

Arizona BioSense Workgroup Meeting

**Sara Imholte, Krystal Collier and Bin Fang
Electronic Disease Surveillance Program
December 13th, 2016**



**ARIZONA DEPARTMENT
OF HEALTH SERVICES**

Health and Wellness for all Arizonans

- Welcome and Attendance
- Updates
 - Onboarding
 - On hold during transition
 - BioSense Governance Group and newly formed [NSSP Community of Practice \(CoP\) Steering Committee \(SC\)](#)
 - SC AZ Representative: Krystal Collier
 - What does this mean for the future of syndromic surveillance?
 - NSSP Updates Newsletter
 - Call for comments to the new NSSP CoP [Charter](#)
 - [International Society for Disease Surveillance \(ISDS\) Conference](#) December 6th-8th, 2016, Atlanta, GA
 - Highlights
- Charter
 - **Objective 2**
 - Collaborate with the ADHS BioSense team to determine training needs, conduct trainings, review training and guidance materials, and disseminate training materials to relevant users.
 - **Deliverable 2**
 - Determine the best methods to train users on the BioSense Platform based on the evaluation of needs. Report the number of users trained for use of the BioSense ESSENCE and/or back end analysis.
 - **Training**
 - » [ISDS Webinar Recording available:](#)
 - [ESSENCE Training: Building queries](#)
 - » [NSSP Resource Center](#)
 - NSSP Publications
 - Webinars & Training

– **Objective 3**

- Assist 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.

– NSSP Move from Transition (Phase 3) to Shutdown of Legacy System (Phase 4): January 3, 2017

» What does this mean for AZ?

» Database Tools:

- Legacy System- phpMyAdmin set up

VS

- New Environment- Adminer set up
- Legacy System-RStudio set up

VS

- New Environment-RStudio Professional set up

» Protocols

• Update Existing Programs:

- Data Quality Programs
 - Bin Fang, ADHS
- Arboviral Syndromic Surveillance
 - Small group meeting to discuss transition on Friday
- Heat Related Illness
 - Need to work on transition

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• Questions

• Other items



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Electronic Partners Status Update

Hospital Onboarding

Registration of Intent = 68

Hold Queue = 39

Testing = 0

Validation = 0

Production = 28

Data Use Agreements

Hospitals = 66

Local Public Health
Jurisdictions = 14



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Onboarding is currently on hold during the transition to the new environment of the BioSense Platform.

OVERALL NSSP UPDATES

Welcome to *NSSP Update*

NSSP Update provides monthly news about the National Syndromic Surveillance Program (NSSP). NSSP embodies collaboration, particularly in the development of its BioSense Platform, a secure cloud-based computing environment that hosts standardized, shared tools to rapidly collect, evaluate, store, and share data. *NSSP Update* will keep you in touch with the latest advancement in the platform's development.

If a colleague forwarded this issue to you, please [subscribe](#) to receive future issues.



IN THIS ISSUE:

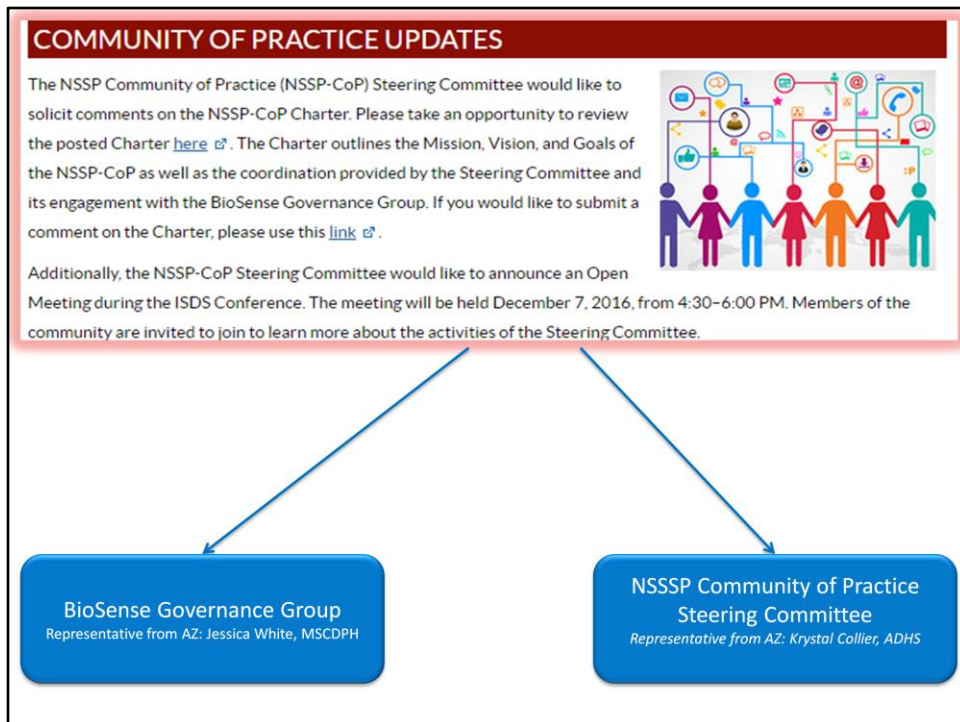


NSSP Move from Transition (Phase 3) to
Shutdown of Legacy System (Phase 4)

Glimpse Into the Future
Tips for Using Syndromic Data

Community of Practice Updates

NSSP Update: <http://www.cdc.gov/nssp/news.html#Future>



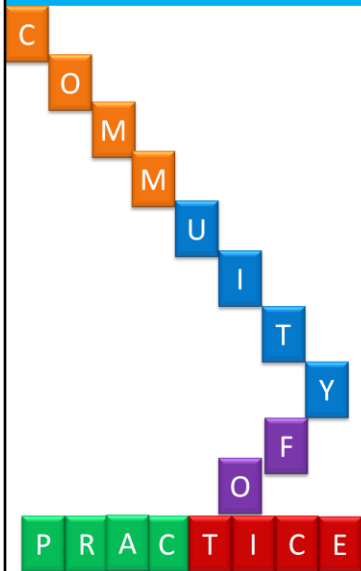
NSSP CoP Steering Committee Charter:

http://www.syndromic.org/storage/documents/NSSP_CoP/nssp_cop_charter_v1_final-annotated-signed.pdf

BioSense Governance Group:

<https://sites.google.com/site/biosenseredesign/governance>

NSSP-CoP Steering Committee Interaction with the BioSense Governance Group:



The NSSP CoP Steering Committee (SC) will have an interactive role with the BioSense Governance Group (BGG), providing the forum to connect with users of the BioSense Platform.

- The SC will work with community to focus on use of data and syndromic surveillance practice
- The BGG will work with the community to focus on the direction and support for the system.



<http://www.syndromic.org/annual-conference/2016-isds-conference>



Tool Time



Legacy Environment

- phpMyAdmin
- RStudio

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New Environment

- Adminer
- RStudio Professional



Tool Time



Legacy Environment	S E T U P	New Environment
<u>Database Tools:</u> • phpMyAdmin • Rstudio <u>Views:</u> • County lockers • Data for all patient visits to participating hospitals within their county • Data for any visit to participating AZ hospitals by patients that resides within their county		<u>Database Tools:</u> • Adminer • Rstudio Professional <u>Views:</u> • Data for all patient visits at AZ state level

In 2013 Arizona BioSense Workgroup decided to have county locker views set up for the database tools, phpMyAdmin and RStudio. County Locker Views were created by CDC for AZ. They were based off of zip code location.



Tool Time



Decision

New Environment

Database Tool: Adminer and RStudio Professional

- Option 1:
 - Give all authorized users access to the AZ state level data

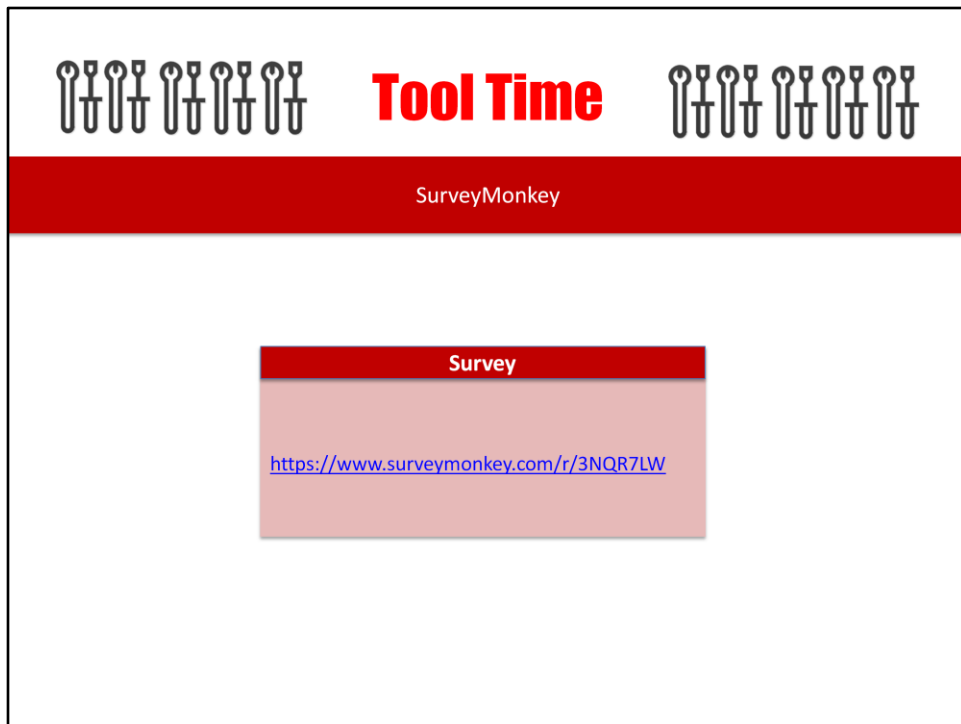
OR

New Environment

Database Tool: Adminer and RStudio Professional

- Option 2:
 - Keep current version of county locker model
 - *Special considerations:*
 - Delay to create views as CDC NSSP team has to configure them
 - Would have to prioritize views for counties that need access to database in first quarter of 2017

The ADHS Syndromic Surveillance Team has been working with the CDC NSSP team on options available for the views through the database tools, Adminer and RStudio Professional, for AZ authorized users. The concern the CDC NSSP team has about option 2, is maintenance of these views, especially for zip codes. If we decide as a workgroup to go with option 2, there will be a delay for counties to access the views because of the time needed to create the views. This means that access to the views and the data through database tools will not be available on 1/3/2017. Keep in mind that there is more data available in ESSENCE than we previously had. Some of the current authorized users may not need to use the database tools because the data may be accessible in ESSENCE. ESSENCE also dedupes the messages to be visualized at the visit level. Line lists can be downloaded from ESSENCE. The database has all of the data received at message level, where multiple messages are sent that make up the entire patient visit (messages for when patient is admitted to the ED, given a diagnosis, discharged and any updates to the visit). Hospital partners do not need to make any changes for their interfaces that would be affected by this decision. The Data Use Agreements will not require changes for either option to be created for Adminer or RStudio Professional.



Please take this SurveyMonkey by COB 12/28/2016 if possible and let us know how to proceed with authorized access to AZ data within the new database tools, Adminer and RStudio Professional.

Charter 2016-2017

Workgroup Year 2 Objectives and Deliverables

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

Deliverable: 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 use of the decided process(es).

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

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

Objective: Assist 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: 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.

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

Deliverable: Present to workgroup results of evaluation.

Charter 2016-2017

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

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ESSENCE Training: Building Queries

- **Date & Time**
 - Wednesday, November 30, 2016
 - Recording Available
- **Presenter**
 - **Wayne Loschen**, MS Computer Science, Johns Hopkins University Applied Physics Laboratory
 - Wayne Loschen is a Software Engineer at the Johns Hopkins University Applied Physics Laboratory (JHU/APL). He holds a B.S. in Computer Science from the University of Illinois Urbana-Champaign and an M.S. in Computer Science from Johns Hopkins University. He is the technical lead for ESSENCE.
- **Description**
 - This presentation will focus on how to build ad-hoc queries in ESSENCE. In addition to teaching the basic mechanics of building queries, the presentation will explore advanced techniques for building complex queries to find specific case definitions in the data.

<http://www.syndromic.org/events/isds-webinars/upcoming-recent/1083-essence-training-building-queries>

NSSP Resource Center

Introduction

Welcome to the NSSP Resource Center! We have compiled resources you will need to bring facilities onboard the BioSense Platform, update your Master Facility Tables, get started using the Platform tools, and comply with HL7 case notifications from finalized mapping guides.

If you have questions or would like technical assistance, please contact the [Service Desk](#) (account required).

Resources by Type

NSSP Publications

Forms

Webinars & Training

Standards & Guidance

Message Mapping Guides

Onboarding Materials

- [Onboarding Guide and Resources](#)

Fact Sheets

- [NSSP Fact Sheet](#)
- [DHIS Fact Sheet](#)

Quick Start Guides

- [Quick Start Guide to Using the Access & Management Center \(AMC\)](#)
- [Quick Start Guide to Using Adminer](#)
- [Quick Start Guide to Using ESSENCE](#)



<http://www.cdc.gov/nssp/biosense/publications.html>

Charter 2016-2017

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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.

Glimpse Into the Future

Tips for Using Syndromic Data

Take a moment to think about our accomplishments. The syndromic surveillance community and NSSP Team have come a long way together in the past two years. Data flow properly through the BioSense Platform—thanks to great collaboration within the syndromic community. Now congratulate yourself on a job well done as we move forward. And although activities to improve data quality and the Platform won't stop, we now have new opportunities to use our data (and creativity) to *practice* public health surveillance—and that's exciting!



For those relatively new to syndromic surveillance, or even for those public health organizations that haven't incorporated syndromic data into day-to-day practice, syndromic surveillance can be a little overwhelming and confusing. Syndromic data aren't perfect—but *that was never the intent*—at least, not initially. Syndromic data, although timely, are messy and require additional investigation (protocols, analyses) to be put into action.

There's no single "right" way to use syndromic data, but there are steps one can take to do a better job of incorporating these data into state and local surveillance. And there are resources for inspiring newer users. A couple excellent resources—Florida's *ESSENCE User Guide* and CDC's *MMWR* article on making sense of data—show how a theoretical framework can be used to develop steps for conducting syndromic surveillance. We've drawn from both sources to summarize what we believe are worthwhile steps to consider for a syndromic surveillance program.^{1,2} For details, please go to the sources. We especially thank the Florida Department of Health for the details in steps 3 and 5.

Essential Steps for Monitoring, Analyzing, and Responding to Syndromic Surveillance Data

Sun Setting of BioSense Legacy Environment

January 17						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Mark this date
on your
calendar

Phase 4 of the Transition

NSSP Move from Transition (Phase 3) to Shutdown of Legacy System (Phase 4)

Aside from working with several sites on a few quality issues, the Phase 3 Transition of the NSSP Implementation Plan is complete, bringing the total sites in production to 44.

The Phase 4 Legacy Shutdown is scheduled for **January 3, 2017**. Efforts to integrate legacy data into the BioSense Platform are well underway. Sites will **no longer need access to legacy data through phpMyAdmin or RStudio**. Logins to these tools will be removed from the Access & Management Center menu sometime during the first quarter of 2017. (Advance notice will be provided.) Initially, these changes might seem inconvenient, but the tools now hosted on the Platform and the new processes are significant improvements that will expand your analytic capabilities and help you get a comprehensive health picture that reflects all data collected.

Before shutting down the BioSense 2.0 front-end application and servers, we will verify that site data flow properly in the new environment, historic and new data are well integrated, and the BioSense Governance Group and syndromic community have had an opportunity to voice final concerns.

NSSP BioSense Platform

ESSENCE	ESSENCE
Adminer	Adminer - for DataMart SQL Queries
RStudio	RStudio
BioSense Application	BioSense web application home page
PhpMyAdmin	Admin - for MySQL Queries

Sun Setting 1/3/2017

Update Existing Programs



Data Quality Programs

- Bin Fang, ADHS



Exploratory Analysis Subgroup Projects:

- Arboviral Syndromic Surveillance
 - Small group is meeting on Friday to discuss the transition
- Heat Related Illness
 - Need to work on transition



Upcoming Meetings

Exploratory
Analysis Subgroup



AZ BioSense
Workgroup

- Thurs. Jan. 26
from 1:00 – 2:00

- Tues. Feb. 14
from 1:00 – 2:00



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THANK YOU

syndromicsurveillance@azdhs.gov | 602-542-6002

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