HIV Cluster and Outbreak Detection and Response Plan

MINNESOTA DEPARTMENT OF HEALTH

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Version History

Version #	Revision Date	CDC Submission Date	Responsible Party	Comments
Version 1	No revision date	09/30/2020	Christine Jones	First draft for CDC review and feedback
Version 2	06/25/2021	07/15/2021	Christine Jones	Revised to address CDC feedback and partner input
Version 3	04/07/2023	04/07/2023	Christine Jones	Revised to address CDC feedback and programmatic updates

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Introduction and purpose

I. About this document

This plan was developed in accordance with the Centers for Disease Control and Prevention (CDC) template, which was provided to jurisdictions funded via PS18-1802, for use in developing an HIV Cluster and Outbreak Detection and Response (CODR) Plan. Each jurisdiction is required to develop and maintain a comprehensive and tailored plan that is useful and feasible to implement.

Throughout this document, the title of the responsible party for each activity is bolded.

II. About this plan

The key contributors to MDH's HIV CODR – Version 3 are listed in Table 1.

Table 1: Key Contributors to MDH's HIV CODR – Version 3

Title/Program	Name
Section Manager, STD/HIV/TB Section	Christine Jones
Assistant Section Manager, STD/HIV/TB Section	Julie Hanson Pérez
Epidemiology (Epi) and Surveillance Manager, Epi and Surveillance Unit	Allison La Pointe
Partner and Care Link Services (PCLS) Manager, PCLS Unit	Marcie Babcock
Prevention Unit Manager, Prevention Unit	Peggy Darrett-Brewer
HIV Testing Program Supervisor, Prevention Unit	Jose Ramirez
Planning, Evaluation, and QI Coordinator, Planning, and Improvement Unit	Beth Kingdon
Communications Specialists, Communications Unit	Debbie Leider, Harry Steffenhagen
Specialty Epidemiologist, Epi and Surveillance Unit	Cheryl Barber
HIV Surveillance Coordinator, Epi and Surveillance Unit	Vacant
HIV Surveillance Operations Epidemiologist, Epi and Surveillance Unit	Nathan Blumenfeld

The HIV Cluster and Outbreak Detection and Response (CODR) Plan was developed by the Minnesota Department of Health (MDH) STD/HIV/TB Section (referred to as the Section throughout this document) managers and staff.

For Version 3, staff assignments were made based on roles and responsibilities. Meetings, both formal and informal, were used to consult and discuss questions and decisions related to the CODR. Shared documents were used to compile and revise content. The **Planning, Evaluation and QI Coordinator** compiled information from Section staff for **Management Team** review, feedback, and approval.

For Version 2, partner input for the HIV CODR was received between January and April 2021 through interactive presentations, key informant interviews (KIIs), and surveys. The following entities (listed alphabetically) participated:

- Interactive presentations and follow-up surveys:
  - END HIV MN Advisory Board: service providers and people living with HIV (PWH)
  - HIV Collaborative Group: local public health (LPH) agencies and community partners
  - Minnesota Council for HIV/AIDS Care and Prevention (MCHACP or the Council): service providers and PWH
  - Monthly MDH grantee call: MDH prevention and syringe services provider grantees
  - Provider Professional Development Day: MDH, the Minnesota Department of Human Services (DHS), and Hennepin County grantees
- KIIs and follow-up surveys:
  - Healthcare for the Homeless
  - Hennepin County Public Health (HCPH): Ryan White Part A recipient
  - Midwest AIDS Training & Education Center (MATEC)
  - Minnesota Department of Human Services (DHS)
  - Native American Community Clinic (NACC)
  - Ramsey County Clinic 555
  - Southside Harm Reduction Services

The Section intended to engage tribal nations, considering their input a priority. Initial plans with the Infectious Disease American Indian Liaison included holding KIIs with 11 Minnesota tribes in the spring of 2021, with an option to provide feedback through a survey. However, tribes had limited capacity to provide feedback while focusing on the COVID-19 response and vaccination efforts, so the KIIs were not held as planned and the response to the survey was low. Plans for future engagement are expected, when tribes have more capacity, and collected information will be used to update future iterations of the CODR.

Partner input is being incorporated into Section activities in real time and through intentional planning. Some feedback has already been incorporated, such as developing an internal procedure for responding to HIV concerns reported by community partners (as described in

Section 3), creating an HIV outbreak response and case counts webpage[1], presenting recurring HIV outbreak updates at partner meetings, and collaborating with providers through the HIV Outbreak Partner Engagement (HOPE) group. In addition, Section staff formed a small group to look more closely at the wealth of partner input received and identify how to prioritize, implement, and address all the input received during this process.

Section 1: Internal collaboration to support cluster and outbreak detection and response

I. Oversight and management

The STD/HIV/TB Section (Section) management and staff work collaboratively to provide management and oversight of the cluster[2] and outbreak[3] detection and response plan. Surveillance staff routinely run time/space and molecular analyses to conduct real-time analysis on HIV data and identify potential clusters and/or outbreaks. This data is shared monthly with the **Section Manager, Assistant Section Manager, Epi, and Surveillance Manager, Prevention Unit Manager, HIV Testing Program Supervisor, PCLS Unit Manager, Partner Services (PS) Supervisor, and Care Link Services (CLS) Supervisor** on a regular basis, and outreach and engagement are initiated to the field services epidemiologist and associated counties as needed (as reporting and overall data monitoring is conducted at the state level in Minnesota). Additionally, PCLS and Epi and Surveillance Unit staff, in coordination with subcontracted DIS in local and tribal health agencies, discuss cases over secure email as needed between scheduled meetings. If a potential cluster and/or outbreak response is needed, the **Section Manager** activates an elevated response.

Once an elevated response is activated, the **Infectious Disease, Epidemiology, Prevention, and Control (IDEPC) Medical Director**, **IDEPC Communications Supervisor, and Infectious Disease American Indian Liaison,** along with lead prevention, surveillance, planning and communications staff, begin working with local partners to identify, implement, and evaluate an appropriate response. These individuals meet at least monthly to provide updates on interventions and activities, evaluate response activities and make necessary adjustments, and ensure needed resources are available for the response. If more frequent or ad hoc meetings are needed with specific partners, these will be scheduled as appropriate. The **Section Manager** works closely with internal and external staff to determine when the elevated response can be deactivated and ensures activities that need to be maintained are adequately in place.

The individuals and groups providing management and oversight of the HIV cluster and outbreak detection and response are:

- IDEPC Division Director.
  - Oversees Division activities, including those of the Section.
- STD/HIV/TB Section Manager.

[1] HIV Outbreak Response and Case Count (https://www.health.state.mn.us/diseases/hiv/stats/hiv.html).
[2] A cluster is defined as a group of PWH who are connected by transmission.
[3] An outbreak is an increase, often sudden, above what is normally expected in a population or area, and an urgent or emergency-level public health response is needed.

    - Informs and updates IDEPC Division Director.
    - Leads Section Management Team.
    - Oversees Section activities.
    - Leads the Incident Command System (ICS) as the Incident Manager (when ICS is activated).
- STD/HIV/TB Management Team: Section Manager, Assistant Section Manager, Epi and Surveillance Manager, Prevention Unit Manager, HIV Testing Program Supervisor, PCLS Unit Manager, PS Supervisor, CLS Supervisor, and TB Prevention and Control Unit Manager.
    - Oversees respective unit activities.
    - Reviews Section data.
    - Participates on ICS team, as needed.
    - Follows up on the progress of cluster and outbreak response activities.
- IDEPC Medical Director.
    - Assists with drafting and approving clinical guidance, and Health Alert Network (HAN) messages.
    - Provides clinical direction to IDEPC and Section staff.
    - Liaises with clinically focused associations and organizations.
- IDEPC Communications Supervisor.
    - Oversees communications activities.
    - Assigns communications staff.
- American Indian Health Director and Infectious Disease American Indian Liaison.
    - Communicate with tribes regarding outbreaks.
    - Coordinate with the Section.
    - Participate on ICS teams, as needed.
    - Communicate with Metropolitan Urban Indian Directors (MUID), as needed.

Additional MDH staff with other subject matter expertise, staff from DHS, and local public health representatives are involved based on the characteristics of specific clusters or outbreak, and the population most impacted.

See Appendix 1 for the IDEPC org chart and Appendix 2 for the STD/HIV/TB Section org chart.

II. Staff capacity and training

Staff training: Section staff with roles and responsibilities related to HIV cluster and outbreak detection and response come from the following units: Epi and Surveillance, Prevention, Partner and Care Link Services, and Planning and Improvement.

All MDH staff are required to complete the following trainings:

- Advancing Racial Equity.

- Code of Ethics and Conduct.
- Data Practices Act.
- Health and Racial Equity 101.
- Local Public Health 101.
- Preventing Sexual Harassment.
- Prohibition of Harassment and Discrimination Policy Review.
- Readiness.
  - Introduction to the Incident Command System.
  - Introduction to Continuity of Operations.
- Records and Information Management Overview.
- Respectful Workplace.
- Security Awareness.

In addition to required MDH trainings, HIV/STD/TB Section staff hired after 2019 also complete the following trainings:

- Minnesota Molecular HIV Data Presentation.
- National HIV Curriculum.
- National STD Curriculum.
- Quality Improvement 101.
- TB 101 for Health Care Workers.

Specific trainings are also required for staff roles in the following units:

Epi and surveillance: Epi and Surveillance Unit staff can attend and benefit from national webinars, meetings, and technical assistance provided by CDC and/or the Council of State and Territorial Epidemiologists (CSTE) concerning outbreak detection and response, when offered, and epidemiologists have access to subject matter experts for questions concerning MicrobeTrace and Secure HIV-TRACE, as well as access to demo sites. Training and orientation will be self-taught for these software and online systems.

Partner and care link services: All new PCLS Disease Intervention Specialists (DIS') are required to participate in Passport to Partner Services and complete other trainings outlined in the National Coalition of STD Directors (NCSD) DIS Training Plan (www.ncsddc.org/wp-content/uploads/2021/09/DIS-Training-Plan-1.pdf). They also receive instruction from PCLS management and are assigned to shadow senior DIS who demonstrate how to conduct job duties such as field investigations and case interviews. All DIS are encouraged to participate throughout the year in webinars and training opportunities available to improve their knowledge and skills.

Prevention: Prevention Unit staff complete the HIV testing training.

See Appendix 3 for a table that outlines staff roles, responsibilities, and training information.

Partner training: The same training and ongoing development opportunities that are available to the MDH PCLS DIS are also made available to the DIS that are funded by MDH at several external grantee organizations.

The following trainings are provided to MDH grantees and partners:

- HIV Testing (required for funded agencies).
  - Rapid HIV Testing.
  - Fundamentals of HIV Prevention Counseling.
  - HIV Test Results.
  - HIV Testing Data and Bloodborne Pathogens.
- Minnesota Molecular HIV Data Recorded Webinar.
- HIV Clinical Trainings (CDC HIV Screening and Testing Guidelines Trainings).

Content of the HIV Testing trainings also includes educational information on Undetectable = Untransmittable (U=U), pre-exposure prophylaxis (PrEP), harm reduction and syringe services programs, syphilis, partner services, and the CDC national HIV testing database EvaluationWeb.

Additional professional development offerings are provided during the annual Provider Professional Development Day hosted by DHS, Hennepin County Public Health (HCPH), and MDH.

III. Funding for cluster response activities

Much of the funding for routine cluster response activities comes from the HIV surveillance and prevention cooperative agreement with CDC, although PCLS DIS positions are funded through a combination of HIV prevention, STD Prevention and Control for Health Departments (PCHD), and DIS Workforce Supplemental dollars. Ryan White funding is used for HIV care and support services for eligible clients. State general funds are used to support staff at many of Minnesota's HIV testing and syringe services programs (SSPs). State funds are also used to purchase syringes and other related harm reduction supplies that cannot be purchased with federal funds. If additional funds were needed for a response, Minnesota would look at the availability of state general funds, foundation funding opportunities, and reach out to the Ryan White Part A and B recipients for assistance as appropriate.

IV. Data sharing

Relevant data are shared between Section units for business purposes only. Access to electronic files on MDH drives is restricted and role-based (staff are only able to access information needed to perform their job duties). Data for public consumption will follow the Data Re-Release Suppression Rules for HIV Surveillance Analysis at Geographic Areas (*see Appendix 4*). Private health data can be shared with local public health in the geographic areas of concern for clusters or outbreaks when granted through a Commissioner's Order, which may specify sharing among multiple counties as needed.

The Section may share data with other IDEPC sections to perform data matches when an integrated response to an HIV outbreak and other co-occurring diseases, such as hepatitis A or C, or syphilis, is needed. This is assessed on a case-by-case basis.

MDH and the MDH-funded DIS at several grantee organizations have a contractual agreement to share data as grantee DIS are an extension of MDH PCLS.

In Minnesota, the Ryan White HIV/AIDS Part B Program is located at DHS. A data sharing agreement is currently in place between MDH, DHS, and HCPH[4] that governs which HIV surveillance data are shared with Parts A and B via CAREWare and how these data can be used. As of December 2022, the three government agencies completed another data sharing agreement that governs which Ryan White client-level data in CAREWare can be shared between the three agencies and for what purposes.

The following identifiable individual-level data variables are currently imported into CAREWare by MDH staff monthly for CAREWare clients who are also in eHARS:

- Date of HIV diagnosis.
- Date of AIDS diagnosis.
- Current HIV status.
- Date(s) and result(s) of CD4 tests.
- Date(s) and result(s) of viral load tests.
- Vital status.
- Date of death.

The data cannot be further released except in aggregate form. DHS, HCPH, and their funded subrecipients can only use the HIV surveillance data in CAREWare for clients who receive services through their respective programs for the following purposes:

- Locate a patient (case) who has fallen out of care to link the person back into care.
- Provide lab data to ensure the patient is in care and has reached viral suppression.
- Have more complete diagnosis status for Ryan White clients.
- Understand if a patient is not locatable due to vital status.
- Coordinate and facilitate comprehensive HIV care for Ryan White Program clients.
- Conduct program planning, program evaluation, and develop policy.
- Provide summary data to the public.

V. Data protection

All HIV data requests are submitted through an online request portal on the MDH website (STD/HIV/TB Data and Presentation Request Form (www.survey.vovici.com/se/56206EE3662437AB)) and processed by both HIV prevention and HIV surveillance staff as appropriate and needed. All data requests follow Minnesota's re-release guidelines for HIV surveillance data, which mirror CDC guidelines for the same

[4] MDH receives CDC funding for surveillance and prevention services. HCPH receives the federal Ryan White Part A grant for care services in the 13-county metro area. DHS receives the Ryan White Part B grant for care services, ADAP, and a supplemental grant. DHS transfers funding to MDH for early interventions services (EIS) through an interagency agreement.

datasets. For any public health partners who receive de-identified datasets instead of completed analyses, all requests are approved in consultation with the General Counsel's Office at MDH and submitted to the requestor with Minnesota's re-release guidelines attached. All datasets containing personally identifiable information (PII) are shared with requestors in a secure fashion, typically password-protected files for which a follow-up communication provides the password, and, if emailed, then the email is encrypted. MDH also uses secure cloud data uploads to restricted requestors.

Because MDH imports CD4 and viral load results for people living with HIV (PWH) currently enrolled in Ryan White services from eHARS to CAREWare on a monthly basis, there is an additional policy for the use of eHARS data from CAREWare.

See Appendix 4 for Data re-release suppression rules and Appendix 5 for Use of eHARS data.

Data protection policies and practices: Current Minnesota statutes classify health data, including HIV data, as private data and not public.

- Minnesota Statutes, section 13.3805: Classifies identifiable health data as private data.
- Minnesota Statutes, section 144.658: Health surveillance data are not accessible to law enforcement or other entities in a legal action.

The Section follows all MDH data practices and data security statutes, rules, and policies for data requests from internal and external requestors. This includes requests from law enforcement. When a request is received from law enforcement, MDH responds that state statutes prohibit the sharing of surveillance data, which includes case investigation and interview data.

When a data request is received from an academic institution, surveillance staff consult with division and/or department legal subject matter experts as to whether a data sharing agreement or other contract would be required and supply the academic institution with our Data Re-Release Suppression Rule *(Appendix 4)*.

To help protect data, all MDH employees receive information security awareness and data practices trainings. New employees are required to complete these combined 90-minute trainings within the first month of employment. All MDH employees are required to complete a "refresher" training annually. Additionally, all staff are made aware of the location of secure shredding bins for on-site cross-cut shredding, are provided with a copy of the NCHHSTP Guidelines for sharing and use of surveillance data, and a copy of the Section Security and Confidentiality Policy, and are asked to not only report potential data breaches to the State of Minnesota IT help desk, but also to the **Assistant Section Manager** for reporting to CDC within one hour.

Section 2: External partnerships to support cluster and outbreak detection and response

The Section has partnerships with other state agencies, tribal nations, local jurisdictions, and community-based organizations. Developing relationships with new partners, strengthening current partnerships, and building community engagement practices is ongoing.

I. Community engagement

The Section's community engagement activities include routine engagement activities and response-specific engagement activities.

Engagement activities with relevant communities

Routine engagement activities are conducted annually with the purpose of proactively sharing information and building relationships related to potential HIV cluster or outbreak response activities. These activities are summarized in Table 2.

Table 2: Routine Engagement Activities

Activity	Description	Population
Annual HIV data release	Community data release providing updated statewide data	PWH, grantees, tribal nations, LPH, providers of medical care, supportive services, mental health and substance use services, community coalitions, planning groups, general public, et al.
Community presentations	Share information related to HIV clusters and outbreaks, including surveillance tools and data privacy practices	Grantees, tribal nations, LPH, providers of medical care, supportive services, mental health and substance use services, community coalitions, and planning groups
END HIV MN Advisory Board	Share information, request input, and relationship building	PWH, providers of medical care, supportive services, mental health and substance use services, representatives from tribes, and other state agencies
Minnesota Council for HIV/AIDS Care and Prevention aka The Council	Share information, request input, and relationship building	PWH, AIDS service organizations (ASOs), providers of medical care, supportive services, and mental health and substance use services

Venue: Some meetings are in person, and some are virtual.

Response-specific informing activities are conducted when an HIV outbreak is declared to communicate, share information, and engage partners and community for input. These activities are tailored for the population impacted by the outbreak and are summarized in Table 3.

Table 3: Response-Specific Engagement Activities

Activity	Description	Population	Frequency	Mode
Health Action Network alerts	Alert with time-sensitive information	Health officials, clinicians, and providers	As needed	Electronic correspondence
Notification to MDH grantees	Key time-sensitive information	Organizations receiving MDH funding	As needed	Email correspondence
HIV outbreak case count updates	Accessible data and case definitions descriptions	General public	Weekly, or as needed	MDH website
Email updates	Key updates regarding outbreak case counts, response efforts, and public engagement	Subscribers (which include the public, grantees, providers, et al.)	Monthly, or as needed	Email correspondence via GovDelivery
MDH grantee calls	HIV updates and information	MDH grantees providing HIV prevention, testing, and SSP services	Monthly	Conference call
HIV Outbreak Public Engagement group meetings	Engaging community in real-time, information sharing, and incorporating input into response activities	Service providers and organizations working directly with impacted communities	Regularly, as determined	In person or virtually
Minnesota Council for HIV/AIDS Care and Prevention aka The Council	Share information related to HIV cluster and outbreak activities and plans, request input, and relationship building	PWH, ASOs, providers of medical care, supportive services, mental health and substance use services	Monthly to quarterly, as needed	In person or virtually
End HIV MN Advisory Board	Share information related to HIV cluster and outbreak activities and plans, request input, and build relationships	PWH, impacted populations, and ASOs	Quarterly	In person or virtually
Provider Learning Series on the HIV Outbreaks in Minnesota (formerly referred to as Town Hall events)	Provide education and training on topics related to HIV clusters and outbreaks for service providers statewide	Grantees, tribal nations, LPH, providers of medical care, supportive services, mental health and substance use services, community coalitions, planning groups, and PWH	As determined	Virtually
Community presentations	Information and updates regarding the outbreak with the option for collecting input	Varies; may include grantees, providers, coalitions, networks, and PWH	As determined or requested	In person or virtually

Engagement descriptions and processes

HIV Outbreak Public Engagement (HOPE): When an HIV outbreak is declared, a HOPE group is formed. The purpose of HOPE is to include the expertise of local partners into the ICS response to better understand what is happening and what is needed in the outbreak region. The group makeup includes Section staff such as the **Harm Reduction Coordinator, HIV Testing Coordinator, HIV Nurse Specialist, and a Communications Specialist**, and external providers who are actively involved in working with the impacted communities. External providers are identified by their involvement or association with impacted populations, and may include PWH, HIV service providers, MDH grantees, and other MDH or state agency representatives, and others. In a spirit of collaboration and shared leadership, the group will develop goals, establish meeting frequency, share information, and plan for meaningful engagement using best practices. Each group may function differently, depending on the providers involved. Meeting notes are documented for each meeting. MDH staff participating in the HOPE group provide regular updates to Section management and Section staff working on response activities during meetings, conversations, and in email, as needed.

Additional community engagement activities: Engagement activities may vary depending on the unique outbreak population and circumstances. Engagement activities are identified and implemented as needed and may include focus groups, key informant interviews, surveys, brainstorming sessions, informational gathering through social media, interactive presentations (virtually or in person), workgroups, and other activities. The HOPE group may provide consultation and input in planning these activities.

Process for incorporating community and partner input: Input received through engagement activities is documented, assessed, shared, and implemented, as able. The **Planning and Evaluation Specialist** supports engagement activities in collaboration with other Section staff.

- Documentation: Input is documented and saved. Documentation varies depending on how the input was received (e.g., input during a collaborative meeting is included in meeting notes, input from a survey is documented in the survey results).
- Assessment: Input is reviewed and analyzed. Staff involved in collecting the data reviews the input to summarize findings, key highlights, and recommendations. This may include putting it in a format that is easy to share, such as pulling out key themes from focus groups or key informant interviews, and identifying recommendations and feedback for consideration.
- Sharing: Once input is received and assessed, it is shared with the Management Team and other relevant staff. Input is shared electronically and presented during meetings.
- Implementing: After input is shared, management and staff determine if and how input can be incorporated into outbreak and cluster response activities. Action steps, assignments, and timelines are developed, as needed. Section staff report back to the community to share how input was used and/or to explain why input may not have been used.

II. Collaboration with external partners

Community partners

The Section collaborates with multiple external partners, including MDH grantees, the END HIV MN Advisory Board, the Council, and nongrantees. The Section also continues to explore and evaluate how to strengthen existing and new collaborative efforts.

MDH grantees: Partnerships with MDH grantees begin with identifying organizations best equipped to work for and with a targeted demographic. Once MDH grantees are identified through a Request for Proposals (RFP) process, roles and expectations are established, such as testing goals, outreach events to conduct, PrEP referrals, and others. Prevention Unit staff will provide MDH grantees and nongrantees with the tools and resources needed to create and maintain an HIV testing program. In the case of a cluster or outbreak, designated MDH grantees will be asked to assist in the outbreak response. This can include increased HIV testing, expanding services, and collecting community concerns about gaps in outreach and engagement.

END HIV MN Advisory Board: The **Planning and Evaluation Specialist, Section Manager, and Prevention Manager** collaborate with DHS staff to support and implement the END HIV MN statewide plan, Minnesota's plan to end the HIV epidemic. Information related to HIV clusters and outbreaks are shared with END HIV MN Advisory Board members during quarterly meetings and through emails as needed. END HIV MN Advisory Board members may provide consultation and input, help with outreach, and disseminate information to their networks and communities.

The Council: The **HIV and STD Prevention Planning Coordinator, HIV Care and Prevention Epidemiologist, Section Manager, and Prevention Manager** work with Hennepin County staff to support the Council. Section staff attend monthly meetings and provide surveillance and HIV outbreak updates on a quarterly basis. Council members may provide consultation and input, help with outreach, and assist with disseminating information with their networks and communities.

Nonfunded partners: Section staff work with the MDH-funded partners (see above) and nonfunded partners. Nonfunded partners include providers of medical services, social services, housing, mental health and well-being, substance use disorders, and other applicable services. A list of the funded and unfunded partners is included in *Appendix 6*.

Collaboration with nonfunded partners is an ongoing process. New partners or areas of collaboration are identified through discussions with current partners, current activities, attending community events, and following up on recommendations from other partners. During an outbreak response, Section staff follow up on recommendations from HOPE group members about other partners and trusted leaders or "gate keepers" in the impacted community. Section staff also partner with other IDEPC sections, state agencies, LPH, or county agencies.

Framework and process

The Section uses the Public Engagement Spectrum as a framework for engaging community partners (*see Appendix 7: Public engagement spectrum*). This framework is also used by

Minnesota's Governor's Office. The spectrum includes a range of engagement activities; on one end of the spectrum is informing the community partners of information and on the other end of the spectrum is fully empowering the public and community partners in making decisions. Section public engagement activities currently fall under Inform, Consult, Involve, and Collaborate levels of the spectrum. Examples of these activities include:

- Inform.
  - HAN notices.
  - Presentations at community group meetings and Provider Learning Series webinars.
- Consult.
  - Partner surveys.
  - Partner interviews.
- Involve.
  - Interactive presentations.
- Collaborate.
  - HOPE group.
  - END HIV MN Advisory Board.
  - Provider Learning Series Planning Group.

Identifying and addressing gaps

Community input and feedback are key in identifying gaps in available services. Gaps are identified informally and formally. Informally, gaps may be identified during conversations or meetings with partners. Section staff share gaps that are identified with managers and other Section staff. Formally, the **Planning and Improvement Unit** will work with Section staff to collect, document, and incorporate input from partners and stakeholders. Input may be collected during facilitated meeting discussions, through key informant interviews, interactive community presentations, and survey tools to identify gaps and potential solutions, as needed. Gaps that are identified are documented, assessed, shared, and implemented as described in Section 2.I.

During an outbreak, the Section will also assess gaps in outbreak response activities during recurring meetings and during midpoint evaluations (as described in Section 7.II.).

III. Data sharing

Data sharing agreements (DSAs)

MDH has established a Commissioner's Order that allows the Section to share private health data with and between Hennepin and Ramsey counties where outbreaks are currently occurring. A Commissioner's Order is required for any specific situation in which data with PII are to be shared between jurisdictions within Minnesota. The order will describe the data elements that may be shared and identify the jurisdictions that may share the data. Local public health is able to request and receive their own data from MDH without a Commissioner's Order

but can only receive data that don't include PII and follows re-release guidance for another local public health jurisdiction.

Existing DSAs

The Commissioner's Order for the Hennepin and Ramsey counties declared outbreak allows MDH to share the following data elements with the public health departments in Hennepin and Ramsey counties on cases involved in the current outbreak:

- First and middle name.
- Last name.
- Date of birth.
- Last address.
- Date of HIV diagnosis.
- Residence at diagnosis.
- Current residence.
- City at diagnosis.
- History of homelessness (yes/no).
- Other locating information (e.g., intersection, encampment).
- Known history of incarceration (yes/no).
- Known history of sex work (yes/no).
- Known drugs used.
- History of syphilis.
- Date address of current residence.
- Transmission category.
- Sex.
- Age.
- Race/ethnicity.
- Stage zero at diagnosis.
- AIDS status.
- Risk factors.
- Last HIV viral load.
- Diagnosis facility.
- Last known facility.
- Last negative HIV Test <180 days.
- Use of syringe exchange.

- Hepatitis C status.
- Outcome of disease investigation by partner services.

This information is used by both counties in attempts to locate known or suspected cases of HIV involved in the current outbreak and to provide individuals with testing and/or linkage to HIV and other infectious disease care.

These data are shared with Hennepin County Public Health via a cloud-based secure upload/download folder. They are currently shared with Ramsey County Public Health via encrypted email using a password-protected Excel file, but MDH hopes to set up a cloud-based secure exchange with them, as well.

At Hennepin County, the data are stored in a restricted access space on the Hennepin County Microsoft Office 365 Government Community Cloud. The infrastructure/service is controlled by Hennepin County and audited to meet Federal Risk and Authorization Management Program standards under the Federal Information Security Management Act. At Ramsey County, the file is stored in a secure folder.

Access to the data is limited to individuals whose work assignments reasonably require access in accordance with Minnesota Rules, part 1205.0400. At Hennepin County, groups that have a business reason to access private data include members of Epi, Ryan White, Health Care for the Homeless, and DIS/Red Door Clinic. At Ramsey County, access is limited to epidemiologists, DIS/Ramsey County, and staff on the outreach team.

Summary/aggregate data are classified as public. Hennepin County has a Power BI report that displays summary data and is currently only accessible to two epidemiologists. Going forward, the report is intended to be shared with the Drug-Related Infectious Disease ICS group and internal leadership of Epi, Ryan White, Health Care for the Homeless, and DIS/Red Door Clinic. Ramsey County does not share the data with anyone outside of epi and outreach staff.

Data sharing procedures or agreements with other state health departments

MDH has a Commissioner's Order that allows IDEPC to share private health data with appropriate government public health officials in other states, territories, or on tribal lands. Private health data will only be released to those jurisdictions where a person (case, suspected case, or carrier) has traveled, sought care, or lived, and it is necessary to control and prevent the spread of a communicable disease. The data may only be used to: (1) locate a case or carrier; (2) conduct a disease investigation; and (3) provide appropriate services. In these instances, the method of transfer is determined on a jurisdiction-by-jurisdiction basis, depending on the technology available to them. Epi and Surveillance staff share data over the phone with authorized staff appearing on the Council of State and Territorial Epidemiologists (CSTE) HIV Contact Board. Partner Services data may be shared with contacts on the Interstate Communications Control Records (ICCR) list via phone or fax.

In June 2021, the **Infectious Disease American Indian Liaison** began working on developing signed joint powers agreements (JPAs) with 11 tribes to share infectious disease data, including HIV data. The first JPA was signed and executed in late January 2023 with the Lower Sioux Indian Community. MDH is currently in talks with seven other tribal nations that are interested.

Minnesota worked with CDC to modify the language in the data use agreement (DUA) related to Secure HIV-TRACE. The DUA has been approved and fully signed. Minnesota will be able to compare molecular sequence data with other participating Class II and Class III jurisdictions.

Section 3: Detecting and describing HIV clusters and outbreaks

This section describes plans for detecting HIV clusters and outbreaks.

I. Time-space cluster detection

Epi and Surveillance staff follow the process for time-space cluster analysis as described in the CDC publication *Detecting and Responding to HIV Transmission Clusters: A Guide for Health Departments, June 2018*.

HIV Surveillance staff conducts the statewide time-space cluster analysis once a month and increases analysis to every two weeks during an escalated response to an outbreak. Below is a description of the analysis process and steps for prioritizing and determining a cluster.

The **Specialty Epidemiologist** uses a SAS program provided by CDC to conduct time-space analysis statewide, by region, at the local level and by individual risk category. Risk categories include: IDU, MSM/IDU, and MSM/IDU and IDU combined. Staff can modify the code to add regions relevant to our health districts, as well as combine geographies as they are being monitored or involved in case definitions of declared outbreaks. The program implements the current approach:

- Define the time period of interest for analysis as the most recent 12 months of HIV diagnosis (e.g., January 2018 to December 2018).
- Define the comparison group as the previous 36 months (e.g., January 2015 to December 2017).
- Define the geographic area of interest. Minnesota reviews county and regional areas of the state and other special breakdowns with specific counties that are involved in a current or recent HIV cluster (e.g., Hennepin County and Ramsey counties as a region to review for a current HIV cluster).
    - Calculate the HIV case counts for each county (or other relevant geographic area) for the most recent 12 months (or other time period of interest). The program also calculates the average HIV case counts per year for the same areas for the previous 36 months for comparison to help in determining an alert.

The **Specialty Epidemiologist** conducting the time-space analysis performs the following steps:

- Calculate the standard deviation for the mean number of cases during the 36-month comparison group.
- Construct an interval of +2 standard deviations around the mean.
- Compare the results to the most recent 12 months of data. The CDC-provided SAS code creates an “alert” for case counts that fall more than two standard deviations above the mean.

- Comparisons for geography include Hennepin County, Ramsey County, and MDH public health regions.
- Additional criteria for geographic regions or time intervals may be applied as needed.

The spreadsheets generated and line lists resulting in areas for which there are alerts are saved in a secure drive and can be viewed by partner services, surveillance, and Section management.

After the initial month an alert is identified with time-space analyses, data are monitored for continued concern. If more cases are added in the subsequent month(s), district epidemiologists (representing the geographic area of interest) are notified. Investigation with MDH grantees or other local providers may also be initiated.

During an escalated response, the time-space analyses are run at least biweekly in advance of biweekly meetings held between Partner Services and surveillance staff. These meetings focus on the affected populations of declared outbreaks. At a minimum, results from the statewide analyses are reviewed by the Section Management Team monthly.

Additionally, internal SAS programs are created for an escalated response to an outbreak for in-depth analysis of additional data needed for programs working on the outbreak to help prioritization of cases, as well as being useful for ICS and CDC meetings.

II. Molecular cluster detection

Program used for analysis, frequency of analysis, and staff involved

The Epi and Surveillance Unit has been granted approval to use MicrobeTrace. In December 2020, the **Epi and Surveillance Manager** and **Assistant Section Manager** submitted authorization for Secure HIV-TRACE to CDC as a Class III participant. Authorization was granted by CDC in February 2021, and the CDC Secure HIV-TRACE point of contact established the **Epi and Surveillance Manager** as the administrator for Minnesota's site. User accounts were established for MDH surveillance staff, including the **Specialty Epidemiologist, HIV Surveillance Operations Epidemiologist,** and the **HIV Surveillance Coordinator**. Executive accounts were established for the **PCLS Manager, PS and CLS Supervisors, HIV Care and Prevention Epidemiologist, and the HIV Data Manager**. The Epi and Surveillance Manager downloaded documents from the Secure HIV-TRACE website, made them available to surveillance staff, and shared a demo site with staff for practice prior to using the production database. By 2022, molecular sequence analyses had moved from MicrobeTrace to Secure HIV-TRACE for both routine monitoring and monitoring of enhanced outbreak response areas.

The **HIV Surveillance Operations Epidemiologist** extracts laboratory data from MEDSS weekly. Each month, the **HIV Surveillance Operations Epidemiologist** extracts a subset of records that include genotyping data and appends them to datasets within molecular analysis software (i.e., Secure HIV-TRACE) to identify potential clustering at ≤1.5% genetic distance. Networks of three to five cases diagnosed within the previous 12 months and with genetic distance ≤0.5% indicate recent and rapid transmission and are reviewed and discussed over email and/or in ad hoc meetings to determine epidemiologic linkages prior to labelling a cluster of public health interest. The **HIV Surveillance Operations Epidemiologist** alerts Epi and Surveillance staff about cluster for potential enhanced Partner Services investigative response. Molecular analyses will

be increased in frequency to biweekly to monitor for growth of cluster over six months or over the duration of an outbreak.

Statewide analyses of molecular data will be presented to the Section Management Team monthly, and a spreadsheet of output and visuals for clusters under investigation, or clusters on observational status only (i.e., clusters 3+ cases having genetic distances 0.5%<X≤1.5% or diagnoses occurring just >1 year relative to clustering cases) is saved in a secure folder.

Status of nucleotide sequence reporting via electronic lab reports (ELRs)

As of the end of 2021, all four national labs and one local lab (Hennepin Healthcare) processing Molecular HIV surveillance (MHS) specimens have been onboarded with the Minnesota Electronic Disease Surveillance System (MEDSS). With the hiring and onboarding of new staff, the backlog of labs provided by Hennepin Healthcare going back to January 2018 were cleaned and imported into eHARS by mid-2022. These data and the subsequent weekly labs received in MEDSS are processed in the Secure HIV-TRACE system where molecular HIV analyses are conducted and results are reviewed by staff on a biweekly or more frequent basis.

Status on partnerships with outside agencies

MDH is not currently partnering with outside agencies to analyze molecular data. A DUA for Secure HIV-TRACE was submitted to CDC in December 2020, and user accounts established for surveillance staff in February 2021 upon return of the signed document.

III. Other cluster detection methods

In addition to epi and surveillance tools, HIV clusters may also be detected through PCLS or from direct input from external partners.

PCLS: Activities conducted by **PCLS DIS** may also detect clusters. When a new HIV case is reported to MDH, **PCLS DIS** investigate, interview, and re-interview HIV cases to elicit the name of sexual and needle-sharing partners, and social contacts who may be at risk for infection and related to a transmission or molecular cluster. Partner and social contacts who are tested and found to be positive for HIV infection are reported to PCLS management by DIS. The **PS and CLS Supervisors** review the investigative and interview data collected by DIS and inform the **Epi and Surveillance Manager** and **Specialty Epidemiologist** of the new cases and any relevant data gathered from the data review conducted. If, in the course of case and contact investigation, DIS suspects that a potential cluster exists, they discuss the details with the supervisor and inform surveillance.

External partners: An MDH grantee, medical or community-based provider, LPH, or other community partner can report a concerning HIV trend, potential HIV cases, or transmission clusters by calling the MDH IDEPC Division or reporting the situation to a Section employee. A detailed process for reporting and responding to concerns is described in *Appendix 8: Process for responding to HIV concerns reported by community partners*. An internal form for documenting reports from providers and community partners is available in *Appendix 9: Concern for trend in new HIV cases report*. The PCLS program responds to the reports, along with Prevention and Epi and Surveillance staff.

IV. Reviewing relevant cluster data

Partner services data (such as care status, number and type of partner and social contacts, testing and treatment information, risk factors, venues, and interview status) is gathered from record searches in MEDSS, including ELRs, and Partner Services field and interview records. Data are recorded by the **PCLS Manager** on an outbreak cluster Excel spreadsheet to complement case data gathered by surveillance. The spreadsheet is shared with surveillance and used for cluster investigation and analysis. The spreadsheet is updated weekly as new information becomes available from the DIS conducting investigations.

The following table (Table 4) provides a summary of the data sources used, who has access, and what type of data and variables are included in each source.

Table 4: Data Elements and Sources

Type of data	Database name	Who has access?	How readily available is it?	Variables included	Notes
HIV	eHARS MEDSS	HIV Surveillance and Partner Services	Available	All information used for investigations (name, date of diagnosis, risk factors, viral loads/CD4 labs, notes/interviews, and acute HIV status)	No notes
Hepatitis C	MEDSS	Hepatitis Unit	Only MDH hepatitis team has access for match with possible HIV outbreak cases	Name, date of birth, date of hepatitis C diagnosis, and other notes	Review new HIV cases with no risk factors within people who inject drugs (PWID)-related outbreak regions to determine if they have possible IDU risk factor and should be counted as outbreak cases.
Homelessness data	Homeless Management Information System (HMIS)	MDH Senior Advisor on Health, Homelessness, and Housing	Accessible through the Senior Advisor on Health, Homelessness, and Housing, as of Spring 2021	Client-level data and data on the provision of housing and services to homeless individuals and families	Section staff work with the Senior Advisor on Health, Homelessness, and Housing to run searches.
STD	MEDSS	STD and HIV surveillance	Available	Name, date of birth, date of STD diagnosis, partner services interview	Review for additional risk and partner-related information for outbreak cases.

Type of data	Database name	Who has access?	How readily available is it?	Variables included	Notes
Partner services data	MEDSS	HIV partner services and surveillance	Available	Risk factors, partners, homelessness, other information related to outbreak	Review for additional risk and partner-related information for outbreak cases.
Vital statistics	Birth certificates and death certificates	Specialty Epidemiologist	Available	Name, date of birth, date of death, cause of death, facility of birth, maternal worksheet (including number of prenatal visits, date of first and last prenatal visit, risk factors, comorbidities)	Review these data sources if information would be useful for a particular outbreak (i.e., related perinatal HIV or pregnant HIV cases) or if an outbreak case died.

Section 4: Review and prioritization of HIV clusters and outbreaks

I. Process for review and prioritization

Section surveillance and partner services data are reviewed regularly.

- The **PS and CLS Supervisors** meet or email with the **DIS'** who are conducting cluster investigations on a weekly basis. They discuss the status of investigations and interviews to determine investigative priorities and next steps, if necessary.
- The **Epi and Surveillance Manager, HIV Surveillance Operations Epidemiologist**, and **Specialty Epidemiologist** exchange emails with the **PCLS Manager** and any **DIS** working cases of interest regarding potential cases being considered for cluster and/or outbreak inclusion and may also review cluster and/or outbreak data as part of one-on-one meetings.
- Biweekly meetings are scheduled between **Epi and Surveillance** and **PCLS staff,** and **Prevention Unit staff** are included on an ad hoc basis. The purpose of these meetings is to discuss the latest cluster investigations updates and determine what additional information is needed and next action steps, including but not limited to determination of cases to be officially added to the outbreak, and reported online in updated case counts and at associated outbreak response meetings. During each meeting, the cluster spreadsheet is reviewed and discussed, as well as additional data analyses that are useful for a specific cluster.

II. Prioritization of clusters

For the time-space analysis, the **Specialty Epidemiologist** uses CDC-provided SAS code to identify areas of concern for HIV cluster outbreaks, which include an overall county or region alert, and risk factors related to IDU only and MSM/IDU. The Section has identified the

following priority populations: PWID, populations of color, and counties or regions that have a large increase in cases compared to the previous 36 months.

Prioritizing time-space clusters for investigation and intervention

Once time-space clusters have been detected, several factors are considered in prioritizing the clusters for investigation and intervention activities. The **Specialty Epidemiologist** examines the data to determine whether there is evidence that a cluster represents recent and ongoing transmission, or if there are alternative explanations for the increase in diagnoses. The **Specialty Epidemiologist** also includes other staff, including **PCLS DIS**, as needed. Key sources of information for making the determination to investigate a time-space cluster include: the magnitude of increase, information about testing levels (especially recent changes in testing) in the area, demographic information, risk information, presence of early HIV infection, facility of diagnosis, and review of molecular data, when available. Also, partner services interviews are reviewed for all clusters that were identified with an alert status to review if there are any related partners of identified clusters.

Epi and Surveillance staff use the following criteria to prioritize clusters:

- What is the level of concern?
  - What is the magnitude of increase (absolute and relative)?
  - What population(s) is/are involved in the time-space cluster(s)? Do any of these reflect populations of particular vulnerability, such as PWID? Have there been recent changes in the population of the area?
- Do increased case counts reflect recent increases in infections?
  - Is there evidence that recent diagnoses reflect recent HIV infection?
    - How many stage 0 infections are there?
    - How many diagnoses are acute?
    - How many cases have a self-reported history of a recent negative HIV test?
    - Are there coinfections with other STDs?
    - How many had a high initial viral load (>500,000)?
- Is molecular data available on any of the cases?
  - If so, does molecular analysis indicate the presence of a single transmission cluster?
  - If not, does it show multiple smaller transmission clusters?
- Are there alternative explanations for time-space clusters?
  - Have there been documented increases of HIV diagnoses in this area? If so, consider the following possible alternative explanations:
    - Have there been testing events, population changes, policy changes, or other reasons for increased diagnosis? For example, were a large number identified at testing sites that are new or have dramatically expanded testing? Discussions with Prevention Unit staff (e.g., DIS, field staff, Partner Services staff) may reveal testing or other prevention initiatives that could have resulted in an increase in diagnoses.

- Are there any data quality issues that may account for these increases, such as duplicate cases? (Performing a soundex check is recommended.)
- Were any of the cases previously diagnosed?

Investigating and responding to time-space clusters

All prioritized clusters are investigated. **Epi and Surveillance** and **PCLS staff** review and discuss the data and determine if the information should be discussed with the Management Team. Prevention Unit staff are also included as needed.

Investigation efforts for time-space clusters begin with reviewing available data (HIV and STD surveillance, partner services) for the cases that were diagnosed in that county during the previous 12 months. A line list with key variables (transmission mode, gender, race/ethnicity, age, geographic area, care status, initial viral load, and most recent viral load to date, stage 0 at diagnosis, acute diagnosis, and date of last negative HIV test) is used. The variables are helpful to understand commonalities and potential interventions.

As linkages between cases are identified, or as molecular cluster data become available, staff review the data and decide if it is necessary to narrow the investigation to focus on the underlying transmission cluster(s) or broaden it to include other cases that may not have been identified through time-space analysis but have been identified as part of a molecular cluster. Individuals without HIV sequences may still be a part of the transmission cluster. Defining the transmission cluster and larger risk network, along with common facilities of diagnosis and possible exposure, can provide guidance into which types of interventions would be most useful to interrupt transmission.

PCLS investigates and interviews cases in time-space or molecular clusters according to the following priorities:

- Newly diagnosed cases unaware of their HIV status.
- Newly diagnosed cases not interviewed for partner services.
- Newly diagnosed cases not linked to HIV medical care.
- Previously diagnosed cases with high viral loads.
- Previously diagnosed cases in need of reengagement to HIV medical care.

The **Specialty Epidemiologist** reports the results of time-space cluster analysis and response quarterly with input from the **PCLS Manager** and **Prevention Unit staff** assigned to the outbreak. The report is completed by using the CDC cluster investigation worksheet for all identified clusters of concern that MDH has determined to be a cluster outbreak that involves an investigation.

III. Tracking and managing clusters

The tracking and management of clusters happens through the cluster spreadsheet that is maintained by **Epi and Surveillance** and **PCLS staff**. Outcome and disposition of cluster investigations are documented on the spreadsheet and/or in a locally created REDCap database. Cases that will remain open for follow-up are noted. Outcome and disposition of sexual and needle-sharing partners, and social contacts initiated from interviews conducted by

DIS, as well as suspect cases to monitor, are also documented in the locally created REDCap database.

IV. Closing out clusters

The key consideration in making the decision to close out a cluster will be whether transmission in the cluster has been successfully interrupted. Monitoring of cluster growth and review of cluster outcome data regularly are helpful in making the assessment. Some of the considerations include:

- Has transmission in the cluster been interrupted?
- Are there no or few recent diagnoses (past six to nine months)?
- Have persons in the transmission cluster without initial evidence of viral suppression been successfully linked to care?
- Have persons in the risk network been tested or retested and referred for PrEP?
- Are new diagnoses in the cluster identified through active investigation and intervention activities, such as partner services and testing?
- Does the rate of new diagnoses identified through cluster-focused activities suggest that more testing is warranted to identify undiagnosed HIV-infected persons in the network?

After the alert in the CDC SAS time-space analysis is no longer indicated for a particular cluster outbreak investigation (no or few new cases within six months and existing cases not initially virally suppressed are linked to care), the **HIV Surveillance Coordinator**, **HIV Surveillance Operations Epidemiologist**, and/or **Specialty Epidemiologist** will review the results and additional data for discussion with the ICS team to determine if all containment and services are in place to address HIV within the area of the cluster outbreak that would allow the ICS to step down or lower the response threshold.

When a cluster is closed, the **Specialty Epidemiologist** and **HIV Surveillance Coordinator** will continue to monitor the new cases monthly within the area and previous cases identified as part of the cluster outbreak by reviewing continued HIV care via viral suppression. The **PS and CLS Supervisors** and **DIS** will continue to monitor new cases within the area and notify HIV surveillance if any of the new HIV cases name partners who were part of the previous cluster outbreak or if there is a new concern for a continuation of the cluster outbreak within the region. **Section staff** will maintain communication with MDH grantees and local service providers within the cluster outbreak area to identify any concerns that may indicate a continuation of the cluster outbreak within the region.

Section 5: Designing and implementing cluster response plans

This section outlines how the Section responds when an HIV cluster is identified, including time-space clusters or molecular clusters.

- Time-space clusters: clusters that occur when the number of people with HIV diagnoses in a particular geographic area is elevated above levels expected given previous patterns.

- Molecular clusters: clusters that occur when a group of persons with diagnosed HIV have genetically similar HIV strains. Because HIV is constantly evolving, persons whose viral strains are genetically similar may be closely related by transmission.

I. Action planning process

New HIV clusters are identified through monthly time-space analysis, molecular data analysis, through conversations with reporting providers, or via shared contacts named in PCLS investigations. Monthly analysis includes reviewing county/region-level alerts and reviewing additional data to determine if an alert needs further discussion. These data are shared with the STD/HIV/TB Section Management Team as a standing agenda item on a monthly basis. Time-space clusters are confirmed by the **Specialty Epidemiologist**, and molecular clusters are confirmed by the **HIV Surveillance Operations Epidemiologist**, both in consultation with the **HIV Surveillance Coordinator**. When a time-space or molecular cluster is identified, staff notifies the **Epi and Surveillance Manager**.

The **Epi and Surveillance Manager** oversees the following initial activities:

- Epi and Surveillance staff conducts an in-depth analysis using surveillance tools (as described in Section 3).
- The PCLS Manager is notified.
- Epi and Surveillance and PCLS staff schedule a meeting to review the data together.

Notification: If the outcome of the surveillance and PLCS meeting results in confirming there is a new HIV cluster, additional staff are notified by the **Epi and Surveillance Manager or designee**:

- Section Manager.
- Section Management Team.
- District Epidemiologist responsible for the area of concern.
- Senior Advisor on Health, Homelessness, and Housing (as appropriate).
- Infectious Disease American Indian Liaison (as appropriate).

Depending on the results of the analysis, staff from other units are notified and involved in cluster response activities as appropriate, including PCLS, Prevention, and/or Planning and Improvement staff.

Cluster response activities: The following activities are completed by designated staff for the current cluster:

- Biweekly monitoring of epi and surveillance data.
- Weekly PCLS reviews of DIS and PCLS data.
- Cluster spreadsheet is created and monitoring by Epi and Surveillance, and PCLS staff.
- Ongoing Epi and Surveillance, and PCLS meetings to review and discuss data.
- Communication with District Epidemiologists as needed.
- Quarterly cluster reports initiated and sent to CDC (CDC cluster investigation worksheet).

- Contact with local grantees and service providers to explore what they are seeing in the community.
- Connecting with existing public engagement groups, including the SSP Network at monthly meetings or via email to the SSP Network Google Group email.
- Connecting with existing HOPE groups at monthly meetings or via email list.
- Contact with MDH grantee organizations through quarterly grantee technical assistance calls.
- Identifying geographic locations for HIV, SSP, and PrEP outreach activities.

Other PCLS, prevention, testing, education, communication, and/or planning activities are initiated depending on the needs and scope of cluster.

II. Data to guide cluster response

When a cluster is identified, the time-space analysis will be reviewed biweekly for additional new cases. **Epi and Surveillance staff** monitor new cases for possible cluster-related criteria, including county of residence, risk in case definition, review of coinfection with hepatitis C, if PWID are included in the case definition, as well as other coinfections that are related to the case definition, such as syphilis or TB. If a new case is determined to be a possible case in the current cluster, the **PCLS Manager and staff** will be notified upon assignment from surveillance staff and the possible new case will be prioritized for partner services investigation. Additional data from other sources that are relevant to the cluster will be reviewed or matched with new possible cases and existing cases for a better understanding of the cluster. The **HIV Surveillance Operations Epidemiologist** and/or **HIV Surveillance Coordinator** will review molecular data for additional cases that are determined to be part of a cluster and notify **Epi and Surveillance** and **PCLS staff** for further investigation.

III. Investigation approaches

MDH grantees and/or outreach workers involved in testing and linkage to care efforts use a modified case interview form to document partner and social contact names, and locating and demographic information. The form is sent to the **PS and CLS Supervisors**, who review the completed form and initiate any partners and contacts to DIS for investigation. HIV surveillance and DIS staff also have access to several provider EMR systems for medical chart abstractions. They also direct and redirect routine program activities to respond to clusters.

Partner services

Newly diagnosed and previously diagnosed HIV cases who are not in care or virally suppressed or who have not received partner services are assigned by the **PS Supervisor, CLS Supervisor or the PCLS Manager** to **DIS** for interview and linkage to care.

HIV cases in transmission clusters are prioritized for data-to-care activities. Reengagement priorities will include:

- Persons who have no evidence of care ever.
- Persons who have no evidence of care within the last 12 months.

- Persons who are not currently virally suppressed.

Sexual and needle-sharing partners are prioritized over social contacts.

HIV care interventions

DIS will refer cases that are not in care to the medical provider of the client's choice. If the client does not have a provider, the client is referred to the Positive Care Center (PCC). The Positive Care Center is part of **Hennepin Healthcare** and is specifically designed for PWH. They have a rapid access program that allows for almost same-day appointments. A case manager works to resolve barriers and challenges that may prevent the client from staying engaged in care.

DIS uses Facebook and other resources to attempt to reach clients who are out of care when traditional methods are not yielding results. Once a client is reached, DIS offers assistance with linkage to care and supportive services. This often includes a warm handoff to case management and working to identify resources to address client-specific barriers to care.

When necessary and as staffing levels allow, DIS will provide case follow-up over time to ensure that cases who may need motivation or assistance to stay in care can stay in care to achieve viral suppression.

Incentivizing different aspects of the linkage, reengagement, and retention in care are provided as needed and as funding is available.

HIV testing and PrEP

Prevention staff provide increased HIV testing and outreach in the target population identified by the cluster as high risk for HIV infection. Community-based organizations best suited to work within the target population, as well as two MDH-funded clinical PrEP programs, may be asked to create and/or host more testing events, increase PrEP referrals, and raise awareness of the cluster through communication channels, such as social media, print and word-of-mouth. Additional testing models may be explored and encouraged, such as home self-testing (via mail or delivery) and rapid-rapid field testing. Additional partnerships may also be explored and implemented, such as training and supporting other well-placed service providers (street outreach staff, housing navigators, emergency room providers, pharmacies, community clinics, harm reduction providers) to provide rapid HIV testing and rapid referrals to care and other HIV prevention services, such as PrEP, PEP, and harm reduction services.

Harm reduction

Improving harm reduction services is accomplished by increasing access to SSPs, HIV testing, PrEP, and PEP services. During an identified cluster, Prevention Unit staff communicate with MDH grantees and provide guidance as needed to assist with coordinating a response. This may include but is not limited to expanding agency service hours, and adapting grantee workplans (i.e., increasing supplies and HIV testing, expanding service areas, as well as directing resources for incentives). Harm reduction is also obtained through HCV and HIV testing, and linkage to care, chemical dependency treatment referral, and naloxone distribution. High-risk individuals will be identified by HIV testing grantees and be referred for PEP and PrEP services. In addition, the Section continually seeks opportunities to partner with local public health and external

organizations for extended reach into areas where clusters develop. One example would be exploring relationships with pharmacies to expand HIV testing, build relationships, and raising awareness of harm reduction as a public health partnership opportunity.

Social services

PCLS staff refers clients to case management services for assessment of client needs and assistance in linking to the appropriate social services. This may include referring to the Minnesota AIDSLine, an HIV resource guide.

MDH grantees are required to develop and maintain a referral list to be used by program staff to ensure rapid linkage to essential support services. The referral list includes community resources, such as HIV testing, PrEP, food support, transportation, housing, mental health, services for chemical dependency, and others. During a cluster response, MDH will also work with LPH, MDH District Epidemiologists, and external partners to identify social services in the cluster area.

IV. Options for enhanced interventions

Section staff may also consider using additional interventions to target gaps in response to clusters (or outbreaks), including but not limited to:

- Providing gift cards to MDH grantees and providers doing outreach to incentivize testing and linkage to care.
- Providing syringe service supplies to MDH grantee and nongrantees working with impacted communities.
- Providing guidance and support to outreach workers performing HIV testing in community settings or encampments.
- Trainings for service providers providing outbreak-related testing in communities most impacted.
- Specialized HIV testing trainings for organizations that interface with communities most impacted by the outbreak.
- Interventions that pay or incentivize “gatekeepers” or individuals that are part of impacted communities to recruit people who are at risk.
- Community engagement activities to find out what other interventions impacted communities recommend.

V. Communication planning

Two **IDEPC Communications Specialists** are assigned to the Section to provide guidance, support, and assistance with communication activities. Communications staff work with the Section Manager and other Section staff to develop communication messages for routine data releases, awareness campaigns, and ad hoc communication needs. Communications staff may also help create news releases that engage the public and media. This includes fielding media requests, developing talking points, and identifying relevant subject matter experts to respond

to inquiries. Additional communications activities may be conducted in response to HIV clusters as needed. Planning for communications activities includes identifying:

- Communication goals.
- Primary audiences and secondary audiences.
- Key messages or content.
- Communications platforms or tools for dissemination.

The following routine communications activities are used to share HIV data with partners and the community:

- **STD/HIV/TB data release:** annual data release via a webinar, including HIV data trends and epidemiological details.
- **Digital communications (GovDelivery) messages:** regular coordinated email updates to subscribers.
- **Community events:** tabling or other opportunities to share information in person, when allowable. During the COVID-19 pandemic, virtual events replaced community events, although word-of-mouth, prior relationships, and grant manager communication remained important.
- **Data and presentation request:** tailored data requests made through the MDH website for specific partners' data needs.
- **Social media:** HIV-related information from MDH and partners.
- **Messaging campaigns:** working with vendors to establish and disseminate messaging campaigns.

Section 6: Implementing an escalated response

The following section outlines the Section process for declaring an HIV outbreak, initiating ICS, and implementing ICS activities.

The Section transitions to an escalated response by declaring an outbreak and initiating ICS at the Section level. ICS may be expanded if staff and resources from other IDEPC sections, local jurisdictions, states, and/or the CDC are needed. An expanded ICS response may also occur when the magnitude of the outbreak extends across multiple counties, and/or includes tribal nations or other states.

I. Initiating ICS, an escalated response

Declaring an outbreak

The process for declaring an HIV outbreak involves a collaborative approach with staff from Epi and Surveillance, PCLS, District Epidemiologists, and the Management Team. After the initial month an HIV cluster is identified, data are regularly monitored and reviewed (as mentioned in Section 5.II.) to determine if an outbreak should be declared.

Criteria used to declare an outbreak include the following:

- Results of epi data using the two standard deviation methodology indicates rapid transmission for two or more months.
- How rapidly transmission is occurring (number of acute cases reported).
- Relatedness of the cases.
- Size of the population among a certain geographic and/or risk population.
- Signs of existing socioeconomic and/or health disparities in the impacted community.
- Common risk behaviors among infected individuals.
- Community concern.
- Following discussions and/or investigations, the **Section Manager** will determine if an escalated response is warranted.

The **Section Manager** is responsible for declaring an outbreak in coordination with the Section Management Team, Epi and Surveillance staff, PCLS staff and assigned District Epi. If the investigation results in declaring an outbreak, the **Section Manager**:

- Initiates the Section's ICS process to manage the outbreak response.

Notification

When an outbreak is declared, key Section and IDEPC Division staff are notified. The **HIV Surveillance Coordinator** will inform the Epi and Surveillance Manager, PCLS Manager, Section Manager, and Assistant Section Manager. The **Section Manager** is responsible for informing the IDEPC Division Director, IDEPC Assistant Division Director, Medical Director, and Communications Unit Supervisor of the suspected outbreak. The **Section Manager** also notifies the CDC and other external partners, as needed.

II. Escalated response options

Initiating the Section ICS outbreak response

After an outbreak is declared, the **Section Manager** assigns staff to the Section ICS outbreak response team. The **Section Manager** will also work with the **Assistant Section Manager** to determine what funding streams may be used to address needed resources. Funding streams may include HIV prevention, Ryan White, state funding, and others. Other staff which may be assigned include:

- Communications staff.
- Epi and Surveillance Manager.
- PCLS Manager.
- Prevention staff.
- Planning, Evaluation, and QI Coordinator.
- Local public health.
- IDEPC Medical Director.

- Infectious Disease American Indian Liaison (as needed).
- In addition to Section staff, the **Section Manager** informs the DHS Ryan White Part B Manager and invites them to participate on the ICS outbreak response team.

See Appendix 10 for ICS structure chart template. See Appendix 11 for roles and responsibilities table.

The ICS outbreak response team supports communications planning efforts, monitors response activities, coordinates across programs, identifies gaps, troubleshoots issues, and performs other relevant activities. Specific ICS activities and responsibilities include:

- Create a case definition for confirmed, probable, and possible cases.
- Identify the ICS goals, objectives, activities, and measures.
- Develop an org chart and define roles and responsibilities.
- Work with the Communications Unit to prepare a media release regarding the outbreak. An advisory will be distributed via a HAN to providers statewide or geographically targeted.
- Identify the type of media and messaging needed to inform partner agencies and the community (with consideration of the affected community's cultural or language needs).
- Discuss the resources needed to respond.
- Identify roles for investigating the suspected outbreak.
- Identify a schedule for completing the investigation and updating the team.
- Monitor data from surveillance and partner services.
- Create and support a HOPE group.
- Attend ongoing monthly meetings with CDC.

The ICS outbreak response team meets during recurring meetings to share epi updates, provide updates on response activities, and clarify next steps (*see Appendix 12 for sample agenda template*). The HIV outbreak tracker is used to identify, monitor, and track action steps (*see Appendix 13 for outbreak tracker template*). Other deliverables include an ICS organizational chart, a communication plan, and an ICS team meeting schedule.

Throughout the response, the **Section Manager** maintains communication with and provides regular updates on response activities to the following:

- CDC Project Officer.
- IDEPC Director.
- DHS Ryan White Part B Manager.
- HCPH Ryan White Manager.

Section staff work with partners to assess needs. Interventions are added or expanded to address identified gaps (also included in Section 5), as needed. These interventions may include:

- Providing gift cards to MDH grantees and providers doing outreach to incentivize testing and linkage to care.

- Providing syringe service supplies to MDH grantee and nongrantees working with impacted communities.
- Providing guidance and support to outreach workers performing HIV testing in community settings and encampments.
- Trainings for service providers performing outbreak-related testing in communities most impacted.
- Specialized HIV testing trainings for organizations that interface with communities most impacted by the outbreak.
- Interventions that pay or incentivize "gatekeepers" or individuals that are part of impacted communities to recruit people who are at-risk.

Data to guide an ICS outbreak response

Epi and surveillance data and PCLS data are analyzed throughout the ICS outbreak response. Data are reviewed biweekly, and alerts are investigated by surveillance and PCLS staff. Newly identified cases that meet the outbreak case criteria from either the time-space analyses, molecular analyses, and/or partner services investigations are discussed at the biweekly meetings to determine if the new cases should be added to the outbreak case count. Additional ad hoc meetings are used to review data with Epi and Surveillance, PCLS, and Prevention Unit staff, as needed. Updated case counts and other outbreak data is shared during recurring ICS meetings, monthly Section Management Team meetings, and meetings with LPH partners.

Time-space analysis: During a declared cluster outbreak, the time-space analysis is reviewed biweekly for additional new cases, using CDC provided time-space analysis SAS code. The **HIV Surveillance Data Manager** monitors new cases for possible outbreak-related criteria (county of residence, risk in case definition, review of co-infection with hepatitis C if PWID are included in the case definition, as well as other co-infections that are related to the case definitions, such as syphilis or TB). If a newly reported case is determined to be a possible case in the current cluster outbreak, the **PCLS Manager and staff** are notified by the **HIV Surveillance Data Manager** and the possible new case will be prioritized for partner services investigation. Additional data from other sources that are relevant to the outbreak will be reviewed or matched with new possible cases and existing cases for a better understanding of the cluster outbreak.

Molecular analysis: The **HIV Surveillance Operations Epidemiologist** and **HIV Surveillance Coordinator** review molecular data every two weeks for additional cases that are determined to be part of a cluster outbreak and notify **Epi and Surveillance** and **PCLS staff** for further investigation (additional cases are linked to existing outbreak cases within threshold ≤0.5% genetic distance). Cases in transmission networks with existing outbreak cases at genetic distance $0.5\% < x \leq 1.5\%$ will be monitored through routine evaluation.

Surveillance staff will ensure that molecular data are obtained when available. Staff reviews previously identified outbreak cases without molecular data and request that data from providers, if available.

In addition, biweekly meetings are held with MDH, DHS Ryan White Part B manager, HCPH Ryan White Part A manager, and LPH staff, as appropriate. Updated case counts and individual level data, as permitted by data sharing agreements and/or Commissioner's Orders, are provided to

designated authorities representing the population/geography affected. Section staff, including the Section Manager and staff on the ICS outbreak response team, share epi updates and data management questions during ongoing discussions with CDC staff regarding outbreak activities.

An expanded ICS response

The ICS outbreak response may be expanded outside of the Section to include more IDEPC staff under the following circumstances:

- The ICS response has exhausted current Section staff capacity.
- The outbreak spans over multiple counties or geographic regions and requires coordination with multiple jurisdictions.
- The outbreak includes tribal nations and/or extends beyond Minnesota and the ICS response requires coordination with other states.

If the outbreak response is expanded, the **Section Manager** will work with the IDEPC Division Director and Assistant Division Director to expand the response using the Section ICS team. The IDEPC Division Director informs the Assistant Commissioner, who will inform the Commissioner. The Section Manager continues as the Incident Manager. Additional roles may be added to the ICS structure, as needed, such as a Logistics Lead and ICS Financial Lead.

Initial activities during an expanded ICS outbreak response may include:

- Identifying a Logistics Lead to manage staffing.
- Reaching out to identified partners stakeholders (e.g., IDEPC staff, states, local jurisdictions, tribal nations, et al.).
- Providing a situation update and training for new staff and partners.
- Establishing joint meetings and/or communication channels between key stakeholders.
- Coordinating ICS responses between MDH and other jurisdictions.
- Updating the goals, measures, and indicators for the response.

Funding

If additional funds are needed during an escalated response, the **ICS Financial Lead (Assistant Section Manager)** and Section Manager would first look at current spending on the federal HIV surveillance and prevention grant to identify whether there are salary savings or underspending in other areas that would allow for re-distribution of funds towards the response. If not, they would then look at general funds, first at the Section level and then at the Division level, to identify the amount that could be used to support the response. If the use of Ryan White funds would be appropriate, they will also approach the Part A and/or Part B Ryan White managers (depending on the geographic area of the outbreak) to determine whether funds are available. If needed, they will also look into foundation funding opportunities.

Deactivation and transition back to routine program oversight

As mentioned in Section 5.I., the Section continues to develop the process for ending an ICS outbreak response. Key considerations for ending an outbreak response will include monitoring surveillance data, partner services data, and response activities. The Section will refer to CDC

guidance[5] for determining when a cluster or outbreak response should be closed, which includes the following considerations:

- Has transmission been interrupted or is it ongoing?
- Have persons in the transmission cluster without initial evidence of viral suppression been successfully linked to care?
- Have persons in the risk network been tested or re-tested and referred for PrEP?
- Are new diagnoses in the cluster identified through active investigation and intervention activities, such as partner services and testing?
- Does the rate of new diagnoses identified through cluster-focused testing activities suggest that more testing is warranted to identify undiagnosed HIV-infected persons in the network?

Ending an ICS outbreak response may also include identifying more specific procedures, action steps, benchmarks, etc. The **Section Manager** will oversee steps to deactivate the escalated response and transition back to routine program oversite. Ongoing epi and PCLS data monitoring will continue following deactivation.

III. Communicating during an escalated response

During an outbreak, the **IDEPC Communications staff** work with the **Section Manager** and ICS outbreak response team members to develop a communications plan for the specific needs of the outbreak. This communication includes the **Section Manager** informing the **IDEPC Division Director** that an escalated response has been activated. The **IDEPC Division Director** will then communicate this to the **Commissioner of Health.** Communications staff and members of the ICS outbreak response team develop outbreak talking points. Talking points may include:

- Key messages about the outbreak.
- Frequently Asked Questions.
- Recommendations for providers.

During the outbreak response, timely and flexible communication with key audiences is essential. These audiences include:

- **CDC:** The **Section Manager** notifies CDC when an outbreak is declared, and of any updates and changes in the response. Section staff participate in regular meetings with CDC project officers, which provide a place to give updates, troubleshoot, and request assistance.
- **LPH:** Section staff share information with LPH in the outbreak region and participate in regular meetings with LPH involved in responding to an outbreak. Statewide, LPH is informed of outbreaks through the PartnerLink messaging system and the HAN network.
- **Tribal nations:** The **Section Manager** notifies the American Indian Health Director and Infectious Disease American Indian Liaison of updates and changes. The **Infectious Disease American Indian Liaison** provides consultation and leads partnerships with tribal

[5] Detecting and Responding to HIV Transmission Clusters: A Guide for Health Departments, June 2018, Draft Version 2.0, Pages 49–50

nations. The **Section Manager** participates in Tribal Directors calls or meetings to provide information, as needed and requested.

- **MDH grantees:** Email notifications are sent to MDH grantees on a regular basis. Section staff convene quarterly HIV grantee calls, which provide a place to give updates, ask grantees to share, and communicate any changes.
- **Community partners:** Section staff have relationships with other agencies and community partners from previous projects that have historically helped create and share relevant HIV prevention messages.
- **General public:** The MDH website is reviewed weekly for broken links and errors. Social media is a place where MDH can share HIV prevention content or create its own.

In addition to the routine communication activities (as listed under Section 5.V), information about the HIV outbreak, and other HIV data, is shared using the following methods:

- **Health Alert Network:** official mass messages with action steps from MDH to health jurisdictions.
- **PartnerLink System:** a messaging system that allows MDH to send messages to Tribal Health and LPH.
- **Monthly GovDelivery messages:** regular coordinated HIV outbreak updates via email.
- **MDH HIV Outbreak Response and Case Counts webpage:** updated case definitions, case counts, action steps and resources.
- **Quarterly HIV grantee call:** calls where Section staff share updates and information with grantees.
- **Presentations at the Tribal Health Directors quarterly meeting:** updates and information sharing with Tribal leaders when invited or when MDH asks to attend.
- **LPH calls:** recurring calls with Section staff and LPH.
- **Communications materials**: Through development and distribution based off needs and requests of external partners, including HOPE groups.

Information may also be shared during inter-jurisdictional communication opportunities as needed for peer learning and consultation. Examples of this may include calls with CDC and other states, the NCSD communication roundtable, etc.

The ICS outbreak response team and communications staff will work with other jurisdictions that become involved in the response. This may include updating the current communications plan and key talking points and coordinating communication efforts.

During the Section ICS response activities, the Section holds regular meetings for information sharing and coordination. Regular epi updates and response activity updates are provided.

IV. Staff training for escalated response

All IDEPC staff complete required MDH trainings, and STD/HIV/TB staff complete additional training for the Section and related job responsibilities (see section 1.II.).

Section managers promote additional professional development opportunities, as offered by MDH, CDC, and other national organizations (such as National Alliance of State and Territorial AIDS Directors [NASTAD], or the Harm Reduction Coalition). Topics may include information related to HIV prevention services, outbreak response, and other related topics. The Section may also utilize the CBA Jurisdictional Team for specific training needs.

At this time, there are no plans for including non-HIV program staff to provide DIS or other staff support during an escalated response. If IDEPC Division staff are included in the response, they will have completed required MDH trainings. In addition, they will be given a situation update and overview of the outbreak and an assessment of additional training needs will be made on a case-by-case basis.

If a determination is made that non-HIV staff are needed to support an escalated response, appropriate training will be provided. This training may include case contact and investigation skills, data security and confidentiality, data entry and management, materials distribution, and others as deemed appropriate.

Section 7: Monitoring and evaluation of cluster response activities

I. Monitoring a cluster or outbreak response

Process for tracking and reporting outcomes required under PS18-1802

An outbreak-specific spreadsheet is maintained by **Epi and Surveillance** and **PCLS staff** and saved in a secure folder with role-based access. The spreadsheet is reviewed every two weeks. During each case meeting, the definition in a declared outbreak, diagnostic dates, status of infection (HIV or AIDS, acute or nonacute), linkage to care, labs, viral suppression information, and referrals for contacts are tracked and documented per case. Cases for whom there may be a link to an outbreak are maintained in separate tabs on the spreadsheet and are relocated to the active outbreak case tab if found to have a connection within the outbreak case definition. A REDCap database is also used for managing data.

Quarterly cluster investigation reports (initial and updates) to CDC are completed by the **HIV Surveillance Coordinator, Specialty Epidemiologist,** and **PCLS Manager** and are uploaded via SAMS. Summaries of key demographics are prepared and updated monthly by the **Specialty Epidemiologist** using and HIV Cluster Table Shell template provided by CDC, which are used for internal use as well as communicating updates with CDC regarding the evolving distribution of cases in ongoing MDH outbreak(s).

Monitoring tools

The monitoring tools Epi and Surveillance staff use includes CDC-provided SAS code, Microbe Trace, and Secure HIV-TRACE.

The **Specialty Epidemiologist** runs CDC-provided SAS code for time-space analyses monthly when not in an outbreak, or at least biweekly during an outbreak response and for which modifications are made to group geography relevant to the defined case definitions, and monthly when conducting routine monitoring. Aggregate counts compared to previous rolling

12-month time frames for the last three years, and any resulting line lists for cases in regions triggering an alert in the time-space analyses are maintained in a secure folder and reviewed biweekly by the Epi/Partner Services/Prevention small group when in an escalated response, and monthly by Section management team for routine monitoring.

Molecular data is also analyzed at least monthly during routine monitoring, and biweekly during an escalated response, using Secure HIV-TRACE led by the **HIV Surveillance Coordinator** in collaboration with the **HIV Surveillance Operations Epidemiologist**. MicrobeTrace may be used as a supplemental tool.

Both time-space and molecular data are shared monthly with the Section management team, as well as during monthly calls with CDC concerning the outbreak response and/or with project officers as scheduled.

Line lists of cases included in each outbreak are maintained on a secure drive and reviewed among a subgroup of prevention, PCLS, and surveillance staff at meetings held biweekly in advance of full ICS meetings. Additional tabs on the spreadsheet are maintained with suspect cases and other cases of potential interest that do not currently meet the working case definition but may have characteristics that we want to continue to monitor. As new cases are added, a Word document summarizing key demographics of the outbreak are updated.

Process for reporting cluster response activities to CDC via cluster report forms

PCLS, Prevention, and Epi and Surveillance staff collaborate to complete the cluster report forms for submission to CDC. Multiple surveillance staff have access to the proper CDC Secure Access Management Services (SAMS) folder and submit quarterly and end-of-year reports according to the appropriate deadline.

II. Evaluation of cluster and outbreak response

Description of how data elements, staff experiences, and other input are brought together to learn and improve future responses

In addition to surveillance data, the Section uses quantitative and qualitative data to monitor cluster and outbreak response activities. The Section maintains a list of potential measures, consisting of Section data that is currently collected and available, to help in identifying measures for specific outbreak response activities (*see Appendix 14*).

When an outbreak is declared, outbreak response goals and response activity measures are identified with support from the **Planning, Evaluation, and QI Coordinator**. Outbreak measures include outputs and outcomes related to the response activities that are implemented to reach the outbreak goals (this is in addition to surveillance data). Goals and measures are documented and shared with the ICS team.

Throughout the outbreak response, Section staff document response activities using the following:

- ICS outbreak tracker: identifies action steps, timelines, staff lead, and status.
- ICS meeting notes: documents attendees, epi and activity updates, decisions, and next steps.

- Other related meeting notes: documents attendees, updates, decisions, and next steps.
- Epi data: data summaries, epi curve, etc.
- Outbreak response activities measures spreadsheet: quantitative and qualitative internal data summaries.
- Communication plan and updates.
- Data findings will be communicated monthly to the HOPE group and quarterly to MDH grantees.
- Other specific response activities will be documented, as identified.

The following ongoing activities offer real-time opportunities to make adjustments and changes, as needed:

- Recurring ICS meetings: standing agenda items include epi updates and response activity updates providing a time to identifying gaps and challenges that need to be address.
- Monthly ICS outbreak tracker reviews: the ICS Operations Lead monitors the tracker to follow up on activities that are ongoing or past due, adding new activities, as needed, etc.
- Monthly Management Team meetings: managers review and monitor data monthly, and use data to add/modify response activities, as needed.

"Midpoint" evaluation

The **Planning, Evaluation, and QI Coordinator** works with the Section Manager and other staff to conduct a "midpoint" evaluation every 12 months during the outbreak to assess the outbreak response. The purpose of a midpoint evaluation is to: (1) assess the current response to make timely adjustments and changes, and (2) provide additional documentation for the overall evaluation of the outbreak, once the outbreak response is over. Both qualitative and quantitative data are used.

Midpoint evaluation activities may include one or more of the following:

- A simplified debrief meeting, or check-in, with ICS team members, HOPE group members, and other partners actively engaged in outbreak activities.
- A survey for the ICS staff team members, HOPE team members, and other partners (including internal and external partners).
- Review and assessment of ICS outbreak tracker activities.
- Review of outbreak goals and measures, including response activities data.

The **Planning, Evaluation, and QI Coordinator** compiles data from the midpoint evaluation into a written summary or report and shares it with the Section Manager, Management Team, and ICS Response Team. Section staff review the data and discuss the results during a meeting, which may include the Management Team meeting, ICS meeting, and/or another ad hoc meeting. During the meeting discussion, staff will: (1) assess the progress for meeting the outbreak response goals, (2) discuss how to address any gaps or challenges that are identified, and (3) add or adjust outbreak goals and response activities.

Evaluating an overall response to a cluster or outbreak

An overall evaluation will take place when a cluster or outbreak has been disrupted and the response activities end or transition to regular program activities. The **Section Manager** and other Section managers/supervisors will work with staff from the **Planning and Improvement Unit** to conduct the evaluation. The purpose of the after-action evaluation is to learn from the response and use that information to inform strategies for future cluster activities, including identification, responding, and monitoring.

Overall evaluation activities may include one or more of the following:

- Debrief meeting with everyone included in the response (including Section staff, MDH staff, local jurisdictions, CBOs, and other internal or external partners).
- One-on-one interviews.
- Focus groups.
- Survey.
- Reviewing goals, indicators, and measures.

Evaluation steps include:

- The **Section Manager** will assign a core team to oversee the evaluation, led by the Planning, Evaluation and QI Coordinator, or other staff in the Planning and Evaluation Unit.
  - The core team will identify the key evaluation questions (e.g., what worked well, what did not work, what could be improved) and make an evaluation plan for collecting input.
- Data collection.
  - Conduct debriefs with ICS team and partners.
  - Collect input from staff and partners through survey, interviews, etc.
  - Compile response activity measures data.
  - Collect other qualitative and quantitative data related to response activities.
- Analysis.
  - Review and analyze all input and compiled data with core team.
  - Identify themes, key findings, and recommendations.
  - Summarize findings and write preliminary evaluation report.
- Review and discussion.
  - Share findings with Management Team, key staff, and partners.
  - Hold meeting(s) to review and discuss findings and recommendations.
- Implementation and follow up.
  - Identify next steps.
  - Create a work plan to address report findings and recommendations.
  - Report back to partners and stakeholders on how their input will be used.
  - Use findings from report to update relevant sections of the HIV CODR.

Annual review

Following the annual submission of the HIV CODR update to the CDC in March 2021, Section staff, including the **Section Manager**, **Management Team**, and a **planner from the Planning and Improvement Unit**, will review and update the HIV CODR annually and as timely updates are identified.

The annual review will consider updated guidance from CDC, recommendations from outbreak evaluations, key stakeholder input (e.g., HOPE group members, END HIV MN Advisory Board, et al.), and best practice research.

Proposed revisions to the plan will be approved by the Section Manager and Management Team.

Process for refining routine processes based on evaluation and effectiveness findings

Within the Section, Unit Managers and their respective staff evaluate and update their program processes and procedures as needed. If recommendations for changes are made during other evaluation processes (such as the midpoint evaluation and partner engagement efforts), findings are shared with the Section Manager and Management Team who develop a plan for addressing the findings. The respective Section managers and supervisors responsible for implementing the changes work with key staff involved. A planner from the Planning and Improvement Unit will assist, as needed.

Acronyms/Glossary

Acronyms

- CDC: Centers for Disease Control and Prevention
- DHS: Minnesota Department of Human Services
- ELR: Electronic Lab Reports or Electronic Lab Reporting
- HAN: Health Alert Network
- HCPH: Hennepin County Public Health
- HIV: Human Immunodeficiency Virus
- HIV CODR: HIV Cluster and Outbreak Detection and Response
- HOPE: HIV Outbreak Partner Engagement
- ICS: Incident Command System
- IDEPC: Infectious Disease Epidemiology, Prevention and Control
- IDU: Injection Drug Use
- LPH: Local Public Health
- MATEC: Midwest AIDS Training & Education Center
- MDH: Minnesota Department of Health
- MSM: Men who have Sex with Men
- PCLS: Partner and Care Link Services
- PWH: People with HIV/AIDS
- PrEP: Pre-Exposure Prophylaxis
- PEP: Post-Exposure Prophylaxis
- PWID: People Who Inject Drugs
- SSN: Syringe Services Network
- SSP: Syringe Services Program
- STD: Sexually Transmitted Disease
- TB: Tuberculosis

Glossary

- **AIDS service organization (ASO):** A nongovernmental organization that provides services related to the prevention and treatment of HIV/AIDS.
- **Clusters**:
  - **Transmission cluster:** A group of PWH who are connected by HIV transmission. Source: *Detecting and Responding to HIV Transmission Clusters: A Guide for Health Departments*, Page 6.

- **Molecular cluster:** A group of persons with diagnosed HIV infection who have genetically similar HIV strains. Because HIV is constantly evolving, persons whose viral strains are genetically similar may be closely related by transmission. Source: *Detecting and Responding to HIV Transmission Clusters: A Guide for Health Departments*, Page 7.
- **Time-space cluster:** Occurs when the number of people with HIV diagnoses in a particular geographic area is elevated above levels expected given previous patterns. Time-space clusters may represent recent and ongoing HIV transmission. In some cases, time-space clusters may reflect transmission clusters that have not yet been identified through molecular data or other approaches. Time-space increases may indicate a single transmission cluster or multiple, smaller transmission clusters, both of which are important to investigate for prevention interventions. Increases in the number of diagnoses may also reflect an increase in HIV testing that has identified longstanding infections, which can also indicate a need for focused prevention efforts. Following the identification of time-space clusters, the review of additional data is important to determine whether investigations and interventions are needed. Source: *Detecting and Responding to HIV Transmission Clusters: A Guide for Health Departments*, Pages 10–11.

- **Grantee:** An organization funded by MDH, HCPH, and/or DHS to provide prevention services, including HIV counseling and testing to populations that are hard to reach and at high risk for transmitting or acquiring HIV, essential medical care, and support services for people at risk of HIV or PWH, or other related services (such as syringe service programs).
- **Outbreak:** The term outbreak can be used in different ways. While a textbook definition of an outbreak is "an increase, often sudden, above what is normally expected in that population or area," the term is often used to describe situations in which an urgent or emergency level public health response is needed. Determining whether an increase in HIV diagnoses or the identification of a transmission cluster warrants an escalated response is an iterative process, and multiple factors are considered.[6]
- **Providers:** Nonfunded organizations providing health and social services.
  - **Harm reduction service providers:** syringe exchange, overdose prevention, and other harm reduction providers.
  - **Health care providers:** provider of health care services, including testing and linkage to care services
  - **Mental health and substance use providers:** provider of services for mental health and well-being and substance use disorders
  - **Social service providers:** provider of social services including housing, food, and other basic needs.
- **Public:** Any individual or group of individuals, or organization with an interest in the outcome of a decision. They may be directly or indirectly affected by the outcome of a

[6] *Detecting and Responding to HIV Transmission Clusters: A Guide for Health Departments*, Page 61

decision. Also referred to as stakeholders.[7] This includes people who can influence a decision, as well as those affected by it.[8]

- **Public engagement:** The process of working collaboratively with groups of people who are affiliated by geographic proximity, special interests, or similar situations with respect to issues affecting their well-being.[9] It is the process of involving individuals or groups of people in addressing issues that affect their lives or well-being. Engagement types vary from sharing information to influencing decision-making. It should go beyond informing individuals and communities about issues and services of concern to them to asking them for input. It should include ongoing relationships and community involvement in the development and implementation of both services and polities.[10]
- **Section:** STD/HIV/TB Section located in the IDEPC Division at MDH.

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Minnesota Department of Health
STD/HIV/TB Section
651-201-5414
www.health.state.mn.us/hiv

To obtain this information in a different format, call: 651-201-5414.

[7] IAP2
[8] Expanding Your Reach to End the HIV Epidemic: Community Engagement Toolkit, National Minority AIDS Council
[9] Minnesota Department of Health, Community Engagement Plan: 2016–2019, (May 2016), (https://www.health.state.mn.us/communities/practice/equityengage/community/docs/ce-plan.pdf)
[10] Expanding Your Reach to End the HIV Epidemic: Community Engagement Toolkit, National Minority AIDS Council

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Maria Bye, Epi Int
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Greta Ciessau, Epi
Leslie Kollman, HPR Int
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Bailey Atkinson, Stu Work Para Sr
Jenna Slack, Stu Work Para Sr
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Julie Hanson Pérez, Asst Section Mgr*

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Pa Xiong, Research Analysis Specialist
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vacant, Mgmt Analyst 4
vacant, Mgmt Analyst 2

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Jean Larson, Nurse Spec
Karmen Dippmann, HPR Sr
McKinzie Woelfel, HPR Sr
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Japhet Nyakundi, HPR Sr
Quay Catalpa HPR Sr.
vacant, Nurse Spec
vacant, Stu Work Para Sr

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George Kraus, Health Prog Supv*
Brian Kendrick, Health Prog Supv*
Tim Heymans, HPR Sr #
Cindy Lind-Livingston, HPR Sr
Jefferson Dennis, HPR Sr
Mady Ekue-Hettah, HPR Sr
Travis Eckman-Rocha, HPR Sr
Sara Emahiser, HPR Sr
Noah Schumacher, HPR Sr
Niles Schwartz, HPR Sr
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vacant, HPR Sr
vacant, HPR Sr
vacant, HPR Sr
vacant, HPR Int

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Hannah Kass-Aten, Epi Int
Nathan Blumenfeld, Epi
Chris Peel, HPR Sr
Melissa Marsh, HPR
Katie Elfstrand, HPR
Jimmy Koch, Stu Work Para Sr
Josie Allen, Stu Work Para Sr
vacant, Health Program Supv
vacant, Stu Work Para Sr

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Nadya Sabuwala, PHN Adv Sr
Milayna Brueshaber, HPR Sr
Lenette Bauer, HPR Int
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vacant, Planner Sr State
vacant, HPR Int
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Josh Leopold, Planner Dir State
Mariah Norwood, Planner Sr
LuAnne Buck, Planner Sr Comm
Elizabeth Mago, HPR Sr
Adriana Campbell, HPR
Erica Chung, Planner Sr Comm
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Brooklyn Petrich, Publ Health SW Spec
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Isaac Triebold, Epi Sr #
Ellen Hill, Epi Sr #
Sara Lovett, NW District Ep Sr
Jacob Zdon, Epi Sr
Pamela LeMaster, Epi Sr
Ryan Swafford, Epi
Ahlam Hashi, AmeriCorps
Dol Hassan, AmeriCorps
vacant, Epi Sr
vacant, Stu Work Para Sr

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Amber Koskey, Res Sci 2
Ann Kayser Gonderinger, Res Sci 2
Sarah Boneske, Res Sci 1
Hanna Chakoian, Res Sci 1
Jacqueline Cassman, Res Sci 1
Megan Polzer, Epi
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Shawna Munger, Accounting Officer Sr
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My Nguyen, ITS 4
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MEDSS
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Mansour Hadidi, ITS 4
Mare Vance, ITS 3

MIIC
Alex Borochin, ITS 4
Gilbert Lu, ITS 3
John Adams, ITS 3

MEDSS & MIIC Messaging
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Phoenix Borowski, Epi
Michelle Rivers, HPR Int
Kate Mehring, Planner Int
vacant, PHN Adv
vacant, St Prog Admin Senior
vacant, Stu Work Para Sr

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Mohamed Ahmed, Planner Int
Aaron Bieringer, Res Sci 2 #
Sydney Kuramoto, Res Sci 2 #
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Maureen Leeds, Epi
Naomi Jiter, Epi
Holly Kidrowski, Epi
Taylor Campbell, HPR Int
Jenevera Wolfe, HPR
Inari Mohammed, Epi Sr
Yeliz Toker, Stu Work Para Sr
Ron Sullivan, Stu Work Para Sr.
Yucabeth Oyaro, Stu Work Para Sr
Chloe Falke, Stu Work Para Sr
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Vacant, HPR Int
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Sarah Spah, Nurse Specialist
Becky Neudecker, Agency Policy Specialist
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Melissa McMahon, Epi Sr
Emily Banerjee, Epi Sr
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Katherine Schleiss, Epi Int
Ali Ruprecht, Epi
Colleen McGraw, HPR
Yeng Vang, HPR
Alexandra Johnson, HPR
Cassy Wilson, Stu Work Para Sr
Eva Potvin, Stu Work Para Sr
Averie Rademacher, Stu Work Para Sr
Anna Chon, Stu Work Para Sr
Madeline Moore, Stu Work Para Sr
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vacant, Epi Sr
vacant, Epi Int
vacant, Epi Int
vacant, HPR

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Nathan Kemp, Epi Int
Bree Friedman, Epi
Leah Donovan, MDPR Prevention Epi
Deepa Mathur, HAI Outbreak Epi
Krista Knowles, Stu Work Para Sr
Asma Mohamed Stu Work Para Sr
Manuel Calzada Ollarzabal, Stu Work Para Sr
Sarah Schroeder, Stu Work Para Sr
Madison Bissonette, Stu Work Para Sr

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Emily Leyrer, HPR Int
Mari Freitas, CSTE Fellow
Zachary Nelson, Pharmacist
Galina Shteyman, Pharmacist
Kayla Chapman, Epi Sr
Mohammed Abdalla, Epi Sr
Patrick Tschida, Epi Sr
Callie Floyd, Health Educator
Vacant, Epi Sr
Vacant, Epi Sr
Vacant, Epi Prin
Vacant, HPR Sr
Vacant, Planner Sr

Infection Control Assessment & Response (ICAR)
Tammy Hale, ICAR Unit Supervisor *
JP Mahoehney, Nurse Specialist
Kristi Juaire, Nurse Specalist
Virginia (Ginnie) Asp, Nurse Specialist
Brittney Bailey, Epi Sr
Caramae Steinwand, Planner Int
Pam Powers, Planner Int
Vacant, Nurse Specialist
Vacant, Nurse Specialist

HAI/AR COVID-19 Unit
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Joann Wagner, COVID Case Manager (CCM) Nurse
Anastasia Norbeck, CCM, Nurse Spec
Ida Banks, CCM, Nurse Spec
Kristy Kunerth, CCM, Nurse Spec
Molly Hunt, CCM, Nurse Spec
Kathy Hogan, ICAR

Communications and Administrative Services Section (CASS)
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Communications Unit
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Elly Pretzel, HPR Sr
Dan Callahan, HE 2
Katie Hill, HE 2
Crystal Gammelgaard, HE2
Tracy Schultz, HE 2
Deborah Leider, HE2
Harry Steffenhagen, HE2
Sabrina Kubisa, HE2

Administrative Unit
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vacant, OAS Prin

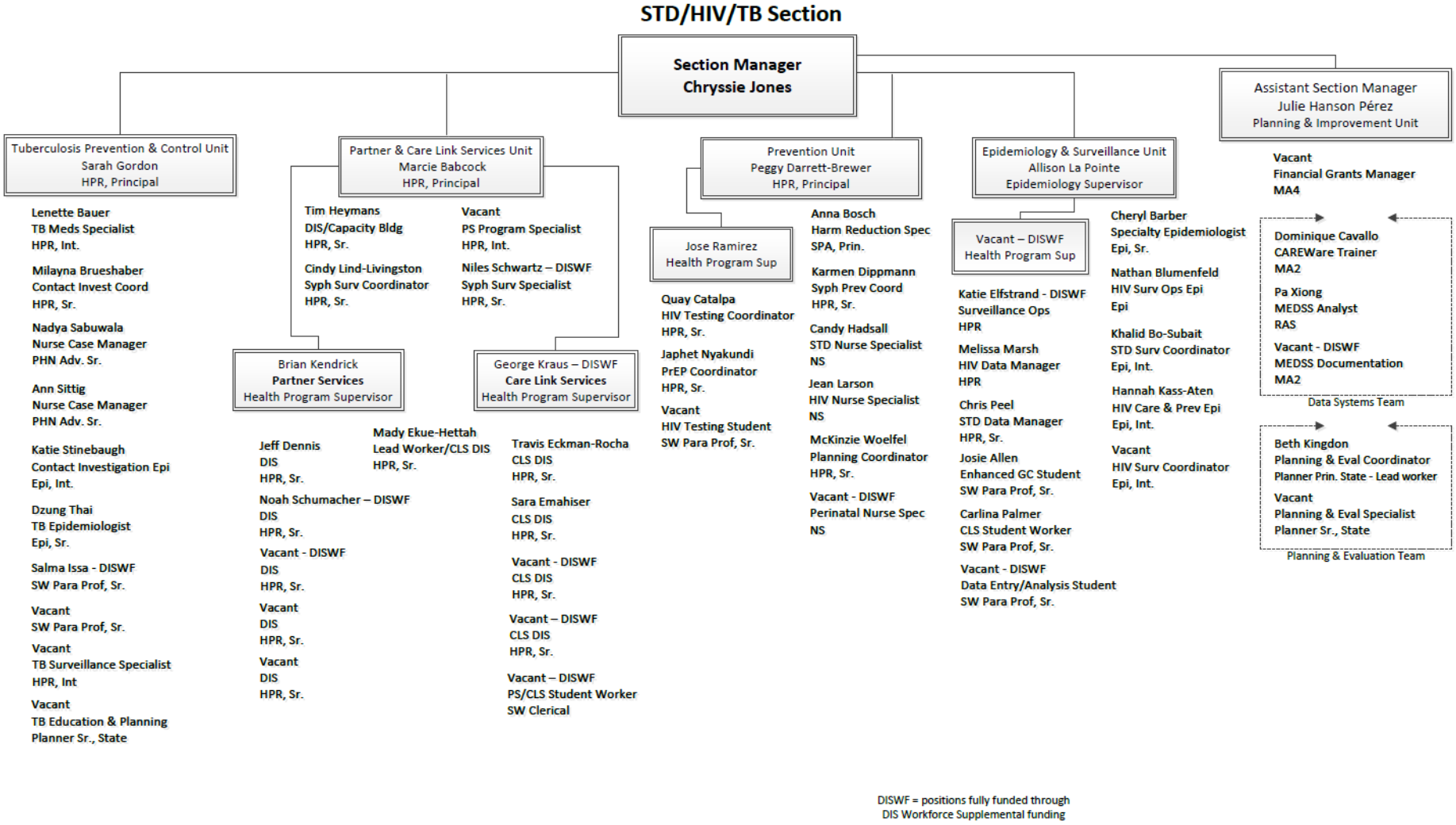
Financial Process Subunit
Heather Pasket, OAS Sr
Lisa Martin, OAS Sr
vacant, OAS Sr

Administrative Services
Connie Davis, OAS Sr
David Determan, OAS Sr
Diane Hanson, OAS Int
Mai Vang, OAS
Ikram Dawid, CSS Int

3/15/2023
* Supervisor
# Lead Worker

Appendix 2: Organizational chart for the STD/HIV/TB Section

Figure 2: STD/HIV/TB Section Organizational Chart



Appendix 3: HIV CODR staff table

Table 5: Staff Roles in HIV Detection and Response Activities

Program is STD/HIV/TB Section unless otherwise indicated.

Staff	**Program** (e.g., Epi, Prevention, Partner Services, etc.)	**Role(s)** (Include all roles staff play during both the detection phase and response activities)	**Program-Specific Trainings** Additional trainings for this role, beyond general MDH or section requirements
Epidemiology and Surveillance Unit Manager	Epi and Surveillance	Reviews time-space analyses and attends internal ICS meetings, as well as participates in any CDC, local health department, or CSTE discussions concerning ongoing clusters or outbreaks, national or state-specific.	National webinars, and technical assistance provided by CDC and/or CSTE.
HIV Care and Prevention Epidemiologist	Epi and Surveillance	Provides training on HIV molecular data for internal and public stakeholder consumption (recording archived on our website as well as content used in grantee HIV Testing Trainings). Serves as epi liaison to Council and Ryan White programs regarding outbreaks and surveillance data as well as Minnesota's Data2Care programs. Generates not-in-care (NIC) lists for outbreak monitoring purposes, including viral load data. Has access to CAREWare and can confirm involvement in Ryan White Services.	National webinars, and technical assistance provided by CDC and/or CSTE.
HIV Surveillance Data Manager	Epi and Surveillance	Triages incoming confirmatory labs, case reports, as well as calls from grantees and health care providers, is aware of new diagnoses, their geography, risk factors, and other key demographics that would indicate an ongoing outbreak or whose shift might indicate an emerging area of concern. Assigns cases to partner services and indicates if may be a potential outbreak case. Collects antiretroviral (ARV) use data for all persons newly diagnosed with HIV as part of core surveillance activities.	National webinars, and technical assistance provided by CDC and/or CSTE.
HIV Surveillance Operations Epidemiologist	Epi and Surveillance	Processes all incoming labs through state ELR system and uploads to eHARS. Monitors lab volume and works to incorporate new labs and tests reported to MDH, including MHS data. Assists with molecular analyses. Participates in MDH ICS outbreak response as well as CDC-sponsored meetings. Serves as a back-up to assign cases to partner services.	Self-taught trainings for MicrobeTrace and Secure HIV- TRACE. National webinars, and technical assistance provided by CDC and/or CSTE.

Staff	**Program** (e.g., Epi, Prevention, Partner Services, etc.)	**Role(s)** (Include all roles staff play during both the detection phase and response activities)	**Program-Specific Trainings** Additional trainings for this role, beyond general MDH or section requirements
Specialty Epidemiologist	Epi and Surveillance	Runs CDC-provided SAS code to conduct time-space analysis of eHARS data. Participates in MDH ICS outbreak response as well as CDC-sponsored meetings. Presents time-space data to management team monthly. For ICS response, maintains internal spreadsheet to monitor labs and other demographics of cases. Is notified when potential outbreak cases are assigned to partner services.	Attended January 2019 CSTE molecular workshop. Self-taught trainings for MicrobeTrace and Secure HIV- TRACE. National webinars, and technical assistance provided by CDC and/or CSTE.
Surveillance Coordinator	Epi and Surveillance	Serves as primary surveillance liaison to HICSB. Conducts molecular analyses. Participates in MDH ICS outbreak response as well as CDC-sponsored meetings. Presents molecular data to management team monthly.	Self-taught trainings for MicrobeTrace and Secure HIV- TRACE. National webinars, and technical assistance provided by CDC and/or CSTE.
District Epidemiologist	Epidemiology Field Staff Unit in IDEPC's Cross-Cutting Epidemiology, Programs and Partnerships	Serves as the coordinator and liaison between MDH and local public health departments involved in the response.	No program-specific trainings.
Medical Director	IDEPC	Assists with clinical guidance and direction, acting liaison with clinically focused entities.	No program-specific trainings.
Communications Specialist	IDEPC Communications	Coordinates all communication efforts needed for the response. Works with MDH Communications team as needed.	No program-specific trainings.
Senior Advisory on Health, Homelessness, and Housing	Infectious Disease Equity and Engagement Unit in IDEPC's Cross-Cutting Epidemiology, Programs and Partnerships	No additional roles.	No program-specific trainings.

Staff	**Program** (e.g., Epi, Prevention, Partner Services, etc.)	**Role(s)** (Include all roles staff play during both the detection phase and response activities)	**Program-Specific Trainings** Additional trainings for this role, beyond general MDH or section requirements
Assistant Section Manager	Management	Monitors availability of and identifies funding sources for response activities and assists with evaluation activities. Provides oversight to the Planning and Improvement Unit staff involved in response activities.	No program-specific trainings.
STD/HIV/TB Section Manager	Management	Oversees and makes final decisions about the management and coordination of detection and response activities and overall direction of the response.	No program-specific trainings.
DHS Ryan White Part B Manager	Minnesota Department of Human Services, HIV Supports, Disability Services Division	Serves as the representative for the DHS Ryan White Part B program at DHS, and coordinates and provides updates on Ryan White funded/coordinated aspects of the response.	No program-specific trainings.
Care Link Services Supervisor	Partner and Care Link Services	Assigns and reviews CLS DIS investigations.	No program-specific trainings.
Partner and Care Link Services Unit Manager	Partner and Care Link Services	Assigns and reviews DIS case investigations, hosts weekly check-ins with DIS, updates the cluster spreadsheet with partner and care link services information, maintains ongoing communication with surveillance, and attends internal ICS meetings, as well as participates in CDC discussions concerning ongoing clusters or outbreaks.	No program-specific trainings.
Partner Services Supervisor	Partner and Care Link Services	Assigns and reviews DIS investigations.	No program-specific trainings.
Disease Intervention Specialists	Partner and Care Link Services, Bois Forte Tribal Nation, Hennepin County Red Door Clinic, Leech Lake Tribal Nation, Native American Community Clinic, and Ramsey County Public Health Clinic 555	Conducts case and contact investigations and interview activities.	No program-specific trainings.

Staff	**Program** (e.g., Epi, Prevention, Partner Services, etc.)	**Role(s)** (Include all roles staff play during both the detection phase and response activities)	**Program-Specific Trainings** Additional trainings for this role, beyond general MDH or section requirements
Planning and Evaluation Specialist	Planning and Improvement	Assists with partner engagement and response evaluation.	No program-specific trainings.
Planning, Evaluation, and QI Coordinator	Planning and Improvement	Provides planning support for ICS, takes notes and schedules meetings, coordinates CODR development, provides response planning support, assists with planning community engagement in the response, leads evaluation processes.	No program-specific trainings.
Harm Reduction Program Director	Prevention	Serves as key contact for syringe services programs involved in the response and ensures client-centered interventions are implemented based on harm reduction model.	Harm reduction trainings
HIV Testing Coordinator	Prevention	Coordinates response HIV testing activities and serves as key contact for external testing agencies. Reviews HIV testing data from grantees.	HIV testing training
HIV Testing Program Supervisor	Prevention	Provides oversight for HIV testing activities included in response efforts.	HIV testing training

Last updated: 03/23/2023

Appendix 4: Data re-release suppression rules for HIV surveillance analysis at geographic areas

OCTOBER 2019

Please refer to Figure 3 on the last page of this appendix for a flowchart of these data re-release suppression rules.

I. Data will be released in aggregate/summary form as follows:

State and geographic areas ≥500,000

- Data will **not** be released (i.e., data are suppressed) if the denominator (i.e., population size) of the population of people living with HIV (PLWH) within a given stratum is <100

Geographic areas <500,000

- Data will not be released if either of the following conditions are true:
  - The denominator of the population of PLWH within a given stratum is <100.
  - The numerator is 1 - 4, for all frequencies and stratifications ≥100 but <500,000.

All geographic levels

- A cautionary note on stability will be included for all levels of analyses when numbers are less than 12, rates are calculated on numbers less than 12, or when trends or estimates are determined to be unstable or unreliable through other statistical methods (e.g., relative standard error).

II. Variables

The main variables of interest covered by the re-release suppression rules are listed below.

General

- Location (state, MSA, MSA subdivision, county, city) based on standard definitions.
- Year (report, diagnosis, death, prevalence, stage of disease, infection [incidence], perinatal exposure).

Demographic/transmission

- Sex at birth (or current gender identity, when available).
- Age group (at diagnosis or calculated age at end of year for prevalence; using five-year groups or larger for state-level and smaller geographic populations).

- Mutually exclusive race/ethnicity (based on OMB and state-specific classifications [i.e., African-born Black, non-Hispanic and non-African-born Black, non-Hispanic]).
- Transmission or exposure category (as defined in *HIV Surveillance Report*).

III. Stratifications (examples)

Stratifications are at the variable level. Note that "male-to-male sexual contact" and the dual "male-to-male sexual contact *and* injection drug use" transmission categories include stratifications by sex (males only) but will be treated as one-way frequency for data releases.

One-way

- Race/ethnicity.
- Sex at birth (or current gender identity, when available).
- Age group.
- Transmission category.

Two-way

- Sex at birth (or current gender identity) and age group.
- Sex at birth (or current gender identity) and race/ethnicity.
- Age group and race/ethnicity.
- Age group and transmission category.
- Transmission category and race/ethnicity.
- Transmission category and sex at birth (or current gender identity).

Three-way

- Transmission category by age group and race/ethnicity
- Transmission category by age group and sex at birth (or current gender identity)
- Transmission category by sex at birth (or current gender identity) and race/ethnicity
- Race/ethnicity by sex at birth (or current gender identity) and age group

Four-way

- Transmission category by age group, race/ethnicity, and sex at birth (or current gender identity)

IV. Geographic areas with ≥500,000 population

Data releases will be limited to presenting measures by the variables of interest noted in section II for MSAs, MSA subdivisions, counties, cities, and other geographic areas with ≥500,000 population.

Suppression rules

A denominator rule of <100 will be applied for all frequencies and stratifications in MSAs, MSA subdivisions, counties, cities, and other geographic areas with ≥500,000 population (i.e., when the stratum-specific population size of PLWH is <100 for a subgroup, count data will not be presented). No numerator suppression rule will be applied if the population size of PLWH is ≥100.

- Totals, one-way frequencies, two-way, three-way, and four-way stratifications (as defined in section III) of variables of interest (including sex at birth, age group, race/ethnicity, and transmission/exposure category) by location (e.g., MSAs, MSA subdivisions, counties, cities, or other geographic areas with ≥500,000 population) and year may be released with the denominator rule suppressing data for stratum-specific populations of PLWH <100.
- Any public release of data that falls outside the scope of these data re-release rules will require discussion with the Minnesota Department of Health (MDH). Refer to section VII for a list of people to contact.

V. Geographic areas with 50,000 to 499,999 population

Suppression rules

Each option for release of data specifies that data will be suppressed. A denominator rule of <100 will be applied for all frequencies and stratifications in areas with 50,000 to 499,999 population (i.e., when the stratum-specific population size of PLWH is <100 for a subgroup, count data will not be presented). In addition, data will be suppressed when numerators are 1 - 4.

- If the release of a total number would allow for calculation of the number for a stratum-specific population that should be suppressed, secondary suppression will be applied by either:
    1. combining two or more categories of data (aggregation of values within the stratification parameter); or
    2. excluding all data in a subcategory (e.g., blocking disaggregation below a pre-selected value for the stratification parameter) across multiple areas.
- Totals, one-way frequencies, two-way, three-way and four-way stratifications (as defined in section III) of variables of interest (including sex at birth, age group, race/ethnicity and transmission/exposure category) by location (e.g., MSAs, MSA subdivisions, counties, cities

or other geographic areas with 50,000 to 499,999 population) and year may be released with the denominator rule suppressing data for stratum-specific populations of PLWH <100 and the numerator rule suppressing data for numerators 1 to 4.

- Any public release of data that falls outside the scope of these data re-release rules will require discussion with MDH. Refer to section VII for a list of people to contact.

VI. Geographic areas <50,000 population

Data will not be released by any area/location with <50,000 population other than counties.

Suppression rules

A denominator rule of <100 will be applied for all frequencies and stratifications in counties with <50,000 population (i.e., when stratum-specific population size of PLWH is <100 for a subgroup, count data will not be presented).

- If the release of a total number would allow for calculation of the number for a stratum-specific population that should be suppressed, secondary suppression will be applied by either:
    1. combining two or more categories of data (aggregation of values within the stratification parameter); or
    2. excluding all data in a subcategory (e.g., blocking disaggregation below a pre-selected value for the stratification parameter) across multiple areas.
- Totals; one-way frequencies; two-way, three-way, and four-way stratifications (as defined in section III) of variables of interest (including sex at birth, age group, race/ethnicity, and transmission/exposure category) by location (i.e., counties with <50,000 population); and year may be released with the denominator rule suppressing data for stratum-specific populations of PLWH <100, and the numerator rule suppressing data for numerators 1 to 4.
- Any public release of data that falls outside the scope of these data re-release rules will require discussion with MDH. Refer to section VII for a list of people to contact.

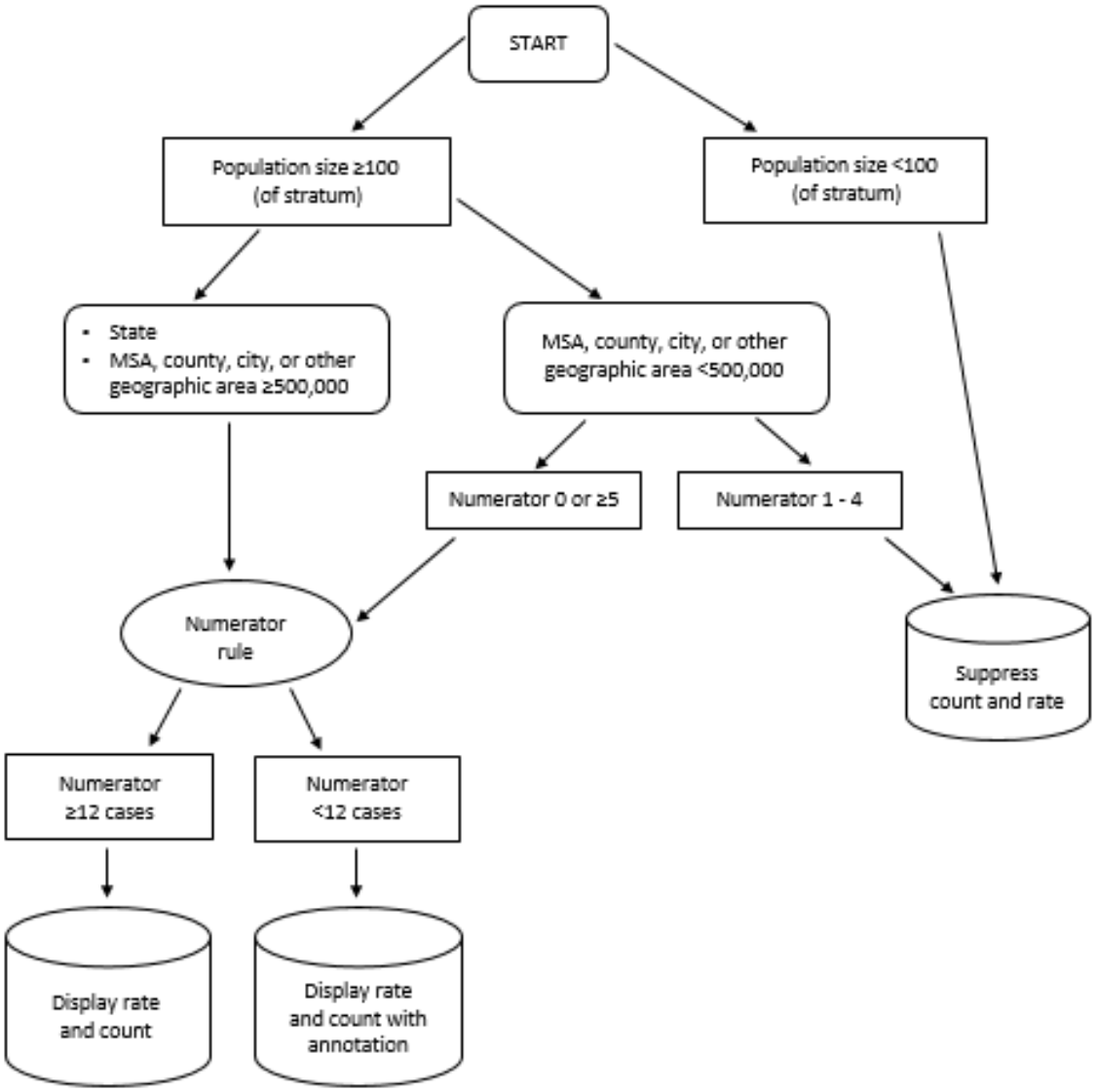
VII. MDH contacts

To discuss public release of data that falls outside the scope of these data re-release rules, or for any other questions related to this document, please contact one of the following three people at MDH (or any future MDH employees who are in these positions):

- HIV Surveillance Coordinator (position is vacant).
- HIV Care and Prevention Epidemiologist (Hannah Kass-Aten).
- Epidemiology and Surveillance Unit Supervisor (Allison La Pointe).

Please call 651-201-5414 to be connected with any of the staff listed above.

Figure 3: Flowchart of Data Re-Release Suppression Rules



Start

- Population size less than 100 (of stratum)
    - Suppress count and rate
- Population size greater than or equal to 100 (of stratum)
    - State or it's a MSA, county, city, or other geographic area with a population size greater than or equal to 500,000
        - Numerator rule
            - Numerator is greater than or equal to 12 cases

        - Display rate and count
    - Numerator is less than 12 cases
        - Display rate and count with annotation
- MSA, county city or other geographic area less than 500,000
    - Numerator 0 or greater than or equal to 5
        - Numerator rule
            - Numerator is greater than or equal to 12 cases
                - Display rate and count
            - Numerator is less than 12 cases
                - Display rate and count with annotation
    - Numerator 1-4
        - Suppress count and rate

Appendix 5: Procedure for the use of eHARS (HIV public health) data in planning, evaluation, and research by Ryan White entities

Background

The Minnesota Department of Health (MDH), under the Minnesota Communicable Disease Reporting Rules, Minnesota Rules, chapter 4605 (www.revisor.mn.gov/rules/4605/), collects public health data relating to HIV/AIDS infection in the state of Minnesota, specifically for preventing the spread of infection. Because MDH is neither a HIPPA entity nor a part of the welfare system, data collected by the HIV surveillance unit are not obtained undersigned informed consents or releases of information from people living with HIV (PLWH) in the state.

Monthly clinical laboratory data — including CD4 and viral load results — are extracted from eHARS and uploaded into CAREWare, the database for Ryan White patients in the state. Data included in the upload are as updated as the eHARS dataset frozen at the time of an upload. The purpose of this upload is to support coordination of care for Ryan White patients between providers within the Ryan White system. This is clearly outlined in the Commissioner of Health's order, section 13.3805, subdivision 1(b)(3):

Private health data may only be used in the following ways: (1) to locate the patient (a case) who has fallen out of care to link the patient back into care, (2) to provide laboratory data to ensure the patient (case) is in care and has reached viral suppression, (3) to have more complete diagnosis status for Ryan White clients, and (4) to understand if a patient (a case) is not locatable due to vital status.

Once eHARS data are uploaded into CAREWare, they are subject to all CDC guidelines for security and confidentiality. This applies to all care coordination and administrative activities at both the Ryan White grantee and subrecipient levels. This procedure only applies to eHARS lab data uploaded into CAREWare, which make up a portion of lab data in the CAREWare database.

Procedure

Whenever a Ryan White entity would like to propose the use of eHARS laboratory data in CAREWare for planning, evaluation, and/or any other use, the following procedures must be followed:

1. **Contact MDH:** To propose a research/evaluation project or presentation, contact one of three staff at MDH. The staff who may be contacted are the HIV Care and Prevention Epidemiologist (Hannah Kass-Aten), the HIV Surveillance Coordinator (position is vacant), and/or the HIV Surveillance Supervisor (Allison La Pointe), or any future MDH employees who are in those positions. This contact may be made through either phone call, email, or in-person meeting.
2. **Describe the proposed analysis/research project:** Submit a written description of the proposed analysis or research project, including exactly which eHARS data will be used,

who has requested the analyses, who will have access to data, how confidentiality will be ensured, and data re-release guidelines met, how the analyses will be conducted, and how the results of all analyses will be shared. At this point in the process, any of the MDH staff described in step one will approve or deny the request, subject to any additionally requested information for clarification.

3. **Coordinate with MDH staff to complete analyses:** MDH employs three epidemiologists in the HIV surveillance unit who, with some lead time and planning, are available for data analysis projects. Any Ryan White entity may request data analysis support from MDH for these kinds of analyses. Decisions about who will analyze eHARS data and how they will be analyzed must be made in consultation with any of the MDH staff described in step one of this procedure.
4. **Submit drafts of any public release of eHARS data:** Once analyses are complete and any drafted publications, tables, and/or presentations are ready, they should be submitted to the MDH staff member who initially approved the analysis project. MDH staff will help to ensure proper scientific interpretation of eHARS data analyses and provide approval for all public releases of data.

Failure to follow procedure

Because eHARS data are collected by MDH under the guidelines set by CDC and the Minnesota Communicable Diseases Reporting Rule, MDH reserves the right to update this procedure at any time. Failure to follow this procedure may result in reconsideration of lab data sharing for planning, evaluation, and any other research purposes in the Ryan White system.

5/9/19

Appendix 6: Funded and nonfunded MDH partners

Table 6: MDH-Funded Partners

Agency Name	HIV Testing Programs	Syringe Services Programs	PrEP Programs	PrEP Integrated Services	Linkage to Care	Other Harm Reduction
African American AIDS Task Force	Yes	No	No	Yes	Yes	Yes
Aliveness Project	Yes	Yes	No	Yes	Yes	Yes
Annex Teen Clinic	Yes	No	No	Yes	Yes	Yes
Lutheran Social Services	Yes	No	No	Yes	Yes	Yes
Minnesota Community Care	Yes	No	No	Yes	Yes	Yes
Native American Community Clinic	Yes	Yes	No	Yes	Yes	Yes
NorthPoint Health & Wellness Center	Yes	Yes	No	Yes	Yes	Yes
Planned Parenthood	Yes	No	No	Yes	Yes	Yes
Ramsey County/Clinic 555	Yes	Yes	Yes	Yes	Yes	Yes
Red Door Clinic-Hennepin County	Yes	Yes	Yes	Yes	Yes	Yes
Southside Harm Reduction Services	Yes	Yes	No	Yes	Yes	Yes
Harm Reduction Sisters	Yes	Yes	No	Yes	Yes	Yes
Rural AIDS Action Network	Yes	Yes	No	Yes	Yes	Yes
Sub-Saharan African Youth and Family Services in Minnesota (SAYFSM)	Yes	No	No	Yes	Yes	Yes

Last updated: 03/20/2023

Table 7: Non-MDH-funded partners

Agency Name	Housing Services	Substance Use Disorder Treatment	Health Care Related Services	Mental Health Services	Syringe Services	HIV/Hep C/Syphilis Testing	PrEP Services/PrEP Integration	Other Harm Reduction Services
Clare Housing	Yes	No	No	No	No	No	No	No
Hennepin County Health Care for the Homeless	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Park House	Yes	Yes	No	No	No	No	No	No
Agate MN	Yes	No	No	No	Yes	No	No	Yes
Urban Homeworks	Yes	No	No	No	No	No	No	No
VA Addiction Recovery Services	No	Yes	No	Yes	No	No	No	No
Sex workers outreach project (SWOP)	No	No	Yes	No	No	No	No	Yes
CHUM Duluth	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Valhalla Place	No	Yes	No	Yes	Yes	No	No	Yes
Recovery Alliance Duluth	No	No	Yes	Yes	No	No	No	Yes
Health Finders Collaborative	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rainbow Health	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Indigenous Peoples' Task Force	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Last updated: 03/20/2023

Appendix 7: Public engagement spectrum

Table 8: Spectrum of Public Engagement

	INFORM	CONSULT	INVOLVE	COLLABORATE	SHARED LEADERSHIP (Empower)
Public Engagement Goal	To provide the public with balanced and objective information to assist them in the understanding the problem, alternatives, opportunities, and/or solutions.	To obtain public feedback on analysis, alternatives, and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
Promise to the Public	We will keep you informed.	We will keep you informed, listen to, and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to maximum extent possible.	We will implement what you decide.
Examples of Activities	▪ Fact sheets. ▪ Websites. ▪ Open houses. ▪ Press releases. ▪ Information sharing through social media.	▪ Public comment. ▪ Focus groups. ▪ Surveys. ▪ Town halls or other public meetings. ▪ Information gathering through social media.	▪ Workshops. ▪ Round tables. ▪ Panels. ▪ Work sessions. ▪ Brainstorming sessions. ▪ Interactive webinars. ▪ Conferences.	▪ Advisory committees. ▪ Planning committees or subcommittees. ▪ Task forces or work groups. ▪ Online community forums and groups.	▪ Steering committees. ▪ Policy councils. ▪ Standing committees. ▪ Citizen juries. ▪ Ballots.

This public engagement spectrum was adapted from the International Association for Public Participation (IAP2).

Appendix 8: Process for responding to HIV concerns reported by community partners

4/22/2021

Purpose

The purpose of this document is to outline the steps that the STD/HIV/TB Section will take when they receive a report from community partners about a suspicious or concerning trend in new HIV cases. Community partners may include: MDH grantees, community-based organizations, medical providers, outreach workers, et al.

Process for reporting concerning trends to MDH

- Preferred method: Call the IDEPC Division at 651-201-5414 and ask for the HIV testing program or Partner Services.
- Other ways we may hear of concerns that would result in making a report (expressing a concern):
  - Grantees may call (or email) their MDH grant manager. If grantees include a concern in submitted reports to MDH, the grant manager should follow up with the grantee and complete a report form if necessary.
  - Community providers or partners may call STD/HIV/TB staff they have a prior relationship with.

Steps

- **Step 1**: Staff receiving the information will complete an HIV Concerning Trend Report Form, including as much of the following information as possible:
  - Description of concern.
  - Case demographic information: name, DOB, gender at birth, address, phone number, risk information, and housing status.
  - Cluster information (if appropriate): cluster location, risk information, and transmission activity.
  - Name of caller, organizational affiliation, phone number.
- **Step 2:** If a named individual or individuals are provided in the intake form, the staff completing the case intake form will send an encrypted email to Surveillance staff at Health.HIV.Surveillance@state.mn.us.
  - Surveillance staff will use the report to confirm case status.
- **Step 3:** Surveillance staff schedules a meeting with STD/HIV/TB Section staff to review reported concerns and outcome of initial investigation.
  - Initial meeting should include a representative from:
    - Surveillance.

    - Partner Services.
    - Prevention.
    - Grant manager, if the report is coming from an MDH grantee.
  - Inform programs and program managers.
    - Small scale concern: engage the programs with an FYI to the program manager.
    - Identify initial activities needed:
      - Re-interviews, more case investigation, outreach testing event, etc.
- **Step 4:** Follow up with person or community-based organization (CBO) who made the report.
  - Collect additional information, as needed.
    - Discuss any information gaps.
    - Inquire about existing contracts that could help respond to the issue.
    - Explore how MDH can support a response.
  - Invite the CBO or partner organization to discuss and to develop an action plan for specific cases or in response to the concern, as needed.
  - Inform the person or organization who make the case report the result of review or assessment, including if no further action is taken as a result of the report.
- **Step 5:** Finalize and implement action plan.
  - Identify action plan activities, including:
    - Education and training.
    - Communication and networking.
    - Resources and support.
  - Use routine engagement activities, as appropriate, to inquire about areas or patterns of concern, such as:
    - Provider Learning Series.
    - Testing data in EvaluationWeb.
    - Grantee progress reports and check-ins.
    - Quarterly all-grantee Teams meetings.
  - Use internal meetings to share and discuss areas of concern, including:
    - Partner Services chalk talk meetings.
    - Grant manager meetings.

    - Section meetings.
    - Meeting with other sections.
- **Step 6:** Continue assessing and monitoring data.
    - Conduct ongoing surveillance and partner services data monitoring.
    - Surveillance can run data checks more frequently to monitor for a potential outbreak and do other surveillance activities that will help in the response to the concern(s).

Appendix 9: Report form

Concern for Trend in New HIV Cases Report*

INTERNAL USE ONLY

The purpose of this form is to document when the Partner and Care Link Services and Prevention Units receive a report from community partners about a suspicious or concerning trend in new HIV cases. Community partners may include: MDH grantees, community-based organizations, medical providers, outreach workers, etc.

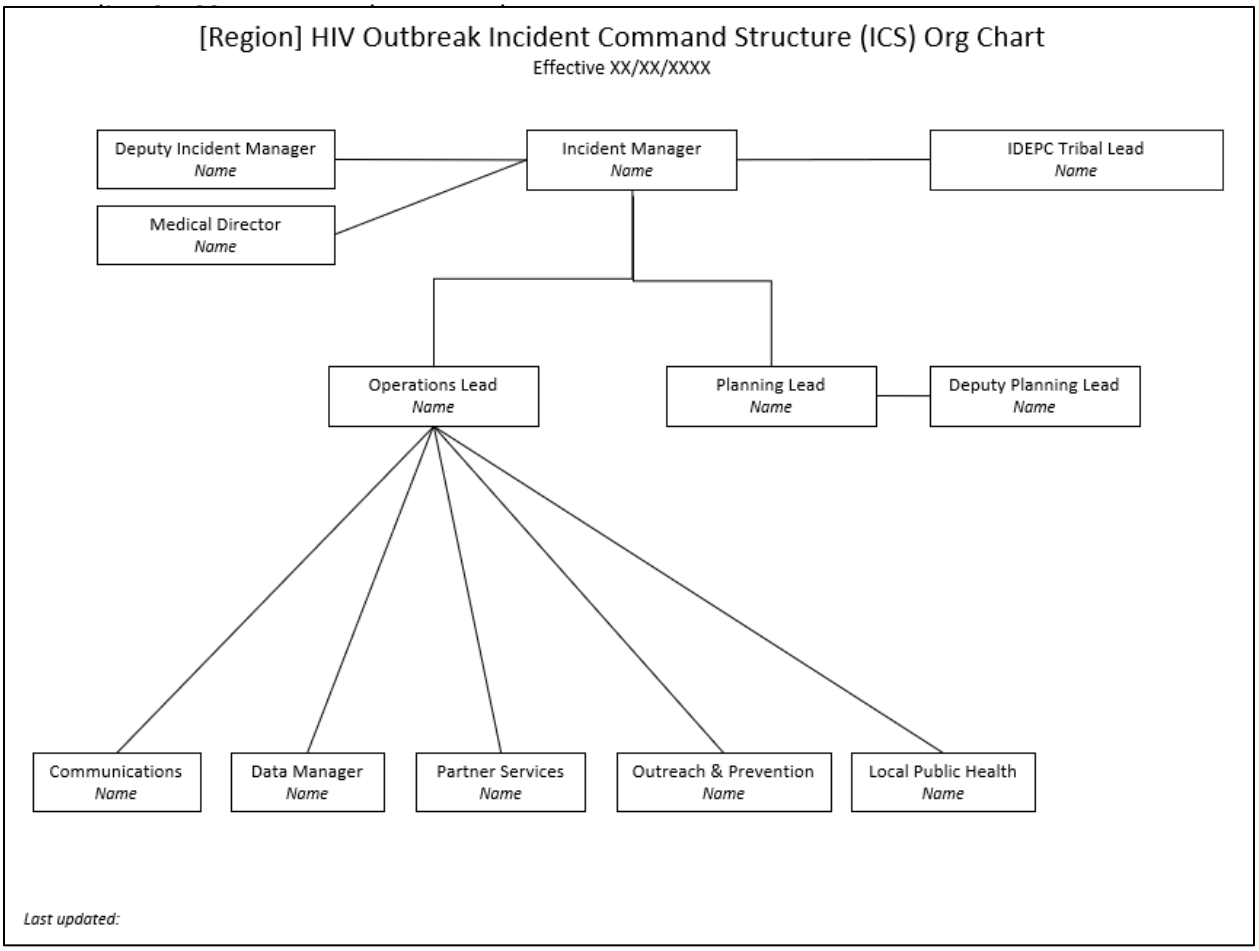
Report date:	**Report taken by:**
Name of Caller:	**Organization:**
	Phone:

Description of Concern:				
Case/suspected case name:	**DOB:**	**Gender at birth:**	**Risk information:**	**Housing Status:**
Address:				
Home phone number:	**Cell number:**	**Other number:**		

Cluster Information	
Cluster location:	
Risk information:	
Transmission activity:	

**Submit the completed report form to HIV Surveillance*

Appendix 10: ICS structure chart template



Appendix 11: ICS roles and responsibilities

Table 9: MDH ICS Roles and Responsibilities

Staff are in the STD/HIV/TB Section unless otherwise indicated.

ICS Role	Staff	Responsibilities
Incident Manager	Section Manager	Approves outbreak response initiation and budget. Keeps MDH leadership informed about outbreak response activities and progress. Provides CDC with status updates. Establishes and oversees implementation of incident objectives, strategies, priorities, and activities. Maintains overall responsibility for managing the outbreak response.
Deputy Incident Manager	Identified by Section Manager	Serves as the Incident Manager when Section Manager is not available. Assists the Incident Manager as directed.
Medical Director	IDEPC Medical Director	Assists with drafting and approving clinical guidance and HANs. Provides clinical direction to IDEPC and Section staff. Liaises with clinically focused associations and organizations.
Operations Lead	Prevention Unit Manager or designee	Oversees response activity operations. Communicates and follows up with ICS leads and staff implementing strategies and activities.
Data Management Lead	Epi and Surveillance Unit Manager	Oversees all surveillance data and analysis, including data entry and case report forms, follow up with reporting providers, and enhanced surveillance.
Communications Lead	Communications Unit Staff	Develops communication plan. Assists with HANs and other communications, creates materials, manages social media and website updates, and additional deliverables.
Partner Services Lead	PCLS Unit Manager or designee	Oversees partner and care link services investigative activities.
Testing, Awareness and Provider Education Lead	Prevention Unit Manager or designee	Coordinates testing supplies and incentives as available, provides HIV testing to new providers, communicates with providers, and assists with engagement activities.
Local Public Health (LPH) Representative	IDEPC Epi Field Staff	Liaises with LPH in local jurisdictions. Discusses epi data when needed (regionally). Conducts training when needed.
Tribal Relations Representative	IDEPC Tribal Lead	Communicates with tribes regarding outbreaks. Coordinates with the Section and provides guidance. Participates on ICS teams, as needed. Communicates with Metropolitan Urban Indian Directors (MUID), as needed.
Planning Lead	Planning, Evaluation, and QI Coordinator	Creates and maintains documentation. Schedules meetings and takes meeting notes. Works with Incident Manager, Deputy Manager and Operations Lead. Oversees planning, assists with evaluation.

ICS Role	Staff	Responsibilities
Finance and Administration Lead	Assistant Section Manager	Facilitates financial tasks. Initiates time tracking studies, if needed.
Logistics Lead	TBD, as needed	Arranges for resources to support the response. Provides scheduling, ordering, and administrative support.

Last updated: 03/20/2023

Appendix 12: HIV cluster ICS meeting agenda template

HIV Cluster ICS Meeting Agenda Template

Date: XX/XX/XXXX

Epi Update

- Epi Updates, Including Time-Space and Molecular
- Partner Services
- Coinfections

Response Activities Updates

- Overall Response
- Surveillance and Data Management
- Partner Services
- Communications
- Training and Education
- Testing and Outreach
- Working with Tribal Partner and Organizations that Serve American Indians
- Local Public Health
- Department of Human Services
- Planning
- Finance

Any other updates, issues, or questions?

Wrap up

- Recap/identify any next steps
- Upcoming meetings

Appendix 13: Outbreak tracker template

[Outbreak Name] Tracker

LAST UPDATED:

Summary and Background

Case Definition

Goals and Objectives

Response Activities Updates

Overall Response

Lead:

Action Step	Target Date\	Lead(s)	Status	Comments

Surveillance and Data Management

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Partner Services

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Communications

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Training and Education

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Testing and Outreach

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Working with Tribal Partners and Organizations that Serve American Indians

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Local Public Health

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Department of Human Services

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Planning

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Finance

Lead:

Action Step	Target Date	Lead(s)	Status	Comments

Appendix 14: HIV CODR measures

Note: MDH is currently revising this list of measures.

Description

The following provides background and a list of currently available data that was identified to potentially monitor and evaluate HIV cluster and outbreak response activities, as described in the HIV Cluster and Outbreak Detection and Response (CODR) Plan.

Purpose

The purpose of using measures to monitor and evaluate activities is to ensure:

- Accountability: We follow our plan(s) and make progress on our goals.
- Insight: We use data to assess the impact of our activities and identify areas that need attention.
- Informed decision-making: We use data to make decisions; we adjust as changes are needed.
- Transparency: We communicate and share information about our activities.
- Capacity building: We incorporate evaluation and monitoring practices into our work.

Uses

The HIV CODR measures will be used for:

- HIV outbreak response midpoint evaluations.
- HIV outbreak response after-action evaluations and reports.
- Other HIV ICS meeting discussions, as determined.
- Monthly check-in calls with CDC, as determined.

These measures may also be used for:

- Community presentations: Sharing information or lessons learned with community partners.
- National presentations: Sharing information or lessons learned with state or national colleagues.
- Grants: Informing future grant processes.

These measures are meant for internal evaluation and monitoring and do not replace the reporting requirements to CDC.

Assumptions

The following assumptions were made about monitoring and evaluating HIV outbreak response activities:

- Use currently available data.
- Measures can be revised and added in the future as staff capacity increases.
- Use quantitative and qualitative data to build a fuller picture.
- Use meaningful data. Consider what will inform activities and decisions.
- Consider data and sharing of data for all areas of response activities, including internal coordination, collaboration, community partnerships, activity efforts, etc.
- Consider different types of measures.
  - Capacity measures: the capacity to conduct each service.
  - Process measures: the processes used to conduct each service.
  - Outcomes measures: the results of the services.

Proposed measures

The following is a list of HIV-related data that the STD/HIV/TB Section currently has available. This compiled summary is not exhaustive. Some measures may or may not be applicable for a specific outbreak depending on the impacted population and case definition, while other meaningful measures may not be listed below. Staff can use this list to identify relevant measures for monitoring current outbreak response activities.

Communications

- HIV outbreak monthly GovDelivery messages.
  - Date range.
  - Number of messages sent.
  - Number of recipients and number of opens (range, average).
- Promotional items and condoms distributed to outbreak areas.
  - Number and type of items distributed.
  - Number and name of organizations receiving items.
- Social media posts focused on HIV prevention and testing.
  - Number of posts.
  - Reach of each post.
- HAN messages.

  - Number of messages sent.
- Virtual town halls related to HIV outbreak.
  - Number of registrants.
  - Number of unique viewers.
  - Evaluation survey results.

Epi and Surveillance

- Demographics (number/percentage).
  - Age.
  - Sex.
  - Race.
  - Ethnicity.
- Transmission category (number/percentage).
- Stage zero at HIV diagnosis (number/percentage).
- Linked to care (under 90 days) (number/percentage).
  - If yes, criteria used to determine linkage.
- Most recent viral load test was within six months (number/percentage).
- Most recent viral load test was within the past 12 months (number/percentage).

Partner and Care Link Services

- Number/percentage of new cases assigned to disease intervention specialists (DIS).
- Number/percentage of cases interviewed by DIS.
- Number of unique partners named ("named" partners are initiated for follow-up by DIS).
- Types of partners (drug, sex, or both) (number/percentage).
- Number of partners HIV tested.
- HIV test results of partners (number/percentage).
- Number/percentage of cases linked to or reengaged in care as a result of partner or care link services.
- Number of previously diagnosed cases re-interviewed.
- Number of previously diagnosed cases reengaged in care as a result of PCLS.

Planning

- Number of ICS meetings.
- Number of MDH and CDC monthly calls.
- Tracker.
  - Number of documented activities.
  - Number/percent of completed activities.
  - Number/percent of ongoing activities.
  - Number/percent of “in progress” activities.
- HOPE meetings.
  - Number of meetings.
  - Number of organizations represented.
  - Number of new activities initiated.
  - Evaluation survey results.
  - Qualitative data regarding accomplishments and lessons learned, etc.
- Number of outbreak related presentations (in person or virtual).

Prevention

- All data are for MDH grantees only.
- Number of HIV tests by MDH grantees.
  - Number of HIV tests by race and ethnicity.
- Number of syringes given (passed out) by MDH grantees.
- Number of used syringes received by syringe services programs (SSPs).
- Number of HIV tests by SSPs.
- Number of condoms distributed.
- Number of linkages to PrEP.

Last updated: 6/24/2021