STD Surveillance Network (SSuN)

Informational Webinar for CDC-RFA-PS19-1907

Surveillance & Special Studies Team
Surveillance & Data Management Branch
Division of STD Prevention
U.S. Centers for Disease Control and Prevention
About this Webinar

- For eligible applicants to CDC’s Notice of Funding Opportunity CDC-RFA-PS19-1907
  - STD Surveillance Network (SSuN) – Cycle 4

- Two identical webinars March 12th and at 3:30pm (EST) March 19th

- All callers are on ‘MUTE’ until lines are opened for questions at the end of the webinar
About this Webinar

- You may use the ‘CHAT’ feature to submit questions at any time
  - We will pause several times to answer questions submitted through CHAT
  - Phone lines will be opened for Q & A at the end of today’s webinar
  - All questions answered today, as well as those we run out of time to answer, will be answered and posted to a Frequently Asked Questions (FAQ) document that will be updated throughout the application process

- Slides and recordings from both of our webinar will also be available
  - Slides will be posted within the next two weeks
  - Audio recording available by the end of March
Resources for Applicants

https://www.cdc.gov/std/funding/ssun/default.htm

- Webinar slides/recording
- Link to NOFO on Grants.gov
- SSuN Protocols
- Best Practice Notes
- SSuN budget guidance
- Frequently Asked Questions
- Work plan templates
- ORP Certification template
Agenda

- Overview of Cycle 4 of the STD Surveillance Network
- Eligibility
- Strategies and activities
- Responsiveness criteria and application requirements
- Resources for applicants
- Q & A
Useful Terms and Abbreviations

- **SSuN**: STD Surveillance Network
- **STD-PCHD**: Strengthening Prevention and Control for Health Departments (PS19-1901)
- **GC**: Gonorrhea
- **CT**: Chlamydia
- **TA**: Technical Assistance
- **QA**: Quality Assurance
- **eHARS**: HIV Surveillance Registry
- **PrEP/PEP**: Pre & Post Exposure Prophylaxis for HIV
- **ORP**: Overall Responsible Party (for HIV Surveillance)
- **NCHHSTP**: National Centers for HIV, Viral Hepatitis, STD and TB Prevention
- **MOU/MOA**: Memorandum of Understanding or Agreement
CDC-RFA-PS19-1907 is a NEW, Competitive NOFO

- Cycle 4 of the STD Surveillance Network is a **new** funding opportunity:
  - 5 – year Cooperative Agreement

- Proposes new activities and substantially re-focuses SSuN strategies to achieve new outcomes

- Proposed activities require significant collaborations within and between programs at the local level
What's New?

STD-Related, High Impact HIV Prevention Focus

• SSuN Cycle 4 requires collaboration with state and local HIV surveillance partners for registry matching and data sharing:
  • Matching gonorrhea and non-congenital syphilis cases
  • Matching patients seeking care in STD clinics
  • Inclusion of HIV-related laboratory observations for matched patients:
    • Earliest indication of HIV infection
    • Viral load tests/results
    • CD4+ tests/results
Who is Eligible for CDC-RFA-PS19-1907?

- Funding for the STD Surveillance Network is limited by statutory authority (NOFO Pg. 29):
  - States, and in consultation with the state health authority,
  - Political subdivisions of the states,
    - Counties
    - Cities
- Open to all eligible entities – *no prior SSuN funding required*
- Consultation with state health authority should be documented with an attached letter of concurrence
  - May propose to conduct activities in broader geographic area with formal proxy from state health authority

* Section 318(c) of the Public Health Service Act [42 U.S.C. 247c(c), as amended.]
How Many Applications will be Funded?

- Approximately 10 applicants will be funded (NOFO Pg. 28)
- Contingent on available funds, awards will be between $200,000 and $600,000 with an average award of approximately $480,000
- Budget guidance is available on page 38 of the NOFO
- Funding for subsequent budget periods is subject to performance and contingent on continuing availability of federal funding

Guidance will be provided post-award on evaluation plans and requirements for ongoing performance management
Key Attachments and Application Materials

- There are 7 required attachments (NOFO pg 55):
  - Documentation of Statutory Authority for Surveillance
  - MOU/MOA documenting collaboration with State STD Program
  - MOU/MOA with their HIV surveillance unit for registry matching
  - MOU/MOA/LOC with proposed STD clinics
  - MOU/MOA from ORP documenting compliance with NCHHSTP’s data security and confidentiality guidelines*
  - Resumes/C.V.s for key personnel
  - Organizational charts

* https://www.cdc.gov/nchhstp/programintegration/data-security.htm
What is the STD Surveillance Network?

- Founded in 2005, SSuN is a network of collaborating health departments conducting sentinel and enhanced surveillance for STDs following common protocols and contributing record-level data to a national project database.

- The purpose of SSuN is to enhance capacity for STD surveillance by:
  - Implementing protocol-based surveillance activities
  - Conducting short-term activities to monitor consequences of STDs
  - Providing technical assistance to improve local STD surveillance
  - Monitoring STD-related HIV prevention

Cycle 1 (2005-2008)
Cycle 2 (2008-2013)
Cycle 4 (2019-2024)
SSuN Contributes to Local and National STD Programs

Overview


* Estimates based on the detection of the gonococcal DNA in specimens collected by contactless methods or in self-collected specimens

SSuN STD SURVEILLANCE NETWORK

Gonorrhea — Proportion* of STD Clinic Patients Testing Positive* by Age Group, Sex, and Sexual Behavior, STD Surveillance Network (SSuN), 2016

* Proportions based on the world’s largest database of the most varied surveillance networks

SSuN: Seattle, San Francisco, New York City, Washington, DC, San Antonio, and Baltimore

CDC: Centers for Disease Control and Prevention

STD: Sexually transmitted disease

MSM: Men who have sex with men

MSW: Men who have sex with women
Overview

SSuN Cycle 4 Logic Model (NOFO Pg. 5):

- Strategies and Activities are linked to Outputs
  - Short term
  - Intermediate
  - Long term

<table>
<thead>
<tr>
<th>Strategies and Activities</th>
<th>Outputs</th>
<th>Short-term Outcomes</th>
<th>Intermediate Outcomes</th>
<th>Long-term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Systematically collect, analyze, interpret and disseminate enhanced surveillance data for reported cases of STDs.</td>
<td>a. Vis-à-vis patient demographics, behavioral, and contact information for all patient visits.</td>
<td>b. Improved and more timely monitoring of HIV and STD-specific clinical and preventive services in STD-focused clinical settings (Strategies A, B, C).</td>
<td>c. Improving understanding of factors that can prevent STRT services, reduce health-care costs, and reduce transmission of HIV and STD prevention interventions (Strategies A, B, C).</td>
<td>d. Improved awareness and screening and treatment guidelines (Strategies A, B, C):</td>
</tr>
<tr>
<td>2. Describe trends in patient demographics, behavioral risk factors, STI disease burden, and community characteristics and HIV/STD preventive services for a probability sample of selected cases reported in the jurisdiction.</td>
<td>b. Laboratory records associated with all reported cases.</td>
<td>d. Improved monitoring of adverse outcomes and negative sequelae of STDs (Strategy B, C):</td>
<td>e. Decreased disease incidence and morbidity associated with STIs (Strategies A, B, C).</td>
<td>f. Improved monitoring of trends in HIV status (Strategies B, C):</td>
</tr>
<tr>
<td>3. Provide technical assistance to state and local STD surveillance programs and staff in monitoring and improving the quality of all STD surveillance data, including collection, testing, and evaluation, and dissemination of these indicators, surveillance standards, data analysis, interpretation, utilization, and determination to improve standardized (Strategy A):</td>
<td>c. Case reports on a complete dataset of reported gonorrhea and syphilis cases.</td>
<td>e. Monitoring of trends in HIV status. (Strategies B, C):</td>
<td>g. Decreased disease incidence and morbidity associated with STIs (Strategies A, B, C).</td>
<td>h. Improved awareness and screening and treatment guidelines (Strategies A, B, C):</td>
</tr>
<tr>
<td>a. Develop and refine clinical algorithms associated with all reported cases, including treatment provided.</td>
<td>d. Patients interviewed to collect behavioral information, clinical outcomes, and contact data, social determinants and associated data, laboratory observations, provider information and treatment provided for sampled cases.</td>
<td>f. Monitoring of trends in HIV status. (Strategies B, C):</td>
<td>i. Improved surveillance systems integrating efficient technologies and methods (Strategies A, B, C).</td>
<td>g. Improved awareness and screening and treatment guidelines (Strategies A, B, C):</td>
</tr>
</tbody>
</table>
SSuN Cycle 4 includes three core surveillance strategies:

- Strategy A – sentinel surveillance in specialty STD clinics (NOFO Pg. 7)
SSuN Cycle 4 includes three core surveillance strategies:

- **Strategy A** – sentinel surveillance in specialty STD clinics
- **Strategy B** – enhanced case-based surveillance (NOFO Pg. 10)
  - Gonorrhea (enhanced case, provider and patient data)
  - Adult syphilis (enhanced case data)
SSuN Cycle 4 includes three core surveillance strategies:

- **Strategy A** – sentinel surveillance in specialty STD clinics
- **Strategy B** – enhanced case-based surveillance
  - Gonorrhea (enhanced case, provider and patient data)
  - Adult syphilis (enhanced case data)
- **Strategy C** – surveillance focus activities (NOFO Pg. 13)
  - Enhanced CT Surveillance
  - LGV Prevalence in rectal CT+ patients
  - Neuro/Ocular Syphilis (enhanced and syndromic)
  - HL7 Reporting using STD MMG
  - TA to STD-PCHD recipients implementing enhanced GC
  - Locally relevant surveillance evaluations
Cross-cutting activities:

- Monitoring co-morbidity and repeat infections
  - HIV
  - Prior and concurrent STDs
- Protocol-driven data collection activities and methods
- Strengthening recipient STD surveillance capacity
  - Enhanced data informing local STD programs
  - Technical assistance (TA) to key stakeholders
- Rigorous data management processes
- Data quality assurance (QA) and evaluation
- Strict assurance of data security and confidentiality
Strategy A Includes Activities Monitoring:

- Goals
  - Monitor trends in people seeking care in STD clinics and the services they receive
  - Monitor STD-related HIV prevention opportunities among persons seeking care in STD clinics

- STD clinics provide:
  - Safety net services to populations at risk for acquiring STDs and HIV
  - STD and HIV prevention activities

- Intended to create network of STD clinical facilities to investigate STD issues related to healthcare seeking behaviors and identify gaps and missed opportunities for STD and HIV preventive care
STD Clinic: Key Requirements

Clinical facility providing timely, comprehensive, confidential, and culturally sensitive STD care as the facility's primary function.
STD Clinic: Key Requirements

- Extract variables from electronic health record system
- Volume of at least 5,000 documented patient visits annually for STD-related clinical services
- If multiple STD clinics, at least 1 STD clinic must meet the requirement of at least 5,000 visits/year
STD Clinic: Key Requirements

**Strategy A**

- Collect/transmit key variables (demographics, gender of sex partners, symptoms, anatomic site(s) of testing, HIV testing and HIV status, HIV PrEP referral/use)
- Ability to provide patient identifiers for HIV registry matching
- Provide active management of (or documented referral to) HIV PrEP/PEP
Summary of Strategy A Activities

- Protocol-based sentinel surveillance in STD clinics
- Abstraction of visit-level data in electronic health records
- Patient-based matching with HIV surveillance registry
- Periodic patient surveys
Protocol-based sentinel surveillance in STD clinics

Abstraction of visit-level data in electronic health records

Summary of Strategy A Activities

Strategy A
Summary of Strategy A Activities

Protocol-based sentinel surveillance in STD clinics

Patient-based matching with HIV surveillance registry
HIV Registry Matching

- Frequency of eHARS matching to STD clinic patients is expected to be at least annually but more frequent matching is strongly encouraged.
- Our intention is for recipients to match all clinic patients, regardless of diagnoses.
- Contribute to the assessment of current services and missed opportunities for STD and HIV preventive care.
Best Practices for HIV Registry Matching

- Proposed methods are specific to the jurisdiction (e.g., software, matching methodology), but expectation is that matching will be automated and tuned for maximum efficiency.

- Collaborate with their CDC-funded HIV Surveillance units to address reciprocal information sharing (missing patient demographics, sexual orientation, gender identity, HIV testing, etc.) for related evaluations and enhance completeness of HIV case surveillance data.

- Information can be shared back to STD clinics for the purpose of patient-level interventions, though not required.
Periodic Patient Clinic Surveys

Protocol-based sentinel surveillance in STD clinics

Sentinel Surveillance in STD Clinics (All Patients)

Periodic patient surveys
STD Clinic Patient Surveys

Year 1

Years 2-5

Minimum recruitment of 350 patient respondents per survey per clinic
STD Clinic Patient Surveys

- Intended to be brief self-administered surveys (approximately 5 minutes) conducted prior to seeing provider (i.e. in waiting room)
- Data collection methods (e.g., paper-based or technology-assisted) can vary among recipients as appropriate for the recipient’s STD clinic(s)
- Survey will include selected targeted measures but the topic areas may vary from year to year
- Linkable to the associated clinic visit record for patients through appropriate identifiers where feasible
Pause

Questions from our audience chat (1)
Enhanced Case-Based Population Surveillance

- All gonorrhea and adult syphilis cases reported from all sources in jurisdiction/area
  - Recode into SSuN formats, including all available case information such as treatment, provider, partner services data, etc.

- Unique Event IDs for each reported case

- Unique, un-duplicated patient IDs for all patients
  - Must be able to monitor STDs in persons over time

- Random sample of all cases drawn
Enhanced Case-Based Population Surveillance

- Maintain a separate index of unique reporting facilities (providers) with unique provider IDs
  - This refers to the facility/organization/group or practice that reports the case, not the individual clinician
  - Ascertain basic information about these reporting facilities
  - Determine type of provider
Enhanced Case-Based Population Surveillance

- Maintain a related file of all available laboratory data for each case
  - Laboratory data from all sources:
  - ELR, manually reported on case reports, etc.
  - Should include specimen collection date, patient ID, Event ID, anatomic site, test type, organism tested and result
  - May include negative test results if available
Enhanced Case-Based Population Surveillance

- Match all patients reported with gonorrhea and adult syphilis with HIV registry
  - For matched records, obtain:
    - Earliest date of HIV infection
    - Transmission category from HIV registry
    - Recent HIV laboratory data (V.L., CD4)

- Provide available information on matched patients back to HIV surveillance partners:
  - Patient risk, current residence, etc.
Enhanced Case-Based Population Surveillance

- Enhanced **provider** investigations on a random sample of gonorrhea cases to obtain information such as:
  - complete treatment information
  - signs, symptoms, sequela
  - screening by anatomic site
  - HIV testing

- Multiple methods such as phone, fax-back, return mail, or other methods should be implemented
Enhanced Case-Based Population Surveillance

- Patient interviews on a random sample of gonorrhea cases
  - Behavioral, demographic, health care seeking, EPT, HIV/STD risks, HIV prevention (PrEP/PEP), HIV testing history, HIV care status, etc.

- Aggressive interview completion targets
  - Multiple attempts to contact
  - Ongoing evaluation
Random Sampling

- A random sample is a smaller number of cases selected at random from the universe of all reported cases.
- Each reported case must have the same probability of getting selected for the sample.
- Enhanced investigations on this random sample will be used to estimate what all cases would look like if we had complete information on all cases.
HIV Registry Matching

- Recipients must match all reported gonorrhea and syphilis cases to their HIV case registry and obtain required HIV-related lab data.

- Matching should be sufficiently frequent to identify new matches for inclusion in ongoing data submissions; suggest a minimum of 4 times each year (quarterly).

- Matches should be fully retrospective and include all patients not previously matched in order to identify newly diagnosed and reported HIV cases.

- Information should be shared with HIV surveillance colleagues to improve case surveillance and help direct retention in care efforts.
Outputs for Enhanced Case-Based Surveillance:

Case Data File:
- All reported gonorrhea cases
- All reported adult syphilis cases
- Unique patient IDs
- Look-back investigations
- Provider investigations
- Patient interviews
- HIV registry match data
- Reported every 2 months

Primary Keys: Event ID, Patient ID, Provider ID
Outputs for Enhanced Case-Based Surveillance:

**Case Data File:**
- All reported gonorrhea cases
- All reported adult syphilis cases
- Unique patient IDs
- Look-back investigations
- Provider investigations
- Patient interviews
- HIV registry match data
- Reported every 2 months

**Lab Data File:**
- All gonorrhea tests
- All syphilis tests
- Selected HIV-related tests
- Reported every 2 months

Primary Keys: EventID, PatientID, ProviderID
Outputs for Enhanced Case-Base Surveillance:

Case Data File:
- All reported gonorrhea cases
- All reported adult syphilis cases
- Unique patient IDs
- Look-back investigations
- Provider investigations
- Patient interviews
- HIV registry match data
- Reported every 2 months

Lab Data File:
- All gonorrhea tests
- All syphilis tests
- Selected HIV-related tests
- Reported every 2 months

Provider Index:
- Unique record for each diagnosing provider/facility
- Updated at least annually

Primary Keys: EventID, PatientID, ProviderID
Enhancing Quality and Use of STD Surveillance Data

- Recipients will collaborate with their local STD programs to improve and enhance STD surveillance capacity
  - Enhance completeness of data
  - Timely use of data to drive prevention and control
  - Dissemination of findings to relevant stakeholders

- Collaboration with STD-PCHD for enhanced GC surveillance:
  - Plan and conduct SSuN activities in collaboration with STD program
  - SSuN supplements STD-PCHD enhanced gonorrhea surveillance:
    - Applies SSuN protocols and methods to STD-PCHD activity (All)
    - Extends STD-PCHD activity to entire project area (States)
    - Enhances sample fraction and completed investigations (Cities)
Strategy C - Surveillance Focus Activities

- Flexible, shorter-term activities focused on:
  - Enhancing STD Surveillance Capacity
  - Monitoring sequela and consequences of STDs
  - Investigating non-nationally reportable STDs
  - Evaluating STD surveillance
  - Modernize STD surveillance data transmissions to CDC
  - Provide surveillance-related technical assistance to state, local and national stakeholders
Strategy C Activities – Initial SSuN Budget Period

- Monitoring LGV prevalence among patients with rectal CT in STD clinics (NOFO Pg.13)
- Enhanced case investigations among a sample of CT cases (NOFO Pg.13)
- Enhanced investigations among syphilis cases reporting neuro/ocular symptoms (NOFO Pg.14)
- Syndromic surveillance for neuro, ocular, otic symptoms of syphilis (NOFO Pg.14)
- Implementation of STD mapping guides for HL7-based case reporting (NOFO Pg.14)
- Technical assistance (TA) to STD – PCHD recipients implementing enhanced GC surveillance (NOFO Pg.15)
- Surveillance focus activities of local interest (NOFO Pg.15)
Questions from our audience chat (2)
Milestones and Timelines

- **NOFO Publication Date**: February 15th (Grants.gov)
- **Due Date for Letter of Intent (requested)**: April 15th
- **Application Deadline**: May 15th
- **Anticipated Award Date**: August 15th
- **Funding Begins**: September 30th
- **Period of Performance**: 9/2019 – 9/2024
- **Funding subject to availability of federal funds**
Letter of Intent

• CDC requests that interested applicants submit a voluntary letter of intent to apply for funding under this NOFO (NOFO pg. 32 & 34).

• This information is useful in helping us estimate the number of applications we may receive and in planning for an adequate number of reviewers for our Objective Review Panel.

• Include your agency name, your contact information, potential collaborating STD clinics, your ability to conduct HIV registry matching, and the geographic area for your proposed Strategy B population-based surveillance activities.
Responsiveness Criteria

• In addition to other required attachments, all applicants must submit three mandatory attachments for their applications to be deemed responsive (NOFO, Pg. 29)

  • Documentation of statutory authority for name-based STD and HIV surveillance.
  
  • Memorandum of Understanding / Agreement (MOU/MOA) from the HIV Surveillance Program documenting collaboration for the purposes of HIV registry matching.
  
  • Certification of Compliance with NCHHSTP Data Security and Confidentiality Standards from their jurisdiction’s Overall Responsible Part (ORP) for HIV/STD.
Application Review

• Applications received by the deadline will be reviewed by the Office of Financial Resources for eligibility, for completeness, and in collaboration with DSTDP, for responsiveness.

• All eligible, complete and fully responsive applications will be reviewed, scored and ranked by an Objective Review Panel composed of subject matter experts from across CDC. (NOFO Pg. 43 – 45)
Resources for Applicants

- SSuN funding website: https://www.cdc.gov/std/funding/ssun/default.htm

- Questions: SSUN_TA@cdc.gov