



The Safety of Legal Abortion and the Hazards of Illegal Abortion

Someone gave me the phone number of a person who did abortions and I made the arrangements. I borrowed about \$300 from my roommate and went alone to a dirty, run-down bungalow in a dangerous neighborhood in east Los Angeles. A greasy looking man came to the door and asked for the money as soon as I walked in. He told me to take off all my clothes except my blouse; there was a towel to wrap around myself. I got up on a cold metal kitchen table. He performed a procedure, using something sharp. He didn't give me anything for the pain — he just did it. He said that he had packed me with some gauze, that I should expect some cramping, and that I would be fine. I left.¹

-Polly Bergen, discussing the illegal abortion in the 1940s that rendered her infertile and nearly proved fatal.

As part of their strategy to make abortion illegal and unavailable, anti-choice forces make unsubstantiated claims that *legal* abortion is harmful to women's health. The fact is that the decriminalization of abortion in the United States in 1973 has led to tremendous gains in protecting women's health. The Institute of Medicine of the National Academy of Sciences declared in its first major study of abortion in 1975 that "legislation and practices that permit women to obtain abortions in proper medical surroundings will lead to fewer deaths and a lower rate of medical complications than [will] restrictive legislation and practices."² The American Medical Association's Council on Scientific Affairs reaffirmed this finding in 1992 when it attributed the marked decline in deaths from abortion services to "the shift from illegal to legal abortion," along with the introduction of antibiotics and the widespread use of effective contraception in the 1960s.³ Furthermore, the experience in the United States is very similar to that in Western Europe, where mortality rates from abortion services were reduced after legal abortion became widely available.⁴

In the more than four decades since *Roe v. Wade* was decided, thousands of American women's lives have been saved by access to legal abortion care. Nonetheless, *Roe* and the availability of legal abortion services, as well as the progress women have achieved for reproductive freedom, are under constant attack. Mandatory delays, biased-counseling requirements, restrictions on young women's access, costly and unnecessary regulations, and limited public funding have had a cumulative impact, making it increasingly difficult for women to obtain safe abortion care. Aggravating the problem, the number of abortion providers continues to decline;⁵ anti-choice forces have created an atmosphere of intense intimidation and violence that deters physicians from entering the field and has caused others to stop providing abortion services.⁶ The most recent, tragic example was the 2009 murder of Dr. George Tiller, an abortion provider, in Wichita, Kansas. Ironically, many of those now raising alarms about the supposed dangers of abortion are the very people whose public policy suggestions would make exercising reproductive rights more hazardous. In pushing for complete bans on safe and medically appropriate abortion services, anti-choice forces reject exceptions to protect a woman's health.⁷

They aim to restrict access to mifepristone (RU 486), a safe early option for nonsurgical abortion, or make it unavailable altogether. They deny public funding for abortion services even when continuing the pregnancy would endanger a woman's health. They put up roadblocks for young women that jeopardize teens' health and can force them to delay abortion care or even, in some cases, take drastic measures. They construct barriers for all women with state-mandated biased counseling and mandatory-delay requirements that can force women to unnecessarily delay the procedure. With these restrictions in place, women's reproductive health is in serious danger.

- The legalization of abortion in the United States led to the near elimination of deaths from the procedure.⁸ Between 1973 and 1997, the mortality rate associated with legal abortion procedures declined from 4.1 to 0.6 per 100,000 abortions.⁹ The American Medical Association's Council on Scientific Affairs credits the shift from illegal to legal abortion services as an important factor in the decline of the abortion-related death rate after *Roe v. Wade*.¹⁰
- Eighty-nine percent of abortions take place in the first 12 weeks of pregnancy, and nearly 99 percent occur during the first 20 weeks. Earlier abortion is associated with fewer mortality and morbidity risks.¹¹
- Studies of abortion services worldwide found that abortion-related deaths are rare in countries where the procedure is legal, accessible, and performed early in pregnancy by skilled providers.¹²

The Safety of Mifepristone

- In 2000, the Food and Drug Administration (FDA) approved the drug mifepristone (originally known as RU 486) for the termination of very early pregnancy. Mifepristone, which is distributed under the brand name Mifeprex[®], is approved for use during the first seven weeks after the first day of a woman's last menstrual period. Mifepristone does not require an invasive procedure or surgery and requires no anesthesia.
 - In the 15 years since FDA approval of mifepristone, more than 1.4 million U.S. women have used the drug for safe and effective nonsurgical abortion care.¹³ Meanwhile, millions of women worldwide have used mifepristone safely.¹⁴ In 2011, medication abortion made up 36 percent of all abortion services before nine weeks.¹⁵
 - Mifepristone is extremely safe. Side effects are similar to the complications of a natural miscarriage, and in the unusual case that the abortion is incomplete, the very safe and common procedure of a surgical abortion is recommended.¹⁶
 - Serious side effects with mifepristone are quite rare. Its safety record is much better than many other drugs or procedures.¹⁷

The Post-Abortion "Syndrome" Myth

For years, anti-choice lawmakers have attempted to prove the existence of "post-abortion

syndrome,” a supposed psychological phenomenon that has never been shown to exist by any legitimate scientific or medical study. In fact, these claims have been *disproven* by a long line of credible, scientific research.

- In 1987, President Reagan asked Surgeon General C. Everett Koop to study the matter. Dr. Koop reviewed some 250 studies on the topic of alleged “post-abortion syndrome.” Despite powerful political pressure to identify such a syndrome, and his own personal anti-choice beliefs, Dr. Koop concluded that “the data do not support the premise that abortion does or does not cause or contribute to psychological problems.”¹⁸
- A 1992 American Psychological Association (APA) review found that severe negative psychological reactions to abortion are rare and that the vast majority of women experience a mixture of emotions after an abortion, with positive feelings predominating.¹⁹ These findings were reaffirmed in 2008 when, after a two-year review of the “best scientific evidence published,” APA’s Task Force on Mental Health and Abortion found that a woman who chooses abortion is at no greater risk for mental-health problems than if she chooses to carry an unintended pregnancy to term. In considering the psychological implications of abortion, the task force recognized that women face complex and diverse circumstances when making decisions about their reproductive health, which may lead to variability in women’s psychological reactions.²⁰
- A 1997 longitudinal study concurred, showing that the experience of abortion has no independent effect on the psychological well-being of a woman.²¹
- A study published in 2000 revealed that two years after the procedure, 72 percent of the women surveyed were satisfied with their decision to have an abortion, 69 percent said they would have the abortion again, and 72 percent reported more benefit than harm from their abortion. The small proportion of women who did experience problems tended to have a prior history of depression.²²
- In 2004, at a Senate hearing on the impact of abortion on women, Dr. Nada Stotland — a psychiatrist and professor of obstetrics and gynecology who has devoted most of her career to studying the psychiatric aspects of women’s reproductive health — testified that “[t]he psychological outcome of abortion is optimized when women are able to make decisions on the basis of their own values, beliefs, and circumstances, free from pressure or coercion, and to have those decisions, whether to terminate or continue a pregnancy, supported by their families, friends, and society in general.”²³
- In 2010, a study published in *Perspectives on Sexual and Reproductive Health* examined the impact of abortion on adolescents. Researchers found that abortion does not cause either depression or low self-esteem among young women. Additionally, the study concluded that “laws mandating that women consider abortion be advised of its psychological risks may jeopardize women’s health by adding unnecessary anxiety and undermining women’s right to informed consent.”²⁴
- In 2012, the *Journal of Psychiatric Research* published a letter by University of California, San Francisco Assistant Professor Julia Steinberg and Guttmacher Institute researcher Lawrence Finer²⁵ detailing the numerous methodological flaws they uncovered after extensive

examination of a 2009 study, published in the same journal that claimed a causal effect between abortion and negative mental-health outcomes.²⁶ In a rare move, the journal's editor-in-chief agreed that the study, led by Priscilla Coleman, professor at Bowling Green State University was "flawed" and unsupported.²⁷

- Also in 2012, researchers in another study examined the differences in the mental health of women who received abortion care versus women who were unable to get the procedure. The study found that one week after getting the abortion, 97 percent felt it was the right decision. Of the women who were unable to get the abortion, 67 percent wished they had been able to get the procedure; those women were three times more likely to be below the poverty level two years later; and seven percent had reported an incident of domestic violence in the previous six months (more than twice the number of women who had gotten an abortion).²⁸ NARAL Pro-Choice America supports every woman's right to choose which option works best for her and her family, and this study helps to illustrate the outcomes a woman may face when she is unable to access the option she has chosen.

The Pregnancy Complications Myth

- For years, the anti-choice movement has put forward an unproven claim that abortion severely impacts a woman's ability to bear children in the future. However, medical research incorporating studies from 21 countries shows that abortion does not increase the risk of suffering major pregnancy complications during future pregnancies or deliveries. There is no added risk of infant mortality or of having a low birth weight infant, nor is there increased risk of infertility, ectopic pregnancy, or miscarriage following an abortion.²⁹

The Breast Cancer Myth

- Anti-choice forces have attempted to frighten women into believing that abortion causes breast cancer, but no credible research supports this claim. In the last few decades, dozens of studies examining the purported link between abortion services and breast cancer have been published.
- A 2006 study published in the *International Journal of Cancer* examined the records of 267,361 women in nine countries and found no link between abortion and breast cancer, noting that "the findings provide further unbiased evidence of the lack of an adverse effect of induced abortion on breast cancer risk."³⁰
- A 2004 study published in *The Lancet*, reanalyzing data from more than 50 studies, concluded that women do not have an increased risk of breast cancer if they obtain abortion care. The authors determined that the previous few studies that had suggested a possible connection were methodologically flawed.³¹
- An article published in the *New England Journal of Medicine* in 1997 similarly concluded that "induced abortions have no overall effect on the risk of breast cancer."³²

- In 1999, a study in Denmark analyzed 1.5 million women’s records and “showed absolutely no effect of abortion on breast cancer.”³³
- Results from a 2000 epidemiology study confirmed that there is “no excess risk of breast cancer among women who reported having an induced abortion compared with those who did not, nor did risk increase with increasing number of reported induced abortions.”³⁴
- Independent experts, including the National Breast Cancer Coalition, the American Cancer Society, and the World Health Organization, have concluded that a link between abortion care and breast cancer has not been established.³⁵
- In 2009, an opinion from The American College of Obstetricians and Gynecologists Committee on Gynecological Practice found that studies continue to “demonstrate no causal relationship between induced abortion and a subsequent increase in breast cancer risk.”³⁶
- Until 2002, the National Institutes of Health (NIH) posted on its website a fact sheet on “Abortion and Breast Cancer” in which it discussed the various studies researching the issue. After a careful analysis of some of the studies, the NIH concluded that there is no overall association between abortion and breast cancer.
- In June 2002, 22 anti-choice members of Congress wrote to Health and Human Services Secretary Tommy Thompson complaining that NIH’s fact sheet expressed the conclusion that no link between abortion and breast cancer had been established.³⁷ Soon thereafter, NIH removed its fact sheet from their website. In November 2002, NIH posted a revised fact sheet on its website in which the agency, without analysis of the studies, merely stated that the studies are “inconsistent.” In December 2002, pro-choice members of Congress wrote Secretary Thompson to protest the move, charging the agency with “distort[ing] and suppress[ing] scientific information for ideological purposes.”³⁸
- After lawmakers protested the change, the National Cancer Institute (NCI) convened a conference to examine the issue. Experts from the scientific community — including geneticists, epidemiologists, and oncologists — reviewed all existing information and concluded that “[i]nduced abortion is not associated with an increase in breast cancer risk.” The NCI page was updated to reflect this “well-established” conclusion on March 21, 2003.³⁹

Illegal Abortion Endangers Women’s Health

- It is estimated that before 1973, 1.2 million U.S. women resorted to illegal abortion each year and that unsafe illegal abortions caused as many as 5,000 annual deaths.⁴⁰ Not surprisingly, anti-choice activists often deny this reality. They point to lower figures tabulated from death certificates — but their position conveniently ignores several facts. Many deaths from illegal abortion would go unlabeled as such because of careless or casual autopsies, lack of experience and ability of autopsy surgeons,⁴¹ and simply the shame and fear associated with abortion’s illegality. According to a 1967 study, illegal abortion was the most common single cause of maternal mortality in California.⁴² Doctors who worked in emergency rooms before 1973, and saw first-hand the consequences of illegal abortion, would be in the best position to know. Dr. Louise Thomas, a New York City hospital resident during the late

1960s, summed up the dangers of illegal abortion, remembering the “Monday morning abortion lineup” of the pre-*Roe* period:

What would happen is that the women would get their paychecks on Friday, Friday night they would go to their abortionist and spend their money on the abortion. Saturday they would start being sick and they would drift in on Sunday or Sunday evening, either hemorrhaging or septic, and they would be lined up outside the operating room to be cleaned out Monday morning. There was a lineup of women on stretchers outside the operating room, so you knew if you were an intern or resident, when you came in Monday morning, that was the first thing you were going to do.⁴³

- Each year, an estimated 42 million women worldwide obtain abortion services to end unplanned pregnancies; approximately 21 million of them obtain the procedure illegally.⁴⁴ Complications due to unsafe abortion account for approximately 13 percent of material deaths worldwide, nearly 50,000 deaths a year.⁴⁵ Where abortion is illegal, the risk of complications and maternal mortality is high. In fact, the abortion-related death rate is hundreds of times higher in developing regions, where the procedure is often illegal, than in developed countries.⁴⁶
- In 1994, *The New England Journal of Medicine* reported that “[s]erious complications and death from abortion-related infection are almost entirely avoidable. Unfortunately, the prevention of death from abortion remains more a political than a medical problem.”⁴⁷

Barriers to Abortion Care Pose Health Risks to Women

Barriers to abortion care endanger women’s health by forcing women to delay the procedure, compelling them to carry unwanted pregnancies to term, and leading them to seek unsafe and illegal abortion services.

- Major complications from abortion care are more likely to develop the later the procedure takes place.⁴⁸ Thus, restrictions on access to abortion and decreases in provider availability — factors that force women to delay the procedure — endanger women’s health:
 - Mandatory waiting periods cause women to terminate pregnancies later in term.⁴⁹ Studies of Mississippi’s mandatory waiting-period law revealed that the proportion of procedures performed later in pregnancy increased after the law went into effect.⁵⁰
 - The American Academy of Pediatrics found that mandatory parental-involvement laws “increase the risk of harm to the adolescent by delaying access to appropriate medical care.”⁵¹
 - In recent years, the number of abortion providers has declined precipitously. At present, 89 percent of all U.S. counties have no abortion clinic.⁵² In 1992, in its assessment of the mortality and morbidity of women who terminated their pregnancy before and after *Roe*, the American Medical Association’s Council on Scientific Affairs concluded that “mandatory waiting periods, parental or spousal consent and notification statutes, a reduction in the number and geographic

- availability of abortion providers, and a reduction in the number of physicians who are trained and willing to perform first- and second-trimester abortions increase the gestational age at which the induced pregnancy termination occurs, thereby also increasing the risk associated with the procedure.”⁵³
- Abortion restrictions that succeed in forcing women to carry unintended pregnancies to term expose women to the greater health risks of childbirth against their will:
 - The mortality rate associated with childbirth is ten times higher than the mortality rate associated with legal abortion care.⁵⁴
 - For adolescents, who account for 18 percent of all abortion services,⁵⁵ pregnancy and childbirth may entail significant medical problems. Adolescents younger than age 15 are more likely to experience pregnancy complications, including toxemia, anemia, and prolonged labor.
 - Barriers to abortion care, such as restrictions on public funding and parental-involvement laws, may have deadly consequences:
 - In 1977, Rosie Jimenez became the first woman known to have died as a result of the federal Hyde amendment, which restricts funding for abortion services except in the case of life endangerment, rape, or incest. Jimenez, a 27-year-old single mother and factory worker who survived on welfare, was unable to afford safe, legal abortion care. In desperation, she obtained a “back alley” abortion and died of complications. After her death, a \$700 scholarship check meant to help pay for a college education and teaching credentials was found in her purse.⁵⁶
 - The American Medical Association noted that “[b]ecause the need for privacy may be compelling, minors may be driven to desperate measures to maintain the confidentiality of their pregnancies. They may run away from home, obtain a ‘back alley’ abortion, or resort to self-induced abortion. The desire to maintain secrecy has been one of the leading reasons for illegal abortion deaths since . . . 1973.”⁵⁷
 - In 1988, a 17-year-old young woman, Becky Bell, became pregnant. When she sought an abortion at a women’s health clinic, she was told that under Indiana law, she first had to obtain the consent of one parent. Afraid to disappoint her parents, she had an illegal abortion and died from complications one week later.⁵⁸

Conclusion

If anti-choice forces prevail in their efforts, Dr. Thomas’ experience in the New York hospital wards during the 1960s and the deaths of women like Rosie Jimenez and Becky Bell are likely to be repeated. Studies show that the more restrictions are placed on abortion care, the less accessible the medical procedure becomes. However, history demonstrates that restricted access does not eliminate abortion; rather, in an anti-choice climate, women are forced to seek control over their reproductive lives in any way possible, often risking serious injury or death. Lifting abortion restrictions reduces the number of clandestine, unsafe abortions. Removal of legal barriers to abortion care would improve women’s health, and spurious claims that

abortion services are dangerous should not be used to justify more restrictions on a woman's right to choose.⁵⁹

January 1, 2016

Notes:

¹ The NARAL Foundation, *Choices: Women Speak Out About Abortion*, at 11 (1997).

² Rachel Benson Gold, ABORTION AND WOMEN'S HEALTH: A TURNING POINT FOR AMERICA? 9 (1990).

³ Stubblefield & Grimes, *Septic Abortion*, THE NEW ENGLAND JOURNAL OF MEDICINE 331, 310 (1994).

⁴ *Id.*, at 310 (citing to Henshaw, *How Safe is Legal Abortion?*, in Teoh et al, PREGNANCY TERMINATION AND LABOUR, 31-40 (1993)).

⁵ There were 1,720 abortion providers in 2011, 4% fewer than in 2008. Jones, RK et al., *Abortion Incidence and Service Availability in the United States, 2011*, PERSP. ON SEXUAL & REPRO. HEALTH, Mar. 2014, 46(1):3-14.

⁶ For example, in October 1999, abortion provider Stephen M. Dixon closed down his District of Columbia ob/gyn practice, indicating that threats and harassment by anti-abortion activists had taken their toll. These activists mailed threats to Dixon's home, placed his photograph on a "wanted poster," and listed him on a "Baby Butchers" web site, along with 32 other D.C. physicians and hundreds more across the country. (In February 1999, a federal jury ordered the creators of the poster and web site to pay over \$107 million to Planned Parenthood of Columbia/Willamette, the Portland Feminist Women's Health Center, and certain physicians because of the threats contained in these and other materials.) Dixon said he had already stopped performing abortions due to the stress caused by anti-abortion terrorism. In a letter to his patients, Dixon wrote, "Sadly, the ongoing threat to my life and my concern for the safety of my loved ones has exacted a heavy toll on me, making it necessary that I discontinue practicing OB-GYN." Avram Goldstein, *Doctor Quits, Cites Antiabortion Threats*, WASH. POST, Nov. 4, 1999, at B1; *Planned Parenthood of the Columbia/Willamette, Inc. v. American Coalition of Life Activists*, 41 F. Supp. 2d 1130 (D. Or. 1999), *aff'd. in part, vacated and remanded in part*, 290 F.3d 1058 (9th Cir. 2002), *cert. denied*, 123 S. Ct. 2637 (2003).

⁷ See NARAL PRO-CHOICE AMERICA & NARAL PRO-CHOICE AMERICA FOUNDATION, *Who Decides? The Status of Women's Reproductive Rights in the United States* (25th ed. 2016), at www.WhoDecides.org; *Gonzales v. Carhart and Gonzales v. Planned Parenthood Federation of America*, 127 S. Ct. 1610 (2007).

⁸ Phillip G. Stubblefield & David A. Grimes, *Septic Abortion*, 331 NEW ENG. J. MED. 310 (1994).

⁹ Laurie D. Elam-Evans et al., Centers for Disease Control & Prevention, *Abortion Surveillance – United States, 1999*, 51 MORBIDITY & MORTALITY WEEKLY REP. 1, 28, tbl. 19 (2002).

¹⁰ Council on Scientific Affairs, American Medical Association, *Induced Termination of Pregnancy Before and After Roe v Wade: Trends in the Mortality and Morbidity of Women*, 268 JAMA 3231, 3232 (1992).

¹¹ Guttmacher Institute, Fact Sheet: *Induced Abortion in the United States* (July 2014) at http://www.guttmacher.org/pubs/fb_induced_abortion.html#10 (last visited on Dec. 14, 2015). According to Guttmacher, "abortions performed in the first trimester pose virtually no long-term risk of such problems as infertility, ectopic pregnancy, spontaneous abortion (miscarriage) or birth defect and little or no risk of preterm or low-birth-weight deliveries."; Boonstra HD et al., *Abortion in Women's Lives*, New York: Guttmacher Institute, 2006.

¹² Guttmacher Institute, *Sharing Responsibility: Women, Society & Abortion Worldwide*, at 32 (1999). These findings were further supported in a 2007 *Lancet* article. [Gilda Sedgh, Stanley Henshaw](#), et. al., *Induced abortion: estimated rates*

Notes, cont.

- and trends worldwide, *The Lancet*, [Volume 370, Issue 9595](#), Pages 1338 - 1345, Oct. 13, 2007.
- ¹³ E-mail from Abbigail Long, Director of Marketing and Public Affairs, Danco Laboratories, to Rachel Tabakman, Policy Aide, Policy Department, NARAL Pro-Choice America (Sept. 2010) (on file with NARAL Pro-Choice America).
- ¹⁴ E-mail from Dr. Cynthia Summers, Director of Marketing and Public Affairs, Danco Laboratories, to Ali Rosholt, Legislative Representative, Government Relations, NARAL Pro-Choice America (Jan. 10, 2006) (on file with NARAL Pro-Choice America).
- ¹⁵ Guttmacher Institute, Fact Sheet: *Induced Abortion in the United States* (July 2014) at http://www.guttmacher.org/pubs/fb_induced_abortion.html#10 (last visited on Dec. 14, 2015).
- ¹⁶ Population Council, *Mifeprex® (Mifepristone) Frequently Asked Questions (FAQs)*.
- ¹⁷ See generally NARAL Pro-Choice America, *Mifepristone is a Safe Choice*, at <http://www.prochoiceamerica.org/what-is-choice/abortion/abortion-ru-486.html> (last visited Dec. 14, 2015).
- ¹⁸ Letter from C. Everett Koop, Surgeon General, Dep't of Health & Human Servs., to Ronald Reagan, President of the United States (Jan. 9, 1989); Rachel Benson Gold, ABORTION AND WOMEN'S HEALTH: A TURNING POINT FOR AMERICA? 9 (1990).
- ¹⁹ Nancy E. Adler et al., *Psychological Factors in Abortion: A Review*, 47 AM. PSYCHOLOGIST 1194, 1202 (1992).
- ²⁰ Brenda Major, et al., *Report of the APA Task Force on Mental Health and Abortion*, AM. PSYCHOLOGICAL ASSOC. (Aug. 12, 2008), at <http://www.apa.org/pi/women/programs/abortion/mental-health.pdf> (last visited Oct. 11, 2012). This report was updated in a December 2009 article published in the *American Psychologist*. The article reaffirmed the findings of the 2008 report. Major, B.; Appelbaum, M.; Beckman, L.; Dutton, M.; Russo, N.; & West, C., *Abortion and mental health: Evaluating the evidence*, *American Psychologist*, 64(9), 863-890 (Dec. 2009). <http://www.apa.org/pubs/journals/features/amp-64-9-863.pdf> (last visited Dec. 14, 2015).
- ²¹ S. Edwards, *Abortion Study Finds No Long-Term Ill Effects on Emotional Well-Being*, 29 FAM. PLAN. PERSP. 193, 193-94 (1997).
- ²² Brenda Major et al., *Psychological Responses of Women After First-Trimester Abortion*, 57 ARCHIVES GEN. PSYCHIATRY 777, 777-784 (2000).
- ²³ Committee on Commerce, Science, and Transportation, U.S. Senate, Testimony of Dr. Nada Stotland (Mar. 3, 2004), at http://commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=a840e181-a4df-4090-9719-32b4c45cc0c1&Statement_id=5549bef1-413c-43a6-9d48-c33a410ff20&ContentType_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group_id=b06c39af-e033-4cba-9221-de668ca1978a&MonthDisplay=3&YearDisplay=2004 (last visited Dec. 14, 2015).
- ²⁴ Jocelyn T. Warren, S. Marie Harvey, and Jillian T. Henderson, *Do Depression and Low Self-Esteem Follow Abortion Among Adolescents? Evidence from a National Survey*, 42 PERSPECTIVES ON SEXUAL AND REPRODUCTIVE HEALTH 230, 234 (2010).
- ²⁵ Steinberg, J. R. & Finer, L. B., *Coleman, Coyle, Shuping, and Rue Make False Statements and Draw Erroneous Conclusions in Analyses of Abortion and Mental Health Using the National Comorbidity Survey*, 46 J. PSYCHIATRIC. RES., 407-8 (2012).
- ²⁶ Coleman, P. K., Coyle, C. T., Shuping, M. & Rue, V. M. *Induced Abortion and Anxiety, Mood, and Substance Abuse Disorders: Isolating the Effects of Abortion in the National Comorbidity Survey*, 43 J. PSYCHOL. RES., 770-776 (2009).
- ²⁷ Ronald C. Kessler, Alan F. Schatzberg, *Commentary on Abortion Studies of Steinberg and Finer (Social Science & Medicine 2011; 72:72-82) and Coleman (Journal of Psychiatric Research 2009;43:770-6 & Journal of Psychiatric Research 2011;45:1133-4)*, 46 J. PSYCHIATRIC. RES., 410-11 (2012).

Notes, cont.

- ²⁸ Annalee Newitz, *What Happens to Women Denied Abortions? This is the First Scientific Study to Find Out*, IO9.com, Nov. 13, 2012 at <http://io9.com/5958187/what-happens-to-women-denied-abortions-this-is-the-first-scientific-study-to-find-out> (last visited Dec. 14, 2015).
- ²⁹ Carol J.R. Hogue et al., *The Effects of Induced Abortion on Subsequent Reproduction*, 4 EPIDEMIOLOGIC REVIEWS 66, 67, 88-9 (1982). Heather Boonstra et. al., *Abortion In Women's Lives*, New York, Guttmacher Institute, 2006.
- ³⁰ *Breast cancer risk in relation to abortion: Results from the EPIC study*, 119 INT'L J. CANCER 1741-45 (2006), *Abortion Seen Not Related to Breast Cancer Risk*, REUTERS, Oct. 16, 2006.
- ³¹ *Breast Cancer and Abortion: Collaborative Reanalysis of Data from 53 Epidemiological Studies, Including 83,000 Women with Breast Cancer from 16 Countries*, 363 LANCET 1007, 1007-16 (2004); *Study: No Link Between Abortion, Breast Cancer*, USA TODAY, Mar. 26, 2004, at http://www.usatoday.com/news/health/2004-03-26-abortion-cancer_x.htm (last visited Dec. 14, 2015).
- ³² Jane E. Brody, *Big Study Finds No Link in Abortion and Cancer: Long-Standing Issue Should Now Be Settled*, N.Y. TIMES, Jan. 9, 1997, at A12; Mads Melbye et al., *Induced Abortion and the Risk of Breast Cancer*, 336 NEW ENG. J. MED. 81 (1997).
- ³³ Daniel DeNoon, *Should Docs Warn About an Abortion/Breast Cancer Link?*, WEBMD MEDICAL NEWS ARCHIVE, Dec. 5, 2001, at http://www.webmd.com/content/article/24/1840_50727.htm (last visited Dec. 14, 2015).
- ³⁴ DeAnn Lazovich et al., *Induced Abortion and Breast Cancer Risk*, 11 EPIDEMIOLOGY 76, 77 (2000).
- ³⁵ National Breast Cancer Coalition (NBCC), *Position Statement on Abortion and Breast Cancer Risk* (May, 2005); American Cancer Society, *Is Abortion Linked to Breast Cancer?*, at <http://www.cancer.org/Cancer/BreastCancer/MoreInformation/is-abortion-linked-to-breast-cancer> (last visited Dec. 14, 2015); World Health Organization, *Induced Abortion Does Not Increase Breast Cancer Risk* (June 2000), at <http://web.archive.org/web/20071214064635/http://www.who.int/mediacentre/factsheets/fs240/en/index.html> (last visited Dec. 14, 2015).
- ³⁶ *Induced Abortion and Breast Cancer Risk*. ACOG Committee Opinion No. 434. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2009;113:1417-8.
- ³⁷ Jocelyn Kaiser, *Nudge From Congress Prompts NCI Review*, 297 SCIENCE 171 (2002).
- ³⁸ Letter to Secretary Tommy Thompson, U.S. Dep't of Health & Human Servs., Dec. 18, 2002.
- ³⁹ Comm. on Gov't Reform—Minority Staff, *Politics and Science in the Bush Administration*, U.S. House of Representatives (Aug. 2003); National Cancer Institute, *Abortion, Miscarriage, and Breast Cancer Risk* (Apr. 2003), at <http://www.cancer.gov/cancertopics/factsheet/Risk/abortion-miscarriage> (last visited Nov. 18, 2014).
- ⁴⁰ The estimated number of deaths from illegal abortion services (e.g. 5,000) has been derived from the findings of several studies. The following is a summary of these studies: "Difficulty as it is to accumulate statistics in this area, a surprising similarity has been noted in various studies independently made within the last thirty years. If general trend observed is accepted, without becoming sidetracked in disputes over exact numbers of methodology, we must consider the probability that more than one million criminal abortions will have been performed in the United States in 1962, and more than five thousand women may have died as a direct result." Zad Leavey & Jerome M. Krummer, *Criminal Abortion: Human Hardship and Unyielding Laws*, 35 S. CAL. L. REV. 124 (1962) (citing to Gebhard, et al, PREGNANCY, BIRTH AND ABORTION 136-137 (1958); Frederick Taussig, ABORTION SPONTANEOUS AND INDUCED: MEDICAL AND SOCIAL ASPECTS 25 (1936); Marie Kopp, BIRTH CONTROL IN PRACTICE 222 (1934); Stix, *A Study of Pregnancy Wastage*, 13 MILBANK MEMORIAL FUND QUARTERLY 347, 355 (1935); MODEL PENAL CODE § 207.11, comment, p. 147 (Tent. Draft No. 9, 1959). "It has been estimated that as many as 5,000 American women die each year as a direct result of criminal abortion. The figure of 5,000 may be a minimum estimate." Richard Schwarz, SEPTIC ABORTION 7 (1968) (citing to Taussig, 23-28, which discusses the original mathematical formula used for determining that somewhere between 8,000 and 10,000 women died each year from illegal abortion.); "One recent study at the University of California's School of Public Health estimated 5,000 to 10,000 abortion deaths annually."

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- Lawrence Lader, ABORTION 3 (1966) (also citing to Edwin M. Gold et al, *Therapeutic Abortions in New York City: A Twenty-Year Review*, in New York Dept. of Health, Bureau of Records and Statistics (1963), which discussed Dr. Christopher Tietze's estimate of nearly 8,000 deaths from illegal abortion annually in the United States. The estimate was based on the number of illegal abortions in New York City, the only major municipality keeping abortion statistics.); "[M]ore than five thousand women may have died as a direct result [of criminal abortion in the United States in 1962]." Zad Leavy & Jerome M. Kummer, *Criminal Abortion: Human Hardship and Unyielding Laws*, 35 S. CAL. L. REV. 123, 124 (1962); "Taussig and others have concluded that the abortion death rate during the late 1920s was about 1.2% and amounted to over 8,000 deaths per year." Russell S. Fisher, *Criminal Abortion*, in Harold Rosen, THERAPEUTIC ABORTION, MEDICAL PSYCHIATRIC, LEGAL, ANTHROPOLOGICAL, AND RELIGIOUS CONSIDERATIONS 8 (1954).
- ⁴¹ Zad Leavy & Jerome M. Krummer, *Criminal Abortion: Human Hardship and Unyielding Laws*, 35 S. CAL. L. REV. 123, 124 (1962).
- ⁴² Leon Parrish Fox, *Abortion Deaths in California*, 98 AM. J. OBSTETRICS & GYNECOLOGY 645, 650 (1967).
- ⁴³ Carole Joffe, DOCTORS OF CONSCIENCE: THE STRUGGLE TO PROVIDE ABORTION BEFORE AND AFTER ROE V. WADE 60 (1995).
- ⁴⁴ World Health Organization (WHO), *Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008*, at 1 (2011).
- ⁴⁵ Guttmacher Institute, *Facts on induced Abortion Worldwide* (Jan. 2012) at http://www.guttmacher.org/pubs/fb_IAW.html#r15a (last visited Dec. 14, 2015).
- ⁴⁶ Guttmacher Institute, *Facts on induced Abortion Worldwide* (Jan. 2012) at http://www.guttmacher.org/pubs/fb_IAW.html#r15a (last visited Dec. 14, 2015); WHO, *Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008*, at 5 (2011).
- ⁴⁷ Phillip G. Stubblefield & David A. Grimes, *Septic Abortion*, 331 NEW ENG. J. MED. 313 (1994).
- ⁴⁸ Guttmacher Institute, *Facts on induced Abortion Worldwide* (Jan. 2012) at http://www.guttmacher.org/pubs/fb_IAW.html#r15a (last visited Dec. 14, 2015); Rachel Benson Gold, *Abortion and Women's Health: A Turning Point for America?*, Guttmacher Institute, New York, at 31 (1990).
- ⁴⁹ Frances A. Althaus & Stanley K. Henshaw, *The Effects of Mandatory Delay Laws On Abortion Patients and Providers*, 26 FAM. PLAN. PERSP. 228, 231 (1994).
- ⁵⁰ The study showed that Mississippi women whose closest abortion provider was an in-state facility, subject to the mandatory delay law, would be more likely to have an abortion later in pregnancy than they would have been before Mississippi passed the law. Mississippi women who had more convenient access to an out-of-state facility not subject to the mandatory delay law also ended up having abortions later following the law's enactment, but to a smaller degree. Ted Joyce & Robert Kaestner, *The Impact of Mississippi's Mandatory Delay Law on the Timing of Abortion*, 32 FAM. PLAN. PERSP. 4, 12 (2000). In April, 2009, a report was released detailing the findings of an extensive literature review on the subject. The report reaffirmed that the impact of Mississippi's "mandatory counseling and waiting period statute—with its requirement that all counseling be done in person 24 hours prior to an induced termination—was associated with a decline in the abortion rate, a rise in abortions obtained out of state and an increase in the proportion of second-trimester abortions." Joyce TJ et al., *The Impact of StateMandatory Counseling and Waiting Period Laws on Abortion: A Literature Review*, New York: Guttmacher Institute, 2009, at 15.
- ⁵¹ American Acad. of Pediatrics, *The Adolescent's Right to Confidential Care When Considering Abortion*, 97 PEDIATRICS 746 (1996).
- ⁵² Guttmacher Institute, *Fact Sheet: Induced Abortion in the United States*, July 2014 at http://www.guttmacher.org/pubs/fb_induced_abortion.html (last visited Dec. 14, 2015).
- ⁵³ Council on Scientific Affairs, American Med. Ass'n, *Induced Termination of Pregnancy Before and After Roe v Wade: Trends in the Mortality and Morbidity of Women*, 268 JAMA 3231, 3238 (1992).

Notes, cont.

- ⁵⁴ The Center for Disease Control and Prevention, *Pregnancy-Related Mortality Surveillance – United States, 1991-1999* (Feb. 2003) at <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5202a1.htm> (last visited Dec. 14, 2015); Council on Scientific Affairs, American Med. Ass'n, *Induced Termination of Pregnancy Before and After Roe v Wade: Trends in the Mortality and Morbidity of Women*, 268 JAMA 3231, 3235 (1992).
- ⁵⁵ Guttmacher Institute, *Facts on induced Abortion Worldwide* (Jan. 2012) at http://www.guttmacher.org/pubs/fb_IAW.html#r15a (last visited Dec. 14, 2015).
- ⁵⁶ Marie Cocco, *Hyde Amendment's Deadly Impact*, ALB. TIMES UNION, Apr. 23, 2005, at A9; Michael Putzel, *Officials Say Four Deaths Resulted from Cutoff of Federal Abortion Funds*, ASSOCIATED PRESS, Feb. 11, 1980.
- ⁵⁷ Council on Ethical and Judicial Affairs, American Med. Ass'n, *Mandatory Parental Consent to Abortion*, 269 JAMA 82, 83 (1993).
- ⁵⁸ The NARAL Foundation, *Choices: Women Speak Out About Abortion*, at 11 (1997).
- ⁵⁹ Anne Tinker & Marjorie A. Koblinsky, *World Bank Discussion Papers: Making Motherhood Safe*, at 40-41 (1993).