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From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

Maternal and Child Health Statistics: Russian Federation and United States, Selected Years 1985–95

March 1999

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

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Preface

This report is the second in a series providing comparative vital and health statistics data for the Russian Federation and the United States. The publication is a joint effort by the National Center for Health Statistics of the Centers for Disease Control and Prevention in the United States and the Public Health Institute, MedSocEconomInform, Ministry of Health of the Russian Federation.

The focus of the current report is on maternal and child health statistics in the two countries. Using tables, figures, and commentary, this report makes available information on a broad range of health measures for mothers, infants, children, and adolescents in the Russian Federation and the United States. The data are presented in a comparative format to enhance the reader's understanding of maternal and child health status in both countries. The report includes a discussion of data quality issues to assist the reader in understanding limitations in the accuracy, coverage, or comparability of the information presented. A background section provides a brief description of the organization of each country's health care system, as well as an outline of national guidelines for the provision of maternal and child health care.

This report contains 24 tables covering population size, prenatal and obstetrical care, abortions, natality data, breastfeeding practices, mortality data including leading causes of death, immunization rates, communicable diseases, and other morbidity measures. Data are provided for selected years from 1985 to 1995, with the focus on the 1990's. The report provides additional detail, when available, for key subgroups of each population: In the Russian Federation, data are presented for urban and rural regions; in the United States, for black and white racial groups. In the final section of the report, a glossary of terms provides additional detail on differences in definitions between the two countries.

The complete report is available as an Acrobat.pdf file on the Internet through the NCHS home page on the World Wide Web. The direct Uniform Locator Code (URL) address is: www.cdc.gov/nchswww/

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Foreword by Yuri M. Komarov

Once again, it is my privilege to introduce a joint report of the National Center for Health Statistics of the United States and the Public Health Institute, MedSocEconomInform, of the Russian Federation. The cooperation between these two well-known and respected organizations began in 1993 and continues now within the framework of the Gore-Chernomyrdin Commission.

The first report, *Vital and Health Statistics: Russian Federation and United States, Selected Years 1980–93*, took 2 years to prepare and was widely disseminated after its 1995 publication. The task of assembling comparative data required creativity because the records systems, definitions, criteria, and methods of calculation and analysis differed substantially between the countries. Many health care indicators were measured differently, making standardization and comparison difficult. Therefore, this report contains not only presentations of data but also explanations of the comparative analysis process.

In Russia, the medical-demographic picture of health in recent years is complicated. At the beginning of 1997, the Russian population was 147.5 million (data supplied from Goskomstat), a decline of 0.5 million from 1996. The number of deaths was 1.6 times higher than the number of births during the first 11 months of 1997, as in 1995–96. Seventy-two of Russia's 89 regions experienced natural population loss in 1997, and in 25 of them, the number of deaths was 2–3 times the number of births.

The trend of declining numbers of births continued in 1997. Nationwide, approximately 1,158,900 births occurred between January and November of 1997, which is 3.6 percent less than the same period in 1996. The average number of newborns per 100 women was about 126 (for simple replacement of the population, this rate must not be lower than 215).

The reproductive health of women in Russia is greatly affected by the lack of reliable contraceptives. Although the number of induced abortions is declining, the birth/abortion ratio (1:2) is almost unchanged. Because the prevention of unwanted pregnancy and its complications can greatly influence maternal mortality, government programs to improve access to family planning need to be strengthened.

Data for 1995–96 and the first 9 months of 1997 indicate an increase in the number of marriages and a decrease in the number of divorces. From January to September of 1997, the number of divorces per 1,000 marriages declined from 642 to 574, compared with the same time period of the previous year.

It is important to note the improvement in mortality in Russia since 1995. The number of deaths per 1,000 population decreased from 15.7 in 1994 to 14.2 in 1996. For the first 9 months of 1997, this indicator was 13.9 but this mortality rate continues to be one of the highest in Europe. The decrease in mortality in 1995–97 occurred in all the main cause-of-death categories, particularly deaths from accidents, poisonings, and injuries. During 1994–96 mortality from circulatory diseases declined by 9.1 percent; from accidents, poisonings, and injuries, by 17.0 percent (among these, alcohol poisoning by 39.4 percent, suicide by 6.2 percent, and homicide by 18.1 percent); and from respiratory diseases, by 14.5 percent. Data for 1997 confirm this trend.

The extremely high mortality rate for working-age men (16–59 years) is 2.5–5.0 times higher in Russia than in the West European countries, the United States, and Japan. If this rate continues, only one-half of males that are now age 16 will survive to age 60.

Infant mortality is declining slowly (in 1996, by 6 percent; in 1995, by 3 percent). The 1996 level was 17.4 per 1,000 live births, a rate 3–4 times higher than in other developed countries. The decline of infant mortality rates since 1993 reflects not only the economic improvement in Russia but also the increased commitment to addressing this problem at both the State (*oblast*) and local levels. Much has already been done to improve the quality of maternal and child health care, and MedSocEconomInform analysts estimate that infant mortality in 1997 will be 16.9 per 1,000, and in 1998 will decrease to 16.5 per 1,000. Compared with other countries, there are considerable declines in infant deaths.

Although diseases of the perinatal period and congenital abnormalities are the cause of 67 percent of all child deaths, other causes of death may be more likely sources for future reductions in infant mortality. For example, although the infant mortality rate is three times higher in Russia than in Germany, differentials are much higher for certain causes of infant death: 2.3 times higher in Russia for congenital malformations, 2.3 times higher for conditions of the perinatal period, 7.1 times higher for injuries and poisonings, 18.8 times higher for infections, 27.3 times higher for respiratory diseases, and 48.9 times higher for pneumonia. These differentials point to potentially preventable infant deaths in Russia.

Maternal mortality rates in Russia during 1990–95 showed a small increase of 11.3 percent (from 47.4 to 53.3 per 100,000 live births). From 1995 to 1996, maternal mortality declined 8.3 percent, and it is estimated that the 1997 rate will be 48.6. MedSocEconomInform analysts forecast that the maternal mortality rate in 1998 will be about 47.5 per 100,000 live births, but it is necessary to remember that the recent decline in the number of births influences this rate. Russian experts believe that the main cause of the reduction in maternal mortality is the decline in the number of deaths from abortions and pregnancy complications.

After a long period of decline in life expectancy in Russia, some improvement has been noticed since 1995. The 1996 figure for men increased to 58.9 years (from 57.6 in 1994) and for women to 72.5 years (from 71.2 in 1994). The considerable gap in life expectancy (12.7 years) between genders remains, but available data for 1997

indicate an improvement in life expectancy to 66.9 years (average for both sexes), and to 61.0 years for men and to 73.1 for women. This trend is expected to continue in 1998.

We hope that this report, which on the Russian side included the participation of the Administration for Maternal and Child Health Protection, will prove useful and we are ready to consider any notes and suggestions concerning this work.

Our work with NCHS continues in several directions: (1) improvement and experimental application of certificate of birth, certificate of death, and certificate of infant death reporting; (2) further development of computer programs for training in the use of the *International Classification of Diseases, Tenth Revision* (ICD–10); and (3) continued development of computer systems for the coding of the underlying cause of death.

This report is devoted to some of the most pressing problems of health and health care. During the development of this publication, specialists from both countries have come to understand each other better and enrich themselves with new knowledge and ideas. We express sincere gratitude to the director and staff of NCHS for their invaluable contribution to the cooperation between our organizations in the preparation of this publication.

Professor Yuri M. Komarov, M.D., Ph.D., D.Sc.
Distinguished Scientist of the Russian Federation
Director General, Public Health Research Institute
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Foreword by Edward J. Sondik

Since 1993 the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), of the United States and the Public Health Institute (MedSocEconomInform) of the Russian Federation have pursued an active program of cooperation in health statistics. Initially through a memorandum of understanding between the two agencies and later as a part of the binational Gore-Chernomyrdin Commission, our two organizations have sought to share information, improve the quality and comparability of our health data, and publish joint reports.

In the area of joint reports, our intention is to publish both broad overviews of health data in the two countries and reports focusing on specific topics of mutual interest. The first report, published in 1995, provided comparative vital and health statistics data on a wide range of topics. The current publication, the second in the series, falls into the category of a special topic report, in this case providing data on maternal and child health status in both nations.

It is appropriate that maternal and child health should be the subject of our first special topic report, as the future of both our countries literally depends on the well-being of both mothers and children. Our ability to ensure the best outcomes for our mothers and children depends in turn on our access to timely, accurate, and complete information on their condition. This report provides comparable data on mothers' health during pregnancy and delivery, on childhood illness and causes of death, and other subjects. It certainly cannot provide information on every aspect of maternal and child health, but by providing a snapshot of what we know and what we can compare between our two nations, this publication presents a challenge to the statistical agencies of both countries to do better.

The data contained in this report show generally positive trends in maternal and child health measures during the first half of the 1990's. Preliminary data for 1996 indicate continued improvement for most measures. For example, the teenage birth rate declined 4 percent from 1995 to 1996, continuing a consistent decline that began in 1991. The proportion of women initiating prenatal care in the first trimester of pregnancy rose to 82 percent in 1996, with increases reported for all major racial and ethnic groups. The infant mortality rate fell by over 5 percent, from 7.6 in 1995 to 7.2 in 1996. Reductions in childhood death rates also were reported in 1996. Not all of the changes were positive, however: the percentage of births to unmarried women rose slightly, to 32.4 percent in 1996, and the low birth weight rate rose to 7.4 percent, from 7.3 percent in 1995.

In addition to maternal and child health, NCHS and MedSocEconomInform will continue to cooperate in several other areas under the general heading of health statistics. In the area of joint reports, we intend to update our general report on vital and health statistics at regular intervals and to publish other reports on topics of mutual interest. NCHS is assisting MedSocEconomInform with the evaluation and revision of the statistical content of birth and death certificates used in the Russian Federation. Both agencies are engaged in a program to begin the use of the *International Classification of Diseases (ICD), 10th Revision*, in the Russian Federation through the development of electronic training software and the organization of ICD training courses. MedSocEconomInform is an active participant in the NCHS-sponsored International Collaborative Effort on the Automation of Mortality Statistics. Finally, both organizations intend to conduct other collaborative projects as the need arises and to continue to engage in scientific exchange programs. We wish to thank the National Institute of Child Health and Human Development, National Institutes of Health, and the Office of Global Health, CDC, for their financial and technical assistance to several of these activities.

We would like to express our gratitude to our colleagues at MedSocEconomInform for all of their contributions to our joint projects. It has been a pleasure to work with them on all of these activities. We believe that this cooperation has been mutually beneficial, and it is our sincere hope that it will continue into the future.

Edward J. Sondik, Ph.D.
Director
National Center for Health Statistics

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Abstract

This report provides comparative maternal and child health data for recent years for the Russian Federation and the United States. Statistical data for Russia are from the Ministry of Health of Russia and from Goskomstat, the central statistical organization of Russia. Information for the United States comes from various data systems of the National Center for Health Statistics as well as other parts of the Department of Health and Human Services.

A background section provides a description of each country's health care system and national guidelines for maternal and child health care. This information is intended to assist the reader in interpreting the subsequent sections on various aspects of maternal and child health.

The report uses tables, figures, and commentary to present information on many different health measures for mothers, infants, children, and adolescents in the two countries. Topics covered include population size, prenatal and obstetrical care, abortions, natality, breastfeeding, mortality, immunization, communicable diseases, and other morbidity measures. The commentary includes a discussion of data quality issues that affect the accuracy and comparability of the information presented. Data are provided for selected years from 1985 to 1995. When available, additional detail is provided for key subgroups of each population: for the Russian Federation, urban and rural populations; for the United States, black and white racial groups. A glossary of terms at the end of the report provides additional information on definitions and data sources and limitations.

Keywords: *maternal and child health • United States • Russia • fertility • mortality • infant mortality • morbidity • prenatal care • abortion • immunization • communicable diseases*

Maternal and Child Health Statistics: Russian Federation and United States, Selected Years 1985–95

by Francis C. Notzon, Ph.D., Office of International Statistics; Yuri M. Komarov, M.D., Ph.D., D.Sc., Anna V. Korotkova, Ph.D., Sergei P. Ermakov, Ph.D., D.Sc., Alexei I. Savinykh, M.D., Elena Sharapova, M.D., Ph.D., D.Sc., Public Health Institute, MedSocEconomInform, Ministry of Health of Russia; Dina I. Zelinskaya, M.D., Ph.D., D.Sc., Administration for Maternal and Child Health Protection, Ministry of Health of Russia; Tracy L. Armstrong, Ph.D., Office of International Statistics; Michele Kiely, Dr.P.H., Maternal and Child Health Bureau, Health Resources and Services Administration.

Introduction

Maternal and child health is essential to the well-being and future growth of all nations. This is certainly true of the Russian Federation and the United States, both of which maintain active maternal and child health programs. Our objective in this report is to provide a snapshot of a broad range of maternal and child health measures and trends in both countries in as comparable a fashion as possible, to provide information on the current status and recent changes in maternal and child health, and to facilitate cross-country comparisions. We have attempted to enhance data comparability by limiting the information presented to variables with comparable definitions and categories. Where this is not possible, we have documented the differences in comparability. For example, data on mortality by cause includes ICD codes for each cause of death to enhance the comparability of mortality data and to alert the reader to limitations in comparability for certain causes of death. Finally, the report provides a basic description of each nation's health care system and guidelines for maternal and child health care. The system information is intended particularly for readers with limited knowledge of the health care system in one or both countries.

Background

Health Care System of the Russian Federation

The provision of health care in the Russian Federation is primarily a government responsibility, as it was in the era of the Soviet Union. However, important changes have occurred, particularly efforts to gradually change the method of financing health care from a system of government allocation of funds to a system based on employer contributions. Despite these changes in

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financing, the overall responsibility for health care continues to reside in the central government, in terms of the provision of care, the establishment of norms and standards for care, and the maintenance of the necessary health infrastructure. Although a limited number of private practice physicians and private hospitals have appeared in recent years, mostly in major cities, a central objective of the health care system continues to be the assurance of universal access to care.

The Ministry of Health is the most important provider of health care in the Russian Federation. Other providers do exist, however, including the Ministry of Defense, Ministry of Transport, and other government organizations, as well as a small private sector. The description provided in this section focuses mainly on the health care system of the Ministry of Health.

The organization of health care within the Russian Federation is based on the administrative divisions of the country. The nation is divided into *oblasts* (territories), each with half a million to several million people. Each oblast is in turn divided into urban and rural *rayons*, with populations ranging from a few thousand in rural areas to half a million or more in large cities. Rayons are divided into smaller *uchastocks* (districts) for the organization of care within the rayons.

In urban areas, polyclinics serve as the central source of primary care. Separate polyclinics provide care for adults, children, and industrial workers, as well as women's consultation clinics for obstetric and maternity care. The area served by the polyclinic is divided into uchastocks, each served by a physician who provides treatment and/or referral to specialists within the polyclinic or to hospital-based specialists. Depending on the type of polyclinic concerned, an uchastock physician serves one of the following populations: an adult population of 2,000, a child population of 800–1,000, or a factory or group of factories with 2,000 workers.

Because rural populations are much more dispersed, paramedical personnel are the first point of contact with the health system in these areas. Most villages and collective farms have feldsher-midwife posts to provide first aid, treat minor illnesses, administer immunizations, and improve sanitation and hygiene. The feldsher (similar to a physician assistant) and midwife are supervised by a physician from the rural hospital. Serious illnesses can be referred to rural hospitals or to more specialized hospitals at the rayon or oblast level.

The Russian Federation has a large number of health facilities, almost all publicly owned. In 1993 there were 12,500 hospitals of all types, with a total of 1.9 million beds, or 13 beds per 1,000 population. Hospitals in Russia are organized according to the regional system of health services. The smallest general hospitals (25–150 beds) serve the rural (uchastock) areas with an average population of 4,000. The largest village in each rural area has a larger rural hospital (50–250 beds) with an outpatient clinic. Rayon central hospitals, located in the central city of each rayon, have 150–750 beds, numerous specialties, and an outpatient clinic, and serve 40,000–150,000 people. The oblast central hospital (800–2,000 beds) is located in the largest city of the oblast and has a full range of specialties as well as outpatient consulting. The central oblast hospital serves a population of 400,000 to 5 million people. There are also oblast specialty hospitals in the central city of the oblast, for such areas as pediatrics, psychiatric care, oncology, tuberculosis, sexually transmitted diseases, and others. In addition to the Ministry of Health oblast specialty hospitals, the central city of each oblast has its own specialty hospitals as well.

Other groups and government ministries operate their own health facilities, separate from the polyclinics and hospitals of the Ministry of Health. Industrial enterprises operate their own clinics for workers as well as their own hospitals and sanatoria. As mentioned earlier, the Ministry of Defense, Ministry of Transport, and others also operate their own systems of health care. Some of these facilities offer a higher level of care than the facilities of the Ministry of Health.

As the large number of hospitals and beds indicates, the Russian health care system is very hospital-centered. There is a high rate of hospitalization (206 discharges per 1,000 population in 1996) and a long average length of stay (16.9 days in 1996). Both of these measures are higher than most industrialized countries and substantially higher than those of the United States. The dependence on hospital-based care makes Russian health care relatively expensive.

The Russian health care system also relies on a large number of physicians and other health care workers. In 1996 there were more than 600,000 physicians in Russia, or about 409 per 100,000 population. Although this is almost twice the active physician-to-population ratio of the United States, the Russian definition includes many categories not included in the United States, such as dentists, nonactive physicians, and physiotherapists. Since 1995, dentists have been excluded from the physician category and are counted as mid-level medical personnel. Russian physicians tend to be highly specialized, as in the United States. In the Russian Federation, there are 83 different physician specialties. About one-quarter of Russian physicians were general family practice or internal medicine practitioners in 1993, compared with about one-third of non-Federal office-based physicians in the United States. Recently, the training of general practitioners has begun in the Russian Federation. At present, there are 640 such general practitioners in Russia. The Russian system also relies on a large number of paramedical personnel, particularly feldshers and midwives in rural areas.

The education of Russian physicians is entirely government controlled, with all medical schools following a standard curriculum established by the Ministry of Health in cooperation with the Ministry of Education. Medical education takes 6 years, plus a 1-year internship. Previously, interns were sent to different areas of the country according to the need for physicians and the preferences of the graduate. After completing the internship, the physician served 3 years of compulsory service,

usually in the same area as the internship.

The financing of the Russian health care system is in transition at present. The system inherited from the Soviets was completely financed with revenues from the central and territorial (oblast) governments. Reform of the health care system began in the early 1990's, based on a transition to a payroll-tax-based system known as the Mandatory Health Insurance Fund (MHIF). The Health Insurance Act of 1991 identifies two sources of revenue for the health care system: first, employer contributions to the territorial MHIF and Federal MHIF, equivalent to 3.2 and 0.4 percent of payroll, respectively; second, local government contributions to the territorial MHIF's for the nonworking population and direct financing of various health programs. Each of the 88 territories has its own separate territorial MHIF. The territorial fund acts as a third party to purchase health care and form contractual relationships with public and private hospitals and polyclinics. The objective is to enhance quality of care and ensure consumer protection by allowing competition.

To date this transition has had some success but still faces many challenges. The serious economic decline in Russia during the 1990's has reduced funding for the health care system. Another problem is the continuing need to address structural distortions in the health care system. Further modification of the MHIF model may be required to ensure the success of health reform in Russia.

Maternal and Child Health Practice Guidelines of the Russian Federation

Guidelines for Prenatal Care

Prenatal care in the Russian Federation is covered by basic medical insurance and as such is free to all women. The standards for obstetric care involve a comprehensive baseline assessment of the pregnant woman's health status, a determination of risk factors that will require special care during pregnancy or delivery, and continued surveillance of health status and risk factors throughout the pregnancy. Standard prenatal care for routine pregnancies requires an average of 14 prenatal care visits, as follows:

- Before 12 weeks: monthly visits
- From 12 to 30 weeks: visits every 2 weeks
- From 30 weeks to delivery: visits every 1–2 weeks

The first prenatal care visit should include obtaining a medical history of the woman and her family, focusing on risk factors for the pregnancy and delivery, and on genetic disorders that may affect the fetus. A comprehensive physical examination should be conducted, including recording of weight, height, and other anthropometric measures, measurement of blood pressure, urinalysis, basic blood tests, ultrasound, electrocardiogram, and tests for various types of infections. The visit should also include an assessment of behavioral risk factors, including the use of tobacco and alcohol as well as illegal drugs. Information should be collected on the woman's circumstances, including her residence, place of employment, type of employment, education, and marital status. Any woman working in dangerous conditions is given a letter for her employers requesting that the employer modify her work conditions. Finally, the pregnant woman must visit the following specialists: general practitioner (internal medicine); dentist; ophthalmologist; otolaryngologist; and other specialists as needed for chronic diseases such as diabetes, hypertension, and so on.

All followup visits include a physical examination, recording of weight, measurement of blood pressure, and basic blood tests. An ultrasound procedure is carried out at the first visit, at 16–28 weeks, and at 36 weeks of gestation. Twice during pregnancy, blood tests are conducted for human immunodeficiency virus (HIV), Rh type determination, hepatitis B, and specific antibodies for herpes, toxoplasmosis, and others. General tests for infections are also performed during pregnancy. In urban areas women are subjected to complete testing for infections; in rural areas the testing is selective, depending on the equipment available. Women at

Immunization schedule, Russian Federation

Age	Vaccine
4–7 days	BCG[1] or BCG-M
3 months	DTP[2], OPV[3]
4 months	DTP, OPV
5 months	DTP, OPV
12–15 months	Measles, mumps, rubella[4]
18 months	DTP, OPV (one dose)
24 months	OPV (one dose)
6 years	dTP, OPV; measles, mumps, rubella[4]
7 years	BCG[5]
11 years	d
14 years	BCG[6]
16–17 years	dT
Adults	dT (one dose every 10 years)

[1]Tuberculosis vaccine.
[2]Diphtheria, tetanus, pertussis vaccine.
[3]Oral polio vaccine.
[4]Measles, mumps, rubella used as single antigens or as combined vaccine (MMR) with locally produced preparations or imported preparations registered appropriately.
[5]Children not infected with tuberculosis should be immunized.
[6]Children not infected with tuberculosis and not immunized at 7 years should be immunized.

Hepatitis B vaccine schedule, Russian Federation

Dose	Age (Schedule I)	Age (Schedule II)
1st dose	Within 24 hours of birth (prior to BCG[1])	4–5 months
2nd dose	1 month	5–6 months
3rd dose	5–6 months	12–13 months

[1]Tuberculosis vaccine.

high risk of diabetes are tested at intervals throughout the pregnancy, with the frequency of testing dependent on the level of risk.

Guidelines for Health Supervision of Infants, Children, and Adolescents

Infant care involves both physicians and nurses and includes both polyclinic and home visits. For uncomplicated deliveries the mother and child typically remain in the hospital for 5–7 days following delivery. The first doctor and nurse visit is in the mother's home, taking place within a few days of hospital discharge. The visit involves a physical examination and an evaluation of the newborn's developmental abilities. If the child is normal, the nurse will continue to make weekly home visits for the first month. For children who are ill, the doctor will make home visits as required during the first month following birth.

Following the first month of life, standard infant care continues to involve visits with both physicians and nurses. Normal children and their mothers must visit the physician at the polyclinic at 1, 3, 6, 9, and 12 months of age for physical examinations, routine measurements, and administration of immunizations as required. Nurses make two additional home visits when the infant is 2 months and 3 months of age. Nurses also call mothers who do not complete their polyclinic visits according to the prescribed schedule, to encourage them to visit the polyclinic and to collect information on the child's health.

Routine care of children beyond 1 year of age does not involve a specific schedule of visits, with the exception of visits to receive required immunizations (see the schedule of required immunizations provided in the box above). As required, the polyclinic nurse calls the mother to remind her to bring the child to the polyclinic for immunization. At the time of the visit, the child also receives a physical examination, including measurement of height, weight, and temperature, and collection of blood and urine samples. Other visits to the polyclinic are made as needed.

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Health Care System of the United States

The U.S. health care system encompasses a multitude of public and private arrangements for the financing and delivery of health care. The system relies heavily on the provision of payment for medical care through public or private insurance. Regardless of the type of insurance coverage, most patients obtain health services directly from privately employed physicians, nurses, or other clinical practitioners with only modest government oversight.

The health care system encompasses a large number and variety of health workers, with physicians often serving as the primary decision makers. The supply of physicians has grown rapidly in recent years, with the ratio of physicians per 100,000 population rising from 153 in 1975 to 242 in 1995. The level of specialization is higher in the United States than in many other countries but is similar to the degree of specialization in Russia. Schools of medicine and other professional schools producing health personnel are accredited by private organizations and are not regulated by the Federal Government, although graduates must be licensed by the State in which they intend to practice. About one-half of the schools of medicine are State entities with budgets and policies governed by State legislatures.

About 23 percent of physicians practicing in the United States obtained their medical education at medical schools outside the United States and Canada. Many of these foreign medical graduates are U.S. citizens. Most foreign medical graduates, both those from the United States and foreign nationals, received their clinical training at U.S. hospitals before entering practice.

Health facilities in the United States may be either public or private institutions. In 1994 there were 6,374 hospitals of all types in operation. The largest category was short-stay general hospitals, with 5,229 such hospitals providing approximately 900,000 beds, or 3.5 beds per 1,000 population. The bulk of these hospitals were private, almost three-quarters either voluntary nonprofit or proprietary institutions in 1994. Most general hospitals have open medical staffs, permitting physicians in private practice to admit and treat patients. Hospitals also operate their own outpatient departments, including emergency care departments, which have become increasingly important providers of general care in recent years.

Federal and State governments also own or support hospitals. Four percent of all hospitals are Federal and may be either short- or long-term facilities that provide care for several special groups, including military personnel, veterans, and reservation-based Native Americans. Mental hospitals, which provide long-term care, are mostly State institutions. Local government hospitals, which are primarily general hospitals, are either small institutions in rural areas or large facilities serving urban, often inner-city poor populations.

Skilled nursing facilities (SNF's) provide long-term care for patients, particularly the elderly, who require nursing care but not the specialized services available in hospitals. SNF's are primarily proprietary facilities and are usually somewhat smaller than general hospitals. In 1996 there were about 16,800 SNF's, with 1.8 million beds.

Other health care facilities exist as well in the United States, particularly a variety of clinics providing ambulatory care. The Federal Government provides basic grants to support a national network of more than 600 community health centers, most of which also derive operating revenue from State, county, and local sources. State or local governments also sponsor their own

clinics for the provision of care to low-income populations. Other clinics provide care in schools or businesses or are linked to public health agencies or voluntary health organizations. An increasing number are freestanding proprietary clinics providing ambulatory care on a for-profit basis.

The financing of health care in the United States also is accomplished through a combination of public and private arrangements. Private health insurance, obtained primarily through employers with substantial cost-sharing by employees, provided financing for health care for 71 percent of Americans under 65 years of age in 1995. Medicaid, a Federal-State program to finance care for poor and disabled Americans, provided coverage for 11 percent of the population under 65 years of age. Health care for the elderly is provided principally by the Federal Medicare program, which provided basic health insurance for 31.5 million persons in 1995. More than 16 percent of the population under age 65, about 39 million people, had no health insurance coverage in 1995. Uninsured individuals obtain access to health care through out-of-pocket expenditures or by seeking care at subsidized health facilities, such as hospital emergency departments or community health clinics.

The provision of health care in the United States has become increasingly costly over time. This has been the result of many factors, including the lack of cost controls on health spending, the shift in financing from out-of-pocket to health insurance arrangements and the growing demand for better health, among others. The result has been a rising proportion of the gross domestic product (GDP) devoted to the health sector. In 1975 national health expenditures represented 8 percent of the GDP, whereas in 1995 health expenditures accounted for 13.6 percent. This proportion is significantly more than that for other industrialized countries.

Many aspects of the health care system have undergone change in recent years, largely in response to the rising cost of medical care. The increasing popularity of the concept of managed care as a means to control health care utilization and expenditures has had an impact on many aspects of the system. A major change has been the growing popularity of health maintenance organizations (HMO's) and other arrangements by which providers contract to provide comprehensive health care in exchange for fixed capitated payments that do not vary with the level or amount of services provided. These arrangements are distinguished from the traditional notion of fee for service, providing an incentive for preventive health care, reductions in hospitalization rates and unnecessary procedures, and more efficient use of other providers and services. Managed care also has accelerated an existing trend among physicians to move from solo to group practices. In addition to the growth of HMO-type group practices, many physicians in recent years have joined physician provider groups that offer services through publicly and privately reimbursed health plans. These plans do not have many of the full management oversight practices of HMO's but do strive for more efficient use of resources.

Cost-control measures have also affected the supply and characteristics of health personnel, the availability of health facilities, and other aspects of the health care system. The supply of physicians will gradually level off in future years, as fewer graduates of foreign medical schools are allowed to train and practice in the United States. The growing use of primary physicians in managed care organizations has led to rising demand for general and family physicians. Significant reductions in the length of hospital stays and the growing use of outpatient surgical procedures has reduced demand for hospital beds, which in turn has led to a reduction in the number of hospitals and in the supply of hospital beds.

As a result of these and other changes, the proportion of GDP devoted to health care remained essentially unchanged between 1993 and 1995. Actual expenditures on health continued to grow, although at a slower pace. However, continued upward pressure on health expenditures from a variety of sources is expected to continue in the future. In the short run, consumer reaction to the restrictive practices of managed care may lead to legislation limiting the ability of managed care providers to restrict health services. Further advances in medical technology may fuel demand for additional, costly services. The reactions of providers and consumers to these forces may lead to other major changes in the U.S. health care system in the future.

Maternal and Child Health Practice Guidelines of the United States

Recommendations for health care practice in the United States are voluntary and are made by professional health care associations, particularly those associations whose members specialize in that particular aspect of health care, government agencies, and health plans. In the area of maternal and child health, two specialty professional medical associations, the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics, in addition to the American Medical Association and numerous other professional associations, have issued guidelines for care. In addition, various government agencies have issued guidelines (e.g., CDC issues guidelines for immunization; the Department of Agriculture issues nutrition guidelines for pregnant and lactating women). Periodic updates of the guidelines for care are issued as required by changes in medical knowledge and technology.

Guidelines for Prenatal Care

The American College of Obstetrics and Gynecology recommends that antepartum care focus on an evaluation of the pregnant woman's status and an assessment of risk factors requiring special antepartum or intrapartum care. Prenatal care should begin as soon as the pregnancy is confirmed, and for women with uncomplicated pregnancies, approximately 12–14 prenatal care visits should take place according to the following schedule:

- Initial visit as soon as possible following confirmation of pregnancy
- Visits every 4 weeks during first 28 weeks of pregnancy

- Visits every 2–3 weeks until 36 weeks of gestation
- Weekly visits thereafter until delivery

Women with medical or obstetric problems should be seen more frequently, the number of visits and their timing dependent on the nature and severity of the problems.

The initial prenatal visit should include a physical examination and the collection of information from the patient to establish an obstetric data base. The information should include a comprehensive health history for the patient, a family and social history, substance use, including alcohol, tobacco, and illicit drugs, and the results of the physical examination, laboratory procedures, and risk assessment. As soon as possible in the pregnancy, the following laboratory tests should be performed: hemoglobin or hematocrit; urinalysis, including microscopic examination or culture; blood group and Rh type determination; rubella antibody titer measurement; syphilis screening; and cervical cytology. Additional laboratory tests may be indicated by the findings of the history, physical examination, and initial tests. Additional tests may include urine culture, screening for diabetes or hepatitis B virus, testing for sexually transmitted diseases, and skin testing for tuberculosis. The patient should be offered a maternal serum alpha-fetoprotein screening for neural tube defects in the fetus between 15 and 24 weeks of gestation. Patients should receive HIV counseling and voluntary testing.

At each followup visit, the physical examination should include measurement of blood pressure, weight, fundal height, fetal heart rate, and, in the later months of pregnancy, assessment of fetal presentation. A urinalysis for albumin and glucose also should be performed at each visit. Measurement of the hematocrit or hemoglobin level should be repeated early in the third trimester. Repeat tests for sexually transmitted diseases should be performed if the woman is in a high-risk group. Unsensitized Rh-negative women should have a repeat antibody test at 28 weeks of gestation. If the patient is still unsensitized, she should receive Rho(D) immunoglobulin prophylactically. Various high-risk patients may be counseled to undergo amniocentesis to evaluate the fetus or assess the amniotic fluid. Finally, prenatal diagnostic tests for genetic disorders may be suggested based on the results of antenatal screening.

The woman's nutritional status should be monitored throughout the pregnancy. A vitamin-mineral supplement should be given if the woman's dietary intake does not satisfy the increased need for protein, iron, folic acid, and other vitamins and minerals during the pregnancy. Women should be counseled on the benefits of abstaining from alcohol and tobacco use during pregnancy; consuming 0.4 milligrams per day of folic acid while attempting pregnancy and in the first trimester for prevention of neural tube defects; and maintaining good control of any preexisting medical conditions, such as diabetes or hypertension. The patient should be encouraged to maintain a level of exercise appropriate to her previous exercise conditioning and pregnancy complications. The woman and her family should be encouraged to participate in childbirth education classes.

Guidelines for Health Supervision of Infants, Children, and Adolescents

In addition to guidelines issued by the American Academy of Pediatrics, the U.S. Preventive Services Task Force, and the American Medical Association, guidelines for the provision of health services to children and their families are provided by the Bright Futures project, an activity of the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA). The guidelines were developed by expert panels involving representatives of numerous professional medical associations, including the American Academy of Pediatrics. The guidelines developed by this project have the support of these medical associations as well as voluntary health education organizations and other groups.

The Bright Futures guidelines provide broad-ranging assistance to the physician to make health supervision more comprehensive and intensive. Although these guidelines involve organizations beyond traditional medical care, including dental care, early intervention centers, mental health, schools, family support centers, and others, the guidelines provided here focus on the medical aspects of health supervision. The guidelines are organized into four sections: infancy, early childhood, middle childhood, and adolescence.

Infancy (0–12 months)—Visits should take place at the following ages: prenatal, newborn (at hospital), 1 week, 1 month, 2 months, 4 months, 6 months, and 9 months. Each visit should include a physical examination, noting specific factors such as jaundice (newborn), strabismus (2 months), evidence of abuse or neglect, and other factors, as well as measurement of length, weight, and head circumference. Visits should also include age-appropriate discussions with parents of infant nutrition, lactation, home safety, and child care arrangements. The health professional should note developmental milestones appropriate for the age, observe the quality of parent-infant interaction, and administer immunizations as indicated on the schedule in this report. The purpose of the prenatal visit is to initiate and set the tone for the relationship between the family and the health professional.

Early childhood (1–5 years)—Visits should take place at the following ages: 1 year, 15 months, 18 months, 2 years, 3 years, and 4 years. Each visit should include a physical examination, noting specific factors such as hip dysplasia (1 year), caries or other dental problems, signs of abuse or neglect, and other factors. The professional should record length, weight, and weight for length on a standard chart, and evaluate for inadequate or excessive weight gain. The health professional also should note developmental milestones appropriate for age and observe the quality of parent-infant interaction. Screening procedures should be carried out at the

appropriate age, such as an assessment of risk of high-dose lead exposure, lead screening, tuberculin test, assessment of risk for hyperlipidemia if indicated, screening for vision, hearing, and blood pressure. Immunizations should be administered according to the schedule provided in this report.

Middle childhood (5–11 years)—Visits should take place at the following ages: 5 years, 6 years, 8 years, and 10 years. The health professional should conduct a physical examination as part of each visit, noting factors such as scoliosis, early puberty (for girls), the need for dental care, and signs of abuse or neglect. The professional should also note developmental milestones appropriate for age, observe the quality of parent-child interaction, and carry out screening procedures such as vision, hearing, and blood pressure screening, assessment of risk of high-dose lead exposure, annual tuberculin test if indicated, and at least one tuberculin test at age 4–6 years, before school entry. Immunizations should be administered according to the prescribed schedule.

Adolescence (11–21 years)—Visits should take place annually or as required. Each visit should include a physical examination, measuring and recording height and weight, and noting such factors as obesity, scoliosis, need for dental care, signs of abuse, and others. The adolescent should be evaluated for sexual maturity, and screening procedures should be carried out for vision, hearing, and blood pressure as required; annual hematocrit or hemoglobin screening for women if risk factors are present; and annual tuberculin screening if indicated or tuberculin test at least once at 14–16 years of age. Hyperlipidemia screening should be carried out if risk factors are present, and the blood cholesterol level should be measured once at 19–21 years of age. For sexually active adolescents, annual screening should be done for gonorrhea and chlamydia, and an annual Pap smear for sexually active females. Syphilis and/or HIV screening should be carried out if the adolescent asks to be tested or if risk factors are present. The health professional should administer immunizations according to the following schedule.

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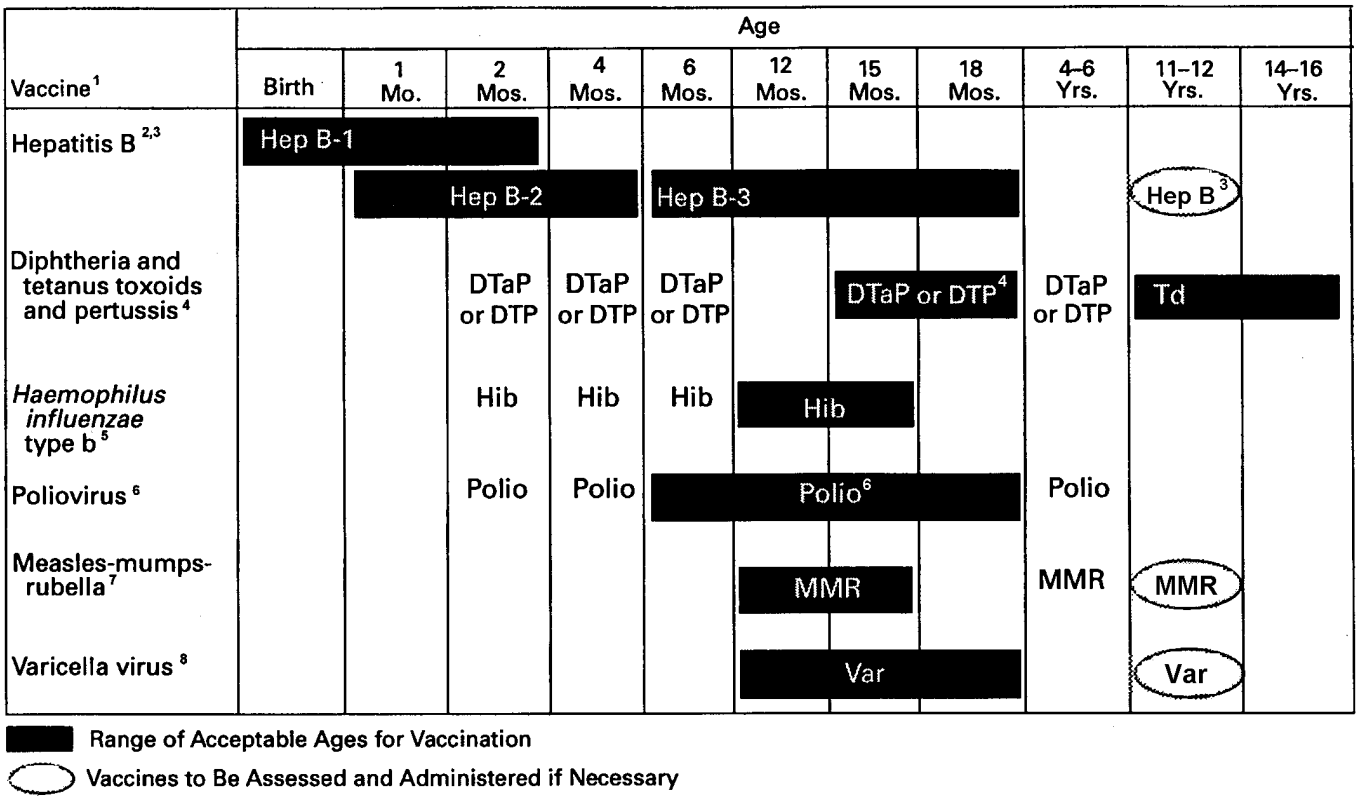
Childhood immunization schedule, United States



[1]This schedule indicates the recommended age for routine administration of currently licensed childhood vaccines. Some combination vaccines are available and may be used whenever administration of all components of the vaccine is indicated. Providers should consult the manufacturers' package inserts for detailed recommendations.

[2]Infants born to HBsAg-negative mothers should receive 2.5 µg of Merck vaccine (Recombivax HB) or 10 mg of SmithKline Beecham (SB) vaccine (Engerix-B). The 2nd dose should be administered 1 mo after the 1st dose.

Infants born to HBsAg-positive mothers should receive 0.5 mL hepatitis B immune globulin (HBIG) within 12 hrs of birth, and either 5 µg of Merck vaccine (Recombivax HB) or 10 µg of SB vaccine (Engerix-B) at a separate site. The 2nd dose is recommended at 1–2 mos of age and the 3rd dose at 6 mos of age.

Infants born to mothers whose HBsAg status is unknown should receive either 5 µg of Merck vaccine (Recombivax HB) or 10 µg of SB vaccine (Engerix-B) within 12 hrs of birth. The 2nd dose of vaccine is recommended at 1 mo of age and the 3rd dose at 6 mos of age. Blood should be drawn at the time of delivery to determine the mother's HBsAg status; if it is positive, the infant should receive HBIG as soon as possible (no later than 1 wk of age). The dosage and timing of subsequent vaccine doses should be based upon the mother's HBsAg status.

[3]Children and adolescents who have not been vaccinated against hepatitis B in infancy may begin the series during any childhood visit. Those who have not previously received 3 doses of hepatitis B vaccine should initiate or complete the series during the 11–12 year-old visit. The 2nd dose should be administered at least 1 mo after the 1st dose, and the 3rd dose should be administered at least 4 mos after the 1st dose, and at least 2mos after the 2nd dose.

[4]DTaP (diphtheria and tetanus toxoids and acellular pertussis vaccine) is the preferred vaccine for all doses in the vaccination series, including completion of the series in children who have received 1 dose of whole-cell DTP vaccine. Whole-cell DTP is an acceptable alternative to DTaP. The 4th dose of DTaP may be administered as early as 12 mos of age, provided 6 mos have elapsed since the 3rd dose, and if the child is considered unlikely to return at 15–18 mos of age. Td (tetanus and diphtheria toxoids, adsorbed, for adult use) is recommended at 11–12 yrs of age if at least 5 yrs have elapsed since the last dose of DTP, DTaP, or DT. Subsequent routine Td boosters are recommended every 10 yrs.

[5]Three *H. influenzae* type b (Hib) conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB7 [Merck]) is administered at 2 and 4 mos of age, a dose at 6 mos is not required. After completing the primary series, any Hib conjugate vaccine may be used as a booster.

[6]Two poliovirus vaccines are currently licensed in the US: inactivated poliovirus vaccine (IPV) and oral poliovirus vaccine (OPV). The following schedules are all acceptable by the ACIP, the AAP, and the AAFP, and parents and providers may choose among them:

1. IPV at 2 and 4 mos; OPV at 12–18 mos and 4–6 yrs
2. IPV at 2, 4, 12–18 mos, and 4–6 yrs
3. OPV at 2, 4, 6–18 mos, and 4–6 yrs

The ACIP routinely recommends schedule 1. IPV is the only poliovirus vaccine recommended for immunocompromised persons and their household contacts.

[7]The 2nd dose of MMR is routinely recommended at 4–6 yrs of age or at 11–12 yrs of age, but may be administered during any visit, provided at least 1 mo has elapsed since receipt of the 1st dose, and that both doses are administered at or after 12 mos of age.

[8]Susceptible children may receive Varicella vaccine (Var) during any visit after the 1st birthday, and unvaccinated persons who lack a reliable history of chickenpox should be vaccinated during the 11–12 year-old visit. Susceptible persons 13 yrs of age should receive 2 doses, at least 1 mo apart.

SOURCE: Approved by the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP). Centers for Disease Control and Prevention. MMWR 47(1). 1998.

Prenatal Care

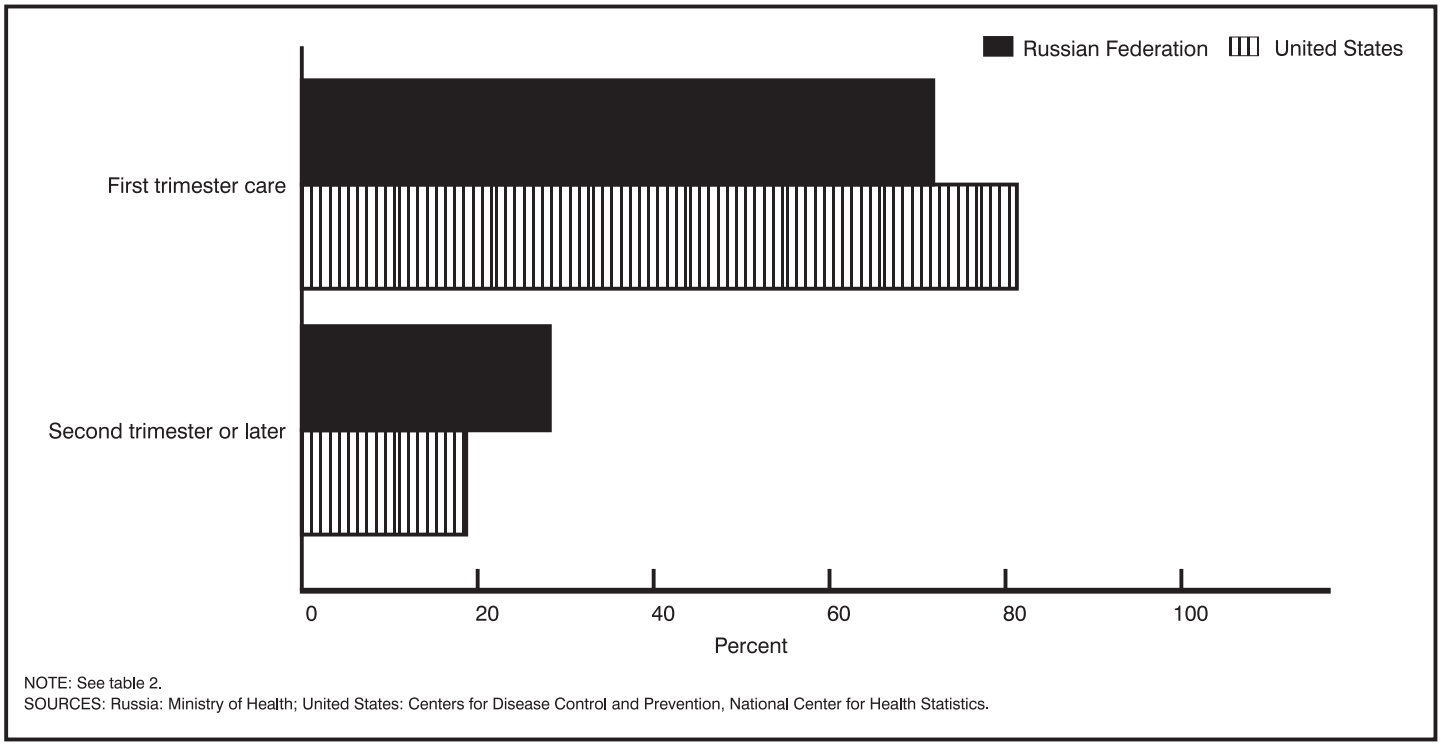


Figure 1. Percent of women receiving prenatal care: Russian Federation and United States, 1995

Russian Federation

- The proportion of women beginning prenatal care in the first trimester of pregnancy rose gradually during the 1990's. This improvement in care despite worsening economic conditions may be partly due to the large decline in fertility over the same time period. In 1994 and 1995, about 72 percent of women initiated prenatal care in the first trimester.
- Prenatal care statistics are based on visits by pregnant women to government polyclinics for women. The statistics cover live births as well as fetal deaths. Information is not available on pregnant women receiving private care or care from the polyclinics of other government ministries, nor on women receiving no prenatal care.

United States

- After stagnating in the late 1980's, the proportion of women beginning prenatal care in the first trimester gradually improved from 1990 to 1995. The proportion receiving early prenatal care rose to 81 percent in 1995, with improvements achieved for all racial and ethnic groups, in particular those groups with the lowest levels of early care.
- The proportion of women receiving late or no care rose from 1985 to 1990 but declined consistently during the 1990's. In 1995, 4.2 percent of women began prenatal care late or received no care.
- Information on the initiation of prenatal care and the number of prenatal visits is recorded on the statistical portion of the birth certificate. The information is provided by the mother at the time of delivery.

Complications of Pregnancy

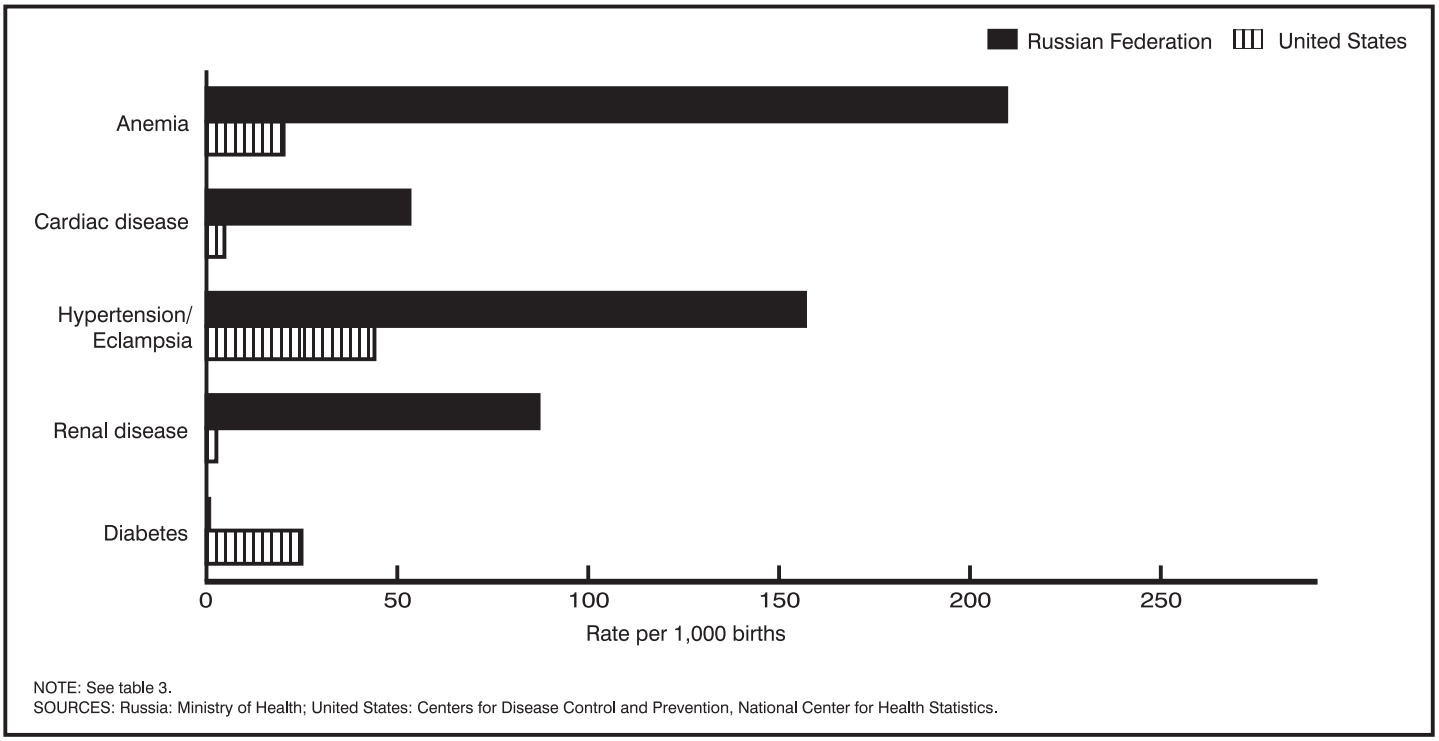


Figure 2. Rates of selected complications of pregnancy: Russian Federation and United States, 1995

Russian Federation

- More than 20 percent of pregnant women were diagnosed with anemia at the time of delivery in 1995, compared with 6.5 percent in 1990. These high levels of anemia are indicative of growing nutritional and other health problems in Russia.
- The rate of eclampsia and preeclampsia rose from 90 per 1,000 deliveries in 1990 to 157 in 1995. Hypertension and renal disease rates nearly doubled in the same interval, from 44 in 1990 to 87 in 1995.
- In Russia the diagnostic criterion for anemia is a hemoglobin level of 100–110, which is somewhat less restrictive than the U.S. standard of 100. Nevertheless, this does not explain the difference in the level of anemia in the two countries.
- These statistics are based on women receiving care from government health facilities. Information on women obtaining care from private facilities or other government polyclinics is not available.

United States

- The levels of anemia, diabetes, genital herpes, pregnancy-induced hypertension, and renal disease increased 10–30 percent in the 1990's. Rates of eclampsia, incompetent cervix, and uterine bleeding decreased over the interval.
- The prevalence of most medical risk factors was much lower in the United States than in Russia. The Russian rates were 10 times higher for anemia and cardiovascular disease. However, the prevalence of diabetes during pregnancy in Russia was substantially lower than the rates reported in the United States.
- This information is recorded on the birth certificate and is available for all live births. Evaluation studies of birth certificate data have found that medical conditions are underreported, particularly complications such as anemia, diabetes, and hypertension.

Abortions

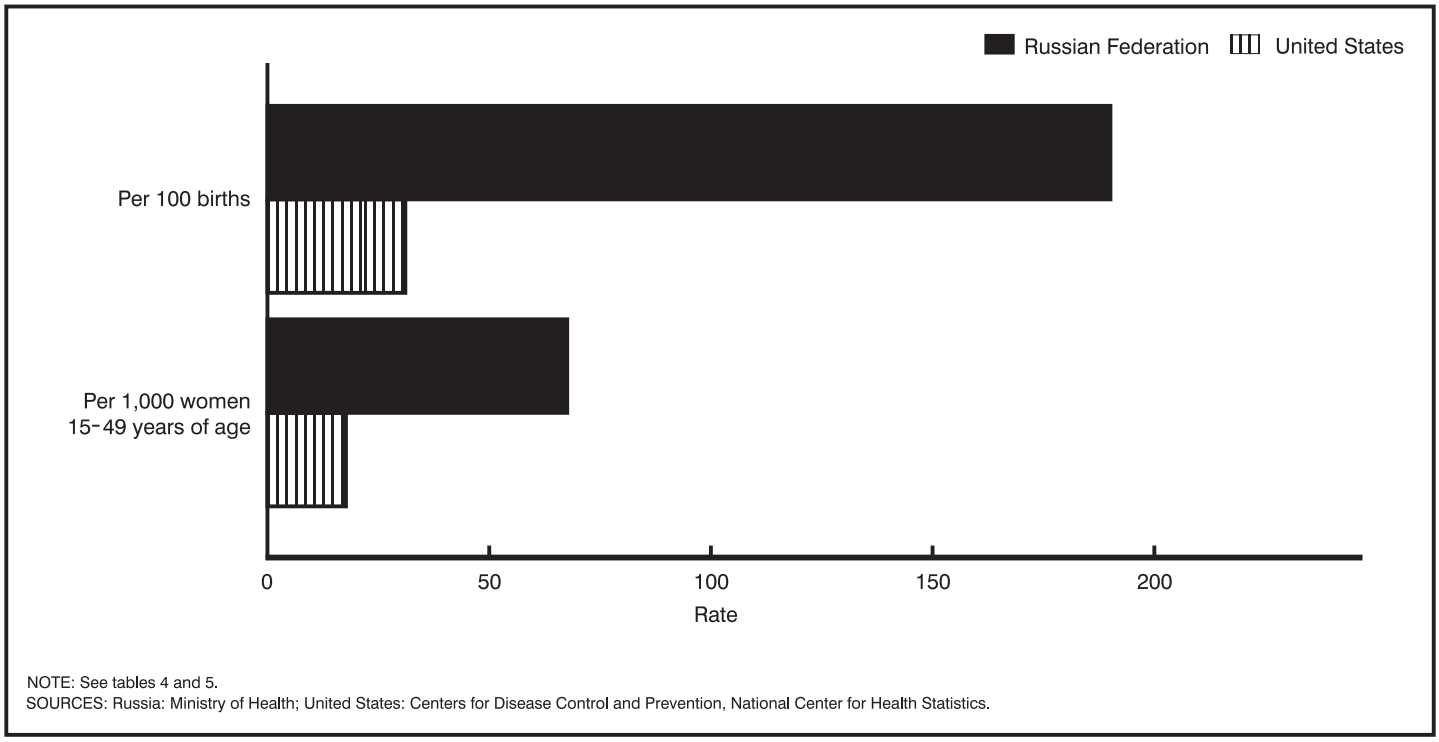


Figure 3. Rates of abortion: Russian Federation and United States, 1995

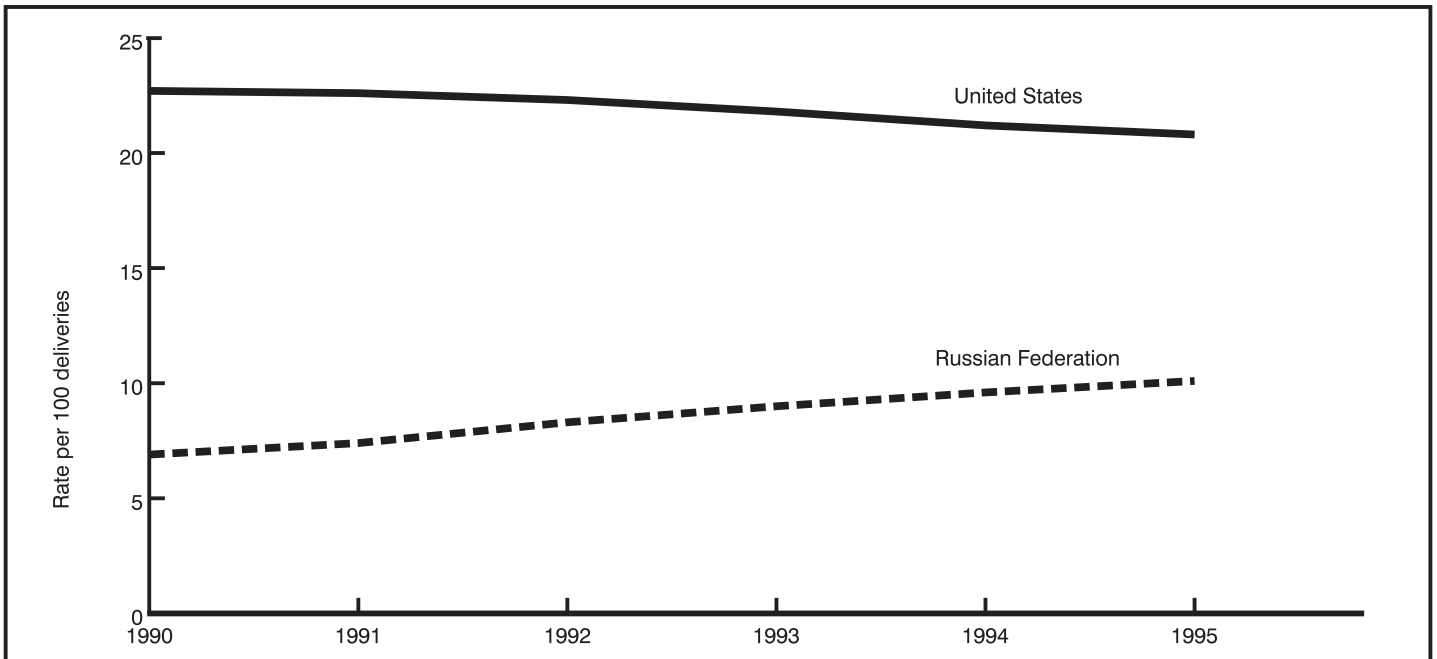
Russian Federation

- The number of abortions declined by 35 percent between 1990 and 1995. However, the rate of abortions per 100 live births declined by only 3 percent in the same interval because of a steep decline in the number of live births. In 1995 the abortion rate per 100 births was 190, about 6 times the U.S. rate.
- Abortion reporting includes mini-abortions, which are abortions performed before the 6th week of pregnancy. Mini-abortions represent one-quarter of all abortions performed.
- The Ministry of Health (MOH) statistics substantially understate the true level of abortions, as they do not include abortions performed in the private sector or in the facilities of other government ministries. The combined report of abortions in table 5 is approximately 7 percent higher than the MOH figure for 1995 but is still considered to understate the true level of abortions.

United States

- The number of abortions performed declined by 15 percent during the 1990's. This is reflected in both the abortion rate per 1,000 women of childbearing ages (19-percent decline from 1990 to 1995) and in the rate of abortions per 100 live births (10-percent decline).
- The proportion of abortions performed on women under 20 years of age in the United States is almost two times the rate for the same age group in Russia.
- National abortion statistics are obtained from the 50 States and other reporting areas through central health agencies and hospitals. The total number of abortions reported by the national abortion surveillance system in 1994 is about 9 percent below the level estimated by the Alan Guttmacher Institute.

Method of Delivery



NOTE: See table 6.
SOURCES: Russia: Ministry of Health; United States: Centers for Disease Control and Prevention, National Center for Health Statistics.

Figure 4. Rates of cesarean section delivery: Russian Federation and United States, 1990–95

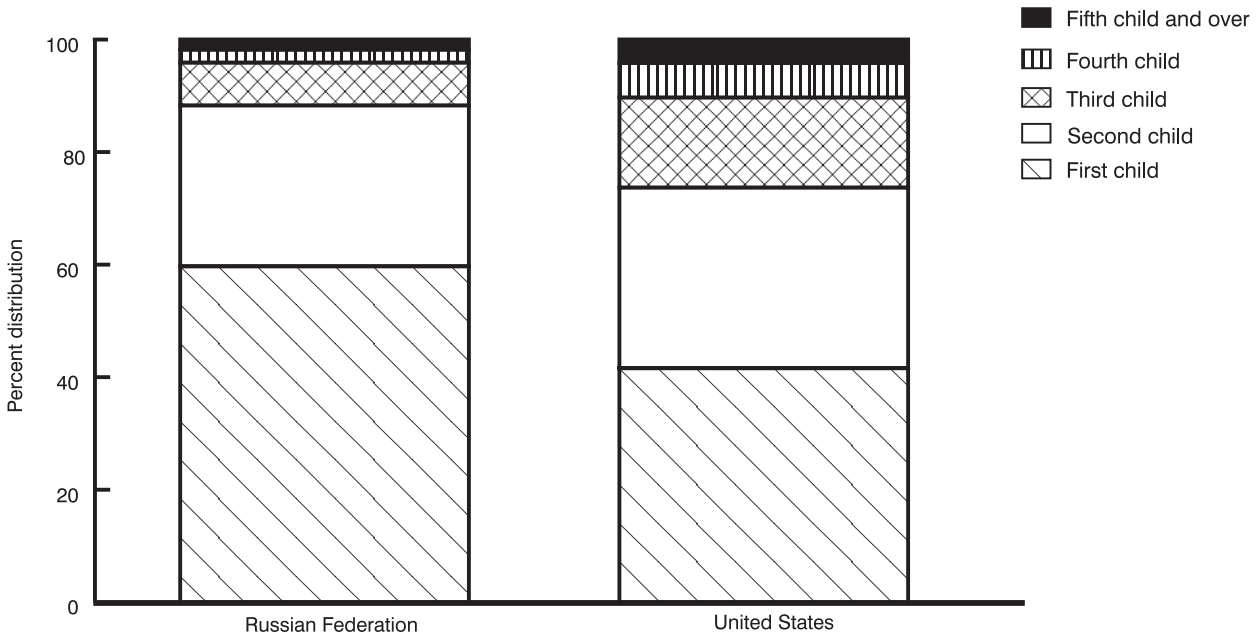
Russian Federation

- The cesarean section delivery rate has risen steadily in recent years, increasing from 3.3 percent of deliveries in 1985 to 10.1 percent in 1995. This increase may be partly the result of a rise in complications of delivery but is also in part the result of an expansion of the official indications for cesarean section delivery.
- The delivery rate for operative vaginal deliveries (vacuum extraction, forceps) has declined slightly over the same interval, although the rate was very low even in 1985. The delivery rate for all interventions combined rose from 4.4 percent in 1985 to 10.7 percent in 1995.
- Method-of-delivery statistics are based on all deliveries, both live births and stillbirths, occurring in government health facilities.

United States

- The proportion of births delivered by cesarean section fell consistently from 1990 to 1995, from 22.7 percent to 20.8 percent of all live births. This decline is the result of both a reduction in the primary cesarean section rate, that is, cesarean deliveries to women without a previous cesarean birth, and a rise in the rate of vaginal births to women with a previous cesarean delivery.
- The combined delivery rate for vacuum extraction and forceps deliveries has changed very little in the 1990's, although the preferred method for operative vaginal deliveries in 1995 was vacuum extraction, whereas forceps was the preferred method in 1990.
- Since 1989 information on method of delivery has been recorded on the birth certificate for all live births.

Birth Order



NOTE: See table 9.
SOURCES: Russia: Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics.

Figure 5. Percent distribution of live births, according to birth order: Russian Federation and United States, 1995

Russian Federation

- The proportion of births that are first births rose rapidly, from 45 percent of all births in 1985 to almost 60 percent in 1995. This large rise in first births was a part of the significant decline in fertility that took place in Russia in this interval. A growing proportion of women have limited their childbearing to a single birth, although some of these women may be be postponing additional births because of economic considerations.
- By 1995 the pattern of fertility was very different from the United States, with first births accounting for almost 60 percent of all live births, compared with only 42 percent in the United States.
- The proportion of births that are first births rose at a similar rate in both urban and rural areas, the result of rapid fertility declines in both regions.

United States

- The proportion of births that are first births has changed very little in recent years. The share of first births declined slightly from 41.6 percent in 1985 to 40.3 percent in 1992 but returned to 41.6 percent in 1995.
- The proportion of births that are third and higher order was much higher in the United States than in Russia, 26 percent versus 12 percent in 1995. Even before the rapid fertility decline in Russia, U.S. women were much more likely to have higher-order births than Russian women: In 1985 the level of third- and higher-order births was 25 percent in the United States and 16 percent in Russia.
- The distribution of births by birth order was much more similar for U.S. white and black women than for urban versus rural women in Russia.

Births to Unmarried Women

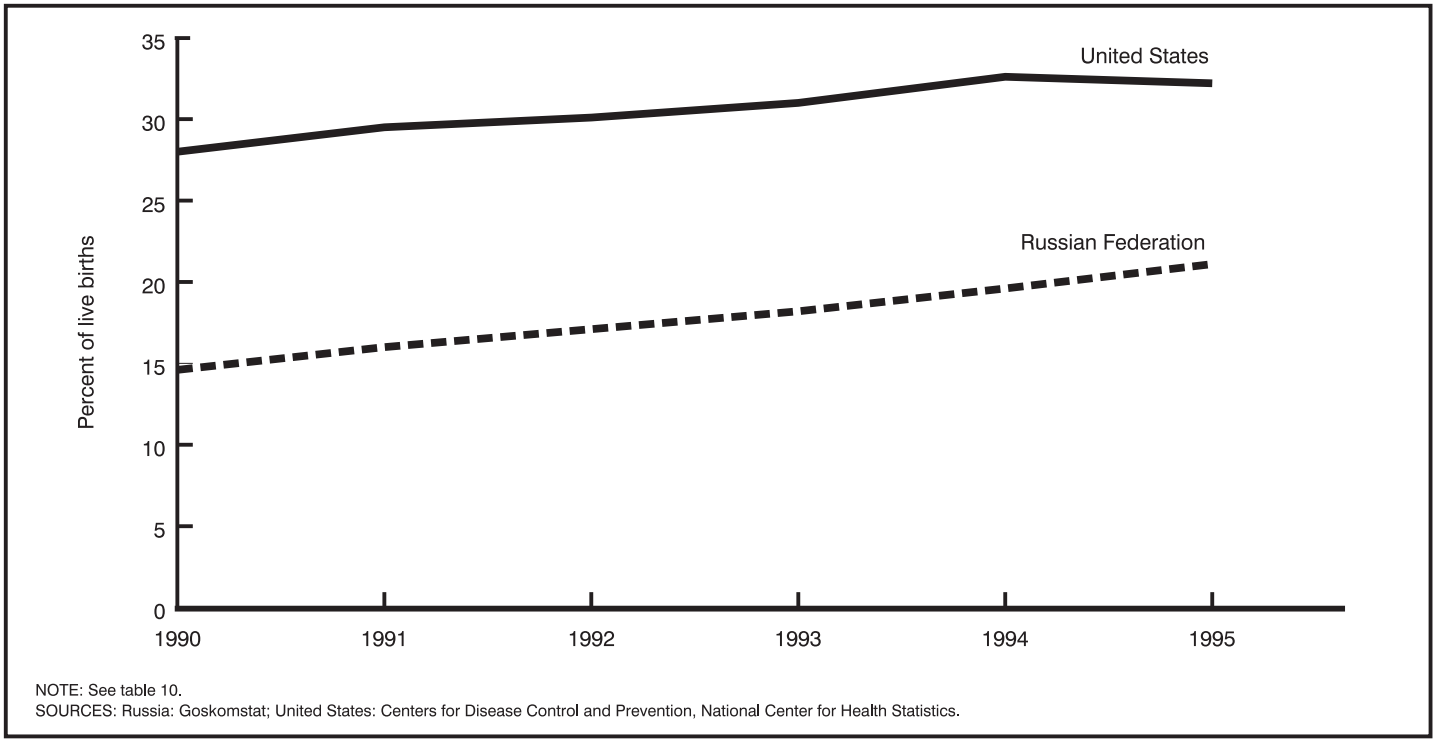


Figure 6. Percent of births to unmarried women: Russian Federation and United States, 1990–95

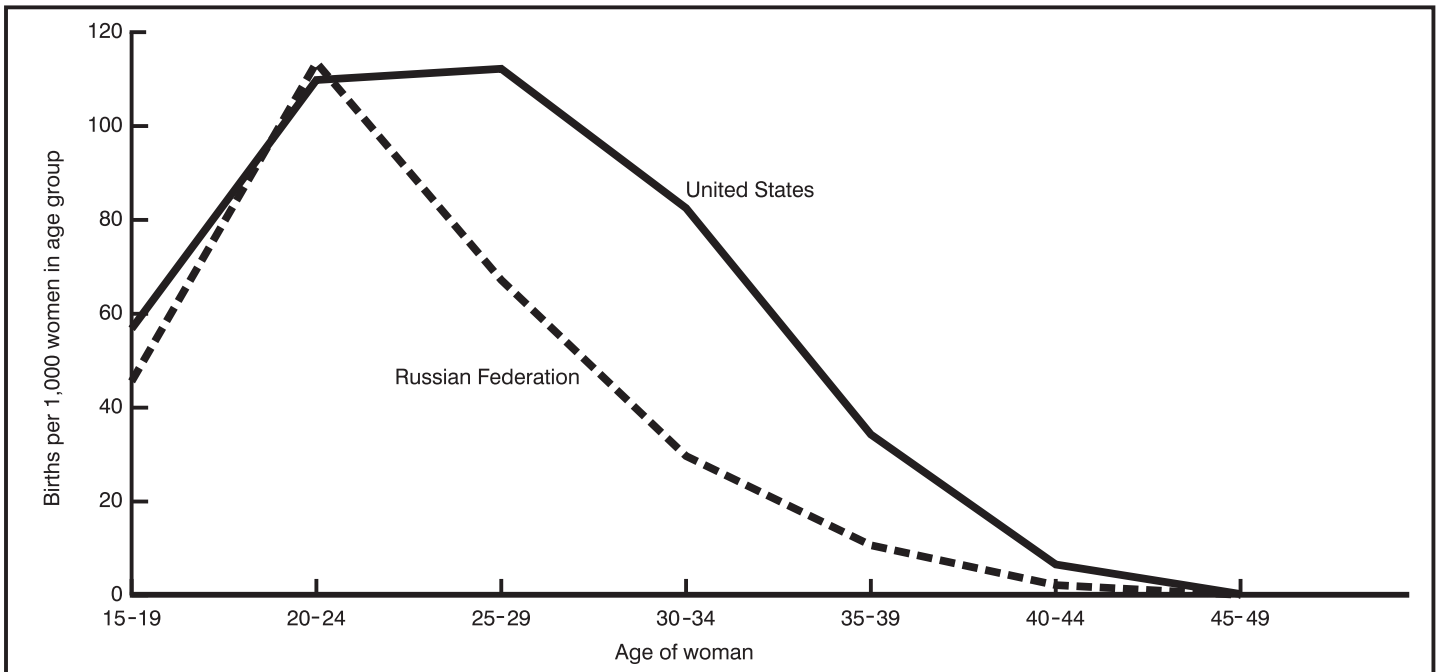
Russian Federation

- From 1985 to 1990, the proportion of births to unmarried women rose 3.7 percent annually, but between 1990 and 1995 the average annual growth rate was 7.6 percent. The year of fastest increase was 1991 (9.6 percent above the previous year), followed by 1994 and 1995.
- In 1995 the proportion of births to unmarried women in Russia was one-third lower than in the United States, 21.1 percent versus 32.2 percent.
- The increase in births to unmarried women in the 1990's was much more rapid in urban areas (8.8 percent per year) than in rural areas (5.2 percent per year). As a result, by 1995 there was little difference in the proportion of births to unmarried women by region.

United States

- The percent of births to unmarried women rose continuously from 1985 to 1994, but declined by about 1 percent in 1995. The decline in this measure, the first since 1951, occurred in both white and black births.
- The proportion of births to unmarried women continued to be much higher among black women (70 percent) than among white women (25 percent). However, births to unmarried women increased much more rapidly in the white population in recent years, rising by 4.4 percent annually for white women and only 1 percent for black women. As a result, the difference in the proportion of births to unmarried women by race in 1995 was much smaller than in 1985.

Births by Age of Mother



NOTE: See table 11.
SOURCES: Russia: Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics.

Figure 7. Age-specific birth rates: Russian Federation and United States, 1995

Russian Federation

- The fertility rate (births per 1,000 women 15–49 years of age) has fallen sharply in recent years. From 1985 to 1995, the fertility rate declined by 45 percent, and just in the 1990–95 period, the rate dropped by 35 percent. The decline was especially sharp through 1993, changed very little in 1994, but declined again in 1995.
- The decline in fertility occurred in all age groups and was particularly large for women 20–24 years of age, the group with the highest level of childbearing. The declines in age-specific fertility rates were compounded by the drop in the number of women in this age group during the 1990's.
- The downturn in fertility has been severe in both urban and rural areas, although the urban decrease has been slightly larger, thus increasing the urban-rural fertility differential.

United States

- The fertility rate declined by about 10 percent between 1990 and 1995. Because fertility rose during the late 1980's, however, the 1995 level was only about 5 percent below the rate in 1985. The U.S. fertility rate was about 60 percent above the Russian rate in 1995.
- Age-specific birth rates showed different trends between 1990 and 1995. Rates declined for all age groups under age 30 but rose for all women 30 years of age and over.
- The black fertility rate has fallen much more than the white rate during the 1990's, 18 percent versus 8 percent. Under 30 years of age, the black age-specific fertility rates have fallen more than the rates for white women, and black women 30 years of age and over did not experience increases in fertility.

Infant Mortality

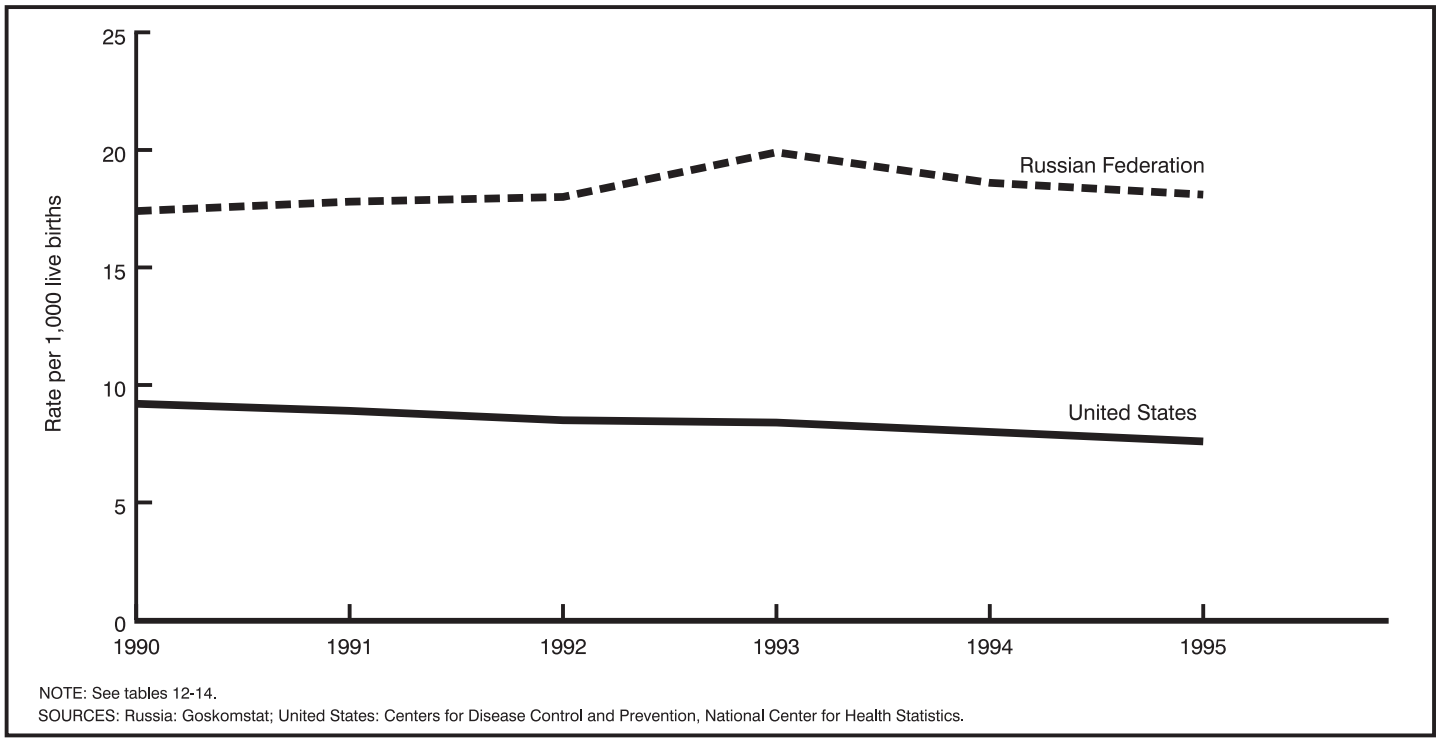


Figure 8. Infant mortality rates: Russian Federation and United States, 1990–95

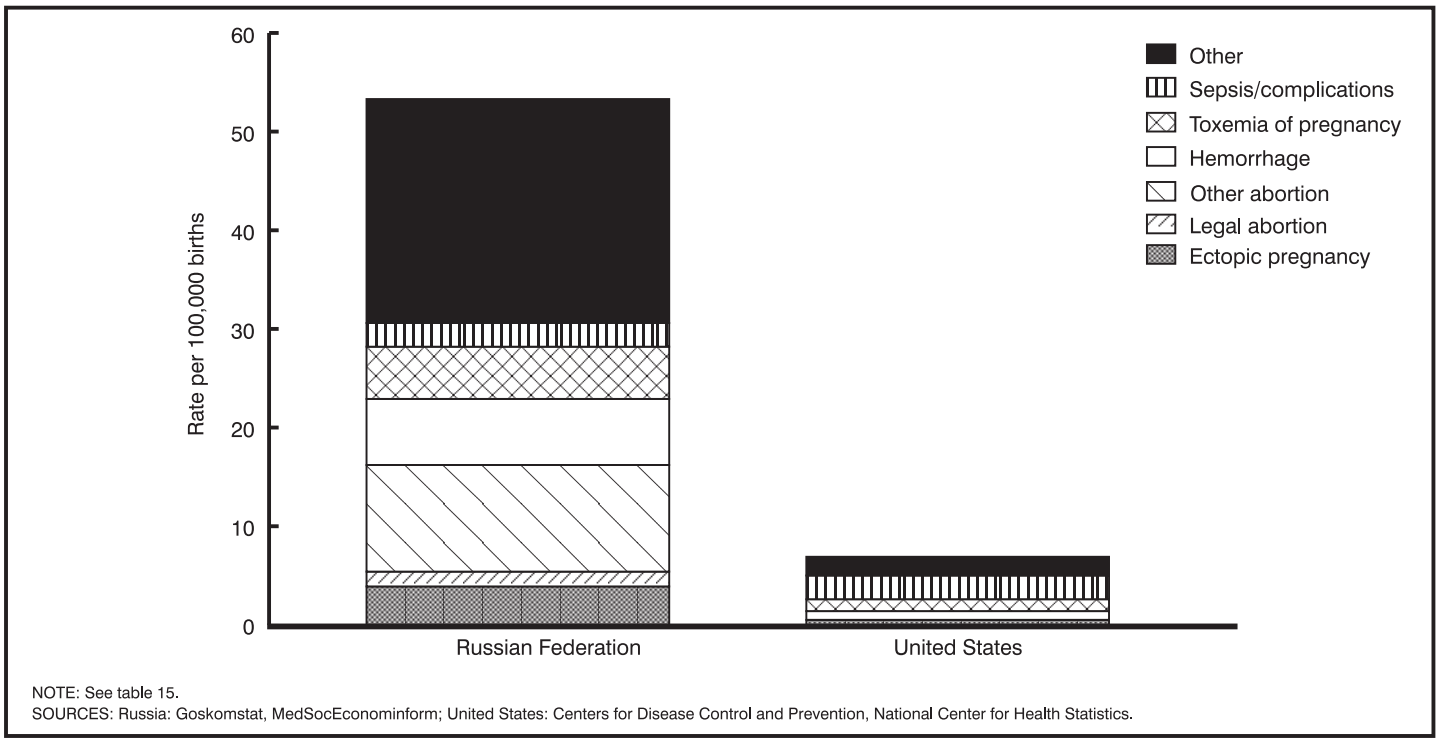
Russian Federation

- The infant mortality rate rose from 17.4 infant deaths per 1,000 live births in 1990 to 19.9 in 1993. The rate declined thereafter to a level of 18.1 in 1995.
- The peak infant mortality rate in 1993 was the result of increases in both neonatal and postneonatal mortality. It was reflective of the difficult economic conditions during that year and of changes in the definition of a live birth introduced in 1993.
- Leading causes of infant death were conditions originating in the perinatal period, congenital anomalies, pneumonia and influenza, and infectious disease.
- The Russian definition of a live birth introduced in 1993 recognizes the four signs of life specified in the standard definition of the World Health Organization but continues to differ in the treatment of very preterm births. In Russia very preterm infants (those weighing less than 1,000 grams, or less than 28 weeks gestation, or less than 35 centimeters birth length) must survive 7 days before they are considered live births. Correction for this difference in definition would increase the infant mortality rate by about 25 percent, according to various analyses.

United States

- Infant mortality declined by 17 percent from 1990 to 1995 and by 28 percent in the 1985–95 interval. The decline in the black infant mortality rate was especially large in 1994 and 1995, but continued declines in the white infant mortality rate meant that black infant mortality remained about 2.4 times that of white infants in 1995. This disparity is far larger than the rural-urban differences in infant mortality in Russia.
- Declines in the 1990's occurred in both neonatal and postneonatal mortality, although the decline in neonatal mortality was somewhat larger. The improved survivability of neonates was largely the result of the use of surfactants to treat the respiratory problems common to premature births. A part of the improvement in postneonatal survival was the result of reductions in deaths attributed to sudden infant death syndrome (SIDS).
- Leading causes of infant death in the 1990's were conditions originating in the perinatal period, congenital anomalies, and SIDS.

Maternal Mortality



NOTE: See table 15.
SOURCES: Russia: Goskomstat, MedSocEconominform; United States: Centers for Disease Control and Prevention, National Center for Health Statistics.

Figure 9. Rates of maternal mortality: Russian Federation and United States, 1995

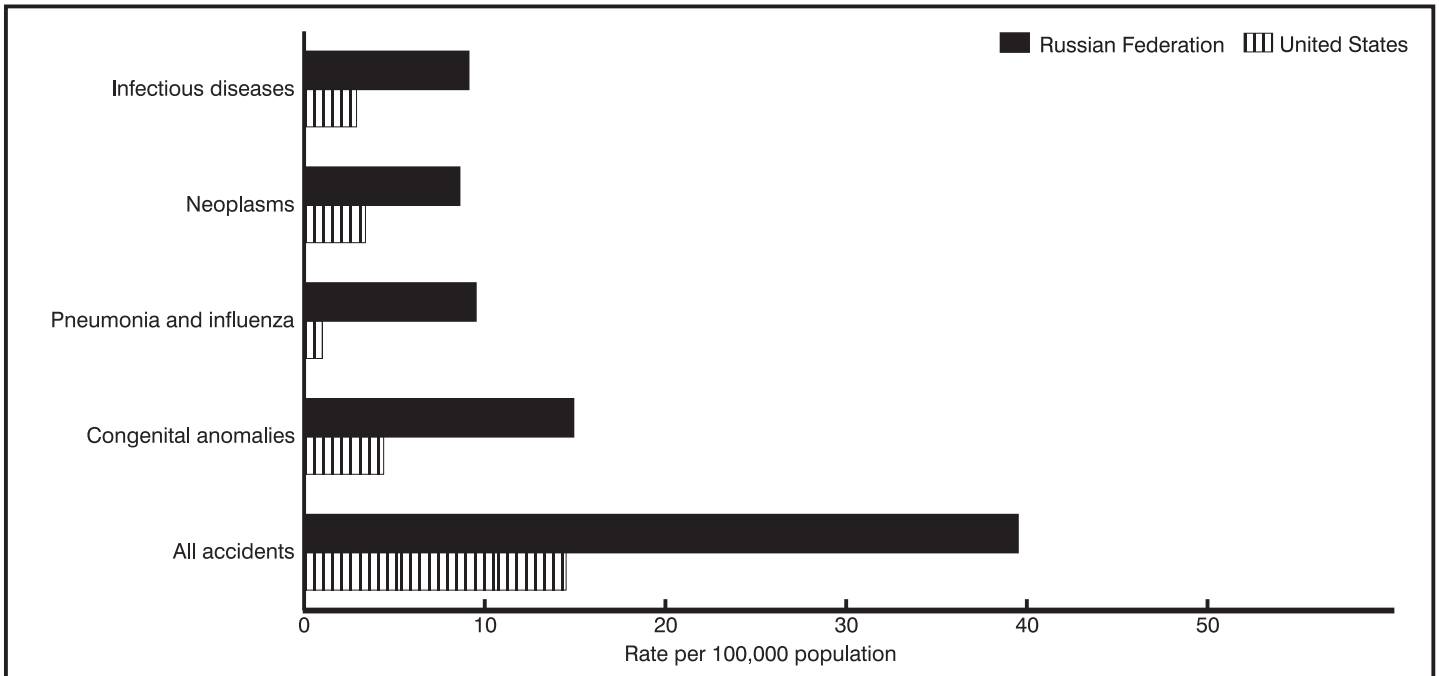
Russian Federation

- The rate of maternal mortality has increased by 12 percent during the 1990's and by 1995 was almost as high as in 1985. The Russian rate is about seven times the maternal mortality rate in the United States.
- Almost one-quarter of all maternal deaths were attributable to abortion-related causes in 1995, the vast majority due to abortions other than legally induced pregnancy terminations. The death rate from other abortions has declined to nearly one-half the level reported in 1985. The 1995 rate for other abortions is also lower than the peak rate for the 1990's, which occurred in 1993.

United States

- The 1995 maternal mortality rate was lower than the 1990 rate, although there is no consistent trend over the interval.
- The proportion of maternal deaths attributable to abortions, both legal and illegal, is essentially zero. The numbers of deaths from these causes were too low to permit calculation of reliable mortality rates.
- Maternal mortality rates in table 15 are based on deaths specifically coded to maternal causes of death.

Childhood Mortality: 1–4 Years of Age



NOTE: See table 17.
SOURCE: Russia: Goskomstat, MedSocEconomInform; U.S.: Centers for Disease Control and Prevention, National Center for Health Statistics.

Figure 10. Rates of mortality for children 1–4 years of age, by cause: Russian Federation and United States, 1995

Russian Federation

- The mortality rate for children 1–4 years of age increased by 10 percent between 1990 and 1995, reaching peak rates of 108 deaths per 100,000 population in 1993 and 1995. Time trends have been roughly the same for males and females.
- The leading causes of death for this age group are accidents, congenital anomalies, pneumonia and influenza, and infectious diseases. Death rates rose between 1990 and 1995 for congenital anomalies, pneumonia and influenza, and infectious diseases. Although still low, the death rate for homicides doubled during the interval; deaths resulting from motor vehicle accidents declined.
- Russian mortality for all causes combined was about 2.7 times the U.S. rate. The largest Russian excesses were for pneumonia and influenza, congenital anomalies, and accidents. Much higher Russian rates were reported for accidental poisoning and drowning.

United States

- The mortality rate for all causes combined declined by 13 percent in the 1990–95 interval, although the trend was not consistently downward.
- Major contributors to the declining death rate were reductions in deaths resulting from accidents, congenital anomalies, and neoplasms. Within the accident category, the largest reductions were for motor vehicle accidents and accidents caused by fires.
- For both cardiovascular diseases and homicides, the U.S. death rate is roughly twice the Russian rate. The death rate for motor vehicle accidents is the same in the two countries.

Childhood Mortality: 5–9 Years of Age

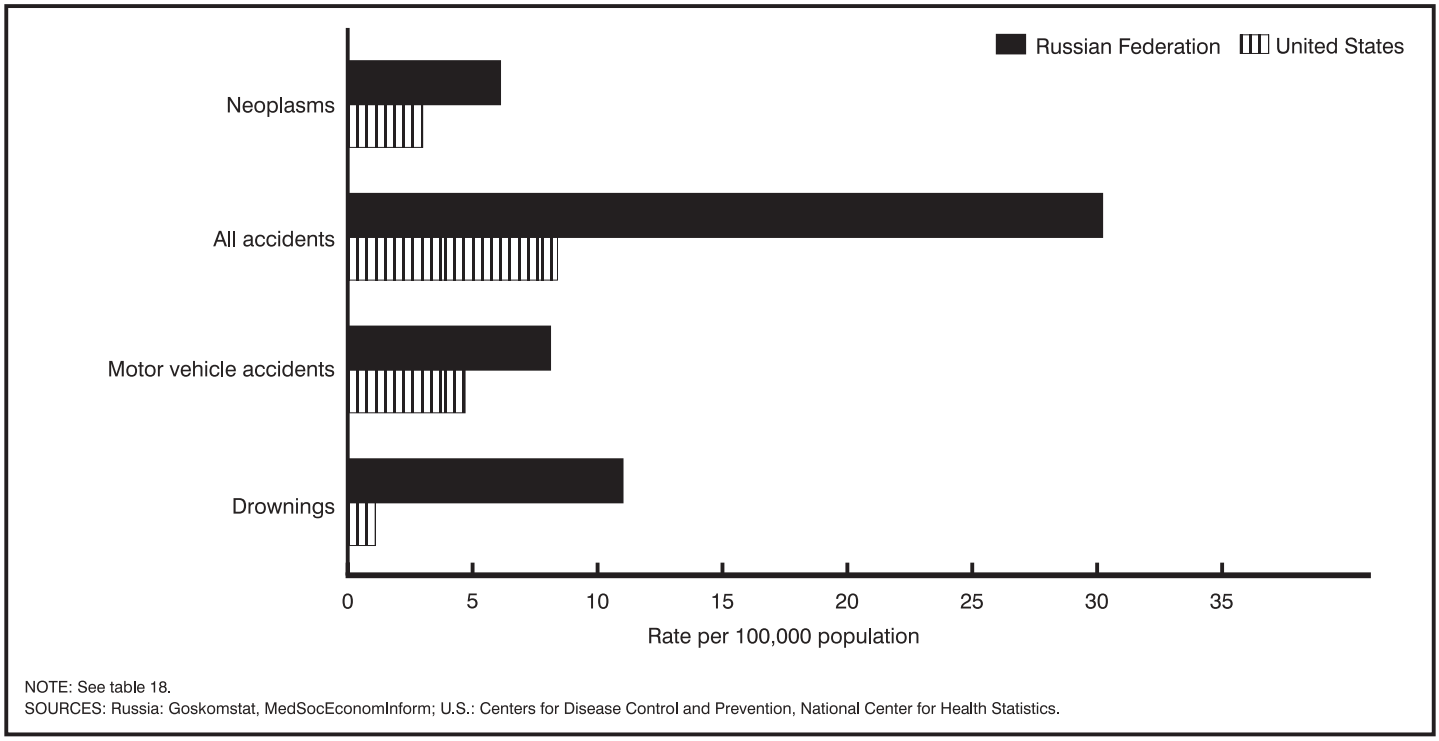


Figure 11. Rates of mortality for children 5–9 years of age, by cause: Russian Federation and United States, 1995

Russian Federation

- Mortality from all causes followed no consistent trend between 1990 and 1995, and the 1995 rate was only slightly above the 1990 level. The most important mortality increases during the interval were attributable to accidents, infectious diseases, and pneumonia and influenza, although these increases were not large. Motor vehicle deaths declined substantially over the interval.
- The most important causes of death for children 5–9 years of age were accidents, neoplasms, and diseases of the nervous system. Drownings alone accounted for almost 20 percent of deaths.
- The largest excess mortality for Russia, compared with the United States, exists for accidents and pneumonia and influenza. Excess Russian mortality is particularly large for drowning and accidental poisoning.

United States

- The leading causes of death in this age group were accidents and neoplasms. About one-quarter of all deaths were from motor vehicle accidents alone.
- The 1995 death rate was 11 percent below the 1990 rate. With the exception of 1993, mortality for children 5–9 years of age has fallen consistently in the 1990's. The most important declines in deaths were those from accidents, neoplasms, and congenital anomalies.
- Mortality from infectious and parasitic diseases increased between 1990 and 1995, primarily because of a 50 percent rise in the death rate from HIV infection.

Childhood Mortality: 10–14 Years of Age

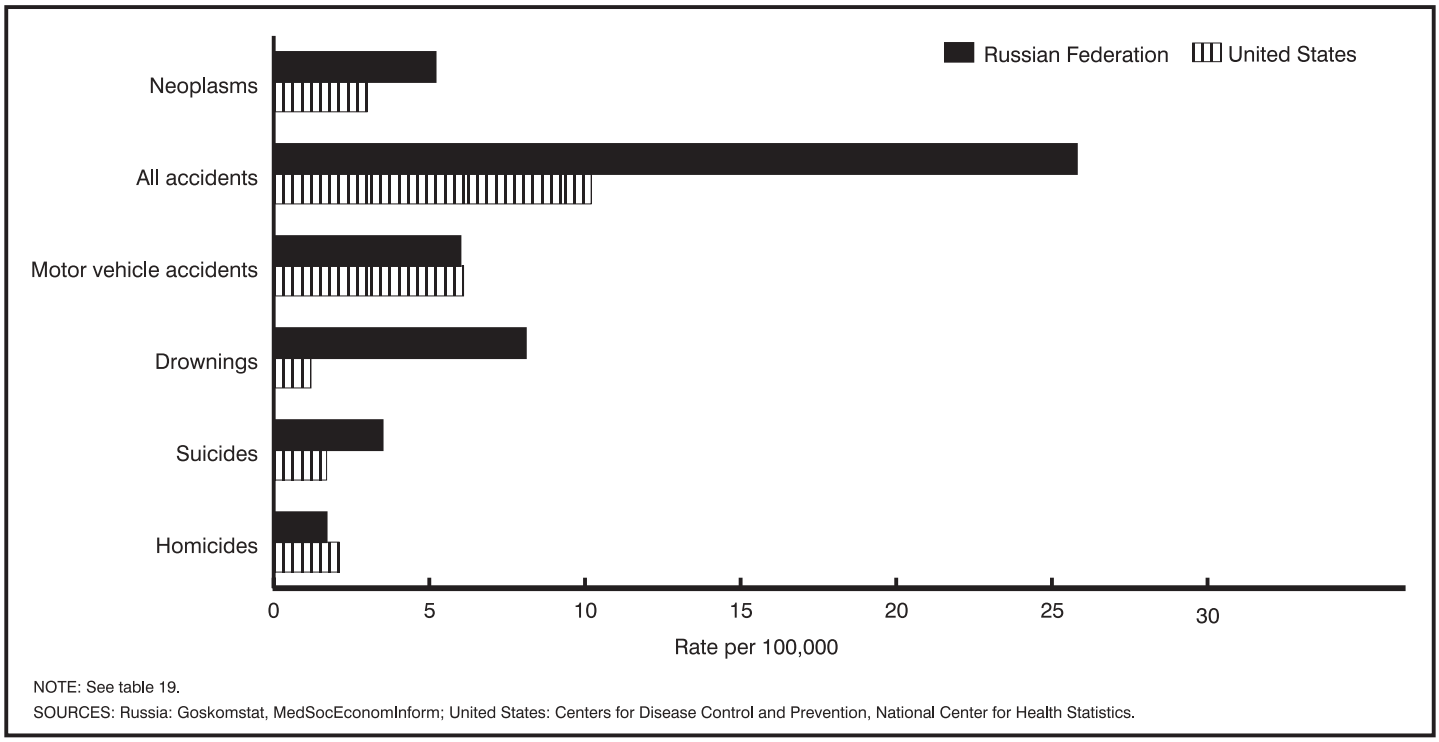


Figure 12. Rates of mortality for children 10–14 years of age, by cause: Russian Federation and United States, 1995

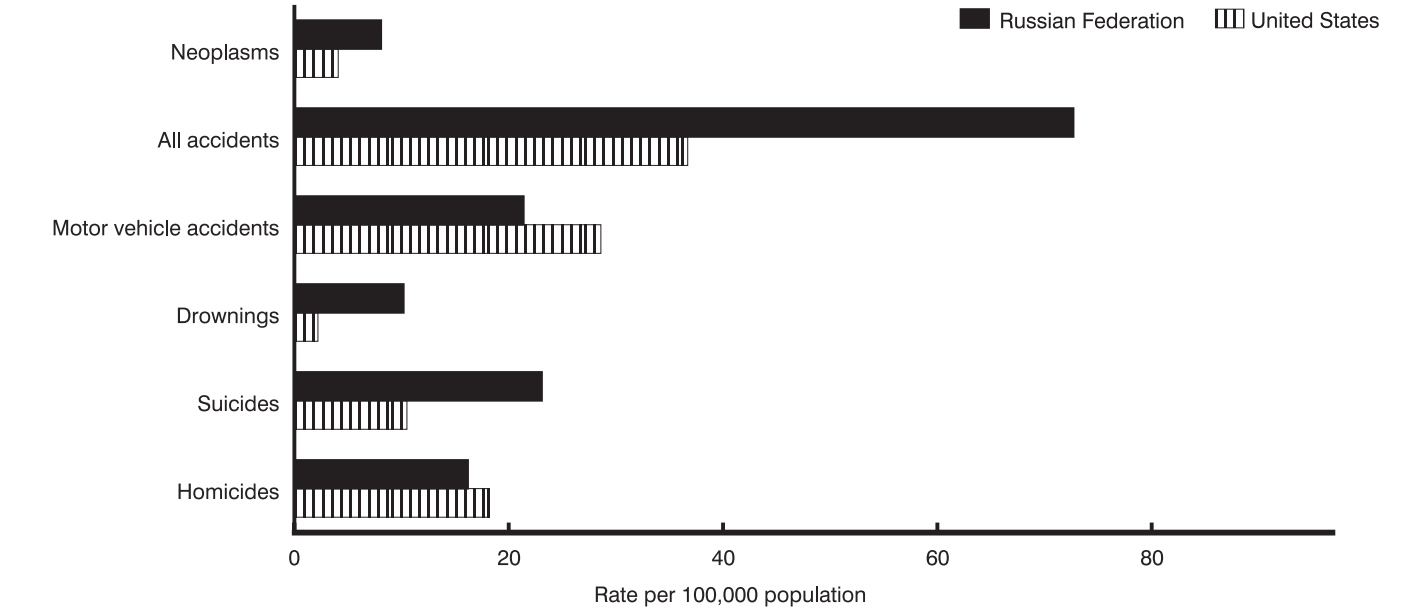
Russian Federation

- The 1995 mortality rate was 18 percent above the 1990 level, although there was no consistent trend in mortality over the interval. The largest contributors to this increase were accidents, diseases of the nervous system, suicides, and homicides.
- The leading causes of death in the 10–14 age group in 1995 were accidents, neoplasms, diseases of the nervous system, and suicides. Drownings accounted for more than 15 percent of all deaths.
- Between 1990 and 1995, death rates declined for neoplasms, congenital anomalies, and transport and motor vehicle accidents.
- Russian mortality rates significantly exceeded U.S. rates for accidents, neoplasms, diseases of the nervous system, and suicides. The Russian death rate attributable to drowning was nearly 7 times the U.S. rate in 1995.

United States

- The leading causes of death in 1995 were accidents, neoplasms, homicides, and suicides. About one-quarter of all deaths in the 10–14 age group were the result of motor vehicle accidents.
- The mortality rate from all causes reached its lowest point in 1992 but by 1995 had risen to nearly the level reported in 1990. The post-1992 increase was primarily the result of increasing deaths from motor vehicle accidents.
- In 1995 about 40 percent of deaths were attributable to accidents, 24 percent the result of motor vehicle accidents. Suicides and homicides accounted for 7 percent and 8 percent of deaths, respectively.
- U.S. death rates exceed Russian rates for homicide and cardiovascular diseases; death rates are about the same in both countries for motor vehicle accidents.

Childhood Mortality: 15–19 Years of Age



NOTE: See table 20.
SOURCES: Russia: Goskomstat, MedSocEconomInform; U.S.: Centers for Disease Control and Prevention, National Center for Health Statistics.

Figure 13. Rates of mortality for children 15–19 years of age, by cause: Russian Federation and United States, 1995

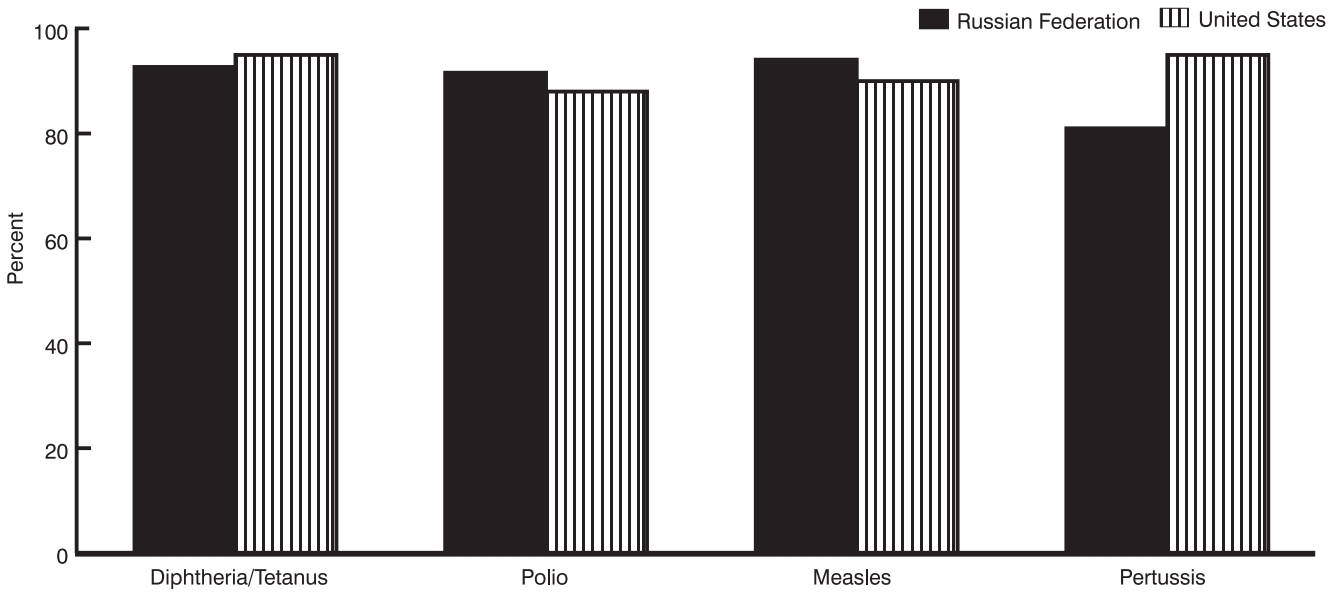
Russian Federation

- The mortality rate rose by more than 44 percent between 1990 and 1995. The largest contributors to this increase were the external causes of death: accidents, suicides, and homicides. Suicide mortality rose by one-half during the interval and accounted for about 14 percent of all deaths in 1995. Mortality from alcohol poisoning tripled from 1990 to 1994 and then declined in 1995. The homicide rate also declined after 1993, but the 1995 rate was still nearly twice the 1990 level.
- Despite the rapid rise in death rates, mortality from certain causes of death declined, including neoplasms, transport accidents, and especially motor vehicle accidents.

United States

- The leading causes of death in 1995 were the external causes, including accidents, suicides, and homicides. Motor vehicle accidents were the single most important cause of death, resulting in more than one-third of all deaths in the group 15–19 years of age.
- The death rate for all causes declined by about 5 percent from 1990 to 1995. The major contributors to this drop were declines in deaths resulting from accidents, particularly motor vehicle accidents, suicides, and neoplasms. Increases occurred in mortality attributable to homicides and cardiovascular diseases.
- The U.S. death rate for all causes was about one-half the Russian rate. The most important contributors to the Russian excess in mortality were suicides, drownings, and neoplasms.

Immunizations



NOTE: See table 21.
SOURCES: Russia: States Committee for Sanitary Epidemiology and Surveillance; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, National Immunization Program.

Figure 14. Rates of immunization coverage: Russian Federation and United States, 1995

Russian Federation

- Immunization rates for all diseases fell in the late 1980's and early 1990's, about the time of the breakup of the Soviet Union, but have improved in recent years.
- Only about two-thirds of infants received diphtheria immunization in 1991, but the coverage rate improved rapidly in following years, reaching almost 93 percent in 1995.
- By 1995 the highest immunization coverage rates were attained for measles (94 percent), tuberculosis (96 percent), and diphtheria and tetanus. The lowest coverage rates were for pertussis (81 percent) and mumps (77 percent).

United States

- Coverage rates for children 19–35 months of age were lowest in the early 1990's and have improved since then. It should be noted that the age group of children used in measuring immunization coverage rates differs from those used in Russia.
- By 1995 coverage rates were highest for diphtheria and tetanus (95 percent), pertussis (95 percent), and haemophilus influenzae B (92 percent). The low immunization rate for hepatitis B (68 percent) is reflective of the fact that this was not a recommended vaccine until 1991. Haemophilus influenzae B vaccine also was not recommended until 1991.

Morbidity in the Russian Federation

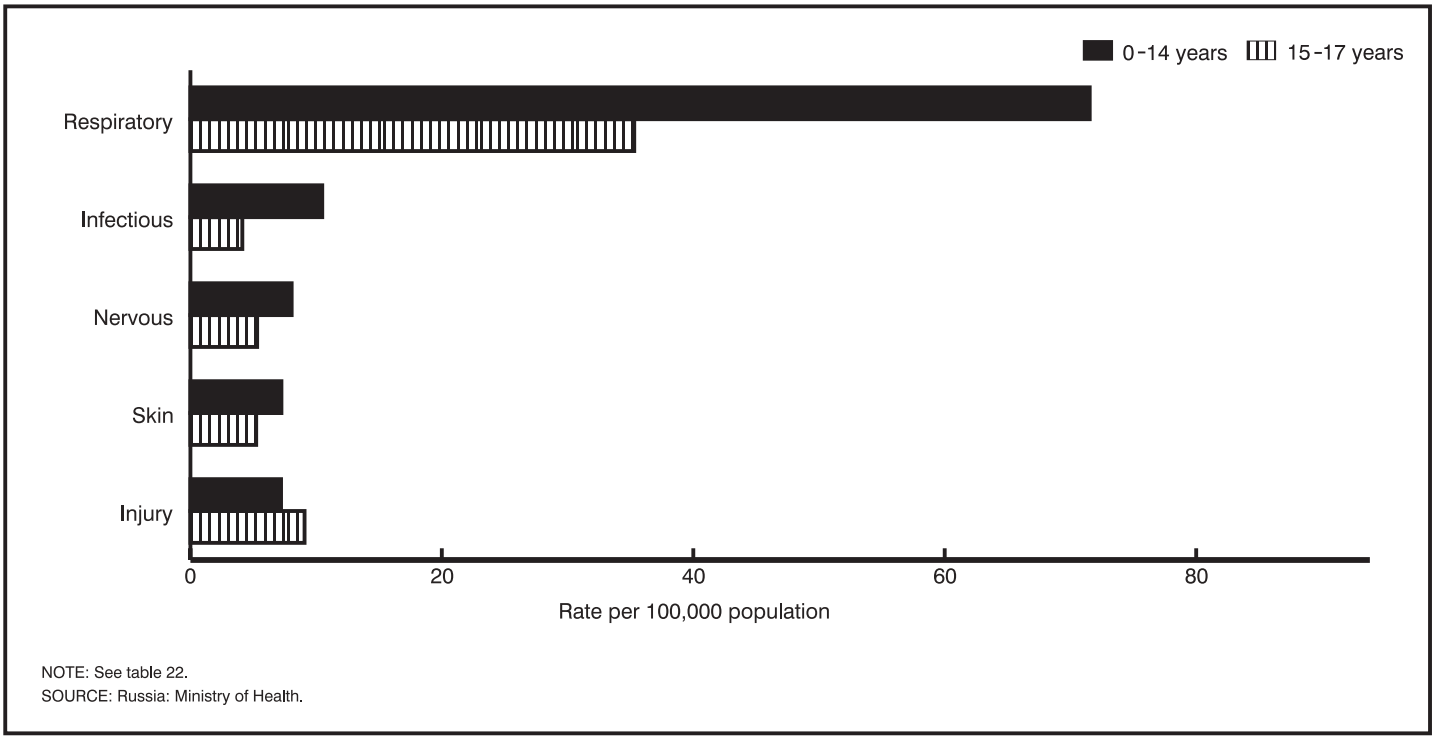


Figure 15. Rates of childhood morbidity, by disease: Russian Federation, 1995

0–14 Years of Age

- There was no consistent trend in all-cause morbidity between 1990 and 1995, but the 1995 rate was about 4 percent above the 1990 level.
- The most important cause of morbidity by far was respiratory diseases, which accounted for more than 60 percent of all illnesses. The next most important diagnoses were infectious diseases and diseases of the nervous system.
- Although injury was the leading cause of death for children 1–14 years of age, injuries accounted for only 6 percent of all morbidity.
- Information on morbidity was based on ambulatory visits to Ministry of Health (MOH) polyclinics or visits to MOH hospitals. Rates were based on the initial diagnosis of a condition; repeat visits for the same disease were excluded from these statistics. Data are presented for Russia only, as comparable information for the United States was not available.

15–17 Years of Age

- The overall morbidity rate for all diseases rose sharply, increasing by 24 percent from 1990 to 1995. Morbidity rates nearly doubled for infectious diseases, neoplasms, genitourinary system diseases, and others. Increases in the morbidity rate were reported for every disease category.
- The most important diagnosis remained respiratory diseases, accounting for one-half of all morbidity in 1995, although the morbidity rate increased by only a small amount between 1990 and 1995. Injury accounted for almost 13 percent of all morbidity, more than twice the proportion for children 0–14 years of age.

Hospitalization in the United States

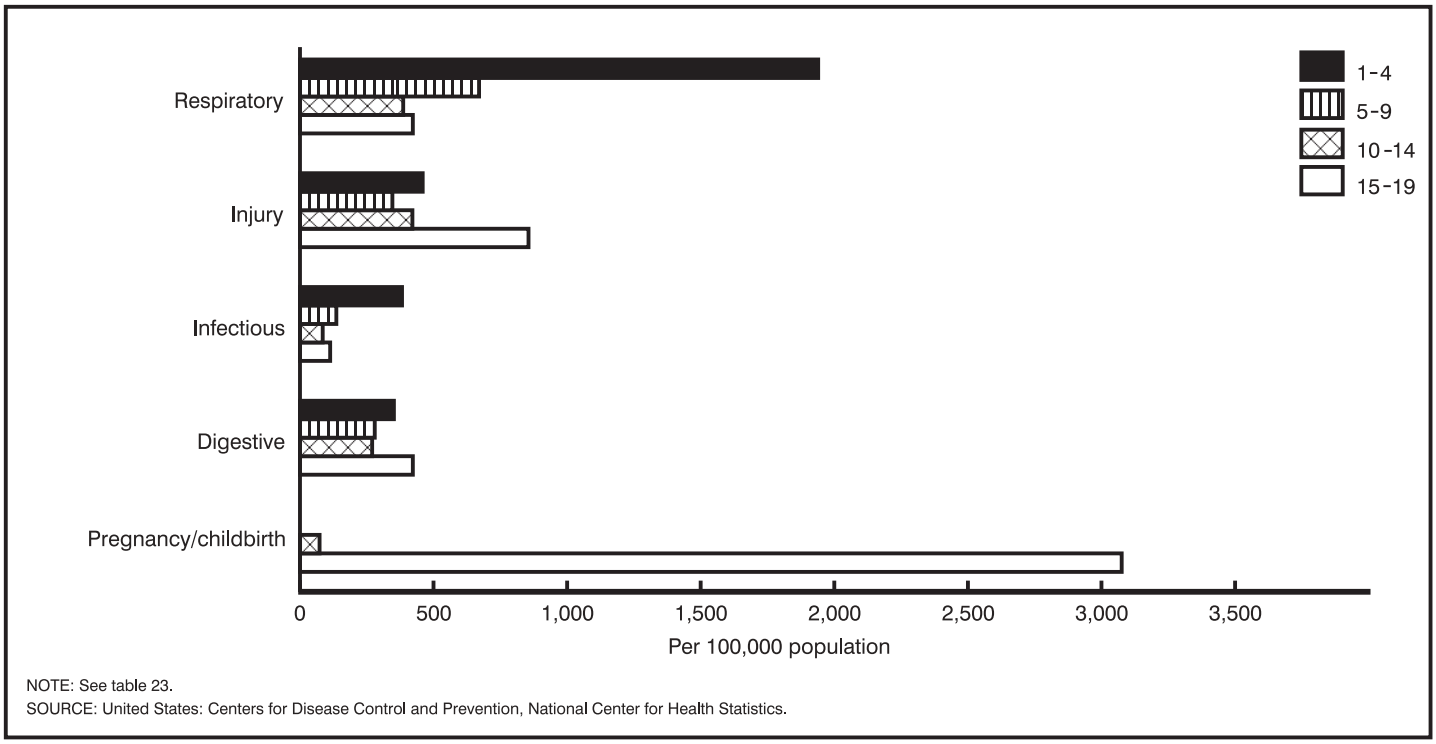


Figure 16. Hospital discharge rates, by diagnosis and age: United States, 1995

- Respiratory diseases were the leading diagnosis by far in the group 1–4 years of age, accounting for more than 40 percent of all hospital discharges in 1995. Respiratory diseases were also the leading diagnosis for children 5–9 years of age. For both age groups, injuries were the second leading diagnosis.
- For children 10–14 years of age, injuries were the leading diagnosis, accounting for 18 percent of discharges in 1995, closely followed by respiratory diseases. For the population 15–19 years of age, childbirth and complications of pregnancy were the predominant diagnoses, accounting for almost one-half of all discharges. The second most important diagnosis was for injuries, representing almost 13 percent of discharges.
- Discharge rates for all causes combined fell from 1990 to 1993 in all age groups, a continuation of a long-term decline in hospitalization. The rates rose in 1994 and 1995 for children in the groups age 1–4, 5–9, and 10–14 years of age. Discharge rates for those 15–19 years of age rose in 1994 but in 1995 resumed the long-term decline.
- Hospital discharge data are obtained from hospital inpatient information. The discharge diagnoses presented here are based on the first-listed diagnosis from the inpatient record. Multiple hospital stays by a patient in the same year for the same illness are each counted separately in this data system.

Communicable Diseases in the Russian Federation

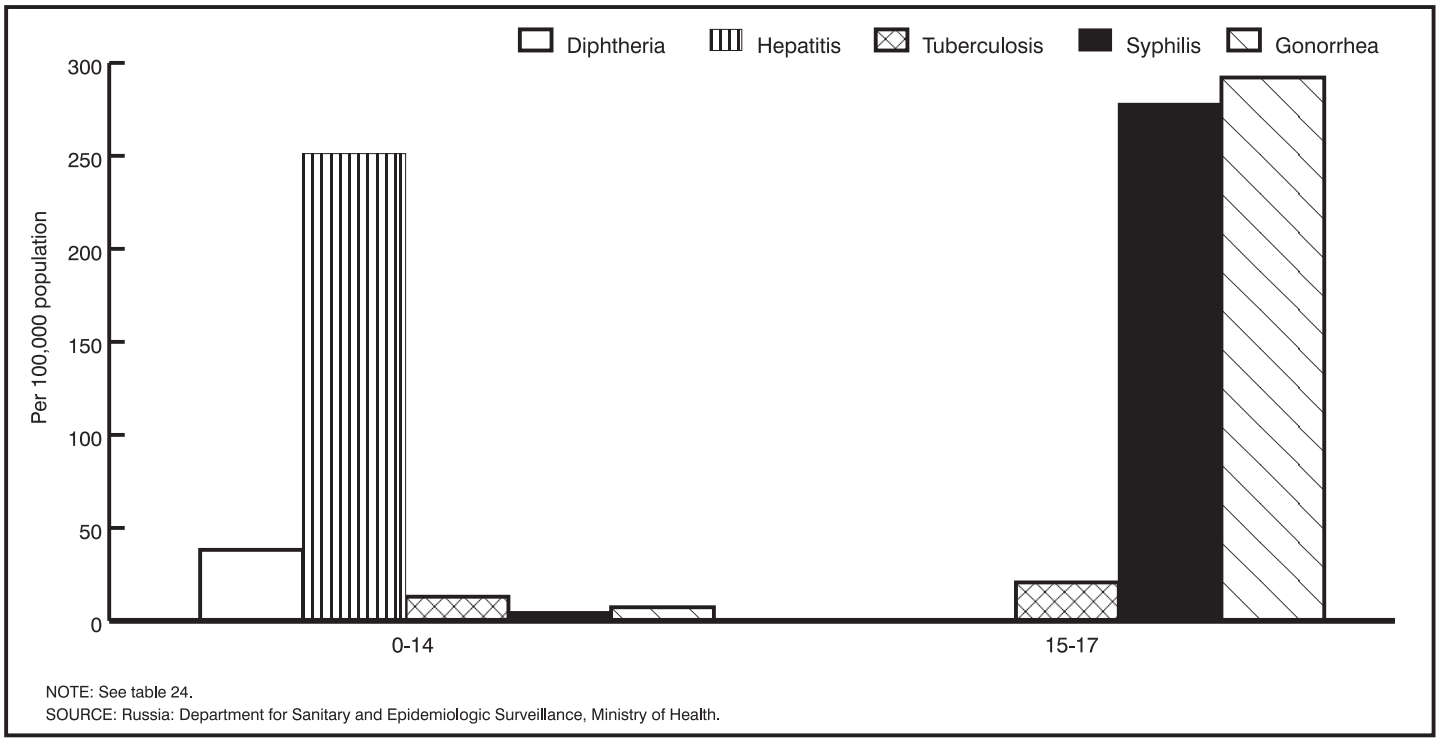


Figure 17. Communicable disease rates, by age group and disease: Russian Federation, 1995

- The incidence of diphtheria among children 0–14 years of age rose rapidly after 1990, particularly in 1994. The 1995 rate declined 11 percent from the 1994 peak.
- Hepatitis rates among children 0–14 years of age declined by more than 50 percent from 1990 to 1995 but remained far higher than the level among U.S. children.
- Gonorrhea rates more than doubled among children 0–14 years of age from 1990 to 1994, but declined by 13 percent in 1995. For adolescents 15–17 years of age, the pattern was similar: The rate rose sharply from 1990 to 1993 but declined substantially in 1994 and 1995.
- Syphilis rates rose dramatically among those 0–14 and 15–17 years of age, increasing almost fiftyfold from 1990 to 1995. The Russian rate for adolescents 15–17 years of age was almost 30 times the U.S. rate for those age 15–19 in 1995.
- Among children 0–14 years of age, tuberculosis rates rose by two-thirds from 1990 to 1995. For adolescents 15–17 years of age, the rate of tuberculosis rose by 29 percent from 1990 to 1995.

Communicable Diseases in the United States

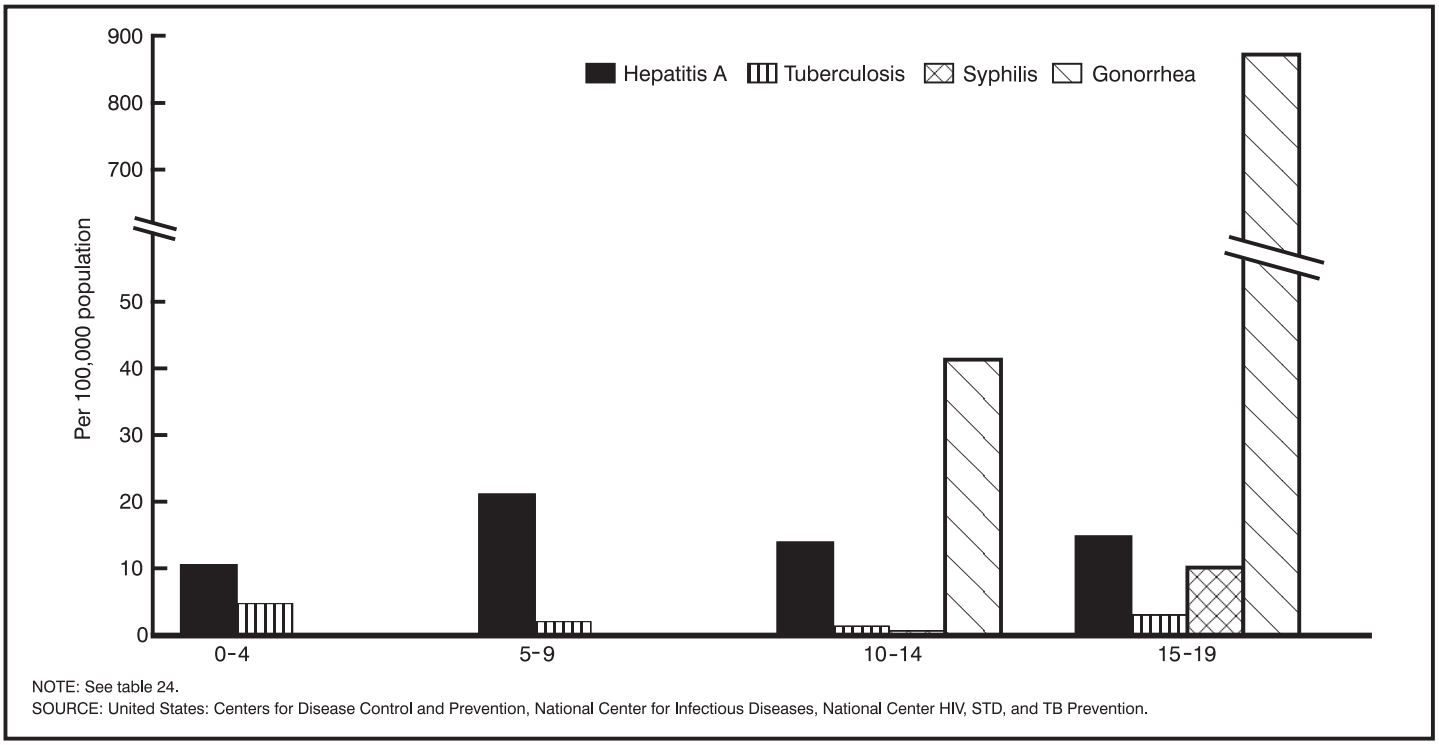


Figure 18. Communicable disease rates, by age group and disease: United States, 1995

- Hepatitis A continued to be an important communicable disease in all four age groups, but particularly among children 5–9 years of age. In all four age groups, the incidence rate fell from 1990 to 1993 but rose thereafter.
- The acquired immunodeficiency syndrome (AIDS) rate for children 0–4 years of age declined by one-third from 1992 to 1995, largely as a result of the use of zidovudine (ZDV) to prevent transmission of HIV infection from pregnant women to their children. The AIDS rate for children 15–19 years of age rose slightly during the interval.
- Diphtheria cases continued to be very rare in the United States. From 1990 to 1995, fewer than five cases were reported annually for all ages combined.
- Although gonorrhea rates for those 15–19 years of age declined substantially from 1990 to 1995, the 1995 rate was three times the Russian rate for adolescents 15–17 years of age.
- Tuberculosis rates in children 0–4 and 5–9 years of age changed very little during the 1990–95 interval. The rate dropped by one-third for adolescents 10–14 years of age over the same interval. For those 15–19 years of age, the rate rose in 1991 but declined thereafter.

Table 1. Resident population, by age and sex: Russian Federation and United States, selected years 1985–95

Country, sex, and age	1985	1990	1991	1992	1993	1994	1995
Russian Federation				Population			
All persons	143,444,187	147,913,047	148,244,835	148,310,174	148,145,911	147,967,813	147,773,657
Under 1 year	2,356,758	2,042,649	1,870,366	1,680,008	1,480,467	1,409,618	1,392,301
1–4 years	9,147,605	9,472,425	9,091,489	8,511,358	7,819,486	7,106,850	6,494,163
5–9 years	20,604,916	11,691,208	11,913,690	12,126,688	12,141,940	11,959,349	11,653,397
10–14 years		10,755,194	10,852,591	10,996,699	11,269,831	11,580,762	11,822,429
15–19 years	20,993,186	10,184,768	10,309,644	10,417,212	10,532,870	10,690,270	10,829,347
20–24 years		9,524,551	9,500,412	9,609,388	9,816,052	10,043,725	10,241,502
25–29 years	25,191,767	11,724,325	11,056,487	10,421,363	9,886,834	9,582,798	9,518,320
30–34 years		12,951,186	13,002,119	12,913,208	12,649,279	12,243,647	11,687,622
35–39 years	16,204,174	12,023,228	12,232,708	12,390,233	12,596,068	12,753,689	12,829,740
40–44 years		9,653,385	10,493,978	10,966,817	11,345,741	11,596,391	11,798,915
45–49 years	19,129,215	6,127,910	5,596,816	5,881,605	6,798,010	8,080,991	9,345,513
50–54 years		10,420,811	10,446,589	9,788,057	8,430,501	6,954,827	5,799,511
55–64 years	15,599,878	16,502,192	16,458,415	16,525,533	16,658,582	16,713,924	16,662,239
65 years and over	14,216,688	14,839,215	15,419,531	16,082,005	16,720,250	17,250,972	17,698,658
All males	66,438,950	69,266,204	69,481,089	69,562,474	69,528,088	69,479,594	69,387,481
Under 1 year	1,203,729	1,046,981	958,645	861,576	760,501	723,589	713,720
1–4 years	4,667,286	4,829,681	4,642,122	4,351,791	4,004,697	3,645,851	3,333,605
5–9 years	10,464,373	5,940,615	6,057,032	6,168,816	6,181,399	6,096,195	5,949,649
10–14 years		5,456,424	5,504,792	5,578,416	5,719,732	5,880,698	6,007,464
15–19 years	10,590,598	5,179,862	5,225,929	5,274,609	5,334,736	5,420,061	5,493,675
20–24 years		4,879,799	4,886,795	4,960,535	5,081,182	5,188,129	5,254,686
25–29 years	12,791,354	5,955,419	5,610,753	5,274,783	4,996,908	4,864,378	4,872,946
30–34 years		6,522,489	6,546,653	6,498,819	6,363,718	6,161,664	5,885,518
35–39 years	7,970,451	5,993,677	6,095,483	6,172,658	6,271,523	6,347,427	6,380,945
40–44 years		4,753,794	5,170,712	5,403,038	5,582,556	5,696,677	5,785,316
45–49 years	8,929,434	2,919,455	2,683,243	2,839,814	3,288,501	3,901,547	4,499,834
50–54 years		4,828,097	4,833,504	4,518,016	3,881,094	3,198,503	2,667,863
55–64 years	6,103,645	7,012,977	7,078,842	7,157,643	7,234,700	7,248,913	7,206,558
65 years and over	3,718,080	3,946,934	4,186,584	4,501,960	4,826,841	5,105,962	5,335,702
All females	77,005,237	78,646,843	78,763,746	78,747,700	78,617,823	78,488,219	78,386,176
Under 1 year	1,153,029	995,668	911,721	818,432	719,966	686,029	678,581
1–4 years	4,480,319	4,642,744	4,449,367	4,159,567	3,814,789	3,460,999	3,160,558
5–9 years	10,140,543	5,750,593	5,856,658	5,957,872	5,960,541	5,863,154	5,703,748
10–14 years		5,298,770	5,347,799	5,418,283	5,550,099	5,700,064	5,814,965
15–19 years	10,402,588	5,004,906	5,083,715	5,142,603	5,198,134	5,270,209	5,335,672
20–24 years		4,644,752	4,613,617	4,648,853	4,734,870	4,855,596	4,986,816
25–29 years	12,400,413	5,768,906	5,445,734	5,146,580	4,889,926	4,718,420	4,645,374
30–34 years		6,428,697	6,455,466	6,414,389	6,285,561	6,081,983	5,802,104
35–39 years	8,233,723	6,029,551	6,137,225	6,217,575	6,324,545	6,406,262	6,448,795
40–44 years		4,899,591	5,323,266	5,563,779	5,763,185	5,899,714	6,013,599
45–49 years	10,199,781	3,208,455	2,913,573	3,041,791	3,509,509	4,179,444	4,845,679
50–54 years		5,592,714	5,613,085	5,270,041	4,549,407	3,756,324	3,131,648
55–64 years	9,496,233	9,489,215	9,379,573	9,367,890	9,423,882	9,465,011	9,455,681
65 years and over	10,498,608	10,892,281	11,232,947	11,580,045	11,893,409	12,145,010	12,362,956
United States							
All persons	237,031,000	248,709,873	252,177,000	255,077,536	257,783,004	260,340,990	262,755,269
Under 1 year	3,736,000	3,945,974	4,011,000	4,000,022	3,916,861	3,870,185	3,848,106
1–4 years	14,268,000	14,811,673	15,210,000	15,512,163	15,773,936	15,856,964	15,743,042
5–9 years	16,823,000	18,034,778	18,237,000	18,346,734	18,529,227	18,858,601	19,219,956
10–14 years	17,101,000	17,060,469	17,671,000	18,104,763	18,520,991	18,752,722	18,914,532
15–19 years	18,390,000	17,881,711	17,205,000	17,102,010	17,267,076	17,616,398	18,064,517
20–24 years	20,365,000	19,131,578	19,194,000	19,044,674	18,762,450	18,326,487	17,882,118
25–29 years	21,381,000	21,327,869	20,718,000	20,179,515	19,624,729	19,176,882	19,005,343
30–34 years	20,035,000	21,832,857	22,159,000	22,265,313	22,250,693	22,177,231	21,867,796
35–39 years	17,528,000	19,845,733	20,518,000	21,099,450	21,586,589	21,960,620	22,248,914
40–44 years	13,975,000	17,589,034	18,754,000	18,807,033	19,197,415	19,698,738	20,218,804
45–49 years	11,618,000	13,743,577	14,095,000	15,360,366	15,930,621	16,679,272	17,448,898
50–54 years	10,937,000	11,313,073	11,645,000	12,055,022	12,726,857	13,191,287	13,629,862
55–64 years	22,335,000	21,112,652	21,005,000	20,925,480	20,922,207	21,017,594	21,131,084
65 years and over	28,539,000	31,078,895	31,754,000	32,274,991	32,773,352	33,158,009	33,532,297

Table 1. Resident population, by age and sex: Russian Federation and United States, selected years 1985–95—Con.

Country, sex, and age	1985	1990	1991	1992	1993	1994	1995
United States—Con.				Population			
All males	114,611,000	121,239,348	122,978,000	124,480,133	125,800,418	127,076,429	128,313,797
Under 1 year	1,912,000	2,018,404	2,052,000	2,043,149	2,004,642	1,980,754	1,969,872
1–4 years	7,300,000	7,580,624	7,784,000	7,937,437	8,070,831	8,113,681	8,055,333
5–9 years	8,609,000	9,232,031	9,337,000	9,394,593	9,487,562	9,657,111	9,843,300
10–14 years	8,762,000	8,738,800	9,051,000	9,273,557	9,484,450	9,602,417	9,685,241
15–19 years	9,298,000	9,172,834	8,834,000	8,777,737	8,857,340	9,036,127	9,265,025
20–24 years	9,948,000	9,742,551	9,775,000	9,700,261	9,542,139	9,311,333	9,087,045
25–29 years	10,556,000	10,702,497	10,393,000	10,132,317	9,849,242	9,618,804	9,529,765
30–34 years	9,886,000	10,861,819	11,034,000	11,100,169	11,092,820	11,057,956	10,902,150
35–39 years	8,569,000	9,833,180	10,174,000	10,480,175	10,726,947	10,920,180	11,071,207
40–44 years	6,810,000	8,676,472	9,258,000	9,287,583	9,477,158	9,728,390	9,990,475
45–49 years	5,651,000	6,739,157	6,907,000	7,540,194	7,814,997	8,180,810	8,559,836
50–54 years	5,276,000	5,493,144	5,656,000	5,857,409	6,185,931	6,410,309	6,621,815
55–64 years	10,498,000	9,955,069	9,932,000	9,914,051	9,926,630	9,983,492	10,044,058
65 years and over	11,536,000	12,492,766	12,791,000	13,041,501	13,279,729	13,475,065	13,688,675
All females	122,420,000	127,470,525	129,198,000	130,597,403	131,982,586	133,264,561	134,441,472
Under 1 year	1,824,000	1,927,570	1,959,000	1,956,873	1,912,219	1,889,431	1,878,234
1–4 years	6,968,000	7,231,049	7,426,000	7,574,726	7,703,105	7,743,283	7,687,709
5–9 years	8,214,000	8,802,747	8,900,000	8,952,141	9,041,665	9,201,490	9,376,656
10–14 years	8,339,000	8,321,669	8,620,000	8,831,206	9,036,541	9,150,305	9,229,291
15–19 years	9,092,000	8,708,877	8,371,000	8,324,273	8,409,736	8,580,271	8,799,492
20–24 years	10,417,000	9,389,027	9,419,000	9,344,413	9,220,311	9,015,154	8,795,073
25–29 years	10,825,000	10,625,372	10,325,000	10,047,198	9,775,487	9,558,078	9,475,578
30–34 years	10,149,000	10,971,038	11,125,000	11,165,144	11,157,873	11,119,275	10,965,646
35–39 years	8,959,000	10,012,553	10,344,000	10,619,275	10,859,642	11,040,440	11,177,707
40–44 years	7,165,000	8,912,562	9,496,000	9,519,450	9,720,257	9,970,348	10,228,329
45–49 years	5,967,000	7,004,420	7,188,000	7,820,172	8,115,624	8,498,462	8,889,062
50–54 years	5,661,000	5,819,929	5,989,000	6,197,613	6,540,926	6,780,978	7,008,047
55–64 years	11,837,000	11,157,583	11,073,000	11,011,429	10,995,577	11,034,102	11,087,026
65 years and over	17,003,000	18,586,129	18,963,000	19,233,490	19,493,623	19,682,944	19,843,622

SOURCES: Russian Federation: Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 2. Percent of mothers beginning prenatal care in the first trimester and percent with late or no care: Russian Federation and United States, selected years 1985–95

Country and care level	1985	1990	1991	1992	1993	1994	1995
Russian Federation							
Number of pregnant women receiving care in Ministry of Health prenatal polyclinics	2,333,501	1,952,049	1,717,364	1,501,741	1,397,992	1,382,477	1,311,498
Percent beginning care in first trimester	72.7	68.8	68.5	70.0	71.2	72.0	71.8
Percent beginning care after first trimester	27.3	31.2	31.5	30.0	28.2	28.0	28.2
United States							
Number of live births	3,760,561	4,158,212	4,110,907	4,065,014	4,000,240	3,952,767	3,899,589
Percent beginning care in first trimester	76.2	75.8	76.2	77.7	78.9	80.2	81.3
Percent late or no care	5.7	6.1	5.8	5.2	4.8	4.4	4.2

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 3. Rates of live birth with selected medical risk factors: Russian Federation and United States, selected years, 1985–95

Country and risk factor[1]		1985	1990	1991	1992	1993	1994	1995
Russian Federation				Rate per 1,000 pregnant women				
Data from polyclinic registration:								
Anemia	648.2	54.0	128.0	166.0	217.0	255.0	292.0	344.0
Cardiovascular disease	648.5–648.6	43.0	51.0	55.0	61.0	67.0	75.0	77.0
Diabetes	648.0	1.0	- - -	1.0	1.0	2.0	1.2	1.1
Toxemia, eclampsia, and preeclampsia	642.4–642.7, 646.1	89.0	112.0	111.0	126.0	138.0	151.0	157.0
Hypertension and renal disease	642.0–642.3, 642.9, 646.2	35.0	59.0	80.0	94.0	108.0	123.0	129.0
				Rate per 1,000 deliveries				
Data from maternity hospitals:								
Anemia	648.2	27.2	65.1	90.2	122.6	146.1	180.0	209.5
Cardiovascular disease	648.5–648.6	25.7	32.6	34.4	38.5	43.5	49.4	53.2
Diabetes	648.0	1.0	- - -	1.3	1.2	1.2	1.0	1.0
Toxemia, eclampsia, and preeclampsia	642.4–642.7, 646.1	57.9	89.6	100.0	114.0	131.8	148.8	156.8
Hypertension and renal disease	642.0–642.3, 642.9, 646.2	25.4	43.5	49.4	58.2	70.7	82.4	87.0
United States				Rate per 1,000 live births				
Anemia	648.2	- - -	17.7	18.0	17.7	18.4	19.8	20.2
Cardiac disease	648.5–648.6, 390–398, 404, 410–429	- - -	3.3	3.5	3.8	4.2	4.5	4.7
Acute or chronic lung disease	110–119, 162–163, 480–487, 490–496, 500–519	- - -	2.9	3.5	4.1	4.7	5.6	6.8
Diabetes	250, 648.0, 468.8, 790.2	- - -	20.6	22.5	25.2	25.6	25.2	24.9
Genital herpes	54.1	- - -	7.6	7.8	8.0	8.3	8.1	8.4
Hydramnios/oligohydramnios	657, 658.0	- - -	5.7	6.5	7.6	9.0	10.1	11.2
Hemoglobinopathy	282	- - -	0.4	0.5	0.6	0.6	0.6	0.7
Hypertension, chronic	642.0–642.3, 401–405	- - -	6.3	6.3	6.4	6.6	6.7	6.7
Hypertension, pregnancy-associated	642.4–642.5, 642.7–642.9	- - -	26.4	26.2	27.7	29.2	31.8	33.7
Eclampsia	642.6	- - -	3.8	3.4	3.5	3.3	3.4	3.6
Incompetent cervix	654.5	- - -	3.3	2.3	2.2	2.2	2.3	2.3
Previous infant 4,000 grams or more		- - -	10.1	9.7	9.9	10.2	10.2	10.3
Previous preterm or small-for-gestational-age infant		- - -	11.6	11.2	11.5	1.4	11.3	11.2
Renal disease	580–589, 590–593.2, 646.2, 753.0–753.1, 753.3	- - -	2.1	2.1	2.2	2.2	2.6	2.6
Rh sensitization	656.1	- - -	5.9	5.8	6.2	6.0	6.5	6.3
Uterine bleeding	640,641.1, 641.3–641.9	- - -	8.1	7.7	7.8	7.7	7.8	7.6

- - - Data not available.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 4. Number and percent distribution of abortions, according to age of woman: Russian Federation and United States, selected years 1985–95

Country and age	1985	1990	1991	1992	1993	1994	1995
Russian Federation			Abortions per 1,000 women 15–49 years of age				
All women 15–49 years of age	116.1	108.8	98.0	90.3	81.9	75.1	67.6
			Abortions per 100 live births and stillbirths				
All ages	184.2	195.3	199.4	203.7	208.4	200.5	190.1
			Percent distribution of abortions by age of woman				
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years	- - -	- - -	0.2	0.1	0.2	0.1	0.1
15–19 years	- - -	- - -	9.9	10.0	10.8	10.9	10.9
20–34 years	- - -	- - -	71.6	70.8	70.3	68.9	68.4
35 years and over	- - -	- - -	18.3	19.1	18.8	20.1	20.5
United States			Abortions per 1,000 women 15–49 years of age				
All women 15–49 years of age	21.2	21.8	21.0	20.3	19.8	18.7	17.7
			Abortions per 100 live births				
All ages	35.4	34.5	33.9	33.5	33.4	32.1	31.1
Under 15 years	137.6	84.4	76.7	79.0	74.4	70.4	- - -
15–19 years	68.8	51.5	46.2	44.0	44.0	41.5	- - -
20–24 years	38.6	37.7	37.8	37.6	38.4	36.4	- - -
25–29 years	21.7	22.0	22.1	22.2	22.7	22.2	- - -
30–34 years	19.9	19.1	18.7	18.3	18.0	17.2	- - -
35–39 years	33.6	27.3	26.2	25.6	24.8	23.4	- - -
40 years and over	62.3	50.1	46.9	45.4	43.0	41.2	- - -
			Percent distribution of abortions by age of woman				
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 years	26.3	22.4	21.0	20.1	20.0	20.2	20.1
20–24 years	34.7	33.2	34.4	34.5	34.4	33.5	32.5
25 years and over	39.0	44.4	44.6	45.4	45.6	46.3	47.4

- - - Data not available.

NOTE: Columns may not add to 100.0 because of rounding.

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services*. Moscow, 1997; United States: Centers for Disease Control and Prevention, National Center for Health Statistics: *Health United States*, selected years; Centers for Disease Control and Prevention, CDC Surveillance Summaries, August 8, 1997. *MMWR* 46:SS-4. 1997.

Table 5. Number and percent distribution of abortions, according to period of gestation: Russian Federation and United States, selected years 1985–95

Country and period of gestation	1985	1990	1991	1992	1993	1994	1995
Russian Federation				Number of abortions			
Ministry of Health	4,257,581	3,920,287	3,525,904	3,265,718	2,977,935	2,808,103	2,574,834
Combined reports	4,454,000	4,103,000	3,608,000	3,530,800	3,476,000	3,006,000	2,753,000
Period of gestation:				Percent distribution			
Less than 6 weeks	- - -	24.3	24.0	26.2	26.8	26.1	25.4
6 weeks or more	- - -	75.7	76.0	73.8	73.2	73.9	74.6
United States				Number of abortions			
Centers for Disease Control and Prevention	1,328,570	1,429,577	1,388,937	1,359,145	1,330,414	1,267,415	1,210,883
Alan Guttmacher Institute	1,589,000	1,609,000	1,557,000	1,529,000	- - -	1,400,000	- - -
Period of gestation:				Percent distribution			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 9 weeks	50.3	51.6	52.3	52.1	52.3	53.7	54.0
Less than 7 weeks	- - -	- - -	- - -	13.7	14.7	15.7	15.7
7 weeks	- - -	- - -	- - -	15.0	16.2	16.5	17.1
8 weeks	- - -	- - -	- - -	21.4	21.6	21.6	21.2
9–10 weeks	26.6	25.3	25.1	24.2	24.4	23.5	23.1
11–12 weeks	12.5	11.7	11.5	12.0	11.6	10.9	10.9
13–15 weeks	5.9	6.4	6.1	6.0	6.3	6.3	6.3
16–20 weeks	3.9	4.0	3.9	4.2	4.1	4.3	4.3
21 weeks or more	0.8	1.0	1.1	1.5	1.3	1.3	1.4

- - - Data not available.

NOTE: Columns may not add to 100.0 because of rounding.

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States: Centers for Disease Control and Prevention, National Center for Health Statistics: *Health United States*, selected years.

Table 6. Number and rate of births, by method of delivery: Russian Federation and United States, selected years 1985–95

Country and method of delivery	1985	1990	1991	1992	1993	1994	1995
Russian Federation				Percent			
Percent of all deliveries in hospital	- - -	99.7	99.2	99.1	99.1	99.1	99.1
				Number of deliveries			
Deliveries in hospital	2,341,952	1,937,036	1,740,919	1,547,114	1,379,089	1,378,456	1,333,441
Method of delivery:				Rate per 100 deliveries			
Forceps	0.6	0.6	0.5	0.5	0.4	0.4	0.4
Vacuum	0.4	0.2	0.3	0.2	0.2	0.1	0.1
Cesarean	3.3	6.9	7.4	8.3	9.0	9.6	10.1
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1
United States				Number of live births			
Live births	3,760,561	4,158,212	4,110,563	4,065,014	4,000,240	3,952,767	3,899,589
Method of delivery:				Rate per 100 live births			
Cesarean, total	22.7	22.7	22.6	22.3	21.8	21.2	20.8
Cesarean, primary[1]	16.3	16.0	15.9	15.6	15.3	14.9	14.7
Vacuum	- - -	3.9	4.4	4.8	5.3	5.7	5.9
Forceps	- - -	5.1	4.6	4.3	4.1	3.8	3.5
VBAC[2]	6.6	19.9	21.3	22.6	24.3	26.3	27.5

- - - Data not available.

[1]Number of primary cesarean deliveries per 100 live births to women who have not had a previous cesarean delivery.

[2]Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States, 1985: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Health Care Statistics; United States, 1990–95: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 7. Rate of live births, by complication of labor and delivery: Russian Federation and United States, selected years 1985–95

Country and complication[1]		1985	1990	1991	1992	1993	1994	1995
Russian Federation				Rate per 1,000 deliveries				
Uterine bleeding associated with placenta	641.1–641.2	6.5	8.9	9.1	9.4	9.8	10.2	10.3
Anomalies of process of delivery	661–662	- - -	93.1	96.5	102.9	110.7	118.5	124.7
Rupture of perineum	664.0–664.4	0.3	0.4	0.8	0.5	0.5	0.6	0.4
Rupture of uterus	665.0–665.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Postdelivery sepsis and generalized postdelivery infection	659.3, 670	0.9	0.3	1.0	1.2	1.4	1.2	1.8
Including peritonitis after cesarean section	670	- - -	0.2	0.3	0.2	0.3	0.2	0.2
United States				Rate per 1,000 live births				
Febrile	659.2	- - -	12.0	13.0	13.6	14.9	15.5	16.0
Meconium		- - -	60.4	60.8	60.9	57.8	57.3	57.1
Premature rupture of membranes	658.1	- - -	33.4	32.6	32.0	31.1	31.1	30.6
Abruptio placentae	641.2	- - -	6.2	6.0	5.8	5.8	5.8	5.7
Placenta previa	641.0–641.1	- - -	3.6	3.5	3.5	3.5	3.4	3.4
Other excessive bleeding	641.3–641.9	- - -	5.3	5.4	5.4	5.4	5.5	5.8
Seizures during labor	669.1	- - -	0.4	0.4	0.4	0.4	0.4	0.4
Precipitous labor	661.3	- - -	18.1	18.7	19.3	19.0	19.0	19.1
Prolonged labor	662	- - -	10.7	10.3	10.0	9.3	9.0	8.8
Dysfunctional labor	661.0–661.2,661.4–661.9	- - -	29.6	29.5	29.6	29.9	29.8	28.0
Breech/malpresentation	652.1–652.9, 660.4, 669.6	- - -	38.3	38.1	37.7	37.8	37.4	37.4
Cephalopelvic disproportion	653	- - -	37.2	35.2	33.3	30.4	25.5	25.4
Cord prolapse	663.0	- - -	3.0	2.7	2.5	2.3	2.4	2.3
Anesthetic complication	668	- - -	0.6	0.4	0.4	0.6	0.6	0.6
Fetal distress	656.3	- - -	42.8	42.9	41.9	41.7	41.2	41.5

- - - Data not available.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 8. Number and percent distribution of live births, according to birthweight: Russian Federation and United States, selected years 1985–95

Country and birthweight	1985	1990	1991	1992	1993	1994	1995
Russian Federation				Number			
Number of live births in Ministry of Health hospitals	2,340,405	1,953,469	1,756,433	1,562,379	1,394,771	1,393,759	1,348,137
Birthweight:				Percent of live births			
Less than 2,500 grams	5.6	5.7	5.7	5.9	6.1	6.2	6.2
500–999 grams	0.3	0.2	0.2	0.2	0.3	0.3	0.3
1,000–2,499 grams	5.3	5.5	5.5	5.7	5.8	5.9	5.9
2,500–3,499 grams	49.1	50.8	53.4	54.7	55.1	55.1	56.0
3,500 grams or more	45.3	43.5	40.9	39.4	38.8	38.7	37.8
United States				Number			
Number of live births	3,760,561	4,158,212	4,110,907	4,065,014	4,000,240	3,952,767	3,899,589
Birthweight:				Percent of live births			
Less than 2,500 grams	6.8	7.0	7.1	7.1	7.2	7.3	7.3
Less than 500 grams	0.1	0.1	0.1	0.1	0.1	0.1	0.1
500–999 grams	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1,000–1,499 grams	0.6	0.6	0.7	0.7	0.7	0.7	0.7
1,500–1,999 grams	1.3	1.3	1.4	1.4	1.4	1.4	1.4
2,000–2,499 grams	4.2	4.4	4.5	4.4	4.5	4.6	4.6
2,500–2,999 grams	15.9	16.0	16.3	16.1	16.4	16.4	16.4
3,000–3,499 grams	36.7	36.7	36.8	36.7	36.9	36.8	36.9
3,500–3,999 grams	29.6	29.4	29.2	29.4	29.1	29.1	29.0
4,000–4,499 grams	9.2	9.1	8.9	9.0	8.8	8.8	8.7
4,500 grams or more	1.9	1.8	1.7	1.7	1.7	1.7	1.4

NOTE: Columns may not add to 100.0 because of rounding.

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 9. Number and percent distribution of live births, according to urban-rural region, race, and birth order: Russian Federation and United States, selected years 1985–95

Country and live birth order	1985	1990	1991	1992	1993	1994	1995
Russian Federation				Number			
All births	2,375,147	1,988,858	1,794,626	1,587,644	1,378,983	1,408,159	1,363,806
Urban births	1,666,673	1,386,247	1,230,516	1,068,304	930,530	960,413	933,460
Rural births	708,474	602,611	564,110	519,340	448,453	447,746	430,346
				Percent distribution			
All regions:							
First child	45.1	49.5	52.5	55.7	58.6	59.7	59.7
Second child	38.7	34.2	32.0	29.9	28.9	28.5	28.6
Third child	10.8	10.5	9.8	8.9	7.9	7.6	7.6
Fourth child	2.9	3.1	3.0	2.9	2.5	2.3	2.3
Fifth child and over	2.5	2.7	2.7	2.5	2.1	1.9	1.8
Urban:							
First child	48.8	54.1	57.7	61.3	64.3	65.3	65.5
Second child	39.8	34.6	31.7	29.0	27.4	27.0	26.9
Third child	8.6	8.0	7.4	6.6	5.7	5.5	5.4
Fourth child	1.7	1.8	1.9	1.7	1.5	1.3	1.3
Fifth child and over	1.1	1.4	1.4	1.4	1.1	1.0	0.9
Rural:							
First child	36.4	39.0	41.2	44.3	46.8	47.5	47.1
Second child	36.1	33.3	32.5	32.0	32.1	31.9	32.2
Third child	15.9	16.0	15.2	13.6	12.4	12.3	12.4
Fourth child	5.8	6.0	5.6	5.3	4.6	4.5	4.5
Fifth child and over	5.7	5.7	5.4	4.9	4.1	3.8	3.8
United States				Number			
All races	3,760,561	4,158,212	4,110,907	4,065,014	4,000,240	3,952,767	3,899,589
White	2,991,373	3,290,273	3,241,273	3,201,678	3,149,833	3,121,004	3,098,885
Black	608,193	684,336	682,602	673,633	658,875	636,391	603,139
				Percent distribution			
All races:							
First child	41.6	40.9	40.7	40.3	40.7	41.2	41.6
Second child	33.2	32.2	32.1	32.4	32.4	32.2	32.1
Third child	15.6	16.4	16.4	16.4	16.2	16.1	16.0
Fourth child	5.7	6.3	6.4	6.4	6.4	6.3	6.1
Fifth child and over	3.8	4.2	4.3	4.4	4.4	4.3	4.2
White:							
First child	42.1	41.6	41.5	41.0	41.3	41.6	41.8
Second child	34.0	32.9	32.8	33.1	33.1	32.9	32.8
Third child	15.4	16.2	16.2	16.2	16.1	16.0	16.0
Fourth child	5.3	5.9	5.9	6.0	5.9	5.9	5.8
Fifth child and over	3.2	3.5	3.6	3.6	3.6	3.6	3.6
Black:							
First child	39.4	37.3	37.0	36.8	37.5	38.8	39.7
Second child	29.8	29.5	29.3	29.3	29.0	28.9	28.7
Third child	17.0	18.0	18.0	18.0	17.6	17.0	16.7
Fourth child	7.7	8.5	8.7	8.7	8.5	8.2	8.0
Fifth child and over	6.1	6.7	7.0	7.3	7.4	7.1	7.0

NOTE: Columns may not add to 100.0 because of rounding.

SOURCES: Russian Federation: Goskomstat. *The Demographic Yearbook of Russia, 1995.* Moscow, 1995; *The Demographic Yearbook of Russia, 1996.* Moscow, 1996. United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 10. Number and percent of live births to unmarried mothers, by urban-rural region or race: Russian Federation and United States, selected years 1985–95

Country and marital status	1985	1990	1991	1992	1993	1994	1995
Russian Federation			Number of live births				
Live births to unmarried mothers	285,016	290,601	287,944	272,255	250,714	275,765	288,291
			Percent of live births to unmarried mothers				
All regions	12.0	14.6	16.0	17.1	18.2	19.6	21.1
Urban	11.3	13.8	15.5	16.7	18.1	19.5	21.1
Rural	13.6	16.5	17.3	18.0	18.4	19.8	21.3
United States			Number of live births				
Live births to unmarried mothers	828,174	1,165,384	1,213,769	1,224,876	1,240,172	1,289,592	1,253,976
			Percent of live births to unmarried mothers				
All races	22.0	28.0	29.5	30.1	31.0	32.6	32.2
White	14.5	20.4	21.8	22.6	23.6	25.4	25.3
Black	60.1	66.5	67.9	68.1	68.7	70.4	69.9

SOURCES: Russian Federation: Goskomstat. *The Demographic Yearbook of Russia, 1995*. Moscow, 1995; *The Demographic Yearbook of Russia, 1996*. Moscow, 1996. United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 11. Rate of live births, by age of mother: Russian Federation and United States, selected years 1985–95

Country and age of mother	1985	1990	1991	1992	1993	1994	1995
Russian Federation			Live births per 1,000 women				
All regions:							
15–49 years	65.0	55.3	49.9	43.9	38.4	38.0	36.0
Under 20 years	46.9	55.6	54.9	51.4	47.9	49.9	45.6
20–24 years	164.2	156.8	146.6	134.0	120.4	120.3	113.5
25–29 years	113.3	93.2	83.0	72.7	65.0	67.2	67.2
30–34 years	60.0	48.2	41.6	35.0	29.6	29.6	29.7
35–39 years	23.2	19.4	16.5	13.9	11.4	10.6	10.7
40–44 years	3.7	4.2	3.7	3.2	2.6	2.3	2.2
45–49 years	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Urban:							
15–49 years	58.9	49.3	43.9	38.1	33.3	33.6	32.1
Under 20 years	42.3	48.1	47.4	43.7	41.1	43.5	39.8
20–24 years	141.5	141.5	130.4	117.5	105.3	106.9	101.7
25–29 years	102.7	86.0	75.2	65.0	58.0	61.2	61.5
30–34 years	55.4	44.2	37.7	31.5	26.6	26.9	27.1
35–39 years	20.5	17.0	14.4	12.1	9.8	9.4	9.4
40–44 years	2.7	3.4	3.0	2.6	2.0	1.8	1.8
45–49 years	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Rural:							
15–49 years	85.8	76.5	71.3	63.9	55.5	52.8	49.3
Under 20 years	59.3	83.2	81.1	75.9	68.1	66.6	62.4
20–24 years	256.8	207.5	201.5	189.9	172.2	167.7	154.5
25–29 years	152.5	116.3	107.7	96.2	85.9	85.2	84.3
30–34 years	77.3	62.0	54.8	46.5	39.2	37.8	37.9
35–39 years	33.9	28.3	24.5	20.6	16.8	15.0	14.7
40–44 years	6.7	7.6	6.7	5.7	4.5	3.9	3.6
45–49 years	0.6	0.3	0.4	0.4	0.4	0.3	0.3
United States			Live births per 1,000 women				
All races:							
15–49 years	60.1	63.4	62.0	60.8	59.5	58.3	57.1
15–19 years	51.0	59.9	62.1	60.7	59.6	58.9	56.8
20–24 years	108.3	116.5	115.7	114.6	112.6	111.1	109.8
25–29 years	111.0	120.2	118.2	117.4	115.5	113.9	112.2
30–34 years	69.1	80.8	79.5	80.2	80.8	81.5	82.5
35–39 years	24.0	31.7	32.0	32.5	32.9	33.7	34.3
40–44 years	4.0	5.5	5.5	5.9	6.1	6.4	6.6
45–49 years	0.2	0.2	0.2	0.3	0.3	0.3	0.3
White:							
15–49 years	57.7	60.7	59.4	58.4	57.2	56.4	55.7
15–19 years	43.3	50.8	52.8	51.8	51.1	51.1	50.1
20–24 years	104.1	109.8	109.0	108.2	106.9	106.2	106.3
25–29 years	112.3	120.7	118.8	118.4	116.6	115.5	114.8
30–34 years	69.9	81.7	80.5	81.4	82.1	83.2	84.6
35–39 years	23.3	31.5	31.8	32.2	32.7	33.7	34.5
40–44 years	3.7	5.2	5.2	5.7	5.9	6.2	6.4
45–49 years	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Black:							
15–49 years	71.9	78.8	77.5	75.3	72.6	69.0	64.5
15–19 years	95.4	112.8	115.5	112.4	108.6	104.5	96.1
20–24 years	135.0	160.2	160.9	158.0	152.6	146.0	137.1
25–29 years	100.2	115.5	113.1	111.2	108.4	104.0	98.6
30–34 years	57.9	68.7	67.7	67.5	67.3	65.8	64.0
35–39 years	23.9	28.1	28.3	28.8	29.2	28.9	28.7
40–44 years	4.6	5.5	5.5	5.6	5.9	5.9	6.0
45 years and over	0.3	0.3	0.2	0.2	0.3	0.3	0.3

SOURCES: Russian Federation: Goskomstat. *The Demographic Yearbook of Russia, 1995.* Moscow, 1995; *The Demographic Yearbook of Russia, 1996.* Moscow, 1996. United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 12. Childhood death rates from all causes, by age, sex, urban-rural region, or race: Russian Federation and United States, selected years 1985–95

Country, sex, and age	1985	1990	1991	1992	1993	1994	1995
Russian Federation, both sexes			Deaths per 1,000 population				
All regions:							
Under 1 year[1]	20.7	17.4	17.8	18.0	19.9	18.6	18.1
1–4 years	1.4	1.0	1.0	1.0	1.1	1.0	1.1
5–9 years	0.5	0.5	0.6	0.6	0.6	0.5	0.6
10–14 years	0.4	0.4	0.5	0.5	0.5	0.5	0.5
15–19 years	0.9	1.1	1.2	1.3	1.5	1.5	1.6
Urban:							
Under 1 year[1]	19.8	17.0	17.2	17.6	19.2	17.9	17.4
1–4 years	1.0	0.8	0.8	0.8	0.9	0.9	0.9
5–9 years	- - -	0.5	0.5	0.5	0.5	0.5	0.5
10–14 years	- - -	0.4	0.5	0.5	0.5	0.5	0.5
15–19 years	- - -	1.0	1.1	1.2	1.4	1.4	1.6
Rural:							
Under 1 year[1]	22.8	18.3	19.1	19.1	21.4	20.1	19.8
1–4 years	2.1	1.5	1.5	1.4	1.6	1.5	1.5
5–9 years	- - -	0.7	0.8	0.7	0.7	0.7	0.7
10–14 years	- - -	0.5	0.6	0.6	0.6	0.6	0.6
15–19 years	- - -	1.5	1.5	1.5	1.7	1.7	1.9
United States, both sexes							
All races:							
Under 1 year[1]	10.6	9.2	8.9	8.5	8.4	8.0	7.6
1–4 years	0.5	0.5	0.5	0.4	0.4	0.4	0.4
5–9 years	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10–14 years	0.3	0.3	0.3	0.2	0.3	0.3	0.3
15–19 years	0.8	0.9	0.9	0.8	0.9	0.9	0.8
White:							
Under 1 year[1]	9.2	7.6	7.3	6.9	6.8	6.6	6.3
1–4 years	0.5	0.4	0.4	0.4	0.4	0.4	0.4
5–9 years	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10–14 years	0.3	0.2	0.2	0.2	0.2	0.2	0.2
15–19 years	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Black:							
Under 1 year[1]	19.0	18.0	17.6	16.8	16.5	15.8	15.1
1–4 years	0.8	0.7	0.7	0.7	0.8	0.8	0.7
5–9 years	0.4	0.3	0.3	0.3	0.3	0.3	0.3
10–14 years	0.3	0.3	0.3	0.4	0.4	0.4	0.4
15–19 years	0.9	1.1	1.2	1.4	1.4	1.5	1.3
Russian Federation, male							
All regions:							
Under 1 year[1]	23.8	20.2	20.7	21.1	22.4	21.3	20.5
1–4 years	1.5	1.1	1.1	1.1	1.2	1.2	1.2
5–9 years	0.6	0.7	0.8	0.7	0.7	0.7	0.7
10–14 years	0.5	0.6	0.7	0.7	0.7	0.7	0.7
15–19 years	1.3	1.6	1.7	1.8	2.1	2.1	2.4
Urban:							
Under 1 year[1]	22.8	19.5	20.0	20.5	21.5	20.5	19.6
1–4 years	1.2	0.9	0.9	0.9	1.0	1.0	1.0
5–9 years	- - -	0.6	0.7	0.6	0.7	0.6	0.6
10–14 years	- - -	0.6	0.6	0.6	0.7	0.6	0.6
15–19 years	- - -	1.5	1.5	1.7	2.0	2.0	2.3
Rural:							
Under 1 year[1]	26.1	21.1	22.3	22.3	24.2	23.0	22.3
1–4 years	2.4	1.7	1.7	1.7	1.7	1.7	1.7
5–9 years	- - -	0.9	1.0	0.9	0.9	0.8	0.9
10–14 years	- - -	0.7	0.8	0.8	0.8	0.8	0.8
15–19 years	- - -	2.0	2.0	2.0	2.3	2.4	2.7

See footnotes at end of table.

Table 12. Childhood death rates from all causes, by age, sex, urban-rural region, or race: Russian Federation and United States, selected years 1985–95—Con.

Country, sex, and age	1985	1990	1991	1992	1993	1994	1995
United States, male			Deaths per 1,000 population				
All races:							
Under 1 year[1]	11.9	10.3	10.0	9.4	9.3	8.8	8.3
1–4 years	0.6	0.5	0.5	0.5	0.5	0.4	0.4
5–9 years	0.3	0.3	0.2	0.2	0.2	0.2	0.2
10–14 years	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15–19 years	1.1	1.3	1.3	1.2	1.3	1.3	1.2
White:							
Under 1 year[1]	10.4	8.5	8.3	7.7	7.6	7.2	7.0
1–4 years	0.5	0.5	0.5	0.4	0.4	0.4	0.4
5–9 years	0.3	0.2	0.2	0.2	0.2	0.2	0.2
10–14 years	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15–19 years	1.1	1.2	1.1	1.1	1.1	1.1	1.1
Black:							
Under 1 year[1]	20.8	19.6	19.4	18.4	18.3	17.5	16.3
1–4 years	0.9	0.9	0.9	0.8	0.9	0.8	0.8
5–9 years	0.4	0.4	0.4	0.4	0.4	0.4	0.3
10–14 years	0.4	0.5	0.5	0.4	0.5	0.5	0.5
15–19 years	1.2	2.0	2.3	2.2	2.3	2.3	2.0
Russian Federation, female							
All regions:							
Under 1 year[1]	17.6	14.7	15.3	15.5	17.1	15.7	15.5
1–4 years	1.2	0.9	0.9	0.8	1.0	0.9	1.0
5–9 years	0.4	0.4	0.4	0.4	0.4	0.4	0.4
10–14 years	0.3	0.3	0.3	0.3	0.4	0.4	0.4
15–19 years	0.5	0.6	0.7	0.7	0.8	0.8	0.9
Urban:							
Under 1 year[1]	16.8	14.4	14.9	15.1	16.6	15.2	14.8
1–4 years	0.9	0.7	0.7	0.7	0.8	0.8	0.8
5–9 years	- - -	0.3	0.4	0.4	0.4	0.4	0.4
10–14 years	- - -	0.3	0.3	0.3	0.3	0.3	0.4
15–19 years	- - -	0.6	0.6	0.6	0.7	0.8	0.8
Rural:							
Under 1 year[1]	19.6	15.4	16.3	16.4	18.3	17.0	16.9
1–4 years	1.8	1.3	1.2	1.2	1.4	1.4	1.3
5–9 years	- - -	0.5	0.5	0.5	0.5	0.5	0.5
10–14 years	- - -	0.3	0.4	0.4	0.4	0.4	0.4
15–19 years	- - -	0.9	0.9	0.9	1.0	0.9	1.0
United States, female							
All races:							
Under 1 year[1]	9.3	8.1	7.8	7.6	7.4	7.2	6.8
1–4 years	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5–9 years	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10–14 years	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15–19 years	0.5	0.5	0.5	0.4	0.5	0.4	0.5
White:							
Under 1 year[1]	7.9	6.6	6.3	6.1	6.0	5.9	5.6
1–4 years	0.4	0.4	0.4	0.3	0.3	0.3	0.3
5–9 years	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10–14 years	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15–19 years	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Black:							
Under 1 year[1]	17.2	16.2	15.7	15.3	14.7	14.1	13.9
1–4 years	0.7	0.7	0.7	0.7	0.7	0.7	0.6
5–9 years	0.3	0.3	0.3	0.3	0.3	0.3	0.3
10–14 years	0.3	0.3	0.2	0.3	0.3	0.3	0.3
15–19 years	0.4	0.5	0.5	0.5	0.5	0.6	0.6

- - - Data not available.

[1]Under 1 year death rate is per 1,000 live births.

SOURCES: Russian Federation: Goskomstat. *The Demographic Yearbook of Russia, 1995.* Moscow, 1995; *The Demographic Yearbook of Russia, 1996.* Moscow, 1996. United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 13. Infant mortality rates, by age at death: Russian Federation and United States, selected years 1985–95

Country and year	Infant mortality rate			Perinatal mortality rate	Late fetal death rate
	Total	Neonatal	Postneonatal		
Russian Federation	Deaths per 1,000 live births			Deaths per 1,000 live births and late fetal deaths	
1985	20.7	11.1	9.6	17.8	9.3
1990	17.4	10.8	6.6	17.9	9.1
1991	17.8	11.0	6.8	17.5	8.7
1992	18.0	11.3	6.7	17.2	8.3
1993	19.9	12.1	7.8	17.4	7.8
1994	18.6	11.8	6.8	16.7	7.8
1995	18.1	11.0	7.0	15.8	7.4
United States					
1985	10.6	7.0	3.7	10.7	4.9
1990	9.2	5.8	3.4	9.1	4.3
1991	8.9	5.6	3.4	8.7	4.1
1992	8.5	5.4	3.1	8.5	4.1
1993	8.4	5.3	3.1	8.1	3.8
1994	8.0	5.1	2.9	7.9	3.7
1995	7.6	4.9	2.7	7.6	3.6

SOURCES: Russian Federation: Goskomstat. *The Demographic Yearbook of Russia, 1995.* Moscow, 1995; *The Demographic Yearbook of Russia, 1996.* Moscow, 1996. Ministry of Health. *Maternal and Child Health Services* in 1996. Moscow, 1997. United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 14. Infant mortality rates per 100,000 live births, by sex and selected causes: Russian Federation and United States, 1990–95

Country, sex, and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, both sexes				Deaths per 100,000 live births			
All causes	001–999	1,764.2	1,810.5	1,839.7	2,026.6	1,856.4	1,821.4
Infectious and parasitic diseases	001–139	135.4	126.3	118.9	144.2	122.1	127.7
Pneumonia and influenza	480–483, 485–486	172.2	189.0	190.1	220.0	177.9	170.4
Congenital anomalies	740–759	375.5	394.0	393.7	414.9	404.6	419.8
Conditions originating in perinatal period	760–779	812.4	810.8	820.0	897.0	849.0	789.5
Birth trauma	767	137.2	136.5	129.2	133.6	117.7	106.2
Intrauterine hypoxia and birth asphyxia	768	121.2	118.3	136.4	141.6	134.4	112.8
Respiratory distress syndrome	769, 770.2–770.9	301.5	296.9	282.9	312.8	290.5	246.0
Congenital and aspirated pneumonia	770.0–770.1	79.8	79.0	85.5	93.3	90.9	85.1
Accidents and adverse effects	E800–E949, E990–E999	62.1	66.9	71.7	82.5	76.1	77.9
United States, both sexes							
All causes	001–999	922.3	894.4	851.9	836.6	802.2	758.6
Infectious and parasitic diseases	001–139	20.2	21.1	19.2	19.2	21.2	19.8
Pneumonia and influenza	480–487	15.2	14.8	14.8	13.2	14.1	12.6
Congenital anomalies	740–759	198.1	186.9	183.2	178.2	173.4	168.1
Conditions originating in perinatal period	760–779	420.4	403.6	382.8	373.6	362.2	341.8
Maternal complications of pregnancy	761	39.8	37.4	35.9	33.6	32.8	33.6
Complications of placenta, cord, and membranes	762	23.4	23.4	24.4	24.8	24.0	24.7
Short gestation and low birthweight	765	96.5	100.7	99.3	107.7	107.6	100.9
Birth trauma	767	5.0	5.0	5.1	5.4	5.8	5.2
Intrauterine hypoxia and birth asphyxia	768	18.3	14.6	15.1	13.7	13.6	12.2
Respiratory distress syndrome	769	68.5	62.5	50.8	45.4	39.6	37.3
Congenital and aspirated pneumonia	770.0–770.1	4.2	4.0	3.9	2.9	3.4	2.0
Infections of the perinatal period	771	21.0	21.4	22.2	19.3	20.9	20.2
Sudden infant death syndrome	798.0	130.3	130.1	120.3	116.7	103.0	87.1
Accidents and adverse effects	E800–E949	22.4	23.4	20.1	22.4	22.5	20.2
Russian Federation, male							
All causes	001–999	2,026.1	2,072.0	2,110.5	2,287.7	2,123.8	2,066.9
Infectious and parasitic diseases	001–139	144.9	139.8	135.0	167.8	134.5	147.5
Pneumonia and influenza	480–483, 485–486	194.5	212.4	215.4	240.0	201.3	186.2
Congenital anomalies	740–759	417.5	425.2	425.2	450.8	432.1	465.9
Conditions originating in perinatal period	760–779	970.6	973.1	977.8	1,040.8	1,012.0	924.0
Birth trauma	767	171.8	170.8	160.1	162.0	148.0	129.7
Intrauterine hypoxia and birth asphyxia	768	140.6	142.1	160.1	163.7	156.5	126.7
Respiratory distress syndrome	769, 770.2–770.9	363.5	357.0	344.5	363.8	350.6	287.6
Congenital and aspirated pneumonia	770.0–770.1	92.6	87.4	96.1	102.0	104.9	98.3
Accidents and adverse effects	E800–E949, E990–E999	68.7	69.0	78.5	88.5	87.7	86.4
United States, male							
All causes	001–999	1,026.3	999.7	938.7	925.3	880.8	832.6
Infectious and parasitic diseases	001–139	21.4	22.5	20.6	20.0	22.9	22.0
Pneumonia and influenza	480–487	17.1	15.6	17.1	15.1	16.8	14.0
Congenital anomalies	740–759	212.3	200.0	193.7	189.7	177.5	179.6
Conditions originating in perinatal period	760–779	466.6	449.7	419.1	408.7	398.4	376.5
Maternal complications of pregnancy	761	41.6	40.0	37.0	35.7	35.6	34.9
Complications of placenta, cord, and membranes	762	26.2	26.2	26.2	25.7	25.3	26.4
Short gestation and low birthweight	765	105.7	107.5	105.7	116.0	114.8	110.6
Birth trauma	767	6.1	5.7	5.7	5.9	7.3	6.1
Intrauterine hypoxia and birth asphyxia	768	19.5	17.0	15.8	13.9	14.0	13.5
Respiratory distress syndrome	769	81.5	74.2	58.9	53.4	47.0	43.4
Congenital and aspirated pneumonia	770.0–770.1	4.4	4.2	3.8	3.3	3.1	2.0
Infections of the perinatal period	771	22.3	24.4	24.9	21.3	23.7	22.4
Sudden infant death syndrome	798.0	155.9	157.4	142.4	139.3	122.1	100.0
Accidents and adverse effects	E800–E949	23.9	26.4	22.2	24.6	25.0	21.1

See footnotes at end of table.

Table 14. Infant mortality rates per 100,000 live births, by sex and selected causes: Russian Federation and United States, 1990–95—Con.

Country, sex, and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, female				Deaths per 100,000 live births			
All causes	001–999	1,487.9	1,533.4	1,552.8	1,750.4	1,572.7	1,562.4
Infectious and parasitic diseases	001–139	125.3	112.0	101.7	119.4	108.9	106.7
Pneumonia and influenza	480–483, 485–486	148.7	164.1	163.3	198.9	153.1	153.7
Congenital anomalies	740–759	331.1	360.8	360.2	377.0	375.4	371.1
Conditions originating in perinatal period	760–779	645.4	638.7	652.9	744.9	676.1	647.5
Birth trauma	767	100.7	100.1	96.5	103.5	85.6	81.5
Intrauterine hypoxia and birth asphyxia	768	100.8	93.1	111.2	118.2	111.1	98.1
Respiratory distress syndrome	769, 770.2–770.9	236.0	233.3	217.5	258.8	226.7	202.1
Congenital and aspirated pneumonia	770.0–770.1	66.3	70.1	74.3	84.1	76.1	71.3
Accidents and adverse effects	E800–E949, E990–E999	55.1	64.6	64.5	76.1	63.7	68.9
United States, female							
All causes	001–999	813.1	784.2	760.6	743.4	719.9	681.0
Infectious and parasitic diseases	001–139	18.9	19.7	17.8	18.4	19.3	17.5
Pneumonia and influenza	480–487	13.3	13.9	12.3	11.3	11.4	11.1
Congenital anomalies	740–759	183.3	173.3	172.2	166.2	169.1	156.0
Conditions originating in perinatal period	760–779	372.0	355.4	344.7	336.8	324.2	305.4
Maternal complications of pregnancy	761	38.0	34.6	34.8	31.4	29.8	32.2
Complications of placenta, cord, and membranes	762	20.6	20.5	22.5	23.9	22.6	22.8
Short gestation and low birthweight	765	86.9	93.5	92.5	99.1	100.1	90.7
Birth trauma	767	3.8	4.2	4.4	4.9	4.1	4.2
Intrauterine hypoxia and birth asphyxia	768	17.1	12.0	14.4	13.5	13.1	10.8
Respiratory distress syndrome	769	54.9	50.3	42.2	36.9	31.9	30.8
Congenital and aspirated pneumonia	770.0–770.1	4.1	3.8	4.0	2.6	3.7	2.0
Infections of the perinatal period	771	19.8	18.4	19.3	17.2	18.0	17.9
Sudden infant death syndrome	798.0	103.4	101.6	97.1	93.0	83.0	73.6
Accidents and adverse effects	E800–E949	20.8	20.2	18.0	20.2	19.9	19.2

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCES: Russian Federation: Rates computed by MedSocEconomInform from data provided by Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics.

Table 15. Maternal mortality rates, by cause of death: Russian Federation and United States, selected years 1985–95

Country and cause of death[1]		1985	1990	1991	1992	1993	1994	1995
Russian Federation				Number per 100,000 live births				
Total	630–676	54.0	47.4	52.4	50.8	51.6	52.3	53.3
Ectopic pregnancy	633	3.2	3.2	4.4	4.7	3.8	4.1	3.9
Legally induced abortion	635	1.8	0.9	1.1	1.4	1.7	1.5	1.5
Other abortion	630–632, 634, 636–639	19.7	12.8	11.9	10.9	13.1	11.7	10.8
Hemorrhage of pregnancy and childbirth	640, 641.1–641.9, 666	5.3	6.4	7.1	7.2	7.1	6.2	6.7
Toxemia of pregnancy	642.4–642.9, 643	5.6	5.7	7.8	5.8	6.2	6.4	5.3
Sepsis	659.3, 670	1.8	1.7	1.6	2.3	1.7	2.3	2.4
Other	642.0–642.3, 641.0, 644–648, 652–659.2, 659.4–659.9, 660–665, 667–669, 671–676	16.6	16.7	18.7	18.5	17.9	20.2	22.7
United States								
Total	630–676	7.8	8.2	7.9	7.8	7.5	8.3	7.1
Ectopic pregnancy	633	0.9	1.0	0.8	0.7	0.8	0.6	0.5
Legally induced abortion	635	0.1	*	*	*	*	*	*
Other abortion	630–632, 634, 636–638	0.3	0.4	0.5	*	*	*	*
Hemorrhage of pregnancy and childbirth	640, 641.1–641.9, 666	1.1	1.1	0.9	1.0	1.0	1.2	0.9
Toxemia of pregnancy	642.4–642.9, 643	0.9	1.5	1.6	1.3	1.3	1.7	1.2
Complications of puerperium	670–676	2.4	2.4	2.4	2.3	2.5	2.6	2.4
Other	642.0–642.3, 644–648, 651–665, 667–669	2.2	1.9	1.3	1.9	1.5	1.8	1.9

* Figures do not meet standards of reliability or precision.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCES: Russian Federation: Rates computed by MedSocEconomInform from data supplied by Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics, *Vital Statistics of the United States*, volume II, Mortality, Part A, for the years shown.

Table 16. Percent of children breastfed, by selected characteristics: Russian Federation and United States, selected years 1985–95

Country and age	1985	1990	1991	1992	1993	1994	1995
Russian Federation			Percent of children breastfed				
3 months	- - -	- - -	47.9	49.3	45.6	45.2	41.6
4 months	68.9	62.5	- - -	- - -	- - -	- - -	- - -
6 months	- - -	- - -	33.3	33.5	32.7	31.6	30.0
United States							
Ever breastfed	58.0	51.5	53.3	54.2	55.9	57.4	59.7
Breastfed at 6 months	22.1	17.6	18.2	18.9	19.0	19.7	21.6

- - - Data not available.

SOURCES: Russian Federation: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997; United States: Ross Products Division, Abbott Laboratories. (1996). Ross Mother's Survey.

Table 17. Mortality rates per 100,000 population 1–4 years of age, by cause and sex: Russian Federation and United States, 1990–95

Country, sex, and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, both sexes				Deaths per 100,000 population			
All causes	001–999	98.5	100.6	99.4	108.4	104.8	108.3
Infectious and parasitic diseases	001–139	7.9	7.4	6.8	8.0	8.7	9.1
Neoplasms	140–239	9.2	9.4	9.1	8.7	8.2	8.6
Diseases of nervous system	320–389	7.5	7.6	6.9	7.8	8.5	8.4
Cardiovascular diseases	390–459	0.9	1.1	1.2	1.1	1.3	1.2
Pneumonia and influenza	480–483, 485–486	9.8	8.5	7.4	9.5	8.5	9.5
Congenital anomalies	740–759	13.5	13.8	13.1	15.4	13.7	14.9
Accidents and adverse effects	E800–E949, E990–E999	36.8	39.3	41.9	41.7	39.9	39.5
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.7	0.6	0.8	0.5	0.6	0.4
Motor vehicle accidents	E810–E825	6.3	6.2	6.4	6.1	5.7	5.2
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	7.3	8.1	8.0	10.0	8.1	7.7
Accident caused by fire	E890–E899	4.9	5.1	5.6	6.4	6.1	5.5
Drowning	E910	7.6	8.1	8.6	7.4	7.6	6.9
Homicide and legal intervention	E960–E978	0.7	0.8	1.1	1.4	1.6	1.5
United States, both sexes							
All causes	001–999	46.8	47.4	43.6	44.8	42.9	40.6
Infectious and parasitic diseases	001–139	2.8	2.7	2.5	3.0	3.1	2.9
HIV infection	*042–*044	0.8	1.0	1.0	1.3	1.3	1.3
Neoplasms	140–239	4.0	4.0	3.5	3.8	3.8	3.4
Diseases of nervous system	320–389	3.3	3.0	2.8	3.2	2.8	2.9
Cardiovascular diseases	390–459	2.3	2.7	2.3	2.3	2.3	2.1
Pneumonia and influenza	480–487	1.2	1.4	1.2	1.2	1.1	1.0
Congenital anomalies	740–759	6.0	5.7	5.5	5.1	4.5	4.4
Accidents and adverse effects	E800–E949	17.3	17.5	15.9	16.4	15.9	14.5
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.1	0.2	0.2	0.2	0.2	0.1
Motor vehicle accidents	E810–E825	6.3	5.9	5.5	5.6	6.0	5.2
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.4	0.4	0.3	0.4	0.2	0.2
Accident caused by fire	E890–E899	3.7	4.0	3.7	3.7	3.8	2.8
Drowning	E910	3.8	3.8	3.3	3.5	3.0	3.4
Homicide and legal intervention	E960–E978	2.6	2.8	2.8	2.9	3.0	2.9
Russian Federation, male							
All causes	001–999	110.9	114.1	113.5	119.4	116.0	120.9
Infectious and parasitic diseases	001–139	8.6	7.5	7.6	8.4	9.4	10.0
Neoplasms	140–239	10.3	10.0	10.2	9.5	9.0	9.6
Diseases of nervous system	320–389	8.5	8.7	7.5	9.0	9.7	9.3
Cardiovascular diseases	390–459	0.9	1.0	1.3	1.2	1.3	1.1
Pneumonia and influenza	480–483, 485–486	10.7	8.8	7.8	10.1	9.4	10.1
Congenital anomalies	740–759	13.4	15.4	13.4	15.4	14.1	15.5
Accidents and adverse effects	E800–E949, E990–E999	46.2	49.8	54.7	51.8	49.3	51.0
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.8	0.7	1.1	0.6	0.6	0.6
Motor vehicle accidents	E810–E825	7.2	7.3	7.6	7.1	6.6	5.6
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	8.2	9.4	9.0	10.5	9.1	8.3
Accident caused by fire	E890–E899	5.5	5.3	6.8	7.0	6.3	6.6
Drowning	E910	10.5	11.2	11.8	9.7	9.9	9.4
Homicide and legal intervention	E960–E978	0.8	0.8	1.1	1.3	1.6	1.9
United States, male							
All causes	001–999	52.4	52.0	48.0	49.5	47.3	44.8
Infectious and parasitic diseases	001–139	3.0	2.8	2.6	3.0	3.2	2.8
HIV infection	*042–*044	0.8	1.0	1.1	1.3	1.2	1.2
Neoplasms	140–239	4.2	4.2	3.5	4.3	4.0	4.0
Diseases of nervous system	320–389	3.9	3.2	2.8	3.3	2.8	3.1
Cardiovascular diseases	390–459	2.2	2.8	2.3	2.5	2.4	2.3
Pneumonia and influenza	480–487	1.2	1.6	1.2	1.2	1.2	0.9
Congenital anomalies	740–759	6.2	6.0	5.8	4.8	4.4	4.6
Accidents and adverse effects	E800–E949	20.8	20.1	19.1	19.1	18.7	16.8
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.1	0.3	0.3	0.2	0.1	0.1
Motor vehicle accidents	E810–E825	6.9	6.3	6.1	6.1	6.6	5.6
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.4	0.5	0.3	0.4	0.2	0.3
Accident caused by fire	E890–E899	4.4	4.6	4.7	4.4	4.7	3.3
Drowning	E910	5.0	4.9	4.1	4.5	3.7	4.3
Homicide and legal intervention	E960–E978	2.7	3.0	3.0	3.4	3.3	3.1

See footnotes at end of table.

Table 17. Mortality rates per 100,000 population 1–4 years of age, by cause and sex: Russian Federation and United States, 1990–95—Con.

Country, sex, and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, female		Deaths per 100,000 population					
All causes	001–999	85.6	86.5	84.6	96.8	93.0	95.0
Infectious and parasitic diseases	001–139	7.2	7.3	5.9	7.6	7.9	8.1
Neoplasms	140–239	8.1	8.8	7.9	7.9	7.5	7.6
Diseases of nervous system	320–389	6.4	6.4	6.3	6.7	7.3	7.4
Cardiovascular diseases	390–459	0.9	1.1	1.1	0.9	1.4	1.2
Pneumonia and influenza	480–483, 485–486	8.8	8.3	7.0	8.9	7.7	8.8
Congenital anomalies	740–759	13.7	12.2	12.8	15.5	13.3	14.2
Accidents and adverse effects	E800–E949, E990–E999	29.1	30.6	31.8	34.5	33.6	31.9
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.6	0.6	0.5	0.4	0.5	0.2
Motor vehicle accidents	E810–E825	5.3	4.9	5.2	5.1	4.7	4.8
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	6.4	6.8	7.0	9.6	7.1	7.1
Accident caused by fire	E890–E899	4.2	4.9	4.3	5.7	5.9	4.4
Drowning	E910	4.5	4.8	5.4	4.9	5.1	4.3
Homicide and legal intervention	E960–E978	0.7	0.8	1.1	1.6	1.6	1.1
United States, female							
All causes	001–999	41.0	42.7	39.0	39.9	38.2	36.2
Infectious and parasitic diseases	001–139	2.7	2.6	2.3	2.9	3.1	3.0
HIV infection	*042–*044	0.8	1.1	1.0	1.3	1.3	1.5
Neoplasms	140–239	3.8	3.7	3.4	3.3	3.5	2.8
Diseases of nervous system	320–389	2.7	2.8	2.7	3.0	2.7	2.6
Cardiovascular diseases	390–459	2.4	2.6	2.3	2.1	2.1	1.9
Pneumonia and influenza	480–487	1.1	1.1	1.2	1.2	1.0	1.1
Congenital anomalies	740–759	5.8	5.4	5.2	5.4	4.6	4.2
Accidents and adverse effects	E800–E949	13.7	14.8	12.6	13.6	12.9	12.0
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.2	0.1	0.2	0.1	0.2	0.1
Motor vehicle accidents	E810–E825	5.6	5.5	4.9	5.2	5.4	4.8
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.3	0.3	0.2	0.4	0.3	0.1
Accident caused by fire	E890–E899	2.9	3.4	2.6	3.0	2.8	2.3
Drowning	E910	2.5	2.6	2.6	2.3	2.2	2.4
Homicide and legal intervention	E960–E978	2.4	2.6	2.5	2.5	2.7	2.6

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

NOTE: HIV is human immunodeficiency virus.

SOURCES: Russian Federation: Rates computed by MedSocEconomInform from data provided by Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics; rates computed by Office of International Statistics from data supplied by the Division of Vital Statistics.

Table 18. Mortality rates per 100,000 population 5–9 years of age, by cause and sex: Russian Federation and United States, 1990–95

Country and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, both sexes				Deaths per 100,000 population			
All causes	001–999	53.3	58.9	56.4	57.0	52.9	55.8
Infectious and parasitic diseases	001–139	1.0	1.1	1.1	1.2	1.8	2.0
Neoplasms	140–239	7.3	7.1	7.3	6.5	6.2	6.1
Diseases of nervous system	320–389	4.5	4.8	4.5	4.9	4.8	4.7
Pneumonia and influenza	480–483, 485–486	1.3	1.1	1.0	1.3	1.3	1.7
Congenital anomalies	740–759	3.7	3.5	4.1	3.6	3.6	3.6
Accidents and adverse effects	E800–E949, E990–E999	29.3	34.7	31.4	31.3	27.9	30.2
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.8	1.0	0.9	1.0	0.8	0.5
Motor vehicle accidents	E810–E825	10.0	10.1	9.6	9.7	8.8	8.1
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.5	1.7	1.7	1.8	1.6	1.9
Drowning	E910	10.0	13.9	11.4	10.7	9.3	11.0
Homicide and legal intervention	E960–E978	0.8	0.7	1.0	1.2	1.3	1.1
United States, both sexes							
All causes	001–999	22.2	21.5	20.4	21.1	19.9	19.7
Infectious and parasitic diseases	001–139	1.0	0.9	1.0	1.2	1.1	1.2
HIV infection	*042–*044	0.4	0.4	0.4	0.5	0.6	0.6
Neoplasms	140–239	3.5	3.4	3.3	3.3	3.2	3.0
Diseases of nervous system	320–389	1.6	1.6	1.5	1.6	1.5	1.5
Pneumonia and influenza	480–487	0.4	0.4	0.3	0.4	0.3	0.4
Congenital anomalies	740–759	1.6	1.5	1.3	1.5	1.3	1.3
Accidents and adverse effects	E800–E949	9.8	9.5	8.9	8.6	8.5	8.4
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.2	0.2	0.2	0.2	0.2	0.2
Motor vehicle accidents	E810–E825	5.4	5.1	4.9	4.7	4.7	4.7
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.1	0.1	0.1	0.1	0.1	0.1
Drowning	E910	1.3	1.2	1.0	0.9	0.9	1.1
Homicide and legal intervention	E960–E978	0.9	0.8	0.8	1.0	0.8	0.8
Russian Federation, male							
All causes	001–999	69.1	77.2	73.0	71.5	64.9	69.7
Infectious and parasitic diseases	001–139	1.2	1.2	1.1	1.2	2.0	2.4
Neoplasms	140–239	8.1	8.0	8.6	7.1	6.9	6.8
Diseases of nervous system	320–389	5.2	5.6	5.4	5.2	5.0	5.6
Pneumonia and influenza	480–483, 485–486	1.6	1.2	1.0	1.4	1.4	1.7
Congenital anomalies	740–759	4.0	3.6	4.4	3.9	3.8	3.8
Accidents and adverse effects	E800–E949, E990–E999	42.1	50.6	44.8	43.2	37.3	40.6
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	1.2	1.4	1.2	1.4	1.1	0.7
Motor vehicle accidents	E810–E825	13.2	13.4	12.8	12.7	10.9	10.4
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.6	2.1	1.9	1.8	1.8	1.9
Drowning	E910	16.1	21.9	17.9	16.5	14.2	16.4
Homicide and legal intervention	E960–E978	0.7	0.6	0.8	1.1	1.3	1.3
United States, male							
All causes	001–999	25.6	24.5	23.7	23.2	22.6	22.5
Infectious and parasitic diseases	001–139	1.0	0.9	1.0	1.0	1.0	1.2
HIV infection	*042–*044	0.3	0.4	0.5	0.5	0.5	0.6
Neoplasms	140–239	3.7	3.7	3.7	3.6	3.4	3.2
Diseases of nervous system	320–389	1.8	1.6	1.7	1.9	1.8	1.5
Pneumonia and influenza	480–487	0.4	0.4	0.3	0.4	0.4	0.3
Congenital anomalies	740–759	1.7	1.6	1.3	1.5	1.2	1.3
Accidents and adverse effects	E800–E949	12.2	12.0	11.3	10.3	10.4	10.3
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.4	0.3	0.3	0.3	0.3	0.3
Motor vehicle accidents	E810–E825	6.4	6.3	6.1	5.4	5.8	5.6
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.1	0.1	0.1	0.1	0.1	0.1
Drowning	E910	1.8	1.8	1.5	1.3	1.4	1.7
Homicide and legal intervention	E960–E978	0.8	0.8	0.8	1.1	0.8	0.9

See footnotes at end of table.

Table 18. Mortality rates per 100,000 population 5–9 years of age, by cause and sex: Russian Federation and United States, 1990–95—Con.

Country and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, female		Deaths per 100,000 population					
All causes	001–999	36.9	40.0	39.2	41.9	40.4	41.4
Infectious and parasitic diseases	001–139	0.8	1.0	1.2	1.1	1.7	1.7
Neoplasms	140–239	6.5	6.1	5.9	5.8	5.5	5.4
Diseases of nervous system	320–389	3.8	4.0	3.7	4.6	4.6	3.6
Pneumonia and influenza	480–483, 485–486	1.1	1.1	1.0	1.2	1.1	1.6
Congenital anomalies	740–759	3.5	3.4	3.8	3.2	3.4	3.4
Accidents and adverse effects	E800–E949, E990–E999	16.1	18.4	17.6	18.9	18.1	19.3
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.4	0.5	0.5	0.6	0.6	0.4
Motor vehicle accidents	E810–E825	6.6	6.8	6.3	6.6	6.7	5.8
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.4	1.2	1.4	1.8	1.4	1.8
Drowning	E910	3.6	5.5	4.6	4.7	4.1	5.4
Homicide and legal intervention	E960–E978	0.9	0.9	1.1	1.2	1.3	1.0
United States, female							
All causes	001–999	18.5	18.4	16.8	19.0	17.0	16.7
Infectious and parasitic diseases	001–139	0.9	0.9	0.9	1.3	1.2	1.3
HIV infection	*042–*044	0.4	0.4	0.3	0.6	0.6	0.6
Neoplasms	140–239	3.1	3.0	3.0	3.0	2.8	2.7
Diseases of nervous system	320–389	1.3	1.6	1.4	1.3	1.1	1.4
Pneumonia and influenza	480–487	0.4	0.3	0.2	0.4	0.2	0.4
Congenital anomalies	740–759	1.5	1.5	1.3	1.5	1.3	1.2
Accidents and adverse effects	E800–E949	7.3	6.9	6.4	6.8	6.4	6.4
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.1	0.2	0.2	0.2	0.2	0.1
Motor vehicle accidents	E810–E825	4.3	3.9	3.7	4.0	3.6	3.8
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.1	0.1	0.0	0.1	0.1	0.1
Drowning	E910	0.8	0.6	0.5	0.5	0.5	0.5
Homicide and legal intervention	E960–E978	1.0	0.8	0.8	1.0	0.9	0.7

0.0 Quantity more than zero but less than 0.05.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

NOTE: HIV is human immunodeficiency virus.

SOURCES: Russian Federation: Rates computed by MedSocEconomInform from data provided by Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics; rates computed by Office of International Statistics from data supplied by the Division of Vital Statistics.

Table 19. Mortality rates per 100,000 population 10–14 years of age, by cause and sex: Russian Federation and United States, 1990–95

Country, sex, and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, both sexes				Deaths per 100,000 population			
All causes	001–999	44.2	51.2	49.9	52.5	49.5	52.0
Neoplasms	140–239	5.7	6.3	6.4	6.0	5.4	5.2
Diseases of nervous system	320–389	3.2	3.8	4.0	4.0	3.7	4.3
Cardiovascular diseases	390–459	0.9	1.0	1.0	1.2	1.2	1.1
Congenital anomalies	740–759	1.9	2.0	2.1	2.2	1.8	1.8
Accidents and adverse effects	E800–E949, E990–E999	22.0	26.3	23.9	24.8	23.9	25.8
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	1.2	1.1	1.3	1.2	1.0	0.8
Motor vehicle accidents	E810–E825	7.6	8.2	7.4	7.1	6.6	6.0
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.3	1.5	1.4	1.6	1.7	1.5
Drowning	E910	4.9	7.4	5.5	6.3	6.4	8.1
Suicide	E950–E959	2.8	3.1	3.3	3.6	3.7	3.5
Homicide and legal intervention	E960–E978	1.3	1.2	1.6	2.5	1.8	1.7
United States, both sexes							
All causes	001–999	26.0	25.8	24.6	25.6	25.2	25.5
Neoplasms	140–239	3.4	3.2	3.2	2.9	3.0	3.0
Diseases of nervous system	320–389	1.6	1.6	1.5	1.7	1.5	1.6
Cardiovascular diseases	390–459	1.4	1.2	1.1	1.3	1.4	1.2
Congenital anomalies	740–759	1.1	1.2	1.1	1.1	1.0	1.1
Accidents and adverse effects	E800–E949	11.0	10.9	9.7	10.1	10.2	10.2
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.4	0.5	0.4	0.4	0.4	0.4
Motor vehicle accidents	E810–E825	6.4	6.1	5.5	5.9	6.0	6.1
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.2	0.2	0.1	0.1	0.2	0.1
Drowning	E910	1.4	1.2	1.1	1.2	1.1	1.2
Suicide	E950–E959	1.5	1.5	1.7	1.7	1.7	1.7
Homicide and legal intervention	E960–E978	2.1	2.2	2.4	2.5	2.2	2.1
Russian Federation, male							
All causes	001–999	58.9	68.6	65.8	68.4	64.1	66.7
Neoplasms	140–239	6.1	7.6	7.4	6.5	5.8	5.7
Diseases of nervous system	320–389	3.5	4.5	4.6	4.2	4.1	4.7
Cardiovascular diseases	390–459	1.0	1.1	1.1	1.3	1.0	1.2
Congenital anomalies	740–759	2.0	2.2	2.1	2.3	1.9	1.8
Accidents and adverse effects	E800–E949, E990–E999	32.7	38.1	34.9	35.7	33.6	35.9
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	2.0	1.4	2.0	1.8	1.5	1.0
Motor vehicle accidents	E810–E825	10.3	11.7	10.1	9.5	8.8	7.8
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.7	1.9	1.8	1.8	2.2	1.8
Drowning	E910	7.2	9.9	7.6	8.5	8.3	11.0
Suicide	E950–E959	4.5	5.0	5.3	5.6	5.9	5.7
Homicide and legal intervention	E960–E978	1.5	1.3	1.9	3.3	2.3	2.0
United States, male							
All causes	001–999	31.6	32.9	30.7	31.7	31.2	31.0
Neoplasms	140–239	3.7	3.8	3.7	3.3	3.3	3.3
Diseases of nervous system	320–389	1.7	1.9	1.7	2.0	1.8	1.8
Cardiovascular diseases	390–459	1.5	1.3	1.3	1.4	1.6	1.3
Congenital anomalies	740–759	1.0	1.3	1.2	1.3	1.2	1.1
Accidents and adverse effects	E800–E949	14.8	15.1	13.2	13.3	13.5	13.2
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.7	0.7	0.6	0.5	0.6	0.5
Motor vehicle accidents	E810–E825	7.6	7.9	7.1	7.2	7.3	7.2
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.3	0.3	0.2	0.1	0.2	0.2
Drowning	E910	2.2	1.8	1.6	1.9	1.8	1.7
Suicide	E950–E959	2.2	2.3	2.4	2.4	2.4	2.6
Homicide and legal intervention	E960–E978	2.6	2.9	3.2	3.2	2.9	3.0

See footnotes at end of table.

Table 19. Mortality rates per 100,000 population 10–14 years of age, by cause and sex: Russian Federation and United States, 1990–95—Con.

Country, sex, and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, female				Deaths per 100,000 population			
All causes	001–999	29.0	33.3	33.4	36.2	34.5	36.9
Neoplasms	140–239	5.3	5.0	5.4	5.6	5.0	4.7
Diseases of nervous system	320–389	3.0	3.0	3.4	3.7	3.3	3.9
Cardiovascular diseases	390–459	0.8	0.9	0.9	1.1	1.3	1.0
Congenital anomalies	740–759	1.8	1.9	2.1	2.0	1.8	1.8
Accidents and adverse effects	E800–E949, E990–E999	10.9	14.0	12.6	13.6	14.0	15.4
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.4	0.7	0.6	0.6	0.4	0.4
Motor vehicle accidents	E810–E825	4.9	4.6	4.6	4.6	4.4	4.1
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.8	1.1	0.9	1.4	1.1	1.2
Drowning	E910	2.6	4.8	3.4	4.1	4.4	5.0
Suicide	E950–E959	0.9	1.1	1.4	1.6	1.3	1.2
Homicide and legal intervention	E960–E978	1.1	1.1	1.2	1.6	1.2	1.4
United States, female							
All causes	001–999	20.2	18.2	18.2	19.2	18.8	19.6
Neoplasms	140–239	3.0	2.6	2.8	2.5	2.6	2.6
Diseases of nervous system	320–389	1.4	1.4	1.3	1.4	1.2	1.5
Cardiovascular diseases	390–459	1.4	1.2	1.0	1.1	1.2	1.1
Congenital anomalies	740–759	1.1	1.1	1.0	1.0	0.9	1.1
Accidents and adverse effects	E800–E949	7.1	6.4	6.1	6.7	6.7	7.1
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.2	0.3	0.3	0.4	0.3	0.3
Motor vehicle accidents	E810–E825	5.1	4.2	3.9	4.4	4.7	4.9
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.1	0.2	0.1	0.2	0.1	0.1
Drowning	E910	0.6	0.5	0.6	0.5	0.4	0.6
Suicide	E950–E959	0.8	0.7	0.9	0.9	1.0	0.8
Homicide and legal intervention	E960–E978	1.5	1.3	1.6	1.8	1.5	1.3

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCES: Russian Federation: Rates computed by MedSocEconomInform from data provided by Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics; rates computed by Office of International Statistics from data supplied by the Division of Vital Statistics.

Table 20. Mortality rates per 100,000 population 15–19 years of age, by cause and sex: Russian Federation and United States, 1990–95

Country and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, both sexes				Deaths per 100,000 population			
All causes	001–999	113.2	117.0	126.9	145.0	147.3	163.2
Neoplasms	140–239	8.4	8.7	8.6	8.2	8.1	8.1
Diseases of nervous system	320–389	3.8	4.5	5.4	5.0	4.7	5.2
Cardiovascular diseases	390–459	4.7	4.7	4.8	5.0	5.8	5.5
Pneumonia and influenza	480–483, 485–486	1.3	1.3	1.5	1.5	1.5	1.9
Congenital anomalies	740–759	1.6	1.5	1.8	1.7	1.7	1.5
Accidents and adverse effects	E800–E949, E990–E999	52.0	51.9	52.4	60.2	59.4	72.7
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	3.0	3.0	3.0	3.3	3.0	2.5
Motor vehicle accidents	E810–E825	25.6	23.4	22.5	23.4	22.2	21.4
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	3.8	4.0	4.3	5.8	6.3	7.0
Alcohol poisoning	E860	0.8	0.8	1.4	2.3	2.4	1.9
Drowning	E910	5.3	6.1	6.0	7.5	7.8	10.2
Suicide	E950–E959	15.1	15.5	16.2	19.9	22.2	23.1
Homicide and legal intervention	E960–E978	8.7	10.2	14.1	17.5	16.9	16.2
United States, both sexes							
All causes	001–999	87.9	89.0	84.3	86.9	86.8	83.5
Neoplasms	140–239	4.5	4.6	4.5	4.4	4.4	4.1
Diseases of nervous system	320–389	2.1	2.0	2.0	2.1	2.1	2.1
Cardiovascular diseases	390–459	2.5	2.8	2.5	2.8	2.6	2.7
Pneumonia and influenza	480–487	0.5	0.5	0.5	0.6	0.5	0.5
Congenital anomalies	740–759	1.3	1.3	1.3	1.3	1.2	1.4
Accidents and adverse effects	E800–E949	42.3	40.3	36.5	37.3	37.3	36.7
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.9	1.0	0.9	0.9	0.8	0.8
Motor vehicle accidents	E810–E825	33.1	31.2	28.2	28.6	29.3	28.6
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.0	1.0	0.8	0.8	0.8	0.9
Alcohol poisoning	E860	0.1	0.0	0.1	0.0	0.0	0.1
Drowning	E910	2.4	2.4	2.0	2.2	1.8	2.2
Suicide	E950–E959	11.1	11.0	10.8	10.9	11.1	10.5
Homicide and legal intervention	E960–E978	17.0	19.6	19.3	20.7	20.3	18.2
Russian Federation, male							
All causes	001–999	161.9	166.4	180.4	209.7	212.0	239.6
Neoplasms	140–239	10.0	10.2	10.0	9.4	9.7	9.0
Diseases of nervous system	320–389	4.6	5.4	6.7	6.1	5.6	6.6
Cardiovascular diseases	390–459	6.0	6.1	6.3	6.9	7.6	7.8
Pneumonia and influenza	480–483, 485–486	1.6	1.5	1.9	2.0	1.8	2.6
Congenital anomalies	740–759	1.7	1.9	2.1	2.0	2.0	1.8
Accidents and adverse effects	E800–E949, E990–E999	79.9	78.9	78.8	90.0	87.7	112.0
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	4.5	4.9	4.4	5.2	4.6	4.0
Motor vehicle accidents	E810–E825	38.5	33.8	32.0	32.2	29.9	28.9
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	4.9	5.4	5.8	7.8	8.5	9.9
Alcohol poisoning	E860	1.3	1.4	2.3	3.9	4.0	3.2
Drowning	E910	8.6	9.6	9.4	12.3	12.6	15.9
Suicide	E950–E959	23.4	24.2	25.3	31.8	34.9	36.2
Homicide and legal intervention	E960–E978	13.4	15.8	22.1	27.6	26.3	24.8
United States, male							
All causes	001–999	127.2	128.6	122.4	126.0	126.6	119.5
Neoplasms	140–239	5.1	5.3	5.4	5.0	5.1	4.9
Diseases of nervous system	320–389	2.9	2.7	2.8	2.8	2.8	2.7
Cardiovascular diseases	390–459	3.2	3.4	3.3	3.5	3.2	3.3
Pneumonia and influenza	480–487	0.4	0.6	0.5	0.5	0.5	0.6
Congenital anomalies	740–759	1.6	1.5	1.7	1.5	1.4	1.5
Accidents and adverse effects	E800–E949	60.6	56.5	50.7	52.6	52.2	50.1
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	1.4	1.4	1.5	1.4	1.4	1.2
Motor vehicle accidents	E810–E825	45.5	41.4	37.0	38.7	38.9	36.8
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	1.4	1.5	1.2	1.2	1.2	1.4
Alcohol poisoning	E860	0.1	0.1	0.1	0.0	0.1	0.1
Drowning	E910	4.4	4.2	3.7	4.0	3.2	3.9
Suicide	E950–E959	18.1	18.0	17.8	17.6	18.2	17.4
Homicide and legal intervention	E960–E978	28.0	32.8	32.6	34.8	34.5	30.0

See footnotes at end of table.

Table 20. Mortality rates per 100,000 population 15–19 years of age, by cause and sex: Russian Federation and United States, 1990–95—Con.

Country and cause of death[1]		1990	1991	1992	1993	1994	1995
Russian Federation, female				Deaths per 100,000 population			
All causes	001–999	62.8	66.2	72.0	78.5	80.8	84.5
Neoplasms	140–239	6.9	7.2	7.3	6.9	6.4	7.2
Diseases of nervous system	320–389	3.1	3.6	4.1	3.9	3.7	3.7
Cardiovascular diseases	390–459	3.3	3.2	3.2	3.0	4.0	3.2
Pneumonia and influenza	480–483, 485–486	1.0	1.0	1.1	0.9	1.1	1.1
Congenital anomalies	740–759	1.5	1.2	1.6	1.4	1.5	1.3
Accidents and adverse effects	E800–E949, E990–E999	23.3	24.1	25.2	29.7	30.2	32.2
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	1.5	1.1	1.6	1.4	1.2	1.0
Motor vehicle accidents	E810–E825	12.2	12.6	12.8	14.4	14.2	13.6
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	2.7	2.5	2.7	3.8	4.0	4.0
Alcohol poisoning	E860	0.3	0.3	0.4	0.6	0.7	0.7
Drowning	E910	1.9	2.4	2.5	2.7	2.9	4.3
Suicide	E950–E959	6.4	6.6	6.9	7.7	9.1	9.5
Homicide and legal intervention	E960–E978	3.8	4.5	6.0	7.2	7.2	7.3
United States, female							
All causes	001–999	46.4	47.2	44.0	45.6	44.8	45.7
Neoplasms	140–239	3.9	3.8	3.7	3.8	3.7	3.2
Diseases of nervous system	320–389	1.3	1.3	1.2	1.4	1.2	1.4
Cardiovascular diseases	390–459	1.8	2.1	1.8	2.0	2.0	2.1
Pneumonia and influenza	480–487	0.5	0.4	0.5	0.6	0.5	0.3
Congenital anomalies	740–759	0.9	1.2	0.9	1.1	1.0	1.2
Accidents and adverse effects	E800–E949	23.0	23.2	21.4	21.1	21.5	22.5
Transport accidents, excluding automobile crashes	E800–E807, E826–E848	0.4	0.5	0.3	0.4	0.3	0.3
Motor vehicle accidents	E810–E825	20.0	20.5	18.8	18.0	19.1	20.0
Accidental poisoning, excluding alcohol	E850–E858, E861–E869	0.5	0.4	0.5	0.5	0.4	0.4
Alcohol poisoning	E860	0.0	- - -	0.0	0.0	- - -	0.1
Drowning	E910	0.4	0.4	0.3	0.4	0.4	0.4
Suicide	E950–E959	3.7	3.7	3.4	3.8	3.5	3.1
Homicide and legal intervention	E960–E978	5.4	5.5	5.2	5.9	5.3	5.9

0.0 Quantity is more than zero but less than 0.05.

- - - Data not available.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCES: Russian Federation: Rates computed by MedSocEconomInform from data provided by Goskomstat; United States: Centers for Disease Control and Prevention, National Center for Health Statistics; rates computed by Office of International Statistics from data supplied by the Division of Vital Statistics.

Table 21. Immunization coverage: Russian Federation and United States, selected years 1987–95

Country and type of immunization	1987	1990	1991	1992	1993	1994	1995
Russian Federation				Percent of children[1]			
Diphtheria/Tetanus (1 year)	79.9	68.5	68.8	72.6	79.2	88.1	92.7
Oral polio vaccine (1 year)	49.8	69.3	71.5	69.0	82.2	87.5	91.6
Measles (2 years)	91.9	81.1	78.7	82.6	88.2	91.3	94.1
Mumps (2 years)	58.6	58.5	56.8	61.7	66.9	71.3	77.1
Pertussis (1 year)	57.8	60.2	58.8	62.0	65.2	71.7	81.0
Tuberculosis (newborn)	92.1	91.4	88.3	86.2	86.7	95.5	96.2
United States							
Diphtheria/Tetanus	- - -	- - -	- - -	83.0	88.0	93.0	95.0
Oral polio vaccine	- - -	- - -	- - -	72.0	79.0	83.0	88.0
Measles	- - -	- - -	- - -	83.0	84.0	89.0	90.0
Pertussis	- - -	- - -	- - -	83.0	88.0	93.0	95.0
Hepatitis B	- - -	- - -	- - -	8.0	16.0	36.0	68.0
Haemophilus influenzae B	- - -	- - -	- - -	28.0	55.0	86.0	92.0

- - - Data not available.

[1]Percent of children for United States includes those 19–35 months of age.

SOURCES: Russia: States Committee for Sanitary Epidemiology and Surveillance, Ministry of Health. United States: Centers for Disease Control and Prevention (1992–93) Health Interview Survey, National Center for Health Statistics; (1994–95) National Immunization Survey, National Immunization Program; (1992) unpublished Hepatitis B data.

Table 22. Childhood morbidity rates per 100,000 population: Russian Federation, 1990–95

Age and disease category[1]		1990	1991	1992	1993	1994	1995
0–14 years of age		Rate per 100,000 population 0–14 years of age					
All causes	001–999	113,620.1	117,551.6	105,134.9	114,177.0	113,042.3	118,498.3
Infectious diseases	001–139	8,841.6	8,267.2	8,592.4	9,002.2	10,223.3	10,485.5
Neoplasms	140–239	104.4	113.6	132.8	139.3	156.1	159.4
Endocrine, nutritional, and metabolic	240–279	540.6	597.0	689.2	797.0	923.9	956.0
Blood and blood-forming organs	280–289	411.1	462.9	555.6	646.0	710.2	758.1
Nervous system and sense organs	320–389	6,215.2	6,311.8	6,827.2	7,310.9	7,710.0	8,053.6
Circulatory system	390–459	191.6	205.1	277.9	352.8	395.0	430.4
Respiratory system	460–519	78,359.7	82,200.3	67,235.2	73,475.9	68,308.9	71,526.7
Digestive system	520–579	3,876.2	4,070.5	4,686.1	5,111.0	5,183.1	5,754.6
Genitourinary system	580–629	770.5	810.0	979.1	1,105.2	1,303.2	1,397.7
Skin and subcutaneous tissue	680–709	4,847.8	4,843.0	5,063.9	5,749.2	6,847.9	7,240.0
Musculoskeletal system and connective tissue	710–739	843.7	915.0	1,130.9	1,345.1	1,580.6	1,707.6
Congenital anomalies	740–759	270.0	311.8	335.5	347.3	383.7	407.0
Injury	800–999	7,034.3	6,796.8	6,739.1	6,695.9	6,982.5	7,214.5
15–17 years of age		Rate per 100,000 population 15–17 years of age					
All causes	001–999	- - -	57,770.9	60,864.5	67,037.3	66,842.8	71,753.6
Infectious diseases	001–139	- - -	2,124.7	2,338.5	3,074.8	3,735.8	4,135.6
Neoplasms	140–239	- - -	67.3	87.0	104.1	119.2	131.4
Endocrine, nutritional, and metabolic	240–279	- - -	523.0	759.2	840.3	1,098.6	1,161.8
Blood and blood-forming organs	280–289	- - -	111.0	148.2	183.9	242.8	287.3
Nervous system and sense organs	320–389	- - -	3,320.9	4,079.7	4,549.5	4,944.0	5,309.3
Circulatory system	390–459	- - -	389.3	496.1	535.2	614.5	649.9
Respiratory system	460–519	- - -	33,175.0	32,396.3	35,389.7	32,031.9	35,304.3
Digestive system	520–579	- - -	2,918.7	3,643.8	3,854.4	4,316.0	4,308.1
Genitourinary system	580–629	- - -	1,061.7	1,465.3	1,776.2	2,163.8	2,495.5
Skin and subcutaneous tissue	680–709	- - -	3,175.4	3,689.3	4,278.9	5,087.1	5,238.5
Musculoskeletal system and connective tissue	710–739	- - -	1,098.6	1,502.5	1,655.3	1,850.4	2,094.7
Congenital anomalies	740–759	- - -	79.4	101.3	108.5	128.6	138.7
Injury	800–999	- - -	8,568.8	8,989.1	9,446.9	9,191.0	9,078.1

- - - Data not available.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCE: Ministry of Health. *Maternal and Child Health Services.* Moscow, 1997.

Table 23. Hospital discharge rates per 100,000 population, by diagnosis and age: United States, 1990–95

Age and disease category[1]		1990	1991	1992	1993	1994	1995
1–4 years of age		Discharge rates per 100,000 population					
All causes	001–999	4,852.4	4,834.8	5,193.6	4,143.4	4,310.2	4,724.4
Infectious diseases	001–139	388.7	421.0	414.6	326.3	335.3	381.9
Neoplasms	140–239	103.0	105.0	137.1	88.8	79.2	89.1
Endocrine, nutritional, and metabolic	240–279	236.9	183.4	275.6	207.2	327.3	400.4
Blood and blood-forming organs	280–289	104.3	111.4	120.5	95.9	94.8	124.7
Nervous system and sense organs	320–389	401.2	353.0	372.5	248.6	248.2	270.2
Circulatory system	390–459	38.2	44.3	63.9	52.0	62.6	38.7
Respiratory system	460–519	1,849.4	1,939.4	1,936.5	1,635.6	1,676.6	1,939.6
Digestive system	520–579	425.0	350.7	477.5	388.4	391.8	351.4
Genitourinary system	580–629	117.8	124.4	135.8	135.5	107.9	116.0
Skin and subcutaneous tissue	680–709	122.8	113.1	116.8	76.2	77.8	96.2
Musculoskeletal system and connective tissue	710–739	47.2	71.2	59.2	*	34.5	52.6
Congenital anomalies	740–759	258.9	228.6	250.4	172.2	168.0	197.4
Injury	800–999	549.9	592.5	603.7	517.3	516.6	459.3
5–9 years of age							
All causes	001–999	2,486.9	2,543.0	2,369.3	1,920.4	2,090.5	2,233.3
Infectious diseases	001–139	143.1	166.1	157.7	139.4	123.2	136.3
Neoplasms	140–239	48.7	82.2	87.0	26.9	103.1	61.7
Endocrine, nutritional, and metabolic	240–279	117.4	97.8	97.4	95.0	90.4	120.9
Blood and blood-forming organs	280–289	88.0	63.3	58.5	65.0	79.8	100.1
Nervous system and sense organs	320–389	177.6	154.8	117.5	84.4	109.2	94.4
Circulatory system	390–459	*	*	*	*	*	*
Respiratory system	460–519	751.3	753.0	604.7	546.8	531.9	670.3
Digestive system	520–579	272.9	272.2	259.1	212.9	242.5	279.9
Genitourinary system	580–629	104.3	77.6	104.2	67.4	74.9	62.3
Skin and subcutaneous tissue	680–709	62.6	68.7	63.1	65.3	54.6	46.0
Musculoskeletal system and connective tissue	710–739	64.0	82.8	59.1	64.0	69.2	54.1
Congenital anomalies	740–759	78.4	109.3	93.0	62.4	78.9	69.2
Injury	800–999	386.6	440.1	450.1	320.8	336.8	345.9
10–14 years of age							
All causes	001–999	2,654.5	2,795.6	2,591.2	2,274.7	2,354.7	2,339.0
Infectious diseases	001–139	106.1	93.4	93.3	112.1	77.9	85.2
Neoplasms	140–239	69.4	84.6	87.9	74.3	60.9	36.8
Endocrine, nutritional, and metabolic	240–279	133.7	159.0	133.5	97.5	125.8	123.7
Blood and blood-forming organs	280–289	134.7	114.3	88.7	96.8	63.5	72.5
Nervous system and sense organs	320–389	121.0	103.6	108.4	78.2	93.6	80.3
Circulatory system	390–459	*	33.2	31.8	39.8	39.0	*
Respiratory system	460–519	432.9	470.0	389.7	332.7	307.2	386.5
Digestive system	520–579	371.3	348.2	324.0	275.7	292.3	270.2
Genitourinary system	580–629	102.1	116.6	83.0	81.5	88.1	95.7
Skin and subcutaneous tissue	680–709	39.7	62.9	41.4	34.2	47.3	40.8
Musculoskeletal system and connective tissue	710–739	98.0	123.6	90.4	100.6	91.8	90.1
Congenital anomalies	740–759	72.0	57.9	63.1	55.9	54.5	64.0
Injury	800–999	511.7	521.6	545.2	422.1	423.2	420.6
Complications of pregnancy, childbirth, and the puerperium; delivery	630–676, V27	101.1	100.6	68.4	72.6	106.5	73.5

See footnotes at end of table.

Table 23. Hospital discharge rates per 100,000 population, by diagnosis and age: United States, 1990–95—Con.

Age and disease category[1]		1990	1991	1992	1993	1994	1995
15–19 years of age		Discharge rates per 100,000 population					
All causes	001–999	7,816.0	7,950.7	7,450.7	7,005.2	7,448.3	6,739.4
Infectious diseases	001–139	160.7	111.8	131.7	135.0	128.3	113.2
Neoplasms	140–239	65.6	89.5	95.1	58.8	76.7	62.8
Endocrine, nutritional, and metabolic	240–279	132.1	143.6	146.7	121.7	148.4	155.5
Blood and blood-forming organs	280–289	91.3	122.6	76.2	148.6	161.0	114.4
Nervous system and sense organs	320–389	115.9	132.3	119.5	69.0	69.2	63.9
Circulatory system	390–459	83.4	62.3	60.6	60.9	48.5	66.3
Respiratory system	460–519	416.2	389.9	375.0	335.2	344.0	298.4
Digestive system	520–579	551.9	500.6	532.7	407.9	487.3	422.4
Genitourinary system	580–629	394.7	406.5	353.9	285.6	279.6	262.3
Skin and subcutaneous tissue	680–709	69.3	80.9	84.2	55.8	40.4	59.4
Musculoskeletal system and connective tissue	710–739	193.2	241.6	227.5	173.0	142.2	175.9
Congenital anomalies	740–759	52.7	63.3	36.5	*	34.3	27.5
Injury	800–999	1,083.6	1,042.4	1,004.6	935.6	975.0	855.2
Complications of pregnancy, childbirth, and the puerperium; delivery	630–676, V27	3,542.1	3,727.9	3,395.6	3,369.2	3,420.5	3,075.9

* Figures do not meet standards of reliability or precision.

[1]Codes are from the *International Classification of Diseases, Ninth Revision.*

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics; rates computed by the Office of International Statistics from data supplied by the Division of Health Care Statistics.

Table 24. Rates of selected notifiable diseases, by type of disease and age group: Russian Federation and United States, 1990–95

Country and disease category	1990	1991	1992	1993	1994	1995
Russia, 0–14 years of age	Cases per 100,000 population					
AIDS	0.0	0.0	0.0	0.0	0.0	0.0
Diphtheria	1.0	1.8	3.2	13.6	42.8	38.2
Hepatitis, all types	551.0	443.9	286.8	251.2	248.9	251.2
Salmonellosis, excluding typhoid fever	119.9	121.1	138.0	117.2	121.5	118.4
Syphilis, primary and secondary	0.1	0.2	0.4	0.8	2.4	4.8
Gonorrhea	4.0	4.1	5.4	8.0	8.5	7.4
Tuberculosis	7.8	8.4	9.1	10.5	12.0	13.0
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.5
Russia, 15–17 years of age						
AIDS	- - -	- - -	- - -	- - -	- - -	- - -
Diphtheria	- - -	- - -	- - -	- - -	- - -	- - -
Hepatitis, all types	- - -	- - -	- - -	- - -	- - -	- - -
Salmonellosis, excluding typhoid fever	- - -	- - -	- - -	- - -	- - -	- - -
Syphilis, primary and secondary	5.7	9.4	20.2	57.2	139.5	278.0
Gonorrhea	255.6	261.1	317.8	421.4	350.5	292.1
Tuberculosis	16.1	16.6	16.5	18.6	19.1	20.7
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0
United States, 0–4 years of age						
AIDS	3.2	3.2	3.6	3.4	3.0	2.3
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis A	11.2	8.7	8.3	8.0	10.4	10.5
Hepatitis B	1.6	1.1	1.1	0.7	0.6	0.4
Hepatitis C, non-A, non-B	0.1	0.2	0.4	0.3	0.2	0.2
Salmonellosis, excluding typhoid fever	69.1	67.3	65.8	55.4	59.3	62.2
Syphilis, primary and secondary	0.0	0.0	0.0	0.0	0.0	0.0
Gonorrhea	0.0	0.0	0.0	0.0	0.0	0.0
Tuberculosis	5.0	5.3	5.5	5.5	5.2	4.7
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0
United States, 5–9 years of age						
AIDS	0.7	0.6	0.8	0.7	0.6	0.7
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis A	26.9	20.2	18.5	16.6	21.6	21.1
Hepatitis B	0.7	0.7	0.5	0.5	0.4	0.4
Hepatitis C, non-A, non-B	0.2	0.1	0.1	0.1	0.1	0.0
Salmonellosis, excluding typhoid fever	15.6	15.3	14.4	12.7	14.9	14.8
Syphilis, primary and secondary	0.0	0.0	0.0	0.0	0.0	0.0
Gonorrhea	0.0	0.0	0.0	0.0	0.0	0.0
Tuberculosis	2.0	2.2	2.1	1.9	2.1	2.0
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0
United States, 10–14 years of age						
AIDS	0.3	0.5	0.5	0.6	0.6	0.6
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis A	17.7	14.4	13.2	11.4	13.3	13.9
Hepatitis B	1.2	1.2	1.2	1.1	0.9	0.7
Hepatitis C, non-A, non-B	0.2	0.1	0.2	0.2	0.1	0.1
Salmonellosis, excluding typhoid fever	10.1	9.3	8.8	7.9	8.5	8.6
Syphilis, primary and secondary	1.1	0.4	0.4	0.9	0.6	0.6
Gonorrhea	68.9	64.6	57.8	48.5	48.3	41.3
Tuberculosis	1.8	1.4	1.4	1.6	1.5	1.3
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0
United States, 15–19 years of age						
AIDS	1.0	1.0	1.1	1.3	1.3	1.3
Diphtheria	0.0	0.0	0.0	0.0	0.0	0.0
Hepatitis A	13.4	10.3	10.4	10.7	11.6	14.8
Hepatitis B	8.6	7.9	6.5	5.3	4.6	3.9
Hepatitis C, non-A, non-B	0.6	0.5	0.6	0.4	0.4	0.2
Salmonellosis, excluding typhoid fever	11.4	9.6	10.0	9.2	8.7	9.4
Syphilis, primary and secondary	15.2	12.5	8.5	17.0	12.7	10.1
Gonorrhea	1,114.4	1,031.4	889.6	728.3	733.7	870.7
Tuberculosis	3.2	3.5	3.4	3.4	3.2	3.0
Poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0

0.0 Quantity more than zero but less than 0.05. - - - Data not available.

NOTE: AIDS is acquired immunodeficiency syndrome.

SOURCES: Russia: 0–14 years: *States Committee for Sanitary Epidemiology and Surveillance of Russia Information Yearbook*. Moscow, 1997; 15–17 years: Ministry of Health. United States: Centers for Disease Control and Prevention, National Center for Health Statistics.

Glossary

This glossary is an alphabetical listing of terms used in this report. It includes cross-references to related terms and synonyms and *International Classification of Diseases* (ICD) codes for cause of death and diagnostic and procedure categories.

Abortion—The Centers for Disease Control and Prevention's (CDC) surveillance program counts legal abortions only. For surveillance purposes, legal abortion is defined as a procedure performed by a licensed physician or someone acting under the supervision of a licensed physician to induce the termination of a pregnancy.

Acquired immunodeficiency syndrome (AIDS)— All 50 States and the District of Columbia report AIDS cases to CDC using a uniform case definition and case report form. The case reporting definitions were expanded in 1985 *(MMWR* 1985; 34:373–5); 1987 *(MMWR* 1987; 36 (supp. no. 1S): 1S-15S); and 1993 *(MMWR* 1993; 41 (supp. no. RR-17)). These data are published semiannually by CDC in HIV/AIDS Surveillance Report. See related *Human immunodeficiency virus (HIV) infection*.

In Russia a reporting form is completed when each AIDS case is reported. Monthly reports on confirmed AIDS cases are published. The monthly results can be corrected during the year as necessary. All confirmed AIDS cases are included in the annual statistical report.

Alan Guttmacher Institute— The Alan Guttmacher Institute (AGI) conducts an annual survey of abortion providers. Data are collected from hospitals, nonhospital clinics, and physicians identified as providers of abortion services. A universal survey of 3,092 hospitals, nonhospital clinics, and individual physicians was compiled. To assess the completeness of the provider and abortion counts, supplemental surveys were conducted of a sample of obstetrician-gynecologists and a sample of hospitals (not in original universe) that were identified as providing abortion services through the American Hospital Association Survey.

The number of abortions estimated by AGI through the mid to late 1980's was about 20 percent more than the number reported to the Centers for Disease Control and Prevention (CDC). Since 1989 the AGI estimates have been about 12 percent higher than those reported by CDC.

For more information, write: The Alan Guttmacher Institute, 120 Wall Street, New York, NY 10005; or visit AGI's home page at http://www.agi-usa.org.

Average length of stay— The average length of stay is computed by dividing the total number of days of care (counting the date of admission but not the date of discharge) by the number of patients admitted (Russian Federation) or discharged (United States). See related *Discharge*.

Bed—Any bed that is set up and staffed for use by inpatients is counted as a bed in a facility. For the American Hospital Association, the count is of the average number of beds, cribs, and pediatric bassinets during an entire reporting period. The World Health Organization, as well as the Russian Federation, defines a hospital bed as one regularly maintained and staffed for the accommodation and full-time care of a succession of inpatients and situated in a part of the hospital where continuous medical care for inpatients is provided. In Russia the bed is the unit for determining State financial support. See related *Hospital*.

Birth rate—See *Rate: Birth and related rates.*

Birthweight—The first weight of a newborn obtained after birth. Low birthweight is defined as less than 2,500 grams or 5 pounds 8 ounces.

Cause of death—For the purpose of national mortality statistics, every death is attributed to one underlying condition, based on the information reported on the death certificate and using international rules for selecting the underlying cause of death from the reported conditions. Since 1979 the *International Classification of Diseases, Ninth Revision* (ICD–9) has been used for coding cause of death.

Crude birth rate; crude death rate—See *Rate: Birth and related rates; Death and related rates.*

Death rate—See *Rate: Death rates.*

Diagnosis—See *First-listed diagnosis*.

Discharge—The National Health Interview Survey defines a hospital discharge as the completion of any continuous period of stay of 1 night or more in a hospital as an inpatient, not including the period of stay of a well newborn infant. According to the National Hospital Discharge Survey, American Hospital Association, and National Master Facility Inventory, discharge is the formal release of an inpatient by a hospital (excluding newborn infants), that is, the termination of a period of hospitalization (including stays of 0 nights) by death or by disposition to a place of residence, nursing home, or another hospital. See related *Average length of stay*.

Early neonatal mortality rate—See *Rate; Death and related rates.*

Fertility rate —See *Rate: Birth and related rates.*

Fetal death—In the World Health Organization's definition, which has also been adopted by the United Nations, the United States, and the Russian Federation, a fetal death is death before the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life, such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles. For statistical purposes, fetal deaths are classified according to gestational age. In this report tabulations are shown for fetal deaths with stated or presumed gestation of 28 weeks or more, also known as late fetal deaths or stillbirths. See related *Live birth; Rate: Death and related rates.*

First-listed diagnosis—In the National Hospital Discharge Survey this is the

first recorded final diagnosis on the medical record face sheet (summary sheet).

Gestation—For the National Vital Statistics System and the Centers for Disease Control and Prevention's Abortion Surveillance, the period of gestation is defined as beginning with the first day of the last normal menstrual period and ending with the day of birth or day of termination of pregnancy. See related *Abortion; Fetal death; Live birth*.

Goskomstat—State Statistical Committee of the Russian Federation. Goskomstat is responsible for collecting and publishing population estimates, vital statistics, and other data from other ministries and Federal agencies.

Gross Domestic Product (GDP)—GDP is the market value of the goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers (that is, the workers and, for property, the owners) may be either U.S. residents or residents of the rest of the world.

Health maintenance organization (HMO)—An HMO is a prepaid health plan delivering comprehensive care to members through designated providers, having a fixed monthly payment for health care services, and requiring members to be in a plan for a specified period of time (usually 1 year). Pure HMO enrollees use only the prepaid capitated health services of the HMO's panel of medical care providers. Open-ended HMO enrollees use the prepaid HMO health services but in addition may receive medical care from providers who are not part of the HMO's panel. There is usually a substantial deductible, copayment, or coinsurance associated with the use of nonpanel providers. These open-ended products are governed by State HMO regulations.

HIV—See *Human immunodeficiency virus infection.*

Hospital—Hospitals are licensed institutions with at least 6 beds in the United States and normally 15 beds or more in Russia. The primary function of a hospital is to provide diagnostic and therapeutic patient services for medical conditions by an organized physician staff and to have continuous nursing services under the supervision of registered nurses. See related *Average length of stay; Bed.*

Short-stay hospitals in the United States are those in which the average length of stay is less than 30 days. In Russia there are only general hospitals, which have both long- and short-stay patients.

Specialty hospitals, such as psychiatric, tuberculosis, chronic disease, rehabilitation, maternity, and alcoholic or narcotic provide a particular type of service to the majority of their patients.

Human immunodeficiency virus (HIV) infection—(For mortality coding) Beginning with data for 1987, NCHS introduced category numbers *042-*044 for classifying and coding HIV infection as a cause of death. The asterisk before the category numbers indicates that these codes are not part of the *International Classification of Diseases, Ninth Revision* (ICD–9). Beginning with 1987, death statistics for HIV infection are not strictly comparable with data for earlier years. (For morbidity coding) Diagnosis data are coded using the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). During 1984 and 1985, only data for AIDS (ICD–9–CM 279.19) were included. Beginning with data for 1986, discharges with a diagnosis of HIV infection (ICD–9–CM 042–044, 279.19, and 795.8) were included. See related *Acquired immunodeficiency syndrome; Cause of death; International Classification of Diseases, Ninth Revision; International Classification of Diseases, Ninth Revision, Clinical Modification.*

ICD; ICD codes—See *Cause of death; International Classification of Diseases, Ninth Revision.*

Incidence—Incidence is the number of cases of disease having their onset during a prescribed period of time. It is often expressed as a rate (for example, the incidence of measles per 1,000 children 5–15 years of age during a specified year). Incidence is a measure of morbidity or other events that occur within a specified period of time. See related *Prevalence.*

Infant death—An infant death is the death of a live-born child before his or her first birthday. Deaths in the first year of life may be further classified according to age as neonatal and postneonatal. *Neonatal deaths* are those that occur during the first 27 days of life; *postneonatal deaths* are those that occur between 28 days and 1 year of age. See *Live birth; Rate: Death and related rates.*

International Classification of Diseases, Ninth Revision (ICD–9)—The *International Classification of Diseases* (ICD) classifies mortality information for statistical purposes. The ICD was first used in 1900 and has been revised about every 10 years since then. The ICD–9, published in 1977, is used to code U.S. mortality data beginning with data year 1979. See related *Cause of death*; *International Classification of Diseases, Ninth Revision, Clinical Modification.*

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM)—The ICD–9–CM is based on and is completely compatible with the *International Classification of Diseases, Ninth Revision.* The ICD–9–CM is used to code morbidity data, and the ICD–9 is used to code mortality data.

ICD–9 and ICD–9–CM are arranged in 17 main chapters. Most of the diseases are arranged according to their principal anatomical site, with special chapters for infective and parasitic diseases; neoplasms; endocrine, metabolic, and nutritional diseases; mental diseases; complications of pregnancy and childbirth; certain diseases peculiar to the perinatal period; and ill-defined conditions. In addition, two supplemental classifications are provided: the classification of factors influencing health status and contact with health service and the classification of external causes of injury and

poisoning. See related *International Classification of Diseases, Ninth Revision.*

Late fetal death rate—See *Rate: Death and related rates.*

Life expectancy—Life expectancy is the average number of years of life remaining to a person at a particular age and is based on a given set of age-specific death rates, generally the mortality conditions existing in the period mentioned. Life expectancy may be determined by race, sex, or other characteristics using age-specific death rates for the population with that characteristic. See related *Rate: Death and related rates.*

Live birth—In 1967 the World Health Organization defined a live birth as the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles, whether the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered live born. The United Nations and NCHS also adopted this definition at that time. The Russian Federation adopted the definition in 1992.

However, the classification of very preterm births in Russia differs from the WHO definition. Infants weighing less than 1,000 grams at birth, or less than 28 weeks gestation, or less than 35 centimeters birth length must survive 7 days to be reported as live births. If the infant dies before completing the seventh day of life, neither the live birth nor the infant death is reported. See related *Rate: Birth and related rates; Death and related rates.*

Live-birth order—In the National Vital Statistics System this item from the birth certificate refers to the total number of live births the mother has had, including the present birth as recorded on the birth certificate. Fetal deaths are excluded. See related *Live birth*.

Low birthweight—See *Birthweight.*

Marital status—Marital status is classified into the categories of married and unmarried. The term ‘‘married’’ encompasses all married people including those separated from their spouses. Unmarried includes those who are single (never married), divorced, or widowed.

Maternal mortality rate—See *Rate: Death and related rates.*

MedSocEconomInform—The state institution in the Russian Federation that is responsible for investigation of the health of the population, scientific support of health reform and medical statistics, and training of health service and public health managers for the Russian Federation. Also known as the Public Health Institute.

National Center for Health Statistics (NCHS)—The principal vital and health statistics agency of the U.S. Federal Government. NCHS is part of the Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services.

Neonatal mortality rate—See *Rate: Death and related rates*.

Notifiable disease—A notifiable disease is one that, when diagnosed, health providers are required, usually by law, to report to State or local public health officials. Notifiable diseases are those of public interest by reason of their contagiousness, severity, or frequency.

Perinatal mortality rate, ratio—See *Rate: Death and related rates.*

Physician—In the United States, physicians are licensed doctors of medicine or osteopathy, as follows:

Active (or professionally active) physicians are currently practicing medicine, regardless of the number of hours worked per week.

Federal physicians are employed by the Federal Government; non-Federal or civilian physicians are not.

Office-based physicians spend the plurality of their time working in practices based in private offices.

Hospital-based physicians spend the plurality of their time as salaried physicians in hospitals.

In the Russian Federation, a physician is a person who received a high medical education from a medical institute or from the medical faculty of a university and who has the legal right to practice medicine. The term ‘‘physician’’ also includes sanitary-epidemiological, dental, and physiotherapeutic practitioners. Data from the Russian Federation on numbers of physicians do not distinguish between active and nonactive physicians or interns and residents in training.

Physician specialty—A physician specialty is any specific branch of medicine in which a physician may concentrate. Data from the United States are based on physician self-reports of their primary area of specialty. Physician data are broadly categorized into two general areas of practice: generalists and specialists. See related *Physician.*

Population—Census bureaus collect and publish data on populations in the Russian Federation and the United States according to several different definitions. Various statistical systems then use the appropriate population for calculating rates.

Resident population is the population living in a country. It includes members of the military and their families living in that country. It excludes international military, naval, and diplomatic personnel and their families located in that country and residing in embassies or similar quarters. Also excluded are international workers and international students living in the country and citizens living abroad. The resident population is usually the denominator when calculating birth and death rates and incidence of disease.

Postneonatal mortality rate—See *Rate: Death and related rates.*

Prevalence—Prevalence is the number of cases of a disease, infected persons, or persons with some other attribute present during a particular interval of

time. It is often expressed as a rate (for example, the prevalence of diabetes per 1,000 persons during a year). See related *Incidence.*

Rate—A rate is a measure of some event, disease, or condition in relation to a unit of population, along with some specification of time.

Birth and related rates

Birth rate is calculated by dividing the number of live births in a population in a given year by the midyear resident population. It is expressed as the number of live births per 1,000 population. The rate may be restricted to births to females of specific age, race, marital status, or geographic location (specific rate), or it may be related to the entire population (crude rate). See related *Live birth.*

Fertility rate is the number of live births per 1,000 females of reproductive age, that is, 15–49 years.

Death and related rates

Death rate is calculated by dividing the number of deaths in a population in a year by the midyear resident population. (For census years in the United States, rates are based on populations as of April 1.) Death rates are expressed as the number of deaths per 1,000 or per 100,000 population. The rate may be restricted to deaths in specific age, race, sex, or geographic groups or from specific causes of death (specific rate) or it may be related to the entire population (crude rate).

Fetal death rate is the number of fetal deaths with stated or presumed gestation of 20 weeks or more divided by the sum of live births plus fetal deaths, stated per 1,000 live births plus fetal deaths. *Late fetal death rate* or *Stillbirth* is the number of fetal deaths with stated or presumed gestation of 28 weeks or more divided by the sum of live births plus late fetal deaths, stated per 1,000 live births plus late fetal deaths. See related *Fetal death.*

Infant mortality rate is calculated by dividing the number of infant deaths during a year by the number of live births reported in the same year. It is expressed as the number of infant deaths per 1,000 live births. *Neonatal mortality* rate is the number of deaths of children under 28 days of age, per 1,000 live births. *Postneonatal mortality rate* is the number of deaths of children that occur 28–365 days after birth, per 1,000 live births. See related *Infant death.*

Perinatal relates to the period surrounding the birth event. Rates and ratios are based on events reported in a calendar year. *Perinatal mortality* rate is the sum of late fetal deaths plus infant deaths within 7 days of birth, divided by the sum of live births plus late fetal deaths, stated per 1,000 live births plus late fetal deaths. *Perinatal mortality ratio* is the sum of late fetal deaths plus infant deaths within 7 days of birth, divided by the number of live births, stated per 1,000 live births. See related *Fetal death; Infant death; Live birth.*

Maternal death is one for which the certifying physician has designated a maternal condition as the underlying cause of death. Maternal conditions are those assigned to complications of pregnancy, childbirth, and the puerperium. The *maternal mortality rate*, which indicates the likelihood that a pregnant female will die from maternal causes, is the number of maternal deaths per 1,000 live births. WHO also recommends calculating this rate per 100,000 live births. The number of live births used in the denominator is an approximation of the population of pregnant females who are at risk of a maternal death.

Resident population—See *Population.*

Ross "Mother's Survey"—The Ross Products Division of Abbott Laboratories conducts an annual sample survey of mothers of infants. The survey questionnaire is mailed to mothers when their infant is 6 months of age. In the questionnaire, mothers are asked to recall the type of milk their baby was fed in the hospital and in the last 30 days.

For more information, write:

Mr. Booker Smith
Ross Mother's Survey
625 Cleveland Ave
Columbus, Ohio 43215-1724

Stillbirth—See *Rate: Death and related rates.*

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For answers to questions about this report or for a list of reports published in these series, contact:

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