

Exploratory Analysis Subgroup

of the Arizona BioSense Work Group



March 24th, 2016

Objectives

- Welcome and Attendance
- Congratulations to Jessica White as the new Local Representative for the BioSense Governance Group!!!!
- Exploratory Analysis Subgroup Project
 - Heat-Related Illness
 - Feedback Request-Email 03-01-2016
 - What, How, When, Where?
 - Jessica White, Maricopa County Department of Public Health
 - CSTE Heat Related Illness Syndrome Definition
- International Society for Disease Surveillance (ISDS) Technical Conventions Committee Consultancies-Defense Threat Reduction Agency (DTRA)
 - Arboviral Problem Template
 - Submitted
- ISDS Community Forum
 - Heat Related Illness Project
 - Syndromic Surveillance Arboviral Protocol Updated
- Next Meetings
- Questions and Discussions
-



Congratulations to Jessica White as the new Local Representative for the BioSense Governance Group!!!!





Heat-Related Illness Project Feedback Request

- Feedback Request-Email 03-01-2016
- Feedback for this project for questions like:
 - What?
 - Example what do we want to accomplish with this project? What are our goals?
 - How?
 - How do we plan to meet these goals for the project? Are there specific tools or resources we will be using? Will there be a protocol or some sort of document that has instructions for this use case?



Heat-Related Illness Project Feedback Request

– When?

- When or do we have a time period for how long we would like to plan steps for this project, also overall time period for this project?

– Where?

- Where do we want to look at BioSense data for this project or where do we want to start looking at BioSense data? Front End Application (also called BioSense Visualization Site), Back End Lockers, RStudio, all three options or some combination? Where does the Biosense syndrome definition for “Heat, excessive” on the Front End Application fall into this project? If you are a LPHJ participant, have you looked at the Front End Application for this syndrome definition for your county or even AZ as whole? Check out Vjollca and Aaron’s presentation slide 7 for an example, or the BioSense Visualization Guide.

Heat-Related Illness Project Feedback Request



👤 Reply by **Jessica White** on March 15, 2016 at 6:03pm

Hey Krystal,

In response to your questions:

- A. *Objective – To observe the trends of heat-related illness within 2016 BioSense data and determine how BioSense data trend with deaths, hospital discharge data, and environmental temperatures*
- B. *Use a protocol similar to the Arboviral Syndromic Surveillance Project protocol, i.e., divide tasks/labor between ADHS and LPHJs*
- C. *Begin working on the protocol ASAP so surveillance may begin by May 2016 and continue through October 2016*
- D. *The Front End Application should be avoided, since it will be phased out by the end of the year. It would be great to use the CSTE Heat Syndrome (developed by the CSTE heat syndrome workgroup, which includes members from ADHS and MCDPH). Code exists for phpMyAdmin, but I'm not opposed to using RStudio. It may be interesting to compare the CSTE heat syndrome to ESSENCE (possibly available in June 2016).*

Jessica (MCDPH)

▶ Reply ✉ Message



Heat-Related Illness Project

- Jessica White, Maricopa County Department of Public Health
 - CSTE Heat Related Illness Syndrome Definition

CSTE Workgroup

- Draft Paper in Progress

Table 1. Recommendations for heat-related illness syndrome: Inclusion criteria

Query	Inclusion terms		
Heat-specific (Narrow)	heat	"sun stroke"	(heat OR hot) AND
	heatcramp	sunstr	(excessive OR
	heatex	sun-str	exhaust OR
	heatst	"to hot"	expos OR
	heat-exhaust	"too hot"	fatigue OR
		992	cramp OR
	heat-related	(Effects of heat and light; ICD-9-CM)*	stress OR
Dehydration	heat-stroke	(Effect of heat and light; ICD-10-CM)*	"in car" OR
	hypertherm	(Accident caused by excessive heat; ICD-9-CM)*	outside OR
	overheat OR "over heat"	X30	prostration)
	dehy	electrolyte AND (abnormal OR imbalance)	276.5 OR 2765
	dehydration	hypovolemia	(Volume depletion; ICD-9-CM)*
	"dry mouth" OR drymouth	volume depletion	E86 (Volume depletion; ICD-10-CM)*
	sunburn	692.71 OR 69271	L55
			(Sunburn; ICD-10-CM)*

Table 2. Recommendations for heat-related illness syndrome: Exclusion criteria

Category	Exclusion terms		
ICD-9-CM codes	1992	6992	E900.1 OR E9001 (of man-made origin)
Feeling heat, swelling, redness, and/or pain	allerg	(hot AND sensation) OR "heat sensation"	pain AND red
	feeling hot	inflam	radiat
	feels heat	pain AND (limb OR arm OR shoulder OR elbow OR wrist OR hand OR leg OR hip OR groin OR thigh OR knee OR ankle OR foot OR feet)	redness
	feels hot		swell OR swollen
	felt hot		surg OR post op
Using heat / ice for therapeutic reasons	ibuprofen OR ibuprophen OR alieve OR motrin OR tylenol	heat AND (applied OR tried OR used OR using)	(pain AND (back OR neck OR flank)) OR lumbago
	injur OR trauma	"heat pack"	relief OR resolve OR relieve OR relieve

CSTE Workgroup

Table 1. Recommendations for heat-related illness syndrome: Inclusion criteria

Query	Inclusion terms		
Heat-specific (Narrow)	heat_	“sun stroke”	(heet OR hot) AND
	heatcramp	sunstr	(excessive OR
	heatex	sun-str	exhaust OR
	heatst	“to hot”	expos OR
	heat-exhaust	“too hot”	fatigue OR
		992	cramp OR
	heat-related	<i>(Effects of heat and light; ICD-9-CM)*</i>	stress OR
		T67	“in car” OR
	heat-stroke	<i>(Effect of heat and light; ICD-10-CM)*</i>	outside OR
Dehydration	hypertherm	E900 <i>(Accident caused by excessive heat; ICD-9-CM)*</i>	prostration)
	overheat OR “over heat”	X30 <i>(Exposure to excessive natural heat; ICD-10-CM)*</i>	
	dehy	electrolyte AND (abnormal OR imbalance)	276.5 OR 2765 <i>(Volume depletion; ICD-9-CM)*</i>
	dehidration	hypovolemia	E86 <i>(Volume depletion; ICD-10-CM)*</i>
	“dry mouth” OR drymouth	volume depletion	
		692.71 OR 69271	
	sunburn		L55 <i>(Sunburn; ICD-10-CM)*</i>

CSTE Workgroup

Table 2. Recommendations for heat-related illness syndrome: Exclusion criteria

Category		Exclusion terms	
ICD-9-CM codes	1992	6992	E900.1 OR E9001 (of man-made origin)
Feeling heat, swelling, redness, and/or pain	allerg	(hot AND sensation) OR “heat sensation”	pain AND red
	feeling hot	inflam	radiat
	feels heat	pain AND (limb OR arm OR shoulder OR elbow OR wrist OR hand OR leg OR hip OR groin OR thigh OR knee or ankle OR foot OR feet)	redness
	feels hot		swell OR swollen
	felt hot		surg OR post op
Using heat / ice for therapeutic reasons	ibuprofen OR ibuprophen OR alieve OR motrin OR tylenol	heat AND (applied OR tried OR used OR using)	(pain AND (back OR neck OR flank)) OR lumbago
	injur OR trauma	“heat pack”	relief OR resolve OR relieve OR releive



ISDS Consultancy

Next Steps

- Arboviral Problem Template
 - Submitted to ISDS for Review

ISDS Community Forum



👤 Reply by **Jessica White** on March 15, 2016 at 5:25pm

I'm glad to see that we added Zika to the arboviral syndromic surveillance protocol. It will be interesting to see how many people come to the hospitals mentioning a concern with Zika.

The next steps for this project will be to conduct an evaluation on the arboviral project as a whole. I'm excited to hear everyone's opinion on the protocol.

-Jessica (Maricopa County)

► Reply ✉ Message



👤 Reply by **Krystal Collier** on March 17, 2016 at 5:57pm

Hi Everybody,

We wanted to let everyone know that **Zika** has now been added to the **Syndromic Surveillance Arboviral Protocol**. Share your thoughts with us on this new edition!

Thanks,

Krystal

Attachments:



SyndromicSurveillance_Protocol_Arboviral_V3 FINAL_17Mar_2016.docx, 1.3 MB

✕ Delete

► Reply

Upcoming Meetings

Arizona BioSense
Workgroup Exploratory
Analysis Subgroup

- Tues. April.05 from
1:00 – 2:00



Exploratory Analysis
Subgroup

- Thurs. April.28 from
1:00 – 2:00



SyndromicSurveillance@azdhs.gov



Health and Wellness for all Arizonans