

Exploratory Analysis Subgroup of the Arizona BioSense Workgroup

September 28, 2017



ARIZONA DEPARTMENT
OF HEALTH SERVICES

Health and Wellness for all Arizonans

Objectives

- Welcome and Attendance
- ADHS Staffing Updates
- ESSENCE
 - New ILI v2 CC and DD Category Syndrome available now
- Banner UMC Tucson Facilities Revalidation
- Community of Practice Updates
 - September [Surveillance CoP](#) Call
 - Guided Discussion - Syndromic Surveillance Data Briefs
 - Amanda Morse (WA)
 - Meredith Jagger and Laurel Boyd (OR)
 - [Analytic Solutions Committee Update](#)
 - Looking for new [uses cases](#) to assist with
 - [ISDS Conference Call for Abstracts](#)
 - Deadline extended
 - New Steering Committee Chair
 - Krystal Collier
 - **Syndrome Definitions Committee**
 - [Register](#) for the call on 10/04/2017@10AM-11:00AM
 - Testing ESSENCE Query Writer Tool Feedback
 - R Hangouts for Beginners
 - [Register](#) for the call on 10/03/2017@9:00am-10AM
- NSSP [Success Stories](#) Submitted
 - Arboviral Syndromic Surveillance
- **What are your plans for syndromic surveillance and flu season?**
- Questions and Open Discussion
- Next Meetings



ADHS Staffing Updates

Meet our newest team member!



September NSSP Update and ESSENCE

💡 ESSENCE Tip: Watch Out for “Hidden” Rows

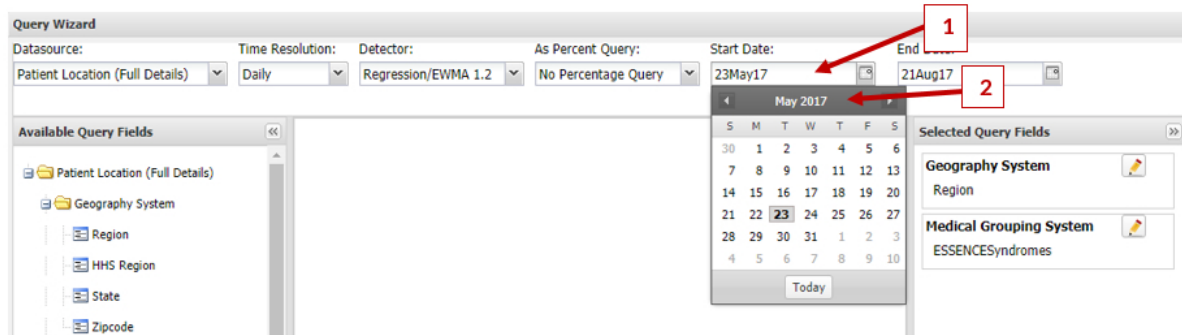
Frustration mounting, one system user couldn't understand why columns didn't total accurately in TABLE BUILDER EXCEL FILE but worked correctly in DETAIL DATA EXCEL FILE.

Here's why autosum did not appear to work: There are SUBTOTALs rows that you can't see unless you expand the rows. It's a good idea to autofit row height and adjust column width to see what's really there.

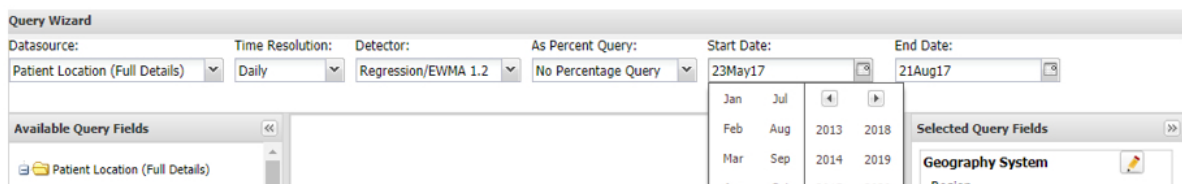
💡 ESSENCE Tip: How to Change Dates Quickly

Changing dates can get cumbersome in ESSENCE if you have to keep pointing and clicking to the year of choice. An easy alternative follows:

1. Select the calendar icon next to the Start Date (here, the date is 23May17).
2. Next, select the date in the top bar (this date is usually set to 90 days before the current date).



This selection reveals another pop-up that lists months to the left and years to the right. Use the arrows to select earlier years.



September 2017



IN THIS ISSUE:

- Overall NSSP
- Spotlight on SyS Practice
- Upcoming Events
- Last Month's Technical Assistance
- NSSP Participation
- Onboarding Updates
- Grantees and Partnerships
- Community of Practice
- Archived NSSP Update

New CC and DD Category Syndrome

ILI CCDD v1

Category	Term	NegTermA	NegTermB	NegTermC	NegTermD
ILI CCDD v1	CCDD TERMS: (,^fever^,andnot,^denies fev^,andnot,^shot^,andnot,^afeb^,andnot,^no fev^,andnot,^no temp^,or,^chill^,or,^pyrexia^,or,^febrile^,or,^high temp^,or,^elevated temp^,andnot,^denies any elevated temp^,andnot,^no elevated temp^,or,^feeling hot^,or,^feels hot^,or,^fvr^,andnot,^denies fvr^,andnot,^no fvr^),and,(^cough^,andnot,^denies cough^,or,^sore ^th[o r][a o][a r]t^,or,^soreth[o r][a o] [a r]t^,or,^strep^,or,^pharyn^,or,^upper resp^),or,(,^[/ JJ09^,or,^[/ JJ10^,or,^[/ JJ11^,or,^[/]487.[018];^,or,^[/]487[018];^,or,^[/]487. [018],or,^[/]487[018],or,^[/]488.[018][19];^,or,^[/]488[018][19];^,or,^[/]488.[018][19],or,^[/]488[018] [19],or,^442696006^,or,^442438000^,or,^6142004^,or,^195878008^,or,^influenza^,andnot,^vaccin^,andnot,^shot^,andnot,^immunizat^,or,^ flu ^,andnot,^shot^,andnot,^stomach^,andnot,^vaccin^,andnot,^immuniza^,or,^flu like^,or,^flulike^,or,^flu symptom^),andnot,^[/]A08.4^,andnot,^[/]A084^				

Onboarding Update

- Banner UMC Tucson Facilities
 - Banner University Medical Center-South Campus
 - Banner University Medical Center-Tucson Campus
- Transitioning from EHR System on 10/1/2017
 - Change from Epic to Cerner
 - ADHS will be revalidating the data
 - Impacts both Syndromic Surveillance and ELR

Onboarding Update

- During this time both facilities will be moved from Production to Staging
- Once the validation process is complete
 - ADHS will move facilities back to Production

September Surveillance CoP Call

- Guided Discussion - Syndromic Surveillance Data Briefs
 - Amanda Morse (WA)
 - Meredith Jagger and Laurel Boyd (OR)
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September Surveillance CoP Call

- For additional information about syndromic surveillance reports, view the following resources:
- [How to Develop a Simple Shiny App](#)
- [Aberration Detection in Public Health Surveillance using the R package surveillance](#)
- [Use of R for Visual Display of Public Health Data](#)
- [Making Report-Quality Plots in R with Low-to-Moderate Coding Experience](#)
- [Exploring Chief Complaint Word Co-occurrence Visualizations](#)
- [Machine Learning in R: Detecting Carbon Monoxide Poisoning in Syndromic Surveillance Data](#)
- [Using R Markdown, SQL, and RODB to Generate Reports](#)
- [Data quality monitoring for syndromic surveillance using R: a tidy approach](#)

Steering Committee Update

New Chair

NSSP-CoP Governance

An established governance and organizational structure for the NSSP-CoP will set a foundation for strategic action and ensure feasibility and alignment of NSSP-CoP activities with stakeholder priorities.

The NSSP-CoP Steering Committee (SC) will work to ensure that the NSSP-CoP effectively promotes the use and practice of syndromic surveillance, enables a peer-to-peer collaborative environment to foster and facilitate knowledge sharing and partnership, and enhances the nation's syndromic surveillance capacity. Committee members will leverage their expertise to provide direction and recommendations for projects that benefit community engagement and collaboration across all sectors of the CoP.

The Centers for Disease Control and Prevention and the International Society for Disease Surveillance are grateful for the service of members of this Committee.

CoP Charter

CoP Steering Committee Members

Ask ASC?

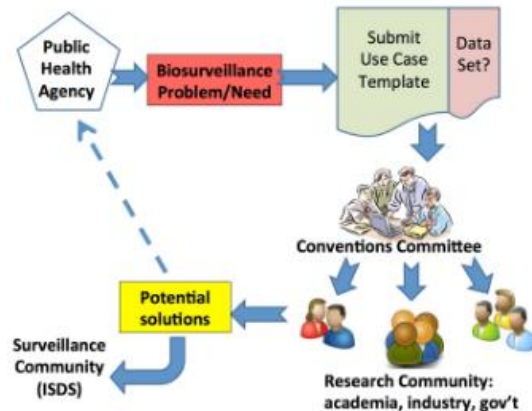
Committees: Analytic Solutions Committee

 Directory  Calendar  Blogs  Forums  Pages ▾

 Welcome

ASC Mission

The purpose of the ISDS Analytic Solutions Committee (ASC) - formerly the Technical Conventions Committee (TCC) - is to facilitate and expedite the development, evaluation, and implementation of technical methods for public health surveillance by:



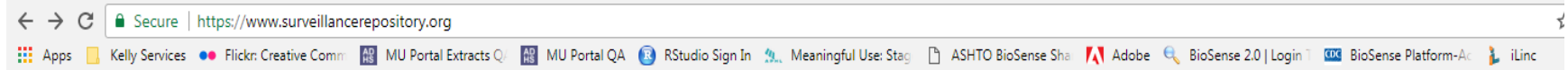
Collecting, classifying, posting use cases (problem descriptions, requests for assistance) from public health professionals.

Discussing use cases as needed in open forums to derive well-defined technical problems of practical

Review of Use Cases

A	B	C	D	E	F	G
Use Case Descriptor	Conference Call	Webinar	Consultancy	Consultancy Paper	Previous Driver/ Attendee institutions	Dataset available
Cluster detection using free text (chief complaint+)	0	0	1	1	North Carolina, New York City, Boston	1
Predictive modeling (influenza, dengue,...)	0	1	1	0	Dept. of Defense, CDC	0
Pediatric asthma exacerbation risk	0	0	1	1	City of Boston, New York City	1
Arboviral disease surveillance	0	0	1	0	Arizona, Tennessee, Louisiana	0
Negation management in free-text classification	0	0	1	1	Univ. Utah, North Carolina, Georgia, Tennessee	1
Severe weather (disaster) surveillance	0	1	0	0		0
Mass Gathering surveillance	0	1	0	0	Florida, New Jersey	0
Spatiotemporal cluster detection of legionellosis	1	0	0	0	New York City	0
Surveillance for norovirus, rotavirus, other specific GI infections	0	0	0	0		0
Mental health or suicidal ideation surveillance	0	0	0	0		0
Overdose surveillance (opioid +) methods	1	1	0	0	(MANY--ISDS workgroup)	0
Surveillance methods for avoidable lab errors/accidents	0	0	0	0	Japan	0
Formation/validation of ICD-10 syndromes	0	1	0	0	(Many)	0
Methods to adjust for temporary, partial data dropouts (data quality example)	1	0	0	0	Washington; Marion County, Ind.	0
Social media surveillance methods	1	0	0	0	Kentucky, Oklahoma City, New York City, Sedgwick County, Kansas	0

Knowledge Repository



Search Webinars Use Cases Surveillance In Action Trending Topics About ISDS Community of Practice

Hurricane Resources

Mass Gathering Surveillance

Opioid Resources

Zika Resources

BioSense Resources

Meaningful Use

Welcome to the Surveillance Knowledge

Click on a topic under the Key Topic Areas section in the left column, then select an article for that topic. You may also search for specific topics by entering one or more keywords in the Search bar. You can filter the results by topic, date, or Author Name. Because this beta version of the Knowledge Repository is still under development, search results will be limited.

Search

Clear

Search

Key Topic Areas

- Surveillance Systems (115)
- Infectious Disease (81)
- Chronic Disease or Injury (43)
- Data Analytics (42)
- One Health Surveillance (36)
- BioSense (31)
- Evaluation of Syndromic Surveillance (28)
- General ISDS (25)

Syndromic Surveillance Climate and Health Guidance Document



In general, data from public health surveillance can be used for short- and long-term planning and response through retrospective data analysis of trends over time or specific events [Hall 2012]. Combining health outcome data (e.g., hospitalizations or deaths) with environmental and socio-... Read more

Editorial - Fentanyl in the US heroin supply: A rapidly changing risk environment



From the Special Edition of the International Journal of Drug Policy: US Heroin in Transition: Supply Changes, Fentanyl Adulteration and Consequences, August 2017, Volume 46, pp 107-111.

Abstract

ISDS Annual Conference

2018 Annual Conference



Conference » 2018 Annual Conference

More in this Section... ▼

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ISDS 2018 Annual Conference

January 30 - One Health Symposium

January 31 - February 2 - Annual Conference

[Call for Abstracts](#)

Exciting Changes are Coming to ISDS 2018!

ISDS Annual Conference

Basic Submission Guidelines

Abstract Tips

We've assembled some of the more common questions about abstract submission on our [Abstract Tips](#) page.

Key Dates

Abstract Submission Deadline: ~~September 29, 2017~~ **Extended: October 13, 2017, Midnight, Eastern Time**

Author Acceptance Notification: November 10, 2017

Abstract Awards

The Award for Outstanding Student or Post-Degree Abstract is currently live. Visit the [Award page](#) to download the Award flyer and to find more information about the requirements and review process.

Abstract Submission Deadline: ~~September 29, 2017~~ **Extended: October 13, 2017, Midnight, Eastern Time**

Student Application Deadline: October 27, 2017

Remember to Register for future SDC Calls

Syndrome Definition Committee Call

[View Registrations](#)[Tell a Friend](#)[Events in Series](#)**10/4/2017**

- [RSVP for this event](#)

When: Wednesday, October 4, 2017
1 - 2 PM ET

Where: <https://attendee.gotowebinar.com/rt/6116206436909396738>
United States

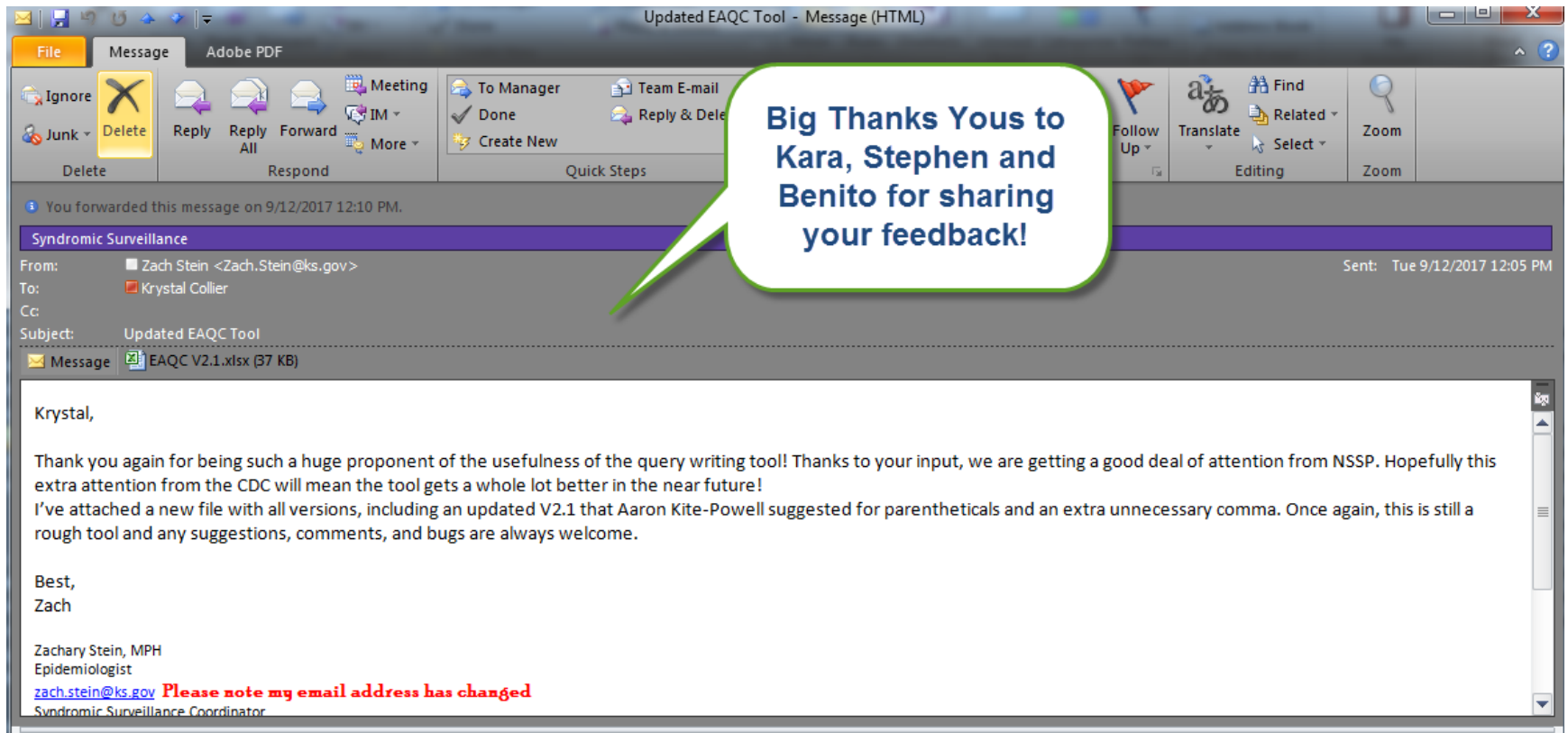
Contact: Rasneet Kumar
rasneetkumar@mail.maricopa.gov

[« Go to Upcoming Event List](#)

Registration Link

<https://attendee.gotowebinar.com/rt/6116206436909396738>

ESSENCE Query Writer Tool



EAQC V2.1.xlsx [Read-Only] - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Acrobat

Clipboard Font Alignment Number Styles Cells Editing

Normal Bad Good Neutral Calculation Check Cell

Output String					
(,^bat^,AND,^bite^,),ANDNOT,(^baseball^,or,^batter^,),or,(^rabies^,AND,^expos					
Main Term Fields	Term 1	Term2	Term 3	Term 4	Te
Enter up to 50 Main Terms of Interest	bat	rabies			
AND Values by Main Term	Ands - Term 1	Ands - Term 2	Ands - Term 3	Ands - Term 4	At
Enter up to 5 AND Terms for each Main Term -	bite	exposure			
1					
2					
3					
4					
5					
ANDNOT Values by Main Term	ANDNOTs - Term 1	ANDNOTs - Term 2	ANDNOTs - Term 3	ANDNOTs - Term 4	At
Enter up to 50 ANDNOT Terms for each Main Term and its AND Terms -	baseball	vaccine			
1					
2	batter				
3					
4					
5					
6					
7					
8					
9					
10					
11					
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13					

Training Requests

- Suggestions for ESSENCE
 - Map Function
 - Sharing Dashboards
 - Validating Queries
 - More examples for use of the data
 - Mass Gathering Surveillance ?
 - Disaster Surveillance ?
 - Data Sharing ?

Training: R Hangouts for Beginners

Dear R Group members,

The next session of our ***R Hangouts for Beginners*** series is coming up on October 3! Please see below for more information about the second meeting and the registration link.

<https://attendee.gotowebinar.com/register/5167307011730796035>

Date and Time:

Tuesday, October 3, 2017

12:00 pm - 1:00 pm ET

Presenter:

Harold Gil

Surveillance Epidemiologist

Marion County Public Health Department

Description:

These sessions are meant to be open forums for R Beginners that have basic R questions. We'll begin with an open forum to take any random R questions from audience members, then if there are no questions we'll go over a short example of creating interactive heatmaps that display percent completeness of fields by data source (i.e. facility). The session will then close with more open forum time to take R questions.

Shared Resource



R news and tutorials contributed by (750) R bloggers

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If you are an R blogger yourself you are invited to add your own R content

Working with air quality and meteorological data Exercises (Part-4)

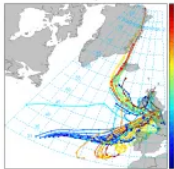
September 26, 2017

By Noshia Assare

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(This article was first published on R-exercises, and kindly contributed to R-bloggers)

[f Share](#) [Tweet](#)



Atmospheric air pollution is one of the most important environmental concerns in many countries around the world, and it is strongly affected by meteorological conditions. Accordingly, in this set of exercises we use openair package to work and analyze air quality and meteorological data. This packages provides tools to directly import data from air quality measurement network across UK, as well as tools to analyse and producing reports.

SEARCH R-BLOGGERS

Google Custom Search

RECENT POPULAR POSTS

Time Series Analysis in R Part 2: Time Series Transformations
Super excited for R promises

MOST VISITED ARTICLES OF THE WEEK

1. How to write the first for loop in R
2. Installing R packages
3. How to Make a Histogram with Basic R
4. Using apply, sapply, lapply in R
5. Tutorials for learning R
6. How to perform a Logistic Regression in R
7. In-depth introduction to machine learning in 15 hours of expert videos
8. Scatterplots
9. Regression Analysis — What You Should've Been Taught But Weren't, and Were Taught But Shouldn't Have Been

SPONSORS

NSSP Success Stories

- Syndromic Surveillance for Arboviral Diseases in Arizona
 - Submitted to NSSP on 09/27/2017

What are your plans for syndromic surveillance and this year's flu season?

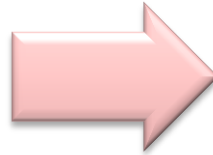
ILI CCDD v1

Category	Term	NegTermA	NegTermB	NegTermC	NegTermD
ILI CCDD v1	CCDD TERMS: (,^fever^,andnot,^denies fev^,andnot,^shot^,andnot,^afeb^,andnot,^no fev^,andnot,^no temp^,or,^chill^,or,^pyrexia^,or,^febrile^,or,^high temp^,or,^elevated temp^,andnot,^denies any elevated temp^,andnot,^no elevated temp^,or,^feeling hot^,or,^feels hot^,or,^fvr^,andnot,^denies fvr^,andnot,^no fvr^),and,(^cough^,andnot,^denies cough^,or,^sore ^th[o:r][a:o][a:r]t^,or,^soreth[o:r][a:o][a:r]t^,or,^strep^,or,^pharyn^,or,^upper resp^),or,(,^[/ JJ09^,or,^[/ JJ10^,or,^[/ JJ11^,or,^[/]487.[018];^,or,^[/]487[018];^,or,^[/]487.[018];^,or,^[/]487[018];^,or,^[/]488.[018][19];^,or,^[/]488[018][19];^,or,^[/]488.[018][19];^,or,^[/]488[018][19];^,or,^442696006^,or,^442438000^,or,^6142004^,or,^195878008^,or,^influenza^,andnot,^vaccin^,andnot,^shot^,andnot,^immunizat^,or,^flu ^,andnot,^shot^,andnot,^stomach^,andnot,^vaccin^,andnot,^immuniza^,or,^flu like^,or,^flulike^,or,^flu symptom^),andnot,^[/]A08.4^,andnot,^[/]A084^				

Upcoming Meetings

Arizona BioSense Workgroup

- Tues. Oct. 03
from 1:00 – 2:00



Exploratory Analysis Subgroup

- Thurs. Oct. 26
from 1:00 – 2:00



ARIZONA DEPARTMENT
OF HEALTH SERVICES

Health and Wellness for all Arizonans

THANK YOU

syndromicsurveillance@azdhs.gov | 602-542-6002

azhealth.gov

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