
Exploratory Analysis

August 16th

Agenda

- Intro
- Updates
 - Onboarding
 - Data Quality
 - NSSP
- Syndrome Free Text
 - Burns
- Opioid Work Group
 - Xylazine Dashboard
- Questions
- Next meetings

Updates: Onboarding

- **Benson Hospital** - Waiting for them to improve the following before they can be moved into production
 - Chief Complaint Text is currently at 28.34% for completeness
 - Diagnosis code and description is currently at 39.41% for completeness
 - Admit Reason Description is currently at 21.66% for completeness
- **Dignity Health Arizona General Facilities**
- **Sage Memorial**

Updates: Data Quality

Completeness:

- **Summit Healthcare Regional Medical Center:**

- Facility type code
- Patient class
- Admit reason description
- Diagnosis code
- Diagnosis description

- **Tuba City Regional Medical Center:**

- Admit reason description

- **Dignity Health:**

- Admit reason description

Updates: Data Quality

Validity

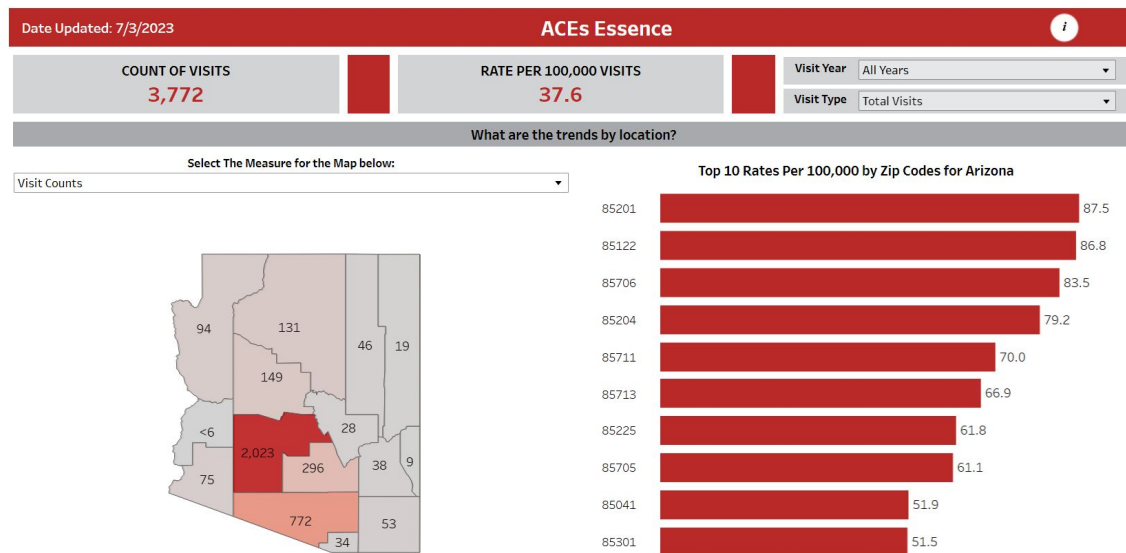
- **Summit Health Regional Medical Center:**
 - Facility type code and patient class code do not match.
- **Dignity Health:**
 - Facility type code and patient class code do not match.

Timeliness

- **Tuba City**
 - Late submissions. Now resolved.
- **Dignity Health**

ACEs Dashboard now live

- ACEs [Dashboard](#)



Due to the small sample size in Greenlee, it is inadvisable to use the rate in research or analysis.

* Rates per county may appear larger than rates per state due to the lower population denominators.

NSSP: Vendor Patches

Effect on Services:

These tasks will require restarting all onboarding and production BioSense Platform servers several times. The following services will not be available during this patching window:

- AMC
- Data Quality Dashboard
- ESSENCE data processing
- ESSENCE Web application
- RStudio Workbench
- SAS Studio.

Announcement!

**Onboarding and Production
Vendor Patches, AMC, and
DQDB Maintenance**

**Thursday, August 17, 2023,
from 12:00 AM ET
to 8:00 AM ET**

Updates: NSSP

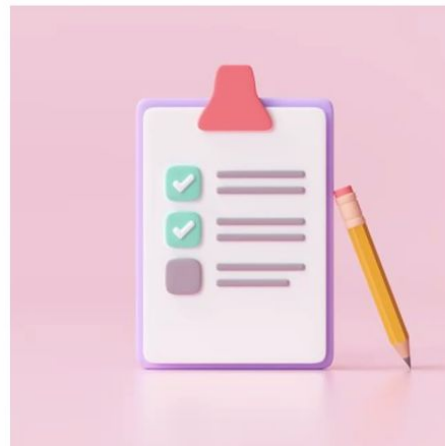
- 2023 Syndromic Surveillance Symposium:
- Call for abstracts
- Submit [abstracts](#) by September 8th
- Happening December 5th -7th 2023
- Virtually



Member Satisfaction & Needs Assessment

NSSP CoP Member Satisfaction & Needs Assessment

- CSTE is seeking input on how well the NSSP Community of Practice is meeting the needs of its members
- Deadline to respond is August 31st, 2023
- Results of the assessment will be aggregated and shared with CDC and the NSSP Community of Practice membership
- If you have any question reach out to syndromic@cste.org



Updates: NSSP

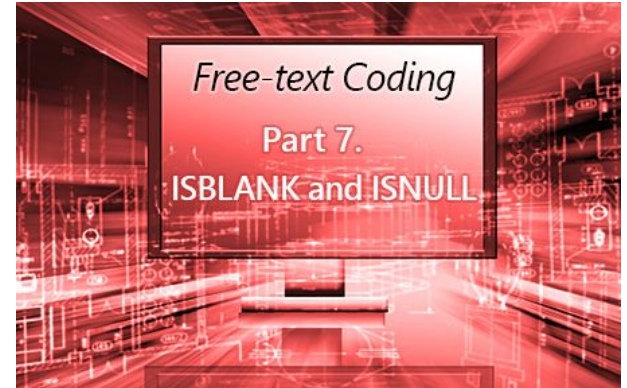
- **NSSP Introduces pynssp, an Alternative to the Rnssp Package for Python Users**
- Pynssp - Python available
- Guide available on [NSSP website](#)
- Latest Analytic Meeting had a demonstration



Updates: NSSP

ISNULL ISBLANK

Part 7: Free-Text Query Guide



**Developing, Evaluating, and Disseminating Definitions for Syndromic
Surveillance:
Or what to do when there is no CCDD Syndrome Definition**

NEWS > LOCAL NEWS



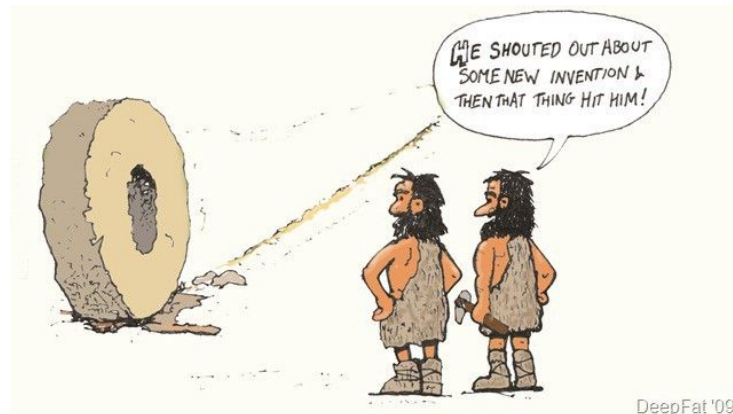
Arizonans getting burned on pavement amid scorching temperatures



Example: Burns from Hot Pavement from the past month

How to make a syndrome definition from scratch

1. Don't Panic!
2. Check to see if anything exists?
 - a. Knowledge Repository (part of the Community of Practice)
 - b. Syndrome Library (part of KR)
 - c. NC Detect List a lot of Syndrome definitions
 - d. NSSP Community Slack (collaborate environment, can post to the syndrome definition)



How to make a syndrome definition from scratch

Think about parts of query

- a. Chief Complaint portion
 - i. Symptoms, name of injury/impact, name of
- b. Discharge Diagnosis portion
 - i. ICD-10, ICD-9, SNOWMED
 - 1. For searching IDC-10, there is CMS tool, ICD-10 Tool
- c. Exclusion Terms

Burn Syndrome Definition

- Key Words
 - Burns
 - Concrete
 - Asphalt
 - Pavement
 - Feet
 - Third Degree
 - Blisters

Discharge Diagnosis Associated

Burns ICD-10 Example

`^[; / ]T2[0-5].[03]^,or,^[; / ]T2[0-5][03]^`

`^[; / ]T2[0-5].3^,or,^[; / ]T2[0-5]3^`

Or if you wanted just foot contact with pavement, it might look like:

`^[; / ]T25.[03]^,or,^[; / ]T25[03]^`

`^[; / ]T25.3^,or,^[; / ]T253^`

Steps to Evaluate

1. Time-Series to visualize how many records are captured.
2. Manually review record-level data
3. Categorize each record as Probable, Ruled Out, or Undetermined
4. Calculate the percentage of probable records captured.
 - a. $\text{Percent Probable} = (\# \text{ Probable records identified} / \# \text{ Total Records identified}) * 100$

^burn^,AND,(^concrete^,OR,^pavement^,OR,^sidewalk^,OR,barefeet^,or,^asphalt^,),or,^[;/]T25.[03]^,or,^[;/]T25[03]^

^[;/]T25.3^,or,^[;/]T253^,or, ^[;/]T2[0-5].[03]^,or,^[;/]T2[0-5][03]^

^[;/]T2[0-5].3^,or,^[;/]T2[0-5]3^

Resources

- [Free-Text Coding in NSSP](#)
- [Introduction to Syndrome Development](#)
- [Syndrome Development Guidance Document](#)
- [Knowledge Repository](#)
- [NC Detect](#)
- [Query Development](#)
- [ICD-10](#)

Xylazine

Xylazine -Xylazine (also called “tranq” or “tranq dope”) is a non-opioid sedative or tranquilizer.

- Mainly used for Veterinary Use as a tranquilizer or muscle relaxer
- Misused as a recreational drug in combination with heroin or fentanyl

Risks and Challenges

- People may not know they have been exposed
- Repeated use associated with skin ulcers ,lesions, and abscesses. Referred to as wounds, not always associated with injection site.
- Challenging to differentiate from an opioid overdose
- Can cause drowsiness, slowed breathing and heart rate

Examples beginning definitions

Using Street Names: Tranq Dope, Tranq, Sleep-Cut, Philly dope, zombie drug, rompun, sedazine, anased, Chanazine, street cut, anestesia de caballo.

(^tranq^, or, ^zylazine^, or, ^sleep-cut^, or, ^philly dope^, or, ^zombie drug^, or, ^rompum^, or, ^sedazine^, or, ^anased^, or, ^chanazine^, or, ^street cut^, or, ^anestesia de caballo^,)

Examining Common overdoses with the co-occurrence of skin ulcerations

(^xylazine^, or, ^tranq^, or, ^fentanyl^,), and, (, ^abcess^, or, ^skin infection^, or, ^wound^, or, ^ulcer^, or, ^necrosis^, or, ^necrotizing^, or, ^open sore^, or, ^oozing^, or, ^L98^, or, ^L00^, or, ^L02^, or, ^L03^, or, ^L08^, or, ^L88^, or, ^L89^, or, ^L96^, or, ^L97^,)

More Examples

Definition 1:

(^xylazine^,or,^heroin^,or,^fentanyl^,or,^dope^,or,^brown powder^,or,^white powder^,or,^tan powder^,or,^tranq^),and,(^injection^,or,^syringe^,or,^abscess^,or,^skin infection^,or,^wound^,or,^ulcer^,)

Definition 2:

1. CDC All Drugs + abscess free text
(^abscess^,or,^skin infection^,or,^wound^,or,^ulcer^,or,^cellulitis^,or,^A49.02^,or,^A49.01^,or,^L02.91^,or,^L02.419^,or,^L02^,or,^L98.4^,or,^E13.622^,or,^L97^,or,^E11.622^,or,^L89^,or,^L03^,or,^M72.6^,or,^J01.9^,or,^A4902^,or,^A4901^,or,^L0291^,or,^L02419^,or,^L984^,or,^E13622^,or,^E11622^,or,^M726^,or,^J019^,)
2. CDC All Drugs + Rhabdomyolysis
(^M62.82^,or,^T79.6^,or,^M62.2^,or,^R30.0^,or,^R74.8^,or,^N17^,or,^M6282^,or,^T796^,or,^M622^,or,^R300^,or,^R748^,)
3. CDC All Drugs + Compartment Syndrome
(^M79.A^,or,^T79.A^,or,^R20.2^,or,^R23.1^,or,^R22.30^,or,^R22.40^,or,^M79.6^,or,^M794^,or,^T79A^,or,^R202^,or,^R231^,or,^R2230^,or,^R2240^,or,^M796^,)
4. CDC All Drugs + Respiratory
(^R09.2^,or,^J96^,or,^R092^,)
5. CDC All Drugs + Systemic
(^R00.1^,or,^I95^,or,^R65.2^,or,^R001^,or,^R652^,)
6. CDC All Drugs + exposure related effects
(^L55^,or,^T33^,or,^T68^,or,^T67^,)

Questions



Next meeting

Exploratory Analysis Meeting: October 18th, 2023

NSSP Community of Practice: August 23rd 2023

Thank you!

syndromicsurveillance@azdhs.gov



ARIZONA DEPARTMENT
OF HEALTH SERVICES