

# OHIO DEATHS OF DESPAIR

## 2010 - 2019

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# 1 Introduction

The Ohio Alliance for Innovation in Population Health (The Alliance) is a collaborative effort of Ohio University and more than thirty partner organizations. By aligning the resources and expertise of state universities, researchers, hospital associations, healthcare providers and public health experts, the Alliance works to solve Ohio's most complex and pressing health problems. Among its various projects, The Alliance explores patterns associated with critical health issues in the State of Ohio.

Among the conditions adversely impacting the health of those living in Ohio are conditions referred to as diseases of despair. Diseases of despair are encapsulated by three categories of behavior-related conditions. These include drug overdoses, suicides, and alcohol-related liver disease. Deaths associated with these aforementioned conditions have been described as deaths of despair, a term adopted by Anne Case and Angus Deaton in an important series of studies on the topic (Case and Deaton, 2015, 2017, 2020) The present report provides an analysis of the impact of diseases of despair on overall mortality and on estimated years of lost life attributable to these diseases in Ohio for the decade from 2010 to 2019.

After a century of relatively steady growth in life expectancy in the United States, the past decade has reflected a decrease in life expectancy accompanied by an increase in mortality rates; especially among selected populations (United Nations Department of Economic and Social Affairs, 2020). From 1959 to 2016, U.S. life expectancy rose by nine years. Since 2014, though, U.S. life expectancy has declined (Woolf & Schoemaker, 2017). This slowing of the increase in life expectancy is often attributed to a pattern described as deaths of despair—early deaths among those who experience diseases of despair.

In 2018, there were approximately 45 deaths of despair per 100,000 Americans, with 20 of those due to drug overdoses, 15 due to suicide, and 10 due to alcohol-related disease (United States Joint Economic Committee, 2019). All of these represent meaningful increases over the numbers of the previous decade. The increase in such deaths is particularly prevalent among middle-aged (i.e., 35 to 54) non-Hispanic White men and women with educational attainment of a high school diploma or less and is associated with an increase in the mortality rate for this population (Case & Deaton, 2015, 2017, 2020; Graham & Pinto, 2018; Sasson, 2016).

The increase in mortality associated with deaths of despair is especially pronounced among non-Hispanic white individuals living outside of urban areas (Erwin, 2017; Meit, et. al., 2017; Stein, et. al., 2017). In reviewing data across urban and rural regions, Monnat (2020) reports heightened increases among rural populations, especially those in mining-dependent counties. These data suggest systemic failures contribute to heightened incidence of deaths of despair in rural areas facing considerable economic hardship. The present analysis builds on this earlier work in exploring patterns of deaths of despair in Ohio over a ten-year period.

## 2 Executive Summary

The goal of this paper is to provide an analysis of how Deaths of Despair have affected mortality in Ohio for the decade ending December 31, 2019. Estimated years of life lost attributable to these disease entities is also reported. The following key findings are noted:

1. For the ten-year period beginning on January 1, 2010 and ending December 31, 2019 the state of Ohio recorded 53,632 deaths attributable to unintentional overdose, suicide or alcohol related cirrhosis.
2. Over the study period, these deaths accounted for more than 1.9 million Years of Life Lost (YLL).
3. Deaths of despair ranked sixth in total deaths, following heart failure, cancer, other unspecified infections, chronic lower respiratory disease, and cerebrovascular disease.
4. Deaths of despair ranked fourth in Years of Life Lost, preceded only by cancer, heart failure and other unspecified infections.
5. Deaths for diseases of despair increased by eighty-nine percent (89.2%) over the ten-year period.
6. Years of Life Lost for diseases of despair increased by ninety-one percent(91.2%).
7. Unintentional overdoses accounted for fifty-seven percent (57.0%) of all disease of despair fatalities for the period, followed by suicides (30.9%) and alcohol related cirrhosis (12.1%)
8. Fatalities by unintentional overdose increased from 1,587 in 2010 to 4,180 in 2019 for a 163.4% increase.
9. Fatalities by alcohol related cirrhosis increased from 551 in 2010 to 769 in 2019 for a 39.6% increase.
10. Fatalities by suicide increased from 1,450 in 2010 to 1,841 in 2019 for a 27.0% increase.
11. The Appalachian region demonstrated the highest rate of deaths for diseases of despair per 100,000 population.
12. Analysis of deaths and Years of Life Lost by region shows that the largest increases occurred in the metropolitan counties, followed by the Appalachian region.
13. Persons 30 to 39 experienced the greatest increase in deaths by diseases of despair and YLL, followed by persons 60 and older. (Ohioans 14 and under were excluded due to the small number of deaths in the initial year).
14. Females experienced a greater increase in YLL for Diseases of Despair than males (94.8% vs 89.8%).

Figure 1: Average Deaths per 100,000 Population for Diseases of Despair  
Ohio, 2010 - 2019

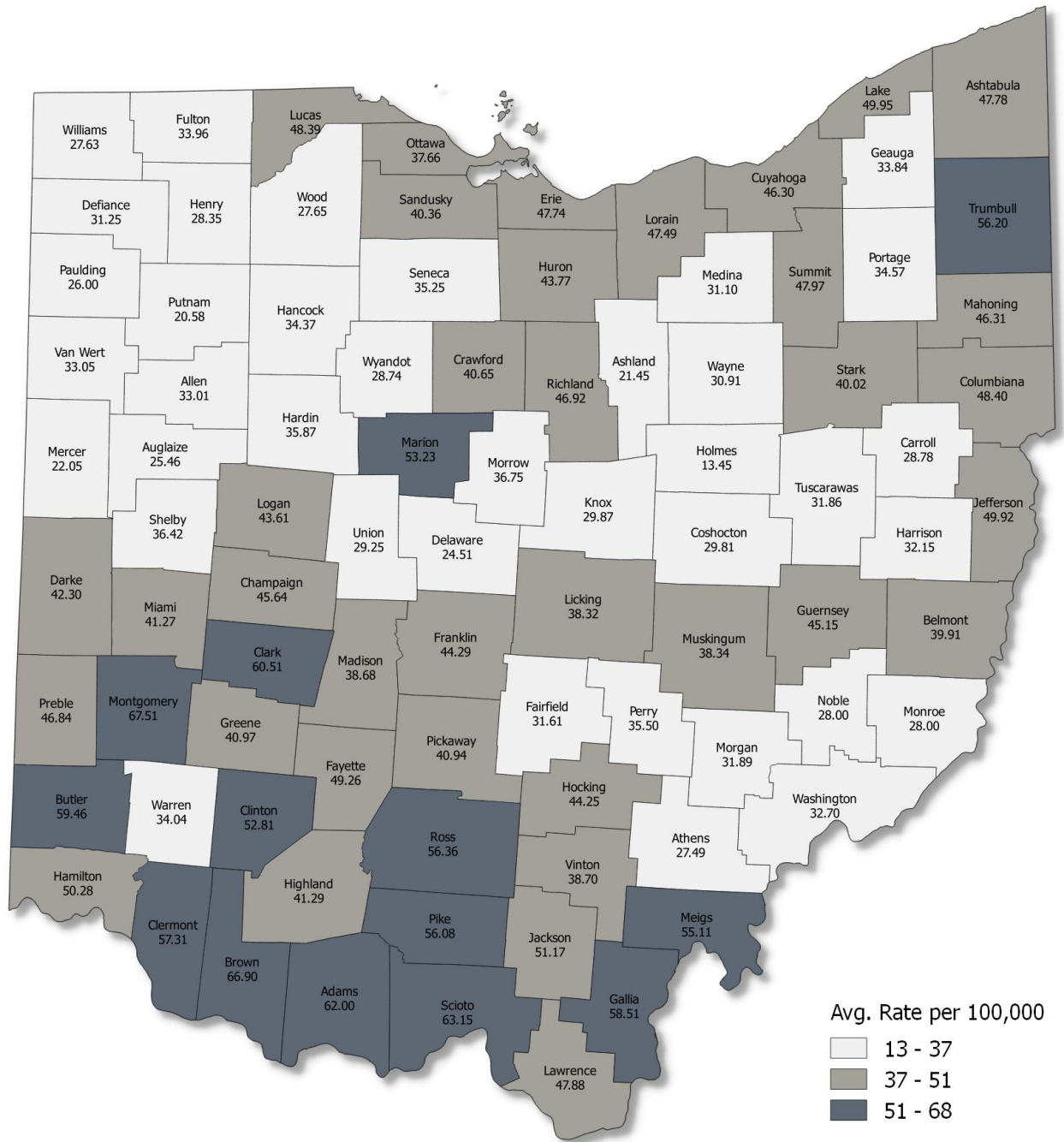
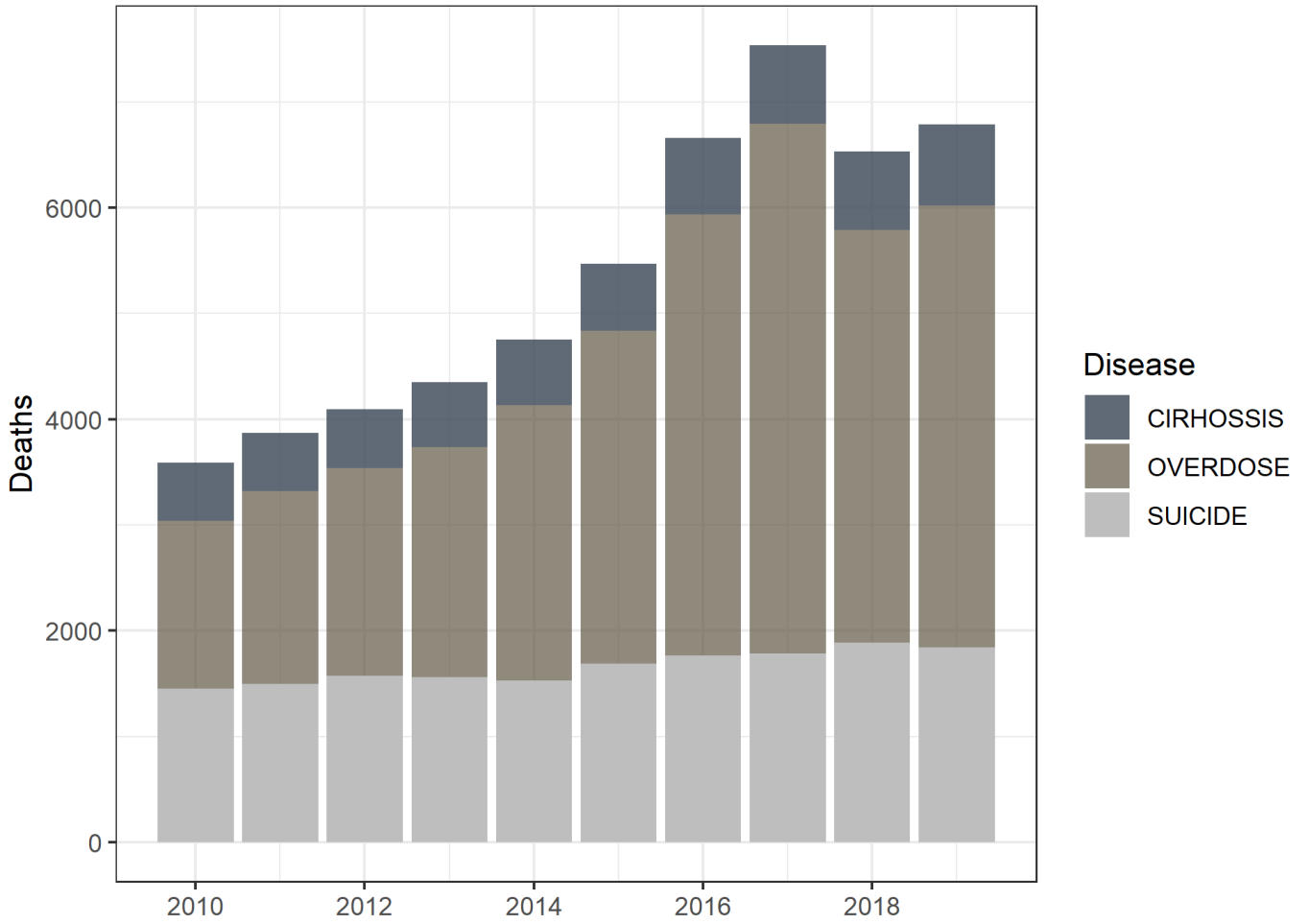


Figure 2: Total Deaths of Despair by Year  
Ohio, 2010 - 2019



Source: Ohio Department of Health



### 3 Methods

This work reflects an analysis of death records obtained from the Ohio Department of Health. A serial cross-sectional analysis was performed for all deaths during the study period in order to better understand the context of diseases of despair as they relate to other disease states resulting in fatalities.

The burden of diseases of despair was determined by ranking deaths of despair among a continuum of other deaths associated with other disease entities by total deaths and years of life lost (YLL). This statistic is calculated by subtracting the age at death from the standard life expectancy for each decedent as determined by the Social Security Administration’s Period Life Table for 2014 (Social Security Administration, 2014). The Ohio Department of Health does not necessarily agree or disagree with the analysis, interpretations, or conclusions of this report.

### 4 Results

As has been documented on a wider scale in earlier work, there are multiple factors associated with diseases of despair. The following table provides a summary of total Ohio deaths associated with diseases of despair for the period from 2010 through 2019. As indicated, there was a general upward trend in deaths of despair through the period of analysis with deaths increasing by 89.2% and years of life lost by 91.2% over the ten-year period.

Table 1  
Total Deaths for Diseases of Despair by Disease Type and Year – Ohio, 2010 - 2019

Disease	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Unintentional overdose	1,587	1,822	1,968	2,171	2,602	3,149	4,170	5,005	3,901	4,180	30,555
Intentional self-harm (suicide)	1,450	1,498	1,572	1,562	1,529	1,687	1,763	1,787	1,888	1,841	16,577
Alcohol related cirrhosis	551	551	556	615	619	631	725	742	741	769	6,500
Total	3,588	3,871	4,096	4,348	4,750	5,467	6,658	7,534	6,530	6,790	53,632

The three disease entities that comprise the deaths of despair construct differentially contributed to patterns of increase. During the ten-year period, fatalities due to unintentional overdoses increased by 163.4%, fatalities due to alcohol-related liver disease increased by 39.6%, and fatalities due to suicide increased by 27.0%.

A county-by-county analysis of deaths of despair is provided in the following table. As was the case on a statewide basis, a general pattern of increase was evident in the majority but not all counties. In some years, no data is reported for some counties. This reflects either the absence of any reported deaths of despair or a report of fewer than 10 such deaths.

Table 2  
Total Deaths for Diseases of Despair by County and Year – Ohio, 2010 - 2019

County	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Out of State	94	203	109	118	244	160	195	218	210	205	1,756
Adams	12	18	15	12	16	20	15	24	21	24	177

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Table 2 – *Continued from previous page*

County	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Allen	22	28	37	25	28	42	51	59	29	30	351
Ashland	13	13	.	.	.	13	14	11	17	12	114
Ashtabula	40	38	47	40	45	46	62	57	56	54	485
Athens	11	20	22	18	13	17	19	17	18	23	178
Auglaize	10	.	.	12	10	19	14	17	.	12	117
Belmont	20	16	24	24	26	32	34	35	37	33	281
Brown	29	22	24	31	22	35	34	41	38	24	300
Butler	130	143	153	175	225	262	274	330	252	245	2,189
Carroll	.	.	.	.	.	.	10	12	.	.	83
Champaign	18	10	20	14	14	19	18	27	23	20	183
Clark	48	58	60	59	66	96	102	133	115	100	837
Clermont	80	87	94	104	117	129	138	133	116	133	1,131
Clinton	.	16	23	20	20	30	17	37	23	27	222
Columbiana	33	40	46	49	44	53	65	71	56	65	522
Coshocton	.	.	.	15	.	.	11	.	16	21	110
Crawford	17	13	14	11	13	18	15	25	23	29	178
Cuyahoga	362	417	500	493	493	513	803	863	724	759	5,927
Darke	13	17	17	17	21	31	32	32	28	16	224
Defiance	.	13	.	.	10	15	15	13	13	19	122
Delaware	30	35	38	35	39	30	44	60	55	61	427
Erie	30	23	28	31	31	30	68	49	42	36	368
Fairfield	38	42	34	44	40	35	50	72	49	58	462
Fayette	.	.	.	13	17	22	13	30	11	15	143
Franklin	384	377	384	391	400	522	509	676	733	777	5,153
Fulton	19	10	19	.	10	12	18	.	27	13	145
Gallia	.	12	14	13	11	16	18	29	28	31	181
Geauga	21	26	26	25	26	29	44	41	37	41	316
Greene	51	48	49	56	59	81	78	93	80	67	662
Guernsey	20	10	16	16	22	22	17	22	16	20	181
Hamilton	228	268	294	350	374	462	463	590	505	500	4,034
Hancock	21	17	12	15	25	23	25	43	41	35	257
Hardin	12	10	.	17	.	10	14	15	.	17	115
Harrison	.	.	.	.	.	.	.	.	.	.	51
Henry	.	.	.	.	.	11	.	.	14	11	80
Highland	19	15	11	19	22	15	20	22	12	25	180
Hocking	.	10	13	22	13	.	12	15	18	13	130
Holmes	.	.	.	.	.	.	.	10	.	.	57
Huron	.	25	11	26	31	19	28	38	33	41	261
Jackson	13	17	17	18	14	16	12	21	21	21	170
Jefferson	28	37	36	27	27	29	33	44	46	41	348
Knox	14	14	16	20	17	17	22	28	14	20	182
Lake	79	95	107	102	99	103	146	150	127	141	1,149
Lawrence	15	15	24	24	16	40	42	45	47	31	299
Licking	50	51	56	58	50	73	63	83	73	81	638

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Table 2 – *Continued from previous page*

County	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Logan	18	.	13	21	16	23	22	30	26	25	200
Lorain	67	75	115	137	122	123	213	220	173	186	1,431
Lucas	145	149	173	154	188	211	262	253	275	328	2,138
Madison	13	.	12	13	13	18	20	32	15	24	168
Mahoning	85	85	80	83	77	108	136	160	150	142	1,106
Marion	15	21	30	31	38	39	40	45	44	51	354
Medina	29	30	39	39	49	56	80	79	75	60	536
Meigs	.	.	11	14	.	12	16	15	27	14	131
Mercer	10	.	.	12	.	.	12	12	.	.	90
Miami	38	28	30	33	36	44	57	62	52	43	423
Monroe	.	.	.	.	.	.	.	.	.	.	41
Montgomery	232	235	256	310	356	364	448	637	385	390	3,613
Morgan	.	.	.	.	.	.	.	.	.	.	48
Morrow	14	14	.	14	12	12	12	11	16	18	128
Muskingum	28	22	21	25	19	30	32	37	64	52	330
Noble	.	.	.	.	.	.	.	.	.	.	41
Ottawa	.	14	10	20	10	.	23	18	27	18	156
Paulding	.	.	.	.	.	.	.	14	.	.	51
Perry	12	11	12	.	13	13	11	15	19	15	128
Pickaway	18	24	20	22	16	18	18	32	29	31	228
Pike	.	17	12	.	.	22	16	24	29	22	161
Portage	44	29	36	49	53	61	86	65	68	67	558
Preble	10	.	24	17	16	19	29	33	20	22	198
Putnam	.	.	.	.	.	10	11	.	.	.	71
Richland	32	34	30	45	53	71	91	71	82	75	584
Ross	38	31	28	32	39	53	59	44	63	53	440
Sandusky	20	24	22	11	25	20	31	36	29	28	246
Scioto	38	34	25	29	40	44	50	69	74	99	502
Seneca	.	15	13	20	17	21	19	31	30	25	200
Shelby	11	16	10	14	13	20	21	30	22	23	180
Stark	115	109	113	122	142	143	205	186	166	202	1,503
Summit	152	148	188	183	226	314	440	363	240	345	2,599
Trumbull	87	96	78	73	89	133	163	188	129	146	1,182
Tuscarawas	21	34	25	26	19	30	32	47	30	31	295
Union	18	12	15	11	11	14	13	15	23	21	153
Van Wert	.	11	.	13	.	10	11	14	.	12	95
Vinton	.	.	.	.	.	.	.	.	.	.	52
Warren	58	42	62	54	71	68	93	122	71	83	724
Washington	14	13	13	16	21	17	31	28	24	25	202
Wayne	20	33	22	24	31	40	50	45	41	48	354
Williams	.	.	.	.	.	.	17	17	16	14	104
Wood	20	24	28	27	32	43	50	39	40	44	347
Wyandot	.	.	.	.	.	.	.	.	13	10	65
Total	3,588	3,871	4,096	4,348	4,750	5,467	6,658	7,534	6,530	6,790	53,632

A list of Ohio deaths by disease entity is provided in the table below. As indicated, deaths due to diseases of despair represent the sixth-ranked cause of death following heart failure, cancer, other unspecified infections, chronic lower respiratory disease, and cerebrovascular disease and also stand as the fourth most frequent contributor to years of life lost to premature death. As indicated, the 53,632 deaths associated with diseases of despair resulted in 1,931,518 years of life lost; following only cancer, heart failure, and other unspecified infections.

Table 3

Total Deaths and Years of Life Lost by Disease Entity – Ohio, 2010 - 2019

Disease	Count	Rank	YLL	Rank
Cancer	258,247	2	4,029,643	1
Heart Failure	281,199	1	3,376,754	2
Other and unspecified infectious and parasitic diseases	195,940	3	2,553,405	3
Diseases of despair	53,632	6	1,931,518	4
Accidents (unintentional injuries)	39,517	8	955,657	5
Chronic lower respiratory diseases	72,115	4	900,448	6
Cerebrovascular diseases	61,833	5	659,831	7
Diabetes mellitus	37,248	9	563,389	8
Certain conditions originating in the perinatal period	5,500	19	382,730	9
Assault (homicide)	6,976	18	319,969	10
Alzheimer's disease	46,238	7	302,611	11
Septicemia	18,807	12	274,801	12
Influenza and pneumonia	23,178	10	267,764	13
Nephritis, nephrotic syndrome and nephrosis	21,580	11	258,176	14
Congenital malformations, deformations and chromosomal	4,462	21	239,978	15
Chronic liver disease and alcohol cirrhosis	8,474	16	164,166	16
Essential (primary) hypertension and hypertensive renal	13,632	13	146,180	17
Parkinson's disease	11,879	14	99,564	18
In situ neoplasms, benign neoplasms and neoplasms of	7,175	17	92,948	19
Pneumonitis due to solids and liquids	8,939	15	85,667	20
Other diseases of circulatory system	4,707	20	65,160	21
Viral hepatitis	1,839	25	42,475	22
Human immunodeficiency virus (HIV) disease	1,348	29	41,770	23
Anemias	2,356	24	31,053	24
Complications of medical and surgical care	1,526	26	29,043	25
Nutritional deficiencies	2,868	23	26,514	26
Atherosclerosis	2,900	22	24,977	27
Peptic ulcer	1,362	28	18,809	28
Pregnancy, childbirth and the puerperium	370	31	18,626	29
Cholelithiasis and other disorders of gallbladder	1,410	27	15,030	30
Hernia	796	30	9,037	31
Legal intervention	188	36	7,677	32
Meningitis	215	35	7,006	33
Infections of kidney	247	33	4,286	34
Other acute lower respiratory infections	116	39	3,170	35
Pneumoconioses and chemical effects	305	32	2,916	36
Diseases of appendix	148	37	2,358	37
Tuberculosis	141	38	2,342	38
Hyperplasia of prostate	234	34	1,626	39
Inflammatory diseases of female pelvic organs	51	40	806	40
Meningococcal infection	12	42	480	41
Salmonella infections	15	41	226	42
Syphilis	12	43	138	44

As indicated in the tables below, deaths associated with diseases of despair generally rose throughout the period for both males and females, the large majority (71.1%) occur among males. Similarly, 68.9% of years of life lost were among males. These patterns are consistent with larger patterns associated with the three categories of deaths that comprise the deaths of despair construct. Interestingly, while males experienced a greater increase in deaths associated with diseases of despair, females experienced a greater increase in terms of years of life lost.

Table 4

Total Deaths for Diseases of Despair by Gender and Year – Ohio, 2010 - 2019

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Female	1,023	1,126	1,166	1,224	1,363	1,583	1,907	2,179	1,913	1,929	15,413
Male	2,565	2,704	2,902	3,103	3,378	3,884	4,751	5,355	4,617	4,860	38,119
DNR	.	41	28	21	.	.	.	.	.	.	100
Total	3,588	3,871	4,096	4,348	4,750	5,467	6,658	7,534	6,530	6,790	53,632

Table 5

Rate Per 100,000 Deaths for Diseases of Despair by County and Year – Ohio, 2010 - 2019

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Female	17	19	20	21	23	27	32	37	32	32	26
Male	45	48	51	55	59	68	83	94	81	85	67
DNR	.	.	.	.	.	.	.	.	.	.	.
Total	31	34	35	38	41	47	57	65	56	58	46

Table 6

Years of Life Lost for Diseases of Despair by Gender and Year – Ohio, 2010 - 2019

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Female	39,114	42,165	44,494	45,950	52,851	62,007	75,135	87,244	75,485	76,175	600,618
Male	88,323	93,245	99,260	105,175	117,135	137,162	169,372	191,573	162,055	167,601	1,330,899
DNR	.	.	.	.	.	.	.	.	.	.	.
Total	127,437	135,410	143,753	151,124	169,986	199,169	244,506	278,817	237,540	243,775	1,931,518

The data in the three following tables indicate varying distributions of deaths associated with diseases of despair across regions of the State of Ohio. As might be expected, the largest percentage (55.0%) occur across metropolitan areas of the state where the largest populations clusters are found. The Appalachian region of the state accounted for 17.8% of all deaths with 13.4% occurring in suburban areas and 10.6% occurring in non-Appalachian rural regions. Similar distributions are evident in terms of years of life lost. A review of rate per 100,000 deaths shows higher rates in Southern Appalachia, the most economically distressed region of Ohio.

Table 7  
Total Deaths for Diseases of Despair by Region and Year – Ohio, 2010 - 2019

Region	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Out of State	93	203	109	118	244	160	195	218	210	205	1,755
Appalachia	323	342	352	383	390	470	517	559	585	572	4,493
Metro	1,869	1,983	2,243	2,385	2,607	3,027	3,759	4,248	3,564	3,837	29,522
N Appalachia	384	400	398	397	394	507	610	699	620	622	5,031
Rural	393	417	417	472	506	571	694	828	677	690	5,665
Suburban	526	526	577	593	609	732	883	982	874	864	7,166
Total	3,588	3,871	4,096	4,348	4,750	5,467	6,658	7,534	6,530	6,790	53,632

Table 8  
Rate Per 100,000 Deaths for Diseases of Despair by Region and Year – Ohio, 2010 - 2019

Region	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Appalachia	36	38	39	43	43	52	57	62	65	64	50
Metro	31	33	37	39	43	50	62	70	59	64	49
N Appalachia	34	35	35	35	35	44	53	61	54	54	44
Rural	25	27	27	31	33	37	45	54	44	45	37
Suburban	28	28	30	31	32	38	46	51	46	45	37
Total	30	32	35	37	39	46	56	63	55	57	45

Table 9  
Years of Life Lost for Diseases of Despair by Region and Year – Ohio, 2010 - 2019

Region	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Out of State	3,495	6,241	4,296	4,447	9,216	6,478	7,833	8,650	8,454	8,391	67,501
Appalachia	11,751	12,207	12,079	13,581	14,149	17,636	18,867	20,749	21,033	20,433	162,485
Metro	66,440	69,834	78,611	82,890	92,545	108,951	138,171	156,264	128,953	137,239	1,059,897
N Appalachia	13,065	13,896	13,433	13,609	14,002	18,043	21,973	25,427	22,293	21,280	177,022
Rural	13,880	15,050	15,002	16,103	17,928	21,034	25,957	31,678	25,041	25,342	207,016
Suburban	18,807	18,181	20,332	20,494	22,145	27,026	31,706	36,049	31,767	31,090	257,597
Total	127,437	135,410	143,753	151,124	169,986	199,169	244,506	278,817	237,540	243,775	1,931,518

Persons aged 30 to 39 experienced the largest increase in deaths associated with diseases of despair and associated years of life lost followed by persons aged 60 and older.

Table 10

Total Deaths for Diseases of Despair by Age Cohort and Year – Ohio, 2010 - 2019

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
14 & Under	.	12	21	17	25	17	23	33	32	38	226
15 - 19	87	117	97	71	88	119	109	141	142	119	1,090
20 - 29	538	522	574	618	733	882	1,183	1,241	1,068	1,054	8,413
30 - 39	651	674	750	804	1,017	1,238	1,547	1,835	1,562	1,581	11,659
40 - 49	880	906	947	973	974	1,121	1,328	1,640	1,265	1,361	11,395
50 - 59	871	1,024	1,036	1,105	1,133	1,286	1,478	1,584	1,294	1,392	12,203
60+	553	575	643	739	771	804	990	1,060	1,167	1,245	8,547
DNR	.	41	28	21	.	.	.	.	.	.	99
Total	3,588	3,871	4,096	4,348	4,750	5,467	6,658	7,534	6,530	6,790	53,632

Table 11

Rate Per 100,000 Deaths for Diseases of Despair by Age Cohort and Year – Ohio, 2010 - 2019

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
14 & Under	.	1	1	1	1	1	1	2	2	2	1
15 - 19	11	15	13	9	11	16	14	18	19	16	14
20 - 29	35	34	37	40	48	57	77	81	69	69	55
30 - 39	44	46	51	55	69	84	105	125	106	107	79
40 - 49	63	65	68	69	70	80	95	117	90	97	81
50 - 59	57	67	68	72	74	84	97	104	85	91	80
60+	19	20	23	26	27	28	35	37	41	44	30
DNR	.	.	.	.	.	.	.	.	.	.	.
Total	31	33	35	37	41	47	57	64	56	58	46

Table 12

Years of Life Lost for Diseases of Despair by Age Cohort and Year – Ohio, 2010 - 2019

Age	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
14 & Under	.	801	1,380	1,160	1,630	1,141	1,559	2,180	2,138	2,545	15,067
15 - 19	5,267	7,139	5,923	4,292	5,364	7,208	6,599	8,593	8,658	7,205	66,249
20 - 29	28,920	28,031	30,750	33,109	39,336	47,322	63,277	66,339	56,921	56,226	450,231
30 - 39	29,191	30,245	33,659	36,205	45,634	55,524	69,496	82,562	70,070	70,751	523,338
40 - 49	31,055	32,073	33,619	34,533	34,708	40,206	47,191	58,706	45,262	48,736	406,089
50 - 59	23,827	28,049	28,339	30,155	30,746	34,879	39,830	42,721	34,923	37,462	330,929
60+	8,642	9,072	10,084	11,670	12,567	12,889	16,554	17,716	19,567	20,851	139,614
DNR	.	.	.	.	.	.	.	.	.	.	.
Total	127,437	135,410	143,753	151,124	169,986	199,169	244,506	278,817	237,540	243,775	1,931,518



The following tables provide a summary of deaths and years of life lost associated with diseases of despair across racial and ethnic groups. These tables show that like the nation at large, death rates are highest among white Ohioans, followed by blacks and Hispanics.

Table 13

Total Deaths for Diseases of Despair by Race, Ethnicity and Year – Ohio, 2010 - 2019

Race	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
White	3,270	3,426	3,546	3,807	4,163	4,730	5,936	6,418	5,549	5,632	46,477
Black	290	313	321	400	404	460	634	826	744	883	5,275
Other	26	35	37	39	57	53	70	99	86	96	598
Total	3,586	3,774	3,904	4,246	4,624	5,243	6,640	7,343	6,379	6,611	52,350
Non-Hispanic	3,459	3,729	3,836	4,176	4,544	5,143	6,351	7,189	6,212	6,418	51,057
Hispanic	67	47	70	71	77	99	111	152	155	179	1,028
Total	3,526	3,776	3,906	4,247	4,621	5,242	6,462	7,341	6,367	6,597	52,085

Table 14

Rate Per 100,000 Deaths for Diseases of Despair by Race, Ethnicity and Year – Ohio, 2010 - 2019

Race	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
White	34	36	37	40	44	50	62	67	58	59	49
Black	21	22	22	28	28	31	43	55	49	58	36
Other	4	6	6	7	10	9	12	16	14	16	10
Total	31	33	34	37	40	45	57	63	55	57	45
Non-Hispanic	31	33	34	37	41	46	57	64	55	57	46
Hispanic	19	13	18	18	19	24	26	34	34	38	24
Total	31	33	34	37	40	45	56	63	55	56	45

Table 15

Years of Life Lost for Diseases of Despair by Race, Ethnicity and Year – Ohio, 2010 - 2019

Race	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
White	116,256	120,946	125,576	133,217	149,011	172,159	218,042	237,604	200,884	201,745	1,675,440
Black	10,016	10,788	10,592	13,437	14,050	16,500	22,697	29,276	27,114	31,221	185,690
Other	1,105	1,432	1,511	1,407	2,365	2,207	3,121	4,268	3,589	4,045	25,050
Total	127,377	133,166	137,678	148,062	165,425	190,866	243,859	271,148	231,588	237,011	1,886,180
Ethnicity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Non-Hispanic	122,445	131,495	135,029	145,390	162,292	186,770	232,325	265,155	224,923	229,466	1,835,292
Hispanic	2,631	1,753	2,728	2,670	2,994	4,058	4,520	5,881	6,147	6,928	40,310
Total	125,076	133,248	137,758	148,060	165,286	190,828	236,846	271,035	231,070	236,394	1,875,602

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