

## TECHNICAL NOTES

### Source of Data

The vital statistics presented in this report are based on the vital certificate records of live births, deaths, and fetal deaths occurring to Westchester County residents in the United States or Canada. The source of this information is the New York State Department of Health.

### Classification of Residence

Vital events are allocated to the place of usual residence as reported on the certificates with the following exceptions: vital events occurring to inmates of state and federal institutions may be allocated to their residence at the time of admission, if known; vital events occurring to resident staff are allocated to the institution district.

In this report, each vital event is assigned to a municipality of residence according to its census tract of residence (based on street address). In a limited number of cases, events without valid census tracts have been assigned by municipality, if the municipality is known by other criteria. Events without valid census tract or municipality information are considered to be from an unknown municipality.

Cases of reportable diseases are assigned to a municipality and census tract based on residence address. Data regarding confirmed cases of animal rabies reflect the municipality in which an animal is captured.

It should be noted that in December 1996, the name of the Village of North Tarrytown was formally changed to Sleepy Hollow. Since municipal boundaries were not changed, the comparability of time series data for this community is unaffected.

### Live Births

A live birth is defined as "the complete expulsion or extraction from its mother of a product of conception, irrespective of duration of pregnancy, which, after such separation, 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" (*Vital Statistics of New York State 1997*, New York State Department of Health).

### Deaths

In this report, the cause of death is the underlying cause classified according to the International Classification of Diseases (ICD), Ninth Revision.

### Fetal Deaths

A fetal death is defined as "the death prior to the complete expulsion or extraction from its mother of a product of conception; 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 beating of the heart, pulsation of the

umbilical cord or definite movement of voluntary muscles" (*Vital Statistics of New York State 1997*, New York State Department of Health). New York State Public Health Law requires the registration of all fetal deaths regardless of the length of gestation of the fetus. Due to changes in the content of fetal death certificates, fetal death data are no longer available by municipality for Westchester County.

## Population

The 1998 and 1999 population estimates by municipality are based on a combination of natural increase (births minus deaths) by municipality during the April 1, 1990 through July 1, 1999 period, and municipality-level rates of net migration recorded during the period between U.S. Censuses (April 1, 1980 to April 1, 1990). Since live birth and death data for the final 6-month period, in this case January 1 through June 30, 1999, are unknown, they are projected based on data recorded during the prior 18-month period, and should be considered provisional. These estimates are updated with actual data when available. For this reason, population estimates for 1998 may differ slightly from those appearing in the *1998 Annual Data Book*, and population estimates for 1999 may be revised for the *2000 Annual Data Book*. The number of live births for 1999, used to calculate the morbidity rate for congenital syphilis, are projected using the same moving 18-month average for live births to county residents.

Estimates of county-wide population by age and sex for July 1, 1998, including female population 10-44 years of age by 5-year age group, are based on the 1997 cohort population estimate series prepared by the New York State Department of Health, adjusted to the aggregate municipality population total estimated using the natural increase/net migration methodology described above. To estimate female population 15-19 years of age by municipality, the total county population in this age group is allocated by municipality based on the proportional distribution of the population of the same age and sex at the time of the 1990 U.S. Census. This is done to preserve localized concentrations of this population component, specifically residents of college dormitories who are more likely than any other age cohort to be replaced by a comparable number of persons of the same age drawn from outside the community, rather than by a younger population aging within the same community.

The population figures include persons living in group quarters or who are under care or custody in institutions. Examples of such institutions are the Bedford Hills/Taconic Correctional Facility in the Town of Bedford, Sing Sing Prison in the Village of Ossining and the Veterans Administration Hospital in the Town of Cortlandt. Residents of college dormitories, convents and monasteries, as well as hospital ward patients who have no usual residence elsewhere are also included. The total population is listed in Table 1 and, unless otherwise noted, is used in the calculation of rates.

Data regarding AIDS do not reflect cases among inmates of New York State correctional facilities, and the denominators used in the calculation of AIDS morbidity rates also exclude this population component. The Westchester County population figures used in the calculation of AIDS morbidity rates for 1997 through 1999 are the projected total county population for each year, as described above, minus the 1990 inmate population of Sing Sing Prison (2,284) and the Bedford Hills/Taconic Correctional Facility (1,522), as estimated by the New York State Department of Health.

## **Vital Statistics Rates**

The definitions of the rates used in this report are given below. In general, the numerator represents the number of vital events occurring in a population during a specific period of time (usually a calendar year). The denominator refers to the population at a specified point in time (usually mid-calendar year {July 1} or, when available, U.S. Census Data, which are provided for April 1).

1. Live Birth Rate: annual number of live births per 1,000 total (July 1, 1998) population.
2. Age-Specific Birth Rate: annual number of live births to females in a specific age group per 1,000 females in that age group on July 1, 1998.
3. Pregnancy Rate: annual number of live births and fetal deaths (spontaneous and induced) per 1,000 females 15-44 years of age on July 1, 1998. Numerator may be maternal age-specific and denominator will represent the same age group of females.
4. Infant Death Rate: annual number of deaths under one year of age per 1,000 live births occurring during the year.
5. Death Rate: annual number of deaths per 1,000 total July 1, 1998 population.
6. Age-Specific Death Rate: annual number of deaths in a specified age group per 1,000 population in the same age group at July 1, 1998. Age is decedent's age at last birthday.
7. Cause-Specific Death Rate: annual number of deaths from a specified cause or group of causes per 100,000 total July 1, 1998 population. Exception: the death rate for complications of pregnancy, childbirth and the puerperium is defined as the number of deaths from complications of pregnancy, childbirth and the puerperium occurring during the year per 100,000 live births occurring during that year. This cause of death category also includes any maternal deaths which may have resulted from induced abortions.

## **Disease Morbidity**

Beginning in 1995, cases of mandatory reportable diseases are assigned to the year during which they were diagnosed, rather than the year in which the case report was filed as they had been in prior years. As cases diagnosed during 1999 and prior years are reported in the future, these figures are also subject to revision.

## **AIDS Data**

Data regarding AIDS cases and deaths are provided by the New York State Department of Health, HIV/AIDS Epidemiology Program. Because AIDS cases and deaths due to AIDS are assigned to the year of diagnosis, historical data are continually revised and will not agree with previously published figures. AIDS data in this report do not include inmates of New York State correctional facilities.

### **Small Area Data**

Rates and percentages based on small numbers of vital events can be subject to a large degree of variability from one year to the next due to chance alone. Therefore, when comparing consecutive years of information for a single geographic area as well as when comparing the information of one small area with that of any other, inferences should be made with extreme care.

### **Crude Rates**

Rates of live births and deaths are influenced markedly by the age and sex distributions of the population. Because morbidity and mortality rates presented in this report are not age and sex-adjusted, caution should be exercised when comparing these rates across different municipalities and over time.

### **Land Area**

Data regarding surface area by municipality appearing in Table 1 are Geographic Information System (GIS) land use measurements from revised U.S. Geological Survey Generalized Land Use maps at a scale of 1"=1000' (*Land Use Trends in Westchester County 1988-1996*, Westchester County Department of Planning, December 1997).