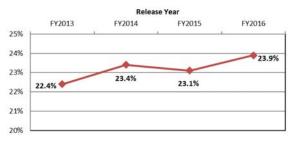
### Trends in Recidivism Rates and Technical Violations

#### Recidivism Rate Trends:

The Virginia Department of Corrections (VADOC) studies and tracks recidivism to obtain information on the success of inmates re-entering society once released from State Responsible (SR) incarceration. Virginia's recidivism rate is the second lowest among the 42 states that report the re-incarceration of inmates with an SR sentence within three years of their release<sup>1</sup>. The three-year SR re-incarceration rate among the FY2016 SR release cohort was 23.9%, which is less than a percentage

#### Three-Year Re-Incarceration Rates of State Responsible Releases



point increase (0.8) from the rate reported for the FY2015 SR release cohort. VADOC waits at least four years to calculate the three year re-incarceration rate of SR releases in order to allow all court information to be received and entered into VirginiaCORIS<sup>2</sup>. Without waiting for the data to fully mature, the FY2016 recidivism rate in July 2019 would have been 22.9%.

#### Technical Violations among Recidivists:

The percentage of inmates returning for technical violations was 23.8%, increasing over two full percentage points (2.3) from FY2015 and 14.1 percentage points higher than FY2013. The higher technical violation rates from the FY2014 through FY2016 release cohorts relative to previous years are, perhaps, in response to the increasing number of opioid overdose deaths in the community. Some judges may have sentenced opioid addicted inmates who violate their terms of supervision to SR

# Percentage of Three-Year Recidivists with Technical Violations 30% 22.3% 21.5% 23.8% 20% 15% 9.7% 10% 5% 0% FY2013 FY2014 FY2015 FY2016

incarceration for their safety and treatment as part of an ongoing response to the opioid epidemic. Without technical violation, the recidivism rate for FY2016 SR releases would have been 18.2%.

## Predictors of Recidivism

The VADOC studies inmate characteristics and other factors associated with recidivism in order to understand, identify, and address their criminogenic needs, with the ultimate goal of reducing recidivism and thereby increasing public safety. VADOC research has shown a consistent link between certain factors and recidivism, thus establishing their importance in predicting recidivism among inmates released from an SR incarceration in Virginia.

These factors include (but are not limited to) the following:

- 1) Gender: Male inmates are more likely to recidivate.
- 2) Age: Younger inmates are more likely to recidivate.
- 3) Previous SR Incarcerations: Inmates with a greater number of previous SR incarcerations are more likely to recidivate.
- 4) Crime Type of Most Serious Offense: Inmates who commit Property or Public Order crimes as their most serious offenses are more likely to recidivate.

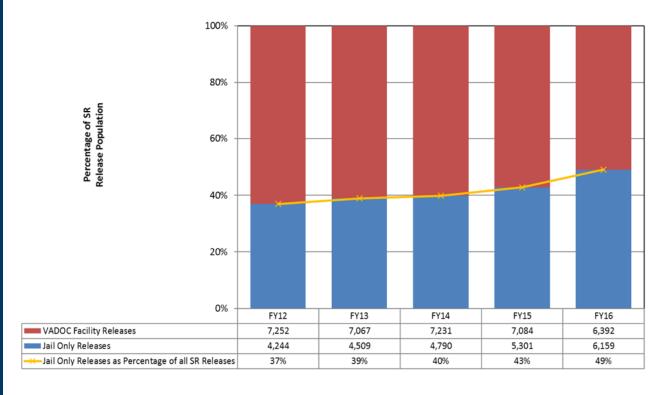
## Predictors of Recidivism—Current Analyses

In addition to the common predictors of recidivism previously discussed, VADOC has also found other predictors that will be highlighted in this report. In particular, there is an increased awareness of the role of drug use in recidivism. The relation of the following factors with recidivism, alongside other known predictors of recidivism, will be explored in this report:

- 1) Location of SR Incarceration: Inmates who serve their entire SR term of incarceration in a Local/Regional Jail are more likely to recidivate than those who serve some or all of their incarceration in a VADOC Facility.
- 2) Evidence of a Mental Health Impairment: Inmates with a mental health impairment are more likely to recidivate than those with no evidence of a mental health impairment.
- 3) Positive Opioid or Cocaine Drug Tests<sup>3</sup>: Inmates with either a history of positive opioid or cocaine drug tests prior to release are more likely to recidivate than inmates without positive opioid or cocaine drug tests.
- 4) History of Positive Drug Tests for Multiple Drugs (Both Opioids and Cocaine)<sup>4</sup>: Inmates with a history of positive drug tests for opioids and cocaine are more likely to recidivate than inmates with a history of positive drug tests for either opioids or cocaine or inmates without any history of positive drug tests for opioids or cocaine.

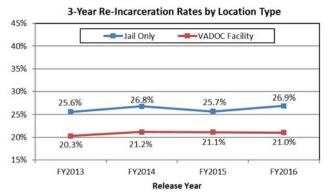
## SR Population Incarcerated Only in Local/Regional Jails

#### Jail Only Inmates as a Percentage of All SR Releases



Due to capacity limitations in VADOC facilities, some SR inmates served their entire term of incarceration in a local or regional jail (Jail Only). The number of Jail Only SR releases has steadily increased since FY2012 SR release cohort, reaching a ten year high of 6,159 in FY2016. The percentage of SR releases that are Jail Only also reached the highest percentage ever in FY2016, with 49% of the SR releases having spent their entire term of incarceration in a jail. Jail Only releases have consistently had higher recidivism rates than DOC facility releases. The increased rate of Jail Only releases in FY2016 may help explained the overall increased recidivism rate for the FY2016 SR release cohort.

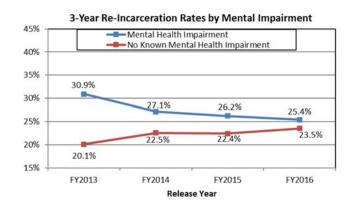
#### SR Incarceration Location and Recidivism



Three-year re-incarceration rates of inmates who spent all of their SR incarceration in a jail are consistently higher than those of inmates who spent at least part of their SR incarceration in a VA-DOC facility. Consistent evidence-based programs (EBPs), educational programs, substance abuse, and mental health treatment in VADOC facilities help returning citizens reentering society successfully and may contribute to those lower rates. FY2016 Jail Only releases saw a rate increase from FY2015, while VADOC facility inmates remained stable at 21%.

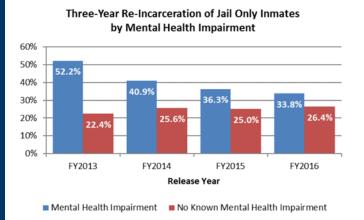
### Mental Health and Recidivism

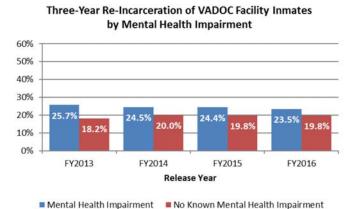
Inmates with a mental health impairment are designated with a mental health code in VirginiaCORIS<sup>2</sup> indicating either minimal, mild, moderate, or severe mental health impairment, or a diagnosis of a serious mental illness. The recidivism rate of inmates with a mental health impairment is higher than that of inmates with no evidence of a mental health impairment across FY2013 to FY2016 SR release cohorts. Recognizing the increased risk of recidivism among those with a mental health impairment, in 2016, the Virginia General Assembly approved



funding for 20 full-time mental health positions to help support VADOC's 43 Probation and Parole Districts. The primary objective for the new staff was to facilitate continuity of care and increase the likelihood of successful reentry for probationers with a mental impairment. Probation officers are now able to make direct referrals for assessments of mental health needs. The additional mental health staff are also able to collaborate with VADOC prisons, local and regional jails to assist in re-entry planning. In recent years, the continuity of care between VADOC facilities and the community has driven the convergence of recidivism rates of releases with and without a mental health impairment.

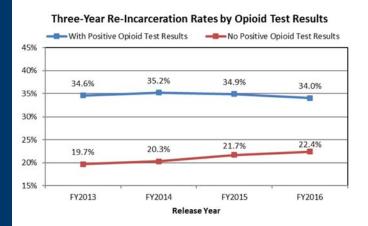
## SR Incarceration Location and Mental Health





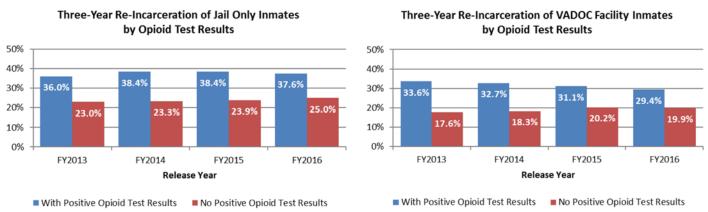
When considering both SR incarceration location and mental health impairment, Jail Only inmates with a mental health impairment had a 10.3 percentage point higher recidivism rate than VADOC Facility inmates with a mental health impairment in FY2016 (33.8% and 23.5%, respectively). This exceeds the 6.6 percentage point difference in recidivism between Jail Only and VADOC Facility inmates without a mental health impairment (26.4% and 19.8%, respectively).

# History of Positive Opioid Tests before Release<sup>3</sup> and Recidivism



History of positive opioid drug tests before release was examined across the FY2013 to FY2016 SR release cohorts. Overall, the recidivism rates of inmates with a history of positive opioid drug tests before release is notably higher than the rates for those without. This difference was found to be statistically significant in each fiscal year<sup>5</sup>. The rate difference between these two groups has declined since FY2014, down to a difference of 11.6 percentage points in FY2016. The rate difference between inmates with or without positive opioid drug tests before release is amplified by considering SR incarceration location as well as mental health impairment.

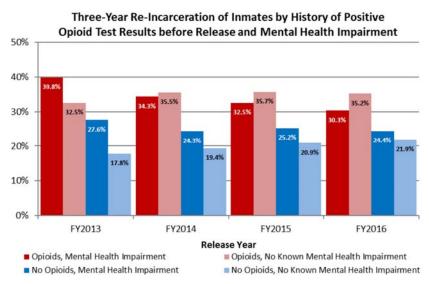
# History of Positive Opioid Tests before Release<sup>3</sup> and SR Incarceration Location



Regardless of location of incarceration, inmates who tested positive for opioids prior to release had higher recidivism rates. However, for those Jail Only releases, the recidivism rates were even higher. For example, among FY2016 SR releases who spent their entire SR term of incarceration in jail, 37.6% of those who tested positive for opioids prior to release recidivated, compared to 29.4% of those who spent at least some time in a VADOC facility.

# History of Positive Opioid Tests before Release<sup>3</sup> and Mental Health

For FY2013 SR releases, the effects of positive opioid drug tests prior to release on recidivism were compounded if the inmates had a mental health impairment. Those who tested positive for opioids before release and had a mental health impairment were more likely to recidivate than those with either a history of positive opioid tests or mental health impairment alone or those with neither condition. However, between FY2014 and FY2016, inmates who tested positive for opioids before release and with no mental health impairment were more likely to recidivate than those with a history of positive opioid tests and a



## History of Positive Opioid Tests before Release<sup>3</sup> and Mental Health (Continued...)

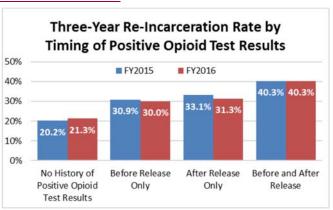
mental impairment. The recidivism rate difference between opioid users with and without a mental health impairment has increased from 1.2 percentage points in FY2014 to nearly five percentage points (4.9) in FY2016. This shift might be attributed to a continuity of care of mental health services for inmates transitioning from incarceration into the community. This shift could also be a result of inmates with comorbid mental health impairment and substance abuse disorders being more likely to receive treatment.

## FY2016 Recidivism, Mental Health, Location of Incarceration, and Opioid Tests<sup>3</sup>

Inmates with a mental health impairment, a history of positive opioid tests before release, and an SR incarceration in Jail Only had a recidivism rate of 39.3%. For those with the same characteristics who spent at least part of their incarceration in a VADOC facility, the recidivism rate was 28.1%. This eleven percentage point difference is nearly double the overall 5.9 percentage point difference in the recidivism rate between Jail Only and VADOC Facility SR releases. The recidivism rate for FY2016 SR releases from DOC facilities without a mental health impairment and no history of opioid use prior to release was 18.8%.

# Impact of Timing of Positive Opioid Tests<sup>4</sup> on Recidivism

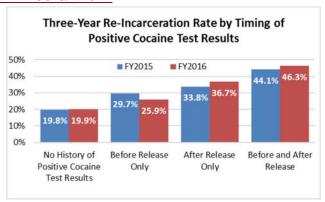
Deeper analysis was done to look at the timing of positive opioid drug tests to see if there were differences in recidivism rates for opioid use: only before release, only after release, and both before and after release. SR inmates released in FY2015 and FY2016 with positive opioid drug tests both before and after release had the highest recidivism rate among all inmates, at 40.3%. FY2016 SR releases saw a slightly higher reincarceration rate for inmates never testing positive for opioids compared to FY2015 releases. However, the FY2015 SR release cohort saw higher re-incarceration rates for inmates



testing positive for opioids either prior to or after release compared to the FY2016 SR release cohort. These results highlight the importance of treatment to prevent recidivism.

# Impact of Timing of Positive Cocaine Tests<sup>4</sup> on Recidivism

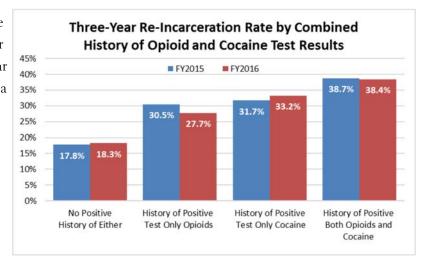
Differences in recidivism were also examined among inmates with positive cocaine drug tests: only before release, only after release, and both before and after release. Inmates with a history of positive cocaine drug tests both before and after their release had the highest recidivism rate among all inmates. Inmates who had a history of positive cocaine tests only after release had a higher recidivism rate than inmates with a history of positive cocaine tests only prior to release. This is consistent with the pattern seen with positive opioid drug tests. The FY2016 SR re-



lease cohort saw an increase in re-incarceration rates for inmates who tested positive for cocaine after release as well as those inmates who tested positive for cocaine prior to and after release compared to the FY2015 SR release cohort.

# Combined Impact of Positive Opioid and Cocaine Tests<sup>4</sup> on Recidivism

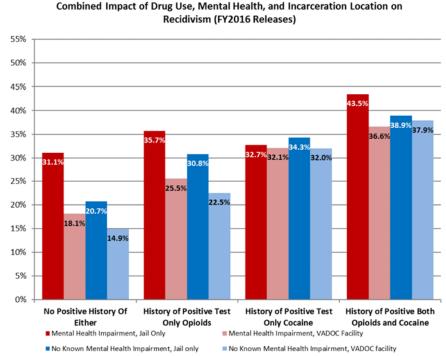
The effect of combined opioid and cocaine positive drug test results on recidivism was also explored for the FY2015 and FY2016 SR release cohorts. Similar patterns are seen in both fiscal years. Inmates with a history of positive drug tests for both opioids and cocaine before or within three years of release had the highest recidivism rate. Inmates with a history of testing positive for cocaine but not opioids had the second highest recidivism rate followed by inmates with a history of testing positive for opioids and not cocaine. Additionally, those inmates with no history of testing positive for opioids or cocaine



had a lower recidivism rate than the respective release cohort overall. The recidivism rate difference between inmates with a history of only testing positive for opioids and only testing positive for cocaine increased from 1.2 percentage points in FY2015 to 5.5 percentage points in FY2016. These results further underline the essential role of substance abuse treatment in reducing recidivism.

# Combined Impact of Drug Use<sup>4</sup>, Mental Health, and Incarceration Location

When factors of mental health, drug use, and incarceration location are looked at together, the results show how these factors compound upon one another. As previously discussed, Jail Only inmates with a mental health impairment have a much higher re-incarceration rate than those who spend at least part of their term of incarceration in a VADOC facility. When an additional factor of drug use is taken into consideration, we see those same inmates without a history of testing positive for opioids or cocaine have a much lower re-incarceration rate (31.1%) than do those with positive tests for both opioids and cocaine (43.5%). As previously seen, inmates with a history of positive drug tests, regardless of mental



health impairment or incarceration history, have a higher re-incarceration rate when testing positive for both opioids and cocaine compared to opioids or cocaine only. The recidivism rate for inmates who have a history of testing positive for cocaine and not opioids varied very little with an average recidivism rate of 33%. Regardless of mental health impairment status or drug test history, VADOC Facility inmates consistently have lower re-incarceration rates than their Jail Only counterparts. The difference in the outcomes of VADOC Facility inmates and Jail Only inmates is quite evident.

#### Summary and Conclusion

The analyses highlighted in this report indicate that risk factors historically tied with recidivism continue to play a central and statistically significant role in the prediction of recidivism in the FY2016 SR release cohort. Most broadly, there was less than a one percentage point increase (0.8) in recidivism rate for the FY2016 SR release cohort compared to the FY2015 SR release cohort. The percentage of technical violations among recidivists continued to increase from the FY2015 SR release cohort and is almost twice as high as the rate for the FY2013 SR release cohort. The continued higher rate of technical violations among recidivists may be connected to the increase of fentanyl and heroin deaths in Virginia, whereby there is an increased emphasis on treatment for inmates with substance abuse.

Mental health impairment, history of positive opioid and cocaine drug tests (both prior to and after release), and location of SR incarceration were found to be significant factors that impact recidivism. Each of these factors, when considered individually, is associated with an increase in the likelihood of recidivating. Exploring these factors together revealed the effect of one risk factor depends on the value of another risk factor when inmates have two or more of these characteristics. Regardless of whether inmates have a mental health impairment or a history of positive drug tests, VADOC Facility inmates consistently have lower re-incarceration rates than their Jail Only counterparts.

It is important to note that the percentage of Jail Only releases reach it's highest point ever in FY2016 with just under half, 49%, having spent their entire term of incarceration in a jail. Jail Only releases consistently have had higher recidivism rates than DOC facility releases due to the EBPs, educational programs, substance abuse, and mental health treatment in VADOC facilities. The increased rate of Jail Only releases may help explained the overall increased recidivism rate for the FY2016 SR release cohort.

In order to address the recidivism rate difference between inmates with and without a mental health impairment, using the 3D model for data-driven decision making, VADOC requested and was granted 20 full-time mental health positions to assist in the continuity of care between VADOC facilities and the community. These new positions have driven the convergence of recidivism rates of SR releases with and without a mental health impairment.

In addition, an examination on the timing of positive opioid and cocaine drug tests revealed that inmates who had a history of testing positive for opioids or cocaine after release had higher recidivism rates than inmates with a history of testing positive for opioids or cocaine prior to release<sup>4</sup>. Further, inmates with a history of positive drug tests for opioids and cocaine were more likely to recidivate than inmates who had a history of a testing positive for either opioids or cocaine. It is also important to note that inmates with no history of positive drug tests for opioids or cocaine had a recidivism rate 5.6 percentage points lower than that of the overall FY2016 release cohort (18.3% and 23.9%, respectively). The results underline the central role of substance abuse treatment in preventing future recidivism.

#### Footnotes:

- <sup>1</sup>VADOC Research-Evaluation Unit (2021), State Recidivism Comparison Report.
- <sup>2</sup> VirginiaCORIS: The computer-based Virginia Department of Corrections inmate information management system.
- <sup>3</sup>History of positive opioid tests before release was only examined across SR release cohorts from FY2013 to FY2016. Inmates with a history of positive drug tests include anytime prior to release.
- <sup>4</sup> History of multiple drug tests was evaluated in the FY2015 & FY2016 SR releases cohorts. History of drug tests was examined in inmates before or within three years of release (end of three year follow-up for non-recidivists or recidivated date for recidivists).
- <sup>5</sup> The chi-square (χ²) test statistic was used to determine the statistical significance of the difference. This test yielded a p-value < 0.001.

#### RESEARCH-EVALUATION UNIT

Virginia Department of Corrections 6900 Atmore Drive P.O. Box 26963 Tama S. Celi, PhD. Yan Jin, MBS Brittney Via, MA Email: tama.celi@vadoc.virginia.gov