

Announcements

- Register for the Epi-Tech Trainings:
 1. Log-on or Request log-on ID/password:
<https://tiny.army.mil/r/zB8A/CME>
 2. Register for Epi-Tech Surveillance Training:
<https://tiny.army.mil/r/dVrGO/EpiTechFY14>
 - Please enter your name/service and e-mail into the chat box to the left or email the disease epidemiology program at:
USAPHC.Disease.Epidemiology@us.army.mil
 - You will receive a confirmation email within the next 48 hours with your attendance record
- Please mute your phones and DO NOT place us on hold. Press *6 to mute your phone.



ESSENCE Epi-Tech Training

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Armed Forces Health Surveillance Center
25 MAR 2014



Objectives

- Brief ESSENCE Background
- Military policy requiring ESSENCE use
- ESSENCE access for new users
- ESSENCE data overview
- ESSENCE nuts & bolts of use for
 - Syndromic Surveillance and Alerts
 - What to investigate
 - Daily case finding
 - Reportable Events
 - Helpful hints
 - Best practices
 - More Training



ESSENCE Background

- Electronic Surveillance System for the Early Notification of Community-based Epidemics
 - Web-based medical surveillance system that utilizes specific detection and alert algorithms
 - Provides structured analysis, ad hoc queries, and create reports
 - Alerts are statistically relevant spikes- not necessarily outbreaks
 - Currently ESSENCE v4 Block 3



MTF ESSENCE Policy

- DoDI 6200.03
 - 2 ESSENCE users per DoD installation CONUS
 - “Maintain close contact and coordination with local ESSENCE monitors and their Service PHC”
- DoDD 6490.02E
 - Comprehensive Health Surveillance references DoDI 6200.03
- Army AR40-5
 - Requires medical surveillance; monitoring ESSENCE fulfills that requirement
- Navy BUMEDINST 3440.10
 - MTFs are required to do surveillance for outbreaks; monitoring ESSENCE fulfills that requirement
- AFI 48-105
 - 1.10.6 states Public health will conduct syndromic surveillance; ESSENCE fulfills that requirement
 - 1.10.6.10 Reviews MTF syndromic surveillance includes respiratory, gastrointestinal, febrile, and dermatological conditions



How to Access ESSENCE

- Acquire your Information Assurance (IA) Certificate
- Forward IA Cert to dhssaccess@tma.ods.mil
- Register your CAC 
 - Web based form (See link on Slide 4)
- Military/Government Approval levels:
 - Commander/Supervisor
 - IA/ISO (only if using application on mobile device)
 - DHSS Access Approver
 - DHSS Government Approver (ESSENCE Program Manager or FHP&R Lead)
- Contractor
 - Government Sponsor (your COR)
 - IA/ISO (only if using mobile device)
 - DHSS Access Approver
 - DHSS Government Approver (your COR)

11/Mar/2014

ESSENCE





User Profile

Name: Your Name

Rank:

Title/Position:

DSN:

Primary Email: your@email

Commercial Phone:

Service:

Grade:

Address: , , ,

DMIS ID:

Alternate Email:

Application Access Type

Access Requested* New Change Deactivate

Applications

Select Required Application* ESSENCE

Essence Access Level

The official duties of this individual require the following level of access (choose one)*

Who should apply for Level II? If you are unclear, please read [here](#)

Level I: User will not have access to any type of patient level data.

Level II: User will have access to patient level data for records associated with the user's relevant Military Treatment Facility and corresponding DMIS ID Family (parent & associated children DMIS ID's). If selecting this Level, complete the fields below (MTF Name, DMIS ID Family). It is essential that the user have a thorough knowledge of Privacy Act and HIPAA rules, restrictions and the proper security clearance.

DMIS ID Family*:

MTF Name*:

Lookup

Employment Category

Must choose 1 of the options below:

Employee Category* Select Category

If Other*

ESSENCE Links

- ESSENCE: <https://essence.csd.disa.mil>

- CAC Registration or to make changes to contact information:

https://sso.csd.disa.mil/amserver/UI/Login?org=cac_pki&authlevel=3&e_crs=true&goto=https://sso.csd.disa.mil/idm/mhs/CACRegistration.do

- iDentity AuthenticationServices/ Enterprise CAC Registration Service to submit request:

https://sso.csd.disa.mil/amserver/UI/Login?org=cac_pki&authlevel=3&e_crs=true&goto=https://sso.csd.disa.mil/idm/mhs/ApplicationAccessRequest.do



Helpful Hints

- Do not let the page sit idle for more than a few minutes or the submittal will not go through. An email notification will be sent if the submittal was successful
- Make sure each Approver is aware of your application
- Approver should check for email from idsm@csd.disa.mil (may be in junk or spam folders)
- Approver follows links with Request ID (and the Approver's CAC should be registered as well)
- Approver needs to verify info and confirm
- Problems:
 - Contact MHS Service Desk: servicecenter@dha.mil or 800-600-9332



ESSENCE Data

Pharmacy
data

Chief
Complaint
data

Outpatient
data

Laboratory
data

Alert= Statistically
relevant spike

Radiology
data



ESSENCE Nuts & Bolts

- Sign in with CAC
- “Site Selection” 1st
- Use “Preferences” to create user defined site

13/Mar/2014

TRICARE

ESSENCE

Home Site Selection Alert List Query Matrix Preferences Privacy Policy References Logout

USA and Global

USACHPPM

NAVMED Site Selection Map

NAVMED

NAVMED-EAST
NAVMED-NCA
NAVMED-WEST

System Defined Site Selection: Select site

User Defined Site Selection: Select site

[User Defined Site Selection Editor](#) - Used to Add/Edit/Delete User Defined Sites

Metro

NAVMED

NAVMED

OCONUS

Syndromic Surveillance Alerts List

Browser: <https://essence.csd.disa.mil/dmss/actions/EssenceMain> | Army Knowledge Online | ESSENCE

File Edit View Favorites Tools Help

Page Safety Tools

13/Mar/2014

TRICARE

ESSENCE

Home Site Selection **Alert List** Query Matrix Preferences Privacy Policy References Logout

Health Encounter Temporal

Site: NAVMED-NCA

[Reset Level 3 Sorting](#)

EXPORT: [SPREADSHEET](#) [PDF](#) [CSV](#)

Health Encounters Regional Temporal Alerts

Alert Date	Syndrome	Detection	Visit Count	Expected	Disp ?	MTF	Links
07/Mar/2014	Localized Cutaneous Lesion	0.032	1	0.10714	IN	ALL	TimeSeries
07/Mar/2014	Localized Cutaneous Lesion	0.029	8	3.51078	OUT	ALL	TimeSeries
06/Mar/2014	Hemorrhagic Illness	0.038	20	11.64133	OUT	ALL	TimeSeries

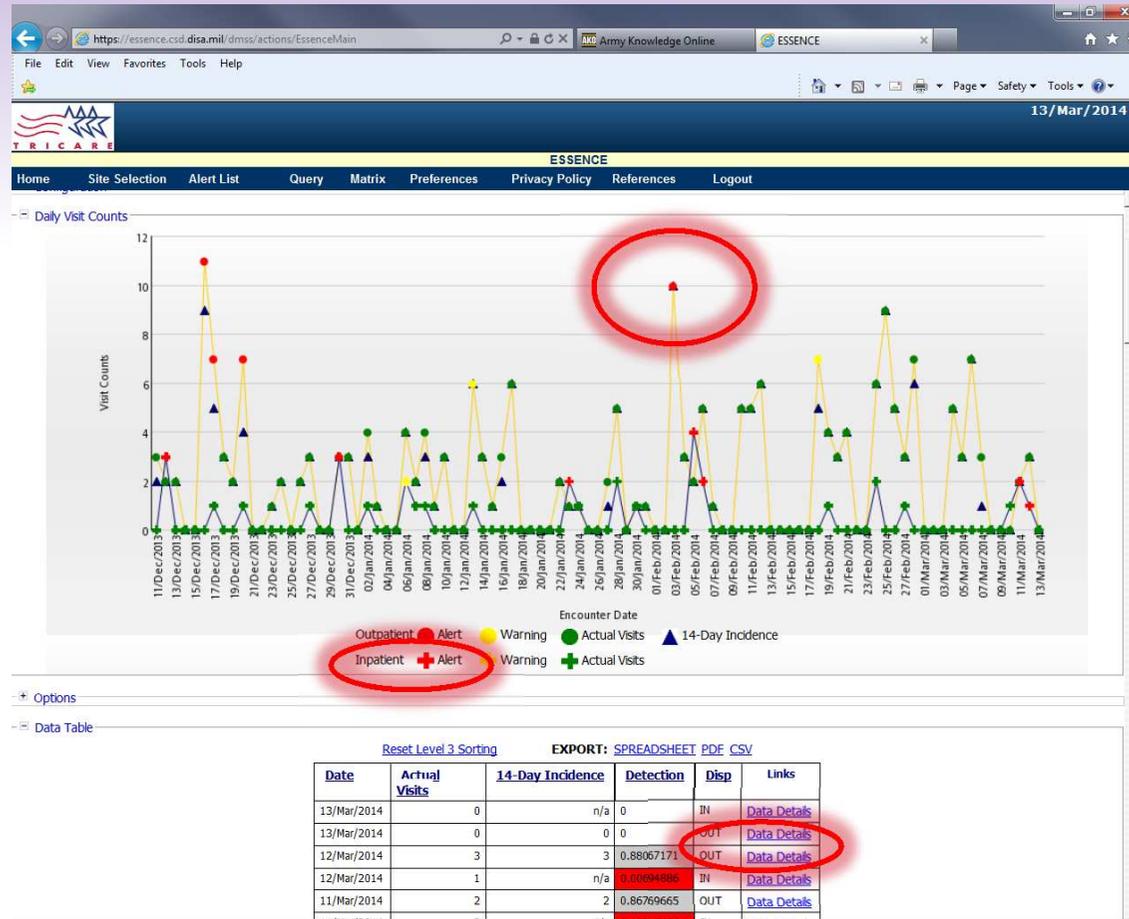
[Reset Level 3 Sorting](#)

EXPORT: [SPREADSHEET](#) [PDF](#) [CSV](#)

Health Encounters MTF-Based Temporal Alerts

Alert Date	Syndrome	Detection	Visit Count	Expected	Disp ?	MTF	Links
11/Mar/2014	Gastrointestinal	0.002	2	0.14286	IN		TimeSeries
11/Mar/2014	ILI	0	3	0.25000	IN		TimeSeries
11/Mar/2014	ILI-Alt Case Def	0	3	0.25000	IN		TimeSeries
11/Mar/2014	Influenza Specific	0.019	1	0.03571	IN		TimeSeries
10/Mar/2014	Rash	0.044	1	0.10714	OUT		TimeSeries
10/Mar/2014	Rash	0.031	3	0.60714	OUT		TimeSeries
07/Mar/2014	Gastrointestinal	0.001	2	0.07143	OUT		TimeSeries
07/Mar/2014	Gastrointestinal	0	3	0.28571	OUT		TimeSeries
07/Mar/2014	ILI	0.035	24	16.15910	OUT		TimeSeries
07/Mar/2014	ILI-Alt Case Def	0.021	25	16.71324	OUT		TimeSeries
07/Mar/2014	Localized Cutaneous Lesion	0.032	1	0.10714	IN		TimeSeries
07/Mar/2014	Neurological	0.037	7	3.00000	OUT		TimeSeries
07/Mar/2014	Rash	0	2	0.03333	OUT		TimeSeries

What to do when you see a flag



Data Details

ESSENCE

[Home](#) [Site Selection](#) [Alert List](#) [Query](#) [Matrix](#) [Preferences](#) [Privacy Policy](#) [References](#) [Logout](#)

Health Encounter Data Details

▢ Description

Site	NAVMED-NCA	Data Source	Health Encounters
Start Date	15/Jan/2014	End Date	15/Jan/2014
MTF		Clinic Type	ALL
Disposition		Age Group	ALL
Syndrome	ILI-Alt Case Def	Patient Military Branch	ALL
Patient Category	ALL		

+ Configuration

+ Options

Data Details

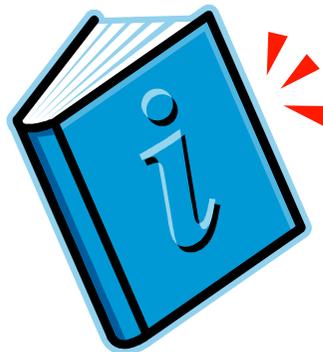
[Reset Level 3 Sorting](#) [EXPORT: SPREADSHEET PDF CS](#)

<u>Encounter Date</u>	<u>Disp</u>	<u>PIN</u>	<u>Age</u>	<u>ICD</u>	<u>ICD Description</u>	<u>Syndrome</u>	<u>MTF</u>	<u>Clinic Type</u>	<u>MEPRS</u>	<u>FMP</u>	<u>Provider</u>	<u>PatCat</u>	<u>Lab Results</u>	<u>More Info</u>
15/Jan/2014	OUT:Release No Limit		19	079.99	unspecified viral infections	ILI-Alt Case Def		Other	BGZA	20		N11	N	Source File Info
15/Jan/2014	OUT:Release w/Limits		20	079.99	unspecified viral infections	ILI-Alt Case Def		Other	BGZA	20		N11	N	Source File Info
15/Jan/2014	OUT:Release No Limit		41	460	Acute nasopharyngitis (common cold)	ILI-Alt Case Def		Other	BGZA	30		N41	N	Source File Info
15/Jan/2014	OUT:Release No Limit		3	786.2	Cough	ILI-Alt Case Def		Other	BGZA	05		N41	N	Source File Info
15/Jan/2014	OUT:Release No Limit		20	382.9	Otitis media unspecified	ILI-Alt Case Def		Other	BGZA	20		N11	N	Source File Info
15/Jan/2014	OUT:Release No Limit		4	460	Acute nasopharyngitis (common cold)	ILI-Alt Case Def		Other	BGZA	01		N41	N	Source File Info
15/Jan/2014	OUT:Release No Limit		33	486	Pneumonia, organism unspecified	ILI-Alt Case Def		Other	BGZA	20		N11	N	Source File Info

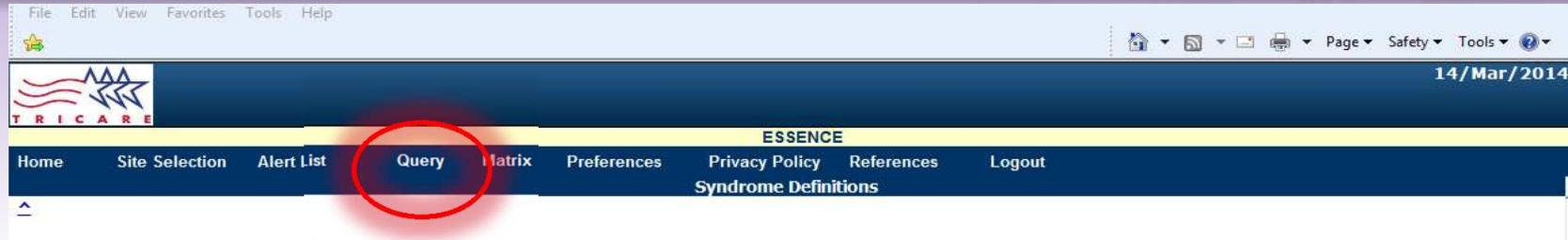


What to Investigate

- Verify the case
- Verify the diagnosis
- Is it reportable?
 - Armed Forces Reportable Medical Events Guidelines and Case Definitions 2012
- Will a formal epidemiologic investigation take place?
 - Unit SOP



How to Use ESSENCE for Daily Case Finding



- Monitor alerts
- Query page
 - Choose the data source
 - Reportable Medical Events
- Check in DRSi to see if the cases are already reported or if they correspond to the case-finding module in DRSi
- If necessary, investigate and enter report into DRSi
- Consider exporting large number of cases to excel



Rep Event Surveillance



Site	NAVMED-NCA	Data Source	Reportable Medical Events
Start Date	17/Feb/2014	End Date	13/Mar/2014
MTF	All MTFs	Clinic Type	All Clinic Types
Disposition	Both	Age Group	All Ages
Syndrome	All	Patient Military Branch	All Military Branches
Patient Category	All Patient Categories		

+ Configuration

+ Options

Data Details

[Reset Level 3 Sorting](#) EXPORT: [SPREADS](#)

Encounter/Order Date	Disp	PIN	Age	ICD	ICD Description / Test Name	Category	MTF	Clinic Type	Service	MEPRS	FMP	Provider	PatCat	Lab Results
20/Feb/2014	OUT:Release No Limit		21	099.41	Other nongonococcal urethritis (NGU), Chlamydia trachomatis	Chlamydia		Other		BBIA			N14	N Sol
20/Feb/2014	OUT:Refer, Appt		21	099.41	Other nongonococcal urethritis (NGU), Chlamydia trachomatis	Chlamydia		Other		BGZA			M11	N Sol
25/Feb/2014	OUT:Release No Limit		30	099.41	Other nongonococcal urethritis (NGU), Chlamydia trachomatis	Chlamydia		Primary Care		BHAA			M11	N Sol
05/Mar/2014	OUT:Release No Limit		22	099.41	Other nongonococcal urethritis (NGU), Chlamydia trachomatis	Chlamydia		Other		BHGA			N12	N Sol
18/Feb/2014	OUT:Outpatient		25	n/a	CHLAMYDIA NAAT	Chlamydia		Other		BGZA			N11	A Lat Sol
18/Feb/2014	OUT:Outpatient		27	n/a	CHLAMYDIA NAAT	Chlamydia		Primary Care		BHA2			N11	A Lat Sol
18/Feb/2014	OUT:Outpatient		26	n/a	CHLAMYDIA NAAT	Chlamydia		Other		BGZA			N11	A Lat Sol

Check the Lab Result



File Edit View Favorites Tools Help

https://essence.csd.disa.mil/cognos8/cgi-bin/cognos.cgi LabResults - ESSENCE

File Edit View Favorites Tools Help

Lab Results EXPORT: [SPREADSHEET](#)

Lab Results
Age: 40
Gender: F
PatCat Code: N11

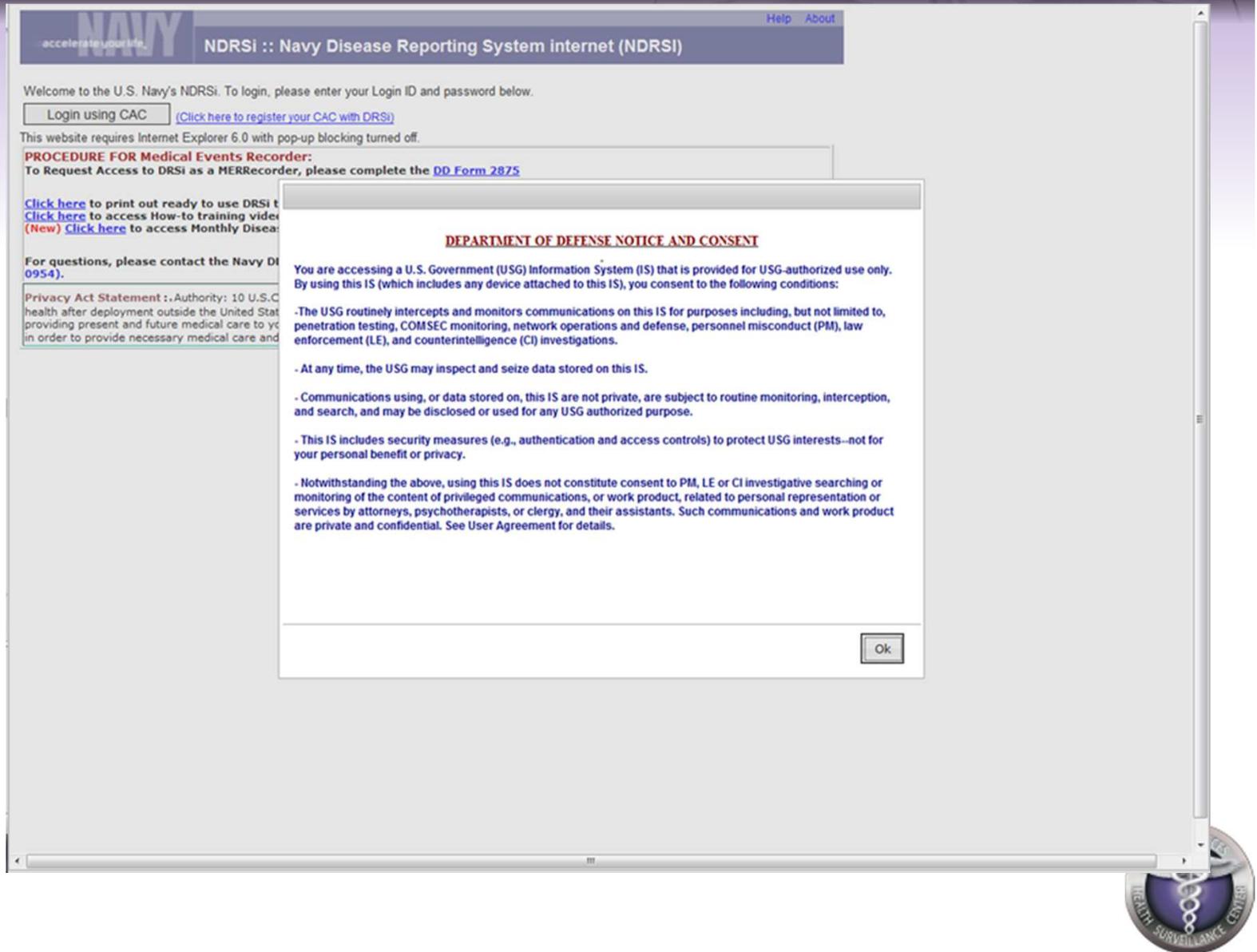
Lab Order ID: **Requesting Facility:** **Performing Location Facility:**
Test Ordered: **Ordering Provider:** **Order Effective Date/Time:**
MEPRS Code: **Order Notes/Comments:**

Collection Date/Time	Certify Date/Time	Set ID	Test Name	Reference Range	Units of Measure	Specimen Source	Body Site/Collection Sample	Test Result	Sensitivity	Abnormal Flag	Result Status OBX	Sensitive Result Flag	Result Comment
19/Feb/2014 10:00	21/Feb/2014 13:34	7	ESCHERICHIA COLI	-	-	URINE	URINE/CLEAN CATCH	-	-	-	P	-	-

For Official Use Only

OUT:Outpatient	1A1C07B55	30	n/a	ESCHERICHIA COLI	E. coli O157:H7		Other	Marine Corps	BGZA	30	DEEP1	M41	A	Lab Results Source File Info
OUT:Outpatient	01E077FF61	21	n/a	ESCHERICHIA COLI	E. coli O157:H7		Other	Navy	BGZC	20		N11	A	Lab Results Source File Info
OUT:Outpatient	1018771659	42	n/a	ESCHERICHIA COLI	E. coli O157:H7		Other	Marine Corps	BGZA	30		M41	A	Lab Results Source File Info
OUT:Outpatient	0395571BD2	12	n/a	ESCHERICHIA COLI	E. coli O157:H7		Other	Marine Corps	BGZC	3		M41	A	Lab Results Source File Info
OUT:Outpatient	20B4D49238	24	n/a	ESCHERICHIA COLI	E. coli O157:H7		Other	Marine Corps	BGZC	30		M41	A	Lab Results Source File Info

Enter into DRSi if Rep Event



The screenshot shows the NDRSi login page with a dialog box for a Department of Defense Notice and Consent. The background page includes a header with the Navy logo and the text "NDRSi :: Navy Disease Reporting System internet (NDRSi)". Below the header, there is a welcome message and a login field for CAC. A procedure for medical events recorder is also visible, along with links for training and privacy information.

DEPARTMENT OF DEFENSE NOTICE AND CONSENT

You are accessing a U.S. Government (USG) Information System (IS) that is provided for USG-authorized use only. By using this IS (which includes any device attached to this IS), you consent to the following conditions:

- The USG routinely intercepts and monitors communications on this IS for purposes including, but not limited to, penetration testing, COMSEC monitoring, network operations and defense, personnel misconduct (PM), law enforcement (LE), and counterintelligence (CI) investigations.
- At any time, the USG may inspect and seize data stored on this IS.
- Communications using, or data stored on, this IS are not private, are subject to routine monitoring, interception, and search, and may be disclosed or used for any USG authorized purpose.
- This IS includes security measures (e.g., authentication and access controls) to protect USG interests—not for your personal benefit or privacy.
- Notwithstanding the above, using this IS does not constitute consent to PM, LE or CI investigative searching or monitoring of the content of privileged communications, or work product, related to personal representation or services by attorneys, psychotherapists, or clergy, and their assistants. Such communications and work product are private and confidential. See User Agreement for details.

Ok

A few helpful hints

- To export, click on:
 - Spreadsheet (excel)
 - PDF (document)
 - CSV (text file)
- Make sure pop-up blocker is off

The screenshot shows the ESSENCE web application interface. At the top right, the date is 13/Mar/2014. The navigation bar includes links for Home, Site Selection, Alert List, Query, Matrix, Preferences, Privacy Policy, References, and Logout. The current site is NAVMED-NCA. There are two main data tables:

Health Encounters Regional Temporal Alerts

Alert Date	Syndrome	Detection	Visit Count	Expected	Disp ?	MTF	Links
07/Mar/2014	Localized Cutaneous Lesion	0.032	1	0.10714	IN	ALL	TimeSeries
07/Mar/2014	Localized Cutaneous Lesion	0.029	8	3.51078	OUT	ALL	TimeSeries
06/Mar/2014	Hemorrhagic Illness	0.038	20	11.64133	OUT	ALL	TimeSeries

Health Encounters MTF-Based Temporal Alerts

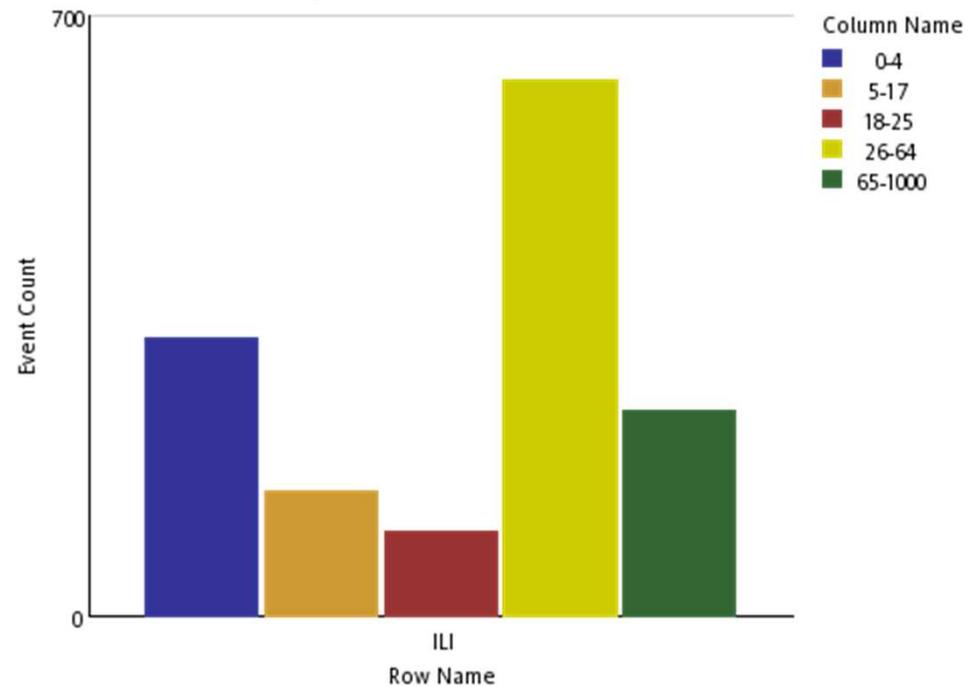
Alert Date	Syndrome	Detection	Visit Count	Expected	Disp ?	MTF	Links
11/Mar/2014	Gastrointestinal	0.002	2	0.14286	IN		TimeSeries

Export options for both tables are: [SPREADSHEET](#) [PDF](#) [CSV](#). A red circle highlights the export options for the MTF-Based Temporal Alerts table.

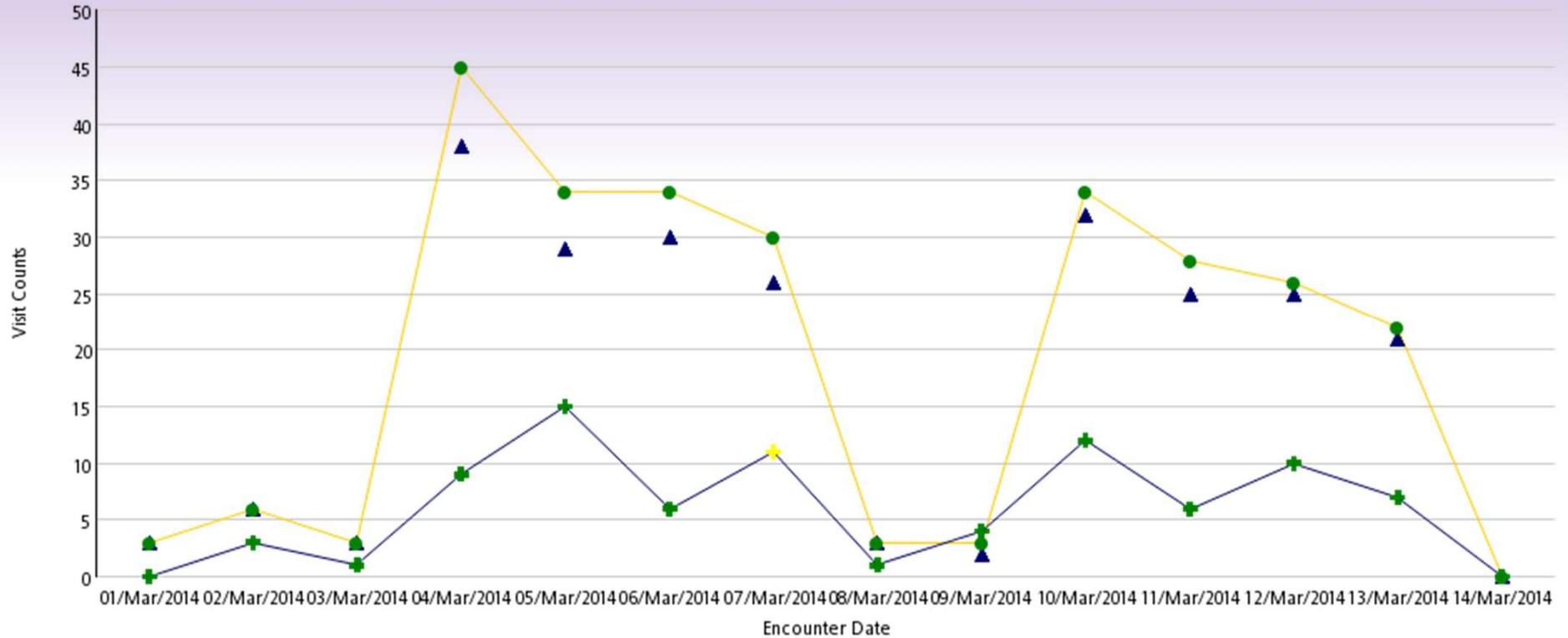


A few helpful hints

- Matrix
- Charts- export by right clicking “download chart”
- Create graphs
- Configuration
- Right click on graph
- Export

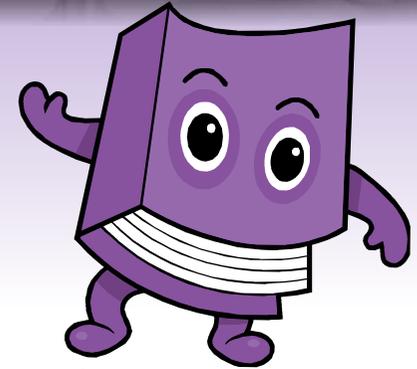


Time Series Graph GI



Best Practices

- Follow your command SOP
- If no SOP consider creating one
- Daily monitoring of alerts and Rep Events
- Investigate alerts and Rep Events 
- Match ESSENCE Rep Events and DRSi
- Remember to be in communication with the lab, providers, and your PH CoC as well as Local and State PH



More ESSENCE Training

- In the ESSENCE program under “References”
 - 5 Training videos
- MHS Learn
 - Certificate available
 - 4 Modules 1 hour each (or less)
 - <https://mhslearn.csd.disa.mil/ilearn/en/learner/mhs/portal/home.jsp>



References in ESSENCE

- Syndrome definitions
 - Lists all the ICD9 and future ICD10 codes in the syndrome
- Explanation of the detector algorithms
- Data dictionary
 - MEPRS codes
 - Patient Category
 - Data Glossary
- ESSENCE History
- User Guide
- Training
- FAQ
- MHS Help Desk
- What's new

The screenshot shows the ESSENCE web application interface. The browser address bar indicates the date 14/Mar/2014. The application header includes the RICARE logo and navigation links: Home, Site Selection, Alert List, Query, Matrix, Preferences, Privacy Policy, References, and Logout. The main content area is titled "Syndrome Definitions" and features two dropdown menus: "Select Category: Syndromes" and "Select Syndromes: Botulism-like". Below these are navigation links for "Health Encounters/ICD9", "Health Encounters/ICD10", "Pharmacy/GC3", "Laboratory Orders/CPT", "Radiology Orders/CPT", and "Chief Complaint". A table displays the following data:

HE/ICD9 Code	ICD9 Description
005.1	Botulism food poisoning
040.4	Other specified botulism
040.41	Infant botulism
040.42	Wound botulism
344.0	Quadriplegia
344.00	Quadriplegia and quadripareis, unspecified
344.01	Quadriplegia and quadripareis, c1-c4, complete
344.02	Quadriplegia and quadripareis, c1-c4, incomplete
344.03	Quadriplegia and quadripareis, c5-c7, complete
344.04	Quadriplegia and quadripareis, c5-c7, incomplete
344.09	Other quadriplegia and quadripareis
344.2	Diplegia, upper limbs
344.89	Other specified paralytic syndrome
344.9	Paralysis, unspecified
351.8	Other specified facial nerve disorders
351.9	Facial nerve disorders unspecified
352.6	Multiple cranial nerve palsies
352.9	Disorders of other cranial nerves, unspecified
357.0	Acute infective polyneuritis
358.0	Myasthenia gravis
358.00	Myasthenia gravis without (acute) exacerbation
368.2	Diplopia
374.3	Ptosis of eyelid
374.30	Ptosis of eyelid, unspecified
374.31	Paralytic ptosis

Stay current and give feedback!

- DHSS updates to ESSENCE
 - <https://public.govdelivery.com/accounts/USMHSDDHSS/subscriber/new>
- Send suggestions for improvement to
 - servicecenter@dha.mil
 - YOUR comments are what drives ESSENCE improvements!



Contact Information

- **Army: USAPHC: Disease Epidemiology Program**
Aberdeen Proving Ground – MD
Comm: (410) 436-7605 DSN: 584-7605
usaphc.disease.epidemiology@us.army.mil

- **Navy: Contact your cognizant NEPMU**
NEPMU2: COMM: (757) 950-6600; DSN: (312) 377-6600
Email: NEPMU2NorfolkThreatAssessment@med.navy.mil
NEPMU5: COMM: (619) 556-7070; DSN (312) 526-7070
Email: ThreatAssessment@med.navy.mil
NEPMU6: COMM: (808) 471-0237; DSN: (315) 471-0237
Email: NEPMU6ThreatAssessment@med.navy.mil

- **Air Force: Contact your MAJCOM PH or USAFSAM/PHR**

USAFSAM / PHR / Epidemiology Consult Service
Wright-Patterson AFB, Ohio
Comm: (937) 938-3207 DSN: 798-3207
episervices@wpafb.af.mil





The Juggler

Fails to hit 'mute' while multitasking; everyone can hear the sounds of typing, chewing, barking dogs or screaming toddlers.

The Coach

Manages the flow of conversation toward a planned goal, noting when the conversation goes off-topic.

The Monopolizer

Thinks through solutions out loud, talking endlessly without regard for other participants.

The Host

Explains the face-to-face joking or visual displays in the meeting room so that remote participants understand and don't feel left out.

The Lurker

Blindsides other participants by sitting through entire calls without announcing his presence until the end, if at all.

The Interrupter

Fails to adapt to communication delays and repeatedly breaks in while others are speaking.

Thank You for Your Attention

