

# HIV Cluster Detection and Response (CDR) Plan

*West Virginia*

*Division of STD, HIV, Hepatitis and Tuberculosis Elimination (DSHHT)*

*V6. December 1, 2024*

*Primary point of contact: Suzanne Wilson, DSHHT Director*

## Version History

<b>Version #</b>	<b>Revision date</b>	<b>CDC submission date</b>	<b>Responsible Party</b>	<b>Comments</b>
1	August 24, 2020	September 30, 2020	Suzanne Wilson	Submitted draft on old version of template
2	October 21, 2020		Suzanne Wilson	
3	May 5, 2021		Suzanne Wilson	
4	December 31, 2021	February 17, 2021	Suzanne Wilson	
5	September 30, 2022	October 26, 2022	Suzanne Wilson	Submitted fully revised version with complete sections.
6	March 1, 2024	December 1, 2024	Suzanne Wilson	Revised version

## Table of Contents

About This Plan	4
SECTION 1: Internal Collaboration to Support Cluster Detection and Response	5
1.1 Oversight and Management	5
1.1.A Description of DSHHT Working Groups (Teams)	5
1.1.B Roles and Processes for Coordination, Oversight, and Responsibility	6
1.2 Staff Capacity and Training	6
1.2.A Cluster Response Command Team Staffing and Roles	6
1.2.B Training	7
1.3 Funding for Cluster Response Activities	7
1.4 Data Sharing	7
1.4.A Data Sharing Activities Within DSHHT Units – Data Sharing Agreements (DSA) Not Required	7
1.4.B Existing Data Sharing Activities Between DSHHT And External Entities	8
1.4.C Planned Data Sharing Activities Between DSHHT And External Entities	8
1.5 Data Protection	8
1.5.A Triaging and Addressing Data Requests from Non-Public Health Partners	8
1.5.B Current or Planned Efforts to Improve Data Protection Policies and Practices	8
SECTION 2: External Partnerships to Support Cluster Detection and Response	8
2.1 Community Engagement	8
2.2 Collaboration with External Partners	8
2.3 Data Sharing (External)	10
SECTION 3: Detecting and Describing HIV Clusters	10
3.1 Time-Space Cluster Detection	10
3.2 Molecular Cluster Detection	11
3.3 Other Cluster Detection Methods	11
3.4 Reviewing Relevant Cluster Data	12
SECTION 4: Review and Prioritization of HIV Clusters	13
4.1 Process for Review and Prioritization	13
4.2 Prioritization of Clusters	14
4.3 Tracking and Managing Clusters	15
4.4 Closing Out Clusters	15
SECTION 5: Designing and Implementing Cluster Detection and Response Plans	15

5.1 Action Planning Process .....	15
5.1.A. Communication Plan	16
5.1.B. Responsibilities	16
5.1.C. Follow-Up Activities	17
5.1.D. HIV Molecular Clusters	17
5.1.E. HIV Time-Space Clusters	18
5.1.F. Syphilis Outbreak	18
5.2 Data to Guide Cluster Response .....	19
5.3 Directing/Redirecting Routine Program Activities for Cluster Response .....	19
5.3.A Partner Services	19
5.3.B HIV Care Interventions	19
5.3.C HIV Testing and PrEP	20
5.3.D. Harm Reduction	20
5.3.E. Social Services	20
5.4 Options for Enhanced Interventions.....	20
5.5 Communication Planning.....	20
5.5.A. Communication with Stakeholders	20
5.5.B. Communication with Media	21
SECTION 6: Implementing an Escalated Response	21
6.1 Initiating an Escalated Response.....	21
6.2 Escalated Response Options .....	21
6.2.A. Components Needed for Surge Staff Capacity, Enhanced Communication Support, and Need for Supplemental Funding	21
6.2.B. Supplemental Funding Allocation or Re-Distribution of Existing Funds	21
6.2.C. Deactivation and Transition Back to Routine Program Oversight	21
6.3 Communicating During an Escalated Response.....	22
6.3.A. Communication Plans for Use in A Large HIV Cluster Response	22
6.3.B. Communication Planning with Local Partners and Neighboring Jurisdictions	22
6.3.C. Notification/Collaboration with CDC or Other Federal Partners	22
6.4 Staff Training for Escalated Response .....	22
6.4.A. HIV Program Staff Training	22
6.4.B. Surge Capacity (Non-HIV Program Staff) Training	22
SECTION 7: Monitoring and Evaluation of Cluster Response Activities	23

7.1 Monitoring A Cluster Response .....	23
7.2 Evaluation of Cluster Response .....	23
7.2.B. Annual Evaluation	23
7.2.C. Identifying Opportunities for Improvement	23
7.2.D. Revising Processes	23
Glossary/Abbreviations	24
Acknowledgements	25
Appendix A: HIV Cluster Response Staffing and Tasks	26
Appendix B: Incident Command System (ICS) structure Template	29

## About This Plan

<b>Key Contributors to The Review of This HIV CDR Plan</b>	
<b>Title/Program</b>	<b>Name</b>
Director / DSHHT	Suzanne Wilson
HIV Prevention Director / DSHHT	Kenya Burton
HIV Care Director / DSHHT	TBD
HIV Surveillance Director / DSHHT	TBD
HIV Surveillance Coordinator/Epidemiologist / DSHHT	Miracle King
HIV Surveillance Epidemiologist / DSHHT	Laura Scarberry
Field Operations Manager / DSHHT	Nathan Kirk
Part B Ryan White Program / DSHHT	Stacey Troyer

The following stakeholders were engaged in the development of this plan:

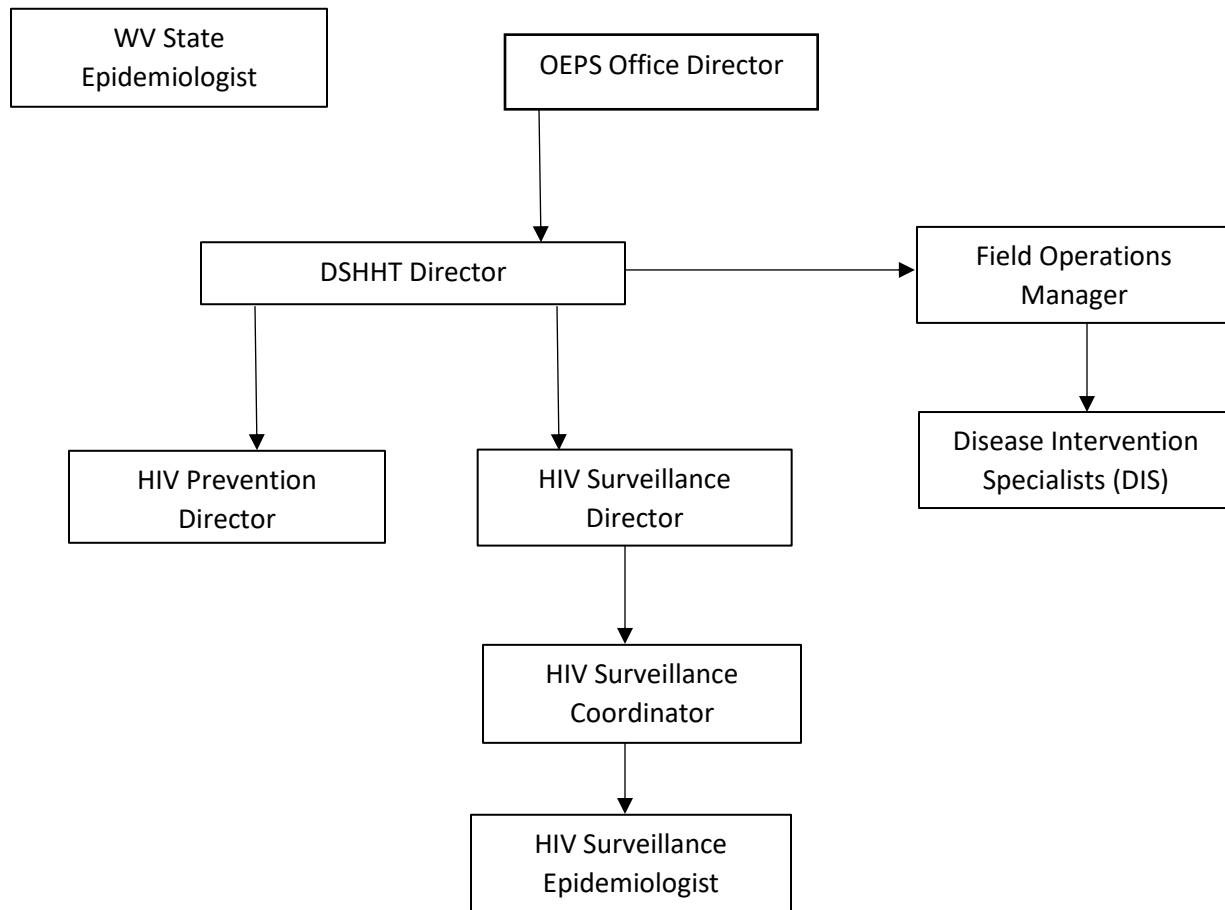
- DSHHT HIV Surveillance Program
- DSHHT HIV Prevention Program
- DSHHT STD Program
- DSHHT Disease Intervention Specialist (DIS)
- DSHHT Part B Ryan White Program

The HIV CDR Plan Template was distributed to each program for completion of designated sections. Conference calls were conducted with program leads to gather and incorporate information into the plan. DSHHT will review and update this plan annually. Additional stakeholders will be engaged as they are identified and available for contribution.

## SECTION 1: Internal Collaboration to Support Cluster Detection and Response

### 1.1 Oversight and Management

The West Virginia Division of STD, HIV, Hepatitis, and Tuberculosis (DSHHT) is situated in the Office of Epidemiology and Prevention Services (OEPS), within the Bureau for Public Health (BPH), within the Department of Health (DH). The Director of DSHHT serves as the Overall Responsible Party (ORP).



#### 1.1.A Description of DSHHT Working Groups (Teams)

##### Management Team – Director of DSHHT - Lead

- Members – HIV Prevention Director, HIV Surveillance Director, DIS Field Operations Manager
- Roles – Approves processes, protocols, plans, staffing, and budgets; provides liaison to community planning groups; approves community-level responses.

##### Cluster Response Team - HIV Surveillance Director – Lead

- Members – HIV Surveillance Coordinator, HIV Surveillance Epidemiologist, Viral Hepatitis Coordinator, Viral Hepatitis Epidemiologist, STD Program Director, STD Surveillance Epidemiologist, Disease Intervention Specialist (DIS) Supervisor(s)
- Roles – Reviews monthly cluster data; makes decisions on client-level responses; proposes community-level responses to the Management Team.

##### Prevention Program Team – HIV Prevention Director – Lead

- Members – Ryan White Director, STD Program Director, DIS Supervisor(s), HIV Testing and Outreach Coordinator, Linkage to Care Coordinator
- Roles – Monitors statewide prevention activities; review prevention data; proposes community-level responses and partnerships to Management Team.

### 1.1.B Roles and Processes for Coordination, Oversight, and Responsibility

- OEPS Director – Liaison to Secretary of the West Virginia Department of Health, legal counsel, State Health Officer, Deputy Commissioner of Health Improvement
- DSHHT Director – Supervises all DSHHT program staff and processes; serves as ORP; reports to the OEPS Director; oversees management team functions
- HIV Surveillance Director – Oversees surveillance/epidemiology staff and functions; manages the Cluster Response Workgroup, runs Time & Space Analysis, prepares cluster reports, and analyzes molecular sequencing
- DIS Supervisor or DIS Field Operations Manager– Oversees general DIS activities, maintain tracking report for partner services
- HIV Prevention Director – Oversees HIV, STD, and hepatitis prevention activities, including integrated testing sites
- Ryan White Director – Oversees Ryan White Part B HIV client services, including case management and support services and the AIDS Drug Assistance Program
- DSHHT Education, Training and Media Coordinator/HIV Prevention Minority Populations Coordinator – Oversees training and capacity building for staff and partners; manages community planning and marketing initiatives

## 1.2 Staff Capacity and Training

When an HIV cluster is identified, an outbreak response command team is established in collaboration with the WV Office of Threat Preparedness. This team consists of WV DSHHT HIV Prevention, HIV Surveillance, Ryan White Part B and DIS staff; WV OEPS staff epidemiologists as needed; and staff from WV Office of Threat Preparedness. This team will devise an outreach, investigation, and support plan for the affected area to assist in quickly identifying at-risk and newly HIV infected individuals, providing partner and contact testing, linkage or re-linkage to HIV medical care, and support services. This team will remain in constant contact during the cluster and share information when not in meetings by email.

### 1.2.A Cluster Response Command Team Staffing and Roles

- HIV & Viral Hepatitis Analytical Epidemiologist – runs monthly cluster data; prepares data for review; uses the West Virginia Enhanced HIV/AIDS Reporting System (eHARS) to review cases for viral suppression and care status; uses STD, partner services, and Hepatitis C (HCV) data to develop a comprehensive cluster profile and identify factors associated with transmission in the cluster.
- Director of HIV Prevention and Care – supports community engagement in response planning.
- HIV Surveillance Epidemiologist – conducts a review of partner services data to help identify factors associated with transmission in the cluster.
- Ryan White Director or Linkage to Care Coordinator – identifies if clients in the cluster are actively engaged in Ryan White services and/or case management, if not, determines if clients could benefit from this service; works with case managers on clients enrolled in Ryan White services. Facilitates case consultations on high-priority clients who are either lost to care or showing gaps in services.

- DIS Supervisor or DIS Field Operations Manager – Oversees general DIS activities, maintains tracking report for partner services, ensures DIS caseloads are prioritized, convene weekly DIS meetings to review case/contact records that were assigned the week prior, determines whether additional investigational activities are needed, and coordinates additional outreach with DIS staff.

### 1.2.B Training

DSHHT provides several training courses routinely for division staff. During a cluster response these trainings will be provided broadly among DSHHT response staff and new community partner staff assisting with the response. DSHHT will work to provide any additional training as needed, including social networking strategies and partner services to increase access to care and early intervention.

DSHHT routinely provides the following trainings:

- Confidentiality and data security: DSHHT staff take (required) annual confidentiality and data security training provided by DSHHT
- HIV Testing and Counseling
- HIV 101

During a cluster response and investigation DSHHT will work closely with the Local Health Department (LHD), Local Community Based Organizations (CBOs), and health care providers to assist in reaching the at-risk population. This team will devise an outreach, investigation, and support plan for the affected area to assist in quickly identifying at-risk and newly HIV infected individuals, providing partner and contact testing, linkage or re-linkage to HIV medical care, and support services. This team will remain in constant contact during the cluster and share information when not in meetings by email. See appendix A for HIV cluster response staffing and tasks.

### 1.3 Funding for Cluster Response Activities

- Surveillance and Prevention Funding
  - PS18-1802 – Integrated HIV Surveillance and Prevention Programs for Health Departments – CDC
- Ryan White Part B/HRSA Funding
  - X07HA00018 – Ryan White CARE Act, Part B – Base Award – HRSA
  - X08HA33872 - Ryan White CARE Act, Part B - Supplemental Award
- STD Funding
  - PS19-1901 – Strengthening STD Prevention and Control for Health Departments (STD PCHD) and Disease Intervention Specialist Workforce Supplement – CDC

### 1.4 Data Sharing

#### 1.4.A Data Sharing Activities Within DSHHT Units – Data Sharing Agreements (DSA) Not Required

- HIV Surveillance and STD Surveillance
  - Partner services and co-infection
- HIV Surveillance and Hepatitis Surveillance
  - Co-infection
- HIV Surveillance and HIV Prevention
  - Testing and linkage to care of people with HIV
- HIV Surveillance and Ryan White Part B Program
  - Care and Services for people living with HIV

#### 1.4.B Existing Data Sharing Activities Between DSHHT And External Entities

Currently, we have Data Sharing Agreements (DSA) with the following programs and/or agencies:

- Cabell-Huntington Health Department
- Kanawha-Charleston Health Department
- AIDS Task Force of the Mid-Ohio Valley – Ryan White Part B Program
- West Virginia Health Statistics Center

#### 1.4.C Planned Data Sharing Activities Between DSHHT And External Entities

Currently, we are developing DSAs with the following programs and/or agencies:

- West Virginia Bureau for Social Services

### 1.5 Data Protection

#### 1.5.A Triaging and Addressing Data Requests from Non-Public Health Partners

HIV data requests from non-public health partners are submitted on the Data Request Confidentiality Agreement Form. For external agencies, they must explain the specific information requested, intended use of the data, and procedure for protecting confidentiality. Once the requests are submitted, they must be approved by the DSHHT Director or the OEPS Director. Data suppression rules require cell counts to be suppressed for values 1-4 when stratification is by two or more factors. All media requests are handled by the Public Health Information Officer.

#### 1.5.B Current or Planned Efforts to Improve Data Protection Policies and Practices

The external agency data release form is in the process of being revised.

## SECTION 2: External Partnerships to Support Cluster Detection and Response

### 2.1 Community Engagement

During an HIV cluster response and investigation WV DSHHT will work closely with the LHD, Local CBOs, and health care providers to assist in reaching the at-risk population. This team will meet regularly to develop an outreach, investigation, and support plan for the affected area to assist in quickly identifying at-risk and newly HIV infected individuals, providing partner and contact testing, linkage or re-linkage to HIV medical care, and support services. This team will remain in contact during the cluster and share information when not in meetings by email.

During the cluster response, WV DSHHT will remain involved and in contact with all community partners from the affected area. WV DSHHT will provide support, engagement, and on-the-ground staff to assist in all HIV outreach, testing, and contact tracing. Staff will be available to work closely in the community, assist with outreach, help identify HIV infections, and provide linkage to HIV medical care.

### 2.2 Collaboration with External Partners

The list below is those positioned to provide clinical and non-clinical HIV testing and PrEP (Pre-Exposure Prophylaxis) referrals.

- HIV testing clinics: WV DSHHT, Local Health Departments, Hospitals and Hospital emergency departments, Free Clinics, Federally Qualified Health Centers (FQHCs), Rural Health Clinics and CBOs trained and supported by a local health care provider.



- HIV testing, non-clinical: WV DSHHT, Local Health Departments and CBOs trained and supported by a local health care provider.
- PrEP education and referrals: WV DSHHT, Local Health Departments, Hospitals and Hospital ERs, Free Clinics, FQHCs, Rural Health Clinics and CBOs.

As soon as a cluster or developing cluster is identified through the WV DSHHT Surveillance, Prevention, DIS or community partnerships, WV DSHHT will begin working with the LHD in the community and working outwards to the CBOs, Hospitals, Clinic, Health Care Providers, Homeless organizations, and all participating community partners to identify and provide support for HIV outreach and linkage to care.

During the cluster response, WV DSHHT meets regularly with all existing and new partners either physically or virtually. Through open communication with all parties, gaps are identified by the cluster response group and WV DSHHT will work closely with these organizations to assist in providing outreach, technical assistance, and resources to fill these gaps as they are identified.

Once the DSHHT Surveillance Program identifies an outbreak in a specific Region, an alert will be sent out to DSHHT, OEPS, CDC, and CDC funded partner agencies along with the Local Health Department.

A collaborative community engagement plan will consist of:

- Notifying funded partners by email to participate in an urgent response call.
- The HIV Surveillance Program will share critical information with participants as it relates to the outbreak.
- The HIV Prevention Program will share information to the partners about the strategies that will be incorporated in response to the outbreak.
  - Engage in community mapping to identify all potential testing locations and opportunities.
  - Once identified locations and opportunities, testing events will be set up at store fronts, community centers, neighborhood centers, anywhere that is conducive for testing.
  - At these testing events educational materials, condoms, and a list of additional testing resources will be available.
  - There will also be a concerted effort to identify any other barriers to care such as identification of social services, community resources and necessary referrals.
  - The length of the intensive testing period will be dependent on the severity of the outbreak in accordance with a specific percentage of the priority populations.
  - This plan will be modified as needed to appropriately respond to the outbreak. Staff in the DSHHT Prevention Program will be tasked with identifying all other potential partnerships and capable organizations to contribute. The DSHHT Director of HIV Prevention, and the HIV Testing and Outreach Coordinator will drive this process specifically.
  - This work will be informed by the four pillars of the National Ending the HIV Epidemic work plan (Diagnose, Treat, Prevent, and Respond). All community engagement efforts will address the outbreak along the four pillars until a desirable outcome is achieved.
  - Expanded integrative testing will include HIV, Hepatitis B, Hepatitis C, and Syphilis testing in the Region and utilize local health departments or other medical centers to carry this out.
  - DIS will link any newly identified case of HIV to care directly, or if available in their region, a Ryan White Linkage to Care Specialist.
  - Funded partners will redirect their normal operations to focus their efforts on addressing the outbreak.

## 2.3 Data Sharing (External)

Currently, WV BPH has DSAs with the following programs and/or agencies:

- Cabell-Huntington Health Department
- Kanawha-Charleston Health Department
- AIDS Task Force of the Mid-Ohio Valley – Ryan White Part B Program
- West Virginia Health Statistics Center

HIV data requests are submitted on either the HIV Data Release Protocol Form for Local Public Health Jurisdictions or for external agencies the Data Request Confidentiality Agreement Form. For external agencies, they must explain the specific information requested, intended use of the data and procedure for protecting confidentiality. Once the requests are submitted, they must be approved by the DSHHT Director or the OEPS Director.

DSHHT utilizes the existing CSTE HIV contact board to discuss HIV case information across jurisdictions. If any information requires discussion across jurisdictional lines, HIV Surveillance staff will contact the indicated jurisdictional partner. In addition, the Interstate Communications Control Records (ICCR) desk can be used to request DIS follow-up for people residing outside of West Virginia.

West Virginia is a participant in the PS24-0121 Black Box project. Georgetown University is the funded entity of PS24-0047 for a secure data sharing tool to support deduplication of cases in the National HIV Surveillance System. Georgetown coordinates quarterly matches of HIV surveillance data between participating jurisdictions to capture current address, laboratory data, death information, and other relevant information shared between states.

OEPS maintains a Memorandum of Understanding (MOU) with the West Virginia Health Statistics Center. The MOU agreement is for the purposes of data exchange for births, fetal deaths, and death related to infectious diseases for data to be used for case investigation and death matching.

Finally, DSHHT has a data-sharing relationship with the AIDS Task Force of the Mid-Ohio Valley who provides Ryan White Part B services in West Virginia. AIDS Task Force of the Mid-Ohio Valley maintains a central data repository (CAREWare) of Ryan White Part B funded services and participates in the exchange of health information for the purpose of improving services to persons living with HIV, enhancing performance measurement, and increasing the quality of data.

## SECTION 3: Detecting and Describing HIV Clusters

### 3.1 Time-Space Cluster Detection

The HIV Surveillance Director performs time-space cluster analyses bi-monthly using a CDC-provided SAS program. West Virginia specific regional and county level alerts are configured within the SAS code. The cutoff month/year within the SAS code changes to the current month/year for the second program execution every month. Output is summarized in an internal workbook for ease of review.

In West Virginia, a priority cluster in time-space analysis is defined as a time-space cluster for which there has been an alert for three consecutive months which indicates a sustained increase for that geographic area. Analyzing real-time HIV surveillance data requires thorough evaluation of each alert to ensure an alert is due to a true increase in new diagnoses and not the result of previous positive cases newly identified in the jurisdiction. Each new case receives a CDC Soundex check to determine if a case

was previously diagnosed in another jurisdiction or a new diagnosis of HIV. DIS investigations and eHARS notes on each case are reviewed for indications of previous diagnosis. Aggregate data on priority time-space clusters are shared with DSHHT internal Cluster Response Workgroup.

SAS programs created by the CDC and customized by West Virginia staff are executed bi-monthly and provide information on the epidemiology of existing outbreaks.

### 3.2 Molecular Cluster Detection

All HIV-related test results reported to the West Virginia BPH are processed and imported into eHARS weekly. HIV surveillance staff are responsible for assessing the completeness and timeliness of the data and addressing issues as they arise.

Nucleotide results are included within the electronic laboratory reporting (ELR) feed which contains all other HIV-related laboratory test results when they become available and are provided by the laboratory performing the test. All HIV-related ELR test results reported to the West Virginia BPH are processed and imported into eHARS weekly. HIV surveillance staff are responsible for assessing the completeness and timeliness of the ELR data and addressing issues as they arise.

All of West Virginia's molecular data is analyzed within the HIV Surveillance Program. The HIV Surveillance Director performs molecular cluster analyses each month. A CDC-provided SAS program extracts the HIV genotypes stored in eHARS. Sequence data are uploaded and analyzed in Secure HIV-TRACE, a bioinformatics tool developed by the CDC, University of California – San Diego, and Temple University. Molecular clusters that meet national priority criteria are reviewed. National priority criteria is defined as a cluster with at least 5 cases diagnosed within the most recent 12- month period at the 0.5% genetic distance threshold. Aggregate data on priority molecular clusters is shared with DSHHT internal Cluster Response Workgroup that meets quarterly.

### 3.3 Other Cluster Detection Methods

If a Disease Intervention Specialist (DIS) identifies an increase in cases or a cluster of cases, the DIS will submit field records and interview records and alert the DIS Supervisor. The DIS Supervisor will notify the Field Operations Manager, who will share information with the HIV Surveillance Program to determine if surveillance data supports what DIS suspect they are seeing in their region. If surveillance data supports DIS findings and a valid cluster is believed to be identified, a cluster outbreak response workgroup meeting will be scheduled to review the cluster.

If a health care provider or agency identifies an increase in cases or a cluster of cases, the information is reported via Case Report Forms to the HIV Surveillance Program. The case report forms are reviewed for completeness. If data is missing, the HIV surveillance staff will utilize available databases to supplement the missing data or contact the provider and complete the form over the phone. The case(s) is then entered in eHARS. If it is a newly diagnosed case, it is then also entered in the WVEDSS, and an HIV investigation is created and assigned to a DIS supervisor for field follow-up for partner services. DIS supervisors review each newly assigned HIV investigation and assign it to an appropriate DIS.

Once the original patient(s) has been located, interviewed, sexual and/or substance use equipment sharing partners have been identified, linked to a medical provider, and offered Ryan White Services the DIS will close the case. The DIS will process the contact records by attempting to locate the contacts, inform them of their exposure, offer them rapid testing (if refused, DIS will make appointment for

testing), and if identified as a new positive through rapid testing DIS will process the contact record as a new case. DIS will complete all necessary reporting forms and ensure that the Adult Care Report Form (ACRF) is sent to HIV Surveillance within 48 hours. The DIS interview record and contact records are reviewed by the DIS Supervisor for completion. The DIS Supervisor informs the HIV surveillance epidemiologists of the completed investigation via encrypted email using the patient’s unique case ID number only. The HIV surveillance epidemiologists enter the HIV partner services interviews into eHARS from WVEDSS.

The HIV Surveillance Program will also determine if the surveillance data supports what the provider or agency feels they are seeing locally. If surveillance data supports the provider/agency’s report and a valid cluster is believed to be identified, a cluster outbreak response workgroup meeting will be scheduled to review the cluster.

### 3.4 Reviewing Relevant Cluster Data

In addition to HIV surveillance data, partner services, viral hepatitis and STD data stored in WVEDSS are the primary data sources used when conducting a cluster investigation. The HIV surveillance program can access profiles that include DIS interview notes, previous STD diagnosis, named partners, and risk information from WVEDSS. Manual review of each person’s profile is the most efficient method to extract information from WVEDSS with relevant cluster case information compiled into an Excel spreadsheet for cluster analyses.

**Table 1. How HIV and Other Data Are Stored and Accessed**

Type of Data	Database Name	Who Has Access?	How Readily Available Is It?	Variables Included
Partner Services Data	WVEDSS	HIV Surveillance Coordinator, HIV Epidemiologist, DIS	Available	DIS interviews, risk data, named partners
Historical Partner Services Data (Pre-July 1, 2021)	Access Partner Services Database	HIV Surveillance Coordinator, HIV Epidemiologist	Available	DIS Interviews, Field records
Hepatitis Data	WVEDSS	DIDE, STD, DSHHT Director, HIV Surveillance Coordinator, HIV Epidemiologists	Available	Viral hepatitis diagnosis date, demographic information
HIV Surveillance Data	eHARS	DSHHT Director, HIV Surveillance Staff, DIS Supervisors, DIS Field Operations Manager	Available	HIV Case Investigation information

STD Data	WVEDSS	STD, DSHHT Director, HIV Surveillance Coordinator, HIV Epidemiologists, Field Operations Manager, DIS Supervisors, and DIS	Available	STD diagnosis, demographic information
Historical STD Data	STD-MIS	HIV Surveillance Coordinator and HIV Epidemiologists	Available	
Ryan White Services	CAREWare	HIV Linkage to Care Staff	Need to request data. Surveillance does not have access to the database.	RW services utilized

## SECTION 4: Review and Prioritization of HIV Clusters

### 4.1 Process for Review and Prioritization

During HIV clusters responses, the DSHHT director, HIV Surveillance Coordinator, HIV Epidemiologist, HIV Surveillance Director, HIV Prevention Director, HIV Care Director, Field Operations Manager, and DIS Supervisor participate in weekly agency update meetings.

Deidentified cluster reports are distributed during cluster meetings to provide insight on newly identified HIV positive cases and if they have been interviewed by the DIS, linked to care, and have reached viral suppression.

HIV Clusters are named through multiple naming conventions, depending on how the cluster was identified.

- a. HIV Clusters identified through local methods are named using an internally derived naming convention. Locally identified HIV Clusters are named as 9-digit codes where digits 1-3 represent the sequential cluster number that West Virginia has identified (e.g., 001, 002, 003, etc.). Digits 4-6 represent the first three letters of the county that is affected (e.g., Kanawha County would be represented by “Kan”). Digits 7-9 represents the risk factor associated with the cluster (e.g., Injection Drug Use would be represented by “IDU”).
- b. HIV Clusters identified through national molecular analysis are named as “CDC quarterly national analysis in which the cluster was first identified cluster ID number” (e.g., CDC\_202209\_123).
- c. HIV Clusters identified through local/state molecular analysis are named as the two-letter jurisdiction abbreviation followed by the year and month in which the cluster was first identified and cluster ID (e.g., WV\_YYYYMM\_10-5). “10-5” is the ID assigned by Secure HIV TRACE. If it is a subcluster at the 0.5% genetic distance threshold that meets CDC priority

- criteria, you must include the subcluster extension ('-5') when entering the cluster ID into eHARS to ensure correct identification of clusters for evaluation purposes.
- d. HIV Clusters identified through national time-space analysis are named as “CDC the quarterly national analysis in which the time-space cluster (aka ‘alert’) was first identified cluster ID with the initials ‘TS’ (e.g., CDC\_202209\_TS456).
  - e. HIV Clusters identified through local/state time-space analyses are named as the two-letter jurisdiction abbreviation followed by the year and month in which the cluster was first identified and cluster ID with the initials ‘TS’ (e.g., WV\_YYYYMM\_TS789).

A weekly meeting is held with the DSHHT Director to discuss findings and decisions. The DSHHT Director also has weekly meetings with the OEPS Office Director and often the BPH Deputy Commissioner of Health Improvement and/or State Epidemiologist will also attend the meetings.

#### 4.2 Prioritization of Clusters

Cluster prioritization is conducted on a case-by-case basis. Highest priority clusters are typically persons who inject drugs (PWID) or men who have sex with men (MSM). DSHHT HIV Cluster Workgroup prioritizes clusters by current size, continued growth, geographic distribution, age distribution, drug resistance prevalence, community viral load, and transmission risk.

**Table 2. Prioritization of HIV Clusters**

Level of Concern	Action Items
Level 1: Individual Follow-Up	<ul style="list-style-type: none"> <li>• Routine case investigation and contact tracing/partner services.</li> <li>• Initial time-space alerts are monitored for three months.</li> <li>• Molecular clusters of interest that do not yet meet criteria for national cluster criteria are monitored.</li> <li>• Any increase in cases reported by a provider or partner services is monitored.</li> </ul>
Level 2: Cluster Investigation Warranted	<ul style="list-style-type: none"> <li>• A jurisdiction or region alerts on the time-space analysis for three consecutive months, triggering an in-depth epidemiologic review of cases diagnosed or identified in that geographic area.</li> <li>• Molecular clusters of interest that do not yet meet criteria for national cluster criteria, but concern for active transmission is present.</li> <li>• An increase in cases reported by a provider or partner services results in concern for active transmission.</li> </ul>

Level 3: Elevated Cluster Response	<ul style="list-style-type: none"> <li>• An in-depth epidemiologic review of time-space alert results in verified concern for active transmission and epidemiologic linkage is present among cases.</li> <li>• Molecular cluster of interest meets national cluster criteria.</li> <li>• Active transmission and/or verified epidemiologic linkage is identified among cases report by a provider or partner services.</li> </ul>
------------------------------------	---

### 4.3 Tracking and Managing Clusters

For time-space and molecular clusters that meet national priority criteria (defined above), person-level line lists are created and managed in Excel. Each month’s data is reviewed and updated on active clusters. A cluster remains in open status if there is an active time-space alert or if a molecular cluster meets national priority criteria. If a molecular cluster no longer meets the national priority definition, it will continue to be monitored each month when Secure HIV-TRACE is run. Time-space clusters will continue to be monitored if there is no longer an alert.

### 4.4 Closing Out Clusters

Time-space clusters will be closed out once there have been six consecutive months without an alert. Molecular clusters are closed out if there have been no new cases added to the cluster at the 0.5% genetic distance threshold for 12 consecutive months. Data collected and stored on clusters will remain available in the event a cluster re-emerges meeting priority criteria.

## SECTION 5: Designing and Implementing Cluster Detection and Response Plans

### 5.1 Action Planning Process

When a potential outbreak is detected, the HIV Surveillance Director, or designee, will schedule a meeting with the Cluster Response Workgroup to share data regarding STD, HIV, or Hepatitis case increases. The Cluster Response Workgroup will determine which components, if any, of the HIV CDR Plan should be activated. The initial meeting should be scheduled within 1 week of outbreak detection for a “rapid response” to be initiated.

The internal team meeting should include: a review of all relevant data (current & historical data); assurance that the team understands the definition and scope of the outbreak; selection of roles of each group member; development of an initial strategy and plan of action; and scheduling of regular meetings and/or updates.

The primary objective of the Cluster Response Workgroup is to generate hypotheses regarding why increases in cases are occurring. The following should be accomplished during the initial meeting:

- Decisions regarding which components of the HIV CDR Plan, if any, are to be activated; or if case increases will continue to be monitored.
- Review the Security and Confidentiality Policy to prepare for data sharing and or data dissemination.

- Discuss how information should be disseminated to other Program Managers and/or key DSHHT staff.
- Review internal and external stakeholders to include in follow-up plans/meetings.
- Creation of an initial “Plan of Action” that includes dates, assigned persons, and responsibilities for follow-up.
- Discuss any potential sensitivities pertaining to the outbreak or investigation.
- Designate an Outbreak Team Leader.
- Select the follow up date of the next meeting.

Follow up meetings are expanded to include Linkage to Care Coordinators (LCCs), DIS Supervisors, Regional DIS, local leadership including local emergency preparedness staff, and funded partners from CBOs and Ryan White agencies. The purpose of follow up meetings with the expanded group is to review available information, discuss initial hypotheses regarding the cluster(s) that are occurring, identify gaps that may be missing from available data, and brainstorm solutions and next steps. Regional and community team members also help with the identification of other medical, community, and social support service representatives who should be included in further meetings. Community Based Organizations can also offer further community scanning through their outreach and support teams. Regional and community teams often assist with introductions and facilitation of meetings with community groups, local medical centers, substance abuse facilities, housing and food programs, and mental health facilities.

Cases may be sent back to DIS or LCC for re-interview, or re-engagement if further information is needed to fully analyze key factors within the cluster. Strategies and stakeholders may expand or shift as new cases are added to the cluster or more information is found regarding the existing cluster.

#### 5.1.A. Communication Plan

Outbreak response communication planning will allow flexibility when addressing HIV, STD and Hepatitis outbreaks in West Virginia. Key communication structure, roles, and responsibilities of staff during outbreaks are described below and also mirrored in the Prioritization Chart above. The exact flow of specific interactions and information exchange will vary based on the circumstances of the outbreak. Before finalizing a communications plan, DSHHT will engage partners and local leadership to discuss health and systems disparities, gaps, and needs.

Communication planning will also consider unintended consequences, such as stigmatization of a community or population. Information approved for release should be non-identifying, sensitive to geographic, racial/ethnic, and socio-economic communities, and include person-first language. It is also helpful to discuss health and systems disparities while reviewing relevant data related to HIV, STD and Hepatitis C clusters and outbreaks. To this end, one-pagers may be created in advance with key points related to sexual health and harm reduction, for example, to assist media contacts with appropriate and respectful messaging.

#### 5.1.B. Responsibilities

The HIV Surveillance Director follows the standard surveillance formula for determining an HIV cluster. If an area is above the average increase in disease, based on the formula(s), the DSHHT Director and HIV Surveillance Director should be notified immediately. This starts the process to address a possible outbreak.



DSHHT Director oversees the management and resources during the cluster response, even when the levels of the incident are large or small. The success of cluster efforts depends on a common, interoperable approach to sharing resources, coordinating, and managing incidents, and communicating information.

Depending on the scope or impact of a particular cluster, DSHHT will work with Communications when widespread media engagement is needed. DSHHT staff will assist in developing informational materials and alerts for distribution.

Finally, all parties above will work together to ensure communication to community stakeholders and partners is consistent throughout and after an cluster, so that outcomes are shared among all parties involved.

#### 5.1.C. Follow-Up Activities

The primary role of DIS in cluster response is Partner Services, contact tracing, and making referrals to appropriate agencies and staff for medical and social service needs. The primary role of the LCC in cluster response is linkage and adherence to HIV medical care and assistance with navigating obstacles that often prevent individuals from entering and remaining in care. The LCC role also includes linkage to medical and social services.

#### 5.1.D. HIV Molecular Clusters

Identification of molecular clusters provides a tool to identify transmission clusters. A transmission cluster represents a subset of an underlying risk network. HIV molecular clusters should be carefully reviewed to determine whether persons in the cluster have been referred to HIV medical care, are virally suppressed, and have had a Partner Services interview. DIS should follow standard investigation, interview, and reinterview procedures on identified cluster cases. Clients should not be informed that they are being contacted because they are part of a “Molecular Cluster”. Partner Services interview data is important to help understand and assess underlying risk networks that should be targeted with Prevention efforts.

Clients identified as being not in HIV medical care and part of a molecular cluster should be referred immediately to LCC for follow up.

Clients identified as not having a Partner Services Interview should be referred to the Field Operations Manager who will assign them to a DIS Supervisor for review, pending DIS follow-up.

The Field Operations Manager will review cases to see why the client has not yet had a Partner Services interview and follow up with DIS Supervisor. DIS Supervisor will assign the case to DIS to establish a timeline for the prospective interview to occur or if the case is lost to follow-up.

Some molecular cluster cases may have refused Partner Services interviews in the past or may have been lost to follow-up. The Field Operations Manager and the DIS Supervisor will review molecular cluster cases provided by HIV Surveillance. The DIS Supervisor will then review these cases with DIS and create a plan for follow-up, including an interview or re-interview.

Granted that molecular clusters can signal underlying high transmission and risk clusters, Partner Services interviews should focus on client risk factors, partners who need testing, and other persons in

client's network who are not sex partners but would benefit from testing. Any sex partner who tests negative for HIV should be counseled and referred to a local PrEP program. Any sex partner who tests positive should have HIV status checked through eHARS or WVEDSS.

If a named partner is known to be HIV positive and not in HIV medical care, DIS will follow-up with them during the investigation to determine what barriers, if any, that they have regarding accessing care. DIS will re-interview this individual for partner services and will make another referral to care as part of this process. If DIS needs to make a referral to medical care or harm reduction (if available in their area) for them at this time, they will do so and then refer them to a Ryan White LCC and/or Ryan White Medical Case Manager for further assistance regarding social service referrals such as housing, food assistance, and substance-use disorder treatment.

Original patients should also be assessed for additional needs including social service referrals such as housing, food assistance, substance-use disorder treatment, and harm reduction programs using regularly established guidelines to help with enrolling into medical care and/or case management.

DIS will document client follow-up, partner follow-up, risk factors, and linkage efforts into WVEDSS according to the DIS Performance Standards and Expectations. DIS will prioritize their cases using the Field Follow-Up reactor grid.

#### 5.1.E. HIV Time-Space Clusters

A time-space cluster occurs when the number of newly diagnosed HIV infections in a particular geographic area is elevated above levels expected given previous patterns. Time-space clusters may represent recent and on-going HIV transmission and can help with prioritization and targeting of HIV prevention efforts. DSHHT should assess the possibility of a rapid transmission cluster when there is an increase in time-space HIV diagnosis. Important things to consider when evaluating client follow-up plans during a time-space cluster include:

- How many diagnoses are acute?
- How many diagnoses are considered a late diagnosis (Stage 3)?
- How many cases have a self-reported history of a negative HIV test?
- Are there co-infections with HCV or other STDs?
- How many had a high initial viral load?

If a time-space cluster has been identified with new ongoing diagnoses, DIS will refer clients directly to a LCC for linkage to care. Original patients and partners in time-space clusters should also be assessed for need for social service referrals such as food assistance, substance-use disorder treatment, and harm reduction programs. DIS will document client follow-up, partner follow-up, risk factors, and linkage efforts into WVEDSS according to the DIS Performance Standards and Expectations. DIS will prioritize their cases using the Field Follow-Up reactor grid.

#### 5.1.F. Syphilis Outbreak

If a syphilis outbreak is confirmed or suspected, the STD Program Director, STD Epidemiologist, Field Operations Manager, and DIS Supervisors will review reported cases to verify that case definitions meet CSTE case definitions. A crucial component of effective disease intervention is timely follow-up on clients and their infected, exposed, or at-risk partners. Furthermore, prompt reporting helps the STD Epidemiologist monitor and assess outbreak trends. Therefore, the DIS Supervisor assigned to the impacted region will assess DIS caseload to determine capacity to follow up promptly on cases. If DIS

resources are limited or overburdened during an outbreak, the Field Operations Manager will reallocate DIS from other Public Health Regions to assist. HIV Prevention staff will prioritize outreach testing efforts in areas experiencing syphilis outbreaks.

## 5.2 Data to Guide Cluster Response

Cluster detection and response acts as part of a larger feedback loop to inform overall program quality improvement. DSHHT imports cluster ID(s), cluster type, and cluster analysis date information into eHARS and WVEDSS and uses the data to assess follow up activities completed for each person in the identified clusters.

DSHHT will review the HIV CDR Plan at least annually to ensure timely updates. The HIV CDR Plan is a living document which DSHHT will update, incorporating DSHHT staff experience and community feedback. The workgroup will monitor data over time to see how many clusters fall into each tier and adjust criteria for tier definitions as needed.

## 5.3 Directing/Redirecting Routine Program Activities for Cluster Response

### 5.3.A Partner Services

Prioritization:

1. New original patients (OP) who are pregnant
2. New OPs with intravenous drug use (IVDU) as a transmission risk
3. Contacts of OPs with IVDU as a transmission risk
4. New OPs with unknown transmission risk
5. Contacts of OPs with unknown transmission risk
6. New OPs with MSM transmission risk
7. Contacts of OPs with MSM transmission risk

Cases are reopened if OP has never been interviewed and is now in care. Cases are also reopened if OP has re-entered care if there is evidence that the OP fell out of care for a period greater than one year and has IVDU as a risk factor.

### 5.3.B HIV Care Interventions

AIDS Drug Assistance Program (ADAP) rebate funds have been utilized to fund salary support for one Linkage to Care/Retention Specialist and a Nurse Practitioner for the Charleston Area Medical Center (CAMC) Ryan White Part C clinic. These staff primarily focus on the Kanawha County area where many clients in a current injection drug use (IDU) outbreak reside and work to ensure all newly confirmed positive patients are linked/re-engaged to care.

Five Linkage to Care/Retention Specialists have been created to support linkage and re-engagement activities in areas currently experiencing outbreaks associated with IDU and increases in syphilis. A Linkage to Care Coordinator was hired at the State level to work with the five regional Linkage/Re-Engagement to Care Specialists and other stakeholders. The State Linkage to Care Coordinator establishes relationships with key staff at health departments, local HIV care providers, medication assisted treatment sites, emergency departments, hospitals, clinics, and correctional system to ensure a comprehensive referral network for expedient linkage/retention in care and rapid initiation of ART. This Ryan White staff member works closely with the local Ryan White Part C Clinic and correctional system to ensure smooth linkage to care for HIV positive individuals being released from incarceration.

### 5.3.C HIV Testing and PrEP

When a cluster of cases or an increase in cases is detected in a jurisdiction, HIV testing outreach is increased within the community targeting at-risk populations. During any HIV testing, either clinical or nonclinical, all clients are offered HIV counseling. During this counseling session, if a client's test returns negative, they are offered HIV prevention counseling which includes educational information on PrEP, and a link to a local PrEP provider. This is done routinely and provided to everyone no matter what their risk factors may be. DSHHT provides HIV outreach testing and counseling training to all organizations in the community interested in becoming HIV testing sites. This training also includes providing support and education on obtaining waived Clinical Laboratory Improvement Amendments (CLIA) licensing and conducting rapid HIV testing.

### 5.3.D. Harm Reduction

Most current harm reduction programs (HRP) in West Virginia are located within LHDs. In areas that are underserved by HRPs, DSHHT collaborates with community partners to increase access to harm reduction programs and encourage development of programs within state regulations. If an HRP participant states they are suffering from a need that has services available for assistance, they are easily enrolled in that service. All programs have linkage to care professionals on staff in order to assist participants with any of their needs.

### 5.3.E. Social Services

Statewide linkage to care staff are trained to link persons living with HIV (PLWH) to needed social and care services when necessary. Ryan White Care Services staff collaborate with social workers to link PLWH to other needed services (job-aid, housing opportunity, mental health, etc.). Staff routinely perform these activities and should offer services to any PLWH who interacts with public health.

## 5.4 Options for Enhanced Interventions

The HIV Prevention Director works with the DHHR Office of Communications to advertise HIV testing and prevention messaging as well as geofencing or targeted ads in areas with clusters. Using DHHR social media accounts (Facebook, Instagram, Twitter) is free, but outreach is limited to people who actively follow accounts. WV DSHHT has set aside funds for social media advertising for targeted messaging in a specific area or population impacted by a cluster.

## 5.5 Communication Planning

### 5.5.A. Communication with Stakeholders

Ongoing dialogue with stakeholders via the pre-established communication network is important because it will keep information consistent and minimize misinformation. It is especially vital when asking stakeholders, such as physicians or schools, to assist in controlling the spread of disease. Finally, it provides a good working relationship with stakeholders beyond the cluster response.

- Notify surrounding county and state health jurisdictions of the potential cluster situation and alert them to be vigilant for disease increases in their jurisdictions.
- Discuss feasibility of hypothesis with key persons from the public health, clinical, and affected communities in the local area.
- Inform public health officials, health care providers, clinical and laboratory managers, affected communities, and the media of the outbreak investigation and outline the response plan.
- Discuss with CBOs ways they could assist with disease control and prevention efforts.

### 5.5.B. Communication with Media

It is important to be ready to respond to media inquiries about both a potential or declared HIV cluster. The media can also be instrumental in helping circulate information about the cluster as well as being an integral part of delivering health information and assisting control efforts during and after the cluster. Contacts with the media should be made in accordance with state or county protocols. The involvement of the state communication team should be made early in the response process, preferably before an cluster is declared, and regular updates on the course of the cluster investigation and implementation of control efforts should be provided to the communication team or information officer.

## SECTION 6: Implementing an Escalated Response

### 6.1 Initiating an Escalated Response

The DSHHT HIV Cluster Outbreak Response Workgroup will discuss when an escalated response is warranted.

### 6.2 Escalated Response Options

#### 6.2.A. Components Needed for Surge Staff Capacity, Enhanced Communication Support, and Need for Supplemental Funding

The HIV Cluster Outbreak Response Workgroup has at least one staff from HIV Surveillance, Viral Hepatitis, STD Surveillance, and DIS program areas. Workgroup members complete activities in their program area and identify surge capacity staff members. DSHHT currently has limited HIV Surveillance capacity and would rely on DIS for surge support.

The HIV Surveillance Director works closely with HIV/Viral Hepatitis/STD/DIS program managers to select a point person in each program area to develop an Incident Command System (ICS) structure (Appendix B).

DSHHT does not have emergency supplemental funds for HIV cluster response. The DSHHT Division Director will explore opportunities for emergency supplemental funds with the Executive Team.

#### 6.2.B. Supplemental Funding Allocation or Re-Distribution of Existing Funds

DSHHT expects its staff to actively participate and serve in a supporting role to meet the agency's obligations for disaster response and/or recovery or continuity of operations (COOP) activation, or perform other duties as assigned. This process allows DSHHT to quickly redirect staff to continue required program activities, including cluster detection and response. DHHR OEPS staff work plans include the expectation to participate in public health emergencies, which allows BPH to allocate staff to cluster response in emergency situations.

#### 6.2.C. Deactivation and Transition Back to Routine Program Oversight

Deactivation and transition back to routine program oversight occurs when client and population level interventions are completed to an acceptable level and the number of new diagnoses linked to the cluster level off for at least three months. DSHHT staff will still actively investigate and intervene, but not to the same staffing level, time commitment, and full-fledged attention (to the detriment of other routine activities).

## 6.3 Communicating During an Escalated Response

### 6.3.A. Communication Plans for Use in A Large HIV Cluster Response

In an escalated cluster response, the following communication occurs:

- DSHHT communicates with local and regional partners twice per month.
- DSHHT posts a health advisory on its website, after approval from BPH leadership.
- DSHHT works with the MidAtlantic AIDS Education and Training Center to offer a series of training around the cluster response. Sessions take place virtually and are offered at no charge.

### 6.3.B. Communication Planning with Local Partners and Neighboring Jurisdictions

Communication with neighboring jurisdictions will take place via email or telephone as needed. If a jurisdiction needs additional follow up, then more collaboration/discussion will happen on web-based calls via Google Meet or another platform that will allow for screen sharing and collaboration. If continued follow-up is needed, a recurring meeting will be established.

### 6.3.C. Notification/Collaboration with CDC or Other Federal Partners

DSHHT will notify CDC HIV Prevention and Surveillance Project Officers via email when a cluster is elevated to an escalated response. If CDC staff are available to assist with the escalated response, DSHHT may choose to request in-person technical assistance or additional resources. CDC Viral Hepatitis and STD Project Officers will be notified if high numbers of co-infections are identified in the HIV cluster members.

## 6.4 Staff Training for Escalated Response

### 6.4.A. HIV Program Staff Training

Training for HIV program staff might include data security and confidentiality, HIV, stigma, cultural competence, outbreak response, incident command, or other relevant topics. DSHHT staff are required to complete annual security and confidentiality training. DSHHT staff are also encouraged to complete the HIV 101 course offered by the DSHHT HIV Prevention Program. DSHHT staff involved in escalated cluster response are encouraged to complete incident command structure (ICS) training. At minimum, DSHHT staff involved in escalated cluster response should complete ICS-100 and ICS-200. Those who will be responsible for leading as branch manager should also complete ICS-300 and ICS-400.

### 6.4.B. Surge Capacity (Non-HIV Program Staff) Training

Training for non-HIV program staff might include data security and confidentiality, HIV, stigma, cultural competence, or other relevant topics. In West Virginia, non-HIV program staff who provide surge capacity are required to complete security and confidentiality training. These staff are also encouraged to complete the HIV 101 course offered by the DSHHT HIV Prevention Program. Any surge capacity staff that would be involved in escalated cluster response are encouraged to complete ICS training, specifically ICS-100 and ICS-200.

## SECTION 7: Monitoring and Evaluation of Cluster Response Activities

All outbreak response efforts will begin with set goals, objectives, and activities to accomplish desired outcomes and to strategically track progress. Quantitative approaches are defined to determine what an outbreak is; routine data collection tools are in place to track and compare data, using the same time period from as early as one quarter to another. Data shared with outside entities shall be limited to the minimum necessary to achieve the purpose of client linkage or re-engagement, and data shall be shared with the minimum number of individuals necessary. Additionally, as needed, outside entities may share client details with DSHHT to assist with linkage or re-engagement activities and to confirm details regarding patients' medical statuses.

### 7.1 Monitoring A Cluster Response

Upon identification of a priority cluster, linkage to care and viral suppression are evaluated among all cluster cases. DIS interview notes and field records are reviewed for details on partner testing and referral to PrEP. Partner services activities are documented in WVEDSS and transferred to eHARS. DSHHT uses SAS reports to monitor cluster growth and complete follow up activities. The HIV Cluster Workgroup uses these monthly reports to discuss and plan next steps. The list of reports currently in use or development is below:

- eHARS SAS datasets
- Cluster Report SAS program
- Cluster Line list SAS program
- Time Space Analysis SAS program
- Secure HIV TRACE

The CDC cluster report form is completed for clusters that have initiated or have active cluster response activities underway. Only aggregate statistics are provided in the CDC cluster report form. Updates to the cluster report form for active clusters are submitted to the CDC on a quarterly basis.

### 7.2 Evaluation of Cluster Response

#### 7.2.A. Post-Response Debrief

After the escalated cluster response has ended, the Cluster Response Workgroup, including local leadership, will meet to discuss the process and outcomes of the response. Relevant data will be reviewed by the team.

#### 7.2.B. Annual Evaluation

Annually, the Cluster Response Workgroup will meet to evaluate the overall process and outcomes from cluster response activities. The HIV CDR Plan will be updated as needed.

#### 7.2.C. Identifying Opportunities for Improvement

During post-response debrief meetings and annual evaluation meetings, the Cluster Response Workgroup will review outcome data to evaluate the program for effectiveness, identify needs, and identify opportunities for improvement.

#### 7.2.D. Revising Processes

The HIV CDR Plan will be updated as needed after each annual evaluation meeting.



## Glossary/Abbreviations

- **AIDS** — acquired immunodeficiency syndrome
- **ADAP** - AIDS Drug Assistance Program
- **BPH** – Bureau for Public Health
- **CBO** – community based organization
- **CDC** — Centers for Disease Control and Prevention
- **CLIA** – Clinical Laboratory Improvement Amendments
- **Cluster** — Also called a transmission cluster or transmission network. A cluster is a group of HIV-infected people (with diagnosed or undiagnosed HIV) connected by HIV transmission. Transmission clusters can represent recent and ongoing HIV transmission in a population, where prevention efforts could prevent new infections.
- **Cluster Response** — Activities that address the increase in transmission or diagnosis that led to the detection of the cluster; these activities would include matching with other data sources, follow up in the field, increased partner or venue-based testing, re-interview and partner elicitation, medical chart review, etc.
- **Contact Tracing** — The practice of identifying and monitoring people who may have had contact with an infectious person as a means of controlling the spread of a communicable disease
- **CSTE** — Council of State and Territorial Epidemiologists
- **DH** – Department of Health
- **DIS** — A disease intervention specialist is generally responsible for field investigations of HIV and other STDs, interviewing exposed clients or newly diagnosed people, and offering field testing to people who have been exposed.
- **DSA** – data sharing agreement
- **DSHHT** – Division of HIV, STD, and Tuberculosis Elimination
- **eHARS** – Enhanced HIV/AIDS Reporting System
- **FQHC** – Federally Qualified Health Center
- **ICCR** – Interstate Communication Control Records
- **ICS** – Incident Command Structure
- **ELR** – electronic laboratory reporting
- **HCV** – Hepatitis C
- **HIV** — Human Immunodeficiency Virus
- **HRP** – harm reduction program
- **Injection Drug Use (IDU)/Intravenous Drug Use (IVDU)**– Persons who injected nonprescription drugs or who injected prescription drugs for nonmedical purposes or injection of drugs prescribed to persons who share injection equipment was shared (e.g. syringes, needles).
- **HRSA** — Health Resources and Services Administration
- **Molecular Analysis** — Also called genetic analysis or phylogenetic analysis, molecular analysis is the pairwise comparison of DNA or RNA sequence data to determine if two sequences are related enough to infer that two people are in the same transmission network.
- **LCC** – Linkage to Care Coordinator
- **LHD** – local health department
- **Male-to-male Sexual Contact (MSM)** — Persons assigned male sex at birth, regardless of current gender identity, who have had sexual contact with other males. Also, persons assigned



male sex at birth who have had sexual contact with both males and females (i.e. bisexual contact).

- **MOU** – Memorandum of Understanding
- **OEPS** – Office of Epidemiology and Prevention Services
- **OP** – original patient
- **Outbreak** — Transmission of a communicable disease in a population that is higher or more pervasive than expected. An increase in disease or diagnosis, often sudden, above what is normally expected in that population or area. The term is often used to describe situations which need an urgent or emergency-level public health response.
- **Partner Services** — Public health term which refers to the health intervention given to a client's intimate partners when a client goes to a health care provider to ask for health care.
- **PLWH** — Person Living with HIV
- **PrEP** – Pre-Exposure Prophylaxis
- **PWID** — Person Who Injects Drugs
- **Risk Network** — A risk network includes the group of people among whom HIV transmission has occurred and could be ongoing. This network includes people not HIV-infected but may be at risk for infection, as well as HIV-infected people in the transmission cluster.
- **STD** – sexually transmitted disease
- **Stigma** – a set of negative attitudes, beliefs, and behaviors towards persons living with HIV or at-risk for HIV.
- **Surge Capacity** — Staff or resources that can be directed where they are needed in a rapid fashion.
- **Viral Suppression** - an HIV viral load of less than 200 copies per milliliter
- **WVEDSS** – West Virginia Electronic Disease Surveillance System

## Acknowledgements

- Thank you to current and former DSHHT staff who have all been involved in the creation of this HIV Cluster Detection and Response Plan.
- Thank you for the collaboration and cooperation of Local Health Departments and community partners that have worked closely with DSHHT in cluster investigations which greatly directed the activities and outcomes listed in this plan.
- The information contained in this HIV Cluster Detection and Response Plan has been developed, with permission, from materials provided by the Louisiana Office of Public Health STD/HIV/Hepatitis Program (SHHP) and the Texas Department of State Health Services (DSHS).

## Appendix A: HIV Cluster Response Staffing and Tasks

SURVEILLANCE		
RESPONSIBLE PERSON	TASK	OUTCOME
HIV SURVEILLANCE COORDINATOR	Monitor for new diagnoses of HIV	Increased detection of newly diagnosed cases
	Systematic summary of case surveillance data (line-list)	Quantitative summary of cluster will be maintained weekly and submitted to outbreak team
	Obtain molecular testing on all newly diagnosed HIV infections	Cases will be genetically linked in at least 80% of newly diagnosed cases
HIV eHARS EPIDEMIOLOGIST	Update data collection fields in surveillance system to reflect enhanced surveillance case report form	HIV surveillance systems will capture 100% of data elements from the enhanced investigation form
HIV SURVEILLANCE DIRECTOR	Monthly cluster surveillance summary	A monthly summary of cluster variables will be shared with incident management team
	Systemic summary of molecular surveillance data (Obtained through Secure HIV TRACE)	Quantitative summary of genotyping will be maintained weekly and submitted to outbreak team
	Maintain and review (annually) HIV cluster investigation protocol	HIV cluster investigation protocol is kept up to date
HIV SURVEILLANCE DIRECTOR	Develop and revise, as needed, the cluster case definitions for HIV	Standardized case definition for case classification will be applied on 100% of newly diagnosed cases
REGIONAL DIS	Complete enhanced case investigation form for all new diagnoses of HIV	Enhanced case investigation forms will be completed for at least 75% of newly diagnosed cases of HIV
	Establish a referral to HIV care for all persons newly diagnosed with HIV	100% of all newly diagnosed cases interviewed will be referred to HIV care where care

		has previously not been established
	Educate all persons newly diagnosed with HIV who have a history of injection drug use on safe injection practices and refer to harm reduction program if available	100% of newly diagnosed HIV cases interviewed with a history of injection drug use will be educated on safe injection practices and will be referred to the harm reduction program, if available
DIS SUPERVISOR AND/OR FIELD OPERATIONS MANAGER  HIV SURVEILLANCE COORDINATOR	Revise enhanced case investigation form as needed	Enhanced case investigation form will be kept up to date

<b>CONTACT TRACING AND PARTNER SERVICES</b>		
<b>RESPONSIBLE PERSON</b>	<b>TASK</b>	<b>OUTCOME</b>
DIS SUPERVISOR AND/OR FIELD OPERATIONS MANAGER	Ensure sufficient DIS resources to complete enhanced case investigation form to interview newly diagnosed cases of HIV and contact tracing for new cases	Enhanced case investigation form will be completed on at least 75% of all newly diagnosed cases of HIV and contacts will be elicited from at least 75% of cases interviewed
	Establish a referral of all contacts of newly diagnosed HIV cases for testing/PrEP education	100% of newly diagnosed HIV case's contacts that are located by DIS will be educated about PrEP and HIV rapid tested by DIS or referred for testing at a medical provider.
REGIONAL DIS	Contact tracing will be attempted for all persons diagnosed with HIV	Contact tracing will be completed on at least 75% of cases interviewed

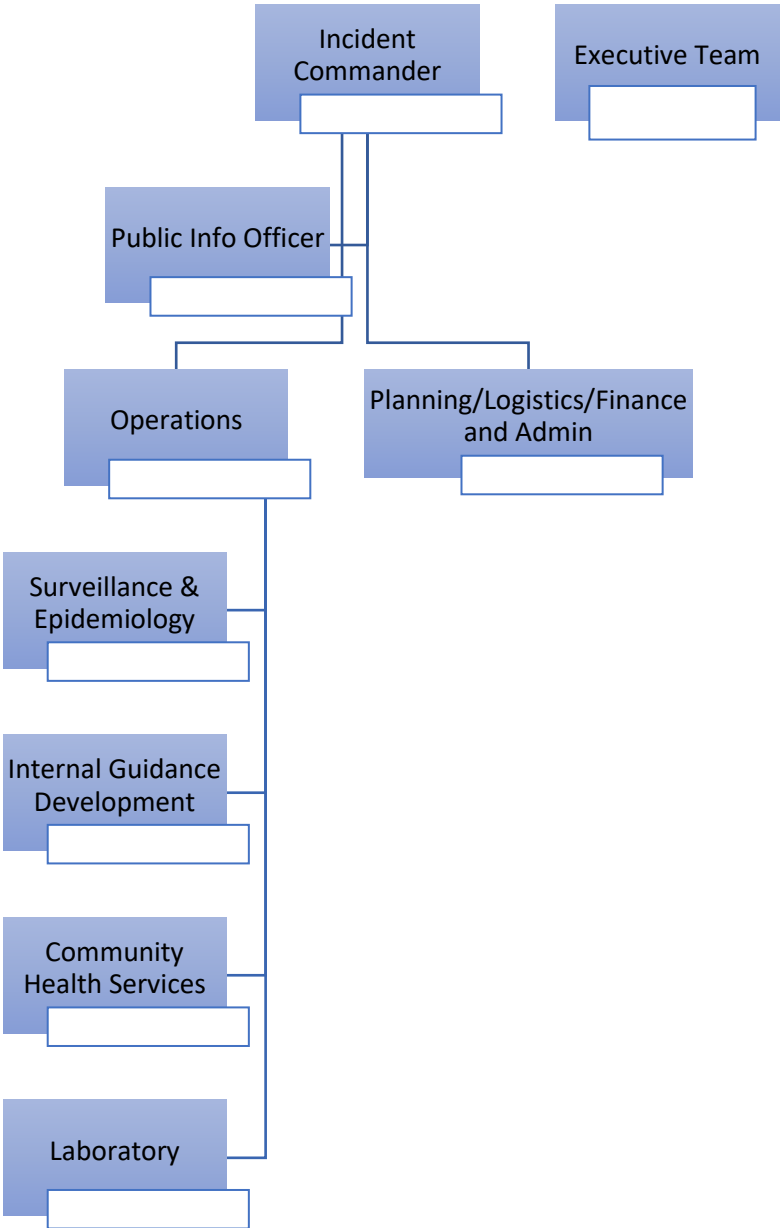
<b>INCREASED TESTING OPPORTUNITIES</b>		
<b>RESPONSIBLE PERSON</b>	<b>TASK</b>	<b>OUTCOME</b>
HIV PREVENTION STAFF	Increase HIV testing opportunities within impacted jurisdiction(s) at locations where free meals are served or there is food pantry access	Increased HIV testing of those at highest risk for infection
	Incorporate HIV testing into standard operating procedures for behavioral health providers in the affected area	Letters of support will be mailed to all behavioral health providers in the affected area

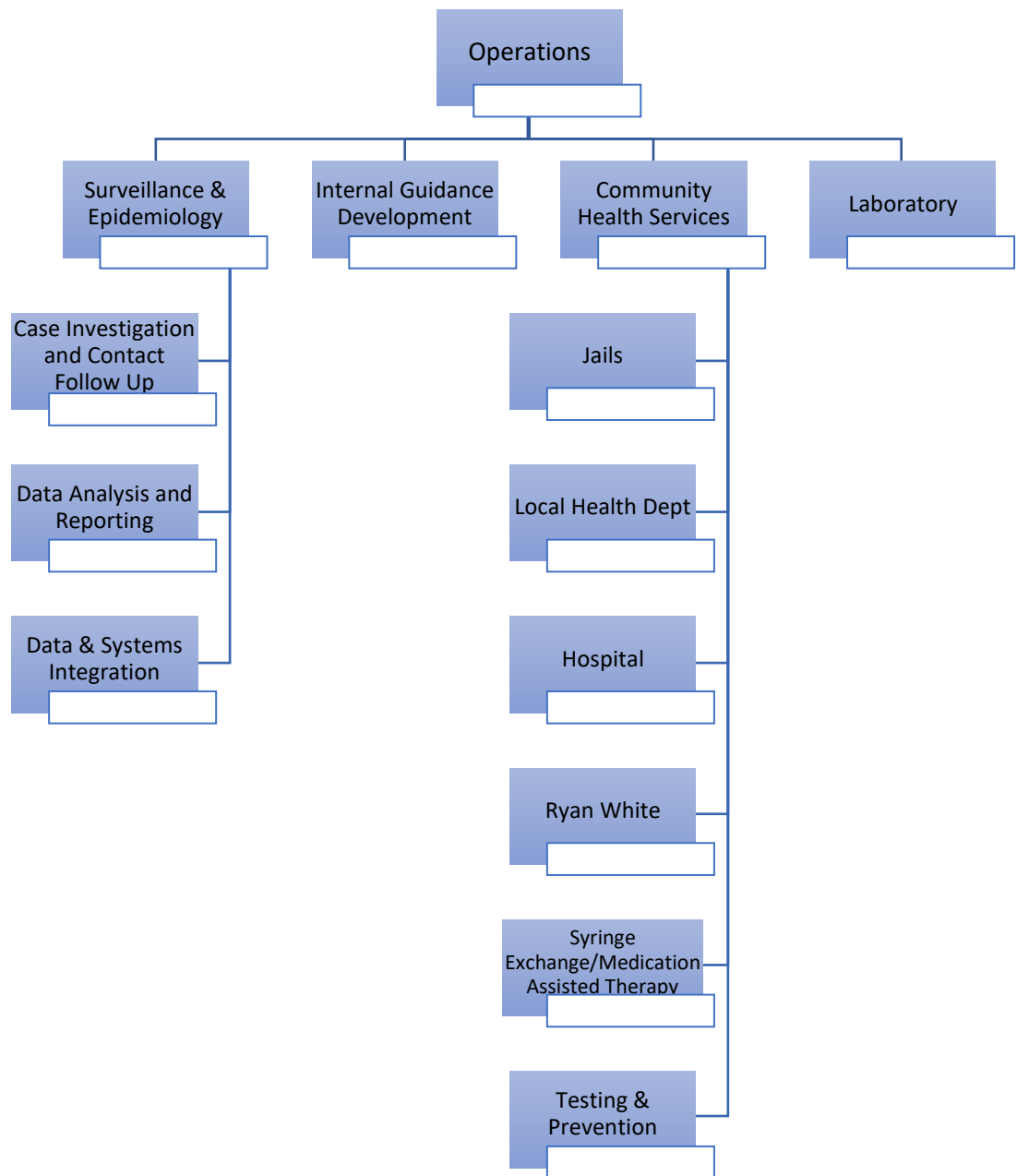
	Conducted HIV testing event at local harm reduction program	Testing events will be conducted at the local treatment facility and at least three CBOs
	Conduct a HIV testing event at treatment centers and CBOs	Increased HIV testing of population at-risk for HIV
LOCAL HEALTH DEPARTMENT	Offer rapid HIV testing through the local health department to the population at-risk for HIV	Increases rapid HIV testing in the jurisdiction among the population at-risk for HIV
HIV PREVENTION DIRECTOR	Offer HIV testing and counseling event(s) in the community in areas where the target population frequent	Increased HIV testing of injection drug users

TRAINING		
RESPONSIBLE PERSON	TASK	OUTCOME
HIV SURVEILLANCE DIRECTOR	Review and revise, as needed, data and confidentiality training	Data and confidentiality training will be kept up to date
STD PROGRAM DIRECTOR	Cross train local health department staff on syphilis case investigations	Decrease burden on DIS and increased attention on HIV cluster

# Appendix B: Incident Command System (ICS) structure Template

## Branch Overview and High-Level Unit Responsibilities





## **Surveillance & Epidemiology (Leads: TBD)**

Branch will carry out routine surveillance activities and ensure OB data are entered into surveillance systems efficiently and accurately. Evaluate data from initial index patients and partner services for trends to guide further case finding, monitor the epidemic curve and identify shifts in the outbreak

## **Case Investigation/Contact Finding Follow Up (Leads: TBD)**

Objectives:

- Coordinating case and partner interviews
- Prepare summary of DIS activities
  - # of active cases currently assigned
  - # of cases/contacts interviewed within 45 days
  - Contact Index Ratio – average # of contacts elicited
  - # of partners tested
- Provide recommendations and coordination of DIS coverage and arrange
- Development of field operations standards and guidelines

## **Data Analysis (Leads: TBD)**

Objectives:

- Prepare Epi Outbreak Summary
- Perform monthly molecular analysis
- Perform time-space analysis monthly
- Evaluate available reports in WVEDSS and make recommendations for use

## **Data Systems and Integration (Leads: TBD)**

Objectives:

- Implement transfer of electronic lab reporting directly from WVEDSS into eHARS
- Lead process to transfer partner services Access database into WVEDSS

## **Internal Guidance Development (Leads: TBD)**

Branch will assist other branches/units with development of documentation for processes or implementation plans with partners.

Objectives:

- Asses need of each branch/unit for needs related to documentation (e.g., protocols, field services manual)

## **Community Health Services (Leads: TBD)**

Branch is responsible for planning and implementation of interventions to prevent disease transmission. Social interventions can be divided into four categories: individual level, group level, community level, and structural level. Each level of intervention has its own advantages and challenges. Some intervention activities may already be occurring in the outbreak area or for the affected population; the outbreak team should keep local intervention facilitators informed of the outbreak.

## **Jails (Leads: TBD)**

### Objectives:

- Review and respond to questions in draft plan
- Present plan to BPH leadership and DOC
- Coordinate implementation of finalized and agreed upon strategic plan

## **Local Health Dept (Leads: TBD)**

### Objectives:

- Listing of local health care provider resources
- Scheduling of mobile testing events using bus

## **Hospital (Leads: TBD)**

### Objectives:

- Provide models of testing implementation from other areas
- Coordinate meetings with CAMC leadership

## **Ryan White (Leads: TBD)**

### Objectives:

- Establish protocol HIV treatment as a medical intervention
- Establish referral and treatment protocol for utilizing SUD treatment and mental health services as a medical intervention

## **Harm Reduction/Medication for Opioid Use Disorder (Leads: TBD)**

### Objectives:

- Develop resources materials to assist community partners with formation of programs
- Support MAT providers in HIV prevention services implementation (i.e., referral, testing, etc.) in
- Report metrics on harm reduction programs

## **Testing/Prevention (Leads: TBD)**

### Objectives:

- Scheduling and Logistics of testing campaign
- Development of PrEP education plan for community providers

## **Laboratory (Leads: TBD)**

Branch provides support and guidance regarding HIV testing and CLIA certification for HIV rapid testing.

### Objectives:

- Ensure 4th generation HIV testing remains available to support the outbreak response
- Provide technical assistance to community partners on CLIA certification for development of HIV rapid testing.



## **Public Information Officer (Leads: TBD)**

Branch is responsible for all public communications activities surrounding the outbreak. Outbreak communications must be timely, informative, and accurate. It also must reach those that are the most affected and be responsive to changing situations. Communications should be tailored for the audience and describe their role in outbreak management (medical, advocacy, screening, etc.).

### Objectives:

- Maintain outbreak specific webpage
- Coordinate media briefings
- Develop media campaign