

## Maternal Mortality



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Although infrequently, women do die as a result of abortion, yet abortion-related maternal mortality is generally underreported. One reason for this is that codes in hospitals report only the presenting cause of death, not the underlying reason which, for example, in the case of abortion-related death, might be hemorrhage, infection, embolism, or ectopic pregnancy. In fact, the reporting systems in Canada, the United States and in the World Health Organization are so imprecise that deaths related to a previous abortion are hard to track: Death certificates are inaccurately completed and, either to protect the privacy of the woman and her family or to avoid a possible lawsuit, hospital staff or doctors may deliberately avoid coding an abortion-related death.

Another reason for underreporting bias is that many of the statistics provided by the Centers for Disease Control (CDC) come from unreliable hospital and clinic records. Statistics from abortion providers in both Canada and the United States tend to underreport negative findings, presumably so that abortion will be seen as a safe procedure. At highest risk of death related to abortion are African-American and other minority women.

A recent authoritative Scandinavian study has established that women who undergo induced abortion experience, over the following twelve months, a death rate nearly four times greater than women who give birth to their children. In addition to this, the suicide rate associated with childbirth was six times lower than the suicide rate associated with abortion. The link between abortion and suicide is of particular note and is examined in detail in Chapter 14 “Behavioral Outcomes, Suicide, Healing”.

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## **Maternal Mortality**

### **Causes of Maternal Mortality in Abortions**

Maternal mortality is a small but persistent aspect of induced abortion. Causes of maternal death that arise specifically from abortions include hemorrhage, infection, *embolism*, and *cardiomyopathy*. These causes of maternal death are generally underreported.

Approximately fourteen per cent of all deaths from *legal abortion* in the United States are due to general anesthesia complications. According to Atrash and colleagues anesthesia-related deaths for legal abortion have not decreased, possibly because “pregnancy increases the sensitivity to the respiratory depressant effects of all these [anesthetic] agents”. Furthermore, “an increasing proportion of these [abortion-related deaths] were anesthesia related deaths...resulting from cardiopulmonary arrest”.<sup>1</sup>

In six of the countries formerly part of the Soviet Union – Russia, Ukraine, Belarus, Estonia, Latvia and Lithuania – the very high frequency of abortion contributes to the “deleterious” population decline and maternal mortality remains “unacceptably high”. “It is particularly worrying,” write Mogilevkina and colleagues, “that induced abortions make up twenty per cent to 35 per cent of all maternal mortality”.<sup>2</sup>

For an in-depth examination of suicide after abortion, see Chapter 14.

### **Underreporting of Maternal Deaths**

In the United States and Canada, as well as in the World Health Organization (WHO) there is a general and systematic underreporting of maternal deaths – deaths of women during pregnancy or delivery, or in the six weeks following the termination of a pregnancy.

According to recent analyses of mortality statistics using linkage studies, “more than half of such deaths...are probably still unreported”.<sup>3</sup> The death rates identified by these new linkage studies, connecting and cross-referencing various

sources of vital statistics data, show that the Centers for Disease Control's Pregnancy-Related Mortality Surveillance System “does not identify all pregnancy-related deaths”.<sup>4</sup> In other words, women have died as a result of pregnancy, but their pregnancy was never connected to official death records.

#### **Underreporting of Abortion-Related Maternal Deaths**

The system used in linkage studies to identify maternal deaths works back from a recorded birth. Because of this, it “cannot identify pregnancy-related deaths that do not generate a record of pregnancy outcome (e.g. ectopic pregnancies...induced or *spontaneous abortions*)”.<sup>5</sup> In any event, Centers for Disease Control (CDC) reports combine maternal deaths by miscarriages and induced abortions into a single category and these combined numbers are accepted as accounting for all maternal deaths, even though demographic researchers recognize that there is systematic underreporting. (For instance, many maternal deaths from ectopic pregnancies and other causes are not recorded as related to abortion; see Chapter 4.)

Recently, Bégin, a Canadian health researcher, has found that the problem of underreporting of maternal and abortion-related deaths is not limited to the United States (and Canada), but is also the result of flawed reporting guidelines from the World Health Organization (WHO). WHO's claim that legal abortion (an abortion procedure performed by a licensed practitioner) is safe depends on a voluntary system of death certification which has been shown to be inherently unreliable. WHO's statistics come from physicians who are not told that they must specify the type of abortion that led to maternal death – spontaneous, induced, legal or illegal.<sup>6</sup> Physicians are not even told that they must specify that the terminal illness (e.g. sepsis) followed an abortion.

In addition, the July 1999 CDC Surveillance on Abortion noted that official statistics show twelve per cent fewer abortions than does the Alan Guttmacher Institute, the research arm of Planned Parenthood.<sup>7</sup> Before raising this issue, Surveillance reports maternal death rates as if their own numbers are accurate, with no further explanation.

Of interest here is the fact that institutions such as the American Medical Association (AMA)<sup>8</sup> use the CDC data. Indeed, the AMA (1992) insists that the reporting practices on abortion of the Centers for Disease Control are accurate and complete because “the CDC conducts a thorough investigation of each reported abortion-related death to verify the cause and circumstances surrounding the death”.<sup>9</sup> But this statement overlooks the CDC’s own admission that it may be missing more than 132,000 actual abortion cases. In any case, the death must first be identified as abortion-related before it can be investigated as such, and this is precisely where information slippage can occur.

#### **How the Reporting System Works**

The success of the CDC system depends entirely on whether a report is made in the first place. Unless induced abortion is identified as an immediate cause of death, it will not be investigated or recorded by the CDC. Inaccuracies may creep into the reporting process in a number of ways:

1. In the United States, 93 per cent of all abortions are performed in free-standing abortion clinics. A woman whose post-abortion condition is life-threatening will be admitted to a general hospital through an emergency department. The attending emergency room doctor will not be the physician who performed the abortion and may not record a subsequent death as resulting from an abortion.

2. If the woman dies, it is not usually the abortion provider but a casualty officer or the family doctor who must complete the death certificate, and it is this information upon which the death may or may not be reported to the CDC.<sup>10</sup> In 1995, Statistics Canada noted that “if complications ensue after a patient has been discharged from hospital, the condition is treated as a separate case and does not appear in the original abortion record”.<sup>11</sup>

3. Inadequate information may be provided on the physician’s or coroner’s report. For example, the

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death may be noted as related to a previous abortion, but insufficient detail may make it impossible to determine whether the abortion was induced or spontaneous. In general, Canadian Medical Certificates of Death have been found to contain major errors 32.9 per cent of the time.<sup>12</sup> At present, given the politicization of the issue, it is not surprising that the records of abortion-related deaths are incomplete.

4. Hospital coding may not reflect the international numbering system. A woman who dies from a hemorrhage may have the event recorded simply as “hemorrhage” but with no code that would connect the bleeding to an earlier induced abortion. Codes such as embolism or cardiomyopathy can stand alone, with no reference to an induced abortion as the cause.

5. Hospital staff may avoid using the full coding in order to protect the privacy of the deceased patient, and/or the family, or to avoid legal or political entanglement.

6. Incomplete, indirect, or subtle coding, if it occurs, may also assist the abortion practitioner who otherwise might run a greater risk of civil liability. Malpractice is a significant issue for all physicians but recent, concerted civil litigation by women injured by abortion has made abortion providers particularly vulnerable.<sup>13</sup>

Bégin has reviewed death statistics and the medical coding methods used to attribute death to maternal causes. She found that the Health Records of four of the seven Canadian provinces and eighteen American states do not permit deaths to be classified as maternal if they occur more than 42 days after the termination of a pregnancy. Bégin goes on to quote Donna Hoyet, the CDC expert on maternal mortality coding: “unless it specifically states that the death was within 42 days we assume it is not a maternal death...If death occurred 43

days or more after a termination of pregnancy...[we] do not [use] code ICD 630-676 [Pregnancy-abortion related]." If the woman has died, then, from abortion-related complications such as ectopic pregnancy, abortion will not be noted; the only cause of death referred to in this case would be "ectopic pregnancy".

If death is immediate, it is not required to specify on the death certificate what kind of an abortion was performed, and if maternal death happens 43 days after an abortion, the death will not be linked to it. As this situation makes clear, accurate reporting on maternal abortion-related deaths is not, at present, a reality in North America.

#### **Doubtful Data**

Another problem in obtaining accurate information is that data analyses use different comparative categories. For example, Meyer and Buescher, statisticians with the North Carolina Health and Environmental Statistics Bureau, use one type of reporting in which abortion mortality statistics are presented in terms of the number of live births in the state but not in terms of the number of abortions performed.<sup>14</sup> The American Medical Association reported that this approach would exaggerate the danger of pregnancy.

As we have seen, death certificates may not connect the direct cause of death with the preceding abortion event. A death from cardiac arrest may be listed as such, and not as a cardiac arrest due to a reaction to the anesthetic given during an abortion. Jacob found that in the statistics of maternal mortality, the greatest errors in classification occurred for women who had recently undergone an induced abortion.

More to the point, in 1992 the AMA Council on Scientific Affairs reported maternal death rates relying not on the CDC data for post-abortion death rates, but on data from Planned Parenthood.<sup>15</sup> The CDC now concedes that the overall abortion figures of the Alan Guttmacher Institute (the Research Branch of Planned Parenthood) show significantly more abortions each year than the official numbers, but a recent publication does not discuss death rates. As the

largest abortion provider in the United States, Planned Parenthood keeps track of the number of abortions, but is clearly in a position of conflict of interest in reporting abortion deaths. In any event, the references found in the CDC report are most often from Planned Parenthood. From a reading of the most recent Surveillance Summary, one might infer that all such deaths are accurately recorded. But it is only from a careful analysis of the literature on the problems of reporting deaths that questions arise.

**Accurate Statistics from Finland**

Further light is shed on the unsatisfactory nature of North-American abortion mortality statistics by the recent experience of Finland. Finland is one of the few countries in the world that has accurate birth, death, and abortion registries. A study of all Finnish women who died between 1987 and 1994 found the following maternal mortality for every 100,000 registered, ended pregnancies.

**Table 6-1**  
**Maternal deaths within twelve months of end of pregnancy per 100,000 women**

Births	26.7
Miscarriages or ectopic pregnancies	47.8
Induced abortions	100.5

Source: Gissler (1997)

In other words *the maternal death rate after abortion was nearly four times greater than the maternal death rate after childbirth*.<sup>17</sup> Add to this the finding that *the suicide rate associated with childbirth was six times lower than the suicide rate associated with abortion*.<sup>18</sup> The findings, reported in prestigious British and Scandinavian medical journals, call seriously into question the oft-repeated claim that induced abortion is safer than childbirth. They also illustrate the need for large, record-linkage-based studies to establish the real rate of maternal death from abortion.

**Table 6-2**  
**Finland: suicide rate per 100,000 women within twelve months of end of pregnancy**

After birth	5.9
After miscarriage	18.1
After induced abortion	34.7
(Mean annual rate)	11.3

Source: Gissler and colleagues (1996)

Gissler and colleagues cautiously conclude that “Increased risk for a suicide after an induced abortion can...result from a negative effect of induced abortion on mental wellbeing”<sup>19</sup>.

The comparison of death rates from causes other than suicide is almost as striking. *Women who have an induced abortion are more than three times as likely to die within a year as women who give birth:*

**Table 6-3**  
**Finland: death rate per 100,000 women within twelve months of end of pregnancy (omitting suicide)**

After birth	20.8
After miscarriage	29.7
After induced abortion	65.8

Source: Gissler and colleagues (1997)

**Reliable Demographic Information?**

What is also known is the greater likelihood that minority women (such as African-Americans) will suffer death while seeking a *legal abortion*. For example, the AMA Council on Scientific Affairs reported, “Death from legal abortion is more common among minority women than white women, women over the age of 35 and those who undergo the procedure during the second trimester.”<sup>20</sup>

Berg and colleagues analyzed the U.S. Centers for Disease Control Statistics of overall maternal deaths for the period 1987 to 1990 and reported that the death ratio has increased

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from seven per 100,000 births in 1987 to ten per 100,000 in 1990, the majority of this ratio being accounted for by the dramatic increase in the deaths of African-American women.<sup>21</sup> In 1990, the rate of death for African-American women was 26.7 per 100,000 births while in the same period white women had a rate of only 6.5 per 100,000 births.

There may be some doubt, however, about the true final figures because some states were missing from the CDC report. Still, there is no particular reason to believe that if all the data were available, the alarming trend towards increase in African-American maternal mortality would disappear. Berg and colleagues report 1453 maternal deaths from the CDC statistics in the four years from 1987 to 1990. Of these, 81 are attributed to abortion, but induced and spontaneous abortions are lumped together. The report did separate the causes of death of these women (50 per cent from infection, twenty per cent from hemorrhage, and eleven per cent “unknown”). At least 70 per cent of the identified causes of death are known major complications in the post-induced abortion period. The authors note that the mortality rate due to infection rose 36 per cent, with the largest increase in the group of women who died following abortion.

A different study by Ferris and colleagues, which looked at short-term complications after an abortion, provided some useful information, suggesting there are few immediate complications.<sup>22</sup> Studies like this, however, do not report the many possible complications that could lead to death in the weeks following abortion. Berg found that among maternal deaths, at least 43 per cent did not occur until more than one week following the termination of pregnancy, while six per cent of the deaths occurred over six weeks after the abortion, the usual time limit used by statisticians to categorize deaths as maternal.

When the issue of abortion is not the main topic of an article, the mortality figures cited are often more straightforward. Lee P. Shulman cites abortion mortality rates in relation to the type and time of procedure.

**Table 6-4**  
**Number of deaths for every 100,000 abortions by procedure<sup>23</sup>**

<i>Procedure</i>	<i>1st trimester</i>	<i>2nd trimester</i>
Suction Curettage	0.8	N/A
Dilation and Evacuation	5.1	4.9
Instillation	N/A	10.1
Saline Injection	N/A	11.6
Prostaglandin Injection	N/A	6.4
Hysterectomy/Hysterotomy*	40.7	90.8

\*These two figures have been re-calculated from the tables on pages 315 and 320 of Shulman.

**General Underreporting Bias**

Despite disclaimers to the contrary, there is a general underreporting bias in abortion and abortion-related maternal deaths. For example, Jones and Forrest of the Alan Guttmacher Institute report that, in using the national survey data in the United States between 1976 and 1988, "...abortions are characteristically underreported...Abortion reporting is found to be highly deficient in all the surveys, although the level varies widely. Whites are more likely to report their abortions than nonwhites."<sup>24</sup> In that case, we must ask, how different would abortion numbers be if they reflected accurately the number of African-American women dying from this procedure? At present, they appear to be underreported.

**Conclusion**

Women continue to die from induced abortion, but this fact is underreported, principally because current methods of gathering and reporting statistics are deficient. Of particular concern is an apparent rise in the death rate of African-American women, combined with the tendency to underreport all abortion deaths. A failure to provide comprehensive and accurate statistics coupled with delays in disseminating available statistics further complicates the problem of reporting abortion-related mortality. It is possible that legal

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abortion, because of its high prevalence, has now caused more maternal deaths than the previous system of restricted abortion access which was also devoid of accurate documentation. The Finnish method of accurate recording of births, deaths, and abortions shows higher mortality and suicide rates among women who have had abortions compared to those who give birth. It underlines the unreliability of North-American statistics and explodes the myth that abortion is safer for a woman than childbirth.

### **Key Points Chapter 6**

- Women die from abortion-related problems but, owing to irregular and biased reporting, it is difficult to know how many.
- Reasons for maternal mortality related to abortion are many, including hemorrhage, infection, embolism, ectopic pregnancy, and cardiomyopathy.
- Coding deaths in hospitals and reasons for death on death certificates frequently record only the presenting problem as the cause of death, which results in many abortion-related deaths going unreported.
- The American Medical Association (AMA) relies on the Centers for Disease Control (CDC) for its statistics concerning abortion-related deaths and, given that the CDC uses hospital and clinic records (which underreport maternal deaths from abortion) for its data, the AMA does not recognize the full extent of abortion-related deaths.
- At most risk of abortion-related deaths are African-American and other minority women.
- A large-scale, authoritative Scandinavian study establishes post-pregnancy death rates within one year that are nearly four times greater among women who abort their pregnancies than among women who bear their babies. The suicide rate is nearly six times greater among aborting women than among women who give birth. These findings refute the oft-heard claim that induced abortion is safer than childbirth.
- There is an urgent need for independent studies of maternal mortality related to abortion, and medical facilities should be required to keep more accurate and informative records so that women may be better served in this area.

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### Notes

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