Agenda

• Orientation to On24
• Check-in
• Massachusetts placeholder title
  • Kathleen Roosevelt, MPH
  • Q&A and discussion
• Vermont placeholder title
  • Daniel Daltry
  • Q&A and discussion
• Closing
EXPANDING THE ROLE OF DIS IN MASSACHUSETTS

CSTE/HealthHIV Webinar
September 25, 2019

Kathleen Roosevelt
Director, Division of STD Prevention
Bureau of Infectious Disease and Laboratory Sciences
Overview

**Background:** Over the past five years, the role of DIS in Massachusetts has significantly changed. Elements of this shift include embedding in a newly procured service system, migration to a new case management system, the new title of field epidemiologist, new follow-up procedures and doubling of field staff.

**Field Expansion Topics:**

- The HIV surveillance and prevention framework in Massachusetts
- Re-defining the DIS role
- Responding to HIV clusters and outbreaks
- Implementing routine HIV field follow-up
Priority Infections receive follow-up from health departments for:

- Partner services
- Verifying treatment and linkage to care
- Providing technical assistance around CDC clinical recommendations

Health departments vary by state/jurisdiction

Follow-up in MA:

- Pregnant women with syphilis/acute HIV/ceftriaxone resistant GC = highest priority
- Primary and secondary syphilis and routine new HIV cases
- Out of care PLWHA (limited to certain sites/providers for automatic follow-up)
- Provider requests for untreated GC/CT in pregnant patients
Definition of Contact Tracing: The identification and follow-up of persons who may have come into contact with an infected person during a specified time period.

Very resource intensive:
- Contact original patient (assist with treatment if needed)
- Work with original patient to identify any exposed individuals
- Tracking down exposed individuals
- Getting identified individuals screened and treated (if needed)
- Do the whole process again if contacts turn out to be infected

Principles of Partner Services in MA:
- Voluntary
- Confidential
- Client Centered
- Standard Public Health Practice for Infectious Disease Control
• **Office of HIV / AIDS** is a Division of the BIDLS that oversees HIV prevention efforts including expanding comprehensive health promotion for PWID and oversight of the contracted service system that provides testing, linkage and care across MA

• **HIV Surveillance** is housed within the **Division of STD Prevention**

• **Field Epidemiologists** (formerly DIS) are housed within the **Division of STD Prevention**
From DIS to Field Epidemiologist

Changing the terminology and the role:

• From 8 DIS in 2016 to 18 Field Epidemiologists in 2019
• DIS were employed under several official job grades
• Field Epidemiologists are all categorized as Epidemiologist I
  • Pros and cons:
    • Increased starting salary
    • Recruitment improved
    • Requirements for entry-level experience and education increased
  • Efforts to improve visibility and inclusiveness to reflect populations served
    • Spanish language coverage across state, at least 3 other languages represented
Identifying challenges and addressing them – public health:

• Integrating surveillance and case management systems
  • HIV data migrated into the BIDLS MAVEN integrated system in 2018
  • Streamlining data workflows
  • Improving cross-jurisdictional communication and deduplication

Identifying challenges and addressing them - clinical:

• Clinical provider “buy-in” essential
  • Site visits
  • Collaboration
  • Ongoing effort
• Appropriate Introduction of the service is key to success
  • At the time of testing: “if you test positive for HIV or syphilis a member of our public health team may contact you to discuss the test results and how to get your partners tested.”
Field Follow-up Process in Massachusetts

CRFs and positive lab results are sent via paper and electronic methods

Integrated surveillance program triages labs based on patient history

Cases meeting follow-up criteria are placed in a workflow for review and assignment

Field epidemiologist receives assignments & contacts providers

Partners are referred to clinic for screening, treatment, and evaluation

Field epidemiologist locates partners elicited during interview

Field epidemiologist meets with patient to discuss testing results, health history & offer partner services
Expanding HIV Field Follow-up

- Data to care work
  - Projects working with specified sites to identify out-of-care patients
  - Line list generation
  - Field response

- Acute HIV response based on laboratory data

- Response for PWID
  - Using HCV as a proxy for prioritizing follow-up
Cluster Investigation Timeline

- **2015:** Data to care projects, acute HIV f/u, provider request
- **August 2016:** First Community Stakeholder Engagement
- **November 2017:** Clinical Advisory and began routine field follow-up on cases with IDU risk
- **April 2018:** CDC Epi-aid
- **January 2019:** Routine HIV field follow-up

**Additional Events:**
- **August 2016:** Field Epi & Provider Alert
- **May 2017:** First samples to CDC for sequencing
- **December 2017:** Routine Molecular Surveillance initiated
- **August 2018:** Field Expansion & Ongoing analysis & investigations

Massachusetts Department of Public Health mass.gov/dph
Molecular epi as a tool for cluster detection

- A transmission cluster can’t always be detected as an increase in diagnoses
  - If it’s not localized to a certain area
  - If it’s occurring in an area with a lot of diagnoses, making it hard to detect the increase
- Molecular analysis can help by detecting groups of people with similar sequences
- In the United States, HIV drug resistance testing is recommended for all persons with HIV
  - Generates HIV nucleotide sequence data (i.e., molecular data)
Cluster / Outbreak Follow-up

Case Definition

- Epidemiologically-linked Case:
  - E1: Confirmed HIV infection diagnosed between 2015-2018 in a person who inject drugs (PWID) with reported personal experience in Lawrence, MA or Lowell, MA (L/L) defined as:
    - Diagnosed with HIV in L/L
    - Received medical care (inpatient or outpatient) in L/L
    - Resided in L/L or experienced homelessness in L/L
    - Known participation in injection drug use in L/L
  - E2: Confirmed HIV infection diagnosed between 2015-2018 in a named partner (P1: sex partner, P2: needle-sharing partner, P3: sex and needle-sharing partner) of an E1 case (as above).

- Molecularly-linked Case (only):
  - Confirmed HIV infection diagnosed between 2015-2018 in a person without a known epidemiologic link but with a viral sequence that is molecularly linked to an epidemiologically-linked case (as above) at a genetic distance threshold of ≤1.5%.

Molecular linked many new cases

- 86 cases (epi cases only)
- 129 cases (epi and molecular cases)
Cluster / Outbreak Follow-up

HIV Cluster Diagnoses by Exposure Mode

- IDU Related
- Non-IDU Related
- Unknown
- Cumulative Number of Diagnoses

Number of Diagnoses

Cumulative Number of Diagnoses

Month of HIV Diagnosis

2015-01 to 2018-05
Main Field Epi Objectives:

• Identify partners who need notification, testing and/or treatment
  • Enroll negative partners on PrEP
• Ensure linkage to care and create a retention plan with the patient
• Prevention messaging (U=U Undetectable is Untransmissible)
• Obtain case reporting form (CRF) data from provider and Interview data from patient as part of follow up
Benefits to HIV Surveillance:

• Faster CRF Return
• Time for surveillance epidemiologists to perform analysis projects
• Improve accuracy of data
  • Reduce NIRs – “no identified risk” (risk information gathered from both patient and provider)
  • Current address / living situation and demographic information from patient
• More timely data collection
Evaluation and Program Improvement

• Data Review
  • Reconciling surveillance and field epi data
  • Ensuring program goals are being met
• Training opportunities
• Conference participation
• Publication and other data dissemination
Connect with DPH

@MassDPH

Massachusetts Department of Public Health

DPH blog
https://blog.mass.gov/publichealth

www.mass.gov/dph
Thank You!

Kathleen Roosevelt
Kathleen.Roosevelt@state.ma.us
HIV Partner Services

An exploration of the use of Disease Intervention Specialists in Vermont

0925/2019
Pursuant to Vermont statute 18 V.S.A. § 1001, the Reportable and Communicable Diseases Rule requires that cases of HIV and AIDS are reported to the Health Department. Section 6.1 of the Rule also specifies that the following laboratory values, related to HIV/AIDS, are reportable:

- CD4+ T-lymphocyte counts of less than 200 cells/uL (amended to all CD4 counts in 2019)
- CD4+ percentage of less than 14% (amended to include all reported percentages in 2019)
- HIV viral load measurement (including non-detectable results)
- All HIV subtype and HIV nucleotide sequence data from antiretroviral drug resistance testing (added in 2019)
The Vermont Department of Health has an integrated approach to HIV surveillance and HIV prevention, under the HIV/STD/Hepatitis Program.

**Staff use a combination of reportable disease reports**
- Reportable laboratory values
  - CD4
  - Viral load
  - P24 antigen/antibody tests
- HCV, GC/CT site specific values, syphilis

**Information gathered through interviews to:**
- identify previously unreported cases of HIV
- investigate risk networks with the goal of identifying HIV positive persons that are unaware of their HIV status and linking them to HIV care.
Disease Intervention Specialist (DIS) seek to:

- Interview individuals newly diagnosed with a reportable sexually transmitted infection (including HIV/AIDS)
- Educate the individual about the disease for which they were diagnosed
- Identify with the individual in how best to notifying individuals of potential exposure to that infection
menu selections of the day

HIV
- All new HIV Infections
- All non-suppressed viral loads

Gonorrhea
- All MSM rectal infected cases
- PrEP Assessment, Referral, Linkage

Syphilis
- All MSM infectious cases
- PrEP Assessment, Referral, Linkage

Hepatitis C
- All acute cases
- HAV and HBV vaccination
- PrEP Assessment, Referral, Linkage

HIV Medication Assistance Program
- All new applications
- All members in jeopardy of being closed
Value of DIS

- Ultimately DIS services are timely
- Play a critical role interrupting the disease transmission cycle while minimizing the impact to community
- DIS are often deployed to the field to interview individuals newly diagnosed with an infection
- DIS will find and meet with sexual contacts of the original patient (OP) with the diagnosis, and offer point of care testing to sexual contacts as consent is obtained
- DIS play a critical role in the linkage to medical care and to that end, the overall continuum of care
- DIS can be the first to detect a HIV cluster or outbreak
Partnership is Paramount

Surveillance
- HIV Surveillance can record search to see if there is a match on cases from other states
- Run HIV Trace or Micro-trace to show connections among cases
- Identify viral loads among patients identified (infectious or not)

DIS
- Help expedite timely and complete case report forms
- Identify trends before there is a cluster or outbreak
- Ensure linkage to care or re-engagement in care for folks that have fallen out

The Vermont Department of Health is fortunate to have a long-standing, collaborative relationship with the primary provider of HIV medical in the state, the University of Vermont Medical Center Comprehensive Care Clinics
Coordination is Imperative

When we had a cluster detected we:
- Informed key community funded organizations
- Educated our HIV community planning body
- Gained support from our community planning body for genomic surveillance
- Held targeted community action meetings

Fear of outbreak has passed; it was just a couple of clusters but still we

Set in place a weekly HIV surveillance meeting
- Review daily data to action tracking tool
- Identify gaps or services needed
- Create plans for community follow up and engagement
Thank you!

Evaluation: https://cste.co1.qualtrics.com/jfe/form/SV_3pG8H5Fl8W4RMtT