

# Data Sets for Research Use

## **BIRTH-DEATH MATCH FILE**

This is a cumulative file of child death records matched to the birth record. An attempt is made to link all Missouri resident and recorded deaths under age seven to corresponding birth records. The National Center for Health Statistics requires the state to link Missouri recorded infant death records. If the matching birth occurred in another jurisdiction, Missouri attempts to obtain the birth record from that jurisdiction and provides the registrar of that jurisdiction with a copy of the death record. Data are available for deaths under age 7 from 1968 forward.

- Years available: 1968 forward (updated monthly)

## **BIRTH DEFECTS REGISTRY**

The Department of Health and Senior Services (DHSS) maintains a birth defects surveillance system for Missouri resident live births based on linkage of defects reported on birth certificates, death certificates, and hospital patient abstracts. Cases include defects diagnosed and reported through the first year of life.

The surveillance system includes data for all births in the state, but is not complete for some counties in which a substantial proportion of residents use out-of-state hospitals. While birth and death certificates are available for Missouri residents using out-of-state hospitals, DHSS has limited access to patient abstract data from these hospitals.

Births since 1980 are included in the data set. Because of changes in access to data sets, and changes in data items included in each component data source, there are inconsistencies over time. For most investigations, DHSS prefers to limit studies to births since 1993. The data for a calendar year of births are generally available 20 months after the close of the year. The delay is necessary because cases are ascertained through the first year of life.

- Years available: 1980-2009

## **DEATHS**

Missouri death records are compiled from death certificates which are filed with the Department of Health and Senior Services by state law (Missouri Revised Statute, Chapter 193). The death registration system has been in place in Missouri continuously since February 1, 1910, although changes in data items and definitions have taken place over the years.

Missouri cooperates with other states in the exchange of non-resident death records. Therefore, statistics on Missouri resident deaths also include those that occurred outside of Missouri.

Death certificate data can be used to assess the status of health, evaluate the effectiveness of programs and make population estimates.

- Years available: 1968-2013

## **DIVORCES (DISSOLUTIONS OF MARRIAGE)**

Since 1949, the Department of Health and Senior Services has been the official state registrar for dissolution of marriage records (Missouri Revised Statute, Chapter 193, Section 205). "A record of each dissolution of marriage and annulment of marriage granted by any court in this state shall be filed by the clerk of the court with the department and shall be registered if it has been completed and filed in accordance with this section." The court that issued the decree is responsible for forwarding reports to the department.

Reports of dissolution of marriage document some of the social characteristics of a population, such as number of previous marriages, number of minor children affected, level of education, type of decree, duration of marriage, etc.

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- Years available: 1969-2013

### FETAL DEATHS

Fetal death records are compiled from the Fetal Death Reports, which are filed with the Department of Health and Senior Services by 193.165.1, RSMo. The fetal death system has been in place in Missouri continuously since 1911, although changes in data items and definitions have taken place over the years.

Fetal death is defined by statute as a non-induced death prior to the complete expulsion or extraction from its mother of a fetus, irrespective of the duration of pregnancy, the death is indicated by fact that after such expulsion or extraction the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Each spontaneous fetal death of twenty completed weeks gestation or more, calculated from the date of last normal menstrual period began to the date of delivery, or a weight of three hundred fifty grams or more which occurs in this state shall be reported.

Missouri cooperates with other states in the exchange of non-resident fetal death records. Therefore statistics on Missouri resident fetal deaths also include those that occurred outside of Missouri.

Fetal death data is used to study maternal and perinatal health as well as pregnancy patterns.

- Years available: 1968-2013

### LIVE BIRTHS (BIRTH CERTIFICATE DATA)

Live birth records are compiled from the live birth certificates, which are filed with the Department of Health and Senior Services by 193.085.1, RSMo. The birth certificate system has been in place in Missouri continuously since 1911, although changes in data items and definitions have taken place over the years.

Live birth is defined by statute (Missouri Revised Statutes, Chapter 193) as the complete expulsion or extraction from its mother of a child, irrespective of the duration of pregnancy, which after such expulsion or extraction, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. The definition is also irrespective of birth weight.

Missouri cooperates with other states in the exchange of non-resident live birth records. Therefore, statistics on Missouri resident live births also include those that occurred outside of Missouri.

Live birth certificate data are used in estimating population, for evaluation of maternal and perinatal health, for the study of fertility patterns, and to assist public health officials in the conduct and evaluation of programs.

- Years available: 1968-2013

### MARRIAGES

Since 1949, the Department of Health and Senior Services has been the official state registrar for marriage records (MO Revised Statute, Chapter 193, Section 185, "A report of each marriage performed in this state shall be filed with the department and shall be registered if it has been completed and filed in accordance with this section."). The county which issued the marriage license is responsible for forwarding reports of marriage to the department.

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Reports of marriage document some of the social characteristics of a population, such as number of previous marriages, age at time of marriage, level of education, etc.

- Years available: 1969-2013

### **MOTOR VEHICLE CRASH & OUTCOMES**

With funds provided by the National Highway Traffic Safety Administration (NHTSA) and Bureau of Health Care Analysis and Data Dissemination (BHCADD) has linked statewide motor vehicle crash records to Patient Abstract System (PAS) files of hospital inpatient and emergency room visit records. The 1996 and 1993 motor vehicle crash files were linked to the 1996 and 1993 Emergency Medical System (EMS) ambulance trip files and the (PAS) files. Since then, motor vehicle crash files have been linked to the PAS files.

The purpose for linking these files is to be able to relate motor vehicle crash characteristics (such as seat belt use) to the severity, type, likelihood and costs of injuries. Identifying an individual's record in each of the above files makes this type of research possible. Because persons and events are not coded perfectly on the individual files, identifying a person's record across files and linking them together into one file is very difficult. To link the data, special software provided by the National Highway Traffic Safety Administration was used. This software links records based on the probability that records with similar values on common variables represent the same person. Even using this software, file linking is an intensive and time-consuming task.

The linked files are comprised of many data items. The data items contained in the Patient Abstract System are listed at <http://www.dhss.mo.gov/PatientAbstractSystem/DataElements.html>. Because the motor vehicle crash file data items are too numerous to be listed in their entirety, only the most frequently used data items are listed on this website. More complete documentation can be obtained by contacting us.

- Years available: 1996-1999, 200, & 2003-2009, & 2011

### **PATIENT ABSTRACT SYSTEM (INPATIENT HOSPITALIZATIONS & OUTPATIENT/AMBULATORY SURGICAL CENTER ENCOUNTERS)**

The Patient Abstract System includes outpatient data as well as inpatient data. The Missouri Department of Health and Senior Services (DHSS), Bureau of Health Care Analysis and Data Dissemination (BHCADD) receives information abstracted from patient medical records of hospitalizations, emergency room visits, outpatient surgery, and selected outpatient services and procedures (CAT scan, MRI, endoscopy, lithotripsy, etc.). Inpatient records of Missouri residents hospitalized in several neighboring states are also included. The patient abstract data are reported to the department each calendar quarter by hospitals and ambulatory surgery centers.

- Years available: 1994-2012

### **SUCCESSIVE PREGNANCY (MATERNALLY-LINKED BIRTHS)**

The Successive Pregnancy file consists of birth and/or fetal death records of women who have had more than one pregnancy lasting 20 weeks or longer. Cause of death information and other selected data elements are added to the record in the case of the death of an infant up to the first birthday. The layout also includes a 'sibship' number that allows the researcher to identify pregnancy outcomes of the same mother, birth order within the sibship, and a multiple birth identifier. The file does not have all birth records; this file only includes records of mothers who have had more than one pregnancy.

- Years available: 1978-2005