RECIDIVISM AMONG SEX OFFENDERS IN MASSACHUSETTS & MAINE

JULY 2023 Maine Statistical Analysis Center Massachusetts Statistical Analysis Center





Acknowledgements

Authors

Tara Wheeler, Research Associate, Catherine Cutler Institute

Julia Bergeron-Smith, Research Associate, Catherine Cutler Institute

George Shaler, Senior Research Associate, Catherine Cutler Institute

Lisa Sampson, Consultant (formerly Director), Research and Policy Analysis Division, Massachusetts Office of Grants and Research

Peer Review/Editing

Robyn Dumont, Research Associate, Catherine Cutler Institute

Special Thanks

Maine Department of Corrections Maine Department of Public Safety Massachusetts Department of Correction Massachusetts Department of Criminal Justice Information Services SEARCH Group, Inc.

State of Maine–Office of Information Technology

This report was produced by the Catherine Cutler Institute's Maine Statistical Analysis Center and the Massachusetts Statistical Analysis Center of the Massachusetts Office of Grants and Research and was conducted under the auspices of the State Justice Statistics Program, Bureau of Justice Statistics (BJS), Department of Justice (DOJ). Funding for this report was provided by BJS grant number 2018-86-CX-K010 and 2019-86-CX-K036. The opinions, findings, and conclusions or recommendations expressed in this product are those of the contributors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Suggested Citation:

Wheeler, T., Bergeron-Smith, J., Shaler, G., Sampson, L., (2023). *Recidivism Among Sex Offenders in Maine and Massachusetts*. Maine Statistical Analysis Center & Massachusetts Statistical Analysis Center.

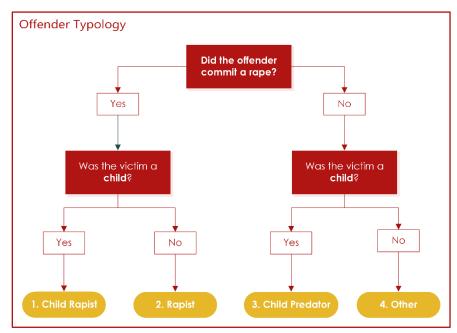
Table of Contents

1
4
5
9
9
15
16
25
25
31
41

Executive Summary

Sex offender recidivism data can be difficult to comprehend, especially when conducting research across states. For example, sex offenders can be categorized in numerous ways: by the type of crime committed (e.g., rape, assault, exhibitionism), by offense severity, by victim age (adult or child). Likewise, recidivism definitions (e.g., rearrest, reconviction, or reincarceration) and timeframes (e.g., one-year, two-year, or three-years following release) can vary across local, state, and federal agencies. Thus, there is no single measure systemically used across jurisdictions. Recognizing the public's concerns about sex offender recidivism, the Maine and Massachusetts Statistical Analysis Centers (SACs), proposed and received funding for a retrospective sex offender recidivism study through the Bureau of Justice Statistics, Department of Justice. This collaboration marks the first time either state has undertaken this type of study.

This project studied the recidivism rates of Maine sex offenders who were released from prison between 2005 and 2019 and Massachusetts sex offenders released between 2009 and 2018. In total, the Massachusetts cohort was composed of 1,210 offenders and the Maine study of 905 offenders. Criminal history records were obtained for each offender from their respective states to determine whether the offender recidivated (i.e., committed post-release offenses that resulted in a conviction). To be included in the recidivism portion of this study, there must have been at least a five-year window between the time of release and the time the criminal history data was pulled. Overall, 880 offenders were included in the Massachusetts recidivism analysis and 661 in the Maine recidivism analysis.



A primary interest area was to determine whether recidivism rates differed by offense severity (i.e., rape or non-rape) and victim age (i.e., child or adult), however, these two groupings are not entirely separate from one another— while rape is considered more severe than other types of sex offenses, crimes against children are also deemed to be more egregious than crimes against adults. Therefore, an offender typology—based on the original sex offenses associated with the commitment and subsequent release—was created that incorporates both victim type and offense severity. The first, and most severe, category is *child rapist*, which includes all offenders who committed a child rape offense, followed by the rapist category, which includes all other offenders who committed a rape offense. Next is *child predator* and is used for those who committed a sex offense against a child but did not commit a rape offense. Last, is the *other* category and captures those who did not fall within one of the prior three categories.

To gain a better understanding of recidivism among the sex offender population, survival analysis (specifically, the Cox Proportional Hazards regression method) was conducted to determine which offender characteristics, if any, influenced recidivism rates. Using this approach, researchers were able to control for other known attributes. The attributes tested in this study were:

- offender type
- severity of sex offense(s) (Maine only)
- number of sex offense(s)
- commitment length (Maine only)
- release type (supervision or discharge)
- security level of facility offender was released from (Massachusetts only)
- release age

Key Findings

- Age at earliest sex offense associated with commitment varied by offender type for both Maine and Massachusetts. Interestingly, child predators had a mean age that was statistically higher than that of rapists and child rapists.
 - In Massachusetts, the average offense age of child predators was 36.6 years old, which was significantly higher than the offense age of rapists (31.1 years old) and child rapists (33.9 years old).
 - For Maine, child predators were, on average, 35.0 years old at the time of their earliest sex offense associated with commitment, compared to 30.4 years old for child rapists and 31.1 years old for rapists.
- Maine's five-year recidivism rate (43%) was much higher than the Massachusetts fiveyear recidivism rate (25%). While there are numerous potential scenarios that could explain the differences in recidivism rates, it is important to note that each state has its own criminal laws and procedures that, in turn, impacts the underlying study population and their recidivism rates. For instance, an offense that resulted in commitment to state prison in Maine might result in a county jail commitment for Massachusetts. Therefore, caution should be taken when making comparisons between the two states.
- Offender type, severity of sex offense, and release age were found to be associated with Maine recidivism rates. When coupled with release age, release type was also found to have an influence on recidivism rates. Holding all other attributes constant:
 - Individuals whose most severe sex offense was a misdemeanor are expected to recidivate at a rate 45% higher than those with a felony level offense.
 - 'Other' type offenders (those whose offenses fell short of rape and did not target children) have an expected recidivism rate 45% higher than offenders who committed sex offenses against children (child predators and child rapists).

- Age at release, both by itself and as an interaction with release type, is associated with recidivism rates. For every 10-year increase in age at release, the predicted recidivism rate decreased by 21%. However, for offenders who were released to supervision, the hazard rate decreases even further, with supervised offenders having a 38% decrease in risk for every 10-year increase of age at release.
- Of the attributes tested, offender type, release type, release level, and release age were found to be associated with Massachusetts recidivism rates. Holding all other attributes constant:
 - Offenders released from a maximum-security level facility are predicted to recidivate at a rate 2.4 times higher than that of offenders released from a medium security level facility or lower.
 - 'Other' type sex offenders are predicted to recidivate at a rate 115% higher than those who committed child-based sex offenses (*child predators* and *child rapists*). Meanwhile, non-child rape offenders are expected to recidivate at a rate 58% higher than child offenders.
 - Discharged offenders released without supervision have an expected recidivism rate 61% higher than offenders who were supervised following release.
 - For every 10-year increase in age, the recidivism rate is expected to decrease by 37%.

Introduction

Few crimes generate more public outrage than sex crimes committed by reoffenders, making the recidivism of sex offenders a topic of importance in public safety realms. In order to ensure the public's safety, policy makers should not simply react to public outrage; they must make informed decisions based on empirical data. Making sense of these data, however, can be challenging. There are multiple ways of categorizing sex offenders—by the type of crime committed (e.g., rape, assault, exhibitionism), by offender sex, sex of the victim, and victim age (adult or child)—and an equal number of ways to categorize any reoffending. There are likewise multiple definitions of recidivism (e.g., rearrest, reconviction, or reincarceration) and multiple timeframes (e.g., one-year, two-year, or three-years following release) employed by federal, state, and local jurisdictions. Thus, there is no single measure that captures and conveys the frequency with which sex offenders reoffend or the level of threat they pose to public safety. Additionally, recidivism studies tend to only include offenses that occurred within two- or three-years of release and, due to the complexities involving sex offenses, this may be too small a window for studying recidivism within the sex offender population.

This does not mean that the topic cannot be studied; rather it means that any study intended to provide findings with practical application must be comprehensive in scope. With this in mind, the Maine and Massachusetts Statistical Analysis Centers (SACs) proposed and received funding for a retrospective sex offender recidivism study through the Bureau of Justice Statistics, Department of Justice. This marks the first time either state has undertaken this type of study, and it is the hope of the authors that the findings will be used both to inform policy and practice in these states and to contribute to the larger field of sex offender recidivism. This report summarizes the findings from this study.

Methodology & Limitations

The goal of this study is to establish recidivism rates for the different types of sex offenders in Maine and Massachusetts and to identify factors associated with recidivism. Toward that end, sex offenders were identified using prison release data from both states. To be included in this study, offenders had to be committed to prison for a sex offense and then released within the determined date range and the offender must have been an adult (i.e., aged 18 or older) when the sex offense occurred. For Maine, the date range spanned the years of 2005 to 2019. An end date of 2019 was chosen because it was the last full year for which data was available at the start of the study, and the start date was set to encompass 15 years' worth of data. For Massachusetts, the range spanned from 2009— the date the state began using its current data system—through 2018, resulting in 10 years' worth of data. Some offenders were released multiple times during the study period, and when this occurred, only the first record was retained in the study to maintain the independence of observations. As a result, 45 records were removed from the Maine data.

Another criterion for inclusion in the study was the existence of a criminal history. These records were used to establish the presence or absence of recidivism. While every sex offender released from prison should logically have a criminal history, some prison records either did not include the identifier needed to match that person with a criminal history record or the criminal history was obviously incomplete, resulting in the removal of 363 Maine records and 4 Massachusetts records. A total of 905 Maine records and a total of 1,210 Massachusetts remained for analysis.

The data used in this study came from a number of sources. Data related to commitment and release came from either the Maine or Massachusetts Department of Corrections (DOC). Maine criminal history data were obtained with the assistance of SEARCH. Researchers at the Maine SAC provided SEARCH with a list of identifiers from the DOC dataset, and SEARCH in turn queried Maine Department of Public Safety data and retrieved any matching records, which they turned over to the Maine SAC. Massachusetts criminal history data were provided by the Massachusetts Department of Criminal Justice Information Services, using the criminal arraignment record file maintained by the Massachusetts Board of Probation.

Recidivism Defined

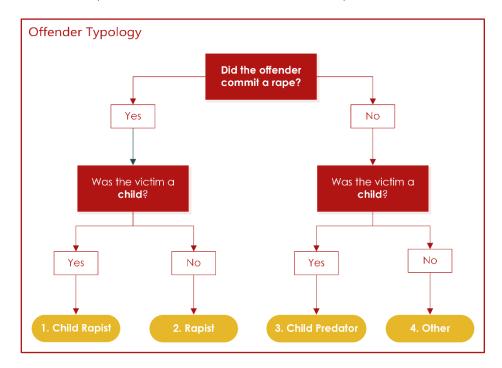
In Maine, recidivism is defined as the presence of an *arrest* following release and the arrest must resulted in a conviction. In Massachusetts, whose criminal history data did not contain arrest information, it is defined as the presence of an *arraignment* following release and the arraignment must likewise have resulted in a conviction. Additionally, a five-year window following release was chosen, meaning the arrest (in Maine) or arraignment (in Massachusetts) must have occurred within five-years of release in order to be counted as recidivism. Recidivating offenses were further categorized as involving a sex offense, a violent offense, a registry violation, or any other type of offense.

Offender Type

Because the term 'sex offender' encompasses a broad range of criminal behavior, it is also important to look at the various types of offenders to determine if there are differences within the study population. The most logical way to typify offenders is by the severity of the crime. (i.e., rape or not rape). However, because crimes against children are deemed to be more egregious than crimes against adults, victim age must also be considered when assessing the seriousness of an offense.

Thus, we referred to the offense descriptions and relevant statutes to determine whether each offense was a rape offense and/or whether it involved a child. Classifying rape offenses was relatively straightforward and could be gleaned from the offense title (e.g., "rape" for Massachusetts and "gross sexual assault" for Maine). Determining whether the victim was a child was also relatively straightforward for the Massachusetts study population, since their offense titles specified crimes against children. However, for Maine, victim age could not be determined by some offense titles (e.g., gross sexual assault, unlawful sexual contact) and therefore we used the statute's sub-paragraph reference to determine whether the victim was younger than 18.

These offense classifications were then used to create an offender typology based on severity. The first, and most severe, category is *child rapist* and encompasses all offenders who committed a child rape offense. Following this is the *rapist* category, which includes all other offenders who committed a rape offense. Next is *child predator*, which is used for those who committed a sex offense against a child but did not commit a rape offense. Last is the *other* category, which encompasses those who did not commit a rape offense nor victimize a child.



Analysis

For both Maine and Massachusetts, regression analysis was used to determine which attributes were associated with recidivism. The Cox Proportional Hazards Survival procedure—a type of regression analysis that uses the time to event as the outcome measure—examines multiple attributes together, isolating the impact of each variable on the time to recidivism, and is thereby able to "control" for the presence of other known variables. Once each attribute has been controlled for, a hazard ratio (the relative risk each group has of recidivating at any given time) can be computed for each population of interest.

One caveat is regression analysis being limited to known attributes (i.e., the variables in the dataset). There are more than likely other attributes that impact recidivism (e.g., having a family history of violence, employment status, etc.) that are not included here. These unknown attributes can sometimes create a 'spurious' or false relationship between a known attribute and recidivism.

Limitations

There are differences in Maine's and Massachusetts' laws for when offenders are sentenced to state prison (DOC) as opposed to county corrections (house of correction/jail) that pose a limitation to this study. In Maine, offenders sentenced to more than nine months of incarceration are committed to prison while the Massachusetts cutoff is almost three times that, at two and a half years. Therefore, Maine's study population includes offenders who, had they committed the crime in Massachusetts, would not be included in the Massachusetts study population.

Additionally, Maine and Massachusetts have differences regarding age of consent. In Massachusetts, the age of consent is 16, so offenders convicted for having sex with someone younger than 16 are classified in this study as *child rapists*—the most serious of the four typologies employed here. In Maine, sexual intercourse with a person under the age of 14 is considered gross sexual assault (Maine's terminology for rape), so these offenders would likewise be classified here as *child rapists*, but intercourse with someone aged 14 or 15 by a person who is at least five years older is considered a lesser crime, so these offenders are classified as *child predators* rather than *child rapists*. While this inconsistency in classification respects the laws in each state, it is nevertheless an inconsistency and readers should be cautioned against making comparisons between the two states.

Another limitation to the offender typology is that offense data did not provide a victim age. Therefore, whether an offender committed a sex offense against a child could only be determined by statutory language that referenced the victim as being aged 17 or younger. When this language was not present, we assumed the victim was not a child. Likewise, we only have data for the offenses an individual was convicted of; thus, if an offender were charged with unlawful sexual contact on a child but plead down to unlawful sexual contact (which is not age-specific), the offender would be classified as *other*. Lastly, the data are limited to the convictions associated with the commitment, meaning it is possible that an offender may have committed earlier sex offenses that, had they been included, would have pushed the offender into a more serious category.

A limitation to the recidivism rates for each state is the amount of time between arrest (in Maine) or arraignment (in Massachusetts) and conviction. It is possible that a small number of study subjects committed offenses within the study period but had not yet been adjudicated by the time criminal history records were queried, and these instances of recidivism would not have been counted as such.

Finally, a limitation to determining which offenders recidivated is the inability to track offenders across state lines. Our initial intent was to do so with the assistance of SEARCH, using date of birth and probation central file numbers, but this proved impossible in practice. As a result, a Maine or Massachusetts offender with no recidivism record in one state may have recidivated in the other, or in yet a third state, and we would not have captured that. Thus, the actual recidivism rates for Maine and Massachusetts sex offenders are likely higher than the rates presented here.

Massachusetts

For the purposes of the Massachusetts section of the study, the sex offender release cohort is defined as those offenders committed to the Massachusetts Department of Correction for one or more sex offense and were subsequently released to the street from a Massachusetts Department of Correction facility between the 2009 and 2018 study period. The data presented here are unduplicated. Thus, if an offender had more than one eligible release during the study period, only the first release is included in this analysis.¹

Offender Information

Year Released

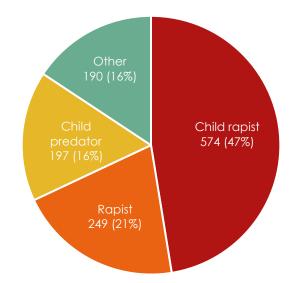
Between 2009 and 2018, a total of 1,210 sex offenders that met the parameters of this study were released from a Department of Correction facility. The overall average was 121 released per year, however, the number released fluctuated throughout the study period, ranging from a high of 155 in 2013 to a low of 98 in 2017.



¹ For more information about eligibility criteria, see the Methodology & Limitations chapter of this report.

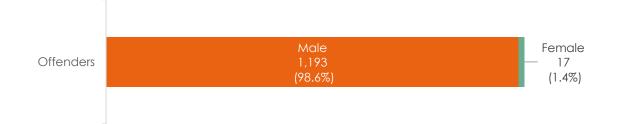
Offender Type

As described in the Methodology & Limitations section, the sex offenses committed were used to classify each offender as one of four types.² Nearly half (47%) of individuals released between 2009 and 2018 were child rapists, followed by rapists at 21%, and child predators at 16%. Approximately 16% were classified as other sex offenders.³



Gender

Almost all sex offenders released from prison between 2009 and 2018 were male (98.6%).

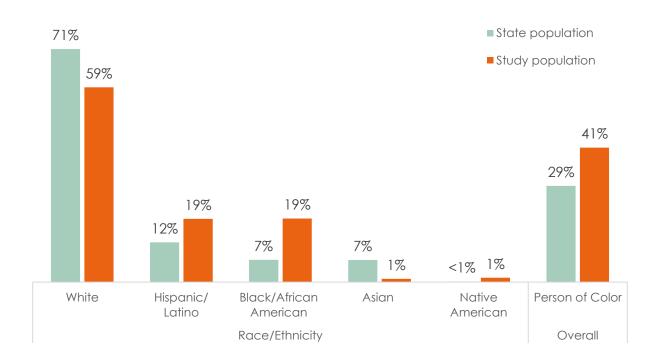


² For a comprehensive list of Massachusetts offenses by offender/offense type, see Appendix A1.

³ Other sex offenders includes 77 offenders (6%) for which the only offense associated with commitment was a sex offender registry violation.

Race/Ethnicity

White/Caucasian offenders made up the majority of the study population, at 59%, followed by Black/African American and Hispanic/Latino, both at 19%.⁴ Together, Asian and Native American offenders composed 1% of the sex offender population.⁵ When compared to the overall state population, persons of color are overrepresented. While approximately 29% of Massachusetts' overall population are persons of color, 41% of the study population are persons of color.⁶ This 12-percentage point difference is largely driven by the overrepresentation of Black/African American and Hispanic/Latino individuals in the study group—19% of offenders in the study group are Black/African American and 19% are Hispanic/Latino, whereas 7% of the state population are Black/African American and 12% are Hispanic/Latino.⁷



⁴ Race and ethnicity are self-reported by the inmate. Massachusetts Department of Correction. (2021). MA DOC Inmate and Prison Research Statistics: Glossary, Definitions and Caveats. Retrieved from https://www.mass.gov/doc/data-dictionary-1/download.

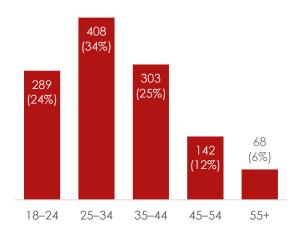
⁵ Offenders whose race/ethnicity is unknown (n=3, <1%) are not included here.

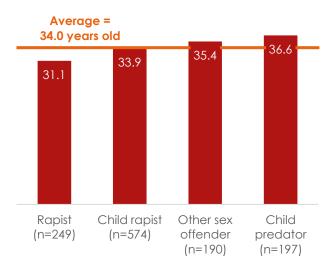
⁶ One-sided binomial test, p<.001.

⁷ U.S. Census Bureau. (2020). 2016-2020 American Community Survey 5-Year Estimates Data Profiles. Retrieved from <u>https://api.census.gov/data/2020/acs/acs5/profile</u>.

Age at Sex Offense

Most of the study population (59%) were between ages 25 and 44 at the time of the earliest sex offense associated with commitment.⁸ While the overall mean age at the sex offense was 34.0 years, these means varied by offender type. *Child predators* were, on average, 5.5 years older than *rapists* at the time of offense and 2.8 years older than *child rapists*. These differences were statistically significant.⁹





⁸ Study records include the earliest commitment and release within the study's stated timeframe (e.g., 2009 to 2018), and the ages reported here are computed solely from these records. Therefore, offenders may have committed sex offenses at an earlier point in time when they were younger.

⁹ Rape offender: t (384.413) = 4.947, p < .001, d = 0.481. Child rape offender: t (316.797) = 2.741, p = .006, d = 0.236.

Number of Sex Offense Incidents

To ascertain which offenders showed a pattern of repeated sexual offending behavior, the number of sex offense incidents per offender was computed from the number of unique offense dates referenced in commitment data (e.g., an offender with two sex offenses committed on different dates would be identified as having two incidents).¹⁰



The number of incidents ranged from 1 to 18 and averaged 1.4 incidents per offender. Approximately 21% of offenders had two or more sex offense incidents associated with commitment; however, this rate varied by offender type. *Child rapists* had the highest rate of multiple incidents at 30%, followed by *child predators* at 20%. Both rates were significantly higher than the rates for *rapists* and *other* sex offenders which were 8% and 12%, respectively. These differences are statistically significant.¹¹



¹⁰ Only sex offenses associated with commitment and subsequent release were included in this study. Therefore, any non-sex offense incidents are not included here.

¹¹ χ^2 (3) = 65.969, p < .001, Cramer's V = 0.233, n = 1,210.

Sex Offenses Associated with Commitment

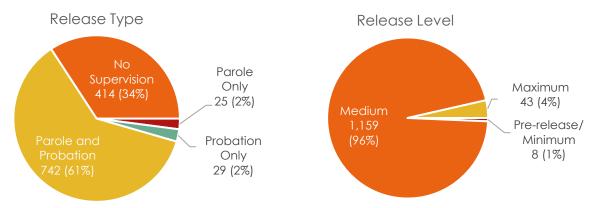
The following table shows the top five offenses. *Rape and abuse of child* was the most common offense description, with nearly a third (32%) of the Massachusetts study population having committed this type of offense, followed by *rape/aggravated rape*, at 22%. Overall, 83% of all offenders had at least one of the offenses listed below associated with their commitment and subsequent release.

	Offenders (n=1,210)	
Offense Description	Ν	%
Rape and abuse of child	388	32%
Rape/aggravated rape	269	22%
Indecent assault and battery on child under 14	259	21%
Rape of child with force	196	16%
Indecent assault and battery on person 14 or older	127	10%

Release¹²

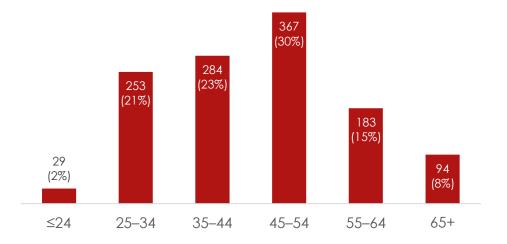
Release Type and Release Level

In Massachusetts, offenders can be released to probation and/or parole or discharged without supervision. Two-thirds (66%) of offenders released between 2009 and 2018 were supervised upon release. Release level indicates the security level of the facility they were released from, which can be one of four categories: pre-release, minimum-security, medium-security, or maximum-security.¹³ The overwhelming majority of the study population (96%) were released from a medium-security facility.¹⁴



Age at Release

Offender age at release ranged from 20 years old to 89 years old with an overall mean age at time of release of 45.5 years old. The mean is nearly identical to the median age at 45 years old.



¹² Data required for accurate calculation of commitment length was not included in the dataset. Hence, length of commitment could not be calculated for the Massachusetts portion of the study.

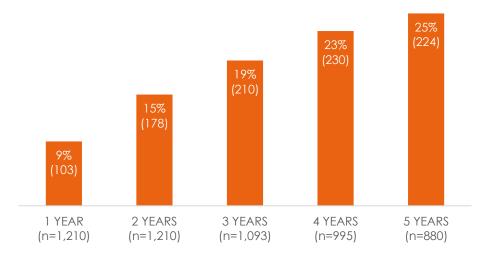
¹³ Massachusetts Department of Correction (2022). Quarterly Report on Status of Prison Capacity, Fourth Quarter 2022. Retrieved from <u>https://www.mass.gov/doc/prison-capacity-fourth-quarter-2022/download</u>

¹⁴ Sex offenders with a mandatory sentence are statutorily restricted from being housed in minimum or prerelease security until close to release.

Recidivism

Recidivism Rates

For this study, recidivism is defined as a criminal offense occurring after release that resulted in conviction. Recidivism rates, as well as the number of offenders included in the calculation of the rate, vary depending on the amount of time tracked (i.e., a researcher-determined timeframe following release). Among sex offenders released between 2009 and 2018, 9% of offenders recidivated within one year following release, and 15% recidivated within two years. Fewer offenders had been released for three years at the time of the study, but among those who had, 19% recidivated. By years four and five, 23% and 25%, respectively, of the released offenders had recidivated.¹⁵

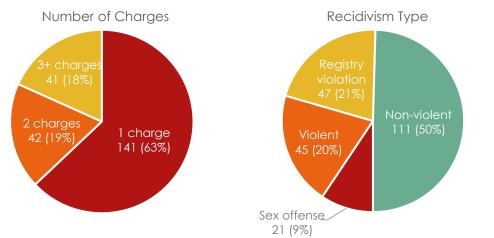


The remainder of this section will focus on the five-year recidivism rate.

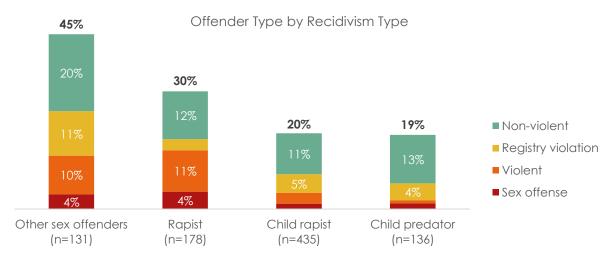
¹⁵ At the time criminal history data was queried (December 31, 2020), 330 offenders released from Department of Correction custody between 2016 and 2018 had not been tracked for five full years and therefore were not included in the five-year rate.

Recidivating Offense

The majority (63%) of recidivating offenders had only one charge associated with the recidivating conviction. Of particular interest for this study was to determine whether the recidivating conviction involved a new sex offense or, if not, some other form of violent offense. Overall, 9% of recidivating convictions included a sex offense while 20% included a violent, but non-sex based, offense. An additional 21% of offenders were convicted for registry violation offenses only and the remaining half of recidivating convictions (50%) were for non-violent offenses.¹⁶



The chart below shows the recidivism type as a proportion of each offender type. For instance, of the 880 offenders eligible for the recidivism analysis, 45% of those who were classified as other type sex offenders (n=131) recidivated and can be broken down as follows: 20% were reconvicted for a non-violent offense, 11% for a registry violation, 10% for a violent offense, and 4% for a sex offense. When compared to the other three offender types, other sex offenders have higher rates of non-violent offenses and registry violations. Additionally, other type offenders and rapists have higher rates of violent offenses than child rapists and child predators.

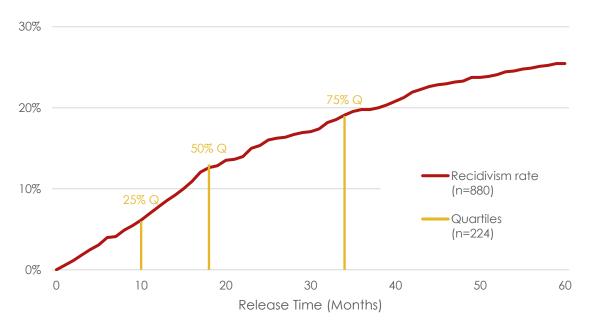


Note: Percentages less than 4% are not labeled

¹⁶ This section is specific to the first recidivating incident that resulted in a conviction; to see a list of recidivating offenses by recidivism type, please see Appendix B2.

Time to Recidivate

The chart below shows the proportion of the total study population (n=880 offenders) who recidivated across each month of the five-year follow-up period. As the amount of time following release increases, the recidivism rate steadily rises until it reaches 25% at month 60. The chart also includes markers showing the quartile ranges for the 224 recidivating offenders. The distance between these markers and the steepness of the curve provides information about when offenders are recidivating. For instance, we can see that the second quartile (between 25% Q and 50% Q) recidivated over an 8-month period while the third quartile's distance was twice that at 16 months. Thus, after 18-months, recidivating activity slows down, and fewer members of the study population recidivate.



Attributes Associated with Recidivism

This study employed a Cox Proportional Hazards model to find which offender characteristics were associated with recidivism. To be included in the model, the offender must have been released from commitment for at least five years. Of the 1,210 offenders examined, 880 (73%) had been tracked for at least five years, and, of those 880 offenders, 25% had recidivated within five years of release.

The time to the event (recidivation) is denoted by the date of arraignment, and the characteristics tested were:¹⁷

- Offender type
- Number of sex offense incidents
- Release type
- Release level
- Release age

Of the attributes tested, offender type, release type, release level, and release age were found to be associated with recidivism. Each of these attributes is shown in Table 1, along with the estimated hazard ratio and 95% confidence interval estimates of the ratio.¹⁹ The hazard ratio is a comparative measure of the risk of recidivating over the entire study period. A hazard ratio less than one indicates a decreased risk of recidivating while a ratio over one indicates an increased risk.

Table 1. Attributes associated with 5-year recidivism rate

Attribute	Hazard Ratio	95% CIE
Rape offender	1.576	1.14, 2.18
Other type sex offender	2.150	1.56, 2.97
Discharged offender	1.609	1.23, 2.10
Maximum-security facility ¹⁸	2.444	1.58, 3.77
Release age (per 10-year increase)	0.628	0.56, 0.71

¹⁷ Due to the sparse number of female sex offenders eligible for the recidivism analysis (n=12), gender could not be tested.

¹⁸ It should be noted that only 35 of the offenders included in the recidivism analysis (approximately 4%) were released from a maximum-security facility. However, because a relatively high number (n=24) recidivated, it was determined that there was enough event data to include this covariate in the regression model.

¹⁹ Cox Proportional Hazard regression results are presented in Appendix C1.

Figure 1 displays the hazard ratio as a percentage difference between the attribute and the comparison group. In Table 1, the comparison group is equal to one, while the comparison group in Figure 1 is equal to zero. For instance, referring to Table 1, offenders released from a maximum level facility are 2.44 times more likely to recidivate than offenders who were released from a medium or lower-level facility. Put another way, as shown in Figure 1, maximum level offenders have a predicted recidivism rate 144% higher than offenders released from medium security or lower security facilities.

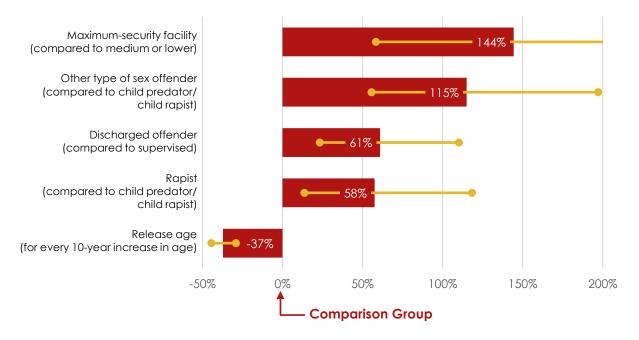
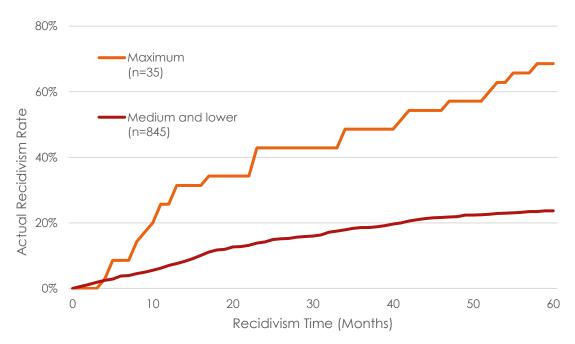


Figure 1 Hazard ratio as percentage difference between attribute and comparison group

Release Level

Offenders released from a maximum-security facility are predicted to recidivate at a rate 2.4 times higher than that of offenders released from a medium or lower security facility.²⁰ Due to the classification process, security issues, or both, offenders released from maximum security are likely those that were deemed too high a risk for placement in medium or lower security facilities. Another possible scenario is that the offender was reclassified to a higher security due to a behavioral or security concern, after having been housed in medium or lower security, and their sentence expired without time to be reclassified or earn their way back to lower security. Additionally, certain sex offenses or violent offenses are associated with a mandatory sentence thus prohibiting movement to a minimum or pre-release security facility.

The chart below shows the actual recidivism rates by release level. The curve for the maximum is more jagged than the curve for the medium security group. This is due to the low number of those released from a maximum-security facility. For example, between months 24 and 33 the maximum level curve is flat because no maximum level offenders recidivated. An interesting feature of this curve is the steepness during the first 14 months following release, during which 31% of the maximum level population recidivates. Meanwhile, the medium level population is more typical of the entire offender population where the curve flattens after month 18. Thus, not only are maximum level offenders recidivating more frequently, but they are also doing so at a faster pace than the rest of the recidivating population.

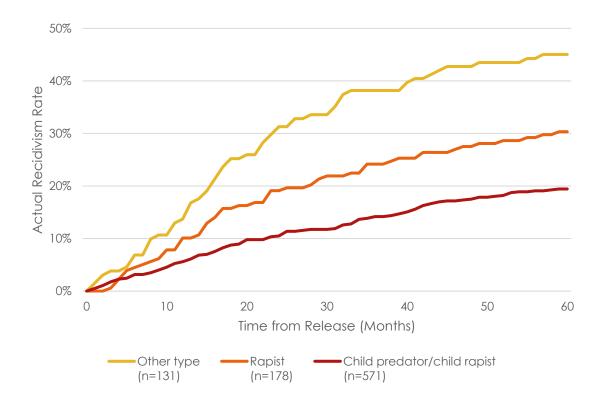


²⁰ It should be noted that only 35 of the offenders included in the recidivism analysis (approximately 4%) were released at the maximum level. However, because a relatively high number (n=24) recidivated, it was determined there was enough event data to include this covariate in the regression model. Additionally, only five offenders eligible for the recidivism analysis had a release level lower than medium.

Offender Type

Offender type is an influence on 5-year recidivism rates, with other type sex offenders (those whose offenses fell short of rape and did not target children)²¹ being most likely to recidivate. These offenders are predicted to recidivate at a rate 115% higher than those committed for victimizing children (*child rapists* and *child predators*). *Rapists* are expected to recidivate at a rate 58% higher than those committed for victimizing children.

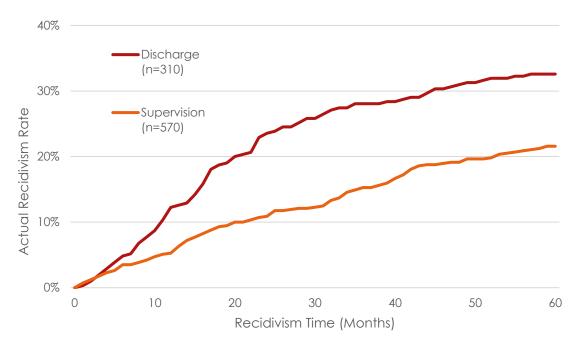
Overall, 19% of child predators and child rapists, 30% of rapists, and 45% of other sex offenders recidivated; however, rapists and other type offenders recidivated at a faster rate than child predators and child rapists. In particular, the recidivism rate for other type sex offenders steadily increased for the first 32 months (about 2 and a half years) of this study, during which 38% recidivated. Over the next 28 months, only an additional 7% recidivated.



²¹ See Appendix A1 for a list of Massachusetts offenses by offender type.

Release Type

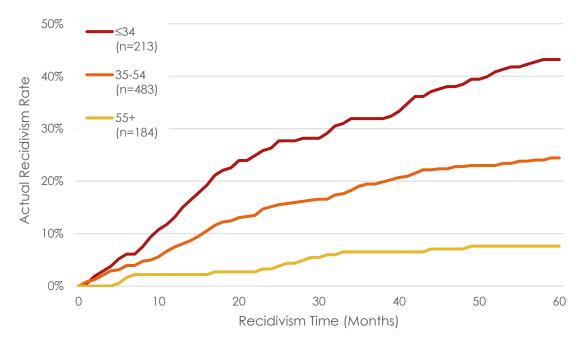
Offenders released to supervision were less likely to recidivate than those discharged without supervision. Overall, 21% of supervised offenders recidivated, compared to 33% of those discharged without supervision. The rate of recidivism for supervised offenders is relatively consistent throughout the 60-month period, however, the discharged without supervision rate increases faster during the first 25 months (about 2 years), at the end of which a total of 24% of discharged offenders recidivate. After month 25, the number recidivating each month drops off and only an additional 8% of discharged offenders recidivate.



There are several possible explanations for the lower recidivism rate of those released to supervision, one being that parole supervision is granted by a parole board following a hearing where a number of considerations are examined, including the offender's involvement in programs, work, institutional record of disciplinary or positive behavior, as well as living arrangements, work, education, or programmatic plans following release. Additionally, release to probation/parole supervision offers reentry planning and supports to the offender that may not be provided to someone who is discharged without supervision. Those who are discharged without supervision are under no further obligation—their sentence is over—and involvement in reentry programming is voluntary. Finding housing and work is extremely challenging for someone previously convicted of a sex offense, and even more so without the support of probation or parole. This instability, in turn, may lead to more criminal activity.

Age at Release

Offender age at the time of release is associated with recidivism rates. For every 10-year increase in age, the recidivism rate is expected to decrease by 37%. This relationship is visualized in the chart below, which shows actual recidivism rates by three age groups: 34 years and younger, 35 to 54 years, and 55 years and older. By the end of the 60-month period, 43% of those released at ages 34 and younger recidivated, compared to 24% released between ages 35 to 54, and 8% released at ages 55 and older.



Maine

Sex offenders in the Maine study are defined as those who were released from a Maine Department of Corrections facility between 2005 and 2019 and had at least one sex offense associated with their commitment. The data presented here are unduplicated. Thus, if an offender had more than one eligible release during the study period, only the first release is included in this study.²²

Offender Information

Year Released

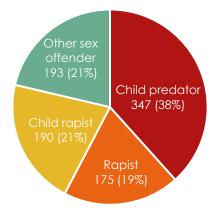
A total of 905 sex offenders that met the parameters of this study were released from a Maine Department of Corrections facility during the 2005 to 2019 study period. Overall, the number released per year ranged between 43 and 71 and averaged 60 offenders per year. However, as indicated in the chart below, the 2012 to 2017 period's release numbers were much lower. The average for this 6-year time period was 49 releases, compared to 62 releases per year for all other years.



²² For more information about eligibility criteria, see the Methodology & Limitations chapter of this report.

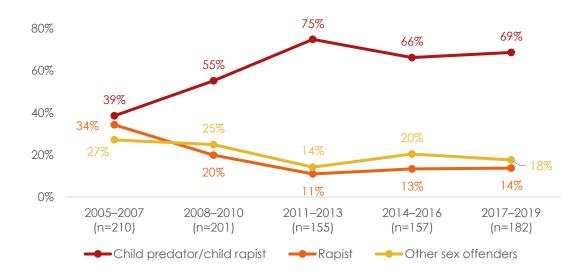
Offender Type

For the purposes of this section of the report, offenders were classified as one of four categories: *child predator, rapist, child rapist,* and other. Classification is based on the Maine Revised Statutes (M.R.S.) associated with the initial commitment and release.^{23,24} Over one-third (38%) of the study population were *child predators*. The remaining categories had very similar rates, with *child rapists* and other sex offenders at 21% and *rapists* at 19%.



Offender Type by Year

Overall, offenders who victimized children (*child rapists* and *child predators*) accounted for 59% of the study population; however, this rate varied significantly depending on the year released.²⁵ As shown below, offenders released between 2005–2007 were fairly evenly divided among the *child predator/child rapist, rapist,* and other sex offender types (27% to 39%). By 2011-2013, however, the majority (75%) of offenders fell within the *child predator/child rapist* category. While the rate for this type dropped somewhat in subsequent years, the type continued to comprise the majority of offenders.



²³ For a comprehensive list of Maine offenses by offender/offense type, see Appendix A2.

²⁴ Twenty-five offenders committed separate rape and child sex offenses but did not commit a child rape offense. For these offenders, most serious offense was used to determine offender type and subsequently all 25 were classified as rape offenders.

²⁵ X² (28, 905) = 95.010, p<.001, Cramer's V=0.229

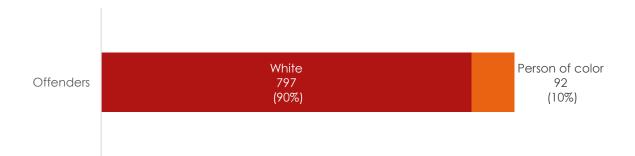
Gender

The study population was predominately male, with only 2.1% of offenders identified as female.



Race/Ethnicity

Approximately 90% of the offender population was white and 10% were persons of color.



33.2

Other sex

offender

(n=193)

35.0

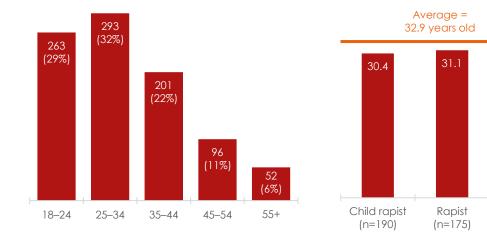
Child

predator

(n=347)

Age at Sex Offense

To understand what age offenders are committing sex offenses at, this study looked at the age of the earliest sex offense associated with the commitment and subsequent release.²⁶ The majority of offenders (61%) were between ages 18 and 34 at the time of their earliest sex offense. Overall, the mean age was 32.9 years old, however, this mean varies by offender type. The mean age of *child predators* was approximately 4.6 years higher than *child rapists* and 3.9 years higher than *rapists*. These differences were statistically significant.²⁷



²⁶ Study records include the earliest commitment and release within the study's stated timeframe (e.g., 2005 to 2019), and the ages reported here are computed solely from these records. Offenders may have committed sex offenses at an earlier point in time when they were younger.

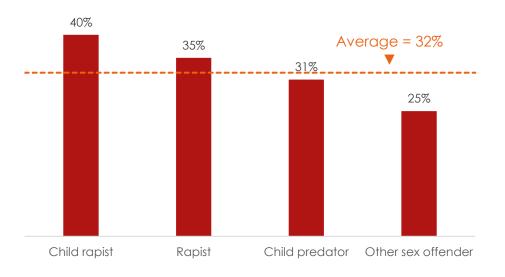
 ²⁷ Rape offender: † (409.578) = 3.803, p < .001, d = .332.
 Child rape offender: † (439.468) = 4.480, p < .001, d = .387.

Number of Sex Offense Incidents

To ascertain which offenders showed a pattern of repeated sexual offending behavior, the number of sex offense incidents per offender was computed from the number of unique offense dates referenced in commitment data (e.g., an offender with two sex offenses that were committed on different dates would be identified as having two incidents).²⁸



The number of incidents ranged from 1 to 23 and averaged 1.7 incidents per offender. Approximately 32% of offenders had two or more sex offense incidents associated with commitment; however, this rate varied by offender type. *Child rapists* had the highest rate of multiple incidents, at 40%, followed by *rapists*, at 35%, *child predators*, at 31%, and *other* sex offenders, at 25%. These differences were statistically significant.²⁹

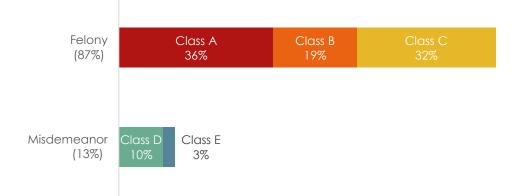


²⁸ Only sex offenses associated with commitment and subsequent release were included in this study. Therefore, any non-sex offense incidents are not included here.

²⁹ X² (3) = 10.979, p=.012, Cramer's V=0.110, n=905.

Most Serious Sex Offense

The most sex serious offense associated with commitment is determined by offense class, with class A offenses being the most severe and class E being the least severe. Thus, if an offender was convicted of both a class B and class D sex offense, their most serious offense is the class B offense. As shown in the table below, the vast majority (87%) of offenders had at least one felony level offense–class A, B, and C offenses–associated with their commitment and subsequent release.



Sex Offenses Associated with Commitment

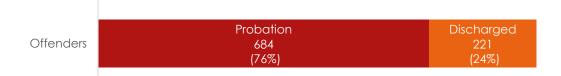
The following table shows the top five offenses by number of offenders. Overall, 91% of offenders were convicted of at least one of the offenses listed below. The most common offense types were unlawful sexual contact and gross sexual assault, both at 39%.

	Offenders (n=905)	
Offense Description	Ν	%
Unlawful sexual contact	368	39%
Gross sexual assault	365	39%
Sexual abuse of minor	148	16%
Unlawful sexual touching	54	6%
Possess sexually explicit material	47	5%

Release

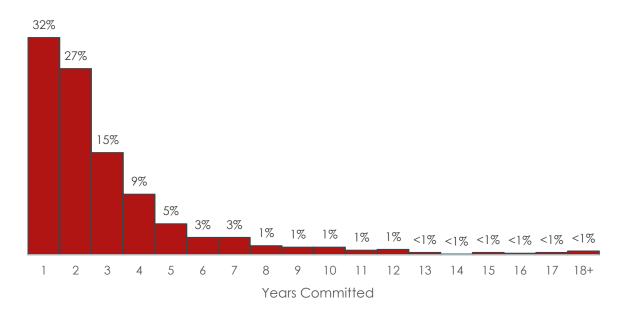
Release Type

Offenders leaving Maine DOC commitment can be released to probation or discharged without supervision. For those released between 2005 and 2019, three-quarters (76%) of offenders were released to probation.



Length of Commitment

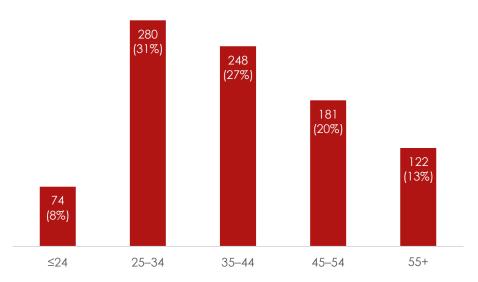
Commitment length is determined by the length of time between the commitment date and the release date. Any time served prior to transfer to the DOC was not included in the original data request and thus the results shown here are likely an underestimate of actual time spent incarcerated. For those offenders released between 2005 and 2019, the length of commitment ranged between 1 and 22 years and averaged 31 months. However, because long commitment lengths can disproportionately impact the mean, the median (20 months) is helpful to consider as well.³⁰ The median tells us that 50% of the releases were committed for less than 20 months and that 50% were committed for more than 20 months.



³⁰ Length of commitment excludes offenders (n=8) for which their commitment date is unknown.

Age at Release

The age at time of release ranged from 19 to 81 years old. The mean age was 40.1 years old, which is slightly higher than the median of 39 years old.



Recidivism

Recidivism Rates

Recidivism for this study is defined as a criminal offense occurring after release that resulted in conviction. Recidivism rates, as well as the number of offenders included in the calculation of the rate, vary depending on the amount of time tracked (i.e., a researcher-determined timeframe following release). Among sex offenders tracked for one year, 15% recidivated within that year. Among those tracking for two years, 27% recidivated within that two-year period. By year five, the recidivism rate had increased to 43%.³¹

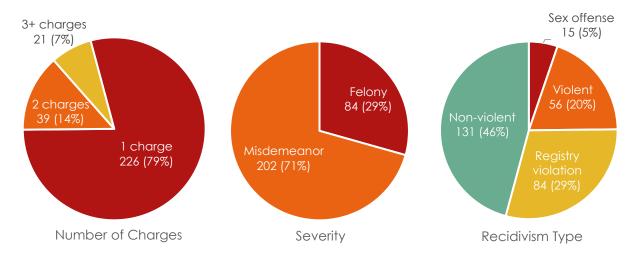


The remainder of this section will focus on the five-year recidivism rate.

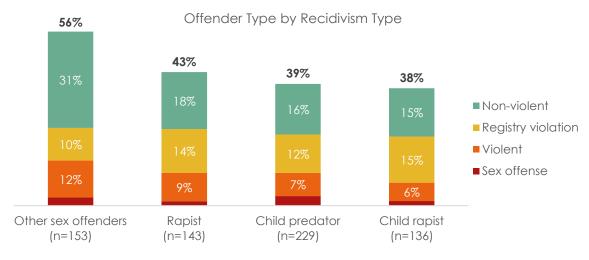
³¹ At the time criminal history data were queried (November 30, 2020), 224 offenders released from Department of Corrections custody between 2016 and 2018 had not been tracked for five full years and therefore were not included in the five-year rate.

Recidivating Offense

Overall, 79% of recidivating offenders had only one charge associated with their recidivating conviction, while the remaining 21% had two or more charges. The highest class of charge in the majority of cases (71%) was a misdemeanor class offense. Of particular interest for this study was whether the recidivating conviction involved a new sex offense or, if not, some other form of violent offense. Overall, only 5% of recidivating offenses included a sex offense while 19% included a violent, but non-sex based, offense. Meanwhile, 29% of offenders were convicted for registry violation offenses only and the remaining 47% were for non-violent offenses.³²



The chart below shows the recidivism type as a proportion of each offender type. For instance, of the 661 offenders eligible for the recidivism portion of this study, 56% of those who were classified as other type sex offenders (n=153) recidivated and can be broken down as follows: 31% were convicted for a non-violent offense, 12% for a violent offense, 10% for a registry violation, and 3% for a sex offense. When compared to the other three offender types, other sex offenders have higher rates of violent and non-violent recidivism, but lower rates of registry violations.

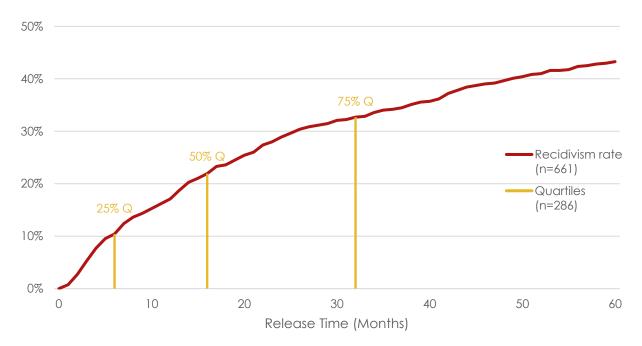


Note: Percentages less than 5% are not labeled

³² This section is specific to the first recidivating incident that resulted in a conviction; to see a list of recidivating offenses by recidivism type, please see Appendix B2.

Time to Recidivate

The chart below shows the proportion of the total study population (n=661 offenders) who had been convicted of a recidivating offense across each month of the five-year period. As the amount of time following release increases, the recidivism rate steadily rises until it reaches 43% at month 60. The chart also includes markers showing the quartile ranges for the 286 offenders who recidivated. The distance between these markers and the steepness of the curve, provides information about when offenders are recidivating. For instance, we can see that the first quartile (represented by 25% Q) recidivated over a 6-month span while the second quartile (25% Q to 50% Q) recidivated over a 10-month period (from month 7 to month 16). By the third quartile, the span has increased to 16 months. Thus, the proportion of offenders recidivating decreases as the amount of time following release increases.



Attributes Associated with Recidivism

Like Massachusetts, recidivism for the Maine study population is defined as having a conviction within five years of release from the Department of Correction's custody. Unlike Massachusetts, where the time to the recidivating event was determined by the arraignment date, the time to the event for the Maine portion of this study is denoted by the date of arrest. A Cox Proportional Hazards model was developed to find which offender characteristics were associated with recidivism. To be included in the model, the offender must have been released from commitment for at least five years. Of the 905 offenders examined, 661 (71%) had been tracked for at least five years, and, of those 661 offenders, 43% had recidivated within five years of release.

The characteristics tested in this study were:33

- Offender type
- Severity of sex offense
- Number of sex offense incidents
- Commitment length
- Release type
- Release age

Offender type, severity of sex offense, and release age were found to be associated with recidivism. Release type, when coupled with release age, were also found to be correlated with recidivism rates; however, the association between release type and recidivism was not significant on its own. Each of these attributes is shown in Table 2, along with the estimated hazard ratio and 95% confidence interval estimates of the hazard ratio.³⁴

Table 2. Attributes associated with 5-year recidivism rate

Attribute	Hazard Ratio	95% CIE		
Rapist	1.168	0.861, 1.583		
Other type sex offender	1.450	1.086, 1.936		
Misdemeanor sex offense	1.455	1.047, 2.022		
Discharged by 10- year increase in release age	0.791	0.657, 0.953		
Supervised by 10- year increase in release age	0.616	0.533, 0.712		

³³ Due to the small number of female sex offenders eligible for inclusion (n=10), gender could not be tested. Additionally, a high proportion of the study population was missing risk assessment data (n=147, 22%) and therefore risk levels could not be evaluated.

³⁴ Cox Proportional Hazard regression results are presented in Appendix C2.

The hazard ratio is a comparative measure of the risk of recidivating over the entire sturdy period. A hazard ratio less than one indicates a decreased risk of recidivating while a ratio over 1 indicates an increased risk. For instance, those who only committed misdemeanor sex offenses are 1.45 times more likely to recidivate than offenders with a felony sex offense.

Figure 2 displays a different method for interpreting the hazard ratio. This method, in which one is subtracted from the ratio and its associated confidence intervals, provides the percentage difference between the attribute and the comparison group. Whereas in Table 2 the comparison group is equal to one, here the comparison group is equal to zero. For instance, instead of describing misdemeanor offenders as having a recidivism rate 1.45 times higher than those with felony offenses, we can say that misdemeanor offenders are predicted to recidivate at a rate 45% higher than felony offenders.

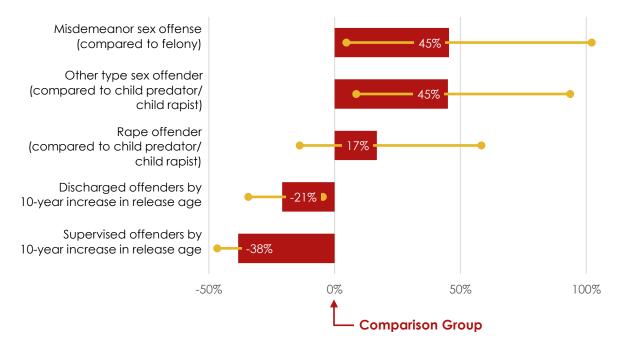
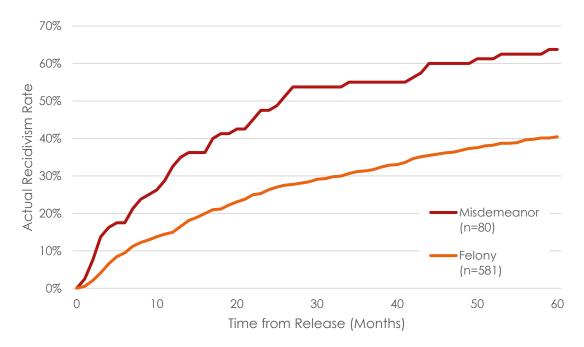


Figure 2. Hazard ratio as percentage difference between attribute and comparison group

Offense Severity

Offenders whose most severe sex offense was a misdemeanor associated with the commitment of interest have a recidivism rate 45% greater than offenders with felony sex offenses. This finding is surprising, as it would typically be expected that offenders who committed higher level offenses have an increased risk of recidivating.

The chart below shows the actual recidivism rates by offense severity. Due to the relatively low number of those with only misdemeanor sex offenses associated with the commitment, the misdemeanor curve is more jagged than those with a felony sex offense. An interesting feature of this curve is that the recidivism rate is rapidly increasing until it reaches 51% in month 26; after which the curve plateaus, indicating that only a handful of misdemeanor offenders recidivated after that point.

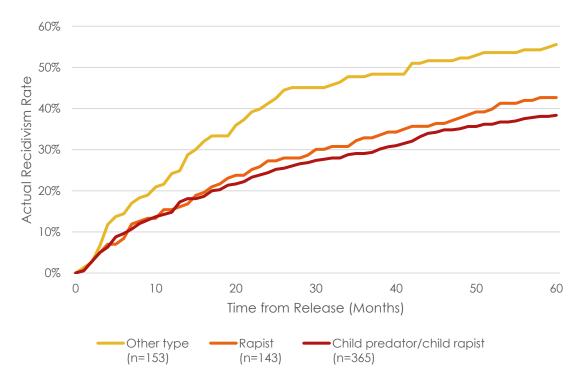


A limitation of this study, which may help explain this finding, is that non-sex offenses associated with commitment were not included in the dataset and therefore could not be analyzed. Thus, this measure could be capturing offenders with a broader range of criminal behavior and that is driving the influence of sex offense severity on recidivism rates. For instance, Maine statute dictates that misdemeanors are those criminal offenses that have a maximum sentence length of 9-months or less. This sentence length is the cutoff for determining whether an offender is sent to a state correction facility or a county jail. Therefore, any sex offenses that are unknown, and, in turn, provides further evidence that offense severity could be a proxy for offenders with a broader, more severe, level of criminality.

Offender Type

While controlling for all other attrributes, offenders who committed other sex offense types (i.e., non-rape and non-child offenses)³⁵ have an expected recidivism rate 45% higher than child predators/child rapists. Analysis of the actual recidivism rate for other type offenders shows that the rate is steadily increasing for the first two years following release, as indicated by the plateau at month 24. In particular, the rate is at its steapest between the day of release and month six. Interestingly, this is also the time when child predators/child rapists have the steepest recidivism rate. In fact, analysis of the quartiles shows that, of the offenders who recidivated, 25% of other type offenders and 25% of child offenders did so by month six.

Figure 2 above suggests rapists have a recidivism rate 17% higher than child predators/child rapists. However, the confidence interval for rape offenders, which ranges from negative 14% to 58%, includes zero and thus indicates that the difference is not statistically significant (i.e., it cannot be said with certainty the rapist rate is different from the child offender rate).³⁶ This can be visualized easily in the below chart, where we can see that the recidivism rates between rape offenders and child offenders are nearly identical until month 18, after which the rape offenders is only slightly higher than the other type offender rate.



³⁵ See Appendix A2 for a list of Maine offenses by offender type.

³⁶ Typically, non-significant covariates would be removed from the model. However, the rape offender covariate had a confounding effect on the offense severity covariate. This is likely because, in Maine, all rape offenses are felonies and thus offense severity's influence on recidivism rates strengthened upon controlling for rape offenders.

Age at Release

Age at release, both by itself and as an interaction with release type, is associated with recidivism rates. For every 10-year increase in age at release, the predicted recidivism rates decrease by 21%. However, for those offenders who were released to supervision, the rate decreases even further, with supervised offenders having a 38% decrease in risk for every 10-year increase of age at release. Like offense severity, this finding might initially appear counterintuitive: namely, it could be expected that a person being supervised has a greater risk of being caught committing new criminal behavior. However, the goals of supervised release go beyond solely monitoring offender activity. Hence, the support provided by Maine's community corrections officers could itself help offenders avoid engaging in future criminal activity. That said, it is important to note that this recidivism analysis only included criminal offenses and, because probation violations are not criminal offenses, the recidivism rates would not capture those who violated conditions without committing new criminal offenses.

Appendix A

A1. Sex offenses associated with commitment by offender type, Massachusetts

Offender Type	Offense Description	
Child Predator	Assault with intent to rape child under the age of 16	
	Dissemination of visual material	
	Enticement of child	
	Indecent assault and battery on child under the age of 14	
	Inducing minor into prostitution	
	Inducing minor to have sexual intercourse	
	Living off minor prostitute	
	Matter harmful to minors	
	Posing child in state of nudity	
	Possession of visual material	
	Risk of sexual abuse to child	
	Unnatural acts, under 16	
Rapist	Rape and aggravated rape	
Child Rapist	Rape of child with force	
	Rape/abuse of child	
Other sex offense	Assault with intent to commit rape	
	Crimes against nature	
	Deriving support from prostitute	
	Incest	
	Indecent assault and battery	
	Indecent assault and battery on a person with an intellectual disability	
	Trafficking of persons for sexual servitude	
	Unnatural acts	
	Violations of sex offender registry	
	Other sex offenses	

Offender Type	Offense Description	
Child predator	Dissemination of sexually explicit material	
	Possess sexually explicit material	
	Sexual abuse of minor	
	Sexual exploitation of minor	
	Sexual misconduct with a child	
	Solicitation of child by computer	
	Unlawful sexual contact	
	Unlawful sexual touching	
	Visual sexual aggression against a child	
Rapist	Gross sexual assault (age not specified in statute)	
Child rapist	Gross sexual assault (age specified in statute)	
Other sex offenses	Aggravated sex trafficking	
	Attempted gross sexual assault	
	Engaging a prostitute	
	Engaging in prostitution	
	Failure to comply with sex offender registry	
	Gross sexual misconduct	
	Incest	
	Indecent conduct	
	Sex offender failure to register or update information	
	Sex trafficking	
	Unlawful sexual contact	
	Unlawful sexual touching	

A2. Sex offenses associated with commitment by offender type, Maine

Appendix B

B1. Recidivating offense description by recidivism type, Massachusetts

Sex Offense

Accosting Assault with intent to rape Assault with intent to rape a child Child pornography Enticement of child under 16 Incest Indecent assault & battery Indecent assault & battery of child under 14 Indecent exposure Lewd and lascivious speech and behavior Open and gross lewdness Other sex offense Prostitution Rape Rape of child Reckless endangerment of child Trafficking a person for sexual servitude

Violent offense

Abuse prevention act Armed assault Armed assault with intent to rob Armed robbery Assault Assault and battery Assault and battery on family/household member Assault and battery on intellectually disabled person Assault and battery on police officer Assault and battery with dangerous weapon Assault on family/household member Assault with dangerous weapon Assault with intent to rob Intimidation Kidnapping Manslaughter Robbery Strangulation or suffocation Threaten to commit crime Unarmed robberv Violation of harassment prevention order

Non-Violent Offense

Abuse prevention act Annoying telephone calls Attempt to commit crime Bomb hoax Breaking and entering Breaking and entering with intent to commit felony, day time Breaking and entering with intent to commit felony, night time Breaking and entering, day time Breaking and entering, night time Burglary Carrying dangerous weapon Common thief Concealing leased property Conspiracy Conspiracy to violate controlled substance act Contempt of court Controlled substance in school Defraud victim Destruction of property **Disorderly conduct** Distribute counterfeit substance Disturbing peace Failure to appear Failure to report change of address False statement to police Forgery Fraud ID/License violation Inhaling toxic vapors Keeper of disorderly house Larceny Larceny form motor vehicle Larceny from building Larceny from check Larceny from person Leave scene of accident, property damage Malicious destruction of property Misuse of credit card

Non-violent offense (continued)

Motor vehicle homicide Negligent motor vehicle operation Operating motor vehicle after license suspension Operating motor vehicle after license revocation Operating under influence of liquor Operating under influence of drugs Operating uninsured motor vehicle Other motor vehicle offense Other offense Other property offense Possession of controlled substance Possession of ammunition without FID card Possession of burglary tools Possession of controlled substance with intent to distribute Possession of firearm Possession of firearm silencer Possession of firearm without a license Procuring alcohol for a minor Receiving stolen property Refuse identification process Resisting arrest Shoplifting Trafficking controlled substance Trespassing Unauthorized use of motor vehicle Uttering Uttering counterfeit Vandalize property Violation of harassment prevention order

Registry violation

Sex offender failure to register Sex offender failure to report change of address Other sex offender registry violation

B2. Recidivating offense description by recidivism type, Maine

Sex Offense

Dissemination of sexually explicit material, prior Gross sexual assault Incest Indecent conduct Possess sexual explicit material of under 12 years of age, prior Possess of sexually explicit material Sexual abuse of minor Unlawful sexual contact Unlawful sexual touching

Violent offense

- Aggravated assault
- Arson
- Assault
- Assault on an officer
- Criminal threatening
- Criminal threatening with dangerous weapon
- Domestic violence assault
- Domestic violence assault, priors
- Domestic violence criminal threatening,
- Domestic violence terrorizing
- Domestic violence terrorizing, priors
- Harassment by telephone
- Kidnapping
- Obstructing report of crime
- Reckless conduct
- Refusal to submit to arrest or detention, bodily injury
- Refusal to submit to arrest or detention, refuse to stop
- Refusing to submit to arrest or detention, physical force
- Refusing to submit to arrest or detention Robbery
- Stalking-serious inconvenience/emotional distress
- Terrorizing
- Violation of protective order

Non-Violent Offense

Aggravated criminal mischief Aggravated criminal trespass Aggravated operating after ho revocation, priors Aggravated trafficking of scheduled drugs Allow minor to possess or consume liquor Burglary Burglary of a motor vehicle Carrying concealed weapon Criminal attempt Criminal mischief Criminal trespass Cultivating marijuana Disorderly conduct Disorderly conduct, loud noise, private place Disorderly conduct, loud unreasonable noise Disorderly conduct, offensive words, gestures Drinking in public Eluding an officer Endangering the welfare of a child Escape Fail to provide correct name, address, date of birth Failing to report Failure to appear after bailed False public alarm or report Forgery Illegal possession of firearm Illegal possession of firearm or crossbow Misuse of entrusted property Negotiate a worthless instrument Operate after habitual offender revocation, 2 prior Operate after habitual offender revocation, 3 prior Operate after habitual offender revocation, prior Operating under the influence Operating under the influence-1 prior Operating under the influence-2 priors Operating under the influence-no test, 2 prior OUI (alcohol)

Non-violent offense (continued)

OUI (alcohol)-no test

OUI (drugs or combo)

Prohibited contact with person under 14 years of age

Protective order from harassment violation Tampering with witness, informant, juror or victim

Theft by deception

Theft by receiving stolen property, priors

Theft by unauthorized taking or transfer

Theft by unauthorized taking or transfer, priors

Theft by unauthorized use of property

Trafficking in dangerous knives

Trafficking in prison contraband

Unlawful furnishing scheduled drug

Unlawful possession of hydrocodone

Unlawful possession of oxycodone

Unlawful possession of scheduled drug

Unlawful trafficking in scheduled drugs

Unsworn falsification

Violating condition of release

Violating protection from abuse order

Violating protective order

Violation of privacy

Registry violation

Fail to comply sex offender registry act, 1st offense

Fail to comply sex offender registry act, 2nd offense

Fail to comply sex offender registry act, 3rd offense

Fail to register or update information

Appendix C

C1. Cox Proportional Hazards Regression for Five-Year Recidivism, Massachusetts

Variable	ß	s.e.	Wald	df	Sig.	Exp(ß)	95% CIE
Offender type			23.022	2	0.000*		
Rapist	0.455	0.166	7.459	1	0.006*	1.576	1.14, 2.18
Other type sex offender	0.766	0.165	21.499	1	0.000*	2.150	1.56, 2.97
Discharged offender	0.476	0.136	12.216	1	0.000*	1.609	1.23, 2.10
Maximum release level	0.894	0.221	16.277	1	0.000*	2.444	1.58, 3.77
Release age (continuous)	-0.047	0.006	55.856	1	0.000*	0.954	0.94, 0.97

* Indicates statistical significance at the .05 level Model x²(5)=144.252, p<.001 n=880

Note: The time variable is months to recidivism and the event variable is five-year recidivism where 0=no and 1=yes.

C2. Cox Proportional Hazards Regression for Five-Year Recidivism, Maine

Variable	ß	s.e.	Wald	df	Sig.	Exp(ß)	95% CIE
Offender type			6.427	2	0.040*		
Rapist	0.155	0.155	0.995	1	0.318	1.168	0.861, 1.583
Other type sex offender	0.372	0.148	6.342	1	0.012*	1.450	1.086, 1.936
Misdemeanor	0.375	0.168	4.976	1	0.026*	1.455	1.047, 2.022
Supervised release	0.209	0.449	0.218	1	0.641	1.233	0.512, 2.97
Release age (continuous)	-0.023	0.009	6.088	1	0.014*	0.977	0.959, 0.995
Release age by supervised release	-0.025	0.012	4.365	1	0.037*	0.975	0.953, 0.998

* Indicates statistical significance at the .05 level Model $\chi^2(6)$ =111.287, p<.001 n=661

Note: The time variable is months to recidivism and the event variable is five-year recidivism where 0=no and 1=yes.