

# VIRGINIA STATE HEALTH ASSESSMENT 2022

## DATA HIGHLIGHTS

### Indicators with Improving Trends

#### 1. Beach Water Quality Monitoring

- The number of days for which beaches are under advisory in Virginia decreased from **67** days in 2017 to **61** days in 2021.
- The number of advisories decreased annually from **68** in 2018 to **32** in 2021. The number of beaches under advisory has been fairly stable with little variations over the years from 18 in 2017 to 16 in 2021.

#### 2. Elevated Blood Lead Levels in Children

- The percentage of children < 6 years with elevated blood lead levels decreased from **2.9%** in 2016 to **1.9%** in 2019. (The number of children < 6 years tested for blood lead levels increased from **53,474** to **62,293** in 2021 from the previous year.)
- The number of children < 16 years with elevated blood lead levels decreased from **3.0%** in 2017 to **2.0%** in 2021. (The number of children < 16 years tested for blood lead levels increased from **57,013** to **64,919** in 2021 from the previous year.)

#### 3. Percent Population Served with Lead Levels Below Action Limit (0.015mb/L) (NTNC School and Non-School)

- The percentage of the population served by non-transient non-community water systems that serve a school (NTNC School) and had lead levels below the action limit increased from **89.20%** in 2020 to **96.25%** in 2021.
- The percentage of the population served by non-transient non-community that do not serve a school (NTNC Non-school) increased from **84.75%** in 2020 to **97.80%** in 2021.

#### 4. **Water Systems with Optimized Fluoride levels**

- The number of systems with optimized fluoride levels decreased yearly from **71** in 2016 to **63** in 2019; however, the number increased substantially in 2020 to **73**.

#### 5. **Stroke Hospitalization Rate**

- The rate of stroke hospitalization decreased from **244.4** per 100,000 in 2016 to **208.1** per 100,000 in 2020. The rate of stroke hospitalization decreased yearly prior to 2020.

#### 6. **Ischemic Heart Disease Hospitalization Rate**

- The incidence of hospitalizations due to ischemic heart disease decreased from **1,456.2** per 100,000 people in 2016 to **1,221.4** in 2020.

#### 7. **Asthma Hospitalization Rate**

- The asthma hospitalization rate in 2020 was **447.95** per 1000,000 people, lower than it was in 2016 at **662.62**.

#### 8. **Alzheimer's and Dementia-related Disorders (ADRD) Hospitalization**

- The rate of ADRD hospitalization decreased from **555.76** in 2016 per 100,000 people to **466.27** in 2020.

#### 9. **Arthritis Hospitalization Rate**

- The rate of arthritis hospitalizations decreased each year between 2016 and 2020, from **1059.78** per 100,000 people to **621.94** in 2020.

#### 10. **Tuberculosis**

- The rate of tuberculosis infection in Virginia has decreased within 5 years from **2.4** per 100,000 population in 2017 to **1.9** per 100,000 population in 2021. However, Virginia has not met the Healthy People 2030 goal of 1.4 per 100,000 population

#### **11. High School Students Who Reported Being in a Physical Fight**

- The percentage of high school students who reported being in a physical fight decreased between 2013 and 2019 from **23.5%** to **19.5%**.

#### **12. Non-Fatal Assault Hospitalizations**

- The number of hospitalizations from nonfatal assaults declined from **1,058** to **816** between 2016 and 2020.

#### **13. Nonfatal Hospitalizations from Traumatic Brain Injury Among Youths in Virginia Aged 10-24 Years**

- The number of hospitalizations due to traumatic brain injury among Virginia youths decreased from 2016 at **742** to **591** in 2020.

#### **14. Nonfatal Hospitalizations from Non-Drug Poisoning**

- The number of hospitalizations from non-drug poisoning decreased yearly between 2016 and 2020 from **683** to **435**.

#### **15. Deaths From Non-Drug Poisoning**

- The number of non-drug poisoning deaths declined from **107** in 2016 to **78** in 2020.

#### **16. Influenza Vaccination Rate in Adults >65 Years Old**

- The proportion of adults > 65 years in Virginia who received their annual influenza vaccine increased between 2016 and 2021 from **67.1%** to **78.0%**.
- Virginia met the Healthy People 2030 goal of 70%.

#### **17. HPV Vaccination Among Adolescent Males**

- Among adolescent males, the HPV vaccination rate increased yearly from 2015 to 2019 from **32.0%** to **62.6%**.
- However, this is below the Healthy People 2030 goal of 80%.

#### **18. Combined 7-Series Vaccination among Children Aged 24 Months and Aged 35 Months**

- The percentage of children aged 24 months who received the combined 7-series vaccine increased to **73.3%** in 2018 from **68.8%** in 2017.

- The proportion of children aged 35 months increased between 2015 and 2018 from **75.2%** to **84.0%**.

#### **19. Percentage of High School Students Who Reported Current Alcohol Use**

- The percentage of high school students who reported current alcohol use declined from **30.5%** in 2011 to **25.4%** in 2019.

#### **20. Percentage of High School Students Who Rode With A Driver Who Had Been Drinking**

- The percentage of high school students who rode with a driver who had been drinking declined for both male and females. For males, this percentage reduced from **19.6%** to **11.9%** between 2011 and 2019. For females, the percentage declined from **20.2%** to **14.1%**.

#### **21. Adults Who Reported Binge Drinking In The Past Month**

- The percentage of adults who reported binge drinking in the past month declined yearly from **16.0%** to **14.8%** between 2017 and 2020.
- Virginia met the Healthy People 2030 goal of 25.4% or below.

#### **22. Drug Overdose Deaths from Heroin**

- The number of deaths from heroin overdose declined annually from **540** deaths in 2017 to **414** deaths in 2020.

#### **23. Drug Overdose Deaths from Benzodiazepines**

- The number of deaths from benzodiazepine overdose decreased yearly from 210 in 2016 to 174 deaths in 2020.

#### **24. Uninsured Children under the Age of 19**

- The rate of uninsured children under the age of 19 decreased from **7%** in 2010 to **4.50%** in 2020.

#### **25. Avoidable Hospitalizations**

- The percentage of avoidable hospitalizations in Virginia decreased from **14.20%** in 2016 to **12.60%** in 2019.

#### **26. Proportion of Adults that Delayed Medical Care due to Cost**

- The percentage of adults that delayed medical care due to cost decreased yearly from **12.10%** in 2015 to **10.40%** in 2020.

## **27. Lung and Bronchus Cancer**

- The lung and bronchus cancer incidence declined yearly from 62.3 in 2012 to 53 in 2019.
- The rate of deaths from lung and bronchus cancer declined yearly from **48.5** per 100,000 population in 2010 to **33.8** in 2019.
- This is below the Healthy People 2030 goal of 25.1 per 100,000 population.

## **28. Colorectal Cancer**

- The incidence of colorectal cancer in Virginia decreased from **37.8 in 2015** to **34.7 in 2019**.
- The rate of deaths due to colorectal cancer decreased from **15.2** deaths per 100,000 population in 2010 to **12.8** in 2019. However, Virginia has not met the Healthy People 2030 goal of 8.9 per 100,000 population.

## **29. Teen Pregnancy**

- The rate of teen pregnancy in Virginia declined steadily from **40.2** per 1,000 females in 2010 to **17.3** per 1,000 females in 2020.
- The rates decreased for all races and ethnicities.

## **30. Maternal Opioid Use Disorder**

- The rate of maternal opioid use disorder declined yearly from **5.6** to **4.7** per 1,000 delivery hospitalizations between 2016 and 2020.
- The rates decreased for all races.

## **31. Children (ages 0 -17 years ) with Special Health Care Needs**

- The percentage of children with special care needs decreased from **21%** in 2016 to **18%** in 2019-2020.

## **32. HIV Incidence and Linkage to Care**

- The HIV incidence in Virginia declined from **925** in 2016 to **631** in 2020.
- The percentage of people with HIV diagnosis that were not linked in 90 days declined between 2016 and 2020 from **19.26%** to **13.47%**.

- The percentage of HIV Viral suppression increased from **74%** in 2016 to **80%** in 2020.

## Indicators with Little or No Change in Trend

### 1. Percent Population Served by Community Water Systems with Lead Levels Below Action Limit (0.015mb/L) (C)

- Although on the increase, there have been subtle changes in the percentage of the population served with lead levels below action limit by community water systems (C) in Virginia over the years from **98.55%** in 2017 to **98.15%** in 2021.

### 2. Hypertension Hospitalization Rate

- The rate of hospitalizations due to hypertension decreased from 3,968.2 per 100,000 population in 2017 to 3,814.9 in 2018. In 2019, it increased to 3,900.2 and then decreased to 3,410.8 in 2020. The decrease in 2020 may be affected by issues with access to care during the pandemic.

### 3. Chronic Kidney Disease (CKD) Hospitalization Rate

- The rate of CKD hospitalization remained fairly stable in a 5-year period between 2016 and 2020 with rates ranging from **2,267.56** per 100,000 people to **2,277.28**.

### 4. Nonfatal Hospitalizations From Traumatic Brain Injury (TBI)

- Nonfatal traumatic brain injury related hospitalizations remained relatively stable within 5 years from **4,742** to **4,752** hospitalizations between 2016 and 2020.

### 5. Households With No Vehicle Available

- The proportion of households with no available vehicles remained fairly constant with mild variations within 11 years from **6.3%** in 2010 to **6.1%** in 2020.

### 6. Proportion of Adults With a Usual Primary Care Provider

- The proportion of adults with a usual primary care provider was relatively stable at around **69.5%** from 2013 to 2019.

### 7. Female Breast Cancer

- The female cancer incidence increased slightly from **126.1** in 2010 to **132.3** in 2019.
- The rate of deaths from breast cancer decreased from **22.2** per 100,000

population in 2010 to **19.2** per 100,000 population in 2019; however, it has not met the Healthy People 2030 goal of 15.3 per 100,000 females.

#### **8. Prostate Cancer**

- The incidence rate of prostate cancer has fluctuated over the past 10 years; it increased from **99** in 2018 to **107.6** in 2019.
- The rate of prostate cancer deaths had mild variations over 10 years from 2010 to 2019, from **22.2** deaths per 100,000 population to **19.9**. However, Virginia has not met the Healthy People 2030 goal of 16.9 per 100,000 population.

#### **9. Hepatitis C Infection**

- The incidence rate of Hepatitis C infection decreased yearly between 2016 and 2018 from **75.2** to **52.4** cases per 100,000 population. It increased in 2019 to **65.2** and decreased in 2020 (**42.2**) and 2021(**41.1**).

#### **10. Infant Mortality**

- The overall infant mortality rate in Virginia remained fairly constant in 11 years from **5.26** per 1,000 live births in 2010 to **5.73** per 1,000 live births in 2020.
- This is true for all races and ethnicities except for American Indian/Alaska Natives whose infant mortality rate varied from **6.37** per 1,000 live births in 2016 decreasing to **0.00** in 2018 and then increased yearly between 2019 and 2020 from **6.25** to **12.12** per 1,000 live births in 2020. However, the AI/AN population in Virginia is very small, which leads to instability in the rates when comparing them annually to other races.

#### **11. Child (1 to 9 years ) Mortality Rate**

- The child mortality rate had little variation between 2009 and 2020, from **15.7** per 100,000 population to **15.0**.



# Indicators with Worsening Trends/Issues of Concern

## 1. Adults Reporting Poor Physical Health

- The percentage of adults reporting 14 or more days of poor physical health in the past 30 days increased from **11%** in 2016 to **11.7%** in 2019

## 2. Adult Consumption of Fruits and Vegetables

- The percentage of adults who consumed fruits and vegetables 5+ more times a day decreased from **17.8%** in 2013 to **16.1%** in 2019
- The percentage of adults who did not eat fruits and vegetables at least once a day increased from **37.4%** in 2013 to **38.3%** in 2019

## 3. Adults Who are Aerobically Active For 150 Minutes Each Week and No Leisure Time Physical Activity in the Past Month

- The percentage of adults who are aerobically active for 150 minutes each week has decreased from **51.9%** in 2013 to **50%** in 2019. This is below the Healthy People 2030 goal of 59.2%
- The percentage of people with no leisure activity has worsened in four years increasing from **23.3%** in 2016 to **25.3%** in 2019. This has not met the Healthy People 2030 target of 21.2%.

## 4. Adults Who are Overweight or Obese

- The percentage of adults who are overweight or obese had a little increase from **65.4%** in 2016 to **66.4%** in 2019. However, Virginia is far from meeting the Healthy People 2030 goal of 36.0%

## 5. Diabetes Hospitalization Rate

- The rate of hospitalization due to diabetes increased yearly from **1588.8** in 2016 to **1852.49** in 2019. The rate decreases in 2020 to 1,648.15 in 2020; however, this may be due to decreased access to care during the COVID 19 pandemic.

## 6. Hotline Calls Related To Sexual Violence

- Hotline calls to the state sexual and domestic violence increased between 2017 and 2021, from **9,077** to **11,086** calls.

## **7. Nonfatal Hospitalizations and Deaths from Firearms**

- The rate of nonfatal hospitalizations from firearms worsened, increasing from **728** in 2016 to **756** in 2020.
- The number of deaths from firearms increased from **1,027** in 2016 to **1,164** in 2020.

## **8. Homicide Deaths**

- The number of deaths from homicides worsened, increasing from **434** deaths in 2016 to **516** deaths in 2020.

## **9. Middle School Students Who Reported Being in a Physical Fight**

- The proportion of middle school students who reported being in a physical fight increased from **44.4%** in 2013 to **45.8%** in 2019.

## **10. Deaths From Unintentional Falls**

- Deaths from unintentional falls increased yearly from **811** in 2016 to **981** in 2020.

## **11. Deaths from Traumatic Brain Injury**

- The number of deaths from traumatic brain injury increased between 2016 and 2020 from **1,644** to **1,876**.
- The number of traumatic brain injury deaths among youths in Virginia worsened, increasing from **258** to **317** between 2016 and 2020.

## **12. Influenza Vaccine Rates in Adults 18-64 years and in Minority Groups**

- The percentage of adults who received influenza vaccine declined from **51.1%** from 2019-2020 to **46.40%** in 2020-2021.
- While the percentage of the white population who received influenza vaccine increased between 2016 and 2021 from 51.3% to 60.9%, it decreased among the Black population from **52.5%** in 2019 to **45.6%** in 2021 and decreased among the Hispanic population from **51.4%** in 2016 to **45.2%** in 2021.
- For other/multiple races, the influenza vaccine rates declined from **61.3%** to **56.6%** between 2019 and 2021.

### **13. HPV Vaccine Among Adolescent Females**

- The proportion of females who received the HPV vaccine declined from **60.1%** in 2018 to **56.6%** in 2019. This is below the Healthy People 2030 goal of 80%.

### **14. Percentage of Middle School Students Who Rode With A Driver Who Had Been**

#### **Drinking**

- The percentage of middle school students who rode with a driver who had been drinking worsened for both boys and girls. For boys, it increased from **13.7%** in 2017 to **15.3%** in 2019, and for girls, it increased from **16.5%** in 2017 to **18.0%** in 2019.

### **15. Alcohol Attributable Deaths**

- Alcohol attributable deaths in Virginia increased every year between 2016 and 2020, from **2,926** to **3,667** deaths.

### **16. High School Students Who Reported Marijuana Use in the Past 30 Days**

- The percentage of high school students who reported marijuana use in the past 30 days increased yearly between 2015 and 2019 from **16.2%** to **17.3%**.

### **17. Nonfatal Cannabis Hospitalizations**

- Hospitalizations from cannabis increased every year from **17,796** in 2016 to **20,303** in 2019. There was a decrease to **19,837** in 2020, which may be related to the pandemic.

### **18. Drug Overdose Deaths**

- While the number of nonfatal drug overdose hospitalizations decreased yearly from 2016 (except in 2019) to 2020 from **8,069** to **7,526**, the number of deaths from drug overdose increased yearly between 2016 and 2020 from **1,324** to **1,749** deaths.
- This is true for all opioids, which increased from 1,078 deaths in 2016 to 1,478 deaths in 2020); synthetic opioids (except methadone), which increased from 624 in 2016 to 1,303 deaths in 2020; cocaine, which increased from 335 in 2016 to 435 in 2020; and psychostimulants, which increased from 66 in 2016 to 326 in 2020.

### **19. Cost Burdened Households**

- The percentage of cost burdened households in Virginia increased from **28.5%** in 2017 to **29.0%** in 2020.

### **20. Homeless Students in Virginia**

- The number of homeless students in Virginia increased from **7,663** in 2011 to **10,268** students in 2020.

### **21. Average Commute To Work Driving Alone**

- The average commute to work driving alone increased yearly between 2010 to 2020 from **25.9** minutes to **28.6** minutes.

### **22. Early Syphilis Infection**

- The rate of early syphilis increased in Virginia from **13.5** in 2017 to **16.4** per 100,000 population in 2021.

### **23. Congenital Syphilis Infection**

- The number of congenital syphilis increased from **0-2** cases per year in 2009-2012 to **17** cases in 2021.

### **24. Gonorrhea Infection**

- The rate of gonorrhea infections per 100,000 population increased yearly from **144.08** in 2017 to **174.12** in 2020. However, this rate decreased to **167.1** in 2021

### **25. Prenatal Care**

- The number of women who received inadequate care increased for all races. It increased from **7.7%** in 2012 to **21.6%** in 2020 for Hispanics, **2.8%** in 2012 to **14.5%** in 2020 for Blacks, and **4.0%** in 2012 to **9.3%** in 2020 for White.

### **26. Proportion of Adults Who Have Seen a Dentist in the Past Year**

- Although the proportion of adults who have seen a dentist in the past year has varied widely in 11 years, it decreased from **76.2%** in 2019 to **70.0%** in 2020.

### **27. Life Expectancy and Years of Potential Life Lost**

- The overall life expectancy in Virginia decreased from **79.7** years in 2019 to **78.3** years in 2020.

- The years of potential life lost increased between 2016 and 2020, from **6,584.3** per 100,000 population to **7,549.4**.

### **28. Chronic Obstructive Pulmonary Disease (COPD) Hospitalization Rate**

- The rate of COPD hospitalization increased yearly from **1,188.3** per 100,000 people in 2016 to **1,357.5** in 2019. It decreased in 2020 to 1,202.9, likely due to factors associated with the COVID-19 pandemic.

### **29. Deaths From Drowning**

- The number of deaths from drowning in Virginia increased yearly from **78** in 2017 to **93** in 2019. There was a decline in 2020 to **88**, but this may have been affected by the pandemic.

### **30. Reports of Forcible Sex Offenses**

- Although the number of forcible sex offenses reported to the police decreased in 2020, this number had an increasing trend between 2016 and 2019 from **5,529** to **5,854**. The decrease in 2020 may be due to the effect of the pandemic

### **31. Maternal Opioid Related Diagnosis**

- The rate of maternal opioid related diagnosis increased yearly from **7.7** in 2016 to **9.0** in 2019. However, this rate decreased to **7.7** per 1000 delivery hospitalizations in 2020. The decline in 2020 may be due to the effects of the pandemic.

### **32. Rate of Neonatal Abstinence Syndrome**

- The overall rate of neonatal abstinence syndrome decreased between 2016 and 2018 from **6.5** to **7.0** per 1,000 birth hospitalizations and then increased to **7.2** in 2019. However, in 2020, there was a marked decrease to **5.8** per 1,000 birth hospitalizations. This decline in 2020 may be due to the effects of the pandemic.