US VIRGIN ISLANDS DEPARTMENT OF HEALTH

Epidemiology Division

2025 Annual Report

GOVERNMENT OF THE UNITED STATES VIRGIN ISLANDS
DEPARTMENT OF HEALTH

Message from the Commissioner

As Commissioner of Health, I am honored to present—together with Dr. Esther Ellis—the *2025 Epidemiology Annual Report* of the Virgin Islands Department of Health. This report reflects our unwavering commitment to safeguarding the health of all Virgin Islanders through evidence-based practice, strategic action, and strong community partnerships. Over the past year, the VIDOH has advanced several key public health priorities:

- *Infection Control:* A territory-wide response to early-year Hand, Foot, and Mouth Disease cases led to a significant reduction in infections through timely community education and prevention messages.
- *Community Wellness:* Our teams expanded healthcare access during the 2025 Health & Wellness Fair, Mental Health Awareness Month activities, and the Breast and Prostate Cancer Awareness Walks—providing essential services, screenings, and education.
- *Youth Health:* The successful implementation of the 2025 Youth Risk Behavior Survey will help guide targeted prevention and wellness initiatives for our young people.
- *Preparedness:* Public health messaging emphasized heat safety, hydration, and hurricane season preparedness to reduce preventable illness, injury, and hospitalization.

While we celebrate this progress, we also recognize the ongoing challenges we must address — particularly in chronic disease prevention, equitable access to care, and the expansion of mental health support. I extend my deepest appreciation to our dedicated public health professionals, our partners, and our community members for their resilience and commitment.

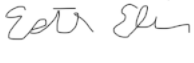
Justa "Tita" Encarnacion, RN, BSN, MBA/HCM

Justa Encarnacion
Health Commissioner
Virgin Islands Department of Health

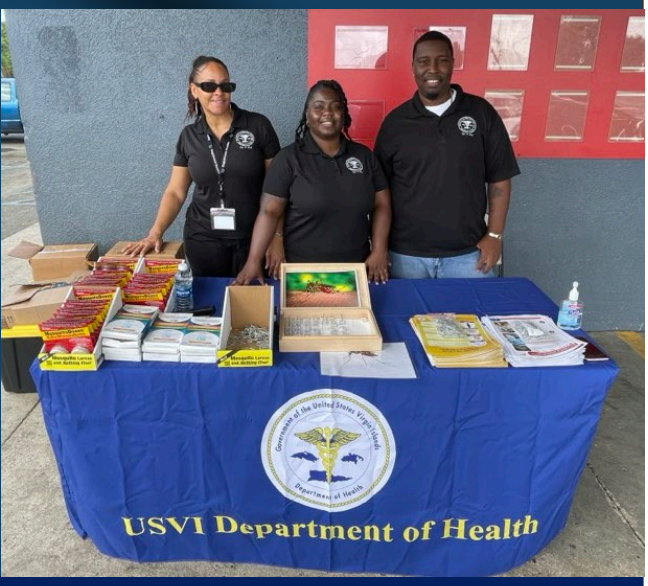
Message from the Director

As the Territorial Epidemiologist, I am proud to present the *Epidemiology Division 2025 Annual Report*, which provides a comprehensive overview of reportable disease trends across the U.S. Virgin Islands, along with highlights of the Division's major accomplishments during the past year. This report reflects both the challenges we confronted, and the collective progress made in protecting the health of our community. Disease surveillance remains the cornerstone of effective public health practice. Through systematic data collection, analysis, and interpretation, we can detect emerging threats, monitor disease activity, and guide evidence-based interventions. In 2025, the Division responded to several key public health challenges. A territory-wide outbreak of Hand, Foot, and Mouth Disease (HFMD) was effectively contained through rapid detection, education, and outreach. The Division also investigated cases of Legionellosis and lead exposure, working closely with healthcare and environmental partners to ensure timely intervention. Throughout the year, we were vigilant against endemic diseases such as dengue, influenza, and COVID-19, sustaining strong surveillance and response systems. A major milestone was the launch of the Virgin Islands' modernized disease surveillance system, transitioning to a secure, cloud-based platform that enhances timeliness, data quality, and interoperability—making the territory a national leader in public health modernization. These accomplishments reflect the dedication of our epidemiology team, healthcare providers, and community partners whose collaboration ensures the strength of our public health infrastructure. As we look ahead, we remain committed to advancing surveillance capacity, building workforce expertise, and engaging communities to promote a healthier, more resilient Virgin Islands.

Esther M. Ellis, PhD



Dr. Esther Ellis
Territorial Epidemiologist,
Director,
Epidemiology Division
Virgin Islands Department of Health



Ms. Milly Cruz, Ms. Andra Prosper, and Mr. Aubrey Drummond, Vector Control Technician (left to right), provided public education on mosquito-borne illness prevention at Cost-U-Less on St. Croix, USVI, February 2025.

Ms. Terri Pietka presented her discussion on the VIDOH Epidemiology Data Dashboard, its functionality, technology, and public health utilization at the Council of State and Territorial Epidemiologists (CSTE) 2025 Annual Conference in Grand Rapids, MI, June 2025.

Previous Years' Annual Reports are available on the VIDOH-EPI Data Dashboard.

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The Epidemiology Division (VIDOH-EPI)

The Virgin Islands Department of Health, Epidemiology Division (VIDOH-EPI) conducts surveillance of nationally notifiable diseases (NNDs) needed for disease monitoring, analysis, and timely reporting of findings to guide public health policy and decision-making. The VIDOH-EPI and the Public Health Laboratory (PHL) are funded through the Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases Cooperative Agreement from the U.S. Centers for Disease Control and Prevention (CDC).

Forms and Resources

- VIDOH-EPI website
- Data Dashboard
- Food & Waterborne Illness complaint form
- General surveillance forms
- Vaccine Preventable Disease (VPD) surveillance forms
- Specimen collection job aids for clinicians

Sociodemographic Characteristics of the U.S. Virgin Islands (USVI)

The U.S. Virgin Islands is a U.S. territory located between the Atlantic Ocean and the Caribbean Sea, consisting of four major islands: Saint Croix (STX), Saint Thomas (STT), Saint John (STJ), and Water Island (WI). The USVI covers approximately 133 square miles of combined land area (approximately twice the area of the District of Columbia). USVI is located 40-50 miles east of Puerto Rico and extends from west to east ~60 miles at the top of the arc of the other Caribbean Islands. Compared to the U.S. Census Bureau 2010 Decennial Census of Island Areas (DECIA) for USVI*, the 2020 DECIA indicated that the population of the USVI decreased by 19,259 (-18.1%) residents for a remaining total of 87,146 residents. This decrease differed by island. STX reported a decrease of 9,957 (-19%) residents, STT reported a decrease of 9,373 residents (-18.2%), and STJ reported a decrease of 289 (-6.9%) residents.

Race and Ethnicity: In 2020, the racial distribution of USVI included 67,769 (77.8%) residents identifying as Black or African American, 11,584 (13.3%) residents as White, 910 (1.0%) residents as Asian, 371 (0.4%) residents as American Indian and Alaskan Native, 51 (0.1%) residents as Native Hawaiian or Other Pacific Islander, 5,478 (6.3%) residents as some other race, and 6,569 (7.5%) residents as two or more races. A total of 16,075 (18.4%) residents identified as having Hispanic ethnicity. Approximately 1/3 of the population is foreign-born with familial and cultural ties elsewhere, primarily in the Caribbean.

Current Sex: In the 2020 DECIA, approximately 49% of the USVI population were reported as male sex and 51% were reported as female sex.

Insurance: Of the 84,630 persons reported by households in the 2020 DECIA, the number of individuals without insurance was 20,825 (24.6%). Of the 63,805 (75.4%) insured individuals, 46.6% had private health insurance and 37.2% had medical assistance. The proportion of uninsured persons in the USVI in 2020 (24.6%) was almost three times the national estimate for uninsured persons (8.6%) in 2020.

Educational Attainment
In 2020, 38.8% of residents ≥ 25 years had at least a high school diploma, while only 22.3% had a bachelor's degree or higher.

Language: According to the 2020 DECIA, 69.8% of USVI residents ≥ 5 years spoke only English at home. Of the 30.2% who reported speaking another language at home, 56.9% spoke Spanish, 29.3% spoke French Creole, and 13.8% spoke a language other than Spanish or French Creole.

Household Income: In 2019, the median household income in the USVI was $40,408 (in 2019 inflation-adjusted dollars), which is considerably lower than the U.S. median household income of $67,521, and lower than the USVI household median income in 2009 of $44,499. A greater proportion of USVI households have a household income of < $25,000 per year compared with the overall U.S. (32.9% vs 18.1%). In 2020, the unemployment rate for USVI was 9.7%.

Country of Birth: In 2020, 47% (39,916) of the USVI population were born in USVI, 18.1% (15,396) of residents were born in the U.S. or other U.S. island area or Puerto Rico, and 34.8% (29,579) of residents were born elsewhere (predominantly in Latin American or the Caribbean).

Children: In 2020, there were 17,086 children in the U.S. Virgin Islands, comprising approximately 20% of the total population. For more information specific to children in the U.S. Virgin Islands, please access the St. Croix Foundation's KIDS COUNT USVI 2025 Data Book †: https://www.flipsnack.com/5A76ADFF8D6/2025-kids-count-usvi-data-book_st-croix-foundation

* Reference: U.S. Census Bureau (2022). 2020 Island Areas Censuses: U.S. Virgin Islands.
† Reference: St. Croix Foundation for Community Development (2025). KIDS COUNT 2025 Data Book, When Data Speaks: The Voices of Our Children.

SNAPSHOTS 2025

VIDOH-EPI

Additions to USVI Notifiable Conditions

During 2025, Dr. Ellis, Dr. Ekpo, and other public health leaders came together to review and update the official USVI Notifiable Conditions list. Considering the important impact of certain conditions and diseases in the territory, additions were made to specify reporting requirements. Additions under Category A (immediately notifiable) include ***Candida aruis*** infection, elevated **lead in blood**, **RSV-associated mortality**, and **typhus** infection. Additions under Category C (reported within 4 working days) include **COVID-19** (distinct from any novel coronaviruses which are under Category A) and any **maternal death** as defined by the CDC as the death of a person while pregnant or within 42 days of termination of pregnancy.

Food and Water Safety Complaint Portal

The VIDOH launched the online food and water safety complaint portal in December 2025, making it easier for residents to report suspected foodborne or waterborne illnesses, as well as concerns related to sanitation, hygiene, and food safety practices at food service establishments. All submissions are reviewed and investigated by the VIDOH-EPI in collaboration with the Environmental Health Division. The portal helps to modernize USVI's public health infrastructure by minimizing reporting barriers and strengthening disease surveillance.

CDC Foundation Site Visit

The CDC Foundation (CDCF) is an important collaborator for the VIDOH-EPI program and has played a critical role in driving USVI data modernization and impact through the Workforce Acceleration Initiative (WAI). During October 2025, CDCF team members attended a site visit to USVI where they were able to have in-person meetings with local partners and gain a better understanding of the environment and public

CSTE DSTT 2025–2026: Cross-Division Team

The CSTE's Data Science Team Training (DSTT) program is a team-based, on-the-job training program to promote data science upskilling and support the data modernization at local public health agencies. Learners in the 12-month program work collaboratively on the project while concurrently participating in trainings, peer-to-peer learning, professional development, and coaching. VIDOH-EPI was accepted into the 2025–2026 DSTT Program and will focus on a joint project with the VIDOH Chronic Disease Division.

USVI Notifiable Conditions

Category A
Acute Flaccid Myelitis
Anthrax
Botulism
Brucellosis
*Candida auris**
Chikungunya
Cholera
Coronavirus (novel)
CRE/CP-CRE
Dengue
Diphtheria
E.coli (O 157)
Encephalitis
Enterovirus D-68
Foodborne Outbreak
Haemophilus influenzae
Influenza (mortality, novel)
Lead in blood*
Legionellosis
Leptospirosis
Measles
Melioidosis
Meningococcal disease
Mpox
Pertussis
Plague
Poliovirus
Q Fever
Rabies
RSV-associated mortality*
Rubella
Smallpox
Tuberculosis
Tularemia
Typhoid (*S. typhi)*
Typhus*
Viral Hemorrhagic Fever (Ebola, etc.)
Waterborne Outbreak
West Nile
Yellow Fever
Zika

Category B
Anaplasmosis
Chancroid
Chlamydia
Ciguatera
Ehrlichiosis
Gonorrhea
Hansen's Disease (Leprosy)
Hantavirus Infection
Hepatitis A
Hepatitis B
Hepatitis C
HIV/AIDS
HUS
Invasive pneumococcal disease
Malaria
Psittacosis (ornithosis)
S. aureus (drug resistant)
S. pneumoniae (drug resistant)
Syphilis
Trichinellosis
VISA/VRSA
VRE

Category C
Babesiosis
Campylobacteriosis
Chickenpox (Varicella)
Coccidioidomycosis
COVID-19*
Cryptosporidiosis
Cyclosporiasis
Giardiasis
Influenza (seasonal)
Listeriosis
Lyme Disease
Maternal Death*
Mumps
Salmonellosis
STEC
Shigellosis
Spotted Fever
Tetanus
Toxic-shock Syndrome
Vibriosis

*New condition added during 2025

The reporting of nationally notifiable diseases to VIDOH by healthcare providers is required by law in the U.S. Virgin Islands.

Disease Reporting in the USVI

Overview
The reporting of Nationally Notifiable Diseases (NNDs) to VIDOH by healthcare providers is required by law in the USVI. The current list of USVI Notifiable Conditions can be accessed here (left panel).

Diseases are reported using two primary forms, the Notification of Infectious Diseases Form (EPI-1) and the Dengue, Chikungunya, Zika, and Febrile Illness Reporting Form (EPI-2) The EPI-1 form is included on the next page for immediate referral. Additionally, VIDOH-EPI uses disease-specific surveillance and investigation forms for case-based investigation requirements of all NNDs.

What
In addition to NNDs, any outbreaks, exotic diseases, and unusual group expression of disease must be reported. All diseases require the reporting of patient information, including name, age, sex, race/ethnicity, date of birth, address and estate, telephone number, disease, date of onset, and symptomology. Other required information includes the method of diagnosis, laboratory result (if applicable), date of diagnosis, as well as the name, address, and telephone number of the reporting health care provider.

When
Cases or suspected cases of illness considered to be public health emergencies, outbreaks, exotic diseases, and unusual group expression of disease must be reported to the VIDOH immediately (Category A). Other diseases for which there must be a quick public health response must be reported within two working days (Category B). All other conditions must be reported within four working days (Category C).

How
Reporting forms can be downloaded from the VIDOH-EPI Data Dashboard website; complete forms can be faxed to Territorial Epidemiology Fax at 1-888-400-8620 or securely emailed to epi@doh.vi.gov. **In case of emergency (Category A, select Category B conditions or major outbreak/incident), reports can be made by telephone to the Territorial Epidemiologist at (340) 626-1654.**

Summary
• Disease reporting of notifiable diseases to VIDOH is required by law in the USVI.
• Unusual diseases or outbreaks of any kind should be reported immediately.
• Report diseases by following the instructions in the EPI-1 or EPI-2 forms. These and all investigation forms can be downloaded here.

EPI-1
Revised November 2025

Notification of Infectious Disease Form

Territorial Epidemiology Fax: 1-888-400-8620, Emergency Phone: (340) 626-1654
Fax HIV/STD reports to the Communicable Diseases Division Fax: 1-612-712-7878

This form may be used to ***report suspected and confirmed cases of notifiable conditions*** in the US Virgin Islands (USVI) based on their reporting time frames on the current USVI Notifiable Conditions List. In addition, **any outbreak, exotic disease, or unusual group expression of disease** that may be of public health concern should be reported by the most expeditious means available. A Health Department epidemiologist will contact you if further investigation is required.

Source of Information: ☐ Private Physician ☐ Private Laboratory ☐ Hospital ☐ Clinic ☐ School	**Date of Report:** (mm/dd/yyyy)	**Island:** ☐ St. Croix ☐ St. John ☐ St. Thomas ☐ Water Island
Name of Physician or Person Reporting	**Physician/Reporter Address**	**Physician/Reporter Phone** (_____) _____ - _____ extension _____
Admitted to Hospital? ☐ No ☐ Yes Date Admitted: Date Discharged:	**Disease Fatal?** ☐ No ☐ Yes Date of Death:	**Parent/Guardian:** (if applicable)

Patient Name (Last)	**(First)**	**(MI)**	**Telephone**: (_____) _____ - _____ Other:	
Address (indicate ESTATE)	City	State	Zip Code	Country
Date of Birth (mm/dd/yyyy)	Age	**Gender:** ☐ M ☐ F ☐ Other	**Ethnicity:** ☐ Hispanic ☐ Not Hispanic	**Race:** ☐ Black ☐ White ☐ Asian ☐ Unknown ☐ Other:

*Additional information such as **pregnancy status (EDD), occupation (food handler), school name/grade, daycare facility, travel history***

Category A -- Report IMMEDIATELY to the USVI Department of Health

SERIOUS PUBLIC HEALTH RISK. Make an additional IMMEDIATE telephone report to the USVI Department of Health.

- ☐ Acute Flaccid Myelitis
- ☐ Anthrax
- ☐ Botulism
- ☐ Brucellosis
- ☐ Chikungunya
- ☐ Cholera
- ☐ Coronavirus, novel or emerging
- ☐ CRE / CP-CRE
- ☐ Dengue
- ☐ Diphtheria
- ☐ *E. coli (O157)*
- ☐ Encephalitis
- ☐ Enterovirus D-68
- ☐ Foodborne Outbreak
- ☐ *Haemophilus, influenzae*
- ☐ Influenza, novel
- ☐ Lead in Blood
- ☐ Legionellosis
- ☐ Leptospirosis
- ☐ Measles
- ☐ Meningitis
- ☐ Meningococcal disease
- ☐ Mpox Virus Infection
- ☐ Pertussis
- ☐ Plague
- ☐ Poliomyelitis
- ☐ Q Fever
- ☐ Rabies
- ☐ RSV-associated Death
- ☐ Rubella
- ☐ Smallpox
- ☐ Tuberculosis
- ☐ Tularemia
- ☐ Typhoid
- ☐ Typhus
- ☐ Viral Hemorrhagic Fever, including Ebola
- ☐ Waterborne Outbreak
- ☐ West Nile
- ☐ Yellow Fever
- ☐ Zika

Category B -- Report WITHIN 48 HOURS to the USVI Department of Health

SIGNIFICANT PUBLIC HEALTH RISK. An additional telephone report is only required for those diseases indicated by the (*).

- ☐ Anaplasmosis
- ☐ Chancroid
- ☐ Chlamydia
- ☐ Ciguatera
- ☐ Ehrlichiosis
- ☐ Gonorrhea
- ☐ Hansen's Disease*
- ☐ Hantavirus Pulmonary Syndrome*
- ☐ Hemolytic Uremic Syndrome
- ☐ Hepatitis A*
- ☐ Hepatitis B
- ☐ Hepatitis C
- ☐ HIV/AIDS
- ☐ Malaria
- ☐ Psittacosis
- ☐ Staph. aureus (drug resistant)
- ☐ Streptococcus pneumoniae
- ☐ Syphilis*
- ☐ Trichinosis

Vancomycin Resistant:
- ☐ *Enterococcus*
- ☐ Staph

Category C -- Report PROMPTLY WITHIN 96 HOURS to the USVI Department of Health

- ☐ Babesiosis
- ☐ Campylobacter
- ☐ Chickenpox (varicella)
- ☐ Coccidioidomycosis
- ☐ COVID-19
- ☐ Cryptosporidiosis
- ☐ Cyclosporiasis
- ☐ Giardia
- ☐ Influenza, seasonal
- ☐ Listeriosis
- ☐ Lyme Disease
- ☐ Maternal Death
- ☐ Mumps
- ☐ Salmonellosis
- ☐ Shigellosis
- ☐ Spotted Fever
- ☐ Tetanus
- ☐ Toxic Shock Syndrome
- ☐ Vibriosis

☐ **Other disease, please specify:**

Diagnosis Status

☐ Suspect Case ☐ Confirmed Case

Diagnostic Criteria:

☐ Symptoms ☐ Laboratory

Clinical Information

Treatment Provided? ☐ No ☐ Yes Specify Treatment:

Symptom Onset Date: _____ (mm/dd/yyyy)

Clinical Symptoms:

Laboratory Results:

Date 1 (mm/dd/yyyy)	Test Name 1	Result 1
Date 2 (mm/dd/yyyy)	Test Name 2	Result 2
Date 3 (mm/dd/yyyy)	Test Name 3	Result 3

THE REPORTING OF NOTIFIABLE DISEASES TO THE DEPARTMENT OF HEALTH IS REQUIRED BY LAW IN THE US VIRGIN ISLANDS. Information collected is confidential pursuant to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and reports will be maintained by the US Virgin Islands Department of Health.

Disease Surveillance in the USVI

NEDSS Modernization to Transform Public Health

VIDOH utilizes National Electronic Disease Surveillance System (NEDSS) Base System (NBS), a CDC-developed information system, to manage NND data and share disease-related health information with partners such as the CDC. NBS integrates data from multiple sources on all territorially reportable conditions to help VIDOH officials identify and track cases of disease over time. NBS supports public health investigation workflows, allows for data extraction, processing, and analysis, and facilitates the adoption of national consensus standards across public health and healthcare including HL7, LOINC, and SNOMED.

During January 2024, the VIDOH-EPI identified a critical need to maintain the cloud-hosted NBS instance. After consulting with federal partners and subject matter experts, VIDOH leadership identified a solution to preserve the USVI system that would also support the local data modernization initiative. VIDOH chose to migrate the integrated disease surveillance system to a new platform hosted on Amazon Web Services (AWS) and update the NBS instance to the most advanced version, NBS 7.

The USVI NBS 7 instance went live on May 6, 2025, with USVI becoming the *second* US jurisdiction utilizing NBS 7 in production and the *first* to implement NBS 7 on AWS. Benefits of this change included cost savings, additional bandwidth, real-time data ingestion and updates, the ability to have greater autonomy over the data and its endpoints, and an opportunity to build local informatics capacity. By the end of 2025, VIDOH successfully re-onboarded 93.6% (103/110) of all previously connected electronic reporting facilities and onboarded one new reporting laboratory previously unable to connect due to interoperability barriers.

Updating the USVI database to NBS 7 in a locally owned, cloud-hosted, AWS environment has improved disease surveillance by providing the most up-to-date CDC-supported data system, improving timeliness of reporting by offering local providers more flexibility in electronic reporting options, and giving USVI direct control over workflow decision functionality. Furthermore, improved interoperability and maintaining a cloud-based platform were additional benefits of the database migration.

Supporting a USVI disease surveillance system that is modern, functional, and cost-efficient is important to be able to monitor and respond to disease threats quickly and inform appropriate public health action. This important investment in public health infrastructure will allow USVI public health providers, clinicians, policymakers, and other stakeholders to work together towards the common goal of protecting population health.

Ms. Terri Pietka, Ms. Rachel Azanleko-Akouete (Project Manager for Workforce Acceleration Initiatives), Ms. Leah de Wilde, Ms. Michelle Panneton (Director of Programs for Workforce Acceleration Initiatives), Commissioner Justa Encarnacion, Dr. Esther Ellis, and Dr. Lisa LaPlace Ekpo (left to right) collaborated during the CDC Foundation Workforce Acceleration Initiative site visit on St. Thomas, USVI, October 2025.

Ms. Milly Cruz (left) and Ms. Taylor Warren (right) provided event services during the 2025 USVI Health and Wellness Fair on St. Croix, USVI, June 2025.

Ms. Annellie Gumbs (back), plus Mr. Aubrey Drummond (left) and Mr. Donald Bough (right), Public Health Technicians, performed field investigation in response to a case of Legionellosis on St. Thomas, USVI, June 2025.

Mr. David Delgado (left), Chronic Disease Diabetes Program Manager, and Dr. Esther Ellis (right) participated in the Battle of the Agencies at Cramer's Park on St. Croix, USVI, September 2025.

Disease Surveillance and Trends in the USVI

VIDOH-EPI Report Overview

This report provides a summary of all nationally notifiable diseases/conditions reported to VIDOH-EPI in 2025 by program area. A list of all reported case counts identified as confirmed or probable can be found in Table 1. This report excludes cases under the jurisdiction of the Communicable Diseases Division: sexually transmitted infections, human immunodeficiency virus, and tuberculosis/latent tuberculosis infection.

Table 1:
2025 Reported Case Counts
for Nationally Notifiable Diseases

CONDITION	CASE COUNT
Campylobacteriosis	3 confirmed
Dengue	47 confirmed
Giardiasis	3 confirmed
Hepatitis B virus, acute	2 probable
Hepatitis B virus, chronic	9 confirmed or probable
Hepatitis C virus, acute	2 confirmed
Hepatitis C virus, chronic or resolved	8 confirmed
Influenza	378 confirmed
Lead in blood	9 confirmed, 3 probable, 3 suspect
Legionellosis	4 confirmed, 1 probable
Lyme Disease	1 confirmed (off-island exposure)
COVID-19	140 confirmed
Salmonellosis (excluding *S. typhi/paratyphi*)	7 confirmed
Shigellosis	1 confirmed
Varicella (Chickenpox)	3 probable
Vibriosis	1 confirmed

Vector-borne and Arboviral Diseases

Arboviral Diseases Overview

Arboviral diseases are caused by viruses transmitted through the bites of mosquitoes, ticks, or other arthropods. Examples include Zika, chikungunya, dengue, and yellow fever viruses. During 2016–2025, VIDOH-EPI utilized ArboNET, a specialized database for arboviral surveillance, in addition to VI-NEDSS surveillance, enabling us to enhance reporting in the territory. There were no reports of active cases of Zika, chikungunya, or yellow fever within the territory in 2025.

Dengue

Dengue virus is an arbovirus with four serotypes (DENV1–4) and spread by *Aedes* mosquitoes. Infection is often asymptomatic, but ~25% of patients experience febrile illness, 5% experience severe disease, and <1% die.

Following the 2024 outbreak of dengue virus in the USVI, the VIDOH continued to perform surveillance, investigate potential cases, and implement vector control strategies to prevent disease transmission. After the 2024 USVI dengue outbreak, local trends steadily declined. In 2025, USVI documented 47 confirmed cases of dengue.

Hepatitis

Reported 2025 events reflect zero confirmed or probable cases of acute hepatitis A virus infection. For hepatitis B virus (HBV) infection, there were two probable cases of acute HBV and nine confirmed or probable cases of chronic HBV. For hepatitis C virus (HCV) infection, there were two confirmed or probable cases of acute HCV and eight confirmed cases of chronic HCV.

Healthcare-Associated Infections (HAI)

VIDOH uses CDC's National Healthcare Safety Network (NHSN) as a critical tool for tracking and monitoring HAIs and other key healthcare-related patient safety and quality indicators. These data are reported by healthcare facilities, including acute care hospitals and dialysis centers. These consistent reports enable timely identification of infection trends, help to support targeted prevention efforts, and inform quality improvement initiatives.

In 2025, NHSN reports include 21 dialysis events, four ventilator-associated events (VAE), three catheter-associated urinary tract infections (CAUTI), and one blood stream infection (BSI). The pathogens contributing to infection were *Escherichia coli* (n=2), *Enterobacter cloacae* (n=1), *Enterococcus faecalis* (n=1), and *Klebsiella pneumoniae* (n=1).

Ms. Terri Pietka, Ms. Leah de Wilde, Dr. Esther Ellis, and Dr. Hannah Cranford (left to right) attended the Council of State and Territorial Epidemiologists (CSTE) 2025 Annual Conference in Grand Rapids, MI, June 2025.

Ms. Leah de Wilde presented her analysis of high-risk substances in USVI wastewater at the Council of State and Territorial Epidemiologists (CSTE) 2025 Annual Conference in Grand Rapids, MI, June 2025. Photo credit: Brandon Cruz Photography, courtesy of CSTE.

Mr. Aubrey Drummond, Vector Technician, Ms. Annellie Gumbs, and Ms. Jayla Norman (left to right) performed lead detection procedures during a home assessment on St. Croix, USVI, October 2025.

Ms. Jayla Norman, Ms. Joy Adkins, and Ms. Milly Cruz (left to right) perform lead detection procedures during a home assessment on St. Croix, USVI, November 2025.

Lead

Following the 2024 VIDOH Safe Haven–Lead-Free Families initiative, enhanced lead exposure surveillance activities continued. During 2025, VIDOH-EPI officially added "Lead in Blood" as a Category A Notifiable Condition, requiring the immediate report of elevated blood lead levels.

Lead is a naturally occurring metal that can cause negative health effects. Children younger than six years are more likely to be exposed due to their hand-to-mouth behavior. No safe blood lead level (BLL) in children has been identified. Even low levels of lead in blood are associated with developmental delays, difficulty learning, and behavioral issues.

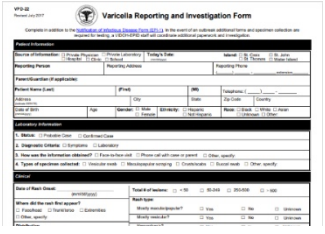
A blood lead test is the best way to determine if a child has been exposed to lead. Testing for blood lead requires: 1) a positive capillary screening test and 2) a confirmatory venous blood draw test (≥3.3µg/dL). After a blood lead case has been confirmed, a home assessment is conducted to identify possible lead exposure sources.

During 2025, VIDOH-EPI documented nine confirmed, three probable, and three suspect cases of elevated lead in blood. Of the nine confirmed cases, six were on St. Croix and three were on St. Thomas. Four were adults and five were children (aged 1–4 years old). Home assessments identified potential sources of lead exposure to be walls with chipping paint, ceramic/porcelain tiles, cooking pots, and ceramic kitchenware (e.g., plates). Certain businesses were identified to be higher risk of exposure to lead, including indoor shooting ranges.

VIDOH-EPI continues to perform surveillance of potential lead exposures across the Territory, offer home assessments to identify lead in homes, and provide guidance and support to families impacted by lead exposure.

Vaccine Preventable Diseases (VPDs)

During 2025, VIDOH-EPI documented three probable cases of varicella. Furthermore, VIDOH-EPI investigated three reports of suspected measles and one report of meningococcal disease that were investigated and determined to not be epidemiologically confirmed cases. For a complete list of VPDs click here. To report a suspected case of varicella, download and complete the VPD-22 form, linked below, and submit to VIDOH-EPI.



Varicella Reporting and Investigation Form

Download the varicella investigation form (VPD-22) here.

Respiratory Diseases

Influenza Surveillance

VIDOH-EPI engages providers across the territory and maintains ongoing partnerships to ensure consistent participation and timely weekly reporting to the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). ILINet data contribute to the Centers for Disease Control and Prevention (CDC) national influenza surveillance report, FluView, and serve as a key component of the national Influenza Surveillance System. For surveillance purposes, influenza-like illness (ILI) is defined as a fever (temperature ≥100°F [37.8°C]) accompanied by a cough and/or sore throat in the absence of a known cause other than influenza. ILI surveillance for 2025 identified 766 visits for ILI among 47,869 total outpatient visits, representing 1.6% of all visits. These data were submitted by five consistently participating providers conducting surveillance with the support of VIDOH-EPI.

In 2025, VIDOH-EPI investigated 378 laboratory-confirmed influenza cases. Of these, 68 (18.0%) were reported in St. Croix, 296 (78.3%) in St. Thomas, and 14 (3.7%) in St. John. This represents the highest case count recorded in the past five years.

COVID-19 Surveillance

During 2025, VIDOH-EPI continued surveillance for SARS-CoV-2 in the local community. A total of 140 COVID-19 cases were reported to the VIDOH. Zero COVID-19-related fatalities were reported for 2025.

Foodborne and Waterborne Diseases

During 2025, VIDOH-EPI investigations identified three confirmed cases of campylobacteriosis, three confirmed cases of giardiasis, seven confirmed cases of salmonellosis, one confirmed case of shigellosis, and one confirmed case of vibriosis.

Foodborne & Waterborne Illness Complaint

Apart from confirmed cases of reportable food and water related illness, VIDOH-EPI also collects information from the public about food or water related complaints or concerns, such as “food poisoning,” contamination concerns, unsanitary conditions in food establishments, or unsafe food handling practices. This information can be collected via phone by calling the USVI Food Safety Hotline at (340) 725-5389 or (340)774-7477 ext. 5647 (Monday-Friday, 8:30 AM-5 PM) or via the online USVI Food & Waterborne Illness Complaint Form.

VIDOH-EPI successfully launched the public-facing USVI Food & Waterborne Illness Complaint Form webpage in December 2025. This form serves as a place where community members can report incidents of food and waterborne illness or file complaints related to food establishments in USVI to the VIDOH. VIDOH-EPI collaborates with the VIDOH Environmental Health Division to investigate specific consumer complaints potentially linked to an illness outbreak. They work together to conduct epidemiological investigations, conduct health inspections, and environmental assessments.

Ms. Andra Prosper (left) and Ms. Leah de Wilde (right) provided public education on mosquito-illness prevention at AgriFest on St. Croix, USVI, February 2025.

Dr. Esther Ellis presented on workforce development strategies at the CSTE Annual Conference in Grand Rapids, Michigan, June 2025.

Ms. Milly Cruz (left) and Mr. Aubrey Drummond (right) traveling for a legionellosis field investigation on St. Croix, USVI, April 2025.

Mr. Aubrey Drummond perform *Legionella* sampling on a showerhead on St. Croix, USVI, April 2025.

Legionellosis

During 2025, VIDOH-EPI investigated ten suspected cases of legionellosis: four were identified as confirmed and one as a probable case. Legionellosis is a bacterial infection caused by inhaling water droplets or mist containing *Legionella pneumophila* bacteria. Symptoms include cough, fever, headache, muscle aches, and shortness of breath. One type of legionellosis is Legionnaires' Disease, a type of severe pneumonia. People at increased risk of legionellosis include people 50 years or older, current or former smokers, and people with weakened immune systems.

Legionella bacteria occur naturally in freshwater environments but can become a health risk when the bacteria enter building water systems. *Legionella* most commonly spreads to people through devices that use water such as hot tubs or air conditioning systems. Common sources of *Legionella* in USVI include household cisterns, plumbing systems that are inadequately disinfected, hot water heaters that are not functioning properly, and sink faucets and showerheads. Factors that can lead to growth of *Legionella* in water systems include the maintenance of certain temperatures (77-113 degrees Fahrenheit), insufficient disinfectant or filtration, stagnant water, and biofilm, a slime of bacterial growth.

In 2025, *Legionella* investigation and response took place across a variety of sites including diverse businesses, facilities, and private homes. Steps in the VIDOH-EPI legionellosis investigation process include reportable disease notification, active case finding, environmental water sampling, laboratory culture, and public notification and education during outbreaks. VIDOH-EPI identified *Legionella* growth in cisterns, underground wells, hot water heaters, sink faucets, and showerheads.

When *Legionella* is detected, VIDOH-EPI provides remediation guidance often including information regarding the replacement of broken hot water heaters, the replacement of sinks or faucets, cistern disinfection, water filtration installation, and the hyperchlorination of the water system, when possible. After remediation has been implemented, the VIDOH-EPI then provides sample re-testing, if requested by the facility.

The key to preventing legionellosis is to control *Legionella* bacteria growth and spread. Buildings and devices at increased risk for *Legionella* should have a water management program based on industry standards. Cisterns that collect and store rainwater can be ripe for *Legionella* growth if not properly maintained. Owners of certain devices, like cisterns and hot tubs, should take steps to reduce the risk of *Legionella* growth by ensuring they are properly cleaned and disinfected.

For more information on cistern maintenance, please see Your Health and Cisterns – A USVI Comprehensive Guide.

Other Notifiable Conditions

VIDOH also monitors other communicable diseases that may impact the USVI community including illnesses such as norovirus and hand, foot, and mouth disease. In addition to routine surveillance activities, the VIDOH-EPI conducted full investigations for two reported cases of human herpesvirus 6, ensuring appropriate public health follow-up and response.

Hand, Foot, and Mouth Disease (HFMD)

During February–April 2025, the VIDOH-EPI identified and responded to an outbreak of HFMD across the Territory. A total of 247 cases—243 on St. Thomas and four on St. Croix—were reported at USVI day cares and schools.

HFMD a common illness in children under five years old that can spread quickly at schools and day care centers. Symptoms are often mild, lasting for 7–10 days, and can include fever, sore throat, mouth sores, and rash commonly found on the hands and feet. HFMD is often self-limiting; supportive care can include over-the-counter pain relievers, soothing mouth rinses or sprays, hydration, and adequate rest.

HFMD is spread through direct contact with an infected person's saliva, mucus, or blisters, respiratory droplets from an infected person's cough or sneeze, contaminated surfaces, or contact with infected feces, such as changing diapers. To reduce the risk of infection, frequent hand washing and cleaning and disinfecting commonly touched surfaces and shared items (e.g., toys) are critical.

To contain the outbreak and prevent further illness, the VIDOH-EPI provided phone consultations and in-person visits for direct observation and infection control training at affected schools and daycares. Improved hand hygiene protocols and environmental cleaning efforts were recommended for all school and childcare settings.

Dr. Lisa LaPlace Ekpo presented at a Legislative Hearing session on the Hand, Foot, and Mouth Disease outbreak and Measles preparedness on St. Thomas, USVI, April 2025.

Ms. Rachel Azanleko-Akouete (center) presented Ms. Leah de Wilde (left) and Ms. Terri Pietka (right) with "Rising Public Health Tech Star" awards for publicly presenting their work at the CDC Foundation Summit on Chicago, IL, June 2025.

Ms. Sheri Hirter, Fiscal Coordinator, attended the Public Health Management Corporation Event on St. Croix, June 2025.

Mr. Cosme Harrison (center) and Ms. Annellie Gumbs (right) provided education on public health opportunities at the Careers in Healthcare Fair held on St. Thomas, October 2025.

Special Public Health Surveillance

Wastewater Surveillance

Wastewater surveillance monitors pathogens and chemicals in aggregate human waste to describe trends in infectious diseases and substance use across communities. It has been used in the U.S. since the 1940s as an early warning system for public health response. Because of its flexible nature, established methodology, and potential for near real-time reporting, wastewater surveillance can be used to monitor trends of ongoing and emerging public health threats such as respiratory infections or drug use. VI-DOH partners with the Virgin Islands Waste Management Authority to collect weekly wastewater samples for respiratory disease and substance surveillance from five sampling sites across St. Croix, St. Thomas, and St. John.

VI-DOH analyzed substance wastewater surveillance data from October 2023 through December 2024 to better understand community-level substance use patterns in the Territory, addressing limited drug use prevalence and outcome data. A total of 204 wastewater samples were tested for select parent drugs and metabolites (indicated in parentheses), including cocaine (benzoylecgonine), fentanyl (norfentanyl), methamphetamine and amphetamine, xylazine (4-hydroxy xylazine), and a nicotine metabolite (trans-3′-hydroxycotinine). Cocaine, benzoylecgonine, and trans-3′-hydroxycotinine were detected in almost every sample, while fentanyl and norfentanyl were detected less frequently. Xylazine biomarkers were not detected during the study period. Community consumption estimates (mg/day/1,000 people) were calculated using measured drug concentrations, wastewater flow, and population estimates that included both resident and estimated tourist populations.

Separately, VI-DOH analyzed respiratory disease wastewater surveillance data from 2022 to evaluate the relationship between wastewater SARS-CoV-2 RNA concentrations and epidemiological COVID-19 case data. Samples were analyzed via PCR, and viral concentrations were evaluated as both raw measurements and normalized effective concentrations using a fecal indicator. Epidemiological COVID-19 case data were analyzed using daily counts and rolling averages, and associations between wastewater and case data were assessed using Spearman correlation and lead-time analyses.

At the territory level, wastewater SARS-CoV-2 RNA concentrations were moderately correlated with reported COVID-19 cases ($\rho = 0.50–0.57$, $p<0.05$). When analyzed by island, statistically significant moderate to strong correlations were observed for St. Croix and St. Thomas, while associations for St. John were not significant. Lead-time analyses indicated that increases in wastewater SARS-CoV-2 RNA appeared before reported case surges by 1–8 days across all islands, with the strongest lead times observed for St. Croix and St. Thomas.

Integrating wastewater monitoring into routine public health practice can strengthen outbreak preparedness, response, and substance use prevention efforts in the USVI.

USVI Fellowships and Field Officers

Career Epidemiology Field Officer (CEFO):
CEFOs are epidemiologists deployed by the Centers for Disease Control and Prevention (CDC) with experience in surveillance, epidemiology, preparedness, research, training, and policy development. Their mission is to strengthen state, tribal, local, and territorial epidemiology capacity for public health preparedness and response.

Epidemic Intelligence Service (EIS):
The EIS is a prestigious two-year fellowship program employed by the CDC designed to train doctoral-level professionals in the practice of consequential epidemiology, which is the collection, analysis, and interpretation of data for evidence-based public health action. The EIS Officers are assigned to either the CDC headquarters in Atlanta or to local, territorial, or state health departments to gain experience in the rapid and effective response to emerging infectious and non-infectious disease threats. The EIS program plays a critical role in strengthening the United States public health workforce.

Applied Epidemiology Fellowship:
The Applied Epidemiology Fellowship is a two-year training program implemented by the Council of State and Territorial Epidemiologists (CSTE). The program is designed for recent and current graduate students of public health who want to gain professional skills in a state, territorial, local, or tribal health department including data analytics, communication, community partnership, management and finance, leadership, systems thinking, and policy and program development.

Ms. Jayla Norman performed lead detection procedures on a cooking pan during a home assessment on St. Thomas, USVI, October 2025.

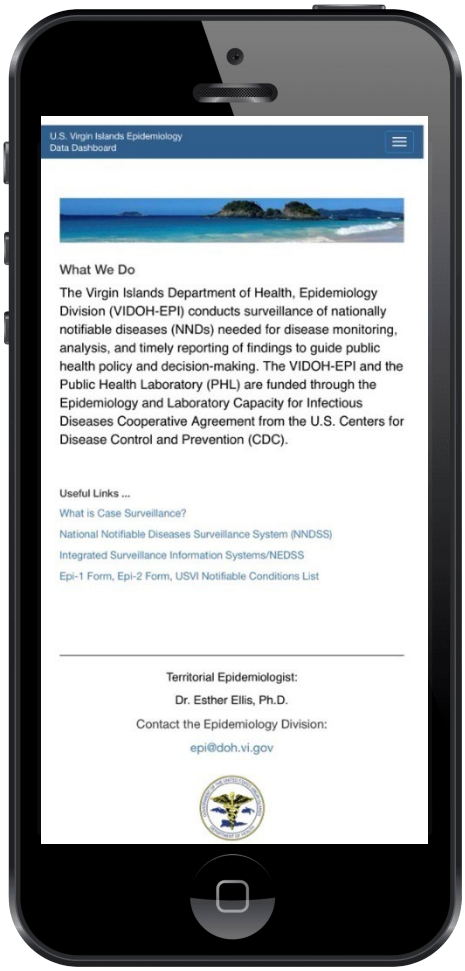
Mr. Aubrey Drummond performed lead detection procedures during an assessment on St. Croix, USVI, December 2025.

U.S. Virgin Islands Epidemiology Data Dashboard

2025 Interactive Enhancements

Accurate, timely communication of health data empowers communities. In the USVI, public health data has not been consistently available to the public. To address this gap, in 2024, the VIDOH-EPI launched the first user-friendly public health data dashboard. This tool provides data on disease trends, emerging outbreaks, and other health concerns impacting the territory. By integrating data from laboratory reports and surveillance systems, the dashboard ensures that USVI residents, policymakers, and healthcare professionals have access to reliable, up-to-date public health information.

VIDOH-EPI Data Dashboard QR Code



NEW KEY FEATURES:

- **Customizable Filters** – Users can view data by island, time period, or health condition.
- **Recent 12-Month Trends** – Epicurves provide a visual representation of public health trends across the territory and individual islands, helping users track the most recent changes and developments.
- **Time-Series Charts** – Displays historical trends over the past decade, offering a clear view of how health data has evolved over time.
- **Geospatial Case Data** – Estate or community level maps by island detailing critical emerging disease outbreaks for enhanced situational awareness.
- **Embedded Resources** – Direct access to important VIDOH-EPI forms (Notifiable Conditions List, EPI-1, etc.), public health guidance, and surveillance insights integrated directly into the dashboard.

The dashboard is designed to translate complex health data into an accessible, interactive format, allowing a broad audience to engage with critical information through visual storytelling and dynamic features. Data is organized by program area and allows users to explore *time-series trends*, *summary statistics*, and *demographic information* specific to various health conditions.

With real-time data updates, the dashboard ensures that individuals and organizations have access to the most current and relevant information, strengthening their ability to respond proactively to emerging issues.

VIDOH-EPI Workforce Highlights

VIDOH Pi Eating Contest Winner! Mr. Cosme Harrison

On March 14, 2025, Pi Day, the VIDOH hosted its high-stakes Pie Eating Contest! Representing the powerhouse team from VIDOH-EPI, we had the dynamic duo: Mr. Cosme Harrison and Ms. Annellie Gumbs, fork to fork, locked in a battle. The competition was fierce, but in a stunning display of speed and stomach stamina, Mr. Harrison claimed the victory as *King of Pi Day!*

Public Health Week 2025: Ms. Annellie Gumbs

National Public Health Week 2025 took place from April 7–13, 2025, and was observed by the VIDOH with community events and opportunities to recognize and give thanks to public health employees. During the festivities, Ms. Annellie Gumbs was recognized for her determination, inspiration, and cheerful spirit for public health. She was crowned VIDOH's Miss Epidemiology!

Public Health Trainings and Education

During 2025, the VIDOH-EPI collaborated with multiple partners to improve public health capacity. Some of the training projects that occurred included:

- R analytics and programming training in collaboration with the CDC Foundation
- Environmental Health and Food Safety training in collaboration with the National Environmental Health Association

VIDOH Battle of the Agencies

The St. Croix Battle of the Agencies was a Government of the Virgin Islands wellness and team-building event held on September 6, 2025, at Cramer's Park. The VIDOH-EPI team members participated in various physical challenges including an obstacle course, a kayak relay race, and a water balloon contest.

CSTE LEAD: Dr. Hannah Cranford

Dr. Cranford was accepted to the Council of State and Territorial Epidemiologists (CSTE) 12-month leadership program called LEAD: Leading Epidemiologists, Advancing Data. This prestigious program provides participants with professional training, networking, mentorship, and skill-building exercises to develop leaders in public health.

2025 Epidemiology Division

Scientific Publications, Presentations, and Accolades

1. Gallalee S, Cranford H, Prosper A, Gumbs A, Mac V, Drummond A, et al. Dengue Outbreak — United States Virgin Islands, January 1–November 30, 2024. **Oral Presentation** presented at: *Centers for Disease Control and Prevention, EIS Conference 2025*; 2025 Apr 23; Atlanta, GA, USA.

2. Gallalee S, Drummond A, Cranford H, Ekpo LL, Ellis BR, Roth J, et al. Legionnaires' Disease Linked to Two Resorts — United States Virgin Islands, October–December 2024. **Oral Presentation** presented at: *Centers for Disease Control and Prevention, Epidemic Intelligence Service Conference 2025*; 2025 Apr 25; Atlanta, GA, USA.

3. Pietka TA, De Wilde L, Orr J, Ekpo LLP, Ellis EM. Enhancing Public Health Awareness in the U.S. Virgin Islands through Interactive Dashboards. **Oral Presentation** presented at: *2025 Council of State and Territorial Epidemiologists (CSTE) Annual Conference*; 2025 Jun 8; Grand Rapids, MI.

4. De Wilde L, Cranford H, Gallalee S, Ekpo LL, Ellis EM. Wastewater Surveillance for 10 Biomarkers for Parent Drug and Metabolites of Cocaine, Fentanyl, Methamphetamine, Nicotine, and Xylazine High-Risk Substances — U.S. Virgin Islands, October 2023–September 2024. **Oral Presentation** presented at: *2025 Council of State and Territorial Epidemiologists (CSTE) Annual Conference*; 2025 Jun 9; Grand Rapids, MI.

5. Cranford H, Pietka TA, De Wilde L, Ekpo LL, Ellis EM. U.S. Virgin Islands launches modernized disease surveillance system to transform public health [Internet]. *Council of State and Territorial Epidemiologists, Data Modernization Stories from the Field*. 2025. Available from: https://stories.cste.org/?page_id=458.

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