

Maine Mortality Report: Leading Causes of Death 2020

Maine CDC
Data, Research, and Vital Statistics
July 2022



Acknowledgements

This report is produced under the general supervision and guidance of Kim Haggan, State Registrar and Director, Data, Research, and Vital Statistics (DRVS). Staff significantly involved in the production include:

Carolyn Bancroft, MPH, DrPH, Surveillance and Statistics Manager – epidemiologic oversight, data checking, and writing the text.

Sarah Wilcox, PhD, Data Analyst- cleaning and editing databases, programming, data analysis, and editorial review.

Jessica Cross, MPH, Epidemiologist – programming and data analysis.

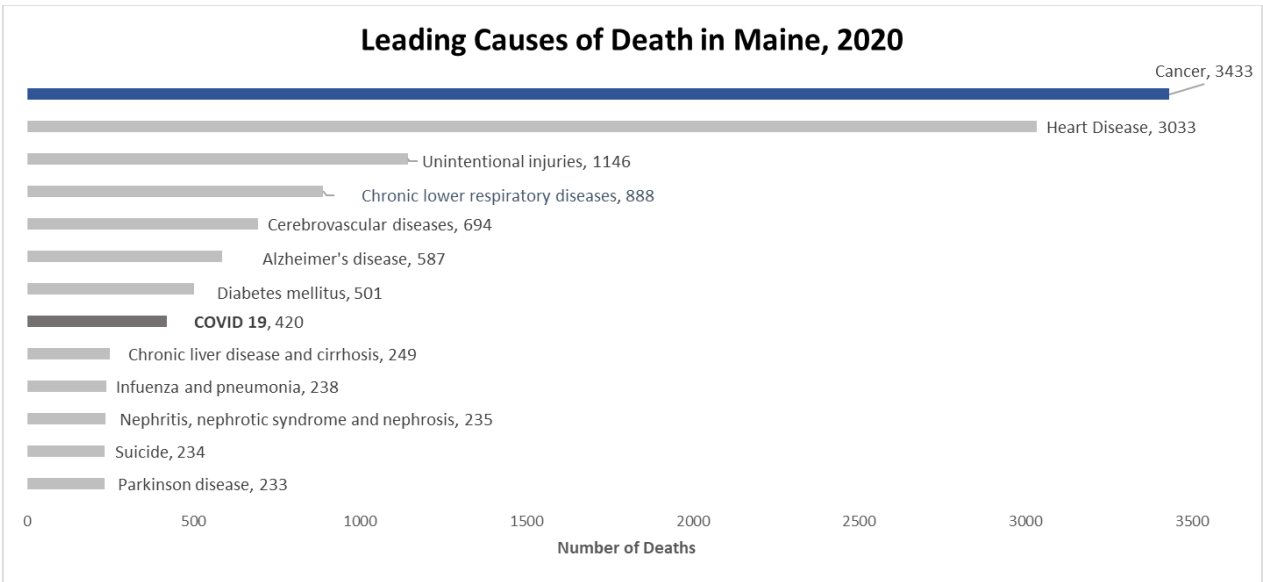
Kim Haggan, Director and State Registrar—editorial review.

The joint efforts of many staff are necessary to produce these data and maintain the vital statistics system. A special acknowledgement is made to all the staff in the Vital Records Unit for their front-line work in dealing with the many stakeholders, funeral directors, municipal clerks, medical certifiers, and medical examiners to collect and edit these data; and thanks to our stakeholders for providing these data and responding to staff inquiries.

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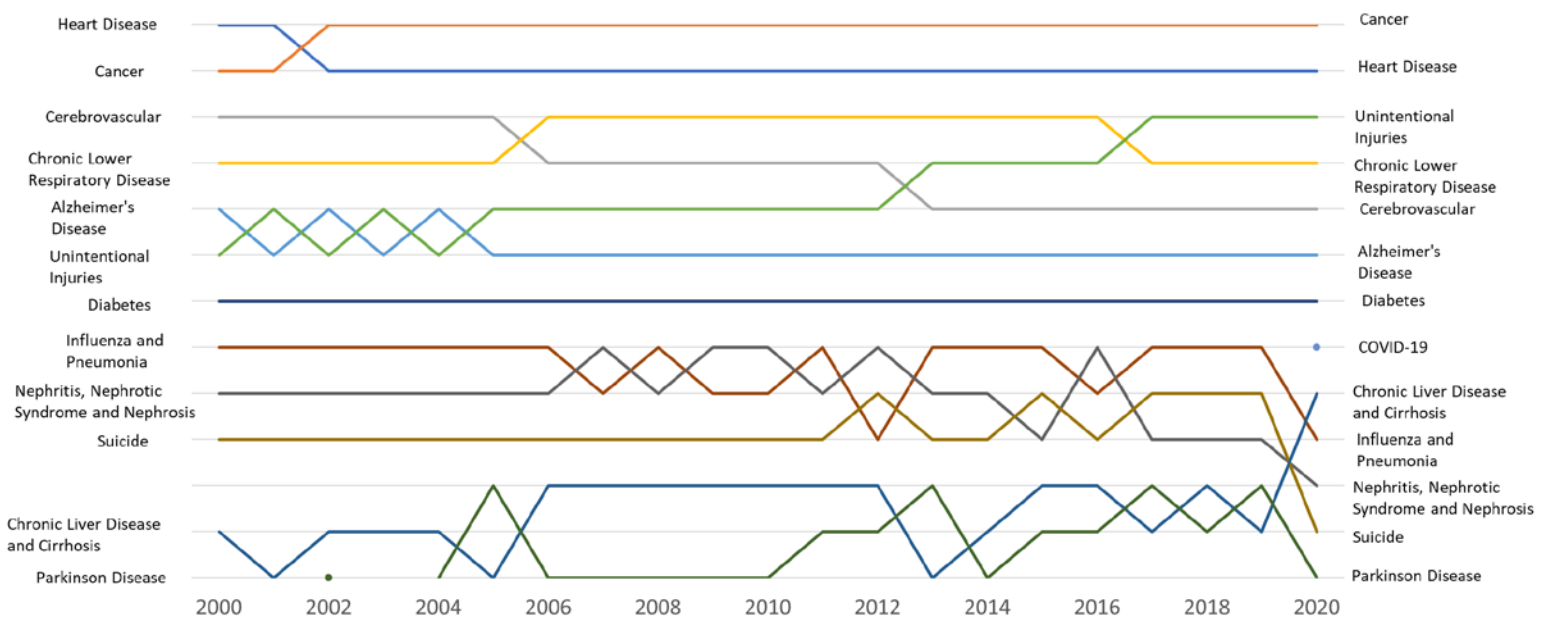
Section 1:
Leading Causes of Death in Maine
2020



Technical note: Ranks are based on number of deaths assigned to a rankable cause, not crude or age-adjusted rate comparisons, based on National Center for Health Statistics guidance.

Interpret ranks with caution because they are based on counts and not rates. When population is small, ranks can be more sensitive to large variation. For example, the causes of death that are ranked 10-13 for Maine in 2020 have a difference of less than 10 deaths between counts.

Maine Leading Causes of Death Rank, 2000-2020



Causes of death listed are those that ranked in the leading causes of death in 2020.

Summary of key findings

In 2020, there were 15,737 deaths to Maine residents compared with 15,068 deaths in 2019. That is an increase of 669 deaths (4.4%) from 2019 to 2020. COVID-19 deaths accounted for 420 (approximately 2.7%) of all deaths to Maine residents in 2020.

Cancer and heart disease represented four of every ten deaths to Maine residents in 2020.

Key findings of trends over time

- The statewide age-adjusted mortality rate decreased from 1999 to 2010 (from 865.9 per 100,000 to 749.6 per 100,000) and then it increased significantly from 2010 to 2020, increasing an average of 0.4% per year to 787.1 per 100,000 in 2020.
- Unintentional Injury deaths were a primary contributor to increased mortality over the past decade, increasing significantly from 38.3 per 100,000 in 2011 to 76.7 in 2020, an 8% average annual increase.
- Three other causes of death have also contributed to increasing mortality over the last two decades: Suicide deaths, Chronic Liver Disease and Cirrhosis deaths, and Parkinson Disease deaths.
- COVID-19 deaths contributed to the increase in the overall mortality rate from 2019 to 2020.
- Primary contributors to decreasing overall mortality from 1999 to 2010 were the two conditions that lead to the highest numbers of deaths in Maine – Cancer and Heart Disease:
 - The age-adjusted Cancer mortality rate decreased significantly over the past two decades from 214.6 per 100,000 in 1999 to 161.6 per 100,000 in 2020.
 - The age-adjusted Heart Disease mortality rate decreased significantly from 1999 to 2010 (from 238.7 to 151.1) and has continued to decline since then, although more slowly, and the decrease is not statistically significant from 2010 to 2020.
- Two other conditions with fewer deaths per year have also had significant declines in mortality rates over the last 15 years: 1) Influenza and Pneumonia and 2) Nephritis and Nephrotic syndromes.

For information about analysis of trends in mortality rates over time, please refer to the description of Joinpoint analysis in the Technical Notes section at the end of this report.

Key findings for leading causes of death

- The top seven leading causes of death in Maine remained the same in 2019 and 2020.
- In 2020, COVID-19 ranked 8th and Influenza and Pneumonia moved to 10th leading cause of death.

- Suicide, which was 9th in 2019 is no longer in the top ten causes of death and ranked 13th in 2020. This mirrors the trend in the overall US rankings for leading causes of death.

Key findings in comparison with the U.S.

- Cancer remains the leading cause of death in Maine while Heart Disease is the leading cause of death in the U.S.
- In 2020, COVID-19 ranked 3rd in the US and 8th in Maine.
 - Note - preliminary data indicates that in 2021 COVID-19 continued to be ranked 3rd in the US and rose to the 3rd leading cause of death in Maine. Maine experienced more than three times the number of COVID-19 deaths in 2021 as in 2020.
- Maine's Cancer, Unintentional Injury, Chronic Lower Respiratory Disease, and Suicide mortality rates were higher than the U.S.
- Maine's overall mortality rate, Heart Disease, Cerebrovascular Disease, Alzheimer's Disease, and COVID-19 mortality were all lower than the US.

Key findings by Sex

- Cancer remains the leading cause of death among both males and females in Maine followed by Heart Disease as the 2nd leading cause of death.
- Unintentional injury is the 3rd leading cause of death among males and the 4th leading cause of death among females.
- The age-adjusted mortality rate for unintentional injury deaths was 105.7 per 100 among Maine males and 48 per 100,00 among Maine females.
- The age-adjusted mortality rate for suicide deaths was 27.7 per 100,000 among Maine males and 5.5 per 100,000 among Maine females.
- The age-adjusted mortality rate for COVID-19 was similar for males (22.8 per 100,000) and for females (17.8 per 100,000).

Key findings by County of Residence

- Compared with the entire state, Androscoggin, Kennebec, Oxford, Penobscot, Piscataquis, Somerset, and Washington counties had higher overall mortality rates.
- Cumberland, Hancock, Lincoln, Sagadahoc, and York counties had lower overall mortality rates compared with the state.

Section 2:

At-a-Glance Sheets

Maine vs. U.S. At-a-Glance

Leading Causes of Death, 2020



Indicator	Unit	Maine	U.S.	Comparison	Year
All Deaths	Rate per 100,000	787.1	835.4		2020
	95% CI	774.6 - 799.5	834.5 - 836.3		
Cancer Deaths	Rate per 100,000	161.6	144.1		2020
	95% CI	156.0 - 167.1	143.8 - 144.5		
Heart Disease Deaths	Rate per 100,000	146.1	168.2		2020
	95% CI	140.8 - 151.4	167.8 - 168.6		
Unintentional Injury Deaths	Rate per 100,000	76.7	57.6		2020
	95% CI	72.0 - 81.5	57.3 - 57.8		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	41.5	36.4		2020
	95% CI	38.7 - 44.3	36.2 - 36.6		
Cerebrovascular Disease Deaths	Rate per 100,000	33.0	38.8		2020
	95% CI	30.5 - 35.5	38.6 - 39.0		
Alzheimer's Disease Deaths	Rate per 100,000	27.9	30.9		2020
	95% CI	25.6 - 30.1	30.7 - 31.1		
Diabetes Deaths	Rate per 100,000	23.9	24.8		2020
	95% CI	21.7 - 26.1	24.7 - 25.0		
COVID-19 Deaths	Rate per 100,000	20.2	85.0		2020
	95% CI	18.2 - 22.1	84.7 - 85.2		
Chronic Liver Disease and Cirrhosis Deaths	Rate per 100,000	13.9	13.3		2020
	95% CI	12.0 - 15.7	13.1 - 13.4		
Influenza and Pneumonia Deaths	Rate per 100,000	11.6	13.0		2020
	95% CI	10.1 - 13.2	12.9 - 13.2		
Nephritis, Nephrotic Syndrome, and Nephrosis Deaths	Rate per 100,000	11.3	12.7		2020
	95% CI	9.8 - 12.7	12.6 - 12.8		
Suicide Deaths	Rate per 100,000	16.3	13.6		2020
	95% CI	14.1 - 18.6	13.5 - 13.7		
Parkinson Disease Deaths	Rate per 100,000	11.0	9.9		2020
	95% CI	9.6 - 12.4	9.8 - 10.0		

ME doing better than the U.S.
 ME similar to the U.S.
 ME doing worse than the U.S.

Rates are age-adjusted to the U.S. 2000 Standard Population.
 95% CI: 95% Confidence Interval of the rate.

Maine data: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics.
 US Data: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released in 2021

Males vs. Females At-a-Glance

Leading Causes of Death, Maine, 2020



Indicator	Unit	Males	Females	Maine Total	Bar Chart	Year
All Deaths	Rate per 100,000	939.7	652.0	787.1		2020
	95% CI	919.2 - 960.1	637.0 - 667.1	774.6 - 799.5		
Cancer Deaths	Rate per 100,000	194.4	135.8	161.6		2020
	95% CI	185.4 - 203.4	128.8 - 142.7	156.0 - 167.1		
Heart Disease Deaths	Rate per 100,000	185.4	113.4	146.1		2020
	95% CI	176.3 - 194.5	107.3 - 119.6	140.8 - 151.4		
Unintentional Injury Deaths	Rate per 100,000	105.7	48.0	76.7		2020
	95% CI	97.6 - 113.8	43.0 - 53.0	72.0 - 81.5		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	47.4	36.4	41.5		2020
	95% CI	42.9 - 51.9	33.0 - 39.9	38.7 - 44.3		
Cerebrovascular Disease Deaths	Rate per 100,000	30.6	34.0	33.0		2020
	95% CI	26.9 - 34.3	30.7 - 37.3	30.5 - 35.5		
Alzheimer's Disease Deaths	Rate per 100,000	23.5	30.6	27.9		2020
	95% CI	20.2 - 26.8	27.5 - 33.6	25.6 - 30.1		
Diabetes Deaths	Rate per 100,000	33.3	16.4	23.9		2020
	95% CI	29.5 - 37.2	14.0 - 18.9	21.7 - 26.1		
COVID-19	Rate per 100,000	22.8	17.8	20.2		2020
	95% CI	19.6 - 25.9	15.4 - 20.2	18.2 - 22.1		
Chronic Liver Disease and Cirrhosis Deaths	Rate per 100,000	19.8	8.4	13.9		2020
	95% CI	16.6 - 23.0	6.5 - 10.6	12.0 - 15.7		
Influenza and Pneumonia Deaths	Rate per 100,000	15.3	9.2	11.6		2020
	95% CI	12.6 - 17.9	7.4 - 11.2	10.1 - 13.2		
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	13.3	9.8	11.3		2020
	95% CI	10.8 - 15.7	8.0 - 11.6	9.8 - 12.7		
Suicide Deaths	Rate per 100,000	27.7	5.5	16.3		2020
	95% CI	23.6 - 31.8	3.8 - 7.6	14.1 - 18.6		
Parkinson's Disease Deaths	Rate per 100,000	16.7	7.1	11		2020
	95% CI	14.0 - 19.4	5.6 - 8.7	9.6 - 12.4		

Rates are age-adjusted to the U.S. 2000 Standard Population. 95% CI: 95% Confidence Interval of the rate.

Bar Chart shows male and female rates in order listed on table from left to right; dark blue bar indicates the total Maine rate.

Data Source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics.

Trend At-a-Glance

Leading Causes of Death, Maine, 2011-2020



Indicator	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-year trend	Progress
All Deaths	Rate per 100,000	752.8	730.4	754.2	739.0	783.5	759.0	771.6	753.9	760.0	787.1		
	95% CI	739.6 - 766.0	717.5 - 743.3	741.2 - 767.2	726.2 - 751.8	770.4 - 796.6	746.1 - 772.0	758.7 - 784.5	741.6 - 766.1	747.8 - 772.3	774.6 - 799.5		
Cancer Deaths	Rate per 100,000	182.2	179.3	175.2	170.3	178.0	168.9	170.8	162.0	164.2	161.6		
	95% CI	175.8 - 188.6	173.1 - 185.6	169.0 - 181.3	164.3 - 176.3	171.9 - 184.1	163 - 174.9	164.9 - 176.7	156.3 - 167.6	158.5 - 169.8	156.0 - 167.1		
Heart Disease Deaths	Rate per 100,000	149.5	145.9	152.3	147.9	157.3	149.5	143.5	146.9	142.5	146.1		
	95% CI	143.7 - 155.2	140.2 - 151.6	146.5 - 158.0	142.3 - 153.5	151.6 - 163.0	144 - 155.1	138.1 - 148.9	141.6 - 152.3	137.2 - 147.7	140.8 - 151.4		
Unintentional Injury Deaths	Rate per 100,000	38.3	40.4	42.6	45.8	53.8	62.4	68.0	64.7	66.7	76.7		
	95% CI	35.1 - 41.6	37.0 - 43.7	39.2 - 46.1	42.2 - 49.4	49.9 - 57.7	58.1 - 66.6	63.6 - 72.5	60.4 - 68.9	62.3 - 71.0	72.0 - 81.5		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	48.4	45.4	49.1	48.1	53.6	47.4	48.7	45.6	48.3	41.5		
	95% CI	45.1 - 51.7	42.2 - 48.5	45.8 - 52.3	44.9 - 51.3	50.3 - 56.9	44.3 - 50.5	45.6 - 52.8	42.6 - 48.5	45.3 - 51.3	38.7 - 44.3		
Cerebrovascular Disease Deaths	Rate per 100,000	35.8	34.3	33.4	33.2	32.6	34.4	37.5	33.8	31.4	33.0		
	95% CI	33.0 - 38.6	31.5 - 37.0	30.7 - 36.0	30.6 - 35.9	30.0 - 35.2	31.7 - 37.1	34.7 - 40.2	31.2 - 36.3	29.0 - 33.9	30.5 - 35.5		
Alzheimer's Disease Deaths	Rate per 100,000	26.8	23.5	21.6	22.7	28.4	29.6	30.4	28.4	25.9	27.9		
	95% CI	24.4 - 29.2	21.2 - 25.7	19.4 - 23.7	20.5 - 24.8	26.0 - 30.8	27.2 - 32.1	27.9 - 32.8	26.0 - 30.7	23.8 - 28.1	25.6 - 30.1		
Diabetes Deaths	Rate per 100,000	20.0	21.3	20.4	22.4	21.9	23.9	19.7	23.4	23.5	23.9		
	95% CI	17.9 - 22.1	19.1 - 23.5	18.3 - 22.5	20.2 - 24.6	19.7 - 24.1	21.7 - 26.2	17.7 - 21.7	21.2 - 25.5	21.4 - 25.7	21.7 - 26.1		
Chronic Liver Disease and Cirrhosis Deaths	Rate per 100,000	8.9	8.2	8.4	8.9	11.1	10.6	10.3	10.7	10.1	13.9		
	95% CI	7.4-10.3	6.8-9.5	7.0-9.8	7.4-10.3	9.5-12.8	9.0-12.2	8.8-11.8	9.1-12.3	8.6-11.6	12.0-15.7		
Influenza and Pneumonia Deaths	Rate per 100,000	16.8	11.6	14.0	13.7	17.6	12.0	15.2	15.2	14.7	11.6		
	95% CI	14.9 - 18.7	10.0 - 13.2	12.3 - 15.8	12.0 - 15.4	15.7 - 19.6	10.4-13.6	13.4 - 16.9	13.5 - 16.9	13.0 - 16.4	10.1 - 13.2		
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	14.8	14.3	13.6	11.7	11.4	12.4	13	12.5	11.6	11.3		
	95% CI	12.9 - 16.6	12.5 - 16.1	11.9 - 15.2	10.1 - 13.3	9.8 - 13.0	10.8 - 14	11.4 - 14.5	11.0 - 14.1	10.1 - 13.2	9.8 - 12.7		
Suicide Deaths	Rate per 100,000	16.6	14.5	17.4	15.7	16.0	15.9	18.9	18.4	19.4	16.3		
	95% CI	14.4 - 18.8	12.5 - 16.6	15.1 - 19.7	13.5 - 17.8	13.9 - 18.2	13.7 - 18.1	16.5 - 21.2	16.1 - 20.7	17.0 - 21.8	14.1 - 18.6		
Parkinson Deaths	Rate per 100,000	7.6	8.1	9.7	8.2	8.1	8.9	10.4	9.3	10.0	11.0		
	95% CI	6.3-8.9	6.8-9.4	8.3-11.2	6.9-9.6	6.8-9.4	7.6-10.3	8.9-11.8	8.0-10.6	8.7-11.4	9.6-12.4		

- = Improving
- = Plateaued
- = Worsening

Rates are age-adjusted to the U.S. 2000 Standard Population.
 95% CI: 95% Confidence Interval of the rate or percent.

"Progress" column is based on Joinpoint regression analysis of 1999-2020 data showing statistically significant trend (improving or worsening), or no significant trend (plateaued) for most recent joinpoint segment.

"Trend" column shows trend line for period shown; dark marker indicates the best rate.

Data Source for 2011-2017: United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released December 2018. Data are from the Multiple Cause of Death Files, 1999- 2018 as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> 2018-2020 data source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics.

County At-a-Glance

Leading Causes of Death, Maine, 2016-2020 5-year average



Indicator	Unit	Androscoggin	Aroostook	Cumberland	Franklin	Hancock	Kennebec	Knox	Lincoln	Maine Total
All Deaths	Rate per 100,000	865.6	788.9	692.4	784.1	716.8	795.7	732.2	692.4	766.0
	95% CI	844.0 - 887.2	764.8 - 813.0	681.0 - 703.9	747.1 - 821.1	691.0 - 742.5	776.7 - 814.7	702.3 - 762.2	661.3 - 723.4	760.4 - 771.5
Cancer Deaths	Rate per 100,000	175.4	163.6	147.8	168.0	159.2	170.3	169.2	163.1	165.3
	95% CI	165.6 - 185.3	152.7 - 174.4	142.4 - 153.1	150.8 - 185.2	147.2 - 171.2	161.7 - 179.0	155.1 - 183.2	148.9 - 177.4	162.7 - 167.8
Heart Disease Deaths	Rate per 100,000	166.9	146.9	127.0	141.1	133.0	151.4	159.1	134.4	145.5
	95% CI	157.3 - 176.4	136.8 - 156.9	122.1 - 131.9	125.6 - 156.5	122.2 - 143.8	143.1 - 159.6	145.7 - 172.5	121.6 - 147.3	143.1 - 147.9
Unintentional Injury Deaths	Rate per 100,000	69.1	53.6	58.3	66.1	65.9	73.5	71.1	62.7	67.5
	95% CI	62.1 - 76.2	45.7 - 61.5	54.5 - 62.1	53.7 - 80.5	56.0 - 75.7	66.5 - 80.5	59.5 - 82.8	50.4 - 74.9	65.6 - 69.5
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	59.6	55.6	35.7	49.7	40.8	48.8	37.5	30.6	46.2
	95% CI	53.8 - 65.3	49.5 - 61.7	33.1 - 38.3	40.5 - 58.8	35.0 - 46.7	44.2 - 53.4	31.1 - 44.0	24.8 - 36.4	44.9 - 47.5
Cerebrovascular Disease Deaths	Rate per 100,000	40.9	35.1	30.3	38.0	32.3	42.9	30.0	41.7	33.9
	95% CI	36.2 - 45.6	30.3 - 40.0	27.9 - 32.7	30.5 - 46.9	27.0 - 37.5	38.5 - 47.3	24.3 - 36.5	34.5 - 48.8	32.8 - 35.1
Alzheimer's Disease Deaths	Rate per 100,000	57.4	20.0	28.2	28.1	23.5	26.7	33.4	25.2	28.4
	95% CI	51.8 - 63.0	16.5 - 23.4	25.9 - 30.5	21.6 - 35.9	19.1 - 27.9	23.3 - 30.1	27.6 - 39.3	20.2 - 31.1	27.3 - 29.4
Diabetes Deaths	Rate per 100,000	25.0	27.0	18.3	25.9	18.8	28.0	15.9	20.1	22.9
	95% CI	21.3 - 28.6	22.7 - 31.4	16.4 - 20.2	19.8 - 33.4	14.8 - 23.4	24.3 - 31.6	12.0 - 20.7	15.2 - 26.0	21.9 - 23.9
Chronic Liver Disease and Cirrhosis Deaths	Rate per 100,000	15.3	13.7	9.4	7.3	10.6	10.5	10.0	12.0	11.1
	95% CI	12.5-18.7	10.4-17.7	7.9-10.8	3.6-13.1	7.4-14.7	8.3-13.1	6.4-14.8	7.8-17.5	10.4-11.8
Influenza and Pneumonia Deaths	Rate per 100,000	16.3	18.3	11.7	16.8	15.0	10.7	8.0	10.1	13.7
	95% CI	13.3 - 19.2	14.9 - 21.8	10.2 - 13.2	11.4 - 23.8	11.5 - 19.1	8.6 - 13.1	4.9 - 12.4	7.1 - 14.0	13.0 - 14.5
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	9.4	18.3	11.4	16.4	10.6	10.9	8.7	8.2	12.1
	95% CI	7.3 - 11.9	14.8 - 21.7	9.9 - 12.9	11.6 - 22.5	7.8 - 14.1	8.8 - 13.3	5.9 - 12.2	5.2 - 12.2	11.4 - 12.8
Suicide Deaths	Rate per 100,000	18.0	15.6	12.6	17.8	17.2	17.3	22.2	20.4	17.7
	95% CI	14.6 - 21.9	11.4 - 20.8	10.8 - 14.4	11.7 - 25.9	12.5 - 23.1	14.1 - 21.1	15.7 - 30.5	13.8 - 28.9	16.7 - 18.8
Parkinson Deaths	Rate per 100,000	10.5	4.9	13.1	8.4	10.3	9.4	11.4	9.4	9.9
	95% CI	8.2-13.2	3.3-7.0	11.5-14.7	5.1-12.9	7.6-13.6	7.5-11.7	8.2-15.4	6.4-13.3	9.3-10.6

Orange shading indicates county rate is significantly worse than the state rate.

Green shading indicates county rate is significantly better than the state rate.

Rates are age-adjusted to the U.S. 2000 Standard Population.

95% CI: 95% Confidence Interval of the rate.

Data Source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. June 28, 2022

County At-a-Glance

Leading Causes of Death, Maine, 2016-2020 5-year average



Indicator	Unit	Oxford	Penobscot	Piscataquis	Sagadahoc	Somerset	Waldo	Washington	York	Maine Total
		Rate per 100,000	806.0	837.9	847.7	679.5	881.4	758.2	927.2	725.8
	95% CI	778.7 - 833.3	820.2 - 855.7	798.3 - 897.2	648.1 - 710.9	850.4 - 912.4	725.8 - 790.5	887.6 - 966.8	711.9 - 739.7	760.4 - 771.5
Cancer Deaths	Rate per 100,000	171.9	174.3	199.4	151.5	192.7	165.3	192.7	162.6	165.3
	95% CI	159.5 - 184.4	166.3 - 182.4	176.6 - 222.2	137.0 - 166.1	178.4 - 207.0	150.3 - 180.4	175.3 - 210.1	156.1 - 169.1	162.7 - 167.8
Heart Disease Deaths	Rate per 100,000	140.7	162.3	183.0	141.2	190.0	160.8	184.0	127.2	145.5
	95% CI	129.4 - 152.0	154.6 - 170.0	161.0 - 205.0	127.4 - 155.1	175.7 - 204.3	146.0 - 175.7	167.2 - 200.8	121.5 - 132.9	143.1 - 147.9
Unintentional Injury Deaths	Rate per 100,000	63.8	76.1	82.6	42.6	72.9	60.4	117.6	72.9	67.5
	95% CI	54.4 - 73.2	69.8 - 82.3	63.0 - 106.3	33.7 - 53.2	62.2 - 83.6	49.6 - 71.2	99.2 - 136.0	67.7 - 78.2	65.6 - 69.5
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	64.2	51.6	38.9	39.0	69.2	48.4	48.5	42.1	46.2
	95% CI	56.7 - 71.7	47.2 - 56.0	29.9 - 49.7	31.8 - 46.2	60.8 - 77.7	40.5 - 56.3	39.9 - 57.0	38.9 - 45.4	44.9 - 47.5
Cerebrovascular Disease Deaths	Rate per 100,000	31.5	32.4	33.1	38.2	38.7	38.2	37.0	27.6	33.9
	95% CI	26.0 - 36.9	29.0 - 35.9	24.6 - 43.5	30.8 - 45.6	32.3 - 45.2	30.9 - 45.5	29.8 - 45.5	24.9 - 30.2	32.8 - 35.1
Alzheimer's Disease Deaths	Rate per 100,000	25.1	23.9	22.5	21.4	20.3	27.7	17.7	30.5	28.4
	95% CI	20.5 - 29.7	21.0 - 26.9	15.7 - 31.3	16.3 - 27.7	15.9 - 25.6	21.9 - 34.6	12.9 - 23.6	27.8 - 33.2	27.3 - 29.4
Diabetes Deaths	Rate per 100,000	34.8	25.7	24.0	16.6	28.8	21.7	22.4	21.1	22.9
	95% CI	29.2 - 40.4	22.6 - 28.7	16.4 - 33.9	11.9 - 22.4	23.4 - 34.3	16.6 - 28.0	16.7 - 29.5	18.7 - 23.4	21.9 - 23.9
Chronic Liver Disease and Cirrhosis Deaths	Rate per 100,000	12.1	11.2	13.0	7.1	12.1	9.3	14.7	11.4	11.1
	95% CI	8.6-16.5	9.0-13.3	7.1-21.9	3.9-11.8	8.8-16.3	5.8-14.1	10.0-20.7	9.5-13.2	10.4-11.8
Influenza and Pneumonia Deaths	Rate per 100,000	15.3	19.2	12.8	13.3	13.9	13.3	17.2	12.0	13.7
	95% CI	11.8 - 19.6	16.6 - 21.9	7.3 - 20.8	9.4 - 18.4	10.2 - 18.5	9.4 - 18.3	12.6 - 22.9	10.2 - 13.9	13.0 - 14.5
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	10.9	15.5	10.9	10.4	10.0	11.7	18.1	12.1	12.1
	95% CI	8.1 - 14.4	13.1 - 17.9	6.4 - 17.2	6.9 - 15.0	7.1 - 13.7	8.0 - 16.5	13.3 - 24.0	10.3 - 13.9	11.4 - 12.8
Suicide Deaths	Rate per 100,000	21.4	17.9	22.0	24.9	24.7	20.2	24.7	19.4	17.7
	95% CI	16.1 - 27.8	14.8 - 20.9	12.6 - 35.8	17.8 - 33.9	18.8 - 31.9	14.4 - 27.5	17.0 - 34.6	16.6 - 22.2	16.7 - 18.8
Parkinson Deaths	Rate per 100,000	10.5	9.5	7.8	8.3	8.1	7.9	7.1	9.7	9.9
	95% CI	7.7-14.0	7.7-11.4	4.0-13.7	5.3-12.5	5.4-11.7	5.0-11.9	4.3-11.1	8.1-11.3	9.3-10.6

Orange shading indicates county rate is significantly worse than the state rate.

Green shading indicates county rate is significantly better than the state rate.

Rates are age-adjusted to the U.S. 2000 Standard Population.

95% CI: 95% Confidence Interval of the rate.

Data Source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. June 28, 2022.

Age Groups At-a-Glance

Leading Causes of Death, Maine, 2020



Indicator	Unit	0 - 14 yrs	15 - 24 yrs	25 - 34 yrs	35 - 44 yrs	45 - 54 yrs	55 - 64 yrs	65 - 74 yrs	75 - 84 yrs	85+ yrs	Bar Chart	Year
All Deaths	Rate per 100,000	47.4	71.3	153.2	264.6	446.8	898.9	1,758.6	4,693.2	15,313.0		2020
	95% CI	37.9-56.9	57.8-84.7	134.3-172.2	239.1-290.1	415.1-478.5	858.4-939.4	1696.5-1820.7	4547.3-4839.0	14894.7-15731.3		
Cancer Deaths	Rate per 100,000	*3.9	*3.3	*8.5	19.1	93.8	299.8	567.9	1,117.0	1,909.3		2020
	95% CI	1.2-6.7	0.4-6.2	4.1-13.0	12.3-26.0	79.3-108.4	276.4-323.2	532.7-603.2	1045.8-1188.1	1761.6-2057.0		
Heart Disease Deaths	Rate per 100,000	*1.0	*1.3	*6.7	30.0	68.6	155.4	308.5	902.3	3,631.2		2020
	95% CI	-0.4-2.4	-0.5-3.1	2.7-10.6	21.4-38.5	56.2-81.0	138.5-172.2	282.5-334.5	838.4-966.2	3427.5-3834.9		
Unintentional Injury Deaths	Rate per 100,000	*6.9	38.3	83.9	119.9	94.4	72.7	54.7	134.5	666.2		2020
	95% CI	3.3-10.5	28.4-48.1	69.9-97.9	102.7-137.0	79.8-109.0	61.2-84.2	43.8-65.7	109.8-159.1	578.9-753.4		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	-	*0.7	*0.6	*2.6	*11.1	48.9	128.9	352.7	698.9		2020
	95% CI	-	-0.6-2.0	-0.6-1.8	0.1-5.0	6.1-16.2	39.5-58.4	112.1-145.7	312.7-392.6	609.5-788.2		
Cerebrovascular Disease Deaths	Rate per 100,000	*0.5	-	*1.8	*2.6	*7.6	23.8	59.9	218.2	990.3		2020
	95% CI	-0.5-1.5	-	-0.2-3.9	0.1-5.0	3.5-11.8	17.2-30.3	48.4-71.3	186.8-249.6	884.0-1096.7		
Alzheimer's Disease Deaths	Rate per 100,000	-	-	-	-	*0.6	*4.8	22.2	198.2	1,097.4		2020
	95% CI	-	-	-	-	-0.6-1.7	1.8-7.7	15.3-29.2	168.2-228.1	985.4-1209.4		
Diabetes Deaths	Rate per 100,000	-	-	*2.4	*4.5	20.5	41.3	86.7	135.6	300.4		2020
	95% CI	-	-	0.0-4.8	1.2-7.8	13.7-27.3	32.6-50.0	72.9-100.5	110.8-160.4	241.8-359.0		
COVID-19 Deaths	Rate per 100,000	-	-	*0.6	*2.6	*4.7	11.4	39.3	169.8	505.6		2020
	95% CI	-	-	-0.6-1.8	0.1-5.0	1.4-7.9	6.8-16.0	30.1-48.6	142.1-197.6	429.6-581.6		
Chronic Liver Disease and Cirrhosis Deaths	Rate per 100,000	-	-	*4.9	13.4	27.6	39.9	29.7	31.8	*29.7		2020
	95% CI	-	-	1.5-8.2	7.7-19.1	19.7-35.4	31.4-48.4	21.6-37.7	19.8-43.9	11.3-48.2		
Influenza and Pneumonia Deaths	Rate per 100,000	*1.0	-	*1.2	*1.9	*4.1	13.3	18.8	81.4	279.6		2020
	95% CI	-0.4-2.4	-	-0.5-2.9	-0.3-4.1	1.1-7.1	8.4-18.2	12.4-25.2	62.2-100.6	223.0-336.1		
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	-	-	-	*2.6	*2.9	10	25.1	84.9	264.7		2020
	95% CI	-	-	-	0.1-5.0	0.4-5.5	5.7-14.2	17.7-32.5	65.3-104.5	209.7-319.7		
Suicide Deaths	Rate per 100,000	-	17.2	20.7	24.9	21.1	20.0	16.0	24.8	*23.8		2020
	95% CI	-	10.6-23.8	13.7-27.6	17.1-32.7	14.2-28.0	13.9-26.0	10.1-21.9	14.2-35.4	7.3-40.3		
Parkinson Deaths	Rate per 100,000	-	-	-	-	-	*1.9	24.5	112.1	270.6		2020
	95% CI	-	-	-	-	-	0.0-3.8	17.2-31.8	89.5-134.6	215.0-326.2		

Rates are crude rates, deaths per 100,000 population. *: death rates are noted as unreliable when the numerator is 20 or less. -: Denotes zero deaths

95% CI: 95% Confidence Interval of the rate. Bar Chart shows age group rates in order listed on table from left to right.

Data Source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics.

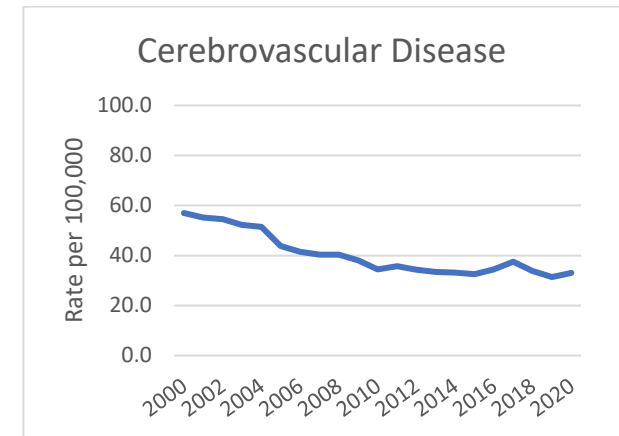
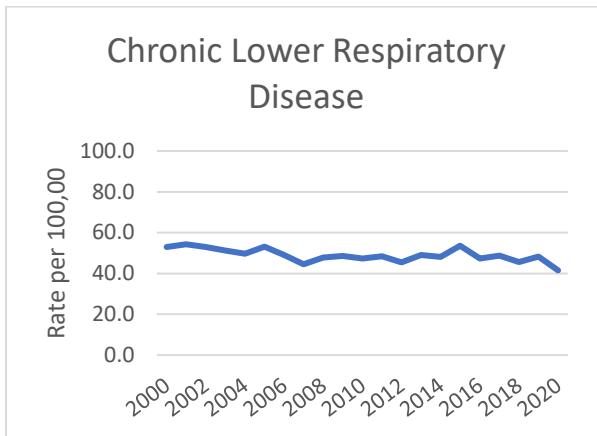
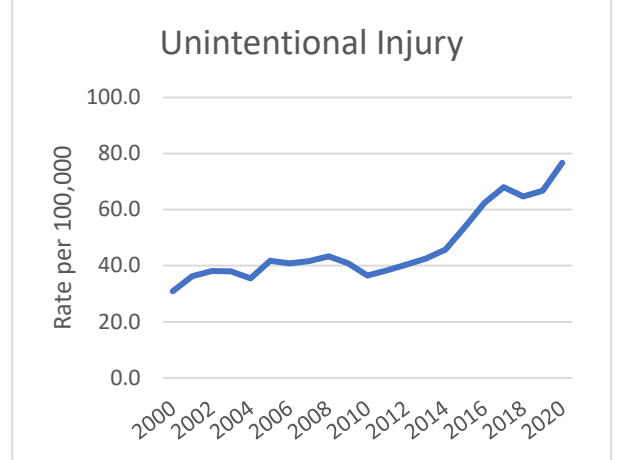
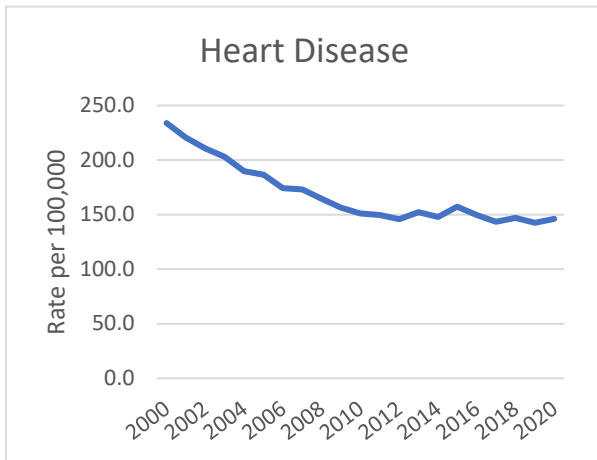
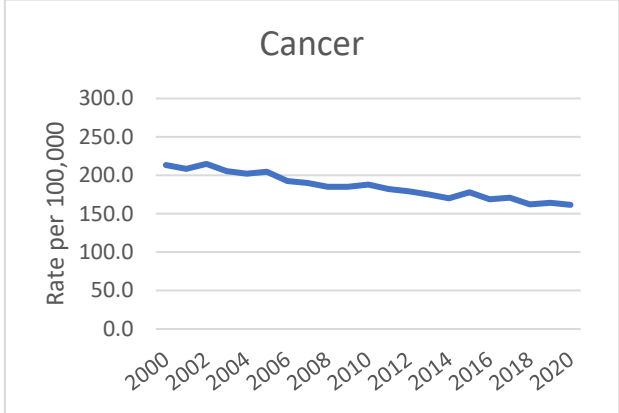
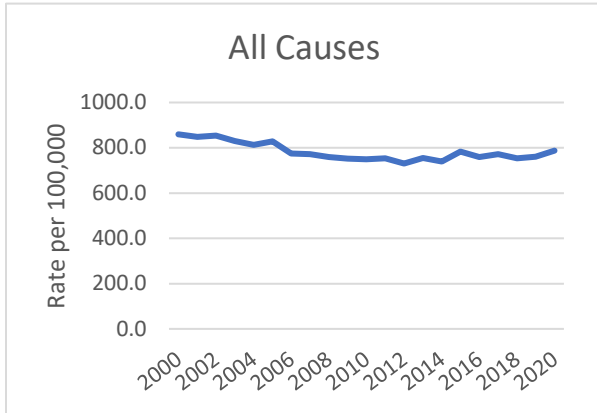
COVID-19 Deaths by County, Maine, 2020			
	Number	Age-Adjusted Rate	
		Rate	95% CI
Maine total			
	420	20.2	18.2 - 22.1
County			
Androscoggin	23	17.0	10.7 - 25.8
Aroostook	21	17.1	10.5 - 26.4
Cumberland	106	25.0	20.2 - 29.8
Franklin	7	15.3	6.2 - 31.6
Hancock	27	27.1	17.8 - 39.4
Kennebec	34	18.6	12.8 - 26.1
Knox	*	*	*
Lincoln	*	*	*
Oxford	32	33.3	22.6 - 47.2
Penobscot	34	16.6	11.4 - 23.5
Piscataquis	*	*	*
Sagadahoc	*	*	*
Somerset	19	23.8	14.3 - 37.1
Waldo	20	33.9	20.1 - 53.6
Washington	7	13.1	5.3 - 27.0
York	82	24.4	19.4 - 30.3
<p>Data Source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. Covd-19 Deaths: Deaths in which the underlying cause of death was coded U.071. Age-adjusted rates are deaths per 100,000 population age-adjusted to the U.S. 2000 standard population.</p> <p>*: Data are suppressed to protect privacy. 95% CI: 95% confidence interval of the rate.</p>			

Section 3:

Cause-specific Figures

Death Rate Trends, Maine, 2000-2020

Please note the different scales in these figures.

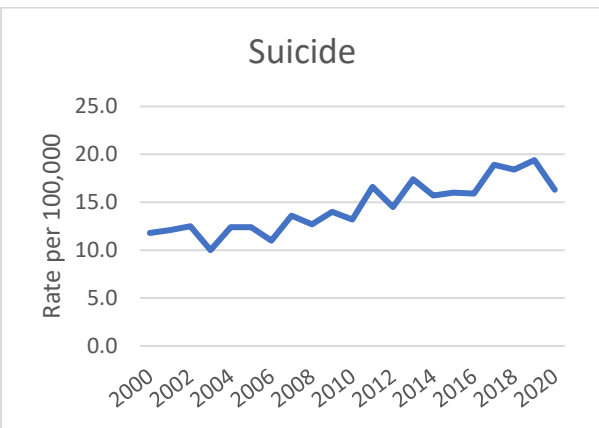
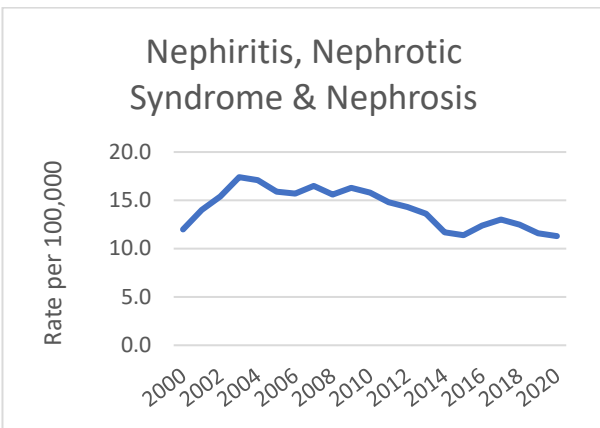
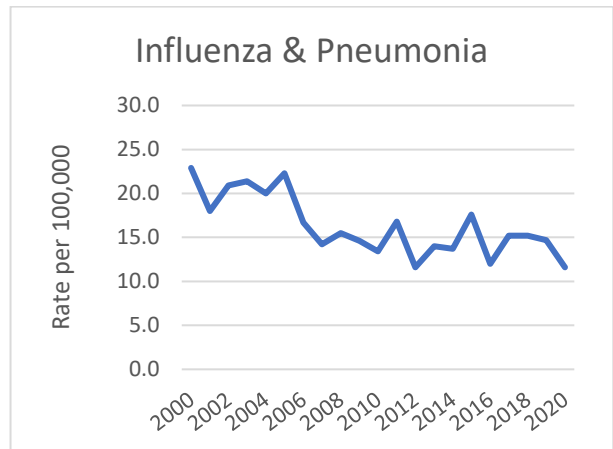
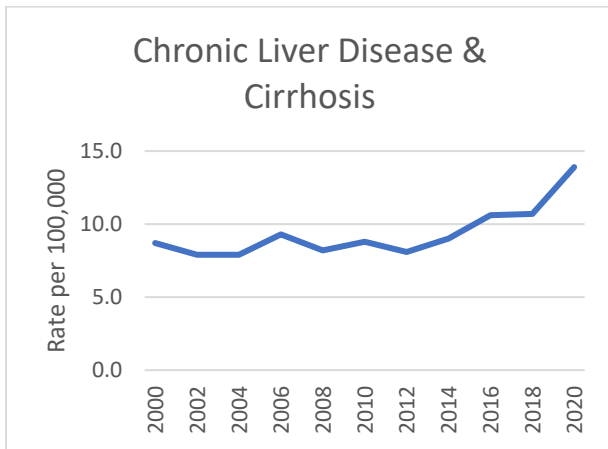
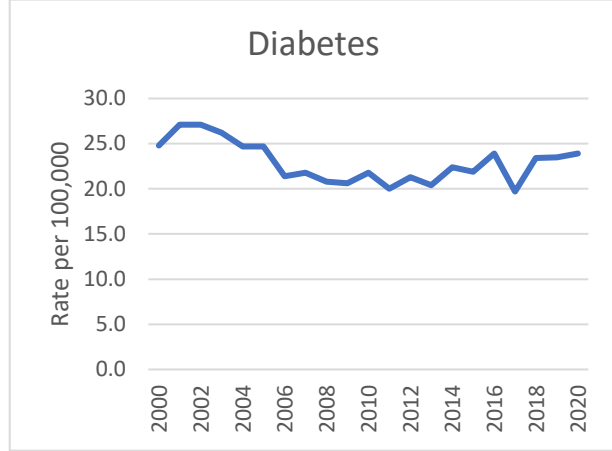
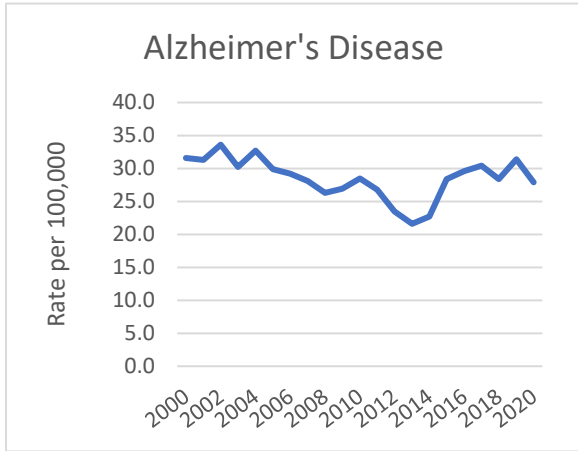


Data Sources: CDC WONDER (1999-2017 data). 2018-2020 data: Maine Center for Disease Control and Prevention. Data, Research and Vital Statistics. June 2022.

Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

Death Rate Trends, Maine, 2000-2020

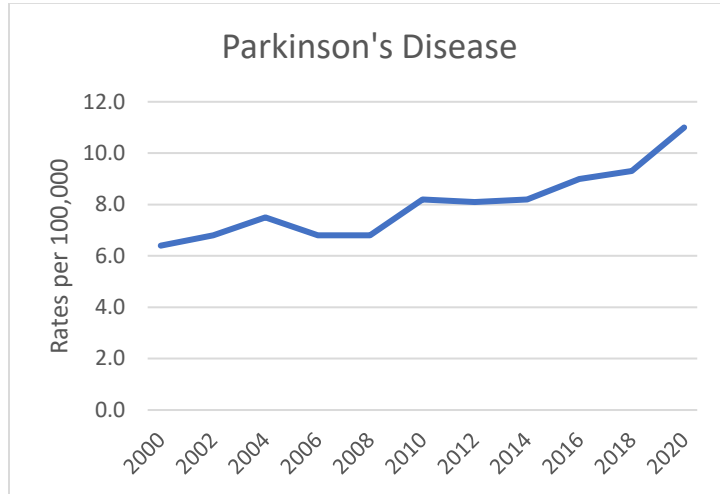
Please note the different scales in these figures.



Data Sources: CDC WONDER (1999-2017 data). 2018-2020 data: Maine Center for Disease Control and Prevention. Data, Research and Vital Statistics. June 2022. Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

Death Rate Trends, Maine, 2000-2020

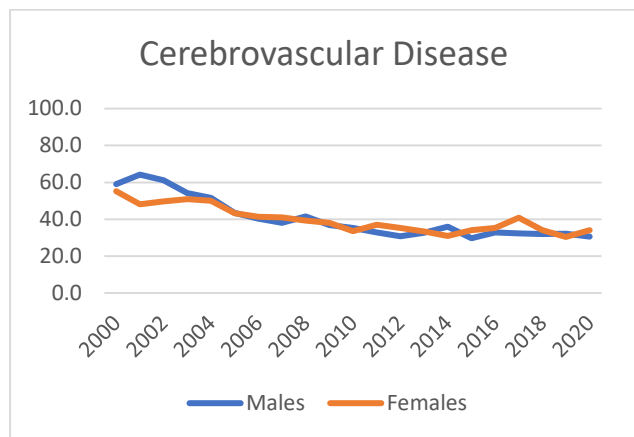
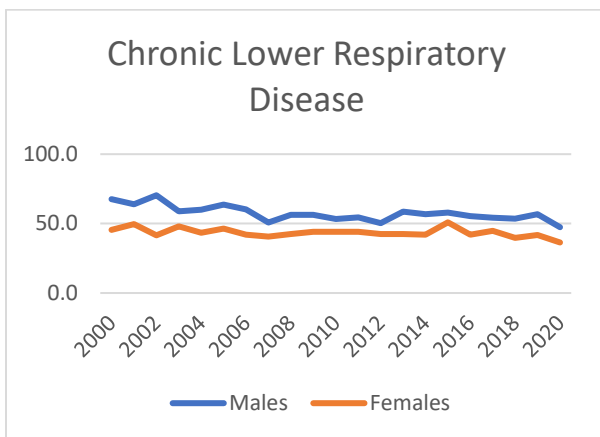
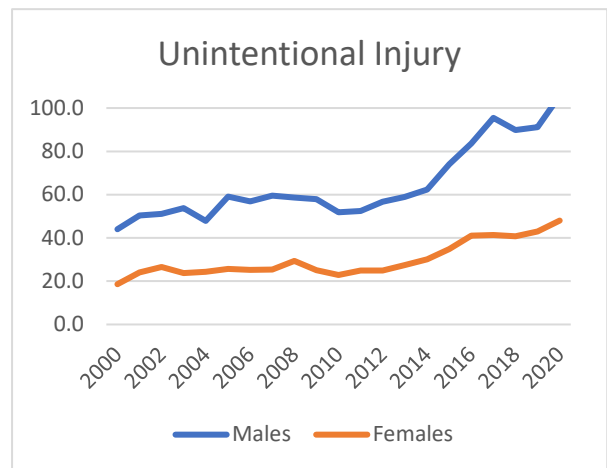
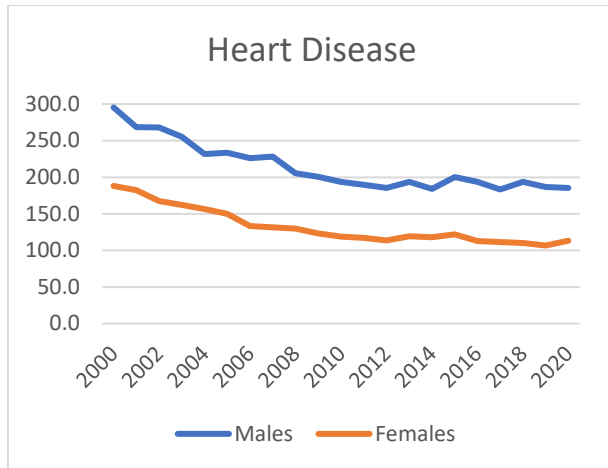
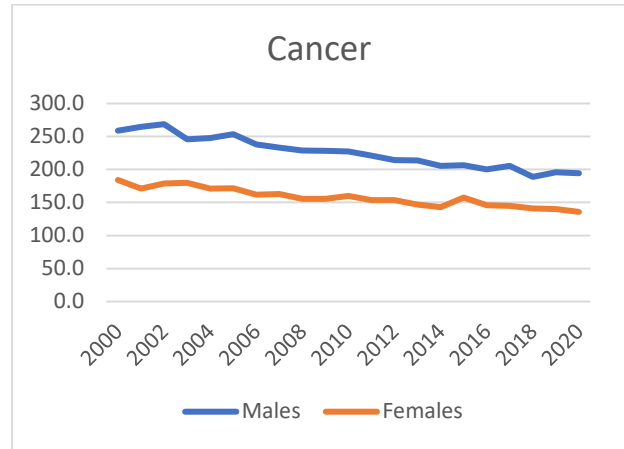
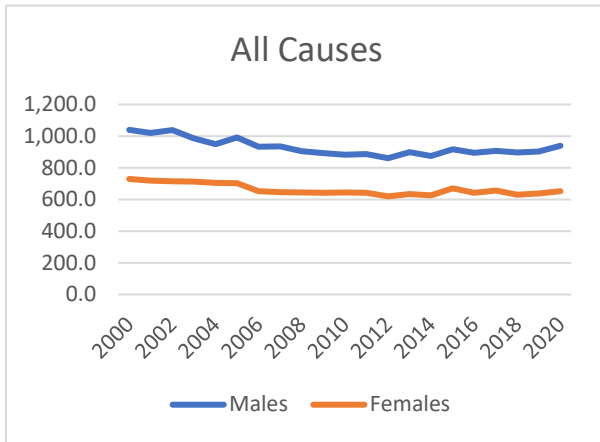
Please note the different scales in these figures.



Data Sources: Maine Center for Disease Control and Prevention. Data, Research and Vital Statistics. June 2022. Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

Death Rate Trends by Sex, Maine, 2000-2020

Please note the different scales in these figures.

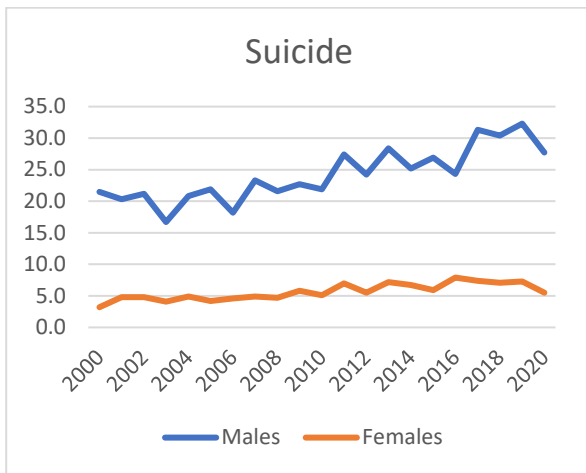
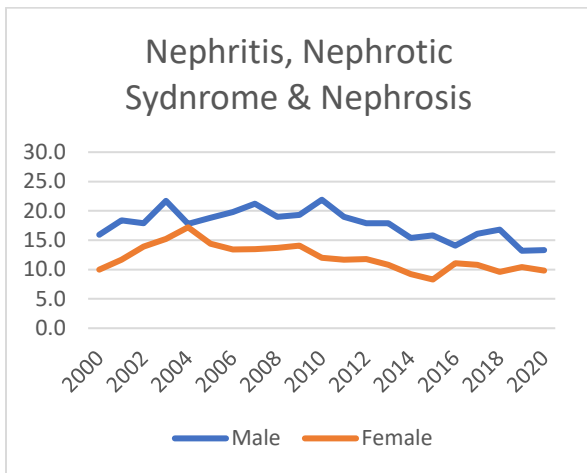
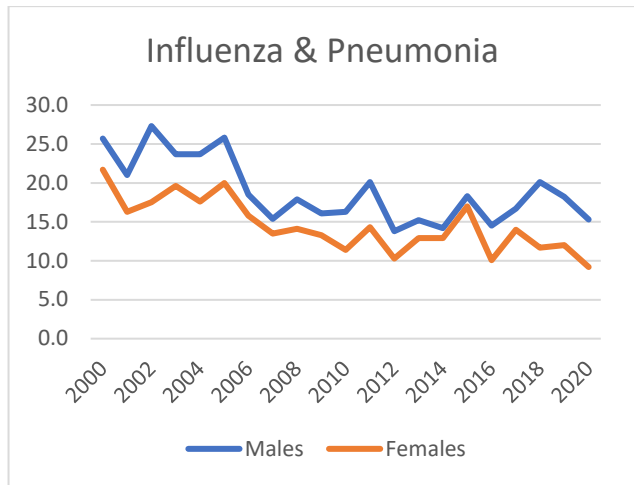
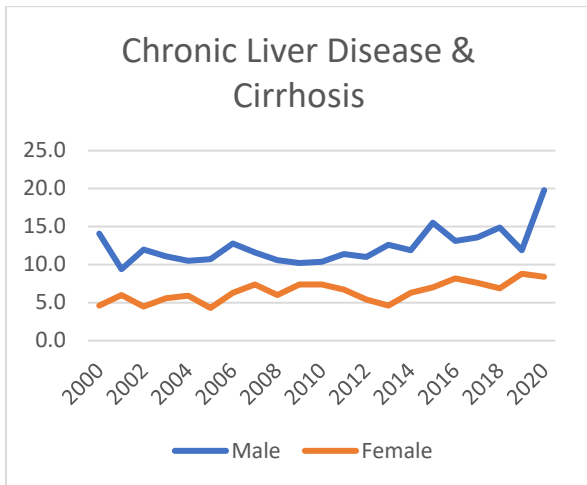
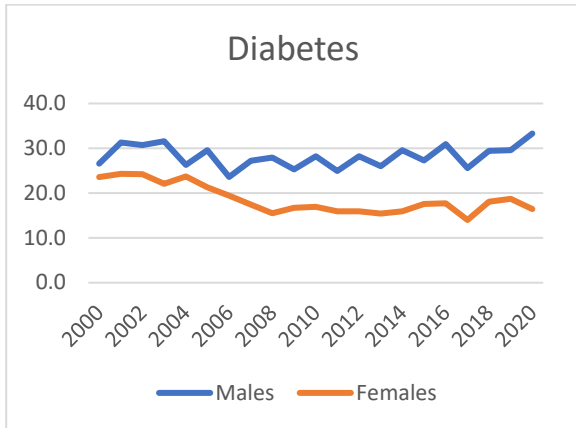
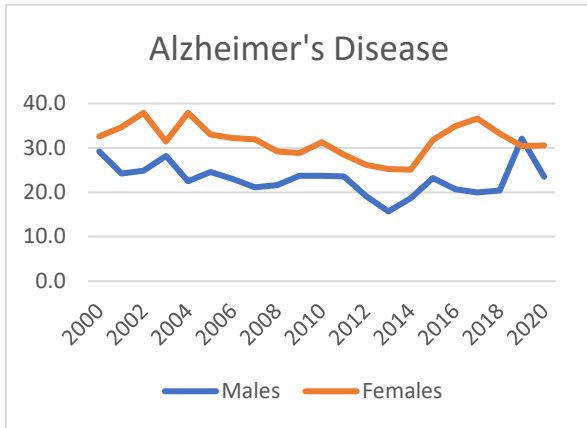


Data Sources: CDC WONDER (1999-2017 data). 2018-2020 data: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. June 2022.

Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

Death Rate Trends by Sex, Maine, 2000-2020

Please note the different scales in these figures.

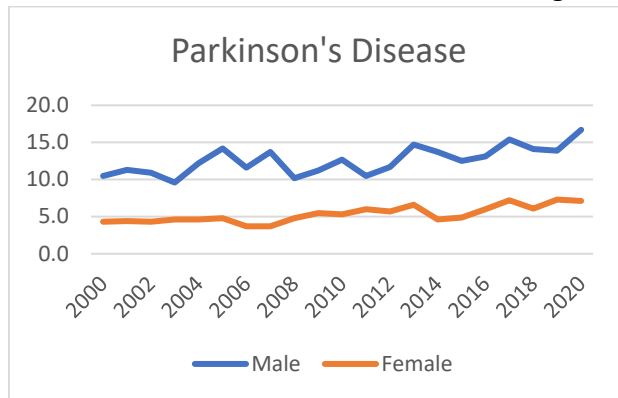


Data Sources: CDC WONDER (1999-2017 data). 2018-2020 data: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. June 2022.

Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

Death Rate Trends by Sex, Maine, 2000-2020

Please note the different scales in these figures.



Data Sources: CDC WONDER (1999-2017 data). 2018-2020 data: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. June 2022.

Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

Technical Notes

Cause of Death and ICD 10 codes

Causes (as presented in this report)	ICD-10 Codes	Technical Name	Notes
Cancer	C00-C97	Malignant neoplasms	
Heart Disease	I00-I09, I11, I13, I20-I51	Diseases of the heart	
Chronic Lower Respiratory Disease	J40-J47	Chronic Lower Respiratory Disease	Includes chronic obstructive pulmonary disease and asthma
Unintentional Injury	V01-X59, Y85-86	Unintentional Injury	Includes (but not limited to) unintentional drug overdose, motor vehicle crash deaths, and falls
Cerebrovascular Disease	I60-I69	Cerebrovascular disease	Also known as stroke.
Alzheimer's Disease	G30, G309	Alzheimer's Disease	
Diabetes	E10-E14	Diabetes mellitus	Includes both Type 1 and Type 2 diabetes deaths.
Influenza and Pneumonia	J09-J18	Influenza and Pneumonia	
Suicide	X60-X84, Y87.0	Intentional self-harm (suicide)	ICD codes related to terrorism are preceded with '*'
Nephritis, Nephrotic Syndrome and Nephrosis	N00-N07, N17-N19, N25-N27	Nephritis, Nephrotic Syndrome and Nephrosis	Specific disease of the kidneys
Chronic Liver Disease and Cirrhosis	K70, K73-K74	Chronic Liver Disease and Cirrhosis	
Parkinson's Disease	G20-G21	Parkinson's Disease	
COVID-19	U.071.	Coronavirus Disease 2019	

Data Sources:

- Mortality data for the US and Maine for years prior to 2018 are from the Centers for Disease Control, National Center for Health Statistics, Underlying Cause of Death. 1999-2019 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999-2019, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> in 2020.
- Maine mortality data for 2018-2020 are from the Maine CDC, Data, Research, and Vital Statistics.
- Counts and rates for Maine may differ slightly from WONDER due to revisions to death records after final year-end counts were submitted to NCHS/WONDER.

Trend Analysis:

- The trend analysis referenced in the Key Summary section as well as in the At-a-Glance table is based on Joinpoint regression analysis. Joinpoint is a software developed by CDC that allows one to test trends over a time period, if a trend has changed and the significance of a given change. If a trend has changed, Joinpoint allows multiple segments to be fitted to a graph and to test the significance of a given segment (increasing, decreasing or not significantly different from 0). Joinpoint also calculates the Average Annual Percent Change (AAPC) which allows assessment of how much trends change over time. If Joinpoint identified a significant increase or decrease, the progress was noted with red diamond or green square, respectively. If the analysis noted a that the rate had plateaued (not changed from zero) in the latest segment, then the progress was noted as a yellow circle.

Mortality Rates:

- Unless otherwise specified, rates presented in this report are age-adjusted to the U.S. 2000 Standard Population using the direct method. Causes of death vary by age and age-adjustment allows comparison across populations with different underlying age distributions.

References

United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999- 2019 as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>

Data, Research, and Vital Statistics, Maine Center for Disease Control and Prevention, Department of Health and Human Services.

Interactive data resources

For additional information on key risk factors, mortality, and leading causes of death in Maine, please visit the following interactive dashboards:

- Maine Shared Community Health Needs Assessment Interactive Dashboard: <https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/maine-interactive-health-data.shtml>
- Maine Environmental Health Tracking Portal: <https://data.mainepublichealth.gov/tracking/home>
- Data, Research, and Vital Statistics Dashboards: <https://www.maine.gov/dhhs/mecdc/public-health-systems/data-research/>
- CDC WONDER: <https://wonder.cdc.gov/>



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