

COMMONWEALTH of VIRGINIA

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## MEMORANDUM

TO: The Honorable Glenn Youngkin Governor of Virginia

> The Honorable L. Louise Lucas President Pro-Tempore, Senate of Virginia

The Honorable Don L. Scott Speaker, House of Representatives

- FROM: Karen Shelton, MD State Health Commissioner, Virginia Department of Health
- SUBJECT: 2023 Board of Health Annual Report

This report is submitted in compliance with the Code of Virginia §32.1-14, which states:

The Board shall submit an annual report to the Governor and General Assembly. Such report shall contain information on the Commonwealth's vital records and health statistics and an analysis and summary of health care issues affecting the citizens of Virginia, including but not limited to, health status indicators, the effectiveness of delivery of health care, progress toward meeting standards and goals, the financial and geographic accessibility of health care, and the distribution of health care resources, with particular attention to health care access for those Virginia citizens in rural areas, inner cities, and with greatest economic need. Such report shall also contain statistics and analysis regarding the health status and conditions of minority populations in the Commonwealth by age, gender, and locality.

Should you have any questions or need additional information, please feel free to contact me at (804) 864-7002.

KS/AJ Enclosure

Pc: The Honorable Janet V. Kelly, Secretary of Health and Human Resources



# VIRGINIA DEPARTMENT OF HEALTH ANNUAL REPORT



2023

VIRGINIA DEPARTMENT OF HEALTH

## PREFACE

Code of Virginia § 32.1-14 tasks the Board of Health to submit an annual report to the Governor and General Assembly containing information on the Commonwealth's vital records and health statistics and an analysis and summary of health care issues affecting the citizens of Virginia. Such report shall also contain statistics and analysis regarding the health status and conditions of minority populations in the Commonwealth by age, gender, and locality. The report was drafted by the Virginia Department of Health on behalf of the Board of Health.

## ANNUAL REPORT WORK GROUP

## Virginia Department of Health

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## EXECUTIVE SUMMARY

The Code of Virginia 32.1-14 requires the Board of Health to submit an annual report to the Governor and General Assembly that contains information on the Commonwealth's vital records and health statistics and an analysis and summary of health care issues affecting the citizens of Virginia. The findings in particular areas of focus and highlighted accomplishments are detailed in the report below.

## INTRODUCTION

## VIRGINIA DEPARTMENT OF HEALTH ANNUAL REPORT MANDATE

Pursuant to Virginia Code §32.1-14 the Virginia Department of Health (VDH) is submitting the following State Board of Health annual report summarizing information on the Commonwealth's vital records and health statistics and an analysis and summary of health care issues affecting the citizens of Virginia. The report includes statistics and analysis regarding the health status and conditions of minority populations in the Commonwealth by age, gender, and locality.

## **REPORT OUTLINE**

The report includes health-related data and updates in these major categories: demographics, income, housing, education, healthcare access and provider availability, food access, immunizations, and births and deaths. Additionally, the report discusses Virginia morbidity and mortality data related to heart disease; infant, child, and maternal health issues; cancer; HIV and STIs; suicide; substance use and overdose-related issues.

#### HIGHLIGHTED ACCOMPLISHMENTS

## COLLABORATION AND FOCUS ON DATA TO FOSTER COMMUNITY HEALTH IMPROVEMENT

To improve health, communities should be given the opportunity to review health data and identify concerning data trends and disparities at granular and statewide levels. The Virginia Department of Health continues to work to make health data easier to access for the people of Virginia. The Virginia Community Health Improvement Data Portal is an interactive data portal that maps and visualizes data for communities including statistics and trends for cancer, communicable diseases, demographics, health behaviors and substance use. In 2023, the Virginia Community Health Improvement Data Portal was expanded to include 17 additional indicators on Social Determinants of Health and 30 indicators on health behaviors at the locality level. Additionally, a new indicator category titled "Community Factors" was added. Community Factors includes data on food facility inspections, food desert census tracts, and transportation profiles. The portal averages 1,500 users and 5,000 downloads monthly.

A key area of improving data infrastructure and a focal area of the agency's strategic plan is VDH's Data Modernization Plan, also called the Data Modernization Initiative (DMI). Goals of the plan include assessing and enhancing public health data and information systems; ensuring enterprise-wide data governance and data management; developing and sustaining a state-of-the-art informatics and data science workforce; implementing data integration and interoperability through partnerships and technology; and creating agency-wide understanding and support for the DMI Plan. Recent accomplishments in the DMI sector include publication of public-facing dashboards, including Respiratory, Syphilis, and Opioid Data pages which are areas of focus programmatically. Other DMI activities beyond analytics are continued electronic lab and case reporting onboarding (ELR and eCR) with a goal of maintaining 98% by volume ELR in our surveillance system, and maintenance and enhancement of the statewide surveillance system VEDSS (Virginia Electronic Disease Surveillance System). DMI efforts are led and implemented by a combination of the Division of Informatics and Information Systems (DIIS) and the Office of Information Management's Center for Public Health Informatics (CPHI).

The Community Health Epidemiology Program (CHEP) and the Center for Community Health Improvement (CCHI) teams partnered to host Virginia's Third Community Health Forum June 14–15, 2023. The Forum theme was "taking action for community health improvement". The Forum examined policy solutions, successful community health projects, and multi-sectoral partnerships to address public health and healthcare workforce challenges and strengthen the health-related workforce through change and innovation. The Forum discussed how to best foster community collaboration, enhance data equity, and develop policies and systems to make Virginia the healthiest state in the Nation.

An example of enhancing our efforts to improve data infrastructure and sharing includes work from the Virginia Early Hearing Detection and Intervention Program (EHDI), housed under the Division of Child and Family Health (DCFH) and in collaboration with the Division of Population Health Data (DPHD). The EHDI program was awarded federal funding to enhance congenital Cytomegalovirus surveillance (cCMV). These funds facilitate tracking key exposures and short- and long-term outcomes of infants who received a CMV diagnosis as a result of Virginia EHDI's CMV screening program. The program will receive \$507,000 annually through September 2027.

#### DEMOGRAPHICS

In Virginia, the total population is 8,624,511<sup>1</sup> and the median age is 39. Figure 1 shows the population age distribution by sex. Approximately 22% percent of the population are children under age 18 while seniors over age 65 make up 16% of the population. The population is diverse in terms of age, however some age groups such as the 25–34-year-olds make up a significant portion of the population (Figure 1). Among the largest racial/ethnic groups in the state, 60% identify as White (Not Hispanic or Latino), 18.6% identify as Black or African American (Not Hispanic or Latino), 10% identify as Hispanic or Latino, and 6.8% identify as Asian (Figure 2); 12.6% of the population are foreign born.



Figure 1: Population Age by Sex, 2018-2000 Data Source: U.S Census Bureau, ACS 5-Year 2018-2022

<sup>&</sup>lt;sup>1</sup> United States Census Bureau ACS 5-Year 2018-2022



Figure 2: Race/Ethnicity Totals, U.S. Census Bureau American Community Survey 5-year 2018-2022 Data Source: U.S Census Bureau, ACS 5-Year 2018-2022

#### INCOME

The median household income in Virginia is \$87,249 which is above the national average of \$75,149<sup>2</sup>. The median income is \$93,691 for White householders<sup>3</sup>, \$60,201 for Black or African American householders and \$83,852 for American Indian and Alaska Native householders. Asian householders have the highest median income at \$125,583 (Figure 3). Figure 4 shows the number of people below the poverty level by age group. From 2018-2022, percentage of people ages 65+ living in poverty were highest in Bath County, Alleghany County, Scott County, Lancaster County, Prince Edward County, Mecklenburg County, and Norton City (Figure 5).

<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau American Community Survey 5-Year estimates 2018-2022

<sup>&</sup>lt;sup>3</sup> The U.S. Census Bureau defines householder as the person, or one of the people, in whose name the home is owned, being bought, or rented. If there is no such person present, any household member 15 years old or over can serve as the householder.



Figure 3: Median Income by Race/Ethnicity of Householder, 2018-2022 Data Source: U.S. Census Bureau, ACS 5-Year 2018-2022



Figure 4: Population Below Poverty Level by Age, 2018-2022 Data Source: U.S. Census Bureau, ACS 5-Year 2018-2022



Figure 5: People Below Poverty Level -Age 65 and Over Per Capita with Poverty Status Determin Data Source: U.S Census Bureau, ACS 5-Year 2018-2022

#### HOUSING

In Virginia, more than half of renters and nearly half of homeowners spend 30 percent or more of their income on housing costs. This indicates a significant burden on households, leaving less money for other essentials like food, healthcare, and education. The data in Virginia mirrors the national trend. The ownership and renter rates vary across different racial and ethnic groups in the state, according to data from the US Census Bureau. The homeownership rate for individuals that identify as White alone is higher compared to other racial and ethnic groups, while the renter rate for those who identify as White alone is lower. Black or African American alone individuals have a lower homeownership rate and a higher renter rate (Figure 7).

Nearly 27% of renters in Virginia pay between \$1,000 and \$1,499 per month, and 22.0% pay between \$1,500 and \$1,999 per month. This data demonstrates that nearly half of renters in Virginia are paying \$1,000 or more in rent each month. These numbers highlight the challenges faced by many renters in Virginia, where finding affordable housing can be difficult.

The U.S Housing and Urban Development (HUD) defines "chronically homeless" as a homeless individual with a disability who lives either in a place not meant for human habitation, a safe haven, or in an emergency shelter or in an institutional care facility if the individual has

been living in the facility for fewer than ninety (90) days and had been living in a place not meant for human habitation, a safe haven or in an emergency shelter immediately before entering the institutional care facility. To meet the "chronically homeless" definition, the individual also must have been living as described above continuously for at least 12 months or on at least four (4) separate occasions in the last three years, where the combined occasions total a length of time of at least 12 months. Each period separating the occasions must include at least seven nights of living in a situation other than a place not meant for human habitation, in an emergency shelter or in a safe haven<sup>4</sup>. There was a significant increase in the number of chronically homeless individuals in Virginia in 2021 and 2022 (Figure 9).



Figure 6: Excessive Housing Costs: 30 Percent or More of Income by Tenure Data Source: American Community Survey 5-Year, 2018-2022

<sup>&</sup>lt;sup>4</sup> Arizona Department of Housing. (2023) https://housing.az.gov/sites/default/files/documents/files/Attachment-3-Definition-of-Chronic-Homelessness.pdf



Figure 7: Homeownership Rate and Renter Rate by Race/Ethnicity, 2018-2022 Data Source: American Community Survey 5-Year, 2018-2022



Figure 8: Monthly Home Rent Data Source: American Community Survey 5-Year, 2018-2022



Figure 9: Chronically Homeless Individuals, 2015-2022 Data Source: Husing and Urban Development, Annual Homelessness Assessment Report, 2023

#### EDUCATION

The sooner a child can enroll in school, the better it is for their health. Early childhood programs help meet challenges of underserved children to prepare them for school and set them on a path to success. According to the U.S Census Bureau 2022, 45.8% of children ages 3 to 4 are enrolled in nursery or preschool. This number is comparable to the national data which is 45.7%. The number of childcare centers in Virginia has remained relatively stable from 2014 to 2021 (Figure 10).

According to the Virginia Department of Education School Quality profiles, the 2022-2023 school year on-time graduation rate is 91.9%. The on-time graduation rate is defined as students who earn a diploma within four years of entering 9<sup>th</sup> grade for the first time. Figure 11 demonstrates the distribution of adults with varying levels of education. For the timeframe 2018-2022, high school was the highest level of education completed for 24% of the adult population 25 years and older in Virginia. During the same timeframe, 23% of the population had a bachelor's degree.



Figure 10: Childcare Centers, 2014-2021 Data Source: County Business Patterns, 2021



Figure 11: Educational Attainment People 25 and Over, 2018-2022 Data Source: U.S Census Bureau ACS 5-year, 2018-2022

#### ACCESS TO CARE

Compared to the United States as a whole, Virginia has a smaller percentage of people with less than a high school degree without health insurance, and a larger percentage of people with a bachelor's degree or higher without health insurance (Figure 12). Nationally, people with higher levels of education, such as a bachelor's degree or higher, have higher rates of health insurance coverage compared to those with lower levels of education. From 2018 to 2022, the percentage

of uninsured individuals in Virginia is similar to the national average, however, there are variations among different age groups. While there is parity in the percentage of uninsured individuals aged 65 and over, Virginia outperforms the nation in the percentage of individuals uninsured in the 19-64 age range. Specifically, Virginia has 2.1% fewer uninsured in the 26-34 and 45-54 year old age ranges, 2.3% fewer uninsured in the 35-44 year old range, and 2.2% fewer uninsured in the 19-25 year old range (Figure 13).



Figure 12: Uninsured People by Insurance Coverage Educational Attainment, 2018-2022 Data Source: U.S Census Bureau, ACS 5-Year Estimate, 2018-2022



Figure 13: Percentage of People Uninsured by Age, 2018-2022 Data Source: U.S. Census Bureau, ACS 5-Year Estimate, 2018-2022

#### PROVIDER AVAILABILITY

Access to essential healthcare providers is crucial for well-being and quality of life. In Virginia, there are significant differences in provider ratios. According to the National Plan and Provider Enumeration System (NPPES), in 2023 there were 1,841 pediatric care physicians and 1,710 pediatricians in Virginia (Figure 14). There are 2,419 children per one pediatric care physician and 1,098 children per 1 pediatrician. Some areas have a high ratio of children per pediatrician, while others have a much lower ratio. Fairfax County has the highest number of pediatric care physicians while Bland County, Floyd County, King and Queen County, Rappahannock County and Page County have no pediatric care physicians. These disparities are important to acknowledge and address because they can impact the health and well-being of children.

In Virginia, the ratio of dentists is 2,142 per 100,000 people. For optometrists, the ratio is 7,742 per 100,000 people. There are 5,418 OB/GYNs per 100,000 females. The ratio for primary care physicians is 1,240 per 100,000 people, and for clinical social workers, it is 1,682 per 100,000 people. Additionally, there are 9 child and adolescent psychiatric providers per 100,000 children. These variations highlight the disparities in healthcare provider availability across different specialties.

The geriatric care provider ratio data shows that in Virginia, there is an average of 1 geriatric care provider for every 1,019 (98 per 100,000) older adults (Table 1). However, when we look at

specific counties, we can see a significant disparity. In 2023, Pittsylvania County had only 1 geriatric care provider for every 11,046 (9.1 per 100,000) older adults, suggesting a shortage of geriatric care providers in that area.

According to Virginia's federally designated state primary care office (PCO) within VDH's Office of Health Equity, as of March 2024, Virginia requires 488 full-time Physicians, Dentists, and Psychiatrists to eliminate all HPSAs for Primary Care, Dental, and Mental Health.

- Dentists: 198 FTEs
- Psychiatrists: 107 FTEs
- Primary Care Physicians: 183 FTEs

PCOs are units of state or territorial governments that provide healthcare workforce and shortage designation analysis, technical assistance, and liaison with federal, state, and local partners. The PCO leads VDH's strategy to expand primary care access and reduce health provider shortages and shortage designations. Health Professional Shortage Area (HPSA) designation identifies an area, population, or facility experiencing a shortage of health care services. Health Professional Shortage Areas help states determine where workforce incentives should be directed (for more on what VDH is doing, please see the section on healthcare access). The threshold for Federal HPSA Designation requires a minimum provider to population of 1:3,000 or 33.3 per 100,000.

Finally, a 2022 analysis conducted by OHE found that losing just 1 provider in Virginia could lead to an average loss of about \$443,000 in state and local tax income from affected areas. Losses include tax revenue generated by auxiliary personnel, as well as the direct and indirect revenue losses experienced by suppliers, local businesses, and the wages lost by employees in these businesses.



Figure 14: Pediatricians and Pediatric Care Physicians, 2023 Data Source: National Plan and Provider Enumeration System, National Provider Identification



Figure 15: Geriatric Care Provider Ratio, Virginia, 2016-2023 Data Source: National Plan and Provider Enumeration System, National Provider Identification

| Geography                | Geriatric Care Provider Ratio                     |
|--------------------------|---------------------------------------------------|
| Virginia                 | 1,019 Older Adults per 1 Geriatric Care Provider  |
| Pittsylvania County, VA  | 11,046 Older Adults per 1 Geriatric Care Provider |
| Bedford County, VA       | 7,811 Older Adults per 1 Geriatric Care Provider  |
| Amherst County, VA       | 6,227 Older Adults per 1 Geriatric Care Provider  |
| Fluvanna County, VA      | 5,425 Older Adults per 1 Geriatric Care Provider  |
| Hanover County, VA       | 4,784 Older Adults per 1 Geriatric Care Provider  |
| Goochland County, VA     | 4,226 Older Adults per 1 Geriatric Care Provider  |
| Prince George County, VA | 4,172 Older Adults per 1 Geriatric Care Provider  |
| Lee County, VA           | 4,162 Older Adults per 1 Geriatric Care Provider  |
| Wise County, VA          | 3,430 Older Adults er 1 Geriatric Care Provider   |
| Buchanan County, VA      | 3,422 Older Adults Per 1 Geriatric Care Provider  |

 Table 1: Geriatric Care Provider Ratio, Number of Older Adults per Geriatric Care Provider, 2023

 Data Source: National Plan and Provider Enumeration System, National Provider Identification



Sources: NPPES NPI 2023

Figure 16: Pediatricians by Locality, 2023 Data Source: NPPES NPI, 2023

| Virginia Provider by Specialty        |                                                 |
|---------------------------------------|-------------------------------------------------|
| Obstetric Provider Rate               | 1,381.7 per 100,000 births                      |
| Mental Health Provider Ratio          | 1,701 people per 1 Mental Health Provider       |
| Geriatric Care Provider Ratio         | 1,019 Older Adult Per 1 Geriatric Care Provider |
| Dentist Ratio                         | 2,142 People per 1 Dentist                      |
| Optometrist Ratio                     | 7,740 People per 1 Optometrist                  |
| OBGYN Ratio                           | 5,418 Females per 1 OBGYN                       |
| Primary Care Physician Ratio          | 1,240 People per 1 Primary Care Physician       |
| Clinical Social Worker Ratio          | 1,682 People per 1 Clinical Social Worker       |
| Child and Adolescent Psychiatric Rate | <b>9.2</b> Per 100,000 Children                 |

Table 2: Virginia Healthcare Provider Availability Source: National Plan & Provider Enumeration System National Provider Identification, 2023 According to the Behavioral Risk Factor Surveillance Survey (BRFSS) dental visits in Virginia remained stable between 2017 and 2021 (Figure 17). The prevalence of dental visits among Virginians that identify as Black and Hispanic are lower compared to those that identify as White (Figure 18). Dental visit prevalence among less educated people is significantly lower than higher educated people (Figure 19). The prevalence of dental visits was significantly lower among adults that have a household income of less than \$50,000 annually as compared to adults with higher incomes (Figure 20).



Figure 17: Prevalence of Dental Visits in the Past Year, Virginia 2017-2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance Survey, 2017-2021



Figure 18: Prevalence of Dental Visits in the Past Year, By Race, Virginia 2017-2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance Survey, 2017-2021



Figure 19: Prevalence of Dental Visits in the Past Year, By Educational Level, Virginia 2017-2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance Survey, 2017-2021



Figure 20: Prevalence of Dental Visits in the Past Year, By Income, Virginia 2017-2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance Survey, 2017-2021

#### HEALTHCARE ACCESS INITIATIVES

VDH administers 15 different state, federal, and privately funded health workforce incentive programs to increase access to quality health care providers in Virginia's Health Professional Shortage Areas (HPSAs) & Medically Underserved Areas (MUAs). These incentive programs address primary care, dental, and mental health care shortage needs by offering loan repayments, scholarships, and other items in exchange for service in Virginia, with the average obligation

typically around 1 to 2 years. Over the last four years, VDH has monitored employment and enrollment requirements and awarded scholarships, loan repayment, and other incentives to approximately 427 providers who have worked across the Commonwealth.

The State Office of Rural Health (SORH) within OHE partners with Virginia's rural health districts, critical access hospitals, and local organizations like the United Way of Southwest Virginia (UWSWVA) to address health inequities. Through the partnership with the SORH, UWSWVA hosts educators, social services, healthcare, and law enforcement personnel annually at the Rural Summit for Childhood Success. The discussions and coalition building forged through this event resulted in plans for United Way to convert an 87,000-square-foot former Kmart in Abingdon into a workforce development hub. The center will open in September 2024. When completed, the center will house 200 different "store fronts" to engage students and expose them to the different local occupational opportunities including STEM labs for teacher training, a licensed early childhood care and education center, workforce development and training programs, and a shared services alliance consolidating back-office functions for the 208 childcare providers in the region. On-site childcare will be available to center staff and neighboring businesses. This center will be the first of its kind in rural Virginia.

The SORH has also partnered with West Piedmont Health District to expand access to primary care services in Patrick County by partnering with the local rescue squad in Stuart, VA to collocate telehealth services in their building. The rescue squad also provides an EMT available to take vital signs and assist with technology needs. This program has been so successful that is has expanded to a second location in Patrick County and other areas of Virginia are interested in replicating the model.

The Three Rivers Health District is piloting a public access defibrillation program in partnership with local county governments and dispatch agencies. After coordinating a public location for the placement of secured Automated External Defibrillators (AEDs) purchased by the health district, local dispatch officials can grant access to anyone in need of the AED during an emergency. The controlled crates also contain STOP THE BLEED® kits.

The Rappahannock Area Health District is delivering a health education curriculum known as HEAL to improve health literacy rates among vulnerable communities, including older adults, Afghan refugees, and non-English speakers. The program teaches critical skills like when to go to urgent care versus the emergency room, how to read prescription instructions, and how to describe symptoms to a doctor. So far 150 community members have received the training, and evaluation results demonstrate increased knowledge and high levels of participant satisfaction.

#### FOOD ACCESS

In Virginia, approximately 246,800 women, infants, and children are eligible for the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Virginia WIC serves 48.8% of those eligible for WIC, compared to the national coverage rate of 51.2%. The WIC Program is a vital resource to promote health and well-being as 50.3% of all infants born in the

United States in addition to millions of young children under the age of five are estimated to be eligible for WIC. WIC provides supplemental foods, health care referrals, and nutrition education to low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, infants, and children.

In Virginia, about 8.3% of households receive benefits from the Supplemental Nutrition Assistance Program (SNAP), compared to 11.5% of households in the United States. SNAP provides food benefits to low-income families to supplement their grocery budget so they can afford the nutritious food essential to health and well-being. In the United States, about 47% of households receiving SNAP have at least one person with a disability. Comparatively, in Virginia, that number is slightly higher at 48%. In Virginia, the data suggests that White households and Black or African American households have relatively high rates of SNAP benefit receipt, compared to other racial/ethnic groups (Figure 22). Meanwhile, in the United States as a whole, the percentage of households receiving SNAP benefits is higher across all racial/ethnic groups, with the highest rates observed among White households. These findings indicate that SNAP benefit receipt varies across racial/ethnic groups, highlighting potential disparities in access to food assistance.



Figure 21: Households Receiving SNAP Benefits, 2018-2022 Data Source: U.S. Census Bureau ACS 5-year 2018-2022



Figure 22: Households Receiving SNAP Benefits by Race/Ethnicity, 2018-2022 Data Source: U.S Census Bureau, ACS 5-Year 2018-2022



Sources: US Census Bureau ACS 5-year 2018-2022

*Figure 23: Households Receiving SNAP Benefits, 2018-2022 Data Source: U.S. Census Bureau, ACS 5-year, 2018-2022* 



Figure 24: Households Receiving SNAP by Presence of Person with Disability, 2018-2022 Data Source: U.S. Census Bureau, American Community Survey 5-year, 2018-2022

#### IMMUNIZATIONS

The proportion of adults who receive their annual influenza vaccine decreased in the 2022-2023 influenza season compared to the prior year, based on data from the Centers for Disease Control and Prevention's *FluVaxView* survey. The decrease is observed primarily in younger adults defined as persons 18-64 years old (47.10% to 44.30%) compared to older adults defined as persons 65 and older (75.80% to 75.60%). Each year, local health districts conduct flu vaccine clinics to ensure that members of the community can receive their flu vaccine. VDH partners with medical providers to raise awareness of the importance of flu vaccine. Increasing flu vaccination coverage across the Commonwealth is an ongoing focus of VDH.

The percentage of youth (ages 13-17 years old) receiving vaccination against human papillomavirus (HPV), the virus that contributes to various cancers, decreased between 2021 and 2022 for females (73.5% to 64.4%) and slightly increased for males (56.7% to 61.0%) based on data from the Centers for Disease Control and Prevention's *TeenVaxView*. To continue efforts to increase HPV vaccination coverage rates for boys and girls, VDH partners with the Cancer Action Coalition of Virginia (CACV) to coordinate the Virginia HPV Immunization Task Force (VHIT). Increasing adolescent vaccination coverage across the Commonwealth is an ongoing priority for VDH.



Figure 25: Virginia Adult Influenza Vaccine Rates by Age, 2019-2023

Data Source: Influenza Vaccination Coverage for Persons 6 Months and Older | FluVaxView | Seasonal Influenza (Flu) | CDC



Figure 26: Virginia Human Papilloma Virus Rates by Sex, 2018-2022

Data Source: Influenza Vaccination Coverage for Persons 6 Months and Older | FluVaxView | Seasonal Influenza (Flu) | CDC

#### BIRTHS AND DEATHS

According to the Virginia Department of Health Vital Event and Screening Tracking System, there were 82,839 resident deaths, 82,271 recorded deaths, 95,583 resident births and 95,887 recorded births in 2022. Residence refers to the Virginia city or county where the mother resided for a birth. Recorded Data refer to vital events that occurred in Virginia regardless of the place of residence of the person experiencing the vital event.

#### MORTALITY

In Virginia, males have a higher mortality rate than females in both urban and rural areas (Figure 27). Overall mortality has decreased from 2021 to 2022. Table 3 demonstrates the 20 leading causes of death by age group. Lower percent distribution within an age group is indicated by green shading, while higher percent distribution within an age group is indicated by red shading. Virginia's Age-Adjusted Mortality Rate saw a decrease from 839.4 in 2021 to 757.1 in 2022. This is driven by decreases in heart disease, neoplasms, and COVID-19 related mortality. For age groups 5-19 years old and 20-44 years old, accidents, homicide and suicide are the leading causes of death. About 60% of liver related mortality falls in the 45-69 age group. For age group 0-4, the leading causes of death are largely influenced by causes of infant mortality (Table 3).



Figure 27: Mortality Rate Per 100,000 Residents Urban vs Rural Data Source: Virginia Department of Health, Vital Statistics, 2022

| 2022 CAUSE OF DEATH | AGES 0-4 | AGES 5-19 | AGES 20-44 | AGES 45-69 | AGES 70+ | TOTAL  |
|---------------------|----------|-----------|------------|------------|----------|--------|
|                     |          |           |            |            |          | DEATHS |
| HEART DISEASES      | 0.02%    | 0.04%     | 2.50%      | 26.46%     | 70.97%   | 16,181 |
| NEOPLASMS           | 0.02%    | 0.20%     | 2.44%      | 36.88%     | 60.46%   | 15,213 |
| COVID               | 0.23%    | 0.14%     | 2.87%      | 28.13%     | 68.64%   | 4,426  |
| ACCIDENTS           | 0.74%    | 2.92%     | 35.33%     | 34.09%     | 26.91%   | 4,834  |
| CEREBROVASCULAR     | 0.05%    | 0.10%     | 1.39%      | 17.73%     | 80.72%   | 4,088  |
| LOWER-RESPIRATORY   | 0.06%    | 0.13%     | 0.70%      | 25.92%     | 73.19%   | 3,129  |
| DIABETES            | 0.00%    | 0.21%     | 4.31%      | 36.80%     | 58.67%   | 2,807  |
| ALZHEIMER'S         | 0.00%    | 0.00%     | 0.00%      | 3.67%      | 96.33%   | 2,450  |
| NEPHRITIS/NEPHROSIS | 0.06%    | 0.00%     | 1.91%      | 24.95%     | 73.08%   | 1,627  |
| SUICIDE             | 0.00%    | 6.75%     | 41.73%     | 36.45%     | 15.06%   | 1,155  |
| LIVER               | 0.00%    | 0.00%     | 9.80%      | 59.80%     | 30.39%   | 1,122  |
| PARKINSONS          | 0.00%    | 0.00%     | 0.00%      | 5.96%      | 94.04%   | 1,040  |
| SEPTICEMIA          | 0.20%    | 0.30%     | 3.31%      | 31.22%     | 64.96%   | 996    |
| INFLUENZA/PNEUMONIA | 0.10%    | 0.61%     | 2.46%      | 25.61%     | 71.21%   | 976    |
| HYPERTENSION/RENAL  | 0.00%    | 0.00%     | 2.99%      | 26.83%     | 70.18%   | 969    |
| HOMICIDE            | 2.64%    | 12.73%    | 63.97%     | 18.35%     | 2.31%    | 605    |
| PNEUMONITIS         | 0.00%    | 0.00%     | 2.10%      | 19.54%     | 78.36%   | 476    |
| IN-SITU NEOPLASMS   | 0.24%    | 0.72%     | 0.48%      | 22.78%     | 75.78%   | 417    |
| PERINATAL           | 99.28%   | 0.72%     | 0.00%      | 0.00%      | 0.00%    | 278    |
| CONGENITAL          | 44.39%   | 5.83%     | 11.21%     | 24.22%     | 14.35%   | 223    |

 Table 3: Leading Causes of Death by Percent Distribution of Cause of Death Across Age Groups, 2022

 Data Source: Virginia Department of Health, Vital Statistics, 2022

#### HEART DISEASE

While most groups have seen a slight increase in heart disease mortality, Black Virginians and those living in rural areas face disproportionately higher age-adjusted mortality rates from heart disease than their counterparts. Heart disease age-adjusted mortality rates per 100,000 population have increased from 147.0 in 2016 to 161.4 in 2021 (Figure 28). Heart disease mortality has a disproportionate effect on certain demographic groups. For example, Black Virginians faced heart disease mortality rates nearly two to three times as Hispanic Virginians every year from 2016–2021 (Figure 29). People living in urban areas had notably lower heart disease mortality rates compared to those living in rural areas (Figure 30).

Obesity and diabetes are risk factors for heart disease. Obesity prevalence rose from 31% in 2016 to 34.81% in 2021(Figure 31). The prevalence of diagnosed diabetes in adults remained stable from 2018 to 2021 at 10% (Figure 32). Despite increasing heart disease mortality rates and comorbid prevalence, health behaviors such as smoking and physical inactivity, also risk factors of heart disease, have declined in overall prevalence from 2018 to 2021. Smoking prevalence declined from 14.95% to 12.44%. Physical inactivity prevalence declined from 23.3% to 20.9%.



Figure 28: Heart Disease Mortality Rate, 2016-2021 Data Source: Virginia Department of Health, Vital Statistics Program, 2016-2021



Figure 29: Heart Disease Mortality Rate by Race/Ethnicity, 2016-2021 Data Source: Virginia Department of Health, Vital Statistics Program, 2016-2021



Figure 30: Heart Disease Mortality Rates per 100,000, by Urban/Rural Status in Virginia, 2016-2021 Data Source: Virginia Department of Health, Vital Statistics Program, 2016-2021



Figure 31: Obesity Prevalence Among Adults, 2018-2021 Data Source: Centers for Disease Control, Behavioral Risk Factors Surveillance System, PLACES, 2021



Figure 32: Percent of Adults with Diagnosed Diabetes, 2018-2021 Data Source: Centers for Disease Control, Behavioral Risk Factors Surveillance System, PLACES, 2021



Figure 33: Percent of Adults Who Report Current Smoking, 2018-2021 Data Source: Centers for Disease Control, Behavioral Risk Factor Surveillance System, PLACES, 2021



Figure 34: Percent of Adults Who Report No Leisure-Time Physical Activity, 2018-2021 Data Source: Centers for Disease Control, Behavioral Risk Factor Surveillance System, PLACES, 2021

#### HEART DISEASE PREVENTION INITIATIVES

The Office of Family Health Services was awarded two grants from the Centers for Disease Control and Prevention in 2023 – The National Cardiovascular Health Program and the Innovative Cardiovascular Health Program. Under the long-term goal of reducing heart disease deaths, the grants focus on (1) improved blood pressure control among partner health care and community populations; (2) reduced disparities in blood pressure control; and (3) increased utilization of social support services. The VDH established the Virginia Healthy Hearts Initiative to coordinate local community groups, health systems, Federally-Qualified Health Centers and primary care, and community-based organizations to implement the following CDC evidencebased strategies: Leverage electronic records and health information technology to identify high risk patients and monitor health disparities and referrals; Create multi-disciplinary teams to enhance access to and quality of care along the continuum of care; and Establish linkages between clinical and community partners to social services and supports. The geographic areas of focus include cities and counties in the Central, Eastern, and Southwest Regions due to high prevalence of hypertension and low health opportunity concentrated in these regions. In 2023, the VDH piloted these grants in Petersburg, Portsmouth, and Roanoke. In subsequent years, the initiative will expand to Richmond, Henrico County, Emporia, Halifax County, Norfolk, Newport News, Hampton, Suffolk, Franklin City, Southampton County, Martinsville, Henry County, Danville, Pittsylvania County, and Lynchburg.

To date, the VDH has partnered with the Virginia Hospital and Healthcare Association to create a VHHA Data Analytics Dashboard for health systems to identify patients at high risk for readmission due to heart disease; secured a partnership with four JenCare (ChenMed) clinics in Colonial Heights / Petersburg, Richmond, Portsmouth, and Norfolk to pilot a Chronic Care Management Model that incorporates a Community Health Worker and Pharmacist on the healthcare team; collaborated with Unite Us to strengthen clinical-community linkages; partnered with Huddle Up Moms to train healthcare and community partners to implement the Moms Under Pressure Program; supported Local Health Departments and community-based organizations to offer the CDC Healthy Heart Ambassador Program.

Crater Health District launched a blood pressure monitoring program at the Richardson Memorial Library in Emporia in partnership with the American Heart Association; this initiative will be replicated at interested libraries throughout the district. Additional programming support will include the Healthy Heart Ambassador program through the VDH Office of Family Health Services.

Leveraging Rural Recovery & Response grant funding, the Three Rivers Health District secured 10 mobile blood pressure screening units that have been placed across the health district in local health departments and with community partners such as YMCAs and libraries. The screening devices provide print outs containing screening results and general guidance on how to interpret the readings. To date, over 3,200 blood pressure screenings have been conducted across the district.

In collaboration with six local partners, including towns, schools, marinas and parks, the Eastern Shore Health District has deployed 22 automated external defibrillators (AEDs) in public outdoor spaces on the Eastern Shore. These AEDs will be easy-to-use by laypeople and are directly connected to EMS providers. Immediate access to an AED increases the chance of survival for out-of-hospital cardiac arrest. The Eastern Shore Health District will work closely with the communities using the facilities where these AEDs have been placed to ensure people are aware of the AEDs and comfortable using them when needed.

## MATERNAL MORTALITY

Maternal mortality as defined by the World Health Organization (WHO) are deaths at any point in the pregnancy or in the first 42 days of the postpartum period that are related to pregnancy, though it is recognized that this definition may not encompass the full picture of

deaths occurring to pregnant people. Maternal deaths have significant impacts on families and serve as an important indicator on the quality of the health system<sup>5</sup>. The US continues to have higher rates of maternal mortality as compared with other industrialized nations according to the WHO definition. Despite advances in care, significant racial disparities still exist for non-Hispanic Black mothers, with the Black/White disparity ratio at nearly 2.5<sup>6</sup>. In 2021, the Black maternal mortality rate in Virginia (96.7 per 100,000 live births) exceeded the national rate (69.9 per 100,000 live births).



Figure 35: Virginia Maternal Mortality Rates, 2013-2021 Data Source: Virginia Department of Health, Division of Health Statistics, 2019-2021

## INFANT MORTALITY

Infant mortality is a hallmark of the overall health status of a population. Infant mortality rates have remained relatively consistent in recent years but vary by race and ethnicity. For example, recent data indicate a disparity in infant mortality rates; in 2021, the rate among Black infants was 2.2 times more than their White counterparts (Figure 36). Preterm birth and low birthweight, both of which contribute to infant mortality, continue to match national trends, and demonstrate racial disparities (Figure 37).

The overall prevalence of preterm birth and low birthweight in Virginia continue to be under 10%; however, disparities persist by race/ethnicity (Figure 38). The CDC reported that in 2021 preterm births affected 10% of infants born in the United States. Additionally, the preterm birth rate saw a 4% increase compared to the prior year with higher rates seen among Black or African American infants. Preterm infants are usually of low birthweight and lower weight is associated with an increased risk of mortality.

<sup>&</sup>lt;sup>5</sup> Collier, AY and Molina, RS. (2020) Maternal Mortality in the United States: Updates on Trends, Causes, and Solutions. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7377107/

<sup>&</sup>lt;sup>6</sup> Centers for Disease Control and Prevention. (2021) Maternal Mortality Rates in the United States. https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2021/maternal-mortality-rates-2021.htm



Figure 36: Infant Mortality Rate by Race/Ethnicity, 2017-2021 Data Source: Virginia Department of Health, Division of Health Statistics, 2017-2021



Figure 37: Preterm Births by Race/Ethnicity 2017-2021 Data Source: Virginia Department of Health, Division of Health Statistics, 2017-2021



Figure 38: Low Birthweight by Race and Ethnicity, 2017-2021 Data Source: Virginia Department of Health, Division of Health Statistics, 2017-2021

## CHILD MORTALITY

Child mortality is an important metric that measures the outcomes of child health interventions and can give insights into the likelihood that a child will reach their tenth birthday. There are disparities in child mortality in children ages 1-9 between racial groups. Specifically, there are racial disparities with non-Hispanic Black children experiencing higher rates of mortality between 2017-2021. In 2021, child mortality rates increased by 36.6% for non-Hispanic Black children and 31.3% for Hispanic children compared with 2020, while mortality decreased by 10.8% and 44.4% among non-Hispanic White children and non-Hispanic Asian/PI children compared with 2020, respectively.



Figure 39: Child (1-9) Mortality Rates by Race and Ethnicity 2017-2021 Data Source: Virginia Department of Health, Division of Health Statistics, 2017-2021

#### MATERNAL AND CHILD HEALTH INITIATIVES

The Division of Family Health Services in the Office of Family Health Services administers Virginia's Title V Maternal Child Health Services Block Grant States Program. Virginia's Title V Program strives to eliminate health disparities, improve birth outcomes, and improve the health and wellbeing of Virginia's mothers, infants, children, and youth, including children and youth with special healthcare needs (CYSHCN) and their families. Title V-funded programs are operationalized across six domains: Women/Maternal Health, Perinatal/Infant Health, Child Health, Adolescent Health, Children and Youth with Special Health Care Needs, and Cross-Cutting/Systems Building. In Virginia, Title V serves as the foundational funding stream for state, regional, and local MCH programs, and is a critical public health infrastructure component. Title V provides essential financial and technical support to approximately 75 state programs and contracts across multiple statewide systems of services, including programs administered in local health districts, community collaborations and coalitions, and partnerships with other state and national organizations. Additionally, Title V funding supports the delivery of clinical services and health education within each of Virginia's 35 local health districts (LHDs).

Title V funding is often braided with other funding streams for gap-filling, data support, or other assurances. Examples of Title V-funded programs include: Virginia's Newborn Screening Program, Maternal Mortality and Infant Mortality Review Teams, oral health initiatives, Five Star Breastfeeding initiative across Virginia's hospitals, perinatal mental health and substance use, Virginia's BabyCare home visiting program and partnership with Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV), developmental screening, child safety seat program, injury prevention curriculum, childhood immunizations, comprehensive sex education programs, two part-time Youth Advisors, family engagement efforts, Child Development Centers (CDCs), Care Connection for Children (CCCs), pediatric and adult sickle cell programs, Virginia Bleeding Disorders Program, maternal and child health workforce development initiatives, and local programs across all 35 local health districts.

Early childhood home visiting offers expectant parents and families with young children support, education, and guidance during pregnancy, postpartum and the early stages of a child's development. Home visitors are professionally trained to help parents form positive connective bonds with their child and learn developmental milestones. The Office of Family Health supports three early childhood home visiting programs: MIECHV, the Virginia Healthy Start Initiative, and Resource Mothers. The MIECHV Program supports pregnant women and parents with young children who live in communities that face greater risks and barriers to achieving positive maternal and child health outcomes. Families choose to participate in home visiting programs, and partner with health, social service, and child development professionals to set and achieve goals that improve their health and well-being. MIECHV Program home visiting models - Nurse Family Partnership, Parents as Teachers, and Healthy Families - serve at risk families who are prenatal families and children ages 0-5 years old. MIECHV has 19 required benchmarks that range from Prenatal Care, Maternal Health, Child Health and Developmental Screenings. The Virginia Healthy Start Initiative (VHSI) targets four localities (Petersburg, Hopewell, Portsmouth, and Norfolk), where the issues of maternal mortality, infant mortality, low birth weights and preterm delivery rates continue to be higher than the state and national averages. The goal of VHSI is to reduce significant disparities in perinatal health, particularly disparities experienced by Hispanics, African Americans, and immigrant populations in order to reduce the

rate of infant mortality and improve perinatal outcomes. This is accomplished through services to individuals as well as efforts to enhance the capacity of the community's perinatal and women's health services systems. Resource Mothers seeks to lower infant deaths and low birth weight rates in Virginia's pregnant and parenting teens. Any pregnant teen, 19 years or younger, is eligible for the program. This program uses a two-generation or three-generation approach to serve target populations. Educational and support services are also available to other family members such as the partner, the teen's parents, and the infant.

The Eastern Shore Health District is one of only a few local health departments in Virginia that offer maternity care, as well as the Nurse Family Partnership program. The Nurse Family Partnership Program is an evidence-based community health program that partners specially educated nurses and first-time moms, starting early in the pregnancy and continuing until the child's second birthday. Moms enrolled in Nurse-Family Partnership benefit by getting the care and support they need to have a healthy pregnancy. At the same time, families develop a close relationship with the nurse who becomes a trusted resource. Prenatal care for women with limited English proficiency and support for those who are first-time parents are among the growing needs seen in the Eastern Shore. Over the past year, community health workers have provided outreach and education to Spanish and Haitian Creole-speaking community members. Community health workers have also provided ongoing support to this population as they navigate the healthcare required for a safe and healthy pregnancy and birth, as well as the first two years of their child's life. Enrollment and retention rates in the Nurse Family Partnership increased throughout 2023.

#### CANCER

Cancer is a major public health concern and is the second leading cause of death in the state. In 2020, there were 40,580 new cancer diagnosis and 15,498 cancer deaths in Virginia. For every 100,000 people in Virginia, 146 died of cancer<sup>7</sup>. Black males are more likely than all other race/gender combinations to be diagnosed with cancer in Virginia. The cancer mortality rate for Black Virginians was 15% higher than White Virginians in 2020 (Figure 40).

VDH's Cancer Prevention and Control Programs, comprised of the Virginia Cancer Registry (VCR), Every Woman's Life (EWL), and Comprehensive Cancer Control Program (CCCP), work collaboratively to implement a comprehensive and coordinated approach to inform policy, systems, and environmental change strategies to address the burden of cancer in Virginia. The VCR is a statewide registry of data on individuals diagnosed with cancer, including initial treatments received in Virginia or Virginia residents who received cancer care out of state. The data is utilized by VDH and statewide partners to help monitor cancer trends over time, identify cancer patterns in various populations, guide planning and evaluation of cancer programs, help set priorities for allocating health resources, and advance cancer research. The EWL program provides free breast and cervical cancer screening services to low-income uninsured Virginia women 18-64. Since 1997, the program has served over 71,000 Virginians, provided more than

<sup>&</sup>lt;sup>7</sup> Centers for Disease Control and Prevention. (2023). U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool. https://gis.cdc.gov/Cancer/

210,000 breast and/or cervical cancer screenings, and diagnosed over 2,500 breast and/or cervical cancers.

The CCCP supports the state cancer coalition and its partners in establishing and implementing the <u>Virginia Cancer Plan</u>, which outlines strategies to address the burden of cancer through prevention, early detection, treatment, and survivorship. Over the past year, the CCCP and its coalition partners have provided sun safety education, sunscreen dispensers, and sunshade structures to schools and parks & recreations sites across the state; supported testing of radon in homes; created and implemented a toolkit to aid oral health professionals in incorporating HPV vaccination education into their practices; funded community based organizations to address barriers to patients accessing cancer screening and treatment services; and provided support to pediatric cancer survivors as they transition back to school after treatment.



Figure 40: Age-adjusted Cancer Mortality Rate per 100,000 Data Source: Virginia Department of Health, Virginia Cancer Registry, 2020

## HIV AND SEXUALLY TRANSMITTED INFECTIONS

Despite a programmatic focus on serving people of color, non-Hispanic Black people are still more severely impacted by the HIV epidemic than any other race/ethnicity. Among new HIV diagnoses, non-Hispanic Black people have accounted for more than half of new HIV diagnoses each year for the past five years. Non-Hispanic Black people with HIV living in Virginia represent an even greater share of HIV diagnoses than the distribution of cases nationwide at 57% compared to 43%<sup>8</sup>. In the last five years, the rate of HIV infection among non-Hispanic Black people has not dropped below 24 per 100,000. In comparison, no other race/ethnicity group contracted HIV at a rate higher than 12 per 100,000. While non-Hispanic Black people only account for 20% of the Virginian population, they accounted for 453 or 57% of new HIV diagnoses in 2022. In 2022, non-Hispanic Black people (26 cases per 100,000) were more than twice as likely to be infected with HIV compared to Hispanics (10.1 cases per 100,000), seven times as likely compared to Asians (3.7 cases per 100,000), and more than seven times as likely to be infected compared to non-Hispanic Whites (3.5 cases per 100,000). The rate of HIV

<sup>&</sup>lt;sup>8</sup> Kaiser Family Foundation. (2022, July22). BlackAmericansandHIV/AIDS: The Basics. https://www.kff.org/hivaids/fact-sheet/ blackamericans-and-hivaids-the-basics/]

infection among non-Hispanic Black people has steadily increased since 2020 while the rate among non-Hispanic Whites and Hispanics have decreased in 2022. Non-Hispanic Black men were 4.5 times more likely to be infected with HIV than non-Hispanic Black women based on 2022 diagnoses.



#### SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infection (STI) rates have increased, some to their highest levels ever reported. Increases in cases of syphilis and congenital syphilis are especially concerning. New cases of early syphilis diagnosed in Virginia in 2022 were 14% higher (17.9 cases per 100,000 people) than in 2018 (15.7 cases per 100,000 people). Even though most cases were diagnosed among men, cases among women increased 69.7%, from 3.3 to 5.6 cases per 100,000 people. Congenital syphilis cases diagnosed in Virginia increased 607% from 2013 to 2022 (from 3.0 to 21.1 cases per 100,000 live births) and 90% from 2018 to 2022 (from 11.1 to 21.1 per 100,000 live births).

New cases of gonorrhea increased by 10.9% from 2018 to 2022 (from 140.4 to 155.7 cases per 100,000 people) while chlamydia cases decreased 8.4% during the same period (likely due to decreased screening in the younger age groups during the COVID-19 pandemic). Rates of chlamydia, gonorrhea, syphilis, and congenital syphilis are disproportionately high among Black non-Hispanic and Hispanic populations. Rates of chlamydia, gonorrhea and early syphilis among Black non-Hispanic people were six, ten and six times higher, respectively, than among White people in 2022. Similarly, rates of these STIs among Hispanic people were 2.6, 1.6 and 2.2 times higher than among White people. Among all congenital syphilis cases diagnosed from 2013-2022 in Virginia, 53.9% were diagnosed among Black non-Hispanic mothers. These disparities are caused not by ethnicity or heritage, but likely by social conditions that can more commonly affect certain minority groups. Factors such as poverty, distrust of the healthcare system and fear of discrimination from healthcare providers may be some of the barriers to staying sexually healthy for some members of these groups.

#### HIV AND STI PREVENTION INTITIATIVES

The Office of Epidemiology established an Incident Management Team (IMT) to address rising rates of adult and congenital syphilis. The IMT developed objectives to comprehensively address the increase in cases by expanding the number of syphilis tests performed by Local Health Departments and partner community-based organizations, promoting doxycycline as STI post-exposure prophylaxis (DoxyPEP), and integrating STI prevention messaging across population health and community health programs. The Division of Disease Prevention also launched a new syphilis resource web page, which includes resources for patients and healthcare providers across the Commonwealth, as well as the most recent case counts and data trends.

The VDH Pharmacy Testing Program is a partnership between VDH and the Virginia Pharmacy Association (VPhA). The program ensures rapid HIV and Hepatitis C testing services are available at select local pharmacies throughout Virginia. Since July 2023, VDH staff has trained 37 pharmacists from 18 pharmacies to administer rapid tests and provide appropriate referrals to additional services or disease prevention needs. No insurance is required. Testing is free at all participating sites; test results are available in approximately 20 minutes. Visit the Pharmacy Testing Program <u>website</u> for additional information, including the pharmacy locations and hours of testing.

The Division of Disease Prevention (DDP) has been expanding its PrEP (pre-exposure prophylaxis) services to cater to an increasing number of clients after the COVID-19 public health emergency. In 2023, two health districts, Piedmont and Rappahannock, were added to PrEP services, taking the total number of DDP-funded clinics to 33. The program served approximately 1,200 clients in 2023, which is close to pre-pandemic numbers. About 86% of the clients were men, most of whom identified as men who have sex with men. Women comprised 10% of the clients, while nearly 2% of the clients were transgender women. Most of the client's ages ranged between 20-39 years old, slightly younger than the participants before the pandemic. The client demographics have changed as well. During the pandemic, more white men and transgender women continued with PrEP, while the number of black men decreased. However, since the end of the pandemic, more men of color have engaged in PrEP services. Presently, black clients make up almost 37% of PrEP clients, Latino clients, and white clients about 40%. Visit Virginia's PrEP services website for more information, including a map of clinical sites.

The Three Rivers Health District Ryan White program provides a continuum of HIV wraparound services for adults living with HIV in the ten counties that make up the health district, to include medical and non-medical case management. As of September 1, 2023, the program has 66 active clients. In the spring of 2023, Three Rivers embarked on a new clinical partnership with Riverside Health System to provide infectious disease clinical services to clients, enhancing the quality of care with a more community provider.

Crater Health District re-established its Men's Sexual Health Clinic. In addition to regular Family Planning and STI clinic hours, the Men's Sexual Health Clinic is a partnership of the Minority Health Consortium and Serenity and operates on the second and fourth Mondays of the month from 5–7 p.m. at the Petersburg Health Department.

#### SUICIDE

Suicides among males and females in Virginia decreased slightly from 2018-2022 (Figure 42). While approximately 49% of Virginia's 2022 population was male, 81% of 2022 suicides among Virginians were male, consistent with national trends. Firearms are the most common method used (64%) in suicides of male Virginians, followed by suffocation (23%)<sup>9</sup>. Suicide among male Virginians decreased by 3.4% from 2018 to 2022, while suicide among female Virginians decreased by 20.1% during the same period.

The VDH is the lead agency for youth suicide prevention pursuant to Virginia Code § 32.1-73.7. The VDH Suicide Prevention Program supports the coordination of youth suicide prevention and postvention efforts throughout the state. To accomplish this work, the program partners with the Department of Behavioral Health and Developmental Services (DBHDS) and co-facilitates the Suicide Prevention Interagency Advisory Group (SPIAG), a statewide coalition dedicated to education and strategic alignment of all suicide prevention, intervention, and postvention efforts via a public health model.

The overarching goals of this program are, 1) to foster leadership, collaboration and partnerships among public, private, non-profit and community entities, including the integration and coordination of suicide prevention efforts across multiple sectors, 2) to provide training and education to enable communities to recognize and respond to suicide risk and educate support systems of those children and adolescents at risk for suicide, 3) to ensure a seamless continuum of care for those at risk for suicide and their support networks, 4) to reduce barriers and increase access to mental/behavioral health services and supports, 5) to cultivate resources and leadership among attempt survivors and survivors of suicide loss via implementation of postvention strategies within communities, and 6) to refine and expand data collection and evaluation of suicide prevention initiatives.

The suicide prevention program receives the majority of its funding through federal grants with a focus on primary prevention. Projects include the Campus Suicide Prevention Center of Virginia, the Virginia Zero Suicide Framework initiative, free access to the Collaborative Assessment and Management of Suicidality (CAMS) training for clinicians, a suicide awareness campaign for postpartum persons, and technical assistance related to organizational policy and procedure surrounding prevention and postvention. In 2022, the program was awarded the Garrett Lee Smith grant through SAMHSA which provides an additional 5 years of funding for youth suicide prevention work. The primary goals of this grant include, 1) increase the capacity of Virginia's system infrastructure to improve early intervention and assessment services, including screening programs, to youth who are at risk for mental or emotional disorders that may lead to a suicide attempt, 2) increase the capacity of Virginia's system infrastructure to provide better suicide care and appropriate community-based mental health services for youth at risk of suicide or suicide attempts, 3) enhance the VDH Youth Suicide Prevention Program's capacity to monitor effectiveness of services and for research, technical assistance, and policy development, and 4) increase Virginia's capacity to improve its comprehensive approach to

<sup>&</sup>lt;sup>9</sup> Centers for Disease Control and Prevention. (2023). Suicide Data and Statistics. https://www.cdc.gov/suicide/suicide-data-statistics.html

youth suicide prevention and recognize/respond rapidly and appropriately to suicide risk among youth/young adults.



Figure 42: Deaths by Suicide, 2018-2022 Data Source: Virginia Department of Health, Vital Event Statistics Program, 2018-2022



Figure 43: Deaths by Suicide Among Virginia Residents, 2018-2022 Data Source: Virginia Department of Health, Vital Event Statistics Program, 2018-2022

#### SUBSTANCE USE AND DRUG OVERDOSE DEATHS

Drug overdose deaths remain a concern in Virginia. In 2022, 62% of the drug overdose deaths among Virginians were White, non-Hispanic, 31% Black non-Hispanic, 5% Hispanic/Latino (all races), and 1% of other race/ethnicity (Figure 44). White, non-Hispanic Virginians have the highest rate of drug overdose deaths. In 2022, there were 1748 drug overdose deaths among Virginians in urban/rural areas. Of the 1748 drug overdose deaths, 84% of the Virginians that died of a drug overdose lived in urban areas and 15% lived in rural areas (Figure 45). The geographic disparities in access to substance abuse treatment centers across Virginia are identified in Figure 46. This map is important as it shows where support may be lacking and where more resources are needed to help people struggling with addiction.



Figure 44: All-Drug Overdose Deaths, 2018-2022 Data Source: Virginia Department of Health, Vital Event Statistics Program, 2018-2022



Figure 45: All Drug Overdose Deaths by Urban/Rural, 2018-2022 Data Source: Virginia Department of Health, Vital Event Statistics Program 2018-2022



Figure 46: Substance Use Treatment Facilities, 2022 Data Source: SAMHSA N-SUMHSS, 2022

## **BINGE DRINKING**

In Virginia, 18.5% of males reported binge drinking in the past month which is significantly higher than that reported in females. In 2021, males were more likely to binge drink than females (Figure 47).



Figure 47: Percent of Adults who Report Binge Drinking (5+ drinks for males or 4+ drinks for females on an occasion) in the Past 30 Days, 2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance Survey

## ADOLESCENT ALCOHOL USE

According to the Substance Abuse and Mental Health Administration (SAMHSA), among adolescents ages 12 to 14 who reported drinking alcohol in the past month, 99.7% reported getting it for free the last time they drank. In 2021, 19% of students in grades 9–12 reported drinking alcohol at least one day during the past thirty days, which is lower than what was reported in 2011 (31%). In 2021, 22.7% of female students and 16.2% of male students reported drinking alcohol at least one day during the past 30 days<sup>10</sup>.

#### SMOKING AND E-CIGARETTES

According to the Virginia Tobacco Control Program, the overall percentage of adults who are current smokers has steadily decreased (Figure 48), but the utilization of e-cigarettes and vaping has continued to increase (Figure 49). The Northern region has the lowest percentage of smokeless and current e-cigarette users.

<sup>&</sup>lt;sup>10</sup> Substance Abuse and Mental Health Services Administration. (2021). National Survey on Drug Use and Health. Table 8.20B—Source where alcohol was obtained for most recent use in past month: among past month alcohol users aged 12 to 20, by age group and gender: Percentages, 2021. https://www.sam- hsa.gov/data/sites/default/files/reports/rpt39441/ NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetailedTabs2021/NSDUHDetabs2021/NSDUHDetabs2021/NSDUHDetab



Figure 48: Percent of Adults who Report Being a Current Smoker, Percentage of Population, 2018-2021 Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, PLACES



Figure 49: Percent of Adults who Report Current E-Cigarette Use, Percentage of Population 2017-2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance System, 2017-2021

| Region       | Current Smokeless Tobacco<br>Use | Current E-Cigarette Use |
|--------------|----------------------------------|-------------------------|
| Central      | 3.70%                            | 7.54%                   |
| Eastern      | 3.64%                            | 8.31%                   |
| Northern     | 1.34%                            | 5.04%                   |
| Northwestern | 3.76%                            | 8.03%                   |
| Southwestern | 6.36%                            | 5.80%                   |

Table 50: Smokeless Tobacco and E-Cigarette Use among Adults by Region, 2021 Data Source: Virginia Department of Health, Behavioral Risk Factor Surveillance System, 2021

## SUBSTANCE USE PREVENTION INITIATIVES

VDH is a recipient of the Centers for Disease Control and Prevention's Overdose Data to Action for States (OD2A-S) grant. This grant supports Agency wide efforts to enhance the ability to track and prevent nonfatal and fatal overdoses while also identifying emerging drug threats. The work supported by this grant emphasizes surveillance strategies and the promotion of evidence-based and evidence informed interventions that have an immediate impact on reducing overdose morbidity and mortality, with a focus on opioids, stimulants, and polysubstance use. OD2A-S supports critical prevention work focused on:

- Implementing and advancing clinician/health system initiatives and Prescription Drug Monitoring Program
- Partnerships between Public Health and Public Safety to decrease the impact of drug overdose
- Implementing harm reduction strategies that reduce overdose, increase treatment entry, reduce drug frequency and improve the health of people who use drugs
- Supporting linkage interventions that facilitate care retention and/or prevention treatment interruptions and access to recovery services

Crater Health District offers regular REVIVE! trainings throughout the district to increase awareness of the signs of overdose and how to respond to an overdose event. Participants receive free naloxone at the conclusion of the training. In the fall of 2023, New Kent County, part of Chickahominy Health District, signed a Memorandum of Understanding (MOU) with Henrico Area Mental Health and Development Services to implement a mobile Medication Assisted Treatment (MAT) pilot program.

Central Shenandoah Health District's Population Health Team expanded the reach of their harm reduction programming. This expansion included the implementation of routine REVIVE! Office Hours hosted in public libraries throughout the district providing free of cost, walk-in access to Rapid REVIVE!, naloxone, fentanyl test strips, drug disposal kits, and other medication safety resources. Access to free lay rescuer training and Naloxone was also enhanced using an online request form shared with community members and organizations as well as internally with other CSHD teams as a tool for connecting groups and individuals to the service. Additionally, Rapid REVIVE! and naloxone continued to be provided during outreach at various community events. Between January 1, 2023, and September 1, 2023, the CSHD Population Health Team trained 578 individuals as lay rescuers and dispensed 641 boxes of Naloxone. Of additional note, the first ever districtwide harm reduction outreach network was spearheaded by the CSHD population health community coordinator and health educator with the purpose of facilitating a more coordinated effort in the realm of harm reduction between organizations who offer outreach services. 2023 also signified remarkable growth of the CSHD Connection2Care program facilitated mostly by the eight Community Health Workers on the Population Health Team. The utilization of the Unite Virginia referral platform played a critical role in the team's ability to significantly increase the number of cases at one time. Between January and June 2023, the CHW team was able to provide resource navigation support to nearly 230 individual clients.

Richmond-Henrico Health District identified the opioid crisis as a key place the local health district needed to be involved. They hired both a substance use coordinator, to plan and connect with local community organizations, and two peer recovery specialists to engage and support the needs of individuals with substance use disorder. Additionally, RHHD has allocated two Community Health Worker positions to substance use disorder outreach. The initial focus was on naloxone; expanding awareness, training, and providing at no cost to those who might experience or witness an overdose. RRHD collaborated with other agencies and organizations that were active in supporting people who use substances.

The Naloxone Distribution program distributed 138,231 naloxone kits to partners in 2023, as well as 99,650 harm reduction test strips. Since 2019, the Virginia Department of Health (VDH) has distributed no-cost naloxone to partners upon request, using a demand-driven distribution model. In 2023, VDH, along with other state agency partners, developed a statewide plan to distribute opioid reversal drugs (e.g., naloxone) and harm reduction test strips to eligible entities and individuals at no cost across Virginia. This plan was developed to strategically place naloxone with individuals in areas of highest impact. The current focus is distribution of no-cost opioid reversal drugs to high-risk individuals and settings, including:

- People who use drugs (PWUD) and their family members and friends
- Authorized comprehensive harm reduction sites (CHR)
- Community services boards (CSB)
- Community-based organizations that serve high-risk populations
- Local health departments (LHD)
- First responders (law enforcement agencies, fire service organizations, licensed EMS agencies)
- Public K-12 school divisions and higher education institutions
- Treatment and Recovery facilities



Figure 51: Naloxone Distributed to Partners in Calendar Year 2022 and 2023 Data Source: Virgina Department of Health, 2023



Figure 52: Harm Reduction Test Strips Distributed in Calendar Year 2022 and 2023 Data Source: Virginia Department of Health, 2023



Figure 54: Naloxone Kits Shipped by Address Calendar Year 2023 Data Source: Virginia Department of Health, 2024

## OPIOID ABATEMENT AUTHORITY

In 2023, VDH was awarded \$2,903,843 from the Opioid Abatement Authority to support projects for state agencies. This is the highest award received by any state agency. These funds will support the following projects:

- Naloxone distribution infrastructure.
- Purchase of naloxone kits.
- Supporting and extending certified harm reduction program sites around the Commonwealth. These funds will be used to add one outreach worker to each of seven existing program sites.
- Opioid use disorder coordinators who will champion the district-wide efforts in collaboration with local governments to maximize the reach and effectiveness of the agency's various opioid use disorder abatement efforts.

## CONCLUSION

Together with its partners, the Virginia Department of Health aims to make Virginia the healthiest state in the nation. In the upcoming year, VDH will encourage collaboration to improve population health and monitor shared progress as measured by health indicators. Using data to evaluate progress will help VDH and its partners assess whether strategies and systems are effective and drive positive public health outcomes.

## APPENDIX A -CODE OF VIRGINIA § 32.1-14

## Annual Report

The Board shall submit an annual report to the Governor and General Assembly. Such report shall contain information on the Commonwealth's vital records and health statistics and an analysis and summary of health care issues affecting the citizens of Virginia, including but not limited to, health status indicators, the effectiveness of delivery of health care, progress toward meeting standards and goals, the financial and geographic accessibility of health care, and the distribution of health care resources, with particular attention to health care access for those Virginia citizens in rural areas, inner cities, and with greatest economic need. Such report shall also contain statistics and analysis regarding the health status and conditions of minority populations in the Commonwealth by age, gender, and locality.

#### APPENDIX B – ACRONYMS AND ABBREVIATIONS

- ACS- American Community Survey
- CDC- Centers for Disease Control and Prevention
- HUD- U.S. Housing and Urban Development
- NPI- National Provider Identifier
- NPPES- National Plan and Provider Enumeration System
- VDH Virginia Department of Health

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