



Mental Health and Recidivism: A Comparison of the FY2009, FY2010, and FY2011 SR Release Cohorts

STATISTICAL ANALYSIS & FORECAST UNIT

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The VADOC calculates its official recidivism rate by looking at who has been re-incarcerated with an SR sentence within three years of their release date. This is a standard measure used by most states nationwide.¹ VADOC only includes SR releases who were at liberty and had the opportunity to recidivate. Those excluded from the analysis include SR releases who died in custody or were transferred to another jurisdiction upon release.

At 23.0%, the re-incarceration rate of the FY2011 SR Releases was slightly higher than it was among the FY2010 SR Releases and the FY2009 SR Releases (both at 22.8%). With these three release year cohorts, then, the re-incarceration rate increased 0.2 percentage point.

Mental Impairment

In FY2009, 12,885 individuals were released from SR incarceration with the opportunity to recidivate. Of these individuals, 2,629 (20%) were known to be mentally impaired. Of these mentally impaired offenders, 737 (28.0%) were re-incarcerated within three years of being released.

In FY2010, 13,018 individuals were released from SR incarceration with the opportunity to recidivate. Of these individuals, 2,673 (21%) were known to be mentally impaired. Of these mentally impaired offenders, 763 (28.5%) were re-incarcerated within three years of being released.

In FY2011, 12,263 individuals were released from SR incarceration with the opportunity to recidivate. Of these individuals, 2,501 (20%) were known to be mentally impaired. Of these mentally impaired offenders, 755 (30.2%) were re-incarcerated within three years of being released.

For offenders with no known mental impairment, both the FY2009 and FY2010 SR Release cohort recidivated at 21.4%. This is 6.6 percentage points lower than the re-incarceration rate of mentally impaired offenders released in FY2009 and 7.1 percentage points lower than the re-incarceration rate of mentally impaired offenders in FY2010. In FY2011, the re-incarceration rate of offenders without known mental impairment decreased to 21.1%, while the re-incarceration rate of those with known mental impairment in-

Three-Year Re-Incarceration Rates by Most Recently Reported Mental Health Code

	Mentally Impaired ²		No Known Mental Impairment ³	
	Number	Percent	Number	Percent
FY2009 SR Releases				
Recidivated	737	28.0%	2,198	21.4%
Did Not Recidivate	1,892	72.0%	8,058	78.6%
Total	2,629		10,256	
FY2010 SR Releases				
Recidivated	763	28.5%	2,210	21.4%
Did Not Recidivate	1,910	71.5%	8,135	78.6%
Total	2,673		10,345	
FY2011 SR Releases				
Recidivated	755	30.2%	2,061	21.1%
Did Not Recidivate	1,746	69.8%	7,701	78.9%
Total	2,501		9,762	

² Includes offenders reported as having minimal, mild, moderate, and severe impairment

³ Includes offenders that have no history or current evidence of mental impairment and those who have not been assigned a mental health code in Virginia CORIS

¹48 states (Hawaii and Maryland excluded) use a three-year re-incarceration rate as a recidivism measure.

creased to 30.2%, a difference of 9.1 percentage points.

To explore whether mental impairment significantly impacted Virginia’s three-year re-incarceration rates, logistical regressions were performed.² While using a logit model to account for differences of gender, age at release, substance abuse history, and a most serious offense of “Property/Public Order,” mental impairment was found to be a statistically significant predictor of re-incarceration.

Most Serious Offense (MSO)

Mentally impaired FY2011 SR Releases who had the MSO of homicide/manslaughter recidivated at nearly twice the rate of the FY2009 SR Release cohort. While the recidivism rate of mentally impaired offenders increased over time, the recidivism rate for offenders with that MSO who were not known to be mentally impaired dropped considerably with the FY2011 SR Release cohort. These fluctuations cannot be attributed to small numbers of SR Releases with that MSO; there were at least 200 homicide/manslaughter offenders released each year.

Three-Year Re-Incarceration Rates for SR Releases

Most Serious Offense ⁵	SR Release Year					
	FY2009		FY2010		FY2011	
	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired
Homicide/Manslaughter	12.8%	12.4%	19.4%	13.4%	22.9%	3.8%
Abduction	12.5%	19.7%	25.0%	15.5%	13.3%	8.9%
Rape/Sexual Assault	24.9%	18.2%	18.5%	17.8%	26.9%	16.2%
Robbery	26.5%	18.7%	26.2%	19.7%	31.6%	14.8%
Assault	29.6%	21.6%	29.9%	19.8%	29.4%	21.3%
Weapons	28.6%	18.5%	21.3%	20.8%	23.7%	15.8%
Burglary/B&E	33.5%	28.6%	41.1%	25.6%	37.2%	24.6%
Larceny/Fraud	30.6%	24.6%	32.0%	25.3%	30.1%	27.4%
Drug Sales & Possession	23.6%	19.7%	24.2%	19.6%	26.3%	20.3%
Other	29.2%	18.9%	23.4%	20.5%	37.7%	21.4%

⁵ Indicates most serious offense for which an offender is sentenced; based on SAF Unit offense hierarchy used for forecast purposes.

Among offenders not known to be mentally impaired, recidivism rates between the FY2009 cohort and the FY2011 cohort generally decreased among offenders with a violent MSO. In general, mentally impaired offenders had higher recidivism rates than offenders not known to be mentally impaired, regardless of their MSO.

Crime Type

The recidivism rate among mentally impaired SR Releases in each of the three DOC crime types increased between the FY2009 cohort and the FY2011 cohort. The recidivism rate among offenders with a Violent crime type declined with the FY2010 SR Release cohort and then, in FY2011, increased among mentally impaired offenders and decreased among offenders not known to be mentally impaired. In each column in the accompanying table, offenders with a Property/Public Order crime type had the highest recidivism rate of

Three-Year Re-Incarceration Rates for SR Releases

DOC Crime Type ⁶	SR Release Year					
	FY2009		FY2010		FY2011	
	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired
Violent	26.2%	19.3%	25.3%	18.9%	27.8%	16.2%
Property/Public Order	30.9%	24.0%	32.1%	24.1%	33.1%	25.2%
Drug	23.6%	19.7%	24.2%	19.6%	26.3%	20.3%

⁶ Crime type of an offender's most serious offense

³ In this study, a p-value of <0.05 indicates statistical significance.

all of those offenders with a known crime type. Mentally impaired individuals with a Violent crime type always had the second-highest recidivism rate. When only considering offenders not known to be mentally impaired, however, those with a Drug crime type had the second-highest recidivism rate.

Violent by §17.1-805

As an alternative to using DOC crime type, “violent” offenders can also be identified using §17.1-805 of the *Code of Virginia*. This definition of “violent” differs from a Violent DOC crime type in two notable ways.

Three-Year Re-Incarceration Rates for SR Releases

	SR Release Year					
	FY2009		FY2010		FY2011	
	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired
Violent by §17.1-805⁷						
Violent	32.8%	26.5%	33.1%	25.3%	35.8%	24.3%
Not Violent	22.7%	16.8%	23.4%	17.7%	23.4%	18.0%

⁷ Indicates if an offender has one or more convictions in his/her VADOC sentence history for an offense that is considered “violent” according to §17.1-805 of the *Code of Virginia*

First, whereas DOC crime type categorizes burglary offenses as being a “Property/Public Order” offense, §17.1-805 of the *Code of Virginia* includes it as violent offenses. Secondly, once an offender is convicted of a offense considered “violent” by §17.1-805, he/she is considered violent forevermore. Whereas DOC crime type reflects the offender’s MSO for that particular term of incarceration, offenders considered “violent” by §17.1-805 may have most recently served a sentence for only drug offenses or property/public order offenses. Offenders considered “violent” by §17.1-805 had higher rates of recidivism among both mentally impaired offenders and offenders not known to be mentally impaired. This is likely due to the statute’s inclusion of some burglary as a “violent” offense, which is not included in the “Violent” DOC crime type because, as the table at the bottom of the previous page shows, offenders with the MSO of burglary generally had the highest recidivism rates. The recidivism rate among mentally impaired SR Releases considered “violent” by §17.1-805 increased with the FY2010 cohort and, again, with the FY2011 cohort. Recidivism rates among their counterparts who were not known to be mentally impaired decreased with each fiscal year’s cohort, however. Mentally impaired offenders consistently had higher recidivism rates than their counterparts who were not known to have a mental impairment.

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Age at Release

In nearly every age group, mentally impaired SR Releases in FY2011 recidivated at a higher rate than SR Releases from FY2009 and FY2010. An offender’s age and mental health serve as important predictors of recidivism; older offenders who were not mentally impaired were much less likely to recidivate than

Three-Year Re-Incarceration Rates for SR Releases

Age at Release (in years)	SR Release Year					
	FY2009		FY2010		FY2011	
	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired
Under 25	40.1%	27.1%	41.8%	26.6%	45.7%	28.4%
25-29	32.6%	23.4%	34.3%	23.1%	38.8%	24.3%
30-34	29.5%	21.6%	29.6%	21.4%	32.8%	20.8%
35-39	28.8%	19.9%	29.6%	21.0%	27.1%	18.0%
40-44	27.6%	21.3%	24.4%	22.1%	22.8%	20.0%
45-49	23.2%	19.7%	24.1%	18.7%	25.3%	19.5%
50-54	20.2%	15.9%	20.7%	18.4%	23.6%	17.4%
55-59	10.3%	15.5%	17.2%	9.6%	21.8%	15.9%
60-64	5.1%	7.6%	9.4%	11.4%	13.2%	9.6%
65 or Older	10.5%	14.9%	5.9%	10.5%	11.1%	2.2%

younger offenders who were mentally impaired. Offenders in younger age groups tended to have larger differences between the rates of their mentally impaired offenders and their offenders not known to be mentally impaired. For offenders who were released younger than age 45, the average drop in the recidivism rate per age group from mentally impaired offenders to offenders not known to be mentally impaired (with all three release year cohorts considered) was 9.5 percentage points. Offenders age 45 or older had a much lower difference, averaging a decrease of just 2.3 percentage points.

Substance Abuse

The recidivism rate among mentally impaired offenders was consistently higher among SR Releases without a history of substance abuse. Among offenders not known to be mentally impaired, however, those offenders with a history of substance abuse consistently recidivated at higher rates. In all three release year cohorts, mentally impaired offenders recidivated at a higher rate than those not known to have a mental impairment, regardless of whether they had a history of substance abuse or not.

Three-Year Re-Incarceration Rates for SR Releases

	SR Release Year					
	FY2009		FY2010		FY2011	
	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired
History of Drug/Alcohol Abuse						
No	34.1%	21.2%	33.5%	21.3%	33.5%	21.9%
Yes	25.8%	21.6%	26.2%	21.5%	26.2%	19.9%

Length of Stay

SR Length of Stay indicates the number of years that an individual is incarcerated as an SR offender. With the exception of the offenders released from an SR length of stay of 30 or more years, mentally impaired offenders recidivated at a higher rate than offenders not known to have a mental impairment in every SR Length of Stay group and in every year. Offenders with shorter lengths of stay (who tended to be offenders with a Property/Public Order crime type) generally recidivated at a higher rate, regardless of mental impairment.

Three-Year Re-Incarceration Rates for SR Releases

	SR Release Year					
	FY2009		FY2010		FY2011	
	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired	Mentally Impaired	Not Mentally Impaired
SR Length of Stay (in years) ⁸						
Less than 2	29.3%	22.0%	32.8%	22.6%	34.8%	23.0%
2 to 3	26.5%	22.5%	23.2%	21.2%	26.6%	22.8%
4 to 5	25.3%	21.0%	29.7%	20.4%	28.6%	18.2%
6 to 9	27.4%	19.8%	21.3%	20.6%	24.0%	18.1%
10 to 14	27.7%	15.6%	20.4%	14.1%	17.9%	11.3%
15 to 19	24.0%	18.7%	23.2%	15.0%	10.0%	4.9%
20 to 24	15.8%	12.2%	20.0%	16.1%	7.7%	4.1%
25 to 29	25.0%	8.9%	14.3%	2.5%	0.0%	2.0%
30+	0.0%	12.0%	0.0%	9.1%	0.0%	0.0%

⁸ An offender's length of stay while he/she is state responsible

Key Points

- ◆ Three-year re-incarceration rates of SR Releases with known mental impairment increased each year from FY2009 until FY2011.
- ◆ Recidivism rates of SR Releases without known mental impairment remained stable from the FY2009 cohort to the FY2010 cohort and then decreased from the FY2010 cohort to the FY2011 cohort.
- ◆ Mentally impaired offenders recidivated at higher rates among all offense groups.

- ◆ In general, offenders with a “Property/Public Order” crime type had the highest re-incarceration rates. The second-highest rate among mentally impaired offenders was those with a “Violent” crime type. The second-highest rate among offenders not known to be mentally impaired was those with a “Drug” crime type.
- ◆ Regardless of whether they were considered “violent” by §17.1-805 of the *Code of Virginia*, mentally impaired offenders recidivated at higher rates than offenders not known to be mental impaired.
- ◆ The recidivism rate among mentally impaired offenders was consistently higher among SR Releases without a history of substance abuse.
- ◆ Offenders with shorter lengths of stay (who tended to be offenders with a Property/Public Order crime type) generally recidivated at a higher rate, regardless of mental impairment.
- ◆ Offenders with no known mental impairment recidivated at lower rates than their mentally impaired counterparts across all SR Length of Stay groups.
- ◆ Using a logit model to account for differences of gender, age at release, substance abuse history, and a most serious offense of “Property/Public Order,” mental impairment was found to be a statistically significant predictor of re-incarceration.
- ◆ Testing has revealed that the increase in re-incarceration rates between the FY2009 SR release cohort and the FY2011 SR release cohort is significantly associated with the increased of recidivism among mentally impaired offenders.
- ◆ Among the FY2011 SR Releases, those not known to be mentally impaired had a three-year incarceration rate of 21.1%, whereas those who were mentally impaired had a three-year re-incarceration rate of 30.2%.

Concluding Insights

“The ‘revolving door’ between incarceration and the street for offenders with mental health issues is propelled largely by untreated mental illness and co-occurring substance abuse disorders among returning citizens. As predicted, the decreased availability of hospital and training center beds without a congruent increase in community services has increased the ‘criminalization’ of the mentally ill in Virginia. Current data demonstrates that without affordable, efficient, and readily available community treatment (e.g. cognitive behavioral groups based on evidence-based practices and medications) the welfare of an individual with mental illness and community safety overall are both at risk. In brief, offenders with mental illness who are stabilized while incarcerated by programming, monitoring, structured settings, and medications, will require increased support, services, and structure on the community side far beyond what they are receiving now. This report demonstrates that without these services in place, returning citizens with mental illness are not able maintain the level of functioning required for successful transition back into their communities.”

–Dr. Denise Malone, Chief of Mental Health Services, VADOC

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