

OPM - Criminal Justice Policy & Planning Division

Mortality among ex-prisoners

Highlights

- OPM evaluated death records for former prisoners using data provided by the Office of the Chief Medical Examiner and the Department of Public Health.
- Within a year of leaving prison, ex-prisoners die at significantly higher rates than their counterparts in the general population. Matching CT Death Registry data with CT DOC data for all sentenced offenders who were released or discharged in 2014, OPM found that former prisoners between the ages of 20 and 29 were approximately 8 times more likely to die within a year of leaving prison than 20-to-29 year olds in the general population.
- Racial disparity in Connecticut’s criminal justice system is well recognized. Less recognized are the disparities that exist in death rates of ex-prisoners from different racial and ethnic groups. In the five years following their 2011-prisoner releases, 74% of homicide victims among the group were black. White former-prisoners, in contrast, accounted for 74% of drug overdose deaths.
- Mortality patterns among women released from prison in 2014 are generally similar to the rates for men. The mortality rates per 1,000 persons for women, however were significantly higher.
- The findings in this report, tend to validate the findings of OPM’s qualitative studies of violence-victimization and patterns of drug-use among the state’s prison population.
- As new data becomes available, OPM will update this information.

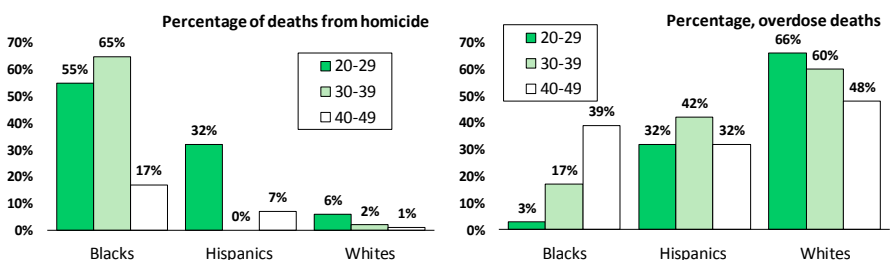
Deaths among former prisoners

For several years, OPM has used data provided by the Office of the Chief Medical Examiner (OCME) to track statewide homicides and drug overdose deaths in CT. From this work we were astonished to discover that, in recent years, over 40% of the people who died from drug overdoses in the state were, at some point in the past, incarcerated by the CT DOC. That such a large percentage of statewide deaths came from a relatively small proportion of the general population was eye-opening. In 2016, the latest year for which data was available, 52% of people who died from an overdose had, at some point in the past, been incarcerated.

Building on this work, the state Department of Public Health (DPH) provided OPM researchers with multi-year extracts of the CT Death Registry. The Registry contains a wide range of information on every death in the state including the cause and manner of death. In 2017, using Registry data, OPM was able to identify death records for 524 individuals who had been released or discharged from the DOC in 2011¹.

This analysis revealed several significant findings. Among former prisoners between the ages of 20 and 29 who had died between 2011 and the end of 2016, 35% had died from drug overdoses; 28% died from homicides, and 7% from suicides. These are horrifically high death rates compared to those found among the general population of this age. When researchers looked at deaths by race and ethnicity, significant differences were observed between black-, white- and Hispanic-former prisoners. Among the black ex-prisoners who had died, 55% succumbed to homicide. In contrast, 66% of whites who dies, died as a result of a drug overdose and only 6% of whites in this age group died from homicide.

This report gathers some of the findings from the 2017 analysis of mortality among the prisoners released in 2011 as well as more recent findings on the mortality among prisoners who were released or discharged from the DOC in 2014. The chart, below, contains data on homicide and overdose deaths by the race/ethnicity of ex-prisoners and age.



Because some of the analysis presented here is based on small numbers of cases², readers should use caution when drawing their conclusions. While findings based on small numbers can be informative, they can also be deceptive. Nevertheless, OPM researchers believe that the mortality data and analysis presented here provides important insights into the lives, and ultimately deaths, of the people that pass through our state’s penal system.

In 2017, OPM matched death records with 524 individuals who had been released or discharged from a CT prison sentence in 2011. We limit our present discussion to former prisoners who were under the age of 50 since most prisoners over the age of 50 die from causes that are generally described as ‘natural’ or ‘accidental’. Among ex-prisoners under the age of 50, however, we observe very high rates of death due to ‘un-natural’ causes, i.e., homicides, drug overdoses and suicides.

For this analysis, OPM tracked 13,592, individuals, between the ages of 20 and 49, who left prison in 2011. Between those prison-release dates through the end of 2016, 305 of these individuals had died³. Among the group, 99.5% of former prisoners were identified as black, white, or Hispanic.

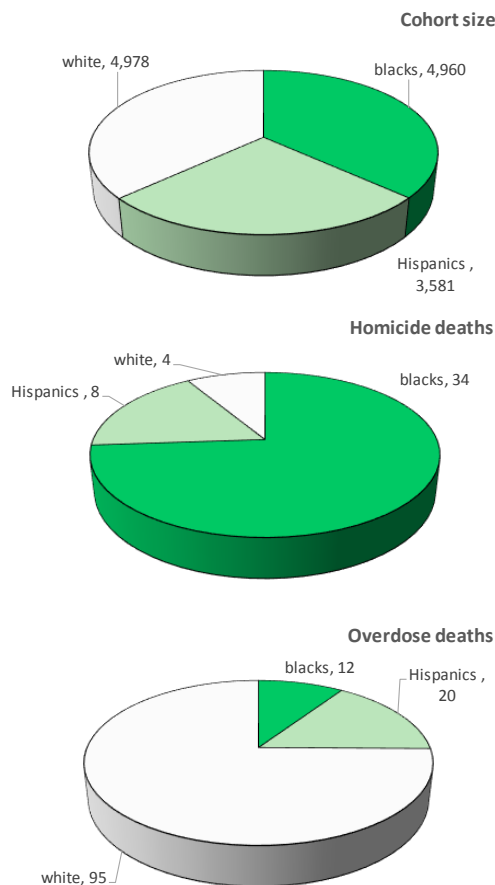
Deaths among former prisoners

	20-29	30-39	40-49
Total cohort	5,691	4,392	3,509
Deaths, all	85	78	142
% due to homicide	28%	21%	4%
% due to overdose	35%	45%	44%
% due to suicide	7%	5%	4%
Cohort, blacks	2,117	1,673	1,170
Deaths, blacks	29	23	18
% due to homicide	55%	65%	17%
% due to overdose	3%	17%	39%
% due to suicide	7%	0%	0%
Cohort, Hispanics	1,572	1,272	737
Deaths, Hispanics	19	12	28
% due to homicide	32%	0%	7%
% due to overdose	32%	42%	32%
% due to suicide	5%	8%	4%
Cohort, whites	1,971	1,424	1,583
Deaths, whites	35	43	95
% due to homicide	6%	2%	1%
% due to overdose	66%	60%	48%
% due to suicide	6%	7%	4%

When all the causes of death were combined, white ex-prisoners were found to be the most likely to die, compared to other groups, within the 5-year period following their release from prison. In 2011, 4,978 whites between the ages of 20 and 49 left prison. By the end of 2016, 173 were dead, i.e., a rate of 35 deaths per thousand prisoners. Among blacks, there were 70 deaths among 4,960 prisoners, or 14 deaths per thousand. Among the 3,581 Hispanic ex-prisoners, 59 died resulting in a 5-year death rate of 16 deaths per thousand. The imbalance in death rates observed among whites was largely driven by the extremely high rate of overdose deaths across all age ranges under consideration.

Overall, while black ex-prisoners were less likely to die than whites, they were much more likely to die from homicide than either white or Hispanic former prisoners. Among blacks between the ages 30 and 39, 65% of the ex-prisoners that died, succumbed to homicide. Among Hispanics in that age range, none died from homicide. Among whites, homicides accounted for only 2% of deaths.

Of the 302 former prisoners that died between 2011 and the end of 2016, 58% died from either a drug overdose or homicide. While the population of former prisoners was almost equally composed of blacks, whites and Hispanics, white ex-prisoners accounted for 74% (95 of 128) of all overdose deaths, and in a tragic and unfortunate symmetry, 74% of all homicide victims were black (34 out of 46).



The fact that whites accounted for such a large proportion of overdose deaths and blacks accounted for a similarly large proportion of homicide death does not mean that these two causes-of-death should be considered solely through a racial lens.

Using Registry data, OPM computed 5-year death rates for men in the 2011 prison-release cohort as well as the rates for males in the statewide population. In calculating these rates, OPM researchers were hoping to determine whether former prisoners exhibited higher death rates than those in the general population.

The analysis revealed several interesting facts. Among 20-29 year old men, drug overdoses were the most common cause of deaths statewide. Among former prisoners, however, homicide was the most common cause of death.

Homicide deaths were the most common cause of death among young black males in both the prison sample and among the general population. Among the youngest Hispanics in the prison group, homicide was also the most common cause of death while motor vehicle accidents were the most common cause among young Hispanics in the general population.

Cause of death, 2011-2016

Demographic	Most common cause of death	
	Statewide population	Former prisoners
All men		
20-29	Over dose	Homicide
30-39	Natural	Overdose
40-49	Natural	Overdose
White men		
20-29	Over dose	Over dose
30-39	Over dose	Over dose
40-49	Natural	Over dose
Black men		
20-29	Homicide	Homicide
30-39	Natural	Homicide
40-49	Natural	Overdose
Hispanic men		
20-29	MV related	Homicide
30-39	Natural	Overdose
40-49	Natural	Natural

Among whites under the age of 40, drug overdoses were the most common cause of death among ex-prisoners and in the general population. Among white, ex-prisoners, overdoses were the most common cause of death among all age groups. Only Hispanics, aged 40 to 49, most commonly died from natural causes.

OPM researchers computed 5-year death rates per 1,000 persons and, as expected, found that former prisoners died at much higher rates than their counterparts in the general population. Among 20-29 year olds, former prisoners were 4 times more likely to be the victim of a homicide as a 20 to 29 year old in the general population. White ex-prisoners were 7 times more likely to die from homicide than young whites in the general population. Young black ex-prisoners, however, were only 1.6 times more likely to die from homicide as their counterparts in the general population.

It is often assumed that a majority of drug overdose victims are young. A quick review of the state's Registry data, puts that assumption to rest. Between 2011 and 2016, death rates by drug overdose were roughly equal among victims in their 20s, their 30s or their 40s. Among male ex-prisoners released in 2011, the number of overdose deaths among 40-year olds (55) was higher than the total among 20-year olds (21) and thirty-year olds (30).

OPM recently published its findings on recidivism among prisoners who were released or discharged from the DOC in 2014. Since the Registry data for 2017 deaths is not yet available, OPM limited its look at mortality among these prisoners to within one year of the individual's release from prison.

Deaths w/in 1 year, prisoners released in 2014

	Age at 2014 release			
	20-29	30-39	40-49	50-59
Blacks	1,409	1,122	810	422
Deaths w/in 1 yr	5	3	2	3
Homicide	3	1	0	0
Overdose	1	1	1	0
Most common cause	Homicide	None	None	Natural
Whites	1,366	1,243	1,129	703
Deaths w/in 1 yr	14	11	13	24
Homicide	1	0	0	1
Overdose	9	8	12	10
Most common cause	Overdose	Overdose	Overdose	Overdose
Hispanics	1,004	866	487	169
Deaths w/in 1 yr	7	5	5	1
Homicide	2	1	0	0
Overdose	4	1	2	0
Most common cause	Overdose	None	Natural	Suicide

While researchers recognized the limitations associated with research based on small numbers, they continued to observe death patterns similar to those seen in the analysis of the 2011 cohort.

Among offenders between the ages of 20 and 29, released in 2014, six died as a result of a homicide. Almost half of these homicide victims were black. In the first year after prison, drug overdoses accounted for 53% of all deaths among prisoners in all age groups combined. Overdose victims included 3 blacks, 7 Hispanics and 39 whites.

OPM anticipates that it will receive Registry data for 2017 deaths shortly. Once that data is available an analysis of three-year death rates will be undertaken.

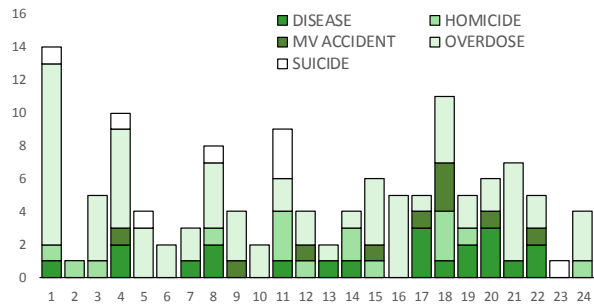
OPM tracked 11,245 offenders (9,948 men and 1,297 women) who were released or discharged from prison in 2014. Within one year, 90 of these men and 16 women had died. Among males, OPM computed a death rate of 9.0 deaths per 1,000 people during that first year. Among women, the death rate per 1,000 was higher at 12.3 deaths per thousand.

For both men and women, overdoses were the most common cause of death during the first year. Women ex-prisoners died from drug overdoses at higher rates than men (6.2 deaths per thousand versus 4.2 deaths per thousand). Although male victims accounted for 8 of the 9 homicide in the group, the homicide death rate among men and women was the same.

The following table contains the number and cause of 94 deaths among offenders aged 20 to 59.

Cause of death w/in 12 months

Cause	Total	F	M
Overdose	50	8	42
Natural	19	2	17
Homicide	9	1	8
Suicide	8	1	7
MV accident	5	1	4
Unknown	3	0	3
All deaths	94	13	81
Cohort	11,245	1,297	9,948



While the discussion of deaths among offenders who were released in 2014 has been restricted to the first year after prison, OPM was able to match a total of 232 death records with offenders in the 2014 release cohort. These deaths covered a period that ranged between 2 days and 1,038 days after the 2014 release.

Among offenders that died within 60 days of their release from prison in 2014, 50% died from a drug overdose. Within this 60-day period, overdose deaths were the most common cause of death for all ex-prisoners between the ages of 20 and 49.

Overdose deaths continued to outpace all other causes of death in the sample. Of all prisoners who died, 47% died of a drug overdose. Among prisoner under the age of 50, drug overdoses accounted for 54% of all deaths.

Deaths w/in 60 days of release

Cause*	20-29	30-39	40-49	50+
Natural			1	5
Homicide	2			
Overdose	3	4	4	
MV accident				1
Suicide		1		1
Total	5	5	5	7
Cohort	3,806	3,279	2,444	1,546

* Known causes

This longer study-window revealed that some of the mortality patterns observed in the 2011-cohort, remained consistent through 2014. With respect to homicide as a cause of death, 63% of the prisoners released in 2014 who died of homicide were black. In addition, 78% of ex-prisoners who succumbed to drug over doses were white.

Deaths among prisoners released in 2014

Cause	White	Black	Hisp.	All
Overdose	84	9	13	108
Natural	35	16	13	64
Homicide	3	12	4	19
Unknown	12		3	15
Mv accident	9	1	3	14
Suicide	8	1	3	12
All deaths	151	39	39	232
2014 cohort	4,604	3,912	2,641	11,245

The following chart shows the causes of death for prisoners under the age of 50 by the months that had passed between the 2014 release from prison and the individual's death. Within this period, 57% of prisoners who died, died of a drug overdose. Homicide was the third most likely cause of death (13%) following deaths due to disease (17%).

Notes:

¹ Matching DOC records with OCME records presented researchers with two separate challenges. OCME records were hand matched against the DOC's RT system. Registry matches against CT DOC records were performed electronically using first names, last names, dates of birth, gender and race. Because of data inaccuracies and typographical errors a considerable amount of individual recording check was performed.

² Although ex-prisoners exhibit higher death rates than the general population, the number of deaths within several years of release by a 10,000 person cohort stands at only several hundred deaths. Once the populations involved are dissected by age, race and gender, the sample sizes under inspection become very small. As a consequence, caution should be used.

³ OPM evaluated deaths among prisoners released in 2011 by considering all deaths that occurred between the 2011 release and December 31, 2016. Using this long timeframe, we were about to capture an adequate amount of mortality data in order to assess longer term mortality patters of ex-prisoners and the general population.