

Evaluation and Impact Assessment of Virginia's REVIVE! for First Responder Training Program

2024 Update



September 2024

Evaluation and Impact Assessment of Virginia's REVIVE! for First Responder Training Program: 2024 Update

Prepared for:

Virginia Association of Chiefs of Police and Foundation (VACP) And
Virginia Department of Behavioral Health & Developmental Services (DBHDS)

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About PlanRVA

PlanRVA is a regional convener, planning agency and provider of essential services to the localities of the Richmond Region. We are an organization comprising nine local governments for the purpose of encouraging collaboration to address regionally significant issues and opportunities. Also known as the Richmond Regional Planning District Commission (RRPDC), our organization encompasses the localities of Ashland, Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Richmond. PlanRVA convenes community representatives to build relationships and capacity across the region; provides technical assistance to member jurisdictions; serves as a liaison between local, state and federal governments; and implements services when requested by members.

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Abbreviations

CAGR	Compound Annual Growth Rate
DBHDS	Virginia Department of Behavioral Health and Developmental Services
DOC	Department of Corrections
EMS	Emergency Medical Service
HIDTA	High Intensity Drug Trafficking Area
IBR	Incident Based Reporting
MOU	Memorandum of Understanding
ODMAP	Overdose Mapping and Application Program
OONE	Opioid Overdose and Naloxone Education
Q	Quarter (Calendar Year)
VACAP	Virginia Community Action Partnership
VACP	Virginia Association of Chiefs of Police and Foundation
VDH	Virginia Department of Health
VSP	Virginia State Police

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Executive Summary

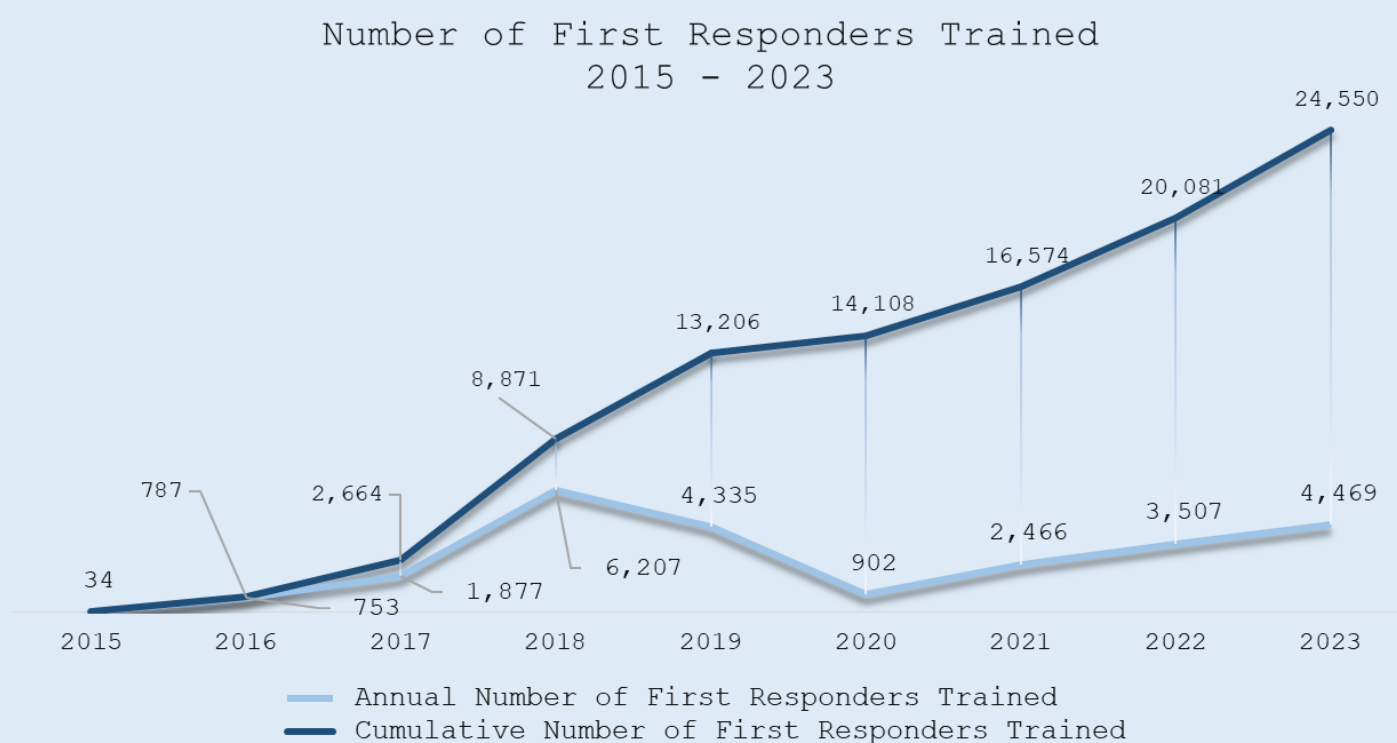
Opioid Overdose and Naloxone Education for Virginia program (OONE), more commonly referred to as the REVIVE! for First Responders program was implemented in 2015. The Virginia Association of Chiefs of Police (VACP) manages a First Responder Naloxone grant for the Virginia Department of Behavioral Health and Developmental Services (DBHDS). The project goals are to increase access and distribution of Naloxone to all First Responders in the Commonwealth of Virginia, increase participation in the DBHDS REVIVE! for First Responders training, and to increase the number of REVIVE! Trainers and Master Trainers. To meet this goal, VACP provides training to First Responders in law enforcement agencies, emergency medical services (EMS), fire service agencies, and correctional facilities. Since 2020, the training has been expanded to also include those employed with the following bodies in Virginia: military police, court services, regional and local jails, juvenile justice, probation and parole, state parks, and the department of forestry. The training covers introduction to various types of opioids, how opioid overdoses occur, how to identify symptoms, the risk factors involved with an opioid overdose, and how a person should respond to an opioid overdose with Naloxone. The training is provided for free, and the trainees are also eligible to receive free Naloxone and rugged Naloxone carrying cases. The REVIVE! for First Responders training program was run by DBHDS from 2015 to 2019. VACP has been managing the training program since March of 2020. This report was first prepared in September of 2021 to review the output and outcome of the REVIVE! for First Responders program activities. This 2024 update of the report covers July 2023 through June 2024. PlanRVA (Richmond Regional Planning District Commission) received a request from VACP to conduct an updated analysis building upon the comprehensive report that was prepared in November of 2022.

The objective of this study is to evaluate the training data since the last reporting period, compare outcomes with historical trends, and to understand the strengths and shortcomings of the program, and propose considerations for the future. We have used a combination of

quantitative and qualitative methods to achieve that goal. The following is a list of important findings from the 2024 evaluation:

- 3,852 First Responders were trained under Virginia's REVIVE! program from July 2023 to June 2024. This is approximately the same number of trainees as the previous reporting period, showing continued positive progress since the low during the COVID-19 pandemic. Historical trends have been considered (Fig. 1), and the program has been increasing training since 2020.

Figure 1 Total First Responders Trained by Year



- The overdose death rate has been consistently rising until 2021. However, 2022 and 2023 represent a decrease in the average rate of opioid emergency department visits per capita and average rate of opioid overdose deaths per capita.
- This year did not feature as strong a correlation between localities with high REVIVE! trained first responders and localities with high opioid deaths per capita as previous reporting periods. Of the top 20 localities with the highest training and top 20 localities with the highest per capita opioid overdose deaths this reporting period, only Newport News City occurs on both lists. Though, cumulative training totals align with better with localities experiencing high opioid overdose deaths.

- Most Virginia localities show high correlation between the number of First Responders trained and the rate of overdose death reported. This report also identifies localities that have disproportionate share – more trainees where overdose death rates are relatively lower, or less trainees where overdose deaths are relatively higher. Although imbalanced localities have greatly been reduced, it is recommended that VACP continue to focus on providing training in those localities and continue to strategically target localities for training.
- About 91 percent of the participants were very satisfied or satisfied with their trainers and the level of expertise/experience they brought to the training. Similarly, 91 percent of the participants were either very satisfied or satisfied with the training materials, and 86 were very satisfied or satisfied with the training.
- Significant improvement in confidence and positive attitude towards Naloxone administration was noted by comparing participant responses taken before and after training sessions. 100 percent of the Train-the-Trainer and Recertification program participants said they felt comfortable administering Naloxone.
- Survey responses indicated that trainees found the instructor to be proficient in the material, responding that the “instructor was very knowledgeable,” and “the instructor was very informative.”



Tiana Vazquez and Stephanie Diaz along with representatives from Henrico County Division of Fire and Virginia Department of Health at Delegate Destiny LeVere Bolling Town Hall meeting, April 30, 2024 [photo by Stephanie Diaz].

Background

The VACP oversees the First Responder Naloxone grant in collaboration with the Virginia DBHDS. The project's primary objectives are to enhance Naloxone accessibility among First Responders statewide, promote participation in the DBHDS REVIVE! for First Responders training, and increase the number of REVIVE! Trainers and Master Trainers. To meet the goals of this program, First Responder agencies in the Commonwealth of Virginia are eligible to receive Naloxone, rugged Naloxone carrying cases, and training at no cost to the agency. Since 2020, the eligibility for free Naloxone, supplies, and training expanded beyond Law Enforcement, Non-EMS Fire Service Agencies, and Correctional Facilities to encompass Military Police, Court Services, Regional and Local Jails, Juvenile Justice, Probation and Parole, State Parks, and Forestry located within the Commonwealth of Virginia. In 2024, dispatchers and emergency communications personnel were added to the list of people eligible to participate in the First Responders Training.

Training

REVIVE! is the OONE program designed for the Commonwealth of Virginia, offering comprehensive training to recognize and respond to opioid overdose emergencies. The program caters to diverse audiences with two distinct training tracks: Lay Persons training tailored for private citizens and First Responders training for members spanning Law enforcement, Non-EMS, Fire Departments, Local and Regional Jails, Probation and Parole, Forestry, Military, Juvenile Justice, Court Services, State Parks, and Correctional Facilities. Successful completion of the REVIVE! for First Responders training is a prerequisite for receiving free Naloxone supplies through the First Responders Naloxone Program.

There are two levels of training provided to First Responders, Basic Rescuer and Train-the-Trainer. The Basic Rescuer training focused on the following objectives:

- Enhance awareness of the opioid epidemic's impact on Virginia and the crucial role of First Responders in mitigating the crisis.
- Understand the relevant sections of the Virginia Code related to Naloxone dispensing, administration, and safe reporting of overdoses.
- Understand the harm reduction model and relevant Virginia Code sections related to harm reduction initiatives.
- Understand risk factors for opioid overdose, the overdose continuum, and how Naloxone works to reverse fatal effects of overdose.
- Develop the ability to recognize signs of opioid overdose and respond effectively to such emergencies.

- Learn about the "Leave Behind" program and how to conduct a Rapid Revive training.
- Become familiarized with actual risk factors associated with fentanyl exposure to First Responders and learn about safety practices.
- Understand the concept of responder fatigue and explore available resources for support.

The Train-the-Trainer curriculum extends beyond Basic Rescuer training, offering instructions on how to conduct effective training sessions and detailing reporting requirements for Certified First Responder Trainers. This advanced training equips First Responders with the skills to impart essential knowledge and ensure the program's sustained impact through ongoing training.

Naloxone

Naloxone, a critical tool in combating opioid overdose, is supplied free of charge to eligible agencies as part of the comprehensive initiative. To receive this life-saving resource, staff from the participating agencies must complete the REVIVE! for First Responders training program, ensuring that the key personnel are equipped with the necessary skills and knowledge to effectively administer Naloxone in emergency situations.

Following the training, agencies who are interested in receiving naloxone at no cost through this program can order naloxone directly from the Virginia Department of Health (VDH) Division of Pharmacy Services through their online ordering system after signing a Memorandum of Understanding (MOU) with VDH. VDH's user-friendly pharmacy platform allows agencies to efficiently place orders for naloxone kits tailored to their specific needs. VDH ships the naloxone directly to the agencies and invoices the VACP for the cost of the naloxone.

As of January 2021, the naloxone provided through this grant includes Narcan 4mg nasal spray. Each kit is carefully packed to contain two doses of Naloxone providing First Responders a failsafe unit in case one breaks, or in case more than one dose is needed to revive a victim.

First Responder agencies have the flexibility to order a sufficient number of kits, ensuring that every active member can carry two doses of Naloxone. Additionally, agencies can place orders for additional Naloxone to replace used or expired kits and maintain a continuous supply chain. Invoices for Naloxone orders are sent by VDH directly to the VACP for payment. Agencies are not burdened with upfront costs, eliminating the need for reimbursement processing. This ensures that the agencies can focus on their mission without financial burden and unnecessary administrative hassle.

Carrying Cases

To foster a proactive approach to opioid emergencies, and to make Naloxone kits available at all times, VACP provides rugged nylon carrying cases that can be attached to a uniform. Staff can choose from a range of carrying cases including hard-shell and soft cases, and various attachment choices including metal clips, Molle clips, or Velcro clips, whichever best fits their operational needs. The ordering process is straightforward, initiated through ODKit.com. Carrying cases are shipped directly to First Responder agencies and the invoices associated with the carrying cases are directed to the VACP for payment without agencies needing to pay up front and wait for reimbursement.

Summary of Findings from Prior Studies

This 2024 update focuses on evaluating the training activities from July of 2023 through June of 2024. The first evaluation of the REVIVE! which was conducted in 2020 evaluated the program's growth and effectiveness by analyzing ten years of historical data on opioid overdose deaths in Virginia and the training activities since the program's inception in 2015. The 2022 and 2034 updates of this report featured fiscal year reporting period additions to the data and updated analysis.

Key findings from past reports:

- Opioid-related deaths have been consistently rising over the last 15 years. Overdose death rates were rising moderately between 2007 through 2015 and more aggressively since 2015 through 2019.
- Larger cities and counties with substantially large number of First Responders trained through the program reported larger reduction in opioid-related death rates compared to localities with fewer trained First Responders.
- Localities with the lowest number of REVIVE! trainees and historically low overdose deaths show no change in death rates in pre- and post- REVIVE! timelines.
- Participants reported a higher level of confidence in successfully administering the drug to the victims of overdose after receiving training through REVIVE!
- Participants, whether voluntary or mandatory, expresses satisfaction and willingness to engage.
- Suggestions included expanding training to laypersons and participants advocated for broader accessibility to training.
- In 2020, most training and outreach was conducted through online medium due to the need for social isolation to protect from the COVID-19 pandemic. Participants suggested that the online training format be offered (in addition to the in-person training) even after the effects of the pandemic are over. The virtual training option

allowed participants to receive the training under the situation when they were not able to travel longer distances, which is especially true for participants from rural and outlying areas. Participants have been heard and virtual training has remained an option along with in-person.

- Training activities ramped up substantially as the impact of COVID-19 subsided.
- The overdose death rate had been rising consistently until 2021. 2022 represented a change in historical trends. Since then, the per capita rate of opioid emergency department visits has been decreasing.
- Most Virginia localities show high correlation between the number of First Responders trained and the rate of overdose death reported. The location and number of training offerings seem strategically placed, however, there is still room for more strategic targeting.

Study Objective

The 2024 update of this report builds on the previous iterations of this study to evaluate the changes since the last reporting period. The program is annually assessed on its process, impacts, and outcomes. The outcome of the REVIVE! for First Responders program is measured by tracking the number of First Responders trained during each reporting period. The program process is evaluated from the survey administered by VACP to trainees, and the program impact is measured by evaluating the trend in reported overdose deaths since the last reporting period¹.

Research Methodology, Data Sources, and Limitations

The total number of First Responders trained through the REVIVE! program is the measure representing program outcomes. VACP provided us the comprehensive training data from 2015 through 2024 quarter (Q) 2 in electronic format. The data included information on training date, trainer name, trainee name, and the name of the organization where the trainee works. The database also mentions the location of the organization where the trainee belongs to, and this location has been assumed to be the primary service location of the trainee and matched with the corresponding geographic identifiers.

We compared all 133 localities in Virginia to better understand trends and gaps in REVIVE! Training and overdose related deaths.

The PlanRVA team performed further data cleaning by removing multiple entries for the same trainee under the same trainer and on the same date. During the cleaning process, special consideration was given to the individuals coming for a refresher training or those registering into multiple training categories. This reporting period also saw the first trainee duplications from those seeking recertification. A new field combining individual IDs, and the date of training was created and multiple entries for the same combination of person, date, training type, and training location were removed.

Death due to drug overdose is our outcome variable. We obtained the data from the Virginia Department of Health's Office of the Chief Medical Examiner which prepares and maintains a

¹ We understand that using this measure to evaluate program output could be affected by the post COVID-19 surge in drug overdose and overdose-related deaths. We also acknowledge that there is no alternative quantitative measure of program outcomes available in the public realm at the time of this reporting. Additionally, we would like the reader to know that the public release of the data on overdose-related deaths is postponed by about two quarters.

public repository of opioid related death database for the Commonwealth². We used historical data from 2015 to 2023 for this update report.

In order to maintain methodological consistency with the previous report, this study uses CAGR which calculates the average annualized rate of change in overdose deaths. CAGR provides a smoothed, compounded annual rate of change offering a more accurate representation of the overall growth or decline. CAGR can be represented through the following expression:

$$CAGR = \left(\left(\frac{EV}{BV} \right)^{\frac{1}{n}} - 1 \right) \times 100$$

Where,

BV = Beginning value representing the number of overdose death at the beginning of the period, EV = Ending value representing the number of overdose death at the end of the period,
n = number of years between BV and EV

The value of CAGR helps us compare the obtained value of rate of overdose deaths in 2022 and the rate predicted based on previous 3-year timeframe 2019-2021. This model was used to numerically estimate the overdose death rate for the last year with complete data (2022), based on historical data, and the estimated value was compared with observed death rate for 2022.

Additionally, the program's effectiveness was evaluated using the participant response collected through an online survey. The survey was conducted by VACP staff. The following probes were included in the survey instrument:

- Reasons for attending the training,
- Overall satisfaction with the training and content,
- Overall satisfaction with the trainers,
- Perceptions of the training (suggestions for improvement, comments),
- Comfort with and perceptions of Naloxone administration following the training,
- Frequency of Naloxone administration following the training,
- If the participants would recommend the training to others, and a few other qualitative comments and suggestions for improving the program.

²Data for 2023 is incomplete, preliminary, and subject to change. 'All Opioids' includes all pharmaceutical and illicit versions of fentanyl, heroin, and one or more prescription opioids.

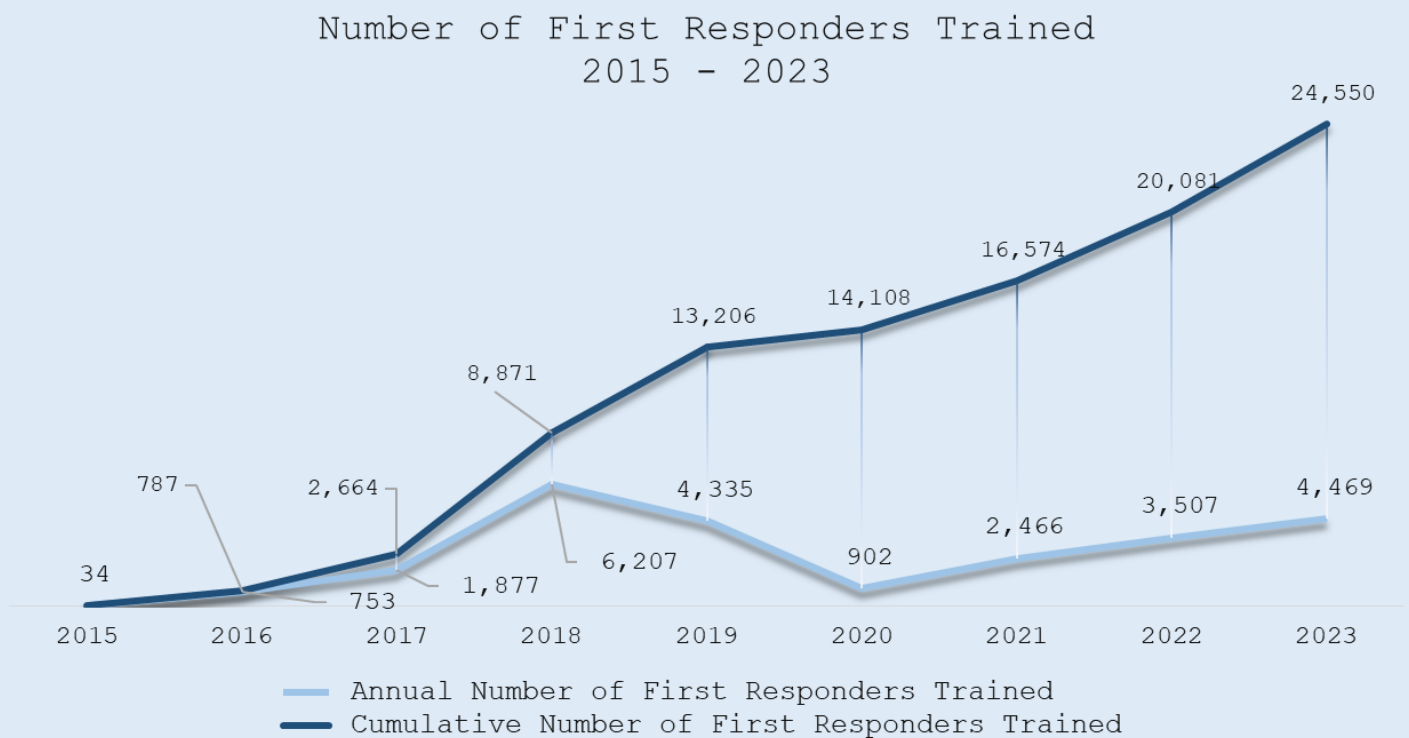
REVIVE! Training and Opioid Overdose Trends in Virginia

REVIVE! Training Statewide Trend

For this reporting period, there were 3,852 registration records listed in the basic rescuer training, 243 registration records listed in the Train-the-Trainer sessions, and 66 records in the recertification records.

Figure 1 represents the annual and cumulative trend in REVIVE! for First Responders Training in 133 Virginia localities from 2015 to 2023. The cumulative total of trainees in the First Responders program through calendar year 2023 is 24,550. At the start of the program, the number of trainees grew consistently and reached a high of 6,207 trained in 2018. The COVID-19 pandemic impacted the ability to conduct on-site training activities. There was a decrease in total trainees in 2020, but the program has shown a consistent annual increase since the first year of the pandemic.

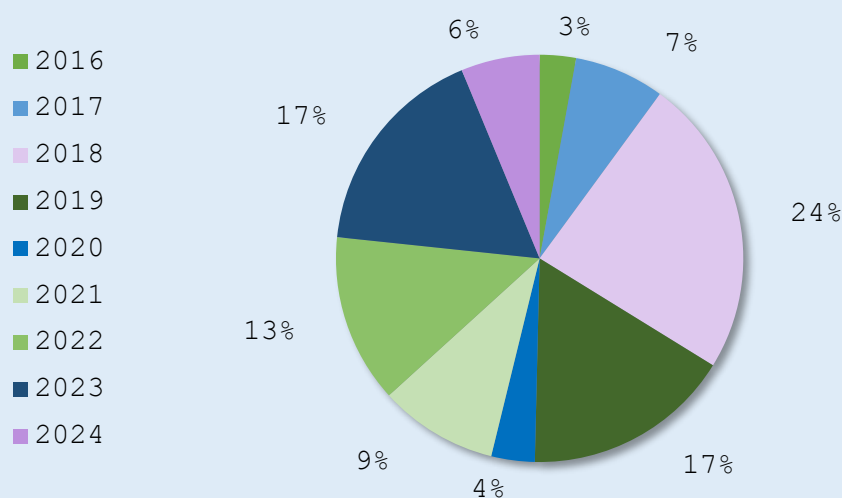
Figure 1 Total First Responders Trained by Year



With the full calendar year of 2023 now completed since the last update of this report, its total has been updated to reflect 4,469 trainees. The first two quarters of 2024 show that 1,632 trainees have been reported for this period. The cumulative aggregate of trainees between 2015 and the second quarter of 2024 across all localities has grown from 34 to 26,182. The post-pandemic growth has shown a logarithmic trend with 2021 increasing 170% over 2020. Since the initial large increase, growth has evened out. The year 2022 has a growth rate of 42% over 2021 and 2023 has a growth rate of 27% over 2022.

Figure 2 Breakdown of Annual Gain

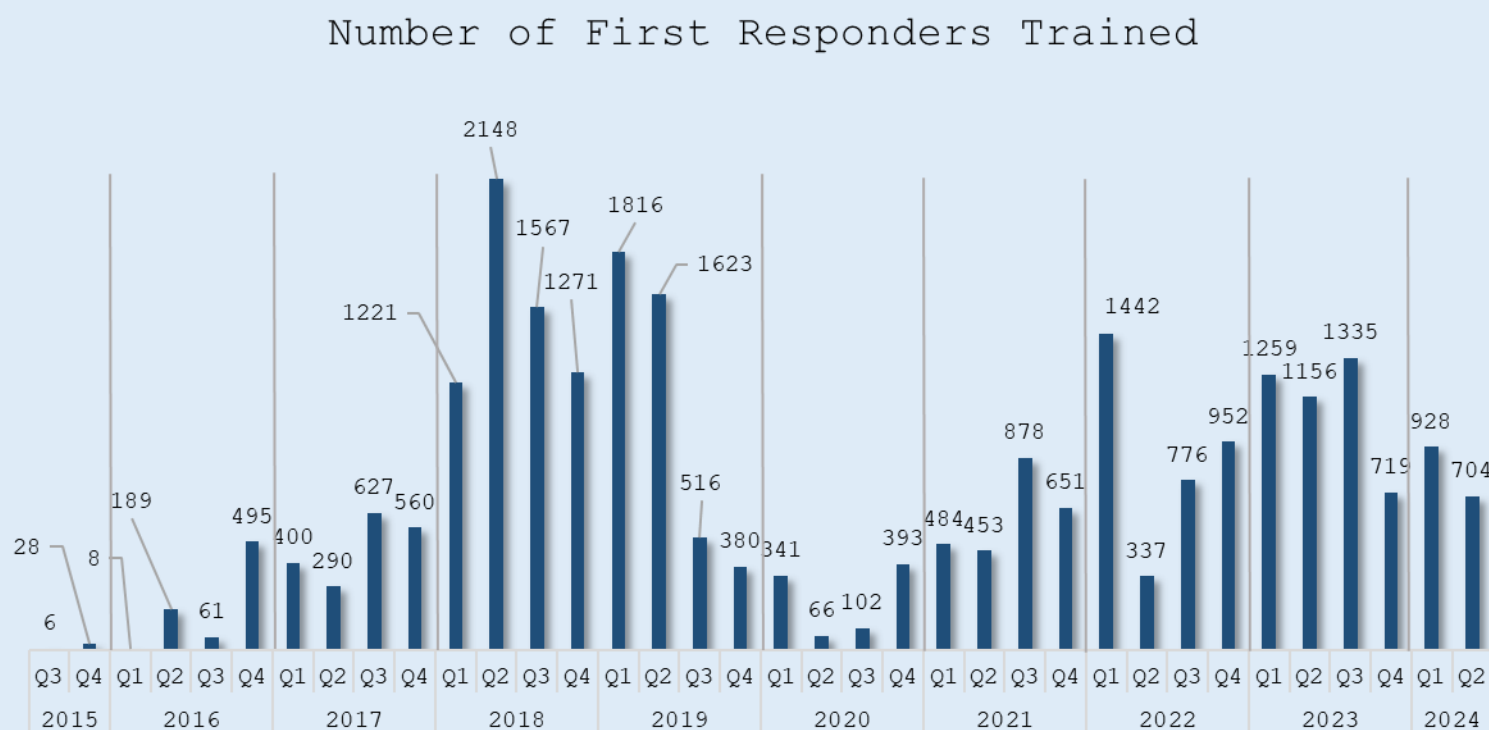
Annual Gain as a Percent of Cumulative Total First Responders Trained



The initial program year of 2015 makes up less than 1% of the cumulative total of the trainees and is not on Figure 2. The following year 2016 represents 3% of the cumulative total, and 2017 represents 7% of the cumulative total. The year 2018 experienced a large growth in trainees and represents 24% of the cumulative total, and 2019 followed with 19% of the cumulative total. The years 2020 and 2021 were impacted by the global pandemic and their shares of the cumulative total is 4% and 9%, respectively. The year 2022 had growth in training and its cumulative share is 14%.

A total of 4,469 First Responders were trained in 2023, which is about 17% of all First Responders trained over the program's history (Fig. 2). This ties 2023 as a share of the cumulative total with 2019, a pre-COVID year. The cumulative share of 2024 is 6% as of Q2 reporting.

Figure 3 Number of First Responders Trained by Quarter



Of all the full calendar years reported, Q1 and Q2 months represent 54% of the cumulative total of First Responders trained and Q3 and Q4 months represent 45% of the cumulative total. Figure 3 presents the numbers by quarters compare the first two quarters of 2024 with the corresponding quarters of the prior years. Training did not begin until Q3 in 2015 and therefore the first two quarters are not in Figure 3. The total trained during the first two quarters increased from 197 in 2016 to 690 in 2017. The years 2018 and 2019 had the highest first two quarters, with 3,369 and 3,439 First Responders trained. These periods in 2018 and 2019 represent 26% of all First Responders trained, which each year having 13% of the total number of First Responders trained during Q1 and Q2. The number dropped to 407 during the first two quarters of 2020 and increased in 2021 to 937. During the same period in 2022, a total of 1,736 First Responders were trained. The total trained in the first two quarters of 2023 was 2,415, and in 2024 the total trained in the same period was 1,636.

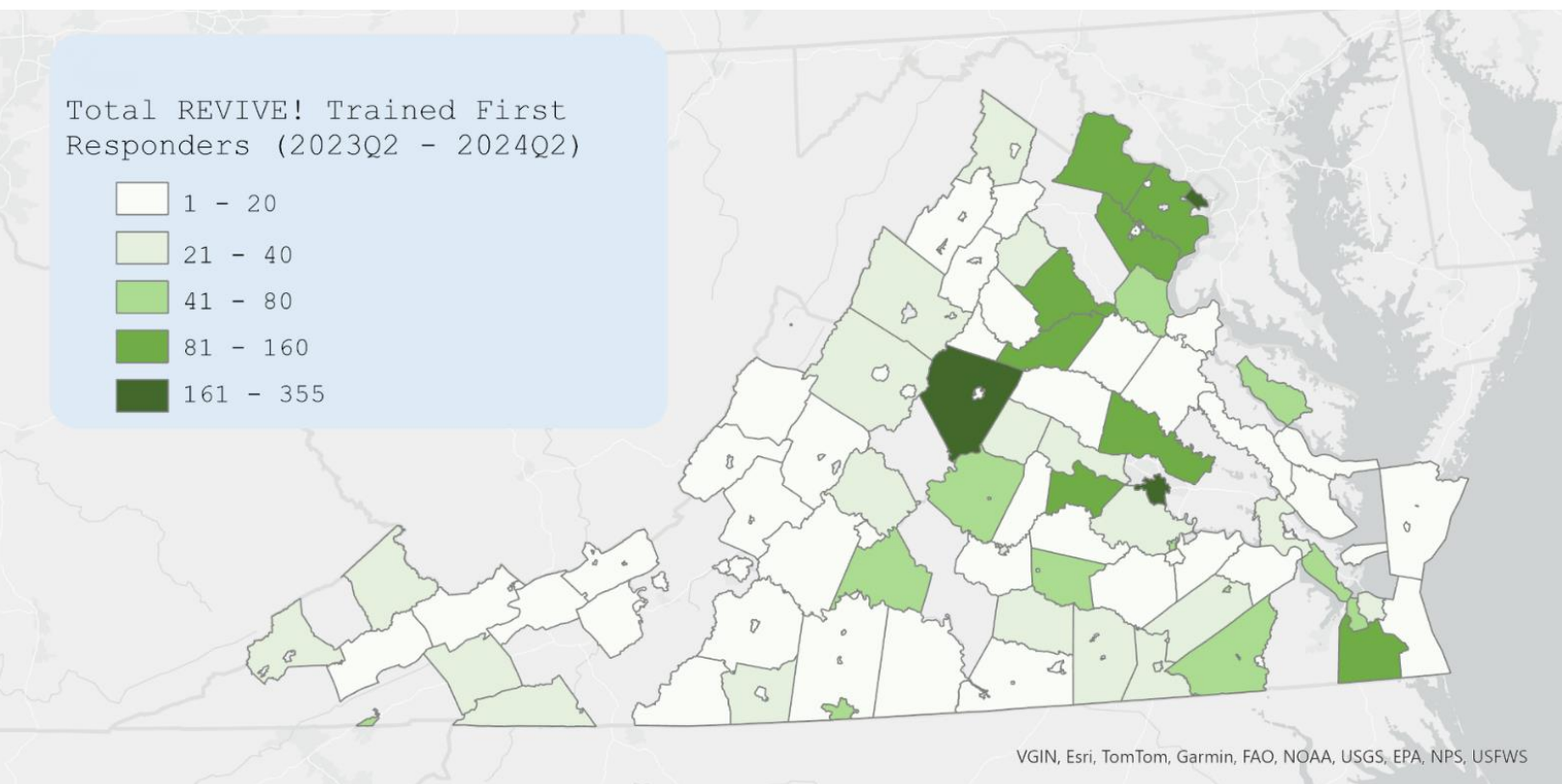
Geographic Distribution of REVIVE! Training across Virginia Localities (2015-2024)

The number of trained First Responders has been summarized into city and counties. This reporting period 96 out of the 133 cities and counties in Virginia had participant representation in the REVIVE! Training program. There were several localities that experienced significant increases in their cumulative total in this reporting period. There were eight localities with a growth rate of over 100% in their cumulative totals. They are Franklin City, Colonial Heights City, Albemarle County, Arlington County, Middlesex County, Bristol City, and Orange County.

The five localities with the highest total cumulative number of trainees as of the 2024 Q2 are Richmond City (1,747), Fairfax County (1,369), Chesapeake City (1,303), Chesterfield County (794), and Newport News City (615). Oppositely, the five localities with the lowest total number of trainees as of 2024 Q2 are Franklin City (1), Falls Church City (3), Northumberland County (6), Highland County (7), and Manassas Park City and Charles City County tied with 8 trained First Responders.

With the addition of the 2023 Q2 – 2024 Q2 numbers, there are now 23 localities that have between 250 to 500 First Responders in total. Last reporting period there were only 16 localities that fell into this range.

Figure 4 Geography of Trained First Responders This Reporting Period



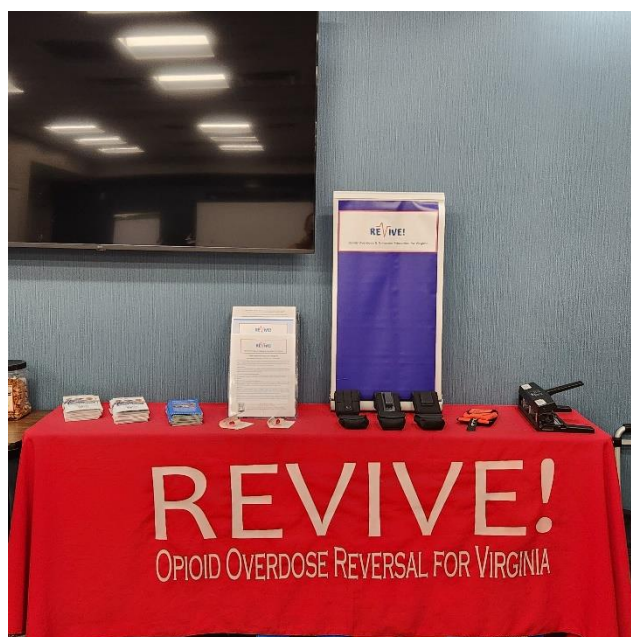
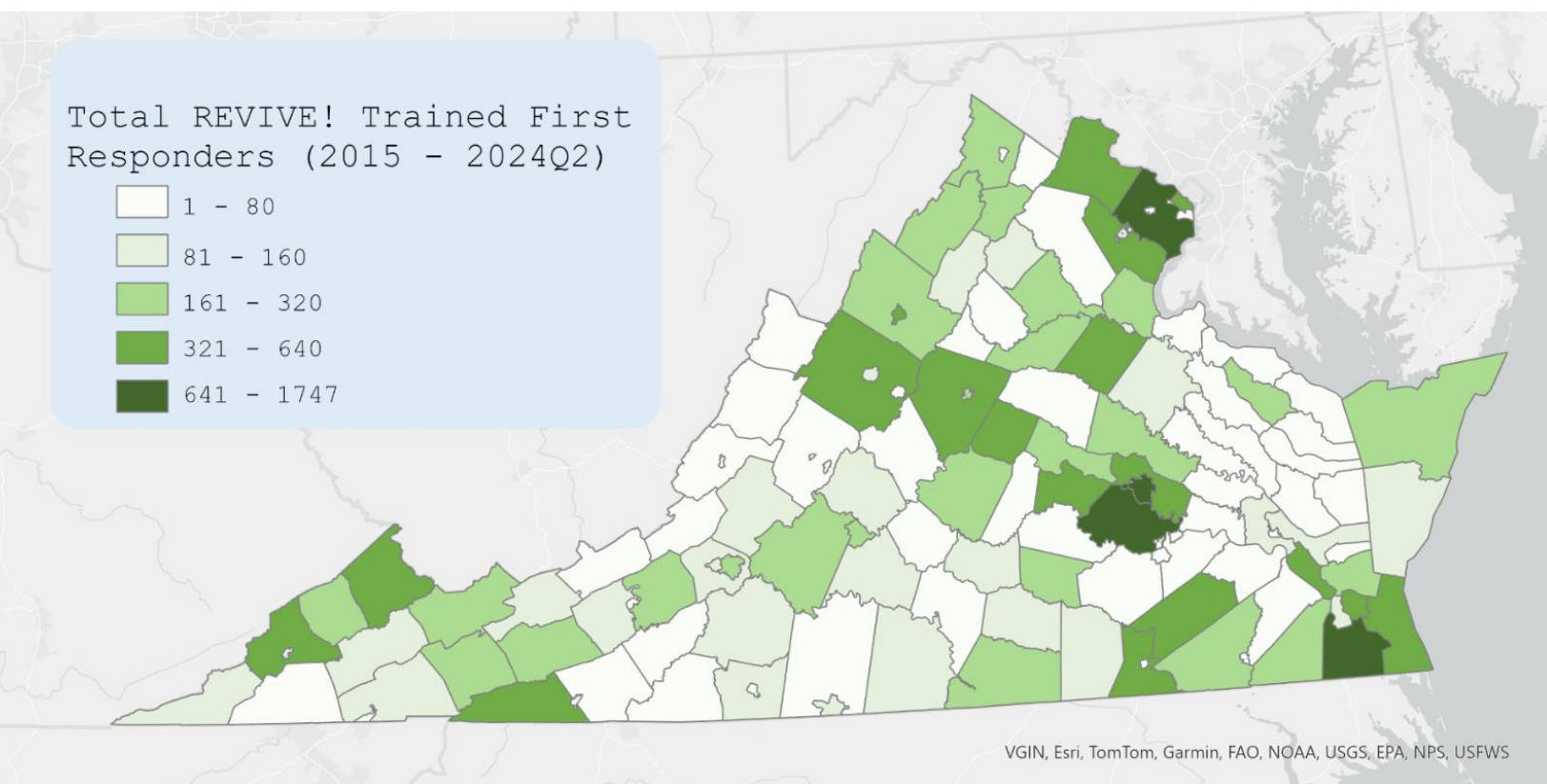
The following localities have reported between 250 to 500 First Responders trained under the program:

- Albemarle County
- Augusta County
- Buchanan County
- Charlottesville City
- Culpeper City
- Fluvanna County
- Goochland County
- Grayson County
- Greensville County
- Harrisonburg City
- Henrico County
- Loudon County
- Norfolk City
- Powhatan County
- Prince William County
- Richmond County
- Roanoke City
- Spotsylvania County
- Suffolk City
- Sussex County
- Tazewell County
- Virginia Beach City

Figure 4 shows the geographic distribution of all First Responders trained under the REVIVE! program from its inception in 2015 until the second quarter of 2024. The color spectrum runs from 1 to 1,747 where lighter colors represent fewer trainees and darker color represent higher numbers. Figure 5 shows the total number of First Responders trained under the program during 2023 and 2024. The following localities trained over 100 First Responders during the current reporting period:

- Albemarle County
- Arlington County
- Chesapeake City
- Culpeper County
- Fairfax County
- Harrisonburg City
- Loudon County
- Powhatan County
- Prince William County
- Sussex County

Figure 5 Geography of Total First Responders Trained

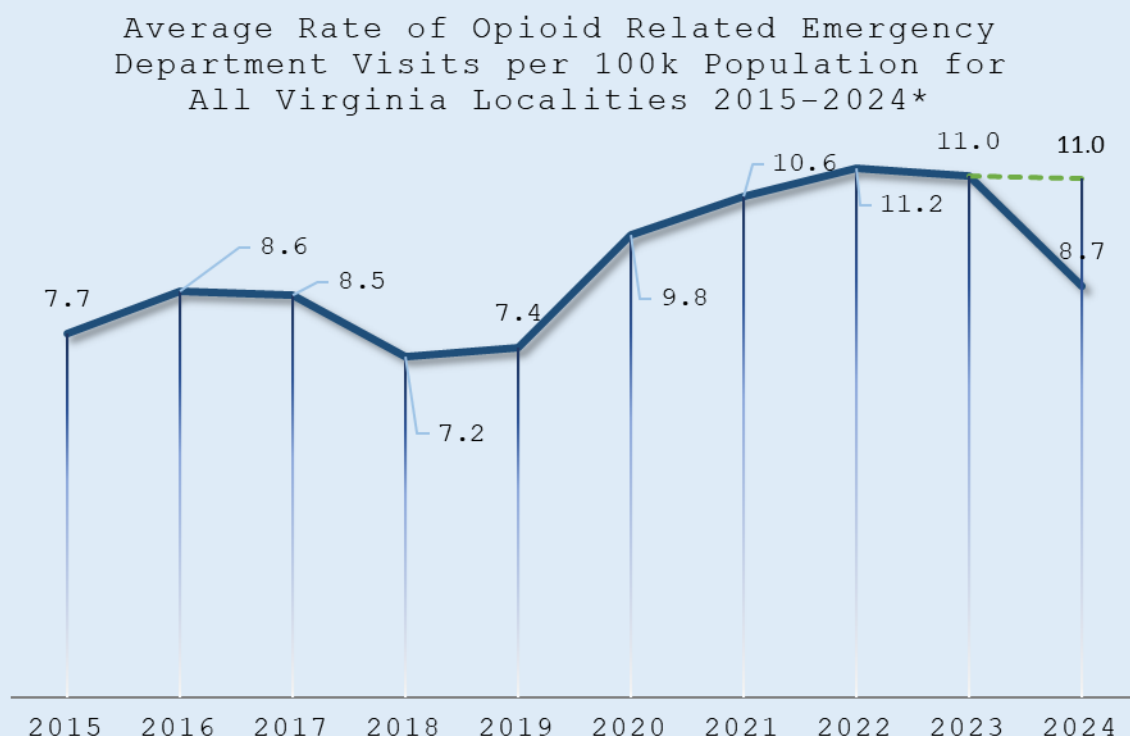


REVIVE Information Table at the April 2024 VACP First Line Supervisors Training School *[photo by Stephanie Diaz]*.

Opioid Overdose and Death Trend in Virginia

We also examined overdose related deaths and emergency department (ED) visits between 2015 and 2024 Q2 in 133 Virginia localities. The average rate of opioid related ED visits per 100k population for all Virginia localities rose between 2015 and 2016 before dropping to a low in 2018, then subsequently increasing each year to the highest rate in 2023 Q2 (11.6). In 2023, the locality with the highest rate of opioid related ED visits per 100k population was the city of Portsmouth (51.4 per 100K population), and the lowest was the city of Williamsburg (1.1 per 100k population). Figure 6 shows the average rate of opioid related ED visits per 100k population for all Virginia localities between 2015 and 2024 Q2. The predicted rate for 2024 was expected to be 11.0 based on a regression with the historical data. The observed rate for 2024 (January – August) is 8.7. So far for 2024, the emergency department visits due to opioids are trending to be less than predicted.

Figure 6 Annual Rate of Opioid ED Visits

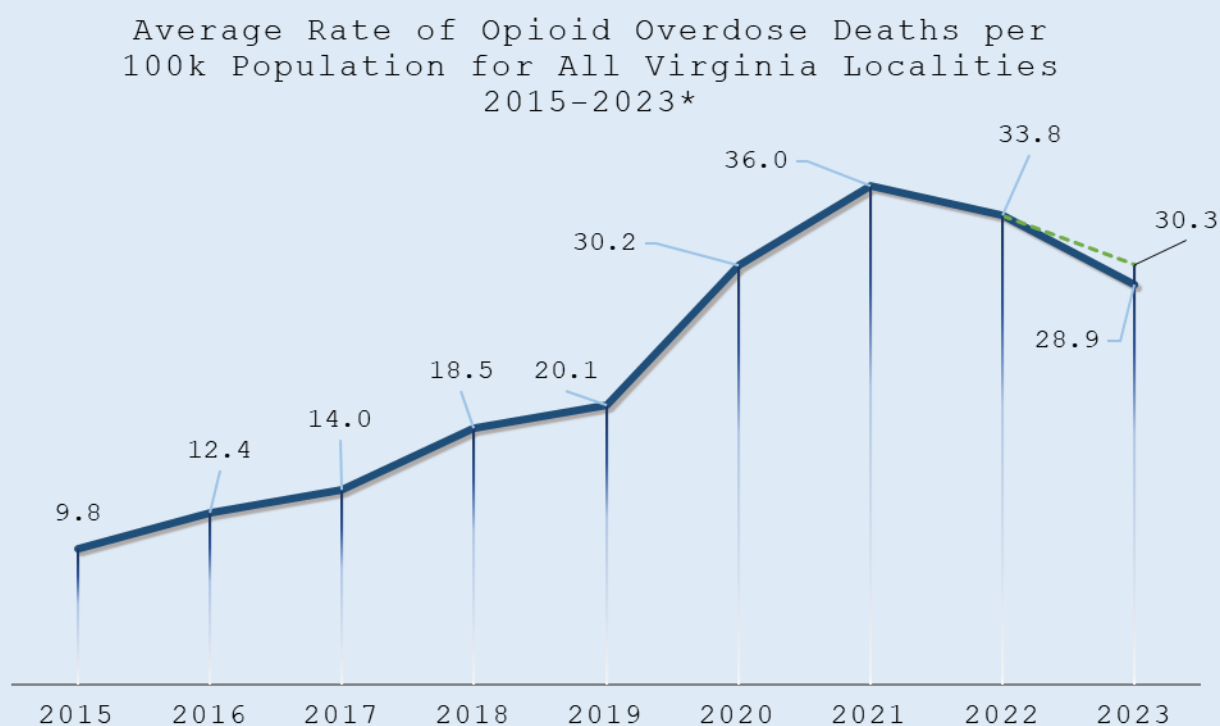


*Average rate calculations for the year 2024 is based on data from January through August.

Source: Virginia Department of health (<https://www.vdh.virginia.gov/opioid-data/emergency-department/>), accessed on 9/30/2024.

Figure 7 represents the rate of opioid overdose deaths per 100,000 population for all Virginia localities between 2015 and 2023. The overdose death rate had been consistently increasing from 9.8 deaths per 100k population in 2015 to a high of 36 deaths per 100k population in 2021. A regression model predicted the rate for 2023 would be 30.3 deaths per 100,000 people. However, the observed rate for 2023 based on the data obtained from VDH Office of the Chief Medical Examiner is 28.9 deaths per 100,000 people. In this regard, the observed rates are slightly lower than the predicted rate for 2023. The years 2022 and 2023 represent a change in the historical trend of opioid overdose deaths per capita. Both years have had the observed rate be lower than the predicted rate.

Figure 7 Annual Rate of Opioid Deaths



*Complete data for opioid related deaths is available through the end of 2023.

Source: Virginia Department of Health, Office of Medical Examiner (<https://www.vdh.virginia.gov/medical-examiner/forensic-epidemiology/>), accessed on 9/30/2024.

Geographic Distribution of Overdose Deaths and REVIVE! Training Outputs

For each locality, per-capita measures were calculated to allow for standardized comparison across the two outcome variables; the number of trained First Responders and the count of opioid overdose deaths. Figure 8 represents the geographic distribution of REVIVE! trained First Responders per 1,000 people across Virginia. The following are the top 10 localities with the highest number of First Responders trained per 1,000 people:

- Bland County
- Buchanan County
- Buckingham County
- Grayson County
- Greensville County
- Northampton County
- Nottoway County
- Richmond County
- Sussex County
- Wise County

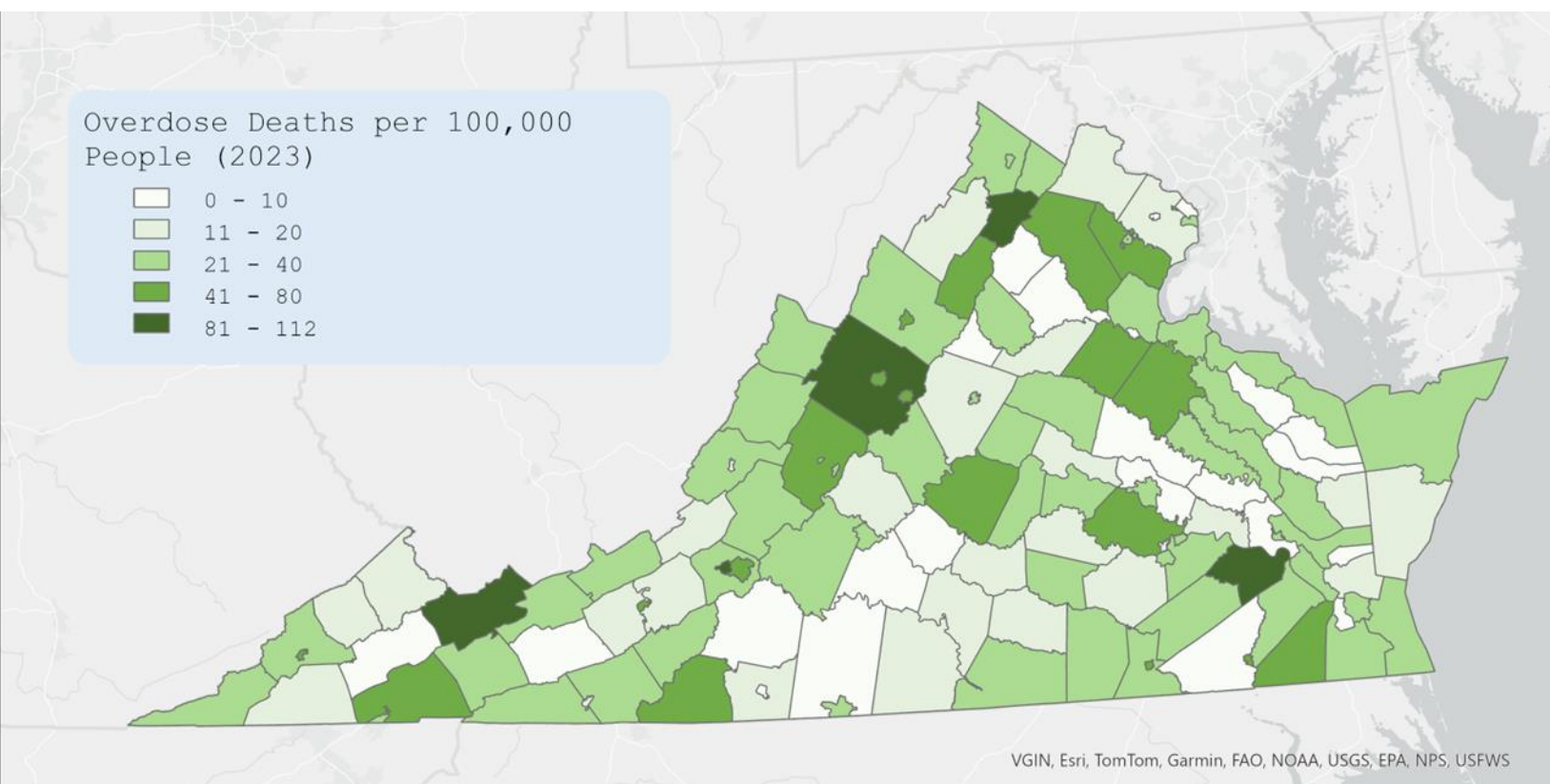
Sussex County has the highest per capita measure, with 40 trained First Responders per 1,000 people, followed by Richmond County (34 per 1,000), Greensville County (32 per 1,000), Grayson County (30 per 1,000), and Bland County (23 per 1,000). Sussex, Richmond, and Bland counties all have low populations (within the lowest 20 localities) and a comparatively high count of trained First Responders. Only 3 localities are different in this top ten list from the previous reporting period.

Similarly, the top 10 localities with the lowest number of REVIVE! trained First Responders have only 3 localities that are different than in the last reporting period. Training has maintained a consistent geography over the past two years. The top 10 localities with the lowest number of REVIVE! trained First Responders per 1,000 people are as follows:

- Alexandria City
- Dinwiddie County
- Falls Church City
- Floyd County
- King George County
- Manassas Park City
- Northumberland County
- Prince George County
- Prince William County
- Virginia Beach City

The localities with the least number of trained First Responders per 1,000 people are Manassas Park City, Falls Church City, and Alexandria City have less than 1 trained First Responder per 1,000 people. Northumberland County and Prince George County both have 1 trained First Responder per 1,000 people. Richmond City is a unique locality whose per capita measure is particularly insightful. Richmond City falls within the top 20 localities with the highest population and the top 20 localities with the highest per capita measures, having 8 First Responders per

Figure 9 Opioid Overdose Rate Per Capita



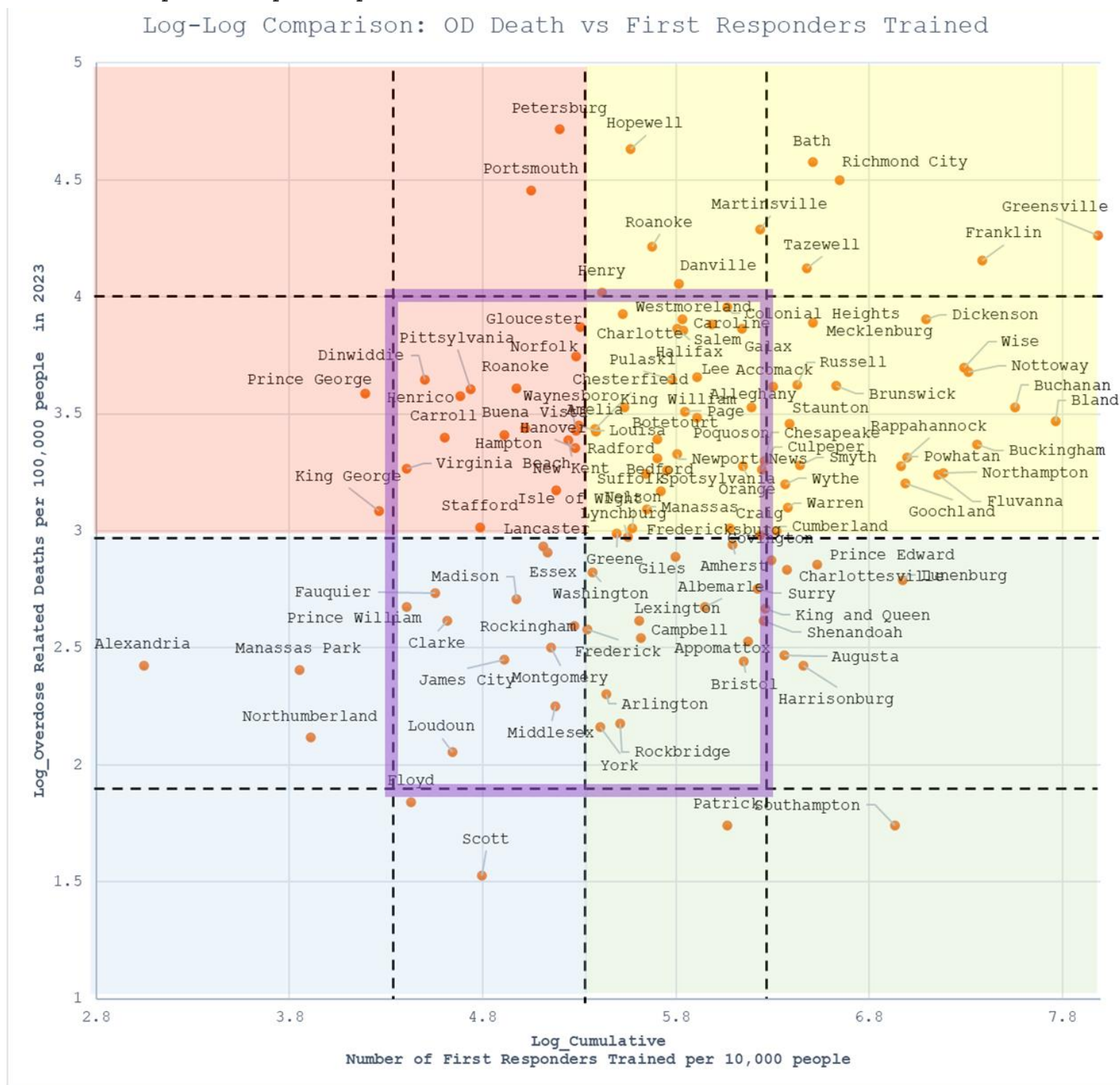
Localities along the I-81 corridor (Warren County, Page County, Augusta County, Rockbridge County, Roanoke City, Salem City, and Tazewell County) feature higher reported per capita overdose deaths and lower reported First Responders per capita. These highlight the areas where the program can strategically focus their future training campaigns.

Some localities surrounding the I-81 corridor (Rappahannock County, Buchanan County, and Dickenson County) have much higher per capita trained responders and lower opioid related overdose deaths. Localities outside the I-81 corridor with low per capita trained and lighter color in Figure 8 but have a dark color and higher per capita reported overdose death in Figure 9 are Fauquier County, Prince William County, Spotsylvania County, Caroline County, Chesterfield County, Washington County, and Suffolk County. A detailed table of localities with estimated gaps in training outputs and observed overdose deaths in 2023 are available in Excel format upon request.

To better understand the geographic correlation between REVIVE! trained First Responders and reported overdose related deaths, we converted both the variables into natural logarithmic scale and plotted them on a scatter diagram (Figure 10). Both axes in the figure are represented

in logarithmic scale. This diagram lets us compare the relative ratio of REVIVE! trained First Responders and the corresponding overdose-related death rates for each locality.

Figure 10 Log-Log Plot of Overdose Death per Capita and Trained First Responders per Capita



The dotted lines in the middle of both vertical and horizontal axes represent the average value for the corresponding measures. The other two dotted lines on either side of the average value represent the first standard deviation – one representing average (+) standard deviation and another representing average (-) standard deviation. This is a standard statistical way of representing how far a single value is from the average of all values. The purple bounding box represents the area where the localities that fall inside the box can be considered to have a relative *balance of the total number of Revive! trained First Responders per 100,000 population relative to the total number of overdose deaths per 100,000 population*. Any localities that fall outside the purple bounding box are relatively imbalanced in terms of how many REVIVE! trained First Responders are there compared to the rate of overdose-related deaths.

The localities outside the purple bounding box on the red and green shaded regions are the ones with imbalance in their ratio of overdose deaths to trained First Responders. The localities in red shaded area have relatively higher per capita overdose- related deaths but also have relatively fewer per capita REVIVE! trained First Responders. Localities in green shaded area have relatively less overdose deaths but at the same time have higher numbers of trained First Responders. The localities in blue shaded area outside the purple box are those which relatively low overdose death per capita while also having relatively low REVIVE! trained First Responders per capita. Similarly, the localities in yellow shaded area outside the purple bounding box have high per capita overdose-related death rates while they also have relatively higher numbers of per capita REVIVE! trained First Responders.

The chart presented in Figure 10 can be useful to identify localities with training saturation and those with training deserts. This information is expected to be useful in planning of geographically targeted training activities in the future. It is worth noting that since the bounding box is representative of a balance of trained responders and overdose deaths, the goal of reducing overdose deaths means that it is positive to be in the green or blue boxes, with the blue quadrant representing the best program outcomes.

The majority of localities reside within the purple bounding box and have a balance of per capita responders and per capita overdose deaths. Henry County and Manassas Park City and Buena Vista have seen improvements in their ratio and moved into the purple bounding box from the red quadrant since the last reporting period. Salem City and Craig County moved into the purple bounding box from the yellow quadrant. King and Queen and Lunenburg Counties have moved from the yellow quadrant to the green quadrant, seeing a reduction in overdose deaths per capita. Colonial Heights City improved their per capita trainees and moved from the red quadrant to the yellow quadrant, though still outside the bounding box.

For the last two reporting periods, Colonial Heights, King George, and Prince George have remained in the red quadrant outside of the purple bounding box. These localities have not seen an improvement in their ratio of overdose deaths to REVIVE! trained first responders. Several localities remained outside the bounding box in the yellow quadrant (Bath County, Buchanan County, Bland County, Hopewell City, Northampton County, Nottoway County, Rappahannock County, Warren County, and Wise County) with high overdose deaths and high trainee count. Additionally, for the last two reporting periods, Alexandria City, Northumberland County, and Scott County have remained in the low-overdoses deaths and low-trainees quadrant. Only Augusta County remained in the low-overdose and high-trainee quadrant over the last two reporting periods.

Distribution of Naloxone Units and Carrying Cases

We received the total number of Naloxone doses distributed to local law enforcement and emergency rescue departments. These are provided by VACP at no cost to the training participants.

A total of 13,060 units were supplied (26,120 total doses) during the 2023-2024 reporting period. This is a marked increase over previous reporting periods, which averaged 6,588 units supplied. A total of 6,752 Naloxone units (13,504 total doses) were distributed during the 2022-2023 reporting period. Figure 11 shows the total naloxone units supplied over the current and previous reporting periods. Since this addition to the program, Q3 of 2023 is the period with the highest count of units supplied.

Figure 11 Naloxone Units Supplied

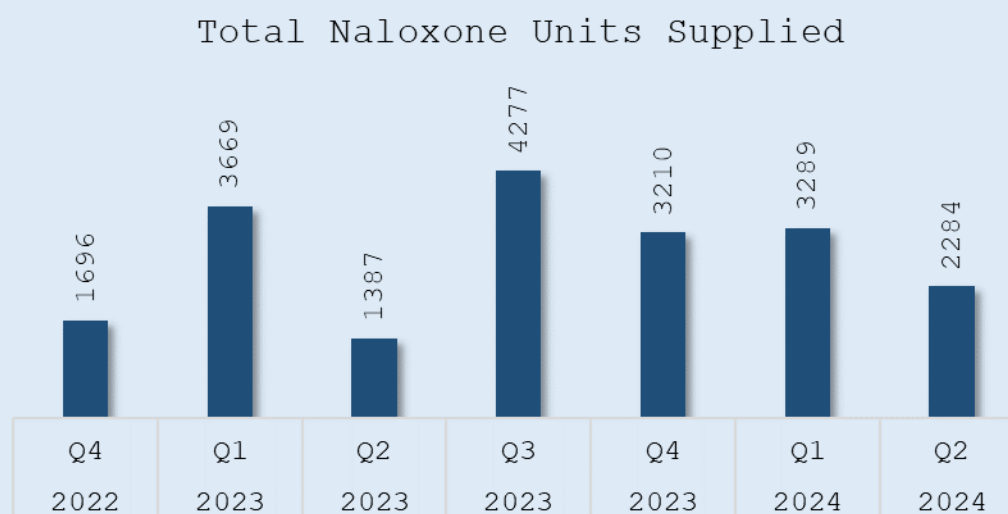
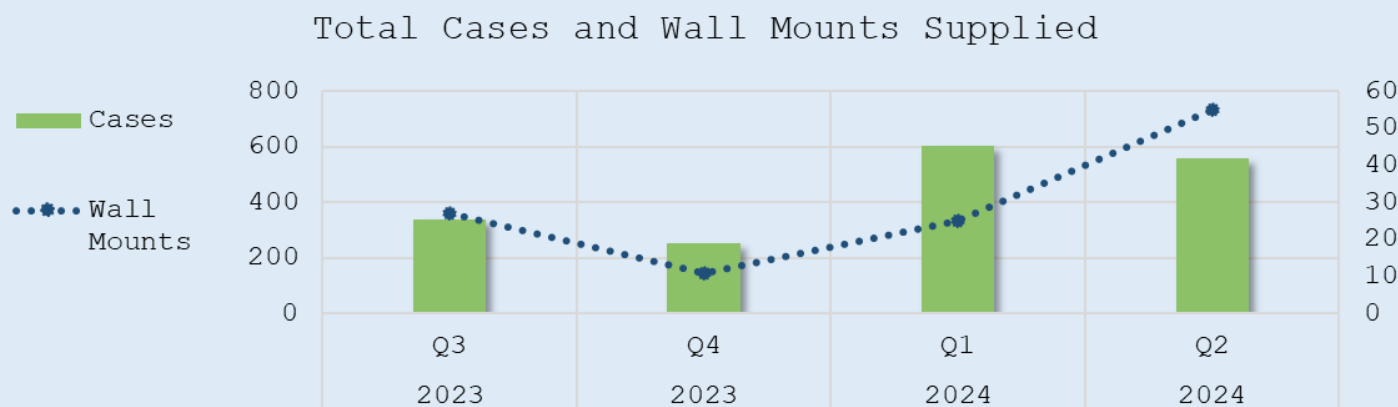


Figure 12 Cases and Wall Mounts Supplied



Like previous reporting periods, 20,000 test strips were distributed to higher education locations around Virginia. Figure 12 shows the cases and wall mounts supplied by VACP for overdose kits. From June 2023 to July 2024, 1,744 carrying cases and 121 wall mounts have been supplied. Q1 of 2024 saw the highest counts of these items supplied to local authorities.

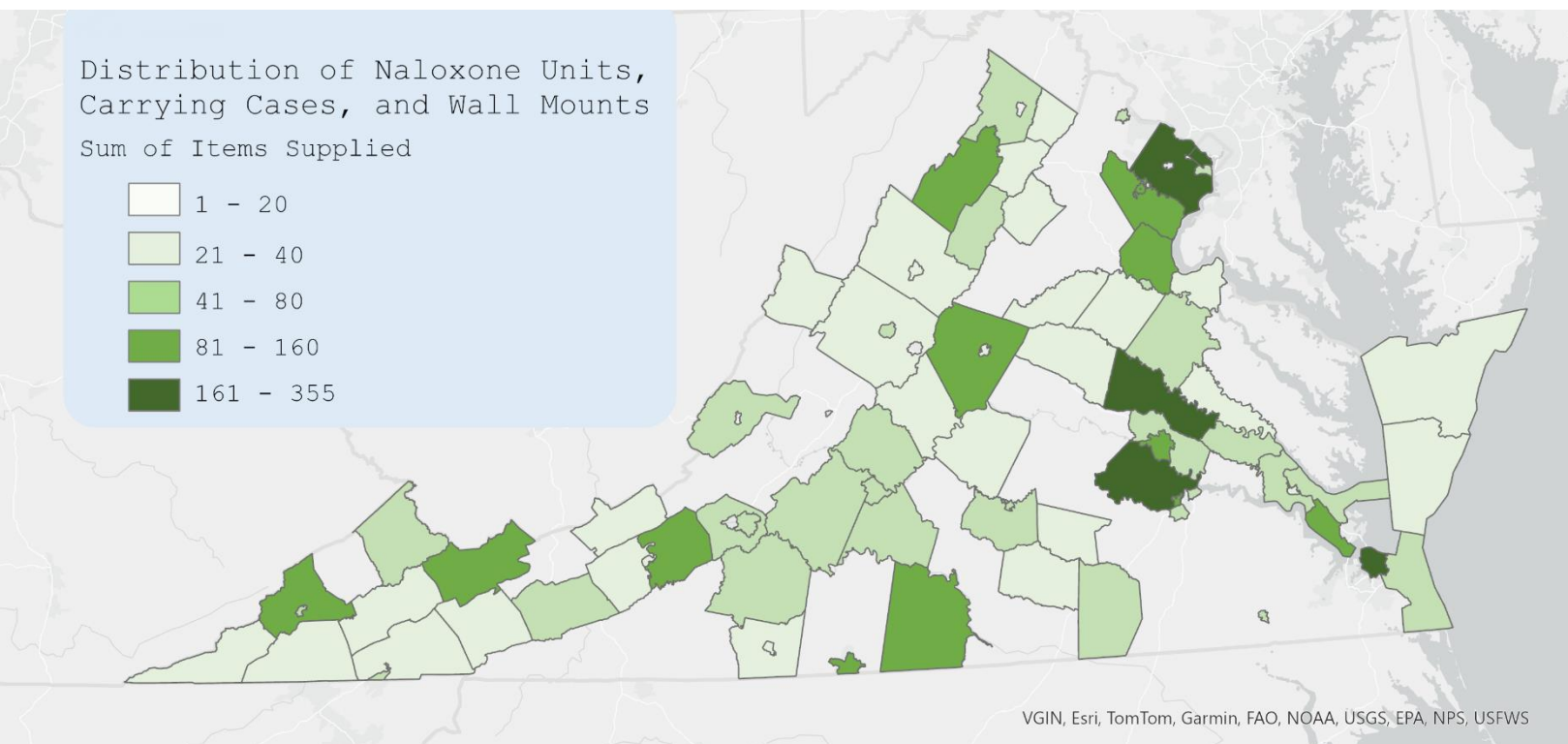
Figure 13 shows the geographic distribution of items supplied by VACP. Several state agencies requested items from the VACP Program and were not mapped due to their state-wide range. These were Virginia Department of Corrections, Virginia Department of Motor Vehicles, and Virginia Conservation Police. Regional jails were included in their county. The top ten counties to receive items are:

- Albemarle County
- Arlington County
- Chesterfield County
- Fairfax County
- Hanover county
- Newport News City
- Norfolk City
- Prince William County
- Shenandoah County
- Stafford County



Sample Narcan Wall Mount

Figure 13 Distribution of Supplied Materials



Chief Angela Comer, Longwood University, receiving a supply of fentanyl test strips *[photo by Dana Schrad]*.

Summary of Quantitative Findings

The following are some of the highlights from the quantitative analysis:

- 3,773 First Responders were trained under REVIVE's program from July 2023 to June 2024. The total for the full calendar year of 2023 is 4,469 trainees, and the cumulative total of trainees is now 26,182.
- The per capita rate of opioid related emergency department visits has decreased for the second year since 2022, with 2023 reporting a rate of 11.0 and 2024 reporting a rate of 8.7 for Q1 and Q2. The per capita rate of opioid related deaths has also been decreasing since 2021.
- The localities with a high per capita of trained First Responders remain consistently high, while the localities with a high per capita number of overdose deaths have shifted greatly. Overdose deaths per capita have increased since the last reporting period in Accomack, Augusta, Bath, Carroll, Grayson, Greenville, Highland, Nelson, Northumberland, and Rockingham.
- Historically, in the 2021 and 2022 update of this report, it has been found that the central region of the state shows an imbalance between the number of overdoses occurring and the number of trained responders. In 2023, the imbalance in the region narrowed to the central region around highway 17, west of interstate 95. This reporting period, the imbalance is most seen around the Richmond City region (Dinwiddie County, Henrico County, Hopewell City, Petersburg City, Prince George County) and southeast of the metro Washington, D.C. region (Prince William County, Stafford County).
- Most Virginia localities show good balance between the number of First Responders trained and the rate of overdose death reported. Although, we have identified some localities that have disproportionate share – more trainees where overdose death rates are relatively lower, or less trainees where overdose deaths are relatively higher – we acknowledge that VACP has been working towards providing more training strategically where the need is the highest. We recommend that VACP continue to focus their training activities in localities reporting a high number of opioid emergencies.

Participant Perception on Effectiveness of REVIVE! Training

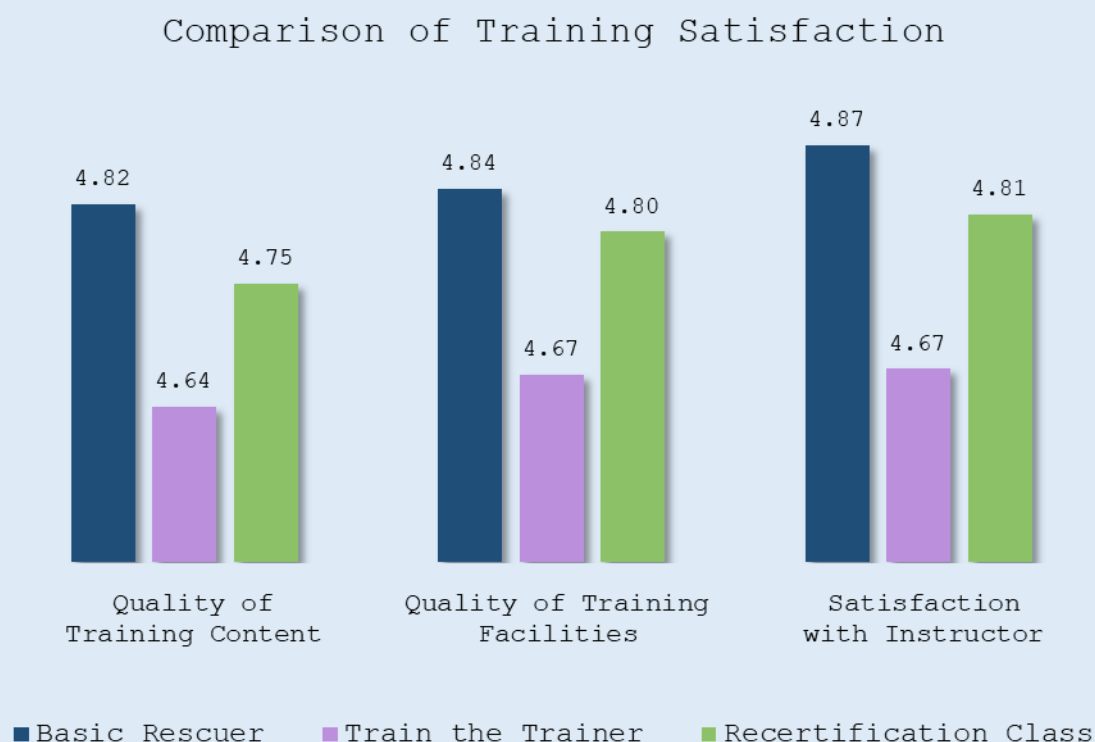
The VACP administered a survey of all REVIVE! FR Trainers during the reporting period. We studied the survey responses first by program evaluation and then by detailed response.

All of the 3,852 trainees in the Basic Rescuer program completed the evaluation survey. They were asked to independently rate the quality of the training content, their satisfaction with the instructor, the quality of the training facilities, and answer if they feel comfortable with administering naloxone. Additionally, 237 of the 243 Train-the-Trainer participants and all 66 of those in the recertification training completed the evaluation survey. The Train-the-Trainer and recertification trainees were additionally asked if they felt comfortable with conducting training as part of the evaluation survey.

Figure 14 shows the results of the evaluation survey by program. Trainees in each program were asked to rate on a 1 to 5 Likert scale the quality of training content, quality of training facilities, and their satisfaction with the program's instructor. The Basic Rescuer training program had the highest average of ratings across all questions posed, while the Train-the-Trainer had the lowest average of ratings across all questions. The average from the Basic Rescuer trainees rated the training content a 4.82, the training facilities a 4.84, and their satisfaction with the training instructor was rated at 4.87. A variety of numeric selections to the Likert scale ratings were seen across each program and question, but it is worth noting that no ratings lower than a 3 were given in the recertification program evaluation.

All the Train-the-Trainer and recertification trainees responded that they feel comfortable with administering naloxone. Only 2 of the Basic Rescuer trainees responded that they did not feel comfortable administering Naloxone; or 0.05%. 3,850 responded that they did feel comfortable administering Naloxone, or 99.94%. Trainees in the recertification and Train-the-Trainer were additionally asked if they feel comfortable with conducting a training on their own, and 100% of the responses were affirmative. Of the 309 total Train-the-Trainer and recertification trainees, 167 responded to the detailed survey (with 142 of these responses having a record that their training was conducted during the June 23 – July 24 period).

Figure 14 Evaluation Survey Results



Respondents were asked to explain their reason for participating in the training event. Fig. 15 shows that 68% of respondents voluntarily participated in the training and 31% participated because it was mandatory training. A total of 53 trainees reported taking part in the training as mandatory, and 114 took it voluntarily. The last reporting period saw an increase in voluntary training, while this period shows an increase in mandatory participation. This increase in mandatory participation is the result of having recertification as an option.

Trainees were asked the reason they chose to attend the training in an open-ended question in the detailed survey. Most participant responses show a desire to educate themselves and others.

One theme that emerged from the responses was that participants viewed training as a professional necessity. Some stated that they are the responsible party in their workplace to train others. *"I am an instructor with the DOC [Department of Corrections] and it is part of my job duties,"* one participant stated, and another responded *"I am the training coordinator for the agency."* Another example: *"I am the training officer for my department."* These statements show the way training and certification has become integrated in many workplaces and is a requirement of a job or a fundamental role within many organizations.

Figure 15 Training Motivation

Training Motivation from Detailed Survey



Another theme was participants taking the training to continue the work being done. They indicated that the person responsible for training had left their organization or lapsed in certification and they were encouraged to continue the work themselves. One participant said that the *"original instructor expired, and [they] wished to continue educating."* Another responded that *"our last department trainer left the department."* Many stated they took the training to fulfill the need for a trainer at their organization, sometimes stating that their workplace needed an additional certified trainer. These responses indicate that trainees are self-motivated to take ownership of the training at their workplace and see the value in continuing to educate others.

Continuing the theme of the above workplace impetus, some trainees play a vital role in documenting naloxone policies and procedures. One respondent indicated they are responsible for *"creating a NARCAN policy for my organization."* The abundance of workplace rationale for taking the training reflects the commitment the trainees have for advancing the work within their organization. Trainees are involved in legitimizing the policies and procedures within their workplace to ensure proper protocols for naloxone training and management of tools from REVIVE!

Keeping with a historical trend in this question, respondents expressed a desire to save lives and help others. One participant responded they took the training *"...because I believe Narcan saves lives, having this training gives me another tool to help save lives."* One participant summarized; *"I believe in this program and its ability to reduce the number of deaths attributed to narcotics overdoses."*

Overall Satisfaction with the Training, Content, and Trainers

About 72 percent of trainees reported being "very satisfied" with the training overall. About 74% said they were "very satisfied" with the training contents, and about 77% reported being "very satisfied" with their trainer. About 14% of trainees were "satisfied" with their trainer, and 7% were "somewhat satisfied." Figure 16 shows the breakdown of satisfaction ratings for all three questions. On Figure 16, "dissatisfied" and "somewhat dissatisfied" are unlabeled on the bars as they only received a 1% response across all questions.

As shown in Figure 17, participants overwhelmingly noted that they learned new information during the training. Approximately 84% of participants responded to the survey that they learned new information during the training.

Figure 17 Learning Outcomes from Training

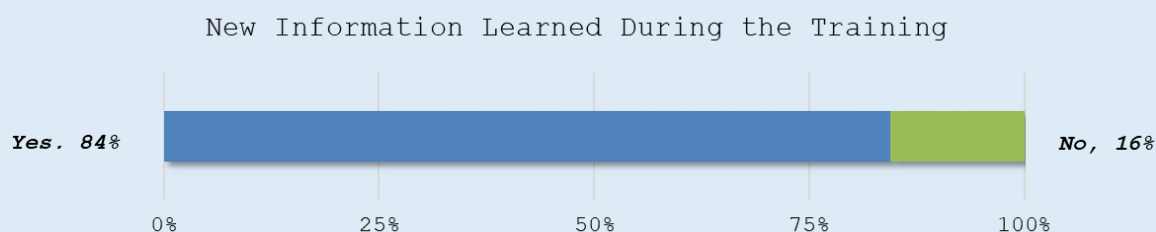
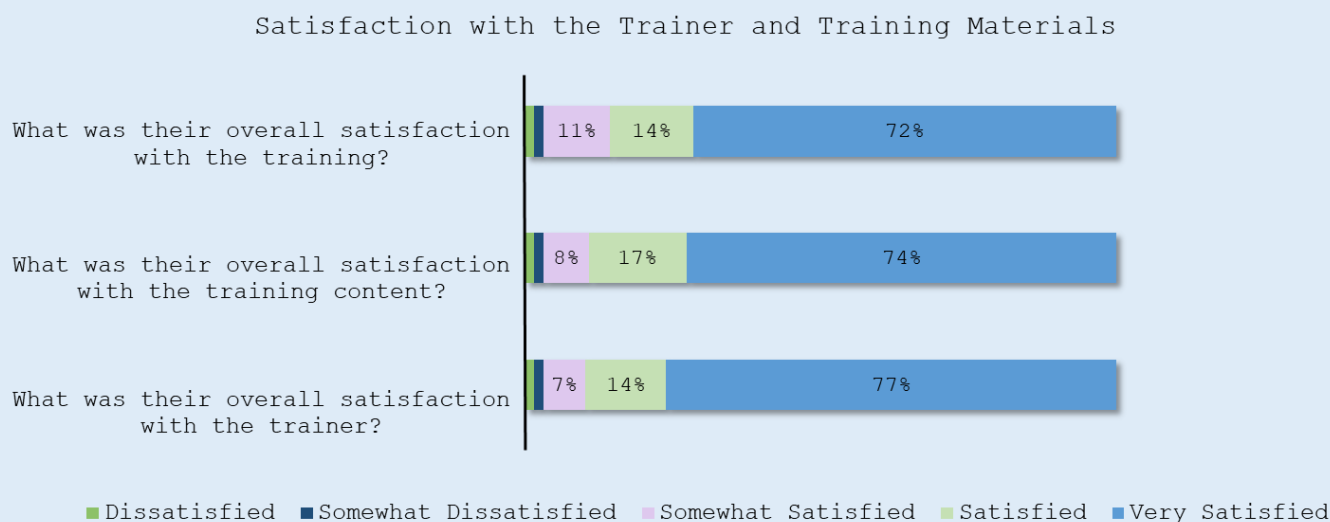


Figure 16 Detailed Survey Results



Participant Perceptions: Program Positives

Participants of the Train-the-Trainer program were additionally asked *"Is there anything you'd like to share?"* and *"How could this training be improved?"* in the detailed survey. Out of 167 trainees that took the detailed survey, 111 did not have any suggestions for changing the training in response to *"How could this training be improved?"* Many responses were positives that echoed: *"Great training, nothing to add," "I think it is a great training," "No improvements needed,"* or *"The training was sufficient."*

There were 24 participants that responded to *"Is there anything you'd like to share?"* that contained comments. Overall, the responses indicated that the trainees found their instructor to be knowledgeable and the training met their expectations.

Responses conveyed their belief that the training instructor had proficiency of the material and communicated well. *"I think the instructor was very informative,"* one responded, another trainee commented that the *"main course instructor was great."* Another remarked that *"instructor was very knowledgeable"* and they *"learned a lot from the class."*

Multiple responses featured comments that the training was satisfactory or that it was sufficient. One trainee commented *"This is a great resource,"* and another said the Train-the-Trainer *"is a great course."* Two respondents called the training *"very informative."* They also gave feedback on the organization of the training, stating that the *"training course was very well designed"* and they thought the *"training content and structure is sufficient."* One respondent commented on the method of the training, comparing in person and online experiences: *"My first training was in person. My recertification was online. I found both to be sufficient for training."* These comments show that the training composition and delivery of the materials meets or exceeds the expectations of the trainees.

A few respondents took the opportunity to update VACP staff on developments in their workplace in the open-ended question. These responses show that trainees see the value of the training and materials VACP is offering to them to progress their efforts in fighting the opioid epidemic. One trainee shared about initiating workplace policies to ensure training is done in a timely manner: *"Our department has elected to recertify officers on a schedule to both keep them up to date as well as provide training events for our instructors."* Another reported back about the benefits of the intranasal Narcan: *"I would like to report that I have not given any Narcan since training, but my department has, and we see an improvement in utilizing the intranasal Narcan."* These responses elaborate on the long-term betterment of the workplace's approach to fighting opioid overdoses the REVIVE! training has had for its participants.

Participant Perceptions: Areas for Improvement

Those who did offer suggestions in the detailed survey for improving the training focused on the content and delivery of the materials. Participants commented on the need to keep the information up to date, and even provide follow-up content for trainees. Participants desire to stay up to date on overdose emergency room visit and overdose death data, though its release is delayed. Trainees are also aware of other drug use in their communities and are interested in discussing *"new substances (Kratom, tianeptine, xylazine) that are on the market and the effectiveness of Narcan"* for their treatment.

Trainees requested more of the *"administrative side (paperwork and pharmacy number)"* be covered, as well. VDH Division of Pharmacy does not publicly provide a phone number, however, an agency can email and request a phone call for assistance with ordering or applying to receive naloxone.

Lastly, it was suggested that success stories be shared with the group of trainees. This was not elaborated on, and it is left for interpretation whether it means program or individual successes. Alternatively, one participant requested that *"actual incidents that have occurred and been documented"* be shared with trainees. The VACP has been actively trying to obtain bodycam footage, but permissions and legal liability hinder obtaining this potential training material.

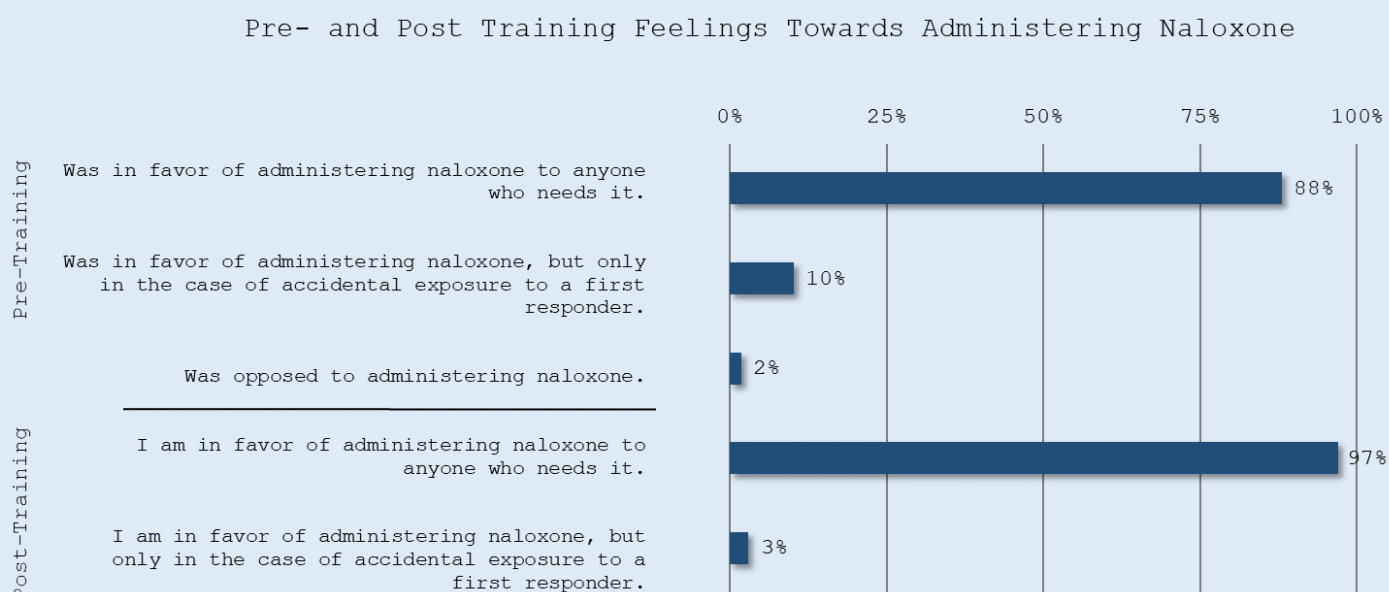
The desire to learn about each other's experience on the job shows a need for communication within the community of first responders fighting the opioid epidemic outside of this training. The suggestions for detailed emergency response advice reveal trainees possess familiarity with responding to emergencies and fostering community with those who are certified trainers would increase sharing knowledge about the signs, symptoms, and situational awareness as expressed here.

Comfort with Naloxone Administration

Prior to the training, about 88% of the trainees were in favor of administering Naloxone to anyone who needs it. About 10% were in favor of using it only in the case of accidental exposure to a First Responder, and 2% of trainees were opposed to administering Naloxone.

After completing training, 97% of trainees were in favor of administering Naloxone to anyone who needs it and 3% were in favor only in the case of accidental exposure to First Responders, and no trainees were opposed to administering Naloxone after training. The training was helpful in improving confidence, comfort levels, and opinion about administering Naloxone. The results for feelings regarding Naloxone administration before and after training are shown in Figure 18.

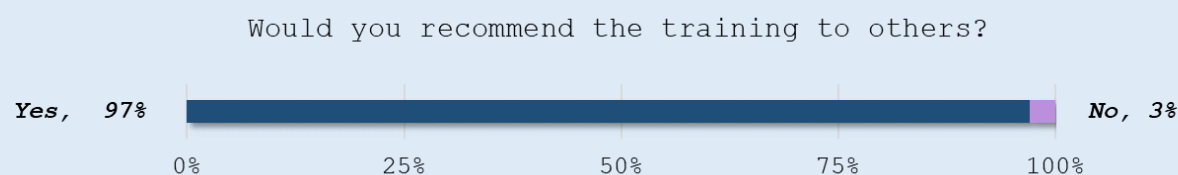
Figure 18 Comfort with Naloxone Administration



Looking Ahead

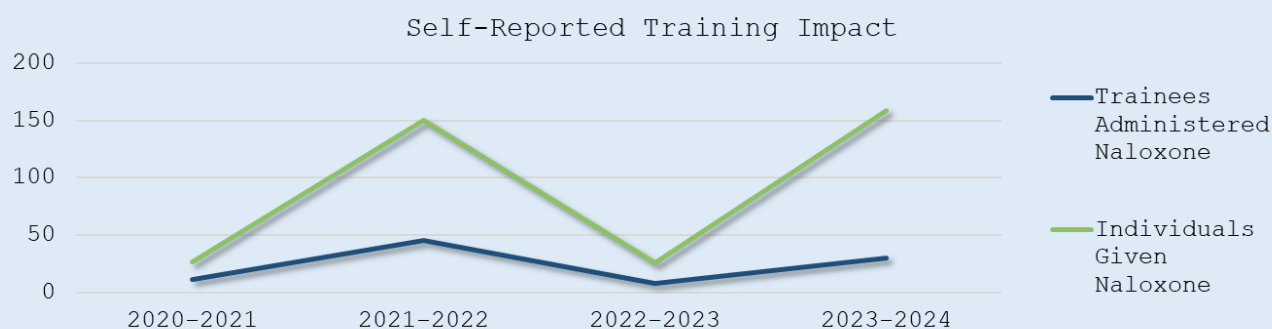
The REVIVE! Program featured an overwhelmingly positive response to its trainings, content, and instructors. Figure 19 shows the respondents answer to a key question in the survey, "Would you recommend training to others?" This response featured an overwhelmingly positive 97% of respondents answering "Yes." The program continues to reach new members of law enforcement and corrections on to train from participant recommendation.

Figure 19 Recommending Training



Since taking the training, 30 respondents reported back that they had administered Naloxone to an estimate of 159 individuals (self-reported estimates). Last reporting period, only 8 trainees reported back that they had administered Naloxone to an estimate of 26 individuals. In the 2022 report, 45 individuals reported in the survey that they had administered Naloxone to 15 individuals, and in 2021, 11 trainees reported they administered Naloxone to 27 individuals. Figure 20 shows the number of trainees and those individuals given Naloxone by year.

Figure 20 Training Impact



Summary of Participant Surveys

In sum, key findings from the interviews include:

- 86 percent of participants were *"very satisfied"* or *"satisfied"* with the training overall. 91 percent were *"very satisfied"* or *"satisfied"* with their trainers and the level of expertise and experience they brought to the training. 91 percent of participants reported being *"very satisfied"* or *"satisfied"* with the training content.
- 84 percent of participants mentioned that they learned new information after taking the training and the training content was rated an average of 4.7 out of 5 by all participants.
- 100 percent of the Train-the-Trainer and Recertification program participants said they felt comfortable administering Naloxone.
- While 97 percent of respondents would recommend training to others, some expressed a desire to hear about the successes organizations have had using Naloxone. Participants communicated they want to learn about each other's experience on the job.

REVIVE! Program's Ongoing Challenges

REVIVE! is one of the largest and most comprehensive Naloxone training and distribution programs in Virginia. Over the last few years VACP has faced and overcome notable challenges in administering the program. One of the biggest challenges was to adjust to the in-person meeting limitations caused by the COVID-19 pandemic while still maintaining the momentum of the program. The VACP team was able to shift to online training. In 2023-2024 the team is still conducting online training for the Train-the-Trainer program, Basic Rescuer and training for lay persons has returned to in-person. The program continues to grow, offering Train-the-Trainer online monthly and in-person when requested to meet the demand for in-person training. It is required that Basic Rescuer be done in-person.

The VACP is also providing new material to Certified Trainers online. They have made efforts to update the course PowerPoints and make announcements on what information has been updated when. Certified Trainers can access this information anytime to ensure they have the most up-to-date materials from the VACP. All Certified Trainers are required to use the materials provided by the VACP, and the materials are available only to Certified Trainers of the REVIVE! for First Responders training program. Certified Trainers also must retrain every 3 years with VACP to certify themselves capable of training others on naloxone administration.

The VACP program administrators have identified challenges they are facing in maintaining the quality of training received by First Responders and lay persons in some communities. VACP is aware that many communities are reluctant to work with the police and tend to approach local health departments and other community organizations for help. These organizations provide Naloxone training on their own as well. However, these organizations and programs do not meet the standard set by REVIVE! in training and providing Naloxone to trainees.

VACP's Outreach and Improvement Efforts

VACP has set long-term goals for the organization and would like to train at least two trainers in each law enforcement department of a locality. VACP has utilized past reports and has proactively connected with localities to engage with first responders there. As of this report, only Norton City and Franklin City remain without a REVIVE! certified responder.

In 2023, Governor Youngkin initiated "Right Help, Right Now," a plan to invest in and reform mental and behavioral health programs in the state. The state budget in 2023 included \$15 million investment in opioid initiatives, with a goal to reduce fentanyl poisoning of youth³. Investments in behavioral health continued in 2024, with the 2024-2025 budget containing \$25 million for opioid abatement and remediation, and a \$169 million addition to the "Right Help, Right Now," initiative⁴. VACP's REVIVE! trainings were conducted in person and information on virtual trainings were shared as part of Governor Youngkin's Fentanyl Awareness Day.

In early 2024 First Lady of Virginia Suzanne S. Youngkin launched a fentanyl education initiative to remind parents and caregivers that "one counterfeit pill can cost a life"⁵. The program was expanded in August to include a Fentanyl Families Ambassador Program to give voice to families who have experienced loss or difficulty and encourage action through networking⁶. As part of this campaign, Suzanne Youngkin invited DBHDS and VACP to conduct REVIVE! trainings for members of the Virginia General Assembly and other stakeholders.

The VACP has played a role in high profile events. In the third quarter of this federal fiscal year, Stephanie Diaz assisted Tiana Vazquez, DBHDS REVIVE! Health Education Specialist, with conducting REVIVE! Lay Rescue trainings and answering questions about the First Responder program at a Town Hall meeting hosted by Delegate LeVere Bolling, at Governor Youngkin's event with Virginia high school and collegiate coaches and athletic directors on National Fentanyl Awareness Day, and on June 14th at the Community HIV Planning Group (CHPG) Meeting. The VACP continues to draw heightened attention to the opioid epidemic and engages in solutions.

In the 2023 iteration of this report, there were two survey participants that mentioned training should be open to more people than those in law enforcement or emergency services, and it was clarified that while VACP does offer training to lay persons, some agencies do not let their certified instructors teach lay persons. Since the last report, there have been many efforts to engage lay persons with REVIVE! trainings. News stories have reported on the success of

³ Vogel song, 2022

⁴ Martinez, 2024b

⁵ Martinez, 2024a

⁶ Martinez, 2024a

citizens taking part in REVIVE!'s Train-the-Trainer. Through educating others, those who have lost loved ones find meaning and hope in being a part of the fight against opioids (Holmes, 2024). Senator Todd Pillion from Washington County held an event with REVIVE! to encourage the state's elected officials to get training on Naloxone emergency treatment⁷. These news articles communicate the concerted effort to increase public awareness and destigmatize the use of Naloxone. Additionally in July 2024, a law went into effect stating that public elementary and secondary schools must have Naloxone or an opioid overdose medication on site and at least one employee properly trained⁸. More laypersons are being trained in REVIVE! courses and the importance of doing so is being recognized. The momentum behind the goals of the REVIVE! program continues to grow, with support from political and administrative leaders in the state. Harm reduction and fighting the opioid epidemic continues to be an example of bipartisan effectiveness.



Governor Glenn Youngkin delivers remarks at Fentanyl Awareness Day event in Richmond, May 7, 2024. Left to Right: Stephanie Diaz, Governor Younkin, Tiana Vazquez. *[Official Photo by Austin Stevens⁹]*.

⁷ Kutner, 2024

⁸ Moreno, 2024

⁹ Martinez, 2024c

Partnerships with universities continue to be successful for VACP. The VACP started a program to distribute fentanyl test strips to major universities in the state to reduce overdose and accidental poisonings. The VACP has distributed 20,000 test strips to 16 universities and community colleges in Virginia in federal fiscal year 2023. While universities are not the hot spots of overdoses, students often experiment with drugs. Recreational and even one-time use of drugs run the risk of consuming contaminated drugs. Test strips have been shown to be an effective way to reduce overdoses¹⁰ and reduce the use of other drugs that are contaminated with fentanyl. Universities have also been expanding access to Naloxone, with Virginia Commonwealth University and Virginia Tech announcing wall mounted boxes with doses for emergencies¹¹. These overdose kits, with staff training, mean universities are leading the way in opioid overdose response in their communities.

This report found that overdose deaths in Virginia were less than predicted for overdose deaths and emergency department visits. These were through the end of 2023, with 2024 data forthcoming. The next update to this report would reflect 2024 numbers for the state of Virginia. Nationally, overdose deaths have been decreasing, with 2024 showing a 10% decrease from 2023¹². Reductions have been attributed to the ability to get Narcan without a prescription, and a dramatic decrease in young adults using hard drugs which began from isolation and mental health issues during the COVID pandemic¹³. The drop can be accredited to efforts like REVIVE! that has different interventions working on the same problem.

¹⁰ Rappe, 2018

¹¹ Tupponce, and Kovik 2024

¹² Ovalle, 2024

¹³ Ovalle, and Mann 2024

Closing Remarks

The "meet them where they are" philosophy is personified through REVIVE!'s work—meeting individuals in their addiction and recovery journeys and empowering communities through education. This comprehensive report offers a data-driven approach to understanding the REVIVE! program's impact. This year's analysis found that over 4,400 First Responders were trained in 2023 and the program has surpassed a cumulative total of 26,000 trained individuals. There has been a decrease in the per capita rate of opioid-related emergency department visits and deaths since 2021. This year's data also revealed a reduction in overlapping training with opioid overdose deaths. While there are still localities where training is needed—particularly in the Richmond area and southeast of the Washington, D.C. metro—most localities are demonstrating a positive balance between overdose deaths and training efforts. Moving forward, continued focus on strategically targeting localities with high overdose rates for training is essential.

With the infrastructure for training is already established, and with increasing public awareness about the REVIVE! program, the potential for expanded reach is promising. The news and success stories from trainees represent a great opportunity for materials to be shared back with program participants who have requested updates on the program efforts and outcomes. Sharing stories of successful interventions by First Responders and laypersons not only honors their work but also motivates new trainees, strengthening the program's foundation and encouraging wider participation.

The REVIVE! program has demonstrated resilience and adaptability, notably in its pivot to virtual training during the COVID-19 pandemic. This ensured the continuity of life-saving education during a challenging time when in-person gatherings were limited. This adaptability has been vital in maintaining momentum and ensuring that communities most at risk continue to receive crucial overdose intervention training. VACP has adapted to geographic disparities in training outcomes and has expanded into preventative measures, such as distributing fentanyl testing strips. The program has thought proactively and continued to engage with new populations. Looking ahead, the REVIVE! program to continue its effort to with colleges and universities across the state, engaging young adults and empowering them as part of the solution.

As the opioid crisis continues to evolve, so too must the approaches to addressing it. The REVIVE! program continues to meet people where they are—whether in need of life saving support or striving to make a difference. With its adaptable strategies, expanding preventive measures, and deep commitment to training, the program is well-positioned to continue to make an impact reducing opioid-related tragedies.



Scan QR code for information on how to use fentanyl test strips and to find help near you *[from Stephanie Diaz, <https://curbthecrisis.com/>].*

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Appendix: Participant Survey Questionnaire

Basic Rescuer, Train-the-Trainer and Recertification Program Evaluation:

1. Quality of Training Content (5 pt. Likert scale)
2. Satisfaction with Instructor (5 pt. Likert scale)
3. Quality of Training Facilities (5 pt. Likert scale)
4. Comfortable administering naloxone? (Y/N)

Train-the-Trainer and Recertification Program Evaluation:

5. Comfortable conducting training? (Y/N)

Train-the-Trainer and Recertification Detailed Survey:

1. Date of train the trainer course you attended (mm/dd/yyyy)
2. Was your participation in the training mandatory or voluntary? (Y/N)
 - a. If voluntary, what was the reason you chose to attend the training?
3. What was your overall satisfaction with the training? (5 pt. Likert scale)
4. What was your overall satisfaction with the training content? (5 pt. Likert scale)
5. Did you learn new information during the training? (Y/N)
6. What was your overall satisfaction with the trainer? (5 pt. Likert scale)
7. After completing the training, did you feel comfortable with administering Naloxone nasal spray? (Y/N)
 - a. If not, why? (open-ended)
8. Would you recommend the training to others? (Y/N)
9. How could this training be improved?
10. What were your feelings prior to the training about administering Naloxone in the event of an opioid overdose?
11. What are your feelings now about administering Naloxone in the event of an opioid overdose?
12. Have you administered Naloxone in response to an opioid overdose since attending the training? (Y/N)
 - a. If yes, how many individuals have you administered Naloxone to?
 - b. If yes, how many individuals showed an improved response after receiving Naloxone?
13. Is there anything else you would like to share? (open-ended)