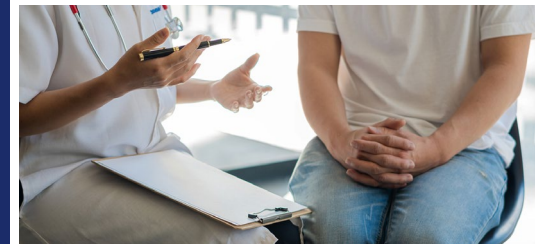
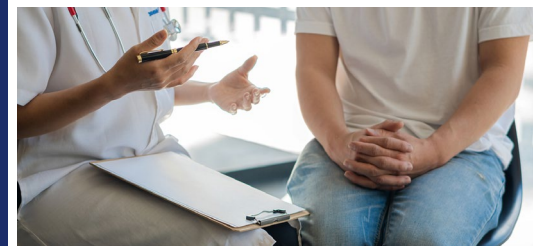


Snapshot of STDs, HIV, and Viral Hepatitis in West Virginia

2023 Office of Epidemiology and Prevention
Services: Infectious Disease Public Health Training
June 8, 2023



Viral Hepatitis Overview



Objectives

After completing this lesson, the learner will be able to:

- Recognize reporting requirements for viral hepatitis laboratory and case reports
- Understand the surveillance roles and responsibilities of public health partners to detect, report, and investigate viral hepatitis cases
- Gain understanding of viral hepatitis conditions and surveillance analysis in West Virginia (WV)
- Gain familiarity with the resources available for hepatitis case investigations, those living with hepatitis in WV and their contacts

Disease Surveillance Chart

West Virginia Reportable Infectious Diseases

Laboratories (W. Va. Code 16-3-1; 64CSR7)

Reporting of the following communicable diseases is required by law as follows:

Category I Report suspect or confirmed cases immediately to the Local Health Department	Category II Report within 24 hours to the Local Health Department	Category III Report within 72 hours to the Local Health Department	Category IV Report within 1 week to the Local Health Department	Category V Report within 1 week to the State Health Department
<ul style="list-style-type: none"> Bacillus anthracis^a Bioterrorist event^c Clostridium botulinum^c Foodborne outbreak^c Francisella tularensis^{a,2} Intentional exposure to an infectious agent^c Middle East respiratory syndrome coronavirus (MERS-CoV)^c Novel influenza infection, animal or human^a Orthopox infection^c Outbreak or cluster^c Rubella^b Rubeola (measles)^b SARS coronavirus infection^c Smallpox^c Viral hemorrhagic fever^b Waterborne outbreak^c Yersinia pestis^a Any laboratory evidence of current infection listed in Category I 	<ul style="list-style-type: none"> Bordetella pertussis Brucella species^{a,2} Corynebacterium diphtheriae^a Coxiella burnetii Dengue Fever^b Haemophilus influenzae from a normally sterile site^{1,2} Hepatitis Hepatitis Hepatitis Mumps site^{a,b} Mycobacterium Neisseria site^a Poliovirus Rabies, Salmo Salmonella Shigella Staphylococcus intermedius resistor Vibrio Yellow Zika virus Any lab infectious 	<ul style="list-style-type: none"> Campylobacter species Cryptosporidium species Cyclospora species Giardia lamblia Listeria monocytogenes^a Salmonella species (except Salmonella typhi)^{1,2} 	<ul style="list-style-type: none"> Anaplasma phagocytophilum Arboviral infection^b <ul style="list-style-type: none"> LaCrosse encephalitis West Nile virus Eastern equine encephalitis Saint Louis encephalitis Powassan encephalitis 	<ul style="list-style-type: none"> CD4+ T lymphocyte or percentages³ Chlamydia trachomatis Enterovirus (non-polio), culture confirmed, numerical totals only, by serotype as available Haemophilus ducreyi Hepatitis C² HIV type 1 or 2



West Virginia Reportable Infectious Diseases Facilities and Providers (W. Va. Code 16-3-1; 64CSR7)

Reporting of the following communicable diseases is required by law as follows:

Category I Report suspect or confirmed cases immediately to the Local Health Department	Category II Report within 24 hours to the Local Health Department	Category III Report within 72 hours to the Local Health Department	Category IV Report within 1 week to the Local Health Department	Category V Report within 1 week to the State Health Department
<ul style="list-style-type: none"> Anthrax Bioterrorist event Botulism Foodborne outbreak Intentional exposure to an infectious agent or biological toxin Middle East respiratory syndrome (MERS) Novel influenza infection, animal or human Orthopox infection, including smallpox and monkeypox Outbreak or cluster of any illness or condition¹ Plague Rubella Rubella, congenital syndrome Rubeola (Measles) SARS coronavirus infection Smallpox Tularemia Viral hemorrhagic fevers² Waterborne outbreak 	<ul style="list-style-type: none"> Animal bites Brucellosis Cholera Dengue fever Diphtheria Haemophilus influenzae, invasive disease³ Hemolytic Uremic Syndrome, postdiarrheal Hepatitis A, acute⁴ Hepatitis B, acute, chronic or perinatal⁴ Hepatitis D⁴ Meningococcal disease, invasive Mumps, acute infection Pertussis (whooping cough) Poliovirus Q-fever (Coxiella burnetii) Rabies; human or animal Shiga toxin-producing Escherichia coli (STEC)⁵ Staphylococcus aureus with glycopeptide- intermediate (GISA/VISA) or glycopeptide- resistant (GRSA/VRSA) susceptibilities³ Tuberculosis; all forms³ Typhoid fever (Salmonella typhi) Yellow fever Zika virus disease Any other unusual condition or emerging infectious disease 	<ul style="list-style-type: none"> Campylobacteriosis Covid-19 (SARS CoV-2)⁶ Cryptosporidiosis Cyclospora Giardiasis Leptospirosis Salmonellosis (except Typhoid fever)³ Shigellosis³ Trichinosis Vibriosis 	<ul style="list-style-type: none"> Acute flaccid myelitis (AFM) Anaplasmosis Arboviral infection Babesiosis Chickenpox (numerical totals only) Ehrlichiosis Hantavirus pulmonary syndrome Influenza-related death in an individual less than 18 years of age Legionellosis Leptospirosis Lyme disease Malaria Psittacosis Respiratory syncytial virus (RSV)-related death in an individual ≤ 5 years of age Spotted fever rickettsiosis Streptococcal toxic shock syndrome Streptococcus pneumoniae, invasive² Tetanus Toxic Shock Syndrome Tuberculosis, latent infection 	<ul style="list-style-type: none"> AIDS Chancroid Chlamydia Creutzfeldt-Jakob disease Gonococcal conjunctivitis of the newborn (within 24 hours) Gonococcal disease, drug resistant (within 24 hours) Gonococcal disease, all other Hepatitis C, acute⁴ Hepatitis C, perinatal HIV Pelvic inflammatory disease Syphilis (late) Syphilis, primary, secondary or early latent (less than 1 year duration) or congenital (within 24 hours)



Resource Link: oeps.wv.gov/reporting/Pages/default.aspx

Reporting Hepatitis A, B, C, D, and E

What to Report: Positive hepatitis A, B, C, D, and E labs with liver function and bilirubin levels if done

When To Report: Within 24 hours for A, B, D, and E labs and within 1 week for hepatitis C labs

How To Report: Contact Local Health Department for positive hepatitis A, B, D, and E labs, and contact State Health Department for positive hepatitis C labs

Resources:

- Hepatitis A: <http://oeeps.wv.gov/hav/>
- Hepatitis B: <http://oeeps.wv.gov/hbv/>
- Hepatitis C: <http://oeeps.wv.gov/hcv/>

Viral Hepatitis Investigations

Local Health Departments (LHDs) are responsible for conducting the case investigations for the following conditions:

- Hepatitis A: acute
- Hepatitis B: acute, chronic, perinatal
- Hepatitis C: acute
- Hepatitis D: acute
- Hepatitis E: acute (WVEDSS page now available)



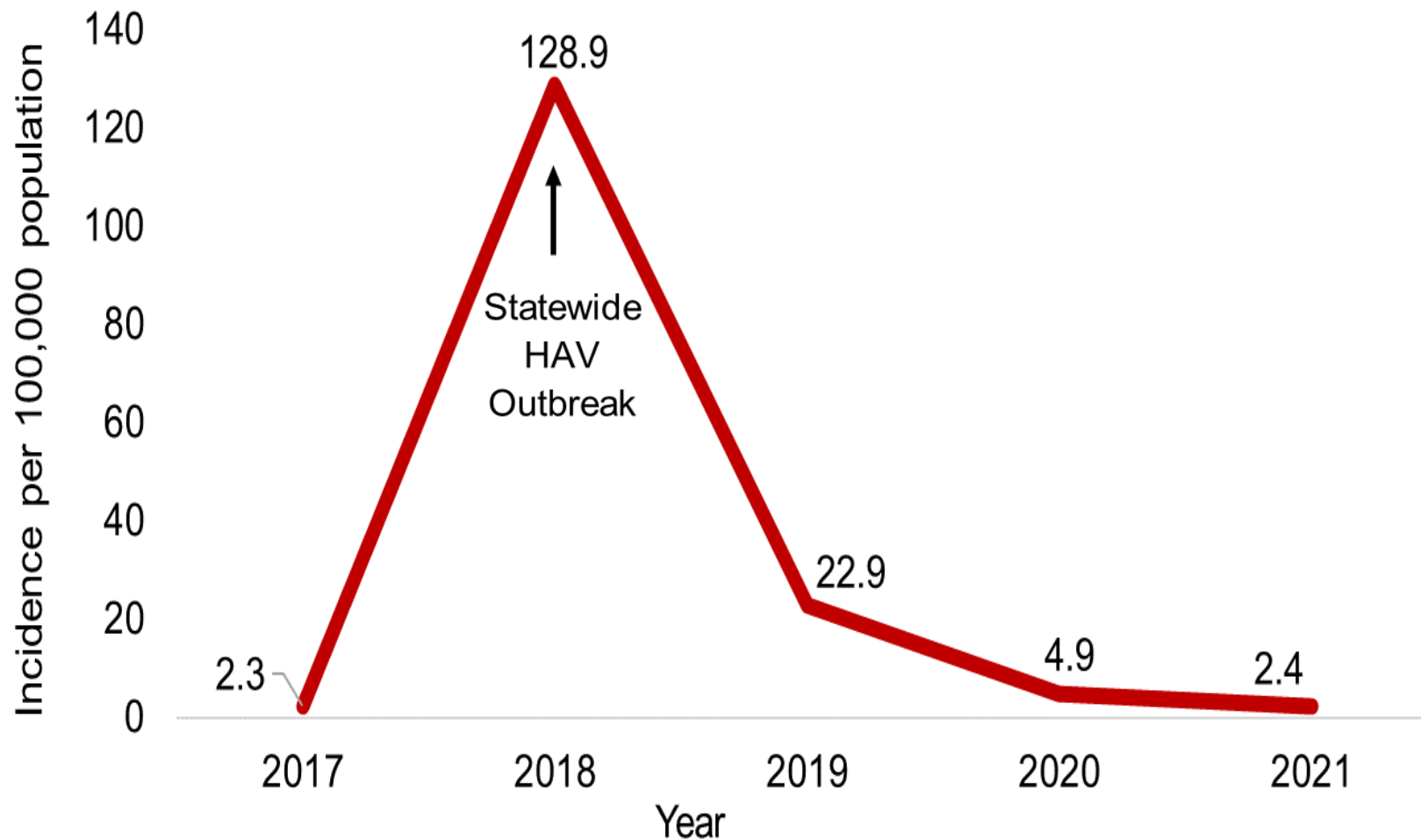
LHD Responsibilities

- Educate providers on prevention and screening of hepatitis
- Provide education to the general public about hepatitis risk factors, prevention, and transmission
- Receive positive hepatitis laboratory results and case reports
- Review West Virginia Electronic Disease Surveillance System (WVEDSS) for case patient profile, enter reported test results, and create case investigation if necessary
- Contact healthcare facility and collect any relevant information on case patient to include in investigation
- Contact case patient and conduct hepatitis interview
- Elicit any relevant contact information and assess the need for post exposure prophylaxis (PEP)
- Provide information on disease condition, transmission, and link to care/treatment

Disease Overview: Hepatitis A Virus (HAV)

- **Infection:** viral liver infection
- **Transmission:** HAV is found in the stool of infected people and spread when someone ingests the virus through person-to-person contact or consuming contaminated food or drinks
- **Symptoms:** jaundice, nausea, stomach pain, fatigue, and loss of appetite
- **Testing:** HAV-specific immunoglobulin G (IgM) antibody test or PCR to detect the HAV RNA.
- **Treatment:** no
- **Populations at increased risk:** international travelers, men who have sex with men (MSM), people who inject drugs (PWID), people experiencing homelessness
- **Vaccine Preventable:** yes

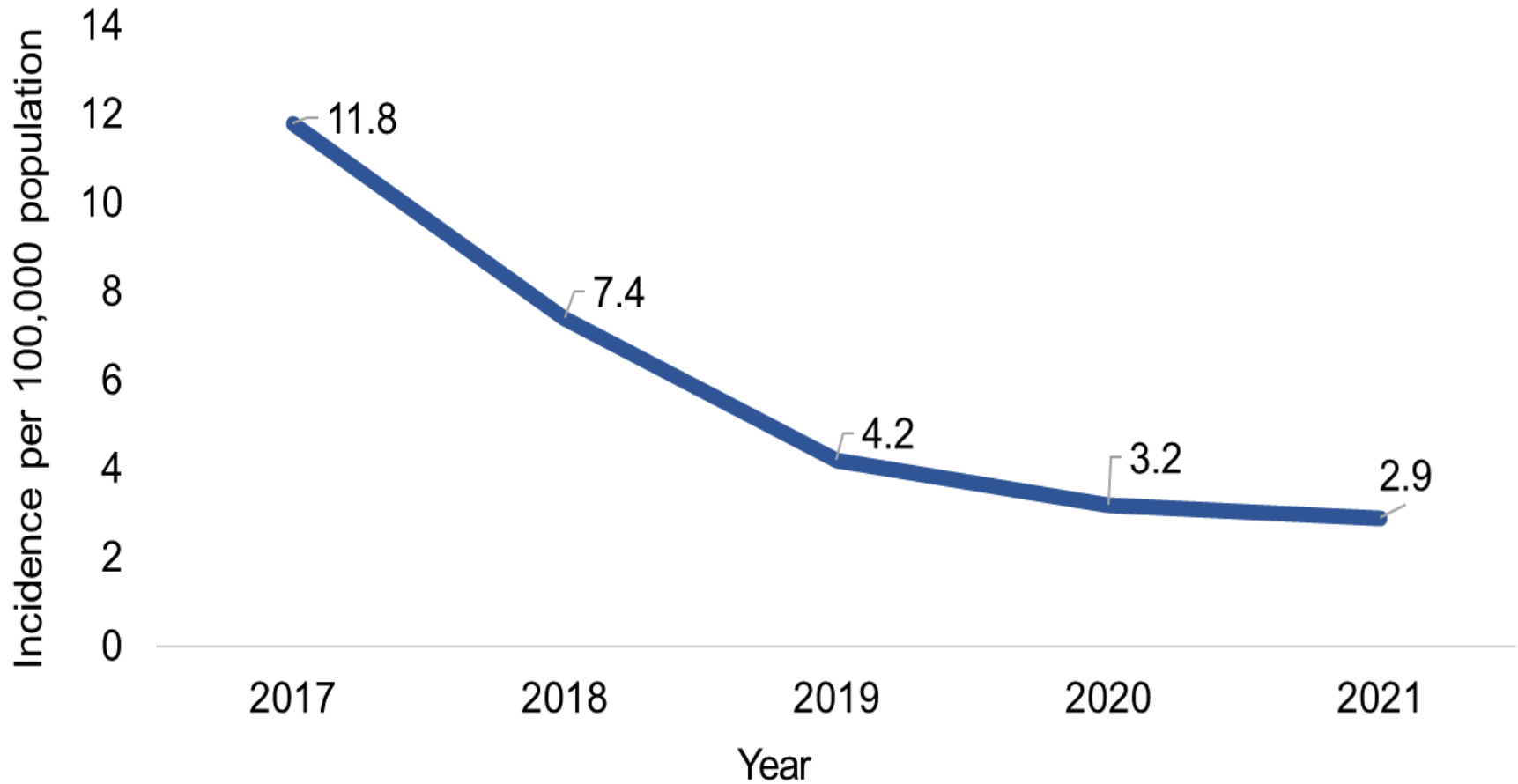
Acute HAV Incidence in WV, 2017-2021



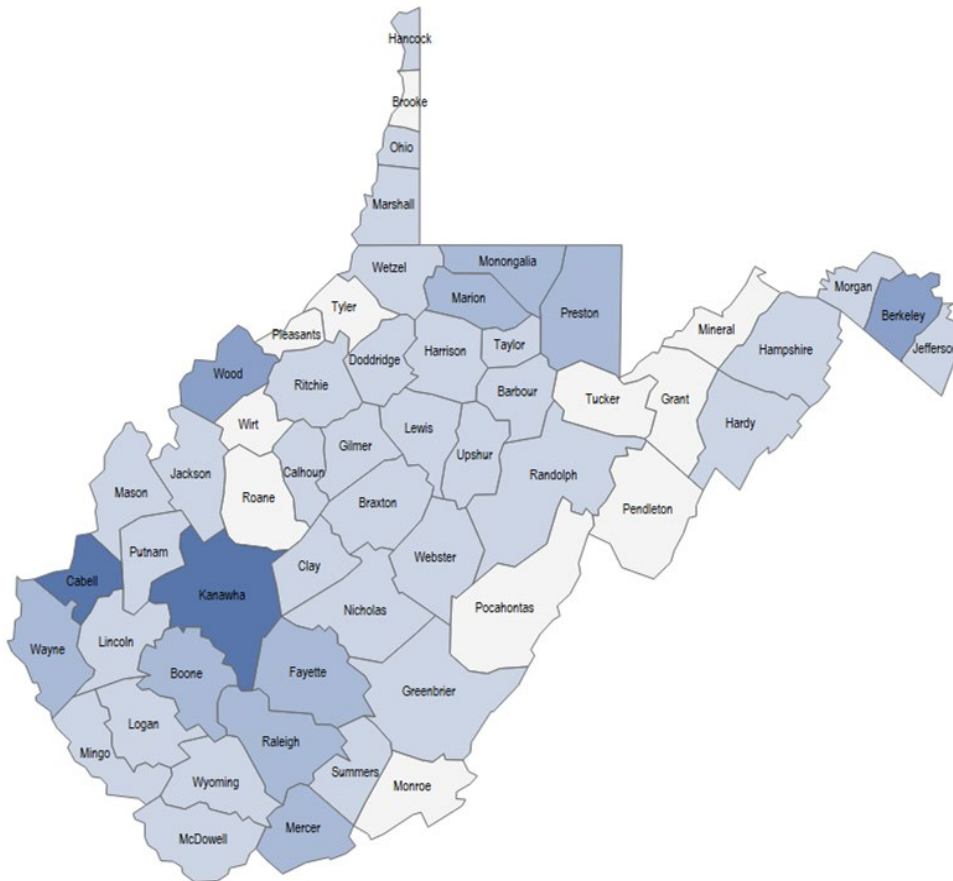
Disease Overview: Hepatitis B Virus (HBV)

- **Infection:** viral liver infection
- **Transmission:** bloodborne and bodily fluids containing blood
- **Symptoms:** jaundice, nausea, stomach pain, fatigue, and loss of appetite
- **Testing:** HBsAg, HBV DNA, and HBeAg diagnostic tests
- **Treatment:** yes
- **Populations at increased risk:** PWID or share drug equipment, sex partners of people infected with HBV, MSM, healthcare workers, public safety workers, and hemodialysis patients
- **Vaccine Preventable:** yes

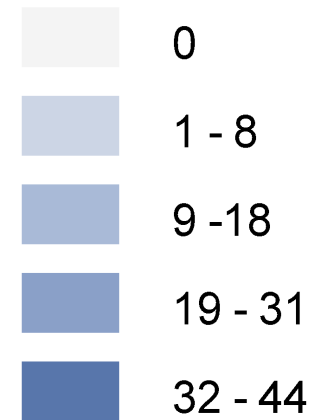
Acute HBV Incidence in WV, 2017-2021



Chronic HBV Cases in WV, 2021



Number of Cases*

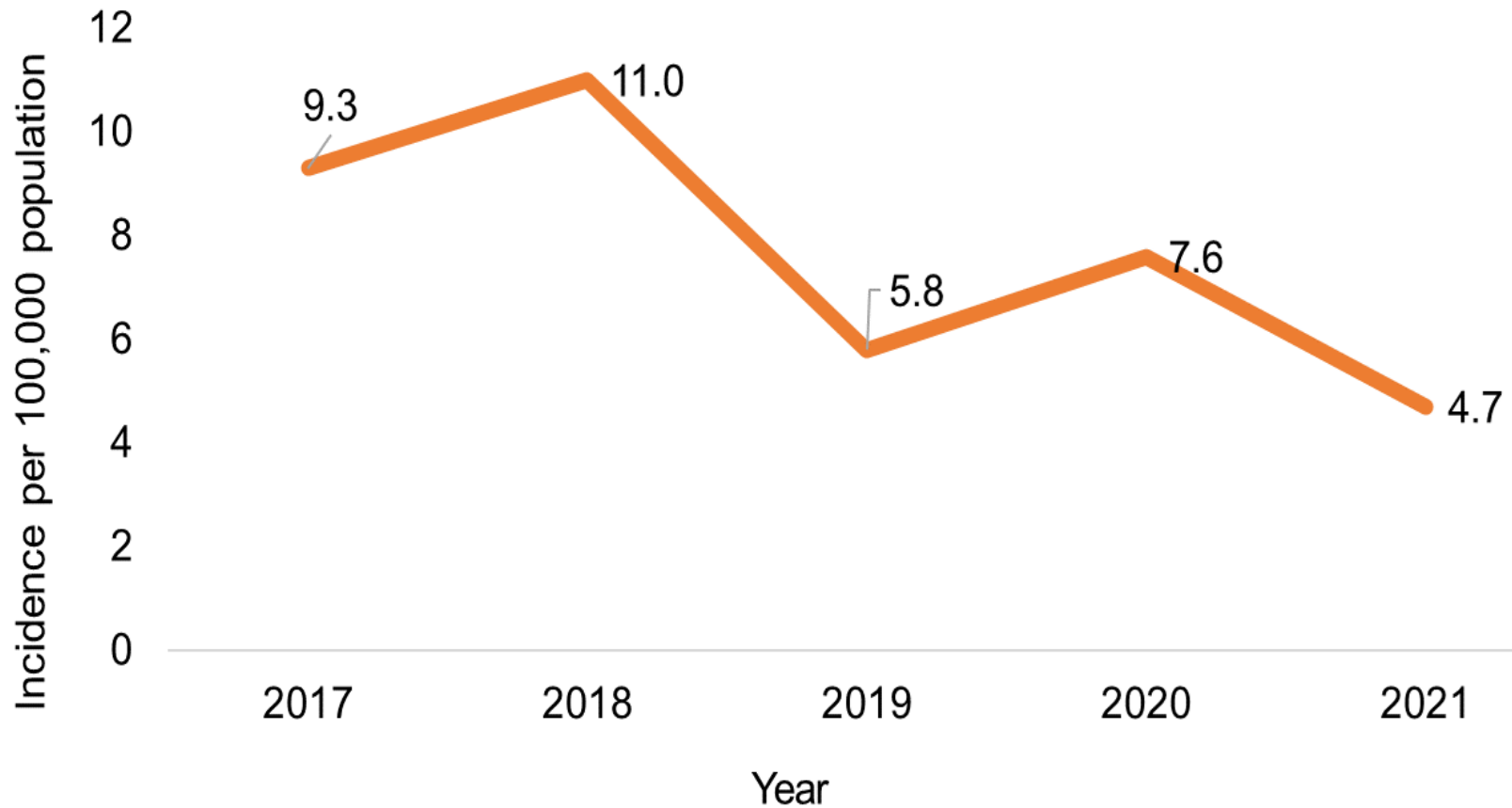


*includes confirmed and probable cases

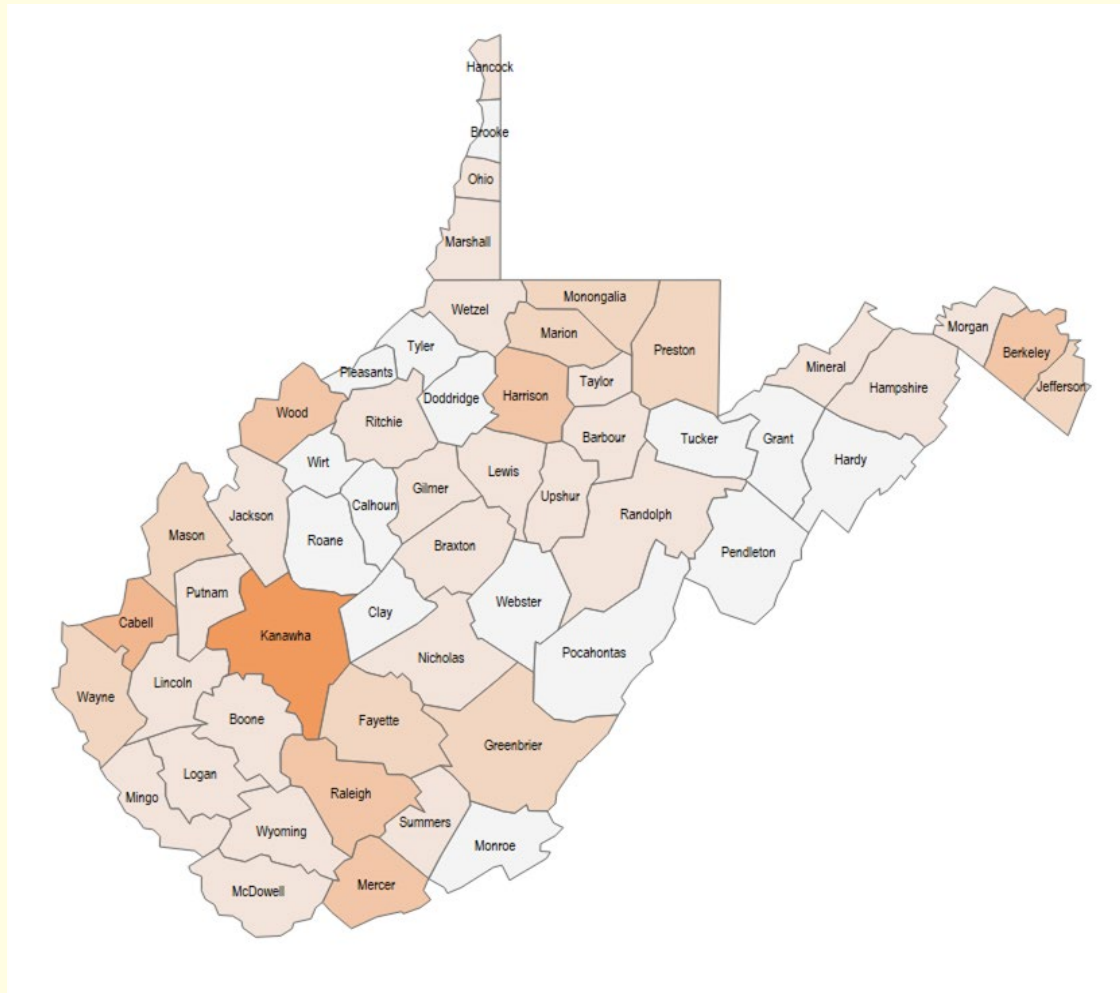
Disease Overview: Hepatitis C Virus (HCV)

- **Infection:** viral liver infection
- **Transmission:** bloodborne and bodily fluids that contain blood
- **Symptoms:** jaundice, nausea, stomach pain, fatigue, and loss of appetite
- **Testing:** HCV RNA and HCV Antibody diagnostic tests
- **Treatment:** treatment and cure available to those ages 3+
- **Populations at increased risk:** PWID, birth to an HCV-infected mother, sex with HCV infected person, MSM, needlestick injuries, and healthcare procedures
- **Vaccine preventable:** no

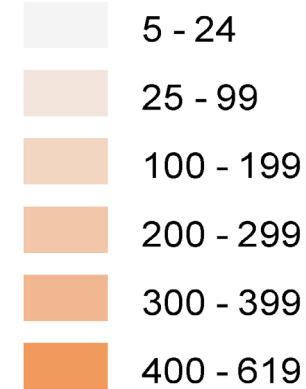
Acute HCV Incidence in WV, 2017-2021



Chronic HCV Cases in WV, 2021



Number of Cases*



*includes confirmed and probable cases

Perinatal HCV in WV

- All pregnant people should be tested for HCV at least once during each pregnancy
- Pregnant people can pass HCV to their babies during pregnancy
- Infants born to a person with HCV have a 5-15% chance of contracting the disease
- Although the transmission of HCV cannot be prevented, children can be treated and cured at the age of three
- Perinatal HCV became a reportable condition in 2022
- Providers and laboratories have seven days to report positive laboratory and case reports to DHHR's Office of Epidemiology and Prevention Services (OEPS)
- Cases of perinatal HCV will be managed by OEPS

HCV Testing in Infants

Best Practice Recommendations for HCV Testing in Infants

0-2 Months

No Testing

2-18 Months

HCV RNA Testing

+ RNA:

- Move to results

- RNA:

- No further action needed

18+ Months

HCV RNA Testing or
HCV Antibody Testing

-RNA or Antibody:

- No further action needed

+ Antibody:

- Conduct HCV RNA Test (if negative, no further action needed)

+ RNA:

- Move to results



Results after + RNA test at any stage:

- Provide and discuss results
- Counsel caregiver on HCV transmission
- Refer infant to a specialist or a doctor who works with WVHAMP for HCV follow-up and liver monitoring

This flyer created based on material from the Michigan Department of Health and Human Services and the CDC.

Disease Overview: Hepatitis D Virus (HDV)

- **Infection:** viral liver infection caused by HDV
- **Transmission:** bloodborne and bodily fluids that contain blood
*only occurs in people who are already infected with HBV
- **Symptoms:** jaundice, nausea, stomach pain, fatigue, and loss of appetite
- **Testing:** HDV antibodies and/or HDV RNA tests
- **Treatment:** no treatment for HDV infection specifically
- **Populations at increased risk:** people with current HBV infections
- **Vaccine preventable:** no, but HBV vaccine immunity can protect against future infection of HDV
- HDV infection should be considered in any person with a positive HBsAg who has severe symptoms or acute exacerbations

Disease Overview: Hepatitis E Virus (HEV)

- **Infection:** viral liver infection
 - **Transmission:** HEV is found in the stool of infected people and spread through person-to-person contact or consuming contaminated food or drinks
 - **Symptoms:** fatigue, poor appetite, stomach pain, nausea, and jaundice
 - **Testing:** HEV antibody or RNA test (neither US FDA approved)
 - **Populations at increased risk:** in developing countries symptomatic cases commonly occur among older adolescents and young adults, but pregnant women are more likely to experience severe illness, fulminant hepatitis, and death
 - **Vaccine Preventable:** no
- HEV is not common in the US, and most cases are a result of consuming raw or undercooked pork, venison, wild boar meat, or shellfish*

Resources for Case Investigations

- *Viral Hepatitis Surveillance and Case Management: Guidance for State, Territorial, and Local Health Departments*
- Disease Protocols
- Case Ascertainment Tool
- Centers for Disease Control and Prevention Viral Hepatitis Serology Trainings
- Regional Epidemiologist
- State Programmatic Epidemiologists and Registrar Staff
- Staff at the West Virginia Department of Health and Human Resources' (DHHR) Office for Laboratory Services (OLS)
- DHHR's Division of Immunization Services Staff (vaccines)

Important Investigation Reminders

- Case investigations in WVEDSS should be complete and well documented
- Case patients should always be contacted and interviewed to the best of your ability— medical records are helpful but should not be relied upon alone to complete the investigation
- Case investigations cannot be designated Lost to Follow Up (LTFU) without appropriate contact attempts being made and documented in the investigation
- Any pregnant people with HBV should be reported immediately to the Perinatal Hepatitis B Prevention Coordinator – each pregnancy should be followed regardless of the investigation status in WVEDSS

Hepatitis Testing at OLS

No Charge HBV/HCV testing is available through OLS, if the patient meets testing criteria

- Must have at least one risk factor for each testing being requested
- Risk factor must be marked on submission form at time the samples are received, or the site will be charged for any testing performed

No Charge HAV testing typically for outbreak or potential outbreak situations

- Must have prior approval from the Hepatitis Program or DIDE before sending the specimen to OLS
- The Diagnostic Immunology (DI) Unit should be notified by the site once approval is obtained

Please contact the DI Unit for additional info: 304-558-3530, ext. 20121

Addressing Barriers and Identifying Needs

What barriers do you have when it comes to hepatitis case investigations?

What training needs do you have?

What resources would you like to know more about?

Questions



Contact Information

Kady Pack, MPH

Viral Hepatitis Epidemiologist

West Virginia Department of Health and Human Resources

Bureau for Public Health

Office of Epidemiology and Prevention Services

Division of STD, HIV, Hepatitis and Tuberculosis

350 Capitol St., Room 125

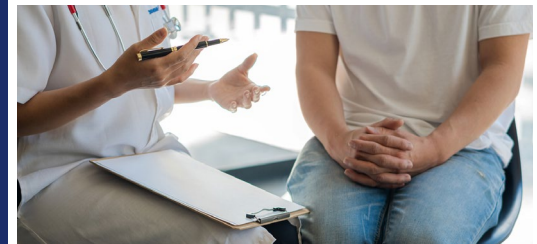
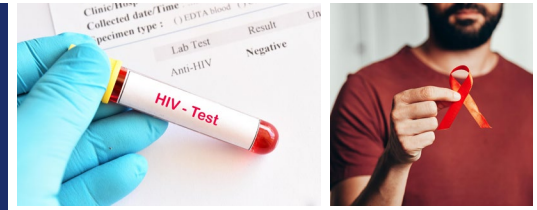
Charleston, WV 25301

Phone: (304) 352-6288

Fax: (304) 558-6478

Email: Kady.Pack@wv.gov

A Summary of Current HIV Surveillance in West Virginia



Objectives

- Review the HIV reporting laws for West Virginia
- Describe the shift in the epidemiology of HIV in West Virginia
- Summarize the descriptive epidemiology of HIV in West Virginia
- Describe the programmatic changes to address the changes in epidemiology

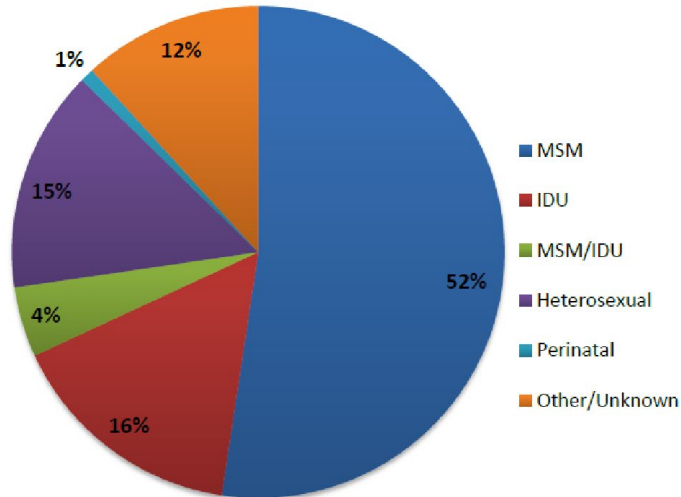
- 64 CSR 7 – Title 64 Legislative Rule, Series 7, Reportable Diseases, Events and Conditions
 - HIV and AIDS Category V Reportable Disease and Condition
 - Healthcare providers and facilities shall report Category V diseases and conditions by filing a written report with the West Virginia Department of Health and Human Resources, Bureau for Public Health (BPH), within one week of diagnosis
 - Laboratories shall report Category V conditions through a written copy of the laboratory report
 - Reports of Category V diseases shall be made on the appropriate HIV/AIDS report forms provided by BPH, until the disease can be reported electronically using the West Virginia Electronic Disease Surveillance System

- W. Va. Code Chapter 16, Article 3C: AIDS-Related Medical Testing and Records Confidentiality Act
 - Routine screening
 - For treatable conditions and part of routine prenatal and perinatal care
 - Persons who engage in high-risk behavior, at least annually
 - No record of any HIV-related testing during pregnancy, and the woman presents for labor and delivery
 - Cause to believe the test could provide information important in the care of the patient
 - Cause to believe a significant exposure could have put medical or emergency responders or other persons at risk
 - Mandated testing – no consent required
 - For any person charged with prostitution, sexual abuse, sexual assault, incest, sexual molestation, or a person who is an injection drug user

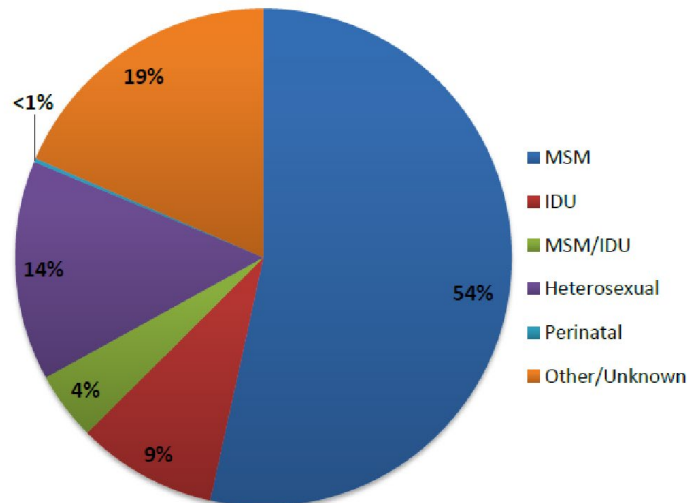
- 64 CSR 64 – Title 64 Legislative Rule, Series 64, AIDS Related Medical Testing and Confidentiality
 - ...all WV healthcare providers who perform, or cause to have performed serologic or other tests for HIV **shall** report all HIV infections associated with laboratory tests that are positive or results, including but not limited to all values of CD4 count and any results from a viral load that are either indicative of or a progression toward the HIV infection to the Commissioner....
 - A confirmed positive report of HIV shall be submitted within **seven** days of the receipt of the test results.
 - All laboratories conducting HIV testing in WV or providing HIV testing results for use in this State **shall** make a report on the first and fifteenth days of each month of all laboratory tests, including but not limited to all values of CD4 counts and any results from a viral load that are positive or results that are indicative of the HIV infection to the Commissioner...

HIV Epidemiology in West Virginia 1984-2018

Percentage of HIV/AIDS Cases by Exposure Category in West Virginia from 1984-2011

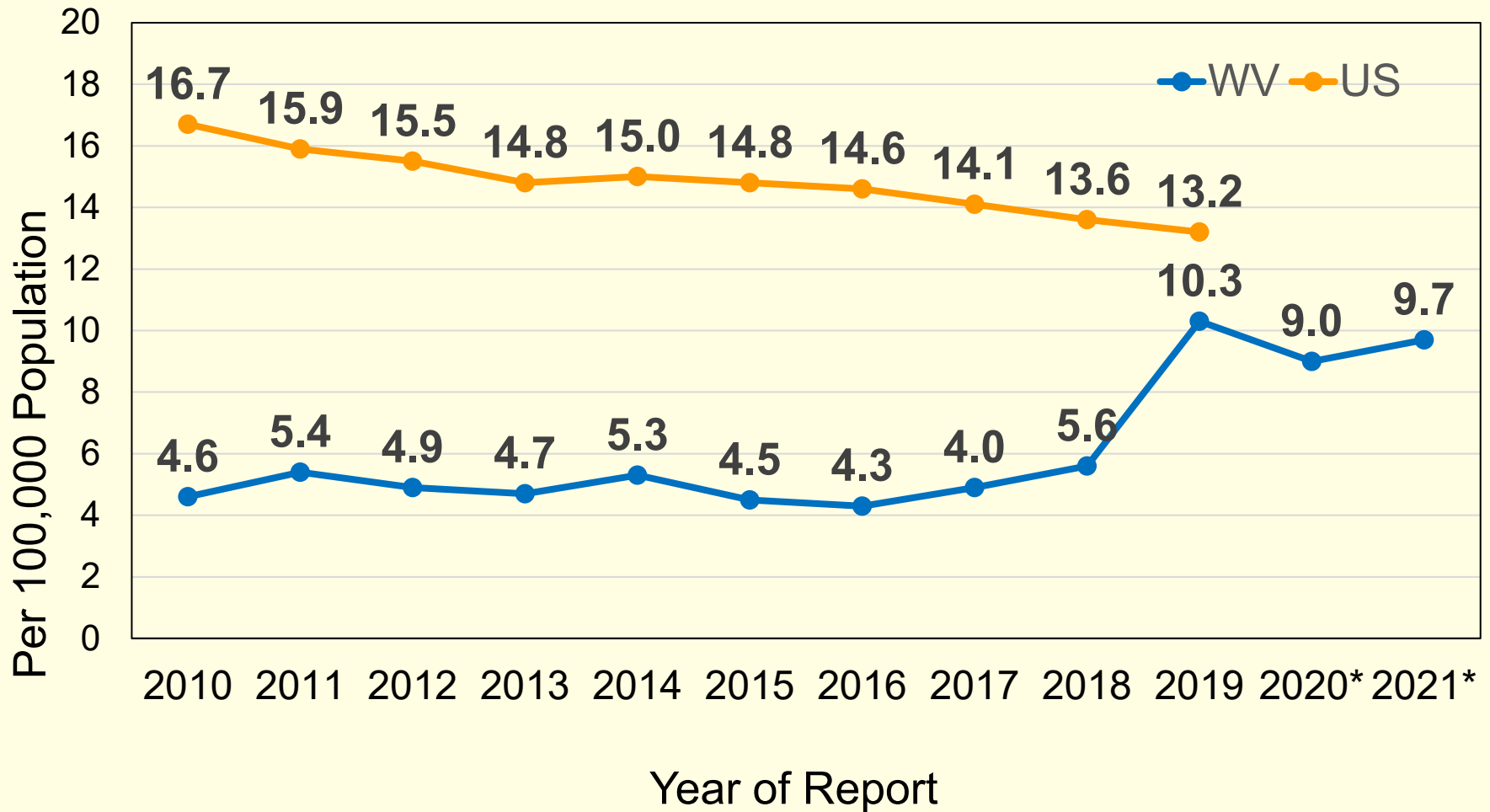


Percentage of HIV/AIDS Cases by Exposure Category in West Virginia from 2012-2016



- Between 1984-2011, the average number of new HIV diagnoses annually was 96
- From 2014-2018, the average number of new HIV diagnoses annually was 83
- Most common exposure category was men who have sex with men (MSM)

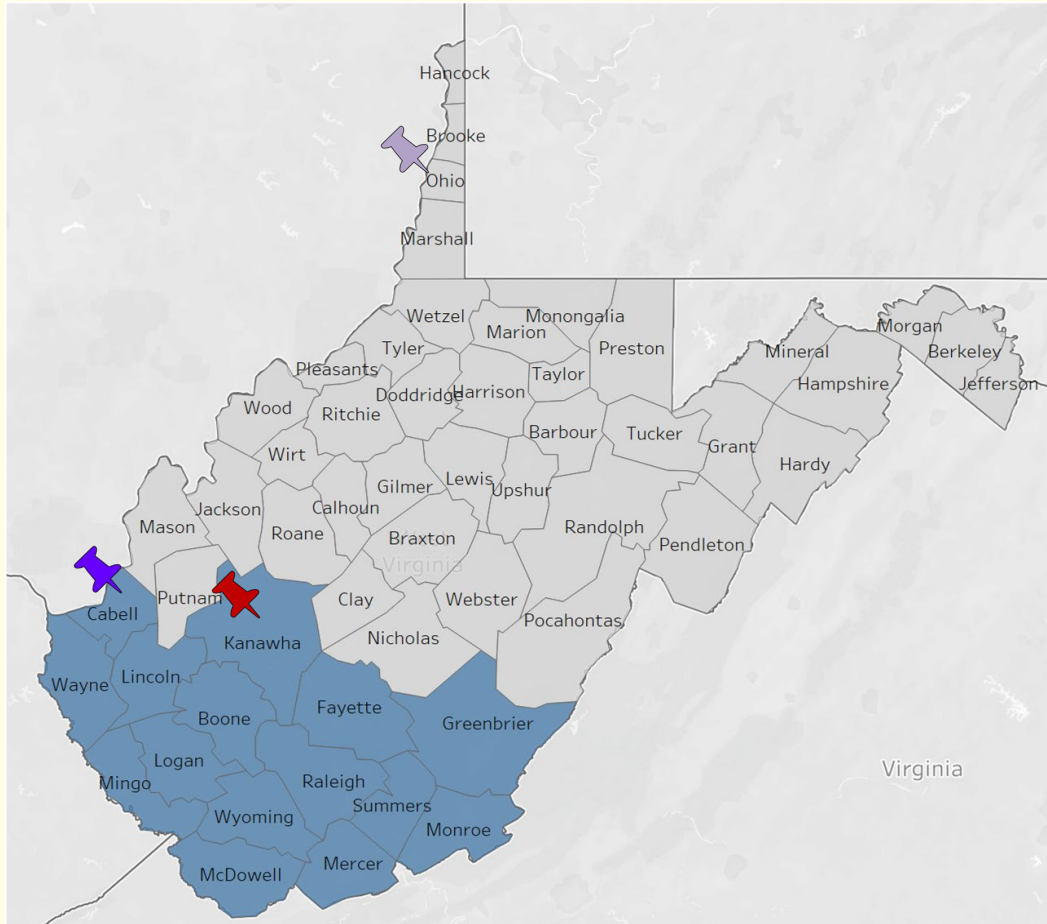
HIV Incidence in West Virginia vs. U.S., 2010-2021



Data Source: CDC Atlas

*Rates calculated by West Virginia data

West Virginia HIV Clusters, 2017-2019



- Southern Counties Cluster 2017
Total Cases:47
MSM:62%
IDU:19%
- 📌 Ohio County Cluster 2018
Total Cases: 5
MSM: 0%
IDU: 100%
- 📌 Cabell County Cluster 2018-present
- 📌 Kanawha County Cluster 2019-present

Initial West Virginia HIV Clusters

- **2017 – Southern West Virginia – Multi-County Area: Increase in HIV diagnoses among gay and bisexual men**
 - Occurred in an area where intravenous drug use (IDU) is common
 - Concerned about possibility of spread into communities of people who inject drugs
 - Relocated HIV testing sites
 - Increased awareness of HIV testing
 - Established syringe service programs where not already established
- **2018 - Increase in Ohio County**
 - IDU and sex work
 - Expanded testing, promoted needle exchange, and notified partners/raised awareness

Current West Virginia HIV Outbreaks

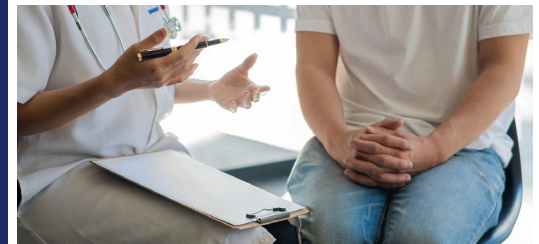
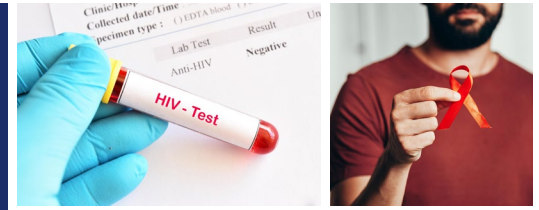
- **Cabell County – ongoing since 2018**
 - IDU primary risk factor
 - 90.1% of males (n=141)
 - 100% of females (n=90)
 - 231 cases (as of 04/27/2023)
 - ~35% of cases diagnosed by Harm Reduction Program (HRP)
 - Increase in cases in 2022 when routine testing resumed in HRP
- **Kanawha County – ongoing since 2019**
 - IDU primary risk factor
 - 81.1% of males (n=74)
 - 100% of females (n=51)
 - 125 cases (as of 04/27/2023)
 - 45% diagnosed in hospital; 25% by Ryan White Clinic/
outreach testing
 - >50% homeless or unstably housed

- **IDU has become the primary risk factor responsible for the steady increases of new HIV diagnoses**
 - Transmission in new HIV cases for 2020 in West Virginia
 - IDU reported in 66.4% of cases
 - MSM reported in 26.2% of cases
 - HIV incidence increased 81.7% from 2017-2021
 - Outbreaks of HIV have been reported in two counties since 2017 and both attributed to IDU transmission (Cabell and Kanawha)

Programmatic Activities to Address the Change in HIV

- Expanded HIV testing to nontraditional settings
 - Food distribution sites
 - Homeless shelters
- Developing community partner groups to provide HIV testing
- Developing Linkage to Care Systems
- Increasing Disease Intervention Specialist (DIS) staff
 - 14 regional DIS and three supervisors
 - Increasing surveillance staff to process reports
- Making HIV data more readily available
 - Website: hivawarewv.org

STD Program Updates



Data Sharing Limitations

- Timely sharing of STD rates with the public has been a concern
 - Data Close Out occurs in Fall
- Annual Fact Sheets can be found on the OEPS website for each of the three reportable STDs under 'Data and Surveillance' tab
 - https://oeeps.wv.gov/std/Pages/std_data.aspx
- WVEDSS access can be requested for STD (view-only)
 - Complete required confidentiality training on blackboard
 - Surveillance Data Security and Confidentiality Training
 - to be completed annually
 - Submit certificate to STD Program
 - must be signed by administrator/supervisor
 - Submit WVEDSS Form to OEPS for access update
 - Remember that investigations are done by DIS, not LHDs

Ordering of STD Medications

- Use the “Medication Order Form” on the STD page:
 - <https://oeps.wv.gov/std/Pages/default.aspx>
- Must be submitted with Statement of Drugs Administered (SDA) Form
- Remember to have EPT in stock
 - Azithromycin and Cefixime
- Keep an eye on expiration dates
 - reallocate what you won't use
- Support state efforts to sustain an Injectable Syphilis Treatment Delivery (ISTD) initiative

West Virginia Bureau for Public Health
Office of Epidemiology and Prevention Services
Division of STD, HIV, Hepatitis and Tuberculosis
350 Capitol Street, Room 125
Charleston, WV 25301
(304) 558-2195

STD Medication Order Form

SHIP TO:

Facility: _____ Attention: _____
Address: _____
City/State/Zip: _____
Email: _____ Phone: _____ Date: _____

PLEASE NOTE:

**Orders are shipped ground delivery via FedEx. Street address is required.*

**All orders must be submitted on this form. No exceptions.*

**Statement of Drugs Administered form must be faxed with this form before the order can be processed.*

Medications			
Code	Item/Unit Dosage	Order Quantity	Date Expired, If Applicable
Q101	Azithromycin 250 mg Tablets	____ Tablets	
Q102	Bicillin L-A 1.2 ml Syringe	____ Syringes	
Q103	Ceftriaxone 500 mg. Vials	____ Vials	
Q104	Clindamycin 500 mg. Tablets	____ Bottle of 50	
Q105	Doxycycline 100 mg. Tablets	____ Bottle of 50	
Q106	Metronidazole 500 mg. Tablets	____ Tablets	
Q107	Podophyllin 15 ml Bottles	____ Bottles	
Q110	Cefixime 400 mg. Tablets	____ Bottle of 50	
Q109	Xylocaine 2 ml. Bottles 1%	____ Bottles	

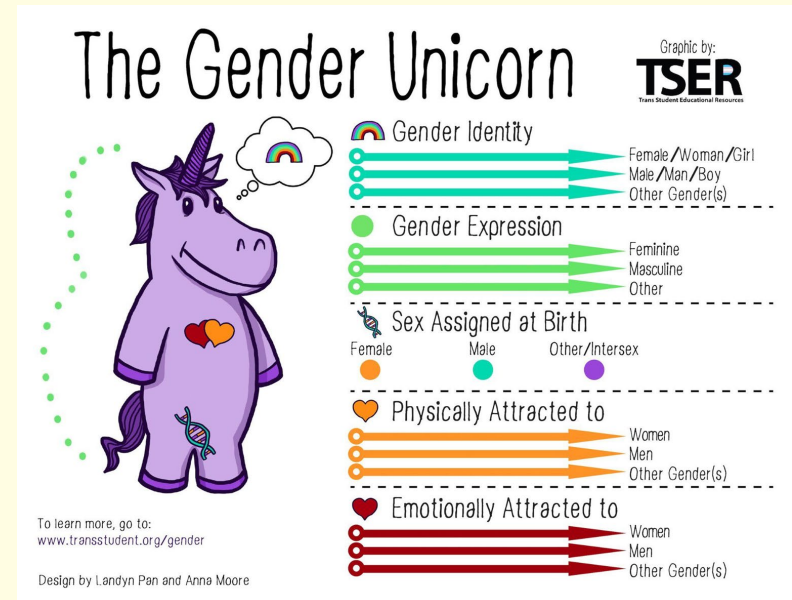
Send order to: (304) 558-6478 or wvstd@wv.gov

STD Testing at OLS

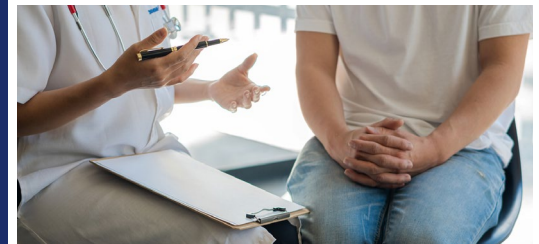
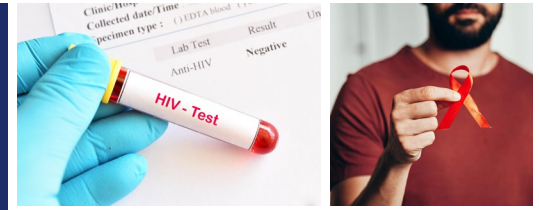
- STD Program covers testing/screening for:
 - Chlamydia/CT (urine, throat swab, rectal swab)
 - Gonorrhea/GC (urine, throat swab, rectal swab)*
 - Syphilis (traditional algorithm w/ TPPA as confirmatory)
 - HIV (only when accompanied by a Syphilis specimen)
- Extragenital Testing (EGT) is now available for GC/CT
 - swabs must be submitted along with a urine sample
 - ideal for patients reporting oral/anal sex
- Supply Order Forms found on OLS website:
 - <https://dhhr.wv.gov/ols/forms/Pages/default.aspx>

Let's Talk about Sex

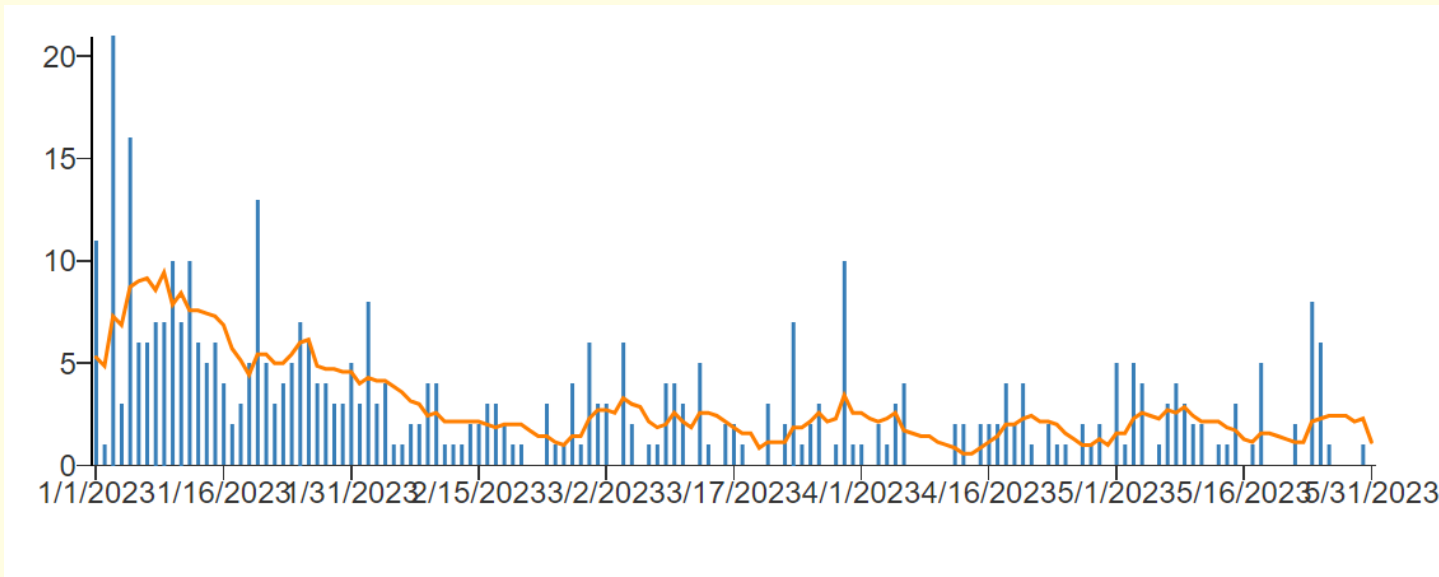
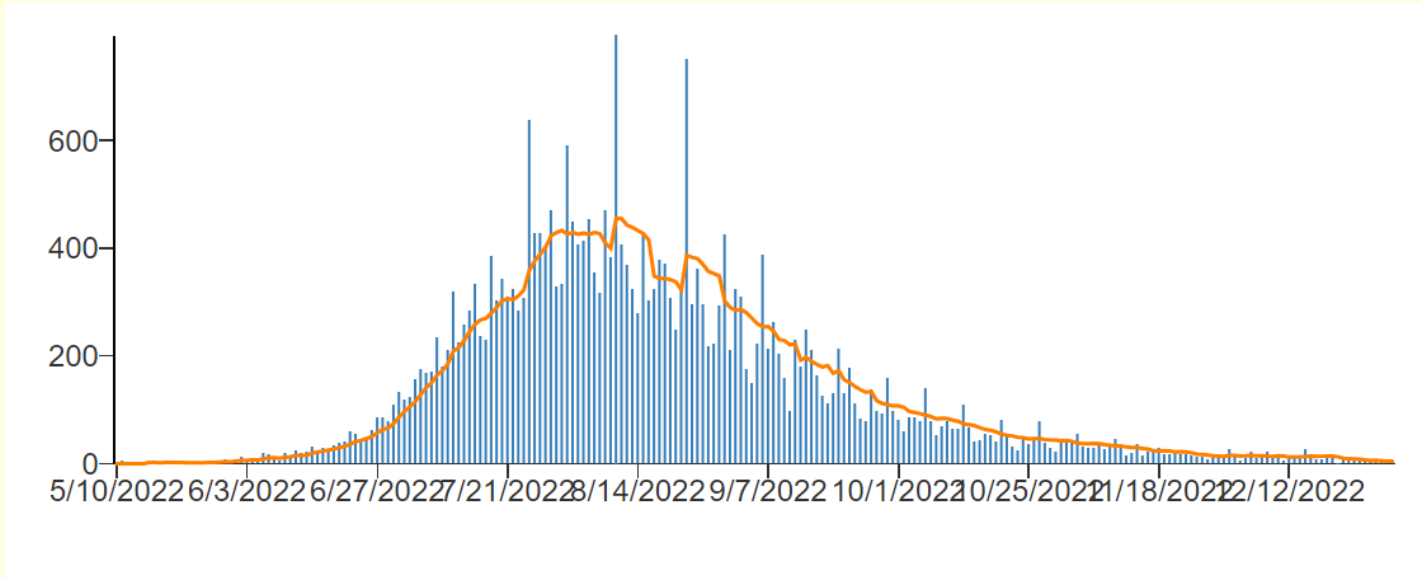
- Do not assume
- Stay humble
- Use open ended questions
- The Gender Unicorn
 - Gender Identity
 - Gender Expression
 - Sex Assigned at Birth
 - Physical Attraction
 - Emotional Attraction
- Take online trainings and attend webinars
 - Johns Hopkins STD/HIV Prevention Training Center (PTC)
- CDC's Guide to Taking a Sexual Health History
 - <https://www.cdc.gov/std/treatment/sexualhistory.pdf>
 - Use the Five P's (soon to be Six P's)



Mpox Updates



MPOX Cases Reported in 2022-2023



- Avoid close, skin-to-skin contact with people who have a rash that looks like mpox.
 - appears as rash, pimples, blisters, or scabs
 - may be present on the genitals or anus, or other areas like hands, feet, chest, face, or mouth
- Avoid contact with objects and materials that a person with mpox has used.
 - eating utensils, cups, bedding, towels, clothing, etc.
- Get vaccinated!
 - two-dose series
- Wash your hands often.



- Conduct a thorough patient history to assess possible mpox exposure or epidemiologic risk factors
- Usually transmitted through close, sustained physical contact
- Almost exclusively associated with sexual contact
- Perform a complete physical examination including a thorough skin mucosal examination
- Consider mpox when determining the cause of a diffuse or localized rash
 - Differential diagnosis: herpes simplex virus, syphilis shingles, chickenpox, scabies, allergic skin rashes and drug eruptions

Public health testing is available through the West Virginia Department of Health and Human Resources' (DHHR) Office of Laboratory Services at no cost for the patient who meet the suspect case definition.

- Consult with the local health department because **pre-approval** is required
- In most instances testing turnaround is within 24 hours

Expanded access to monkeypox testing is available through commercial labs (LabCorp, Mayo, Qlabs, Sonic Healthcare, Quest, Aegis).

- Testing does not require pre-approval
- Testing is not free and out of pocket expenses vary
- Refer to lab for specific test ordering and specimen collection
- Labs send positive specimens to the Centers for Disease Control and Prevention (CDC) for additional characterization

- At a minimum, collect two swabs from each lesion site sampled as follows:
1. Use a sterile synthetic swab to swab the lesion vigorously to collect adequate DNA. Do not use cotton swabs as cotton can inhibit real time PCR assays. Be sure to properly label the container with one patient identifier including lesion collection site (e.g., face, neck, left hand, etc.).
 2. Place swabs in individual sterile containers. Do not add any viral or universal transport media.
 3. Freeze (-20°C or lower) specimens within an hour after collection (if you do not have access to a -20°C or lower freezer, then refrigerate specimens within 1 hour). Shipping on dry ice is strongly recommended; however, refrigeration and shipping on ice packs for any facility that doesn't have access to a -20°C freezer or dry ice is acceptable.
 4. Complete the WV Office of Laboratory Services Bioterrorism Lab Clinical Specimen Submission form.
 5. Package the sample swabs in an insulated Category B box, with dry ice. If you do not have access to dry ice, samples may be shipped with several frozen packs.

Vaccine Eligibility

- Had known/suspected exposure to someone with mpox
- Had a sex partner in the past 2 weeks with mpox diagnosis
- Are gay, bisexual, or other man who has sex with men (GBMSM) or a transgender, nonbinary, or gender-diverse person who had any of the following in the past 6 months:
 - a new diagnosis of one or more STDs
 - more than one sex partner
- Had any of the following in the past 6 months:
 - sex at commercial sex venue (sex club or bathhouse)
 - sex related to a large commercial event or in a geographic area where mpox virus transmission is occurring
 - sex in exchange for money or other items
- Have a sex partner with any of the above risk factors or anticipate experiencing any of the above scenarios
- Have HIV or other causes of immune suppression and have recent or anticipate mpox exposure
- Work in settings where you may be exposed to mpox

- Licensed as a series of two doses administered 28 days (4 weeks) apart
- Intradermal (ID) route of administration with an injection volume of 0.1mL
- A subcutaneous route of administration with an injection volume of 0.5mL can be given to those aged <18 years under or those with a history of keloid scarring
- Getting the vaccine intradermally or subcutaneously appears to be equally effective against mpox

Vaccine Availability

- MPOX vaccine is available by contacting your local health department
- The warmer months are full of events that celebrate the LGBTQ+ community, contact your local health department for hosting a vaccine clinic
- Providers who serve populations at greatest risk for MPOX may receive vaccine, requests should be made to:
snsvaccinerequest@wv.gov

- How to Protect Yourself from Mpox:

<https://www.cdc.gov/poxvirus/mpox/prevention/protect-yourself.html>

- Safer Sex, Social Gatherings, and Mpox:

<https://www.cdc.gov/poxvirus/mpox/prevention/sexual-health.html>