

# **Maine Mortality Report: Ten Most Common Causes of Death 2019**

Maine CDC  
Data, Research, and Vital Statistics  
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## 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:

Anne Rogers, MEd, Supervisor, Statistical Services Unit (*Retired*)- cleaning and editing databases, programming to extract and tabulate these data.

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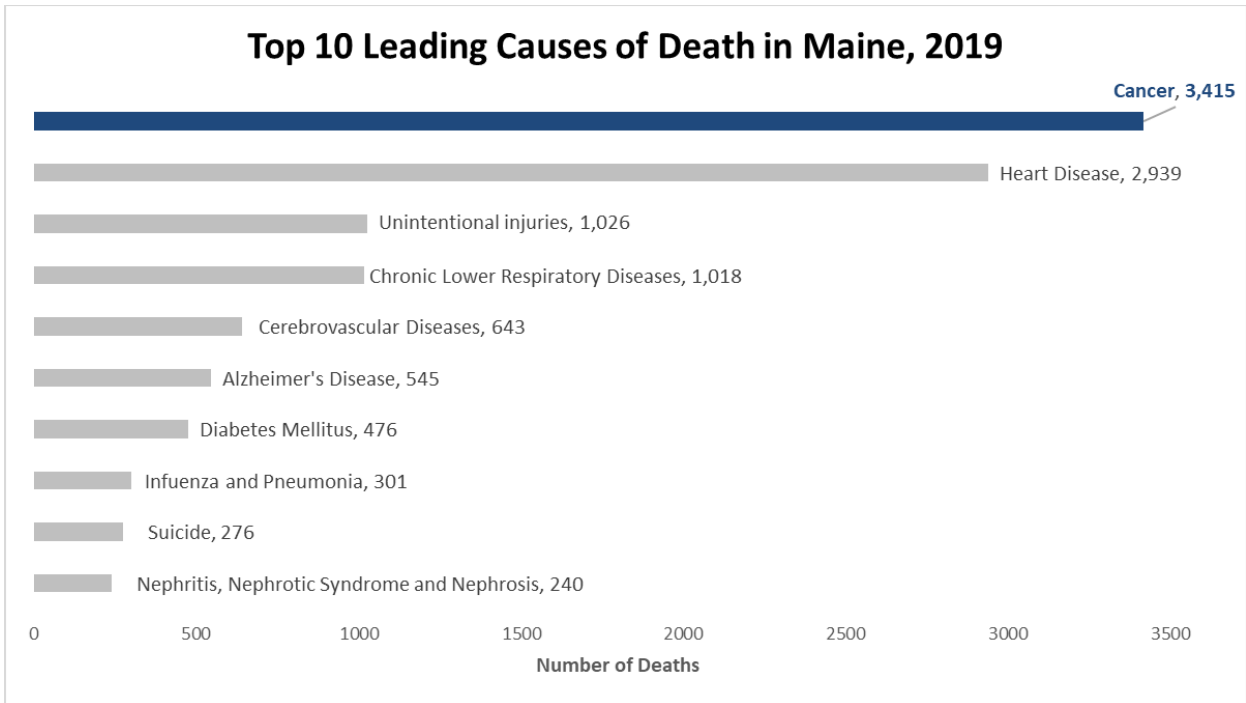
Jessica Cross, MPH, Epidemiologist - data checking.

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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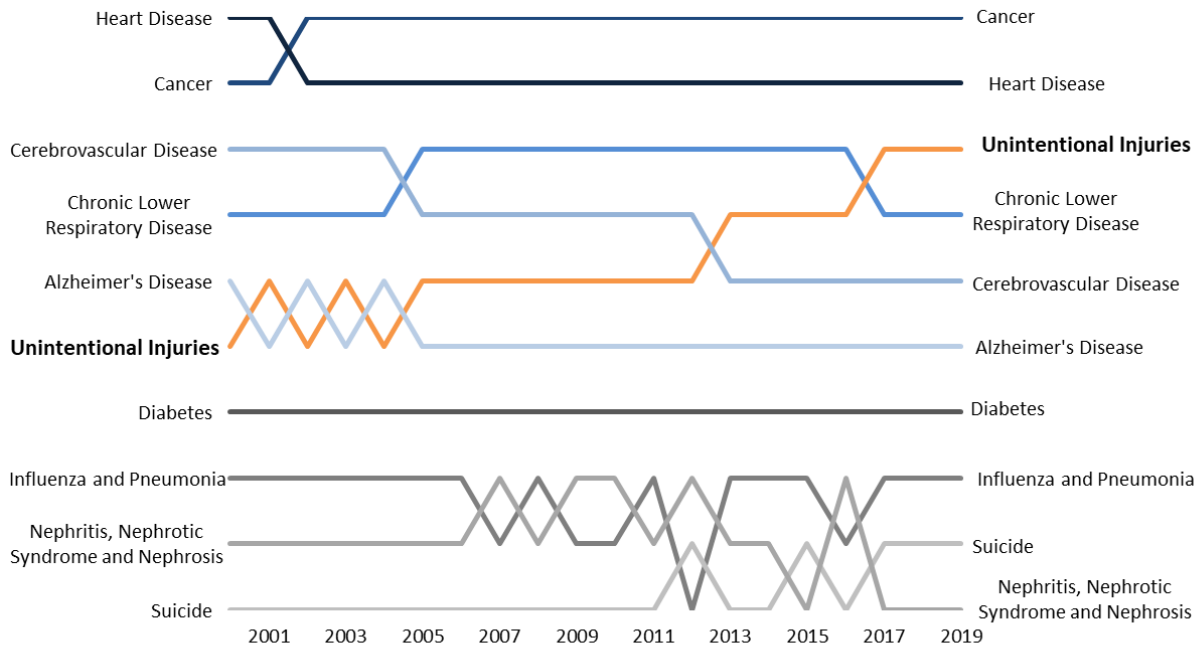
**Section 1:**  
**Leading Causes of Death in Maine,**  
**2019**



*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.

### Maine Leading Cause of Death Rank, 2000-2019

Unintentional injuries have risen from the 6th to the 3rd leading cause of death in Maine since 2000.



2000-2017 Data accessed on WONDER, US CDC. <https://wonder.cdc.gov/ucd-icd10.html>.

2018 data: Maine Center for Disease Control and Prevention. Data, Research and Vital Statistics. October 2019.

## Summary of key findings

### Key findings in comparison with the U.S.

- Cancer remains the leading cause of death in Maine and Heart Disease is the leading cause of death in the U.S.
- Maine's Cancer mortality rate is higher than the US and Maine's Heart Disease mortality rate is lower than the U.S.
- Maine's Unintentional Injury, Chronic Lower Respiratory Disease, Influenza and Pneumonia, and Suicide mortality rates are also higher than the U.S.

### Key findings by Sex

- Cancer remains the leading cause of death among both males and females in Maine followed by Heart Disease as the 2<sup>nd</sup> leading cause of death.
- Unintentional injury is the 3<sup>rd</sup> leading cause of death among males and the 4<sup>th</sup> leading cause of death among females.

### Key findings by County of Residence

- Compared with the entire state, Androscoggin, Kennebec, 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.

### Key findings of trends over time

- The statewide age-adjusted mortality rate decreased from 865.9 per 100,000 in 1999 to 760.0 per 100,000 in 2019. However, the decline in mortality plateaued starting in 2010 with no significant increase nor decrease since then.
- The age-adjusted cancer mortality rate in Maine decreased significantly over the past two decades from 214.6 per 100,000 in 1999 to 164.2 per 100,000 in 2019.
- The age-adjusted heart disease mortality rate decreased from 238.7 per 100,000 in 1999 to 142.5 per 100,000 in 2019. However, the decline in mortality plateaued starting in 2010 with no significant increase or decrease since then.
- The age-adjusted unintentional injury mortality rate nearly doubled over the past two decades from 34.9 per 100,000 in 1999 to 66.7 per 100,000 in 2019.
  - Unintentional injury deaths in Maine increased significantly from 2011 -2017 with an annual percent change of 11%, though they have plateaued between 2017-2019 with no statistically significant increase or decrease. It is the leading cause of death for individuals ages 54 and younger.

*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.*

# **Section 2:**

## **At-a-Glance Sheets**

# Maine vs. U.S. At-a-Glance Leading Causes of Death, 2019



Indicator	Unit	Maine	U.S.	Comparison	Year
All Deaths	Rate per 100,000	<b>760.0</b>	<b>715.2</b>	◆	2019
	95% CI	747.8 - 772.3	714.4 - 716.1		
Cancer Deaths	Rate per 100,000	<b>164.2</b>	<b>146.2</b>	◆	2019
	95% CI	158.5 - 169.8	145.8 - 146.5		
Heart Disease Deaths	Rate per 100,000	<b>142.5</b>	<b>161.5</b>	■	2019
	95% CI	137.2 - 147.7	161.1 - 161.9		
Unintentional Injury Deaths	Rate per 100,000	<b>66.7</b>	<b>49.3</b>	◆	2019
	95% CI	62.3 - 71.0	49.0 - 49.5		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	<b>48.3</b>	<b>38.2</b>	◆	2019
	95% CI	45.3 - 51.3	38.0 - 38.4		
Cerebrovascular Disease Deaths	Rate per 100,000	<b>31.4</b>	<b>37</b>	■	2019
	95% CI	29.0 - 33.9	36.8 - 37.1		
Alzheimer's Disease Deaths	Rate per 100,000	<b>25.9</b>	<b>29.8</b>	■	2019
	95% CI	23.8-28.1	29.7 - 30.0		
Diabetes Deaths	Rate per 100,000	<b>23.5</b>	<b>21.6</b>	●	2019
	95% CI	21.4 - 25.7	21.4 - 21.7		
Influenza and Pneumonia Deaths	Rate per 100,000	<b>14.7</b>	<b>12.3</b>	◆	2019
	95% CI	13.0 - 16.4	12.2 - 12.4		
Suicide Deaths	Rate per 100,000	<b>19.4</b>	<b>13.9</b>	◆	2019
	95% CI	17.0 - 21.8	13.8 - 14.1		
Nephritis, Nephrotic Syndrome, and Nephrosis Deaths	Rate per 100,000	<b>11.6</b>	<b>12.7</b>	●	2019
	95% CI	10.1 - 13.2	12.6 - 12.8		

- 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 1999-2019 on CDC WONDER Online Database, released in 2020.  
Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Dec 23, 2020.



# Males vs. Females At-a-Glance

## Leading Causes of Death, Maine, 2019



Indicator	Unit	Males	Females	Maine Total	Bar Chart	Year
All Deaths	Rate per 100,000	<b>903.7</b>	<b>637.9</b>	<b>760.0</b>		2019
	95% CI	883.6 - 923.8	622.9 - 652.9	747.8 - 772.3		
Cancer Deaths	Rate per 100,000	<b>195.6</b>	<b>139.9</b>	<b>164.2</b>		2019
	95% CI	186.4 - 204.8	132.7 - 147.1	158.5 - 169.8		
Heart Disease Deaths	Rate per 100,000	<b>186.9</b>	<b>106.8</b>	<b>142.5</b>		2019
	95% CI	177.7 - 196.1	100.9 - 112.8	137.2 - 147.7		
Unintentional Injury Deaths	Rate per 100,000	<b>91.2</b>	<b>42.9</b>	<b>66.7</b>		2019
	95% CI	83.8 - 98.6	38.2 - 47.6	62.3 - 71.0		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	<b>56.8</b>	<b>41.9</b>	<b>48.3</b>		2019
	95% CI	51.8 - 61.8	38.2 - 45.7	45.3 - 51.3		
Cerebrovascular Disease Deaths	Rate per 100,000	<b>32.1</b>	<b>30.4</b>	<b>31.4</b>		2019
	95% CI	28.2 - 35.9	27.2 - 33.6	29.0 - 33.9		
Alzheimer's Disease Deaths	Rate per 100,000	<b>21.0</b>	<b>29.0</b>	<b>25.9</b>		2019
	95% CI	17.9-24.1	26.0-31.9	23.8-28.1		
Diabetes Deaths	Rate per 100,000	<b>29.6</b>	<b>18.7</b>	<b>23.5</b>		2019
	95% CI	26.0- 33.3	16.0 - 21.3	21.4 - 25.7		
Influenza and Pneumonia Deaths	Rate per 100,000	<b>18.2</b>	<b>12</b>	<b>14.7</b>		2019
	95% CI	15.3 - 21.1	10.0 - 14.0	13.0 - 16.4		
Suicide Deaths	Rate per 100,000	<b>32.3</b>	<b>7.3</b>	<b>19.4</b>		2019
	95% CI	27.9 - 36.8	5.3 - 9.7	17.0 - 21.8		
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	<b>13.2</b>	<b>10.4</b>	<b>11.6</b>		2019
	95% CI	10.7- 15.6	8.5- 12.3	10.1 - 13.2		

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.

Created December 2020 by Anne Rogers based on work by Mary Caron, Finn Teach, and Sara Huston, Maine Center for Disease Control and Prevention.

# Trend At-a-Glance

## Leading Causes of Death, Maine, 2010-2019



Indicator	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	10-year trend	Progress
All Deaths	Rate per 100,000	<b>749.6</b>	<b>752.8</b>	<b>730.4</b>	<b>754.2</b>	<b>739</b>	<b>783.5</b>	<b>759</b>	<b>771.6</b>	<b>753.9</b>	<b>760.0</b>		●
	95% CI	736.4 - 762.8	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		
Cancer Deaths	Rate per 100,000	<b>187.9</b>	<b>182.2</b>	<b>179.3</b>	<b>175.2</b>	<b>170.3</b>	<b>178.0</b>	<b>168.9</b>	<b>170.8</b>	<b>162</b>	<b>164.2</b>		■
	95% CI	181.3 - 194.4	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		
Heart Disease Deaths	Rate per 100,000	<b>151.1</b>	<b>149.5</b>	<b>145.9</b>	<b>152.3</b>	<b>147.9</b>	<b>157.3</b>	<b>150</b>	<b>143.5</b>	<b>146.9</b>	<b>142.5</b>		●
	95% CI	145.3 - 156.9	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		
Unintentional Injury Deaths	Rate per 100,000	<b>36.5</b>	<b>38.3</b>	<b>40.4</b>	<b>42.6</b>	<b>45.8</b>	<b>53.8</b>	<b>62.4</b>	<b>68</b>	<b>64.7</b>	<b>66.7</b>		●
	95% CI	33.4 - 39.7	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		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	<b>47.4</b>	<b>48.4</b>	<b>45.4</b>	<b>49.1</b>	<b>48.1</b>	<b>53.6</b>	<b>47.4</b>	<b>48.7</b>	<b>45.6</b>	<b>48.3</b>		■
	95% CI	44.1 - 50.7	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		
Cerebrovascular Disease Deaths	Rate per 100,000	<b>34.5</b>	<b>35.8</b>	<b>34.3</b>	<b>33.4</b>	<b>33.2</b>	<b>32.6</b>	<b>34.4</b>	<b>37.5</b>	<b>33.8</b>	<b>31.4</b>		●
	95% CI	31.7 - 37.3	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		
Alzheimer's Disease Deaths	Rate per 100,000	<b>28.5</b>	<b>26.8</b>	<b>23.5</b>	<b>21.6</b>	<b>22.7</b>	<b>28.4</b>	<b>29.6</b>	<b>30.4</b>	<b>28.4</b>	<b>25.9</b>		●
	95% CI	26.0 - 31.1	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		
Diabetes Deaths	Rate per 100,000	<b>21.8</b>	<b>20</b>	<b>21.3</b>	<b>20.4</b>	<b>22.4</b>	<b>21.9</b>	<b>23.9</b>	<b>19.7</b>	<b>23.4</b>	<b>23.5</b>		●
	95% CI	19.6 - 24.1	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		
Influenza and Pneumonia Deaths	Rate per 100,000	<b>13.4</b>	<b>16.8</b>	<b>11.6</b>	<b>14</b>	<b>13.7</b>	<b>17.6</b>	<b>12</b>	<b>15.2</b>	<b>15.2</b>	<b>14.7</b>		■
	95% CI	11.7 - 15.1	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		
Suicide Deaths	Rate per 100,000	<b>13.2</b>	<b>16.6</b>	<b>14.5</b>	<b>17.4</b>	<b>15.7</b>	<b>16.0</b>	<b>15.9</b>	<b>18.9</b>	<b>18.4</b>	<b>19.4</b>		◆
	95% CI	11.2 - 15.1	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		
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	<b>15.8</b>	<b>14.8</b>	<b>14.3</b>	<b>13.6</b>	<b>11.7</b>	<b>11.4</b>	<b>12.4</b>	<b>13</b>	<b>12.5</b>	<b>11.6</b>		■
	95% CI	13.9 - 17.7	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		

- = 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 1999-2019 WONDER 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: 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 data source: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics.

Created January 2021 by Carolyn Bancroft, Maine Center for Disease Control and Prevention building on work by Mary Caron, Finn Teach, and Sara Huston. ☒

# County At-a-Glance

## Leading Causes of Death, Maine, 2015-2019 5-year average



Indicator	Unit	Androscoggin	Aroostook	Cumberland	Franklin	Hancock	Kennebec	Knox	Lincoln	Maine Total
All Deaths	Rate per 100,000	858.5	792.7	692.1	803.8	713.1	801.3	749.9	679.1	764.9
	95% CI	836.9-880.1	768.5-816.8	680.6-703.7	766.1-841.5	687.4-738.8	782.1-820.5	719.7-780.1	648.1-710.1	759.3-770.4
Cancer Deaths	Rate per 100,000	179.7	163.1	149.9	176.4	158.2	178.5	177.7	152.9	168.3
	95% CI	169.7-189.7	152.1-174.1	144.4-155.4	158.7-194.1	146.3-170.2	169.5-187.4	163.0-192.4	139.0-166.8	165.7-170.9
Heart Disease Deaths	Rate per 100,000	168.8	155.0	127.5	150.6	136.0	154.2	161.7	139.5	147.6
	95% CI	159.2-178.4	144.6-165.3	122.5-132.4	134.4-166.8	125.0-147.0	145.7-162.6	148.4-175.1	126.1-152.9	145.1-150.0
Unintentional Injury Deaths	Rate per 100,000	61.8	49.5	56.9	60.1	60.6	69.3	60.7	58.0	62.9
	95% CI	55.1-68.4	42.0-57.0	53.1-60.7	48.4-73.8	51.3-70.0	62.6-76.0	50.0-71.4	46.8-71.2	61.0-64.8
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	60.2	58.5	37.7	53.2	42.1	51.6	41.5	32.4	48.6
	95% CI	54.4-66.0	52.3-64.8	35.0-40.4	43.7-62.6	36.0-48.2	46.8-56.4	34.6-48.4	26.3-38.5	47.2-50.0
Cerebrovascular Disease Deaths	Rate per 100,000	40.3	33.3	30.4	37.3	33.4	42.8	32.6	38.6	33.9
	95% CI	35.6-45.1	28.6-38.0	28.0-32.8	29.8-46.2	28.0-38.8	38.4-47.3	26.4-38.8	31.8-45.3	32.7-35.0
Alzheimer's Disease Deaths	Rate per 100,000	55.7	24.7	27.8	27.2	25.6	26.2	34.3	22.3	28.5
	95% CI	50.1-61.2	20.9-28.6	25.5-30.1	20.8-35.0	20.9-30.2	22.8-29.6	28.3-40.3	17.6-27.9	27.4-29.5
Diabetes Deaths	Rate per 100,000	25.2	26.8	17.5	29.2	19.9	27.0	17.4	20.8	22.5
	95% CI	21.4-29.0	22.4-31.2	15.6-19.4	22.3-37.6	15.9-24.6	23.4-30.6	13.2-22.5	15.7-27.1	21.5-23.5
Influenza and Pneumonia Deaths	Rate per 100,000	16.8	17.0	12.7	20.7	14.5	13.4	11.9	11.7	14.9
	95% CI	13.8-19.9	13.7-20.3	11.1-14.3	14.6-28.4	11.1-18.6	11.0-15.9	8.2-16.6	8.3-16.2	14.1-15.7
Suicide Deaths	Rate per 100,000	18.9	16.1	12.4	19.9	16.6	18.6	20.3	21.8	17.7
	95% CI	15.2-22.6	11.9-21.3	10.6-14.2	13.3-28.6	12.1-22.2	15.1-22.2	14.2-28.1	15.0-30.7	16.6-18.7
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	9.8	17.3	12.1	17.0	12.6	10.6	8.2	7.8	12.2
	95% CI	7.6-12.4	14.0-21.1	10.6-13.7	12.0-23.3	9.5-16.4	8.6-13.0	5.5-11.8	4.9-11.8	11.5-12.9

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. February 2022

Created February 2022 by Sarah Wilcox Maine Center for Disease Control and Prevention.

# County At-a-Glance

## Leading Causes of Death, Maine, 2015-2019 5-year average



Indicator	Unit	Oxford	Penobscot	Piscataquis	Sagadahoc	Somerset	Waldo	Washington	York	Maine Total
		Rate per 100,000	797.5	823.2	863.2	701.2	878.9	756.1	891.7	726.8
	95% CI	770.3-824.7	805.7-840.8	812.9-913.6	669.1-733.3	847.8-910.0	723.6-788.7	853.0-930.4	712.9-740.8	759.3-770.4
Cancer Deaths	Rate per 100,000	176.0	175.2	206.7	157.2	195.8	164.1	192.9	168.4	168.3
	95% CI	163.4-188.6	167.0-183.3	183.3-230.0	142.3-172.2	181.3-210.3	149.0-179.2	175.5-210.3	161.8-175.1	165.7-170.9
Heart Disease Deaths	Rate per 100,000	141.6	158.5	179.9	148.8	194.0	165.6	184.7	129.8	147.6
	95% CI	130.2-153.0	150.8-166.1	157.8-201.9	134.3-163.3	179.4-208.5	150.5-180.7	167.6-201.8	124.0-135.6	145.1-150.0
Unintentional Injury Deaths	Rate per 100,000	62.1	67.3	72.9	43.1	70.8	57.7	100.0	69.5	62.9
	95% CI	52.7-71.4	61.5-73.2	54.7-95.1	34.4-53.3	60.4-81.3	47.0-68.4	83.1-116.8	64.4-74.6	61.0-64.8
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	65.2	54.9	42.4	38.1	72.4	49.7	53.3	44.7	48.6
	95% CI	57.6-72.7	50.4-59.5	32.7-54.0	30.9-45.3	63.6-81.1	41.6-57.7	44.1-62.5	41.3-48.0	47.2-50.0
Cerebrovascular Disease Deaths	Rate per 100,000	29.8	34.0	37.8	42.8	35.1	35.3	32.6	28.2	33.9
	95% CI	24.4-35.1	30.5-37.6	28.3-49.5	34.9-50.6	28.9-41.3	28.5-43.1	25.8-40.7	25.4-30.9	32.7-35.0
Alzheimer's Disease Deaths	Rate per 100,000	26.5	23.0	27.3	18.8	22.1	25.7	19.0	30.6	28.5
	95% CI	21.7-31.3	20.1-25.9	19.7-36.9	14.0-24.8	17.4-27.6	20.1-32.4	14.1-25.2	27.8-33.4	27.4-29.5
Diabetes Deaths	Rate per 100,000	33.9	24.0	28.6	15.9	24.7	22.2	20.2	21.0	22.5
	95% CI	28.4-39.4	21.0-27.1	20.2-39.2	11.3-21.6	19.9-30.3	16.9-28.6	15.0-26.6	18.6-23.3	21.5-23.5
Influenza and Pneumonia Deaths	Rate per 100,000	16.6	19.9	14.8	14.9	13.4	15.3	19.8	13.3	14.9
	95% CI	12.9-21.0	17.1-22.6	8.7-23.3	10.6-20.2	9.7-18.1	11.1-20.7	14.9-25.9	11.4-15.2	14.1-15.7
Suicide Deaths	Rate per 100,000	19.7	17.4	22.7	24.0	25.1	21.3	23.3	18.4	17.7
	95% CI	14.7-25.7	14.4-20.4	12.7-37.4	17.0-32.7	19.2-32.2	15.3-28.9	15.9-32.8	15.7-21.1	16.6-18.7
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	12.5	15.7	9.9	11.3	9.3	10.5	13.9	11.7	12.2
	95% CI	9.4-16.2	13.3-18.2	5.4-16.7	7.6-16.2	6.5-13.0	6.9-15.3	9.7-19.3	10.0-13.5	11.5-12.9

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. February 2022.

Created February 2022 by Sarah Wilcox, Maine Center for Disease Control and Prevention.



# Age Groups At-a-Glance

## Leading Causes of Death, Maine, 2019

Indicator	Unit	Age Group									Bar Chart	Year
		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		
All Deaths	Rate per 100,000	<b>44.7</b>	<b>62.4</b>	<b>152.3</b>	<b>236.2</b>	<b>410.9</b>	<b>848.5</b>	<b>1,717.5</b>	<b>4,696.2</b>	<b>14,745.6</b>		2019
	95% CI	35.5-53.9	49.9-75.0	133.4-171.3	212.0-260.5	380.9-441.0	809.2-887.7	1655.1-1780.0	4548.2-4844.2	14336.2-15154.9		
Cancer Deaths	Rate per 100,000	*	*	<b>DNR</b>	<b>29.9</b>	<b>97.9</b>	<b>302.0</b>	<b>575.5</b>	<b>1,151.9</b>	<b>1,813.6</b>		2019
	95% CI	*	*	2.8-10.7	21.2-38.5	83.2-112.5	278.6-325.5	539.3-611.6	1078.6-1225.2	1670.0-1957.2		
Heart Disease Deaths	Rate per 100,000	*	*	<b>DNR</b>	<b>23.4</b>	<b>61.8</b>	<b>138.0</b>	<b>312.3</b>	<b>904.3</b>	<b>3,588.8</b>		2019
	95% CI	*	*	3.6-12.3	15.7-31.0	50.2-73.5	122.2-153.9	285.6-338.9	839.3-969.2	3386.8-3790.7		
Unintentional Injury Deaths	Rate per 100,000	<b>DNR</b>	<b>28.3</b>	<b>81.1</b>	<b>87.0</b>	<b>67.5</b>	<b>54.8</b>	<b>66.2</b>	<b>168.7</b>	<b>630.2</b>		2019
	95% CI	4.8-12.9	19.8-36.7	67.2-94.9	72.2-101.7	55.3-79.7	44.9-64.8	54.0-78.5	140.7-196.8	545.5-714.8		
Chronic Lower Respiratory Disease Deaths	Rate per 100,000	*	*	*	*	<b>14.9</b>	<b>60.5</b>	<b>151.4</b>	<b>395.7</b>	<b>816.6</b>		2019
	95% CI	*	*	*	*	9.2-20.6	50.0-71.0	132.9-170.0	352.7-438.7	720.2-912.9		
Cerebrovascular Disease Deaths	Rate per 100,000	*	*	*	<b>DNR</b>	<b>DNR</b>	<b>20.8</b>	<b>55.0</b>	<b>229.4</b>	<b>860.9</b>		2019
	95% CI	*	*	*	3.4-12.2	4.4-11.5	14.7-26.9	43.8-66.2	196.7-262.1	762.0-959.9		
Alzheimer's Disease Deaths	Rate per 100,000	*	*	*	*	*	<b>DNR</b>	<b>23.1</b>	<b>178.4</b>	<b>1,032.5</b>		2019
	95% CI	*	*	*	*	*	1.8-7.7	15.8-30.3	149.6-207.3	924.2-1140.9		
Diabetes Deaths	Rate per 100,000	*	*	*	*	<b>21.2</b>	<b>38.3</b>	<b>75.1</b>	<b>166.3</b>	<b>245.6</b>		2019
	95% CI	*	*	*	*	14.4-28.0	29.9-46.6	62.0-88.2	138.4-194.1	192.7-298.4		
Influenza and Pneumonia Deaths	Rate per 100,000	*	*	*	*	*	<b>11.8</b>	<b>33.7</b>	<b>97.1</b>	<b>363.9</b>		2019
	95% CI	*	*	*	*	*	7.2-16.4	25.0-42.5	75.8-118.4	300.0-428.2		
Suicide Deaths	Rate per 100,000	*	<b>17.7</b>	<b>25.2</b>	<b>26.0</b>	<b>33.8</b>	<b>19.9</b>	<b>21.9</b>	<b>24.3</b>	*		2019
	95% CI	*	11.1-24.4	17.5-32.9	17.9-34.0	25.2-42.4	13.8-25.9	14.8-28.9	13.6-34.9	*		
Nephritis, Nephrotic Syndrome and Nephrosis Deaths	Rate per 100,000	*	*	*	*	*	<b>DNR</b>	<b>33.1</b>	<b>91.0</b>	<b>260.4</b>		2019
	95% CI	*	*	*	*	*	2.1-8.3	24.4-41.8	70.4-111.6	206.0-314.8		

Rates are crude rates, deaths per 100,000 population. DNR: Data not reliable; Using the WONDER system definition, death rates are noted as unreliable when the numerator is 20 or less. \* Counts less than 10 are suppressed  
 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. March 2021.

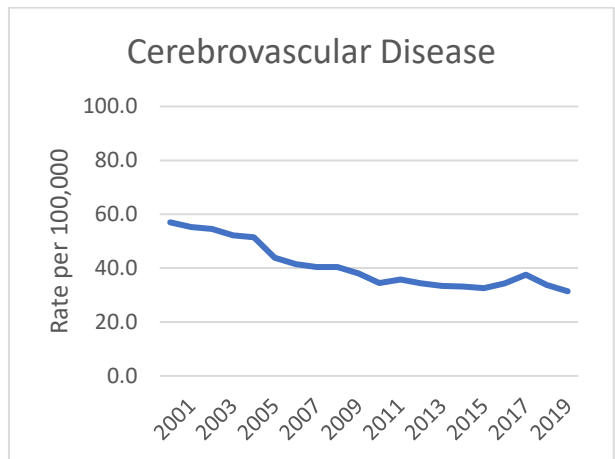
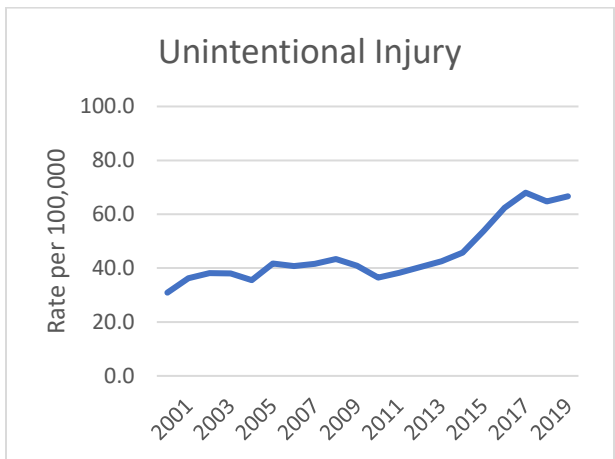
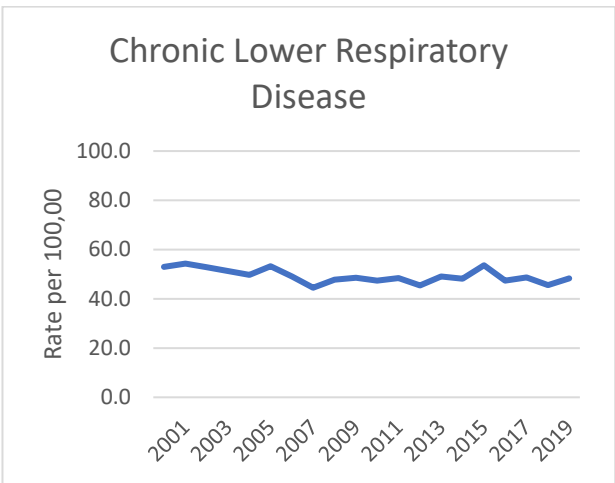
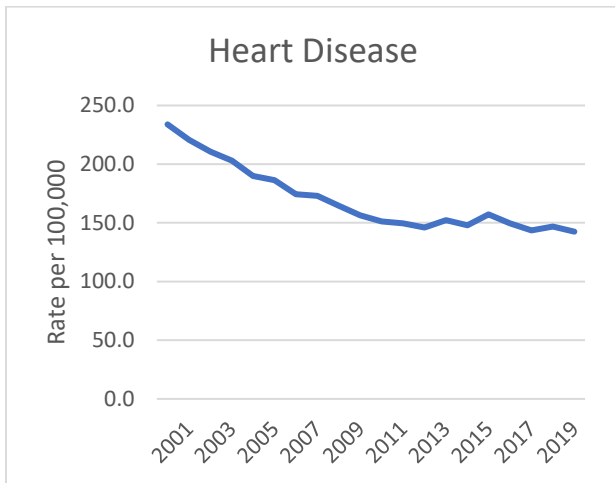
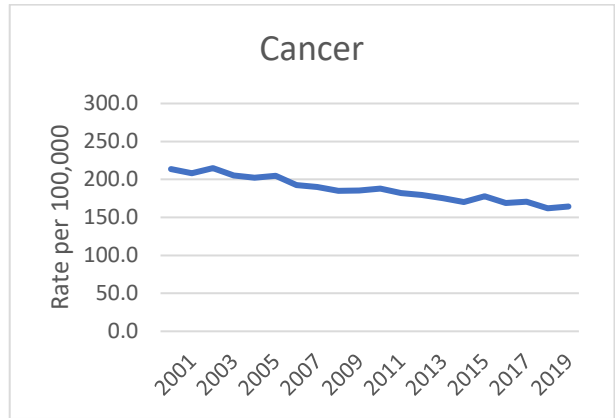
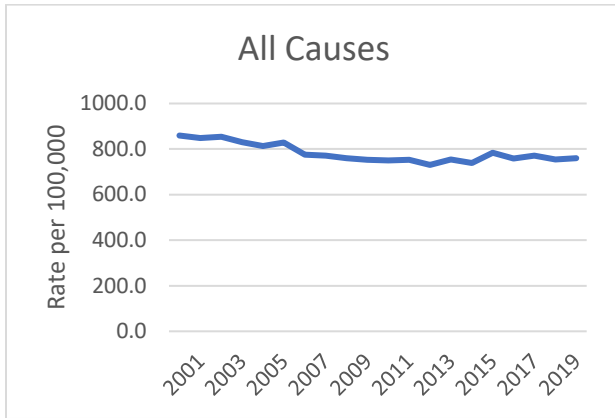
Created March and November 2021 by Anne Rogers and Sarah Wilcox based on work by Mary Caron, Finn Teach, and Sara Huston, Maine Center for Disease Control and Prevention.

# **Section 3:**

## **Cause-specific Figures**

# Death Rate Trends, Maine, 2000-2019

Please note the different scales in these figures.

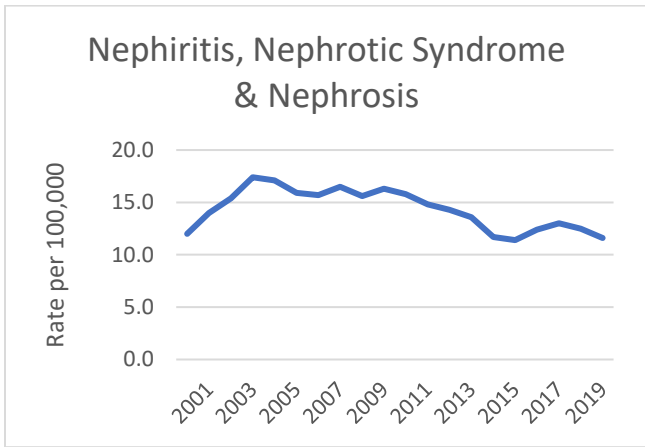
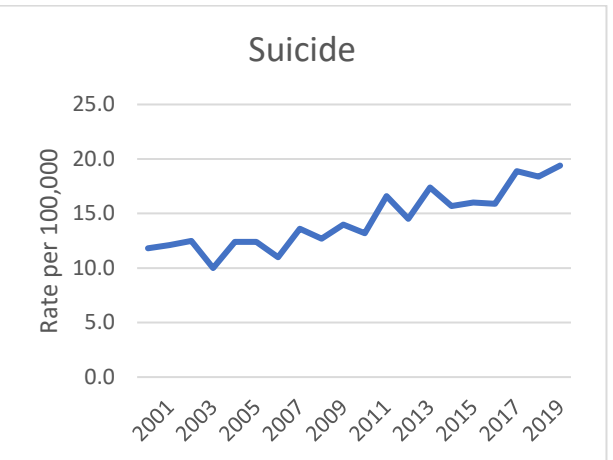
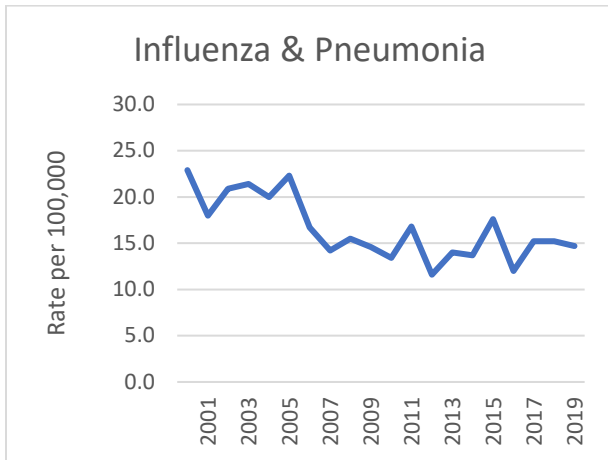
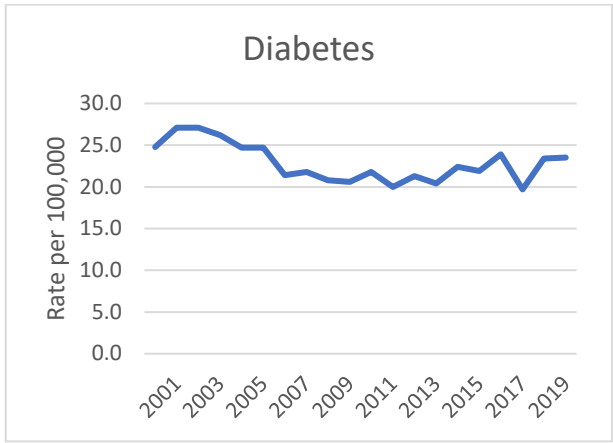
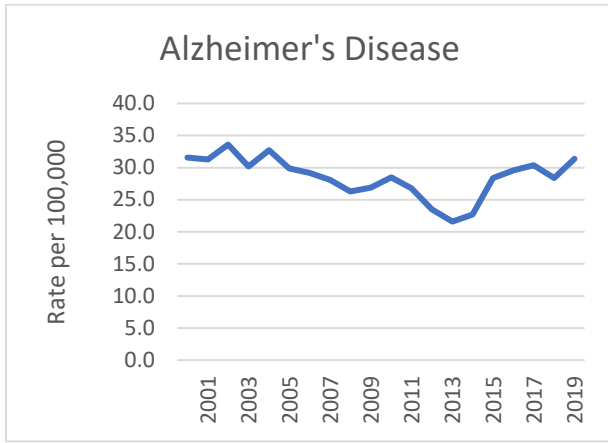


Data Sources: CDC WONDER (1999-2017 data). 2018-2019 data: Maine Center for Disease Control and Prevention. Data, Research and Vital Statistics. March 2021.

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

# Death Rate Trends, Maine, 2000-2019

Please note the different scales in these figures.



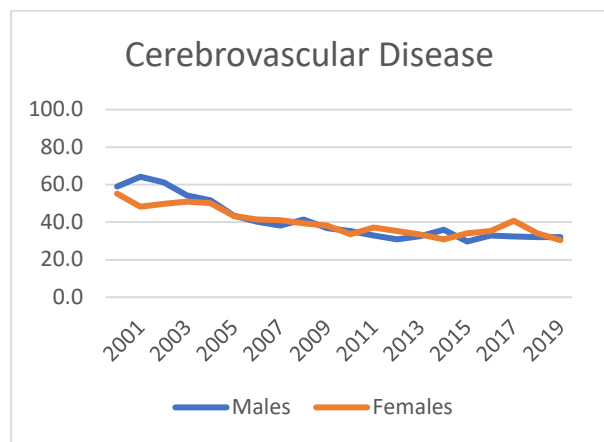
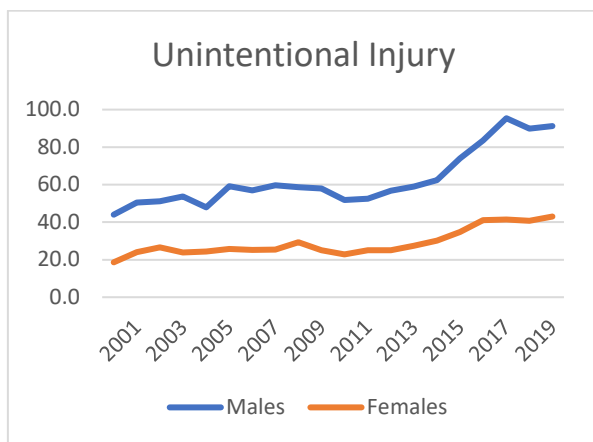
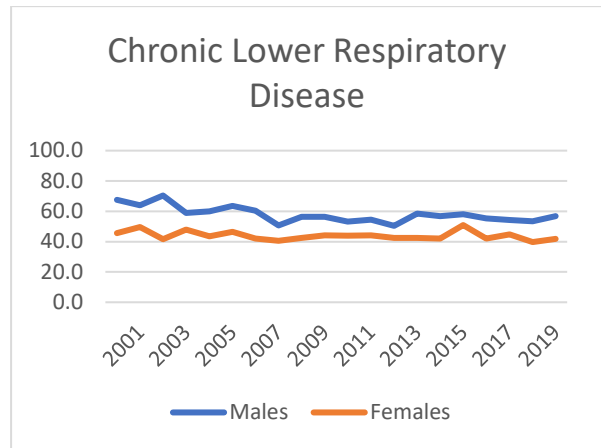
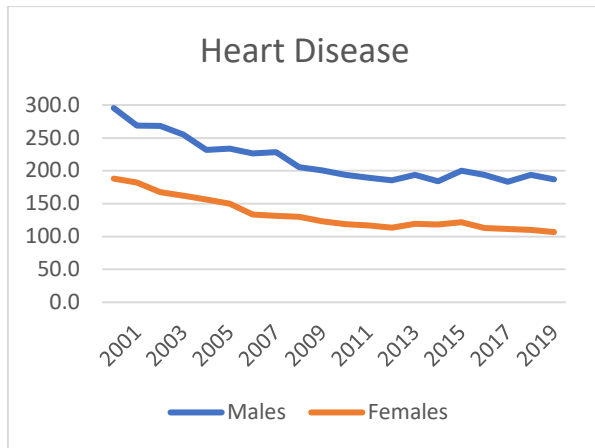
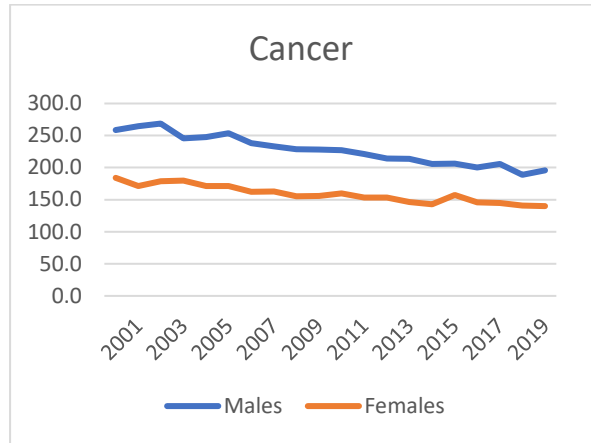
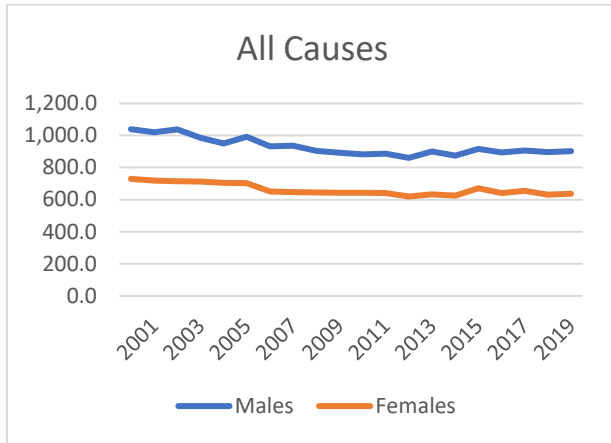
Data Sources: CDC WONDER (1999-2017 data). 2018-2019 data: Maine Center for Disease Control and Prevention. Data, Research and Vital Statistics. March 2021.

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



# Death Rate Trends by Sex, Maine, 2000-2019

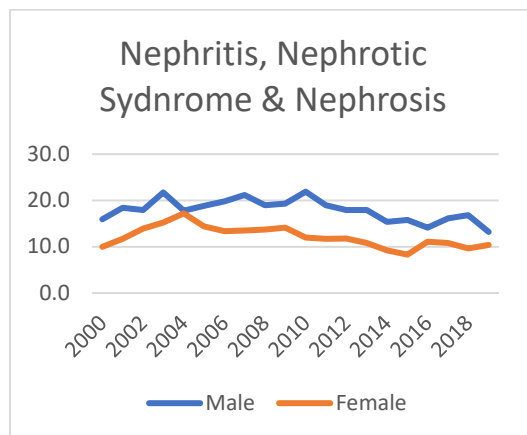
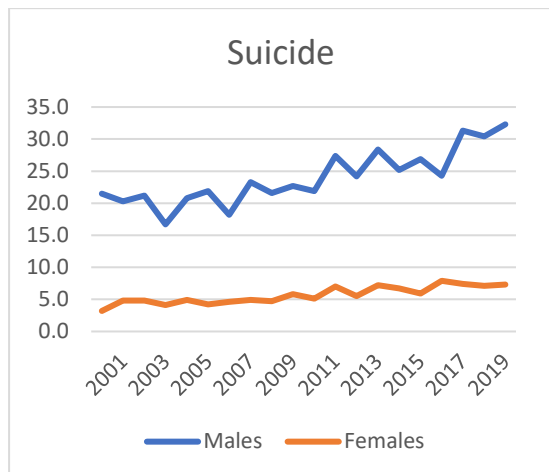
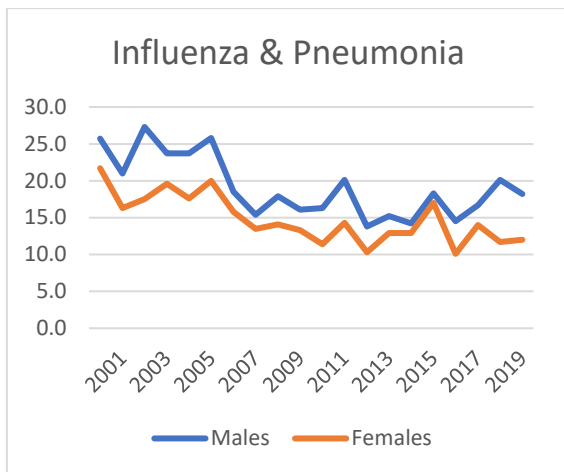
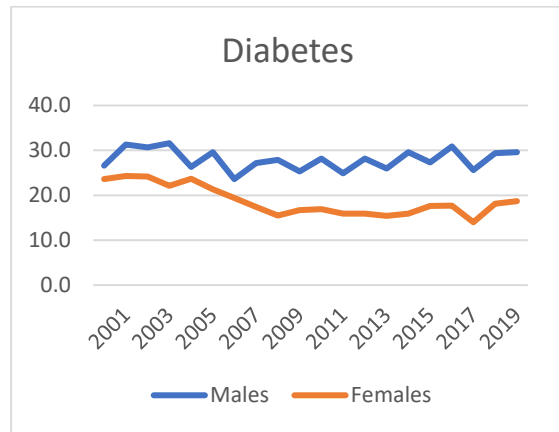
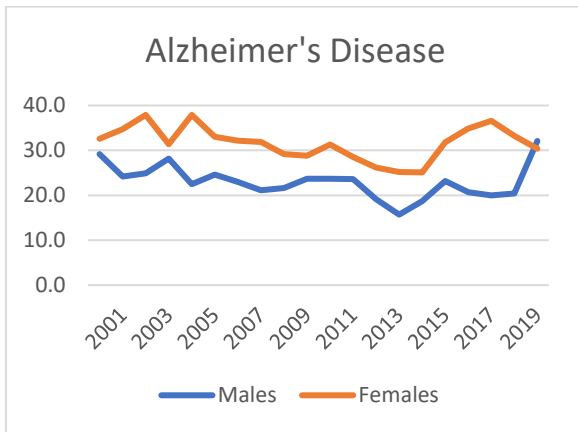
Please note the different scales in these figures.



Data Sources: CDC WONDER (1999-2017 data). 2018-2019 data: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. March 2021.  
Rates are deaths per 100,000 population, age-adjusted to the U.S. 2000 standard population.

# Death Rate Trends by Sex, Maine, 2000-2019

Please note the different scales in these figures.



Data Sources: CDC WONDER (1999-2017 data). 2018-2019 data: Maine Center for Disease Control and Prevention. Data, Research, and Vital Statistics. March 2021.  
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	
Septicemia	A40-A41	Septicemia	A serious infection of the bloodstream (sometimes called blood poisoning or bacteremia) causing sepsis, a life-threatening immune response.
In Situ Neoplasms, Benign Neoplasms and Neoplasms of Uncertain or Unknown Behavior	D00-D48	In Situ Neoplasms, Benign Neoplasms and Neoplasms of Uncertain or Unknown Behavior	Includes (but not limited to) brain and central nervous system tumors and myelodysplastic syndromes.
Pneumonitis due to Solids and Liquids	J69	Pneumonitis due to Solids and Liquids	Pneumonitis (inflammation of lungs) due to inhalation of solids or liquids.

**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 and 2019 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.

## 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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