Florida Mortality Study:

Florida Law Enforcement and Corrections Officers compared to Florida General Population



Presented by Sheriff J.R. "Jack" Parker
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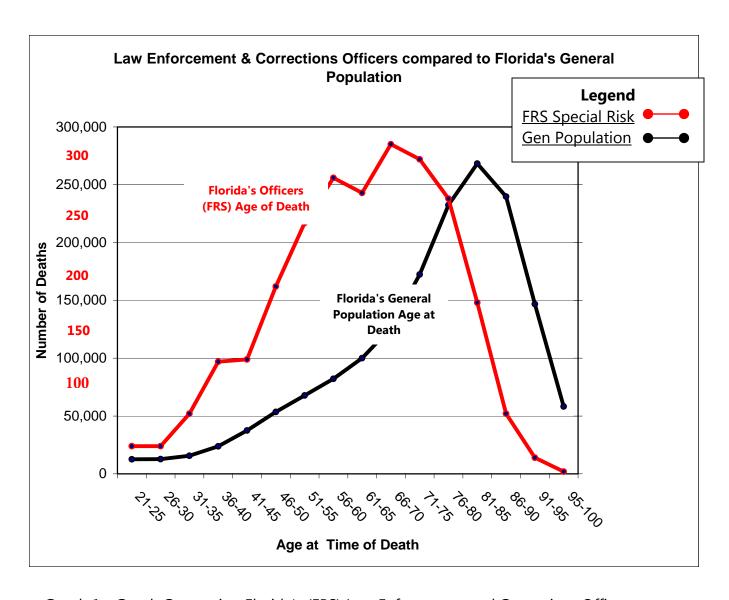
Executive Summary

During the 2011 Legislative Session, changes made to the Florida Retirement System (FRS) extended by five years both the age and the years of service necessary to retire for members of the special risk class which includes law enforcement and corrections officers. The stated justification for the change was the assumption that special risk class members are living longer and now have life spans similar to that of the general population. This assumption was derived without the benefit of conducting any studies in the State of Florida. The assumption also conflicts directly with well-established medical theory and other scientifically conducted longitudinal studies regarding the lifespan of law enforcement officers.

To verify whether there is a lifespan difference between the law enforcement and corrections special risk class members and that of the general population in Florida, data was derived from the FRS and the Florida Department of Health. The comprehensive data was analyzed and compiled to establish an accurate "average age at death" comparison between FRS special risk class members (Law Enforcement and Corrections Officers) and the State of Florida general population.

The actual death rates between the two groups were compared during the most recent decade beginning in year 2000 and ending in 2009. It was determined the average age at death for FRS special risk class members assigned to law enforcement and corrections duties was 62.4 years, while the average age of death for Florida's general population was almost 12 years longer at 74.2 years (approximately 19% longer life spans).

This report clearly demonstrates that FRS special risk class members assigned to law enforcement and corrections duties do not enjoy a similar lifespan as compared to the population they serve and the 2011 changes to the FRS requiring officers to work to age 60 was based on an invalid assumption. The following graph illustrates the difference in life spans of Florida law enforcement and corrections officers as compared with Florida's general public:



Graph 1 - Graph Comparing Florida's (FRS) Law Enforcement and Corrections Officers with Florida's General Population regarding age of death.

It is requested the Florida Legislature submit and pass bill language in this legislative session in both the Florida House and Florida Senate, and that Governor Scott sign into law, corrective statutory language that will return special risk members in the Florida Retirement System to the appropriate special risk retirement age of 55 or 25 years of service. It is further requested those FRS special risk members hired on or after July 1st of 2011 be retroactively included in the legislative change.

If you have any questions regarding this report or this legislative request, please contact Sheriff J. R. "Jack" Parker, by calling 321-264-5201 or by email at <u>jack.parker@bcso.us</u> or by mail at Brevard County Sheriff's Office, 700 South Park Avenue, Titusville, Florida, 32780.

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Introduction

A commonly held belief among policymakers and the public is that law enforcement officers, by nature of their profession, have a shorter life expectancy than the general population. Law enforcement work is riddled with stressors that exist throughout the career of the officer. Officers function in a constant state of stress and it is a major contributor to the earlier death suffered by law enforcement and corrections professionals. The negative impact of stress on life span is not a disputed fact and acts as one of the justifications that granted special risk members a retirement age commensurate with their life span and service to our citizens. ⁱ

In a cost-cutting measure, during the 2011 legislative session, the Florida Legislature extended the years of service and age requirements for Special Risk class members. Many in Florida's law enforcement community expressed concern that extending the retirement age from 55 to 60 years for law enforcement and corrections officers was dangerous both for the officer and for the public.

Research Parameters

The research focuses on a ten-year period ranging from 2000 to 2009 and is specific to Florida. Given the state of current research in this area, statistical data was acquired from reliable and valid sources relating specifically to the general population in the State of Florida and FRS special risk population. Mortality rate statistics for Florida's general public were obtained directly from the Department of Health, and statistics for FRS Special Risk employees were obtained directly from the Florida Retirement System.

The objective of the study was to determine if Florida law enforcement and corrections officers who belong to the FRS have a similar life expectancy as the general population.

Two data sets were analyzed to determine an average age for all persons who died in the State of Florida and for members of the FRS Special Risk Class, employed by or retired from Sheriff's Offices, State Law Enforcement Agencies, or the Department of Corrections. Cause of death statistics were not collected for these study groups but rather focuses simply on the age of death regardless of cause. There is great debate and discussion on the reasons those in direct service public safety positions die much earlier than their non-public safety counterparts. The objective of this study was not to determine what factors contribute to reducing the lifespan of those in the public safety profession, rather it was conducted to determine if law enforcement and corrections officers were, in fact, suffering from reduced life spans.

Data: Florida General Population

Per Florida Statute 302.008 Death and Fetal Death Registration, a certificate for each death and fetal death which occurs in this state shall be filed on a form prescribed by the department with the local registrar or the district in which the death occurred within five days after such death and prior to the final disposition, and shall be registered by such registrar if it has been completed and filed in accordance with this chapter or adopted rules. Per Department of Health Administrative Code 64V-1.0061 Death and Fetal Death Registration, all deaths must be registered with the Florida Department of Health, State Office of Vital Statistics, P.O. Box 210, Jacksonville, Fl 32231-0042.

The following death information was compiled from the Florida Department of Health, Office of Health Statistics and Assessment's website. The illustrated menu (Table 1) was utilized to compile that data. With the exception of the AGE field, all displayed fields were employed when compiling death statistics. The AGE field was increased numerically beginning at age twenty-one (21) through age ninety-nine (99). Empirical data obtained for each individual age was copied directly from the menu to an Excel spreadsheet.

Category:	All Causes (A00-Y89)						
Cause of Death*:	All Causes (A00-Y89)						
Year:	2009						
Race:	All Races						
Ethnicity**:	All Ethnicities 🔻						
Sex:	All Sexes 🔻						
Age:	21 through 99 (leave blank for all ages, enter 0 through 0 for infant deaths)						
Counties:	All counties (Displays a single cause of death for all counties)						
	Single county (Displays all individual causes of death for 1 county)						
Report Type:	10 single-year counts						
	Single-year counts by standard age groups						
	Single-year counts by race, ethnicity and gender						

Table 1: Florida Department of Health Menu Illustration

Florida Department of Health data was segregated by the number of reported deaths specific to each year and the age of the decedent at the time of death. ⁱⁱ

Calculations for the average age at death for both populations were determined by summing the number of deaths for each age group for the specified time frame and multiplying this result by the age of death to obtain a total number of years of age at the time of death.

The variables for this calculation can be expressed mathematically as:

Y= Sum of all deaths as specific age

A= Age at time of death

N = Sum of all (y x a)

T= Sum of all deaths

N ÷ T= Average age at death

Using this formula, the average Age at Death for persons in the General Public in the State of Florida for the ages of 21 through 99 is **74.21** years.

Please see Graph 2 on page 8 for a graphical illustration.

Data: FRS Special Risk Class (Law Enforcement and Corrections)

Data requested from the Florida Division of Retirement (FRS) was used to establish the average Age at Death for members who are part of, or retired from, the Special Risk Class assigned to law enforcement and corrections duties including Sheriff's Offices, State Law Enforcement Agencies and the Department of Corrections.

For FY 2000-01 through FY 2009-10, the number of deaths by age (the age in years at time of death) for members who died post retirement from the Special Risk Class, or died active without retiring were derived for the purposes of this study.ⁱⁱⁱ

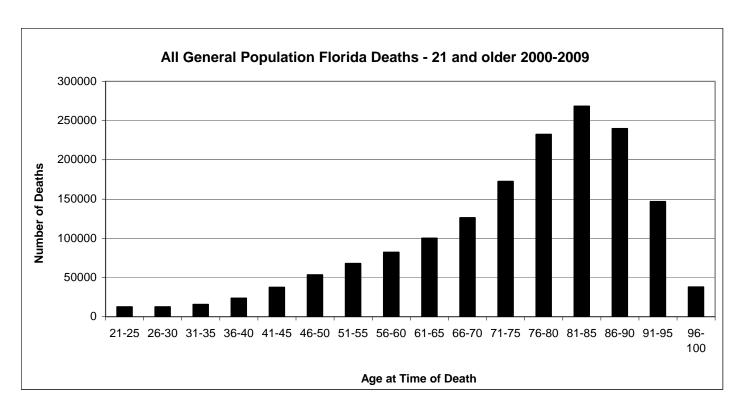
The average age at death for Florida Law Enforcement Officers and Florida Corrections Officers in the FRS data set is **62.47** years of age.

Please see Graph 3 on page 8 for a graphical illustration.

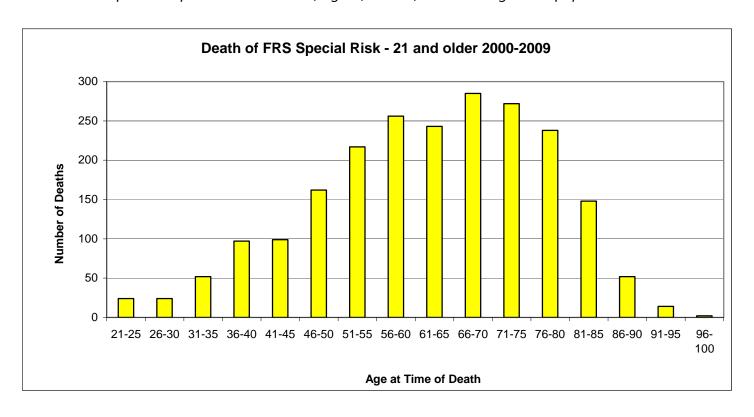
Population Comparison

To simplify the comparisons, FRS data was presented in the same Age at Death segregated format as the Florida Department of Health data for the ten-year period.

Subtracting the Age at Death for the Special Risk Population (FRS) of 62.47 years from the average Age at Death for the general population (DOH) of 74.21 years yields a difference of 11.74 years. Members of the general population in the State of Florida had lived an additional 11.74 years, or almost 19% longer, than Florida's Law Enforcement and Corrections Officers.



Graph 2: Graphical illustration of age of death for Florida's general population



Graph 3: Graphical illustration of age of death for Florida's Law Enforcement and Corrections Officers (FRS)

Conclusion

The data presented indicated that for the ten-year period specified, law enforcement and corrections officers who belonged to the Florida Retirement System died, on average, approximately 12 years <u>earlier</u> than the general population. The study also found that the general population in the State of Florida are enjoying lives approximately 19% longer than Florida's Law Enforcement and Corrections Officers (FRS).

Age	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
21	200	230	243	237	250	257	295	297	273	245
22	184	219	207	263	257	267	265	315	289	269
23	205	207	230	239	245	253	285	280	264	289
24	216	213	224	221	243	272	307	312	316	272
25	196 209	184 217	202 221	201 230	233 250	260 269	307 312	315 285	298 267	276 283
26 27	198	205	218	230	232	248	250	255	286	283
28	218	217	207	230	218	253	261	291	309	276
29	244	261	246	264	241	232	295	287	288	271
30	259	252	281	244	229	251	249	271	273	299
31	241	271	271	277	255	283	268	269	312	257
32 33	264 299	280 320	305 323	285 348	292 316	300 324	276 281	276 331	294 281	285 286
34	335	343	357	324	338	352	353	333	300	318
35	367	376	389	333	373	368	373	388	329	303
36	428	425	399	378	376	361	350	401	376	357
37	490	496	459	442	455	378	386	426	431	390
38	505	527	528	464	470	471	469	411	427	431
39 40	582 607	559 635	583 641	534 594	554 617	559 582	485 514	433 501	440 467	480 474
41	639	635	648	695	656	602	605	579	543	513
42	713	718	721	772	729	763	728	611	647	549
43	749	709	760	805	739	800	836	723	686	661
44	737	792	861	861	831	899	838	796	811	765
45 46	864	867	937	892	940	917	878	901	828	802
46 47	854 961	872 969	954 999	1,013 1,014	957 1,089	972 1,047	1,001 1,046	966 1,063	947 1,012	898 973
48	935	978	993	1,065	1,073	1,188	1,137	1,003	1,147	1,125
49	968	985	1,055	1,142	1,133	1,225	1,254	1,219	1,239	1,156
50	993	1,013	1,066	1,159	1,157	1,216	1,251	1,296	1,354	1,274
51	1,023	1,030	1,120	1,226	1,279	1,326	1,327	1,350	1,394	1,358
52	1,147	1,159	1,123	1,199	1,318	1,269	1,407	1,437	1,452	1,544
53 54	1,235 1,113	1,196 1,325	1,189 1,283	1,252 1,372	1,329 1,391	1,430 1,397	1,377 1,474	1,463 1,515	1,460 1,644	1,577 1,615
55	1,141	1,239	1,505	1,507	1,549	1,433	1,547	1,540	1,591	1,653
56	1,352	1,232	1,319	1,597	1,553	1,558	1,617	1,575	1,597	1,731
57	1,399	1,448	1,316	1,445	1,720	1,652	1,625	1,665	1,744	1,782
58	1,327	1,533	1,504	1,514	1,503	1,834	1,819	1,807	1,718	1,776
59	1,386	1,480	1,651	1,658	1,561	1,674 1,710	2,049	1,875	1,859	1,914
60 61	1,484	1,561 1,589	1,618 1,656	1,835 1,754	1,689 1,973	1,710	1,804 1,805	2,110 1,736	2,062 2,280	2,021
62	1,656	1,687	1,821	1,807	1,932	2,101	2,003	1,975	1,936	2,409
63	1,761	1,869	1,771	1,934	1,896	2,141	2,234	2,065	2,122	2,123
64	1,937	1,954	1,958	2,039	2,105	1,992	2,042	2,284	2,203	2,137
65	2,098	2,031	2,039	2,087	2,191	2,180	2,119	2,201	2,479	2,370
66 67	2,118 2,258	2,216 2,316	2,191 2,392	2,115 2,413	2,213 2,439	2,234 2,413	2,231 2,351	2,298 2,311	2,390 2,429	2,641 2,532
68	2,537	2,530	2,409	2,516	2,395	2,413	2,409	2,482	2,529	2,611
69	2,738	2,812	2,737	2,599	2,685	2,584	2,668	2,538	2,675	2,576
70	3,079	3,002	2,977	2,884	2,749	2,723	2,649	2,771	2,656	2,715
71	3,253	3,372	3,063	3,013	2,903	2,814	2,885	2,823	2,856	2,791
72	3,585	3,556	3,357	3,346	3,214	3,022	2,957	3,013	3,055	2,948
73 74	3,923 4,103	3,829 4,151	3,822 3,959	3,621 3,890	3,536 3,825	3,398 3,644	3,180 3,457	2,938 3,308	3,214 3,158	3,130 3,471
75	4,311	4,344	4,234	4,131	3,943	3,897	3,747	3,632	3,422	3,422
76	4,531	4,613	4,523	4,266	4,137	4,150	4,017	3,888	3,727	3,612
77	4,760	4,833	4,708	4,471	4,578	4,482	4,323	4,173	4,029	3,908
78	4,837	4,920	4,946	4,916	4,730	4,743	4,628	4,320	4,209	4,333
79 80	5,144 5,128	5,178 5,371	5,165 5,352	5,114 5,245	5,001 5,181	4,846 5,223	4,804 5,028	4,651 4,957	4,643 4,964	4,463 4,639
80 81	5,128	5,452	5,352	5,245	5,181	5,223	5,028	5,066	4,964	4,639
82	5,332	5,330	5,530	5,449	5,618	5,438	5,318	5,261	5,110	5,226
83	5,188	5,301	5,506	5,509	5,563	5,601	5,281	5,324	5,373	5,344
84	5,187	5,481	5,256	5,248	5,530	5,624	5,646	5,410	5,596	5,503
85 96	5,082	5,207	5,317	5,409	5,225 5,192	5,674 5,126	5,525	5,603 5,545	5,403 5,567	5,511
86 87	5,114 5,007	5,283 5,026	5,040 5,053	5,137 4,962	5,192 5,069	5,126 5,148	5,295 5,026	5,545 5,163	5,567	5,494 5,452
88	4,500	4,718	4,641	4,855	4,750	4,894	5,003	4,721	5,239	5,265
89	4,249	4,445	4,439	4,596	4,453	4,476	4,585	4,639	4,542	4,858
90	3,944	3,892	4,091	4,134	4,276	4,276	4,116	4,186	4,377	4,266
91	3,554	3,684	3,652	3,693	3,880	3,944	4,003	3,791	4,106	3,991
92	3,116	3,188	3,323	3,316	3,365	3,470	3,503	3,451	3,502	3,521 3,148
93 94	2,740	2,864 2,455	3,014 2,374	2,856 2,473	2,851 2,295	3,073 2,487	2,997 2,546	2,991 2,512	3,118 2,653	2,728
94 95	1,843	1,952	1,928	2,473	1,965	2,487	2,087	2,082	2,653	2,128
96	1,456	1,588	1,574	1,639	1,560	1,676	1,555	1,596	1,734	1,817
97	1,163	1,137	1,207	1,176	1,161	1,293	1,247	1,226	1,386	1,342
98	825	893	918	875	882	935	944	1,010	1,030	994
	158,089	162,247	162,594	163,272	163,148	164,883	163,781	162,206	164,839	164,634

10 Year Annual Total	Total Deaths Multiplied by Age	Percentage
2,527	53,067	0.1551%
2,535	55,770	0.1556%
2,497	57,431	0.1532%
2,596	62,304	0.1593%
2,472 2,543	61,800 66,118	0.1517% 0.1560%
2,415	65,205	0.1482%
2,480	69,440	0.1522%
2,629	76,241	0.1613%
2,608	78,240	0.1600%
2,704	83,824	0.1659% 0.1753%
2,857 3,109	91,424 102,597	0.1753%
3,353	114,002	0.2057%
3,599	125,965	0.2208%
3,851	138,636	0.2363%
4,353	161,061	0.2671%
4,703 5,209	178,714 203,151	0.2886% 0.3196%
5,632	225,280	0.3456%
6,115	250,715	0.3752%
6,951	291,942	0.4265%
7,468	321,124	0.4582%
8,191	360,404	0.5026%
8,826 9,434	397,170 433,964	0.5416% 0.5789%
10,173	478,131	0.6242%
10,739	515,472	0.6590%
11,376	557,424	0.6980%
11,779	588,950	0.7228%
12,433	634,083	0.7629%
13,055 13,508	678,860 715,924	0.8011% 0.8289%
14,129	762,966	0.8670%
14,705	808,775	0.9023%
15,131	847,336	0.9285%
15,796	900,372	0.9693%
16,335	947,430	1.0023%
17,107 17,894	1,009,313 1,073,640	1.0497% 1.0980%
18,360	1,119,960	1.1266%
19,327	1,198,274	1.1859%
19,916	1,254,708	1.2221%
20,651	1,321,664	1.2672%
21,795	1,416,675	1.3374%
22,647 23,854	1,494,702 1,598,218	1.3896% 1.4637%
24,875	1,691,500	1.5264%
26,612	1,836,228	1.6329%
28,205	1,974,350	1.7307%
29,773	2,113,883	1.8269%
32,053	2,307,816	1.9668%
34,591 36,966	2,525,143 2,735,484	2.1225% 2.2683%
39,083	2,931,225	2.3982%
41,464	3,151,264	2.5443%
44,265	3,408,405	2.7162%
46,582	3,633,396	2.8583%
49,009 51,088	3,871,711	3.0073%
52,263	4,087,040 4,233,303	3.1348% 3.2069%
53,612	4,396,184	3.2897%
53,990	4,481,170	3.3129%
54,481	4,576,404	3.3430%
53,956	4,586,260	3.3108%
52,793	4,540,198	3.2394%
51,572 48,586	4,486,764 4,275,568	3.1645% 2.9813%
45,282	4,030,098	2.7786%
41,558	3,740,220	2.5501%
38,298	3,485,118	2.3500%
33,755	3,105,460	2.0712%
29,652	2,757,636	1.8195%
24,744 20,379	2,325,936 1,936,005	1.5183% 1.2505%
16,195	1,554,720	0.9937%
12,338	1,196,786	0.7571%
9,306	911,988	0.5710%
1,629,693	120,935,729	100.00%

Average Age at Death

Age	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
21	0	1	0	0	1	0	0	0	0	0
22	0	0	0	0	0	0	0	1	0	1
23	0	1	1	2	0	0	1	1	1	0
24 25	2	0	2	0	0	0	1	0	0	0
26	0	0	0	2	0	0	0	1	1	1
27	0	0	0	1	1	0	0	2	0	2
28	0	0	0	0	0	0	1	1	0	0
29	1	1	1	2	0	1	0	0	1	1
30	0	0	0	0	2	0	0	0	0	1
31	0	0	2	2	0	1	0	2	3	3
32 33	1	0	2	1	1	1	1	0	2	1
34	0	0	4	1	1	1	1	0	3	1
35	0	1	0	1	2	0	2	2	0	1
36	1	0	2	1	1	1	3	3	3	2
37	1	0	1	1	1	3	3	0	3	2
38	1	1	2	2	3	3	2	0	3	0
39 40	3	2	3	3	2	4	3	6	0	3
41	1	1	3	0	5	4	2	1	1	1
42	0	1	1	2	1	3	0	1	2	1
43	3	0	0	3	3	3	1	3	1	3
44	0	1	0	2	1	3	3	1	4	6
45	2	2	0	3	2	3	2	5	3	5
46 47	5 2	3	1	3 5	5	8	5 4	4	5	3
47 48	2	0	3	1	3	2	7	5	4	3
49	1	6	1	1	2	5	6	6	3	3
50	4	3	5	2	3	1	4	4	3	3
51	2	2	5	6	4	3	2	3	5	4
52	1	4	4	1	3	3	4	4	4	5
53	6	6	6	5	7	6	3	4	3	6
54 55	4	2	7	4	4	7	5 10	6	8	3
56	2	0	0	2	5	4	5	3	3	7
57	1	3	4	2	4	9	5	7	4	4
58	4	11	6	4	3	8	5	10	5	6
59	5	3	3	10	3	5	11	10	5	6
60	9	3	2	7	5	9	7	5	5	7
61 62	1	5 2	1 5	7	3	8	3 5	6	6	7
63	6	7	5	3	6	5	7	5	11	5
64	6	1	5	6	4	2	3	8	6	3
65	0	5	4	5	2	5	6	8	7	9
66	3	2	2	5	4	10	3	5	3	5
67	5	7	5	9	5	6	5	10	5	9
68	4	4	7	6	8	6	5	8	4	11
69 70	5 8	1	7	8 5	5 3	5 9	4	8 10	6 3	6
71	8	5	6	6	6	8	5	3	8	2
72	3	3	6	2	8	4	8	6	5	1
73	2	6	4	14	4	8	4	8	12	7
74	8	5	3	5	6	3	3	8	3	9
75 70	3	6 4	6	6	3	5	5	5	3	5
76 77	1	3	3 5	10 9	5 6	5	6 9	8	8 5	7
78	3	4	0	4	6	6	3	9	6	7
79	4	2	2	4	4	3	9	6	3	5
80	1	3	0	3	3	6	5	5	4	2
81	1	2	1	4	4	4	5	8	4	8
82	1	0	1	0	0	4	8	6	7	8
83 84	3	0	4	1	2	6	4	5	7 5	6 5
85	0	1	1	2	0	0	2	3	0	1
86	1	1	1	1	2	0	3	1	2	1
87	0	0	1	1	1	2	1	2	4	1
88	0	0	1	2	1	1	0	0	4	3
89	0	1	0	0	2	1	0	0	2	1
90	0	0	1	0	0	2	1	3	0	0
91	0	2	0	0	0	0	0	0	1	0
92 93	0	0	0	0	0	1	0	0	0	1
94	0	0	0	0	0	1	0	0	0	0
95	0	0	0	0	0	0	0	0	1	1
96	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	1
98	0	0	0	0	0	0	0	0	1 252	0
	152	150	183	225	192	245	242	279	253	266

10 Year Annual Total	Total Deaths Multiplied by Age	Percentage
2	42	0.0914%
2	44	0.0914%
7	161	0.3201%
6	144	0.2743%
7 5	175 130	0.3201% 0.2286%
6	162	0.2743%
2	56	0.0914%
8	232	0.3658%
3 10	90 310	0.1372% 0.4572%
12	384	0.5487%
10	330	0.4572%
12 9	408 315	0.5487% 0.4115%
17	612	0.4113%
15	555	0.6859%
18	684	0.8230%
23 24	897 960	1.0517% 1.0974%
19	779	0.8688%
12	504	0.5487%
20	860	0.9145%
21 27	924 1,215	0.9602% 1.2346%
30	1,380	1.3717%
36	1,692	1.6461%
30	1,440	1.3717%
34 32	1,666	1.5546% 1.4632%
32 36	1,600 1,836	1.6461%
33	1,716	1.5089%
52	2,756	2.3777%
49 47	2,646 2,585	2.2405% 2.1491%
31	1,736	1.4175%
43	2,451	1.9662%
62	3,596	2.8349%
61 59	3,599 3,540	2.7892% 2.6978%
48	2,928	2.1948%
40	2,480	1.8290%
60	3,780	2.7435%
44 51	2,816 3,315	2.0119% 2.3320%
42	2,772	1.9204%
66	4,422	3.0178%
63	4,284	2.8807%
58 56	4,002 3,920	2.6520% 2.5606%
57	4,047	2.6063%
46	3,312	2.1033%
69	5,037	3.1550%
53 47	3,922 3,525	2.4234% 2.1491%
57	4,332	2.6063%
59	4,543	2.6978%
48	3,744	2.1948%
42 32	3,318 2,560	1.9204% 1.4632%
41	3,321	1.8747%
35	2,870	1.6004%
27	2,241	1.2346%
35 10	2,940 850	1.6004% 0.4572%
13	1,118	0.4572%
13	1,131	0.5944%
12	1,056	0.5487%
7 7	623 630	0.3201% 0.3201%
5	455	0.2286%
5	460	0.2286%
2	186	0.0914%
1 2	94 190	0.0457% 0.0914%
0	0	0.0000%
1	97	0.0457%
1	98	0.0457%
2,187	136,631	100.00%

Average Age at Death

62.47

ⁱ References

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ii Ages 21 to 99 years-of-age were chosen in order to maintain consistency with the FRS data.

iii Sheriff's Offices –as a group; DHSMV, DOC, DOACS, DEP, FWC, and FDLE