ANNOUNCEMENT

To Register for the Monthly Disease Surveillance Trainings:

1. Contact your Service Surveillance HUB to receive monthly updates and reminders
2. Log-on or Request log-on ID/password: https://tiny.army.mil/r/zB8A/CME
3. Register at: https://tiny.army.mil/r/4TgNE/EpiTechFY17

Confirm attendance:

- Please enter your full name/email into the DCS chat box to the right or email your Service HUB
- You will receive a confirmation email within 48 hours with your attendance record; if you do not receive this email, please contact your Service HUB
Case Finding for DRSi Reporting

Presented by: Asha Riegodedios, Staff Epidemiologist
Disease Surveillance Monthly Training
31 January 2017
Objectives

- Identify methods to find potential reportable events
- Understand how to implement those case finding methods
- Describe the advantages and limitations of those case finding methods including CHCS spool reports
Outline

- Background
- Definition and Importance of Case Finding
- Framework for Success
- Case Finding Activities
  - Know your MTF: clinics, providers, lab and resources available
  - CHCS
  - ESSENCE
  - Case Finding Records
- Resources
- Questions/Contacts
Background

- Service, DoD, civilian state and federal regulations for Reporting
- Expectation that Medical Providers notify local Preventive Medicine (PM) or Public Health (PH)
- Local PM/PH reports the case in DRSi
- Reality => local PM/PH must seek out potentially reportable cases
Case Finding – Definition and Importance

- CF = the activities involved in actively seeking out potentially reportable events
- Limitations of provider reporting
  - Many providers, high turnover, constant need for education
  - May not be aware of the case if labs came back positive and no follow-up visit was scheduled by the patient
  - May not be aware that the condition is reportable
- Studies show you may miss up to 80% of your cases if you don’t employ additional activities
  - No awareness = no follow-up, no contact tracing, no control measures put into place
Number of cases you think you have

Number of cases you ACTUALLY have
Case Finding – Framework for Success

Get out from behind your computer screen and systems!

Establish relationships

Uses information gathered from electronic systems to help frame discussions

Know the key people to talk with

Recognize you are part of the MTF
Case Finding – Framework for Success

- Local implementing instruction implementing BUMED INST 6220.12C, AFI 48-105, or AR 40-11
  - Stand alone or overarching local PM/PH instruction
  - Describe roles and responsibilities
  - Focus on disease reporting and everyone’s duties to support it
  - Including labs, clinician offices, and PH/PH staff
- Also have SOPs to ensure continuity of operations
Case Finding – Framework for Success

- SOPs in support of those local implementing instructions
  - Signed by all Departments
  - Staff case finding in a consistent manner
  - Gather data with the proper tools
  - Communicate regularly with providers or Senior Medical Officer
  - Stay trained on current practices
Case Finding Activities

- Each MTF is different
  - Available resources
  - Available software/systems to help query CHCS
  - KNOW YOUR MTF capabilities: PM/PH and Population Health and Infection Control
- Educate providers/labs, regularly on reporting requirements
  - Teach during lunch and learn
  - Post the list of reportable events in clinic/lab in a visible location
  - Call your providers when you find a case they didn’t report
  - Set up a PM/PH notification process
Case Finding Activities – CHCS Ad Hocs/Spool Reports

- CHCS
  - CHCS is a tool to track clinical services
  - Coded in a legacy programming language
  - Data can be retrieved
Case Finding Activities – CHCS Ad Hocs/Spool Reports

- CHCS ad hocs/spool reports/quick keys
  - Allow PM/PH staff to run reports on ER visits, patient admissions, infection control organisms, and lab results
  - Search on lab test names or on ICD-10 codes using “quick keys”
  - Many MTFs use these; this is a standard of practice
  - Provides the most timely access to potentially reportable events
  - Some are only available at your MTF, some are available at all MTFs
  - May not be capturing updated or new lab test names or ICD-10 codes
Case Finding Activities – CHCS Ad Hocs/Spool Reports

<table>
<thead>
<tr>
<th>NAME: GS PREVENTIVE MEDICINE</th>
<th>MENU TEXT: Preventive Medicine Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE: menu</td>
<td></td>
</tr>
</tbody>
</table>

| ITEM: DG ADMISSION BY DIAGNOSIS RPT | SYNONYM: ADR |
| ITEM: GS STD CHLAMYDIA STUDY       | SYNONYM: STDC |
| ITEM: GS EHRLICHIOSIS STUDY        | SYNONYM: EHR |
| ITEM: PS PRINT SPOOLED             | SYNONYM: PSR |
| ITEM: LRSPMLOG                     | SYNONYM: MLOG |
| ITEM: LR INFCONTROL                | SYNONYM: INFC |
| ITEM: GS CORPSMAN ORDER ENTRY       | SYNONYM: COR |
| ITEM: GS ICD-9 INQUIRY             | SYNONYM: ICD9 |
| ITEM: GS INFECTIOUS DISEASE BY ICD | SYNONYM: INIC |
| ITEM: DG DRG OUTPUT MENU           | SYNONYM: DRG |
| ITEM: GS JCAHO REGISTER ALPHA      | SYNONYM: JER |

Available only at this MTF

Available to all MTFs

Case Finding for DRSi Reporting
Case Finding Activities – CHCS Ad Hocs/Spool Reports

- Some available at all MTFs
  - Infection Control Report (prints out list of microbiology cultures that grew specific organisms)
- Some available at only specific MTFs
  - Local CHCS mumps programmers have developed reports for their MTFs (i.e. for a special ehrlichiosis study)
- Get to know your local Systems/IT support helpdesk
  - They are helpful in creating and updating ad hocs
  - Provide them with the list of Reportable Events
  - Smaller clinics may need to refer to parent MTF support
  - Regional Medical Centers can be very helpful
Case Finding Activities – CHCS Ad Hocs/Spool Reports

Latest LOG-IN DATE/TIME: 31 Dec 1999// (31 Dec 1999)

Within LOG-IN DATE/TIME, Sort by: CLINICAL CHEMISTRY// CLINICAL CHEMISTRY (multiple)

CLINICAL CHEMISTRY SUB-FIELD: RESULT// RESULT (multiple)
RESULT SUB-FIELD: TEST'@;2// TEST

Select TEST: RAPID PLASMA REAGIN// RAPID PLASMA REAGIN RAPID PLASMA REAGIN
Select another TEST: STOOL CULTURE// STOOL CULTURE STOOL CULTURE
Select another TEST: FTA// FTA FTA
Select another TEST: CHLAMYDIA DNA PROBE// CHLAMYDIA DNA PROBE
CHLAMYDIA DNA PROBE
Select another TEST:

Within TEST, Sort by: CLINICAL CHEMISTRY// CLINICAL CHEMISTRY (multiple)

CLINICAL CHEMISTRY SUB-FIELD: RESULT// RESULT (multiple)
RESULT SUB-FIELD: RESULT"P"//

Within RESULT"P", Sort by: CLINICAL CHEMISTRY// CLINICAL CHEMISTRY (multiple)

CLINICAL CHEMISTRY SUB-FIELD: REQUESTING LOCATION// REQUESTING LOCATION
Case Finding Activities - ESSENCE

- ESSENCE is DoD’s preferred method for syndromic surveillance
- DoD ESSENCE RME module
  - Assists in finding potentially reportable events
  - Based on ICD-10 codes; visibility of associated lab data
  - Can help you ensure providers are reporting to you
  - Useful for specific diagnoses
    - Be wary of miscoding (e.g. vaccine preventable diseases)
    - Some diagnoses are coded as symptom rather than the disease
    - Focus on events that are likely truly reportable events rather than miscodes
## Case Finding Activities - ESSENCE

<table>
<thead>
<tr>
<th>Encounter/Order Date</th>
<th>Disp</th>
<th>PIN</th>
<th>Age</th>
<th>ICD</th>
<th>ICD Description/Test Name</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/Oct/2016</td>
<td>OUT: Release No Limit</td>
<td>1F329DB8F8</td>
<td>12</td>
<td>B01.9</td>
<td>Varicella without complication</td>
<td>Varicella</td>
</tr>
<tr>
<td>23/Oct/2016</td>
<td>OUT: Release No Limit</td>
<td>1A47AC68D7</td>
<td>13</td>
<td>B01.9</td>
<td>Varicella without complication</td>
<td>Varicella</td>
</tr>
<tr>
<td>24/Oct/2016</td>
<td>OUT: Refer, Appt</td>
<td>186F3F8104</td>
<td>41</td>
<td>B18.2</td>
<td>Chronic viral hepatitis C</td>
<td>Hepatitis C</td>
</tr>
<tr>
<td>24/Oct/2016</td>
<td>OUT: Release No Limit</td>
<td>040F6B8B62</td>
<td>29</td>
<td>A52.16</td>
<td>Charcot's arthropathy (tabetic)</td>
<td>Syphilis</td>
</tr>
</tbody>
</table>
Case Finding Activities - ESSENCE

- May be useful for the following events, particularly if you see multiple visits for the same patient over a week/month period
- Know the trends in your population, are these often miscoded? Pay attention to age, clinic type, PatCat, clustering trends, lab test, etc

- Malaria
- Varicella
- Measles
- Mumps
- Leishmaniasis
- Leprosy
- Leptospirosis
- Dengue Fever
- Q Fever
- Meningococcal Meningitis
Case Finding Activities - ESSENCE

- Often Miscoded:
  - Pulmonary Tuberculosis
  - Vaccine Preventable Diseases: anthrax, smallpox, measles
  - Rabies

- Lab data only visible through associated ICD-10 encounter record
  - includes negative results
  - includes tests not associated with a reportable event

- It is up to the user to determine if a record represents a reportable event!
Case Finding Activities – DRSi Case Finding Module

- DRSi Case Finding (CF) module
  - Module available to DRSi users
  - NMCPHC receives lab results every day from CHCS
    - Filtered for tests that may indicate a reportable event
    - CF record put into DRSi to alert you to a potential lab result
  - Not as timely as CHCS spool reports (2-3 days delay)
  - Does not capture all reportable events (53 diseases)
    - Some dx do not have associated lab diagnostics (e.g. heat)
    - Some dx do not have timely lab results (e.g. tuberculosis)
  - Positive lab may not = reportable event (e.g. syphilis)
Case Finding Activities – DRSi Case Finding Module

Welcome: Stefani Ruiz

Instructions: To perform a Medical Events Recorder task, click on the appropriate task link presented below.

Medical Event Reports Patient Management Summary Reports

- **Enter/Edit Medical Event Report(s) by SSN**
  - Review, edit, and report new Medical Event Report(s) for a patient(sponsors and associated FMPs).

- **Enter/Edit Outbreak Report(s)**
  - Review, edit, and report new Outbreak Report(s).

- **Review Deleted Medical Event Report(s)**
  - Review Medical Event Reports that have been flagged for removal or deletion, also restore these records back into DRSi.

- **Manage STI Case(s)**
  - Review reported incidents of sexual transmitted infections.

- **Enter/Edit Medical Event Report(s) by Reporting Unit**
  - Review and edit Medical Event Report(s) based on associated Reporting Units.

- **Enter/Edit VAERS Case(s)**
  - Enter, edit, and report new Vaccine Adverse Event Report(s) (VAERS).

- **Review Case-Findings by Reporting Unit**
  - Analyze available Case-Finding data and report new Medical Event Report as necessary.

- **Manage Health Department Print**
  - Print Health Department MER Case(s)

Click on “Review Case Findings by Reporting Unit”
Case Finding Activities – DRSi Case Finding Module

Instructions: Below is a list of potential Medical Events that may be reportable in your AOR over the past 14 days. This list can be used as a guide to assist in local case finding and response efforts, but is not meant to replace these activities.

Please only show me records from the past 14 days (30 days maximum).

Show me: * View All

Show me records for the following UIC(s):

00232

List of Potentially Reportable Medical Event(s):

<table>
<thead>
<tr>
<th>Sponsor SSN</th>
<th>FMP</th>
<th>Potential Diagnosis</th>
<th>Date of Event</th>
<th>MTF</th>
<th>Classification</th>
<th>Classification Criteria</th>
<th>Create MER?</th>
<th>Delete Case?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>01 - Dependent child of Sponsor</td>
<td>Shigellosis</td>
<td>1/31/2010</td>
<td></td>
<td>Positive</td>
<td>positive stool culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30 - Spouse of Sponsor</td>
<td>Chlamydia</td>
<td>1/26/2010</td>
<td></td>
<td>Positive</td>
<td>Positive lab test in a genital specimen</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01 - Dependent child of Sponsor</td>
<td>Chlamydia</td>
<td>1/26/2010</td>
<td></td>
<td>Positive</td>
<td>Positive lab test in a genital specimen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Case Finding Activities – Case Finding Module

- CF records are classified as
  - Suspect = a Medical Event Report may be required
  - Positive = a Medical Event Report likely is required
  - THIS IS NOT AN RME CLASSIFICATION, a Suspect CF record doesn’t mean it is a suspect RME case
  - Depends on the lab test result and clinical findings
  - Users must determine if a CF record truly represents a reportable event

- Records are 2-3 days old by the time you see them in the CF Module in DRSi
- Doesn’t include events that do not rely on laboratory testing (i.e. heat injury)
Case Finding – Framework for Success

Uses information gathered from electronic systems to help frame discussions

Search for reportable medical events that may not have been directly reported!

Recognize you are part of the MTF

Review encounter notes, laboratory, pharmacy, and laboratory results

Includes demographic details and may contain relevant medical history

Use surveillance hub tools and guidance manuals to maintain current skillsets
Conclusion

- There are many different methods for finding cases
- Each has its own value and limitations
- Have a process in place that maximizes your time in finding true reportable events
  - Minimize the time you spend tracking down events that turn out not to be reportable
- Make your efforts a part of your MTF’s business process: local instruction/SOPs
Resources

- MTF Completeness of Reporting reports
  - Help you understand how well you are doing
  - Contact your service surveillance hub
- Printable One-Page List of Reportable Events
  - Army: Email the Disease Epidemiology Program at usarmy.apg.medcom-aphc.mbx.disease-epidemiologyprogram13@mail.mil
  - Air Force: https://gumbo2.wpafb.af.mil/epi-consult/reportableevents/ Click under “General Information”
Contact Information

- **Army:** USAPHC – Disease Epidemiology Program
  Aberdeen Proving Ground – MD
  Comm: (410) 436-7605   DSN: 584-7605
  usarmy.apg.medcom-aphc.mbx.disease-epidemiologyprogram13@mail.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
  usafsam.phrepiservic@us.af.mil
Contact Information

- **Navy**: NMCPHC Preventive Medicine Programs and Policy Support Department
  - COMM: (757) 953-0700; DSN: (312) 377-0700
  - Email: usn.hampton-roads.navmcpubhlthcenpors.list.nmcphc-threatassess@mail.mil

- **Navy Environmental and Preventive Medicine Units (NEPMU)**
  - **NEPMU2**
    - COMM: (757) 953-6600; DSN: (312) 377-6600
    - Email: usn.hampton-roads.navhospporsva.list.nepmu2norfolk-threatassess@mail.mil
  - **NEPMU5**
    - COMM: (619) 556-7070; DSN (312) 526-7070
    - Email: usn.san-diego.navenpvntmedufive.list.nepmu5-health-surveillance@mail.mil
  - **NEPMU6**
    - COMM: (808) 471-0237; DSN: (315) 471-0237
    - Email: usn.jbphh.navenpvntmedusixhi.list.nepmu6@mail.mil
  - **NEPMU7**
    - COMM (international): 011-34-956-82-2230 (local: 727-2230); DSN: 94-314-727-2230
    - Email: NEPMU7@eu.navy.mil
Questions?