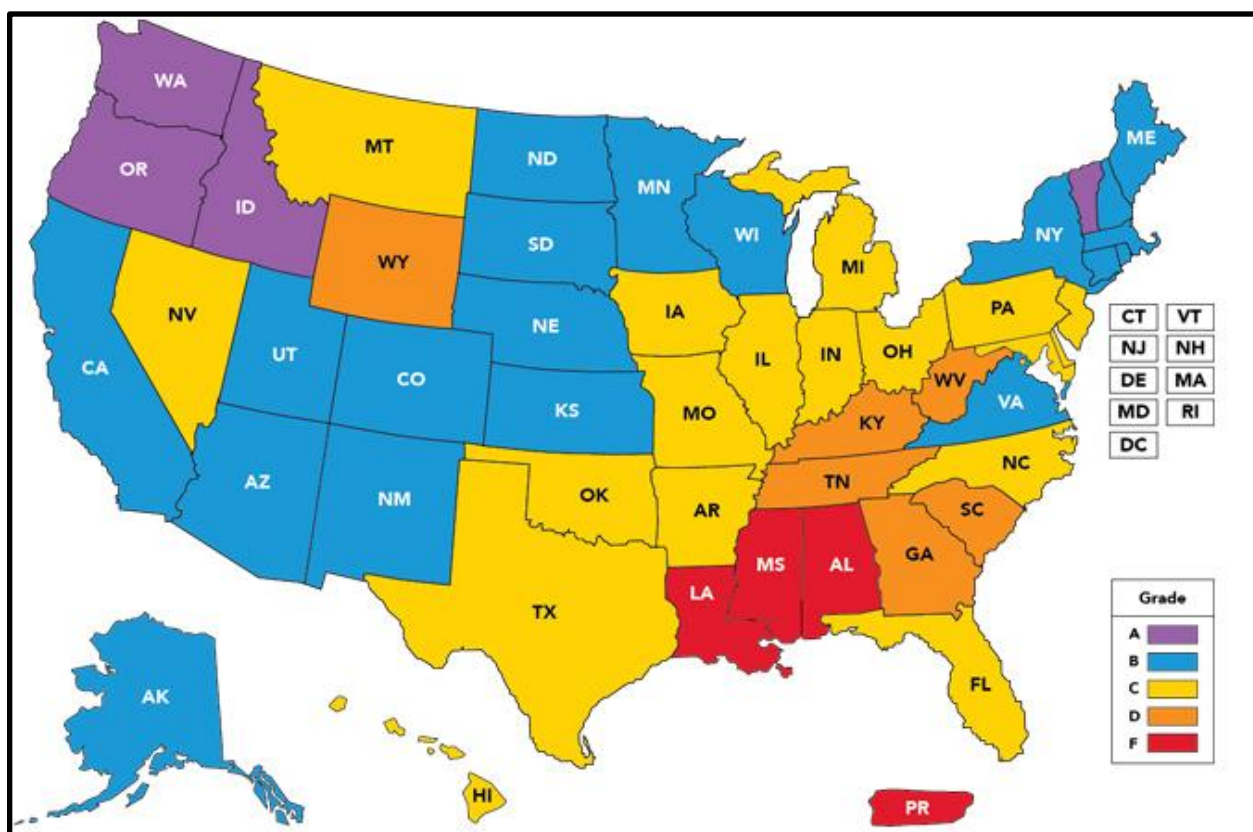
A baby born before 37 weeks gestation is considered premature. These babies can have more health challenges than full term babies, spending more time in the neonatal intensive care unit (NICU) and developing more long-term health problems. According to the March of Dimes about one in ten babies are born prematurely each year in the United States. The list of health issues that premature babies can experience is long: apnea, respiratory distress syndrome (RDS), jaundice, anemia, infections—just to name a few.

Science Daily (July 24, 2015) reported that Professor Dieter Wolke of the department of psychology and Warwick Medical School at the University of Warwick had found that “adults born very premature are more likely to be socially withdrawn and display signs of autism.” Polin and colleagues (2014) found “respiratory failure secondary to surfactant

deficiency is a major cause of morbidity and mortality in preterm infants,” and can be treated with surfactant therapy which “substantially reduces mortality and respiratory morbidity for this population.”

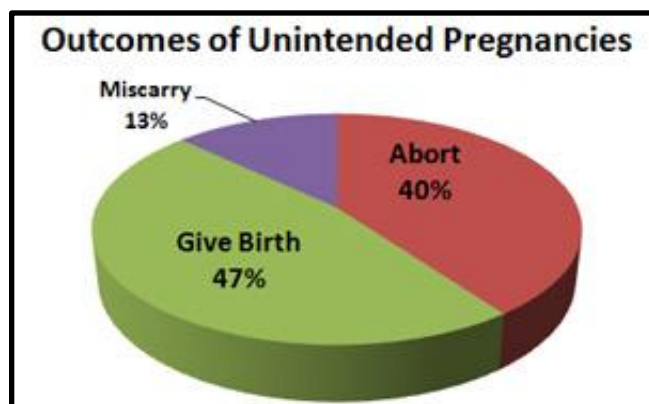
Because prematurity is the leading cause of death among the country’s newborns, the March of Dimes has launched a Prematurity Campaign in an effort to have families give birth to full-term babies. The organization funds research in this vital field under its Prematurity Research Initiative and publishes a Premature Birth Report Card for states and the nation each year. The 2015 the grade given the United States was “C” while Arizona earned a “B.” Jennifer Howse (February 16, 2014), President of the March of Dimes Foundation, stated in her letter to the editor of the New York Times: The Institute of Medicine estimates the yearly societal cost of preterm birth to our country at \$26 billion”. The nation’s preterm birth rate is higher than most other high-income countries, indicating that much can be done to reduce the rate and improve the health and well-being of our nation’s babies.

The map below illustrates the distribution of grades among states.



Abortion

The Guttmacher Institute reports, “half of pregnancies among American women are unintended, and four in 10 of these are terminated by abortion. Twenty-one percent of all pregnancies (excluding miscarriages) end in abortion. In 2011, 1.06 million abortions were performed, down 13% from 1.21 million in 2008.”



The Arizona Department of Health Services reports the number of abortions performed in the state; 12,747 abortions were performed in 2014. “The average age of resident women who received an abortion was 30.5 years,” according to the report issued September 21, 2015. Most of those (91.4%) occurred within the first 13 weeks of gestation. *The point of abortion surveillance is to facilitate “efforts to decrease and/or prevent unplanned pregnancies [emphasis added].”*

Teenage Pregnancy

In November 2014, the Arizona Department of Health Services issued a report titled *Teenage Pregnancy Arizona, 2003 – 2013*. The key finding was, “in 2013, the pregnancy rate of 19.2 pregnancies per 1,000 females 19 years or younger was 44.3 percent lower than the rate of 34.5 per 1,000 in 2003.” This was the lowest rate since 1983.

PREGNANCY RATES BY PREGNANCY OUTCOME, AGE GROUP, AND YEAR, FEMALES 19 OR YOUNGER, ARIZONA, 2003-2013

Pregnancy outcome by year	Total, females 19 years or younger	Under 15 years	15-19 years old		
			Total, 15-19 years	15-17 years	18-19 years
ALL PREGNANCIES					
2003	34.5	1.4	68.9	41.6	108.2
2004	34.6	1.1	69.4	42.0	108.7
2005	32.7	1.1	65.6	39.1	103.6
2006	34.1	1.1	68.7	39.0	115.6
2007	34.4	1.5	68.4	36.9	121.4
2008	31.6	1.0	63.2	34.6	111.3
2009	28.0	0.7	56.1	28.5	102.5
2010	24.7	0.7	48.3	25.5	80.8
2011	23.0	0.7	44.8	22.1	77.2
2012	21.6	0.5	42.2	21.8	70.2
2013	19.2	0.4	37.7	18.0	64.8

THE COST OF GIVING BIRTH

Maternal and newborn care together represent the largest single category of hospital expenditures for most commercial health plans and state Medicaid programs, so reducing maternity care costs provides a major opportunity to reduce insurance premiums for employers and to make Medicaid coverage more affordable for taxpayers. There are many examples of physicians, midwives, hospitals, and birth centers around the country that are reducing maternity care costs in ways that improve quality and outcomes for both mothers and babies, a win-win for both payers and patients. (Truven Health Analytics MarketScan Study, 2013)

The study, *The Cost of Having a Baby in the United States*, quoted above, determined:

among women and newborns with employer-provided Commercial health insurance, average total charges for care with vaginal and cesarean births were \$32,093 and \$51,125, respectively. Average total Commercial insurer payments for all maternal and newborn care with vaginal and cesarean childbirths were \$18,329 and \$27,866, respectively. In Medicaid, average total maternal and newborn care charges for care with vaginal and cesarean births were \$29,800 and \$50,373, respectively. Medicaid payments for all maternal and newborn care involving vaginal and cesarean childbirths were \$9,131 and \$13,590, respectively. Both Commercial and Medicaid payers paid approximately 50% more for cesarean than vaginal births. For both types of birth, Commercial payers paid approximately 100% more than Medicaid.

According to a *New York Times* article (Rosenthal, 2013) titled *American Way of Birth, Costliest in the World*,

Childbirth in the United States is uniquely expensive, and maternity and newborn care constitute the single biggest category of hospital payouts for most commercial insurers and state Medicaid programs. The cumulative costs of approximately four million annual births is well over \$50 billion.

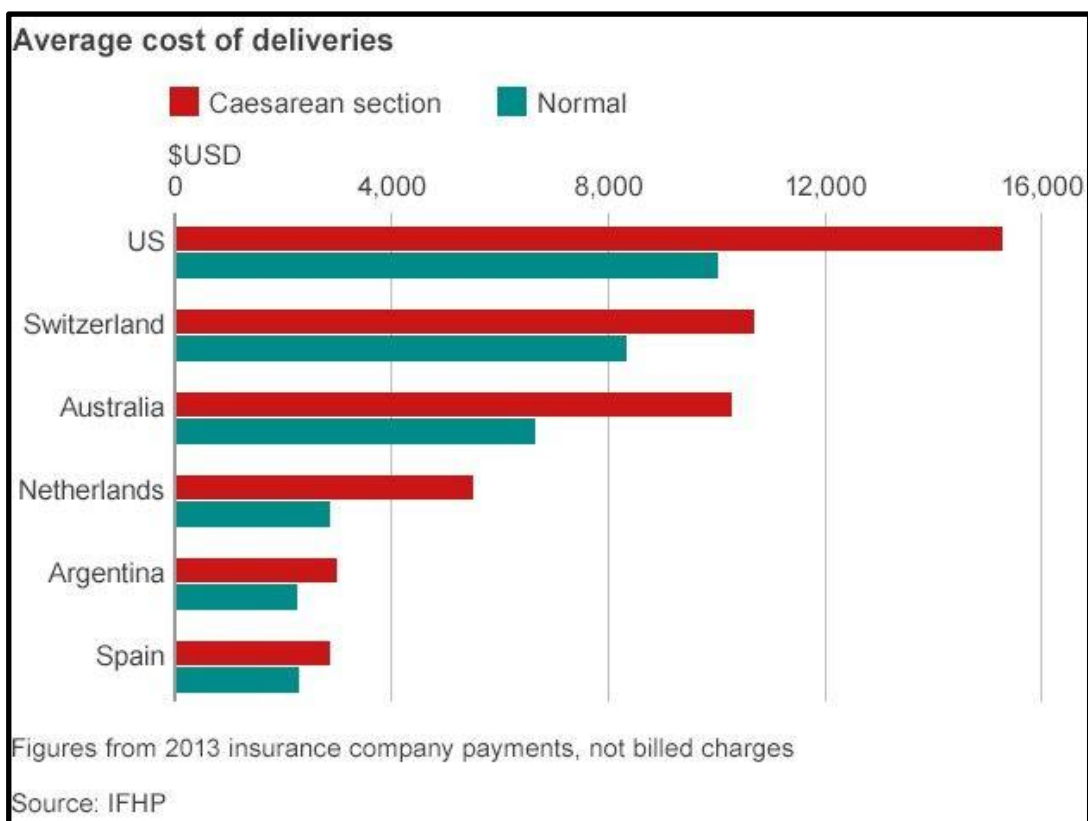
This article emphasizes: “In most other developed countries, comprehensive maternity care is free or cheap for all, considered vital to ensuring the health of future generations.”

Noting escalating costs, Maricopa Medical Center, a public hospital in Phoenix, “began offering uninsured patients a comprehensive package” in 2011. According to this report, the Phoenix hospital “charges \$3,850 for a vaginal delivery, with or without an epidural, and \$5,600 for a planned C-section — prices that include standard hospital, doctors’ and testing fees” (Rosenthal, 2013). “Making women choose during labor whether you want to pay \$1,000 for an epidural, that didn’t seem right,” said Dr. Dean Coonrod, the hospital’s chief of obstetrics and gynecology.

Consumer Reports (2015) published the results of their investigation of more than 1500 hospitals in 22 states, and concluded that C-sections “drive up costs and increase risks for mothers and babies.” Further, “cutting the number of C-sections in half would save the U.S. about \$5 billion a year in health care costs [emphasis added].”

World Cost Comparison

The U. S. pays more than other Westernized nations for birthing.



Average 2012 Amount Paid for Childbirth			
	CONVENTIONAL DELIVERY		CAESAREAN
United States	\$9,775		\$15,041
Switzerland	4,039		5,186
France	3,541		6,441
Chile	2,992		3,378
Netherlands	2,669		5,328
Britain	2,641		4,435
South Africa	2,035		3,449

Note: Amounts paid are the actual payments agreed to by insurance companies or other payers for services, and are lower than billed charges. Amounts shown include routine prenatal, delivery and postpartum obstetric care. Some care provided by practitioners other than the obstetrician – like ultrasounds performed by a radiologist or blood testing by a lab – are not included in this tally.

Source: International Federation of Health Plans

A 2016 brief co-authored by *Choices in Childbirth* and the *Childbirth Connection*, a program of the *National Partnership for Women and Families*, pointed out the benefits to mothers and babies of having the care of a doula. This brief, *Overdue: Medicaid and Private Insurance Coverage of Doula Care to Strengthen Maternal and Infant Health*, reported:

In 2013, hospitals billed \$126 billion for combined maternal and newborn care. Obstetric care has become procedure intensive, even for low-risk women and newborns, contributing to the soaring maternity care costs. Studies conducted in Oregon, Minnesota and Wisconsin have found that Medicaid reimbursement of doula support has the potential to reduce Medicaid expenditures by reducing the number of unnecessary cesareans, instrument assisted birth and admissions to neonatal intensive care units based on Apgar Scores.

Citing the numerous benefits to women and babies who receive doula care and the cost savings associated with receiving that care, this report recommended that “the most effective and far-reaching step to increase utilization of doula support among women in underserved communities would be for Congress to mandate coverage of this high-value service for pregnant Medicaid beneficiaries.” The brief ultimately recommended that “Private and government insurers throughout the United States should make doula services widely available. The greatest priority, however, is to initiate policy changes to ensure access to doula support for vulnerable women.” The report indicates that doula care could prevent nearly one-third of Cesarean sections, saving over \$2.3 billion annually and reducing long term expenditures by minimizing complications during labor and resulting-follow-up care by increasing positive postpartum behaviors.

There are efforts being made to transform maternity care in the United States. The Loving Birth Task Force is committed to supporting and promoting those efforts. In concert with the goals and tenets of Childbirth Connection, The Task Force agrees:

the quality of maternity care in our country is poor. Childbirth costs more in the United States than in any other developed country, but our maternal and child health outcomes lag behind those of other countries. Too many babies are born at low birth weight. The rates of maternal mortality and prematurity are high. Disparities persist – especially for African American women and babies. And too many women receive unnecessary and unwanted interventions during labor that don’t result in better outcomes. (Childbirth Connection, 2016)

The Loving Birth Task Force endorses the principles of Childbirth Connection and allied organizations to improve quality maternity care while reducing the exorbitant costs associated with childbirth in the United States. Further, we agree with the statement made by Maureen Corry of Childbirth Connection: “It’s critically important that pregnant women have the tools and information they need to partner with their providers to make the best decisions about pregnancy and childbirth, and ensure care adheres to a woman’s preferences.”

The Impact of Economics on Childbearing

Economics are impacting decisions that young men and women are making regarding childbearing. *Science Daily* (2013) reported “economics influences fertility rates more than other factors.” According to the *Population Reference Bureau* (2014),

The U. S. total fertility rate (TFR) currently stands at 1.9 births per woman, down from 2.1 at the onset of the recession in 2007. This represents the sixth straight year that the U. S. fertility rate has been below "replacement level," the level that is needed for couples to replace themselves in the population.

Theories to explain this phenomenon include the perception of potential parents that the cost of raising children together with the payoffs received from investing in themselves rather than in their offspring reduces fertility rates. The perceived value of children, the changing ideal regarding family size, the acceptance and availability of contraception, women’s fear of giving birth (tokophobia), and even a desire by women to avoid changes in their bodies due to pregnancy all contribute to reductions in the fertility rate.

Women constitute a large share of the work force and may decide to limit the number of children they bear due to the demands of their careers. The expense of gaining an education and paying back student loans cause many young adults to delay having children. A struggling economy itself deters marriage and childbearing.

The Loving Birth Task Force is dedicated to education that includes consideration of economic factors in childbearing, to assist those who are experiencing economic challenges to handle stresses as they seek to have healthy pregnancies and births, to work toward a paradigm shift that will reduce costs, and to influence governmental policy-makers to create legislation that helps young families with programs such as paid parental

Prenatal and perinatal psychology is a relatively unknown field of psychology. Prenatal means before birth; perinatal means around the time of birth; and psychology is the study of what we think (mental), feel (emotional), and do (behavioral). “Prenatal psychology at its very core is the simple extension of commonly held and accepted developmental psychological principles into the period of birth” (Maret, 2009, p. 9). Pioneers in this field have shown over decades that individuals are left with imprints made much earlier in life than had been thought. In 1923 Otto Rank, a colleague of Freud, published *The Trauma of Birth* in which he stated his idea that “the normal individual never completely overcomes the birth trauma” (Rank, 1993). Rank was followed by others including Nandor Fodor who wrote *The Search for the Beloved: A Clinical Investigation of the Trauma of Birth and Pre-Natal Conditioning* (1949) and whose work has been acknowledged as marking “the beginning of the modern ‘prenatal psychology’ movement” (Maret, 2009, p. 16). Fodor observed the dependence of the unborn child upon its mother, noting that the mother provided nutrients and oxygen and processed waste products but could contribute both undesirable as well as desirable elements to the baby’s development. A few years earlier Sadger (1941) wrote, “there exists certainly a memory, although an unconscious one, of embryonic days, which persists throughout life and may continuously determine an action” (p. 333). These were very progressive ideas in the 1940s, ones that are being substantiated by modern research.

Prenatal and perinatal psychologists contend, “the prenatal period may be the most important and influential period of time in our lives” (Maret, 2009, p. 18). Today, research is showing that parents and even grandparents leave an indelible mark on the biology and psychology of future generations. Epigenetics, “a rapidly growing research field that investigates heritable alterations in gene expression caused by mechanisms other than changes in DNA sequence” (Stowers Institute for Medical Research, 2009) reveals that lifestyles, the environment, and behavioral choices affect gene expression and can then be transmitted to one’s children, grandchildren, and to subsequent generations. One multigenerational study found “that offspring born to mothers with histories of sexual abuse were more likely to be born preterm, have a teenage mother, and be involved in protective services (Noll, Trickett, Harris, & Putnam, 2009, p. 424). A 2015 study has found “that birthweight is shaped by preconception factors dating back to women’s early life environment as well as conditions dating back three generations, via integrative and intergenerational processes” (Kane, p. 246). *Science Daily* posted an article September 28, 2015, titled “Grandmother’s smoking habits increase asthma risk in grandchildren.” On this topic,

Dr. Caroline Lodge, an author of the study and Research Fellow at the University of Melbourne, Australia, said: We found that smoking in previous generations can influence the risk of asthma in subsequent generations. This may also be important in the transmission of other exposures and diseases.

The study did not establish a causal relationship but, according to another report of the research,

The study included more than 66,000 grandchildren and nearly 45,000 grandmothers in Sweden. Children whose grandmothers smoked while pregnant with daughters had a 10 percent to 22 percent increased risk of asthma, even if their own mothers did not smoke during pregnancy. (Preidt, 2015)

In 2006 researchers Massaro, Rothbaum, and Aly reported in the *Journal of Pediatric Neurology* their review of literature spanning 25 years. The investigation suggested that fetal brain development can be either positively or negatively impacted by maternal behaviors during pregnancy. The researchers reviewed articles focusing on “early neurological development and a selection of various maternal exposures and behaviors that may impact the fetal brain during this critical developmental period” (p. 1).

Prenatal and perinatal psychology is a field of growing importance, primarily because it has been thought that the time spent in the womb is of little consequence. Nothing could be further from the truth. Entire lives are shaped by the experiences of conception, gestation, labor, and birth. Patterns of behavior are formed on the template laid down in utero. As adults discover the underlying causes of their dysfunctional beliefs, thoughts, feelings, and behaviors, they begin to change—healing occurs. It is the realm of prevention that more much can be done. Both prevention *and* treatment of prenatal and perinatal wounds is possible as society awakens to this vitally important time of life (Highsmith, 2014).

The Loving Birth Task Force acknowledges prenatal and perinatal theory and research that clearly demonstrate that the maternal environment—the unborn child’s only environment—is vital in determining a child’s brain development, indeed, entire physical, mental, and emotional development. Therefore, healthcare, including psychological healthcare, for women throughout their lives, particularly during childbearing years, is endorsed and promoted.

CHILDBIRTH EDUCATION

Changing the Language of Childbirth

Childbirth education is not just for pregnant women; childbearing and reproductive health are subjects that every member of society needs to fully comprehend. One way to begin is to consider the language we use when talking about conception, pregnancy and birth. Casual conversation often refers to pregnancy as nine months, a misunderstanding about the length of an ideal pregnancy. The March of Dimes is raising awareness regarding the ideal gestation period for a baby: 280 days or 10 months! This is lunar time—women’s time—10 cycles of 28 days each. *Delivery* language is disempowering to women, suggesting that a woman cannot give birth but requires a doctor to bring her baby into the world (Highsmith, 2014). In taking our language for granted, we perpetuate old paradigms.

The Loving Birth Task Force strongly advocates changing the language of childbirth by substituting *birthing* or *giving birth* for the word *delivery*, in honor of the gift women give when bringing forth new life. We acknowledge the *ten months* it takes to fully develop a healthy baby, and support all efforts to prevent premature births.

There are many childbirth education organizations available locally, regionally, nationally, and internationally. The International Childbirth Education Association (ICEA) “supports educators and health care professionals who believe in freedom to make decisions based on knowledge of alternatives in family-oriented maternity and newborn care.” Lamaze Childbirth Educator Seminars are designed to assist childbirth educators increase women’s self-confidence and ability to give birth. This organization promotes “the childbearing experience as a natural, safe and healthy process which profoundly affects women and their families.” Like the La Leche League, it is known to promote breastfeeding. The March of Dimes, Childbirth Connection, and the American Pregnancy Association (APA) share the same objectives. The Childbirth and Post Partum Professional Association (CAPPA) “is an international certification organization for Doula, Childbirth Educators and Lactation Educators.” The Association for Prenatal and Perinatal Psychology and Health (APPPAH) is “a public-benefit educational and scientific organization offering information, inspiration, and support to medical professionals, expecting parents, and all persons interested in expanding horizons of birth psychology.” All these organizations, among others, provide essential childbirth educational services worldwide.

The United States government also supports maternal, infant, and child health. The *Healthy People 2020* goal is to “improve the health and well-being of women, infants, children, and families.” The website states:

Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future health challenges for families, communities, and the health care system. . . . Pregnancy can provide an opportunity to identify

existing health risks in women and to prevent future health problems for women and their children. (www.healthypeople.gov)

Incorporating the Principles of Evidence Based Care

Improving Birth, a group that promotes respectful, evidence based care, states:

Evidence-based care means care that is first based on the highest-quality, most current scientific evidence, and is tailored to the individual needs of the patient. As simple a concept as that may be, most people are surprised to find that this model is not in practice in much of American childbirth. Research shows that some of the most common practices in U. S. hospitals are contrary to what evidence shows is best—and most women experience care that actually increases the chances that they or their babies will be injured or develop complications. (www.improvingbirth.org)

Note that the above quote is designed to bring evidence-based care into hospitals, where a laboring woman is referred to as a “patient.” Within holistic healthcare systems, laboring women are viewed as healthy, not infirm, and are treated as capable of giving birth, therefore, requiring “patience,” which abounds in birth center and home birth settings.

The following chart, which can be found on the Improving Birth website, points out the numerous interventions used routinely in modern maternity care contrasted with those supported by research and are, therefore, evidence-based.


 Maternity Practices in the United States: "Routine" vs. Evidence Based Care		
Labor and Delivery Procedures	U.S. Care	Evidence-Based Care
Surgical birth (C-section)	33% total ¹ 27% of first-time mothers ²	≤15% of first-time mothers ³
Vaginal birth after Cesarean (VBAC)	7-9% ²	Every eligible woman should be offered a VBAC; ⁴ 74% will be successful ⁵
Artificial induction of labor	42% of first-time mothers; ⁶ doubles the risk of C-section ⁷	Induction should only be used for true medical indications; ⁸ suspected “big baby” is not a valid medical indication ⁹
Artificial acceleration with Pitocin	47% ¹⁰	Not supported by evidence ¹¹
Artificial breaking of the waters	65% ¹⁰	Not supported by evidence ^{12, 13}
Routine electronic fetal monitoring	94% ¹⁰	Not supported by evidence ¹⁴
Routine intravenous fluids	80% ¹⁰	Not supported by evidence ¹⁵⁻¹⁸
Not allowed to eat or drink	60% ¹⁰	Not supported by evidence ¹⁹
Not allowed out of bed	76% ¹⁰	Not supported by evidence ²⁰
Back-lying positions during pushing and birth	92% ¹⁰	Women should choose whatever position is most comfortable for them ²¹
Water immersion during labor	6% ¹⁰	This intervention has many benefits and no adverse effects ²²
Continuous labor support from a doula	3% ¹⁰	The use of doulas is supported by evidence ²³

Table © 2012 by Rebecca Dekker, PhD, RN, APRN
See footnote references at www.EvidenceBasedBirth.com

Evidence Based Birth

Evidence-based maternity care gives priority to care paths and practices that are effective and least invasive, with limited or no known harms whenever possible. This framework is in the tradition enjoining practitioners to ‘first, do no harm’ and consider undesirable consequences of good intentions. (Sakala & Correy, 2008)

Evidence-based care is associated with the lowest rate of maternal and infant mortality, is protective of the mother’s pelvic floor, has the best psychological outcomes, and highest rate of breastfed babies. Dependence on physiological principles results in the fewest number of medical interventions: the lowest rates of anesthetic use, obstetrical complications, episiotomies, instrumental deliveries, cesarean surgeries, post-operative complications, and delayed or downstream complications in future pregnancies. According to Robin Dekker, PhD and RN, in her first online lesson “What is evidence-based care?”

Evidence based care is a combination of best research evidence with clinical experience and patient values. In other words, evidence-based care means receiving full, accurate, and evidence-based information to help you [a pregnant woman] make decisions, being attended by an experienced care provider who pays attention to the evidence (including both research evidence and clinical experience), and having care that is tailored to your preferences and values.
(www.evidencebasedbirth.com)

The Loving Birth Task Force endorses evidence based care and is dedicated to incorporating its principles in education programs as well into holistic birthing policies and practices.

The Loving Birth Task Force is dedicated to providing childbirth education to the local residents of central Arizona, while embracing those from other areas who seek both childbirth education and healthcare within the Foundation for Living Medicine’s Holistic Healthcare and Birth Centers. Education is based on the principles espoused by the ICEA, Lamaze International, the March of Dimes, the APA, APPPAH, CAPPA, the La Leche League, and other sister organizations with whom the Foundation is aligned or co-partnered. The evidence based education and healthcare model being developed in the Phoenix/Mesa region of Arizona in alliance with the Mesa Community College/Red Mountain Campus could serve as a prototype for other local childbirth education programs across the nation and would be in concert with the goals and objectives of Healthy People 2020.

PRECONCEPTION HEALTH

It has been thought that all the eggs a woman carries develop during her gestation period in her own mother's womb but "a new study suggests that women's ovaries continue to form new eggs throughout life" (Contemporary OB/GYN, 2012). Although animal studies are now questioning whether this is actually true and that more eggs (oocytes) may be generated during her lifetime (Johnson, Canning, Kaneko, Pru, & Tilly, 2004), certainly the million or more eggs that it is estimated a woman has in her ovaries when she is born are susceptible to the same health considerations as the rest of her anatomy. A woman's reproductive life should be considered prenatally, through infancy and puberty, and into mature adulthood.

Unintended Pregnancy

Since it is estimated that 49% of the 6.6 million pregnancies a year in the United States are unintended (Centers for Disease Control, 2013), it is especially important for women to maintain their health throughout their childbearing years. Preconception health is also important because many of a baby's organs are developed prior to a woman knowing she is pregnant and before she knows that she needs prenatal care when she should pay particular attention to her nutrition and lifestyle choices. For example, the human heart is the first organ to form and begins to beat just three weeks after conception (Nilsson, 2009).

According to the Guttmacher Institute (2014), 51% of all pregnancies (61,000) in Arizona were unintended in 2010. Among adolescent women, those aged 19 years and younger, the rate of unintended pregnancy is particularly high. The teen pregnancy rate in Arizona was 60 per 1,000 in 2010, higher than the national rate of 57 per 1000. These young women, and their babies, are particularly vulnerable, making it even more important for them to make prudent choices regarding their health.

The Centers for Disease and Control and Prevention (CDC) address the issue of unintended pregnancies—those that are unwanted, unplanned, or mistimed:

Unintended pregnancy is associated with an increased risk of problems for the mom and baby. If a pregnancy is not planned before conception, a woman may not be in optimal health for childbearing. For example, women with an unintended pregnancy could delay prenatal care that may affect the health of the baby.

Longitudinal studies conducted in Europe have found that children who are born as the result of unwanted pregnancies are at risk "for poor mental health in adulthood" (David, 2003). Researchers found that:

UP [unwanted-pregnancy] young adults between the ages of 21 and 23 reported significantly less job satisfaction, more conflict with coworkers and supervisors, fewer and less satisfying relations with friends and more disappointments in love. More were dissatisfied with their mental well-being and actively sought or were in treatment. Twice as many UP participants as AP [accepted-pregnancy] had been sentenced to prison terms. (p. 227)

In the fourth and fifth waves of this longitudinal study, when participants were age 30 and 35 respectively, the “study lends support to the hypothesis that being born from an unwanted pregnancy entails an increased risk for negative psychosocial development and mental well-being” (David, 2003, p. 228).

Researchers in the Unintended Pregnancy Working Group reviewed unintended pregnancy for the Division of Reproductive Health at the CDC and findings were published in 2003 by the Guttmacher Institute. These investigators explain:

The concept of unintended pregnancy has been essential to demographers in seeking to understand fertility, to public health practitioners in preventing unwanted childbearing and both groups in promoting a woman’s ability to determine whether to have children. . . .Pregnancy intentions are increasingly viewed as encompassing affective, cognitive, cultural and contextual dimensions. Developing a more complete understanding of pregnancy intentions should advance efforts to increase contraception use, to prevent unintended pregnancies and to improve the health of women and their children. (Santelli et al., 2003)

The United States has established family planning goals in *Healthy People 2020* aimed at improving pregnancy planning and spacing, and preventing unintended pregnancies. An objective of this extensive policy is to increase the proportion of intended pregnancies to 56 percent. Family planning services are encouraged in the far-ranging program because they “prevent 1.94 million unintended pregnancies, including 400,000 teen pregnancies” (*Healthy People 2020*). The overview of family planning contained in the information available to members of the public on-line states:

Unintended pregnancies are associated with many negative health and economic consequences. Unintended pregnancies include pregnancies that are reported by women as being mistimed or unwanted. Almost half of all pregnancies in the United States are unintended. The public costs of births resulting from unintended pregnancies were \$11 billion in 2006. (This figure includes costs for prenatal care, labor and delivery, post-partum care, and 1 year of infant care).

A recent program, designed and carried out in Colorado, was reported in *The New York Times* (July 5, 2015) as “a startling success.” This six-year real-life experiment offered young women “free intrauterine devices and implants that prevent pregnancy for years” (Tavernise, 2015). From 2009 to 2013 the state’s birthrate for teenagers “plunged by 40 percent,” and the abortion rate fell by 42 percent. This effort demonstrates that when provided with birth control, young women will use long term methods to prevent unwanted, unintended pregnancies.

Encouraging the use of birth control is a preventative measure that has long-term personal consequences for young women. For those children born as the result of unintended pregnancies or those who experienced adverse circumstances during their gestation period, there are long-term economic consequences that lie dormant and do not make themselves known for years.

Educating Fathers

Including their partners in the process of helping mothers would then educate young men to use birth control themselves and can help prevent unintended pregnancies. Since those who are sexually active contribute to the high rate of unintended pregnancies, young men should be aware of their health and lifestyle choices as well. More research is showing that the health of the father also impacts the health of babies. Lack of necessary vitamins, especially Vitamin C, or exposure to drugs, alcohol, or nicotine may decrease sperm function, damage the sperm, or create birth defects or cancers in their offspring. Optimal health is encouraged at least 100 days prior to conception for the sperm and the oocyte to produce a healthy zygote. The American Pregnancy Association, a non-profit “national health organization committed to promoting reproductive and pregnancy wellness through education, support, advocacy, and community awareness,” provides excellent preconception health guidelines for men on their website (*Preconception Health for Men*, 2015).

The Maternal and Child Health Journal reported in 2011:

Efforts to reduce infant mortality in the United States have failed to incorporate paternal involvement. Research suggests that paternal involvement, which has been recognized as contributing to child development and health for many decades, is likely to affect infant mortality through the mother’s well-being, primarily her access to resources and support. In spite of that, systemic barriers facing the father and the influence on his involvement in the pregnancy have received little attention. The Commission on Paternal Involvement in Pregnancy Outcomes (CPIPO) has identified the most important social barriers to paternal involvement during pregnancy and outlined a set of key policy priorities aimed at fostering paternal involvement . . . including equitable paternity leave, elimination of marriage as a tax and public assistance penalty, integration of fatherhood initiatives in MCH [Mother and Child Health] programs, support of low-income fathers through employment training, father inclusion in family planning services, and expansion of birth data collection to include father information. (Alio, Bond, Padilla, Heidelbaugh, Lu, & Parker, 2011)

In accordance with both the Commission on Paternal Involvement in Pregnancy Outcomes and the American Pregnancy Association recommendations, The Loving Birth Task Force is committed to integrating father initiatives into its maternal and child healthcare programs and including fathers in family planning and education services.

Maternalism

In 2013, Miranda Waggoner of Princeton University published an article in the *Journal of Health Politics, Policy and Law* titled “Motherhood Preconceived: The Emergence of the Preconception Health and Health Care Initiative.” Waggoner notes the paradigm shift taking place in maternal and child healthcare (MCH):









Since the 1980s, maternal and child health experts have sought to redefine maternity care to include the period prior to pregnancy, essentially by expanding the concept of prenatal care to encompass the time before conception. In 2004, the Centers for Disease Control and Prevention endorsed and promoted this new definition when it launched the Preconception Health and Health Care Initiative. In arguing that prenatal care was often too little too late, a group of maternal and child health experts in the United States attempted to spur improvements in population health and address systemic problems in health care access and health disparities. By changing the terms of pregnancy risk and by using maternalism as a social policy strategy, the preconception health and health care paradigm promoted an ethic of anticipatory motherhood and conflated women’s health with maternal health, sparking public debate about the potential social and clinical consequences of preconception care.

Maternalism suggests that women themselves need to be included in the dialogue addressing their preconception health. In an effort to find out what women know and believe, 499 women were asked what they knew about preconception health care and results were reported in 2006. Researchers found that 98.6 percent of the women:

realized the importance of optimizing their health prior to a pregnancy, and realized the best time to receive information about preconception health is before conception. The vast majority of patients surveyed (95.3%) preferred to receive information about preconception health from their primary care physician. Only 39% of women could recall their physician ever discussing this topic. The population studied revealed some significant knowledge deficiencies about factors that may threaten the health of mother or fetus. (Frey & Files, 2006)

Researchers Frey and Files (2006) concluded from their study: “a majority of women do understand the importance of optimizing their health prior to conception, and look to their Primary care physician as their preferred source for such information.” Nonetheless, the women surveyed were not aware of many of the risk factors associated with maternal or fetal health, which indicated that many physicians are missing the opportunity to educate women regarding preconception healthcare during their regular healthcare visits.

The Loving Birth Task Force endorses the recommendations of the CDC advising all women of reproductive age to adopt healthy behaviors including:

-  **Taking folic acid.**
-  **Maintaining a healthy diet and weight.**
-  **Being physically active regularly.**
-  **Quitting tobacco use.**
-  **Abstaining from alcohol and drugs.**
-  **Talking to their health care provider about screening and proper management of chronic diseases.**
-  **Visiting their health care provider at the recommended scheduled time periods for their age and discussing if or when they are considering becoming pregnant.**
-  **Using effective contraception correctly and consistently if they are sexually active but wish to delay or avoid pregnancy.**

GMOs and Birth Defects

In addition to the above guidelines, awareness is growing regarding the impact genetic modification is having on diets and, thus, the health of the population in the United States. There are admonitions to avoid genetically modified organisms (GMOs) and genetically engineered (GE) foods, which contain glyphosate, an herbicide (Roundup). This chemical is sprayed on engineered plants to resist infestation, aid in growth, promote longevity, restrict weed growth, and facilitate harvesting. Animal studies are revealing the abnormalities that result from exposure to this chemical. A high incidence of human birth defects including “spina bifida (spinal cord protrusion in the lower back), microtia (abnormal ear). cleft lip and palate, polycystic kidney, postaxial polydactyly (extra fingers or toes) and Down’s Syndrome” (Ritterman, 2014) were found in regions of Argentina where aerial spraying of glyphosates occurred.

A headline posted on *The Free Thought* website declares, “Hawaii sees 10-fold increase in birth defects after becoming a GM corn testing grounds” (Syrmpoulos, 2015). The investigative journalist and author of the article, Jay Syrmopoulos, reports that severe heart defects have been observed by a pediatrician on the island of Kauai over the last five years. Residents of the area in close proximity to the fields sprayed with pesticides (which have been banned in Europe) complain of “headaches, vomiting and stinging eyes.” Children say they feel “dizzy and nauseous.” Syrmopoulos cites the World Health Organization (WHO) as stating that “glyphosate, sold as Roundup, the most common of the non-restricted herbicides, is ‘probably carcinogenic to humans.’” Indeed, a 2015 report of over 600 pages issued by the Food and Agriculture Organization of the United Nations and the WHO Core Assessment Group on Pesticide Residues expresses international concern for the safety of pesticide residues in food consumed by the population at large.

According to an article that appeared on the *Sustainable Pulse* website (2014): “Celiac disease, gluten intolerance and irritable bowel syndrome are on the rise worldwide, and that rise has taken place in parallel with the increased use of glyphosate (Roundup) herbicide.”

The Celiac Disease Awareness Campaign of the National Institutes of Health (2014) reports: “Research suggests an association between untreated celiac disease and reproductive problems, including menstrual disorders, unexplained infertility, recurrent spontaneous abortion, intrauterine growth retardation, and low birth-weight babies.” The rate of celiac disease among women who have unexplained fertility problems is higher than those who experience normal fertility. In addition,

several studies have reported miscarriage rates to be substantially higher among women with untreated celiac disease than among healthy women, with one study finding the rate of spontaneous abortion to be nearly nine times higher. The incidence of low birth-weight babies is reportedly almost six times higher in women with untreated celiac disease. The risk of intrauterine growth retardation may be increased three-fold. Women aren’t the only ones to suffer reproductive ills. A study of men with celiac disease found nearly half of them to have hypogonadism, sexual dysfunction, or poor semen quality, resulting in increased infertility. (*Celiac Disease and Reproductive Problems*, 2014).







Obstetrician and gynecologist Kay Stout at the Virginia Women’s Center in Kilmarnock adamantly encourages celiac screening for those women with unexplained infertility, according to the government website cited above.

The *Examiner* (2013) reports reproductive problems including “infertility, miscarriage, birth defects, and sexual development” on their website. Glyphosates disrupt gene expression and can, therefore, adversely affect the development of fetuses, infants, and children. A major concern has been voiced by physician Jeff Ritterman (2014), cited above, who notes studies around the world that demonstrate the negative effects of exposure to glyphosates and urges policy changes to protect the public:

The science is clear. There is only one rational response. No family should have to tolerate the risk of significant birth defects - in the United States, or in any part of the world. Roundup and other glyphosate formulations should be banned. Thus far, the voices of public health advocates in this country have been drowned out by those promoting biotechnology and its profits, regardless of the health consequences. We can't let this continue. Our health, the health of our children and the health of our environment must come first. It is the responsibility of our governmental institutions to protect humanity, not corporate profit.

Columbia University economist Douglas Almond (2011) speaks eloquently about the fetal origins hypothesis, suggesting that the months “*in utero* are one of the most critical periods in a person’s life, shaping future abilities and health trajectories—and thereby the likely path of earnings” (p. 153). Almond brings to light long-term health issues that arise from in utero exposure to poor nutrition, environmental toxins, maternal exposure to infectious diseases, and more. Pointing out the vulnerability of the fetus, he suggests preventive programs that “can best help children (throughout their life course) by helping their mothers” (p. 167).

The Loving Birth Task Force is committed to providing preconception healthcare education that includes:

-  **Improving awareness of the influence that preconception and prenatal periods have on pregnancy outcomes and the lifelong health of children;**
-  **Educating women *and* men on the importance of achieving optimal health before conceiving a child;**
-  **Encouraging and educating women and men on how to plan for their reproductive lives—to decide when and if they will have children and are ready to assume the responsibilities of becoming parents;**
-  **Advocating that prospective parents be supported in a wholesome, nurturing environment with appropriate educational opportunities, shelter, nutrition, health care, and financial security;**
-  **Supporting legislation for medical coverage so women and men can receive pre-pregnancy preparation services (wellness visits) which include medical visits, counseling, and education; and**
-  **Supporting policy changes that prohibit the contamination of food supplies with chemicals that are suspected or known to cause birth defects or other adverse consequences.**

PRENATAL OPPORTUNITIES & CHALLENGES

The Three Stages of Prenatal Development

It is during the prenatal period of time that a baby develops in mother's womb, the period when the most accelerated development in a person's life takes place. This period is divided into three stages known as the germinal, embryonic, and fetal stages. The germinal stage begins with conception when an egg and sperm unite to form a zygote. This period will continue for about two weeks while the fertilized egg travels along the fallopian tube to the uterus. The single cell divides and multiplies in exponential fashion forming a blastocyst and implanting in the uterine wall.

At about the third week, the embryonic stage of prenatal development commences. The neural tube forms and embraces a tiny heart which begins to beat at 18 to 22 days following conception. Until about eight weeks gestational age (ga), the cluster of cells is called an embryo. The cells are differentiating as they start to perform different functions. The placenta forms and the embryo develops three layers: ectoderm (outer), mesoderm (middle), and endoderm (inner). The ectoderm develops into skin and hair as well as brain and nervous system; the mesoderm forms bones and muscles; and the endoderm forms the digestive and respiratory systems. By the end of this period identifiable eyes, ears, nose, and mouth appear. Arm and leg buds emerge. The tiny embryo is now about an inch long and weighs one gram.

When most cell differentiation has taken place, the embryo has changed enough that it becomes known as a fetus and from the ninth week will be developing into a baby that can survive outside mother's body. The ideal timeframe for this development is 280 days or 40 weeks. Sexual differentiation occurs during the fetal stage, which lasts the longest while systems develop and size increases. Fingernails, toenails, eyelashes, and hair all grow and babies born prematurely can actually survive, even when born at 28 weeks or less. Of course, the best place for baby to develop is in mother's womb.

Lisa Roundy, in an online course, *Prenatal States and Development: Germinal, Embryonic & Fetal Period*, describes the prenatal period as the time in which the baby is first conceived and looks for a place to live (the germinal period), begins to organize her space (embryonic period), and then puts on the finishing touches in preparation for birth (fetal period).

Prenatal Considerations

This is vulnerable time for the unborn baby, and therefore, a time when mothers are advised to take care of themselves, pay attention to diet and exercise, and avoid teratogens, "the broad range of conditions and substances that can increase the risk of prenatal problems and abnormalities" (Cherry, 2015). Some women, however, may feel that they are not ready for motherhood and choose to terminate their pregnancy. There appears to be consciousness in the developing baby, and some may feel that undergoing such a procedure would contradict religious or moral beliefs. The members of the Task Force do not wish to judge any woman's choice.

Indeed, Dr. Gladys McGarey relates stories about women patients who have communicated with the baby growing within them and subsequently had spontaneous miscarriages. Dr. Gladys, learning from experiences with this phenomenon, stresses the need for honest conscious communication with the baby. The pregnant woman can explain to the baby why the timing is not right; that they are loved but cannot, under the circumstances, have the life they deserve; that demands on time, energy, and resources make it impossible for the woman to dedicate herself to raising a child. Dr. Gladys (2001) says,

If there is communication, if there is prayer, if there is sought understanding of life's purpose – or at least the direction toward a life purpose – and if there is the awareness of the continuity of life and the reality of choices each person can make that are either constructive or destructive, then, when the choice is made, it will be right for that time and place. Those who have fulfilled prerequisites like these may indeed have thrown new light on abortions. (McGarey, p. 59-60)

Dr. Gladys tells of stories she has heard from women who have experienced abortions. Typically, a woman would say that the baby who had been aborted returned to her at a later time when circumstances had changed so she could give birth to another child. How does a woman know it is the same child? Sometimes there is an innate sense of connection with the child; sometimes the child literally tells her about the abortion and the return in a different body to the intended mother and family.

Ultrasound Imaging

Ultrasound imaging (also known as sonography) is frequently performed during pregnancies in the United States. It is estimated that at least half of all pregnant women receive one or more ultrasound scans. Although there are no studies proving that ultrasounds are either safe or cause harm to mothers or fetuses, the procedure uses high frequency sound waves, inaudible to the adult human ear. Kevin Helliker (2015), writing for the *Wall Street Journal*, states that “women in America are getting more ultrasound scans per pregnancy, on average, than experts in fetal medicine recommend.”

Ultrasound imaging was originally recommended only for pregnancies which were medically at risk. However, they have now been accepted by most women as normal, if not essential. The images are considered a good way for women to connect with their unborn babies. The wisdom of the ages is inherent within all women and the ability to bond with a child in the womb seems to be a lost art with the advent of technology.

If a pregnant woman decides in favor of having an ultrasound scan, Helliker (2015) recommends five things that pregnant women should ask their doctors:

1. How many scans do you intend to administer throughout my pregnancy?
2. Will you pay attention to the Output Display Standard?
3. Is the operator certified to perform the anatomy scan?
4. Do you plan to use pulsed Doppler ultrasound?
5. Can I see and take home an image of my baby?

Asking how many ultrasounds may influence the doctor to reduce the number of scans to be ordered. The Output Display Standard is an index required by federal regulators to be displayed. It shows two safety indexes, thermal and mechanical, which indicate the potential for rising temperatures and mechanical effects that could pose a risk to developing tissue and cells. A certified operator of the equipment is not required but should be requested to insure competence in performing the procedure. Doppler ultrasound, also used by midwives, is a high intensity ultrasound that the American Institute of Ultrasound noted, “requires considerable skill, and subjects the fetus to extended periods relatively high ultrasound exposure levels” (Helliker, 2015). Finally, although snapshots of the baby in utero seem to psychologically enhance the connection between a mother and her developing baby, women can *tune in* to their babies in more natural ways that enrich the bond forming prenatally.

Dr. Manual Cassanova, psychiatrist, Professor of Anatomical Sciences and Neurobiology at the University of Louisville, and special contributor to the *Fearless Parent* website, has proclaimed:

Excessive, non-indicated use of ultrasound is dangerous and may be tied to the ever increasing prevalence of some neurodevelopmental conditions. Urgent government regulation is needed. Selling equipment through Amazon or eBay to non-health professionals should be prohibited. The use of ultrasound for keepsake images and other non-medical purposes should be banned.

A website dedicated to investigating the connection between ultrasound and autism states:

The burden of proof should fall onto those who claim prenatal ultrasound is safe rather than those who say it is unsafe. This website has no references to studies showing prenatal ultrasound to be safe for the fetus because prenatal ultrasound has never been proved safe. No such studies exist. Although most children appear to have had no adverse reactions to typical prenatal ultrasound exposure, it is possible that some fetuses are affected by factors such as genetic predisposition, operator error and machine inaccuracy. (www.ultrasound-autism.com)

Jennifer Margulis (2013), author of *The Business of Baby*, asks online “Are Ultrasounds Causing Autism in Unborn Babies?” She states, “Scientists are uncovering disturbing evidence that those sneak peeks at baby could damage a developing brain.”

Dr. Sarah J. Buckley (2002), author of *Gentle Birth, Gentle Mothering*, calls ultrasounds “cause for concern.” She urges women to carefully consider having routine ultrasounds, and, if choosing this procedure, to make sure the operator is skilled and the exposure the shortest possible.

Dr. Chris Kresser (2011) notes:

the new trend of non-medical fetal ultrasound (also known as ‘keepsake’

ultrasound), which is defined as using ultrasound to view, take a picture, or determine the sex of a fetus without a medical indication. This practice involves long exposures using 3-D and 4-D ultrasound techniques, which have not been studied adequately, and do not provide the patient with medically appropriate data. For this reason, major organizations like the American College of Obstetricians and Gynecologists, AIUM and the FDA do not support keepsake ultrasound.

Marsden Wagner (1999) proclaimed:

Using the anti-precautionary approach and assuming the safety of any obstetric intervention is dangerous. In the 1930s, taking x-rays of pregnant women seemed harmless. A report in 1956 made a connection between fetal X-rays and later cancer in the child.

In agreement with Doctors Cassanova, Buckley, Kresser, and Wagner, The Loving Birth Task Force suggests that ultrasound scans only be performed when medically indicated. Scans should be avoided or limited until research fully establishes their safety. If the procedure is elected, it is recommended that both exposure time and intensity be minimized.

Amniocentesis

A diagnostic test performed together with sonography is amniocentesis. This test is done to obtain samples of the amniotic fluid which contains skin cells shed by the fetus to determine if there are abnormalities. A needle is inserted in the pregnant woman's abdomen, usually between 14 and 20 week's gestation. David Chamberlain, psychologist and author of *Windows to the Womb*, relates instances found in the medical literature of babies twisting away from the needle or batting the needle away.

The American Pregnancy Association (APA) recognizes amniocentesis as a safe but invasive procedure although the primary risk associated with the test is miscarriage. The mother may experience pain during the procedure and the baby risks being pierced by the needle.

The APA states:

Performing the tests and confirming the diagnosis provides you with certain opportunities:

- Pursue potential interventions that may exist (i.e. fetal surgery for spina bifida)
- Begin planning for a child with special needs
- Start addressing anticipated lifestyle changes
- Identify support groups and resources

Some individuals or couples may elect not to pursue testing or additional testing for

various reasons:

- They are comfortable with the results no matter what the outcome is
- Because of personal, moral, or religious reasons, making a decision about carrying the child to term is not an option
- Some parents choose not to allow any testing that poses any risk of harming the developing baby

The Loving Birth Task Force concurs with the APA: It is important to discuss the risks and benefits of testing thoroughly with your healthcare provider who will help you evaluate if the benefits from the results could outweigh any risks from the procedure.

LABOR & BIRTH

Birthing Venues

The majority of births (98.6 percent) in the United States today take place in hospitals (Martin, Hamilton, Osterman, Curtin, & Mathews, 2015). Out-of-hospital births accounted for only 1.36 percent of total births in 2012 (MacDorman, Mathews, & Declercq, 2014). Although the risk profile for out-of-hospital births is low, that is, those that take place in homes and birth centers, women tend to rely on hospitals and medical technology when giving birth.

The following chart is distilled from information on the Keeper of the Home website.

Features	Home	Birthing Center	Hospital
Comforts of Home or Homelike	Yes	Yes	Sterile
Complete freedom for birthing Positions	Yes	Yes	No
Freedom of movement	Yes	Yes	Maybe
Ambiance of choice(candles, music, light)	Yes	Mostly	No
Restrictions on birth witnesses	No	May have some	Yes
Time restrictions for Labor	No	No	Yes
Privacy	Yes	Yes/modified	No
Known personnel	Yes	Yes	No
Personnel changes shifts	No	No	Yes
Can eat during labor	Yes	Yes	Usually No
Interventions	No	Some if needed	Yes
Procedure pressures	No	No	Often
Ultrasound	No	No	Yes
Fetal Monitor	No	Not usually	Yes
Pain management (epidural or other)	Not medical	Not medical	Yes
Possibility for C-section	Very low	Very Low	High (30%)
Showers	Maybe	Maybe	Maybe
Birthing Tub	Portable	Usually	Some Hospitals
Emergency plan for transport	Ask	Yes	Not necessary
Use of Midwife or CNM	Your Choice	Yes	Some Hospitals
Professionally Licensed Midwife	Your Choice	Possibly	No
May Use of Doula	Yes	Yes	Usually
Back-up Physician	Ask	Yes	On Floor
Hospital close by	Ask	Yes	
High chance of achieving natural birth	Yes	Yes	No
Skin to Skin immediately after birth	Yes	Yes	Maybe
Baby can stay with Mother	Yes	Yes	Maybe
Baby removed for tests & bathing	No	No	Yes
Medical help for baby when necessary (NICU)	Need transport	Need Transport	Yes
High risk pregnancy	No	No	Yes

Features	Home	Birth Center	Hospital
Baby medical tests & procedures	Only required	Only required	Yes
Lactation support	Yes	Yes	Usually
Length of stay after birth	Unlimited	6+ hours	24+ hours
Cost	Least \$3-5,000	Moderate \$4-7,000	High \$9-18,000+
Insurance coverage	Maybe, Not usually	Maybe Private, Not Medicaid	Yes Also Medicaid
Out of pocket expense	Mostly	Some	Some
Best suited for Mothers who are	Low Risk	Low Risk	High Risk/Fearful
Prenatal Care & Education	Yes	Yes	By OB
Postpartum Follow up - physical	Yes at home	Yes	OB office
Postpartum Care & support	Yes	Yes	No
First Baby exam	Ped. Office	Ped. Office	In hospital
Birth Satisfaction	High	High	Questionable

Prepared by Alyce-Anne Meadows.

Benefits of Spontaneous Vaginal (Physiological) Birth

The Journal of Perinatal Education (2013) included an article titled “Supporting Healthy and Normal Physiologic Childbirth: A Consensus Statement by ACNM, MANA, and NACPM” in which normal physiologic birth was succinctly defined:

A normal physiologic labor and birth is one that is powered by the innate human capacity of the woman and fetus. This is more likely to be safe and healthy because there is no unnecessary intervention that disrupts normal physiologic processes. (p. 15)

The Consensus Statement further states:

Normal physiologic childbirth

- ✚ is characterized by spontaneous onset and progression of labor;
- ✚ includes biological and psychological conditions that promote effective labor;
- ✚ results in the vaginal birth of the infant and placenta;
- ✚ results in physiological blood loss;
- ✚ facilitates optimal newborn transition through skin-to-skin contact and keeping the mother and infant together during the postpartum period; and
- ✚ supports early initiation of breastfeeding. (p. 15)

The following factors disrupt normal physiologic childbirth:

- ✚ induction or augmentation of labor;
- ✚ an unsupportive environment, i.e., bright lights, cold room, lack of privacy, multiple providers, lack of supportive companions, etc.;
- ✚ time constraints, including those driven by institutional policy and/or staffing;

- + nutritional deprivation, e.g., food and drink;
- + opiates, regional analgesia, or general anesthesia;
- + episiotomy;
- + operative vaginal (vacuum, forceps) or abdominal (cesarean) birth;
- + immediate cord clamping;
- + separation of mother and infant; and/or
- + any situation in which the mother feels threatened or unsupported. (p. 15)

In accordance with the American College of Nurse-Midwives (ACNM), the Midwives Alliance of North America (MANA), and the National Association of Certified Professional Midwives (NACPM) Consensus Statement, The Loving Birth Task Force is committed to providing the best setting and environment for women to give birth normally including:

- **Access to midwifery care for each woman;**
- **Adequate time for shared decision making with freedom from coercion;**
- **No inductions or augmentations of labor without an evidence-based clinical indication;**
- **Encouragement of nourishment (food and drink) during labor as the woman desires;**
- **Freedom of movement in labor and the woman's choice of birth position;**
- **Intermittent auscultation of heart tones during labor unless continuous electronic monitoring is clinically indicated;**
- **Maternity care providers skilled in non-pharmacologic methods for coping with labor pain for all women;**
- **Care that supports each woman's comfort, dignity, and privacy; and**
- **Respect for each woman's cultural needs.**

In an optimum physiological birth:

- The woman is fully informed of all birthing options and procedures prior to birth. She is the main decision-maker.
- The woman and family have continuity of care and continuous support during the birthing process.
- The woman is free to eat, drink, and move during labor. She is free to choose the position that will work best for her and is in an environment where she is comfortable.
- The woman feels empowered through the process to then become a parent.
- The mother and baby are enabled to be alert, thus promoting early bonding and attachment.
- The mother and baby are viewed as a pair/couple.

The Loving Birth Task Force promotes physiological birth as the optimum manner for women with low risk pregnancies to give birth.

The Hormones of Birth

Vaginal, i.e. normal, physiologic births have many benefits compared to medicalized births or cesarean surgeries. They are associated with a lower rate of morbidity, a decreased chance for post-partum infection, and a shorter hospital stay. In vaginal birth, hormones released within the birthing mother stimulate placental blood flow and prepare and protect the body. Hormones are especially important in triggering the protective and loving instinct (Buckley, 2005; Odent, 2001).

When not impeded by medical interventions, hormones secreted within the mother's body help the birthing process proceed at its own pace. In January 2015, Childbirth Connection, a program of the National Partnership for Women & Families, published *Hormonal Physiology of Childbearing: Evidence and Implications for Women, Babies, and Maternity Care*. The comprehensive and well researched report features ancillary documents that state:

Hormonal physiology of childbearing involves complex interconnected beneficial processes. Hormonal actions of one phase anticipate and prepare for subsequent phases. In healthy pregnancies, these processes foster efficient labor, safety for mother and infant, successful breastfeeding, and optimal mother-newborn bonding. (Buckley, 2015, p. 1)

During late pregnancy and early labor there is a rise in both the hormones and receptor systems, which prepares mother and baby for efficient labor, birth, breastfeeding, and bonding. These steps lay the foundation for the newborn to develop a secure attachment style that will endure into adulthood. During active labor hormones stimulate contractions and prevent hemorrhage. Mother's breasts are prepared to provide nourishment for her newborn. The physiologic birth process followed by skin-to-skin contact combine to release the hormones necessary for maternal-infant bonding and breastfeeding.

The major hormones released during the childbearing process are oxytocin, beta-endorphins, epinephrine-norepinephrine (catecholamines), and prolactin. Each plays a vital role in the birthing process, creating a cascade of benefits to both the mother and newborn child. The sequential release of these hormones is interrupted when medical interventions such as Pitocin and epidurals are introduced. National Vital Statistics Reports determined that 61 percent of birthing mothers in 27 states received epidurals in the year 2008 (Osterman & Martin, 2011).

The Loving Birth Task Force is dedicated to reducing the use of epidurals and other medications during childbirth and to promoting the natural processes of birth that allow the flow of hormones to ease birth, empower mothers, enhance bonding, and give newborns the most positive transition into the arms of their mothers.

The Sacred Hour and Skin-to-Skin Contact

The first hour after a baby is born is considered so important that is referred to as the “sacred hour” (Phillips, 2011), the golden hour” (Stoddard, 2013), and the magical hour (Healthy Children Project, 2011). Dr. Raylene Phillips (2013), neonatologist at Loma Linda University School of Medicine, states:

The manner in which a new baby is welcomed into the world during the first hours after birth may have short- and long-term consequences. There is good evidence that normal, term newborns who are placed skin to skin with their mothers immediately after birth make the transition from fetal to newborn life with greater respiratory, temperature, and glucose stability and significantly less crying indicating decreased stress. Mothers who hold their newborns skin to skin after birth have increased maternal behaviors, show more confidence in caring for their babies and breastfeed for longer durations. Being skin to skin with mother protects the newborn from the well-documented negative effects of separation, supports optimal brain development and facilitates attachment, which promotes the infant’s self-regulation over time. Normal babies are born with the instinctive skill and motivation to breastfeed and are able to find the breast and self-attach without assistance when skin-to-skin. When the newborn is placed skin to skin with the mother, nine observable behaviors can be seen that lead to the first breastfeeding, usually within the first hour after birth. Hospital protocols can be modified to support uninterrupted skin-to-skin contact immediately after birth for both vaginal and cesarean births. The first hour of life outside the womb is a special time when a baby meets his or her parents for the first time and a family is formed. This is a once-in-a-lifetime experience and should not be interrupted unless the baby or mother is unstable and requires medical resuscitation. It is a “sacred” time that should be honored, cherished and protected whenever possible.

According the Loma Linda University Children’s Hospital website, newborns have nine instinctive behaviors that occur in stages:

1. The Birth Cry – often a distinctive cry that occurs as the baby's lungs expand for the first time.
2. Relaxation – after the birth cry stops, the mouth and hands become relaxed. The baby should be skin to skin with the mother, and have some mouth activity.
3. Awakening – usually starts around 3 minutes after birth. The baby may open his or her eyes, move their head and shoulders and show some mouth activity.
4. Activity – usually begins around 8 minutes after birth. During this stage, a newborn could: keep eyes open, look at the breast, salivate (dampen mother’s skin), root by moving his or her mouth from side to side by rubbing the cheek against mother’s chest, exhibit high rooting by lifting part of the torso from mother’s chest, bring hand to his or her mouth, move his or her hand to mother’s breast and back to the mouth, stick out tongue, look at mother, massage mother’s breast with one or both hands.
5. Rest – Baby may have periods of resting at any point throughout the first hour.

6. Crawling – usually begins around 35 minutes after birth; the baby will move his or her way to the breast by crawling (sometimes while also pushing and rooting) or leaping through sliding (sometimes while also rooting and questing).
7. Familiarization – usually begins around 45 minutes after birth, lasting around 20 minutes. During this stage, the newborn could touch and/or massage mother's breast, lick mother's breast and/or nipple, look at mother, make sounds, mouth his or her hand, stick out tongue, move his or her hand from mother to mother's breast, and look at people.
8. Suckling – about an hour after birth the newborn should take the nipple, self-attach and suckle. It may take more time with the baby skin to skin to complete the previous stages if the mother has had medication for pain or an epidural.
9. Sleep – baby, and sometimes mother, may fall into a restful sleep about 1½ to 2 hours after birth. (www.childrens-hospital.lomalindahealth.org)

Skin-to-skin contact, also known as Kangaroo Care, is an internationally recognized way to naturally care for a newborn infant, placing it on mother's body without clothing to separate them. Dr. Nils Bergman (2013) points out in his on-line article, *Skin-to-skin contact is key to perinatal neuroscience*, the neuroscience implications for babies who are held in such intimate contact with their mothers:

The SKIN-TO-SKIN CONTACT is very specifically firing two key capacities in the newborn brain. The first is the emotional brain: the amygdala is the sorting station for all emotions, and will appropriately decide what situations are safe to approach, and what are better avoided. This is EMOTIONAL INTELLIGENCE. But if the approach pathway is not fired, the avoid orientation will predominate. Adults with predominant "avoid activity" are more at risk for depression, and have poorer resilience, both physiologically and psychologically. The second capacity is SOCIAL INTELLIGENCE. The amygdala (the emotional sorting station) has inputs from a "face coding" area (fusiform gyrus), and a "am I safe here" decision centre (peri-aquiductal gray), and the subsequent capacity to choose wisely between approach and avoid is core to SOCIAL INTELLIGENCE. (In autism, the fusiform and the approach centre are the most commonly affected).

Dr. Bergman, the leading international expert and proponent of skin-to-skin care, recommends this method of care to mothers of premature babies, and expands the recommendation to all mothers and their newborn babies. He is also an advocate of co-sleeping (bed-sharing), a controversial practice, but lists recommendations on his website for safely engaging in co-sleeping with baby.

The Loving Birth Task Force concurs with proponents of the "sacred hour," and advocates keeping mother and newborn together in the hour immediately following birth to enhance bonding and attachment, babies' development of both emotional and social intelligence, and to contribute to the formation of a loving family with baby in arms.

Bonding and the Foundation for Secure Attachment

The Sacred Hour, known also as the magical and golden hour, is vital in establishing the bond between a mother and her newborn child. It is in these moments that the eye-to-eye contact between them, called the maternal-infant gaze, stimulates the flow of oxytocin, the love hormone, to physiologically create a loving and lasting bond. Each reflects the love they see in each other's eyes. The baby evokes the gaze from mother—if mother falls in love with baby, she will provide the care so essential for a helpless human infant. This is part of Nature's grand design (Highsmith, 2014).

Klaus, Kennell, and Klaus (1995), authorities on the subject of bonding, define a bond as the tie from the adult to the child while attachment refers to the tie from the child to the adult. This is an important distinction. Bonding is falling in love with baby, and bonds can endure. The attachment style(s) the child develops with each caregiver forms a template for all relationships that will develop throughout that child's life. Attachment can be secure, insecure, or disorganized. Security depends on the mother or primary caregiver providing responsive, appropriate care when the child needs it (Siegel, 1999). Only half of the population is estimated to be securely attached. Although insecure attachment is not a diagnosis, it is a pattern of behavior associated with security or insecurity within relationships. The patterns of ambivalence or avoidance are created early—in the womb, at birth, and during childhood years. Bonding and attachment—secure or insecure—begin in the womb.

A prenatal bonding program has been developed in Germany and is currently being taught internationally by psychiatrist and psychoanalyst Gerhard Schroth. Three thousand women have experienced Prenatal Bonding since 1995. Among this population, there have been no cases of postpartum depression and the number of preterm births and Cesarean sections has been significantly reduced. Pregnant women appear to be able to gently resolve any trauma associated with past issues of sexual abuse during 20 weekly sessions. After birth, babies, too, appear to benefit as they demonstrate more curiosity, emotional stability, and social maturity (www.schroth-apv.com/PrenatalBondingBA.html).

The Loving Birth Task Force encourages prenatal bonding and is dedicated to honoring the Sacred Hour, deterring the separation of mother and newborn during those first valuable moments (unless life threatening emergencies dictate otherwise).

Delayed Cord Clamping

Immediate cord clamping is a practice that has been performed routinely for decades without evidence of benefit. Placental transfer of oxygenated blood, nutrients, and stem cells continues for several minutes after birth. Physiologic principles suggest that the optimal transition to life outside the womb depends on this transfer. Researchers have found higher newborn iron levels at birth correlate with less likelihood of childhood anemia, a condition with long-term neurologic consequences (Ceriani et al., 2006).

Brazilian researchers have subsequently found:

Tackling anemia should involve creating policies aimed at reducing social inequalities, improving the quality of antenatal care, as well as implementing a criterion of delayed clamping of the umbilical cord within the guidelines of labor. (Oliveria et al., 2014)

Some pediatricians recommend iron supplementation for breastfed infants, but it may be that by providing the full complement of iron, delayed cord clamping is the only iron supplement healthy babies need. As an added bonus, delayed cord clamping can keep babies in their mother's arms, the ideal place to regulate their temperature and initiate bonding and breastfeeding. Delaying cord clamping may be an important reason to justify keeping mothers and babies together after birth.

Mary Jackson (March 14, 2016), nurse, licensed midwife and craniosacral therapist, recommends that the cord *and* placenta remain attached until babies have latched on to the breast and know where their next source of nourishment is. Mary is a midwife with extensive experience and specializes in “supported attachment,” a practice she and Ray Castellino developed to allow newborns to gently adjust to their new environment at birth. The process is one that encourages the baby to tell its story with their sounds and movements, one that can be heard and seen physically and can be employed as a treatment modality for adults who carry implicit memories of less than ideal births.

Relaxation, Meditation, and Self-Hypnosis for Labor and Birth

A number of birth education programs encourage meditation and relaxation during labor. For example, *Calm Birth: A New Method for Conscious Childbirth* (Newman, 2005) promotes meditation in place of medication in the realm of childbearing. *Calm Birth* methods, most importantly, preserve a birthing mother’s awareness rather than suppressing it with drugs. According to Newman, “when pregnant women practice meditation an empowering sense of safety and wholeness is generated from the inside” (p. xxiii). Further, “new applications of meditation practices empower women to adhere to and advance the principles of natural childbirth” (p. 8).

HypnoBirthing, a program developed by Marie Mongan, helps “women reclaim their right to call upon their natural birthing instincts, and with the total involvement of their partners . . . [create] . . . one of the most memorable experiences of their lives” (Mongan, 2005, p. 18). The program teaches women to deeply relax during labor, promoting the natural flow of hormones that ease giving birth. It utilizes exercises including “positive thinking, relaxation, visualization, breathing, and physical preparation” (*HypnoBirthing*, back cover) to reduce fear, pain, and tension. It guides women to discover their inner resources to safely and gently give birth.

The Loving Birth Task Force encourages pregnant women to explore and enroll in educational programs like *Calm Birth* and *HypnoBirthing* to enhance their abilities to give birth naturally, bond with their babies during pregnancy and at birth, and increase their awareness throughout the miraculous process of childbearing.

Placental Encapsulation

According to the American Pregnancy Association, “placental encapsulation is the practice of ingesting the placenta after it has been steamed, dehydrated, ground, and placed into pills. Traditionally, this is taken by the mother and is believed to impart numerous health benefits” (*Placenta Encapsulation*, americanpregnancy.org). Although there is limited scientific research supporting this practice, one study found that 48 women who were lactating insufficiently increased milk production within four days when they took powdered placenta (Bensky, 1997).

The leading researcher in the field of placentophagia (ingesting afterbirth), Professor Emeritus Mark Kristal at the University at Buffalo, notes that this behavior is normal in nonhuman mammalian mothers. It has a number of benefits including increasing maternal caretaking behaviors and diminishing pain. Kristal (2012) asks, “Why don’t humans engage in placentophagia as a biological imperative?” (p. 177). He concludes “the quest for medicinal or behavioral benefits of components of afterbirth is important, for the same reasons that the quest for plant-based medicinal substances is important” (p. 192). Indeed, if substances in the placenta and amniotic fluid are natural pain relievers and bonding enhancers, research should logically be conducted to determine if a woman’s own biological system produces the very medicine both she and her baby need after birth as well as before.

The Microbiome and Its Impact on the Baby (This section was contributed by Dr. Janet Teodori, Pediatric Neurologist and member of the Loving Birth Task Force.)

Establishing a symbiotic microbiome in life is one of the key factors to developing general health. Links between an adverse microbiome and many somatic and neuropsychiatric conditions such as asthma, inflammatory bowel disease, allergies, obesity, diabetes, autism, schizophrenia, and depression have been shown experimentally. This research continues to grow in both adult and pediatric medicine across a wide variety of scientific communities. What we realize now is that the microbes in our bodies are vast in number (100 trillion), exceed our cellular number by a factor of 10, and genes associated with these microbes exceed our own genome by a factor of 30. Microbes play a critical role in our health and function of our immune system

There have been several recent publications and documentaries about the microbiome and its long term effects on the newborn. A documentary titled *Microbirth* promoted vaginal births, as opposed to Cesarean section deliveries, because of the impact of an altered microbiome in the baby when the baby was not allowed to traverse the birth canal in the

natural way. Breastfeeding has also been shown to be important for transference of microbes to the infant, as well as critical immunologic factors. The newer emerging studies have revealed that the baby is colonized by bacteria in utero. In utero, microbes are already having an effect on development of immune function as well as organ development, such as the brain. This only increases the need for us to look at the microbiome of mothers more carefully in consideration of their overall health and preparation for pregnancy.

The microbes mothers carry will be transmitted to the baby in a variety of ways, and an adverse microbial population may have a life-long effect on the infant. We need to encourage mothers toward healthy eating and life-practices which promote the most beneficial microbial population both for the mother and the baby. This effort may need to begin before pregnancy for maximum benefit. Early access to expectant mothers and woman anticipating pregnancy will be necessary (Teodori, 2016).

According to a Healthline article by Heather Kathryn Ross (2015),

Babies born vaginally get their first major dose of microbes from their mothers as they pass through the birth canal. These beneficial bacteria include Lactobacillus . . . Babies delivered via C-section surgery get their first dose of microbes from their mothers' skin and the skin of doctors and nurses in the delivery room.

Realizing that babies are already being "colonized by bacteria in utero" (Teodori, 2016), more microbes are being transferred to babies throughout their births and postpartum as well. Dr. Maria Dominguez-Bello at New York University is developing a process called the "gauze-in-the-vagina technique" (Ross, 2015) which acquires microbes from a mother's vagina that can be swabbed on the baby after a cesarean delivery.

The Loving Birth Task Force encourages all women to become aware of the subject of microbiomes in order to promote their own healthy immune systems and make choices that will help their unborn and newborn babies develop healthy immune systems as well.

Breech Birth

A baby that is not positioned head-down is considered to be in breech position, one that presents feet, knees, or buttocks (breech means buttocks) to the birth canal (Goer, 1999). According to Goer, this used to be considered a variation that could be encountered matter-of-factly by obstetricians, however, about 45 years ago when Cesarean sections were thought to solve all birthing problems, breech position became a mandate for surgical delivery.

Fifteen years ago a study of 2083 women in 121 centers in 26 countries determined that "planned caesarean section is better than planned vaginal birth for the term fetus in the

breech presentation; serious maternal complications are similar between the groups” (Hannah et al., 2000). In a 2007 issue of *Birth*, Dr. Andrew Kotaska countered:

In 2001 the term breech trial led the American and Royal Colleges of Obstetricians and Gynecologists (ACOG and RCOG) to issue black-and-white “cookbook” guidelines condemning vaginal breech birth. Since then, women have been coerced, both overtly and covertly, into having Cesarean sections. New evidence and a better understanding of the limitations of the term breech trial have led both the ACOG and RCOG to replace their 2001 guidelines with new ones that re-open the door for planned vaginal breech birth, acknowledge the evolving understanding of the nature of evidence, and emphasize the importance of external validity in the evaluation of complex phenomena. Parturient choice and clinical judgment are re-introduced.

The American College of Obstetricians and Gynecologists (ACOG) did modify their recommendations for breech births noting that the “mode of delivery should depend on the experience of the health care provider,” although Cesarean sections would probably be preferred by most physicians because “of the diminishing expertise in vaginal breech delivery” (ACOG Committee on Obstetric Practice, 2006).

In *Optimal Care in Childbirth: The Case for a Physiologic Approach* (2012), researchers and authors Henci Goer and Amy Romano state, “the optimal arrangement for breech, VBAC, and twin births is almost certainly home-style midwifery care in a hospital setting with the active collaboration and immediate availability of physicians. This, however, is almost never an option” (p. 506).

Vaginal Birth after Cesarean Section (VBAC)

Vaginal birth after Cesarean section (VBAC), in most areas of the country, is discouraged or disallowed. In fact, worldwide “the primary obstetric indication for Cesarean section is previous Cesarean section” (Kaplanoglu, 2014). Childbirth Connection, an advocacy group for women and families, reports that, while the C-section rate has modestly declined, the rate of VBAC has fallen as well, meaning fewer women are giving birth vaginally after having had a previous surgical delivery.

The Childbirth Connection website addresses *VBAC or Repeat C-Section* telling women:

Unfortunately, a growing number of hospitals and doctors do not allow you to weigh the facts, consider your preferences and choose for yourself whether to plan a VBAC or repeat cesarean. They may refuse because they fear lawsuits, because they face restrictions from insurance companies, because they prefer the convenience of scheduled deliveries, or other reasons, but the effect is the same: if you wish to use their services, you must accept surgical delivery. Your best approach is to become informed and clarify your goals well in advance and then seek care that is in line with your preferences and birth plan.

A recent study of 100 women found that 85% of the cases were able to have successful vaginal births following previous Cesarean sections. Only 15% required an emergency C-section (Bangal et al., 2013). Nonetheless, the adage “once a C-section, always a C-section” has become reality for most women who have had surgical deliveries.

The Loving Birth Task Force suggests that women become informed of their options early and, particularly, to determine if options are available by the care providers they expect to utilize. Procedures for dealing with breech positions and vaginal births after previous cesarean surgeries differ and the Task Force endorses those that are the least invasive while providing the greatest safety for both mother and baby.

Waterbirth

Giving birth in water is a relatively recent procedure. Some women choose to labor in a tub of warm water but exit to give birth. It is thought that the water helps relieve the effects of gravity on the mother and provide a naturally wet environment for the baby who has been in amniotic for months. Water birth is considered by its advocates to be safe, soothing, and relaxing. Nonetheless, the American College of Obstetricians and Gynecologists (ACOG) consider the procedure experimental although perhaps beneficial during the first stage of labor.

The benefits of water birth are enumerated on the American Pregnancy website:

Benefits for Mother:

- Warm water is soothing, comforting, relaxing.
- In the later stages of labor, the water has been shown to increase the woman's energy.
- The effect of buoyancy lessens a mother's body weight, allowing free movement and new positioning.
- Buoyancy promotes more efficient uterine contractions and improved blood circulation resulting in better oxygenation of the uterine muscles, less pain for the mother, and more oxygen for the baby.
- Immersion in water often helps lower high blood pressure caused by anxiety.
- The water seems to reduce stress-related hormones, allowing the mother's body to produce endorphins which serve as pain-inhibitors.
- Water causes the perineum to become more elastic and relaxed, reducing the incidence and severity of tearing and the need for an episiotomy and stitches.
- As the laboring woman relaxes physically, she is able to relax mentally with greater ability to focus on the birth process.
- Since the water provides a greater sense of privacy, it can reduce inhibitions, anxiety, and fears.

Benefits for Baby:

- Provides an environment similar to the amniotic sac.
- Eases the stress of birth, thus increasing reassurance and sense of security.

The risks of giving birth in water are speculative as the rates of perinatal mortality between waterbirths and conventional births are similar. Waterbirth activist Barbara Harper states

Research has verified many aspects of water labor and waterbirth: Water facilitates mobility and enables the mother to assume any position which is comfortable for labor and birth; speeds up labor; reduces blood pressure; gives mother more feelings of control; provides significant pain relief; promotes relaxation; conserves her energy; reduces the need for drugs and interventions; gives mother a private protected space; reduces perineal trauma and eliminates episiotomies; reduces cesarean section rates; is highly rated by mothers . . . [and] . . . experienced providers; encourages an easier birth for mother and a gentler welcome for baby.

Harper further explains:

When a woman in labor relaxes in a warm deep bath, free from gravity's pull on her body, with sensory stimulation reduced, her body is less likely to secrete stress-related hormones. This allows her body to produce the pain inhibitors-endorphins-that complement labor. Noradrenaline and catecholamines, the hormones that are released during stress, actually raise the blood pressure and can inhibit or slow labor. A laboring woman who is able to relax physically, is able to relax mentally as well. Many women, midwives, and doctors acknowledge the analgesic effect of water. Thousands of these mothers state they would never be able to consider laboring without water again.

Due to limited research, the Loving Birth Task Force can recommend laboring in water; however, careful consideration should be given to giving birth in the water. It is possible that the microbiome being established on the babies' skin could be washed off or weakened by birthing in water. Research is needed in this area. Tubs for labor and birth are available in birthing centers and portable tubs are carried by home birth midwives. Ultimately the decision to give birth in water is one reached by a pregnant woman and her birthing healthcare provider

Women in America today have many choices when it comes to considering where and with whom they will give birth. Many are not aware of the array of choices facing them and could benefit from education in the realm of childbirth.

The Loving Birth Task Force is dedicated to providing education that expands women's choices.

Master's candidate Jenae Franklin (2014), a student at Pitzer College, conducted research and produced a master's thesis titled *A Mother's Paradox: Choosing a Birthing Method in the 21st Century*. Noting the dominance of the medical model in society, Franklin concluded:

Overall, with increased public awareness of the benefits of midwifery services, the philosophy of the holistic model, the consequences of rising cesarean rates, and the expansions of the Affordable Care Act, the United States is going to begin to see various changes in the practices of obstetric care moving toward the direction of midwives. Given that other countries have lower costs and better outcomes, it would be a positive thing for the U. S. to start changing their views.

BIRTH INTERVENTIONS

Interventions in the realm of childbearing refer to those practices that disturb a normal, physiologic birth. The following discussion describes many of those practices, most of which are thought to be unnecessary by holistic health practitioners, midwives, and doulas.

Interventions have become commonplace if not routine. Used appropriately, they can be life-saving procedures. Routine use, without valid indications, can transform childbirth from a normal physiologic process and family life event into a medical or surgical procedure. Every intervention presents the possibility of untoward effects and additional risks that engender the need for more interventions with their own inherent risks. Unintended consequences to intrapartum interventions make it imperative that nurse educators work with other professionals to promote natural childbirth processes and advocate for policies that focus on ensuring informed consent and alternative choices. Interdisciplinary collaboration can ensure that intrapartum caregivers “first do no harm.” (Jansen, Gibson, Bowles, & Leach, 2013, p. 83)

Other credible sources also question the use of routine birth interventions:

Findings from a two-year review of the science behind maternity care indicate that the common and costly use of many routine birth interventions, such as continuous electronic fetal monitoring, labor induction for low-risk women, and cesarean surgery, fail to improve health outcomes for mothers and their babies and may cause harm. (*Care Supporting Normal Birth Is Best for Mothers and Babies*, CIMS, 2007)

The Loving Birth Task Force supports the reduction in routine use of interventions during childbirth for low risk women and their healthy newborns.

Friedman’s Curve

Sixty years ago Dr. Friedman (1955) of Columbia University published a study in which he produced a graph that purported to describe the average time it took laboring women to dilate each centimeter. Five hundred laboring women (first time moms) participated in the study. According to Rebecca Dekker of *Evidence Based Birth* (2013), Friedman’s research was flawed by the fact that:

Pitocin was used to induce or augment labor in 13.8% of women. “Twilight sleep” was common practice at the time, and so 23% of the women were lightly sedated, 42% were moderately sedated, and 31% were deeply sedated (sometimes “excessively” sedated) with Demerol and scopolamine—**meaning that 96% of the women were sedated with drugs.**

Care providers are still using Friedman's Curve, thought of as "the gold standard for rates of cervical dilation and fetal descent during active labor" (Davis, 2003), and even considered an ideal. Unfortunately, the curve was based on sedated women in labor, therefore today, its use creates an artificial timeline in which birth should take place.

This practice has spawned the term "failure to progress" and has set a standard that encourages the use of interventions including medications and surgery to "deliver" babies when progress is deemed too slow. A study of detailed labor data gained from 1329 birthing women produced a rate of progress very different from Friedman's curve. Researchers Zhang, Troendle, and Yancey (2002) concluded "the pattern of labor progression in contemporary practice differs significantly from the Friedman's Curve. The diagnostic criteria for protraction and arrest disorders of labor may be too stringent in nulliparous women" (p. 824).

Failure to Progress

Failure to progress is a term applied to a laboring woman whose labor is progressing too slowly according to medical staff; that is, her cervix is dilating at less than one centimeter an hour. "Labor progress is facilitated when a woman feels safe, respected, and cared for by the experts who are responsible for her clinical safety, when she can remain active and upright, and when her pain is adequately and safely managed" (Simpkin, 2005, p. 16). The derogatory label of *failure to progress* has precipitated many inductions and cesarean sections when the issue might be just "failure to wait" (www.pregnancy.org).

Lithotomy Position

The lithotomy position is the position most frequently associated with childbirth, the one in which the laboring mother is lying on her back with her hips and knees flexed and spread apart. This allows attendants to view what is happening at the vaginal outlet, but causes women and their unborn babies to work against gravity. Those in favor of normal, physiologic birth recommend laboring women stand, walk, sit on birth balls, squat, or otherwise use gravity to facilitate giving birth. In a study by Stremmler, Hodnett, Petryshen, Stevens, Weston, and Willan (2005), the researchers found women who used a hands-and-knees position while laboring "had significant reductions in persistent back pain" (p. 243). Lawrence, Lewis, Hofmeyr, and Styles (2013) conducted a review of research and reported that "observational studies have suggested that if women lie on their backs during labour this may have adverse effects on uterine contractions and impede progress in labour." They recommend women choose the most comfortable position for laboring and giving birth.

The Loving Birth Task Force concurs that Friedman's Curve is an obsolete measure of progress during labor. The Task Force encourages allowing time for women to experience labor without interventions to artificially speed progress and that they be allowed to move around freely instead of having their movements restricted.

Electronic Fetal Monitoring (EFM)

The American College of Obstetricians and Gynecologists (ACOG) defines electronic fetal monitoring (EFM) as “a method in which electronic instruments are used to record the heartbeat of the fetus and the contractions of the mother’s uterus” (2011). This is the most commonly performed obstetric procedure used today. This is most often done continuously which requires that the mother lie on her back connected to the monitor, reinforcing the lithotomy position as the predominant position imposed upon laboring women. Indeed, some states have laws mandating the use of EFM in addition to hospital policies, driven by fear of litigation, to continuously monitor the heart rate of babies in the womb. If the external device does not provide the data well enough, an electrode is inserted into the scalp of the birthing baby, accessed through the vaginal canal.

Dr. Rebecca Dekker (2012) points out on the Evidence Based Birth website that “U.S. hospitals have invested over \$700 million dollars in electronic fetal monitoring equipment that is NOT evidence-base and contributes to unnecessary Cesarean deliveries.” Dr. Dekker recommends intermittent auscultation as a better way to monitor the baby’s heart rate during labor saying “the care provider listens to the baby’s heart rate for about 60 seconds using a fetal stethoscope (fetoscope or Pinard) or a hand-held Doppler ultrasound device.” In addition to EFM increasing the administration of pain medication, Dekker points out that research is revealing that women who are continuously affixed to an EFM are more likely to receive cesarean sections and are slightly more likely to have instrumental (forceps or vacuum extraction) deliveries.

Dekker (2012) states, “The evidence against continuous electronic fetal monitoring is so clear that the U. S. Preventive Services Task Force issued a recommendation saying that continuous electronic fetal monitoring should NOT be used in low risk women.” The American Congress of Obstetricians and Gynecologists (ACOG; 2009) has also refined its guidelines to reflect the greater than 99% “false positive rate of EFM for predicting cerebral palsy” although it continues to recommend that EFM be used with high-risk women. A review published by the Cochrane Collaboration found that EFM is associated with many known medical risks to women, without providing benefit to the fetus in low-risk pregnancies (Alfirevic, Devane, & Gyte, 2006).

Labor Induction

According to the Mayo Clinic (2014):

Labor induction—also known as inducing labor—is a procedure used to stimulate uterine contractions during pregnancy before labor begins on its own. Successful labor induction leads to a vaginal birth. A health care provider might recommend labor induction for various reasons, primarily when there's concern for a mother's health or a baby's health. Labor induction carries various risks, including infection and the need for a C-section.

An induction, or speeding up labor, could include applying cervical softeners (a ripening agent), injecting artificial oxytocin, rupturing the membranes (breaking the waters with a

small hook), stripping the membranes (separating the amniotic sac from the wall of the uterus), or using a water-filled balloon catheter to expand the cervix. Risks associated with induction include inducing too early (prior to 39 weeks gestation), intensifying contractions, lowering of the baby's heart rate, increasing the risk of infection, increasing the need for a cesarean section, or causing uterine rupture. Cytotec, for example, is a drug used to induce labor and is associated with uterine rupture (Wagner, 1999).

There are psychological considerations as well. *The Journal of Perinatal Education*, a journal dedicated to advancing normal birth, published an article titled "Care Practice #1: Labor Begins on Its Own," in which it cautions women:

Induced labor, especially when it is not medically necessary, can send a powerful message that your body is not working correctly—that you need help to begin your labor. Allowing labor to begin on its own may increase your confidence in your ability to give birth and take care of your baby once it arrives. (Amis, 2007)

There are several concerns with elective induction including increased use of fetal monitoring, administration of epidural analgesia, and assisted delivery by means of vacuum extraction or forceps. There is also a greater risk for postpartum hemorrhage and transfusion, and a longer intrapartum period and postpartum stay at the hospital. The *Coalition for Improving Maternity Services (CIMS)* supports normal, induction-free birth:

Women whose labors are induced for non-medical reasons are more likely to suffer from intrapartum fever and more likely to end up needing forceps, vacuum extractions and cesarean surgery. Inductions add to the risk of poor outcomes for the health of the baby. Artificially induced labors increase the rate of fetal distress and a serious complication of labor called shoulder dystocia. Elective induction babies are also more likely to need phototherapy to treat jaundice after birth, and are at higher risk for breathing difficulties and admission to neonatal intensive care. (*Coalition for Improving Maternity Services*, 2007)

Costs also increase with the use of inductions. Although costs have escalated in recent years Vivian von Gruenigen (2013), the chair of obstetrics and gynecology at Akron City and St. Thomas Hospitals states:

In today's health care environment, the elective induction of labor is no longer sustainable. Recent medical research questions the safety of inductions and labor and delivery units are closing secondary to negative financial margins. Patient and physician convenience can no longer be the driving force of elective inductions of labor.

Elective inductions prior to 39 weeks increase the rate of prematurity since it is difficult to accurately determine when conception actually occurred. A baby induced might be 37 weeks gestational age or less, and at risk for respiratory challenges or in need of neonatal intensive care. Despite these facts, labor inductions are commonly performed in hospitals today.

Epidural Analgesia

Epidurals are injected into the lower spine—through the dura—in adult doses, which cross the placenta and reach the child, although it is said to be in smaller doses. Epidurals relieve pain, often caused by the induction drug given to speed up contractions, but reduce the ability of the laboring mother to *give birth* naturally. In the most radical course of events, the baby experiences fetal distress and the mother, in severe pain and fearing for the life of her baby, agrees to a cesarean section. Needless to say, this pattern occurs far too often according to the American College of Obstetricians and Gynecologists (ACOG; 2014) and the World Health Organization (WHO, 2015). Current ACOG guidelines seeking to safely prevent cesarean deliveries note, “Recent data show that contemporary labor progresses at a rate substantially slower than what was historically taught” (2014). This suggests that there is wisdom in disregarding Friedman’s Curve and waiting longer before inducing labor or administering drugs.

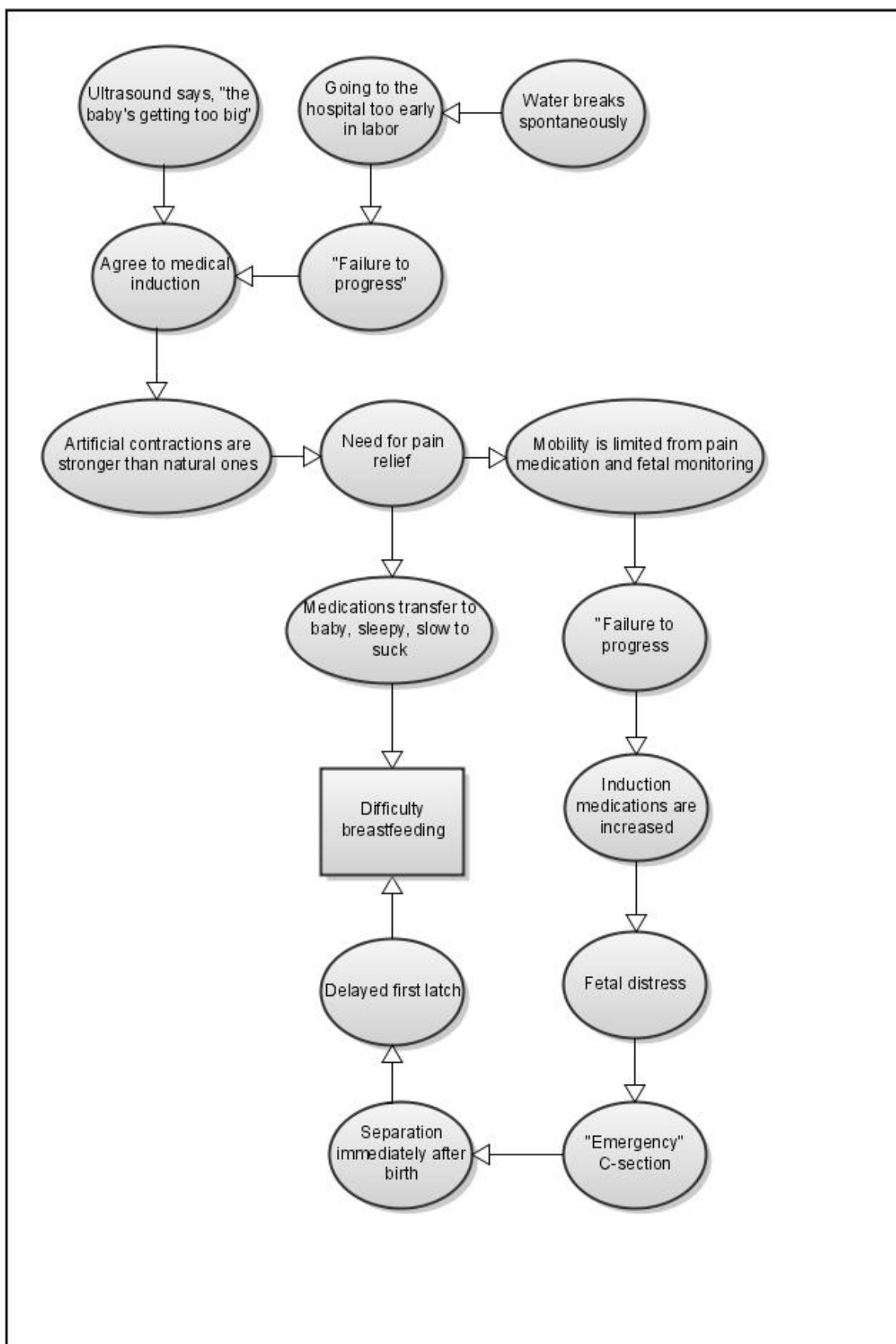
Labor epidurals are a frequent component of childbirth today, with 76% of mothers experiencing them according to the *Listening to Mothers III* survey (Declercq, Sakala, Corry, Applebaum, & Herrich, 2013). Although epidurals are effective at relieving pain, they change the birthing process, leading to many unintended, negative results for both the mother and baby. Effects of epidurals for mothers include sedation, fever, hypotension, longer length of the pushing phase of labor, and perineal tears. Babies may experience unusually low heart rates, poorer performance on newborn assessment scales, exhibit drowsiness, lack of coordination, and an inability to latch on to mother’s breast. If they are removed from their mothers, these conditions might barely be noticed. The sleepiness would be considered normal. The baby’s inclination to suckle would be suppressed and interpreted as normal as well. Again, we at Loving Birth believe an intervention-free birth followed by skin-to-skin contact is the best option for both mothers and newborn babies.

Cascade of Interventions

According to Marsden Wagner (2008),

One intervention leads to another, in a cascade of interventions that all lead to c-section. In the past decade, the classic example of such a cascade is an induction of labor with powerful drugs, which leads to increased labor pain, which leads to an epidural block to relieve the pain, which leads to a slowing of labor, which becomes “failure to progress”: the number one diagnosis used to justify pulling the baby out with forceps or a vacuum extractor or performing a C-section.

The following flow chart (choiceforempowerment.weebly.com) shows the typical course of actions taken when a woman enters a hospital either already in labor but “too early,” or when she has agreed to have her labor induced.



In the first case, a woman in labor may go to the hospital when her cervix has dilated to less than five centimeters. If the medical staff is using Friedman's Curve, they will want labor to progress rapidly and/or according to the institution's policies and procedures. Often, particularly when it is a woman's first pregnancy, the laboring mother will experience *white coat syndrome*, a well known anxiety response when a person enters a hospital. This reaction causes blood pressure to elevate. Because human mothers are mammals, they respond to anxiety (fear) as any other mammal would. A laboring woman's body will go into fight/flight causing her cervix to constrict to protect her child from being born until a threat has passed and she feels safe.

This normal, healthy response is labeled *failure to progress* and she is encouraged to start what becomes a *cascade of interventions*. Frequently, a cervical softener is applied. If her body does not begin to relax and resume normal contractions or cervical dilation, she is injected with Pitocin or other medication that induces contractions. These drugs do not flow naturally from the pituitary gland in the same gentle, rhythmic pulsations that the secretion of her own hormones would. They cause frequent, intense, hard, painful contractions that provoke staff to suggest an epidural—and mothers agree.

The Loving Birth Task Force supports a reduction in the use of interventions and the cascade of those interventions, and advocates normal physiologic childbearing.

Episiotomy

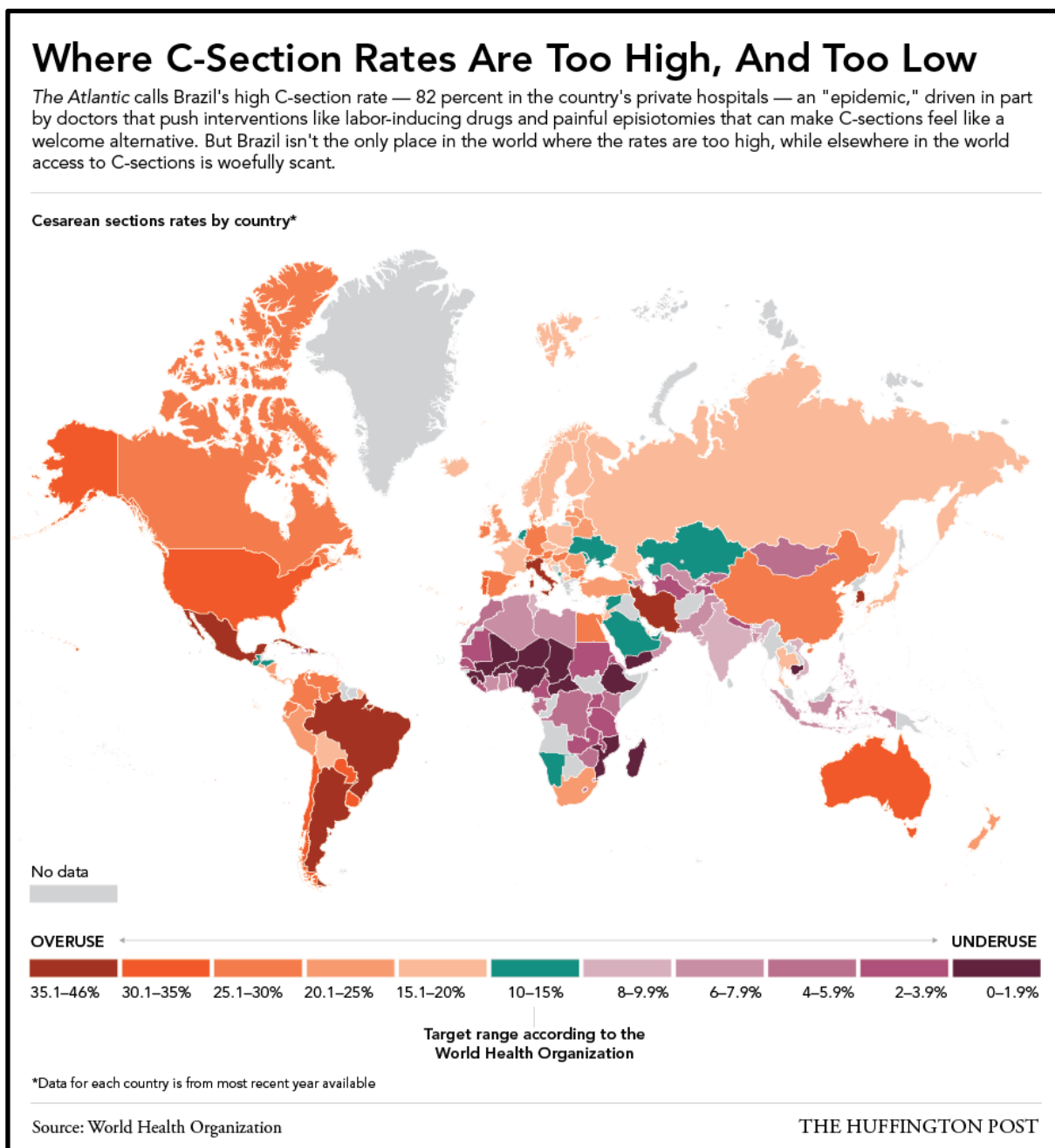
"Episiotomy is a surgical incision made into the perineum—the region between the vagina opening and the anus—to widen the vaginal opening for delivery" (www.acog.org). These cuts were made routinely by attending physicians, as it was believed that an incision would prevent more extensive tearing. That belief has been dispelled as research has shown that

recovery is uncomfortable, and sometimes the surgical incision is more extensive than a natural tear would have been. Infection is possible. For some women, an episiotomy causes pain during sex in the months after delivery. An extensive episiotomy might also contribute to fecal incontinence after childbirth. (Mayo Clinic Staff, 2015).

In 2006 ACOG issued a statement for its member obstetricians and gynecologists restricting the use of episiotomy during labor, stating that clinical evidence does not support the routine use of the procedure. The taken-for-granted procedure neither improved outcomes nor prevented problems it was supposed to deter. Dr. John Repke, ACOG Fellow and author of the document *ACOG Recommends Restricted Use of Episiotomies* (2006), concluded the bulletin by stating, "In the case of episiotomy, as with all medical and surgical therapies, we need to continually evaluate what we do and make appropriate changes based on the best and most current evidence available."

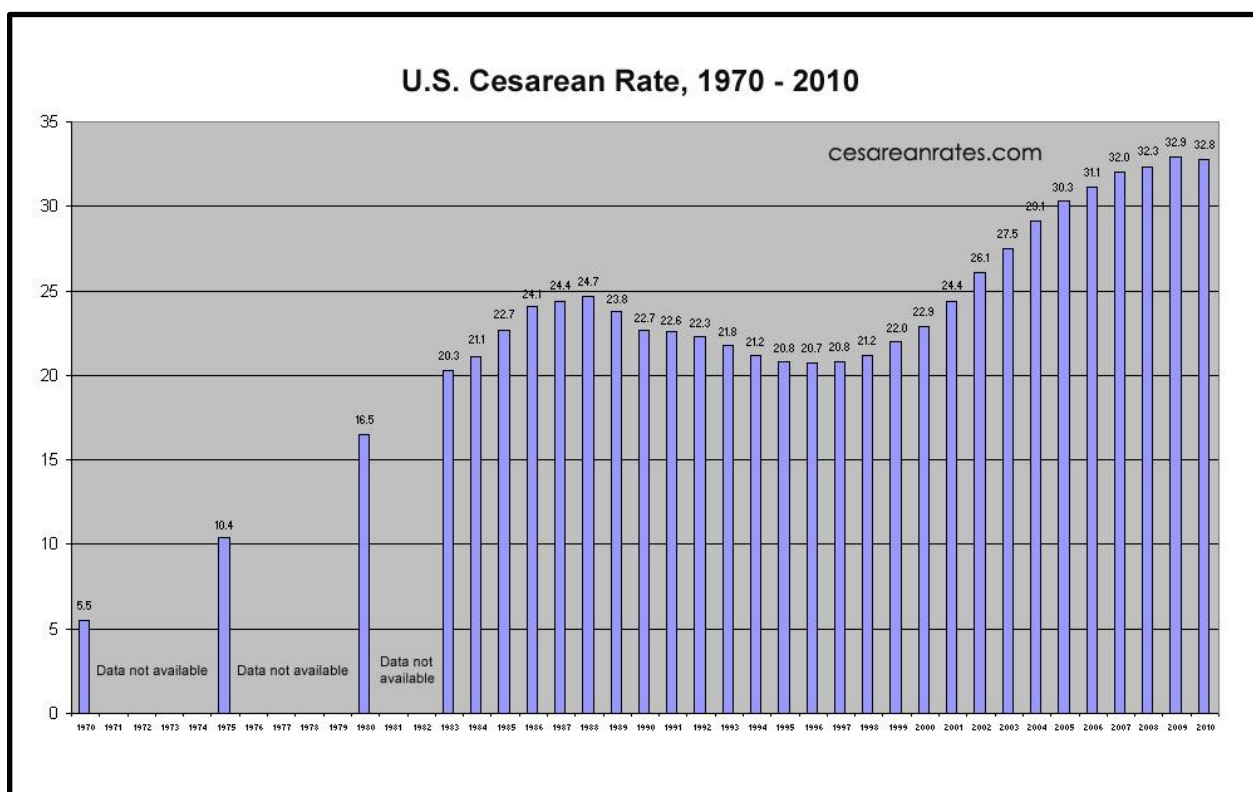
Cesarean Section (CS)

Cesarean sections have been performed for centuries. This surgical procedure was originally used to save the life of the baby when the mother was dead or dying. Reports can be found in the mythology of many countries, both Eastern and Western. Today, used for birthing worldwide, C-sections appear to be both over-used for convenience in developed nations and under-used for complicated births in third world countries. According to the *Huffington Post* in April 2014, Brazil had a C-section rate of 82% per 1,000 live births in private hospitals, while the Netherlands had a rate of under 15%, the maximum rate suggested by the World Health Organization (WHO). Rates are depicted on the map below.



There has been a rapid increase in cesarean-sections in the United States since 1989. It is

the most common major surgery performed in this country and generates enormous revenue for medical facilities. The United States C-section rate in 2015 was 32.7%, down slightly from the rate shown in the chart below (National Vital Statistics Report).



The rate can vary widely from state to state: the rate in Arizona is 27%, among the ten states with the lowest C-section rates nationwide.

Although cesarean delivery can be life-saving for the fetus, the mother, or both in some cases, the rapid increase in the rate of cesarean births without evidence of concomitant decreases in maternal or neonatal morbidity or mortality raises significant concern that cesarean delivery is overused (ACOG, 2014). In a joint development effort between ACOG and the Society for Maternal-Fetal Medicine, the following statements were published in the *American Journal of Obstetrics and Gynecology*:

Cesarean birth can be life-saving for the fetus, the mother, or both in certain cases. However, the rapid increase in cesarean birth rates from 1996 to 2011 without clear evidence of concomitant decreases in maternal or neonatal morbidity or mortality raises significant concern that cesarean delivery is overused. (Obstetric Care Consensus, *Safe Prevention of the Primary Cesarean Delivery*, 2014)

Hospitals policies vary widely, as do the practices of doctors. It is wise to check physician and hospital rates (even if employing an out-of-hospital midwife in the event transport to a hospital is necessary) before deciding where to give birth.

Childbirth Connection (2015), a program of the National Partnership for Women and Families, explores myths that appear to explain the rise in operative deliveries. The

organization's Fact Sheet titled "Why is the U. S. Cesarean Section Rate So High" states the assumptions that 1) more women are requesting C-sections without medical necessity, that 2) more women need surgery to give birth, and that 3) fears of liability are driving C-section rates up are all incorrect. Childbirth Connection has conducted several surveys among thousands of women who have given birth. *Listening to Mothers III* (2013) found that only one percent of respondents reported scheduling a C-section without medical rational. On the other hand, one quarter of the "participants who had cesareans reported that they had experienced pressure from a health professional to have a cesarean."

Childbirth Connection (2015) has identified a number factors that contribute to the high rate of C-sections in our society at this point in time:

- There is a "low priority" for enhancing women's own abilities to give birth.
- Surgical deliveries often result from labor interventions, particularly induction.
- There is a reluctance to provide women with informed choices.
- Society as a whole demonstrates a casual attitude toward major surgery, viewing it as, not only acceptable, but normal and customary.
- There is "limited awareness of harms that are more likely with cesarean sections."
- There are incentives (e.g. conservation of time and financial rewards) for medical professionals to practice efficiently, versus honoring the timing of women and babies which takes more time and generates less money.
- There is a professional unwillingness to work at night and on weekends, therefore, to schedule deliveries during office hours on weekdays.
- There is a tendency for women to trust their maternity care providers regardless of statistics, evidence, or recommendations that the application of technology (including drugs and surgery) be reduced and the trust in one's physiological ability to give birth be increased.

CNN (2009) reported other considerations regarding the increase in cesarean sections: 1) there is now better technology (men in particular prefer to rely on technology, encouraging partners to give birth in hospitals where they perceive it is safest); 2) mothers are older and believe that their gestational window is closing and want assurance that they will have a successful outcome; 3) more of today's mothers are overweight; 4) more inductions lead to more C-sections; and 5) one C-section leads to another—vaginal birth after cesarean section (VBAC) is uncommon.

Unfortunately, doctors often do not tell pregnant women that a C-section is major abdominal surgery and that adverse conditions can arise after such an operation. While C-sections are the most common operating room procedure, they seem to provide minimal benefit. The Maternity Action Team of the Childbirth Connection is addressing inappropriate and unsafe maternity care with a goal to reduce C-sections to the maximum 15% recommended by WHO and ACOG. Avoidance of malpractice law suits may be a driving force for many physicians to perform C-sections. Tort reform could impact physician decisions, encouraging them to put mothers' and babies' welfare first. Of course, birthing women should be informed of potential, and possibly chronic, complications that can result from surgical deliveries. Negative consequences are possible

for both mother and baby: negative postpartum quality of life, difficulties establishing breastfeeding, subsequent reproductive complications such as placental issues, psychological morbidity, and, for the child, chronic childhood illnesses. As the number of pregnancies ending in C-sections increase for women, risk factors also increase, including those that are life threatening. Subsequent C-sections entail a much longer recuperation period with more pain, requiring the mother to have additional assistance in the home.

In addition, babies experience different outcomes based on whether they are born vaginally or by Cesarean section. Babies born vaginally appear to have both a higher rate and more complete variety of microbes necessary for digestion and immune system function. The process of birthing vaginally prepares the baby's lungs for breathing in the outside world, thus a baby delivered via C-section may experience a 50% risk for respiratory difficulties. New guidelines from ACOG (2014) recommend babies be born as close to term as possible for optimal development and fewer complications, and, if possible, not before 39 weeks of pregnancy.

The risks for a child born by Cesarean section are most often related to breathing. Respiratory distress syndrome (RDS) is experienced more among babies born by C-section than by those born vaginally. Long term chronic diseases are associated with C-sections: asthma, allergies, and obesity. Because of the separation of mother and baby following an operative delivery, breastfeeding can be deterred and bonding and secure attachment can be adversely affected.

A study of mice at the University of Texas reported in *Medical Daily* June 25, 2015 may have strong implications for human birth. The researchers found that a protein, called a surfactant, released by the lungs of the fetus, may be the trigger for labor to commence. The report, originally published in the *Journal of Clinical Investigation* (2015), was titled "Steroid receptor coactivators 1 and 2 mediate fetal-to-maternal signaling that initiates parturition" (Gao et al., 2015). The surfactant kills viruses and bacteria that could be detrimental to the baby and is necessary for the fetus to be able to breathe outside the mother's womb. If this protein/surfactant is the trigger for labor to begin, then the preclusion of its release might be the reason why babies born via C-section have a 50% risk of respiratory complications.

Maureen Corry (2012), Executive Director of Childbirth Connection and co-chair of the Maternity Action Team states, "C-sections can be life-saving in a small proportion of emergency situations. For other types of complications the risks of major abdominal surgery may outweigh the benefits. But today, too many low-risk women who are the least likely to benefit from cesareans are having them. That means these women and their babies face unnecessary risks and avoidable harm."

The Loving Birth Task Force supports the promising policy strategies advocated by the Childbirth Connection including the promotion of spontaneous labor, minimal intervention, and cesarean deliveries only when medically necessary. We encourage expectant mothers to become familiar with the risks of inductions and cesarean sections, as well as the culture, philosophy, and policies of place of giving birth.

Vacuum Extraction & Forceps (Instrumental Delivery)

Vacuum extraction (also known as *ventouse*) is a procedure that can be performed to “extract” a baby from the mother during vaginal childbirth. “The apparatus consists of a flexible cap attached to a handle, tubing, and a vacuum source. The doctor uses the vacuum to hold the cap to the baby’s head. The doctor then pulls while the mother pushes” (Goer, 1999, p. 115). Goer points out, “vacuum extraction can cause a blood-filled swelling (cephalohematoma) beneath the cup, which increases the likelihood of developing jaundice (p. 117). The swelling on the head of a baby born with the application of a vacuum extractor can be observed for months following birth.

Forceps are large metal instruments also used to extract a baby from the mother. “For safe forceps delivery, the head must be at least partially through the mother’s pelvis. The doctor inserts the curved blades on either side of the baby’s head, locks them together, and pulls” (Goer, 1999, p. 115). Goer’s book, *A Thinking Woman’s Guide to a Better Birth*, is an older but popular source of information on childbearing.

More current information available on the Mayo Clinic (2015) website lists the possible risks to mother and baby associated with these procedures. Risks to the mother associated with vacuum extraction include pain in the perineum, lower genital tears and wounds, short-term difficulty urinating, short- or long-term urinary or fecal incontinence, anemia, and weakening of pelvic muscles and ligaments that support pelvic organs thereby causing pelvic organs to prolapse. Risks to the baby include scalp wounds, skull fracture, bleeding within the skull, and shoulder dystocia. “The single most common risk factor for shoulder dystocia is the use of a vacuum extractor or forceps during delivery” (Baxley & Gobbo, 2004).

Possible risks to a mother associated with the use of forceps include pain in the perineum, lower genital tract tears and wounds, difficulty urinating, short or long-term urinary or fecal incontinence, anemia due to loss of blood, injuries to bladder or urethra, uterine rupture, and weakening of the muscles and ligaments that support the pelvic organs. Risks to the babies include minor facial injuries, temporary weakness of facial muscles, minor external eye trauma, skull fracture, bleeding with the skull, and seizures (Mayo Clinic Staff, 2015).

The Loving Birth Task Force discourages the routine use of instrumentation during labor and endorses the midwifery model of care, which provides more natural assistance to laboring mothers.

Eye Drops & Vitamin K

Historically babies have eye drops (silver nitrate) or ointment (erythromycin) administered to prevent eye infections (ophthalmia neonatorum) or blindness caused by mothers infected with gonorrhea or chlamydia. This has become a prophylactic procedure and can be prevented by screening for sexually transmitted diseases during pregnancy. Eye drops can be refused or application delayed by parents who are making informed decisions regarding the care they and their babies receive.

Newborns often receive an injection of vitamin K, which is needed for normal blood clotting. This has been a standard procedure since 1961 as recommended by the American Academy of Pediatrics. Dekker (2014) notes the benefits of receiving a vitamin K shot: it “is highly effective in preventing classic and late VKDB [Vitamin K Deficiency Bleeding]; Vitamin K is slowly released over time from the injection site, which provides enough Vitamin K1 until the baby’s Vitamin K levels reach adult levels naturally” (Dekker, 2014). Three primary dangers associated with vitamin K injections are enumerated by Dr. Cees Vermeer (2010), the foremost expert on the world on vitamin K:

- Among the most significant is inflicting pain immediately after birth which has the potential to cause psycho-emotional damage and trauma to a newborn.
- The amount of vitamin K injected into newborns is 20,000 times the needed dose. Additionally, the injection may also contain preservatives that can be toxic for your baby's delicate, young immune system.
- An injection creates an additional opportunity for infection in an environment that contains some of the most dangerous germs, at a time when your baby's immune system is still immature (Mercola & Vermeer, 2010).

Inflicting pain or blurring the vision of a newborn are discouraged by the Loving Birth Task Force. If well-informed parents choose eye drops or vitamin K injections, it would be advisable to delay the procedures for at least one hour while essential bonding with the baby is taking place.

Suctioning (Aspirating on the Perineum)

Clearing the newborn baby’s respiratory passages is often done at birth, even while the baby’s head is lying on the mother’s perineum with the larger portion of its body still within the mother. Velaphi and Vidyasagar (2008) report:

Routine oronasopharyngeal [nose and throat] suctioning (ONPS) of the infant at delivery is a common practice in the delivery room. ONPS is performed to remove lung fluid, meconium, or other secretions from the airway, thereby improving oxygenation and/or preventing aspiration. However, there are controversies regarding this practice, as it seems to be associated with complications. In the presence of clear amniotic fluid, routine ONPS in infants born vaginally and by Cesarean section is associated with bradycardia, apnea, and delays in achieving normal oxygen saturations, with no benefit. Intrapartum ONPS and post-natal

endotracheal suctioning of vigorous infants born through meconium-stained amniotic fluid (MSAF) does not prevent meconium aspiration syndrome (MAS). Although depressed infants born through MSAF are at risk of developing MAS, there is no evidence that endotracheal suctioning of these infants reduces MAS. (p. 375)

Whitfield, Charsha, & Chiruvolu, (2009) concur saying, "Suctioning of the upper airway [of newborns] is no longer recommended" (p. 128) to prevent meconium aspiration syndrome (MAS). Even so, this procedure is routinely performed in hospitals and even in births at home and in birth centers attended by midwives.

The Loving Birth Task Force promotes education among childbirth professionals and childbearing women to reduce suctioning except in those cases that are truly determined to be emergencies.

Circumcision

Circumcision is a "surgical procedure that removes the foreskin (the loose tissue) covering the glans (rounded tip) of the penis" (Perlstein, 2015). It is carried out for medical, social/cultural, or religious reasons. Circumcision is performed routinely within a short time following a baby boy's birth. Between 1979 and 2010 the Centers for Disease Control and Prevention (CDC) report the rate of circumcision declined from 64.5% to 58.3% (Owings, Uddin, & Williams, 2013, p. 1). Before the mid-1980s most circumcisions were performed with no anesthetic. Neuropsychologist James Prescott (1989) suggests that the "early experiences with genital pain contribute to the encoding of the brain that begins the neurobiological foundation for sado-masochistic behaviors." Although this an extreme hypothesis, it is Prescott's contention that the pain of circumcision experienced by the infant confounds the brain's ability to distinguish between pain and pleasure and can lead to violent sexual behaviors in later life.

The National Organization of Circumcision Information Resource Centers (NOCIRC) provides the following information:

- No national or international medical association recommends routine circumcision.
- Only the USA circumcises the majority of newborn boys without medical or religious reason.
- Medicalized circumcision began during the 1800s to prevent masturbation, which was believed to cause disease.
- Today's parents are learning that the foreskin is a normal, protective, functioning organ.
- Today's parents realize circumcision harms and has unnecessary risks.
- Circumcision denies a male's right to genital integrity and choice for his own body.

Circumcision is a questionable procedure that parents should seriously consider before allowing the surgery to be performed on their newborn son. It seems that parents are doing so in increasing numbers (Owings, Uddin, & Williams, 2013). It is also worthy of note that many hospitals now charge for the procedure. More parents appear to view circumcision as an unnecessary expense when they are paying the exorbitant costs of giving birth in today's economy.

The Loving Birth Task Force encourages all parents to carefully consider whether circumcision is the best choice for their sons.

MIDWIVES & DOULAS

Midwives

“The midwife is recognized worldwide as being the person who is alongside and supporting women giving birth. The midwife also has a key role in promoting the health and well-being of childbearing women and their families before conception, antenatally and postnatally, including family planning” (Fraser & Cooper, 2009, p. 3). According to Wikipedia, “Midwifery (also known as obstetrics) is the health science and the health profession that deals with pregnancy, childbirth, and the postpartum period (including care of the newborn), besides sexual and reproductive health of women throughout their lives.”

Midwifery has been practiced for thousands of years, but declined when men began to practice obstetrics in the 1800s and women were urged to go hospitals to have their babies. Birthing in hospitals became common as many believed it was safer and more modern. Because women were usually given a sedative, physicians developed interventions to *deliver* babies when mothers were anesthetized. These included the use of mechanical devices such as forceps, and increased surgical deliveries. Midwifery became thought of as old fashioned and unsafe, and used only by the poor. The opposition to midwifery has continued into the late 20th and early 21st century.

In the 1970s the American College of Obstetrics and Gynecology (ACOG) actively discouraged homebirth, threatening doctors who provided assistance to midwives in emergencies with loss of hospital privileges and licenses. In the mid 1980s the American Academy of Family Physicians (AAFP) opposed nurse-midwifery, issuing a formal statement that all nurse midwives should work non-independently, under the supervision of a physician, and that all payments should go through the physician. These beliefs and practices promoted the distrust of midwifery *and* natural birth. However, in many European countries, midwives have continued to be the primary caregivers assisting non-high risk mothers to birth their babies. Industrialized countries similar to the United States have vastly different cultural beliefs surrounding birth, embracing midwifery and providing high quality care while having lower infant and maternal mortality rates (CIA World Factbook).

In September of 2015 the Cochrane Collaboration reprinted a report for inclusion in the Cochrane Library. This report distilled the results of 15 trials involving 17,674 women. The authors noted that “in many parts of the world, midwives are the main providers of care for childbearing women” (Sandall, Soltani, Gates, Shennan, & Devane, 2015). They found that the midwifery model was associated with significant benefits for mothers and babies, without adverse effects when compared with medical models. Women received fewer interventions including episiotomies and instrumental births, fewer epidurals, and fewer instances of preterm birth or miscarriages before 24 weeks’ gestation. The researchers concluded “that most women should be offered midwife-led continuity models of care, although caution should be exercised in applying this advice to women with substantial medical or obstetric complications.”

The Midwives Model of Care is based on the belief that pregnancy and birth are normal life processes. This Model of Care includes:

- monitoring the physical, psychological, and social well-being of the mother throughout the childbearing cycle
- providing the mother with individualized education, counseling, and prenatal care, continuous hands-on assistance during labor and delivery, and postpartum support
- minimizing technological interventions
- identifying and referring women who require obstetrical attention. (Midwifery Task Force)

Midwives are qualified health care providers who receive comprehensive training and must pass an examination to become certified. Certification is offered by the American College of Nurse Midwives (ACNM) and the North American Registry of Midwives (NARM). Even so, the practice and credentials related to midwifery differ throughout the United States.

Below is a brief description of each of type of midwife (information obtained from the Midwives Alliance of North America (MANA) website):

- Certified Nurse-Midwife (CNM): a midwife trained and licensed in nursing and midwifery. Nurse-midwives must have at least a bachelor's degree from an accredited institution and are certified by the American College of Nurse Midwives.
- Certified Midwife (CM): an individual trained and certified in midwifery. Certified midwives must have at least a bachelor's degree from an accredited institution and are also certified by the American College of Nurse Midwives.
- Certified Professional Midwife (CPM): an individual who is trained in midwifery and meets standards of the North American Registry of Midwives. Multiple educational backgrounds are recognized to become a CPM.
- Direct-Entry Midwife (DEM): an independent individual trained in midwifery through various sources that may include apprenticeship, self-study, a midwifery school, or a college/university program.
- Lay Midwife: an individual who is not certified or licensed as a midwife but has received informal training through self-study or apprenticeship.

Midwives believe in facilitating a natural childbirth as much as possible. Accordingly, it is common to receive care from a midwife in a private and comfortable birthing center or in one's own home. Because of their professionalism and expertise, midwives are often part of a labor and delivery team associated with a local hospital.

According to the American College of Nurse Midwives (ACNM), benefits of receiving midwifery care include:

- Decreased risk of needing a cesarean
- Reduced rates of labor induction and augmentation
- Reduced use of regional anesthesia
- Decreased infant mortality rates
- Decreased risk of preterm birth
- Decreased third and fourth degree perineal tears
- Lower costs for both clients and insurers
- Increased chances of having a positive start to breastfeeding
- Increased satisfaction with quality of care.

If a mother or baby require medical interventions that are outside the scope of services offered by a midwife, appropriate referrals are made to obstetricians, perinatologists, or other healthcare professionals.

The Loving Birth Task Force encourages the use of midwives and adheres to the midwifery model which supports natural childbirth and promotes the empowerment of women to give birth as Nature designed.

Doulas

The use of doulas is a centuries-old phenomenon of women helping women. The word originates from the Greek word *doulos*, which means servant. Doula has come to mean “a woman experienced in childbirth who provides continuous physical, emotional, and informational support to the mother before, during, and just after childbirth” (Klaus, Kennell, & Klaus, 1993). Doulas are trained to be prenatal, labor and birth, and/or postpartum assistants and to look for signs of perinatal mood disorders and provide support as needed. Doulas promote bonding and attachment, which have wide-ranging positive effects. Most doulas are professionally trained and certified but do not provide medical information or interfere with the birthing process.

Rebecca Dekker (2013), RN and PhD, describes the role of a doula on her website *Evidence Based Birth*. She distinguishes between doulas and nurses who are medically trained, have other duties to perform, and work in shifts which can take them away from laboring women instead of providing continuous support.

Dekker (2013) notes the results of a 2012 study by Hodnett, Gates, Hofmeyr, and Sakala of over 15,000 women stating, “Overall, **women who received continuous support were more likely to have spontaneous vaginal births** and **less likely** to have any pain medication, epidurals, negative feelings about childbirth, vacuum or forceps-assisted births, and C-sections. In addition, their labors were shorter by about 40 minutes and their babies were less likely to have low Apgar scores at birth.”

Dekker (2013) determined that the best childbirth experiences reported in the Hodnett et al. study occurred “**when women had continuous support from a doula**—someone who was NOT a staff member at the hospital and who was NOT part of the woman’s social network. When continuous labor support was provided by a doula, women experienced a:

- 31% decrease in the use of Pitocin
- 28% decrease in the risk of C-section
- 12% increase in the likelihood of a spontaneous vaginal birth
- 9% decrease in the use of any medications for pain relief
- 14% decrease in the risk of newborns being admitted to a special nursery
- 34% decrease in the risk of being dissatisfied with the birth experience.”

In general, continuous support provided for women during labor has been shown internationally to be effective in fostering spontaneous vaginal births, reducing the use of intrapartum drugs, and increasing mothers’ satisfaction with their childbearing experiences. The Hodnett, Gates, Hofmeyr, and Sakala (2012) study mentioned above was a review of the literature examining 22 studies involving 15,288 women in 16 countries. Published through the auspices of the National Institutes of Health (NIH), the authors concluded:

given the clear benefits and absence of adverse effects of continuous labour support, policy makers should consider including it as a covered service for all women. Every effort should be made to ensure that women’s birth environments are empowering, non-stressful, afford privacy, communicate respect and are not characterised by routine interventions that add risk without clear benefit.

Hodnett, Gates, Hofmeyr, and Sakala (2012), further recommended:

Continuous support during labour should be the norm, rather than the exception. Hospitals should permit and encourage women to have a companion of their choice during labour and birth, and hospitals should implement programs to offer continuous support during labour.

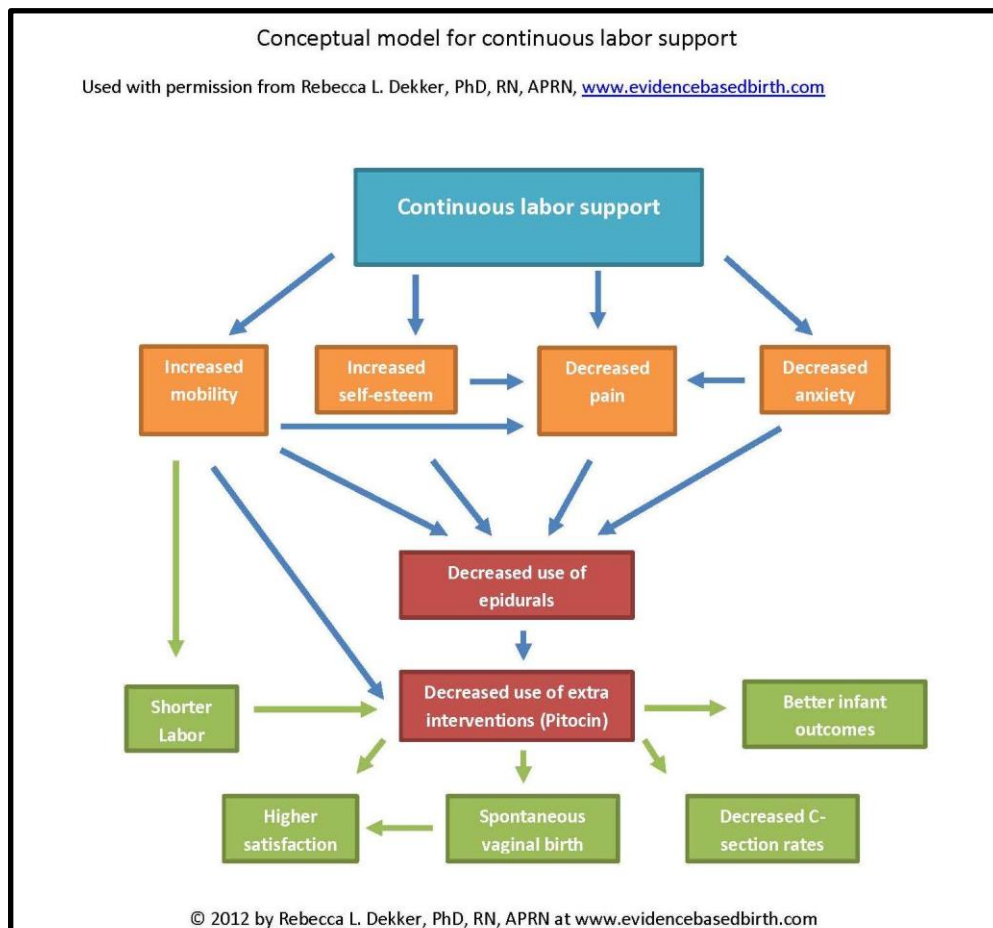
In an article titled “U study finds doulas improve birth outcomes, cut costs” (Benson, 2016), the author reported: “Across the 12 states analyzed, including Minnesota, the U of M study estimated that doula-supported births could eliminate more than 3,200 preterm births and save Medicaid \$58 million each year.”

Researchers Gruber, Cupito, and Dobson (2013) described their study, saying:

Birth outcomes of two groups of socially disadvantaged mothers at risk for adverse birth outcomes, one receiving prebirth assistance from a certified doula and the other representing a sample of birthing mothers who elected to not work with a doula, were compared. All of the mothers were participants in a prenatal health and childbirth education program. Expectant mothers matched with a doula had better birth outcomes. Doula-assisted mothers were four times less likely to have a low birth weight (LBW) baby, two times less likely to experience a birth complication involving themselves or their baby, and significantly more likely to initiate breastfeeding. Communication with and encouragement from a doula throughout the pregnancy may have increased the mother's self-efficacy regarding her ability to impact her own pregnancy outcomes. (p. 49)

The Loving Birth Task Force endorses the model of continuous labor support created by Dr. Rebecca Dekker and further recommends the engagement of doulas to provide continuous care for pregnant women prior to, during, and following labor.

Below is a model created by Dr. Dekker for providing continuous support during labor.



POSTPARTUM MATERNAL & NEWBORN CARE

The World Health Organization (WHO) has published *Recommendations on Postnatal Care of Mother and Newborn* (2014) stating:

The days and weeks following childbirth – the postnatal period – is a critical phase in the lives of mothers and newborn babies. Major changes occur during this period which determine the well-being of mothers and newborns. Yet, this is the most neglected time for the provision of quality services. Lack of appropriate care during this period could result in significant ill health and even death. Rates of provision of skilled care are lower after childbirth when compared to rates before and during childbirth. Most maternal and infant deaths occur during this time.

The postpartum period is a time following the birth a child that should be filled with joy, but that might not be the case for many women. Forty percent of young mothers in the United States today are raising babies without fathers. Many must return to work to provide financial support for themselves and their child. Many do not have adequate support of any kind, limited knowledge of how to care for a newborn, responsibilities for other children, and on and on.

Paid Parental Leave

Although the President's Commission on the Status of Women recommended paid maternity leave in 1963,

Fifty years later, access to paid family and medical leave of any kind, including maternity leave, is far from universal, and only a few states, and no federal law, provide a mechanism for mothers or fathers to take paid parental leave. (Gault, Harmann, Hegewisch, Milli, & Reichin, 2014)

Paid Parental Leave in the United States (2014), cited above, concludes:

The benefits of paid family leave to individuals, to businesses, and to society are well-documented. Not only could a paid family leave program keep women in the workforce and decrease their need for public assistance, but it could reduce employer costs and contribute to U. S. economic growth. Paid family leave substantially increases the amount of leave taken by parents and is linked to health benefits like lower rates of infant and child mortality, increased incidence and length of breastfeeding, and improved cognitive development in children. It also allows lower-income families to take care of loved ones without sacrificing much-needed income.

Further, Gault et al. (2014) report:

the United States is the only high-income country, and one of only eight countries in the world (Heymann and McNeill 2013), that does not mandate paid leave for mothers of newborns. Nearly every member of the European Union (EU) provides at

least 14 weeks of job-guaranteed paid maternity leave, during which workers receive at least two-thirds of their regular earnings (International Labour

The Loving Birth Task Force supports efforts to change governmental and business policies to provide paid parental leave for mothers *and* fathers.

Organization, 2010).

Care for Mother Means Baby Receives Care

Without financial support, mothers can feel even more overwhelmed than they might otherwise. KidsHealth, an online resource for mothers who have just given birth, acknowledges women's feelings of exhaustion, discomfort, emotional instability, and doubts about physical appearance. The website notes that women might experience everything from sore breasts to baby blues. The list of physical symptoms that will take time to heal is extensive.

Recommendations include drinking 8-10 glasses of water a day; avoiding stairs and lifting; avoiding bathing, swimming, and driving until their healthcare provider says it's OK. Napping while baby sleeps, taking time for relaxation, showering daily, exercising and getting fresh air, scheduling a few minutes a day for private time with their partner, enjoying the baby, limiting housekeeping as well as cooking and entertaining, and talking to other new mothers are all self-care practices that can speed their adjustment.

WHO recommends postnatal visits with a healthcare provider for both mother and infant. Of course, the organization advises exclusive breastfeeding for six months, taking iron and folic acid for three months, and obtaining psychosocial support to prevent postpartum depression. The Mayo Clinic (2015) also has online suggestions for care of mother and newborn. After a vaginal birth Mayo Clinic staff recommends care for vaginal tears or episiotomy wounds such as sitting on pillows or padded surfaces, pouring water over the site while urinating, applying cold packs, and taking pain relievers and stool softeners. After a Cesarean section self-care should include more rest, supporting the abdomen especially when coughing, sneezing or laughing, using a heating pad or taking pain medication, and drinking lots of fluids. Care of the incision includes keeping the site clean with soapy water, rinsing and then patting it dry.

Both mothers and newborns need care at this vulnerable time while they are bonding, learning to know what it is like to hold a newborn or be held in mother's arms. Offering to relieve stress by running errands, bringing prepared food, performing cleaning chores, shopping, doing laundry and other tasks can be offered by friends and family members. Demonstrating our love by listening, holding the baby while mother showers, and offering to help can be supportive in ways that are appreciated more than we know.

One alternative in providing postpartum care is, for those who can afford it, to hire a Newborn Care Specialist, trained in newborn care, who can work around the clock, helping mother sleep through the night or bringing baby to her if she is nursing (ncsainfo.com).

Breastfeeding

Breastfeeding is the term used to describe mothers holding their infants and nursing them so that the babies receive milk produced by the mothers' bodies (mammary glands/breasts). Breastfeeding is strongly recommended by both the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP). The World Health Organization (WHO) estimates, "increasing breastfeeding could save 800,000 children and U. S. \$300 billion every year." Further, the WHO website states:

A major new Series on breastfeeding, published in "*The Lancet*", finds that despite strong health and economic benefits from breastfeeding, few children are exclusively breastfed until 6 months, as recommended by WHO. Globally, an estimated 1 in 3 infants under 6 months are exclusively breastfed – a rate that has not improved in 2 decades.

Breastfeeding is considered "the normal way of providing young infants with the nutrients they need for healthy growth and development. Virtually all mothers can breastfeed, provided they have accurate information, and the support of their family, the health care system and society at large." In addition, "colostrum, the yellowish breast milk produced at the end of pregnancy [but thought for years to have no nutritional value and *real* milk had not yet come in], is recommended by WHO as the perfect food for the newborn, and feeding should be initiated within the first hour after birth" (WHO, 2016).

WebMD provides a user-friendly overview of breastfeeding which describes the benefits of breastfeeding to mother and baby. The website notes the advantages for babies:

Breast milk provides the ideal nutrition for infants. It has a nearly perfect mix of vitamins, protein, and fat – everything your baby needs to grow. And it's all provided in a form more easily digested than infant formula. Breast milk contains antibodies that help your baby fight off viruses and bacteria. Breastfeeding lowers your baby's risk of having asthma or allergies. Plus, babies who are breastfed exclusively for the first 6 months, without any formula, have fewer ear infections, respiratory illnesses, and bouts of diarrhea. They also have fewer hospitalizations and trips to the doctor.

Breastfeeding has been linked to higher IQ scores in later childhood in some studies. What's more, the physical closeness, skin-to-skin touching, and eye contact all help your baby bond with you and feel secure. Breastfed infants are more likely to gain the right amount of weight as they grow rather than become overweight children. The AAP says breastfeeding also plays a role in the prevention of SIDS (sudden infant death syndrome). It's been thought to lower the risk of diabetes, obesity, and certain cancers as well, but more research is needed.

The advantages for mothers include a discussion of baby massage:

Breastfeeding exclusively and on demand until 6 months of age is also a perinatal best practice. Benefits include increased immunity, greater bonding, longer periods of sleeping by three months, and a decrease in common ailments such as ear infections, allergies and asthma. . . . In addition, parents can be taught to massage their babies, promoting bonding, decreasing stress, increasing circulation and immunity in babies, and supporting well-being in the family overall.

Infant formula is *not* the same as mother's milk. Babies are often not able to easily digest cow's milk or soy, which is frequently added to formula. Cows are fed genetically modified grains and are injected with antibiotics and hormones. These substances are not good for developing infants.

Wikipedia, another online source of information used by young adults of reproductive age, states:

Benefits of breastfeeding for the mother include less blood loss following delivery, better [uterus](#) shrinkage, weight loss, and less postpartum depression. It also increases the time before menstruation and fertility returns, known as lactational amenorrhea. Long term benefits may include a decreased risk of breast cancer, cardiovascular disease, and rheumatoid arthritis. Breastfeeding is less expensive for the family than infant formula.

Health organizations, including the World Health Organization (WHO), recommend feeding for six months only through breastfeeding. This means that no other foods or drinks other than vitamin D are typically given. Continued partial breastfeeding until at least one to two years of age is then recommended. Globally about 38% of infants are only breastfed during their first six months of life. In the United States, about 75% of women begin breastfeeding and about 13% only breastfeed until the age of six months. Medical conditions that do not allow breastfeeding are uncommon. Mothers who take recreational drugs and certain medications should not breastfeed.

Loving Birth strongly advocates breastfeeding as the perfect start for new humans. Human milk is uniquely designed for human babies. It is much cheaper and easier than formula, it has no GMOs (as long as mother is careful not to ingest them) so there is no question about safety, and it has many health and psycho-social benefits for both mother and baby.

BELIEFS & RECOMMENDATIONS

Our Beliefs

- ✚ Pregnancy is a natural biological and sociological process, not a pathological disease nor medical condition.
- ✚ Improving a woman's health—and a man's health—before conception decreases the risks to a healthy pregnancy and increases the chances for a healthy baby.
- ✚ A baby who is nurtured in the womb of a healthy, loving, tranquil mother receives the best possible start in life.
- ✚ Birth is a natural life event that should be approached from a wellness model rather than a pathology model.
- ✚ Pregnant and laboring women deserve to be revered.
- ✚ Women have innate knowledge about pregnancy and birth, and the ability to birth a baby successfully.
- ✚ Women have the right to full information prior to labor about all options for care so they can make informed and objective choices about what is best for themselves and their babies.
- ✚ The birth experience is enhanced in hospitals, birth centers, and homes that support the parents' culture, values, and birth preferences (aka: birth plans).
- ✚ Bonding in infancy is essential for optimal development and secure attachment. Optimal bonding occurs more easily within the first hour following birth and is facilitated by skin-to-skin contact and the commencement of breastfeeding.
- ✚ Nationally certified nurse-midwives can be an integral part of the medical birthing team, especially being utilized to assist routine, low-risk births.
- ✚ The use of doulas provides support for the birthing mother during pregnancy, labor, and postpartum periods.
- ✚ What happens before pregnancy and throughout—at conception, in the womb, at birth, and in the first days and months—establishes the foundation for every child's life.
- ✚ Breastfeeding, skin-to-skin contact, and being carried on the body are important for brain, nervous system, and immune system development, and bestow long-term health benefits for both baby and mother.
- ✚ Every baby and child needs to be securely bonded with at least one human being who is a loving and consistent presence in the child's life.

Recommendations

- ✚ Restoring confidence in the normal birth process among childbearing women and healthcare professionals.
- ✚ Encouraging mothers' innate knowledge and inner wisdom regarding how to give birth naturally.
- ✚ Educating women and their care providers about the flow of hormones, particularly oxytocin, which occurs during unmedicated births.
- ✚ Advocating for the tenets of the Baby-Friendly Hospital Initiative.
- ✚ Providing education about all birth options, including full disclosure regarding the possible risks and benefits of induction, cesarean births, medical interventions, and natural birth.
- ✚ Encouraging women to develop a birth preference list that outlines where she will labor and give birth with qualified providers of her choice (physician or midwife).
- ✚ Advocating strategies, such as immediate skin-to-skin contact after birth, that allow maternal-infant bonding to unfold.
- ✚ Encouraging the initiation of breastfeeding within an hour of birth, helping to establish latching on and suckling, and also to enhance bonding.
- ✚ Supporting mothers' breastfeeding their babies according to the recommendation of the American Academy of Pediatrics for at least one full year.
- ✚ Collaborating with women, providers, and health care organizations to redesign the facilities in which women give birth.
- ✚ Bringing together all knowledge and best practices to achieve optimal birth outcomes.
- ✚ Changing the paradigm from 'delivering a baby' to 'birthing a baby.'
- ✚ Changing the paradigm from a pathological/disease model of birth to a positive, physiological (natural) model.
- ✚ Examining those cultures of excellent maternal infant outcomes to seek out best practice strategies.
- ✚ Promoting the positive impact of birth doulas who provide continuous support to the mother throughout labor and postpartum.
- ✚ Advocating for evidenced-based use of tests, procedures, technology and restrictions.
- ✚ Supporting the governmental *Healthy People 2020* objectives of reducing Cesarean sections for first time mothers and increasing vaginal births following cesarean surgeries for subsequent births.
- ✚ Advocating for a change, including, but not limited to, tort reform, including the reduction in premiums of liability in malpractice insurance for all professionals involved in the birthing profession so they can afford to practice their art.
- ✚ Advocating for full health coverage for all births for both babies and their mothers.

The Loving Birth Task Force supports the Midwifery Model of Care, including the use of the Optimality Index-US advocated by the American College of Nurse-Midwives “that shifts the measurement focus from adverse to good outcomes, and counts the frequency of ‘optimal’ events during childbirth” (midwife.org).

LOVE VERSUS FEAR

(by Susan Highsmith, PhD, Prenatal and Perinatal Psychology)

Fear

The polarization of love and fear appears in the realm of childbearing today. Fear is so predominant that a word has been coined to describe an extreme fear of childbirth: *tokophobia* (Hofberg & Brockington, 2000). This term stems from the Greek *tokos*, which means childbirth, and *phobos*, which means fear. This psychological condition is either primary or secondary. Primary tokophobia originates *before* a woman gets pregnant, and often starts in adolescence. It is experienced as a deeply felt dread of giving birth and arises from her own birth, her mother's experience giving birth, or things she learned through the media, from her friends, or at school. Secondary tokophobia arises from the woman's personal experience when she previously gave birth. That event was perceived as traumatic due to receiving poor care, having had post-partum depression, and/or experiencing a significant loss or other distressing circumstances during her pregnancy or while giving birth. Tokophobia can be present even though a woman strongly wants to have a child.

A recent study (2014) found that 34 percent of the 174 participating women who had never given birth were "identified as severely tokophobic" (Greathouse, p. 103). Further, the researcher stated: "Evidence from 30 years of international research suggests that maternal tokophobic perceptions are generational, contribute to the technological birth schema, increase caesarean-section rates, and contribute to increased childlessness" (p. vi).

The Dual Nature of Cells' Responsiveness

Cell biologist Bruce Lipton (2005) has described the nature of cells, including human cells, which have the ability to respond to stimuli in only two ways: growth or protection. If a cell is growing, it perceives its environment as safe, nurturing, and growth promoting. If a cell is protecting itself, it perceives threats in its environment, and therefore, must contract or otherwise defend itself. According to Dr. Lipton, these perceptions translate as love/growth or fear/protection. Beliefs—instilled at a cellular level—are based on how the environment is perceived, that is, threatening and fearful or nurturing and loving.

Love

Love is not a word found often in research, however, the chemistry of love is now studied as it relates to childbirth, mother-child attachment, and personal relationships. John Gottman's research on marriage and *The Science of Trust* (2011) is awakening consciousness to the importance of the vital chemical involved in relating to one another, and has made *oxytocin* a household word. Oxytocin, discussed in the childbirth section of this paper, is a neuropeptide that is produced in the hypothalamus, and is stored in and then secreted from the posterior pituitary gland. According to Gottman "the word *oxytocin* comes from the Greek for 'swift birth'" (p. 135). He reports that animal studies have found that maternal behaviors are inhibited when the subjects are deprived of oxytocin, and enhanced when given oxytocin. Importantly, oxytocin appears to down-regulate fear

responses. Gottman contends that the hormones of love, “oxytocin and vasopressin appear to be the hormones of trust in all relationships” (p. 135).

Psychoanalyst Erik Erikson created a model of psychosocial development that occurs in eight stages across the lifespan beginning in infancy and ending in late adulthood. During each stage an individual faces a particular challenge. During the first stage, an infant must have its needs met by caregivers and faces the challenge of learning to trust or mistrust. An infant perceives the care provided in a way that shapes his/her developing personality, and is answering the existential question, “Can I trust the world and the people in it?” If the child feels safe and loved, it learns to trust; if the child experiences neglect, abuse, or inconsistent care, s/he learns to mistrust. This choice mirrors the polarity of love or fear.

Developing secure or insecure attachment is also predicated on the infant being able to trust, or mistrust, caregivers who ideally consistently respond to his/her needs in a timely manner. One of the first ways this trust is built is by gazing into the infant’s eyes. This infant-mother gaze has become known as the bonding gaze as it helps women fall in love with their babies. Researchers have found that mothers who gaze into their babies’ eyes have blood levels of oxytocin increase; those who shift their gaze away more frequently have lower levels of oxytocin. “Findings underscore the involvement of oxytocin in regulating the mother’s responsive engagement with her infant, particularly in times when the infant’s need for access to the mother is greatest” (Kim, Fonagy, Koos, Dorsett, & Strathearn, 2014).

Medical News Today reported in June 2015, “**The release of oxytocin by the pituitary gland acts to regulate two female reproductive functions: Childbirth [and] Breast-feeding.**” Other hormones including beta-endorphin, a natural painkiller, and prolactin, “the major hormone of milk synthesis and breastfeeding,” (Buckley, 2003) act in concert with oxytocin to create an optimal birth experience for both mother and baby. During breastfeeding mothers often gaze into their babies’ eyes, releasing oxytocin that literally reinforces a loving bond between them.

In his classic book *The Scientification of Love* (1999), retired French obstetrician Michel Odent clarifies oxytocin’s role: “it stimulates uterine contractions for the birth of the baby and the delivery of the placenta. It stimulates the ‘milk ejection reflex’” (p. 11). Due to the inordinate number of interventions and Cesarean sections during which women are anesthetized, birthing women do not release their own naturally produced hormones. Dr. Odent points out, “Today, for the first time in the history of humankind, most women, in many countries, become mothers without releasing a complex cocktail of hormones of love” (p. 132).

Animal studies demonstrate that virginal rats whose brains are injected with oxytocin will manifest maternal behaviors (Pederson & Prange, 1979). Interestingly, these injections do not cause maternal behaviors when administered intravenously. This implies that oxytocin needs to cross the blood/brain barrier, which naturally produced oxytocin does but artificial oxytocin does not. Synthetic oxytocin injected into the blood streams of laboring women generates different responses in the body. Candace Pert described in her book, *The Molecules of Emotion* (1997), the action of oxytocin during childbirth when it binds with

uterine receptors to produce contractions. Artificial oxytocin—Pitocin—occupies those same receptor sites but does not act in the same way. It generates more intense, painful contractions, increasing the need for pain medication, and probably affects babies as well.

Researchers who studied voles conclude that there are long-term effects from manipulating neurochemicals at birth, in this case, oxytocin, as the brains of the voles showed differences in the neocortex that were evident in adulthood (Kramer, Yoshida, Papademetriou, & Cushing, 2007). Animal studies are valuable because dissections cannot be performed on living humans. By means of brain scans and observations of behaviors, human children have been found to have neurological effects resulting from their experiences. The *Center on the Developing Child* at Harvard University reports on development of brain architecture:

Early experiences affect the development of brain architecture, which provides the foundation for all future learning, behavior, and health. Just as a weak foundation compromises the quality and strength of a house, adverse experiences early in life can impair brain architecture, with negative effects lasting into adulthood.

Infants are receiving input from their environments that alter the developing architecture of their brains, just as lab animals receive by injection of the neurochemicals associated with loving or stress-inducing treatment. Data from a longitudinal study begun at Harvard 35 years earlier and reported by Russek and Schwartz (1997) “suggest that perceptions of parental caring obtained during college predict health and illness in midlife” (p. 11). Anatomy, physiology, and psychology of individuals are found to be impacted by the presence or absence of loving care, evidenced by measureable oxytocin levels, brain scans, and/or personal reflections.

While animal studies may not translate directly to humans (Teicher, Tomoda, & Anderson, 2006), psychologists observe behaviors in adults that can be correlated with events that took place during pregnancy and at birth; for example, “unwantedness in early pregnancy has a detrimental effect on children's psychosocial development” (David, 1992/2012). Those people who exhibit violent behavior, and harm others and themselves, all seem to have a deficit in their ability to love. There appear to be long-term negative consequences that result from missing the natural flow of hormones during pregnancy and birth. Both animal and human studies are revealing that oxytocin is vital in manifesting maternal behaviors (Buckley, 2003; Gottman, 2011; Pederson & Prange, 1979). Longitudinal studies are revealing detrimental effects in the offspring of mothers who had a deficiency of naturally produced oxytocin. Odent (1999) comments:

When looking at the background of those people who have demonstrated an impaired capacity to love in different ways – whether it be love of oneself or love of others – it seems that the capacity to love is determined, to a great extent, by early experiences during foetal life, and the period around birth. (p. 21)

Odent is so concerned about childbirth interventions impeding the natural flow of oxytocin in mothers and babies that he declares: “The questions must be raised in terms of civilisation. Can Humanity survive obstetrics?” (p. 132).

The Loving Birth Task Force has calculated the savings that would accrue in the United States each year:

If all births were intended	\$ 21 Billion
If no babies were born preterm	26 Billion
If C-sections were reduced to 15%	5 Billion
If doulas assisted with births	2.3 Billion
If breastfeeding increased x 800,000 children	<u>300 Billion</u>
Total	\$354.3 Billion

Childbirth Education, Preconception Healthcare, Birth by Nature's Design without unnecessary medical interventions and reinforced by continuous labor support followed by breastfeeding infants could save U. S. taxpayers

\$354.3 Billion a year!

**The Loving Birth Task Force is dedicated to the premise
~More Love=Less Fear~
in all aspects of childbearing.**

HELPFUL DEFINITIONS

- **Auscultation:** listening to sounds of the body using a stethoscope.
- **Childbirth Educator:** a professional trained to offer sources of information, with skills to support parents as they prepare for pregnancy, labor, birthing, and parenthood.
- **Circumcision:** the surgical removal of the foreskin, the tissue covering the head(glans) of the penis.

- **Doula:** a woman who serves other women by providing physical and emotional support before, during, or after they give birth.
- **Evidenced Based:** a designation given to processes or procedures that demonstrates effectiveness through scientific studies.
- **Green Pregnancy, Birth, Nursery:** the use of products that are natural with no chemicals and considered safe for baby.
- **Holistic medicine:** a form of healing that considers the whole person—body, mind, emotions, and spirit—in the quest for optimal health and wellness.
- **Homeopathy:** treatments used with natural remedies.
- **Induction:** the process of causing labor to begin, usually with medication. It may be medically necessary or elective.
- **Infant Massage:** combinations of touch and massage therapy to enhance the physiological, structural, and emotional well-being of newborns through the first year, and to bond and form secure attachments with their caregivers.
- **Infant Mortality Rate:** the number of infant deaths per 1,000 live births.
- **Intervention:** procedures administered either to speed up or slow down labor.
- **Lactation Consultant:** a healthcare professional trained to assist mother and baby in breastfeeding.
- **Maternal Mortality Rate:** the number of women per 100,000 who die from birth-related causes up to one year following giving birth.
- **Midwife:** a traditional care provider trained to support women during pregnancy, at birth, and during the postpartum period.
- **Miscarriage:** the loss of an embryo or fetus before the 20th week of pregnancy.
- **Newborn Care Specialist:** a trained person who aids the mother after birthing, often to help baby learn to sleep through the night; not a nurse.
- **Nulliparous:** the medical term for a woman who has never given birth although the term includes women who have borne a stillborn or nonviable infant.
- **Oxytocin:** the “love” hormone secreted during birthing and lactation.
- **Physiological birth:** birthing vaginally according to Nature’s design.
- **Placental Encapsulation:** a process of saving the placental nutrients in capsule form.
- **Postpartum Depression:** a negative mental state following birthing that usually needs treatment and extra care
- **Prenatal and Perinatal Psychology:** The study of the mental, emotional, and behavioral aspects of life that originate prior to or around the time of birth.
- **Preterm birth (Prematurity):** Birth before 37 completed weeks of gestation.
- **V-BAC:** Vaginal birth after having had a previous Cesarean section.

SUMMARY OF THE LOVING BIRTH TASK FORCE POSITION STATEMENTS

THE COSTS OF GIVING BIRTH

The Loving Birth Task Force endorses the principles of Childbirth Connection and allied organizations to improve quality maternity care while reducing the exorbitant costs associated with childbirth in the United States. Further, we agree with the statement made by Maureen Corry of Childbirth Connection: “It’s critically important that pregnant women have the tools and information they need to partner with their providers to make the best decisions about pregnancy and childbirth, and ensure care adheres to a woman’s preferences.”

THE COSTS OF GIVING BIRTH: THE IMPACT OF ECONOMICS ON CHILDBEARING

The Loving Birth Task Force is dedicated to education that includes consideration of economic factors in childbearing, to assist those who are experiencing economic challenges to handle stresses as they seek to have healthy pregnancies and births, to work toward a paradigm shift that will reduce costs, and to influence governmental policy-makers to create legislation that helps young families with programs such as paid parental leave.

PRENATAL & PERINATAL PSYCHOLOGY

The Loving Birth Task Force acknowledges prenatal and perinatal theory and research that clearly demonstrate that the maternal environment—the unborn child’s only environment—is vital in determining a child’s brain development, indeed, entire physical, mental, and emotional development. Therefore, healthcare for women throughout their lives, particularly during childbearing years, is endorsed and promoted.

CHILDBIRTH EDUCATION: CHANGING THE LANGUAGE OF CHILDBIRTH

The Loving Birth Task Force strongly advocates changing the language of childbirth by substituting *birthing* or *giving birth* for the word delivery, in honor of the gift women give when bringing forth new life. We acknowledge the *ten months* it takes to fully develop a healthy baby, and support all efforts to prevent premature births.

CHILDBIRTH EDUCATION: INCORPORATING THE PRINCIPLES OF EVIDENCE BASED MATERNITY CARE

The Loving Birth Task Force endorses evidence based care and is dedicated to incorporating its principles in education programs as well as integrating the principles into holistic birthing policies and practice.

PRECONCEPTION HEALTH

In accordance with the Commission on Paternal Involvement in Pregnancy Outcomes (CPIPO) recommendations and those of the American Pregnancy Association (AQPA), The Loving Birth Task Force is committed to integrating father initiatives into its maternal and child healthcare (MCH) programs and including fathers in family planning services.

MATERNALISM

The Loving Birth Task Force endorses the recommendations of the CDC advising all women of reproductive age to adopt healthy behaviors including:

- ✚ Taking folic acid.
- ✚ Maintaining a healthy diet and weight.
- ✚ Being physically active regularly.
- ✚ Quitting tobacco use.
- ✚ Abstaining from alcohol and drugs.
- ✚ Talking to their health care provider about screening and proper management of chronic diseases.
- ✚ Visiting their health care provider at the recommended scheduled time periods for their age and discussing if or when they are considering becoming pregnant.
- ✚ Using effective contraception correctly and consistently if they are sexually active but wish to delay or avoid pregnancy.

The Loving Birth Task Force is committed to providing preconception healthcare education within Holistic Healthcare and Birth Centers that includes:

- ✚ Improving awareness of the influence that preconception and prenatal periods have on pregnancy outcomes and the lifelong health of children;
- ✚ Educating women *and* men on the importance of achieving optimal health before conceiving a child;
- ✚ Encouraging and educating women and men on how to plan for their reproductive lives—to decide when and if they will have children and are ready to assume the responsibilities of becoming parents;
- ✚ Advocating that prospective parents be supported in a wholesome, nurturing environment with appropriate educational opportunities, shelter, nutrition, health care, and financial security;
- ✚ Supporting legislation for medical coverage so women and men can receive pre-pregnancy preparation services (wellness visits) which include medical visits, counseling, and education; and
- ✚ Supporting policy changes that prohibit the contamination of food supplies with chemicals that are suspected or known to cause birth defects or other adverse consequences.

PRENATAL OPPORTUNITIES & CHALLENGES: ULTRASOUND IMAGING

In agreement with Doctors Cassanova, Buckley, Kresser, and Wagner, The Loving Birth Task Force suggests that ultrasound scans only be performed when medically indicated. Scans should be avoided or limited until research fully establishes their safety. If the procedure is elected, it is recommended that both exposure time and intensity be minimized. *Loving Birth would like to raise the question of the impact to the eggs within the ovaries of a female fetus when she has received one or more ultrasounds.*

PRENATAL OPPORTUNITIES & CHALLENGES: AMNIOCENTESIS

The Loving Birth Task Force concurs with the American Pregnancy Association (APA): It is important to discuss the risks and benefits of testing thoroughly with your healthcare provider who will help you evaluate if the benefits from the results could outweigh any risks from the procedure.

LABOR & BIRTH: BENEFITS OF SPONTANEOUS VAGINAL (PHYSIOLOGIC) BIRTH

In accordance with the American College of Nurse-Midwives (ACNM), the Midwives Alliance of North America (MANA), and the National Association of Certified Professional Midwives (NACPM) Consensus Statement, The Loving Birth Task Force is committed to providing the best setting and environment for women to give birth normally including:

- Access to midwifery care for each woman;
- Adequate time for shared decision making with freedom from coercion;
- No inductions or augmentations of labor without an evidence-based clinical indication;
- Encouragement of nourishment (food and drink) during labor as the woman desires;
- Freedom of movement in labor and the woman's choice of birth position;
- Intermittent auscultation of heart tones during labor unless continuous electronic monitoring is clinically indicated;
- Maternity care providers skilled in non-pharmacologic methods for coping with labor pain for all women;
- Care that supports each woman's comfort, dignity, and privacy; and
- Respect for each woman's cultural needs.

The Loving Birth Task Force promotes physiological birth as the optimum manner for women with low risk pregnancies to give birth

LABOR & BIRTH: THE HORMONES OF BIRTH

The Loving Birth Task Force is dedicated to reducing the use of epidurals and other medications during childbirth and to promoting the natural processes of birth that allow the flow of hormones to ease birth, empower mothers, enhance bonding, and give newborns the most positive transition into the arms of their mothers.

LABOR & BIRTH: THE SACRED HOUR AND SKIN-TO-SKIN CONTACT

The Loving Birth Task Force concurs with proponents of the “sacred hour,” and advocates keeping mother and newborn together in the hour immediately following birth to enhance bonding and attachment, babies’ development of both emotional and social intelligence, and to contribute to the formation of a loving family with baby in arms.

LABOR & BIRTH: BONDING AND THE FOUNDATION FOR SECURE ATTACHMENT

The Loving Birth Task Force encourages prenatal bonding and is dedicated to honoring the Sacred Hour, deterring the separation of mother and newborn during those first valuable moments (unless life threatening emergencies dictate otherwise).

LABOR & BIRTH: RELAXATION, MEDITATION, AND SELF-HYPNOSIS

The Loving Birth Task Force encourages pregnant women to explore and enroll in educational programs like *Calm Birth* and *HypnoBirthing* to enhance their abilities to give birth naturally, bond with their babies during pregnancy and at birth, and increase their awareness throughout the miraculous process of childbearing.

LABOR & BIRTH: THE MICROBIOME AND ITS IMPACT ON THE BABY

The Loving Birth Task Force encourages all women to become aware of the subject of microbiomes in order to promote their own healthy immune systems and make choices that will help their unborn babies develop healthy immune systems as well.

LABOR & BIRTH: BREECH & VAGINAL BIRTH AFTER CESAREAN SECTION (VBAC)

The Loving Birth Task Force suggests that women become informed of their options early and, particularly, to determine if options are available by the care providers they expect to utilize. Procedures for dealing with breech positions and vaginal births after previous cesarean surgeries differ and the Task Force endorses those that are the least invasive while providing the greatest safety for both mother and baby.

LABOR & BIRTH: WATERBIRTH

Due to limited research, the Loving Birth Task Force can recommend laboring in water; however, careful consideration should be given to giving birth in the water. It is possible that the microbiome being established on the babies’ skin could be washed off or weakened by birthing in water. Research is needed in this area. Tubs for labor and birth are available in birthing centers and portable tubs are carried by home birth midwives. Ultimately the decision to give birth in water is one reached by a pregnant woman and her birthing healthcare provider.

The Loving Birth Task Force is dedicated to providing education that expands women's choices.

BIRTH INTERVENTIONS

The Loving Birth Task Force supports the reduction in routine use of interventions during childbirth for low risk women and their healthy newborns.

BIRTH INTERVENTIONS: FRIEDMAN'S CURVE, FAILURE TO PROGRESS, & LITHOTOMY POSITION

The Loving Birth Task Force concurs that Friedman's Curve is an obsolete measure of progress during labor. The Task Force encourages allowing time for women to experience labor without interventions to artificially speed progress and that they be allowed to move around freely instead of having their movements restricted.

BIRTH INTERVENTIONS: CASCADE OF INTERVENTIONS

The Loving Birth Task Force supports a reduction in the use of interventions and the cascade of those interventions, and advocate normal physiologic childbearing.

BIRTH INTERVENTIONS: CESAREAN SECTIONS

The Loving Birth Task Force supports the promising policy strategies advocated by the Childbirth Connection including the promotion of spontaneous labor, minimal intervention, and cesarean deliveries only when medically necessary. We encourage expectant mothers to become familiar with the risks of inductions and cesarean sections, as well as the culture, philosophy, and policies of place of giving birth.

BIRTH INTERVENTIONS: VACUUM EXTRACTION & FORCEPS: INSTRUMENTAL DELIVERY

The Loving Birth Task Force discourages the routine use of instrumentation during labor and endorses the midwifery model of care, which provides more natural assistance to laboring mothers.

BIRTH INTERVENTIONS: EYE DROPS & VITAMIN K

Inflicting pain or blurring the vision of a newborn are discouraged by the Loving Birth Task Force. If well-informed parents choose eye drops or vitamin K injections, it would be advisable to delay the procedures for at least one hour while essential bonding with the baby is taking place.

BIRTH INTERVENTIONS: SUCTIONING (ASPIRATING ON THE PERINEUM)

The Loving Birth Task Force promotes education among childbirth professionals and childbearing women to reduce suctioning except in those cases that are truly determined to be emergencies

BIRTH INTERVENTINOS: CIRCUMCISION

The Loving Birth Task Force encourages all parents to carefully consider whether circumcision is the best choice for their sons.

MIDWIVES & DOULAS

The Loving Birth Task Force encourages the use of midwives and adheres to the midwifery model which supports natural childbirth and promotes the empowerment of women to give birth as Nature designed.

The Loving Birth Task Force supports the Midwifery Model of Care, including the use of the Optimality Index-US advocated by the American College of Nurse-Midwives “that shifts the measurement focus from adverse to good outcomes, and counts the frequency of ‘optimal’ events during childbirth” (midwife.org).

The Loving Birth Task Force endorses the model of continuous labor support created by Dr. Rebecca Dekker and further recommends the engagement of doulas to provide continuous care for pregnant women prior to, during, and following labor.

POSTPARTUM & NEWBORN CARE: PAID PARENTAL LEAVE

The Loving Birth Task Force supports efforts to change governmental and business policies to provide paid parental leave for mothers *and* fathers.

POSTPARTUM & NEWBORN CARE: BREASTFEEDING

Loving Birth strongly advocates breastfeeding as the perfect start for new humans. Human milk is uniquely designed for human babies. It is much cheaper and easier than formula, it has no GMOs (as long as mother is careful not to ingest them) so there is no question about safety, and it has many health and psycho-social benefits for both mother and baby

BELIEFS & RECOMMENDATIONS: LOVE VERSUS FEAR

The Loving Birth Task Force has calculated the savings that would accrue in the United States each year:

If all births were intended	\$ 21	Billion
If no babies were born preterm	26	Billion
If C-sections were reduced to 15%	5	Billion
If doulas assisted with births	2.3	Billion
If breastfeeding increased x 800,000 children	<u>300</u>	<u>Billion</u>
Total	\$ 354.3	Billion

Childbirth Education, Preconception Healthcare, Birth by Nature's Design without unnecessary medical interventions and reinforced by continuous labor support followed by breastfeeding infants could save U. S. taxpayers \$354.3 Billion a year!

The Loving Birth Task Force is dedicated to the premise
– **More Love =Less Fear** –
in all aspects of childbearing.

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