

Arizona BioSense Workgroup Meeting

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Electronic Disease Surveillance Program
August 14th, 2018



ARIZONA DEPARTMENT
OF HEALTH SERVICES

Health and Wellness for all Arizonans

- Welcome and Attendance
- Reminder for BioSense Liaisons
- Charter
 - Review of Current Year
 - Year 4 Objectives and Deliverables
 - Feedback Request-**Comments due by COB 8/21/2018**
- Questions
- Other items



Updates

Electronic Partners Status Update

Hospital Onboarding

Registration of Intent = 69

Hold Queue = 43

Testing = 0

Validation = 2

Production = 24

Data Use Agreements

Hospitals = 66

Local Public Health
Jurisdictions = 15

Reminder for BioSense Liaisons

- Staff Changes
 - If you have new staff or staff that no longer need access to the syndromic surveillance data, contact syndromicsurveillance@azdhs.gov.
 - If you have new staff or need a quick reminder on how to use ESSENCE, let our team know.
 - We can schedule a call with you.

Charter 2017-2018

Objective 1: Continue to support efforts to increase awareness among acute care facilities (hospitals) about how BioSense data is used.

Deliverable 1: Implement a process to provide outreach to acute care facilities regarding updates, use, onboarding, etc., at a state and/or local level. Report on the status of the decided process(es).

2017-2018 Hospital Outreach



- Plan to update ADHS's publicly available Syndromic Surveillance Website with information about activities
- Plan to create reports to share with hospital partners

Charter 2018-2019

Objective 1:

Deliverable 1:

Charter 2017-2018

Objective 2: Collaborate with the ADHS BioSense team, NSSP and ISDS to determine training needs, conduct trainings, review training and guidance materials, and disseminate training materials to relevant.

Deliverable 2: Determine the best methods to train users on the BioSense Platform based on the evaluation of needs and available resources. Report on the number of users trained for use of the BioSense ESSENCE and/or back end analysis and the available methods and resources available.

Charter 2018-2019

Objective 2:

Deliverable 2:

2017-2018 Training

- 75 ESSENCE Users as of this call
- 2 ESSENCE Q &A Trainings hosted by ISDS with webinar recording available
 - 96 people sent ESSENE Q & A webinar invitation
 - 94 people sent ESSENCE Q &A v2.0 webinar invitation
- 10 New ESSENCE Users AZ packages shared

NSSP UAT Pilot Sites

- **2 Pilot User Acceptance Testing Opportunities for BioSense Platform AZ participated**
 - **SAS Studio**
 - **Master Facility Table**

NSSP Community of Practice

- 1 NSSP CoP Steering Committee Chair
- 2 NSSP CoP Committee Co-Chairs
- 2 NSSP ESSENCE CoP CC DD Category HRI v1 and HRI v2
 - SDC Suicide Related v1
- 1 Pilot for ESSENCE Auto Query Writer Tool

Syndrome Definition Library



Help Build the Syndrome Definition Library

The Syndromic Surveillance Community of Practice is beta testing its [Syndrome Definition Library](#) . Look for syndromes by keyword. Filter search results by platform or author name.

To name a few topics, the library includes Heat-related Illness, Homeless Population, Zika, West Nile and Saint Louis Encephalitis, Chikungunya and Dengue, (various) Mass Gatherings, Opioid Diagnosis Codes, Fireworks Injuries, Agriculture-related Injuries, Hazardous Materials, and Rabies Exposure.

- 8 Syndromes from AZ submitted, including 3 from the Exploratory Analysis Subgroup Arboviral Syndromic Surveillance Protocol

Charter 2017-2018

Objective 3: ADHS and local health department users adapt to the NSSP transition. Continue to develop new and advance existing use cases which will include maintaining updates for current protocols.

Deliverable 3: Define new use cases for Arizona and any revisions for existing use cases. Report the number of use cases for routine analysis and event/outbreak analysis.

2017-2018 Use Cases

New Use Cases: 4

ILI

AFM

Varicella

RMSF

Ongoing Use Cases: 4

Arboviral

HRI

Mass Gatherings

Opioid Overdoses

Exploratory Analysis Subgroup Projects

- 1 Varicella ESSENCE Workgroup Formed

Charter 2018-2019

Objective 3:

Deliverable 3:

Exploratory Analysis Subgroup Projects

- New Use Cases?
- Any Collaborative Ideas?

Charter 2017-2018

Objective 4: Evaluate Arizona's syndromic surveillance use cases and validate BioSense data.

Deliverable 4: Present to workgroup and/or subgroup results of evaluation. Report on number of evaluations presented.

Conference Abstracts

- Abstracts accepted
 - International Society for Disease Surveillance
 - 2 ADHS and NSSP
 - 4 Maricopa County
 - 1 Pinal County
 - Council of State and Territorial Epidemiologist (CSTE) Conference
 - 2 for Maricopa County
 - Public Health Informatics (PHI) Conference
 - 1 ADHS
 - 1 ADHS and ISDS

Conference Abstracts

- Public Health Informatics (PHI) Conference
 - 1 ADHS
 - 1 ADHS and ISDS
- AZ Infectious Disease Training and Exercise
 - 2 ADHS

NSSP Recipient Meeting Roundtables and Presentations

- Information Sharing and Reporting
- Data Flow, Data Quality, and Data Validation
Production Process and Onboarding Process
- Community of Practice



Female *Aedes aegypti* mosquito

Lessons Learned

- **Syndromic surveillance can be used to identify cases of arboviral disease.** This case illustrates that arboviral disease records may be identifiable in the syndromic surveillance data *before* laboratories or healthcare providers are required to report.
- **Syndromic surveillance can improve situational awareness of arboviral diseases.** Syndromic surveillance best serves as part of an integrated approach to surveillance. In the absence of other surveillance, such as mosquito surveillance, syndromic data may be useful.

Syndromic Surveillance for Arboviral Diseases in Arizona

Public Health Problem

Arizona reports an average of 116 cases of West Nile virus (WNV) each year, and in 2015, Arizona saw a reemergence of St. Louis encephalitis (SLE) virus. In addition, Arizona is at risk for importation of viruses such as chikungunya, dengue, and Zika due to an abundance of *Aedes aegypti* mosquitoes in many parts of the state. Rapid identification of potential cases of arboviral disease (borne by mosquitoes and ticks) is critical to implementing appropriate public health responses. These include mosquito surveillance and control to eliminate infected mosquitoes and education about mosquito avoidance to prevent further transmission during the viremic period, when people are either symptomatic or asymptomatic and can transmit the virus.

Actions Taken

In 2015, Arizona's BioSense Exploratory Analysis Subgroup, which includes representatives from the Arizona Department of Health Services (ADHS) and seven Arizona counties, collaborated to develop a query and standard procedure for identifying potential arboviral disease cases by using the National Syndromic Surveillance Program's (NSSP) BioSense Platform. In Arizona, syndromic surveillance data contains emergency department and inpatient hospital records, including chief complaint (CC) and discharge diagnosis (DD) fields. The arboviral query identifies keywords and ICD-9-CM and ICD-10-CM diagnosis codes for chikungunya, dengue, SLE, WNV, and Zika in the combined "CC and DD" field. The query results are monitored by ADHS twice a week during the primary WNV season and once a week during the rest of the year, and ADHS staff notifies the county health departments when a record is identified for their jurisdiction. County investigators can use a "Case Investigation Decision Tree."

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Objective 4:

Deliverable 4:



Upcoming Meetings

Exploratory
Analysis
Subgroup

Thursday,
August 23 from
1:00 – 2:00

Exploratory
Analysis
Subgroup

Thursday,
September 27
from 1:00 – 2:00

THANK YOU

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