Emerging Infections Program (EIP)

Notice of Funding Opportunity (NOFO)

Funding Opportunity Number
CDC-RFA-CK24-2401

Centers for Disease Control and Prevention
May 1, 2023

EMERGING INFECTIONS PROGRAM

Agenda

- EIP Overview
- Timeline
- EIP NOFO Application and CDC Review
  - Main NOFO
    - Fundamental Information
    - Application Instructions
  - Attachment 1 – EIP 2024 Activities
    - EIP Infrastructure and Data Modernization
    - Surveillance and Reporting 1 & 2
    - Programmatic Activities
- Q&A

EMERGING INFECTIONS PROGRAM

Emerging Infections Program – Overview

- Established in 1994 as a collaborative population-based surveillance network
- Conducts surveillance and other public health practice activities to detect, control, and prevent emerging infectious diseases
- Quickly translates surveillance, non-research, and research activities into informed policy and public health practice
- Uses a representative subset of the nation to explore disease patterns and their causes
- Uses a cooperative agreement funding mechanism
- Relies on robust and integrated data reporting and sharing systems
- Investigates causes of infectious disease outbreaks, evaluates effectiveness of interventions, promotes prevention and the EIP network has been leveraged in emergencies

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EIP Timeline

- April 21, 2023 — NOFO Published
- May 1, 2023 — EIP Informational Webinar
- May 21, 2023 — Letter of Intent Due
- May 16, 2023 — EIP Informational Webinar - **Replay**
- June 20, 2023 — Applications Due
- December 1, 2023 — Estimated award date
- January 1, 2024 - December 31, 2024 — Year 1 – Performance/Budget Period

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EIP NOFO – Important Points

- This is a competitive process and the quality of your application will be critical for being selected and potentially funded
- All sites may not be funded for all EIP Activities
- Strongly encourage applicants to use templates posted on grants.gov for applications and budgets

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EIP NOFO – Layout

- Part I: Overview Information
- Part II: Full Text
  - About the Program (II.A-C)
    - Background & Context
    - Outcomes, Strategies and Activities
    - Eligibility and Funding Expectations
  - Application Instructions (II.D)
  - Review, Selection, and Award Process (II.E-F)
    - Application Review Process – Evaluation Criteria
    - Reporting Requirements, etc.
  - Agency Contacts, Other Information, and Glossary (II.G-I)

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EIP NOFO

Award Information (II.B.)

- Award Estimates
  - Up to $153 million per year
  - Up to 15 recipients
  - No floor or ceiling
- Under Funding Strategy, you will find estimated award amount ranges for all EIP Activities
  - Divide estimated funding amounts by the number of awards to get a sense of site-specific awards

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EIP NOFO

Funding Strategy (II.A.2.)

Activity (Required)	Award ($)	Number of Awards
Infrastructure and Data Modernization (Required)	$3,000,000 to $6,500,000	Up to 15 Awards
Surveillance and Reporting 1 (Required)	up to $30,000,000	Up to 15 Awards
Surveillance and Reporting 2 (Required)	up to $30,000,000	Up to 15 Awards

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EIP NOFO
Funding Strategy – continued

Activity	Award ($)	Number of Awards
FluSurv-NET	$4,500,000 to $7,000,000	Up to 15 Awards
COVID-NET	$11,000,000 to $15,000,000	Up to 15 Awards
RSV-NET	$3,000,000 to $5,000,000	Up to 15 Awards
ABCs	11,000,000 to $13,000,000	10 Awards
FoodNet	$5,000,000 to $7,000,000	10 Awards
HAIC	$29,000,000 to $30,000,000	10-15 Awards

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EIP NOFO
Funding Strategy – continued

Activity	Award ($)	Number of Awards
HPV-IMPACT	$2,000,000 to $3,000,000	5 Awards
Lyme and Other Tickborne Diseases (TickNET)	$500,000 to $2,000,000	Up to 4 Awards
Prion Disease	$185,000 to $300,000	2 Awards
Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) and ME/CFS-like Post-COVID Conditions	$600,000	1 Award
Mpox Vaccine Effectiveness Evaluation	$2,000,000 to $4,000,000	Up to 15 Awards

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EIP NOFO

Eligibility & Additional Information on Eligibility (II.C.)

- **Eligible Applicants**: Open Competition
- **Requirements:**
  - Authority – Applicants must have access to timely public health data for the EIP Activities they are applying for
  - Letters of Support
  - Catchment Area Requirements
  - Bona Fide Agent (if applicable)

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EIP NOFO

Eligibility & Additional Information on Eligibility (II.C.)

Program Responsiveness Criteria:

- **Authority**
  - Eligible applicants must have the public health authority, legislative mandate or otherwise show legal access to the requisite data to conduct population-based infectious disease surveillance and take appropriate public health action based on the data.
    - Individual-level identifiable data from multiple data sources
    - Timely data access and commitment to participate in EIP and public health emergency response activities

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Eligibility for Applicants Who Do Not Explicitly Possess Public Health Authority or Legislative Mandate (II.C.)

Program Responsiveness Criteria (Authority):

- **Must** be able to receive access to data (with a commitment and pathway to taking public health action) from their respective public health agency
  - **Must** submit a **signed letter** from public health agency leadership or designee on organizational letterhead including the role(s) of the public health agency and explicitly state that they agree to provide the applicant access to public health data needed for the proposed EIP activities and catchment population.
    - Individual-level identifiable data from multiple data sources
    - Timely data access and commitment to participate in EIP and public health emergency response activities

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EIP NOFO – Additional Information on Eligibility (II.C.)

(slide 1 of 2)

Program Responsiveness Criteria:

- **Letter(s) of Support**
  - Applicants are required to include a Letter of Support from each of the applicant's proposed collaborating academic and other partners, acknowledging their support and plans to collaborate with the applicant on EIP Activities.
  - Applicants must include **at least one academic institution, unless** the applicant is an academic institution.
  - For those who **do not** explicitly possess public health authority or legislative mandate, they must submit a signed letter from public health agency leadership or designee on organizational letterhead to be eligible.

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EIP NOFO – Additional Information on Eligibility (II.C.)

(slide 2 of 2)

Program Responsiveness Criteria:

- Catchment Area Requirements
  - Catchment area population: 1,000,000 – 11,000,000
  - The minimum of 1,000,000 people applies to the overall catchment area and **not** each individual EIP Activity
  - Refer to the H. Other Information section (application instructions) of this NOFO and the application template tools (Attachments 2 and 3) for additional information on defining the applicant's catchment area.

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EIP NOFO – Additional Information on Eligibility (II.C.)

Program Responsiveness Criteria:

- Bona Fide Agent (if applicable)
  - If applying as a bona fide agent of an eligible governmental agency, documentation is required that establishes the validity of the entity and proves its designation as an authorized representative of the eligible governmental agency.

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EIP NOFO – Phase I, II, III Review

- **Phase I Review**
  - All applications will be initially reviewed for eligibility and completeness by CDC Office of Grants Services
  - Additional Information on Eligibility (Authority/Data Access, Letters of Support, Catchment Area, and Bona Fide Agent – if applicable)
- **Phase II Review –** Objective Review
  - Based on the following criteria: Approach, Evaluation and Performance Measurement, and Applicant's Organization Capacity
- **Phase III Review** – Technical Review based on criteria listed in the NOFO

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EIP NOFO - Application Instructions (II.D)

- Letter of Intent – **due May 21**
- Application – **due June 20**
- Two Application Templates (Attachments 2 & 3)
  - EIP Background Application template (complete 1 template)
  - EIP Project Approach Application template
    - Complete separate Project Approach Template for each Activity
- One EIP Budget Template (Attachment 4 - Excel workbook)
  - Separate set of worksheets for each Activity
- One Budget Narrative/Justification
  - Separate budget narrative sections for each Activity

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EIP NOFO

Application Instructions (II.D) and H. Other Information

- Applicants are **strongly encouraged** to use the application template tools provided by EIP for NOFO submission.
  - Application Templates 2 & 3 were designed to ensure applicants meet all NOFO requirements
  - If applicants miss any required information, then their applications may not receive further review
- Application templates follow the application instructions in H. Other Information
- General instructions in main NOFO
- Detailed programmatic Activity instructions in each Activity Description of Attachment 1

EMERGING INFECTIONS PROGRAM

EIP NOFO

Application Narrative – Format – H. Other Information

- Overall Background – EIP Application Template/Attachment 2
- Project Approach – EIP Application Template/Attachment 3

One Narrative for each EIP Activity

- Background
- Purpose
- Catchment Area (for population-based activities)
- Outcomes
- Applicant Capacity
- Evaluation Plan for 2024
- Work Plan (plus for research activities, must respond to the nine research sections listed in H. Other Information, including Human Subjects)

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EIP NOFO

Budget – KEY POINTS

For each Activity (even if multiple sub-activities)

- ONE Budget Narrative/Justification
- ONE set of worksheets in EIP Budget Template

EXCEPTION:

- ABCs (Attachment 1- Section G)
  - Optional Pertussis activities - separate Narrative and budget should be provided
- HAIC (Attachment 1, Section I)
  - Optional “Candidemia and Mold” – separate Narrative and budget should be provided

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EIP NOFO

EIP Application Templates

CDC-RFA-CK24-2401
Emerging Infections Program
Department of Health and Human Services
Centers for Disease Control - NCEZID

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SYNOPSIS | VERSION HISTORY | **RELATED DOCUMENTS** | PACKAGE

Print Related Documents List

Click on the following file link(s) to download the related document(s):

File Description	File Name	Last Updated Date/Time	File Size
Folder: Full Announcement - Full Announcement	CDC-RFA-CK24-2401-Full Announcement - Full Announcement.zip	Apr 21, 2023 11:12:41 AM EDT	896.6 KB
Foa_Content_of_CDC-RFA-CK24-2401.pdf	Foa_Content_of_CDC-RFA-CK24-2401.pdf	Apr 21, 2023 11:12:41 AM EDT	1007.7 KB
Folder: Other Supporting Documents - Other Supporting Documents	CDC-RFA-CK24-2401-Other Supporting Documents - Other Supporting Documents.zip	Apr 21, 2023 02:59:42 PM EDT	368.6 KB
Attachment 1 - EIP 2024 Activities.docx	Attachment 1 - EIP 2024 Activities.docx	Apr 21, 2023 02:59:20 PM EDT	215.1 KB
Attachment 2 - Background - EIP Application Template.docx	Attachment 2 - Background - EIP Application Template.docx	Apr 21, 2023 02:59:26 PM EDT	45.8 KB
Attachment 3 - Project Approach - EIP Application Template.docx	Attachment 3 - Project Approach - EIP Application Template.docx	Apr 21, 2023 02:59:34 PM EDT	40.0 KB
Attachment 4 - EIP Budget Template.xlsx	Attachment 4 - EIP Budget Template.xlsx	Apr 21, 2023 02:59:42 PM EDT	367.0 KB

EMERGING INFECTIONS PROGRAM

Activities

Infrastructure and Data Modernization

(Attachment 1, Section A)

EIP NOFO
Attachment 1, Section A
EIP Infrastructure and Data Modernization

- Scientific, Programmatic, Business/Administrative Oversight and Coordination
- Establishing/Managing the EIP Populations/Catchment Areas
- Ensuring Flexibility and Efficiency
- Managing Collaborations and Partnerships
- Training and Workforce Development
- Data Management, Access, and Sharing
- Application of Bioinformatics into EIP Activities
- Program Evaluation
- Human Subjects, OMB PRA, DURC
- Data Modernization

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Data Modernization: Activities

Required Activities

1. **Modernize EIP information systems** including data collection, data entry and electronic data exchange within the EIP site.
2. Leverage **existing electronic laboratory reporting (ELR)** and **electronic case reporting (eCR)** infrastructure and processes to reduce duplication and manual effort for EIP active surveillance.
3. Work towards a more flexible, efficient, and automated approach to **exchanging data between electronic health records (EHRs) and public health**, with a goal of automating data extraction for use in EIP surveillance or special studies as a model for how this can be achieved across public health.
4. Enhance capacity for **analytics, visualization, and reporting** (AVR) for EIP activities.
5. Modernize **data exchange with CDC**.
6. Participate in the **EIP IT Support and Monitoring** and coordination efforts.

Special Projects: Propose at least 2 data modernization special projects.

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Data Modernization: Considerations

- Consists of EIP site activities, as well as CDC implementing modernized infrastructure across EIP programs. As services become available and activities continue to develop at CDC, EIP sites will be expected to continue to align with and engage in these modernization efforts.
- Aligns with CDC's broader Data Modernization Initiative (DMI) and Laboratory Data Exchange (LDX) Strategy.
- Should be coordinated closely with related investments through Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases (ELC), Public Health Infrastructure Grant (PHIG) and other funding mechanisms.
- Proposed activities should build upon the appropriate existing investments and infrastructure supported by existing data modernization and health information system funding.

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Surveillance and Reporting 1 & 2

(Attachment 1, Section B & C)

EIP NOFO
Attachment 1, Sections B & C
Surveillance and Reporting 1 & 2

- This potential funding would provide additional epidemiologic, laboratory, and/or health information systems surge capacity necessary for enhanced public health surveillance or applied research activities due to factors such as an increase in response efforts for emerging or re-emerging infectious disease(s), outbreak scenarios, or other public health threats. Activities in this section will only be funded should applicable surveillance and/or applied research conditions warrant.

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RESP-NET

RESP*iratory Virus Hospitalization Surveillance* ***Net****work*

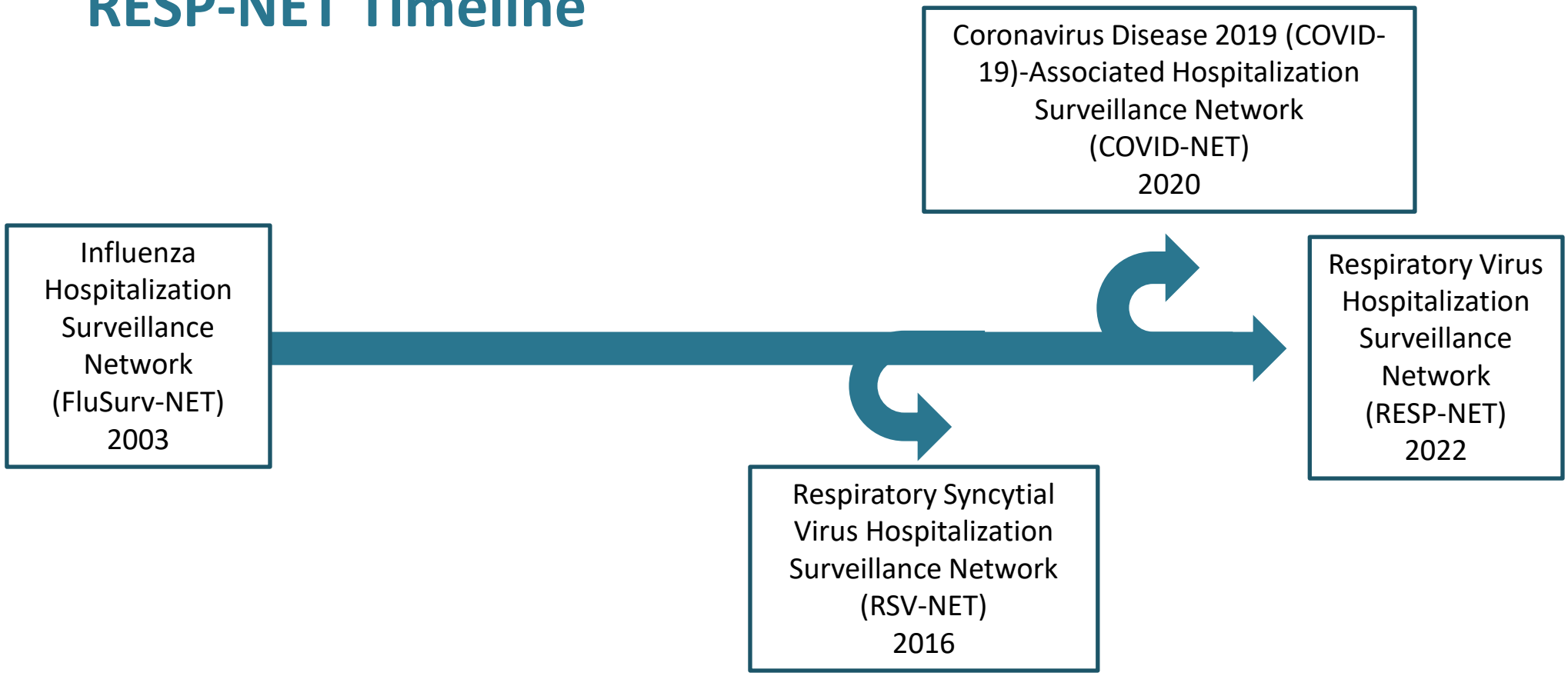
(Attachment 1, Section D, E, & F)

- Influenza Hospitalization Surveillance Network (FluSurv-NET)
- Respiratory Syncytial Virus Associated Hospitalizations (RSV-NET)
- COVID-19 Associated Hospitalization Surveillance (COVID-NET)

- Comprises three platforms that conduct population-based surveillance for laboratory-confirmed hospitalizations associated with COVID-19, Influenza, and Respiratory Syncytial Virus (RSV) among children and adults
  - COVID-NET
  - FluSurv-NET
  - RSV-NET

- Surveillance is currently conducted through a network of acute care hospitals in select counties in 13 states
- Covers more than 29 million people and includes an estimated 8–10% of the U.S. population

RESP-NET Timeline



RESP-NET Primary Objectives

- Provide timely **age-specific rates** of laboratory-confirmed COVID-19-, Influenza-, and RSV-associated hospitalizations among adults and children
- Describe **clinical characteristics, interventions, and outcomes** of patients with COVID-19-, Influenza-, and RSV-associated hospitalizations
- Hospitalization rates adjusted for testing practices critical for ongoing influenza **burden estimates** and future COVID-19 and RSV burden estimates
- Assess **risk factors** for COVID-19-, Influenza-, and RSV-associated complications among hospitalized persons.

RESP-NET Required Activities (slide 1 of 2)

- Conduct population-based surveillance for laboratory-confirmed COVID-19, RSV, and influenza-associated hospitalizations among all ages
    - Clearly identify all hospitals in which residents of the catchment areas are hospitalized so that population estimates can be obtained for rate calculations on a weekly basis
    - Utilize hospital laboratories, admission/discharge information, infection control practitioner logs/databases, and review of reportable conditions databases to identify all cases
    - Conduct periodic (at least annual) audits to verify completeness of case ascertainment
- Enter minimum case data into a standardized data collection database or send de-identified data extracts that match the format required by CDC on a weekly basis during the surveillance period
- FluSurv-NET ONLY: Determine influenza A subtype on at least 20% of FluSurv-NET specimens each year. Determine influenza B lineage on specimens as feasible
- Conduct a laboratory survey among all laboratories that serve RESP-NET hospitals to determine diagnostic tests used at participating laboratories every year

RESP-NET Required Activities (slide 2 of 2)

- Perform geocoding and linkage to US Census data using standardized methods for all RESP-NET cases
- Monitor COVID-19, influenza, and RSV testing practices among all, or a majority of hospitals that fall within the catchment area by participation in the influenza disease burden project every year*
- Ascertain COVID-19, influenza, and RSV -associated deaths that occurred during hospitalization or within the first 30 days of hospital discharge (or 60 days of hospital discharge for COVID-19 and RSV) by matching the dataset of hospitalized patients captured regular surveillance with records from the National Center for Health Statistics Electronic Death Registration System to identify death-cases missed by surveillance and/or deaths occurring after hospital discharge*
- Complete a standardized case report form to collect detailed clinical data for all identified cases using data obtained from medical chart review**
- Obtain COVID-19 (COVID-NET cases) and influenza (FluSurv-NET cases) vaccination status, and RSV (RSV-NET cases) vaccination status if/when products become available**
- FluSurv-NET ONLY: Maintain flexibility to rapidly respond to changes in core surveillance in response to a novel influenza A virus epidemic of pandemic potential.

*New sites that have not previously participated in EIP may develop methods/capacity to conduct activity over several years

**Required for all sites participating in COVID-NET, RSV-NET, and FluSurv-NET Tier 2 activities. Sites participating in FluSurv-NET Tier 1 activities only do not need to complete these activities.

RESP-NET Optional Activities

- Participate in evaluations of the use of electronic health records (EHR) data extraction to enhance data obtained through routine surveillance at facilities (Highest Priority for FluSurv-NET).
- If resources allow, participate in vaccine effectiveness studies related to influenza, RSV and/or SARS-CoV-2 using test negative or other study designs
- If resources allow, participate in enhanced data collection to assess clinical course and outcomes in special populations

FluSurv-NET Optional Activities

- If resources allow, participate in studies to assess effectiveness of antiviral treatment on severe outcomes among patients hospitalized with influenza
- If resources allow and we encounter a season with circulation of oseltamivir or baloxavir-resistant viruses, collect a sample of specimens from patients for antiviral resistance testing.
- Evaluate methods to identify and bank specimens for advanced molecular detection (AMD) studies including to assess the association between variant influenza viruses and disease severity

COVID/RSV-NET Optional Activities

- Participate in activities to assess the impact of vaccination on the burden of COVD-19 and RSV hospitalizations and studies to assess vaccine effectiveness
- Expand activities designed to assess disease burden and/or assessment of testing practices
- As the COVID-19 and RSV therapeutic landscape evolves, participate in studies to assess effectiveness of treatment against various outcomes including severe disease and length of stay, as well as assess the use of monoclonal antibodies, antibiotic use and other treatments in COVID-19 and RSV-infected patients.
- Expand surveillance to include surveillance for SARS-CoV-2 and/or RSV in outpatient settings to monitor treatment use and effectiveness, potentially inform vaccine impact, and understand the full spectrum of SARS-CoV-2 and RSV
- Additional optional activities described in the NOFO

RESP-NET Funding Strategy

- COVID-NET: $11,000,000 to $15,000,000; up to 15 awards
- FluSurv-NET: $4,500,000 to $7,000,000; up to 15 awards
- RSV-NET: $3,000,000 to $5,000,000; up to 15 awards

Active Bacterial Core Surveillance (ABCs)

(Attachment 1, Section G)

Centers for Disease Control and Prevention
National Center for Immunization and Respiratory Diseases

Overview of Active Bacterial Core surveillance (ABCs) program

Emerging Infections Program NOFO webinar

Yunmi Chung, ABCs program coordinator, Respiratory Diseases Branch

Tami Skoff, Enhanced Pertussis Surveillance (EPS) program lead, Meningitis and Vaccine Preventable Diseases Branch

Kristen Kreisel, Division of STD Prevention, Surveillance and Data Science Branch acting chief

Active Bacterial Core surveillance (ABCs) program background and funding strategy

- Conduct active, laboratory, and population-based surveillance for invasive bacterial disease due to group A *Streptococcus* (GAS), group B *Streptococcus* (GBS), *Haemophilus influenzae*, *Neisseria meningitidis*, and *Streptococcus pneumoniae*
  - Case of invasive bacterial disease is defined as isolation of *H. influenzae, N. meningitidis*, GAS, GBS, or *S. pneumoniae* or detection of ABCs pathogen-specific nucleic acid in a specimen obtained from a from a normally sterile body site
  - Definition also includes GAS isolated from a wound or other tissue in the presence of necrotizing fasciitis (NF) or streptococcal toxic shock syndrome (STSS)
  - Molecular testing culture independent diagnostic tests (CIDTs) are now integrated in the ABCs case definition; therefore, sites must actively identify persons who test positive for ABCs pathogens by all CIDTs of sterile site specimens
- Optional activities: surveillance for pneumonia; neonatal sepsis; enhanced pertussis (EPS); Disseminated Gonococcal Infections (DGI)
- Anticipated funding level: $11,000,000-$13,000,000 across 10 sites

Required surveillance activities

- Identify patients who meet the case definition by establishing contact with all laboratories that regularly process specimens from residents of the catchment area
- Complete standardized case report forms through review of medical records
- Collect isolates for all pathogens under surveillance (GAS, GBS, *H. influenzae, N. meningitidis* and *S. pneumoniae*) and ship to CDC labs monthly
- Conduct periodic (every year) laboratory surveys to assess laboratory practices, i.e., the use of culture independent diagnostics on sterile site specimens
- Collect vital statistics records to enhance the quality of ABCs data
  - Birth and death registry matching to obtain missing data on key variables such as race, ethnicity, outcome
- Geocode all ABCs cases to the census tract level as a means of capturing area-level socioeconomic factor
- Collect additional demographic, medical and vaccination history information on all invasive pneumococcal infections in children aged 3 months through 59 months and adults aged 65 years or greater with an isolate available for serotyping
- Collect additional infant and maternal information on early-and late-onset GBS disease
- Provide timely responses to reports and requests for information to assist in preliminary & final analyses, reports, and data close-outs
- Participate in all required conference calls and in person meetings

Optional ABCs surveillance activities

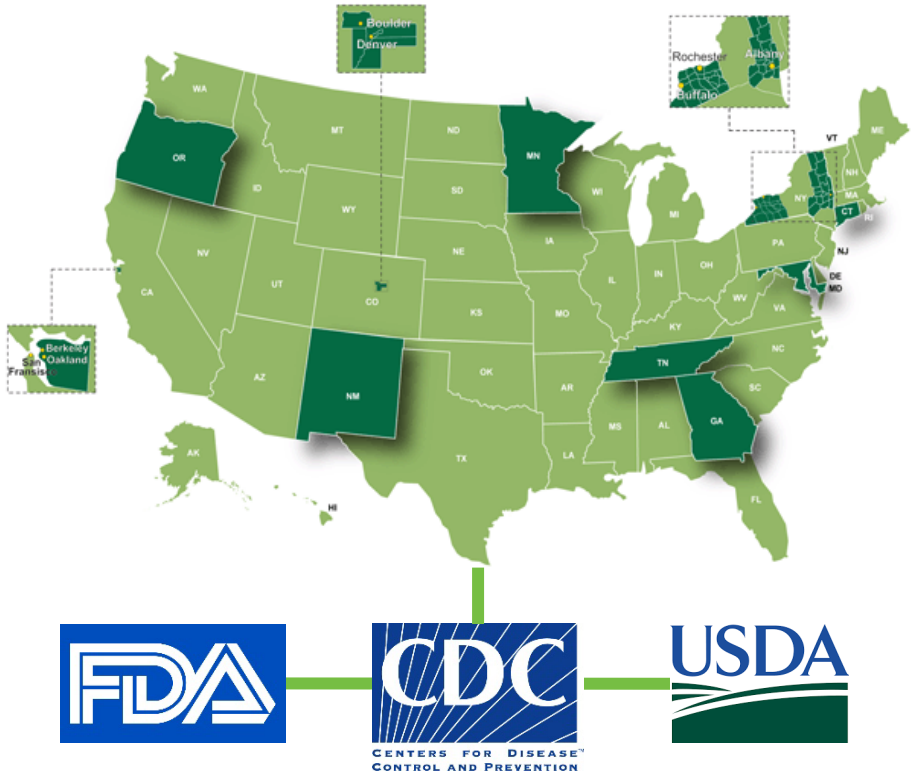
- Conduct surveillance for non-invasive pneumococcal pneumonia (SNiPP)
  - Core activity identifying cases with a positive urinary antigen test and clinically or radiographically confirmed pneumonia within the designated surveillance area
- Conduct surveillance for neonatal sepsis in children less than three days old (first 72 hours of life).
  - Core activity includes the optional collection of surveillance data and isolates, with an emphasis on gram negative pathogens, such as *E. Coli*
- Conduct enhanced pertussis surveillance (EPS) as well as special studies aimed at understanding pertussis prevention and control strategies
- Conduct surveillance for Disseminated Gonococcal Infections (DGI)
  - Conduct prospective surveillance for DGI cases by reviewing medical charts and collecting *Neisseria gonorrhoeae* isolates from sterile sites for antimicrobial susceptibility testing and whole genome sequencing

Foodborne Diseases Active Surveillance Network (FoodNet)

(Attachment 1, Section H)

FoodNet: Background and Goals

FoodNet



- **Determine burden** of foodborne illness in United States
- **Monitor trends** in burden of foodborne illness over time
- **Attribute burden** of foodborne illness to specific foods and settings
- Provide information that can lead to **improvements in public health practices** and the **development of interventions** to reduce the burden of foodborne illness

Current Projects

- **Publish annual FoodNet MMWR and related communications** with incidence and trends in enteric infections during 2022
- **Assess disparities in enteric infections** using newly acquired, geocoded data. Perform Social Vulnerability Index (SVI) and climate change analyses
- **Analyze our Population Survey data**, including assessing health care-seeking behavior estimates to calculate the true burden of enteric illness
- **Data Modernization Initiative (DMI)** – transition FoodNet's data transmission and linking systems to DCIPHER

More FoodNet Activities

Conduct active surveillance for *Salmonella*, *Shigella*, *Campylobacter*, *Listeria*, *Yersinia*, STEC, *Vibrio*, and *Cyclospora* infections and pediatric HUS

Participate in a project on enhanced specimen testing and follow-up among patients excluded from high-risk transmission settings

Obtain exposure information (foods, travel history, antimicrobials, etc.) on select *Campylobacter, Salmonella,* and *Shigella* cases

Better define co-infections and understand transmission risks to prepare for screening recommendations and epidemiologic analyses

Perform routine surveillance of clinical laboratories within FoodNet catchment areas to ascertain changes in diagnostic testing practices

Participate in metagenomic and/or highly multiplex amplicon sequencing (HMAS) for PulseNet pathogens as guided by CDC

STEC = Shiga toxin-producing *E. coli* HUS = Hemolytic Uremic Syndrome

Healthcare-Associated Infections – Community Interface (HAIC)

(Attachment 1, Section I)

EIP Healthcare-Associated Infections/Community Interface Activity (HAIC)

- Launched in late 2009 with funds for new work related to healthcare-associated infections (HAIs)
- The **mission** of the EIP HAIC Activity is to promote U.S. healthcare safety and quality through:
  - Evaluation of the epidemiology and public health impact of HAIs, healthcare-associated pathogens, and other related adverse events;
  - Assessment of the effect of prevention and control strategies for HAIs, healthcare-associated pathogens, and other related adverse events;
  - Development and exploration of innovations in healthcare safety surveillance methods; and
  - Identification of health disparities among persons affected by HAIs, healthcare-associated pathogens, and other related adverse events, and opportunities for interventions.
- **Key focus areas for 2024–2028**
  - **Data for action** – timely, high quality data to inform public health action
  - **Health equity** – surveillance areas should reflect state's diversity of communities/populations
  - **Collaboration and innovation** – enhance usefulness of EIP data through collaboration with other partners and/or linkages with other data sources

HAIC Project Framework Within the Guidance

- Projects are divided into those that are REQUIRED and OPTIONAL
- REQUIRED and OPTIONAL projects are each divided into two categories:

	REQUIRED	OPTIONAL
Population-based surveillance	• *C. difficile* surveillance and/or • Multisite Gram-negative Surveillance Initiative (must include invasive *E. coli* surveillance)	• Invasive *S. aureus* • Candidemia • Invasive mold infections • Endemic mycoses • Non-tuberculous mycobacteria • Other organisms/infections
Special projects	• HAI & antimicrobial use prevalence survey	• Adverse events in healthcare workers • Link HAIC data to other data source • Infectious complications of injection drug use • Collaboration with other CDC programs • Projects focused on colonization or transmission of resistant pathogens • Other healthcare epidemiology projects • Data modernization

Additional Information on HAIC Projects

- Anticipated funding levels for 2024:
  - Total of up to $29-$30 million
  - 10 to 15 awards
- Protocols and data collection forms are available upon request for required and some optional projects listed in the HAIC appendix to the NOFO
- Additional information can be obtained from the HAIC website (http://www.cdc.gov/hai/eip/) and multiple publications, including –
    - September 2015 HAIC activity overview in *Emerging Infectious Diseases* special EIP issue: http://wwwnc.cdc.gov/eid/article/21/9/15-0508_article

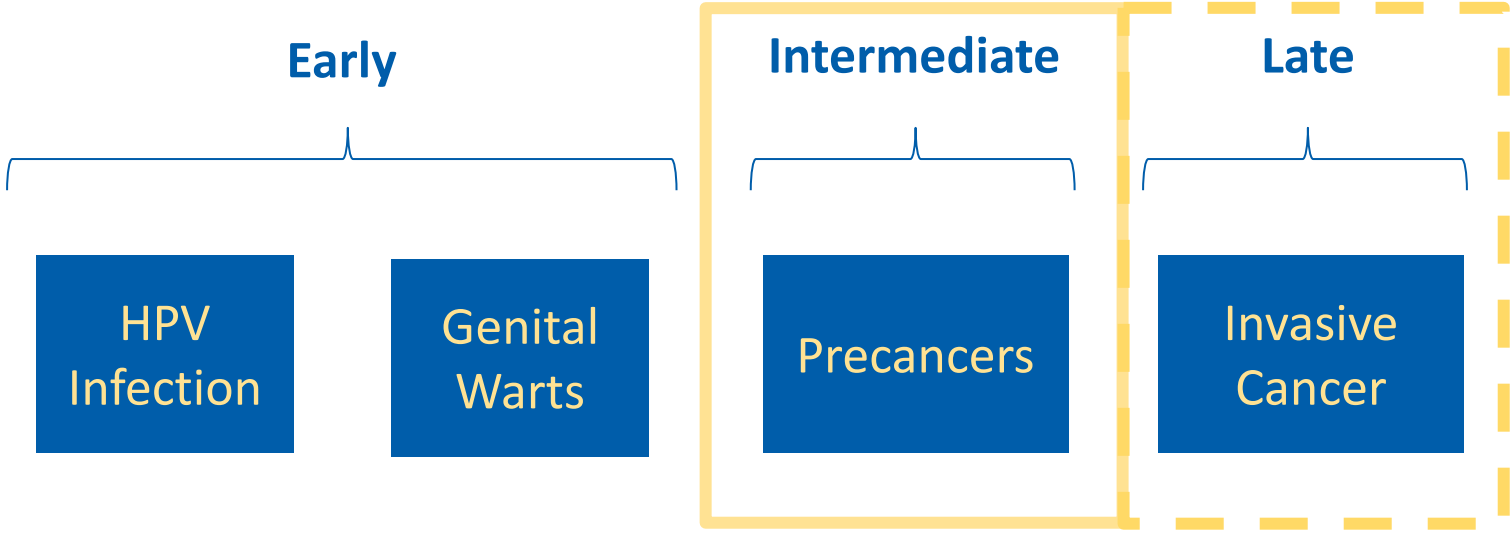
HPV Vaccine Impact Monitoring Project

(HPV-IMPACT)

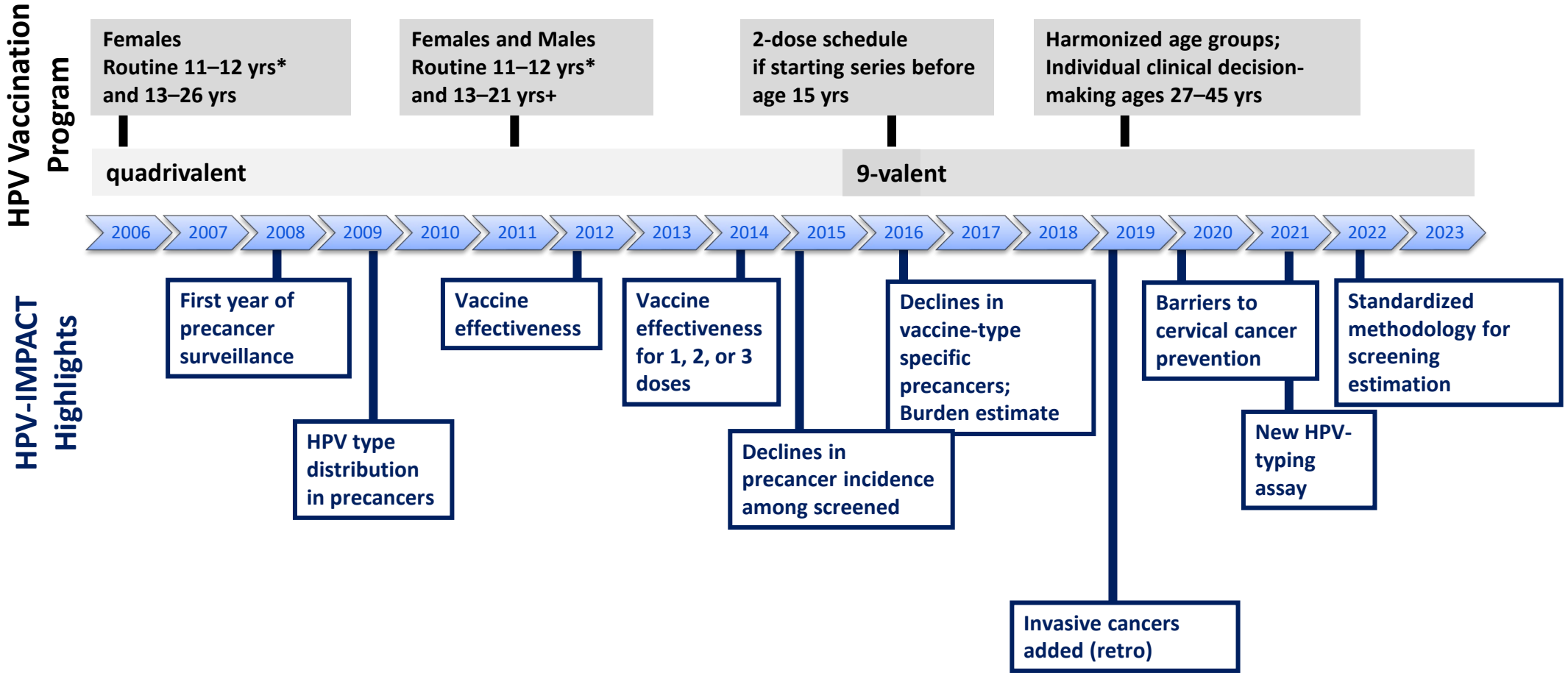
(Attachment 1, Section J)

Human Papillomavirus Vaccine Impact Monitoring Project (HPV-IMPACT)

- Purpose: Evaluate impact of the HPV vaccination program & vaccine effectiveness
  - Overall trends in high-grade cervical lesions (CIN grades 2 and 3 and adenocarcinoma in situ, referred to as CIN2+) and invasive cancers
  - HPV type distribution in CIN2+ lesions
- Anticipated funding: $2-3M total across 5 awards



History of HPV Vaccination Program and HPV-IMPACT



Main Required Activities

- Conduct surveillance on histologically-confirmed high grade cervical dysplasia (CIN2+) and invasive cervical cancers, using active surveillance of pathology labs and cancer registries
- Obtain archived diagnostic biopsy specimens on CIN2+ precancers (ages 18-39 years) and cancers (ages 18+) for HPV genotyping at CDC
- Obtain additional information on CIN2+ cases (e.g., HPV vaccination history, demographic information, and cervical cancer screening history)
- Assess feasibility of adding surveillance of oropharynx cancers

Optional Activities

- Assess feasibility of adding surveillance to include anal precancer and/or cancer

Lyme and Other Tickborne Diseases

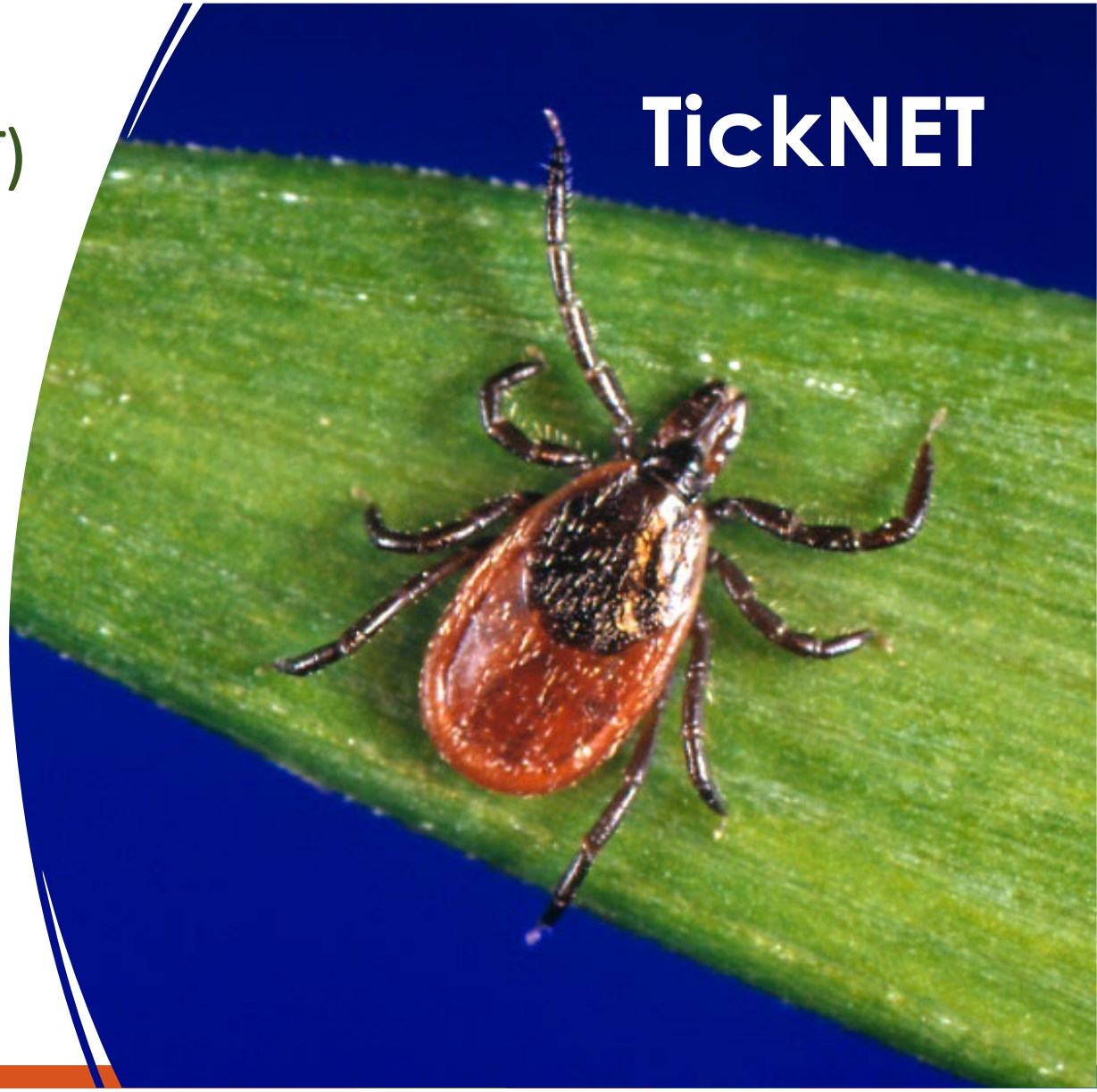
(TickNET)

(Attachment 1, Section K)

Lyme and Other Tickborne Diseases Program (TickNET)

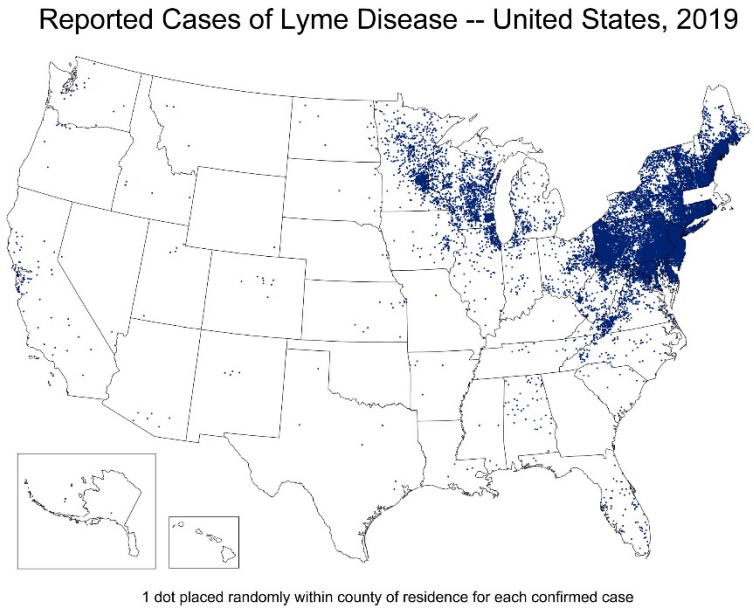
- Established in 2007
- A collaborative effort:
  - Division of Vector-borne Diseases (DVBD)
  - Division of Parasitic Diseases and Malaria (DPDM)
  - State health departments
  - Academic partners
- Foster coordinated surveillance, research, education, and prevention of Lyme and other tickborne diseases
- CDC contacts, DVBD
  - Principal Investigator: Sarah Hook
  - Study coordinator: Courtney Nawrocki
- Anticipated funding strategy:
  - $500,000 to $2,000,000
  - Up to 4 awards

https://www.cdc.gov/ticknet/index.html



Summary of TickNET Activities

- New for 2024: two activity tiers
  - **Tier 1:** Enhanced surveillance for Lyme disease using electronic health records (EHRs) or other novel data sources
    - **Academic partnership(s) strongly recommended**.
  - **Tier 2:** Tickborne disease special studies
- Sites may participate in Tier 1 or Tier 2 activities, or both.
- Activities listed within each tier are marked as either required or optional. *Examples:*
  - **Tier 1 required activity**: Produce routine estimates of Lyme disease incidence using EHRs or other novel data sources.
  - **Tier 1 optional activity**: Conduct clinical research studies to address questions regarding Lyme disease in certain patient populations using EHRs.
  - **Tier 2 optional activity:** Conduct studies to evaluate the feasibility, acceptability, or effectiveness of interventions to reduce the incidence of tickborne disease.



Prion Diseases

(Attachment 1, Section L)

EIP Prion Surveillance Overview
NCEZID/DHCPP/PPHO

- **Over the last 10 years, up to 12 state/local health departments have received prion disease funding in any one year through EIP, ELC, or direct contract.**
- **Anticipated funding level: $185,000 to $300,000 across 2 sites**
- **Recipients selected based on:**
  - population size
  - occurrence of a cluster of human cases increasing public and health authority concerns
  - proximity to Alberta Canada, the epicenter in North America for bovine spongiform encephalopathy (BSE)
  - the occurrence of a case of BSE in the state
  - the presence of chronic wasting disease (CWD) in the state
  - a state's interest and ability to conduct enhanced human prion surveillance
- **In addition, all states are provided non-monetary support through the National Prion Disease Pathology Surveillance Center (NPDPSC).**

EIP Prion Surveillance Activities
NCEZID/DHCPP/PPHO

- Reporting prion disease cases in persons <55 years or suspected of resulting from iatrogenic transmission.
- Maintaining a line list of all suspected prion disease cases.
- Providing outreach to medical providers and others to increase the number of autopsies of suspected and clinically-diagnosed prion cases.
- Collaborating with NPDPSC to coordinate testing and dissemination of results.
- Conducting a study to identify CJD-related neurological illness among hunters (in state with endemic CWD).

Mpox Vaccine Effectiveness Evaluation

(Attachment 1, Section N)

CDC Emerging Infections Program

Project Opportunity:
Mpox Multi-Jurisdictional Vaccine Effectiveness Evaluation

May 1, 2023

Centers for Disease Control and Prevention, Atlanta, GA

EMERGING INFECTIONS PROGRAM

Multi-Jurisdictional Case-Control VE Public Health Evaluation

- In October 2022, CDC proposed a multi-jurisdictional case-control study to evaluate vaccine effectiveness of JYNNEOS™ vaccine to prevent mpox infection in collaboration with the Emerging Infection Program (EIP) and Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases (ELC) sites with substantial Mpox incidence

- **Goal:** to continue the multi-jurisdictional case-control evaluation to estimate the durability and effectiveness of the JYNNEOS vaccine for the eligible population - gay, bisexual, other MSM (GBMSM), and transgender individuals

Multi-Jurisdictional Case-Control VE Public Health Evaluation

(slide 1 of 2)

- **Primary Objective:** To evaluate the effectiveness and durability of JYNNEOS MPX vaccine in preventing infection among GBMSM and transgender individuals aged ≥18-49 years

- **Secondary Objective:** To estimate effectiveness and durability by number of doses, route of administration, timing of doses, age groups, immunocompromised status, and clinical endpoints

- **Outcome:** Actionable public health data on the durability and effectiveness of JYNNEOS MPX vaccine in preventing symptomatic MPX illness and aid in informing vaccine policy such as the need for booster doses to reduce mpox disease burden and prevent future outbreaks

Multi-Jurisdictional Case-Control VE Public Health Evaluation (slide 2 of 2)

- **Design:** Case-control design with cases frequency matched to controls based on timepoint (e.g., within 2-4 weeks of clinic attendance) and state
- Cases will be identified through state/local health departments and controls will be selected from healthcare settings where PrEP is administered and from sexually transmitted infection (STI) and HIV clinics
- Questionnaire will be administered via mobile phone, email to assess demographic information, case history, exposure history, and vaccination history
- **Anticipated funding strategy:** $2,000,000 to $4,000,000; up to 15 awards

For additional information:

- EIP website at https://www.cdc.gov/ncezid/dpei/eip/index.html
- Activities: EIP Mailbox (eipmailbox@cdc.gov)


Question & Answer

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov