Approved: April 4, 2003
Date

MINUTES OF THE SENATE PUBLIC HEALTH AND WELFARE COMMITTEE.

The meeting was called to order by Chairperson Senator Susan Wagle at 1:30 p.m. on March 24, 2003 in Room 231-N of the Capitol.

All members were present except: Senator David Haley

Committee staff present: Mrs. Emalene Correll, Kansas Legislative Research Department
Mr. Norm Furse, Revisor of Statutes
Ms. Margaret Cianciarulo, Administrative Assistant

Conferees appearing before the committee: Mr. Peter Bownlie, President and CEO
Planned Parenthood of KS and Mid-Missouri
Ms. Julie Burkhart, Director, Pro Kan Do PAC for
Dr. George R. Tiller, M.D., DABPF
Medical Director and Abortion Provider
Women's Health Care Services, Wichita, Kansas
Ms. Michelle Amaro, Central Women's Services, Inc.
Dr. Herb Hodes, Center from Women's Services, Inc.

Others attending: See attached guest list

Hearing on HB 2176 - an act concerning abortion clinics; providing for regulations licensing and standards for the operation thereof; providing penalties for violations and authorizing injunction actions

Upon calling the meeting to order, Chairperson Wagle announced there would be a hearing on the above bill for opponents and tomorrow they would hear from proponents, ask questions, and leave some time to work the bill. She then asked Mr. Norm Furse, Revisor of Statutes, to give an overview of the bill. Highlights of Mr. Furse's overview is as follows:

1) provides for the regulations, licensure, penalties, and standards, for the operation of abortion clinics;

2) Section one has a number of subsections and contains the substantive part of the bill.

3) Section two contains the effective date of the bill after it has been published in the statute book.

4) In regards to the subsection in Section one:

(a) is the definition section, ex. The operative administrator is the Secretary of Health and Environment (KDHE) and the key term, "abortion clinic" is defined as a facility, other than an accredited hospital in which five or more first trimester abortions in any month or any second or third trimester abortions are performed;

(b) through (h) sets out areas by which the Secretary of Health and Environment adopts rules and regs relating to various aspects that the clinics perform (for physical facilities) and set out in a list, the minimum these rules and regulation may be;

©) sets out standards relating to abortion clinic supplies and equipment and what the Secretary should set out as standards are enumerated in lines 7 through 31;

(d) commencing on line 32, page 2, requires the Secretary to set by rules and regs and standards relating to abortion clinic personnel (ex. requiring an abortion clinic designate a medical director and physicians performing the abortions are licensed and demonstrate competence);

(e) page 3, beginning on line 25, relates to rules and regs relating to the medical screening and evaluation. The enumerations' following (A through D) would be the subject matter areas (ex. A medical history including reporting of allergies, appropriate lab tests, etc.);

(f) page 4, beginning on line 15, relates to abortion procedures and again directs the Secretary to adopt rules and regs relating to medical personnel available and standards for safe conduct of abortion procedures (ex. Local anesthesia, establishment of intravenous access, monitoring of vital signs, etc.);

(g) relates to minimum recovery room standards (ex. Immediate postprocedure care, arranging hospitalization if complications, etc.);

(h) commencing on page 5, line 15, this section relates to follow-up visits (ex. Minimum postabortion medical visits, and a urine pregnancy test is obtained);

(I) relates to rules and regs to adopt minimum abortion clinic reporting;

(j) this is a new subsection amended into the bill by the House Committee, requiring each clinic to: establish and maintain an internal risk management program and at a minimum, which will consist of investigation and analysis of reportable instances; measures to minimize the occurrence of reportable incidents, and a reporting system based upon the duty of health care providers staffing the clinic, agents, and employees to report reportable incidents to the chief of the medical staff or administrative officer or risk manager of the clinic. The second part of this subsection, defines a "reportable incident."

(k) is also a new subsection relating to the Secretary making or cause to be made, inspections and investigations of clinics as the Secretary deems necessary to protect public health;

(l) (a new subsection) found on lines 23 through 29, relates to information received by the Secretary through filed reports, inspections, etc. and will not be disclosed publicly as to identify individuals and all patient medical or other identifying information will be treated as confidential;

(m) (new) requires each clinic to annually to obtain a license from KDHE and the Secretary to adopt rules and regs for this issuance, requiring compliance, at a minimum, with the standards adopted pursuant to this act and setting fees;

(n) is a clarifying statement that nothing in the act or rules and regs adopted by the Secretary is to limit the ability of a physician or health care professional to advise a patient on any health issue;

(o) the provision of the act and rules & regs adopted or in addition to any other laws and regulations adopted pursuantly, will be in addition to any other laws or rules and regs applicable to these types of clinics under this section;

(p) is the penalty subsection; and

(q) deals with seek and order by the Secretary.

And finally, Section two relates to the statute and publication.

The Chair then asked the Committee if there were questions for Mr. Furse. Questions from Senators Barnett, Harrington, Haley, Steineger, and Brungardt ranged from what does "available" mean (page 2 line 42), physical presence of abortion clinic personnel (page 4, line 31), is the HIPPA compliance

achieved found on page 6, sec.(l), what is a class B misdemeanor (minimum, maximum, discretions left to the judge), are there any previous annual licensing provisions, annual licenses inspected by KDHE (for ambulatory surgical centers or special hospitals, recuperative centers, etc.), are physician or medical director's licenses posted, are home addresses or where the doctor's practice listed, reference to medical screening and evaluations (physical or psychological), screening for allergies or medical solutions (Page 3, line 13), to license statutes and specific guidelines.

As there were no more questions for Mr. Furse, the Chair recognized Mr. Peter Brownlee, the first opponent conferee called to testify. Mr. Brownlee, President/CEO of Planned Parenthood of Kansas and Mid-Missouri, gave a brief history of Planned Parenthood and stated that a criminal statute regulating the practice of medicine is vastly different from medical standards and guidelines in three ways:

1) Medical standards are established by medical experts.

2) Medical standards are revised constantly because medical practice and technology change constantly.

3) Medical standards advise practicing physicians on the latest advancements in medicine and advise them on standards of practice.

A copy of his testimony, a fact sheet, and guidelines adopted by the Board of Healing Arts in October of last year, are (Attachment 1) attached hereto and incorporated into the Minutes as referenced.

The second opponent was Ms. Julie Burkhart, Director, Pro Kan Do PAC, read testimony for Dr. George R. Tiller, M.D. DABFP, Medical Director and Abortion Provider, Women's Health Care Services. In Dr. Tiller's testimony, he stated that he felt the sole purpose of the bill is to further limit the number of abortion providers by punitively and unnecessarily increasing the cost, regulation and restriction of this integral component of reproductive medicine and that the Health Care Stabilization fund reports that in the past five years, there has been two abortion related settlements and the total of all malpractice settlements made to patients for abortion related problems in the past five years in Kansas are $300,000. A copy of his testimony is (Attachment 2) attached hereto and incorporated into the Minutes as referenced.

The third opponent was Ms. Michelle Amaro, co-owner of Central Women's Services, Inc., who gave an overview of her clinic and stated that in 20 years of operation, they have never experienced a death resulting from complications from an abortion procedure. A copy of her testimony is (Attachment 3) attached hereto and incorporated into the Minutes as referenced.

The third opponent to testify was Dr. Herb Hodes, Center for Women's Services, Inc., offering 8 articles relating to abortion (ex. ACOG News Releases, surveillance, complications, guidelines, aftereffects of abortion, etc.) A copy of his testimony and the articles are (Attachment 4) attached hereto and incorporated into the Minutes as referenced.

Adjournment

As it was after 2:30 p.m., Senate session time, Chairperson Wagle announced they would meet tomorrow at 12:45 p.m. to allow time for the remaining testimony of opponents and to hear proponent testimony.

Senator Harrington then shared an instance with Dr. Hodes during a prior year Public Health and Welfare Committee meeting.

The meeting was adjourned at 2:35 p.m. The next meeting is scheduled for March 25, 2003.

SENATE PUBLIC HEALTH AND WELFARE COMMITTEE

24 in attendance

GUEST LIST

2003

DATE: Monday, March 24

NAME	REPRESENTING
Jennifer McAdam	PPKM
Peter Brownlee	Planned Parenthood
Herbert Hodes, MD	Self
Julie Burkhart	WHCS
Katie Korf	Guest of Sen. Salmans
Sarah Korf	Guest of Sen. Salmans
Michelle Peterson	Ks. Governmental Consulting
Judith Hausman	Senator Bob Lyon
Jodie Anspaugh	Senator Brownlee
Jim Bypuec	Sen. Salmans
Michelle Amaro	Central Womens Services
Willow Ely	Center for Reproductive Rights
Joanne Lawder	KFL
Mark Pederson	Aid For Women, Zaremski, MD
Sylvie J. Ruffee	Kansas N.O.W.
Peggy Long	State Representative

Planned Parenthood®
of Kansas and Mid-Missouri

Testimony by

Peter Brownlie
President/CEO
Planned Parenthood of Kansas and Mid-Missouri

Before the Public Health and Welfare Committee of the Kansas Senate

On March 24, 2003

in Opposition to House Bill 2176

Senate Public Health & Welfare Committee
Date: March 24, 2003
Attachment 1-1

4401 W. 109th St., Suite 200 • Overland Park, KS 66211 • (913) 312-5100

My name is Peter Brownlie. I am President/CEO of Planned Parenthood of Kansas & Mid-Missouri. Thank you, Senator Wagle and members of this Committee, for giving me the opportunity to discuss HB 2176 and my opposition to it.

Planned Parenthood operates three health centers in Kansas, in Wichita, Hays, and Lawrence. We also operate eight centers in Missouri. We are affiliated with Comprehensive Health of Planned Parenthood of Kansas & Mid-Missouri in Overland Park, an ambulatory surgical center licensed by the Kansas Department of Health and Environment (KDHE). Comprehensive Health provides comprehensive reproductive health services, including abortion care. In 2002, Planned Parenthood provided family planning and related care to 30,000 women and men; Comprehensive Health provided abortion care to 4,000 women.

Proponents of HB 2176 would have you believe that abortions are dangerous. They claim they simply want to improve the safety of abortion care in Kansas by enacting Planned Parenthood's Medical Standards and Guidelines into law. Both claims are disingenuous at best and intentionally dishonest at worst. This bill is unnecessary and unwise.

Abortion In Kansas Is Safe – Far Safer Than Other Surgical Procedures

Abortion is among the safest surgical procedures in this country. According to KDHE, there have been no deaths – zero – due to "induced termination of pregnancy" in Kansas since 1980, the earliest records they maintain. We know of no deaths since *Roe v. Wade* was decided 30 years ago. In contrast, according to KDHE, 106 people have died in Kansas just since 1990 from "misadventures to patients during surgical and medical care." Nationally, abortion entails half the risk of tonsillectomy; one-hundredth the risk of an appendectomy and, in the first trimester is eleven times safer than childbirth.

Where is the public health crisis that HB 2176 is supposed to address? The Kansas Board of Healing Arts is the regulatory agency for all office-based surgery. The Board receives only one or two complaints each year concerning abortion providers. Bill proponents suggest this number is low because some women are ashamed about their abortions. But women have made complaints about other extremely personal health care problems. Since 1999, four surgeons have been disciplined for inappropriate behavior including inappropriate sexual behavior with their patients. None were abortion providers. The Board reports that far more cosmetic surgeons are sued for medical malpractice than abortion providers.

If proponents of HB 2176 are interested in protecting women's health, why aren't we creating new criminal law to protect Kansans getting face lifts?

Planned Parenthood Guidelines vs. HB 2176

I want to dispel the fiction that HB 2176 simply reflects Planned Parenthood's standards. I have compared HB 2176 with our *Manual of Medical Standards and Guidelines*. While some of the standards are similar, there are many substantial differences. HB 2176 is modeled after legislation passed in Arizona in 1999. Our two-pound *Manual* is revised at least annually and usually more often. (I just received the latest revisions last week; the previous revision was in November 2002.) The "standards" in HB 2176 are thus already four years out of date. HB 2176 is currently seven pages long; the abortion care section of our Manual is 34 pages, with many additional attachments.

Most importantly, however, a criminal statute regulating the practice of medicine is vastly different than medical standards and guidelines in three other ways.

First, medical standards are established by medical experts. HB 2176, in contrast, was developed by medical laypeople (for purely political reasons, I might add). Planned Parenthood's National Medical Committee, comprised of forty distinguished physicians, nurses and other leading health professionals, establishes Planned Parenthood's standards. The Committee includes experts in all areas of reproductive health, including obstetrician/gynecologists, endocrinologists, gynecologic oncologists, surgeons, pharmacists, anesthesiologists, pathologists and others.

How many of you or your colleagues – or lobbyists for Kansans for Life – have similar credentials?

Second, medical standards are revised constantly because medical practice and technology change constantly. Planned Parenthood's Medical Committee meets throughout the year to evaluate the latest advances in medical technology and practice. They review the professional literature. They review the latest findings of the FDA, AMA, ACOG, NIH, CDC and other professional advisory groups. All this is considered when updating the *Manual of Medical Standards and Guidelines*. The Kansas legislature, in contrast, meets annually for about 90 calendar days, followed by a three to eleven day wrap up session.

If HB 2176 is enacted, will the Kansas legislature meet throughout the year to update it? The Arizona legislature apparently has not. As only one example, HB 2176 – again, modeled on Arizona's law – requires "ultrasound equipment in those facilities that provide abortions after 12 weeks' gestation". Planned Parenthood's standards now require ultrasound in first trimester procedures in several circumstances. At Comprehensive Health, ultrasound evaluations are performed before every abortion.

The standard of care has and will continue to change. How quickly will the Kansas legislature convene to change HB 2176 when magnetic resonance or computerized tomography techniques evolve to replace gynecologic sonography? Will you even know when that change is needed?

Third, medical standards advise practicing physicians on the latest advancements in medicine and advise them on standards of practice. But they always respect the responsibility of the treating physician to assess each patient in each situation and to apply his or her professional judgment. This bill does neither. Instead, it mandates standards which may quickly become out of date – and worse, establishes criminal penalties if the physician decides in his or her professional judgment that the patient requires something different.

I must mention one other glaring contrast between HB 2176 and Planned Parenthood's standards – one that reflects that it is now 2003, not 1999. Our standards recognize that medical and surgical abortions are very different. This bill does not. In Kansas law (65-6701), abortion is defined so that HB 2176 would apply to both surgical and medical abortion procedures. Most of its provisions are completely unjustified when applied to medical abortion, and would be difficult, if not impossible, to comply with in that context. (*See attached fact sheet on medical abortion*).

Rather than single out abortion care, we should focus on making all surgery safer. The Kansas Medical Society recently published its *Guidelines for Office-Based Surgery and Special Procedures.* A twenty-one-member task force, representing twelve medical specialties, developed the Guidelines after reviewing guidelines and materials from other states and national medical specialty organizations. The Board of Healing Arts subsequently adopted those *Guidelines* in October of last year. (*See attached sheet*). They are far superior to HB 2176 because they apply to all medical specialties; they were written by physicians, who know best how to practice medicine; and they are professional standards and guidelines, not criminal statutes.

No one advocates more strongly for women's health than Planned Parenthood. No one is more committed to protecting women's health than Planned Parenthood. No one provides women's health care more safely than Planned Parenthood.

Let's be honest. Protecting women's health is not the true intention of HB 2176. It is part of the effort by opponents of abortion to make abortion more expensive and less available.

I have great respect for those who oppose abortion for religious, moral and ethical reasons. I have great respect for those who sincerely believe that the world would be better without abortion. I agree with them – we only disagree on how to achieve that.

I have less respect for those whose opposition to abortion is motivated by political agendas, by antipathy towards women and their rights or by their wish to force other people to conform to their own religious beliefs.

I have no respect for those who knowingly use deception and dishonesty to advance the anti-choice agenda. HB 2176 is deceptive and dishonest. It is bad public policy and does not deserve your support.

NATIONAL ABORTION FEDERATION

Safety of Abortion

FACT SHEET

bortion has not always been so safe.

Between 1880 and 1973, when abortion was illegal in all or most states, many women died or had serious medical problems after attempting to induce their own abortions or going to untrained practitioners who performed abortions with primitive instruments or in unsanitary conditions. Women streamed into emergency rooms with serious complications — perforations of the uterus, retained placentas, severe bleeding, cervical wounds, rampant infections, poisoning, shock, and gangrene.

Around the world, in countries where abortion is illegal, it remains a leading cause of maternal death. In fact, many of the doctors who perform abortions in the United States today are committed to providing this service under medically safe conditions because they witnessed and still remember the tragic cases of women who appeared in hospitals after botched, illegal abortions.

Since the Supreme Court re-established legal abortion in the U.S. in the 1973 *Roe v. Wade* decision, women have benefitted from significant advances in medical technology and greater access to high quality services.[1] Generally, the earlier the abortion, the less complicated and safer it is. The safest time to have a surgical abortion is between 6 and 10 weeks from the last menstrual period (LMP).

Serious complications arising from abortions before 13 weeks are quite unusual. About 89% of the women who obtain abortions are less than 13 weeks pregnant. Of these women, 97% report no complications; 2.5% have minor complications that can be handled at the physician's office or abortion facility; and less than 0.5% require some additional surgical procedure and/or hospitalization. Complication rates are somewhat higher for abortions performed between 13 and 24 weeks. General anesthesia, which is sometimes used in abortion procedures, carries its own risks.

In addition to the length of the pregnancy, significant factors that affect the possibility of complications include:

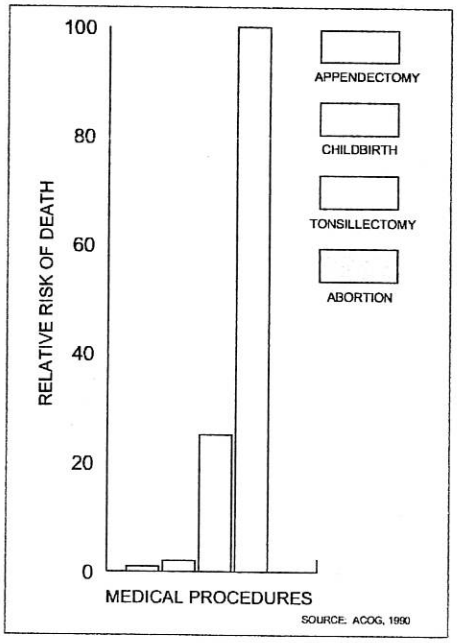
- the skill and training of the provider;
- the kind of anesthesia used;
- the woman's overall health; and
- the abortion method used.

(See *Fact Sheet: What is Surgical Abortion?*)

Although rare, possible complications from a surgical abortion procedure include:

- blood clots accumulating in the uterus, requiring another suctioning procedure, which occur in less than 1% of cases;
- infections, most of which are easily identified and treated if the woman carefully observes follow-up instructions, which occur in less than 3% of cases;
- a tear in the cervix, which may be repaired with stitches, which occurs in less than 1% of cases;
- perforation (a puncture or tear) of the wall of the uterus and/or other organs, which may heal itself or may require surgical repair or, rarely, hysterectomy, which occurs in less than 1/2 of 1% of cases;
- missed abortion, which does not end the pregnancy and requires the abortion to be repeated, which occurs less than 1/2 of 1% of cases;
- incomplete abortion, in which tissue from the pregnancy remains in the uterus, and requires the abortion to be repeated, which occurs in less than 1% of cases;
- excessive bleeding caused by failure of the uterus to contract and which may require a blood transfusion, which occurs in less than 1% of cases.

Relative Risk Of Death From Abortion



Between 13 and 16 weeks, the dilation and evacuation (D&E) procedure is significantly safer and more effective than other second trimester abortion methods. After 16 weeks, the different methods carry about the same complication rates.

One death occurs for every 160,000 women who have legal abortions. These rare deaths are usually the result of such things as adverse reactions to anesthesia, heart attacks, or uncontrollable bleeding. In comparison, a woman's risk of death in carrying a pregnancy to term is ten times greater.

If a woman has any of the following symptoms after having an abortion, she should immediately contact the facility that provided the abortion:

- severe pain;
- chills or fever with an oral temperature of 100.4° or more;
- bleeding that is heavier than the heaviest day of her normal menstrual period or that soaks through more than one sanitary pad per hour;
- foul-smelling discharge or drainage from her vagina; or
- continuing symptoms of pregnancy.

Doctors and clinics that offer abortion services provide a 24-hour number to call in the event of complications.

There are some things women can do to lower their risks of complications. The most important thing is not to delay the abortion procedure. After six weeks LMP, the earlier the abortion, the safer it is.

Asking questions is also important. Just as with any medical procedure, the more relaxed a person is and the more she understands what to expect, the better and safer her experience will be.

In addition, any woman choosing abortion should:

- find a good clinic or a qualified, licensed practitioner. For referrals, call NAF's toll-free hotline: 1-800-772-9100;
- inform the practitioner of any health problems, current medications or street drugs being used, allergies to medications or anesthetics, and other health information;
- follow post-operative instructions; and
- return for a follow-up examination.

Anti-abortion activists claim that having an abortion increases the risk of developing breast cancer and endangers future childbearing. They claim that women who have abortions without complications will still have difficulty conceiving or carrying a pregnancy, will develop ectopic (outside of the uterus) pregnancies, will deliver stillborn babies, or will become sterile. However, these claims have been refuted by a significant body of medical research.

Women have abortions for a variety of reasons, but in general they choose abortion because a pregnancy at that time is in some way wrong for them. Such situations often cause a great deal of distress, and although abortion may be the best available option, the circumstances that led to the problem pregnancy may continue to be upsetting.

Some women may find it helpful to talk about their feelings with a family member, friend, or counselor. Feelings of loss or of disappointment, resulting, for example, from a lack of support from the spouse or partner, should not be confused with regret about the abortion. Women who experience guilt or sadness after an abortion usually report that their feelings are manageable. The American Psychological Association finds no scientific support or evidence for the so-called "post-abortion syndrome" of psychological trauma or deep depression. The most frequent response women report after having ended a problem pregnancy is relief, and the majority are satisfied that they made the right decision for themselves.

[1]AMA Council Report. Induced Termination of Pregnancy Before and After Roe v. Wade. *Journal of the American Medical Association*, 1992, 268: 3231.

■ Statistical information in this fact sheet is based on research by the U.S. Centers for Disease Control Division of Reproductive Health, The Alan Guttmacher Institute, and other members of the National Abortion Federation.

■ **For More Information**

For information or referrals to qualified abortion providers, call the National Abortion Federation's toll-free hotline: 1-800-772-9100. In Canada: 1-800-424-2280. In Washington, DC: 202-667-5881. Weekdays, 9:30-5:30 Eastern time.

■ **For Further Reading**

Adler, N.E., *et al.* Psychological Factors in Abortion: A Review, *American Psychologist*, 1992, 47: 1194.

Gold, R.B. *Abortion and Women's Health*, New York: Alan Guttmacher Institute, 1990.

Tietze, C. & Henshaw, S.K. *Induced Abortion: A World Review, 1986.* New York: Alan Guttmacher Institute, 1986.

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Writer: Susan Dudley, PhD

NATIONAL ABORTION FEDERATION

What Is Medical Abortion?

FACT SHEET

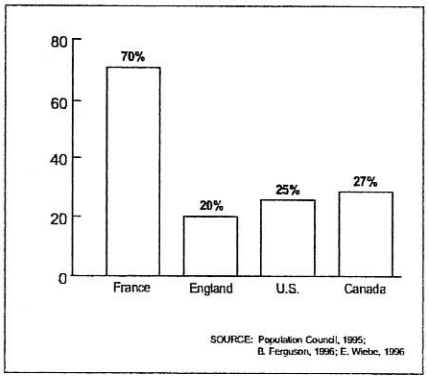
medical abortion is one that is brought about by taking medications that will end a pregnancy. The alternative is **surgical abortion**, which ends a pregnancy by emptying the uterus (or womb) with special instruments. (See Fact Sheet: *What Is Surgical Abortion?*) A medical abortion usually is done without entering the uterus. Either of two medications, methotrexate or mifepristone, can be used for medical abortion. Each of these medications is taken together with another medication, misoprostol, to induce an abortion.

Before any abortion can be done, a medical professional must confirm that a woman is indeed pregnant and determine exactly how long she has been pregnant. The length of a pregnancy is usually measured by the number of days that have passed since the first day of the woman's last menstrual period (abbreviated as LMP). Medical abortions can be performed as early as a pregnancy can be confirmed. In fact, the shorter the time that a woman has been pregnant, the better the medications will work. Because they do not work as well later in pregnancy, medical abortion is often not an option **after** seven weeks (or 49 days) LMP. After that, surgical abortion may be the safest and best option. (See Fact Sheet: *Safety of Abortion.*)

Methotrexate has been used in the US since 1953, when it was approved by the FDA to treat certain types of cancer. Since that time, medical researchers have discovered other important uses for the drug. One of these uses is to end unintended pregnancies. Although the FDA did not consider methotrexate for this specific purpose, clinicians may prescribe (and are now prescribing) methotrexate for early abortion.

Methotrexate usually is given to a pregnant woman in the form of an injection, or shot, although it can be taken orally. Methotrexate stops the ongoing implantation process that occurs during the first several weeks after conception.

Percentage of Eligible Women (≤ 7 or 9 wks LMP) Who Choose Medical Over Surgical Abortion



Another medication that might be used is mifepristone. Mifepristone (or RU-486) is a newer medication that was developed and tested specifically as an abortion inducing agent. It has been used by over 500,000 women in Europe and millions of women worldwide, especially in China.

Mifepristone is taken in the form of a pill. It works by blocking the hormone progesterone, which is necessary to sustain pregnancy. Without this hormone, the lining of the uterus breaks down, the cervix (opening of the uterus or womb) softens, and bleeding begins.

A few days after taking either methotrexate or mifepristone, a second drug, misoprostol, is taken. Misoprostol tablets, which can be taken orally or put into the vagina, cause the uterus to contract and empty. This ends the pregnancy.

Methotrexate and mifepristone work in different ways, and so they will have slightly different effects on a woman's body. A clinician can help a woman decide whether medically induced abortion is the right option for her, and which of the two drugs she should use.

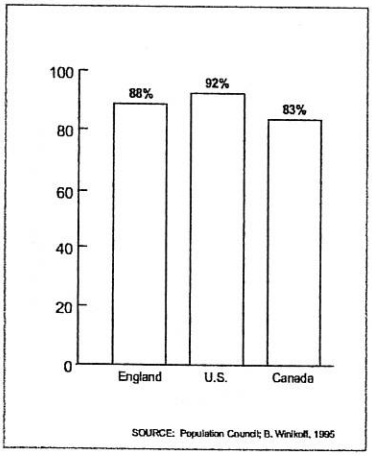
Medical abortion can take anywhere from 3 days to 3-4 weeks, and requires a minimum of two visits to the clinic or medical office. *The return visits are very important since there is no other way to be sure that the abortion has been completed.* With methotrexate, 80-85% of women will abort within two weeks. Some will take longer and may need more doses of misoprostol. With mifepristone, 95-97% of women will abort within two weeks. About 1 in 20 women who try medical abortion will need to have a surgical abortion because the medication does not work for her.

Some women will have vaginal bleeding after the first drug. This bleeding may be light, or it may be like a heavy period. The abortion provider may have the woman stay at the clinic for several hours after taking the second drug (misoprostol). The uterine contractions caused by this medication may lead to immediate

cramping that will expel the embryo, thus ending the pregnancy. A high proportion of women, however, will expel the uterine contents later, after they have left the medical facility. Many women insert the misoprostol at home and pass the tissue later. A woman considering medical abortion will need to be prepared for this possibility. The clinic staff can answer questions about what to expect.

The most common side effects of medical abortion are caused by misoprostol, the medication taken after the methotrexate or mifepristone. The side effects may include: cramps similar to those with a heavy menstrual period, headache, nausea, vomiting, diarrhea, and heavy bleeding.

Percentage of Women Who Would Choose Medical Abortion Again



The amount of bleeding that a woman has will be greater with medical abortion than with surgical abortion. Most women have cramps for several hours, and many pass blood clots as they are aborting. In some cases, the blood clots will be larger than the embryo and other tissue from the pregnancy which will also be passed, and the embryo will probably not be seen among the blood clots. For example, at 49 days LMP, the si e of the embryo will be about one-fifth of an inch. In an earlier pregnancy, it might be much smaller than that. Cramps and bleeding usually begin to ease after the embryonic tissue has been passed, but bleeding may last for one to two weeks after medical abortion.

Some women report that their first regular menstrual period after a medical abortion is heavier, or longer, or in some other way different from normal for them. By the second period after the abortion, their cycles should be back to normal.

Medical abortion is irreversible once the mifepristone or methotrexate has been taken. *Deciding to continue the pregnancy to term is not an option at any point after taking the first medication.* If the embryo is not expelled after using these medications, a suction procedure (surgical abortion) must be done to empty the uterus and complete the abortion (See Fact Sheet: *What Is Surgical Abortion?*).

The most common immediate complication of a medical abortion is heavy bleeding. For this reason, a woman must have access to a telephone and transportation in case emergency treatment is needed. Rarely, just like with surgical abortion, treatment for very heavy bleeding might require a D C or a blood transfusion.

There do not appear to be any long-term complications associated with use of these drugs to induce a medical abortion.

Because there is no way to know for sure that the abortion is complete without an examination by a health care professional, *keeping appointments with the clinic for follow-up care is very important!* In addition, a woman must report any problems she has during the medical abortion to a health care professional.

Anti-abortion activists claim that medical abortion is unsafe for women, even though the evidence confirms that medical abortion is both safe and effective. The real goal of those activists is to stop all types of legal abortion — a situation which would put the lives and health of women in danger. When abortion was illegal in the United States (from the late 1800s until 1973), more pregnant women died from complications from self-induced abortions or abortions performed by untrained practitioners than from any other cause. Today, abortion is one of the most common and safest procedures in medicine. Because earlier abortions are the safest, medical abortion is an important medical advance for women, and an option that many will choose.

- Information in this fact sheet is based on clinical research reviewed through a joint project of Planned Parenthood Federation of America and the National Abortion Federation. International statistics on acceptability of medical abortion are from research by the Population Council and other NAF members.

- **For More Information**

  For information or referrals to qualified abortion providers, call the National Abortion Federation's toll-free hotline: 1-800-772-9100. In Canada: 1-800-424-2280. In Washington, DC: 202-667-5881. Weekdays, 9:00 a.m.-7:00 p.m. Eastern time.

- **For Further Reading**

Kaufmann, K. *The Abortion Resource Handbook*. New York: Fireside, 1997.

Creinin, M.D., and Edwards, J. Early Abortion: Surgical and Medical Options. *Current Problems in Obstetrics, Gynecology, and Fertility*, 1997, 20:1.

National Abortion Federation
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Writers: Stephanie Mueller and Susan Dudley, PhD

KANSAS STATE BOARD OF HEALING ARTS

POLICY STATEMENT NO. 02-1

Subject: **Guidelines for Office-Based Surgery and Special Procedures**
Date: **October 12, 2002**

Whereas, there is growing concern nationwide that surgeries in non-hospital settings pose a threat to the safety of patients unless performed by qualified practitioners utilizing proper equipment, facilities, staff and procedures; and

Whereas, the Kansas Medical Society has convened a committee of experts among its membership to study methods of reducing the risk to patients undergoing office-based surgery; and

Whereas, the Kansas Medical Society House of Delegates approved the committee's Guidelines for Office-Based Surgery and Special Procedures; and

Whereas, the Board recognizes that guidelines for practitioners do not have the force and effect of state law, but if utilized by practitioners, guidelines do protect the public health, safety and welfare.

Therefore, the Board commends the work of the committee of the Kansas Medical Society, and approves the Guidelines for Office-Based Surgery and Special Procedures adopted by the House of Delegates May 5, 2002.

Howard D. Ellis, M.D.
President

WOMEN'S HEALTH CARE SERVICES, P.A.

George R. Tiller, M.D., DABFP
Medical Director

Carrie Klaege
Administrative Director

Cathy Reavis
Patient Coordinator

March 24, 2003

Senator Susan Wagle, Chair
Senate Public Health and Welfare Committee
State Capitol, 123 South
Topeka, Kansas 66612

Dear Chairwoman Wagle and Committee Members:

Thank you for allowing me to address the committee by letter. From my perspective, as a family physician and abortion provider in Kansas for thirty-three and thirty years respectively, my observation is that the clinic regulations bill is not about public safety.

The sole purpose of HB 2176 is to further limit the number of abortion providers by punitively and unnecessarily increasing the cost, regulation and restriction of this integral component of reproductive medicine. Since those opposed to abortion have been, until now, unable to make abortion illegal, they seek to accomplish their goal of eliminating all abortions in Kansas by restricting physicians.

The Health Care Stabilization Fund reports that in the past five years, there have been two abortion related settlements. One settlement was for $100,000, involving a lacerated uterus. The second monetary settlement was for $200,000, stemming from failure to administer RhoGam after an abortion. The total of all malpractice settlements made to patients for abortion related problems in the past five years in Kansas are $300,000.

On the other hand, the Healthcare Stabilization Fund in Kansas reports that during those same five years, medical liability insurance carriers have paid out a total of $158,081,311 to settle Kansas's malpractice insurance claims. Furthermore, these figures indicate that 0.199 percent of malpractice payments in Kansas are a result of abortion settlements. So only two-tenths of one percent of all malpractice awards in Kansas is attributable to abortion settlements. Obviously, the malpractice awards for abortion-related problems are minuscule in comparison to the resources depleted by other malpractice payments.

Let me illustrate this point for you. In the same five-year period, all obstetric malpractice payouts totaled $14,668,621, which was 48 times greater than malpractice settlements for abortion-related services. Additionally, the total paid out for all medical malpractice in the same five years, which I mentioned earlier, of $158,081,311 was 526 times greater than the malpractice settlements for abortion-related services.

Medicine and surgery are and will always be fraught with hazard. Let's now look at the record regarding Kansas's abortion services.

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Senate Public Health & Welfare Committee
Date: March 24, 2003
Attachment 2-1

If we believe the testimony in support of HB 2819 given last year by Mike Farmer of the Kansas Catholic Conference, there have been twenty-seven malpractice suits filed against Kansas abortion providers since 1980. During the same time period, Kansas's physicians have performed 293,489 abortions. In this twenty-plus year time frame, only one lawsuit was filed for every 10,868 abortions performed in Kansas. When compared to the rate of one or more per thousand deliveries at which lawsuits are filed in the rest of the obstetric field, this indicates a sterling record of safety for abortion.

I would like to present a singularly compelling point. According to the KDHE's Center for Health and Environment Statistics, out of the 106 deaths in the state of Kansas that were attributed to surgical and medical care between 1990 and 2001, none of the deaths were due to abortion services.

Therefore, I ask you, where is the proof that abortion services as now practiced in Kansas generates excessive lawsuits? Where is the proof that abortion surgery in unlicensed facilities results in enormous malpractice claims? Where is the proof that abortion reproductive healthcare account for a maternal death rate? There is no objective evidence that abortion services as now practiced in Kansas represent a threat to the public safety and welfare of Kansas. There is no objective evidence that the interests of public health and safety will improve through further regulation of abortion services by HB 2176.

Turning to judicial matters involving this bill, I would like to point out that the Arizona clinic regulations bill from 1999, after which this Kansas bill was modeled, does not hold constitutional muster. A Federal District Court of Arizona has permanently enjoined portions of the Arizona legislation. Proponents of the bill have portrayed judicial opinions as favorable, which is simply not true. I've attached a copy of the most recent court opinion, from the United States District Court for the District of Arizona, for your own personal review.

The Constitutional arguments that can be made regarding HB 2176 are that it violates the following:

1. The Due Process rights of physicians.
2. The Equal Protection Clause of the 14th Amendment.
3. A woman's right to privacy
4. A physicians Fourth Amendment guarantee against warrant-less searches
5. A woman's right to an abortion

HB 2176 is bad for Kansas's women and Kansas's physicians. Quite clearly, this legislative measure is intended to restrict abortion even further by eliminating several small practitioners who safely perform abortion procedures in their office-based practices. This bill also turns a blind eye to the fact that medical abortion, which requires no surgery, is unnecessarily included in the requirement for surgical facilities.

Limiting abortion providers allows the anti abortion zealots to focus their harassment and

attention on a fewer providers so they can harass and intimidate more patients, as well as, the abortion provider. For example, when I started performing abortions in 1973, there were approximately 23 physicians outside of Kansas City performing abortions in their office or at the hospital. Through the terrorist's tactics of intimidation, harassment and threats to family and neighbors, that number of physicians is now one. Their methodology is effective. At the present time, I am the only physician performing abortions in his private clinic or office between Kansas City and Denver, Omaha and Oklahoma City. As an abortion provider, I have been shot, bombed, and been the focus of national demonstrations and the subject of slander and liable. My house has been picketed. This bill is simply in another tactic, in addition to those already listed, to deprive women of the opportunity to make the decision for themselves when to become a mother and parent.

This piece of legislation serves no PURPOSE except to further the misogynous, anti abortion, agenda of those who are opposed to abortion based on their own religious and moral convictions. It should be discarded as the SHAM that it is. Let the women and families make medical and healthcare decisions for themselves without unnecessary and prejudicial legislative meddling.

Thank you again for the privilege of testifying before your committee.

George R. Tiller, M.D. DABFP
Medical Director and Abortion Provider
Women's Health Care Services
Wichita, Kansas

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ARIZONA

TUCSON WOMAN'S CLINIC; DAMON RAPHAEL, M.D.; OLD PUEBLO FAMILY PLANNING; WILLIAM RICHARDSON, M.D.; SIMAT CORP., d/b/a/ ABORTION SERVICES OF PHOENIX; ROBERT H. TAMIS M.D., PC; and ROBERT H. TAMIS, M.D.; on behalf of themselves and their patients seeking abortions,

Plaintiffs,

vs.

CATHERINE EDEN in her capacity as Director of the Arizona Department of Health Services; JANET NAPOLITANO, in her capacity as Attorney General of the State of Arizona; RICHARD M. ROMLEY, in his official capacity as County Attorney for the County of Maricopa, and as representative for all other prosecuting attorneys similarly situated throughout the State of Arizona, including without limitation all County, City and Town Attorneys,

Defendants.

No. CV 00-141-TUC-RCC

ORDER

This action is a constitutional facial challenge to (a) Arizona Revised Statutes §§ 36-402, 36-449, 36-449.01, 36-449.02, 36-449.03, 36-2301.02, as revised by Arizona House Bill 2706 and Arizona House Bill 2647; and (b) Arizona Regulation Title 9, Chapter 10, Article

(227)

RCC

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15, as amended (collectively referred to as the "Regulatory Scheme"). The challenged statutes and regulations provide for the licensing, supervision, regulation and control of physician practices in which five or more first trimester abortions per month or any post-first trimester abortions are performed. Plaintiffs' Complaint[1] requests (1) a declaratory judgment, finding the challenged statutes and regulations unconstitutional, and (2) a permanent injunction against their enforcement. Plaintiffs are healthcare providers whose practice includes the performing of five or more first trimester abortions per month who bring this action on their own behalf and on behalf of their patients seeking abortions. *See Singleton v. Wulff*, 428 U.S. 106, 118 (1976) (allowing physicians to assert the constitutional rights of their patients). Defendants include Catherine Eden, Director of the Arizona Department of Health Services, Janet Napolitano, Attorney General of the State of Arizona, and a class of all prosecuting attorneys in the state of Arizona, represented by Richard Romley, County Attorney for the County of Maricopa.

Plaintiffs allege that the Regulatory Scheme is constitutionally defective for the following reasons:

1. It violates the rights of Plaintiffs and their patients to equal protection of the laws guaranteed by the Fourteenth Amendment to the United States Constitution by impairing women's ability to exercise their fundamental right to choose abortion; (Compl. ¶ 74.)
2. The provisions allowing for warrantless searches of physicians' offices and patient records violate Plaintiffs' and their patients' right to be free from unreasonable searches and seizures guaranteed by the Fourth and Fourteenth Amendments to the United States Constitution; (Compl. ¶76.)
3. The Regulatory Scheme's failure to ensure the confidentiality of the physician-patient relationship or of patients' medical records violates Plaintiffs' patients' right to

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[1] "Complaint" refers to Plaintiffs' Fourth Amended Complaint filed on January 23, 2001.

information privacy as guaranteed by the Fourteenth Amendment to the United States Constitution; (Compl. ¶ 78.)

4. The purpose of the Regulatory Scheme is not reasonably related to a legitimate state interest and therefore, creates an undue burden on a woman's ability to have an abortion and violates Plaintiffs' patients' right to privacy under the Fourteenth Amendment to the United States Constitution; (Compl. ¶ 80.)

5. Vague and uncertain terms in the Regulatory Scheme fail to give adequate notice of conduct that will subject Plaintiffs to criminal, administrative and civil penalties and expose Plaintiffs to arbitrary enforcement of the Regulatory Scheme; and (Compl. ¶82.)

6. The provision delegating the licensing authority to hospitals that control physicians' admitting privileges violates Plaintiffs' due process rights under the Fourteenth Amendment to the United States Constitution. (Compl. ¶ 84.)

The parties have filed cross-motions for summary judgment. Defendants filed six separate motions for partial summary judgment, one for each of Plaintiffs' claims. Plaintiffs' motion for summary judgment seeks relief in their favor, as a matter of law, on all claims except for their undue burden claim. Plaintiffs contend that there is a disputed issue of material fact as to the undue burden claim and therefore, summary judgment would be inappropriate. The parties have also filed evidentiary motions seeking to preclude portions of their opponent's statement of facts. The Court will rule on these evidentiary motions to the extent that the challenged material is necessary for the Court's disposition.

SUMMARY JUDGMENT STANDARD

Federal Rule of Civil Procedure 56(c) provides that a court may grant summary judgment if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." The party seeking summary judgment must identify those parts of the record that indicate the absence of a

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genuine issue of material fact. *Celotex Corp. v. Caltrett*, 477 U.S. 317 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242 (1986); *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986). Once the moving party has made this showing, the nonmoving party must designate which specific facts show that there is an issue for trial. *Celotex*, 477 U.S. at 324, *citing* Fed.R.Civ.P. 56(e). The moving party is held to a strict standard, and any doubts about the existence of a genuine issue of material fact will be resolved against it. *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 456 (1992).

Under Fed.R.Civ.P. 56(e), in response to a properly supported motion for summary judgment, the opposing party "must set forth specific facts showing that there is a genuine issue for trial." The inquiry performed by the trial court is to determine whether there are "any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." *Anderson*, 477 U.S. at 250. For an issue to be "genuine," there must be evidence such that a "reasonable jury" could reach a verdict in favor of the nonmoving party. *Id.* at 248.

FACIAL CHALLENGE STANDARD[2]

"A facial challenge to a legislative Act is, of course, the most difficult challenge to mount successfully, since the challenge must establish that no set of circumstances exists under which the Act would be valid." *United States v. Salerno*, 481 U.S. 739, 745 (1987). If an act "can be construed in such a manner that [it] can be applied to a set of individuals without infringing upon constitutionally protected rights," a facial challenge must fail. *See Rust v. Sullivan*, 500 U.S. 173, 183 (1991). Anticipation of the effects of an act, is generally not an appropriate basis on which to strike down statutes and regulations. *See Bowen v. Kendrick*, 487 U.S. 589, 612-13 (1988) (noting that "[i]t has not been the Court's practice"

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[2] The following is the general standard used when reviewing a constitutional facial challenge to a statute. The Ninth Circuit in *Planned Parenthood of Southern Arizona v. Lawall*, 180 F.3d 1022 (9th Cir. 1999), held that facial challenges to abortion statutes should be reviewed under the "undue burden" standard set forth by the Supreme Court in *Casey*. While this Court will apply the *Casey* standard to Plaintiffs' undue burden claim, it finds that the general standard is appropriate for Plaintiffs' other claims.

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to strike down a statute on a facial challenge "in anticipation" of particular circumstances, even if the circumstances would amount to a "likelihood"); *see also Greenville Women's Clinic v. Bryant*, 222 F.3d 157, 164 (4th Cir. 2000).

EQUAL PROTECTION CLAIM

Plaintiffs contend that the Regulatory Scheme creates three impermissible classifications which violate the Equal Protection Clause of the Fourteenth Amendment: (1) physician practices that provide abortions are singled out from physician practices that provide comparable procedures, (2) women seeking abortions versus men seeking similar medical procedures and (3) physician practices that provide five or more first trimester abortions per month and those that provide one to four. The Equal Protection Clause of the United States Constitution "commands that no state shall 'deny to any person within its jurisdiction the equal protection of the laws,' which is essentially a direction that all persons similarly situated should be treated alike." *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 439 (1985) (*quoting Plyler v. Doe*, 457 U.S. 202, 216 (1982)). The Supreme Court has developed three different levels of review for determining whether governmental classifications comply with the Constitution's mandate of fair and equal governmental treatment. *Cleburne*, 473 U.S. at 440-41. The most stringent standard of judicial equal protection review, "strict scrutiny," is triggered only when a regulation targets a suspect class or impinges upon a fundamental right protected by the constitution. *See Greenville Women's Clinic*, 222 F.3d at 172.

a) Physician practices that provide abortions and physician practices that provide comparable procedures

Plaintiffs argue that "strict scrutiny" is appropriate when reviewing the classification of physicians based on whether they perform abortions. Physicians are not considered members of a suspect class for purposes of equal protection analysis therefore, "strict scrutiny" is only appropriate if the Regulatory Scheme impinges on a fundamental right. Defendants contend that the Supreme Court's decision in *Planned Parenthood of Southeastern Pennsylvania v. Casey*, 505 U.S. 833 (1992), called into serious doubt the

Supreme Court's previous holding in *Roe v. Wade*, 410 U.S. 113 (1973), that the right to an abortion was a fundamental right. After *Casey*, it is unclear whether abortion is a fundamental right because regulatory schemes pertaining to abortion need not serve a compelling state interest. *See Casey*, 505 U.S. at 874 (O'Connor, Kennedy and Souter, JJ., joint opinion).

In this case, the classification of physicians does not directly implicate a fundamental right; even if abortion remains a fundamental right after *Casey*, the fundamental right is that of a woman to choose an abortion, not of a doctor to perform one. If the challenged classification does not impinge on a fundamental right, the court should review it using the rational basis test. Legislative classifications subject to a rational basis standard of review are presumed to be constitutional, a presumption "that can be overcome by a clear showing of arbitrariness and irrationality." *Hodel v. Indiana*, 452 U.S. 314, 331-32 (1981). Here, the state of Arizona had a rational basis for the Regulatory Scheme, protecting maternal health and welfare. *See Casey*, 505 U.S. at 847 ("the state has legitimate interests from the outset of the pregnancy in protecting the health of the woman"). Moreover, abortion is inherently different from other medical procedures. *See id.* at 852; *Greenville Women's Clinic*, 222 F.3d at 173. Finally, the state of Arizona was reacting to specific incidents, including the death of Lou Anne Herron from complications associated with an abortion, where maternal health was impacted by sub-standard medical care. (Equal Protection DSOF at ¶2.) The Regulatory Scheme's classification of physician practices based on whether they perform abortions does not violate the Equal Protection clause of the United States Constitution because the state of Arizona had a rational basis for creating the classification.

b) Regulatory Scheme Impermissibly Discriminates on the Basis of Sex

Plaintiffs argue that Arizona has created a regulatory scheme which burdens only women seeking medical care. The Supreme Court has held that a classification based on sex must show "at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those

objectives." *Mississippi Univ. for Women v. Hogan*, 458 U.S. 718, 724 (1982). Defendants oppose Plaintiffs' position by clarifying that classification concerning pregnancy is not necessarily sex-based classification. *See Gedulig v. Aiello*, 417 U.S. 484, 496 n. 20 (1974). Supreme Court jurisprudence concerning the right to have an abortion is clearly rooted in substantive due process, not equal protection. Therefore, the Court concludes that the Regulatory Scheme does not violate the Equal Protection Clause by impermissibly discriminating on the basis of sex.

c) Physician practices that provide five or more first trimester abortions per month compared to practices that provide one to four first trimester abortions.

Plaintiffs' final equal protection argument is that the Regulatory Scheme impermissibly classifies physician practices based on how many first trimester abortions they provide. According to Plaintiffs, the classification based on whether the physician practice provides five or more first trimester abortions per month is not rationally related to the State's interest in maternal health because more experienced abortion providers perform safer abortion procedures. While Plaintiffs' position may be true, courts may not second-guess a legislature's "line drawing" when it would be permissible for the legislature to regulate all abortion providers irrespective of how many abortions they provide. *See Greenville*, 222 F.3d at 174; *Women's Medical Center of Northwest Houston v. Bell*, 248 F.3d 411, 421 (5th Cir. 2001). Therefore, the Regulatory Scheme's classification of abortion providers based on how many first trimester abortions they provide does not violate equal protection.

After reviewing the parties' arguments and supporting materials, the Court will deny Plaintiffs' motion for summary judgment and will grant Defendants' motion for summary judgment on Plaintiffs' Equal Protection claim.

FOURTH AMENDMENT

The parties' motions for summary judgment addressing Plaintiffs' Fourth Amendment claim focus on whether physicians' offices should be considered closely regulated businesses. With regard to commercial property employed in a "closely regulated business," the expectation of privacy is "particularly attenuated" and, therefore, no warrant is required.

New York v. Burger, 482 U.S. 691, 699 (1987); *Marshall v. Barlow's, Inc.*, 436 U.S. 307 (1978). The Court finds that Plaintiffs' Fourth Amendment claim raises two distinct issues. First, Plaintiff's claim calls into question whether the portion of the Regulatory Scheme requiring licensed physicians to ensure the Department of Health Services ("DHS") access to the abortion clinic violates physicians' Fourth Amendment rights.[3] The second issue raised is whether the regulation requiring physicians to disclose patient medical records without a warrant violates patients' Fourth Amendment rights.[4] After reviewing the parties' arguments, the Court concludes that the entry of DHS employees into physicians' offices should be reviewed by determining whether the "closely regulated business" exception to the warrant requirement applies to physicians' offices. However, the disclosure of patient medical records is more properly addressed as an informational privacy claim.

In determining whether the Department of Health Services may access licensed abortion clinics without a warrant, the Court must determine whether physicians' offices are closely regulated businesses. In determining whether a business is "closely regulated" courts should look at three factors: (1) the duration of a particular regulatory scheme, (2) the pervasiveness of the regulation and (3) the regularity of the regulation. Due to the sensitive nature of abortion and the physician-patient relationship, licensed abortion clinics are sufficiently different from the other places of business that courts have found to be closely regulated. *See New York v. Burger*, 482 U.S. 691, 710-12 (1987) (auto junkyard); *United*

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[3] "A licensee shall ensure that the Department's director or director's designee is allowed immediate access to the abortion clinic during the hours of operation." Ariz. Admin. Code R9-10-1503 (B)(4).

[4] "A licensee shall ensure that a medical record maintained at the abortion clinic is provided to the Department for review no later than 2 hours from the time the Department requests the medical record." Ariz. Admin. Code R9-10-1511 (A)(4)(b).

"A licensee shall ensure that a medical record maintained off-site is provided to the Department for review no later than 24 hours from the time the Department requests the medical record." Ariz. Admin. Code R9-10-1511 (A)(4)(c).

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States v. Biswell, 406 U.S. 311 (1972) (firearms); *Colonnade Catering Corp. v. United States*, 397 U.S. 72 (1970) (catering business); *United States v. Argent Chem. Labs.*, 93 F.3d 572 (9th Cir. 1996) (veterinary drug industry). Therefore, Arizona Administrative Code regulation R9-10-1503(B)(4), on its face, violates the warrant requirement of the Fourth Amendment because it permits warrantless searches without sufficient justification.

INFORMATIONAL PRIVACY

Plaintiffs contend that the Regulatory Scheme violates patients' right to informational privacy in three ways; (1) the Regulatory Scheme allows DHS to review unredacted patient medical records, remove such records from the provider's facilities, and retain copies of those records in DHS's offices; (2) the Regulatory Scheme requires providers to submit to a contractor of DHS copies of fetal ultrasound prints when the patient is obtaining an abortion after twelve weeks gestation and (3) the Regulatory Scheme forces Plaintiffs to consent to unannounced and warrantless searches of their medical offices by DHS at any time and for any reason.

Courts have consistently recognized that individuals have a constitutionally protected privacy interest "in avoiding disclosure of personal matters," including medical information. *See generally Doe v. Attorney Gen.*, 941 F.2d 780, 795 (9th Cir. 1991). Individuals' privacy interest in personal information is not absolute and may yield to the government's interest in obtaining certain information. The Court balances following factors to determine whether the government's interest outweighs the individual's:

> (1) the type of information requested;
> (2) the potential for harm in any subsequent non-consensual disclosure;
> (3) the adequacy of safeguards to prevent unauthorized disclosure;
> (4) the degree of need for access; and
> (5) whether there is an express statutory mandate, articulated public policy, or other recognizable public interest militating toward access.
> *In re Crawford*, 194 F.3d 954, 959 (1999).

A) Unredacted Patient Medical Records

While Defendants characterize the type of information requested as limited, the Court disagrees and finds that the information contained in patient medical records is extensive and

intensely personal. The regulations require that the patient medical records contain information including the patient's medical, obstetrical and gynecological history, medications the patient is currently taking and other medical conditions. *See* Ariz. Admin. Code R9-10-1511; Ariz. Admin. Code R9-10-1508 (A)(1). The relevant medical records would also contain patient identification information including the patient's name, address and date of birth, in addition to ultrasound results and the estimated gestational age of the fetus. *Id.* As a result of the type of information contained in the medical records, the potential for harm if the information was disclosed is enormous. While the Department of Health Services is governed by several statutes and regulations designed to safeguard confidential information and prevent unauthorized disclosures, this factor is outweighed by DHS's limited need to know the identity of the patient. If DHS's goal is to ensure that doctors are performing safe abortions and meeting the licensing requirements, redacted medical reports without references to patient identification information are sufficient to meet that goal. The Court is not persuaded by Defendants' argument that their investigations will be substantially delayed, if patient-identifying information is redacted from the medical record. In this case, the public's interest in ensuring that abortions are safe does not vitiate the patient's right to informational privacy of intensely personal medical documents. Therefore, the Court concludes that Arizona Administrative Code regulations R9-10-1511(A)(4)(b) and R9-10-1511(A)(4)(c) are, on their face, unconstitutional because they violate an individual's right to informational privacy.

B) Ultrasound Prints

After twelve weeks gestation, the Regulatory Scheme requires licensed abortion providers to generate a fetal ultrasound print and provide it to DHS and an independent contractor for review. While the disclosure of the ultrasound prints to DHS raises many of the same privacy concerns as the disclosure of medical records, their disclosure to DHS with patient identifying information raises an additional consideration. The Regulatory Scheme provides that "[t]he department of health services shall contract with qualified public or

private persons or corporations for review of ultrasound results to determine compliance with this section." A.R.S. §36-2301.02(C). The contractor must review ultrasound results to verify the accuracy of the fetus' estimated gestational age and file a monthly report noting, among other things, any significant inaccuracy in the estimated gestational age of the fetus. The Department of Health Services will forward this report to the appropriate professional regulatory boards for their review. *See* A.R.S. §36-2301.02. Defendants indicate that DHS will use a coding system which will prevent the contractor who reviews the ultrasound prints from learning the patient's identity. (Defs.' Info. Privacy Mot. for Summ J. at 7; DSOF ¶8.) This coding system is not part of the Regulatory Scheme and there is no assurance that the proposed system would be employed. Therefore, Arizona Revised Statute section 36-2301.02(C) violates a patient's right to information privacy by disclosing personal information contained on the ultrasound print to 1) the Department of Health Service and 2) an independent contractor.

The portion of the Regulatory Scheme providing for warrantless searches of physicians' offices is addressed in the section of this order discussing Plaintiffs' Fourth Amendment claim. Accordingly, the Court will grant, in part, and deny, in part, Plaintiffs' and Defendants' motions for summary judgment on Plaintiffs' informational privacy claim.

UNLAWFUL DELEGATION

Plaintiffs' unlawful delegation claim arises from the Regulatory Scheme's section requiring that "[a] physician with admitting privileges at an accredited hospital in this state is in the physical facilities until each patient is stable and ready to leave the recovery room." Ariz. Admin. Code R9-10-1506(B)(2). Plaintiffs contend that this provision "grants local hospitals unbridled power to determine whether Plaintiffs may continue to provide abortions." (Pls.' Mot. for Summ. J. at 25.) According to Plaintiffs, granting third parties authority to prevent otherwise legal abortions is unconstitutional. *Id.* Defendants respond by stating that "a facial challenge to a grant of authority—in the absence of any actual deprivation of rights—only has merit if the delegation explicitly allows the violation of

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constitutional rights." (Defs.' Reply at 1.) Because no doctors have yet been denied admitting privileges, their argument continues, Plaintiffs must show that the regulatory scheme's delegation of authority is on its face unconstitutional. Defendants contend that the Regulatory Scheme does not explicitly grant hospitals the discretion to act in an unconstitutional manner, therefore, Plaintiffs' challenge has no merit.

Plaintiffs attempt to analogize the admitting privileges requirement in the Regulatory Scheme to the judicial bypass provision required in parental consent statutes. Courts have consistently held that statutes which give judges discretion to deny minors abortions when the minor is informed and mature enough to make a sound decision or the abortion would be in the minor's best interest are unconstitutional. *See Bellotti v. Baird*, 443 U.S. 622, 647 (1979); *Causeway Medical Suite v. Ieyoub*, 109 F.3d 1096 (5th Cir. 1997), *overruled on other grounds, Okpalobi v. Foster*, 244 F.3d 405 (5th Cir. 2001). However, in this case, the Regulatory Scheme and Arizona state law do not vest hospitals with discretion in deciding which doctors should be granted admitting privileges. Both private and public hospitals must comport with both procedural and substantive due process in reviewing an application for admitting privileges. *See Holmes v. Hoemako Hosp.*, 573 P.2d 477 (Ariz. 1977) (private hospitals); *Peterson v. Tucson Gen. Hosp.*, 559 P.2d 186 (Ariz. App. 1976) (public hospitals). The delegation of authority, here, is not inherently unconstitutional because it does not explicitly give hospitals the authority to act in an unconstitutional manner. Moreover, the authority it does grant is not unbridled or unfettered because it is subject to judicial review and will be held up to constitutional standards. Therefore, the Court will deny Plaintiffs' motion for summary judgment and grant Defendants' motion for summary judgment on Plaintiffs' unlawful delegation claim.

VAGUENESS

Plaintiffs assert that the Regulatory Scheme violates the Due Process Clauses of the Fifth and Fourteenth Amendments because some of the scheme's provisions are unconstitutionally vague. In response, Defendants contend that the scheme is not

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unconstitutional vague and that the majority of Plaintiffs' objections are premature because the objections are "as-applied" challenges and there has been no evidence of any improper enforcement. (Defs.' Resp. to Pls.' Mot. for Summ. J. at 16.)

The Fourteenth Amendment's guarantee of Due Process proscribes laws so vague that persons "of common intelligence must necessarily guess at [their] meaning and differ as to [their] application." *Smith v. Goguen*, 415 U.S. 566, 572 n.8 (1974) (citation omitted). A law is unconstitutionally vague if it fails to provide those targeted by the statute a reasonable opportunity to know what conduct is prohibited, or is so indefinite that it allows arbitrary and discriminatory enforcement. *See Grayned v. City of Rockford*, 408 U.S. 104, 108-09 (1972).

If the statute subjects transgressors to criminal penalties, then a vagueness review is even more exacting. *See Kolender v. Lawson*, 461 U.S. 352, 357 (1983). However, "[s]tatutes need not be written with 'mathematical' precision, nor can they be thus written." *Forbes v. Napolitano*, 236 F.3d 1009, 1011 (9th Cir. 2000) (citation omitted). Rather, a statute "must be intelligible, defining a 'core' of proscribed conduct that allows people to understand whether their actions will result in adverse consequences." *Id.* (citation omitted). "In addition to defining a core of proscribed behavior to give people constructive notice of the law, a criminal statute must provide standards to prevent arbitrary enforcement." *Id.* (citing *City of Chicago v. Morales*, 527 U.S. 41, 52 (1999)).

Plaintiffs claim that numerous terms used in the Regulatory Scheme are unconstitutionally vague. For purposes of this decision, the Court has grouped some terms due to their similarity. Plaintiffs argue that the definition of "gestational age"[5] contains two incompatible methods of calculation because they produce estimates roughly two weeks apart. The definition of "gestational age" is not unconstitutionally vague because it provides physicians with two methods by which they can comply with the Regulatory Scheme. Several of the challenged terms involve medical terms of art or medical judgments: "potentially life-

[5] "'Gestational age' means the number of completed weeks of the unborn fetus as calculated from the first day of the last menstrual period or the date of fertilization." Ariz. Admin Code R 9-10-1501(17).

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threatening,"[6] "serious injury,"[7] "vital signs,"[8] and drugs and equipment needed to support and monitor cardiopulmonary function.[9] In *Karlin v. Foust*, 188 F.3d 446 (7th Cir. 1999), the Seventh Circuit stated that the central principle established in *Colautti v. Franklin*, 439 U.S. 379 (1975), is that "an abortion statute that imposes liability on a physician for erroneous medical determinations is void for vagueness only if it leaves physicians uncertain as to the relevant legal standard under which their medical determinations will be judged." *Karlin*, 188 F.3d at 463. The *Karlin* court observed that "physicians have a duty to exercise due care, i.e. act reasonably, in treating all their patients and this duty extends to a physician's decision to perform an emergency abortion." *Id.* The Seventh Circuit stated:

> [w]hile it is certainly true that physicians may disagree as to whether a specific situation rises to the level of posing a significant treat to a woman's health sufficient to necessitate an immediate abortion, the fact that one physician would choose to perform the emergency abortion under those circumstances while others would not, does not necessarily mean the former physician is acting unreasonably. In any given medical situation there is likely to be a number of reasonable medical options and disagreement between doctors over the appropriate course of action does not, of course, render one option reasonable and another unreasonable.
> *Id.*

This Court agrees with the Seventh Circuit's reasoning in concluding that "serious injury" and "potentially life threatening" are not unconstitutionally vague. In addition, "vital signs"

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[6] "'Emergency' means a potentially life-threatening occurrence that requires an immediate response or medical treatment." Ariz. Admin. Code R9-10-1501(13).

[7] "'Serious injury' means an injury that occurs at an abortion clinic and that creates a serious risk of substantial impairment of a major body organ." Ariz. Admin. Code R9-10-1501(41).

[8] "G. A medical director shall ensure that:
1. Patient care staff monitor the patient's vital signs throughout the abortion procedure to ensure the patient's health and safety."
Ariz. Admin. Code R9-10-1508(G)(1).

[9] "5. In addition to the requirements in subsection (4), the following equipment is available [in the licensed abortion clinic] for an abortion procedure performed after the first trimester:...
b. Drugs to support cardiopulmonary function; and
c. Equipment to monitor cardiopulmonary status;..."
Ariz. Admin. Code R9-10-1513(5)(b)&(c).

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and drugs and equipment needed to support and monitor cardiopulmonary function are sufficiently understood within the medical community and are therefore, not unconstitutionally vague.

Two provisions of the Regulatory Scheme require physicians and the ultrasound independent contractor to review fetal ultrasound prints. Physicians are required to "interpret" the original ultrasound print despite the fact that the ultrasound machine performs the necessary calculations to determine the fetus's gestational age.[10] In addition, the contractor chosen to provide ultrasound review services shall report significant inaccuracies in the estimated gestational age of the fetus.[11] While these two provisions rely on the professional judgment of medical personnel, the Court concludes that they are not unconstitutionally vague. Plaintiffs further contend that the Regulatory Scheme's provision governing the staffing,[12] maintenance[13] and layout[14] of licensed abortion clinic are

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[10] "D. If a physical examination or other information obtained from the patient or laboratory tests indicate the gestational age of the fetus is greater than 12 weeks, a medical director shall ensure that:

. . .

3. An original ultrasound print is:
   a. Interpreted by a physician; and
   b. Maintained in the patient's medical record."

Ariz. Admin. Code R9-10-1508(D)(3).

[11] "E. Beginning on January 1, 2001, on a monthly basis, persons or corporations providing ultrasound review service to the department pursuant to this section shall file a report with the director regarding ultrasound results noting:

1. Any instances in which the contractor believes there was a significant inaccuracy in the estimated gestational age of the fetus made before the abortion."

A.R.S. § 36-23001.01(E).

[12] "A. A licensee shall ensure that there are a sufficient number of patient care staff and employees to:

1. Meet the requirements of this Article;
2. Ensure the health and safety of a patient; and
3. Meet the needs of a patient based on the patient's medical evaluation."

Ariz. Admin. Code R9-10-1506(A).

"B. A licensee shall ensure that: . . .
3. If a physician is not present, a nurse or nurse practitioner or a physician assistant:

standardless and vague. The portions of the Regulatory Scheme governing the staffing, maintenance and layout of licensed abortion clinics are constitutional because they are sufficiently clear and are not so indefinite as to allow arbitrary and discriminatory enforcement. Plaintiffs also argue that the Regulatory Scheme's requirement that the clinic's medical director ensure written polices and procedures are developed and implemented governing individuals who counsel patients in the clinic is vague because it does not define

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a. Monitors each patient during the patient's recovery following the abortion; and
b. Remains in the physical facility until each patient is discharged by a physician."

Ariz. Admin. Code R9-10-1506(B)(3).

[13] "A licensee shall ensure that:

1. Physical facilities:
   a. provide lighting and ventilation to ensure the health and safety of a patient;
   b. Are maintained in a clean condition;
   c. Are free from a condition or situation that may cause a patient to suffer physical injury;
   d. Are maintained free from insects and vermin; and
   e. Are smoke-free."

Ariz. Admin. Code R9-10-1512(1).

[14] "B. A licensee shall ensure that an abortion clinic provides areas or rooms:

1. That provide privacy for:
   a. A patient's interview, medical evaluation, and counseling;
   b. A patient to dress; and
   c. Performing an abortion procedure;
1. For personnel to dress;
2. With a sink in working order and a flushable toilet;
3. For cleaning and sterilizing equipment and supplies;
4. For storing medical records;
5. For storing equipment and supplies;
6. For hand washing before the abortion procedure; and
7. For a patient recovering after an abortion."

Ariz. Admin. Code R9-10-1514(B).

what training and experience are needed to be "qualified."[15] The Regulatory Scheme does not require any particular qualification, only that clinic directors decide for themselves what amount and type of training counselors should complete before providing counseling in their clinic. Therefore, this provision of the Regulatory Scheme is neither standardless nor vague. Additionally, Plaintiffs express concern that the maintenance of patient records at licensed clinics for at least six months is burdensome if physicians retire or otherwise close their practices.[16] This provision is not vague and any challenge to the burden that it places on physicians is properly raised in another claim for relief.

The final provision of the Regulatory Scheme that Plaintiffs challenge on the basis of vagueness involves a patient's rights while being treated at a licensed abortion clinic. The Regulatory Scheme requires that

> [a] licensee shall ensure that a patient is afforded the following rights, and is informed of these rights:
> 1. To be treated with consideration, respect, and full recognition of the patient's dignity and individuality.
>
> Ariz. Admin. Code R9-10-1507(1).

The Fifth Circuit held unconstitutional an abortion regulation requiring physicians to "enhance" their patient's dignity and self-esteem and requiring physicians to provide a degree of care that met or exceeded the patient's expectations. *See Women's Med. Ctr. of Northwest Houston v. Bell*, 248 F.3d 411, 422 (5th Cir. 2001). In finding the regulations unconstitutional, the Fifth Circuit determined that the regulation "impermissibly subjects

---

[15] "C. A medical director shall ensure written polices and procedures are developed and implemented for:

> . . .
>
> Individuals qualified to provide counseling in the abortion clinic and the amount and type of training required for an individual to provide counseling."
>
> Ariz. Admin. Code R9-10-1503(C)(2).

[16] "a. A medical record is maintained at the abortion clinic for at least 6 months from the date of the patient's discharge."

Ariz. Admin. Code R9-10-1511(A)(4)(a).

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physicians to sanctions based not on their own objective behavior, but on the objective viewpoints of others." *Id.*

The Fifth Circuit further noted that "[i]t was no solace that . . . no abortion facility has yet been subjected to civil or criminal penalties for violating these regulatory provisions. Especially in the context of abortion, a constitutionally protected right that has been a traditional target of hostility, standardless laws and regulations such as these open the door to potentially arbitrary and discriminatory enforcement." *Id.* While the provision in this case does not require physicians to enhance the patient's dignity, it suffers from the same constitutional infirmity as the regulation in *Women's Medical Center of Northwest Houston v. Bell*. The Court will grant Plaintiff's Motion for Summary Judgment, in part, to the extent it argues that Arizona Administrative Code regulation R9-10-1507(1) is unconstitutionally vague. The Court will grant, in part, Defendants' motion for summary judgment as to all other terms that Plaintiffs challenge as unconstitutionally vague.

DUE PROCESS—UNDUE BURDEN

Plaintiffs allege that the Regulatory Scheme creates an undue burden on a woman's right to decide to have an abortion because it 1) increases the cost of obtaining an abortion, 2) threatens patient confidentiality, 3) stigmatizes and marginalizes the provision of abortion, 4) usurps abortion providers' ability to exercise their medical judgment, and 5) grants hospitals the authority to interfere with a woman's right to choose an abortion. This Court has addressed the Regulatory Scheme's threat to patient confidentiality and the appropriateness of hospitals' ability to decide admitting privileges in previous sections of this order. The effect of the Regulatory Scheme on physicians does not directly effect a woman's right to decide to have an abortion. Whether the Regulatory Scheme stigmatizes and marginalizes abortion providers or usurps abortion providers' ability to exercise their medical judgment are not appropriate questions for this Court. Therefore, the remaining issue is whether the implementation of the Regulatory Scheme will result in increased costs for abortions and create an undue burden on a woman's right to decide to have an abortion.

Plaintiffs contend that their evidence creates a material dispute of fact and therefore, summary judgment is inappropriate. Defendants respond by arguing that the Regulatory Scheme serves a valid purpose, was not enacted for an invidious purpose and that Plaintiffs have failed to demonstrate that the implementation of the Regulatory Scheme will result in prohibitive cost increases. Regulations "designed to foster the health of a woman seeking an abortion" are valid as long as they do not constitute an "undue burden." *Planned Parenthood of Southeastern Pennsylvania v. Casey*, 505 U.S. 833, 878 (joint opinion of O'Connor, Kennedy and Souter, JJ.). Courts must find that an abortion regulation is an "undue burden" when it "has the purpose or effect of placing a substantial obstacle in the path of a woman seeking an abortion of a nonviable fetus." *Id.* at 877. "[U]ndetermined fee increases predicted by abortion providers, but not supported by specific credible estimates, when weighed against the regulations' health benefits, do not constitute an undue burden on women seeking abortions." *Women's Med. Ctr. of Northwest Houston v. Archer*, No. H-99-3639, slip op. at 60-64 (S.D. Tex. 1999), *rev'd in part*, 248 F.3d 411 (2001). Even if this Court considers all of Plaintiffs' purported facts as true, Plaintiffs have failed to establish that any increase in the cost of abortions due to the Regulatory Scheme creates a "substantial obstacle in the path of a woman seeking an abortion of a nonviable fetus." *Casey*, 505 U.S. at 877. Therefore, the Court will grant Defendants' Motion for Summary Judgment on Plaintiffs' Undue Burden Claim.

SEVERABILITY

The Regulatory Scheme contains a severability clause. "If a provision of this act is held invalid, the invalidity of that specific provision does not affect the validity of any other section of this act that is not specifically held to be invalid, and to this end the provisions of this act are severable." 1999 Ariz. Sess. Laws HB 2706, sec. 10. Therefore, the portions of the Regulatory Scheme ruled unconstitutional by this order can be cleanly severed from the Regulatory Scheme without additional provisions being held invalid.

IT IS HEREBY ORDERED that:

(1) Plaintiffs' April 30, 2001 Motion for Summary Judgment [docket #132-1] is GRANTED, in part, and DENIED, in part;

(2) Defendants' May 1, 2001 Motion for Summary Judgment on Plaintiffs' Equal Protection Claim [docket #143-1] is GRANTED;

(3) Defendants' May 1, 2001 Motion for Summary Judgment on Plaintiffs' Fourth Amendment Claim [docket #138-1] is DENIED;

(4) Arizona Administrative Code regulation R9-10-1503(B)(4) is unconstitutional because it violates the Fourth Amendment to the United States Constitution;

(5) Defendants' May 1, 2001 Motion for Summary Judgment on Plaintiffs' Informational Privacy Claim [docket #141-1] is DENIED;

(6) Arizona Revised Statute section 36-2301.02(C) and Arizona Administrative Code regulations R9-10-1511(A)(4)(b) and R9-10-1511(A)(4)(c) are unconstitutional because they violate an individual's constitutional right to informational privacy;

(7) Defendants' May 1, 2001 Motion for Summary Judgment on Plaintiffs' Unlawful Delegation Claim [docket #139-1] is GRANTED;

(8) Defendants' May 1, 2001 Motion for Summary Judgment on Plaintiffs' Vagueness Claim [docket #140-1] is GRANTED, in part, and DENIED, in part;

(9) Arizona Administrative Code regulation R9-10-1507(1) is unconstitutionally vague;

(10) Defendants' May 1, 2001 Motion for Summary Judgment on Plaintiffs' Undue Burden Claim [docket #145-1] is GRANTED;

(11) Plaintiffs' May 31, 2001 Motion to Strike Portions of Defendants' Summary Judgment Submissions [docket #154-1] is DENIED;

(12) Plaintiff's June 29, 2001 Second Motion to Strike Portions of Defendants' Summary Judgment Submissions [docket #181-1] is DENIED;

(13) Defendant's June 29, 2001 Motion to Preclude Consideration of Evidence

[docket #179-1] is DENIED;

(14) Defendants are permanently enjoined from enforcing any portion of the Regulatory Scheme ruled unconstitutional by this Order; and

(15) The Clerk of the Court is directed to enter judgment and close the case.

Dated this 30th day of September, 2002.

RANER C. COLLINS
United States District Judge

DEATHS DUE TO MISADVENTURES TO PATIENTS DURING SURGICAL & MEDICAL CARE
BY CAUSE, BY YEAR, KANSAS, 1990-2001, OCCURRENCE DATA
Table of CAUSEDS by YEAR

CAUSEDS Frequency	YEAR 1990	1992	1993	1995	1996	1997	1998	1999	2000	2001	Total
8700 - SURGICAL OPERATION	1	1	1	1	0	0	3	0	0	0	7
8704 - ENDOSCOPIC EXAMINATION	0	1	0	2	0	3	0	0	0	0	6
8705 - ASPIRATION OF FLUID OR TISSUE PUNCTURE	1	0	0	0	0	0	0	0	0	0	1
8706 - HEART CATHETERIZATION	0	1	0	0	0	0	0	0	0	0	1
8708 - OTHER	1	1	0	0	1	0	2	0	0	0	5
8741 - INFUSION AND TRANSFUSION	0	0	0	1	0	1	0	0	0	0	2
8760 - MISMATCHED BLOOD IN TRANSFUSION	1	0	0	0	0	0	0	0	0	0	1
8768 - OTHER SPECIFIED MISADVENTURES	1	1	0	0	1	1	0	0	0	0	4
Y658 - OTHER SPECIFIED MISADVENTURES DURING	0	0	0	0	0	0	0	0	1	1	2
Y818 - MISCELLANEOUS DEVICES NOT ELSEWHERE	0	0	0	0	0	0	0	1	0	0	1
Y831 - SURGICAL OPERATION WITH IMPLANT OF	0	0	0	0	0	0	0	1	1	4	6
Y832 - SURGICAL OPERATION WITH ANASTOMOSIS	0	0	0	0	0	0	0	1	2	3	6
Y833 - SURGICAL OPERATION WITH FORMATION OF	0	0	0	0	0	0	0	1	2	3	6
Total (Continued)	5	5	1	4	2	5	5	25	19	35	106

Misadventures to Patients during Surgical & Medical Care, ICD-9 Codes 870-876
Kansas Occurrence Data
Source: KDHE Center for Health and Environmental Statistics

DEATHS DUE TO MISADVENTURES TO PATIENTS DURING SURGICAL & MEDICAL CARE
BY CAUSE, BY YEAR, KANSAS, 1990-2001, OCCURRENCE DATA
Table of CAUSEDS by Year

CAUSEDS Frequency	Year 1990	1992	1993	1995	1996	1997	1998	1999	2000	2001	Total
Y834 - OTHER RECONSTRUCTIVE SURGERY	0	0	0	0	0	0	0	2	0	1	3
Y835 - AMPUTATION OF LIMB(S)	0	0	0	0	0	0	0	1	5	0	6
Y836 - REMOVAL OF OTHER ORGAN (PARTIAL)	0	0	0	0	0	0	0	0	1	3	4
Y838 - OTHER SURGICAL PROCEDURES	0	0	0	0	0	0	0	2	2	3	7
Y839 - SURGICAL PROCEDURE UNSPECIFIED	0	0	0	0	0	0	0	8	2	9	19
Y841 - KIDNEY DIALYSIS	0	0	0	0	0	0	0	2	0	0	2
Y846 - URINARY CATHETERIZATION	0	0	0	0	0	0	0	2	1	1	4
Y848 - OTHER MEDICAL PROCEDURES	0	0	0	0	0	0	0	4	2	7	13
Total	5	5	1	4	2	5	5	25	19	35	106

Misadventures to Patients during Surgical & Medical Care, ICD-9 Codes 870-876
Kansas Occurrence Data
Source: KDHE Center for Health and Environmental Statistics

DEATHS DUE TO PREGNANCY WITH ABORTIVE OUTCOME
BY CAUSE, BY YEAR, KANSAS, 1990-2001, OCCURRENCE DATA
Table of CAUSEDS by YEAR

CAUSEDS	YEAR			
Frequency	1992	1997	2000	Total
6339 - UNSPECIFIED ECTOPIC PREG	1	1	0	2
0009 - ECTOPIC PREGNANCY UNSPECIFIED	0	0	1	1
Total	1	1	1	3

Pregnancy with Abortive Outcome, ICD-9 Codes 630-639, ICD-10 000-008
Kansas Occurrence Data
Source: KDHE Center for Health and Environmental Statistics

Central Women's Services, Inc.

3013 East Central
Wichita, Kansas 67214
316-688-0107 ◆ 1-800-678-0107

March 24,2003

Today I am here to speak for "Central Women's Services". My name is Michelle Amaro and I am part owner of the clinic. I have work at this clinic for 5 ½ years. I started working there when the clinic was "Wichita Family Planning". In May 2002, I purchased the clinic. I am a single mom and have 3 children, 2 are mine .The 3rd is a nephew that I took from a sister with a drug addiction. This clinic is not only my sole source of income I have to raise my children, but also something I believe very strongly in protecting for all women.

At Central Women's Services, we do everything within our power to ensure that our services are administered safely and professionally. For as long as I have been the owner of CWS, we have not experienced any hospitalizations or deaths due to complications from abortion procedures. Our clinic is a small, independently owned business that, in addition to abortion services, also provides other vital elements of care to our patients. We provide low-cost birth control, well-woman exams and sexually transmitted disease screening. Many of our patients would have limited options if our facility and services were to be discontinued, which would put them at higher risk for illness.

Patients who seek our services are from all different races, ages, cultures and socioeconomic status. Just as there are many different characteristics of each of our patients, each has an individualized reason and circumstance why they enter our doors. The common thread among all of the different women and girls is that each is seeking private services in a professional and respectful environment. We provide the requested services of each of our patients in the hopes of helping them through whatever complex and difficult situation they are faced with.

While we may be a small clinic, our size in no way compromises the safety and high level of care that each patient receives. We are fully equipped with a surgical facility with all necessary equipment. Our facility also has a recovery room that is staffed by a registered nurse at all times, to monitor our patients' recovery. Each of our patients is carefully monitored from the time they enter surgery until they are discharged from our facility. We follow careful guidelines regarding when our patients are released following treatment.

In 20 years of operation we have never experienced a death resulting from complications from an abortion procedure. We are subject to inspection from the National Abortion Federation every 2 years. We have passed each of our inspections by this national and well-respected organization that monitors clinics across the country. We also subject to inspection by CLIA to monitor our lab practices. In addition to meeting the CLIA criteria, we also independently hire a lab consultant to ensure that our lab practices go above and beyond the minimum requirements.

I hope that you can see from my testimony today that passing these new regulations will not benefit women by protecting their medical health. I, as a clinic owner, already feel a deep responsibility to each patient who seeks our services. We take all necessary precautions to ensure that the safety of each patient is protected. In my experience at CWS, I have never felt that we were not operating at standards that would ensure quality, respectful care for each individual.

What passage of this bill will do is bring undo hardship on small clinics such as mine and jeopardize the services we are able to provide women in Kansas. You are not protecting a women's health, but increasing harm by limiting her access to quality medical services. For years, our patients have depended on us and trusted us to assist them with very individual and often difficult situations. Without our clinic, women will be forced into situations that may prove to be damaging to their lives and health.

As a clinic owner, and a woman, I can see nothing that will actually benefit the population the proponents of this legislation claim to be protecting. By forcing clinics to close all across the state, we will be reducing options for women and forcing them to return to the days of back alley abortions, a situation that either side can admit will threaten the health and well-being of women.

Senate Public Health & Welfare Committee
Date: March 24, 2003
Attachment 3-1

Central Women's Services, Inc.
3013 East Central
Wichita, Kansas 67214
316-688-0107 ◆ 1-800-678-0107

I urge you to vote no on this legislation. The women of Kansas who need quality medical services are relying on you to protect them from legislation that will only limit their choices and ultimately endanger their lives and well-being.

Michelle Amaro

Herbert C. Hodes, MD, FACOG
Center for Women's Health
4840 College Boulevard
Overland Park, KS 66211-1601
(913) 491-6878
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Testimony in opposition to House Bill 2176

Articles presented to the Senate Public Health and Welfare Committee on March 24, 2003

1. Factors associated with immediate abortion complications
2. Abortion Complications
3. ACOG News Release
4. The Aftereffects of Abortion
5. Pregnancy-Related Mortality Surveillance
6. Abortion Surveillance
7. Saving Women's Lives
8. Guidelines for Office-Based Surgery and Special Procedures

Senate Public Health & Welfare Committee
Date: March 24, 2003
Attachment 4-1

Factors associated with immediate abortion complications

Lorraine E. Ferris, PhD, CPsych; Margot McMain-Klein, BScOT, MHSc; Nikki Colodny, MD, MEd; G. Fraser Fellows,| MD, FRCSC; John Lamont, MD, MSc, FRCSC

Canadian Medical Association Journal 1996; 154: 1677-1685

From the Department of Behavioural Sciences, Faculty of Medicine, University of Toronto, Toronto, Ont.; the Clinical Epidemiology Unit, Sunnybrook Health Science Centre, North York, Ont.; the Institute for Clinical Evaluative Sciences in Ontario, Toronto, Ont.; the Task Group of Abortion Service Providers, Toronto, Ont.; |the Department of Obstetrics and Gynaecology, University of Western Ontario, St. Joseph's Health Care Centre, London, Ont.; and the Department of Obstetrics and Gynaecology, McMaster University Clinic, Henderson General Hospital, Hamilton, Ont.

Abstract

Objective: To identify factors associated with increased risk of immediate complications from induced abortion.
Design: Retrospective analysis of a provincial database.
Setting: All Ontario general hospitals in which abortions are performed and all free-standing abortion clinics in Ontario.
Population: Women in Ontario aged 15 to 44 years who underwent an induced abortion in the province (without concurrent sterilization) between Jan. 1, 1992, and Dec. 31, 1993.
Outcome measures: Recording of complications at the time of the procedure; gestational age, type of procedure, place of abortion (hospital or clinic), and patient's age, parity and history of previous abortion (spontaneous or induced).

Results: During the study period 83 469 abortions were performed that met our inclusion criteria. Immediate complications were reported in 571 cases (0.7%).

Multivariate logistic regression analysis revealed that, after other variables were controlled for, the patient's age, parity and history of previous abortions (spontaneous or induced) were not significant risk factors for immediate complications; however, gestational age, method of abortion and place of abortion were significant risk factors ($p < 0.001$). The odds ratio (OR) for having a complication from abortion was 1.3 (95% confidence interval [CI] 1.02 to 1.63) between 9 and 12 weeks, compared with having one after abortion at 9 weeks or earlier, and increased to 3.3 (95% CI 2.23 to 5.00) after abortion between 17 and 20 weeks. Compared with surgical dilatation and curettage (D&C), instillation of saline and instillation of prostaglandins were more likely to be associated with immediate complications (OR 24.0, 95% CI 13.22 to 43.70, and OR 11.7, 95% CI 6.43 to 21.18, respectively), whereas both suction D&C and insertion of a laminaria tent were less likely to be associated with immediate complications (OR 0.4, 95% CI 0.26 to 0.67, and OR 0.3, 95% CI 0.19 to 0.52, respectively). Compared with women who had an abortion in a free-standing clinic, the risk for immediate complications was greater among those who had an abortion in a hospital, especially a teaching hospital (OR 1.9, 95% CI 1.38 to 2.58), a nonteaching hospital with 200 to 399 acute care beds (OR 3.1, 95% CI 2.27 to 4.21) and a nonteaching hospital with fewer than 200 acute care beds (OR 5.9, 95% CI 4.04 to 8.64).

Conclusion: The risk of immediate complications from induced abortion is very low. Unlike in previous studies, the woman's age, parity and history of previous spontaneous or induced abortions were not found to be risk factors. However, advancing gestational age and procedures involving instillation of saline or prostaglandins were predictive factors of immediate complications.

Endnotes

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[4] Anna Kalandidi, et al., "Induced Abortions, Contraceptive Practices, and Tobacco Smoking as Risk Factors for Ectopic Pregnancy in Athens, Greece," *British Journal of Obstetrics and Gynecology* Vol. 98, No. 2 (1991): 207-13; Ann A. Levin, et al., "Ectopic Pregnancy and Prior Induced Abortion," *American Journal of Public Health* 72 (March **1982**): 253-256.

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[6] Kenneth Schultz, et al., "Measures to Prevent Cervical Injury During Suction Curettage Abortion," *The Lancet,* **(1983):** 1182-1184.

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[8] Joel Brind, et al., "Induced Abortion as an Independent Risk Factor for Breast Cancer: A Comprehensive Review and Meta-Analysis," *Journal of Epidemiology and Community Health* 50 **(1996):** 481-496.

[9] Katrina Armstrong, et al., "Assessing the Risk of Breast Cancer," *New England Journal of Medicine* Vol. 342, No. 8 (2000): 564-571.

[10] David Reardon, et al., "Abortion and Subsequent Substance Abuse," *American Journal of Drug and Alcohol Abuse* Vol. 26, No. 1 (2000): 61-75.

[11] Major, *Archives of General Psychology*, 2000.

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[13] J.R. Ashton, "The Psychosocial Outcome of Induced Abortion," *British Journal of Obstetrics and Gynaecology* 87 **(1980):** 1120-1122.

[14] Hanna Soderberg, et al., "Emotional Distress Following Induced Abortion: A Study of its Incidence and Determinants among Abortees in Malno, Sweden," *European Journal of Obstetrics & Gynecology and Reproductive Biology* Vol. 79, No. 2 (1998): 173-8.

[15] Mika Gissler, et al., "Suicides after Pregnancy in Finland, 1987-94: Register Linkage Study," *British Medical Journal* 313 (1996): 1431-1434.

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Abortion Complications

By Carrie Gordon Earll

Last Updated January 9, 2003

Physical

Women face a number of possible physical complications as a result of legal abortion including hemorrhage requiring transfusion, perforation of the uterus, cardiac arrest, endotoxic shock, major unintended surgery, infection resulting in hospitalization, convulsions, undiagnosed ectopic (tubal) pregnancy, cervical laceration, uterine rupture, and death.[1] Seventeen percent of women participating in a study on the effects of abortion reported that they have "experienced physical complications (e.g., abnormal bleeding or pelvic infection) since their abortion." Based on reported abortion statistics, this represents 200,000 women annually experiencing physical complications after an abortion.[2] Abortion can adversely affect later pregnancies. Research has found that women having abortions are more likely to have a low birth weight baby in a later pregnancy. There are also indications that having an abortion can increase your chances of delivering prematurely.[3] Abortion can increase your chance of having an ectopic (or tubal) pregnancy in the future.[4] Research published in the *Journal of the American Medical Association* found that having multiple abortions increases a woman's chance of having a miscarriage in a later pregnancy.[5] All women, especially young teenagers, are at risk for damage to their cervix during an abortion, which can lead to complications with later pregnancies.[6] Medical researchers have also found that women who have abortions face increased risks of additional complications in future pregnancies: "Complications such as bleeding in the first and third trimesters, abnormal presentations and premature rupture of the membranes, *abruptio placentae,* fetal distress, low birth weight, short gestation, and major malformations occurred more often among women with a history of two or more induced abortions."[7] Abortion can increase your risk for breast cancer. A review analyzing 23 studies on breast cancer and abortion states that 17 of those studies indicate an increased risk of breast cancer among women having an abortion.[8] Existing evidence of an abortion-breast cancer connection prompted the *New England Journal of Medicine* to publish a February 2000 review of breast cancer research, which lists abortion as a risk factor.[9]

Emotional

Women who ended their first pregnancy by abortion are five times more likely to report subsequent substance abuse than women who carried the pregnancy to term and four times more likely to report substance abuse compared to those whose first pregnancy ended naturally.[10] Research published in the prestigious *Archives of General Psychiatry* acknowledges that many women experience post-traumatic stress disorder (PTSD) after an abortion. In one of the longest-running studies conducted on women after abortion, researchers found that over time, relief and positive emotions relating to the abortion declined and negative emotions increased. PTSD symptoms include dreams or flashbacks to the abortion, a general numbing of responsiveness not present before the abortion, and difficulty falling asleep. In the same study, a survey of women two years after their abortions found that 28 percent of women were either indifferent about or dissatisfied with their abortion decision and 31 percent said they were uncertain or would not have an abortion again.[11] The circumstances surrounding an abortion decision can impact a woman, as well. According to research published in the *American Journal of Psychiatry*, "Abortion for medical or genetic indications, a history of psychiatric contact before the abortion, and mid-trimester abortions often result in more distress afterward. When women experience significant ambivalence about the decision or when the decision is not freely made, the results are also more likely to be negative."[12] After an abortion, women can experience psychological reactions ranging from guilt feelings, nervous symptoms, sleep disturbance and regrets. Also, as many as 10 percent of women "experience serious psychiatric problems following abortion."[13] As many as 60 percent of women having an abortion experience some level of emotional distress afterwards. In 30 percent of women, the distress is classified as severe.[14]

A Finnish study of suicide after pregnancy found

- "the suicide rate after an abortion was three times the general suicide rate and six times that associated with birth"
- suicides were more common after a miscarriage—and especially after an induced abortion—than in the general population
- an increased risk of suicide after an abortion indicates either common risk factors for both suicide and abortion, or harmful effects of induced abortion on mental health.[15]

Welch researchers examined abortion and suicide and concluded, "Our data suggest that a deterioration in mental health may be a consequential side effect of induced abortion."[16]

ACOG NEWS RELEASE

For Release February 13, 2002

Statement on So-Called "Partial Birth Abortion" Laws By The American College of Obstetricians and Gynecologists

The American College of Obstetricians and Gynecologists (ACOG) continues to oppose state or federal legislation known as so-called "partial birth abortion" bans. "Partial birth abortion" is a non-medical term apparently referring to a particular abortion procedure known as intact dilatation and extraction (intact D&X, or D&X), a rare variant of a more common midterm abortion procedure know as dilatation and evacuation (D&E).

In June 2000, the US Supreme Court struck down a Nebraska "partial birth abortion" law in the case of *Stenberg v. Carhart*, ruling that the law violated the US Constitution by (1) failing to provide any exception "for the preservation of the health of the mother," and (2) being so broadly written that it could prohibit other types of abortion procedures such as D&E, thereby "unduly burdening a women's ability to choose abortion itself."

As stated in a 1997 Statement of Policy issued by ACOG's Executive Board, and in ACOG's *amicus curiae* brief filed in the *Stenberg* case, ACOG continues to find it disturbing that legislators would take any action that would supersede the medical judgment of a trained physician, in consultation with a patient, as to what is the safest and most appropriate medical procedure for that particular patient.

ACOG's 1997 Statement of Policy affirmed that position and explained why ACOG believes such legislation to be "inappropriate, ill advised, and dangerous." The policy statement noted that although a select panel convened by ACOG could identify no circumstances under which intact D&X would be the *only* option to protect the life or health of a woman, intact D&X "may be the best or most appropriate procedure in a particular circumstance to save the life or preserve the health of a woman, and only the doctor, in consultation with the patient, based upon the woman's particular circumstances, can make this decision."

The Statement of Policy further reads that such legislation has the potential to outlaw other abortion techniques that are critical to the lives and health of American women. This was the second basis upon which the Supreme Court struck down the Nebraska law in the *Stenberg* case. Such "partial birth" laws are invariably overly broad or imprecisely drawn, frequently using terms — such as "partial birth abortion" — that are not recognized by the very constituency (physicians) whose conduct the law would criminalize. They purport to address a single procedure, yet describe elements of other procedures used in obstetrics and gynecology. Thus, even when legislators add an exception to a so-called "partial birth abortion" ban that includes protecting a woman's health, the ban may fail to have the necessary specificity to avoid encroaching on other safe and constitutionally protected medical procedures. For this reason, the ban would fail the two-part test outlined by the Supreme Court in the *Stenberg* decision.

The misinformation currently circulating in political discussions of abortion procedures only reinforces ACOG's position: in the individual circumstances of each particular medical case, the patient and physician — not legislators — are the appropriate parties to determine the best method of treatment.

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The American College of Obstetricians and Gynecologists (ACOG) is the national medical organization representing nearly 40,000 physicians who provide health care for women.

THE AFTEREFFECTS OF ABORTION

ABORTION AS A PUBLIC HEALTH ISSUE

In the 1973 the United States Supreme Court struck down every federal, state, and local law regulating or restricting the practice of abortion. This action was based on the premise that the states no longer had any need to regulate abortion because the advances of modern medicine had now made abortion "relatively safe." Therefore, the Justices concluded, it is unconstitutional to prevent physicians from providing abortions as a "health" service to women.[34] National abortion policy is built upon this judicial "fact" that abortion is a "safe" procedure. If this "fact" is found to be false, then national policy toward abortion must be re-evaluated. Indeed, if it is found that abortion may actually be dangerous to health of women, there is just cause for governments to regulate or prohibit abortion in order to protect their citizens. This is especially true since over 1.5 million women undergo abortions each year. Since the Court's ruling in 1973, there have been many studies into the aftereffects of abortion. Their combined results paint a haunting picture of physical and psychological damage among millions of women who have undergone abortions.

THE PHYSICAL COMPLICATIONS OF ABORTION

National statistics on abortion show that 10% of women undergoing induced abortion suffer from immediate complications, of which one-fifth (2%) were considered major.[9,11] Over one hundred potential complications have been associated with induced abortion. "Minor" complications include: minor infections, bleeding, fevers, chronic abdominal pain, gastro-intestinal disturbances, vomiting, and Rh sensitization. The nine most common "major" complications which are infection, excessive bleeding, embolism, ripping or perforation of the uterus, anesthesia complications, convulsions, hemorrhage, cervical injury, and endotoxic shock.[23] In a series of 1,182 abortions which occurred under closely regulated hospital conditions, 27 percent of the patients acquired post-abortion infection lasting 3 days or longer.[27] While the immediate complications of abortion are usually treatable, these complications frequently lead to long-term reproductive damage of much more serious nature. For example, one possible outcome of abortion related infections is sterility. Researchers have reported that 3 to 5 percent of aborted women are left inadvertently sterile as a result of the operation's latent morbidity.[33,23] The risk of sterility is even greater for women who are infected with a venereal disease at the time of the abortion.[30] In addition to the risk of sterility, women who acquire post-abortal infections are five to eight times more likely to experience ectopic pregnancies.[7,20] Between 1970-1983, the rate of ectopic pregnancies in USA has risen 4 fold.[4] Twelve percent of all maternal deaths due to ectopic pregnancy.[2] Other countries which have legalized abortion have seen the same dramatic increase in ectopic pregnancies.[14,30] Cervical damage is another leading cause of long term complications following abortion. Normally the cervix is rigid and tightly closed. In order to perform an abortion, the cervix must be stretched open with a great deal of force. During this forced dilation there is almost always causes microscopic tearing of the cervix muscles and occasionally severe ripping of the uterine wall, as well. According to one hospital study, 12.5% of first trimester abortions required stitching for cervical lacerations.[31] Such attention to detail is not normally provided at an outpatient abortion clinics. Another study found that lacerations occurred in 22 percent of aborted women.[1] Women under 17 have been found to face twice the normal risk of suffering cervical damage due to the fact that their cervixes are still "green" and developing.[26,28] Whether microscopic or macroscopic in nature, the cervical damage which results during abortion frequently results in a permanent weakening of the cervix. This weakening may result in an "incompetent cervix" which, unable to carry the weight of a later "wanted" pregnancy, opens prematurely, resulting in miscarriage or premature birth. According to one study, symptoms related to cervical incompetence were found among 75% of women who undergo forced dilation for abortion.[32] Cervical damage from previously induced abortions increase the risks of miscarriage, premature birth, and complications of labor during later pregnancies by 300 - 500 percent.[12,15,19,33] The reproductive risks of abortion are especially acute for women who abort their first pregnancies. A major study of first pregnancy abortions found that 48% of women experienced abortion-related complications in later pregnancies. Women in this group experienced 2.3 miscarriages for every one live birth.[19] Yet another researcher found that among teenagers who aborted their first pregnancies, 66% subsequently experienced miscarriages or premature birth of their second, "wanted" pregnancies.[25] When the risks of increased pregnancy loss are projected on the population as a whole, it is estimated that aborted women lose 100,000 "wanted" pregnancies each year because of latent abortion morbidity.[23] In addition, premature births, complications of labor, and abnormal development of the placenta, all of which can result from latent abortion morbidity, are leading causes of handicaps among newborns.[16] Looking at premature deliveries alone, it is estimated that latent abortion morbidity results in 3000 cases of acquired cerebral palsy among newborns each year.[23,33] Finally, since these pregnancy problems pose a threat to the health of the mothers

too, women who have had abortions face a 58 percent greater risk of dying during a later pregnancy.[23]

THE PSYCHOLOGICAL EFFECTS OF ABORTION

Researchers investigating post-abortion reactions report only one positive emotion: relief. This emotion is understandable, especially in light of the fact that the majority of aborting women report feeling under intense pressure to "get it over with."[8,23] Temporary feelings of relief are frequently followed by a period psychiatrists identify as emotional "paralysis," or post-abortion "numbness."[18] Like shell-shocked soldiers, these aborted women are unable to express or even feel their own emotions. Their focus is primarily on having survived the ordeal, and they are at least temporarily out of touch with their feelings. Studies within the first few weeks after the abortion have found that between 40 and 60 percent of women questioned report negative reactions.[3,23,35] Within 8 weeks after their abortions, 55% expressed guilt, 44% complained of nervous disorders, 36% had experienced sleep disturbances, 31% had regrets about their decision, and 11% had been prescribed psychotropic medicine by their family doctor.[3] In one study of 500 aborted women, researchers found that 50 percent expressed negative feelings, and up to 10 percent were classified as having developed "serious psychiatric complications."[10] Thirty to fifty percent of aborted women report experiencing sexual dysfunctions, of both short and long duration, beginning immediately after their abortions.[23,8] These problems may include one or more of the following: loss of pleasure from intercourse, increased pain, an aversion to sex and/or males in general, or the development of a promiscuous life-style. Up to 33 percent of aborted women develop an intense longing to become pregnant again in order to "make up" for the lost pregnancy, with 18 percent succeeding within one year of the abortion.[23,22,29] Unfortunately, many women who succeed at obtaining their "wanted" replacement pregnancies discover that the same problems which pressured them into having their first abortion still exist, and so they end up feeling "forced" into yet another abortion. In a study of teenage abortion patients, half suffered a worsening of psychosocial functioning within 7 months after the abortion. The immediate impact appeared to be greatest on the patients who were under 17 years of age and for those with previous psychosocial problems. Symptoms included: self-reproach, depression, social regression, withdrawal, obsession with need to become pregnant again, and hasty marriages.[29] The best available data indicates that on average there is a five to ten year period of denial during which a woman who was traumatized by her abortion will repress her feelings.[23,24] During this time, the woman may go to great lengths to avoid people, situations, or events which she associates with her abortion and she may even become vocally defensive of abortion in order to convince others, and herself, that she made the right choice and is satisfied with the outcome. In reality, these women who are subsequently identified as having been severely traumatized, have failed to reach a true state of "closure" with regard to their experiences. Repressed feelings of any sort can result in psychological and behavioral difficulties which exhibit themselves in other areas of one's life. An increasing number of counselors are reporting that unacknowledged post-abortion distress is the causative factor in many of their female patients, even though their patients have come to them seeking therapy for seemingly unrelated problems.[13,17] Other women who would otherwise appear to have been satisfied with their abortion experience, are reported to enter into emotional crisis decades later with the onset of menopause or after their youngest child leaves home.[6,21] Numerous researchers have reported that post abortion crises are often precipitated by the anniversary date of the abortion or the unachieved "due date."[23,29] These emotional crises may appear to be inexplicable and short-lived, occurring for many years until a connection is finally established during counseling sessions. A 5 year retrospective study in two Canadian provinces found that 25% of aborted women made visits to psychiatrists as compared to 3% of the control group.[5] Women who have undergone post-abortion counseling report over 100 major reactions to abortion. Among the most frequently reported are: depression, loss of self-esteem, self-destructive behavior, sleep disorders, memory loss, sexual dysfunction, chronic problems with relationships, dramatic personality changes, anxiety attacks, guilt and remorse, difficulty grieving, increased tendency toward violence, chronic crying, difficulty concentrating, flashbacks, loss of interest in previously enjoyed activities and people, and difficulty bonding with later children.[23,24] Among the most worrisome of these reactions is the increase of self-destructive behavior among aborted women. In a survey of over 100 women who had suffered from post-abortion trauma, fully 80 percent expressed feelings of "self-hatred." In the same study, 49 percent reported drug abuse and 39 percent began to use or increased their use of alcohol. Approximately 14 percent described themselves as having become "addicted" or "alcoholic" after their abortions. In addition, 60 percent reported suicidal ideation, with 28 percent actually attempting suicide, of which half attempted suicide two or more times.[24]

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Pregnancy-Related Mortality Surveillance --- United States, 1991—1999

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ABSTRACT

Problem/Condition: The risk of death from complications of pregnancy has decreased approximately 99% during the twentieth century, from approximately 850 maternal deaths per 100,000 live births in 1900 to 7.5 in 1982. However, since 1982, no further decrease has occurred in maternal mortality in the United States. In addition, racial disparity in pregnancy-related mortality ratios persists; since 1940, mortality ratios among blacks have been at least three to four times higher than those for whites. The Healthy People 2000 objective for maternal mortality of no more than 3.3 maternal deaths per 100,000 live births was not achieved during the twentieth century; substantial improvements are needed to meet the same objective for Healthy People 2010.

Reporting Period Covered: This report summarizes surveillance data for pregnancy-related deaths in the USA for 1991--1999.

Description of System: The Pregnancy Mortality Surveillance System was initiated in 1987 by CDC in collaboration with state health departments and the American College of Obstetricians and Gynecologists Maternal Mortality Study Group. Health departments in the 50 states, the District of Columbia, and New York City provide CDC with copies of death certificates and available linked outcome records (i.e., birth certificates or fetal death certificates) of all deaths occurring during or within 1 year of pregnancy. State maternal mortality review committees, the media, and individual providers report a limited number of deaths not otherwise identified. Death certificates and relevant birth or fetal death certificates are reviewed by clinically experienced epidemiologists at CDC to determine whether they are pregnancy-related.

Results: During 1991--1999, a total of 4,200 deaths were determined to be pregnancy-related. The overall pregnancy-related mortality ratio was 11.8 deaths per 100,000 live births and ranged from 10.3 in 1991 to 13.2 in 1999. The pregnancy-related mortality ratio for black women was consistently higher than that for white women for every characteristic examined. Older women, particularly women aged ≥35 years and women who received no prenatal care, were at increased risk for pregnancy-related death. The distribution of the causes of death differed by pregnancy outcome. Among women who died after a live birth (i.e., 60% of the deaths), the leading causes of death were embolism and pregnancy-induced hypertension.

Interpretation: The reported pregnancy-related mortality ratio has substantially increased during 1991--1999, probably because of improved ascertainment of pregnancy-related deaths. Black women continued to have a 3--4 times higher pregnancy-related mortality ratio than white women. In addition, pregnancy-related mortality has the largest racial disparity among the maternal and child health indicators. Reasons for this difference could not be determined from the available data.

Public Health Actions: Continued surveillance and additional studies should be conducted to monitor the magnitude of pregnancy-related mortality, to identify factors that contribute to the continuing racial disparity in pregnancy-related mortality, and to develop effective strategies to prevent pregnancy-related mortality for all women. In addition, CDC is working with state health departments, researchers, health-care providers, and other stakeholders to improve the ascertainment and classification of pregnancy-related deaths.

Introduction The reduction of maternal mortality is one of the Healthy People 2010 objectives for the United States. This objective is a public health priority with the same goal as the Healthy People 2000 objective of no more than 3.3 maternal deaths per 100,000 live births (*1--2*). The risk of death from

complications of pregnancy decreased substantially during the twentieth century, from 850 maternal deaths per 100,000 live births in 1900 to 7.5 in 1982, according to official U.S. vital statistics (*3*). However, this progress halted in 1982, and the mortality ratio has fluctuated between seven and eight maternal deaths per 100,000 live births since that time (*4--5*). In addition, a continuing disparity exists in the risk for pregnancy-related death between black women and white women. The pregnancy-related mortality ratios (pregnancy-related deaths per 100,000 live births) for black women are 3--4 times higher than for white women (*6--10*). Prevention of mortality attributable to pregnancy is a primary public health objective. Pregnancy complications remain an important concern for clinical medicine and for the health-care system. In 1987, CDC's Division of Reproductive Health, in collaboration with state health departments and the American College of Obstetricians and Gynecologists (ACOG) Maternal Mortality Study Group, established the Pregnancy Mortality Surveillance System (PMSS) (*11*). This system provides ongoing surveillance of all pregnancy-related deaths reported through individual state health departments, maternal mortality review committees, media, and individual providers. Therefore, PMSS permits increased precision in measuring the magnitude of pregnancy-related mortality and identifying the groups at increased risk of death than do systems relying on death certificate data alone. This report summarizes the analysis of identified pregnancy-related deaths in the United States during 1991--1999.

METHODS

PMSS collects data regarding all reported deaths that are causally related to pregnancy. The first step is to identify all deaths occurring during pregnancy or within 1 year of pregnancy. Methods used to establish this temporal relation between pregnancy and a death included 1) a pregnancy check box had been marked on the death certificate, 2) the death certificate had indicated that the woman was pregnant at the time of death, or 3) the death certificate of the reproductive-aged woman had been matched with a birth certificate or fetal death certificate for a delivery that occurred within 1 year before the woman's death. Health departments in the 50 states, the District of Columbia, and New York City voluntarily provided CDC with copies of death certificates that were causally related to pregnancy. For deaths that occurred after a live birth or stillbirth, the matching birth or fetal death certificates were also provided by the health departments. In addition to requesting certificates of deaths that are causally related to pregnancy, beginning with deaths occurring in 1991, states were asked to send certificates of all deaths that occurred during pregnancy or within 1 year of pregnancy, regardless of the cause of death or relation between pregnancy and the death. Pregnancy-related deaths occurring during 1991--1999 are reported because these are the most recent data available that have not been published previously in an *MMWR Surveillance Summary*. Data were coded after review of all available information from death certificates (including notes written on the margins of death certificates), maternal mortality review committee reports, autopsy reports, and matched birth and fetal death certificates. Matched birth certificates or fetal death certificates were available for the majority of women who delivered a live-born or stillborn infant. These certificates provided information not otherwise available on the death certificate (e.g., prenatal care and live birth order). Data concerning all deaths were reviewed and classified by clinically experienced medical epidemiologists at CDC regarding the immediate and underlying cause of death, associated obstetric conditions, and the outcome of pregnancy. In this report, a woman's death was classified as pregnancy-related if it occurred during pregnancy or within 1 year of pregnancy and resulted from 1) complications of the pregnancy, 2) a chain of events that was initiated by the pregnancy, or 3) the aggravation of an unrelated condition by the physiologic effects of the pregnancy or its management (*11*). Pregnancy-related mortality ratios were calculated by using the number of deaths obtained from the PMSS (numerator) and live-birth data (denominator) obtained from the 1991--1999 national natality files compiled by CDC's National Center for Health Statistics (*12*). This standard live-birth population included all women who delivered a live birth during 1991--1999. For both the numerator and the denominator of pregnancy-related mortality ratios, race was defined as the race of the mother and classified as white, black, or other. Other races included Asian/Pacific Islander, American Indian/Alaska Native, and those reported as other. All pregnancy-related deaths of women with unknown races (n = 19) were proportionally redistributed into known categories. Because of the limited number of pregnancy-related deaths in the other race category (n = 208), data regarding other race were not included for race-specific analyses. The women's ages at the time of death were grouped into standard 5-year intervals. Education information was obtained from either the death, birth, or fetal death certificates and was based on the total years of education completed at the time of death. The analysis of education was restricted to

women aged ≥20 years, an age by which the majority of women would have had the opportunity to graduate from high school. The state of Georgia did not report maternal education during 3 years of the surveillance period (1997--1999); therefore, women who died in Georgia were excluded from analyses by education. Marital status was categorized as married (currently married) or unmarried (never married, divorced, separated, or widowed). Information concerning prenatal care and live-birth order were limited to women who delivered a live-born infant, because these data were not consistently available for women who had a stillbirth or abortion. Onset of prenatal care was categorized as initiation in the first, second, and third trimesters, or no prenatal care. Live birth order, defined as the number of live births including the index pregnancy in which the woman had delivered, was used as a proxy for parity. Time interval, defined as number of days between the end of pregnancy and maternal death, was calculated and used as a categorical variable. All analyses were performed by using SAS® software system (*13*). Logistic regression was based on maximum likelihood estimation methods and used to test the significance of the change in mortality ratios over time and to compute 95% confidence intervals and associated p values. However, because of the high number of live births in each year (approximately 4 million live births per year), a limited increase in the mortality ratio over time could lead to a statistically significant result. Ninety-five percent confidence intervals were provided for risk ratios by using the associated standard errors *(14)*. Unless otherwise stated, all p values <0.05 were considered statistically significant.

RESULTS

During 1991--1999, a total of 7,342 deaths were reported to PMSS. Of these, 2,919 deaths occurred during pregnancy or within 1 year of pregnancy but were not causally related to pregnancy. Although causally related to pregnancy, 106 deaths were excluded from this analysis because the time interval between the end of pregnancy and maternal death exceeded 1 year, and 117 deaths were excluded because whether the death was related to a pregnancy was unknown. The remaining 4,200 deaths were used as the basis for this analysis. A matched birth certificate was available for 93% of deaths that occurred after a live birth, and a matched fetal death certificate was available for 88% of deaths that occurred after a stillbirth. The overall pregnancy-related mortality ratio was 11.8 deaths per 100,000 live births for the 9-year surveillance period. The ratio significantly increased from 10.3 in 1991 to 13.2 in 1999 ($p<0.001$ for trend) . The pregnancy-related mortality ratio differed by maternal age; the risk for pregnancy-related death increased substantially among women aged ≥35 years . Women aged ≥40 years had a pregnancy-related mortality ratio that was two times higher than that among women aged 35--39 years and approximately 4 times higher than women aged 30--34 years. Race was strongly associated with pregnancy-related mortality; black women were approximately four times more likely to die from pregnancy-related causes than were white women.

Race-specific pregnancy-related mortality ratios were higher for black women than for white women of all ages. In comparison with pregnancy-related mortality ratios for white women, excess risk for black women increased substantially with age and was most evident at aged >39 years (i.e., the ratio was 5.5 times higher for black women). Overall, the risk for pregnancy-related death among unmarried women was higher than that among married women (Figure 3). However, the pattern of this risk differed for black women and white women. The mortality ratio for black married women was higher than that for black unmarried women; the ratio was lower for white married women compared with white unmarried women. Overall, women who had >12 years of education had the lowest pregnancy-related mortality ratio. The risk for pregnancy-related death decreased with increasing levels of education among women aged 25--39 years (Figure 4). At all levels of education, pregnancy-related mortality ratios for black women were 3--4 times higher than ratios for white women. The most frequent pregnancy outcome associated with a pregnancy-related death was live birth (60%), followed by undelivered pregnancy (10%), and stillbirth (7%) (Figure 5). The outcome of pregnancy at the time of death was not known for 552 (13%) of the women. The only significant differences between black and white women in relation to pregnancy outcomes was the higher percentage of ectopic pregnancy (8%) among black women than among white women (4%) ($p<0.001$). Of women who died after a live birth, 4% had not received any prenatal care, and 24% had missing data regarding prenatal care. Mortality ratios for each trimester of prenatal-care initiation were 3--4 times higher for black women than for white women (Table 2). Overall, the pregnancy-related mortality ratio was 3--4 times higher among women who received no prenatal care compared with women who received any prenatal care. Women who received no prenatal care were more likely to have had ≥5 previous live births

and have fewer years of education. Among women whose pregnancies resulted in a live birth, the risk for pregnancy-related death increased with increasing live-birth order (Table 2). For both white and black women, the pregnancy-related mortality ratios were approximately 2 times higher for women after the delivery of a fifth or higher live birth than for women after a first live birth. Overall, a three- to fourfold disparity exists in pregnancy-related deaths for black women compared with white women for each level of parity. The leading causes of pregnancy-related death were embolism (20%), hemorrhage (17%), and pregnancy-induced hypertension (16%) (Table 3). Although the percentages of all pregnancy-related deaths attributable to these causes have gradually decreased in the previous two decades, the percentage of deaths attributable to cardiomyopathy increased from 6% in 1991 to 9% in 1999. However, this increase was not statistically significant. Deaths attributable to other medical conditions have significantly increased from 14% in 1991 to 20% in 1999 ($p<0.05$). Deaths attributable to other medical conditions consist primarily of cardiovascular problems (34%), pulmonary problems (11%), and neurologic or neurovascular problems (7%). The leading causes of death differed by pregnancy outcome (Table 3). The leading causes of death among women who died after a live birth were embolism (21%), pregnancy-induced hypertension (19%), and other medical conditions (17%). Among women whose pregnancies ended in a stillbirth, the leading causes of death were hemorrhage (21%) (from abruptio placenta and uterine rupture), pregnancy-induced hypertension (20%), and infection (19%). Hemorrhage accounted for 221 (93%) of 237 deaths associated with ectopic pregnancies. Among women whose pregnancies ended in a spontaneous or induced abortion, infection was the cause of death for 34% of the women, followed by hemorrhage (22%) and other medical conditions (16%). Women who were still pregnant (undelivered) at the time of death most frequently died from other medical conditions (e.g. cardiovascular and neurologic problems) (34%) and embolism (25%), mostly thrombotic. Embolism, hemorrhage, and pregnancy-induced hypertension were the leading causes of death for both white and black women. The cause-specific, pregnancy-related mortality ratio was approximately 3--4 times higher for black women compared with white women for each cause of death. However, the risk for death as a result of cardiomyopathy and complications of anesthesia was 6 times higher for black women than for white women. Information regarding the time interval between the end of pregnancy and death was known for 3,378 (80%) of 4,200 maternal deaths. Of these, 1,160 (34%) women died within 24 hours after the end of their pregnancy; 1,845 (55%) deaths occurred during 1--42 days of pregnancy; and 11% died during 43--365 days. In addition, time interval varied by cause of death (Figure 6). Among women who died from embolism, the majority of deaths (52%) occurred within 24 hours after the pregnancy ended, and 68% of deaths attributed to hemorrhage occurred within 48 hours after the pregnancy ended. Of the 116 women who died as a result of cardiomyopathy, 45% died during 43--365 days after the end of pregnancy.

DISCUSSION

The Healthy People 2000 and Healthy People 2010 objectives address the same goal for reducing maternal deaths to 3.3 maternal deaths per 100,000 live births (*1--2*). However, this goal was not met by the year 2000, and substantial improvement is needed to attain the goal by 2010. The pregnancy-related mortality ratios reported by the PMSS increased from 10.3 deaths per 100,000 live births in 1991 to 13.2 in 1999. This increase in the pregnancy-related mortality ratio probably reflects the enhanced ascertainment of cases for this surveillance system (e.g., increased use of linkages, pregnancy check boxes, and the new request to identify all deaths during pregnancy or within 1 year of pregnancy). Embolism, hemorrhage, and pregnancy-induced hypertension complications were the leading causes of pregnancy-related deaths during 1991--1999 (*7*). Although a substantial reduction in the percentage of deaths attributable to these causes has occurred during the previous two decades (*9, 15*), the percentage of deaths attributable to cardiomyopathy and other medical conditions increased during the surveillance period (*16*). The increase in the number of cardiomyopathy-related deaths and deaths attributable to other medical conditions likely reflects improved ascertainment of pregnancy-related deaths by linking death certificates of women to live and stillbirths occurring within 1 year of the mother's death. The increasing number of deaths caused by other medical conditions might also be affected by changes in the age distribution of women giving birth. Women in the United States are becoming pregnant at older ages, and the prevalence of chronic medical conditions increases with age (*17--18*). In addition, older women are at increased risk for pregnancy-related death (*7--10*) and adverse reproductive health outcomes, particularly women aged ≥35 years (*17, 19*). Pregnancy-related mortality ratios continued to be 3--4 times higher for black women than for white women (*6--10*). In

addition, the pregnancy-related mortality ratios for black women aged >39 years were particularly high in comparison with white women in the same age group (*7, 19*). The risk for pregnancy-related death resulting from cardiomyopathy and complications of anesthesia were both approximately 6 times higher for black women than for white women.

Among women aged ≥20 years, higher levels of education were associated with decreasing pregnancy-related mortality ratios; however, pregnancy-related deaths for black women were 3--4 times higher than that for white women at any education level. Although the overall risk for pregnancy-related death was higher among unmarried women than among married women, this association varied by race. Black married women had a higher mortality ratio than black unmarried women, and the inverse was observed for white women. Of all maternal deaths that occurred after a live birth, 56% of the women received early prenatal care (i.e., during the first trimester) as recommended (*20*), but 4% received no prenatal care at all. Overall, women who received any prenatal care have a lower risk for pregnancy-related mortality in comparison with women who received no prenatal care. Pregnancy-related mortality ratios for black women were higher at each level of prenatal-care initiation than ratios for white women. In addition, the reduction in mortality ratios among women who received prenatal care compared with women who received no prenatal care was higher among white women than among black women. Differences exist, by race, in the content of prenatal care for black women and white women (*21--24*); black women often receive fewer services and insufficient health-promotion education during their prenatal visits (*24--27*). However, the relation between these prenatal care indicators (i.e., content of prenatal care and number of visits) and pregnancy-related mortality is not clear. The characteristics evaluated in this report confirmed the racial disparity in pregnancy-related deaths, but the reasons for disparities could not be determined from the available data. Whether the racial disparity might be related to differences in the seriousness of morbidity, differences in diagnosis and treatment of pregnancy-related complications, or a combination of these factors is unclear. These factors, although not measurable through routine surveillance, probably contributed to the increased risk for pregnancy-related death among black women. Race might also serve as a marker for other sociodemographic risk factors and cultural differences (*28--30*). However, the sources from which data were obtained for this surveillance system had limited information concerning sociodemographic indices, family and community conditions, and other factors that might be associated with the differences in pregnancy-related mortality between black and white women.

LIMITATIONS

Limitations should be considered in the analysis of pregnancy-related mortality during 1991--1999. Although ascertainment methods have improved, pregnancy-related deaths were undetected (*9, 16, 31--35*). Because this report is based on data provided voluntarily by state health departments in the 50 states, the District of Columbia, and New York City (which registers births and deaths separately from New York state), methods used to identify death certificates differed by reporting area. For 1991--1998, the majority of reporting areas identified deaths by the *International Classification of Diseases, Ninth Revision* (ICD-9), codes 630--676 (*36*). Beginning in 1999, the *International Classification of Diseases, Tenth Revision* (ICD-10), was used; however, the use of ICD-10 has not been fully implemented by all reporting areas. Seventeen reporting areas include a check box on their death certificate to indicate whether pregnancy had recently occurred (*37*). The inclusive time interval (i.e., interval between the end of pregnancy and death) used in the check box is inconsistent and varies by state, from 42 days to 18 months. Using a check box has been helpful for health departments to identify additional deaths that occurred during a specified time frame (*37*). However, death certificates ascertained by check box alone did not contain enough information to establish that a causal relation also existed between pregnancy and death. In addition, the increased use of linkages of death certificates of women of reproductive age to live birth or fetal death records occurring within the year before death substantially improves ascertainment of pregnancy-related deaths associated with live-birth or fetal-death outcomes (*16,31- -33,38*). However, this linkage of vital records does not identify pregnancy-related deaths that do not generate a record of pregnancy outcome (e.g., ectopic pregnancies and undelivered events) (*39*). Although having the matched birth or fetal death certificates with maternal death certificates improved the quality and quantity of the available information regarding the pregnancy-related deaths, the assessment of circumstances leading to pregnancy-related death was limited by the absence of detailed clinical data. Pregnancy-related death encompasses a complex

combination of etiologies and pregnancy outcomes, and the underlying risk factors associated with death vary with cause of death and pregnancy outcome. A more accurate classification can be made if the medical information (the lower section of the birth record) is included, but this information is not consistently provided. In addition, certain states are now providing to CDC computer-generated reports that do not include details needed to optimally classify deaths. However, CDC is working with state health departments, researchers, health-care providers, and other stakeholders to improve the ascertainment and classification of pregnancy-related deaths.

PUBLIC HEALTH MEASURES

Although deaths attributable to pregnancy are rare, each death needs to be identified and carefully reviewed at the state level. To accurately identify causes of pregnancy-related mortality in the United States, complete and consistent reporting is needed (*40*). Additional sources of data, including review of the medical and social circumstances of the death, are necessary to understand the effects of medical care, socioeconomic status, access to and content of prenatal care, social environment, and lifestyle on the sequence of events that lead to pregnancy-related deaths. The continuing disparity in pregnancy-related mortality between white and black women indicates the need to identify the differences that contribute to excess mortality among black women. Specific interventions should be developed to reduce pregnancy-related mortality, especially among black women. Pregnancy-related deaths are underreported, and the true number of deaths related to pregnancy might increase from 30%--150% with active surveillance (*16*, *31*--*33*). Therefore, improved surveillance and additional research are needed to assess the magnitude of pregnancy-related deaths, further identify potential risk groups, and investigate the causal pathway that led to the death (*41*). The use of ICD-10 and the revised death certificate will assist in identifying additional maternal deaths. The proposed revision includes a pregnancy check box as a standard element with designated time intervals between the end of pregnancy and death to more effectively identify deaths that are potentially associated with pregnancy. This report provides results from a national population-based data set with sufficient numbers to examine trends and major risk factors for pregnancy-related mortality. It provides information that is needed to develop effective strategies to prevent pregnancy-related mortality for all women.

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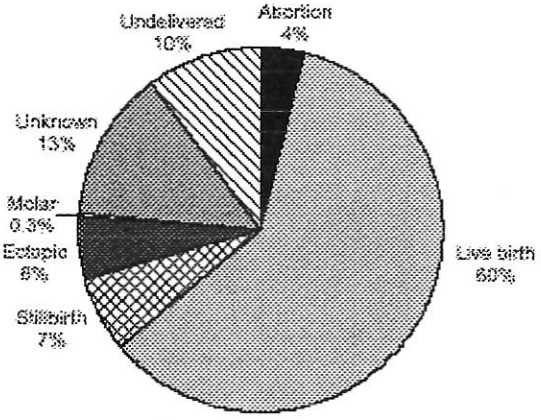
TABLE 3. Causes of pregnancy-related death, by outcome of pregnancy and pregnancy-related mortality ratios (PRMR*) — United States, 1991–1999

Cause of death	Outcome of pregnancy (% distribution)							All outcomes	
	Live birth (n = 2,513)	Stillbirth (n = 275)	Ectopic (n = 237)	Abortion† (n = 165)	Molar (n = 14)	Undelivered (n = 438)	Unknown (n = 552)	% (N = 4,200)	PRMR
Embolism	21.6	18.6	2.1	13.9	28.6	25.1	18.3	19.6	2.3
Hemorrhage	2.7	21.5	93.3	27.8	7.1	8.7	8.7	17.2	2.0
PIH§	19.3	20.0	0	9.6	0	12.3	11.8	15.7	1.8
Infection	11.7	18.9	2.5	33.9	14.3	11.0	12.6	12.6	1.5
Cardiomyopathy	10.1	5.1	0.8	1.8	0	3.4	11.2	8.3	1.0
CVA¶	5.7	0.7	0	1.2	0	3.9	8.5	5.0	0.6
Anesthesia	1.8	0.7	1.3	9.7	0	0	3.4	1.6	0.2
Other**	17.1	14.9	0.4	16.4	50.0	33.6	27.9	19.2	2.3
Unknown	0.6	0	0	0.6	0	2.1	0.4	0.7	0.1
Total††	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	11.8

* Pregnancy-related deaths per 100,000 live births.
† Includes spontaneous and induced abortions.
§ Pregnancy-induced hypertension.
¶ Cerebrovascular accident.
** The majority of the other medical conditions were cardiovascular, pulmonary, and neurologic problems.
†† Percentages might not add to 100.0 because of rounding.

FIGURE 5. Distribution of pregnancy-related deaths, by outcome of pregnancy — United States, 1991–1999



Abortion Surveillance -- United States, 1999

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Abstract

Problem/Condition: CDC began abortion surveillance in 1969 to document the number and characteristics of women obtaining legal induced abortions and to monitor unintended pregnancy.

Reporting Period Covered: This report summarizes and describes data reported to CDC regarding legal induced abortions obtained in the United States in 1999.

Description of System: For each year since 1969, CDC has compiled abortion data by state or area of occurrence. From 1973 through 1997, data were received from or estimated for 52 reporting areas in the United States: 50 states, the District of Columbia, and New York City. Beginning in 1998, CDC compiled abortion data from 48 reporting areas. Alaska, California, New Hampshire, and Oklahoma did not report, and data for these areas were not estimated. The availability of data regarding the characteristics of women who obtained an abortion in 1999 varied by state and by the number of states reporting each characteristic. The total number of legal induced abortions is reported by state of residence and also by state of occurrence for most areas; characteristics of women obtaining abortions in 1999 are reported by state of occurrence.

Results: A total of 861,789 legal induced abortions were reported to CDC for 1999, representing a 2.5% decrease from the 884,273 legal induced abortions reported by the same 48 reporting areas for 1998. The abortion ratio, defined as the number of abortions per 1,000 live births, was 256 in 1999, compared with 264 reported for 1998; the abortion rate for these 48 reporting areas was 17 per 1,000 women aged 15--44 years for 1999, the same as in 1997 and 1998. The highest percentages of abortions were reported for women aged <25 years, women who were white, and unmarried women; slightly more than half were obtaining an abortion for the first time. Fifty-eight percent of all abortions for which gestational age was reported were performed at ≤8 weeks of gestation, and 88% were performed before 13 weeks. From 1992 (when these data were first collected) through 1999, increases have occurred in the percentage of abortions performed at ≤6 weeks of gestation. Few abortions were provided after 15 weeks of gestation; 4.3% were obtained at 16--20 weeks and 1.5% were obtained at ≥21 weeks. A total of 27 reporting areas submitted data stating that they performed medical (nonsurgical) procedures (two of these areas categorized medical abortions with "other" procedures), making up <1.0% of all procedures reported from all reporting areas. In 1998 (for which data have not been published previously and the most recent year for which such data are available), nine women died as a result of complications from known legal induced abortion; no deaths were associated with known illegal abortion.

Interpretation: From 1990 through 1997, the number of legal induced abortions gradually declined. In 1998 and in 1999, the number of abortions continued to decrease when comparing the same 48 reporting areas. In 1998, as in previous years, deaths related to legal induced abortions occurred rarely.

Public Health Action: Abortion surveillance in the United States should continue so that trends and characteristics of women who obtain legal induced abortions can be examined and efforts to prevent unintended pregnancy can be enhanced.

Introduction: CDC began conducting abortion surveillance in 1969 to document the number and characteristics of women obtaining legal induced abortions and to monitor unintended pregnancy. This report is based on abortion data for 1999 provided to CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), Division of Reproductive Health.

Methods

For 1999, CDC compiled data that were voluntarily provided from 48 reporting areas in the United States: 46 states (excluding Alaska, California, New Hampshire, and Oklahoma), the District of Columbia, and New York City. Legal induced abortion was defined as a procedure, performed by a licensed physician or someone acting under the supervision of a licensed physician, that was intended to terminate a suspected or known intrauterine pregnancy and to produce a nonviable fetus at any gestational age (*1,2*). The total number of legal induced abortions was available from all reporting areas; however, not all of these areas collected data regarding some or all of the characteristics of women who obtained abortions. Thus, the availability of these data varied by reporting area in 1999. The majority of reporting areas (45 states, the District of Columbia, and New York City) collected and reported adequate abortion data (i.e., data categorized in accordance with surveillance variables and with ≤15% unknown values) by age of the woman, whereas only 24 states, the District of Columbia, and New York City collected and reported adequate

abortion data by Hispanic ethnicity. Therefore, the findings in this report reflect characteristics of women only from reporting areas that submitted adequate data for those characteristics.

The percentage data for most state tables include unknown values; unknowns have not been redistributed for the calculation of these percentages. However, percentages based only on known values are included for trend data, out-of-area residents, adolescent ages, and two-characteristics tables. For the 48 reporting areas, data concerning the number of women obtaining legal induced abortions were provided by the central health agency.* These agencies provided data on numbers of abortions and characteristics of women by the state in which the abortions were performed (i.e., state of occurrence). For most states, only abortion totals were available by state of residence. However, two states, Delaware and Wisconsin, reported characteristics only for women who were residents and who obtained abortions in the state, but not for women from out of state; and one state (Iowa) provided both numbers and characteristics only for state residents. Two states (Florida and Louisiana) did not report abortion totals by resident status, and two states (Arizona and Massachusetts) provided only the total number of abortions for out-of-state residents without specifying their particular state or area of residence. Women who obtained legal induced abortions were categorized by 5-year age groups and by single years of age for adolescents aged 15--19 years.

Both abortion ratios (number of abortions per 1,000 live births in the same age group per year) and abortion rates (number of abortions per 1,000 women in the same age group per year) are presented by age group. Starting with 1996, ratios were calculated by using the number of live births to residents of each area from birth data reported to CDC's National Center for Health Statistics; numbers had previously been received from state health departments. Rates were calculated by using the number of women residents of each area from tabulations provided by the U.S. Census Bureau. Because nearly all (94%) abortions among women aged <15 years occurred among those aged 13--14 years in 1988 (the latest year for which this information is known) (*3*), the population of women aged 13--14 years was used as the denominator for calculating abortion rates for women <15 years. Rates for women aged ≥40 years were based on the number of women aged 40--44 years. Rates for all women who obtained abortions, however, were based on the population of women aged 15--44 years. Race was categorized by three groups: white, black, and all other races. Other races included Asian/Pacific Islander, American Indian, Alaska Native, and women classified as "other" race. Ethnicity was categorized as Hispanic and non-Hispanic.

As in previous reports, race and ethnicity were provided as separate variables and abortions were not cross-classified by race and ethnicity. Marital status was reported as either married (including women who were married or separated) or unmarried (including those who were never married, divorced, or widowed). Gestational age (in weeks) at the time of abortion was categorized as ≤6, 7, 8 and ≤8, 9--10, 11--12, 13--15, 16--20, and ≥21. Weeks of gestation were estimated in 20 reporting areas as the time elapsed since the woman's last menstrual period. For 18 other states, gestational age was reported on the basis of the physician's estimate (data from the clinical examination including ultrasound results). For the remaining five states, gestational age came from a combination of physician's estimates and the time elapsed since the woman's last menstrual period. Most areas (41 of 43) that reported adequate data on weeks of gestation at the time of abortion also reported abortions performed at ≤8 weeks separately for ≤6, 7, and 8 weeks of gestation. CDC has periodically reported data on abortion-related deaths since these deaths were first included in the Abortion Surveillance Report for 1973 *(4,5)*. An abortion-related death was defined as a death resulting from a) a direct complication of an abortion, b) an indirect complication caused by the chain of events initiated by abortion, or c) aggravation of a preexisting condition by the physiologic or psychologic effects of the abortion *(1,2)*.

Sources of data for abortion-related deaths included national and state vital records, maternal mortality review committees, surveys, private citizens and groups, media reports, health-care providers, medical examiners' reports, and computerized searches of full-text newspaper databases. All deaths associated with any type of abortion, induced or spontaneous, were investigated. For each death possibly related to an induced abortion or an abortion of unknown type, clinical records and autopsy reports were requested and reviewed by two clinically experienced medical epidemiologists to determine the cause of death and whether the death was abortion related. Each abortion-related death was then categorized as legal induced, illegal induced, spontaneous, or unknown (whether induced or spontaneous). Abortion-related deaths for 1972--1998 are provided in this report. The 1998 data have not been published previously and are the most recent data available. National case-fatality rates were calculated as the number of known legal induced abortion-related deaths per 100,000 reported legal induced abortions. Case-fatality rates for 1972--1997 are provided in this report. No case-fatality rate was calculated for 1998 because only 48 states reported abortions; thus, the denominator for the national case-fatality rate was unknown.

Results

Overall, the annual number of legal induced abortions in the United States increased gradually until it peaked in 1990, and it has generally declined thereafter (Figure 1). In 1999, a total of 861,789 legal induced abortions were reported to CDC by 48 reporting areas. This represents a 2.5% decrease from 1998, for which 884,273 legal induced abortions were reported from the same 48 reporting areas (*5*) (Table 1). The national legal induced abortion ratio increased from 196 per 1,000 live births in 1973 (the first year that 52 areas reported) to 358 per 1,000 live births in 1979 and remained stable through 1981 (Figure 1) (Table 2). The ratio peaked at 364 per 1,000 live births in 1984 and since then has shown a generally steady decline. In 1999, the abortion ratio was 256 per 1,000 live births in the 48 reporting areas. This represents a 3.2% decrease from 1998 (264 per 1,000 live births) in the

same 48 reporting areas (5) (Table 2). However, approximately 30--35 points of the apparent decrease in the 1998 and 1999 ratios compared with earlier years can be attributed to the current exclusion of the four nonreporting states, which had relatively high abortion ratios in earlier years. The national legal induced abortion rate increased from 14 abortions per 1,000 women aged 15--44 years in 1973 (the first year that 52 areas reported) to 25 per 1,000 in 1980. In the 1980s and early 1990s, the rate remained stable at 23--24 abortions per 1,000 women, and from 1994 through 1997 it again stabilized at 20--21. The abortion rate has remained unchanged since 1997 at 17 per 1,000 women in the same 48 reporting areas. Again, the seeming decline after 1997 is due to the exclusion of the four nonreporting states with relatively high abortion rates. The numbers, ratios, and rates of reported legal induced abortions are presented by area of residence as well as by area of occurrence (Table 3). In 1999, as in previous years, the highest number of reported legal induced abortions occurred in New York City (102,334), Florida (83,971), and Texas (80,739); the fewest occurred in Wyoming (110), South Dakota (740), and Idaho (867) (Table 3). The abortion ratios by state or area of occurrence ranged from 18 per 1,000 live births in Wyoming to 980 per 1,000 live births in the District of Columbia. The rates by occurrence ranged from 1 per 1,000 women aged 15--44 in Wyoming to 59 per 1,000 women aged 15--44 in the District of Columbia. These ratios and rates should be viewed with consideration of the sizable variation by state in the percentage of abortions obtained by out-of-state residents.

In 1999, approximately 9% of reported abortions were obtained by out-of-state residents. The percentages ranged from 0.5% in Hawaii to 55% in the District of Columbia (Table 3). Data by state of residence are not complete because four states (Alaska, California, New Hampshire, and Oklahoma) did not report, and five states (Arizona, Florida, Iowa, Louisiana, and Massachusetts) could not provide any data concerning the residence status of all women obtaining abortions in their state. Women with known age reported as 20--24 years obtained 32% of all abortions; women aged <15 years obtained <1.0% of all abortions in areas where age was reported (Table 4). Abortion ratios were highest for the youngest women (709 abortions per 1,000 live births for women aged <15 years) and lowest for women aged 30--34 years (152 per 1,000 live births) (Figure 2) (Table 4). In contrast to abortion ratios, among women for whom age was reported, abortion rates were highest for women aged 20--24 years (35 abortions per 1,000 women) and lowest for women at the extremes of reproductive age (2 abortions per 1,000 women aged 13--14 years and 2 per 1,000 women aged 40--44 years) (Table 4). Among adolescents (aged <20 years), the percentage of abortions obtained increased with increasing age. However, the abortion ratio was highest for those <15 years (708 abortions per 1,000 live births)[†] and lowest for those aged 19 years (343 per 1,000 live births) (Table 5). Conversely, the rates of abortions were lowest for adolescents aged <15 years (2 per 1,000 women aged 13--14 years) and highest for women aged 19 years (30 per 1,000 women aged 19 years) (Table 5).

For women in the majority of age groups, the abortion ratio increased from 1974 through the early 1980s and declined thereafter, particularly for the younger (≤19) and oldest reproductive-aged women (Figure 3). Abortion ratios for women <15 years have always been higher than those for the other age groups. The abortion ratio for women aged 20--34 years (the groups with the highest fertility rates) (*6*) has remained relatively stable since the mid-1980s. In 1999, for women whose weeks of gestation at the time of abortion were adequately reported, 57% of reported legal induced abortions were known to have been obtained at ≤8 weeks of gestation, and 87% were reported at <13 weeks (Table 6). Overall, 22% of abortions were performed at ≤6 weeks of gestation, 17% at 7 weeks, and 18% at 8 weeks (Table 7). Few reported abortions were provided after 15 weeks of gestation; 4.3% were known to have been obtained at 16--20 weeks, and 1.5% at ≥21 weeks. For women whose type of procedure was adequately reported, almost all (98%) abortions were known to have been performed by curettage and 0.2% by intrauterine instillation (Table 8). Hysterectomy and hysterotomy were included in the "other" procedure category and were used in <0.01% of all abortions. Twenty-seven reporting areas submitted data stating that they performed medical (nonsurgical) procedures[§] (two of these areas included medical abortions in the "other" category), making up approximately 1% of all procedures reported from all areas with adequate reporting. However, certain other reporting areas do not include medical abortions as a separate category in their abortion reporting form. For 1999, 25 reporting areas submitted data stating that they performed a total of 6,278 medical (nonsurgical) procedures. This reflects an increase of 28% from the 4,899 medical abortions reported by 22 reporting areas for 1998 (5). We do not know to what extent the 6,278 medical (nonsurgical) abortions reported to CDC for 1999 represent the use of this procedure in all reporting areas. In the 37 areas for which race was adequately reported, approximately 55% of women who obtained legal induced abortions were known to be white, 36% were black and 6% were of other races. (Table 9).

However, the abortion ratio for black women (529 per 1,000 live births) was 3.0 times the ratio for white women (177 per 1,000 live births). Additionally, the abortion ratio for women of other races (367 per 1,000 live births) was 2.1 times the ratio for white women. The abortion rate for black women (31 per 1,000 women) was 3.0 times the rate for white women (10 per 1,000 women). The abortion rate for women of other races (26 per 1,000 women) was 2.5 times the rate for white women. Twenty-four states, the District of Columbia, and New York City reported adequate data[¶] concerning the ethnicity of women who obtained legal induced abortions (Table 10). The percentage of abortions known to have been obtained by Hispanic women in these reporting areas ranged from 0.2% in Kentucky to 46% in New Mexico. For Hispanic women in these reporting areas, the abortion ratio was 261 per 1,000 live births. The abortion rate for Hispanic women was 19 abortions per 1,000 women. For women whose marital status was adequately reported, 78% of women who obtained abortions were known to be unmarried (Table 11). The abortion ratio for unmarried women was 8.6 times the ratio for married women (604 versus 70 abortions per 1,000 live births). For women for whom data on previous live births were adequately reported, 39% of women who obtained legal induced abortions were known to have had no previous live births, and 86% had had ≤2 previous live births (Table 12).

The abortion ratio was highest for women who had three previous live births (298 per 1,000 live births) and lowest for women who had one previous live birth (206 per 1,000 live births). In 1999, of women who obtained an abortion and whose number of previous abortions was adequately reported, 52% were known to have obtained an abortion for the first time. Nineteen percent of women had ≥2 previous abortions (Table 13). For women whose age and race were known, white women had a greater percentage of abortions at the youngest (≤19 years) and oldest (≥35 years) age groups compared with women of black or other races (20% versus 18%, and 12% versus 10%, respectively) (Table 14). For women whose marital status and race were both known, the percentage of reported abortions among black or other races that were obtained by unmarried women (84%) was higher than that obtained by unmarried white women (79%). Among women obtaining abortions whose age and Hispanic ethnicity were known (25 reporting areas), the percentage of abortions obtained by older women (≥35 years) of non-Hispanic ethnicity (12%) was greater than that for older women of Hispanic ethnicity (9%) (Table 15). For women whose marital status and ethnicity were known (24 reporting areas), the percentage of reported abortions obtained by unmarried women was similar for non-Hispanic and Hispanic women (Table 15). Data were not available to cross-classify race by Hispanic ethnicity. As in the past, approximately 88% of all abortions (for which gestational age at the time of abortion was reported and known) were obtained during the first 12 weeks of gestation (Table 1). The percentage of women who obtained an abortion at ≤8 weeks of gestation increased with age (Figure 4) (Table 16). This association is most evident for abortions obtained at ≤6 weeks' gestation (Table 17).

The percentage of women who obtained an abortion at ≥21 weeks of gestation decreased with age for women through 25--29 years and remained stable for women in the older age groups (Table 16). Among women with known race and weeks of gestation, white women and women of other races were more likely than black women to obtain abortions at ≤6 or 7 weeks of gestation (Table 17). Among women with known ethnicity and weeks of gestation, 23% of Hispanic women obtained abortions at ≤6 weeks of gestation and 59% obtained abortions at ≤8 weeks' gestation (Table 17). For women whose type of procedure and weeks of gestation were known, approximately 99% of reported abortions obtained at ≤15 weeks of gestation were performed using curettage (primarily suction procedures) (Table 18). Approximately 88% of reported medical (nonsurgical) abortions (n = 4,777) were performed at ≤8 weeks' gestation; these 4,777 represent 1.3% of all abortions that are performed at ≤8 weeks' gestation. At ≥16 weeks of gestation, medical (nonsurgical) abortions (n = 491) made up 1.3% of all abortions, whereas at all other gestational ages, medical (nonsurgical) abortions made up <0.2%. Intrauterine instillation involved the use of saline or prostaglandin and was used rarely (0.2% of all abortions), primarily at ≥16 weeks of gestation.

From the National Pregnancy Mortality Surveillance System, CDC identified 22 maternal deaths with some indication of abortion on the death certificate for 1998. Investigation of these cases indicated that nine of these 22 deaths were known to be related to legal induced abortion and none to illegal induced abortion (Table 19). Eleven deaths were due to spontaneous abortion, and one death was due to abortion of unknown type. One death was determined not to be abortion related. Numbers of deaths due to legal induced abortion were highest before the 1980s, with very few deaths occurring in 1998 (Table 19). Possible abortion-related deaths that occurred during 1999 are currently being investigated.

Discussion

A total of 861,789 legal induced abortions were reported for 1999 in the United States from 46 states, the District of Columbia, and New York City. This is a decline of 2.5% from the legal induced abortions reported for 1998 from the same 48 reporting areas (5). In previous years, a substantial number of legal induced abortions were estimated to have been performed in California, (e.g., >23% of the U.S. total in 1997) (7). The lack of data for California for 1999 explains most of the 27% decrease from the annual number of abortions reported in 1997 (7) as well as some of the decrease in the total ratio and rate. After 1997, data were no longer estimated for nonreporting states (5). The abortion ratio for 1999 (256 per 1,000 live births) was a 3.2% decline from the previous year and is the lowest recorded level since 1975 (8). The abortion rate (17 per 1,000 women aged 15--44 years) was the same as in 1997 and 1998 (Table 2). The declines in the abortion ratio and rate over time may reflect multiple factors, including a decrease in the number of unintended pregnancies (9); a shift in the age distribution of women toward the older and less fertile ages (6); reduced access to abortion services, including the passage of abortion laws that affect adolescents (e.g., parental consent or notification laws and mandatory waiting periods) (10--13); and changes in contraceptive practices, including an increased use of contraception, particularly of condoms, and, among young women, of long-acting hormonal contraceptive methods that were introduced in the early 1990s (14--16). The abortion rate reported here for the United States was higher than recent rates reported for Australia, Canada, and Western European countries and lower than rates reported for China, Cuba, most Eastern European countries, and several of the Newly Independent States of the former Soviet Union (17,18).

The abortion rates reported for teenagers are higher in the United States than in most Western European countries and some Eastern European countries (19). As in previous years, the abortion ratio in 1999 varied substantially by age (5). Although the ratio was highest for adolescents, the percentage of legal induced abortions obtained by women aged ≤19 years has decreased since the early 1970s (from 33% in 1973 to 22% in 1990 and to 20% in 1992) and has remained at that level (Table 1) (4,20--22). The abortion ratio has declined for women aged ≤15 and 15--19 years since the mid-1980s. Other studies also have indicated a decrease in birth rates for women aged 15--19 years from 1991 through 2000 and a decrease in adolescent pregnancy rates from 1991 to 1997 (6,23--29). Since 1980, the percentage distribution of abortions by known weeks of gestation has been stable. From 1992 (when more detailed data for ≤8 weeks' gestation were first available) through 1999, data have shown some steady increases

in procedures performed at ≤6 and 7 weeks' gestation, with decreases occurring in the percentage of abortions performed at 8, 9--10, and 11--12 weeks' gestation. The increase in the percentage of abortions known to have been performed at ≤6 and 7 weeks may be related to an increase in availability of early abortion services since 1992 as well as to an increase in medical (nonsurgical) and surgical procedures that can be performed early in gestation (*30,31*). Abortions performed early in pregnancy are associated with lower risks of mortality and morbidity (*32*). The proportions of abortions performed later in pregnancy (≥13 weeks) have varied little since 1992. Several additional factors affect the timing of abortion. Age of the woman, race, marital status, level of education, availability and accessibility of services, timing of confirmation of pregnancy, personal decision-making, level of fear of discovery of pregnancy and denial of pregnancy all have an impact on timing (*5,33,34*). Since the mid-1990s, two medical (nonsurgical) regimens -- methotrexate and mifepristone, each used in conjunction with misoprostol -- have been tested in clinical trials and used by clinical practitioners to perform early medical (nonsurgical) abortions (*31,35*).

Surveillance data from CDC and other investigators indicate that >50% of all U.S. abortions are performed at ≤8 weeks of gestation, which is the timing of the regimen approved for both mifepristone and methotrexate (*36*). The medical (nonsurgical) procedures reported most often for abortions performed early in gestation (≤7 weeks) are use of methotrexate with misoprostol and mifepristone with misoprostol (*37,38*). Mifepristone for medical abortion was approved by the Food and Drug Administration for use and distribution in the United States in September 2000. This approval might result in early medical (nonsurgical) induced abortions becoming more widespread (*39,40*). In 1997, the U.S. Standard Report of Induced Termination of Pregnancy, published by the National Center for Health Statistics (NCHS) and used by providers for abortion reporting to state health departments, was revised to include a category for "medical (nonsurgical)" procedures (*41*). Medical (nonsurgical) legal induced abortion procedures have been included in this report since then as a separate category. CDC will continue to monitor early medical (nonsurgical) procedures.

The percentage of abortions known to be performed by curettage (which includes dilatation and evacuation [D&E]) increased from 89% in 1972 to 98% in 1999 (Table 1), while the percentage of abortions performed by intrauterine instillation declined sharply, from 10% to 0.2%. The increase in use of D&E is likely due to the lower risk for complications associated with the procedure (*42,43*). From 1974 (first year for which these data were available) through 1999, the percentage of second-trimester abortions performed by D&E (curettage) increased from 31% to 96%; the percentage of second-trimester abortions performed by intrauterine instillation decreased from 57% to 1.3% (Table 18) (*44*). The differential between the abortion ratio for black women and that for white women has increased substantially since 1989 (*45*). In addition, the abortion rate for black women was 3.0 times the rate for white women. Census Bureau estimates and birth certificate data indicate that the majority of Hispanic women report themselves as white. NCHS vital statistics reports indicate that 97% of Hispanic women giving birth in 1999 were white (*6*). Data for some Hispanic women, therefore, are included in data for white women; in 1999, Hispanic women accounted for 24% of all births to white women (*6*). Race-specific and ethnicity-specific differences in legal induced abortion ratios and rates might reflect differences in factors such as socioeconomic status, access to family planning and contraceptive services, contraceptive use, and incidence of unintended pregnancies among groups. In 1999, 37 states, the District of Columbia, and New York City reported Hispanic ethnicity of women who obtained abortions. Because of concerns regarding the completeness of such data (>15% unknown data) in some states, in 1999, data from only 24 states, the District of Columbia and New York City were used to determine the number and percentage of abortions obtained by women of Hispanic ethnicity. These geographic areas represent approximately 40% of all reproductive-age Hispanic women in the United States for 1999 and approximately 40% of U.S. Hispanic births (*6,46*). Thus, the number of Hispanic women who obtain abortions is underestimated, and the number, ratio, and rate of abortions for Hispanic women in this report are not generalizable to the overall Hispanic population in the United States. The abortion ratio for Hispanic women in past years has either been slightly lower than or similar to that for non-Hispanic women; however, in 1999, the results shifted in that the ratio for Hispanic women (261) was substantially higher than for non-Hispanic women (252). As in the past, the abortion rate per 1,000 Hispanic women was higher than the rate per 1,000 non-Hispanic women, which is consistent with another study (*47*). NCHS vital statistics reports indicate that in 1999, fertility and live birth rates were substantially higher for Hispanic women as a whole than for non-Hispanic women for all age groups (*6*). However, because fertility and birth rates differ substantially among components of the Hispanic subgroups (Mexican, Puerto Rican, Cuban, and other Hispanic), and these differ substantially from rates among components of the non-Hispanic subgroups (white, black, other), comparisons between Hispanic and non-Hispanic groups are of limited value (*6*). The available abortion surveillance data do not permit cross-classification of race by Hispanic ethnicity.

Compared with 1972, the annual number of deaths associated with known legal induced abortion in 1998 has decreased nearly two thirds (Table 19). In 1972, 24 women died from causes known to be associated with legal abortions and 39 died as a result of known illegal abortions. In 1998, nine died as a result of legal induced abortion and none died as a result of illegal induced abortion. The national case-fatality rate for 1998 can not be appropriately calculated because a substantial number of abortions occurred in the four nonreporting states, making the denominator unknown. Because these data are reported voluntarily, several limitations exist. First, abortion data are compiled and reported to CDC by reporting area where the abortion was performed rather than by where the woman resides. This inflates the numbers, ratios, and rates of abortions for areas where a high proportion of legal abortions are obtained by out-of-state residents and undercounts procedures for states with limited abortion services or more stringent legal requirements for obtaining an abortion (causing women to seek abortions elsewhere). Second, four states (Alaska, California, New Hampshire, and Oklahoma) did not collect or report abortion data in 1998 or 1999. Data for these four states were

not estimated for 1998 or 1999. Data for California and Oklahoma had been estimated before 1998, and Alaska and New Hampshire reported for 1997. Third, data provided to state or area health departments by providers may be incomplete (*48*). Fourth, the overall number, ratio, and rate of abortions are conservative estimates because the total numbers of legal induced abortions provided by central health agencies and reported to CDC for 1999 were probably lower than the numbers actually performed. Additionally, totals provided by central health agencies are lower than those obtained by direct surveys of abortion providers (*49*). For example, the total number of abortions reported to CDC for 1997 was approximately 12% lower than that reported for 1997 by The Alan Guttmacher Institute, a private organization that contacts abortion providers directly to obtain the total number of abortions performed (*27*). Fifth, not all states collected or reported data on all characteristics (e.g., age, race, and weeks of gestation) of women obtaining a legal induced abortion in 1999.

Thus, the numbers, rates, and ratios derived in this analysis may not be representative of all women who obtained abortions. Despite these limitations, findings from ongoing national surveillance of legal induced abortion are useful for several purposes. First, public health agencies use data from abortion surveillance to identify characteristics of women who are at high risk for unintended pregnancy. Second, ongoing annual surveillance is used to monitor trends in the number, ratio, and rate of abortions in the United States. Third, statistics regarding the number of pregnancies ending in abortion are used in conjunction with birth data and fetal death computations to estimate pregnancy rates (e.g., pregnancy rates among adolescents) (*23--27*). Fourth, abortion and pregnancy rates can be used to evaluate the effectiveness of family planning programs and programs for preventing unintended pregnancy. Fifth, ongoing surveillance provides data for assessing changes in clinical practice patterns related to abortion (e.g., longitudinal changes in the types of procedures and trends in weeks of gestation at the time of abortion). Finally, numbers of abortions are used as the denominator in calculating abortion morbidity and mortality rates (*32*).

Welfare-reform legislation, specifically, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996,** has increased interest in accurate state-based surveillance for induced abortion. In addition, certain states have instituted programs that emphasize the prevention of unintended pregnancy, particularly among adolescents. To help guide these efforts, an ongoing, accurate assessment of induced abortion is needed in all states (particularly abortion data by state of residence) to determine the number and characteristics of women who obtain these procedures. Induced abortions usually result from unintended pregnancies, which often occur despite use of contraception (*14,50,51*). Data from the 1995 National Survey of Family Growth (NSFG), conducted by NCHS, indicate that approximately 49% of all pregnancies were unintended (*9,52*) and 31% of live births were associated with unintended pregnancy (i.e., either mistimed or unwanted at conception).

Unintended pregnancy is a problem not just for adolescents, unmarried women, or poor women; it is a pervasive public health problem for all women of reproductive age (*9,14,52*). A reduction in unintended pregnancy, and thus abortion, will require several complex strategies. In a study of abortion patients conducted during 1994--1995, 58% of patients reported that they "currently used" contraception during the month of their last menstrual period. However, their use of contraception might have been inconsistent or incorrect (*47*). In 1995, when the most recent NSFG was conducted, approximately 29% of sexually active U.S. women who used only oral contraceptives for birth control reported that they missed a birth-control pill one or more times during the 3 months before their NSFG interview. In addition, approximately 33% of U.S. women who were using only coitus- dependent contraceptive methods†† during the 3 months before the interview used these methods inconsistently (*9*). Also, not all health insurance plans provide contraceptive benefits (*53*). Therefore, education regarding improved contraceptive use and practices as well as access to and education regarding safe, effective, and affordable contraception and family-planning services might help reduce the incidence of unintended pregnancy and, therefore, might reduce the number of legal induced abortions in the United States (*54--56*).

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In developing countries each year more than half a million women die from maternal causes. Nearly all of these deaths could be prevented. Efforts to prevent maternal deaths from one major cause—complications of unsafe abortion—are crucial but inadequate in most of the world. Providing appropriate medical care immediately could save many thousands of women's lives. Offering family planning could prevent many future unintended pregnancies and unsafe abortions.

Unsafe abortions cause 50,000 to 100,000 deaths each year. In some countries complications of unsafe abortion cause the majority of maternal deaths, and in a few they are the leading cause of death for women of reproductive age. The World Health Organization estimates that as many as 20 million abortions each year are unsafe and that 10% to 50% of women who undergo unsafe abortion need medical care for complications. Also, many women need care after spontaneous abortion (miscarriage). In one country, for example, at 86 hospitals an estimated 28,000 women seek care for complications of unsafe or spontaneous abortion each month. The five main causes of maternal mortality are hemorrhage, obstructed labor, infection, pregnancy-induced hypertension, and complications of unsafe abortion. Many countries are undertaking programs to reduce deaths from the other four causes, but few provide adequate emergency medical care that would reduce maternal deaths from abortion complications. Even fewer provide family planning services and counseling to women treated for abortion complications.

Improving Care, Providing Family Planning

While abortion complications are a common medical emergency in developing countries, care often is provided in a crisis atmosphere. In contrast, a strategic approach to postabortion care anticipates the need for emergency treatment, plans ahead to meet that need, and provides family planning to prevent repeat abortions. An effective postabortion care plan ensures that women receive care that is **complete**, **appropriate**, and **prompt** ("CAP").

- **Complete.** Many women treated for abortion complications want to avoid pregnancy. Yet fewer than one-third of women receiving care for abortion complications have ever used effective contraception. Family planning services and counseling can best be provided at the same place where women receive emergency postabortion care, yet few facilities provide family planning services and even fewer provide counseling. At two hospitals, for example, fewer than 3% of women received postabortion family planning counseling. Because postabortion care is often a medical and emotional crisis, empathic family planning counseling is especially important to enable women to avoid future unwanted pregnancies—and unsafe abortions.

- **Appropriate.** Most women seeking emergency care are suffering from incomplete abortion, which, if left untreated, can lead to hemorrhage, infection, and death. Uterine evacuation can be done safely and effectively with manual vacuum aspiration (MVA) using local anesthesia. MVA under local anesthesia is safer and usually less expensive than sharp curettage with general anesthesia, the treatment commonly used in many countries. For example, at one Kenyan hospital the cost of postabortion treatment fell by 66% after MVA replaced sharp curettage, mainly because of dramatically reduced hospital stays.

- **Prompt.** Often, women do not receive medical treatment soon enough. Delays put their lives at risk. Decentralizing emergency care and establishing a formal referral system can reduce delays by offering some degree of postabortion care at every level of the health system and by helping each woman reach the level of care that she needs in time.

Women's Lives At Risk

In developing countries each year an estimated 585,000 women die from complications of pregnancy, childbirth, and unsafe abortion —about one every minute (295). Nearly all of these deaths could be prevented (148, 209, 289). Pregnancy-related complications cause one-quarter to one-half of deaths among women of reproductive age in developing countries compared with less than 1% in the US. In some developing countries pregnancy-related complications are the leading cause of death for reproductive-age women (76, 233, 285). On average, in developing countries a pregnancy is 18 times more likely to end in the woman's death than in developed countries (295). Also, many thousands of women in developing countries suffer serious illnesses and disabilities, including chronic pelvic pain, pelvic inflammatory disease, incontinence, and infertility, caused by pregnancy or its complications (96, 166). The risk associated with each pregnancy and delivery is far higher for women in developing countries because good health care is far less available than in developed countries. Moreover, women in developing countries generally bear more children and thus face the risk of maternal death or illness more often. In some developing regions a woman's risk of dying due to maternal causes over the course of her life is as much as 300 times greater than the risk faced by the average woman in a developed country (285, 295). For example, a woman in Eastern Africa faces the highest risk of maternal death—1 in 12—compared with only 1 in 3,700 for a woman in North America (see **Table 1**). No other health indicator varies so dramatically between developed and developing countries (171, 229, 233, 295). As well as a tragedy for women themselves, maternal mortality and morbidity take a toll on families and communities (55, 111, 186, 245, 258, 285). Women who die during their childbearing years usually leave at least two children (96, 157). Also, mothers in nearly all developing societies devote 12 to 15 hours of daily labor to meeting household needs for food, water, and fuel as well as caring for children. Thus, when mothers die, families lose their primary caregiver and often a family wage earner as well. Where mothers are heads of household, as is often the case in cities world-wide and in parts of rural Africa, a mother's death means the loss of the *primary* wage earner (58).

Toward Safe Motherhood

While still considered "a neglected tragedy" in many countries (230), maternal mortality has become a focus of international action in the past decade. In 1987 the United Nations Population Fund (UNFPA), the United Nations Childrens Fund (UNICEF), the World Health Organization (WHO), the World Bank, the International Planned Parenthood Federation (IPPF), the Population Council, and agencies from 37 countries launched the Safe Motherhood Initiative. This campaign aims to cut maternal mortality in half by the year 2000. More recently, statements from the International Conference on Population and Development (ICPD), held in Cairo in 1994, and the Fourth World Conference on Women, held in Beijing in 1995, have reaffirmed the global importance of addressing women's health issues, including maternal mortality and morbidity. Today, more and more developing countries are recognizing the need to take action (96, 164, 171, 230, 235, 245, 258, 289). While debate continues about the best strategies to adopt, under the Safe Motherhood Initiative a variety of programs have been developed to reduce maternal mortality and morbidity (159, 164, 174, 181). Some programs emphasize prenatal care to identify women at high risk of pregnancy complications. Others emphasize training for traditional birth attendants, who in some countries assist with most births. Still others emphasize establishing or upgrading obstetric care to manage complications when they arise (96, 235). Family planning programs also have contributed to the Safe Motherhood Initiative by helping women use contraceptives to prevent unintended and high-risk pregnancies and to limit births (73, 164). In most developing countries, however, one major cause of maternal death and disability remains largely unaddressed. Few countries provide adequate emergency medical care to prevent maternal deaths and illness resulting from the complications of unsafe abortions (74, 274, 282, 292).

The Extent of Unsafe Abortion

Each year an estimated 36 million to 53 million abortions are performed worldwide (94). Of those, as many as 20 million are considered unsafe—that is, they take place outside health care systems, are performed by unskilled providers under unsanitary conditions, or both (292). Most, but not all, unsafe abortions take place in developing countries where abortion is limited by law. In developing countries complications of unsafe abortion cause between 50,000 and 100,000 women's deaths annually (94, 233, 292). WHO estimates that the proportion of maternal mortality due to abortion complications ranges from 8% in Western Asia to 26% in South America, with a worldwide average of 13% (292). In some settings complications of unsafe abortion cause most maternal deaths, and in a few they may even be the leading cause of death for women of reproductive age (23, 78, 142, 153, 157, 203, 207, 255, 292). Estimating the worldwide incidence of abortion and abortion-related deaths requires piecing together information from many sources. Where abortion is legal and data collection systems exist, accurate information is available, while in countries where abortion is legally restricted the only available abortion statistics are estimates. The quality of abortion estimates varies greatly among regions and countries. International efforts are underway to improve the quality of data available on both abortion-related deaths and maternal mortality (301).

Latin America. According to estimates from WHO and others, the highest rate of unsafe abortion is in Latin America, where an estimated 4.6 million unsafe abortions take place each year, or 40 per 1,000 women of reproductive age (292). Unsafe abortion is estimated to cause one-quarter of all maternal deaths in Latin America—6,000 deaths each year (13, 292) (see **Table 2**). Hospital-based studies in some countries have reported higher fractions (240). For example, between 1985 and 1989 unsafe abortion accounted for nearly one-third of maternal mortality at one Colombian hospital (81). At a Brazilian hospital abortion complications accounted for 47% of maternal deaths between 1978 and 1987 (157).

the developing world, at 12 per 1,000 women. Nearly half the world's unsafe abortions take place in Asia, almost one-third in South Asia alone. Unsafe abortion accounts for 12% of all maternal deaths in Asia—40,000 deaths each year (292).

Sub-Saharan Africa. It is African women, however, who are most likely to die when they undergo unsafe abortion; about one of every 150 abortions results in the woman's death (292). An estimated 3.7 million unsafe abortions are performed each year in sub-Saharan Africa, or 26 per 1,000 women, and about 23,000 African women die from complications (292) (see **Table 2**). Abortion complications account for an estimated 13% of all maternal deaths in Africa (292). In some countries hospital-based studies report much higher percentages. For example, in Ethiopia a hospital-based study estimated that abortion complications accounted for nearly 40% of maternal deaths (297). In Nigeria during the 1980s, at two teaching hospitals abortion complications accounted for 20% (17) and 35% (206) of maternal deaths. At a third hospital 37% of gynecologic deaths were due to abortion complications (8).

Eastern Europe. In Eastern Europe couples have desired small families for decades, yet women have had little access to or confidence in modern contraceptives. By default, abortion has become the primary means of limiting fertility in many Eastern European countries and the Commonwealth of Independent States (CIS) (formerly the Soviet Union) (56, 129, 130). While abortion is legal in these countries, many procedures are performed under unsanitary conditions or by poorly trained providers. Thus complications of unsafe abortion are a major cause of maternal mortality, accounting for 25% to 30% of all maternal deaths in Russia, for example, and an estimated 50% in Albania (56, 136, 213).

Where abortion is legal. In addition to Eastern Europe and the CIS, unsafe abortions also take place in some developing countries where abortion is legal. For example, in India abortion is legal, and yet many women seek abortions outside the formal health system because medical facilities equipped to provide safe abortion are few. Even where services are available in India, problems with confidentiality, quality, and cost deter women from using them. Also, many people are unaware that abortion is legal (47, 94, 123, 212, 280). Of the estimated 5.3 million abortions induced in India in 1989, 4.7 million took place outside approved health care facilities and thus were potentially unsafe (123). In Turkey, where abortion is legal, it must be performed or supervised by obstetrician-gynecologists, which makes safe abortions inaccessible to most rural women (185). Among Turkish women whose abortions are legal and performed in medical clinics, mortality is 49 deaths per 100,000 procedures, while among women whose abortions take place outside medical clinics, the risk of death is four times as high, at 208 deaths per 100,000 procedures (156). Also, in Zambia abortion is legal, but many women and service providers are unaware of its legality. Additionally, legal, safe abortion is inaccessible to most women because they must obtain the consent of three physicians (165). Thus, for every woman in Zambia obtaining a legal abortion in 1991, five sought emergency treatment for complications of unsafely induced abortions (41).

Where abortion is restricted. Conversely, even where abortion is restricted by law, safe abortion is usually available to those who can afford it. Throughout Latin America, for example, private clinics offer abortion services; in Brazil some have even advertised in newspapers (94). In Morocco and Iran abortion is generally illegal, but it is reported that women who can pay high fees to medical providers obtain abortions that are safer than those offered by traditional midwives (80, 198). Also, women who can afford to travel go to countries where abortion is legal to obtain safe services.

Complications of Unsafe Abortion

Deaths related to unsafe abortion in developing regions are estimated as high as 100 deaths per 100,000 abortions in Latin America, 400 deaths per 100,000 abortions in Asia, and 600 deaths per 100,000 abortions in Africa (292). In contrast, the aggregate mortality rate from complications of legal abortions in 13 countries, most of them developed, for which accurate data are available is 0.6 deaths per 100,000 abortions (94). The mortality rate is low because in these countries abortions are performed largely by skilled providers using appropriate equipment under aseptic conditions. From a range of studies, WHO estimates that 10% to 50% of women undergoing unsafe abortions in developing countries need subsequent medical care (292). Four factors, along with the overall health of the woman, determine the risk that a woman undergoing an abortion will experience medical complications or die from the procedure—(1) the abortion method used, (2) the provider's skill, (3) the length of gestation, and (4) the accessibility and quality of medical facilities to treat complications if they occur (167, 233). The most common abortion complications are incomplete abortion, sepsis, hemorrhage, and intra-abdominal injury (9, 150, 154, 155, 292). Except for intra-abdominal injury, all complications can result from either spontaneous abortion (miscarriage) or induced abortion. Left untreated, each can lead to death (133, 150, 154). Also, women surviving immediate abortion complications often suffer life-long disability or face elevated risk of complications in future pregnancies (96, 166, 292).

Incomplete abortion. When tissue remains in the uterus after either miscarriage or unsafely induced abortion, the woman suffers "incomplete abortion," the most common abortion complication. Typical symptoms include pelvic pain, cramps or backache, persistent bleeding, and a soft, enlarged uterus (154, 250, 282).

Sepsis. Septic abortion results when the endometrial cavity and its contents become infected (154), usually after contaminated instruments are inserted into the cervix or when tissue remains in the uterus (282). In addition to suffering the general symptoms of incomplete abortion, women with sepsis have fever, chills, and foul-smelling vaginal discharge. Bleeding may be either slight or heavy (154, 250, 282). The first signs of septic abortion usually appear a few days after the miscarriage or unsafe abortion. The infection can quickly spread from the uterus to become generalized abdominal sepsis. High fever, difficulty breathing, and low blood pressure often indicate a more extensive infection (252).

Hemorrhage. Heavy bleeding can occur when incomplete abortion is left untreated. Also, some techniques to induce abortion, such as sharp curettage or inserting sticks or other objects into the cervix can result in intra-abdominal injuries that cause heavy bleeding. Herbs, drugs, or caustic chemicals swallowed or placed into the vagina or cervix can cause toxic reactions and also lead to hemorrhage (154). The risk of postabortion hemorrhage increases with gestational age, as well as with the use of general anesthesia during unsafely induced abortion (48, 285).

Intra-abdominal injury. When instruments are inserted into the cervix to cause abortion, the cervix, the uterus, or other internal organs can be cut or punctured. The most common injury is perforation of the uterine wall. The ovaries, fallopian tubes, bowel, bladder, or rectum also can be damaged (292). Intra-abdominal injury can cause internal hemorrhage with little or no visible vaginal bleeding.

How many women need care? Sepsis and hemorrhage resulting from spontaneous abortion or unsafely induced abortion often are the most common reasons that women in developing countries seek treatment in hospital obstetric and gynecologic wards (155, 231). In Kenya, for example, two hospital-based studies conducted during the 1980s found that women with postabortion complications accounted for 60% of all gynecological admissions (10, 207). In a 7-year study, abortion complications constituted 77% of all emergency gynecological admissions at University College Hospital in Ibadan, Nigeria (150). A recent Egyptian study of 86 public-sector hospitals found that 28,000 women seek postabortion treatment at these facilities each month (62). Poor women and young women often suffer the most mortality and morbidity from unsafe abortions. Where abortion is restricted, they rarely have access to safe services, and they also are more likely to have unintended pregnancies because they lack access to family planning (60, 94, 210, 211). For example, in Latin America cities, where abortions are increasingly performed by medical providers, poor women are more likely to be hospitalized for abortion complications than wealthy women, who seek safe abortions in private clinics. Poor women are likely to try to induce abortions themselves or go to untrained or poorly skilled providers because they cannot pay doctors' fees (210, 240). In addition to the absence of or distance to medical facilities, cultural factors, such as the inability to travel without a male escort, often limit a woman's access to medical care when complications arise. Women experiencing spontaneous abortion (miscarriage) need prompt, compassionate medical care. In Egypt, for example, one-third of the women seeking treatment at the 86 public-sector hospitals apparently had experienced miscarriage—they showed no signs of induced abortion and stated that the pregnancy was planned and desired (62). Like women undergoing unsafe abortions, women experiencing miscarriage face unnecessary health risks, permanent disability, or even death where postabortion care is unavailable or ineffective (87, 177, 279). In addition to causing many deaths and much suffering, abortion complications consume a large portion of health-care budgets and scarce medical resources. In some areas, for example, large amounts of resources such as blood supply are used for treating complications of unsafe abortion (10, 91, 122, 150, 275).

Planning Care to Save Women's Lives

Abortion complications are a common medical emergency in developing countries. Yet, in most, postabortion care is provided in a crisis atmosphere (34, 46). Most developing-country health systems, whatever their national policies toward induced abortion, do not systematically plan for or effectively provide emergency medical care for women suffering from abortion complications (114, 148, 209, 277, 279, 289). As a result, treatment is often delayed and ineffective, with life-threatening and costly consequences.

The Need to Plan Care

Most abortion-related deaths and disabilities can be prevented with emergency medical procedures that require only basic equipment, skills, and drugs. In most cases when women die or suffer permanent disability, it is because they do not receive medical treatment soon enough. In developing countries many women with abortion complications suffer for days before seeking or receiving care (22, 61, 204, 219, 255). For example, at an Indonesian hospital most women arrived already in critical condition (61). The case of a 35-year-old Bolivian woman is typical. She died of abortion complications within three hours of arriving at a hospital, but she had been suffering symptoms for 15 days before seeking treatment (22). Many women or the friends or family members caring for them delay seeking care after unsafe abortion because they are afraid providers will refuse them care and notify the authorities (219). Some delay seeking care because they are unfamiliar with or afraid of the formal health care system. In some cases, they do not recognize how serious the complications are (219, 253). Still others cannot obtain or pay for transportation to a hospital or pay for medical care or supplies. Young women often delay seeking care even longer than their older counterparts because they fear their parents' reaction or because they do not know how to find health care. Once they reach hospitals or clinics, many women wait for hours, and in some cases, days, before receiving medical attention (2, 46, 128, 134, 177). In Nepal, for example, women admitted to the national maternity hospital with abortion complications once waited one to seven days for treatment (177). Common reasons that care is delayed or unavailable at clinics or hospitals include lack of protocols, misdiagnosis, punitive attitudes among providers, and heavy case loads and hospital overload due to lack of supplies or trained personnel.

4.26

Misdiagnosis. In some cases appropriate treatment is delayed because providers are not immediately aware that a woman's condition is pregnancy-related. Some women may not acknowledge that they have attempted to induce abortion or may not even acknowledge that they are pregnant (218, 282). Also, providers may not recognize the severity of the woman's complication. In Zambia, for example, an 18-year-old suffering from septic abortion was hospitalized for 14 days with a misdiagnosis of malaria before a gynecologist diagnosed her true condition. Despite surgery and appropriate antibiotic therapy, the woman died 8 days later, 22 days after being hospitalized (46).

Punitive attitudes. Deep differences in attitudes toward induced abortion exist among policy-makers and among health professionals around the world. Some health care providers hold judgmental or punitive attitudes toward women who have had abortions, and their attitudes can affect the care that they give postabortion patients (3, 200, 243, 247). Even in countries where abortion is legal, some providers who disapprove of abortion have difficulty separating their personal feelings about abortion from their professional commitment to provide medical care (140, 244). Some providers feel a need to punish women by delaying treatment, withholding pain medication, or charging higher fees than the actual cost of treatment (3, 172, 243). Some berate women for attempting abortion, for not using family planning, or for having sex in the first place (200, 218). When resources are scarce and personnel are overworked, some providers may resent caring for women who have undergone unsafe abortion, whom they see as a low priority and as bringing the problem on themselves. As one provider in Kenya described it, "The patients are generally handled as criminals or sinners" (242). Because in many cases it is impossible to differentiate between induced and spontaneous abortion, such attitudes affect the care offered to women suffering miscarriage as well as those whose abortion was induced.

Complete Care: Providing Family Planning

Linking emergency postabortion care with family planning and other reproductive health services is crucial if women are to avoid future unintended pregnancies and unsafe abortions. Few clinics or hospitals, however, offer women family planning counseling and services. Ensuring that family planning counseling and services are offered to all women treated for complications of unsafe abortion usually is one of the most immediate ways to improve postabortion care. Most women who have risked their health and even their lives undergoing unsafe abortion want to avoid pregnancy (33, 161, 209, 228, 236, 282, 287). When family planning counseling and services are offered to women treated for abortion complications, many begin using a contraceptive method. Family planning counseling, always important, is indispensable for women who have been treated for abortion complications because they often need to address broader issues than choosing a contraceptive method (107)

- The name of at least one family planning provider or clinic;
- Its location and the days and times that clients can receive services. Providing maps helps, especially if they are understandable to illiterate clients;
- A client brochure, where available, about family planning methods or about the family planning service.

MVA and Local Anesthesia

The vast majority of women seeking emergency care for abortion complications are suffering from incomplete abortion. Incomplete abortion means that the uterus has not been completely emptied and contains retained tissue. If not treated promptly with uterine evacuation, incomplete abortion can cause hemorrhage or infection, which can then lead to death (277, 282). In most cases, manual vacuum aspiration (MVA) under local anesthesia is the appropriate treatment for postabortion complications. MVA is preferable to sharp curettage (also known as dilation and curettage, or D&C), the technique that is still most often used in much of the world (94, 186, 277, 282). Switching from sharp curettage to vacuum aspiration for treating complications through 12 weeks' gestation is central to improving postabortion care in developing countries. In most developing countries, switching to vacuum aspiration means introducing *manual* vacuum aspiration. While electric vacuum aspiration is also appropriate for postabortion care, its availability is limited in developing countries. The World Health Organization (WHO) recognizes vacuum aspiration as the most appropriate method for treating early incomplete abortion. In fact, WHO considers MVA an essential element of care at the first referral level of all health care systems (282, 283).

Improving Post abortion Care with MVA

The effectiveness of vacuum aspiration for uterine evacuation is well-documented. In 19 US studies evaluating more than 5,000 vacuum aspiration procedures for treatment of incomplete abortion, effectiveness rates (defined as complete evacuation of the uterus) ranged from 95% to 100% and generally exceeded 98% (86). Studies in Egypt, Kenya, Nigeria, and Zimbabwe, looking specifically at MVA, found it to be effective in 98% of early incomplete abortion cases treated (63, 65, 146, 172, 268). The Zimbabwe study found MVA effective for treating cases of early septic abortion as well (268). Furthermore, studies have shown that MVA, when performed under local anesthesia on an outpatient basis, offers significant advantages over sharp curettage—advantages for women as well as for the health care providers and systems that serve these women (40, 93, 214, 277). Specifically, compared with sharp curettage, MVA with local anesthesia:
Increases women's access to postabortion care,
Shortens waiting time,

- Reduces the risk of complications during treatment,
- Reduces the cost of postabortion care, and
- Facilitates links between emergency postabortion care and family planning services.

Increases women's access to postabortion care. MVA is a simple way to extend and improve emergency care for abortion complications (63, 86, 277). Where medical personnel and operating room resources are limited, MVA can be performed safely by trained nonphysicians on an outpatient basis (86, 186, 277). Also, because MVA equipment is inexpensive and does not require electricity, MVA can be introduced at primary levels of the health care system and in rural settings, where resources are limited and effective postabortion care is less accessible than in cities (186, 282).

Shortens waiting time. When performed using local anesthesia, MVA treatment takes less time than sharp curettage, which is usually performed with general anesthesia. Also, because general anesthesia is not used, less time is needed to prepare both the patient and the treatment area. As a result, women do not have to wait as long (41, 63, 126, 127, 134, 268). In Zambia, for example, switching from sharp curettage to MVA and changing patient management reduced waiting time for treatment from 12 hours to 4 to 6 hours (41). Also, patient recovery time is shorter after MVA (86). When MVA is performed by nonphysicians at lower levels of the health care system, it can reduce the caseload at higher-level facilities. This frees operating rooms and specialists at hospitals and reduces waits for women with the most serious complications who require immediate treatment.

Reduces the risk of complications during treatment. Complication rates are substantially lower for vacuum aspiration procedures—both electric and manual—than for sharp curettage (85, 257). Recent studies in developing countries find that MVA leads to fewer complications than sharp curettage specifically in treatment of incomplete abortion (65, 146, 172, 268). In Zimbabwe, for example, researchers found one-fourth as many complications with MVA as with sharp curettage. In particular, blood loss was substantially less with MVA (268). Because MVA is less painful than sharp curettage, women require less pain-control medication during the procedure (146). Thus MVA is performed with local anesthesia and light sedation. The risk of adverse reaction to general anesthesia is avoided (214, 293).

Reduces the cost of postabortion care. Switching from sharp curettage to MVA saves money and thus can free resources for other obstetric or gynecologic services (22, 38, 40, 71, 89, 126, 127, 128, 150, 214). For example, in Kenya the average treatment cost per patient fell 66% in one hospital and 23% in another, primarily because of dramatically reduced patient stays when MVA replaced sharp curettage. After a Mexican hospital switched from sharp curettage to MVA, the cost of treating patients with abortion complications fell by over 75% (126, 127, 128). Another study in Kenya found that, on average, women treated with MVA stayed at the hospital less than six hours after treatment, while those treated with sharp curettage were hospitalized for one to three days (146). In Nepal, when an MVA pilot project was introduced at the major maternity center in 1995, average length of stay for postabortion patients was reduced from 36 hours to just 3 hours. Within the first six months after its introduction, MVA saved the hospital and the women it served 400 days of hospitalization and 282 surgeries under general anesthesia (177). Savings are possible because, compared with sharp curettage, MVA with local anesthesia requires:

- Fewer staff,
- Fewer expensive medications for pain relief,

- No operating room facilities, and
- Less recovery time (fewer overnight hospital stays before and after treatment).

Facilitates links between emergency postabortion care and family planning services. Because only low levels of pain control medication are required with MVA, women recover quickly and often feel well enough to talk with a family planning counselor while recovering. Counselors can visit women to offer family planning counseling and services before they leave the hospital or can escort women to family planning facilities (105, 214)

Introducing MVA: A postabortion care program usually is introduced at a national training center or teaching hospital, where providers are trained to use MVA to treat postabortion complications. Later the program is expanded to lower levels of the health care system (103, 116, 177). Regardless, however, of whether providers are trained to switch to MVA or to use conventional sharp curettage, programs need to adopt a comprehensive approach to improving care. This usually means re-organizing services and patient flow in addition to training providers.
Training providers. Postabortion MVA training requires a high level of technical assistance from experienced trainers, especially in the start-up phase. Later, on-going training and supervision help providers maintain skills and assure quality of care (186). Training usually involves a brief, intensive course on the basic steps of MVA, infection prevention, and family planning. For example, recent pilot projects in Egypt and Nepal tested models for introducing MVA, using 6-day, competency-based training programs for physicians. The Population Council provided training at two Egyptian hospitals, and the Johns Hopkins University Program for International Education in Reproductive Health (JHPIEGO) provided training at a maternity hospital in Nepal. Training focused on learning by doing, beginning with practice on anatomic models. After training, providers performed MVA under the close medical supervision of an experienced clinician during the first few months (103, 177). Currently, training programs in postabortion MVA have started in over 20 countries in Africa, Asia, and Latin America (186).
Site selection. Choosing the right site is important when first introducing MVA training. Key personnel at the chosen site must have a commitment to postabortion care and provide strong leadership in adopting new treatment protocols. Also, adequate training requires a high volume of abortion complication cases. Thus hospitals that already treat abortion complications are a logical choice for introducing MVA; staff can be trained to switch from using sharp curettage to MVA. In the Nepal pilot project, for example, the national maternity hospital was selected as the initial training site because 1,400 women a year seek treatment there for postabortion complications, and the hospital trains many medical personnel (177).
Equipment and supplies. While MVA requires little specialized equipment and few drugs, providers need to develop a system for continued resupply of MVA kits and other consumable items such as cotton, gauze, disinfectants, and soap; pharmaceuticals such as antibiotics, local anesthesia, pain medications; and intravenous fluids (293). Introducing MVA also requires coordinating with other hospital departments such as those in admitting, pharmacy, medical records, clinical laboratory, equipment and supply, and with surgical, obstetrical, and gynecological departments, so that each understands its role in the new treatment practices (177).

Managing Pain During Postabortion Care

Pain management is an often-neglected aspect of improving postabortion care. Women often experience pain from the method used to induce the abortion as well as the pain associated with uterine evacuation, whether sharp curettage or MVA is used. Additionally, women are likely to be anxious and frightened. Reducing the woman's pain requires: nonjudgmental staff, a calm environment, the use of an appropriate level of available pain medication, and supportive counseling (146, 172, 178, 199, 249, 277). When available, pain medications should not be denied to women undergoing postabortion care (172). Often, however, women treated for postabortion complications receive no pain control—neither medication nor counseling. While in some cases drugs, needles, syringes, and intravenous equipment are not available, in others, the lack of pain control—both medical and verbal—may reflect providers' negative attitudes (3, 200, 243). For example, in Kenya some providers said women should be *made* to feel pain during MVA so that they would avoid future unsafe abortions (243).
Pain medications. Because the procedure lasts only a few minutes and the woman's cervix often is already dilated and soft, MVA usually can be performed with minimal pain (277). Local anesthetics, analgesics, sedatives, or some combination of these three can be used to control pain during MVA, depending on the severity of pain and the availability of the medications (178, 296). Local anesthetics numb physical sensation, while analgesics alleviate pain in the receptors of the spinal cord and brain. Sedatives do not actually reduce pain; they are used to relieve anxiety and relax muscles.
Local anesthesia. When additional dilation of the cervix is needed, local anesthesia, in the form of an injected para-cervical block, is used (296). Two frequently used local anesthetics are lidocaine (*Xylocaine*) and chloroprocaine (*Nesacaine*) (178). Using local anesthesia rather than general anesthesia is safer and less costly and offers several advantages (178, 199):

- The woman is awake throughout the procedure. She can report changes in her condition to providers.
- The woman recovers within 5 to 15 minutes, without the nausea or headache often associated with general anesthesia.
- Depressed breathing and suppressed gag reflex, which can occur with general anesthesia, are avoided, markedly reducing the risk of anesthesia-related death.
- The woman need not be restricted from eating before the procedure. Making women aware that they can eat while awaiting treatment is especially important if women must wait a long time for treatment.

Table 1: ***Maternal Deaths, Maternal Mortality Ratio, and Lifetime Risk of Maternal Death, by Region***

Region	Annual Number of Maternal Deaths	Maternal Mortality Ratio [1]	Lifetime Risk of Maternal Death—One in:
WORLD	585,000	430	60
DEVELOPED COUNTRIES[2]	4,000	27	1,800
DEVELOPING COUNTRIES	582,000	480	48
AFRICA	235,000	870	16
Eastern Africa	97,000	1,060	12
Middle Africa	31,000	950	14
Northern Africa	16,000	340	55
Southern Africa	3,600	260	75
Western Africa	87,000	1,020	12
ASIA[2]	323,000	390	65
Eastern Asia	24,000	95	410
South-central Asia	227,000	560	35
South-eastern Asia	56,000	440	55
Western Asia	16,000	320	55

EUROPE	3,200	36	1,400
Eastern Europe	2,500	62	730
LATIN AMERICA & THE CARIBBEAN	23,000	190	130
Central America	4,700	140	170
South America	15,000	200	140
NORTH AMERICA	500	11	3,700
OCEANIA[2]	1,400	680	26

[1] Maternal Mortality Ratio (MMR) = the total number of maternal deaths for every 100,000 live births. This ratio measures the risk of death a women faces each time she becomes pregnant.
[2] Australia, New Zealand and Japan have been excluded from the regional totals but are included in the totalfor developed countries.
Source: WHO & UNICEF 1996 (295) **Unsafe Abortion Worldwide**

Table 2: ***WHO Global and Regional Estimates of Unsafe Abortions, and Related Deaths, 1994*** Source: WHO 1994 (292)

Region	Annual Number of Unsafe Abortions (in Millions)	Annual Number of Deaths from Unsafe Abortions	Risk of Death from Unsafe Abortion
World Total	20.00	70,000	1 in 300
Developed countries	2.34	600	1 in 3,700
Europe	.26	100	1 in 2,600
Developing countries	17.62	69,000	1 in 250
Africa	3.74	23,000	1 in 150
Asia	9.24	40,000	1 in 250
Latin America	4.62	6,000	1 in 800

Figures may not add to totals due to rounding.

Maternal Mortality and Morbidity
Preventable Deaths, Avoidable Injuries

The World Health Organization (WHO) defines maternal mortality as the death of a women during pregnancy or within 42 days after pregnancy, irrespective of the duration or the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management (289). Five direct causes hemorrhage, sepsis, pregnancy-induced hypertension, obstructed labor, and complications of unsafe abortion account for more than 80% of maternal deaths (4, 26, 54, 181, 245, 258, 285). Also, although not a direct cause, anemia is a factor in almost all maternal deaths. Anemia is very common among women in developing countries, and as many as 60% of pregnant women in developing countries suffer from nutritional anemia (59, 289). An anemic woman is five times more likely to die of pregnancy-related causes than a woman who is not anemic (269). Anemia, typically the result of iron deficiency, malaria, or other parasitic diseases, contributes to maternal mortality by making women less able to survive hemorrhage and other complications of pregnancy and delivery (147).

Hemorrhage. The leading cause of maternal death, hemorrhage can kill a woman within just a few minutes. During pregnancy or after delivery, hemorrhage can result from prolonged labor, uterine rupture, or early separation of the placenta from the uterine wall. Hemorrhage also can occur after miscarriage or unsafely induced abortion.

Sepsis. Infection can develop after delivery, miscarriage, or unsafe abortion, when tissue remains in the uterus, when unclean instruments or other objects are placed in the vagina, or when aseptic procedures are not followed. Septic abortion, when the endometrial cavity or its contents become infected, often follows incomplete abortion, spontaneous or induced.

Pregnancy-induced hypertension. This condition can be one of the most difficult of obstetric emergencies to prevent and to manage. The early stage of this disorder is characterized by high blood pressure, fluid retention (edema), and protein in the urine. Eclampsia can occur during pregnancy or after delivery and can result in convulsions, heart or kidney failure, cerebral hemorrhage, and death (52, 53).

Obstructed labor. This condition occurs when the infant's head cannot pass through the woman's pelvic opening. Obstructed labor can result from malpresentation of the infant or may be due to a woman's physical immaturity, stunted growth, pelvic distortion resulting from disease or malnutrition, or abnormalities of the cervix or vagina, sometimes resulting from female genital mutilation (260). Unless cesarean section can be performed, women struggling with obstructed labor can die from hemorrhage, uterine rupture, infection, or exhaustion. Obstructed labor and the resulting complications are the primary cause of maternal death in sub-Saharan Africa (147, 153, 233).

Complications of unsafe abortion. Common complications include incomplete abortion, infection, hemorrhage, and intra-abdominal injuries, including cervical laceration and uterine perforation (135, 154). All can be fatal if left untreated.

Maternal Morbidity

Women who survive pregnancy complications may suffer ongoing health problems, including chronic pelvic pain, pelvic inflammatory disease, and secondary infertility (96, 154, 166, 292). They also may be at increased risk of ectopic pregnancy (a potentially life-threatening condition in which the fertilized egg implants and develops outside the uterus, usually in a fallopian tube), premature delivery, spontaneous abortion, uterine prolapse, and cervical incompetence from overdilation or injury to the cervix (292).

While little is known about the extent of maternal morbidity in developing countries, estimates have ranged from 16 to 100 episodes of illness or disability for each maternal death (148). Recent evidence suggests that these estimates may be too low. In Bangladesh, for example, for every maternal death, 73 other women experienced life-threatening illnesses related to pregnancy; in Egypt, 56 women. When every episode of pregnancy-related morbidity was counted separately (including minor morbidities and multiple morbidities for the same woman), totals reached 700 maternal illnesses in Bangladesh; over 1,000 in Egypt; and nearly 600 in India for every maternal death (75). In addition to affecting a woman's physical health, these illnesses also may be detrimental to her social and economic well-being if they affect her ability to work or interact in her community (49, 55, 74, 245, 258, 292). Infertility can be a devastating condition for women emotionally, socially, and economically in countries where women derive their status from bearing children (289). One of the most serious and most common pregnancy-related morbidities, obstetric fistula, results from obstructed labor. A fistula is an opening between the vagina and the rectum (recto-vaginal fistula) or the vagina and the urethra (vesico-vaginal fistula) that allows feces or urine to leak into the vagina. A women with a fistula suffers from incontinence, and the resulting odor and uncleanliness leave women uncomfortable and often ostracized by their communities. Obstetric fistula can be surgically repaired, although most women in developing countries lack access to such care.

Unsafe Abortion Increasing Among Young Women

Unsafe abortion among young women is an increasing problem in the developing world, particularly in Africa and Latin America (22, 24, 74, 97, 191, 217, 292). Estimates of abortions among women under age 20 in developing countries range from 1 million to 4.4 million a year. Most of these abortions are unsafe, and for some young women, unsafe abortion results in life-long disability, infertility, or death (39, 87, 186, 195, 216, 299). Where abortion is unsafe, it may be one of the greatest health risks that a young woman can face (168).

Women under age 20 often account for more than their share of abortion complication cases reported by developing-country hospitals (34, 97, 145, 216, 222, 256). In Kenya, for example, 53% of septic abortion patients were under age 20 (10). In two Nigerian studies adolescent girls represented 61% and 74% of septic abortion patients (6, 7). Similarly, young and unmarried women often account for more than their share of abortion-related deaths. For example, in a Ugandan study almost 60% of deaths due to unsafe abortion occurred among women under age 20 (266). A Nigerian study found that abortion complications were the most common cause of death among unmarried women ages 15 to 24, particularly those in school (203).

Low contraceptive use. As young women in many developing countries marry later, more are experiencing sex before marriage. While some adolescents become sexually active by choice, others are coerced or forced—either physically or because of economic need—into sex. Few young people, especially the unmarried, use contraception the first time they have sex (182, 194). Studies in a number of countries have found that women delay about one year on average between starting sexual activity and first using modern contraceptives (12, 50, 137). Many pregnancies occur within a year after first sexual intercourse (50, 298), and most are unintended (194). For example, among 200 16-year-olds delivering at Harare Maternity Hospital, Zimbabwe, over one-half had become pregnant within just three months of starting sexual activity (173). In Mexico City nearly two-thirds of women ages 18 to 19 with premarital sexual experience reported that they had been pregnant at least once (193).

Faced with unintended pregnancy, many young women turn to abortion rather than getting married or bearing the child as a single mother (37). For example, a Nigerian study found that 90% of unmarried and working women with unintended pregnancies had abortions (203). Another Nigerian study, involving 1,800 never-married women ages 14 to 25, found that, of those who had experienced sexual relations, nearly half of students and two-thirds of nonstudents had been pregnant, and nearly all had ended their pregnancies with abortion (201). In some areas of Nigeria and Kenya young people know more about—and have more favorable attitudes toward—abortion than modern contraception (25).

Many young women risk unsafe abortion to avoid leaving school (208). In one Zambian study, for example, 81% of women hospitalized for complications of unsafe abortions were students who did not want mistimed pregnancy to disrupt their education (237). Young women who have given birth rarely return to school, whether they are married or not (84). Some countries routinely expel students who become pregnant; in Kenya alone nearly 10,000 are forced to leave school each year because they are pregnant (70).

Family Planning Can Prevent Abortion

Opponents of family planning programs often say that using family planning encourages the use of abortion as well. To the contrary, comparative data and historical evidence show that abortion rates are lowest in societies where more couples use effective contraceptive methods. For example, in industrialized countries where at least 30% of couples rely on oral contraceptives (OCs), intrauterine devices (IUDs), or voluntary sterilization, abortion rates are the lowest in the world, according to a 1989 study of 16 countries. Abortion rates were twice as high in countries where the use of OCs, IUDs, and voluntary sterilization was below 30%. "The principal effect of using a highly effective method of contraception is to reduce the incidence of abortion," the study concluded (131).

Trends. Over the long-term, increasing contraceptive use can and does reduce abortion (56, 77, 94, 265). This trend has been consistently demonstrated at different times in many countries and different cultures. Chile is the most often cited example: In the 1960s, after the government started an intensive family planning program that increased contraceptive use sevenfold, the number of women treated at hospitals for abortion complications decreased markedly (51, 167).

Other historical examples come from Japan and Hungary. In Japan abortion was a significant factor in the country's initial fertility reduction (94), but as contraceptive use rose between the 1950s and the 1970s, the abortion rate dropped (77). In Hungary, between 1966 and 1977, as OCs and IUDs replaced traditional methods as the preferred family planning methods among most contraceptive users, the abortion rate, which had been rising during the 1950s and early 1960s, dropped sharply (42, 77, 265, 301, 305) More recently, a similar trend has been seen in elsewhere around the world. In Bogota, Colombia, for example, while use of contraception increased by 33% between 1976 and 1986, the abortion rate dropped by 45%, from 49 abortions per 1,000 women to 27. In Mexico City and the surrounding region, a 24% increase in contraceptive use between 1987 and 1992 was accompanied by a 39% drop in the abortion rate, from 41 abortions per 1,000 women to 25 (239). In Russia, after family planning programs began in 1991, contraceptive use increased and the abortion rate dropped. In 1995 the abortion rate was one-third lower than it had been in the 1980s (136). In Kazakstan between 1988-89 and 1993-95, Pill and IUD use rose by 32%, while the abortion rate dropped by 15%—"clear and convincing evidence that contra ception has been substituted for abortion" (304).

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Guidelines for Office-Based Surgery and Special Procedures

(Approved by KMS House of Delegates May 5, 2002)

Statement of Intent and Goals

The following are clinical guidelines for surgical and special procedures performed in physician offices and other clinical locations not otherwise regulated by the Kansas Department of Health and Environment (i.e. hospitals and ambulatory surgical centers licensed pursuant to K.S.A. 65-425). The purpose of these guidelines is to promote patient safety in the non-hospital setting, and to provide guidance to physicians who perform surgery and other special procedures which require anesthesia, analgesia or sedation in such settings. Included are recommendations for qualifications of physicians and staff, equipment, facilities, quality assurance, and policies and procedures for patient assessment and monitoring. These guidelines are not intended to establish a standard of care, and variation from these guidelines does not establish that a required standard of care was not met. Unless otherwise indicated, the terms in these guidelines have the meanings as they are defined in **Appendix A.**

These guidelines are applicable to any surgical or special procedure involving anesthesia levels which are greater than minimal sedation, local anesthesia in quantities greater than the manu-facturer's recommended dose, adjusted for weight, or tumescent local anesthesia exceeding 7 mg/kg of lidocaine. These guidelines are not applicable to minor surgery. Any physician performing office-based surgery, regardless of the level of anesthesia required, should have the necessary equipment and personnel to be able to handle emergencies resulting from the procedure and/or anesthesia.

I. Personnel

a. All health care personnel should have appropriate licensure or certification and necessary training, skills and supervision to deliver the services provided by the facility.
b. Appropriate policies and procedures for oversight and supervision of non-physician personnel should be in place.

c. At least one person should have training in advanced resuscitative techniques (e.g. ACLS or PALS, as appropriate), and should be immediately available to the patient and in the facility at all times until the patient is discharged from anesthesia care.

II. Facility and Safety

a. Locations at which office-based surgery and special procedures are performed should comply with all applicable federal, state and local laws and regulations pertaining to fire prevention, building construction and occupancy, accommodations for the disabled, occupational safety and health, and disposal of medical waste and hazardous waste.

b. Policies and procedures should comply with applicable laws and regulations pertaining to controlled drugs supply, storage, security and administration.

c. Premises should be neat and clean. Sterilization of operating materials should be adequate.

III. Patient and Procedure Selection

a. Procedures to be undertaken should be within the scope of practice of the health care personnel and within the capabilities of the location.

b. The procedure should only be of a duration and complexity that can be safely undertaken, and which can reasonably be expected to be completed and patient discharged during normal operational hours.

c. The condition of the patient, specific morbidities that complicate operative and anesthetic management, the specific intrinsic risks involved, and the invasiveness of the planned procedure or combination of procedures should be considered in evaluating a patient for office-based surgery.

d. Nothing relieves the surgeon or physician of the responsibility to make a medical determination of the proper surgical setting or forum, and particular care should be exercised in the evaluation of patients that are considered high risk.

IV. Perioperative Care

a. Anesthesia services should be provided consistent with the "Essentials for Office-Based Anesthesia" as incorporated herein.

b. The anesthesia provider should be physically present during the intraoperative period and should be available until the patient has been discharged from anesthesia care.

c. Patients should be discharged only after meeting clinically appropriate criteria which includes the following factors: stable vital signs, responsiveness and orientation, ability to move voluntarily, reasonably controlled pain, and minimal nausea and vomiting.

V. Monitoring and Equipment

a. All locations to which these guidelines apply should have a defibrillator, a positive pressure ventilation device, a reliable source of O2, suction, resuscitation equipment, emergency drugs; and emergency air-way equipment including appropriate sized oral airways, endotracheal tubes, laryngoscopes and masks.

b. Locations that provide general anesthesia should have medications and equipment available to treat malignant hyperthermia when triggering agents are used. At a minimum, such locations should maintain a supply of ***dantrolene sodium*** adequate to treat a patient until the patient's transfer to a hospital or other emergency facility can be effected. Such locations should maintain tracheostomy and chest tube kits.

c. There should be sufficient space to accommodate all necessary equipment and personnel and to allow for expeditious access to the patient, anesthesia machine and all monitoring equipment.

d. All equipment should be maintained, tested and inspected according to the manufacturer's specs.

e. An appropriate back up energy source should be in place to ensure patient protection in the event of an emergency.

f. In any location where anesthesia is administered, there should be appropriate anesthesia apparatus and equipment which allow monitoring in accordance with the criteria set forth **in "Essentials for Office-Based Anesthesia"** as incorporated herein.

VI. Emergencies and Transfers

a. At a minimum, the location should have written protocols addressing emergency situations such as medical emergencies and internal and external disasters such as fire or power failures. Personnel should be appropriately trained in and regularly review all emergency protocols.

b. The location should have written protocols in place for the timely and safe transfer to a pre-specified alternate care facility within a reasonable proximity when extended or emergency services are needed. The location should have a plan for transfer or a transfer agreement with a reasonably convenient hospital, or all physicians performing surgery in the location should have admitting privileges at such a hospital.

VII. Accreditation or licensure

a. Accreditation by a nationally recognized accrediting agency is encouraged.

b. Any location at which surgical or other special procedures requiring general anesthesia are performed is strongly encouraged either to be licensed as an ambulatory surgical center under K.S.A. 65-425, or accredited by a nationally recognized accrediting agency.

VIII. Quality Assurance and Peer Review

All locations at which surgical or special procedures subject to these guidelines are performed should establish an internal quality assurance/peer review committee (pursuant to K.S.A. 65-4915) for the purpose of evaluating and improving quality of care. The physician in charge of such location should report to the Kansas Medical Society Office Based Surgery Review Committee, on a quarterly basis, any incidents related to the performance of office-based surgery, special procedures or anesthesia which is a reportable incident or which results in the following quality indicators:

a. death of the patient during the surgical or special procedure, or within 72 hours thereafter;

b. transport of the patient to a hospital emergency department;

c. unscheduled admission of the patient to a hospital within 72 hours of discharge, when such admission is related to the office-based surgery or special procedure;

d. unplanned extension of the surgery or special procedure more than four (4) hours beyond the planned duration of the procedure being performed;

e. an unplanned procedure to remove a foreign object remaining in the patient from a prior surgical or special procedure in that location;

.. performance of wrong surgery, surgery on the wrong site, or surgery on the wrong patient; or

g. unanticipated loss of function of a body part or sensory organ.

Kansas Medical Society Guidelines for Office-Based Surgery and Special Procedures

(Approved by KMS House of Delegates May 5, 2002)

ESSENTIALS FOR OFFICE-BASED ANESTHESIA

These criteria and guidelines apply to any administration of anesthesia, including general, spinal, and managed intravenous anesthetics (i.e., local standby, monitored anesthesia or conscious sedation), administered in designated anesthetizing locations and any location where conscious sedation is performed. In emergency circumstances in any situation, appropriate life-support measures take precedence and can be started with attention returning to these monitoring criteria as soon as possible and practical.

These guidelines are intended to encourage quality patient care, but observing them cannot guarantee any specific patient outcome. In certain circumstances some of these monitoring methods may be clinically impractical, and appropriate use of the described monitoring methods may fail to detect untoward clinical developments. Brief interruptions of continual monitoring may be unavoidable. Under extenuating circumstances the physician may waive these criteria, and in such circumstances it should be so stated (including the reasons) in a note in the patient's medical record. These guidelines are not intended for application to the care of the obstetrical patient in labor or in the conduct of pain management.

1. An orderly preoperative anesthetic risk evaluation should be done by the responsible physician and recorded on the chart in all elective cases, and in urgent emergency cases, the anesthetic evaluations should be recorded as soon as feasible.

2. Every patient receiving general anesthesia, spinal anesthesia, or managed intravenous anesthesia (i.e., local standby, monitored anesthesia or conscious sedation), should have arterial blood pressure and heart rate measured and recorded at least every five minutes where not clinically impractical, in which case the responsible physician may waive this requirement stating the clinical circumstances and reasons in writing in the patient's chart.

3. Every patient should have the electrocardiogram continuously displayed from the induction and during maintenance of general anesthesia. In patients receiving managed intravenous anesthesia, electrocardiographic monitoring should be used in patients with significant cardiovascular disease as well as during procedures where dysrhythmias are anticipated.

4. During all anesthetics, other than local anesthesia and/or minimal sedation (anxiolysis), patient oxygenation should be continuously monitored with a pulse oximeter, and, whenever an endotracheal tube or Laryngeal Mask Airway (LMA) is inserted, correct positioning in the trachea and function should be monitored by end-tidal CO_2 analysis (capnography) throughout the time of placement.

a. Additional monitoring for ventilation should include palpation or observation of the reservoir breathing bag, and auscultation of breath sounds.

b. Additional monitoring for circulation should include at least one of the following: Palpation of the pulse, auscultation of heart sounds, monitoring of a tracing of intra-arterial pressure, pulse plethsymography, or ultrasound peripheral pulse monitoring.

5. When ventilation is controlled by an automatic mechanical ventilator, there should be in continuous use a device that is capable of detecting disconnection of any component of the breathing system. The device should give an audible signal when its alarm threshold is exceeded.

6. During every administration of anesthesia using an anesthesia machine, the concentration of oxygen in the patient's breathing system should be measured by a functioning oxygen analyzer with low concentration audible limit alarm in use.

7. During every administration of general anesthesia, there should be readily available a means to measure the patient's temperature.

8. Qualified trained personnel dedicated solely to patient monitoring should be available.

Kansas Medical Society Guidelines for Office-Based Surgery and Special Procedures and *Essentials for Office-Based Anesthesia*

(Approved by KMS House of Delegates May 5, 2002)

APPENDIX A

Definitions:

"Conscious sedation" means a minimally depressed level of consciousness that retains the patient's ability to maintain adequate cardiorespiratory function and the ability to independently and continuously maintain an open airway, a regular breathing pattern, protective reflexes and respond purposefully and rationally to tactile stimulation and verbal command. This does **not** include oral preoperative medications or nitrous oxide analgesia.

"General anesthesia" means the administration of a drug or drugs which results in a controlled state of unconsciousness accompanied by a loss of protective reflexes including loss of ability to independently and continuously maintain patent airway and a regular breathing pattern. There is also an inability to respond purposefully to verbal command and/or tactile stimulation.

"Local anesthesia" means the administration of an anesthetic agent into a localized part of the human body by topical application or local infiltration in close proximity to a nerve, which produces a transient and reversible loss of sensation.

"Minimal sedation (anxiolysis)" means the administration of oral sedative or oral analgesic drugs in doses appropriate for the unsupervised treatment of insomnia, anxiety or pain.

"Minor surgery" means surgery which can be safely and comfortably performed on a patient who has received local or topical anesthesia, without more than minimal sedation and where the likelihood of complications requiring hospitalization is remote.

"Office-based surgery" means any surgical or other special procedure requiring anesthesia, analgesia or sedation which is performed by a physician in a clinical location other than a hospital or ambulatory surgical center licensed by the Kansas Department of Health and Environment, and which results in a patient stay of less than 24 hours.

"Physician" means a person licensed to practice medicine and surgery or osteopathic medicine and surgery in the state of Kansas.

"Reportable incident" means an act by a physician or other health care provider which is or may be below the applicable standard of care and has a reasonable probability of causing injury to a patient, or may be grounds for disciplinary action by the appropriate licensing agency.

"Special procedure" means a patient care service which requires contact with the human body with or without instruments in a potentially painful manner, for a diagnostic or therapeutic procedure requiring anesthesia services (i.e., diagnostic or therapeutic endoscopy; invasive radiologic procedures; manipulation under anesthesia, or endoscopic examination).

"Surgery" means a manual or operative procedure which involves the excision or resection, partial or complete, destruction, incision or other structural alteration of human tissue by any means, including the use of lasers, performed upon the human body for the purpose of preserving health, diagnosing or treating disease, repairing injury, correcting deformity or defects, prolonging life or relieving suffering, or for aesthetic, reconstructive or cosmetic purposes. Surgery includes, but is not limited to incision or curettage of tissue or an organ, suture or other repair of tissue or an organ, a closed or open reduction of a fracture, or extraction of tissue from the uterus, and insertion of natural or artificial implants.

"Topical anesthesia" means an anesthetic agent applied directly or by spray to the skin or mucous membranes, intended to produce a transient and reversible loss of sensation to a circumscribed area.

"Tumescent local anesthesia" means the induction of local anesthesia through the administration of large volumes of highly dilute lidocaine (not to exceed 55mg/kg), epinephrine(not to exceed 1.5 mg/liter), and sodium bicarbonate (not to exceed 10-15 meq/liter) in sterile saline solution by slow infiltration into subcutaneous fat. It does not include the concomitant administration of any sedatives, analgesics and/or hypnotic drugs at dosages that possess significant risk of impairing the patient's ability to maintain adequate cardiorespiratory function and the ability to independently and continuously maintain an open airway, a regular breathing pattern, protective reflexes and respond purposefully to tactile stimulation and verbal command.

APPENDIX B

Directory of Resource Organizations

I. Accrediting Organizations for Office-Based Surgery:

American Association for Accreditation of Ambulatory Surgery Facilities, Inc. (AAAASF)
1202 Allanson Rd.
Mundelein, IL 60060
Phone: 888.545.5222
www.aaaasf.org

Accreditation Association for Ambulatory Health Care, Inc. (AAAHC)
3201 Old Glenview Rd., Suite 300
Wilmette, IL 60091.2992
Phone: 847.853.6060
info@aaahc.org

American Osteopathic Association Healthcare Facilities Accreditation Program
142 East Ontario St.
Chicago, IL 60611
Phone: 800.621.1773
www.aoa-net.org

Institute for Medical Quality (IMQ)
221 Main Street, Suite 210
San Francisco, CA 94105
Phone: 415.882.5151
www.imq.org

Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
One Renaissance Blvd.
Oakbrook Terrace, IL 60181
Phone: 630.792.5000
www.jcaho.org

II. Other Resource Organizations

American Academy of Dermatology
930 N. Meacham Road
Schaumberg, IL 60168
Phone 847.330.0230
www.aad.org

American Academy of Facial Plastic and Reconstructive Surgery
310 S. Henry Street
Alexandria, VA 22314
Phone 703.299.9291
www.facial-plastic-surgery.org

American Academy of Otolaryngology-Head and Neck Surgery

One Prince St.
Alexandria, VA 32314
Phone 703.836.4444
www.entnet.org

American Association of Nurse Anesthetists
222 South Prospect Ave.
Park Ridge, IL 60068
Phone 847.692.7050
www.aana.com

American College of Surgeons
633 North Saint Clair St.
Chicago, IL 60611
Phone 312.202.5000
www.facs.org

American Society of Anesthesiologists
520 N. Northwest Highway
Park Ridge, IL 60068
Phone 847.825.5586
www.ASAHQ.org

American Soc./Aesthetic Plastic Surgery, Inc.
36 West 44th Street, Suite 630
New York, NY 10036
Phone 212.921.0500
www.surgery.org

American Society for Dermatologic Surgery
930 North Meacham Road
Schaumburg, IL 60173
Phone: 847.330.9830
www.asds-net.org

American Society of Plastic Surgeons
444 East Algonquin Road
Arlington, Heights, IL 60005
Phone 847.228.9900
www.plasticsurgery.org

American Gastroenterological Association
7910 Woodmont Ave., 7th Floor
Bethesda, MD 20814
Phone 301.654.2055
www.gastro.org

Federation of State Medical Boards
400 Fuller Wiser Road, Suite 300
Euless, TX 76039
Phone 817.868.4000
www.fsmb.org