

Washington State
Pregnancy and Induced Abortion Statistics
1999

April
2001

For more information contact:

Center for Health Statistics
1112 SE Quince Street
PO Box 47814
Olympia, WA 98504-7814

360 236-4300
Fax 360 753-4135

Mary Selecky
Secretary

Center for Health Statistics, Pregnancy & Induced Abortion Statistics report staff:

John Whitbeck, *Research Services (360) 236-4321*

Ken Krupski, *Krupski Consulting, SAS Support*

Patricia Starzyk, *Research Investigator, Births (360) 236-4323*

Gregory Newkirk, *Research Services, ITAS, (360) 236-4332*

Design Consultation:

Office of Health Promotion

Acknowledgements:

We gratefully acknowledge the contributions of the many individuals who participate in the reporting of birth, fetal death, and abortion data. Their contributions are essential to the very important public health indicators contained in this report. We thank Charles Mies in the Center for Health Statistics, Statistical Services Section for his role as data coordinator for the Abortion Reporting System and Margaret Love in the Center for Health Statistics, Research Services Section for her role as publishing expert for CHS.

Jac Davies

Assistant Secretary

Epidemiology, Health Statistics & Public Health Laboratories

Teresa Jennings

State Registrar and Director

Center for Health Statistics

Table of Contents

<u>Introduction.....</u>	<u>3</u>
Why is data on Induced Abortion important?	3
<u>Data Reporting Issues.....</u>	<u>5</u>
Source of Pregnancy and Induced Abortion Data	5
1997 Revisions to Abortion Reporting Form	6
<u>How To Use Pregnancy and Abortion Data</u>	<u>8</u>
Why Read this Section?	8
Issues in Using the Data	8
Residence vs. Occurrence.....	8
Abortions Occurring in Washington & Abortions of Washington Residents During 1999.....	9
Numbers vs. Rates	9
Standards for Comparison of Rates.....	10
Unknowns.....	11
Small Numbers.....	11
Data Quality	12
Confidentiality	14
<u>Additional Services</u>	<u>14</u>
<u>Overview</u>	<u>16</u>
Change Over Time.....	16
Table 1. Induced Abortions, Live Births, and Abortion Ratios, Washington State Residents, 1975-1999 ¹	17
Table 2. Pregnancy Statistics ¹ , Washington State Residents, 1975-1999	18
Table 3. Teenage Pregnancy Rates ¹ by Age Group, Washington State Residents, 1980-1999	19
<u>Recent County Trends.....</u>	<u>20</u>
Table 4. Induced Abortion Rates ¹ by County of Residence, Washington State, 1993-1999	21
Table 5. Induced Abortion Rates ¹ with Ranks by County, Washington State Residents, 1995-1999	22
<u>Statistics Tables.....</u>	<u>27</u>
Table 99-1. Pregnancy Outcomes of Residents by Woman's Age, 1999	27
Table 99-2. Age-Specific Rates ¹ and Abortion Ratios of Residents, 1999	27
Table 99-3. Induced Abortions of Residents by Selected Indicators, 1999	28
Table 99-4. Induced Abortions of Residents by Woman's Age and Weeks of Gestation, 1999	29
Table 99-5. Previous Live Births of Women Having Abortions by Age Washington State Residents, 1999-2000	30
Table 99-6. Previous Induced Abortions of Women Having Abortions by Age Washington State Residents, 1999	30
Table 99-7. Induced Abortions by Woman's Age and Place of Occurrence or Residence, 1999	31
Table 99-8. Induced Abortions Occurring Within Washington State by Selected Indicators, 1999	32
Table 99-9. Induced Abortions Occurring Within State by Type of Procedure and Weeks of Gestation, 1999	33
Table 99-10. Induced Abortions with Complications Occurring Within State by Type of Procedure and Weeks of Gestation, 1999	33
Table 99-11. Induced Abortions with Secondary Management Occurring Within State by Type of Procedure and Weeks of Gestation, 1999	34
Table 99-12. Induced Abortions with Secondary Management Occurring Within State by Type of Secondary Management and Weeks of Gestation, 1999	34
Table 99-13. Induced Abortions with Complications Occurring Within State by Type of Complication and Weeks of Gestation, 1999	35
Table 99-14. Induced Abortions with Complications Occurring Within State by Type of Complication and Secondary Management Procedure, 1999	35

Table 99-15. Birth and Abortion Indicators ¹ by County of Residence, 1999.....	36
Table 99-15. Birth and Abortion Indicators ¹ by County of Residence, 1999.....	36
Table 99-16. Total Pregnancies ¹ by Woman's Age and County of Residence, 1999.....	37
Table 99-17. Age-specific Pregnancy Rates ¹ by County of Residence, 1999.....	38
Table 99-18. Live Births by Woman's Age and County of Residence, 1999.....	39
Table 99-19. Age-specific Live Birth Rates ¹ by County of Residence, 1999.....	40
Table 99-20. Induced Abortions by Woman's Age and County of Residence, 1999.....	41
Table 99-21. Age-specific Abortion Rates ¹ by County of Residence, 1999.....	42
Table 99-22. Percent of Pregnancies Terminated by Abortion by Woman's Age and County of Residence, 1999.....	43
Table 99-23. Abortion Ratio ¹ by Woman's Age and County of Residence, 1999.....	44
Table 99-24. Abortions in Second Trimester or Later ¹ by Woman's Age and County of Residence, 1999.....	45
Table 99-24. Abortions in Second Trimester or Later ¹ by Woman's Age and County of Residence, 1999.....	45
Table 99-25. Repeat Abortions by Woman's Age and County of Residence, 1999.....	46
Table 99-26. Induced Abortions, County of Residence by County of Occurrence, 1999.....	47
Table 99-27. Fetal Deaths by Woman's Age and County of Residence, 1999.....	48
Table 99-28. Female Population by Age and County of Residence, 1999.....	49

Appendix A: Technical Appendix53

Sources of Data.....	53
Demographics.....	53
Abortion Complications and Secondary Management.....	54
Adjusted Abortion and Pregnancy Rates, 1992-1995.....	55
Definitions.....	57
Induced Abortion Procedures:	58
Rates and Ratios.....	60

Appendix B: Sample Forms61

Certificate of Live Birth	61
Certificate of Fetal Death	62
Report of Induced Termination of Pregnancy	63
Continuation of the Report of Induced Termination of Pregnancy	64

Introduction



Introduction

Washington State Pregnancy and Induced Abortion Statistics, 1999, published by the Center for Health Statistics of the Washington State Department of Health, contains tables on pregnancies—the sum of births, induced abortions, and fetal deaths—and more detailed information about induced abortions for calendar year 1999.

Why is data on Induced Abortion important?

Pregnancy data collected by the Department of Health help address issues related to family planning, maternal and child health, and access to health care. Induced abortion data help planners decide if safe and adequate care is being provided to women obtaining abortions in Washington State and may indicate a need for family planning services and sexual education. Since 1993, the Department of Health has been engaged in changing policy and programs in support of reducing unintended pregnancies.

Unintended pregnancy refers to pregnancies that are unwanted or mistimed at the time of conception. When pregnancies occur without planning or intent, there is less opportunity to prepare for an optimal outcome. Unintended pregnancy is a risk factor for late or inadequate prenatal care, exposure of the fetus to harmful substances, low birth weight and neonatal death. Unintended pregnancy is also associated with other negative social outcomes such as reduced education and career attainment of the parents, welfare dependency, divorce and domestic violence. Unintended pregnancy has economic costs as well. At an average cost of \$5,639 for prenatal care and delivery, the estimated cost to the government for unintended pregnancies in Washington that are paid for by Medicaid is \$95.8 million. It is estimated that approximately 42% of unintended pregnancies result in abortion¹ (see footnote). Most abortions are due to unintended pregnancy so abortion is one of the indicators of unintended pregnancy in Washington.

The Department of Health and the Department of Social and Health Services have a joint performance measure to reduce the rate of unintended pregnancy by three percent each year over the next three biennia. At the national level, major public health planning documents such as *Healthy People 2010* have established priority goals and objectives for increasing the proportion of pregnancies that are intended to 70 percent of all pregnancies. For adolescents, the goal for the nation in 2010 is to reduce the pregnancy rate to 68 per 1000 women aged 15-17. As induced abortion is one component of a pregnancy rate, public health officials can use these data target interventions. It is perhaps

¹ The formula for this estimate uses Pregnancy Risk Assessment Monitoring System (PRAMS) data and induced abortion data. See *Technical Appendix*.

startling to note that the 1999 pregnancy rate among counties of Washington State for teen-age women varies all the way from 11.9/1000 to 78.5/1000 women.

Washington State was among 11 states with inadequate data on racial characteristics and among 24 states with inadequate data on Hispanic ethnicity to meet national standards for reporting. National data from 1997 show that the abortion ratio for women of other races (341 per 1,000 live births) was 1.8 times the ratio for white women and the abortion rate for black women (32 per 1,000 women) was 2.9 times the rate for white women (11 per 1,000 women) ¹.

The induced abortion reporting system provides important information for assessing access and quality of services. The lack of abortion service providers in 28 of the 39 counties of the state leads to concern around access. Women in these counties travel considerable distance to seek providers in distant locations. They are required to expend additional resources for travel and overnight stay. These additional burdens may add delay in the timing of the procedure leading to increased risk of complications. Still in 1999, 88% of induced abortions were performed at 12 or fewer gestational weeks.

Legal induced abortion is one of the most frequently performed surgical procedures in the United States ²; yet as a procedure performed by a trained physician, it is one of the most safe. Out of 26,325 abortions performed in Washington State in 1999, there were only 185 procedures with complications reported—a rate of 7.2 per 1,000. Without an abortion reporting system, public health professionals and those interested in public policy surrounding abortion would not be able to assess the volume of abortion, the safety of the procedure or to target interventions to reduce the number through effective family planning, abstinence education, or Emergency Contraceptive Pills (ECPs) programs. Nor would it be possible to evaluate the effectiveness of such programs.

The National Centers for Disease Control and Prevention note that ongoing surveillance in the area of induced abortion is essential to:

- Monitor trends in the number, ratio and rate of abortions,
- Accurately estimate pregnancy rates and calculate other outcome rates, such as the rate of ectopic pregnancies per 1,000 pregnancies,
- Evaluate the effectiveness of family planning and unintended pregnancy prevention programs, especially teenage pregnancy prevention programs,
- Assess changes in clinical practice patterns over time, and
- Provide denominators to calculate abortion morbidity and mortality rates²

As advances in medical pharmacologies and technologies are made more available to women making decisions with regard to childbearing, information on induced abortion from the reporting system will remain an important tool in

understanding and evaluating the changes in this critical area of women's health.

In 1999 the Center for Health Statistics continued efforts to improve the quality of the abortion reporting system and to ensure as complete reporting as possible. As always, monthly query letters were sent to providers for any abortion reporting forms submitted with incomplete or inconsistent information. Also, a year-end summary of activity reported was sent to each provider asking for his or her verification of the information maintained in the system. Any provider who reported over 100 abortions during 1999 but did not reply to the year-end verification letter was contacted directly by the Coordinator of the abortion reporting system. Finally, facilities in which the number of abortions declined by at least 100 were asked to provide a written statement explaining the reason for the decline.

In 1999, the Center contributed an article about abortion to *EpiTrends*, a monthly newsletter on epidemiology and public health topics produced by the Department of Health. The article examined the declining trends of the abortion rate as well as the number of abortion providers in Washington State. This pattern was compared to survey estimates, published by the Alan Guttmacher Institute in 1998 that reflected similar trends at the national level. For the complete article, go to the DOH web page at www.doh.wa.gov, click on "Publications", scroll down to the "Newsletters" section of the screen, click on "EpiTrends 1999", and then click on "Vol. 4 No.6 - June 1999." This downward trend has leveled, with the state abortion rate virtually unchanged from 1998 to 1999 (see Table 1 this volume). The number of medical centers performing abortions remains virtually unchanged from 1995 to 1999, while the number of other facilities performing abortions (e.g., clinics and Doctor's Offices) rose by two.

Data Reporting Issues

Source of Pregnancy and Induced Abortion Data

Data used to prepare this report come from Reports of Induced Termination of Pregnancy, Certificates of Live Birth, and Certificates of Fetal Death. The forms for these reports and certificates are provided by the Washington State Department of Health. The following table describes who completes the forms and where they are filed:

Filing of Washington State Pregnancy-Related Forms

Form	Completed by	Initially Filed with
Abortion	Service Provider	State Dept. of Health
Live Birth	Hospital or Birth Attendant	State Dept. of Health
Fetal Death	Hospital or Birth Attendant	Local Health Jurisdiction

For each induced abortion performed in Washington State, specified non-identified information about the patient, the procedure performed, and the medical complications must be reported to the Department of Health by the attending physician, hospital, or medical facility within one month of the abortion as required by Washington Administrative Code (WAC 246-490-100). This WAC is based on the statutory authority vested in the Secretary of the Department of Health to collect and utilize health-related data to promote and assess the quality and accessibility of health care throughout the state (RCW's 43.70.040 and 43.70.050). In addition, information about abortions performed in other states and in Canada for women who are residents of Washington State is obtained through voluntary cooperative arrangements between vital records offices in most states and Canadian provinces.

Similarly, RCW 70.58 governs the registration and reporting of vital statistics and requires births and fetal deaths to be reported within a timely fashion. Birth and fetal death certificates are designed to gather information that meet federal reporting requirements of the National Center for Health Statistics. A formal interstate exchange agreement governs the mutual exchange of information on births and fetal deaths between states and other countries, so that events occurring to Washington residents elsewhere are also reported to this state.

Starting in 1992, hospitals or birth attendants use the Electronic Birth Certificate System (EBC) to send birth records directly to the Department of Health instead of to registrars of local health jurisdictions.

1997 Revisions to Abortion Reporting Form

The Centers for Disease Control and Prevention (CDC) asked each state to revise its abortion reporting forms by January 1, 1997 to accommodate the reporting of medical (nonsurgical) procedures in anticipation of wider use of these procedures. As a result the following changes were made to the abortion reporting form:

1. Under the primary procedures section, the response category "Medical (nonsurgical)" was added. Space for listing the medications used (e.g., mifepristone, methotrexate) was also added. Saline and Prostaglandin were

combined into the “Intra-Uterine Instillation (Saline or Prostaglandin)” category. Hysterectomy and Hysterotomy were combined into one category. Also, the categories for reporting the primary procedure were re-ordered slightly. All changes to the primary procedure item were recommended by the CDC.

2. Under the demographics section, the responses for the item, *Is patient of Hispanic Ethnic Origin?*, was modified to distinguish between “No” and “Unknown.”
3. Under complications, changes were made to three response categories. The definition for *infection* was changed to “inflammation of the endometrium that requires hospitalization for intravenous antibiotics” in accordance with a definition recommended by the National Abortion Federation. The definition of *failed abortion* was changed to “embryonic death that is not passed from the uterus by four weeks after the death of the embryo,” based on the recommendation of a physician who assisted in the development of the national abortion requirements. *Retained Products* was added to the complication categories since this was a response frequently provided under *Other Complications*.
4. Under the secondary management item, space was added after *Resuction*, to enable providers to specify the nature of the secondary procedures used. This change was made in the event that the medical (nonsurgical) procedure is unsuccessful and a surgical procedure is required for follow-up.
5. Under the section on fetal abnormalities, the item, *Anomaly* was changed from “Name of anomaly (ies), if known, to “Name of observed or suspected anomaly (ies)” for internal consistency between the reporting form and the abortion reporting handbook. Responses for the item, *Was diagnosis confirmed?*, were modified to distinguish between “No” and “Unknown.”

How To Use Pregnancy and Abortion Data

Why Read this Section?

Washington State Pregnancy and Induced Abortion Statistics presents commonly used pregnancy and abortion data. These data not only have a variety of uses, but also a variety of users ranging from the beginner to the sophisticated analyst. This section is intended primarily to help those who do not entirely understand how to use pregnancy and abortion data or are not aware of data limitations. Reading this section may help beginning users avoid drawing incorrect conclusions from the data. For other users, this section may serve as a review.

Issues in Using the Data

‘Pregnancy’ is the sum of abortions, live births, and fetal deaths reported to the state. This figure underestimates the actual number of pregnancies because fetal deaths are required to be reported to the state only for gestational ages of 20 weeks or more. Thus, early fetal deaths (commonly called ‘miscarriages’) are not included in the total. ‘Abortion’ refers to the induced termination of a pregnancy.

Residence vs. Occurrence

What's the difference between residence and occurrence? In trying to locate topics of interest in this report, users may notice that data are tabulated in two ways: 1) by residence (where the person lived); or 2) by occurrence (where the event occurred). For example, a woman who lived in Olympia (Thurston County) but had an abortion in Seattle (King County) would be counted in Thurston County on a residence table and in King County on an occurrence table. The Center for Health Statistics actually registers only those events occurring in Washington State. However, thanks to an interstate exchange agreement pertaining to birth and fetal death certificates, we receive data on Washington residents in other states. Thus we have complete knowledge of Washington State resident births and fetal deaths. Although no such formal agreement exists for abortion reports, most states have agreed to exchange abortion reports as well.

Some users may be tempted to add residence and occurrence figures together to get a total for any area, but this would not be correct. There is a great deal of overlap between these two categories, as many residents of a county also have the abortion or birth in the same county. Other users try to subtract residence and occurrence data to figure out how many residents have abortions or births outside of their county, but this is also incorrect. The only way to determine where county residents are having abortions or births is to tabulate residence by occurrence. This tabulation is done for abortions in Table 26 of this report in which the patient's county of residence is cross-tabulated by the county in which the

abortion occurred. (Some counties have been grouped on this table in order to protect confidentiality.)

When should residence or occurrence data be used? Users generally need data about the residents of an area. Residents would be the target audience for any local health assessment or health promotion programs. Population figures, commonly used to calculate rates, are also based on residence. In contrast, family planning programs might want to know both how many abortions occurred in their area and how many were performed for the residents of that area so they can assess service usage, travel patterns, or the impact of local regulations. The decision to use residence or occurrence data should be based on the type of data needed and the way they will be used, given the above discussion as a guideline.

In this report, all of the tables in the *Introduction* and most of those in the *Statistics 1999* section pertain to residents of Washington state. A few (Tables 7-14) pertain to characteristics of induced abortions occurring in the state, and one (Table 26) provides a tabulation of abortions based on the woman’s county of residence relative to the county where the abortion was performed.

The following figure shows the number of Washington State residents who had abortions in 1999 was 25,965. The number of abortions performed in Washington State, which includes those women residing in other states or Canada (occurrence), was 25,523.

Abortions Occurring in Washington & Abortions of Washington Residents During 1999

Abortions by Resident Location	Occurrence In State	Occurrence Out of State	Total Abortions
In-State Resident	24,409	1,556	25,965
Out-of-State Resident	1,114	--*	1,115
Total	25,523	1,557	27,080

Numbers vs. Rates

When should numbers or rates be used? All tables in this report give the number of events (e.g., the number of Washington residents who are pregnant in any particular year). These numbers are used to determine the size of a problem in any area (e.g., how many teenagers are pregnant) or to calculate the percentage change from one year to the next. Such comparisons, however, should also take the size of the population into account to avoid erroneous conclusions.

To eliminate the effect of different sized populations, we use crude rates or age-specific rates. A crude rate is the number of events in a specified time period divided by the number of people at risk for these events in that period. This figure is generally multiplied by a constant such as 1,000 or 100,000 to get a number that is easy to read and compare and is reported as ‘per 1,000’ or ‘per 100,000.’

A common natality measure is the *crude birth rate* which equals the total number of births in a year per 1,000 people living in a specific geographic area (usually the midyear population estimate).² (See footnote) Crude birth rates may be affected by the underlying age and sex structure of a population.

Therefore, the *general fertility rate* which equals the total number of births in a year per 1,000 women of child-bearing ages (usually women aged 15-44 years) is often used since the denominator represents more closely the population at risk of giving birth. To further eliminate possible distortions in rates caused by the age structure of the female population, one might use an *age-specific birth rate* which equals the number of births to women of a particular age group, usually in one- or five-year intervals, per 1,000 female population of that age group. To the extent that two populations differ significantly in their underlying age structures, age-specific rates would be better measures to use for comparison purposes than either the crude rate or the general fertility rate. Similar rates are also shown in this report for pregnancies and abortions. (See *Appendix A*.)

Researchers and policy-makers often place considerable emphasis on which geographic area has the highest rate, but it is important to remember that rates can mask substantial differences in the numbers on which the rate is based. For example, in 1999 Skamania and Grays Harbor Counties have roughly the same teen pregnancy rate of 77 to 78 pregnancies per 1,000 women aged 15 to 19. In Grays Harbor County, a more populated area, there were 184 teen pregnancies compared to 28 in Skamania. Both the number and the rate should be considered for making policy decisions and designing programs to impact teen pregnancies in these two counties.

Standards for Comparison of Rates

What are good standards for comparison of rates? To help interpret a particular rate, one may choose to compare it to rates for another county or similar geographical area, national or state data, or an independent goal or standard (such as the Year 2000 goals). Such issues as comparability of the population characteristics and stability of rates from year to year for the standard population should be considered when choosing a base for comparison.

No matter what source for comparison is chosen, users should always find out how the rates were calculated to see if the same methods and definitions were used. Otherwise, the rates are not truly comparable and may lead to incorrect conclusions. Some questions to ask might be: Are the rates crude or age-specific? Are they for the same time period? Is the definition of what constitutes an event

² Population estimates from the Office of Financial Management used as denominators for rates in this report are full year rather than mid-year estimates.

the same? Is the completeness of reporting events similar? Are the denominators taken from the same or similar data sources?

Unknowns

Most pregnancy and abortion data are not 100% complete. Sometimes the information is not (or cannot be) collected, and then the item is reported as unknown. When the number of unknowns for a particular characteristic (e.g., race) is large, it can affect rates or percentage distributions based on that characteristic. For example, in 1999, woman's race was not reported for a fairly small proportion of births (about 4%) but for a sizable proportion of induced abortions (40.5 %).

How should unknowns be handled in calculating percentages? If we include unknowns in the total, the percent in any category is smaller than it would be if we subtract unknowns from the total. For example, in the case of abortions performed in 1999, the percent of women classified as black is 5.0 % if unknowns are included in the total, but the percentage is 9.2 % if unknowns are excluded from the total.

In deciding which method offers a "truer" representation of the population as a whole, one needs to consider whether the cases with an unknown characteristic are similar to or different from those cases in which the characteristic is known. If it appears likely that the cases with the unknown characteristic are similar to those with the known values, then "unknowns" should be excluded from the total and percentages should be based on the "known" population. To the extent that this assumption seems unlikely, then other methods could be invoked to distribute the cases with unknown values.

Assumptions about the probable characteristics of the population with a given unknown attribute could be based on: 1) greater familiarity with local situations by persons in the county or city health community or 2) more in-depth analysis of the source of unknowns in the reporting system. For example, if only a few hospitals or medical facilities fail to report a particular variable (as is the case with the reporting of race by abortion providers) one might examine information about the population served by those particular facilities or about those living in the nearby community.

Small Numbers

How should small numbers be handled? If the state collects all births, fetal deaths, and abortions in a year, then aren't the pregnancy and abortion rates exactly as calculated? It is certainly true that pregnancy and abortion statistics are not based on samples of the population, as many research data are. We do know the actual number of births, fetal deaths, and abortions (assuming complete reporting of

events), so we can calculate an exact pregnancy or abortion rate for any one year. However, the data may still be affected by random fluctuations in the number of events between successive measurements (e.g., for different years).

The effect of such random fluctuations on birth, pregnancy, and abortion rates is proportionately larger when the number of events is small. For example, one more teenage pregnancy has a larger numerical impact in an area with 10 teenage pregnancies than it does in an area with 1,000 teenage pregnancies. Because of these random fluctuations, the rates based on small numbers may not be as reliable as those based on larger numbers in the sense that they may have limited predictive value. Specifically, knowing one year's rate in such instances may not allow one to reliably anticipate the rate for another year. This instability makes it difficult to use the rates for program planning or assessment purposes. In fact, considerable caution should be used in interpreting any data where the number of events is small.

While there are no hard and fast rules as to when numbers are too small for rates to be stable predictors of what's happening, DOH has published a protocol on small numbers³. Also, the Public Health Improvement Plan (PHIP) guidelines call for suppressing calculation of rates when the number of events is less than five (5).

To increase the stability of the rate, one can combine several years of data (as long as there is no strong temporal trend in rates) or one can group several counties in the same geographic area or with similar population characteristics.

Data Quality

How does data quality affect the use of the data? Conclusions and health policy decisions are only as good as the data that go into making them. Pregnancy and abortion data quality has three major components: completeness, accuracy, and timeliness. Are the data *complete*, i.e., do we have a record for each event? Although WAC 246-490-100 requires that each hospital or facility that performs induced abortions report them to the Department of Health, there are some reasons to believe that some may not do so, but the number of unreported procedures is unclear.

Some indication of the completeness of current reporting can be had from a periodic national survey conducted by the Alan Guttmacher Institute (AGI) which indicates that the reported number of abortions in Washington State in the years when their survey could be compared with Washington State data, 1991, 1992, 1995 and 1996. In 1996, the most recent year for which the Guttmacher survey was performed, 26,340 abortions were reported to AGI as occurring in Washington State, which compares with 26,138 (occurrences) reported to the Department of Health/ Center for Health Statistics, a difference of 1%. The same survey showed 26,950 abortions by residents of Washington State, compared to 26,396 reported to the Center, a difference of 2%.⁴

Registration of births is currently more than 99% complete, according to National Center for Health Statistics (NCHS) studies. Registration completeness may be slightly lower for births occurring outside of a hospital. A small number of birth certificates are filed after the data files are prepared and thus are not included in the data presented in this report.

In addition to determining the completeness of a reporting system, researchers are often concerned with the degree to which people report what is actually happening. This characteristic of data is called its *validity*. Studies of validity of reporting systems like the birth certificate system usually look for an independent source of the information and determine the consistency with data contained in the reporting system. A previous study of birth certificate data quality conducted by the Center for Health Statistics showed that validity varied with the type of item. Legal information (e.g., names, addresses, ages) is very accurately reported. Unfortunately, medical information (e.g., menses date, prior pregnancy outcomes, complications, and malformations) is less accurate. Comparison to what was actually found in patients' medical history records for births revealed error rates of 5-20%. Rates for the abortion reporting system are not known.

To improve data quality, abortion providers are queried if the information obtained on their reporting forms is incomplete, inconsistent, or falls outside expected ranges. Tables are sent back to each provider annually for a review of the completeness and accuracy of information reported for their facility. Birth certificates are also edited for accuracy, internal consistency, and appropriate range of values (e.g., mother's age should normally be 8-59, so warning flags occur if ages less than 14 or greater than 49 are entered into the electronic birth system).

A factor that affects the completeness of the data is the number of *unknowns* among responses. Sometimes providers do not complete all items on a birth certificate or abortion reporting form. The information may be overlooked or refused by the informant, or the informant may not have been asked for the data. As discussed above, unknowns are a particular problem for race on abortion forms. Preliminary investigation of this reporting problem revealed that several large abortion clinics contribute to most of the unknowns since they do not report race for any of their clients. Discussions with a committee in 1997 established to review the contents of the abortion reporting form revealed several reasons that women are not asked to state their race or ethnicity. The two main reasons cited were: the potential for misrepresenting women of color and the perceived discomfort of clients when asked their race or ethnicity before receiving medical services. (See *Appendix A* for further discussion of problems with individual items on the birth certificate and the abortion reporting form).

Finally, are pregnancy data *timely*, i.e., are births, abortions, and fetal deaths reported early enough so that the data are available when needed to be most useful

for planning and program assessment purposes? There is often a tradeoff between timeliness and accuracy. For example, if abortion reports and birth certificates are filed quickly, there may not be enough time for complications related to the abortion procedure or the delivery to become evident. Indeed, abortion providers are asked to wait four weeks before submitting reports to the state to have time to include any complications that may have occurred in that interval. Despite the potential benefits of waiting, the main thrust - particularly for birth certificates - is to streamline the reporting process and to gather and report information as close to the event as possible. This has been accomplished by the Center for Health Statistics primarily by the development of the Electronic Birth Certificate System.

Confidentiality

How do we ensure confidentiality of the data? All of the data in this report are presented in aggregate form, which means that individuals cannot be identified from the data. However, it is important for potential data users to be aware of confidentiality issues related to the data. First, such personal information as a patient's name or address is not asked for on the Report of Induced Termination of Pregnancy. The Washington Administrative Code (WAC 246-490-110) stipulates that information from the abortion reporting system cannot be disclosed in such a way that any individual or facility is identified.

The medical and health information about births and fetal deaths is considered confidential and can be used for statistical purposes only (RCW 70.58.055). Hence, such confidential medical information may not be linked to any identifying information except for research projects approved by the Human Research Review Board of the Department of Social and Health Services and the Department of Health. (The Birth and Fetal Death Certificates, and the Report of Induced Termination of Pregnancy are shown in *Appendix B*).

It is the responsibility of all data users to treat these data in such a way as to respect and protect the privacy of individuals who have allowed information about their personal lives to be used for the good of the public. To ensure continued reporting of important demographic, medical, and health information, data must be handled in a way that ensures the privacy of individuals as required by law.

Additional Services

Additional tabulations of birth and fetal death data can be found in the publication, *Washington State Vital Statistics*, published annually by the Center for Health Statistics. Birth and fetal death data are available on the Center's CD-ROMs: *Vital Registration System Annual Statistical Files, Washington State*. The CD-

ROMs contains data in ASCII format, detailed technical documentation, and annual summary tables of births, deaths, and fetal deaths for 1980-1999. To order a copy of a CD-ROM, call (360) 236-4327.

All of the tables for this report are available for 1996, 1997, 1998 and 1999 on the Internet, along with copies of this introduction, the overview and the appendices. To access this information, go to the DOH web page at www.doh.wa.gov, click on "Health Data" then click on "Vital Statistics". At that point a list of items appears. Go to pregnancy and induced abortion tables. The other items in the list pertain to information from the annual summary of vital statistics from 1980 to 1999.

The Center also works with data users on a variety of levels: 1) to help users formulate requests so they get the data they need; 2) to provide technical consultation about how to use or interpret data; 3) to perform special analyses to address a specific problem or need; and 4) to help users access raw data files. For more information, call the Center's research line at (360) 236-4321.

¹*MMWR*, December 08, 2000 / Vol. 49, No.SS11, Abortion Surveillance United States, 1997, 1-44.

²Wilcox, Lynne S. and James S. Marks, eds., *From Data to Action*, CDC's Public Health Surveillance for Women, Infants, and Children, DHHS/PHS/CDCP, pp. 83.

³Assessment Operations Group, Washington State Department of Health. Guidelines for Working With Small Numbers. Nov. 2000. Available from URL: <http://www.doh.wa.gov/Data/guidelines/SmallNumbers.htm>.

⁴S.K. Henshaw, "Abortion Incidence and Services in the United States, 1995 -1996," *Family Planning Perspectives*, Alan Guttmacher Institute, Vol. 30, no. 6, November/December 1998.

Washington State Counties



Overview

The above map of Washington State counties is provided to help users identify the location of counties discussed in this report.

Change Over Time

Data for the two major components of pregnancy—births and induced abortions—are shown in Table 1. Since the 1970s, when abortions were first reported, the number rose through the early 1980s, declined slightly, rose to a high of over 30,000 in 1991, and then declined for several years. However, in 1999, 25,965 abortions were reported for residents of the state, up about 1.3% from 1998, when 25,613 abortions were reported for residents of the state. 1998 reported abortions were slightly decreased from the 27,055 abortions reported in 1997. (1999 reported abortions were about 1% lower than the 1997 total.) Abortions for 1992 through 1995 shown in Tables 1 and 2 are estimates that reflect the addition of between 1,200 and 1,350 previously unreported abortions each year; these estimates differ from official counts in annual reports for prior years.

Table 1. Induced Abortions, Live Births, and Abortion Ratios, Washington State Residents, 1975-1999¹

Year	Induced Abortions ²	Percent Change	Live Births	Percent Change	Abortion Ratio ³	Percent Change
1975	18,628	15.30	50,821	1.4	367	13.6
1976	20,251	8.70	53,004	4.3	382	4.2
1977	23,938	18.20	57,256	8.0	418	9.4
1978	26,254	9.70	58,725	2.6	447	6.9
1979	26,796	2.10	64,377	9.6	416	-6.9
1980	28,074	4.80	67,989	5.6	413	-0.8
1981	28,975	3.20	69,987	2.9	414	0.3
1982	27,421	-5.40	69,681	-0.4	394	-4.9
1983	26,560	-3.10	68,794	-1.3	386	-1.9
1984	26,732	0.60	69,059	0.4	387	0.3
1985	25,835	-3.40	70,357	1.9	367	-5.1
1986	26,991	4.50	69,572	-1.1	388	5.7
1987	29,067	7.70	70,409	1.2	413	6.4
1988	29,175	0.40	72,660	3.2	402	-2.7
1989	30,452	4.40	75,595	4.0	403	0.3
1990	30,613	0.50	79,468	5.1	385	-4.4
1991	30,390	-0.70	79,962	0.6	380	-1.3
1992*	28,922	-4.80	79,897	-0.1	362	-4.8
1993*	28,804	-0.40	78,771	-1.4	366	1.0
1994*	27,330	-5.10	77,368	-1.8	353	-3.4
1995*	26,650	-2.50	77,240	-0.2	345	-2.3
1996	26,396	-1.00	77,874	0.8	339	-1.8
1997	27,055	2.50	78,141	0.3	346	2.1
1998	25,613	-5.30	79,640	1.9	322	-7.1
1999	25,965	1.40	79,577	-0.1	326	1.5

¹Births for 1980-1994 and abortions for 1980-1982 are based on revised annual statistical data files and may not match numbers published in prior reports. These changes occur in all subsequent tables in this report using data for those years.

²For 1974-1977, abortions were reported by place of occurrence only. Therefore, abortions for state residents for these years are estimates based on the 1978 ratio of abortions for residents relative to occurrences (88.9%).

³Number of induced abortions per 1,000 live births.

*Abortions for 1992-1995 include 1,262; 1,234; 1,316 and 1,346 estimated abortions that were unreported in these years. See Appendix A, "Adjusted Abortion and Pregnancy Rates, 1992-1995."

Table 2. Pregnancy Statistics¹, Washington State Residents, 1975-1999

Year	Women	Pregnancy		Live Births		Abortions ²		Fetal Deaths	
	15-44	Number	Rate	Number	Rate	Number	Rate	Number	Ratio
1975	790,215	69,870	88.4	50,821	64.3	18,628	23.6	421	8.3
1976	818,011	73,694	90.1	53,004	64.8	20,251	24.8	439	8.3
1977	848,212	81,620	96.2	57,256	67.5	23,938	28.2	426	7.4
1978	889,259	85,444	96.1	58,725	66.0	26,254	29.5	465	7.9
1979	934,870	91,639	98.0	64,377	68.9	26,796	28.7	466	7.2
1980	982,660	96,596	98.3	67,989	69.2	28,074	28.6	533	7.8
1981	1,012,120	99,449	98.3	69,987	69.1	28,975	28.6	487	7.0
1982	1,024,704	97,601	95.2	69,681	68.0	27,421	26.8	499	7.2
1983	1,029,732	95,827	93.1	68,794	66.8	26,560	25.8	473	6.9
1984	1,042,867	96,235	92.3	69,059	66.2	26,732	25.6	444	6.4
1985	1,061,003	96,595	91.0	70,357	66.3	25,835	24.3	403	5.7
1986	1,073,620	97,008	90.4	69,572	64.8	26,991	25.1	445	6.4
1987	1,087,409	99,887	91.9	70,409	64.7	29,067	26.7	411	5.8
1988	1,103,462	102,216	92.6	72,660	65.8	29,175	26.4	381	5.2
1989	1,123,340	106,435	94.7	75,595	67.3	30,452	27.1	388	5.1
1990	1,151,604	110,543	96.0	79,468	69.0	30,613	26.6	462	5.8
1991	1,175,505	110,778	94.2	79,962	68.0	30,390	25.9	426	5.3
1992*	1,186,679	109,267	92.1	79,897	67.3	28,922	24.4	448	5.6
1993*	1,201,110	107,971	89.9	78,771	65.6	28,804	24.0	396	5.0
1994*	1,209,988	105,141	86.9	77,368	63.9	27,330	22.6	443	5.7
1995*	1,221,009	104,309	85.4	77,240	63.3	26,650	21.8	419	5.4
1996	1,229,056	104,732	85.2	77,874	63.4	26,396	21.5	462	5.9
1997	1,239,089	105,653	85.3	78,141	63.1	27,055	21.8	457	5.8
1998	1,243,120	105,724	85.0	79,640	64.1	25,613	20.6	471	5.9
1999	1,245,309	106,010	85.1	79,577	63.9	25,965	20.9	468	5.9

¹Rates equal total pregnancies, births, or abortions per 1,000 women of childbearing age (15-44). The fetal death ratio is equal to total fetal deaths per 1,000 live births.

²For 1974-1977, abortions were reported by place of occurrence only. Therefore, abortions for state residents for these years are estimates based on the 1978 ratio of abortions for residents relative to occurrences (88.9%).

*Abortions for 1992-1995 are estimates that include: 1,262; 1,234; 1,316; 1,346 (for the years 1992, 1993, 1994, 1995) respectively that were unreported by one or more facilities. See Appendix A, "Adjusted Abortion and Pregnancy Rates, 1992-1995."

Table 3. Teenage Pregnancy Rates¹ by Age Group, Washington State Residents, 1980-1999

Year	Age 15-19			Age 15-17			Age 18-19		
	Pregnancy Rate	Birth Rate	Abortion Rate	Pregnancy Rate	Birth Rate	Abortion Rate	Pregnancy Rate	Birth Rate	Abortion Rate
1980	95.4	46.7	48.3	60.2	24.8	35.1	144.8	77.3	66.9
1981	94.1	47.0	46.6	59.4	25.7	33.4	142.0	76.6	64.8
1982	88.6	45.2	43.1	56.2	24.7	31.3	132.1	72.7	59.0
1983	87.3	44.6	42.3	54.1	24.0	30.0	131.9	72.4	58.9
1984	85.6	44.1	41.2	52.7	23.1	29.4	132.6	74.1	58.1
1985	84.7	44.3	40.0	52.9	24.6	28.0	133.4	74.6	58.4
1986	84.9	43.9	40.7	53.1	24.2	28.8	135.8	75.5	59.6
1987	87.9	44.5	43.2	55.8	25.2	30.4	137.3	74.1	62.7
1988	90.3	46.7	43.3	56.5	26.5	29.8	137.8	75.1	62.3
1989	96.0	50.0	45.7	59.0	28.7	30.0	143.2	77.1	65.6
1990	95.2	53.4	41.3	57.9	29.8	27.8	145.0	85.1	59.4
1991	93.8	54.1	39.4	57.2	31.0	26.0	147.1	87.8	58.9
1992*	91.8	54.3	37.0	58.1	32.9	25.0	143.9	87.5	55.7
1993*	89.7	53.4	36.0	56.0	30.9	24.8	143.6	89.4	53.7
1994*	83.4	50.8	32.3	52.9	29.6	23.2	132.4	84.9	47.1
1995*	80.5	49.9	30.2	50.5	28.8	21.4	129.9	84.7	44.7
1996	76.7	47.1	29.3	46.9	26.6	20.2	126.2	81.2	44.5
1997	74.5	44.7	29.6	45.7	25.3	20.2	122.0	76.6	45.0
1998	71.2	44.0	26.9	42.6	24.0	18.4	116.8	75.8	40.4
1999	68.8	42.1	26.3	39.2	22.4	16.6	113.6	72.0	41.0

¹Rates per 1,000 women in age group.

* Abortion and pregnancy rates for 1992-1995 include 173, 173, 185, and 188 estimated abortions that were unreported in these years. See Appendix A, "Adjusted Abortion and Pregnancy Rates, 1992-1995."

In 1999 about 85 out of 1,000 women of childbearing age (15-44) had a pregnancy, which continues a trend since 1995. Of these, 64 resulted in a live birth and about 21 resulted in either an induced abortion or a fetal death. As shown in Table 2, the pregnancy, live birth, and abortion rates in 1999 are quite similar to those since 1995 but lower than those in the late 1980s and early 1990s.

The 1999 pregnancy rate for teenagers continues at record low rates, now at 68.8 pregnancies per 1,000 women aged 15 to 19. Teenagers from 15 to 17 years old had 39.2 pregnancies per 1,000, while those aged 18 to 19 had 113.6 per 1,000, both rates being the lowest recorded since 1980.

Recent County Trends

Table 5: Induced Abortion Rates with Ranks by County, Washington State Residents, 1995-1999 ranks the 39 counties in the state of Washington by their standing, for example, the total number of induced abortions per 1000 women of child-bearing age, 15-44. King County has had the highest abortion rate and Pierce the second highest of any county in the state over the last five years. Snohomish, Thurston, and Yakima counties usually rank in the top ten, while the position of most other counties varies over time.

In using this table, it is important to recall the warning earlier in this report that rates can mask substantial differences in the numbers on which the rates are based. Counties which may have the same rate could have widely disparate actual numbers of abortions. Additionally, small counties may have extremely small numbers, which could vary widely from year to year. Therefore, it is very important to consider both the rate and the number before making policy decisions or designing programs.

Table 4. Induced Abortion Rates ¹ by County of Residence, Washington State, 1993-1999

County	1993 ²	1994 ²	1995 ²	1996	1997	1998	1999
State Total	24.0	22.6	21.8	21.5	21.8	20.6	20.9
Adams	7.4	8.2	8.1	8.3	7.6	7.6	8.6
Asotin	15.6	12.9	11.8	10.3	13.3	10.3	9.7
Benton	17.7	16.6	16.3	15.2	15.6	14.4	14.4
Chelan	14.8	18.1	15.0	14.2	15.5	13.1	14.2
Clallam	18.4	15.1	13.7	14.8	15.3	14.9	13.9
Clark	16.9	18.5	18.8	17.5	15.7	15.6	17.3
Columbia	9.1	9.0	15.0	15.2	11.4	9.0	15.6
Cowlitz	18.1	18.5	15.9	14.7	12.4	13.4	12.7
Douglas	9.6	10.6	10.4	9.4	8.9	8.5	9.5
Ferry	14.5	5.4	12.7	8.0	8.6	8.0	10.8
Franklin	22.7	21.2	17.4	19.6	15.9	17.9	17.8
Garfield	--*	--*	--*	--*	--*	--*	--*
Grant	10.8	13.1	12.9	12.8	13.4	11.6	11.1
Grays Harbor	19.3	16.0	17.4	16.5	16.8	18.5	16.3
Island	16.5	18.0	15.6	13.0	14.7	14.9	14.1
Jefferson	15.1	17.2	15.7	16.1	19.5	18.2	16.5
King	30.7	29.1	28.8	27.8	29.0	26.9	26.8
Kitsap	22.9	19.8	16.0	16.5	18.6	16.1	18.9
Kittitas	18.9	15.9	15.6	14.2	18.9	15.1	18.1
Klickitat	12.2	9.6	11.5	9.4	6.7	11.2	11.5
Lewis	16.7	17.2	15.3	17.5	16.0	16.3	16.2
Lincoln	10.2	11.1	5.0	5.5	5.0	5.0	8.4
Mason	17.8	14.4	14.0	14.6	18.4	17.0	16.0
Okanagan	11.0	13.0	13.4	13.3	13.2	12.3	12.7
Pacific	12.1	11.3	15.7	13.4	11.2	12.9	12.8
Pend Oreille	10.5	12.1	12.8	8.7	10.6	10.7	10.0
Pierce	27.9	25.7	24.3	25.1	26.2	23.9	25.1
San Juan	20.4	20.9	18.2	14.0	12.1	21.1	22.2
Skagit	16.4	18.0	16.7	14.8	14.1	18.0	17.3
Skamania	9.8	4.5	9.2	11.0	8.6	9.2	5.9
Snohomish	23.0	21.2	21.1	22.0	21.4	20.7	20.1
Spokane	19.6	17.8	17.2	17.0	16.0	15.5	15.3
Stevens	8.9	9.6	10.1	10.8	8.2	6.5	6.3
Thurston	22.5	21.2	20.5	20.5	21.3	21.2	21.1
Wahkiakum	--*	--*	9.8	--*	--*	--*	--*
Walla Walla	16.5	14.7	14.0	10.6	12.0	14.3	14.4
Whatcom	21.2	18.5	16.8	19.3	18.0	15.8	16.5
Whitman	16.0	15.7	13.0	14.7	12.1	11.1	11.6
Yakima	20.3	19.9	20.1	18.8	20.1	18.8	19.1

¹Total number of induced abortions per 1,000 women of childbearing age (15-44).

²Abortions for 1993-1995 include 1,234; 1,316; and 1,346 estimated abortions that were unreported in these years. See Appendix A, "Adjusted Abortion and Pregnancy Rates, 1992-1995."

* Rate not calculated because number of abortions was less than 5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 5. Induced Abortion Rates¹ with Ranks by County, Washington State Residents, 1995-1999

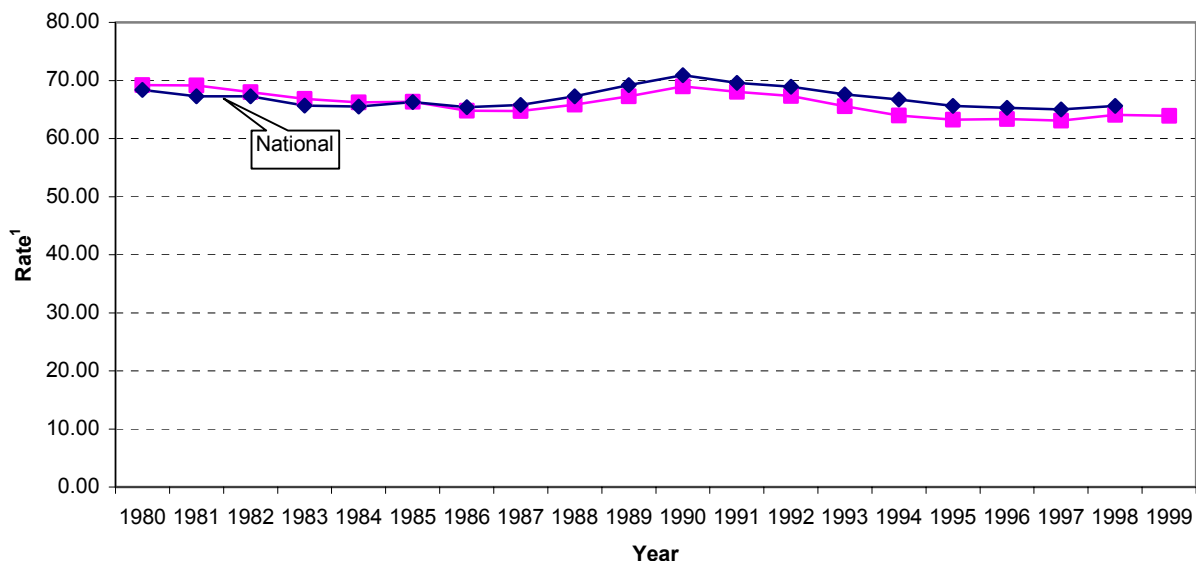
Rank	1995		1996		1997		1998		1999	
	County	Rate	County	Rate	County	Rate	County	Rate	County	Rate
1	King	28.8	King	27.8	King	29.0	King	26.9	King	26.8
2	Pierce	24.3	Pierce	25.1	Pierce	26.2	Pierce	23.9	Pierce	25.1
3	Snohomish	21.1	Snohomish	22.0	Snohomish	21.4	Thurston	21.2	San Juan	22.2
4	Thurston	20.5	Thurston	20.5	Thurston	21.3	San Juan	21.1	Thurston	21.1
5	Yakima	20.1	Franklin	19.6	Yakima	20.1	Snohomish	20.7	Snohomish	20.1
6	Clark	18.8	Whatcom	19.3	Jefferson	19.5	Yakima	18.8	Yakima	19.1
7	San Juan	18.2	Yakima	18.8	Kittitas	18.9	Grays Harbor	18.5	Kitsap	18.9
8	Franklin	17.4	Lewis	17.5	Kitsap	18.6	Jefferson	18.2	Kittitas	18.1
9	Grays Harbor	17.4	Clark	17.5	Mason	18.4	Skagit	18.0	Franklin	17.8
10	Spokane	17.2	Spokane	17.0	Whatcom	18.0	Franklin	17.9	Skagit	17.3
11	Whatcom	16.8	Grays Harbor	16.5	Grays Harbor	16.8	Mason	17.0	Clark	17.3
12	Skagit	16.7	Kitsap	16.5	Lewis	16.0	Lewis	16.3	Whatcom	16.5
13	Benton	16.3	Jefferson	16.1	Spokane	16.0	Kitsap	16.1	Jefferson	16.5
14	Kitsap	16.0	Benton	15.2	Franklin	15.9	Whatcom	15.8	Grays Harbor	16.3
15	Cowlitz	15.9	Columbia	15.2	Clark	15.7	Clark	15.6	Lewis	16.2
16	Jefferson	15.7	Skagit	14.8	Benton	15.6	Spokane	15.5	Mason	16.0
17	Pacific	15.7	Clallam	14.8	Chelan	15.5	Kittitas	15.1	Columbia	15.6
18	Island	15.6	Cowlitz	14.7	Clallam	15.3	Island	14.9	Spokane	15.3
19	Kittitas	15.6	Whitman	14.7	Island	14.7	Clallam	14.9	Walla Walla	14.4
20	Lewis	15.3	Mason	14.6	Skagit	14.1	Benton	14.4	Benton	14.4
21	Chelan	15.0	Chelan	14.2	Grant	13.4	Walla Walla	14.3	Chelan	14.2
22	Columbia	15.0	Kittitas	14.2	Asotin	13.3	Cowlitz	13.4	Island	14.1
23	Mason	14.0	San Juan	14.0	Okanogan	13.2	Chelan	13.1	Clallam	13.9
24	Walla Walla	14.0	Pacific	13.4	Cowlitz	12.4	Pacific	12.9	Pacific	12.8
25	Clallam	13.7	Okanogan	13.3	Whitman	12.1	Okanogan	12.3	Okanogan	12.7
26	Okanogan	13.4	Island	13.0	San Juan	12.1	Grant	11.6	Cowlitz	12.7
27	Whitman	13.0	Grant	12.8	Walla Walla	12.0	Klickitat	11.2	Whitman	11.6
28	Grant	12.9	Skamania	11.0	Columbia	11.4	Whitman	11.1	Klickitat	11.5
29	Pend Oreille	12.8	Stevens	10.8	Pacific	11.2	Pend Oreille	10.7	Grant	11.1
30	Ferry	12.7	Walla Walla	10.6	Pend Oreille	10.6	Asotin	10.3	Ferry	10.8
31	Asotin	11.8	Asotin	10.3	Douglas	8.9	Skamania	9.2	Pend Oreille	10.0
32	Klickitat	11.5	Douglas	9.4	Skamania	8.6	Columbia	9.0	Asotin	9.7
33	Douglas	10.4	Klickitat	9.4	Ferry	8.6	Douglas	8.5	Douglas	9.5
34	Stevens	10.1	Pend Oreille	8.7	Stevens	8.2	Ferry	8.0	Adams	8.6
35	Wahkiakum	9.8	Adams	8.3	Adams	7.6	Adams	7.6	Lincoln	8.4
36	Skamania	9.2	Ferry	8.0	Klickitat	6.7	Stevens	6.5	Stevens	6.3
37	Adams	8.1	Lincoln	5.5	Lincoln	5.0	Lincoln	5.0	Skamania	5.9
38	Lincoln	5.0	Garfield	--*	Garfield	--*	Garfield	--*	Garfield	--*
39	Garfield	--*	Wahkiakum	--*	Wahkiakum	--*	Wahkiakum	--*	Wahkiakum	--*

¹Total number of induced abortions per 1,000 women of childbearing age (15-44).

*Rate not calculated because number of abortions was less than 5.

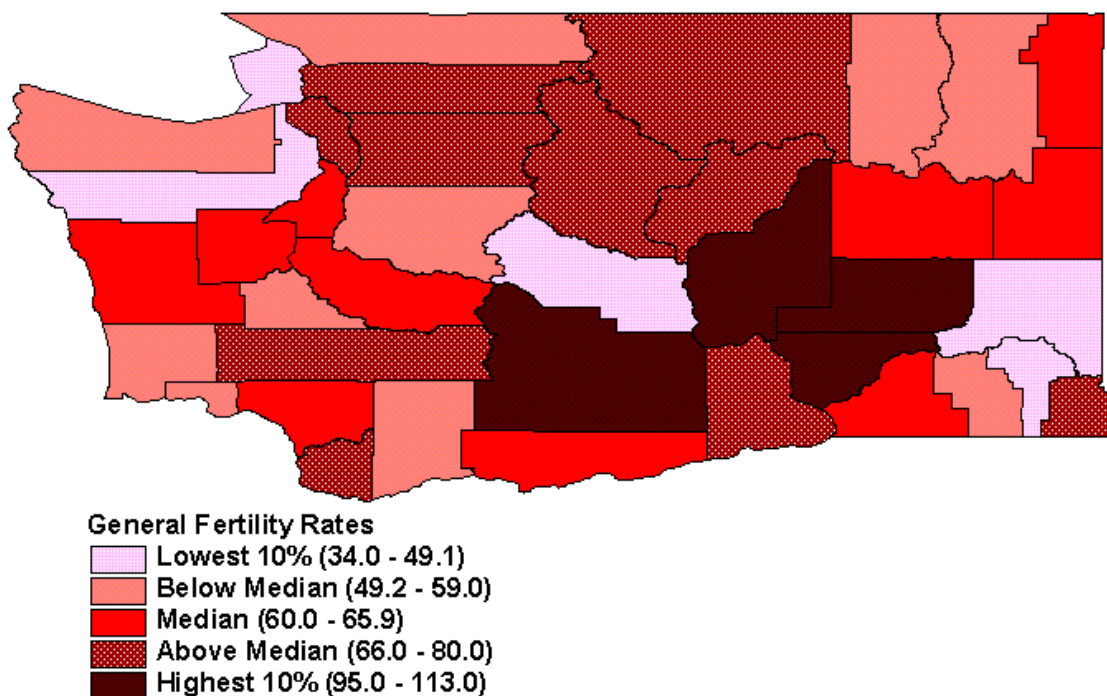
NOTE: Abortions for 1994 and 1995 include 1,316 and 1,346 estimated abortions, respectively, that were unreported in these years. See Appendix A, "Adjusted Abortion and Pregnancy Rates, 1992-1995."

Figure 1. General Fertility Rates¹, Washington State Residents Compared to National, 1980 - 1999



¹ Number of births to women of all ages per 1,000 women age 15 - 44

Figure 2. Washington State General Fertility Rates by County of Residence, 1997 – 1999
(Washington State Rate = 63.68)



Statistics 1999



Statistics Tables

Table 99-1. Pregnancy Outcomes of Residents by Woman's Age, 1999

Age	Total Pregnancies	Live Births		Abortions		Fetal Deaths	
		Number	Percent ¹	Number	Percent ¹	Number	Percent ¹
State Total	106,010	79,577	75.1	25,965	24.5	468	0.4
Under 15	279	138	49.5	140	50.2	1	0.4
15-19	13,764	8,435	61.3	5,274	38.3	55	0.4
15-17	4,726	2,699	57.1	2,006	42.4	21	0.4
18-19	9,038	5,736	63.5	3,268	36.2	34	0.4
20-24	27,534	19,302	70.1	8,143	29.6	89	0.3
25-29	27,821	22,176	79.7	5,536	19.9	109	0.4
30-34	22,021	18,329	83.2	3,591	16.3	101	0.5
35-39	11,528	9,149	79.4	2,321	20.1	58	0.5
40-44	2,725	1,909	70.1	796	29.2	20	0.7
45 and Over	176	115	65.3	60	34.1	1	0.6
Unknown	151	24	15.9	104*	68.9	23	15.2

¹Percents are the number of live births, abortions, or fetal deaths out of total pregnancies for specific age group.

* The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

Table 99-2. Age-Specific Rates¹ and Abortion Ratios of Residents, 1999

Age	Female Population	Pregnancy Rate	Birth Rate	Abortion Rate	Abortion Ratio ²
All Ages³	1,245,309	85.1	63.9	20.9	326
Under 15	211,304	1.3	0.7	0.7	1014
15-19	200,245	68.7	42.1	26.3	625
15-17	120,608	39.2	22.4	16.6	743
18-19	79,637	113.5	72.0	41.0	570
20-24	172,790	159.3	111.7	47.1	422
25-29	182,193	152.7	121.7	30.4	250
30-34	202,210	108.9	90.6	17.8	196
35-39	244,259	47.2	37.5	9.5	254
40-44	243,612	11.2	7.8	3.3	417
45 and Over	218,099	0.8	0.5	0.3	522

¹Age-specific rates equal the number of pregnancies, births, or abortions occurring to women in a specific age group per 1,000 female population in that age group. For "Under 15" and "45 and Over," the denominators for the age-specific rates are limited to the female populations aged 10-14 and 45-49, respectively.

²The abortion ratio equals the number of abortions per 1,000 live births.

³For the category, "All Ages," rates equal total pregnancies, births, or abortions per 1,000 women aged 15-44 (child-bearing ages.)

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 99-3. Induced Abortions of Residents by Selected Indicators, 1999

A. Age of Woman

Age	Number	Percent ¹
State Total	25,965	100.0
Under 15	140	0.5
15-19	5,274	20.3
15-17	2,006	7.7
18-19	3,268	12.6
20-24	8,143	31.4
25-29	5,536	21.3
30-34	3,591	13.8
35-39	2,321	8.9
40-44	796	3.1
45 and Over	60	0.2
Unknown	104*	0.4

B. Weeks of Gestation²

Weeks of Gestation	Number	Percent ¹
State Total	25,965	100.0
1-4	213	0.8
5-8	14,190	54.7
9	2,966	11.4
10	2,184	8.4
11	1,639	6.3
12	1,031	4.0
13-15	1,853	7.1
16-19	1,118	4.3
20 and Over	681	2.6
Unknown	90	0.3

C. Previous Abortions

Previous Abortions	Number	Percent ¹
State Total	25,965	100.0
0	14,133	54.4
1	6,672	25.7
2	2,971	11.4
3	1,126	4.3
4	511	2.0
Over 4	447	1.7
Unknown	105	0.4

D. Previous Live Births

Previous Live Births	Number	Percent ¹
State Total	25,965	100.0
0	11,677	45.0
1	6,702	25.8
2	4,774	18.4
3	1,865	7.2
4	580	2.2
Over 4	302	1.2
Unknown	65	0.3

E. Previous Pregnancies

Previous Pregnancies	Number	Percent ¹
State Total	25,965	100.0
0	7,427	28.6
1	5,248	20.2
2	4,446	17.1
3	3,377	13.0
4	2,257	8.7
Over 4	3,095	11.9
Unknown	115	0.4

F. Race and Hispanic Origin

Race	Number ³
State Total	25,965
White	12,034
Black	1,421
Native American	291
Asian	1,548
Multiple Races	97
Other	61
Unknown	10,513
Hispanic Origin ⁴	917

¹Detail may not add to 100% due to rounding.

²Weeks of gestation are estimated by the physician and may differ from weeks calculated from last known menses.

³Due to the large number of unknowns, percent by race is not calculated.

⁴Hispanic Origin is considered an ethnicity not a race. Abortions for women of Hispanic Origin are also counted under the woman's race.

* The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

Table 99-4. Induced Abortions of Residents by Woman's Age and Weeks of Gestation, 1999

Age	Total	Weeks of Gestation ¹										Unknown	
		Under 9		9-12		13-15		16-19		20 +		n	
		#	%	#	%	#	%	#	%	#	%	#	%
State Total	25,965	14,403	55.5	7,820	30.1	1,853	7.1	1,118	4.3	681	2.6	90	0.3
Under 15	140	58	41.4	37	26.4	21	15.0	10	7.1	14	10.0	0	--*
15-19	5,274	2,455	46.5	1,826	34.6	511	9.7	284	5.4	182	3.5	16	0.3
15-17	2,006	871	43.4	736	36.7	198	9.9	108	5.4	87	4.3	6	0.3
18-19	3,268	1,584	48.5	1,090	33.4	313	9.6	176	5.4	95	2.9	10	0.3
20-24	8,143	4,319	53.0	2,562	31.5	641	7.9	371	4.6	224	2.8	26	0.3
25-29	5,536	3,348	60.5	1,547	27.9	321	5.8	194	3.5	106	1.9	20	0.4
30-34	3,591	2,189	61.0	992	27.6	199	5.5	117	3.3	83	2.3	11	0.3
35-39	2,321	1,431	61.7	635	27.4	116	5.0	80	3.4	48	2.1	11	0.5
40-44	796	504	63.3	187	23.5	36	4.5	45	5.7	18	2.3	6	0.8
45 and Over	60	44	73.3	13	21.7	1	--*	2	--*	0	--*	0	--*
Unknown	104 ²	55	52.9	21	20.2	7	6.7	15	14.4	6	5.8	0	--*

¹Percents are row-wise percentages which show the proportion of abortions terminated at each gestational age.

²The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

* Percent not calculated because number of events was less than 5.

Table 99-5. Previous Live Births of Women Having Abortions by Age Washington State Residents, 1999

Age	Total Abortions	Previous Live Births						Unknown
		0	1	2	3	4	Over 4	
State Total	25,965	11,677	6,702	4,774	1,865	580	302	65
Under 15	140	138	2	0	0	0	0	0
15-19	5,274	4,246	863	143	16	2	0	4
15 - 17	2,006	1,803	182	17	2	0	0	2
18 - 19	3,268	2,443	681	126	14	2	0	2
20 - 24	8,143	4,048	2,598	1,145	269	55	10	18
25 - 29	5,536	1,795	1,608	1,350	555	154	63	11
30 - 34	3,591	864	904	1,034	508	179	86	16
35 - 39	2,321	391	484	834	380	129	92	11
40 - 44	796	139	196	235	119	57	47	3
45 and Over	60	10	14	17	12	3	3	1
Unknown	104*	46	33	16	6	1	1	1

* The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

Table 99-6. Previous Induced Abortions of Women Having Abortions by Age Washington State Residents, 1999

Age	Total	Previous Induced Abortions						Unknown
		0	1	2	3	4	Over 4	
State Total	25,965	14,133	6,672	2,971	1,126	511	447	105
Under 15	140	136	2	1	0	0	0	1
15-19	5,274	4,218	833	184	25	7	1	6
15 - 17	2,006	1,784	189	28	2	0	0	3
18 - 19	3,268	2,434	644	156	23	7	1	3
20 - 24	8,143	4,701	2,172	802	283	99	61	25
25 - 29	5,536	2,379	1,625	838	345	173	161	15
30 - 34	3,591	1,387	1,093	604	259	119	106	23
35 - 39	2,321	890	697	383	153	89	87	22
40 - 44	796	326	217	137	56	23	27	10
45 and Over	60	23	18	11	2	1	3	2
Unknown	104*	73	15	11	3	0	1	1

* The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

Table 99-7. Induced Abortions by Woman's Age and Place of Occurrence or Residence, 1999

A. Abortions of State Residents by Place of Occurrence

Age	Total	Inside Home County	Outside Home County	Residence Unknown
State Total	25,965	17,125	8,820	20
Under 15	140	91	49	0
15-19	5,274	3,344	1,926	4
15 - 17	2,006	1,279	724	3
18 - 19	3,268	2,065	1,202	1
20 - 24	8,143	5,396	2,741	6
25 - 29	5,536	3,736	1,796	4
30 - 34	3,591	2,409	1,180	2
35 - 39	2,321	1,506	813	2
40 - 44	796	533	263	0
45 and Over	60	47	13	0
Unknown	104*	63	39	2

* The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

B. Occurrences by Place of Residence

Age	Total	County Resident	Out-of-County Resident	Residence Unknown
State Total	25,523	17,125	8,376	22
Under 15	143	91	52	0
15-19	5,226	3,344	1,877	5
15 - 17	2,003	1,279	720	4
18 - 19	3,223	2,065	1,157	1
20 - 24	7,966	5,396	2,564	6
25 - 29	5,422	3,736	1,682	4
30 - 34	3,516	2,409	1,105	2
35 - 39	2,283	1,506	775	2
40 - 44	802	533	268	1
45 and Over	59	47	12	0
Unknown	106*	63	41	2

* The sharp increase in 1999 unknowns for age can be traced to a very small number of facilities not reporting age.

Table 99-8. Induced Abortions Occurring Within Washington State by Selected Indicators, 1999

A. State or Country of Residence

State or Country	Number	Percent
State Total	25,523	100.0
Washington	24,409	95.6
Idaho	533	2.1
Alaska	207	0.8
Oregon	180	0.7
California	16	0.1
Montana	6	0.0
Canada	121	0.5
Other States or Countries	42	0.2
Unknown	9	0.0

B. Type of Facility

Type of Facility	Number	Percent
State Total	25,523	100.0
Hospital	378	1.5
Nonhospital	25,145	98.5

C. Operative Procedure

Type of Procedure	Number	Percent
State Total	25,523	100.0
Suction Curettage	22,289	87.3
Dilation & Evacuation (D&E)	2,669	10.5
Medical (nonsurgical)	515	2.0
Intrauterine Instillation	29	0.1
Sharp Curettage	15	0.1
Hysterotomy/Hysterectomy	0	0.0
Other Procedures ¹	0	0.0
Unknown	6	0.0

¹There were no Other Procedures in 1999.

D. Complications

Type of Complication	Number	Percent
Complications Total¹	185	0.7
Retained Products	83	0.3
Failed Abortion	13	0.1
Hemorrhage > 500 cc	0	0.0
Infection	34	0.1
Cervical Laceration	9	0.0
Uterine Perforation	2	0.0
Other Complications ²	32	0.1
Multiple Complications ³	12	0.0
Unknown if Complications	13	0.1
No Complications	25,325	99.2

¹The total number of patients with complications was 185; total complications was 197.

²Includes 4 patients with PAS (Post abortion syndrome); 1 patient required 4 doses of misoprostol; 1 patient with Pain; 1 patient with Hematometria; 1 patient with Endometritis; 1 patient with Uterine Atony; 1 patient with Dehydration; and 1 patient with Fever.

³Includes 1 patient with hemorrhage and other complications; 3 patients with failed abortion and other complications; 2 patients with infection and retained products; 2 patients with retained products and other complications; 3 patients with infection and other complications; 1 patient with hemorrhage and retained products.

E. Secondary Management

Type of Procedure	Number	Percent
Sec. Mgmt. Total¹	188	0.7
Resuction	157	0.6
Hospitalization	23	0.1
Laparoscopy	0	0.0
Transfusion	0	0.0
Laparotomy	0	0.0
Multiple Management ²	8	0.0
Unknown if Sec. Mgmt.	18	0.1
No Secondary Mgmt.	25,317	99.2

¹The total number of patients receiving secondary management care was 188; total number of secondary care procedures was 197.

²Includes 8 patients who received hospitalization & resuction

Table 99-9. Induced Abortions Occurring Within State by Type of Procedure and Weeks of Gestation, 1999

Type of Procedure	Total	Weeks of Gestation ¹					Unk
		Under 9	9-12	13-15	16-19	20 +	
State Total	25,523	13,954	7,817	1,828	1,092	767	65
Suction Curettage	22,289	13,485	7,646	960	126	19	53
Dilation and Evacuation (D&E)	2,669	27	158	861	935	683	5
Medical (nonsurgical)	515	429	6	4	20	51	5
Intrauterine Instillation	29	1	0	2	11	14	1
Sharp Curettage	15	9	5	0	0	0	1
Hysterotomy/Hysterectomy	6	3	2	1	0	0	0
Other Procedure ²	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0

¹Weeks of gestation are estimated by the physician and may differ from weeks calculated from last known menses.

²There were no Other Procedures in 1999.

Table 99-10. Induced Abortions with Complications Occurring Within State by Type of Procedure and Weeks of Gestation, 1999

Type of Procedure	Total	Weeks of Gestation ¹					Unk
		Under 9	9-12	13-15	16-19	20 +	
State Total²	185	100	52	11	13	7	2
State Rate³	7.2	3.9	2.0	0.4	0.5	0.3	--*
Suction Curettage	150	87	50	9	3	0	1
Dilation and Evacuation (D&E)	8	0	0	2	4	2	0
Medical (nonsurgical)	20	11	2	0	4	3	0
Intrauterine Instillation	4	0	0	0	2	2	0
Sharp Curettage	3	2	0	0	0	0	1
Hysterotomy/Hysterectomy	0	0	0	0	0	0	0
Other Procedure ⁴	0	0	0	0	0	0	0
Unknown Procedure	0	0	0	0	0	0	0
Unknown if Complications Present	13	3	2	1	5	1	1
No Complications	25,325	13,851	7,763	1,816	1,074	759	62

¹Weeks of gestation are estimated by the physician and may differ from weeks calculated from last known menses.

²The total number of patients with complications was 185 total number of complications was 197.

³Rate equals the number of abortion patients with complications per 1,000 abortions occurring in Washington. Abortions occurring in Washington was 25,523 in 1999.

⁴There were no Other Procedures in 1999.

*Rate not calculated because number of abortions was less than 5.

Table 99-11. Induced Abortions with Secondary Management Occurring Within State by Type of Procedure and Weeks of Gestation, 1999

Type of Procedure	Total	Weeks of Gestation ¹					Unk
		Under 9	9-12	13-15	16-19	20 +	
State Total²	188	96	48	11	19	12	2
State Rate³	7.4	3.8	1.9	0.4	0.7	0.5	--*
Suction Curettage	144	85	46	8	3	0	2
Dilation and Evacuation (D&E)	9	0	0	2	4	3	0
Medical (nonsurgical)	26	10	2	0	8	6	0
Intrauterine Instillation	8	0	0	1	4	3	0
Sharp Curettage	1	1	0	0	0	0	0
Hysterotomy/Hysterectomy	0	0	0	0	0	0	0
Other Procedure	0	0	0	0	0	0	0
Unknown Procedure	0	0	0	0	0	0	0
Unknown if Sec. Mgmt.	18	7	2	1	5	2	1
No Secondary Management	25,317	13,851	7,767	1,816	1,068	753	62

¹Weeks of gestation are estimated by the physician and may differ from weeks calculated from last known menses.

²The total number of patients receiving secondary management care was 188; total number of secondary care procedures was 197.

³Rate equals the number of abortion patients with complications per 1,000 abortions occurring in Washington. Abortions occurring in Washington was 25,523 in 1999.

Table 99-12. Induced Abortions with Secondary Management Occurring Within State by Type of Secondary Management and Weeks of Gestation, 1999

Type of Management Care	Total	Weeks of Gestation ¹					Unk
		Under 9	9-12	13-15	16-19	20 +	
State Total²	188	96	48	11	19	12	2
State Rate³	7.4	3.8	1.9	0.4	0.7	0.5	--*
Resuction	157	92	41	8	11	3	2
Hospitalization	23	2	3	2	7	9	0
Laparoscopy	0	0	0	0	0	0	0
Transfusion	0	0	0	0	0	0	0
Laparotomy	0	0	0	0	0	0	0
Multiple Management ⁴	8	2	4	1	1	0	0
Unknown if Sec. Mgmt.	18	7	2	1	5	2	1
No Secondary Management	25,317	13,851	7,767	1,816	1,068	753	62

¹Weeks of gestation are estimated by the physician and may differ from weeks calculated from last known menses.

²The total number of patients receiving secondary management care was 188; total number of secondary care procedures was 197.

³Rate equals the number of abortion patients with complications per 1,000 abortions occurring in Washington. Abortions occurring in Washington was 25,523 in 1999.

⁴Includes 8 patients who received hospitalization & resuction

* Rate not calculated because number of abortions was less than 5.

Table 99-13. Induced Abortions with Complications Occurring Within State by Type of Complication and Weeks of Gestation, 1999

Type of Complication	Total	Weeks of Gestation ¹					20 +	Unk
		Under 9	9-12	13-15	16-19			
Patients w/Complications²	185	100	52	11	13	7	2	
State Rate³	7.2	3.9	2.0	0.4	0.5	0.3	--*	
Retained Products	83	40	29	4	4	4	2	
Failed Abortion	13	11	2	0	0	0	0	
Hemorrhage > 500 cc	0	0	0	0	0	0	0	
Infection	2	1	0	0	0	1	0	
Cervical Laceration	34	22	7	3	2	0	0	
Uterine Perforation	9	3	3	1	2	0	0	
Other Complications ⁴	32	15	10	1	4	2	0	
Multiple Complications ⁵	12	8	1	2	1	0	0	
Unknown if Complications Present	13	3	2	1	5	1	1	
No Complications	25,325	13,851	7,763	1,816	1,074	759	62	

Footnote: see bottom of page.

Table 99-14. Induced Abortions with Complications Occurring Within State by Type of Complication and Secondary Management Procedure, 1999

Type of Complication	Total	Secondary Management Procedure						None	Unk
		Resuc-tion	Hospital-ization	Trans-fusion	Laparo-scropy	Lapa-rotomy	Multiple Mgmt. ⁶		
State Total	25,523	157	23	0	0	0	8	25,317	18
Patients w/Complications²	185	150	12	0	0	0	8	15	0
Retained Products	83	75	3	0	0	0	3	2	0
Failed Abortion	13	13	0	0	0	0	0	0	0
Hemorrhage > 500 cc	0	0	0	0	0	0	0	0	0
Infection	2	0	1	0	0	0	0	1	0
Cervical Laceration	34	30	3	0	0	0	0	1	0
Uterine Perforation	9	5	0	0	0	0	0	4	0
Other Complications ⁴	32	19	5	0	0	0	3	5	0
Multiple Complications ⁵	12	8	0	0	0	0	2	2	0
Unknown if Complications Present	13	0	0	0	0	0	0	0	13
No Complications	25,325	7	11	0	0	0	0	25,302	5

¹Weeks of gestation are estimated by the physician and may differ from weeks calculated from last known menses.

²The total number of patients with complications was 185; total complications was 197.

³Rate equals the number of abortion patients with complications per 1,000 abortions occurring in Washington.

⁴Includes 4 patients with PAS (Post abortion syndrome); 1 patient required 4 doses of misoprostol; 1 patient with Pain; 1 patient with Hematometria; 1 patient with Endometritis; 1 patient with Uterine Atony; 1 patient with Dehydration; and 1 patient with Fever.

⁵Includes 1 patient with hemorrhage and other complications; 3 patients with failed abortion and other complications; 2 patients with infection and retained products; 2 patients with retained products and other complications; 3 patients with infection and other complications; 1 patient with hemorrhage and retained products.

⁶Includes 8 patients who received hospitalization & resuction.

* Rate not calculated because number of events was less than 5.

Table 99-15. Birth and Abortion Indicators¹ by County of Residence, 1999

County	Women 15-44	Live Births	Abortions	Abortion Ratio	Abortion Rate	Fertility Rate
State Total²	1,245,309	79,577	25,965	326	20.9	63.9
Adams	3,269	319	28	88	8.6	97.6
Asotin	4,111	263	40	152	9.7	64.0
Benton	30,406	2,119	437	206	14.4	69.7
Chelan	12,497	964	178	185	14.2	77.1
Clallam	11,331	617	158	256	13.9	54.5
Clark	74,654	5,185	1,290	249	17.3	69.5
Columbia	768	27	12	444	15.6	35.2
Cowlitz	18,954	1,286	241	187	12.7	67.8
Douglas	6,212	454	59	130	9.5	73.1
Ferry	1,482	77	16	208	10.8	52.0
Franklin	9,284	1,104	165	149	17.8	118.9
Garfield	420	27	2	--*	--*	64.3
Grant	14,141	1,390	157	113	11.1	98.3
Grays Harbor	13,227	823	215	261	16.3	62.2
Island	14,104	912	199	218	14.1	64.7
Jefferson	4,616	220	76	345	16.5	47.7
King	377,344	22,007	10,126	460	26.8	58.3
Kitsap	48,246	2,893	913	316	18.9	60.0
Kittitas	8,185	364	148	407	18.1	44.5
Klickitat	3,836	229	44	192	11.5	59.7
Lewis	13,611	944	221	234	16.2	69.4
Lincoln	1,781	113	15	133	8.4	63.4
Mason	9,007	523	144	275	16.0	58.1
Okanogan	7,307	552	93	168	12.7	75.5
Pacific	3,599	163	46	282	12.8	45.3
Pend Oreille	2,110	134	21	157	10.0	63.5
Pierce	153,110	9,939	3,838	386	25.1	64.9
San Juan	2,119	100	47	470	22.2	47.2
Skagit	19,962	1,359	346	255	17.3	68.1
Skamania	2,047	134	12	90	5.9	65.5
Snohomish	127,652	8,496	2,562	302	20.1	66.6
Spokane	90,657	5,497	1,389	253	15.3	60.6
Stevens	7,883	456	50	110	6.3	57.8
Thurston	44,385	2,478	935	377	21.1	55.8
Wahkiakum	723	42	4	--*	--*	58.1
Walla Walla	11,008	713	159	223	14.4	64.8
Whatcom	36,972	1,995	610	306	16.5	54.0
Whitman	11,643	422	135	320	11.6	36.2
Yakima	42,641	4,237	814	192	19.1	99.4

¹The abortion ratio equals total abortions per 1,000 live births; the general abortion rate equals total abortions per 1,000 women of childbearing age (15-44); the general fertility rate equals total live births per 1,000 women of childbearing age.

²Total abortions includes 20 for which county of residence was unknown.

*Rate not calculated because number of events was less than

5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 99-16. Total Pregnancies¹ by Woman's Age and County of Residence, 1999

County	All Ages	< 15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 +	Age Unk
State Total	106,010	279	13,777	4,733	9,044	27,554	27,818	22,015	11,533	2,726	177	131
Adams	349	4	59	23	36	115	102	39	24	6	0	0
Asotin	304	0	60	20	40	104	79	45	14	2	0	0
Benton	2,565	5	379	141	238	775	686	455	222	39	3	1
Chelan	1,148	3	154	43	111	349	325	196	90	29	1	1
Clallam	777	1	130	46	84	231	198	133	70	13	1	0
Clark	6,496	7	789	268	521	1,731	1,796	1,366	662	123	17	5
Columbia	39	0	6	1	5	12	9	8	2	2	0	0
Cowlitz	1,542	1	244	77	167	512	411	245	103	24	2	0
Douglas	516	1	81	22	59	166	134	72	49	9	4	0
Ferry	95	0	20	9	11	29	24	11	7	2	1	1
Franklin	1,278	3	230	93	137	414	330	180	97	20	4	0
Garfield	29	0	4	3	1	5	8	7	2	3	0	0
Grant	1,555	9	299	107	192	487	416	223	99	21	1	0
Grays Harbor	1,047	5	184	72	112	315	270	168	81	23	0	1
Island	1,121	0	123	39	84	326	323	225	97	19	7	1
Jefferson	297	0	42	18	24	79	70	61	30	14	1	0
King	32,253	75	3,113	1,070	2,043	6,686	8,177	8,131	4,745	1,180	75	71
Kitsap	3,822	17	510	159	351	1,146	931	699	414	97	5	3
Kittitas	515	1	64	9	55	172	136	85	45	11	0	1
Klickitat	273	3	48	18	30	91	57	40	26	7	0	1
Lewis	1,170	6	219	84	135	350	310	171	88	23	3	0
Lincoln	129	0	14	7	7	29	39	27	16	4	0	0
Mason	668	2	123	45	78	191	181	106	50	12	1	2
Okanogan	646	2	128	53	75	208	163	88	42	14	1	0
Pacific	210	1	37	15	22	61	58	33	17	3	0	0
Pend Oreille	155	0	24	15	9	47	34	25	21	3	1	0
Pierce	13,842	37	2,017	674	1,343	3,997	3,650	2,584	1,253	285	9	10
San Juan	150	0	14	7	7	28	35	31	28	14	0	0
Skagit	1,713	10	300	107	193	469	430	322	145	34	3	0
Skamania	147	1	28	9	19	38	39	22	18	1	0	0
Snohomish	11,116	25	1,308	427	881	2,585	3,036	2,605	1,264	267	6	20
Spokane	6,913	11	956	296	660	2,002	1,892	1,333	581	130	6	2
Stevens	508	3	72	24	48	152	133	85	42	21	0	0
Thurston	3,426	10	501	152	349	931	938	611	348	75	8	4
Wahkiakum	47	0	7	0	7	15	10	12	3	0	0	0
Walla Walla	882	7	134	58	76	270	206	168	77	20	0	0
Whatcom	2,614	4	341	123	218	680	690	545	273	74	5	2
Whitman	558	0	44	8	36	183	153	107	53	16	2	0
Yakima	5,075	25	967	388	579	1,567	1,335	749	333	86	10	3
Unknown	20	0	4	3	1	6	4	2	2	0	0	2

¹Total pregnancies equals the sum of live births, abortions, and fetal deaths.

Table 99-17. Age-specific Pregnancy Rates¹ by County of Residence, 1999

County	All Ages	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
State Total²	85.1	68.8	39.2	113.6	159.5	152.7	108.9	47.2	11.2
Adams	106.8	85.0	49.8	155.2	261.4	231.3	75.1	43.0	9.7
Asotin	73.9	82.1	39.9	173.9	201.6	135.7	69.1	16.5	--*
Benton	84.4	72.6	41.0	133.6	202.6	149.7	89.9	37.5	6.7
Chelan	91.9	74.2	33.0	143.4	230.7	173.6	99.2	35.3	11.5
Clallam	68.6	63.8	34.2	121.2	170.5	130.5	77.8	30.9	5.3
Clark	87.0	63.5	33.9	115.2	167.7	158.4	114.9	46.6	8.5
Columbia	50.8	40.3	--*	106.4	121.2	84.1	77.7	--*	--*
Cowlitz	81.4	73.7	37.9	130.7	213.2	146.8	80.0	28.3	6.4
Douglas	83.1	71.9	29.9	150.5	220.7	158.2	74.3	40.0	7.0
Ferry	64.1	67.8	43.3	126.4	140.1	120.6	51.2	25.3	--*
Franklin	137.7	124.6	78.5	206.9	326.0	233.1	125.0	57.9	12.2
Garfield	69.0	--*	--*	--*	102.0	181.8	114.8	--*	--*
Grant	110.0	110.3	60.5	203.8	257.1	195.4	100.7	37.4	8.2
Grays Harbor	79.2	77.9	46.8	135.8	194.6	142.4	80.8	30.7	8.7
Island	79.5	54.9	27.4	103.1	140.8	148.5	93.4	39.1	7.6
Jefferson	64.3	56.2	34.8	104.3	142.3	110.1	94.1	32.5	12.6
King	85.5	60.1	35.0	96.3	142.4	147.5	124.8	59.4	15.1
Kitsap	79.2	65.6	32.3	123.2	168.1	124.0	89.8	45.8	10.4
Kittitas	62.9	28.0	11.9	35.9	74.1	215.9	104.7	44.5	9.8
Klickitat	71.2	63.5	34.8	125.5	199.1	117.5	69.2	35.2	8.5
Lewis	86.0	85.1	50.8	146.9	193.2	157.8	82.7	34.6	8.7
Lincoln	72.4	40.9	26.4	90.9	130.6	187.5	102.3	43.6	--*
Mason	74.2	74.8	40.9	143.4	172.5	140.6	76.6	28.3	6.6
Okanogan	88.4	95.7	59.5	167.8	235.0	159.6	78.0	29.4	9.3
Pacific	58.3	57.5	35.0	102.3	135.6	118.4	62.1	24.0	--*
Pend Oreille	73.5	56.5	50.2	71.4	164.3	132.8	81.7	50.0	--*
Pierce	90.4	83.0	47.3	133.7	165.9	154.5	103.3	43.6	10.4
San Juan	70.8	43.6	28.2	95.9	123.3	128.2	105.4	63.3	24.9
Skagit	85.8	89.5	50.7	155.5	187.8	143.3	101.6	37.0	8.4
Skamania	71.8	77.3	39.8	139.7	153.2	144.4	67.5	40.7	--*
Snohomish	87.1	66.8	34.9	120.1	167.5	166.5	119.1	47.4	10.3
Spokane	76.3	61.8	33.0	101.5	138.1	144.9	95.3	34.8	7.7
Stevens	64.4	44.1	20.4	105.0	150.3	136.8	79.2	28.2	12.3
Thurston	77.2	68.6	33.5	126.6	159.4	140.0	88.2	41.0	8.2
Wahkiakum	65.0	44.6	--*	116.7	156.3	107.5	116.5	--*	--*
Walla Walla	80.1	55.7	49.2	62.0	134.7	161.3	113.6	39.8	10.5
Whatcom	70.7	50.4	31.6	75.9	98.3	137.0	105.8	43.4	10.9
Whitman	47.9	14.8	12.0	15.6	46.0	121.6	107.8	43.1	13.2
Yakima	119.0	121.4	77.1	197.5	284.3	204.7	110.5	42.4	10.7

¹The general pregnancy rate shown under "All Ages" equals total pregnancies (live births, fetal deaths, plus abortions) per 1,000 women of childbearing age (15-44). Age-specific rates equal the number of pregnancies to women in a specific age group per 1,000 women in that age group.

²Total pregnancies includes 20 abortions for which county of residence was unknown.

* Rate not calculated because number of events was less than 5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 99-18. Live Births by Woman's Age and County of Residence, 1999

County	All Ages	< 15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 +	Age Unk
State Total	79,577	138	8,435	2,699	5,736	19,302	22,176	18,329	9,149	1,909	115	24
Adams	319	4	53	20	33	105	91	37	23	6	0	0
Asotin	263	0	49	17	32	88	74	39	11	2	0	0
Benton	2,119	3	280	99	181	620	594	404	188	27	3	0
Chelan	964	0	115	28	87	289	280	174	83	22	1	0
Clallam	617	0	84	20	64	176	170	119	54	13	1	0
Clark	5,185	4	548	178	370	1,300	1,512	1,172	541	96	12	0
Columbia	27	0	2	0	2	10	6	7	1	1	0	0
Cowlitz	1,286	0	180	53	127	432	360	216	79	17	2	0
Douglas	454	1	64	18	46	149	123	66	41	8	2	0
Ferry	77	0	14	7	7	26	20	10	5	1	1	0
Franklin	1,104	3	189	74	115	350	298	163	84	14	3	0
Garfield	27	0	4	3	1	5	8	7	2	1	0	0
Grant	1,390	8	246	89	157	435	388	206	90	16	1	0
Grays Harbor	823	3	127	49	78	260	221	133	65	14	0	0
Island	912	0	82	18	64	264	279	195	72	13	7	0
Jefferson	220	0	25	11	14	61	55	46	23	10	0	0
King	22,007	24	1,419	451	968	3,610	5,751	6,592	3,758	799	42	12
Kitsap	2,893	8	309	82	227	814	764	589	325	77	5	2
Kittitas	364	1	30	5	25	105	111	74	38	5	0	0
Klickitat	229	2	35	14	21	74	55	35	22	6	0	0
Lewis	944	4	168	61	107	289	257	145	61	17	3	0
Lincoln	113	0	12	5	7	23	35	26	13	4	0	0
Mason	523	2	88	32	56	141	150	89	44	8	1	0
Okanogan	552	0	97	34	63	176	154	80	35	9	1	0
Pacific	163	0	25	8	17	48	49	25	14	2	0	0
Pend Oreille	134	0	21	13	8	39	31	21	19	2	1	0
Pierce	9,939	17	1,176	349	827	2,740	2,853	2,042	919	189	3	0
San Juan	100	0	7	3	4	17	23	24	24	5	0	0
Skagit	1,359	6	197	70	127	378	363	276	116	21	2	0
Skamania	134	1	25	9	16	35	36	20	16	1	0	0
Snohomish	8,496	9	730	216	514	1,857	2,474	2,219	1,000	195	3	9
Spokane	5,497	7	624	167	457	1,527	1,634	1,132	472	97	4	0
Stevens	456	2	60	17	43	138	122	78	39	17	0	0
Thurston	2,478	4	279	76	203	634	746	492	268	47	7	1
Wahkiakum	42	0	6	0	6	15	10	9	2	0	0	0
Walla Walla	713	3	93	36	57	215	173	149	63	17	0	0
Whatcom	1,995	2	204	76	128	472	588	467	207	52	3	0
Whitman	422	0	15	2	13	113	137	100	45	11	1	0
Yakima	4,237	20	753	289	464	1,272	1,181	651	287	67	6	0

Table 99-19. Age-specific Live Birth Rates¹ by County of Residence, 1999

County	All Ages	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
State Total	63.9	42.1	22.4	72.0	111.7	121.7	90.6	37.5	7.8
Adams	97.6	76.4	43.3	142.2	238.6	206.3	71.3	41.2	9.7
Asotin	64.0	67.0	33.9	139.1	170.5	127.1	59.9	13.0	--*
Benton	69.7	53.6	28.8	101.6	162.0	129.6	79.8	31.8	4.7
Chelan	77.1	55.4	21.5	112.4	191.0	149.6	88.1	32.6	8.8
Clallam	54.5	41.2	14.9	92.4	129.9	112.1	69.6	23.9	5.3
Clark	69.5	44.1	22.5	81.8	125.9	133.3	98.6	38.1	6.6
Columbia	35.2	--*	--*	--*	101.0	56.1	68.0	--*	--*
Cowlitz	67.8	54.4	26.1	99.4	179.9	128.6	70.5	21.7	4.5
Douglas	73.1	56.8	24.5	117.3	198.1	145.2	68.1	33.5	6.2
Ferry	52.0	47.5	33.7	80.5	125.6	100.5	46.5	18.1	--*
Franklin	118.9	102.4	62.5	173.7	275.6	210.5	113.2	50.1	8.6
Garfield	64.3	--*	--*	--*	102.0	181.8	114.8	--*	--*
Grant	98.3	90.7	50.3	166.7	229.7	182.2	93.0	34.0	6.3
Grays Harbor	62.2	53.8	31.9	94.5	160.6	116.6	63.9	24.7	5.3
Island	64.7	36.6	12.6	78.5	114.0	128.3	80.9	29.0	5.2
Jefferson	47.7	33.5	21.3	60.9	109.9	86.5	71.0	24.9	9.0
King	58.3	27.4	14.7	45.6	76.9	103.7	101.1	47.1	10.2
Kitsap	60.0	39.8	16.6	79.7	119.4	101.7	75.7	36.0	8.3
Kittitas	44.5	13.1	6.6	16.3	45.3	176.2	91.1	37.5	4.5
Klickitat	59.7	46.3	27.1	87.9	161.9	113.4	60.6	29.8	7.3
Lewis	69.4	65.3	36.9	116.4	159.5	130.9	70.1	24.0	6.4
Lincoln	63.4	35.1	18.9	90.9	103.6	168.3	98.5	35.4	--*
Mason	58.1	53.5	29.1	102.9	127.4	116.6	64.3	24.9	4.4
Okanogan	75.5	72.5	38.2	140.9	198.9	150.8	70.9	24.5	6.0
Pacific	45.3	38.9	18.7	79.1	106.7	100.0	47.1	19.7	--*
Pend Oreille	63.5	49.4	43.5	63.5	136.4	121.1	68.6	45.2	--*
Pierce	64.9	48.4	24.5	82.3	113.7	120.8	81.6	32.0	6.9
San Juan	47.2	21.8	--*	--*	74.9	84.2	81.6	54.3	8.9
Skagit	68.1	58.8	33.1	102.3	151.3	121.0	87.1	29.6	5.2
Skamania	65.5	69.1	39.8	117.6	141.1	133.3	61.3	36.2	--*
Snohomish	66.6	37.3	17.7	70.1	120.3	135.7	101.4	37.5	7.5
Spokane	60.6	40.3	18.6	70.3	105.4	125.2	81.0	28.2	5.7
Stevens	57.8	36.8	14.5	94.1	136.5	125.5	72.7	26.2	10.0
Thurston	55.8	38.2	16.7	73.7	108.6	111.3	71.1	31.6	5.1
Wahkiakum	58.1	38.2	--*	100.0	156.3	107.5	87.4	--*	--*
Walla Walla	64.8	38.7	30.5	46.5	107.3	135.5	100.7	32.6	8.9
Whatcom	54.0	30.2	19.5	44.5	68.2	116.7	90.6	32.9	7.6
Whitman	36.2	5.0	--*	5.6	28.4	108.9	100.7	36.6	9.1
Yakima	99.4	94.5	57.4	158.3	230.8	181.1	96.0	36.5	8.4

¹The general fertility rate shown under "All Ages" equals total live births per 1,000 women of childbearing age (15-44). Age-specific rates equal the number of live births to women in a specific age group per 1,000 women in that age group.

* Rate not calculated because number of events was less than 5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 99-20. Induced Abortions by Woman's Age and County of Residence, 1999

County	All Ages	< 15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 +	Age Unk
State Total	25,965	140	5,274	2,006	3,268	8,143	5,536	3,591	2,321	796	60	104
Adams	28	0	6	3	3	9	11	1	1	0	0	0
Asotin	40	0	11	3	8	16	4	6	3	0	0	0
Benton	437	2	97	40	57	151	90	50	34	12	0	1
Chelan	178	3	38	15	23	58	44	21	7	7	0	0
Clallam	158	1	46	26	20	54	28	13	16	0	0	0
Clark	1,290	3	235	87	148	426	279	192	120	26	4	5
Columbia	12	0	4	1	3	2	3	1	1	1	0	0
Cowlitz	241	1	62	24	38	71	48	28	24	7	0	0
Douglas	59	0	17	4	13	17	11	5	7	0	2	0
Ferry	16	0	5	1	4	3	4	1	2	0	0	1
Franklin	165	0	38	18	20	63	31	14	12	6	1	0
Garfield	2	0	0	0	0	0	0	0	0	2	0	0
Grant	157	1	51	17	34	51	27	15	7	5	0	0
Grays Harbor	215	2	54	23	31	54	46	34	15	9	0	1
Island	199	0	41	21	20	58	43	28	23	5	0	1
Jefferson	76	0	17	7	10	18	15	14	7	4	1	0
King	10,126	51	1,680	615	1,065	3,062	2,399	1,511	959	373	32	59
Kitsap	913	9	199	76	123	323	166	109	88	18	0	1
Kittitas	148	0	34	4	30	66	25	11	6	5	0	1
Klickitat	44	1	13	4	9	17	2	5	4	1	0	1
Lewis	221	2	51	23	28	59	51	26	26	6	0	0
Lincoln	15	0	2	2	0	6	3	1	3	0	0	0
Mason	144	0	35	13	22	50	31	16	6	4	0	2
Okanogan	93	2	30	18	12	32	9	8	7	5	0	0
Pacific	46	1	12	7	5	13	9	7	3	1	0	0
Pend Oreille	21	0	3	2	1	8	3	4	2	1	0	0
Pierce	3,838	20	828	322	506	1,244	779	528	327	96	6	10
San Juan	47	0	7	4	3	10	10	7	4	9	0	0
Skagit	346	4	102	37	65	89	65	43	29	13	1	0
Skamania	12	0	3	0	3	3	3	1	2	0	0	0
Snohomish	2,562	16	570	206	364	717	543	377	257	70	3	9
Spokane	1,389	3	329	127	202	469	255	189	107	33	2	2
Stevens	50	1	12	7	5	13	11	7	3	3	0	0
Thurston	935	6	221	76	145	293	189	115	80	27	1	3
Wahkiakum	4	0	1	0	1	0	0	2	1	0	0	0
Walla Walla	159	4	40	21	19	50	32	18	12	3	0	0
Whatcom	610	2	136	46	90	204	102	77	64	21	2	2
Whitman	135	0	29	6	23	70	15	7	8	5	1	0
Yakima	814	5	211	97	114	288	146	97	42	18	4	3
Unknown	20	0	4	3	1	6	4	2	2	0	0	2

Table 99-21. Age-specific Abortion Rates¹ by County of Residence, 1999

County	All Ages	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
State Total²	20.9	26.3	16.6	41.0	47.1	30.4	17.8	9.5	3.3
Adams	8.6	8.6	--*	--*	20.5	24.9	--*	--*	--*
Asotin	9.7	15.0	--*	34.8	31.0	--*	9.2	--*	--*
Benton	14.4	18.6	11.6	32.0	39.5	19.6	9.9	5.7	2.1
Chelan	14.2	18.3	11.5	29.7	38.3	23.5	10.6	2.7	2.8
Clallam	13.9	22.6	19.3	28.9	39.9	18.5	7.6	7.1	--*
Clark	17.3	18.9	11.0	32.7	41.3	24.6	16.2	8.5	1.8
Columbia	15.6	--*	--*	--*	--*	--*	--*	--*	--*
Cowlitz	12.7	18.7	11.8	29.7	29.6	17.1	9.1	6.6	1.9
Douglas	9.5	15.1	--*	33.2	22.6	13.0	5.2	5.7	--*
Ferry	10.8	16.9	--*	--*	--*	--*	--*	--*	--*
Franklin	17.8	20.6	15.2	30.2	49.6	21.9	9.7	7.2	3.7
Garfield	--*	--*	--*	--*	--*	--*	--*	--*	--*
Grant	11.1	18.8	9.6	36.1	26.9	12.7	6.8	2.6	2.0
Grays Harbor	16.3	22.9	15.0	37.6	33.4	24.3	16.3	5.7	3.4
Island	14.1	18.3	14.7	24.5	25.0	19.8	11.6	9.3	2.0
Jefferson	16.5	22.8	13.5	43.5	32.4	23.6	21.6	7.6	--*
King	26.8	32.4	20.1	50.2	65.2	43.3	23.2	12.0	4.8
Kitsap	18.9	25.6	15.4	43.2	47.4	22.1	14.0	9.7	1.9
Kittitas	18.1	14.9	--*	19.6	28.4	39.7	13.5	5.9	4.5
Klickitat	11.5	17.2	--*	37.7	37.2	--*	8.7	--*	--*
Lewis	16.2	19.8	13.9	30.5	32.6	26.0	12.6	10.2	2.3
Lincoln	8.4	--*	--*	--*	27.0	--*	--*	--*	--*
Mason	16.0	21.3	11.8	40.4	45.2	24.1	11.6	3.4	--*
Okanogan	12.7	22.4	20.2	26.8	36.2	8.8	7.1	4.9	3.3
Pacific	12.8	18.7	16.4	23.3	28.9	18.4	13.2	--*	--*
Pend Oreille	10.0	--*	--*	--*	28.0	--*	--*	--*	--*
Pierce	25.1	34.1	22.6	50.4	51.6	33.0	21.1	11.4	3.5
San Juan	22.2	21.8	--*	--*	44.1	36.6	23.8	--*	16.0
Skagit	17.3	30.4	17.5	52.4	35.6	21.7	13.6	7.4	3.2
Skamania	5.9	--*	--*	--*	--*	--*	--*	--*	--*
Snohomish	20.1	29.1	16.8	49.6	46.4	29.8	17.2	9.6	2.7
Spokane	15.3	21.3	14.2	31.1	32.4	19.5	13.5	6.4	1.9
Stevens	6.3	7.4	6.0	10.9	12.9	11.3	6.5	--*	--*
Thurston	21.1	30.3	16.7	52.6	50.2	28.2	16.6	9.4	3.0
Wahkiakum	--*	--*	--*	--*	--*	--*	--*	--*	--*
Walla Walla	14.4	16.6	17.8	15.5	25.0	25.1	12.2	6.2	--*
Whatcom	16.5	20.1	11.8	31.3	29.5	20.3	14.9	10.2	3.1
Whitman	11.6	9.7	9.0	10.0	17.6	11.9	7.0	6.5	4.1
Yakima	19.1	26.5	19.3	38.9	52.3	22.4	14.3	5.3	2.2

¹The general abortion rate shown under "All Ages" equals abortions per 1,000 women of childbearing age (15-44). Age-specific rates equal the number of abortions to women in a specific age group per 1,000 women in that age group.

²Total abortions includes 20 for which county of residence was unknown.

* Rate not calculated because number of events was less than 5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 99-22. Percent of Pregnancies Terminated by Abortion by Woman's Age and County of Residence, 1999

County	All Ages	< 15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
Percents										
State Total¹	24.5	50.2	38.3	42.4	36.1	29.6	19.9	16.3	20.1	29.2
Adams	8.0	--*	10.2	--*	--*	7.8	10.8	--*	--*	--*
Asotin	13.2	--*	18.3	--*	20.0	15.4	--*	13.3	--*	--*
Benton	17.0	--*	25.6	28.4	23.9	19.5	13.1	11.0	15.3	30.8
Chelan	15.5	--*	24.7	34.9	20.7	16.6	13.5	10.7	7.8	24.1
Clallam	20.3	--*	35.4	56.5	23.8	23.4	14.1	9.8	22.9	--*
Clark	19.9	--*	29.8	32.5	28.4	24.6	15.5	14.1	18.1	21.1
Columbia	30.8	--*	--*	--*	--*	--*	--*	--*	--*	--*
Cowlitz	15.6	--*	25.4	31.2	22.8	13.9	11.7	11.4	23.3	29.2
Douglas	11.4	--*	21.0	--*	22.0	10.2	8.2	6.9	14.3	--*
Ferry	16.8	--*	25.0	--*	--*	--*	--*	--*	--*	--*
Franklin	12.9	--*	16.5	19.4	14.6	15.2	9.4	7.8	12.4	30.0
Garfield	--*	--*	--*	--*	--*	--*	--*	--*	--*	--*
Grant	10.1	--*	17.1	15.9	17.7	10.5	6.5	6.7	7.1	23.8
Grays Harbor	20.5	--*	29.3	31.9	27.7	17.1	17.0	20.2	18.5	39.1
Island	17.8	--*	33.3	53.8	23.8	17.8	13.3	12.4	23.7	26.3
Jefferson	25.6	--*	40.5	38.9	41.7	22.8	21.4	23.0	23.3	--*
King	31.4	68.0	54.0	57.5	52.1	45.8	29.3	18.6	20.2	31.6
Kitsap	23.9	52.9	39.0	47.8	35.0	28.2	17.8	15.6	21.3	18.6
Kittitas	28.7	--*	53.1	--*	54.5	38.4	18.4	12.9	13.3	45.5
Klickitat	16.1	--*	27.1	--*	30.0	18.7	--*	12.5	--*	--*
Lewis	18.9	--*	23.3	27.4	20.7	16.9	16.5	15.2	29.5	26.1
Lincoln	11.6	--*	--*	--*	--*	20.7	--*	--*	--*	--*
Mason	21.6	--*	28.5	28.9	28.2	26.2	17.1	15.1	12.0	--*
Okanogan	14.4	--*	23.4	34.0	16.0	15.4	5.5	9.1	16.7	35.7
Pacific	21.9	--*	32.4	46.7	22.7	21.3	15.5	21.2	--*	--*
Pend Oreille	13.5	--*	--*	--*	--*	17.0	--*	--*	--*	--*
Pierce	27.7	54.1	41.1	47.8	37.7	31.1	21.3	20.4	26.1	33.7
San Juan	31.3	--*	50.0	--*	--*	35.7	28.6	22.6	--*	64.3
Skagit	20.2	--*	34.0	34.6	33.7	19.0	15.1	13.4	20.0	38.2
Skamania	8.2	--*	--*	--*	--*	--*	--*	--*	--*	--*
Snohomish	23.0	64.0	43.6	48.2	41.3	27.7	17.9	14.5	20.3	26.2
Spokane	20.1	--*	34.4	42.9	30.6	23.4	13.5	14.2	18.4	25.4
Stevens	9.8	--*	16.7	29.2	10.4	8.6	8.3	8.2	--*	--*
Thurston	27.3	60.0	44.1	50.0	41.5	31.5	20.1	18.8	23.0	36.0
Wahkiakum	--*	--*	--*	--*	--*	--*	--*	--*	--*	--*
Walla Walla	18.0	--*	29.9	36.2	25.0	18.5	15.5	10.7	15.6	--*
Whatcom	23.3	--*	39.9	37.4	41.3	30.0	14.8	14.1	23.4	28.4
Whitman	24.2	--*	65.9	75.0	63.9	38.3	9.8	6.5	15.1	31.3
Yakima	16.0	20.0	21.8	25.0	19.7	18.4	10.9	13.0	12.6	20.9

¹Total pregnancies includes 20 abortions for which county of residence was unknown.

* Percent not calculated because number of abortions was less than 5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Table 99-23. Abortion Ratio¹ by Woman's Age and County of Residence, 1999

County	All Ages	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
State Total²	326	625	743	570	422	250	196	254	417
Adams	88	113	--*	--*	86	121	--*	--*	--*
Asotin	152	224	--*	250	182	--*	154	--*	--*
Benton	206	346	404	315	244	152	124	181	444
Chelan	185	330	536	264	201	157	121	84	318
Clallam	256	548	1,300	313	307	165	109	296	--*
Clark	249	429	489	400	328	185	164	222	271
Columbia	444	--*	--*	--*	--*	--*	--*	--*	--*
Cowlitz	187	344	453	299	164	133	130	304	412
Douglas	130	266	--*	283	114	89	76	171	--*
Ferry	208	357	--*	--*	--*	--*	--*	--*	--*
Franklin	149	201	243	174	180	104	86	143	429
Garfield	--*	--*	--*	--*	--*	--*	--*	--*	--*
Grant	113	207	191	217	117	70	73	78	313
Grays Harbor	261	425	469	397	208	208	256	231	643
Island	218	500	1,167	313	220	154	144	319	385
Jefferson	345	680	636	714	295	273	304	304	--*
King	460	1,184	1,364	1,100	848	417	229	255	467
Kitsap	316	644	927	542	397	217	185	271	234
Kittitas	407	1,133	--*	1,200	629	225	149	158	1,000
Klickitat	192	371	--*	429	230	--*	143	--*	--*
Lewis	234	304	377	262	204	198	179	426	353
Lincoln	133	--*	--*	--*	261	--*	--*	--*	--*
Mason	275	398	406	393	355	207	180	136	--*
Okanogan	168	309	529	190	182	58	100	200	556
Pacific	282	480	875	294	271	184	280	--*	--*
Pend Oreille	157	--*	--*	--*	205	--*	--*	--*	--*
Pierce	386	704	923	612	454	273	259	356	508
San Juan	470	1,000	--*	--*	588	435	292	--*	1,800
Skagit	255	518	529	512	235	179	156	250	619
Skamania	90	--*	--*	--*	--*	--*	--*	--*	--*
Snohomish	302	781	954	708	386	219	170	257	359
Spokane	253	527	760	442	307	156	167	227	340
Stevens	110	200	412	116	94	90	90	--*	--*
Thurston	377	792	1,000	714	462	253	234	299	574
Wahkiakum	--*	--*	--*	--*	--*	--*	--*	--*	--*
Walla Walla	223	430	583	333	233	185	121	190	--*
Whatcom	306	667	605	703	432	173	165	309	404
Whitman	320	1,933	--*	1,769	619	109	70	178	455
Yakima	192	280	336	246	226	124	149	146	269

¹The abortion ratio shown under "All Ages" equals total abortions per 1,000 live births; age-specific abortion ratio equals the number of induced abortions for women in a specific age group per 1,000 live births in that age group.

²Total abortions includes 20 for which county of residence was unknown.

* Ratio not calculated because number of abortions was less than 5.

Table 99-24. Abortions in Second Trimester or Later¹ by Woman's Age and County of Residence, 1999

County	Total	<15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
State Total	3,652	45	977	393	584	1,236	621	399	244	99
Adams	5	0	2	0	2	2	1	0	0	0
Asotin	6	0	3	2	1	2	0	1	0	0
Benton	53	1	10	4	6	23	8	5	4	1
Chelan	29	3	5	1	4	10	8	2	1	0
Clallam	25	1	8	6	2	10	4	0	2	0
Clark	187	1	39	12	27	74	29	19	22	1
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	38	1	12	5	7	14	3	4	3	1
Douglas	16	0	7	1	6	3	2	1	3	0
Ferry	3	0	0	0	0	1	0	0	1	0
Franklin	12	0	4	2	2	5	1	1	0	1
Garfield	1	0	0	0	0	0	0	0	0	1
Grant	25	0	5	2	3	11	2	4	1	2
Grays Harbor	53	0	16	9	7	8	10	12	3	3
Island	30	0	9	4	5	9	9	2	1	0
Jefferson	12	0	2	1	1	4	1	2	1	2
King	1,291	20	305	116	189	406	254	152	96	45
Kitsap	107	2	30	10	20	47	11	6	10	1
Kittitas	22	0	5	1	4	10	4	3	0	0
Klickitat	9	0	1	0	1	6	0	1	0	1
Lewis	47	1	11	4	7	14	7	6	6	2
Lincoln	3	0	0	0	0	2	0	0	1	0
Mason	36	0	6	1	5	16	4	6	0	2
Okanogan	11	0	9	6	3	1	0	0	1	0
Pacific	10	1	4	4	0	1	1	2	0	1
Pend Oreille	7	0	1	0	1	3	2	1	0	0
Pierce	621	4	170	68	102	219	110	69	36	12
San Juan	6	0	2	2	0	1	0	2	0	1
Skagit	46	2	21	9	12	12	5	2	2	2
Skamania	1	0	1	0	1	0	0	0	0	0
Snohomish	327	1	101	39	62	102	57	34	23	4
Spokane	216	1	62	20	42	74	30	33	12	3
Stevens	8	1	1	0	1	5	1	0	0	0
Thurston	163	2	54	25	29	62	24	11	6	3
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	19	1	6	3	3	6	5	1	0	0
Whatcom	60	0	23	13	10	17	7	6	2	5
Whitman	12	0	3	1	2	4	2	0	1	2
Yakima	130	2	38	21	17	51	18	11	6	3
Unknown	5	0	1	1	0	1	1	0	0	0

¹Includes abortions occurring at 13 or more weeks of gestation.

Table 99-25. Repeat Abortions by Woman's Age and County of Residence, 1999

County	Total	<20	20 - 24	25- 29	30 -34	35- 39	40 - 44	45+	Unk
State Total	11,727	1,053	3,417	3,142	2,181	1,409	460	35	30
Adams	5	0	--*	--*	0	0	0	0	0
Asotin	10	--*	--*	--*	--*	--*	0	0	0
Benton	165	11	53	51	27	17	6	0	0
Chelan	65	--*	20	22	12	6	--*	0	0
Clallam	60	6	20	14	8	12	0	0	0
Clark	570	38	192	143	100	76	17	--*	--*
Columbia	7	--*	--*	--*	--*	--*	0	0	0
Cowlitz	90	10	22	29	15	12	--*	0	0
Douglas	21	--*	6	6	--*	--*	0	--*	0
Ferry	--*	0	0	--*	0	0	0	0	0
Franklin	61	5	21	13	11	8	--*	--*	0
Garfield	--*	0	0	0	0	0	--*	0	0
Grant	57	11	13	19	8	--*	--*	0	0
Grays Harbor	96	9	21	29	21	10	5	0	--*
Island	86	8	24	19	19	13	--*	0	0
Jefferson	34	--*	7	9	9	5	--*	--*	0
King	4,735	396	1,307	1,313	903	567	212	19	18
Kitsap	381	28	129	89	72	52	11	0	0
Kittitas	57	9	17	16	8	--*	--*	0	0
Klickitat	17	--*	7	--*	5	--*	--*	0	0
Lewis	96	5	21	28	18	19	5	0	0
Lincoln	5	0	--*	--*	--*	--*	0	0	0
Mason	64	9	23	18	8	--*	--*	0	0
Okanogan	28	--*	10	--*	--*	--*	--*	0	0
Pacific	22	--*	6	5	6	--*	0	0	0
Pend Oreille	9	0	--*	--*	--*	0	--*	0	0
Pierce	1,889	156	588	497	351	233	57	5	--*
San Juan	24	--*	--*	6	--*	--*	6	0	0
Skagit	151	22	41	35	26	19	8	0	0
Skamania	6	0	--*	--*	--*	--*	0	0	0
Snohomish	1,220	136	322	340	237	137	43	--*	--*
Spokane	549	50	172	140	108	59	19	0	--*
Stevens	18	0	--*	8	--*	--*	--*	0	0
Thurston	438	45	133	113	71	56	19	0	--*
Wahkiakum	--*	--*	0	0	--*	0	0	0	0
Walla Walla	50	6	12	17	7	7	--*	0	0
Whatcom	254	27	78	54	42	41	11	--*	0
Whitman	41	5	14	9	--*	5	--*	--*	0
Yakima	334	41	115	84	60	22	10	--*	--*
Unknown	7	0	3	1	2	0	0	0	1

* Number not shown to protect confidentiality.

Table 99-26. Induced Abortions, County of Residence by County of Occurrence, 1999

County of Residence ¹	County of Occurrence ¹									Total Residents	
	King	Pierce	Spokane	Thurston	Yakima	Snohomish	Whatcom	Clark	Other Counties ²		Out of State
King	9,885	140	1	24	1	38			22	15	10,126
Pierce	975	2,705		136					13	9	3,838
Snohomish	1,925	2	1	3		621	3		6	1	2,562
Spokane	61		1,270		51			1	2	4	1,389
Clark	6	1		1				114		1,168	1,290
Thurston	120	71		740						4	935
Kitsap	294	217		21		1			380		913
Yakima	42	2			720				44	6	814
Whatcom	240	3	1	3		11	352				610
Benton	19	1	6		67				337	7	437
Skagit	245	1				13	86			1	346
Cowlitz	5	2		3				5		226	241
Lewis	15	16		167	1					22	221
Grays Harbor	11	21		180						3	215
Island	128	3				43	22		2	1	199
Chelan	51	2	3	3	114	1			4		178
Franklin	3	1	3		21				135	2	165
Walla Walla	8	1	1		25				118	6	159
Clallam	89	19		3					44	3	158
Grant	20		10		100		1		25	1	157
Kittitas	40				104	1			2	1	148
Mason	21	14		98					11		144
Whitman	21		95	3	15		1				135
Okanogan	36	1	26	1	26		2			1	93
Jefferson	48	5		2					20	1	76
Douglas	17			1	40				1		59
Stevens	4	1	43		2						50
SanJuan	34						11		1	1	47
Pacific	3	2		21						20	46
Klickitat	2				5				1	36	44
Asotin	4		32		3				1		40
Adams	1		3		13				11		28
Pend Oreille	2		19								21
Ferry	4		11		1						16
Lincoln	1		13		1						15
Columbia					3				9		12
Skamania										12	12
Wahkiakum										4	4
Garfield	1		1								2
Unk Cnty	17	1				1			1	1	21
Out-of-state	305	4	447	4	85	1	2	5	124		977
Non-U.S.	121					1	4		1		127
Unknown	7	1						1		1	10
Total	14,831	3,237	1,986	1,414	1,398	732	484	126	1,315	1,557	
Cumulative Percent³	58.1	70.8	78.6	84.1	89.6	92.5	94.4	94.8	100.0		

¹Counties in columns are ranked by total abortions by place of occurrence; rows are ranked by abortions for residents.

²Includes abortions for counties in which less than 5 abortions occurred or there was only one abortion provider: Benton, Grant, and Kitsap. Excludes counties where no abortions occurred: Adams, Asotin, Chelan, Clallam, Columbia, Cowlitz, Douglas, Ferry, Franklin, Garfield, Grays Harbor, Island, Jefferson, Kittitas, Klickitat, Lewis, Lincoln, Mason, Okanogan, Pacific, Pend Oreille, SanJuan, Skagit, Skamania, Stevens, Wahkiakum, Walla Walla, and Whitman.

³Of all abortions occurring statewide, 58.1% occurred in King alone, 70.8% in King and Pierce, and so on.

Note: Cells in table are shaded when county of residence and county of occurrence are the same.

Table 99-27. Fetal Deaths by Woman's Age and County of Residence, 1999

County	All Ages	< 15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 +	Age Unk
State Total	468	1	68	28	40	109	106	95	63	21	2	3
Adams	2	0	0	0	0	1	0	1	0	0	0	0
Asotin	1	0	0	0	0	0	1	0	0	0	0	0
Benton	9	0	2	2	0	4	2	1	0	0	0	0
Chelan	6	0	1	0	1	2	1	1	0	0	0	1
Clallam	2	0	0	0	0	1	0	1	0	0	0	0
Clark	21	0	6	3	3	5	5	2	1	1	1	0
Columbia	0	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	15	0	2	0	2	9	3	1	0	0	0	0
Douglas	3	0	0	0	0	0	0	1	1	1	0	0
Ferry	2	0	1	1	0	0	0	0	0	1	0	0
Franklin	9	0	3	1	2	1	1	3	1	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0	0	0
Grant	8	0	2	1	1	1	1	2	2	0	0	0
Grays Harbor	9	0	3	0	3	1	3	1	1	0	0	0
Island	10	0	0	0	0	4	1	2	2	1	0	0
Jefferson	1	0	0	0	0	0	0	1	0	0	0	0
King	120	0	14	4	10	14	27	28	28	8	1	0
Kitsap	16	0	2	1	1	9	1	1	1	2	0	0
Kittitas	3	0	0	0	0	1	0	0	1	1	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0	0	0
Lewis	5	0	0	0	0	2	2	0	1	0	0	0
Lincoln	1	0	0	0	0	0	1	0	0	0	0	0
Mason	1	0	0	0	0	0	0	1	0	0	0	0
Okanogan	1	0	1	1	0	0	0	0	0	0	0	0
Pacific	1	0	0	0	0	0	0	1	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0	0
Pierce	65	0	13	3	10	13	18	14	7	0	0	0
San Juan	3	0	0	0	0	1	2	0	0	0	0	0
Skagit	8	0	1	0	1	2	2	3	0	0	0	0
Skamania	1	0	0	0	0	0	0	1	0	0	0	0
Snohomish	58	0	8	5	3	11	19	9	7	2	0	2
Spokane	27	1	3	2	1	6	3	12	2	0	0	0
Stevens	2	0	0	0	0	1	0	0	0	1	0	0
Thurston	13	0	1	0	1	4	3	4	0	1	0	0
Wahkiakum	1	0	0	0	0	0	0	1	0	0	0	0
Walla Walla	10	0	1	1	0	5	1	1	2	0	0	0
Whatcom	9	0	1	1	0	4	0	1	2	1	0	0
Whitman	1	0	0	0	0	0	1	0	0	0	0	0
Yakima	24	0	3	2	1	7	8	1	4	1	0	0

Table 99-28. Female Population by Age and County of Residence, 1999

County	15-44	10-14	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49
State Total	1,245,309	211,304	200,245	120,608	79,637	172,790	182,193	202,210	244,259	243,612	218,099
Adams	3,269	740	694	462	232	440	441	519	558	617	505
Asotin	4,111	805	731	501	230	516	582	651	849	782	693
Benton	30,406	5,956	5,222	3,441	1,781	3,826	4,582	5,061	5,919	5,796	5,054
Chelan	12,497	2,442	2,076	1,302	774	1,513	1,872	1,975	2,547	2,514	2,169
Clallam	11,331	2,249	2,039	1,346	693	1,355	1,517	1,710	2,264	2,446	2,273
Clark	74,654	13,085	12,431	7,910	4,521	10,323	11,340	11,884	14,192	14,484	13,352
Columbia	768	128	149	102	47	99	107	103	144	166	144
Cowlitz	18,954	3,554	3,310	2,032	1,278	2,402	2,799	3,064	3,642	3,737	3,542
Douglas	6,212	1,285	1,127	735	392	752	847	969	1,225	1,292	1,154
Ferry	1,482	321	295	208	87	207	199	215	277	289	262
Franklin	9,284	2,147	1,846	1,184	662	1,270	1,416	1,440	1,676	1,636	1,361
Garfield	420	102	96	85	11	49	44	61	77	93	92
Grant	14,141	2,972	2,712	1,770	942	1,894	2,129	2,214	2,644	2,548	2,302
Grays Harbor	13,227	2,639	2,362	1,537	825	1,619	1,896	2,080	2,636	2,634	2,405
Island	14,104	2,491	2,239	1,424	815	2,316	2,175	2,409	2,481	2,484	2,175
Jefferson	4,616	875	747	517	230	555	636	648	922	1,108	1,041
King	377,344	55,108	51,810	30,588	21,222	46,942	55,449	65,178	79,860	78,105	70,123
Kitsap	48,246	8,708	7,773	4,925	2,848	6,816	7,511	7,783	9,037	9,326	8,590
Kittitas	8,185	972	2,288	755	1,533	2,320	630	812	1,012	1,123	1,009
Klickitat	3,836	760	756	517	239	457	485	578	739	821	719
Lewis	13,611	2,732	2,572	1,653	919	1,812	1,964	2,067	2,545	2,651	2,392
Lincoln	1,781	379	342	265	77	222	208	264	367	378	339
Mason	9,007	1,767	1,645	1,101	544	1,107	1,287	1,384	1,768	1,816	1,604
Okanogan	7,307	1,628	1,338	891	447	885	1,021	1,128	1,431	1,504	1,374
Pacific	3,599	697	643	428	215	450	490	531	709	776	697
Pend Oreille	2,110	431	425	299	126	286	256	306	420	417	400
Pierce	153,110	26,119	24,306	14,259	10,047	24,094	23,619	25,023	28,739	27,329	24,213
San Juan	2,119	380	321	248	73	227	273	294	442	562	605
Skagit	19,962	3,840	3,353	2,112	1,241	2,498	3,001	3,168	3,914	4,028	3,687
Skamania	2,047	425	362	226	136	248	270	326	442	399	363
Snohomish	127,652	23,197	19,570	12,233	7,337	15,437	18,230	21,876	26,652	25,887	22,617
Spokane	90,657	15,243	15,465	8,965	6,500	14,494	13,053	13,983	16,719	16,943	15,124
Stevens	7,883	1,637	1,632	1,175	457	1,011	972	1,073	1,488	1,707	1,442
Thurston	44,385	7,724	7,299	4,543	2,756	5,839	6,701	6,924	8,479	9,143	8,378
Wahkiakum	723	141	157	97	60	96	93	103	134	140	151
Walla Walla	11,008	1,956	2,405	1,180	1,225	2,004	1,277	1,479	1,933	1,910	1,721
Whatcom	36,972	5,740	6,763	3,889	2,874	6,921	5,037	5,152	6,293	6,806	5,912
Whitman	11,643	1,159	2,976	667	2,309	3,979	1,258	993	1,229	1,208	1,068
Yakima	42,641	8,769	7,965	5,034	2,931	5,511	6,523	6,781	7,854	8,007	7,050

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-1999, Washington State," December 1999.

Appendices



Appendix A: Technical Appendix

Sources of Data

Collection Year

Data for this report are compiled from abortion reports received by September 2000 and from birth and fetal death certificates received by September, 2000. (See Appendix B for samples of forms and certificates.)

Population

Population estimates for 1999 are from the Office of Financial Management, Forecasting, "Intercensal and Postcensal Estimates of Population by Age and Sex, State of Washington: 1980-1999, Washington State," December 2000.

Demographics

Age

For abortions, the woman's age is based on her reported age. For births and fetal deaths, the woman's age is computed from mother's date of birth and the date of delivery or the date of the fetal death beginning in 1989. Before that, mother's age was reported age since mother's date of birth was not recorded on the birth or fetal death certificate until 1989. A comparison of mothers' age distributions before and after the change showed that ages calculated from birth dates are consistent with ages determined by asking the mother to report her age and that there is no substantial increase in missing data as a result of asking for her date of birth.

Race

Race on abortion, birth, and fetal death forms follow the U.S. Census:

The concept of race as used by the Census Bureau reflects self-identification; it does not denote any clear-cut scientific definition of biological stock. The data for race represents self-classification by people according to the race with which they most closely identify. Furthermore, it is recognized that the categories of the race item include both racial and national origin or socio-cultural groups.³

For abortion reports, race is to be determined by patient's self-identification and placed into one of the Bureau of the Census race categories: White, Black, American Indian or Native Alaskan, Asian/Pacific Islander, and Other. If more than one racial category is checked or reported under "Other," the person's racial background is classified as "Multiple Races" in the reporting system and the specific racial categories are recorded in the database.

Race data on abortion reports continues to be so incomplete that the data cannot be used to study racial patterns in use of abortion services. In 1999, as Table 99- 3F shows 10,513 of the 25,965 abortion reports (40.5 %) were submitted by abortion providers with the patient's race shown as blank or unknown. This number is down slightly from 43.4% blank or unknown in 1998.

Birth and fetal death certificates use open-ended categories for reporting race, and multiple racial entries are stored on the database. When more than one racial category is reported, mother's race is classified

³ U.S. Bureau of the Census, *1990 Census of Population: General Population Characteristics*, Washington, Report 1990 CP-1-49, Washington, D.C., June 1992.

according to decision rules set by the National Center for Health Statistics (NCHS): If more than one race is listed and one is Hawaiian, then Hawaiian is selected. For other races, the first race listed is selected. Prior to 1990, the first non-white race listed was selected (unless Hawaiian was listed somewhere in the item).

Hispanic Origin

‘Origin’ as used by the Census Bureau refers to "the ancestry, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States." Persons of Hispanic origin have their origins in a Hispanic or Spanish-speaking country such as Mexico, Cuba, or Puerto Rico, or the Spanish-speaking countries of Central or South America. Persons of Hispanic origin may be of any race.

Prior to 1985, Hispanic data on abortion reporting forms were provided by a racial category of ‘Spanish Origin or Descent’. Hispanic origin was added as an ethnic category and collected as a separate item (in addition to race) in 1985. However, this item only asks, ‘Is patient of HISPANIC ethnic origin? - Yes’. A ‘No’ box (meaning not Hispanic) was not provided on the form. Thus, blanks (which are found on 98% of the forms) may mean either ‘Not Hispanic’ or ‘Origin Unknown’, making the data difficult, if not impossible, to interpret.

For birth and fetal death certificates, Hispanic origin was added as an ethnic category and collected as a separate item (in addition to race) in 1988. For the first year of data collection (1988), some hospitals did not include the ethnicity item on the worksheet used to collect birth data. For this reason, Hispanic ethnicity data are less complete for 1988 than they are for later years. Rates calculated using these 1988 data will be lower than rates for other years because of this underreporting and should thus not be used to study changes in Hispanic birth rates.

Prior to 1988, Hispanic data on birth and fetal death certificates were provided by a racial category of "Mexican/Chicano" or "Mexican American". Data based on Hispanic origin from those years are not comparable with data collected in 1988 or thereafter and should not be used for trend analysis or year-to-year comparisons.

Abortion Complications and Secondary Management

The abortion reporting form provides pre-coded categories for complications related to the abortion procedure. Abortion complications are likely to be underreported because follow-up care may be administered after abortion reports are filed or by a second facility or physician. Also, because Washington’s reporting form asks specifically about complications of the abortion procedure, complications attributed to something other than the procedure (such as pre-existing conditions) are not necessarily reported. For these reasons, complication totals and rates presented in this report should be interpreted as a low estimate of complications and used with caution.

Changes to the abortion reporting form may have affected the reporting of complications over time. Before 1990, the form had a separate check box for retained products, which is the most common type of complication reported. In 1990, retained products was removed as a separate check box item for consistency with the National Abortion Federation (NAF), the private national organization promoting standards of care. Many facilities still provide this information by checking the box for ‘Other’ complications and then writing in ‘Retained Products.’ These write-in responses are used to tabulate data on retained products. The absence of an explicit category for retained products, however, is believed to cause underreporting of this complication. Since retained products was removed as a category on the form, the number of abortions with ‘retained products’ noted as a complication has decreased, as follows: 1989 - 62, 1990 - 40, 1991 - 40, 1992 - 48, 1993 - 23, 1994 - 18, 1995 - 39, 1996 - 36. As a result of the committee that formed to review the abortion reporting system (see the

introduction for details), there was an increase in the reporting of complications in 1997. This is reflected in the ‘retained products’ category which increased to 56 in 1997 and was 55 in 1998.

A new item called, “Secondary Management,” was added to Washington’s abortion reporting form in 1990 to provide data on the treatment of abortion complications. The categories were “resuction or other secondary procedure”, “hospitalization”, “transfusion”, “laparotomy”, “laparoscopy”, and “none”. This information probably underestimates the amount of secondary care since abortion patients may receive such care after the abortion report is completed or at facilities other than the one where the primary abortion procedure was performed.

Adjusted Abortion and Pregnancy Rates, 1992-1995

One abortion facility failed to report abortions as required under Washington Administrative Code for four years (1992-1995). Due to the estimated size of the facility’s caseload (about 1,350 abortions per year, or 4% of the state total), a method was devised to impute the missing records. Two characteristics—woman’s age and place of residence—were assigned based on the characteristics of women who received abortions at this facility in 1991 and 1996, the years immediately preceding and following the years of non-reporting. Straight-line interpolation was used for categories formed by single year of age and place of residence.⁴ The residence categories included individual counties; other states or countries; and relevant cities and remainders of respective counties.

A small number of abortion reporting forms were actually submitted by this facility in 1992-1995 (i.e., n = 82, 114, 42, and 17, respectively). Since the reported records contain information about such variables as gestational age and primary procedure, these records were kept in the datafile and used in place of selected imputed records that had been matched based on woman’s age and place of residence.⁵ For two reported cases in 1992 and one reported case in 1994, the county of residence did not match any of the imputed records; these reported cases were retained in the database. As a result, the number of records **added** to the database equals (A) the number of imputed cases minus (B) the number of reported cases plus (C) the unmatched records, as shown in the following table.

Imputation	1992	1993	1994	1995
(A) Imputed cases	1,342	1,348	1,357	1,363
(B) Reported cases	82	114	42	17
Difference = (A) – (B)	1,260	1,234	1,315	1,346
(C) Unmatched cases (retained)	2	0	1	0
Records added=(A) – (B) + (C)	1,262	1,234	1,316	1,346

The counties in which imputed abortions were added are: Chelan, Clallam, Cowlitz, Douglas, Grant, Grays Harbor, Island, Jefferson, King, Kitsap, Kittitas, Lewis, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Spokane, Stevens, Thurston, Walla Walla, Whatcom, Whitman, and Yakima. For some of these counties, so few records were added through imputation that abortion

⁴ The facility performed 1,336 in 1991 and 1,369 in 1996 and estimated that they had performed between 1,275 and 1,350 each year in between. Several regression equations and interpolation methods using different years of data were examined; straight-line interpolation between 1991 and 1996 produced estimates most consistent with these parameters.

⁵ The criteria for matching records required: (a) an exact match on the county or large city of residence and (b) an exact or approximate match by age with priority given to exact matches, matches within an age group or with the nearest age, in that order.

and pregnancy rates will not be different from those previously published. In the remaining counties, no imputed records were added.

Definitions

Abortion - The termination (spontaneous or induced) of a pregnancy before the fetus has attained viability. Consistent with common usage and understanding, when the term abortion is used in this report, it refers to induced abortion.

Abortion-related Complications - An unfavorable medical condition arising from induced abortion. Only complications that are: 1) known by the reporting provider; and 2) known before the abortion report has been filed are included in the state's count of complications. Specific complications on Washington's abortion reporting form include:

Cervical laceration - a tear wound of the cervix which requires sutures.

Perforation - unintentional puncture of the uterine wall which requires intervention.

Hemorrhage (more than 500 cc) – clinical assessment of copious or excessive blood loss (more than 500cc).

Infection - inflammation of the endometrium (the mucous coat of the uterus) that requires hospitalization for intravenous antibiotics.

Failed abortion (continuing pregnancy) - the products of conception fail to be expelled from the uterus after induction. The patient was still pregnant following the initial procedure and a second procedure is required to terminate the pregnancy.

Death-the patient died as a result of complications of the procedure.

Retained products – a portion of the products of conception was not expelled from the uterus after induction. A second procedure is required to prevent further medical complications. (Not the same as a Failed Abortion (continuing pregnancy); see # 5 above).

Other (specify)- occurrence of any other complication, such as peritonitis or drug reaction.

Fetal Death - Death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy. The death is indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Reporting of fetal deaths to the state is required only when the gestational period is twenty weeks or more.

Gestational Period - Number of weeks elapsed between the first day of the last menstrual period and date of delivery or date of pregnancy termination. The term *gestational period* is interchangeable with *weeks of gestation*, *gestational age*, and *duration of pregnancy*. This report uses the physician's estimate of gestational age.

Induced Abortion - The purposeful interruption of pregnancy, irrespective of the duration of pregnancy, with the intention other than to produce a live born infant or to remove a dead fetus, the result of which is not a live birth. Procedures for false pregnancy, ectopic pregnancy, and missed abortion (dead ovum retained in uterus in intended pregnancy) are not included in the definition. The term is used in this report interchangeably with *induced termination of pregnancy*, *induced termination*, and *abortion*.

Induced Abortion Procedures:

Dilation and Evacuation (D&E) – involves opening the cervix (dilation) and using primarily sharp techniques, but also suction and other instrumentation such as forceps for evacuation. (Dilation is performed by means of laminaria tents (sterile dried seaweed) until the cervical opening is large enough to allow removal of the uterine contents by means of a sponge forceps or some other specially designed instrument).

Hysterotomy /Hysterectomy. Hysterotomy involves surgical entry into the uterus, as in a Cesarean section, that removes a fetus that is too immature to survive, even with extraordinary life support measures. Hysterotomy is usually performed only if other abortion procedures fail. Hysterectomy is a procedure in which the uterus is removed either with the fetus inside or after the fetus has been removed. It is usually performed only when a pathological condition of the uterus, such as fibroid tumors, warrants its removal or when a woman desires sterilization.

Intra-Uterine Instillation (Saline or Prostaglandin)- involves either withdrawing a portion of amniotic fluid from the uterine cavity by a needle inserted through the abdominal wall and replacing this fluid with a concentrated salt solution (known as saline instillation, saline abortion, or saline amniotic fluid exchange) or injecting a prostaglandin- a substance with hormone-like activity- into the uterine cavity through a needle inserted through the abdominal wall (known as intra-uterine prostaglandin instillation). The saline instillation process induces labor, which results in the expulsion of the usually dead fetus approximately 24 to 48 hours later. The interval between prostaglandin injection and expulsion tends to be shorter than in a saline abortion.

Medical (Nonsurgical)- involves the administration of a medication or medications to induce an abortion. Medications (e.g., methotrexate, mifepristone, misoprostol, etc.) are used most frequently early in the first trimester of pregnancy. However, some medications (e.g., prostaglandin suppositories, injectable prostaglandins, etc.) may also be administered during the second trimester of pregnancy to induce abortion. Medications may be administered orally, by injection or intra-vaginally.

Sharp Curettage (D&C) – involves dilation of the cervix as in suction, although usually to a larger diameter. The fetal and placental tissues are then scraped out with a curette, which resembles a small spoon. Also, *surgical D&C* or *surgical curettage*.

Suction Curettage – the cervical canal is dilated by the successive insertion of instruments of increasing diameter called dilators. When the opening is large enough, a flexible tube (cannula) is inserted into the uterine cavity and the fetal and placental tissues are then suctioned out by an electric vacuum pump. Also, *vacuum aspiration*, *suction D&C*, or *early uterine evacuation*.

Other- all other procedures not included in the preceding categories should be shown as “Other” and the procedure used should be described after “specify.” This category includes procedures using a combination of agents, such as laminaria and prostaglandin, urea and prostaglandin, prostaglandin and oxytocin, or prostaglandin and saline.

Induced Abortion Management - Medical care consequent and secondary to the primary abortion procedure. The specific types of management care listed on Washington’s abortion reporting form are:

Resuction or other secondary procedure - Resuction of the uterus to remove remaining fetal tissue. (Note that providers are instructed to check this management category only for cases where a

resuction or other secondary procedure was required for removal of retained products or failed abortion and performed following initial discharge of patient.)

Hospitalization - Hospitalization became necessary following the termination as a result of complications or for any other reason.

Transfusion - Transfusion of whole blood or plasma.

Laparotomy - A surgical incision through the abdominal wall as part of an examination.

Laparoscopy - Examination of the abdominal cavity by the introduction of a laparoscope through a small abdominal incision.

Live Birth - The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes, or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Maternal Death - Death attributed to complications of pregnancy, childbirth, or the puerperium (ICD-9, 630-676); includes abortion-related death. The death must occur within six weeks of the live birth or abortion to be considered a maternal death.

Occurrence Data - Data allocated by place where the event occurred, regardless of the person's place of residence.

Provider - Facility where induced abortions are performed. Facilities performing induced abortions may be clinics, doctors' offices, or hospitals.

Residence Data - Data allocated by place of residence of the child's mother (births, fetal deaths), or by place of residence of the patient (abortions), regardless of where the event occurred.

Spontaneous Abortion - An unintended interruption of pregnancy, the result of which is a fetal death of any gestational age. Other terms used: *miscarriage*, *miscarried pregnancy*.

Trimester - The duration of human pregnancy, approximately 266 days, divided by 3, resulting in three equal time periods equaling 88.67 days, or 12.67 weeks, or approximately three months, each.

As a useful rule-of-thumb, gestation weeks 1 through 12 are considered the first trimester of pregnancy; weeks 13 through 24, the second trimester; and over 24 weeks, the third trimester.

Rates and Ratios

Rounding - Rates are rounded to the nearest tenth. When the rate or percent is less than one-tenth, the entry is 0.

Rates and Ratios Used in this Report - Rates and ratios are calculated by dividing the number of events of concern by the population at risk (or a related population) and multiplying by a standard constant (i.e., 1,000 or 10,000).

$$\text{GeneralAbortionRate} = \frac{\text{TotalAbortions}}{\text{WomenofChildbearingAge}(15 - 44)} \times 1,000$$

$$\text{GeneralFertilityRate} = \frac{\text{TotalLiveBirths}}{\text{WomenofChildbearingAge}(15 - 44)} \times 1,000$$

$$\text{PregnancyRate} = \frac{\#(\text{LiveBirths} + \text{Abortions} + \text{FetalDeaths})}{\text{WomenofChildbearingAge}(15 - 44)} \times 1,000$$

$$\text{Age - SpecificAbrtnRate} = \frac{\# \text{AbortionsforSpecificAgeGroup}}{\# \text{WomenofSameAgeGroup}} \times 1,000$$

$$\text{Age - SpecificBirthRate} = \frac{\# \text{LiveBirthsforSpecificAgeGroup}}{\# \text{WomenofSameAgeGroup}} \times 1,000$$

$$\text{AbortionRatio} = \frac{\# \text{Abortions}}{\# \text{LiveBirths}} \times 1,000$$

$$\text{GeneralComplicationRate} = \frac{\# \text{ComplicationCases}}{\# \text{AbortionsPerformedinWA}} \times 1,000$$

$$\text{FetalDeathRate} = \frac{\# \text{FetalDeaths}}{\text{TotalLiveBirths} + \text{TotalFetalDeaths}} \times 1,000$$

$$\text{FetalDeathRatio} = \frac{\# \text{FetalDeaths}}{\text{TotalLiveBirths}} \times 1,000$$

$$\text{MaternalDeathRate} = \frac{\# \text{MaternalDeaths}}{\text{TotalLiveBirths}} \times 10,000$$

Appendix B: Sample Forms

Certificate of Live Birth

Currently this form is not in an Electronic Format

Certificate of Fetal Death

Currently this form is not in an Electronic Format

Report of Induced Termination of Pregnancy

Currently this form is not in an Electronic Format

Continuation of the Report of Induced Termination of Pregnancy