

Top Two Leading Causes of Death in Virginia 2005-2013

The causes of death are typically ranked based on the actual numbers of deaths, as opposed to either crude rates or age adjusted rates. While counts and crude rates should yield similar rankings, the Centers for Disease Control and Prevention (CDC) advise against using rates per 100,000 because they are less precise. The CDC states that age-adjusted rates should never be used to rank the leading causes of death because the actual rankings will vary depending upon the age distribution in the standard. For example, when the standard gives more weight to an older population, causes of death that primarily affect older people will tend to rank higher than causes of death affecting younger people.

The actual rankings of the leading causes of death can vary, depending on how the causes of death are grouped. VDH has adopted the groupings that are used by the CDC's National Center for Health Statistics (NCHS). These grouping separate heart disease and cerebral-vascular disease, whereas the data is sometimes combined in cardiovascular disease.

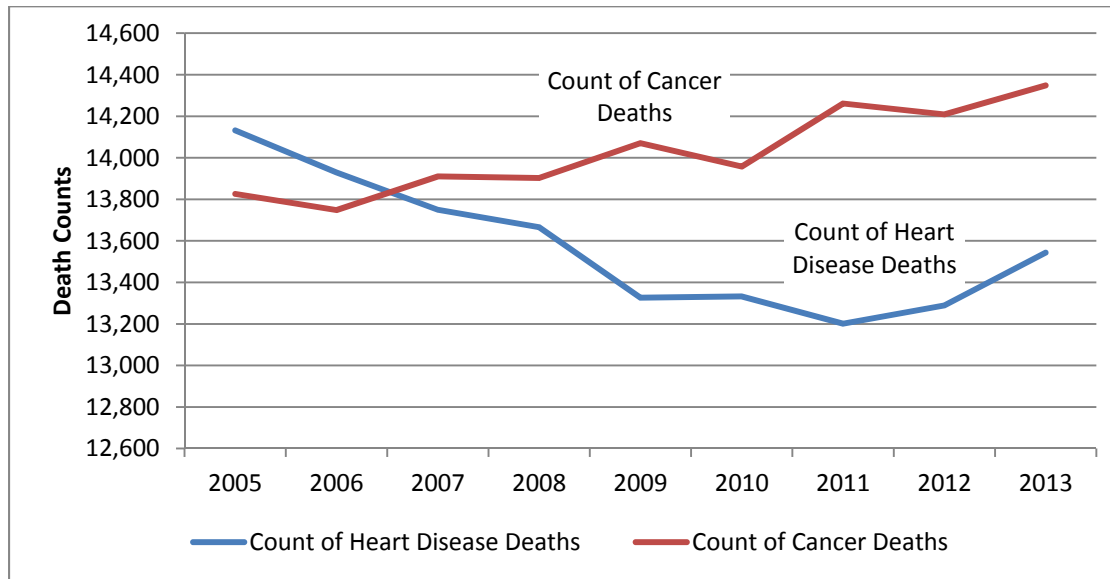
At the beginning of the time period investigated, from 2005 to 2006, heart disease contributed to the highest number of deaths. However, from 2007 onward cancer has caused the highest number of deaths. The crude rates show the same trend.

Since the beginning of the time period investigated, both heart disease and cancer rates declined but cancer is decreasing less than heart disease. One of the potential reasons for the greater decline in heart disease would include advances in treatment. It is also worth noting that the primary cause of cancer mortality is lung cancer, which has a five-year survival rate of only 54% when diagnosed at a localized stage. However, only 19% of all lung cancers are diagnosed at a localized stage.

Table of data. Colors indicate the higher number within a category.

Year of Death	Population	Count of Heart Disease Deaths	Crude Heart Disease Rate per 100,000	Count of Cancer Deaths	Crude Cancer Rate per 100,000
2005	7,567,465	14,132	186.7	13,826	182.7
2006	7,642,884	13,929	182.2	13,748	179.9
2007	7,712,091	13,750	178.3	13,910	180.4
2008	7,769,089	13,666	175.9	13,902	178.9
2009	7,882,590	13,326	169.1	14,070	178.5
2010	8,001,024	13,332	166.6	13,958	174.5
2011	8,096,604	13,201	163.0	14,261	176.1
2012	8,185,867	13,289	162.3	14,209	173.6
2013	8,260,405	13,543	164.0	14,348	173.7

Chart of Death Counts



Top 14 Leading Causes of Death in Virginia in 2013

Although they are the top two leading causes, cancer and heart disease account for less than 50% of all deaths. And "Other" is just as big a category as cancer or heart disease.

Virginia Resident Deaths 2013 – Top 14 Leading Causes of Death

Death all causes	62309	
Malignant neoplasm	14348	23.0%
Disease of the heart	13543	21.7%
Cerebrovascular disease	3278	5.3%
Chronic lower respiratory disease	3168	5.1%
Unintentional injury	2794	4.5%
Alzheimer's disease	1634	2.6%
Diabetes mellitus	1618	2.6%
Nephritis and nephrosis	1547	2.5%
Septicemia	1464	2.3%
Influenza and pneumonia	1430	2.3%
Suicide	1047	1.7%
Chronic liver disease	836	1.3%
Primary hypertension and renal disease	629	1.0%
Parkinson's disease	549	0.9%
Other	14424	23.1%

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10 Leading Causes of Death by Age Group, United States – 2010

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 5,107	Unintentional Injury 1,394	Unintentional Injury 758	Unintentional Injury 885	Unintentional Injury 12,341	Unintentional Injury 14,573	Unintentional Injury 14,792	Malignant Neoplasms 50,211	Malignant Neoplasms 109,501	Heart Disease 477,338	Heart Disease 597,689
2	Short Gestation 4,148	Congenital Anomalies 507	Malignant Neoplasms 439	Malignant Neoplasms 477	Homicide 4,678	Suicide 5,735	Malignant Neoplasms 11,809	Heart Disease 36,729	Heart Disease 68,077	Malignant Neoplasms 396,670	Malignant Neoplasms 574,743
3	SIDS 2,063	Homicide 385	Congenital Anomalies 163	Suicide 267	Suicide 4,600	Homicide 4,258	Heart Disease 10,594	Unintentional Injury 19,667	Chronic Low Respiratory Disease 14,242	Chronic Low Respiratory Disease 118,031	Chronic Low Respiratory Disease 138,080
4	Maternal Pregnancy Comp. 1,561	Malignant Neoplasms 346	Homicide 111	Homicide 150	Malignant Neoplasms 1,604	Malignant Neoplasms 3,619	Suicide 6,571	Suicide 8,799	Unintentional Injury 14,023	Cerebrovascular 109,990	Cerebrovascular 129,476
5	Unintentional Injury 1,110	Heart Disease 159	Heart Disease 68	Congenital Anomalies 135	Heart Disease 1,028	Heart Disease 3,222	Homicide 2,473	Liver Disease 8,651	Diabetes Mellitus 11,677	Alzheimer's Disease 82,616	Unintentional Injury 120,859
6	Placenta Cord. Membranes 1,030	Influenza & Pneumonia 91	Chronic Low Respiratory Disease 60	Heart Disease 117	Congenital Anomalies 412	HIV 741	Liver Disease 2,423	Cerebrovascular 5,910	Cerebrovascular 10,693	Diabetes Mellitus 49,191	Alzheimer's Disease 83,494
7	Bacterial Sepsis 583	Septicemia 62	Cerebrovascular 47	Chronic Low Respiratory Disease 73	Cerebrovascular 190	Diabetes Mellitus 606	Cerebrovascular 1,904	Diabetes Mellitus 5,610	Liver Disease 9,764	Influenza & Pneumonia 42,846	Diabetes Mellitus 69,071
8	Respiratory Distress 514	Benign Neoplasms 59	Benign Neoplasms 37	Benign Neoplasms 45	Influenza & Pneumonia 181	Cerebrovascular 517	HIV 1,898	Chronic Low Respiratory Disease 4,452	Suicide 6,384	Nephritis 41,994	Nephritis 50,476
9	Circulatory System Disease 507	Perinatal Period 52	Influenza & Pneumonia 37	Cerebrovascular 43	Diabetes Mellitus 165	Liver Disease 487	Diabetes Mellitus 1,789	HIV 3,123	Nephritis 5,082	Unintentional Injury 41,300	Influenza & Pneumonia 50,097
10	Necrotizing Enterocolitis 472	Chronic Low Respiratory Disease 51	Septicemia 32	Septicemia 35	Complicated Pregnancy 163	Congenital Anomalies 397	Influenza & Pneumonia 773	Viral Hepatitis 2,376	Septicemia 4,604	Septicemia 26,310	Suicide 38,364

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC.

Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC using WISQARS™.



Centers for Disease Control and Prevention
National Center for Injury Prevention and Control