

# Adapting Data Systems to Support Integrated STD/HIV Field Investigations at the Local Level

**A Regional Response to End the HIV Epidemic in California**

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1/24/2020





# Overview

- Background
- CaIREDIE STD/HIV Field Investigation Incident (SHFII)
- Local Interventional Surveillance Access (LISA)



## Background:

# Public Health Activities on Reported Cases of HIV/STD

- Linkage/re-engagement in HIV care
- Tx verification or referral (STD)
- HIV/STD/HCV testing
- HIV pre-exposure prophylaxis (PrEP)
- Referral to other services
- Contact tracing (+ above, as appropriate)

## Background:

### Data Collection – Prior Approach (RED = Database)

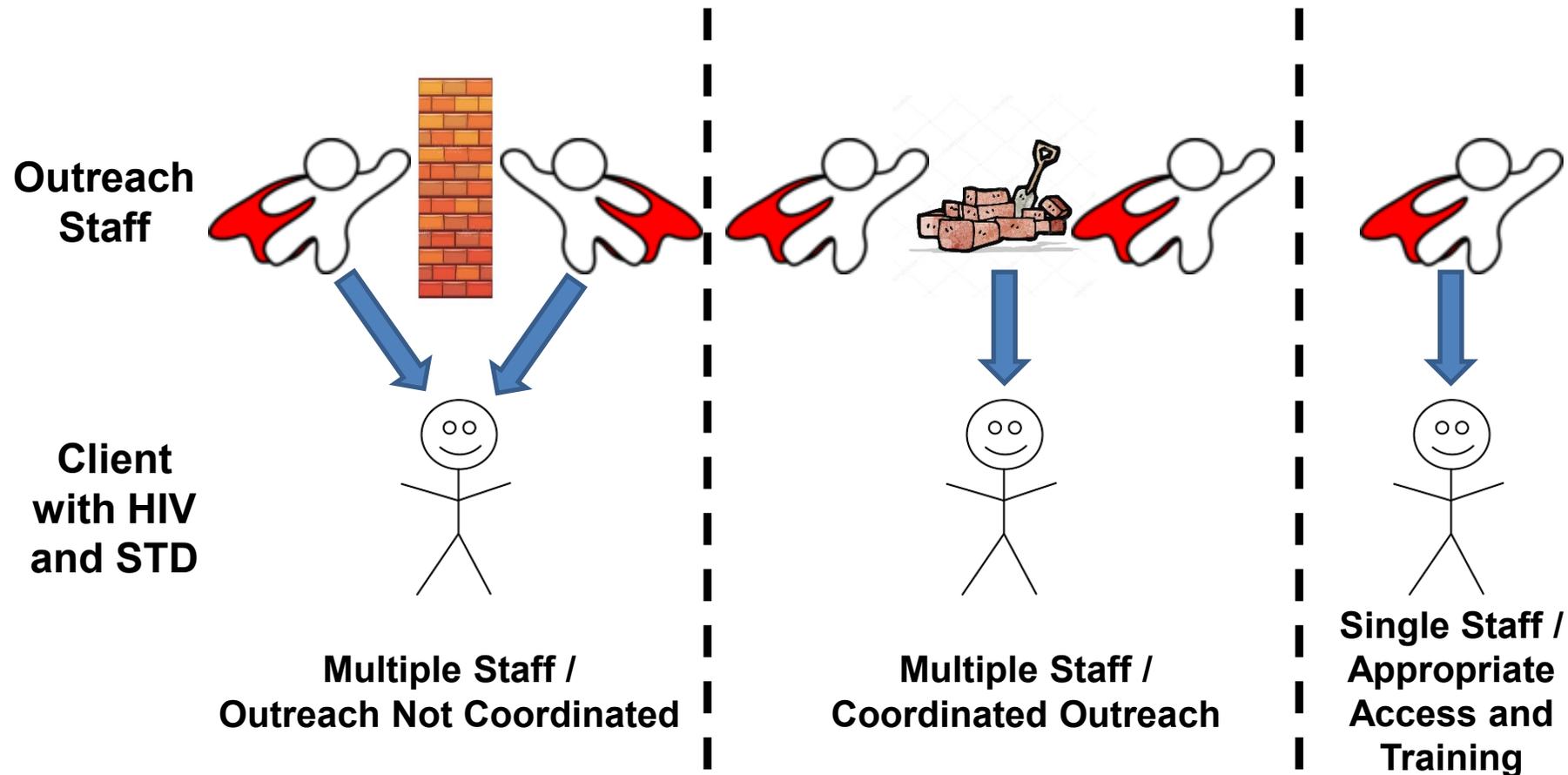
#### ▪ Contact Tracing:

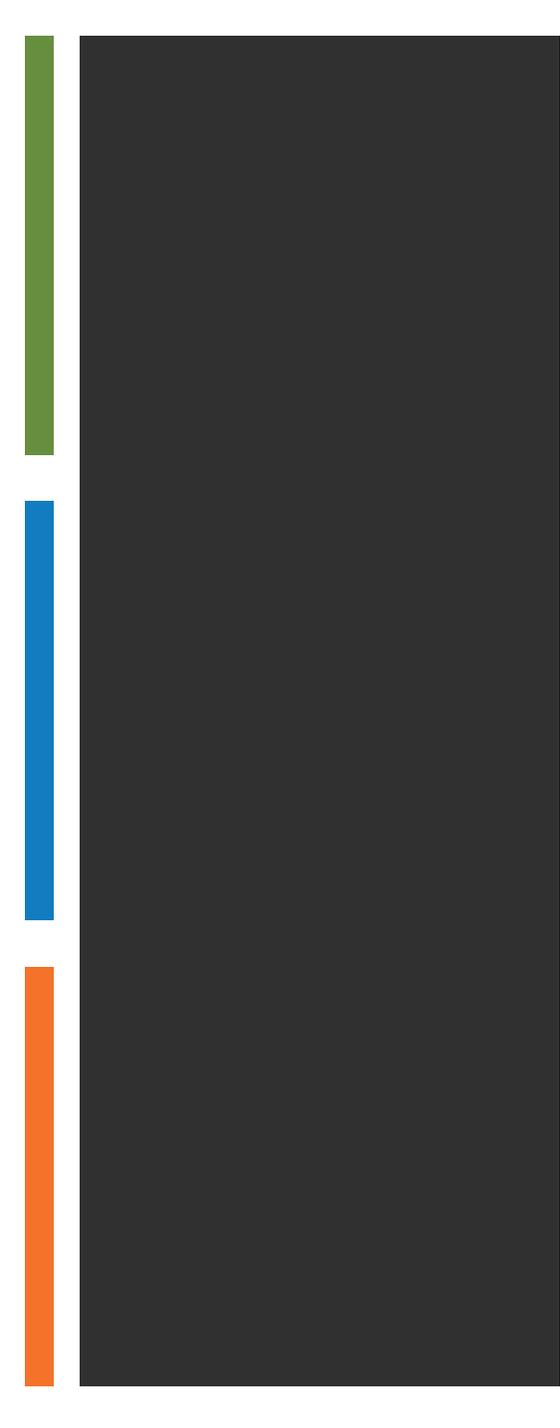
- 1) HIV only → **LEO**
  - HIV Testing Encounter
  - Risk Reduction Activities Encounter
  - Stand Alone Partner Information Form
  
- 2) Ryan White funded → **ARIES**
  - 1) STD only or STD + HIV → **CalREDIE**

#### ▪ Linkage/Re-engagement in care:

- 1) HIV only → **LEO**
  - HIV Counseling Information From (CIF)
  - Health Care HIV Test From (HTF)
  - Risk Reduction Activities (RRA) Form
  
- 2) Ryan White funded → **ARIES**
  
- 3) If co-infected with STD → **CalREDIE** (duplicate data entry)

# Variation among LHJs in level of Integration for STD/HIV Field Investigations





# **STD/HIV Field Investigation Incident (SHFII)**

# STD/HIV Field Investigation Incident (SHFII)

- A recently developed incident in CalREDIE that will be used to document health department follow-up activities for reported cases of STD and HIV

## Disease Incident

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Patient: Pilgrim, Scott      Incident ID: 2492099      Process Status: In LHD Review  
DOB: 06/25/1972      Disease: STD/HIV Field Investigation Incident      Resolution Status: Suspect

Patient    Tracking    Linkage to Care    Risk Info    Contacts    Case Investigation

\* Disease Being Reported    STD/HIV Field Investigation Incident    ▼

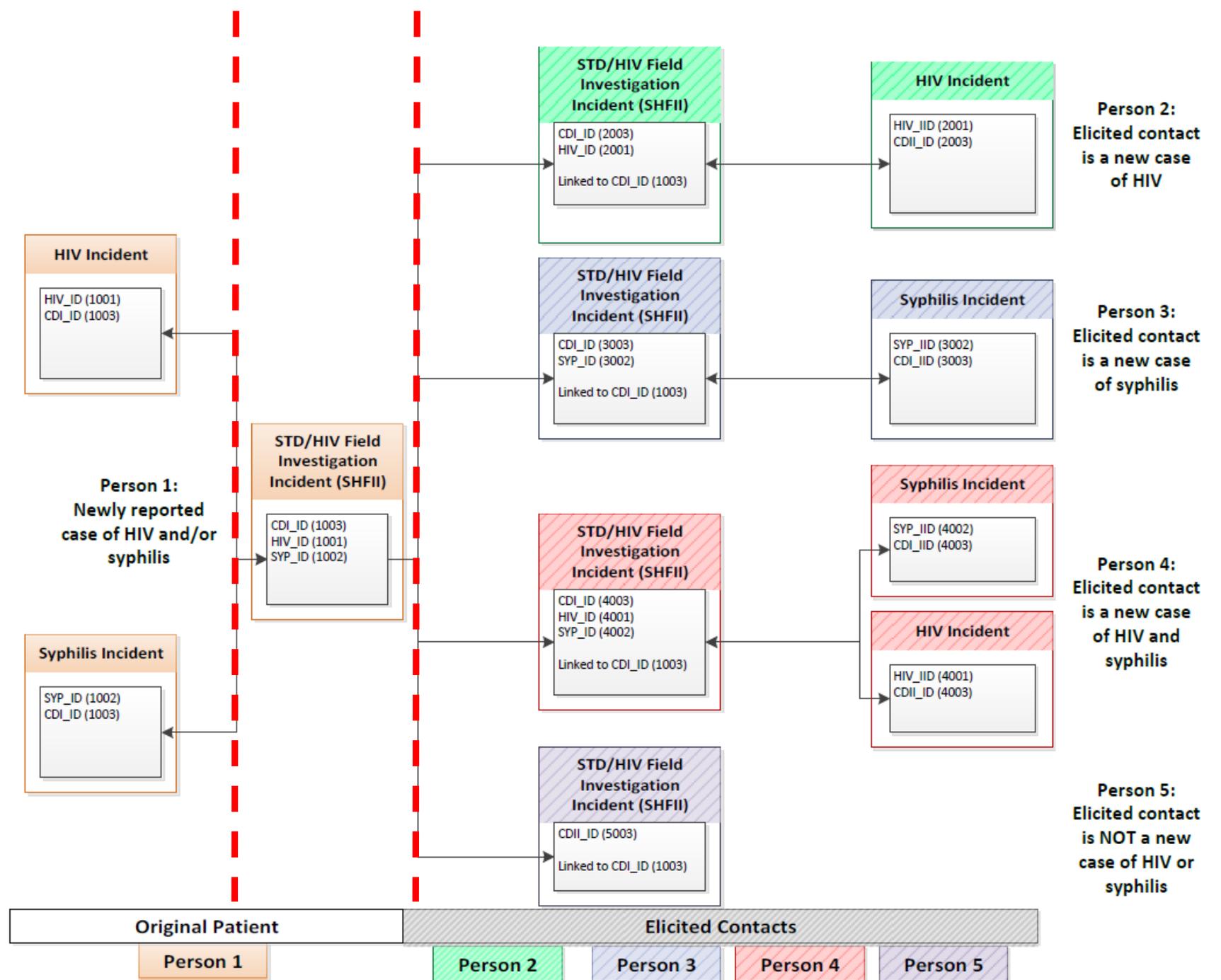


# SHFI: Sections in CaIREDIE

## 6 Sections:

1. Patient (system)
2. Investigation Tracking
3. Linkage to Care (HIV, STD, HCV, PrEP, other services)
4. Client Risk Information
5. Contacts
6. Case Investigation (system)

# Proposed Record Flow in CaIREDIE





# SHFI Development Process

- Local Health Jurisdiction (LHJ) learning sessions:
  - Visited 5 LHJs between June 2017 – March 2018
- Presentations at Annual STD/HIV Controllers' Meeting
  - May 2018: Key Findings from Learning Sessions
  - May 2019: SHFI Demo & drop-in discussions
- Testing
  - Internal (July-September, 2019)
  - LHJs via WebEx & state staff (August, 2019)
  - Final checks and business rules (now)

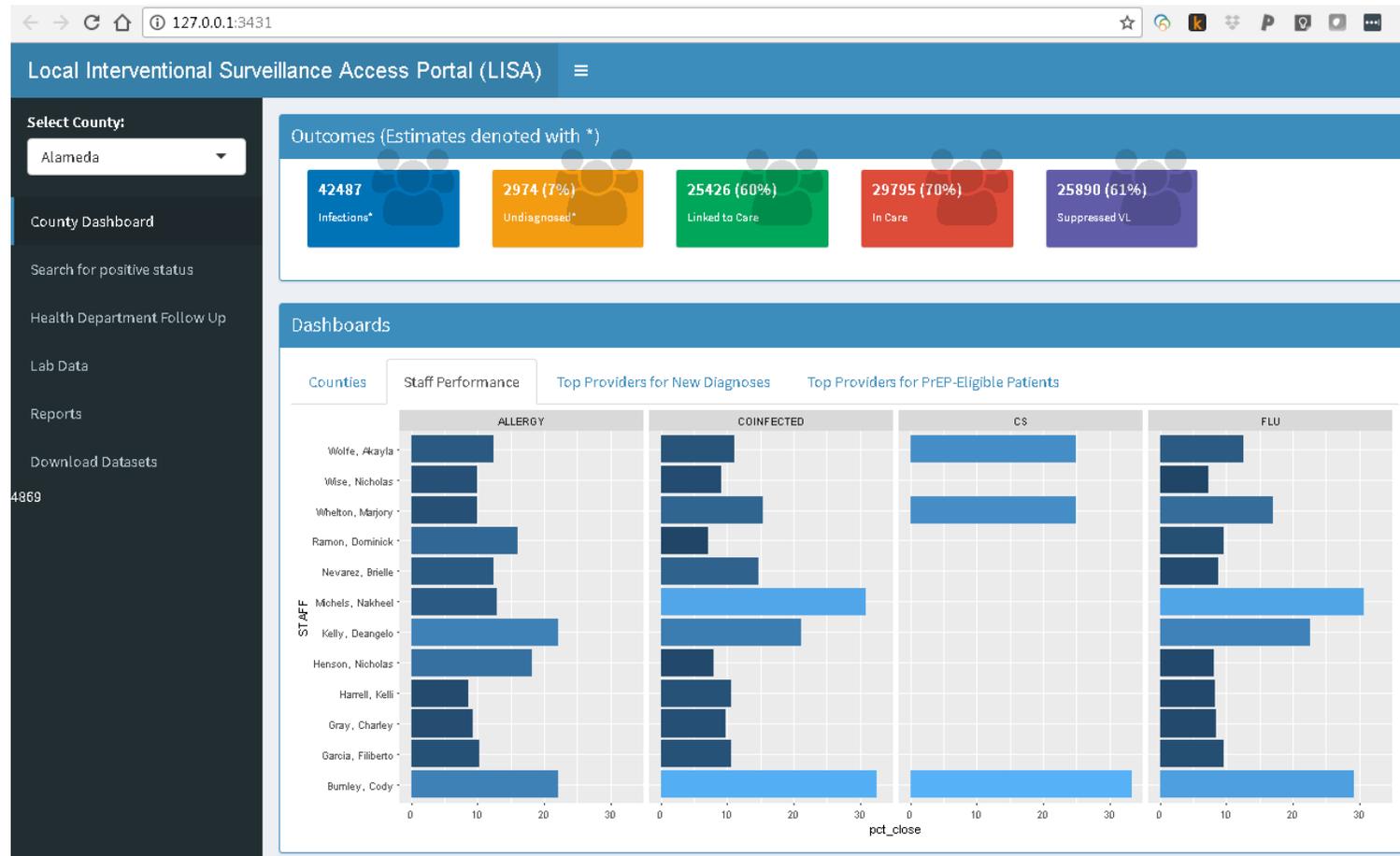


# **Local Interventional Surveillance Access (LISA)**

# Local Interventional Surveillance Access (LISA)

- Nimble solution for two-way Local/State data exchange
  - Disseminate client-level and agency level actionable information
  - Timely (goal: as close to “real time” as possible)
  - Person-level priority and notifications for disease investigator caseload
- Overcome technical and statutory barriers
  - Provide LHJs access to eHARS
  - Integrated data from relevant OA/STD data systems
  - Cross-jurisdictional data sharing
  - Interface for administrative and programmatic feedback
- Create routine tasks and reports

# Local Interventional Surveillance Access (LISA)



# Local Interventional Surveillance Access (LISA)

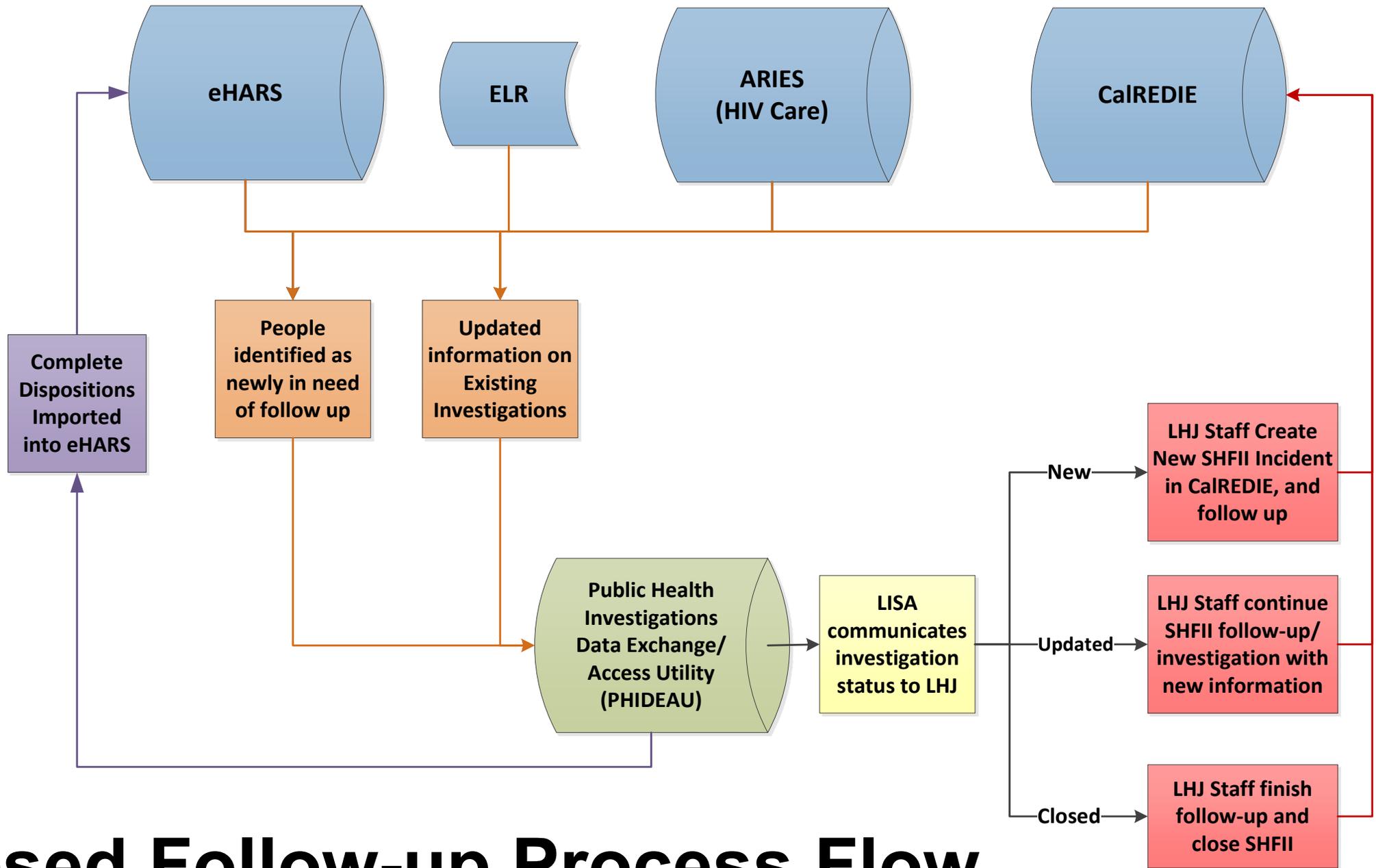
Health Department Follow Up

New Diagnoses Not Linked to Care   Prevalent Cases Out of Care   Lost to Follow Up   Recent Detectable Viral Load   PrEP Eligible

Show  entries   Search:

	LName	FName	DOB	DxDT	COUNTY	PROVIDER	STAFF
1	Rodgers	Elisabeth	2000-01-21	2017-08-13	Sacramento	Sutter	Javier Gomez
2	Baker	Dakota	1968-12-12	2017-11-22	Sacramento	County PH Clinic	Michael Jones (DIS)
3	Price	Christian	1983-04-04	2017-09-10	Sacramento	HIV Specialist Org	Javier Gomez
4	Dixon	Aaron	1960-10-28	2017-11-22	Sacramento	Other HIV Specialist Org	Sarah Morton (DIS)
5	Chambers	Garrett	1995-01-20	2017-08-25	Sacramento	Kaiser	Javier Gomez
6	Vasquez	Alexia	1986-02-04	2017-03-18	Sacramento	Kaiser	Michael Jones (DIS)
7	Gardner	Mustaba	2000-11-30	2017-01-09	Sacramento	Other	Michael Jones (DIS)
8	Arneson	Brendon	1994-02-14	2017-09-17	Sacramento	Other HIV Specialist Org	Michael Jones (DIS)
9	Taylor	Eric	1988-11-04	2017-04-27	Sacramento	Small PMD	Sarah Morton (DIS)
10	Sandoval	Martin	1988-05-28	2017-11-22	Sacramento	County PH Clinic	Unassigned

Showing 1 to 10 of 210 entries   Previous      2   3   4   5   ...   21   Next

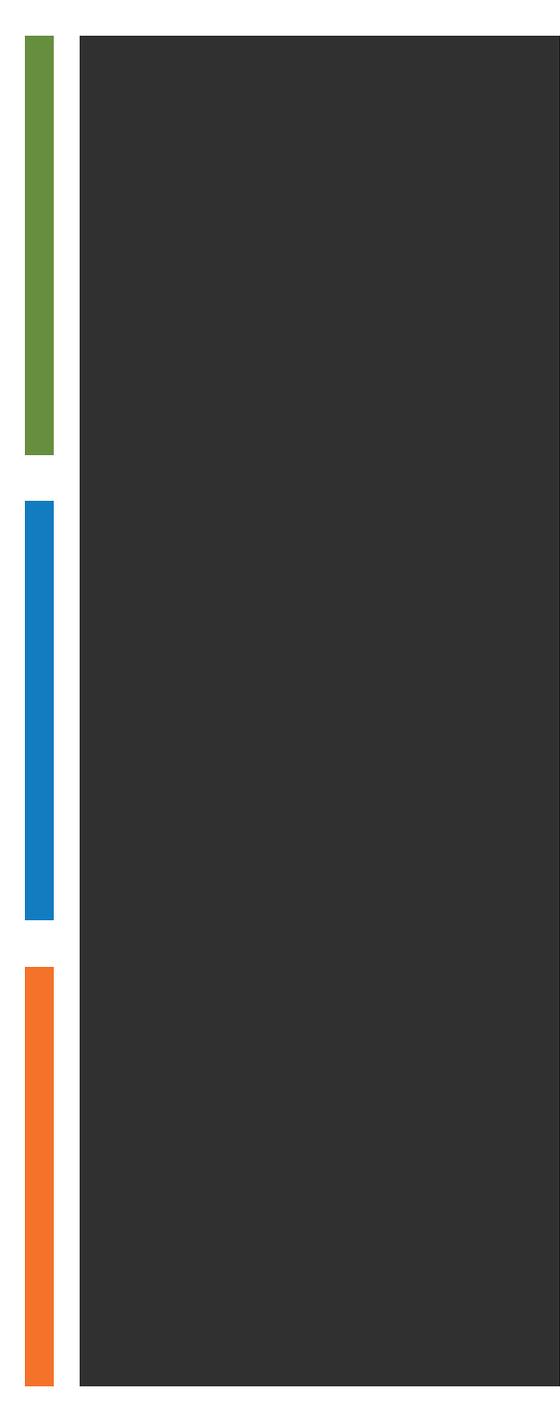


# Proposed Follow-up Process Flow



# Local Interventional Surveillance Access (LISA)

- Supported by Office of AIDS Informatics Section in partnership with OA and STD Control Branch stakeholders
- Local Health Jurisdiction Advisory Group
  - Advise on LISA and other informatics projects development
  - Provide local testing and feedback on newly developed work items
  - Propose and define specifications for new functionality
  - Help OA/STD/Informatics prioritize development
  - Advise on local workflows and how informatics projects can enhance workflow



# THANK YOU!

## Office of AIDS

Will Wheeler, MPH PhD

Lauren Nelson, MPH

## STD Control Branch

Denise Gilson

## CaIREDIE

Deniz Dominguez, MHS

Sebastian Chavez

Allison Jacobsen, MPH

Larry Imel

# SHFII – Screenshots

# SHFI – Screenshots: Patient Tab

# Disease Incident



Patient: Pilgrim, Scott

Incident ID: 2453666

Process Status: Entered

DOB:

Disease: STD/HIV Field Investigation Incident

Resolution Status: Suspect

Patient

Investigation Trac

Linkage to Care

Client Risk Inform

STD Contacts

Case Investigation

\* Disease Being Reported **STD/HIV Field Investigation Incident**

\* Last Name

Pilgrim

\* First Name

Scott

Middle Name

Name Suffix

Primary Language

SSN

DOB (MM/DD/YYYY)

Age Months Days

\* Ethnicity

Not Hispanic or Latino

Address Number & Street

Apartment/Unit Number

\* Race

American Indian or Alaska Native

City

State

CA

Zip

Asian

Census Tract

N/A

County of Residence

Country of Residence

Black or African American

Country of Birth

Date of Arrival (MM/DD/YYYY)

Work/School Telephone

Native Hawaiian or Other Pacific Islander

Home Telephone

Cellular Phone / Pager

Other

E-mail Address

Other Electronic Contact Information

Unknown

Work/School Location

Work/School Contact

Reported Race

White

\* Gender

Male

Pregnant?

Yes  No  Unknown

Estimated Delivery Date

Marital Status

Medical Record Number

View...

Patient's Parent/Guardian Name

Occupation Setting

Describe/Specify

Occupation

Describe/Specify

Occupation Location

Alerts

Next

Cancel

Save

# **SHFI – Screenshots: Investigation Tracking Tab**

# Disease Incident



Patient: Pilgrim, Scott

Incident ID: 2453666

Process Status: Entered

DOB:

Disease: STD/HIV Field Investigation Incident

Resolution Status: Suspect

Patient

Investigation Trac

Linkage to Care

Client Risk Inform

STD Contacts

Case Investigation

## INSTRUCTIONS FOR THIS TAB

Use this tab to document the primary reason for follow-up, investigation assignment history, communication attempts, and investigation outcomes.

### Primary reason for follow up

- New report (lab/ACRF/CMR)  Contact to HIV/STD (sex/needle/network)  Out of care list (HIV)  Virally unsuppressed (HIV)  Follow-up serology (syphilis)  Outbreak/Molecular Cluster
- Neonatal exposure

Date Initiated



## INCIDENTS LINKED TO THIS INVESTIGATION

If this individual was initiated as a sexual, needle or network contact to HIV or STD, list the original patient ID below.

Original patient ID

If the individual was initiated (or determined to be) a case of HIV, syphilis, or other STD, list the corresponding disease incident ID numbers in the sections below.

Syphilis disease incident ID

HIV disease incident ID

Other disease incident ID

## PRIMARY REASON FOR FOLLOW-UP: SEXUAL, NEEDLE, OR CLUSTER CONTACT

Type of contact



First date of exposure to original patient



Initiated as an app/website contact?



Last date of exposure to original patient



### INVESTIGATOR ASSIGNMENT HISTORY

ID	Investigator name	Date of assignment	Initial vs. Reassignment	Date investigation closed or re:
ID-001	01Diaz, Carlos - DIS Worker 326	05/14/2019	Initial	05/15/2019

Count : 1      << Page 1 of 1 >>      10

Add

### COMMUNICATION ATTEMPTS

ID	Method of contact	Contact result	Date/Time of contact
ID-001	Phone Call	No contact, left message	05/14/2019

Count : 1      << Page 1 of 1 >>      10

Add

### COMMUNICATION NOTES

Communication notes:

Add

### HIV INVESTIGATION OUTCOMES

HIV disposition date   HIV disposition

HIV-related diagnosis

### SYPHILIS INVESTIGATION OUTCOMES

Syphilis disposition date   Syphilis disposition

Syphilis-related diagnosis

### OTHER DISEASE INVESTIGATION OUTCOMES

ID
ID-001

Count : 1      << Page 1 of 1 >>      10

Add

# **SHFI – Screenshots: Linkage to Care Tab**

## Disease Incident



Patient: Pilgrim, Scott

Incident ID: 2453666

Process Status: Entered

DOB:

Disease: STD/HIV Field Investigation Incident

Resolution Status: Suspect

Patient

Investigation Trac

Linkage to Care

Client Risk Inform

STD Contacts

Case Investigation

### INSTRUCTIONS FOR THIS TAB

Use this tab to document all linkage to care activities, including: HIV medical care; HIV, STD, and Hepatitis testing; STD treatment; HIV pre-exposure prophylaxis (PrEP); and other services.

### HIV AND CARE STATUS AT INITIATION

HIV status at initiation

Unknown HIV Status

If negative, enter month and year of most recent HIV test below:

Month

Year

### HIV TESTING AND LINKAGE TO CARE

Did the client receive an HIV test as part of this investigation?

Any test done within 30 days before specimen collection date (or original patient interview date for contacts) to the investigation close date should be considered part of the investigation.

HIV linkage to care investigation initiated?

Reason investigation not initiated

If yes, date of HIV test

HIV test Result

Date returned or linked to care

How was returned to care status determined?

**STD AND HEPATITIS C TESTING AND LINKAGE TO CARE**



ID	Disease tested	Test results indicative of current infection	Date of test (specimen collection)
ID-001			

Count : 1      Page 1 of 1      10      Add

**REFERRAL/LINKAGE TO PrEP**

Currently on PrEP	How long has the client been on their current course of PrEP?
<input type="text"/>	<input type="text"/>
Screened for PrEP eligibility?	Eligible for PrEP?
<input type="text"/>	<input type="text"/>
Referred for PrEP services?	Reason not referred
<input type="text"/>	<input type="text"/>
Client assisted with navigation/linkage to PrEP provider?	PrEP referral date
<input type="text"/>	<input type="text"/>

**REFERRALS TO OTHER SERVICES**

Other referrals provided (select all that apply)

<input type="checkbox"/> None	<input type="checkbox"/> Substance Abuse	<input type="checkbox"/> Transportation	<input type="checkbox"/> Family planning	<input type="checkbox"/> Health Insurance Enrollment	<input type="checkbox"/> Housing
<input type="checkbox"/> Mental Health	<input type="checkbox"/> Domestic Violence	<input type="checkbox"/> Prenatal	<input checked="" type="checkbox"/> Other		

If Other, specify

# **SHFI – Screenshots: Client Risk Information Tab**

## Disease Incident



Patient: Pilgrim, Scott

Incident ID: 2453666

Process Status: Entered

DOB:

Disease: STD/HIV Field Investigation Incident

Resolution Status: Suspect

Patient

Investigation Trac

Linkage to Care

Client Risk Inform

STD Contacts

Case Investigation

### INSTRUCTIONS FOR THIS TAB

In addition to these questions, verify that demographic information (ethnicity, race, gender identity, and sex at birth) on the Patient Tab are complete and accurate.

### CLIENT INTERVIEW

Was the client interviewed?

Type of interview

Reason for interview

Date of first interview

### METHOD OF CASE DETECTION AND HIV/STD HISTORY

Reason for HIV/STD testing

Other than current diagnosis, has client ever had an STD?

Type of facility where initially tested

### PARTNER ELICITATION (details for all NAMED partners should be entered on the contacts tab)

Did you attempt to elicit contacts for follow-up

Total number of CLAIMED SEX AND NEEDLE SHARING partners

Number of sex partners in the past 12 months

Total number of NAMED SEX AND NEEDLE SHARING partners

Total number of NAMED CLUSTER/NETWORK partnersCLIENT

**SEXUAL RISK INFORMATION**

Vaginal or anal sex in the past 12 months (select all that apply)

- None reported     Refused     Males     Females     Transgender/gender queer/non-binary

Other sexual risk behaviors in the past 12 months (select all that apply):

- None reported     Anonymous partners     Received drugs/money for sex     Gave drugs/money for sex     Sex partner used injection drugs     Vaginal or anal sex without a condom
- Refused     Sex while high/intoxicated

Had sex with a pregnant partner in past 12 months (males only)

Had sex with MSM in past 12 months (females only)

**SUBSTANCE USE**

Substance use past 12 months (select all that apply):

- None reported     Methamphetamine     Crack     Prescription opioids     Excessive alcohol     Erectile dysfunction
- Refused     Heroin     Cocaine     Cannabis     Nitrates/Poppers     Other

If other, specify

Injection drug use (12 months)

- No     Yes, no needle sharing     Yes, needle sharing

**HOUSING STATUS**

Did the client experience any of these housing situations in the past 12 months (select all that apply)?

- None reported     Refused     Homeless     Transitional/Unstable housing     Group home/Halfway house     Drug rehabilitation

**INCARCERATION**

Institutionalized at diagnosis?

Has the client been to any of the following in the past 12 months (select all that apply)

- None reported     Jail     Prison
- Refused     Juvenile Hall

**VENUES REPORTED**

Did the client report any venues for meeting partners?

**VENUES REPORTED - DETAILS**

ID	Venue type	Name of venue(s) – enter nearest cross street if name not available
ID-001		

Count : 1      Page 1 of 1      10      Add

**PATIENT DESCRIBED SYMPTOMS (SYPHILIS ONLY)**

Did the client report any symptoms?

If yes, previously sought care for symptoms?

**PATIENT DESCRIBED SYMPTOMS - DETAILS (SYPHILIS ONLY)**

ID	Symptom	Anatomic site	Onset date
ID-001			

Count : 1      Page 1 of 1      10      Add

**BASIS FOR EARLY STAGE (SYPHILIS ONLY)**

If history in the past 12 months (select all that apply)

- Negative STS     4-fold titer increase     Exposure to confirmed infection  
 P&S symptoms     Sexual debut

Basis

- Lesion (710)     Secondary symptoms (720)     History, past 12 months (730)  
 No basis (late)

Back

Next

Save

Cancel

Print Tab

# SHFI – Screenshots: Contacts Tab

# Disease Incident



Patient: Pilgrim, Scott  
DOB:

Incident ID: 2453666  
Disease: STD/HIV Field Investigation Incident

Process Status: Entered  
Resolution Status: Suspect

- Patient
- Investigation Trac
- Linkage to Care
- Client Risk Inform
- STD Contacts
- Case Investigation

## Contacts (system)

ID	Last Name	First Name	DOB	Jurisdiction
ID-001	Yodel	Pete	02/15/2001	Unknown

Count: 1    Page 1 of 1    10    Add

## Contacts (system)

ID-002

Last Name    First Name    Middle Name    Name Suffix    DOB    Age    Gender    Phone Number

Street Address    Apartment    City    State    Zip    Jurisdiction    Investigator

Race

American Indian or Alaska Native     Asian     Black or African American     Native Hawaiian or Other Pacific Islander     Other     Unknown     White

Reported Race    Type of Contact    Date of Contact    Exposure Event    Cluster ID

Priority    Status    Medication Used    E-mail Address    Other Electronic Contact Information

Link Patient

Create Incident    Create Investigation    Delete

OK    Cancel    Add

# **SHFI – Screenshots: Case Investigation Tab**

# Disease Incident



Patient: Pilgrim, Scott

Incident ID: 2453666

Process Status: Entered

DOB:

Disease: STD/HIV Field Investigation Incident

Resolution Status: Suspect

Patient

Investigation Trac

Linkage to Care

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Case Investigation

## Case Information

\* Jurisdiction

Sacramento

Secondary Jurisdiction

Investigator

## Reporting Source

Provider

Provider Name

Submitter Name Wheeler, William

Lab

Additional Provider

Additional Lab

Index Case Cluster ID

Patient Died of This Illness  Yes

No

## Dates

Date of Onset

Lab Specimen Collection Date

Lab Specimen Result Date

Date of Diagnosis

Date of Death

Date Received

03/25/2019

\* Date Created

03/25/2019

Episode Date

03/25/2019

Date Closed

## Statuses

\* Process Status

Entered

Set to the Next Status

Set to: Not a Case

Reported by:

Web Report

Lab Report

Imported Status

Resolution Status

Suspect

Final Disposition

Transmission Status

Date Sent

Last CDC Update

### Linked Outbreaks

Outbreak ID	Outbreak #	Location	Date Created	Jurisdiction	Process / Resolution Status
◀ PREV   NEXT ▶					

[Unlink](#) [Add](#)

### Notes/Remarks

[Add](#)

[Delete Incident](#)

[Back](#)

[Cancel](#)

[Submit](#)

[Print Preview](#)