

IV. TECHNICAL NOTES

Race/Ethnicity Groups

Throughout this report the following mutually exclusive race and ethnicity groups are used: white, black, Hispanic, and Asian/Pacific Islander. Data for white, black, and Asian/Pacific Islander do not include Hispanics and Hispanics may be of any race. Race and ethnicity are reported as separate characteristics on most of the forms used to collect data reported in this document. Among these are birth and death certificates, the New Jersey Behavioral Risk Factor Survey, the UB-92 hospital discharge file, and the Cancer Registry. The HIV registry collects race/ethnicity as one characteristic: non-Hispanic white, non-Hispanic black, non-Hispanic other race, and Hispanic.

The reporting of Hispanic ethnicity on some major data systems is problematic due to a relatively large percentage of records with ethnicity not stated. Additionally, Asians and Pacific Islanders are sometimes misreported. Efforts are underway to improve the reporting of Hispanic ethnicity and Asian and Pacific Islander races on the health data collected by the New Jersey Department of Health and Senior Services. For now, data presented for Hispanics and Asian/Pacific Islanders should be used with caution as they may understate the true rates.

Definitions

Birth Weight -- the first weight of the newborn obtained after delivery.

Cause of Death Classification -- a system of specification of the diseases and/or injuries which led to death and the sequential order of their occurrence. The version of the system in use since 1999 is the *International Classification of Diseases and Related Health Problems, Tenth Revision* (ICD-10), sponsored by the World Health Organization

Healthy Migrant Effect -- Selective in- and out-migration, also known as the “healthy migrant effect” and the “salmon-bias effect,” may contribute to the Hispanic and Asian/Pacific Islander mortality advantages, since a relatively high proportion of those living in New Jersey are foreign-born ([Singh, 2001](#), [Palloni, 2004](#)).

Infant Death -- a death within the first year of life.

Live Birth -- the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Low Birth Weight -- birth weight of less than 2,500 grams or approximately 5 pounds, 8 ounces.

Motor Vehicle-Related Injuries -- Motor vehicle-related injury is a broad term encompassing a number of different types of motorized vehicles and a variety of circumstances covering an encounter of an individual with a motorized vehicle. A motor vehicle is defined in *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Volume 1* as

“any mechanically or electrically powered device, not operated on rails, upon which any person or property may be transported or drawn upon a highway. Any object such as a trailer, coaster, sled, or wagon being towed by a motor vehicle is considered a part of the motor vehicle.” The Manual includes automobile; bus; construction, industrial, or farm machinery; fire engine; motorcycle; moped; motorized scooter; trolley bus not operating on rails; truck; and van in its definition of motor vehicle. Persons killed or injured by a motor vehicle can be drivers, passengers, bicyclists, or pedestrians. Injuries and fatalities related to the use of motor vehicles are not currently labeled “accidents” by public health professionals, as these events are considered preventable.

Underlying Cause of Death -- the disease or injury which initiated the train of events leading directly to death or the circumstances of the unintentional injury or violence which produced the fatal injury.

Very Low Birth Weight -- birth weight of less than 1,500 grams or approximately 3 pounds, 5 ounces.

Rates

The presentation of statistics in the form of rates facilitates comparisons between political subdivisions with populations of different sizes or between subgroups of a population. Age-adjusted rates are used to compare the mortality and morbidity experience among groups with differing age distributions. The definitions of rates used in this report follow. Caution should be exercised in the interpretation of rates based on small numbers. Death rates based on fewer than 20 deaths do not meet National Center for Health Statistics standards for reliability and precision.

Age-Adjusted Incidence or Death Rate -- the application of age-specific rates to a standard population to arrive at the theoretical number of events that would occur in the standard population at the rates prevailing in the actual population. The number of events is divided by the total number of persons in the standard population to arrive at the adjusted rate. The resulting age-adjusted rate is an index number and can only be compared to other rates age-adjusted using the same standard population and cannot be compared to crude or other actual rates. The standard population used in this report for age-adjustment of rates is the United States 2000 standard million, derived from projected 2000 decennial census counts.

Emergency Department (ED) Visit Rate -- the number of resident ED visits per 100,000 population.

Hospitalization Rate -- the number of resident hospital admissions per 100,000 population.

Infant Mortality Rate -- the ratio of the number of deaths to children less than one year of age in a given year per 1,000 births in the same year.

Ratio – an expression of the quantity of one outcome in relation to that of another. For example, for the age-adjusted death rate due to breast cancer among blacks as compared to whites, the ratio for whites as the reference group is 1.0 and for blacks, it is 1.24. In this example, the age-adjusted death rate among blacks is 24 percent higher than the rate among whites.

ICD-10 Codes

<i>Cause of Death</i>	<i>ICD-10 Codes</i>
Asthma	J45-J46
Female Breast Cancer	C50 (females only)
Cervical Cancer	C53
Prostate Cancer	C61
Colorectal Cancer	C18-C21
Coronary Heart Disease	I11, I20-I25
Stroke	I60-I69
Diabetes	E10-E14
HIV Infection	B20-B24
Sudden Infant Death Syndrome (SIDS)	R95
Unintentional Injuries	V01-X59, Y85-Y86
Motor Vehicle-Related Injuries	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Poisoning	X40-X49
Suffocation	W75-W84
Falls	W00-W19
Drowning	W65-W74
Fire/burns/smoke	X00-X09

Population Estimates

Population estimates used to calculate various rates in this report were derived from the bridged-race postcensal population estimates prepared by the National Center for Health Statistics ([NCHS](#)) in collaboration with the [U.S. Bureau of the Census](#). These estimates result from bridging the 31 race categories used in the 2000 Census, as specified in the [1997 federal OMB standards](#) for the collection of data on race and ethnicity, to the four race categories specified under the [1977 standards](#). Many data systems are continuing to use the 1977 standards during the transition to full implementation of the 1997 standards. Population estimates as of April 1, 2000 were used with 2000 data, Vintage 2003 estimates were used with 2001 - 2003 data, and Vintage 2004 estimates were used with 2004 data. For more information about the bridged-race population estimates: www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm

The estimates presented below have not been rounded. However, it should not be presumed that they have the degree of accuracy which such precise figures might imply.

Bridged-Race Population Estimates, New Jersey, 2000-2005								
Year	White		Black		Hispanic		Asian/ Pacific Islander	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2000	5,638,028	66.9	1,142,607	13.6	1,127,601	13.4	508,367	6.0
2001	5,633,473	66.2	1,155,691	13.6	1,169,737	13.8	529,435	6.2
2002	5,625,887	65.6	1,168,045	13.6	1,213,478	14.2	551,943	6.4
2003	5,613,438	65.0	1,178,980	13.6	1,254,466	14.5	575,423	6.7
2004	5,588,490	64.2	1,181,060	13.6	1,294,422	14.9	618,705	7.1
2005	5,551,291	63.7	1,181,540	13.6	1,327,413	15.2	641,502	7.4

Bridged-Race Population Estimates by County, New Jersey, 2005									
County	Total	White		Black		Hispanic		Asian/Pacific Islander	
		#	%	#	%	#	%	#	%
Atlantic	271,015	170,374	62.9	44,895	16.6	37,765	13.9	17,315	6.4
Bergen	902,561	608,783	67.5	48,964	5.4	119,814	13.3	123,874	13.7
Burlington	450,743	334,938	74.3	74,688	16.6	22,370	5.0	17,696	3.9
Camden	518,249	336,516	64.9	98,051	18.9	58,771	11.3	23,695	4.6
Cape May	99,286	89,663	90.3	4,770	4.8	3,942	4.0	776	0.8
Cumberland	153,252	85,635	55.9	30,985	20.2	33,810	22.1	1,711	1.1
Essex	791,057	290,390	36.7	325,712	41.2	138,755	17.5	34,416	4.4
Gloucester	276,910	234,673	84.7	27,265	9.8	8,677	3.1	5,778	2.1
Hudson	603,521	211,507	35.0	76,165	12.6	247,682	41.0	66,779	11.1
Hunterdon	130,404	118,028	90.5	3,473	2.7	4,751	3.6	4,003	3.1
Mercer	366,256	220,623	60.2	73,497	20.1	43,201	11.8	28,299	7.7
Middlesex	789,516	440,385	55.8	73,698	9.3	128,282	16.2	145,644	18.4
Monmouth	635,952	504,675	79.4	49,853	7.8	48,629	7.6	31,863	5.0
Morris	490,593	387,392	79.0	14,527	3.0	47,654	9.7	40,427	8.2
Ocean	558,341	494,958	88.6	17,901	3.2	35,303	6.3	9,417	1.7
Passaic	499,060	246,105	49.3	60,885	12.2	168,962	33.9	22,125	4.4
Salem	66,346	52,645	79.3	9,805	14.8	3,171	4.8	516	0.8
Somerset	319,900	219,135	68.5	26,865	8.4	35,641	11.1	37,951	11.9
Sussex	153,130	140,061	91.5	2,300	1.5	7,865	5.1	2,752	1.8
Union	531,457	266,390	50.1	114,048	21.5	126,219	23.7	23,925	4.5
Warren	110,376	98,415	89.2	3,193	2.9	6,149	5.6	2,540	2.3

Data Sources

Data	Source
Adult behavioral risk factors	NJDHSS, Center for Health Statistics, NJ Behavioral Risk Factor Survey
Death rates	NJDHSS, Center for Health Statistics NJ Resident Death Certificates
Hospitalization and amputation rates	NJDHSS, Center for Health Statistics NJ Uniform Billing Hospital Discharge File
Emergency department visit rates	NJDHSS, Center for Health Statistics NJ Emergency Department File
Cancer incidence rates and stage of diagnosis	NJDHSS, Cancer Epidemiology Services NJ Cancer Registry
Childhood obesity prevalence and seatbelt usage	NJ Department of Education Youth Risk Behavior Survey
End-stage renal disease prevalence	NJDHSS, Division of Family Health Services Diabetes Prevention and Control Program
AIDS/HIV incidence and prevalence rates	NJDHSS, Division of HIV/AIDS Services HIV/AIDS Epidemiological Services Unit
Infant mortality rates	NJDHSS, Center for Health Statistics NJ Resident Matched Death and Birth Certificates
Birth weight, prenatal care, and maternal age	NJDHSS, Center for Health Statistics NJ Resident Birth Certificates
Traumatic brain injury rates	NJDHSS, Center for Health Statistics Traumatic Brain Injury Surveillance System