The background of the page is filled with a pattern of parallel, diagonal gray lines. These lines are spaced evenly and run from the top-left towards the bottom-right, creating a textured, grid-like appearance.

Technical Notes

TECHNICAL NOTES

SOURCES OF DATA

BIRTHS, DEATHS AND FETAL DEATHS: Birth, death and fetal death certificates were the source documents for data on vital events to Delaware residents. A copy of each certificate is included as Appendices F, G and H, respectively.

The cut-off date for data in this report was October 31 after the close of the calendar year. Any data pertaining to an event for which a certificate was filed after this date, are not included in this report. It is possible that data obtained directly from the Delaware Health Statistics Center (DHSC) may differ slightly from that which appear in this report. If this should occur, it is the result of an update that was made after the cut-off date for this report.

Births and deaths to Delaware residents which took place in other states are included in this report. The inclusion of these data is made possible by an agreement among all registration areas in the United States for the exchange of copies of resident certificates.

MARRIAGES AND DIVORCES: Each of Delaware's three counties has a state office for the collection of marriage certificates. All of these certificates are processed and maintained by the Office of Vital Statistics in the Division of Public Health's central office in Dover. Copies of divorce certificates are forwarded to the Office of Vital Statistics from the Delaware Family Court system so that certain selected data items can be processed for statistical purposes. A copy of each of these certificates is included as Appendices I and J.

INDUCED TERMINATIONS OF PREGNANCY: Beginning on January 1, 1997, all induced terminations of pregnancy (ITOP) were required to be reported to the Department. ITOP reports are filed directly with the DHSC. The reports are filed for statistical purposes only and are shredded and discarded when all reports for the data year have been coded. ITOP records are currently not being exchanged among the states, so events to Delaware residents occurring out-of-state are not included in this report. A copy of the reporting form is included as Appendix K.

REPORTED PREGNANCIES: Reported pregnancies refer to live births, fetal deaths, and induced terminations of pregnancy (ITOP). When used in combination, these three events can yield a great deal of information regarding pregnancy and pregnancy outcomes that is not possible by looking at each individual event separately. For example, live birth rates can be calculated using live births in conjunction with population data. However, differences observed between live birth rates in two or more geographic areas or within the same area at different points in time may be due to differences in the rate of pregnancy, differences in pregnancy outcomes (i.e., live birth, fetal death, or ITOP), or a combination of these factors. Only pregnancy rates allow such questions to be thoroughly examined. It should be kept in mind that both births and fetal deaths of Delaware residents are reported regardless of state of occurrence, while induced terminations are reported for only those that occur in Delaware.

POPULATION PROJECTIONS: The state, county and city population figures used in this report are estimates and projections produced by the Delaware Population Consortium (DPC). The DHSC is a member of the DPC and supplies birth and death data used in making the projections. Copies of the most recent projections for Delaware's population by age, race, sex, and geographic location are available at <http://www.cadsr.udel.edu/demography/consortium.htm>.

DATA QUALITY

QUERY AND FIELD PROGRAMS: The quality of vital statistics data presented in this report is directly related to the completeness and accuracy of the information contained on the certificates and forms. The DHSC works with the Office of Vital Statistics to ensure that the information received is as complete and accurate as possible. The Office of Vital Statistics operates two programs related to improving the quality of information received on vital records--the query and field programs.

The query program is a system used to follow-back to hospital and clinic personnel, funeral directors and/or physicians concerning data quality problems. The follow-back contact is usually via mail and/or telephone. The field program attempts to improve vital statistics data quality by educating the participants in the vital registration system (i.e., hospital personnel, funeral directors, physicians, etc.) of the uses and importance of vital

statistics data. The field program completes this mission by conducting seminars with various associations representing the individuals listed above.

The National Center for Health Statistics (NCHS) monitors Delaware's coding of statistical data on death certificates. A 20 percent sample of death records coded and submitted monthly by the state are used as a quality control mechanism by NCHS. NCHS codes these sample records independently and then conducts an item-by-item computer match of codes entered by the state and NCHS. NCHS has established an upper limit of two percent for coding differences involving any one data item of these sample records, with the exception of cause of death. NCHS independently codes cause of death information.

COMPUTER EDITS AND DATA PROCESSING: Another dimension of data quality is related to the procedures and methodologies used in preparing the data for presentation. Beginning with the 1991 Annual Vital Statistics Report, methodologies for editing and processing vital data were standardized to match the procedures used by NCHS in tabulating national vital statistics data. These procedures include checking for valid codes, computation of data items (e.g., age, live-birth order, weeks of gestation, duration of marriage, interval between divorce and remarriage), consistency checks between data items (e.g., age and education), and imputation of missing values.

Standardized imputation procedures are of particular importance because they ensure that Delaware's data are comparable to that published for the United States by NCHS. In general, the adoption of these new procedures has not produced large differences when compared with previous reports. One new procedure of particular interest is the method for computing weeks of gestation as reported in the Natality Section. A new item on the 1989 U.S. Standard Certificate of Live Birth, "clinical estimate of gestation," permits substitution for weeks of gestation in two situations: (a) when the date of the last normal menstrual period (LMP) is incomplete or missing; and (b) when the computed weeks of gestation is inconsistent with reported birth weight. Substitution with this item has resulted in a smaller "Unknown" category for weeks of gestation.

FETAL DEATHS: In terms of the completeness of the data, the reporting of deaths and live births is considered to be virtually complete. However, in Delaware, a spontaneous termination of pregnancy is not required to be reported

when the fetus weighs less than 350 grams or, when weight is unattainable, if the duration of pregnancy is less than 20 weeks. National estimates (Ventura, Taffel and Mosher, 1985) indicate that over 90 percent of all spontaneous terminations of pregnancy may occur before this 20 week period and thus go unreported. In addition, the exchange agreement among states for resident fetal death records is relatively new and it is unknown whether complete exchange is taking place. The result is that a large number of spontaneous terminations are not reported.

GEOGRAPHY ALLOCATION

In Delaware's registration program, as in other states, vital events are classified geographically in two ways. The first way is by place of occurrence (i.e., the actual state and county in which the birth or death took place). The second and more customary way is by place of residence (i.e., the state, county, and census tract) stated to be the usual residence of the decedent in the case of death, or of the mother in the case of a newborn.

While occurrence statistics are accurate and have both administrative value and some statistical importance, residence statistics are by far the more useful tool in developing health indices for planning and evaluation purposes. The natality and mortality statistics provided in this report are based upon Delaware residence data. However, the marriage and divorce statistics are occurrence data. This is primarily due to the fact that two separate residences are usually involved in a marriage or a divorce, and there are no accepted standard procedures for classification of residence in these events.

Allocation of vital events by place of residence is sometimes difficult because classification depends entirely on a statement of the usual place of residence furnished by the informant at the time the original certificate is completed. For various reasons, this statement may be incorrect or incomplete. However, in recent years, the DHSC has invested a great deal of effort into editing of address information leading to a significant improvement in data quality.

In any case, geographical allocation is generally a problem only at the level of census tract. Resident counts at the State level are, for all practical purposes, complete. County resident figures are substantially correct and can be used with a high degree of confidence.

Most of the data provided in this report are available at the census tract level. This information can be obtained by contacting the DHSC.

BIRTH WEIGHT

This report presents birth weight in grams in order to provide data comparable to that published for the United States and other countries. For those live birth certificates where birth weight is reported in pounds and ounces, the Center converts the birth weight into grams.

The equivalents of the gram intervals in pounds and ounces are as follows:

499 grams or less	=	1 lb. 1 oz. or less
500 - 999 grams	=	1 lb. 2 ozs. - 2 lbs. 3ozs.
1,000 - 1,499 grams	=	2 lbs. 4 ozs. - 3 lbs. 4ozs.
1,500 - 1,999 grams	=	3 lbs. 5 ozs. - 4 lbs. 6ozs.
2,000 - 2,499 grams	=	4 lbs. 7 ozs. - 5 lbs. 8ozs.
2,500 - 2,999 grams	=	5 lbs. 9 ozs. - 6 lbs. 9ozs.
3,000 - 3,499 grams	=	6 lbs. 10 ozs. - 7 lbs. 11ozs.
3,500 - 3,999 grams	=	7 lbs. 12 ozs. - 8 lbs. 12ozs.
4,000 - 4,499 grams	=	8 lbs. 13 ozs. - 9 lbs. 14ozs.
4,500 - 4,999 grams	=	9 lbs. 15 ozs. - 11 lbs. 0ozs.
5,000 grams or more	=	11 lbs. 1 oz. or more

RATES

Absolute counts of births and deaths do not readily lend themselves to analysis and comparison between years and various geographic areas because of differences in population characteristics (e.g., age, sex, and race). In order to account for such differences, the absolute number of events is converted to a relative number such as a percentage, rate, ratio, or index. These conversions are made by relating the number of events to the population at risk in a particular area at a specified time.

Precautions should always be taken when comparing any rates based on vital events. Both the number of events and the characteristics of the population are important to take into account when interpreting a rate.

All statistics are subject to random variation.¹ Rates based on a relatively small number of events tend to be subject to more random variation than rates based on a large number of events.

In addition to the problem of small numbers, demographic characteristics of populations (i.e., age, race and sex) can affect the comparability of rates. Since mortality rates vary substantially by age, race and sex, comparisons between rates from populations that differ in these characteristics could be misleading. However, there are two methods that can be used separately or in combination to improve the comparability of mortality rates. The first

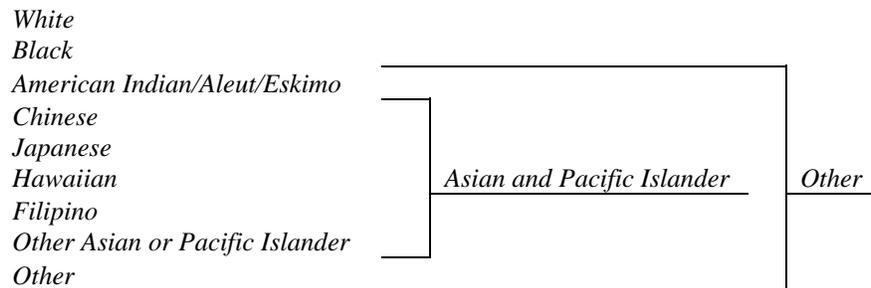
¹See Appendix A for more details.

method involves comparing rates for specific age, race, and/or sex groups in the populations of interest. With this method, the rates are easily calculated and very specific groups may be compared. However, when very specific groups are compared the numbers are often small, and relationships between the overall populations are difficult to determine.

The second method is a more sophisticated technique that statistically "adjusts" for demographic differences between populations and allows direct comparisons between overall population rates. The major disadvantages of adjusted rates are that they can be cumbersome to calculate without the aid of a computer and they only have meaning when compared to other rates adjusted in the same manner.

RACE

All Delaware vital records contain an item(s) regarding race. Race is self-reported in all records except on death certificates where it is provided by an informant. Although the question allows for a free form response, all race data are grouped for purposes of data analysis into the following categories established by NCHS:



The categories *Chinese*, *Japanese*, *Hawaiian*, *Filipino*, and *Other Asian or Pacific Islander* can be combined to form the category *Asian or Pacific Islander*. For purposes of this report, *American Indian/Aleut/Eskimo*, *Chinese*, *Japanese*, *Hawaiian*, *Filipino*, *Other Asian or Pacific Islander*, and *Other* have been combined to form the category *Other*.

In the case of death, race of decedent from the death certificate is reported in all tables except in the birth cohort (see next paragraph). However, in the case of birth and fetal death, race is indicated on the birth and fetal death certificates for the mother and father only (i.e., race of the newborn is not given). Consequently, birth and fetal death data are reported by race of the mother in most tables throughout this report. However, some tables

containing historical birth data prior to 1989 are reported by race of child. For these tables, race of child was imputed using criteria established by NCHS.

In the birth cohort section of this report, birth certificate data for infants dying in the first year of life are combined with information from their death certificates. Therefore, data are available for race of the mother and race of the deceased infant for each case. In the vast majority of these cases, the race listed for the mother and infant are the same. However, in a small number of cases the race of the mother and infant differ. In order to maintain consistency with data in the natality section, race of the mother is used for all tables in the birth cohort section.

HISPANIC ORIGIN

Beginning in 1989, a specific question regarding Hispanic origin was added to the birth and death certificates. This question is considered to be separate from the Race question. Therefore, a person may report Hispanic origin in combination with any race category. The Hispanic question has two parts. The first simply asks whether the person is of Hispanic origin (Yes or No). The second part is a free-form item that asks for the specific origin (e.g., *Cuban, Mexican, Puerto Rican, etc.*).

MISSING INFORMATION REGARDING FATHERS

The Delaware vital statistics law specifies that information regarding the father should not be entered on the birth certificate if the mother is single. As such, there is no information regarding the father for the vast majority of births to single mothers. However, in a few cases, information about the father was entered on the certificate when the mother was single. Some tables in the natality section (e.g., births to parents of Hispanic origin) may contain information regarding the father that includes such cases.

Beginning on January 1, 1995, a new program was instituted to allow fathers to acknowledge paternity through completion of a simple form in cases where the mother and father are not married. This form can be completed at any time up to the child's eighteenth birthday. When such acknowledgments are completed at the hospital at the time of birth, the DHSC is able to add father information to its electronic data base.

SOURCE OF PAYMENT FOR DELIVERY

Beginning with the 1991 data year, the Center began obtaining information regarding the source of payment for delivery on birth certificates (private insurance, Medicaid, and self pay). However, this information was not available for Delaware resident mothers giving birth in other states (approximately 5 percent of all resident births). For purposes of this report, all such mothers were assigned to the private insurance category. This assignment was based on detailed analyses of the characteristics of these mothers. These analyses indicated that the demographic characteristics of these mothers very closely matched the characteristics of Delaware resident mothers who gave birth within the State and had private insurance listed as their source of payment. Furthermore, an examination of Medicaid data indicated that it is extremely rare for Medicaid mothers to give birth out-of-state.

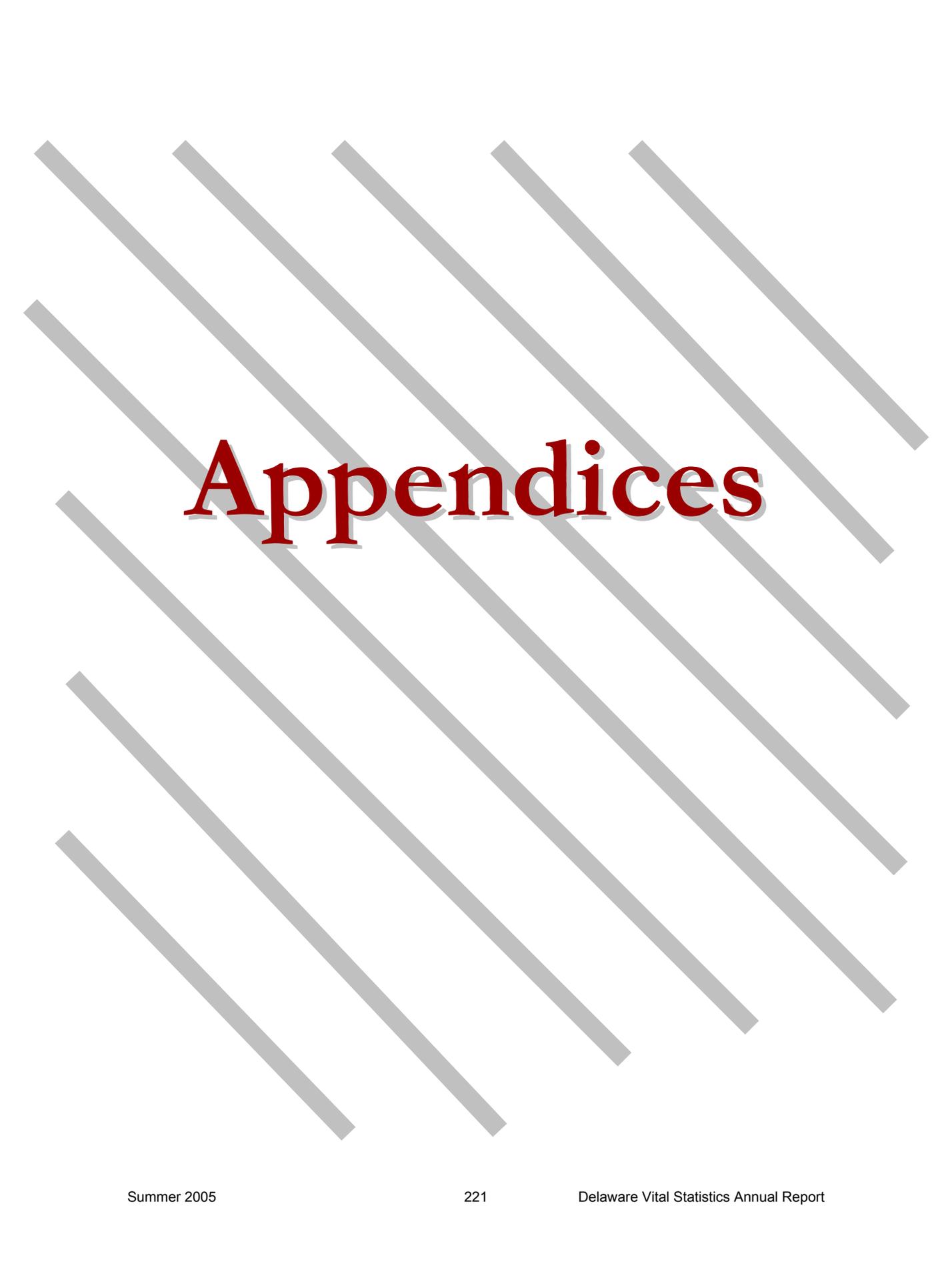
METHOD OF DELIVERY

The number of cases reported for the category “Vaginal birth after previous C-section” (VBAC) of the METHOD OF DELIVERY question on the birth certificate may represent an undercount. Due to way the question was worded (see Appendix F), persons completing the form may have sometimes reported VBACs in the “Vaginal” category. The DHSC staff has been working to improve the data quality of this question in two ways. The question has been reworded so that it is much clearer on the Electronic Birth Certificate (EBC). Over 95 percent of all birth certificates were filed through the EBC. For those records that were not filed using the EBC, efforts were made to train the staff about the proper way to complete the question.

2000 POPULATION STANDARD

Beginning with the 1999 report, all mortality rates were age-adjusted using the projected 2000 U.S. population standard. All previous versions of the vital statistics report used the 1940 U.S. population standard from the census of the same year. All historical mortality data have been adjusted to the new standard to allow comparisons over time. Comparisons between rates using the old standard and the new standard are not valid and should not be made.

A more detailed explanation of the rationale for updating the population standard can be found in a special report from NCHS (Anderson and Rosenberg, 1998).



Appendices

APPENDIX A

RANDOM VARIATION

In this report, the number of vital events represent complete counts for the U.S., Delaware, and county populations. Therefore, they are not subject to sampling error, although they are subject to certain errors in the registration process such as age misreporting. However, the number of events and the corresponding rates are subject to random variation. That is, the rates that actually occurred may be considered as one of a large number of possible outcomes that could have arisen under the same circumstances (National Office of Vital Statistics, 1961). As a result, rates in a given population may tend to fluctuate from year to year even when the health of the population is unchanged. Random variation in rates based on a relatively small number of events, tends to be larger than for rates based upon events that occur more frequently. Delaware rates for some events (e.g., infant deaths) are particularly subject to such variations due to the small number of events that occur by definition in a relatively small population. Therefore, caution should be exercised when drawing conclusions about rates based on small numbers.

The issue of random variation was addressed in three ways in this report. First, multi-year average rates were reported instead of annual rates. This tended to reduce the effects of random variation since the number of events in a three or five-year period was much larger. Second, tests of statistical significance were used to make comparisons between Delaware/county and U.S. rates when appropriate. These statistical tests were used to determine the chance that the observed differences would occur in populations with equal rates by random variation alone. The methods used to calculate infant mortality rates are described in Appendix B. Third, in accordance with the policy of the National Center for Health Statistics, rates based on fewer than 20 events were suppressed due to the fact that the rate would not be considered statistically reliable.

APPENDIX B

METHODS FOR CALCULATION AND STATISTICAL ANALYSIS OF FIVE-YEAR AVERAGE INFANT MORTALITY RATES

Due to the small number of infant deaths in Delaware, slight year-to-year changes in the number of deaths can lead to substantial fluctuations (referred to in statistics as random variation) in annual rates. In many cases, this problem makes interpretation of annual rates extremely difficult, if not impossible. Since there is far less random fluctuation in five-year average (FYA) rates, they are much better for assessing the health status of infants in Delaware.² When running FYA rates (e.g., rates for 1980-1984, 1981-1985, and 1982-1986) are used, the patterns of changes in infant mortality over a number of years can be determined.

A description of the methods used to calculate the running FYA rates and the statistical methodology used to compare Delaware and U.S. rates are described below.

FIVE-YEAR AVERAGE INFANT MORTALITY RATES: Running FYA infant, neonatal, and postneonatal mortality rates (see Definitions) were calculated by race for the U.S., Delaware, and Delaware's three counties. The rates (i.e., infant, neonatal, or postneonatal) were computed by dividing the total number of deaths over each five-year period by the total number of live births over the same five-year period and multiplying the result by 1,000. Rates were calculated for five-year periods beginning with 1978-1982 to provide running FYA rates.

STATISTICAL TESTS: The observed differences between Delaware and U.S. FYA rates were tested statistically to determine whether they were a reflection of actual differences or a result of random variation. Due to the small number of infant deaths by county, differences between county and U.S. rates were not tested for significance and should be interpreted with caution.

²See Appendix A for a description of random variation and rationale for use of five-year average rates.

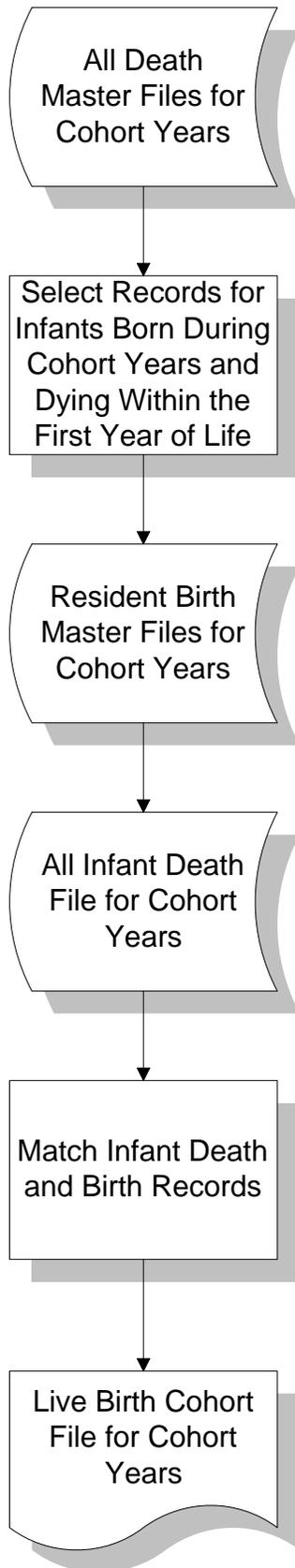
The Delaware and U.S. rates were considered to be significantly different (two-tailed test; alpha level = 0.05) if the observed difference between the rates exceeded twice the estimated standard error of the differences (National Center for Health Statistics, 1988). The standard error of the differences (SE), an estimate of random variation, was calculated as follows:

$$SE = 2\sqrt{\frac{R_{U.S.}^2}{N_{U.S.}} + \frac{R_{DE}^2}{N_{DE}}}$$

where $R_{U.S.}$ and R_{DE} are the observed rates for the two populations, and $N_{U.S.}$ and N_{DE} are the number of deaths on which the rates were based.

APPENDIX C

CREATION OF A LIVE BIRTH COHORT FILE



APPENDIX D

METHODS FOR CALCULATION OF YEARS OF POTENTIAL LIFE LOST (YPLL)

Years of Potential Life Lost (YPLL) is a statistic used to measure the number of years of life lost in a population when persons in that population die prematurely. YPLL provides valuable information regarding the causes of death that contribute most significantly to premature mortality. For example, accidents accounted for 4.1 percent of all deaths in Delaware during 1999-2002. However, this same cause accounted for 13.5 percent of all YPLL during the same period.

In order to calculate YPLL, a standard must be chosen (e.g., 75 years of age) as a reference point for years of life lost. The number of years of life lost is then calculated for each person dying before the standard age. For example, assume that a standard of 75 years of age is chosen. A person dying at age 39 has lost 36 years of life relative to the standard (i.e., 75 years - 39 years = 36 years). To obtain YPLL, the number of years of life lost for each person in the population dying before the standard age is summed. Persons dying at 75 years of age or older would be excluded from the analysis because they have not lost years of life relative to the standard.

For the present report, a standard of 75 years of age was chosen to calculate YPLL. Although other standards are sometimes used, 75 years was chosen because it is the most frequently used standard by the Centers for Disease Control and the National Center for Health Statistics. The standard of 75 years is not used with the implication that it is the maximum potential for years of life. Rather, it is used because deaths before age 75 are considered to be premature.

APPENDIX E

Comparable category codes and comparability ratios for selected causes of death.

Cause of death	Category codes according to		Comparability Ratio ³
	ICD-10 ¹	ICD-9 ²	
Diseases of the Heart	I00-I09, I11, I13, I20-I51	390-398, 402, 404, 410-429	0.9858
Malignant Neoplasms	C00-C97	140-208	1.0068
Cerebrovascular Diseases	I60-I69	430-434, 436-438	1.0588
Chronic Lower Respiratory Diseases	J40-J47	490-494, 496	1.0478
Diabetes mellitus	E10-E14	250	1.0082
Influenza and pneumonia	J10-J18	480-487	0.6982
Alzheimer's Disease	G30	331.0	1.5536
Nephritis, nephrotic syndrome, and nephrosis	N00-N07, N17-N19, N25-N27	580-589	1.232
Septicemia	A40-A41	038	1.1949
Intentional self-harm (suicide)	*U03, X60-X84, Y87.0	E950-E959	0.9962
Chronic liver disease and cirrhosis	K70, K73-K74	571	1.0367
Assault (Homicide)	*U01-*U02, X85-Y09, Y87.1	E960-E969	0.9983
Certain conditions originating in the perinatal period	P00-P96	760-771.2, 771.4-779	1.0658
Congenital malformations	Q00-Q99	740-759	0.8470
Human immunodeficiency virus (HIV)	B20-B24	042-044	1.0637
Accidents (unintentional injuries)	V01-X59, Y85-Y86	E800-E869, E880-E929	1.0305
Essential (primary) hypertension and hypertensive renal disease	I10, I12	401, 403	1.1192
Aortic aneurysm and dissection	I71	441	1.0012
Atherosclerosis	I70	440	0.9637

1. International Classification of Diseases, Tenth Revision.

2. International Classification of Diseases, Ninth Revision.

3. Comparability ratios are preliminary estimates by the National Center for Health Statistics presented in National Vital Statistics Report, Vol. 49, No. 2.

APPENDIX F

STATE OF DELAWARE CERTIFICATE OF LIVE BIRTH

DOC. NO.
35-05-02-90-07-03

OFFICE OF
VITAL
STATISTICS

CERTIFICATE OF LIVE BIRTH

State of Delaware

(107)

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

STATE FILE NUMBER

	1. CHILD'S NAME (FIRST, MIDDLE, LAST)	2. DATE OF BIRTH (MO., DAY, YR.)	3. TIME OF BIRTH M
CHILD	4. SEX	5. CITY, TOWN, OR LOCATION OF BIRTH	6. COUNTY OF BIRTH
	7. PLACE OF BIRTH: <input type="checkbox"/> HOSPITAL <input type="checkbox"/> RESIDENCE <input type="checkbox"/> CLINIC (DOCTOR'S OFFICE) <input type="checkbox"/> FREESTANDING BIRTH CENTER <input type="checkbox"/> OTHER (SPECIFY)		8. FACILITY NAME (IF NOT INSTITUTION, GIVE STREET AND NUMBER)
CERTIFIER ATTENDANT	9. I CERTIFY THAT THIS CHILD WAS BORN ALIVE AT THE PLACE AND TIME ON THE DATE STATED SIGNATURE ▶	10. DATE SIGNED (MO., DAY, YR.)	11. ATTENDANT'S NAME AND TITLE (IF OTHER THAN CERTIFIER) (TYPE/PRINT) NAME _____ <input type="checkbox"/> M.D. <input type="checkbox"/> D.O. <input type="checkbox"/> C.N.M. <input type="checkbox"/> OTHER MIDWIFE <input type="checkbox"/> OTHER (SPECIFY)
	12. CERTIFIER'S NAME AND TITLE (TYPE/PRINT) NAME _____ <input type="checkbox"/> M.D. <input type="checkbox"/> D.O. <input type="checkbox"/> HOSPITAL ADM. <input type="checkbox"/> C.N.M. <input type="checkbox"/> OTHER (SPECIFY)	13. ATTENDANT'S MAILING ADDRESS (STREET AND NUMBER OR RURAL ROUTE NUMBER, CITY OR TOWN, STATE, ZIP CODE)	
	14. REGISTRAR'S SIGNATURE ▶	15. DATE FILED BY REGISTRAR (MO., DAY, YR.)	
MOTHER	16A. MOTHER'S FULL MAIDEN NAME (FIRST, MIDDLE, LAST)	16B. MARRIED SURNAME	17. DATE OF BIRTH (MO., DAY, YR.)
	18. BIRTHPLACE (STATE OR FOREIGN COUNTRY)	19A. RESIDENCE - STATE	19B. COUNTY
	19C. CITY, TOWN OR LOCATION	19D. STREET AND NUMBER	19E. INSIDE CITY LIMITS <input type="checkbox"/> YES <input type="checkbox"/> NO
FATHER	20. MOTHER'S MAILING ADDRESS (IF SAME AS RESIDENCE, ENTER ZIP CODE ONLY)		21. FATHER'S NAME (FIRST, MIDDLE, LAST)
	22A. DATE OF BIRTH (MO., DAY, YR.)	22B. BIRTHPLACE (STATE OR FOREIGN COUNTRY)	
INFORMANT	23. I CERTIFY THAT THE PERSONAL INFORMATION PROVIDED ON THIS CERTIFICATE IS CORRECT TO THE BEST OF MY KNOWLEDGE SIGNATURE OF PARENT OR OTHER INFORMANT ▶		
DEATH UNDER ONE YEAR OF AGE ENTER STATE FILE NUMBER OF DEATH CERTIFICATE FOR THIS CHILD.	THE FOLLOWING CONFIDENTIAL STATISTICAL INFORMATION WILL NOT APPEAR ON A CERTIFIED COPY OF THIS BIRTH RECORD.		
	PERMISSION GRANTED TO SOCIAL SECURITY ADMINISTRATION WITH DATA FROM THIS FORM FOR THE PURPOSE OF ISSUING A SOCIAL SECURITY NUMBER <input type="checkbox"/> YES <input type="checkbox"/> NO		
	PERMISSION GRANTED TO SOCIAL SECURITY ADMINISTRATION TO RELEASE ISSUED NUMBER TO THE DELAWARE OFFICE OF VITAL STATISTICS <input type="checkbox"/> YES <input type="checkbox"/> NO		
	MOTHER'S SOCIAL SECURITY NUMBER		FATHER'S SOCIAL SECURITY NUMBER
	DID MOTHER PARTICIPATE IN ANY OF THE FOLLOWING PROGRAMS DURING PREGNANCY? (CHECK ALL THAT APPLY) <input type="checkbox"/> WIC <input type="checkbox"/> AFDC <input type="checkbox"/> MEDICAID <input type="checkbox"/> FOOD STAMP <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/> NONE		
	PRINCIPAL SOURCE OF PAYMENT FOR DELIVERY <input type="checkbox"/> MEDICAID <input type="checkbox"/> PRIVATE INSURANCE <input type="checkbox"/> SELF PAY <input type="checkbox"/> OTHER (SPECIFY)		

REV. 8/90

(1) ORIGINAL COPY - STATE

APPENDIX F (cont.) STATE OF DELAWARE CERTIFICATE OF LIVE BIRTH STATISTICAL SECTION

INFORMATION FOR MEDICAL AND HEALTH USE ONLY					
24. OF HISPANIC ORIGIN? SPECIFY NO OR YES - IF YES, SPECIFY CUBAN, MEXICAN, PUERTO RICAN, ETC. 24A. <input type="checkbox"/> NO <input type="checkbox"/> YES SPECIFY: _____ 24B. <input type="checkbox"/> NO <input type="checkbox"/> YES SPECIFY: _____	25. RACE - AMERICAN INDIAN, BLACK, WHITE, ETC. (SPECIFY BELOW) 25A. _____ 25B. _____	26. EDUCATION (SPECIFY ONLY HIGHEST GRADE COMPLETED) ELEMENTARY/SECONDARY (0-12) COLLEGE (1-4 OR 5+) 26A. _____ 26B. _____	27. OCCUPATION AND BUSINESS/INDUSTRY (WORKED DURING LAST YEAR) OCCUPATION BUSINESS/INDUSTRY 27A. _____ 27B. _____ 27C. _____ 27D. _____		
28. PREGNANCY HISTORY (COMPLETE EACH SECTION) LIVE BIRTHS (DO NOT INCLUDE THIS CHILD) 28A. NOW LIVING 28B. NOW DEAD NUMBER NUMBER <input type="checkbox"/> NONE <input type="checkbox"/> NONE 28C. DATE OF LAST LIVE BIRTH (MONTH, YEAR) 28E. DATE OF LAST OTHER TERMINATION (MONTH, YEAR)		29. MOTHER MARRIED? (AT BIRTH, CONCEPTION, OR ANY TIME BETWEEN) (YES OR NO) 30. DATE LAST NORMAL MENSES BEGAN (MONTH, DAY, YEAR) 31. MONTH OF PREGNANCY PRENATAL CARE BEGAN FIRST, SECOND, THIRD, ETC. (SPECIFY) 32. PRENATAL VISITS - TOTAL NUMBER (IF NONE, SO STATE) 33. BIRTH WEIGHT (SPECIFY UNIT) 34. CLINICAL ESTIMATE OF GESTATION (WEEKS) 35A. PLURALITY - SINGLE, TWIN, TRIPLET, ETC. (SPECIFY) 35B. IF NOT SINGLE BIRTH - BORN, FIRST, SECOND, THIRD, ETC. (SPECIFY)			
36. APGAR SCORE A - 1MIN. B - _____ 37A. MOTHER TRANSFERRED PRIOR TO DELIVERY? <input type="checkbox"/> NO <input type="checkbox"/> YES IF YES, ENTER NAME OF FACILITY TRANSFERRED FROM: _____		37B. MOTHER TRANSFERRED PRIOR TO DELIVERY? <input type="checkbox"/> NO <input type="checkbox"/> YES IF YES, ENTER NAME OF FACILITY TRANSFERRED TO: _____			
38A. MEDICAL RISK FACTORS FOR THE PREGNANCY (Circle all that apply) Anemia (Hct. <30/Hgb. <10) 01 Cardiac disease 02 Acute or chronic lung disease 03 Diabetes 04 Genital Herpes 05 Hydramnios/Oligohydramnios 06 Hemoglobinopathy 07 Hypertension, chronic 08 Hypertension, pregnancy-associated 09 Eclampsia 10 Incompetent cervix 11 Previous infant 4000+ grams 12 Previous preterm or small-for-gestational-age infant 13 Renal disease 14 Rh sensitization 15 Uterine bleeding 16 None 00 Other (Specify) 17		40. COMPLICATIONS OF LABOR AND/OR DELIVERY (Circle all that apply) Febrile (>100° F. or 38° C.) 01 Meconium, moderate/heavy 02 Premature rupture of membrane (>12 hours) 03 Abruptio placenta 04 Placenta previa 05 Other excessive bleeding 06 Seizures during labor 07 Precipitous labor (<3 hours) 08 Prolonged labor (>20 hours) 09 Dysfunctional labor 10 Breech/Malpresentation 11 Cephalopelvic disproportion 12 Cord prolapse 13 Anesthetic complications 14 Fetal distress 15 None 00 Other (Specify) 16		43. CONGENITAL ANOMALIES OF CHILD: (Circle all the apply) Anencephalus 01 Spina bifida/Meningocele 02 Hydrocephalus 03 Microcephalus 04 Other central nervous system anomalies (Specify) 05 Heart malformations 06 Other circulatory/respiratory anomalies (Specify) 07 Rectal atresia/stenosis 08 Tracheo-esophageal fistula/Esoophageal atresia 09 Omphalocele/Gastroschisis 10 Other gastrointestinal anomalies (Specify) 11 Malformed genitalia 12 Renal agenesis 13 Other urogenital anomalies (Specify) 14 Cleft lip/palate 15 Polydactyly/Syndactyly/Adactyly 16 Club foot 17 Diaphragmatic hernia 18 Other musculoskeletal/integumental anomalies (Specify) 19 Down's syndrome 20 Other chromosomal anomalies (Specify) 21 None 00 Other (Specify) 22	
38B. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items) Tobacco use during pregnancy Yes No Average number of cigarettes per day Alcohol use during pregnancy Yes No Average number of drinks per week Weight gained during pregnancy lbs.		41. METHOD OF DELIVERY (Circle all that apply) Vaginal 01 Vaginal birth after previous C-section 02 Primary C-section 03 Repeat C-section 04 Forceps 05 Vacuum 06			
39. OBSTETRIC PROCEDURES (Circle all that apply) Amniocentesis 01 Electronic fetal monitoring 02 Induction of labor 03 Stimulation of labor 04 Tocolysis 05 Ultrasound 06 None 00 Other (Specify) 07		42. ABNORMAL CONDITIONS OF THE NEWBORN (Circle all that apply) Anemia (Hct. <39/Hgb. <13) 01 Birth injury 02 Fetal alcohol syndrome 03 Hyaline membrane disease/RDS 04 Meconium aspiration syndrome 05 Assisted ventilation <30 min. 06 Assisted ventilation ≥30 min. 07 Seizures 08 None 00 Other (Specify) 09			

(2) HEALTH STATISTICS COPY

APPENDIX H

STATE OF DELAWARE CERTIFICATE OF FETAL DEATH

DOC. NO.
35-05-02-88-09-10

OFFICE OF
VITAL
STATISTICS

CERTIFICATE OF FETAL DEATH (STILLBIRTH)

State of Delaware (107)

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

STATE FILE NUMBER

FETUS	1. NAME OF FETUS (FIRST, MIDDLE, LAST)		2. SEX OF FETUS	3. DATE OF DELIVERY	4. TIME OF DELIVERY	
	5A. NAME OF FACILITY (IF NOT AN INSTITUTION GIVE STREET AND NUMBER)			5B. CITY, TOWN, OR LOCATION	5C. COUNTY OF DELIVERY	
PARENTS	6A. MOTHER'S NAME (FIRST, MIDDLE, LAST)		6B. MAIDEN SURNAME		7. DATE OF BIRTH (MO., DAY, YR.)	
	8A. RESIDENCE STATE	8B. COUNTY	8C. CITY, TOWN, OR LOCATION		8D. STREET AND NUMBER	
	8E. INSIDE CITY LIMITS WILM., NEWARK, DOVER ONLY <input type="checkbox"/> YES <input type="checkbox"/> NO		8F. ZIP CODE	9. FATHER'S NAME (FIRST, MIDDLE, LAST)		10. DATE OF BIRTH (MO., DAY, YR.)
	11. PART I: FETAL DEATH WAS CAUSED BY: FETAL OR MATERNAL CONDITION DIRECTLY CAUSING FETAL DEATH					ENTER ONLY ONE CAUSE PER LINE (A), (B), (C)
CAUSE	(A) IMMEDIATE CAUSE				SPECIFY FETAL OR MATERNAL	
	(B) DUE TO, OR AS A RESULT OF FETAL AND/OR MATERNAL CONDITIONS, IF ANY, GIVING RISE TO THE IMMEDIATE CAUSE (A), STATE OF DELAWARE, OR AS A RESULT OF A CONCURRENCE OF CAUSES					
12A. PART II: OTHER SIGNIFICANT CONDITIONS OF THE FETUS OR OTHER WHICH MAY HAVE CONTRIBUTED TO CAUSE GIVEN IN PART I			12B. FETUS DIED BEFORE LABOR DURING LABOR OR DELIVERY, UNKNOWN (SPEC.)		13. AUTOPSY (SPECIFY YES OR NO)	
14. I CERTIFY THAT THIS DELIVERY OCCURRED ON THE DATE SHOWN AND THAT THE FETUS WAS BORN DEAD			15A. ATTENDANT <input type="checkbox"/> M.D. <input type="checkbox"/> D.O.		15B. DATE SIGNED	
CERTIFIER	SIGNATURE		16. IF NOT ATTENDED BY A PHYSICIAN (TYPE/PRINT NAME)			
	15C. MAILING ADDRESS					
	17A. BURIAL, CREMATION, OTHER		17B. NAME OF CEMETERY, OR CREMATORY		17C. LOCATION (CITY, TOWN, COUNTY) (STATE)	
18A. DATE RECEIVED BY REGISTRAR		18B. REGISTRAR'S SIGNATURE		19. FUNERAL DIRECTOR'S SIGNATURE ADDRESS		

INFORMATION FOR STATISTICAL USE ONLY

MOTHER	20. OF HISPANIC ORIGIN (SPECIFY YES OR NO. IF YES, SPECIFY CUBAN, MEXICAN, PUERTO RICAN, ETC. BELOW)		21A. RACE - AMERICAN INDIAN, WHITE, BLACK, ETC. (SPECIFY BELOW)	22. EDUCATION (SPECIFY ONLY HIGHEST GRADE COMPLETED)		23. OCCUPATION AND BUSINESS/INDUSTRY (WORKED DURING LAST YEAR)	
	20A. <input type="checkbox"/> YES <input type="checkbox"/> NO			ELEM./SEC. (0-12) COLLEGE (1-4 OR 5+)		OCCUPATION BUSINESS/INDUSTRY	
FATHER	20B. <input type="checkbox"/> YES <input type="checkbox"/> NO		21B.	22B.		23B.	
	20C. <input type="checkbox"/> YES <input type="checkbox"/> NO		21C.	22C.		23C.	
PREGNANCY HISTORY (COMPLETE EACH SECTION)			25. MOTHER MARRIED? (AT DELIVERY, CONCEPTION, OR ANY TIME BETWEEN)(YES OR NO)		26. DATE LAST NORMAL MENSES BEGAN (MO., DAY, YR.)		
LIVE BIRTHS			OTHER TERMINATIONS (SPONTANEOUS AND INDUCED AT ANY TIME AFTER CONCEPTION)		27. MONTH OF PREGNANCY PRENATAL CARE BEGAN - FIRST, SECOND, THIRD, ETC. (SPECIFY)		
24A. NOW LIVING		24B. NOW DEAD	24C. (DO NOT INCLUDE THIS FETUS)		28. PRENATAL VISITS - TOTAL NUMBER (IF NONE, SO STATE)		
NUMBER _____		NUMBER _____	NUMBER _____		29. WEIGHT OF FETUS (SPECIFY UNIT)		
<input type="checkbox"/> NONE		<input type="checkbox"/> NONE	<input type="checkbox"/> NONE		30. CLINICAL ESTIMATE OF GESTATION (WEEKS)		
24C. DATE OF LAST LIVE BIRTH (MO., DAY, YR.)		24D. DATE OF LAST OTHER TERMINATION (MO., DAY, YR.)		31. DID MOTHER HAVE BLOOD TEST FOR SYPHILIS? (SPECIFY YES OR NO)			
				32A. PLURALITY - SINGLE, TWIN, TRIPLET, ETC. (SPECIFY)		32B. NOT SINGLE BIRTH - BORN FIRST, SECOND, THIRD, ETC. (SPECIFY)	

REV. 1/89

ORIGINAL COPY - STATE

APPENDIX I

STATE OF DELAWARE CERTIFICATE OF MARRIAGE

1

TO OFFICIANT - PLEASE COMPLETE LOWER PART OF FORM AND MAIL WITHIN 4 DAYS, COPIES 1, 3, AND 4 TO: OFFICE OF VITAL STATISTICS, P.O. Box 637, Dover, DE 19903.

OFFICE OF VITAL STATISTICS		CERTIFICATE OF MARRIAGE State of Delaware				STATE FILE NUMBER			
		DIVISION OF PUBLIC HEALTH							
LOCAL REGISTRAR'S NO.	LICENSE NO. 58801	NO. LICENSE APPLICATION	PLACE LICENSE ISSUED						
GROOM			BRIDE						
NAME	FIRST	MIDDLE	LAST	FIRST	MIDDLE	LAST			
RESIDENCE STREET OR NUMBER, CITY			RESIDENCE STREET OR NUMBER, CITY						
STATE	ZIP	COUNTY		STATE	ZIP	COUNTY			
DATE OF BIRTH		AGE		DATE OF BIRTH		AGE			
BIRTHPLACE (STATE OR FOREIGN COUNTRY)			BIRTHPLACE (STATE OR FOREIGN COUNTRY)						
WE HEREBY CERTIFY THAT THE INFORMATION PROVIDED IS CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF AND THAT WE ARE FREE TO MARRY UNDER THE LAWS OF THIS STATE									
SIGNATURE OF GROOM X			SIGNATURE OF BRIDE X						
FATHER	NAME	FIRST	MIDDLE	LAST	FATHER	NAME	FIRST	MIDDLE	LAST
	BIRTHPLACE (STATE OR FOREIGN COUNTRY)				BIRTHPLACE (STATE OR FOREIGN COUNTRY)				
MOTHER	MAIDEN NAME	FIRST	MIDDLE	LAST	MOTHER	MAIDEN NAME	FIRST	MIDDLE	LAST
	BIRTHPLACE (STATE OR FOREIGN COUNTRY)				BIRTHPLACE (STATE OR FOREIGN COUNTRY)				
<p><i>I hereby certify that on the _____ day of _____, 19____, _____ M. the aforementioned persons were by me united in marriage at _____ (CITY, TOWN, OR LOCATION) County of _____, in accordance with the Laws of the State of Delaware.</i></p> <p>Signature of Clergy or Other Official ▶ _____ TITLE _____</p> <p>RESIDENCE-STATE _____ COUNTY _____</p> <p>Witnesses (two are required.)</p> <p>1. NAME _____ RESIDENCE _____</p> <p>2. NAME _____ RESIDENCE _____</p> <p>3. NAME _____ RESIDENCE _____</p> <p>REGISTRAR'S SIGNATURE _____ DATE RECEIVED BY LOCAL REGISTRAR _____</p>									

VALID ONLY IN THE STATE OF DELAWARE

STATE FILE COPY

	Number of this Marriage - 1st, 2nd, etc. (Specify below)	If Previously Married			Race/American Indian, Black, White, etc. (Specify below)	Education (Specify highest grade completed)	
		Date of First Marriage (Mth./Day/Year)	Last Marriage Ended by Death, Divorce or Annul. (Specify below)	Last Marriage Ended on: Mth./Day/Year		Elementary/Secondary (0-12)	College (1-4 or 5+)
GROOM							
BRIDE							

APPENDIX K

STATE OF DELAWARE REPORT OF INDUCED TERMINATION OF PREGNANCY



DELAWARE HEALTH
AND SOCIAL SERVICES

REPORT OF INDUCED TERMINATION OF PREGNANCY

1. FACILITY NAME (if not clinic or hospital, give address)		2. CITY, TOWN, OR LOCATION OF PREGNANCY TERMINATION		3. COUNTY OF PREGNANCY TERMINATION	
4. FORM NUMBER		5. AGE LAST BIRTHDAY	6. MARRIED? <input type="checkbox"/> Yes <input type="checkbox"/> No	7. DATE OF PREGNANCY TERMINATION (Month, Day, Year)	
8a. RESIDENCE - STATE		8b. COUNTY	8c. CITY, TOWN, OR LOCATION	8d. ZIP CODE	
9. OF HISPANIC ORIGIN? <small>(Specify No or Yes - if Yes, specify Cuban, Mexican, Puerto Rican, etc.)</small> <input type="checkbox"/> No <input type="checkbox"/> Yes Specify: _____		10. RACE <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Other (Specify) _____		11. EDUCATION <small>(Specify only highest grade completed)</small> Elementary/Secondary (0-12) College (1-4 or 5+)	
12. DATE LAST NORMAL MENSES BEGAN (Month, Day, Year)	13. CLINICAL ESTIMATE OF GESTATION (Weeks)	14. PREVIOUS PREGNANCIES (Complete each section)			
		LIVE BIRTHS		OTHER TERMINATIONS	
		14a. Now Living Number _____ <input type="checkbox"/> None	14b. Not Living Number _____ <input type="checkbox"/> None	14c. Spontaneous Number _____ <input type="checkbox"/> None	14d. Induced (Do not include this termination) Number _____ <input type="checkbox"/> None
15. TYPE OF TERMINATION PROCEDURE <small>(Check only one)</small>					
<input type="checkbox"/> Suction Curettage <input type="checkbox"/> Medical (Nonsurgical), Specify Medication(s) _____ <input type="checkbox"/> Dilation and Evacuation (D&E) <input type="checkbox"/> Intra-Uterine Instillation (Saline or Prostaglandin) <input type="checkbox"/> Sharp Curettage (D&C) <input type="checkbox"/> Hysterotomy/Hysterectomy <input type="checkbox"/> Other (Specify) _____					

Mail completed forms to:
Bureau of Health Planning and Resources Management
P.O. Box 637
Federal and Water Streets
Dover, DE 19903

Doc No 35-01-20-96-12-01

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