![County of Los Angeles Public Health logo]

INSTRUCTIONS FOR COMPLYING WITH THE 2017
CRE REPORTING REQUIREMENTS

The following instructions relate to the Health Officer Order for Reporting of Carbapenem-Resistant Enterobacteriaceae (CRE) and Antimicrobial Resistance of Bacterial Pathogens, issued on January 19, 2017.

Updated information and instructions for CRE reporting can be found at:
http://publichealth.lacounty.gov/acd/Diseases/CRE.htm

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1 Surveillance Definition

1.1 Reporting Requirements

Effective January 19, 2017 all acute care hospitals and skilled nursing facilities (SNFs) are mandated to report carbapenem-resistant *Enterobacteriaceae* (CRE) and submit an antibiogram annually. Reporting of CRE to the Los Angeles County Department of Public Health (LACDPH) will follow the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) Multidrug-Resistant Organism (MDRO) and *Clostridium difficile* Infection (CDI) Module: report all first CRE positive tests per patient, per calendar month, per location, regardless of specimen source except when a unique blood source is identified, that were collected on or after January 1st, 2017. SNFs are to follow the same surveillance rule above and report to the LACDPH Morbidity Unit via NHSN if enrolled, or via fax beginning February 28, 2017. If reporting via fax submit the completed CRE epi form and include the lab report with susceptibility results.

1.2 CRE Definition

LACDPH will follow the CDC NHSN MDRO and CDI Module CRE surveillance definition, which define CRE as any *Escherichia coli*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, or *Enterobacter spp*. demonstrating resistance by one or more of the following methods:

1. Resistant to imipenem, meropenem, doripenem, or ertapenem by standard susceptibility testing methods (i.e., minimum inhibitory concentrations of ≥4 mcg/mL for doripenem, imipenem and meropenem or ≥2 mcg/mL for ertapenem) **OR**
2. Production of a carbapenemase (e.g., KPC, NDM, VIM, IMP, OXA-48) demonstrated using a recognized test (e.g., polymerase chain reaction (PCR), metallo-β-lactamase test, modified-Hodge test, Carba-NP, Carbapenem Inhibition Method (CIM)).

2   Submitting Data via the National Healthcare Safety Network – All NHSN Enrolled Facilities

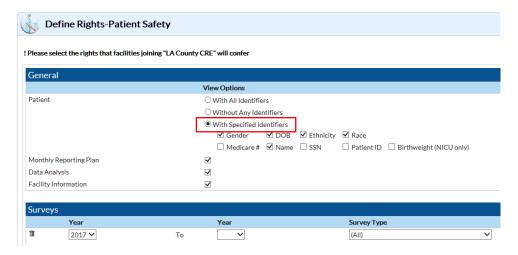## 2.1   Joining the New LA County CRE NHSN Group

All facilities enrolled in NHSN are to join the new LA County CRE NHSN group and report via NHSN to comply with the Health Officer Order. This is different group from the one through which many of you are already sharing CLABSI, SSI, CDI and MRSA/VRE bacteremia data with LACDPH.

1. In the left menu bar select Group →Join
2. This will take you to the Memberships page where you can view the groups you have joined that have access to your facility's data
3. Enter Group ID: 49773
4. Enter Group Joining Password: lacdph (all lowercase)
5. Click 'Join Group'
6. After you have joined the group

2.2   Conferring Rights

To comply with the Health Officer Order, conferred rights to CRE data with patient identifiers in the MDRO/CDI Events module is required. Please note the following elements must be present in the conferred rights template you accept.

1. Select the group named LA County CRE in the 'Groups that have access to this facility's data' box
   a. Click 'Confer Rights'
2. Under General:
   a. Select patient data with specified identifiers
       i. Ensure the following identifiers are selected: Gender, DOB, Ethnicity, Race, Name
   b. Select Monthly Reporting Plan, Data Analysis, and Facility Information
3. Under Surveys:
   a. Enter 2017 in the first Year field
   b. Leave 'To' year blank
   c. Survey type: Hospital Survey Data

4. Under MDRO/CDI Events:
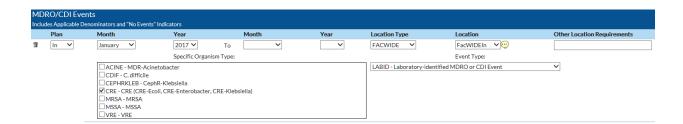   a. Plan: In
   b. Month: January
   c. Year: 2017
   d. Leave 'To' fields blank
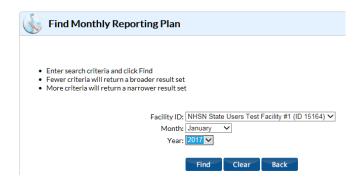   e. Location Type: FACWIDE
   f. Location: FacWIDEIn
      i. **NOTE**: Selecting FacWIDEIn will automatically add ED and 24-HR observation areas to your reporting locations.
   g. Specific Organism Type: CRE – CRE (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella)
   h. Event Type: LABID – Laboratory-identified MDRO or CDI Event
      i. **NOTE**: Do not select Blood Specimens only. The Health Officer Order specifies CRE from any specimen source is to be reported.
5. Save the template

2.3   Adding CRE to Monthly Reporting Plan

1. **Note**: if you already have LabID CRE reporting in your monthly plan please check to make sure you are reporting **All Specimens**
2. In the NHSN menu bar on the left of the screen select Reporting Plan → Find
3. In Month field enter January
4. In Year field enter 2017

Find Monthly Reporting Plan

- Enter search criteria and click Find
- Fewer criteria will return a broader result set
- More criteria will return a narrower result set

Facility ID: NHSN State Users Test Facility #1 (ID 15164) ▾
Month: January ▾
Year: 2017 ▾

Find   Clear   Back

5. Once you are in the January 2017 plan scroll down and select 'Edit'
6. Scroll down to the Multi-Drug Resistant Organism Module section of the template and click 'Add Row'
7. In Locations dropdown select 'FACWIDEIN'
8. In Specific Organism Type select 'CRE – CRE (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella)'
9. Check the box under Lab ID Event All Specimens
   a. **NOTE**: do not select Blood Specimens Only. The Health Officer Order specifies CRE from any specimen source is to be reported.
10. Save your monthly reporting plan. This same plan should be used for all reporting months going forward.

Multi-Drug Resistant Organism Module

	Locations	Specific Organism Type
🗑	FACWIDEIN - Facility-wide Inpatient (FacWIDEIn) ▾	CRE - CRE (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella) ▾

Process and Outcome Measures

Infection Surveillance	AST-Timing	AST-Eligible	Incidence	Prevalence	Lab ID Event All Specimens	Lab ID Event Blood Specimens Only
☐	▾	▾	☐	☐	☑	☐

2.4 Creating Custom Reporting Fields

We will be creating new custom fields in your LabID entry form to capture the CRE positive patient's healthcare exposure, both from direct transfers to your facility as well as other known exposures obtained from history and physical examinations, medical record review from transferring facilities, etc.

Variables to be created in NHSN for additional data entry:
- ADMIT_FACILITY: If you answered "Nursing Home/Skilled Nursing Facility" or "Other Inpatient Healthcare Setting" as the last physical overnight location of a patient immediately prior to arriving in your facility you will enter the name of the facility that transferred the patient under this variable; if you do not know the name of the facility enter Unk – Alphanumeric field
- DATE_LAST_CRE: Enter the date of the last CRE positive test for the patient in the current admission, regardless of specimen source; if the test being reported was the only CRE positive during the admission, leave blank – Date field
- DIED: Indicate Yes, No, or Unk for patient status at the end of the current hospitalization or at the time the event is being reported – Alphanumeric field
- DISCHARGED_TO: If known, indicate the name of the facility to which the patient was discharged; if not known, enter Unk – Alphanumeric field

- DATE_DEATH.D/C: enter the date the patient was discharged; if the patient died, please enter the date of death here. If unknown or patient not discharged when entering event leave blank – Date field

Note: Custom fields are to be created in the order listed above for consistency of data analysis across the many facilities reporting into NHSN. The NHSN system will label and order the variables in the order they are created in the custom options manager, so they will be labeled 'custom 1', 'custom 2', etc. You are able to analyze the custom variables created in NHSN, though note they will be labeled as custom 1, custom 2, etc.

To create the custom variables in NHSN
1. In the left menu bar from the main NHSN page go to Facility → Customize Forms
2. Go down to the Custom Field Labels section
   a. In Form Type field select CDC-Defined - PS - Event
   b. In Form field select LABID - LABORATORY IDENTIFIED MDRO OR CDAD EVENT
   c. In Status field select Active
   d. In the first row of the Define Custom Fields box click in the box under Label and enter your first custom variable name
   e. In the same row tab to the box under Type and select Alphanumeric in the drop down box
   f. In the same row tab to the box under Status and select Active
   g. When your row entry is complete click Add Row to add another row for a new custom variable

VARIABLE CREATION EXAMPLE - ADMIT_FACILITY
If you answered "Nursing Home/Skilled Nursing Facility" or "Other Inpatient Healthcare Setting" as the last physical overnight location of a patient immediately prior to arriving in your facility you will enter the name of the facility that transferred the patient under this variable

1. Click in the box under Label and type ADMIT_FACILITY
2. Click in the box under Type and select 'Alphanumeric' in the drop down box
3. In the same row click in the box under Status and select 'Active'
4. When your row entry is complete click Add Row to add another row for a new custom variable
5. Continue with the additional custom variables in the order listed above
6. When you complete entry of all your custom variables click 'Save' to save the entry

Form Type *:	CDC-Defined - PS - Event
Form *:	LABID - Laboratory-identified MDRO or CDI Event
Description *:	LABID - LABORATORY-IDENTIFIED MDRO OR CDAD EVENT
Status *:	Active

Define Custom Fields

Add Row

Delete	Label	Type	Status
☐	ADMIT_FACILITY	Alphanumeric	Active
☐	DATE_LAST_CRE	Date	Active
☐	DIED	Alphanumeric	Active
☐	DISCHARGED_TO	Alphanumeric	Active
☐	DATE_DEATH.D/C	Date	

Find   Save   Clear

2.5   Entering CRE Events into NHSN

1. Enter patient information as defined in rights template, including patient Name, DOB, Gender, Ethnicity and Race
2. In Event Type select LABID-Laboratory-identified MDRO or CDI Event
3. Complete all required fields indicated with an * under Event Information
   a. In Specific Organism Type select the CRE organism that was detected in your laboratory (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella)
   b. A new field will appear under when you select a CRE organism asking if the isolate was tested for presence of a carbapenemase – indicate Yes or No
   c. If you answer Yes, indicate the test method used in your laboratory and the identified carbapenemase as well as the carbapenemase that was identified
   d. If your answer is Other, or if you detect a carbapenemase that is not listed on this form please contact Acute Communicable Disease Control Program at (213) 240-7941 immediately to report.

Event Type *: LABID - Laboratory-identified MDRO or CDI Event
Date Specimen Collected *: 01/03/2017
Specific Organism Type *: CREECOLI - CRE-Ecoli
Was the bacterial isolate tested for carbapenemase? *: Y - Yes

If Yes, which tests were done (check all that apply): *:
- [ ] PCR-KPC - Polymerase chain reaction - Klebsiella pneumoniae carbapenemase
- [ ] PCR-NDM - Polymerase chain reaction - New Delhi metallo-ß-lactamase
- [ ] PCR-IMP - Polymerase chain reaction - Imipenemase
- [ ] PCR-VIM - Polymerase chain reaction - Verona Integron-encoded metallo-ß-lactamase
- [ ] PCR-OXA-48-like - Polymerase chain reaction - Oxacillinase-48 like
- [ ] MHT - Modified Hodge Test
- [ ] CNP - Carba NP
- [ ] MBLe - Metallo-ß-lactamase E-test
- [ ] MBLs - Metallo-ß-lactamase screen
- [ ] OTHCTM - Other (please specify)
- [ ] UNKCTM - Unknown

Completion of this section is required by the Health Officer Order if your laboratory tests for the presence of a carbapenemase

Did the isolate test positive for carbapenemase? *: Y - Yes

If Yes, please identify which carbapenamase were identified (check all that apply): *:
- [x] (KPC) Klebsiella pneumoniae carbapenemase
- [ ] (NDM) New Delhi metallo-ß-lactamase
- [ ] (IMP) Imipenemase
- [ ] (VIM) Verona integron-encoded metallo-ß-lactamase
- [ ] (OXA-48 like) Oxacillinase-48 like
- [ ] (NS-Carba) Nonspecific carbapenemase activity (e.g., MHT or Carba NP)
- [ ] (NS-MBL) Nonspecific metallo-ß-lactamase activity (e.g., MBL E-test or MBL screen)
- [ ] OTHCDT - Other (please specify)
- [ ] UNKCDT - Unknown

4. In addition to the 10 required fields in Event Information section, complete the optional fields that provide additional patient healthcare exposure information
   a. Last physical overnight location for patients with specimens collected in outpatient setting or <4 days after admission
      i. LACDPH is requesting facilities answer this question regardless of the time period in which the specimen was collected after admission

ii. **Note**: If the answer is Nursing Home or Other Inpatient Healthcare setting please enter the facility name, if known, in the custom variable ADMIT_FACILITY. If you do not know the name please enter Unk in the custom variable.

b. Indicate whether the patient was discharged from your facility in the past 4 weeks (Y/N)
    i. If Yes, enter the date of last discharge from your facility
c. Indicate if the patient was discharged from another facility in the past 4 weeks

5. Custom field data entry - In addition to entering the name of the facility the patient was immediately admitted from to your facility, there are additional elements to be entered for the patient during their current hospitalization
    a. ADMIT_FACILITY: If the patient was immediately admitted from another facility to yours and you know the name of that healthcare facility, enter it in the ADMIT_FACILITY field
    b. DATE_LAST_CRE: If the patient is positive multiple times during their hospitalization and NHSN does not allow you to enter the duplicate events, enter the date of the last CRE positive specimen collection in the DATE_LAST_CRE field
    c. Died: indicate the patient's status at the time you are reporting the event (Yes, No, Unk)
    d. DISCHARGED_TO: If you know the name of the facility the patient was discharged to, enter the name; if you do not know the name but know the facility type (i.e., other hospital, SNF, home) enter that here
    e. DATE_DEATH.D/C: if the patient has been discharged or died at the time you are reporting the event enter the date they died or the date they were discharged

Sample patient data entry:

Patient information:

Facility ID *****: NHSN State Users Test Facility #1 (ID 15164) ⌄	Event #:
Patient ID *****: 123 [Find] [Find Events for Patient]	Social Security #:
Secondary ID:	Medicare #:
Last Name: Beiber	First Name: Justin
Middle Name:	
Gender *****: M - Male ⌄	Date of Birth *****: 12/12/1989
Ethnicity: NOHISP - Not Hispanic or Not Latino ⌄	

Race: ☐ American Indian/Alaska Native ☐ Asian
☐ Black or African American ☐ Native Hawaiian/Other Pacific Islander
☑ White

Event Information:

Event Type *****: LABID - Laboratory-identified MDRO or CDI Event
Date Specimen Collected *****: 01/13/2017
Specific Organism Type *****: CREKLEB - CRE-Klebsiella
Was the bacterial isolate tested for carbapenemase? *****: Y - Yes

If Yes, which tests were done (check all that apply): *****:

☑ PCR-KPC - Polymerase chain reaction - Klebsiella pneumoniae carbapenemase
☐ PCR-NDM - Polymerase chain reaction - New Delhi metallo-ß-lactamase
☐ PCR-IMP - Polymerase chain reaction - Imipenemase
☐ PCR-VIM - Polymerase chain reaction - Verona Integron-encoded metallo-ß-lactamase
☐ PCR-OXA-48-like - Polymerase chain reaction - Oxacillinase-48 like
☐ MHT - Modified Hodge Test
☐ CNP - Carba NP
☐ MBLe - Metallo-ß-lactamase E-test
☐ MBLs - Metallo-ß-lactamase screen
☐ OTHCTM - Other (please specify)
☐ UNKCTM - Unknown

Did the isolate test positive for carbapenemase? *****: Y - Yes

If Yes, please identify which carbapenamase were identified (check all that apply): *****:

☑ (KPC) Klebsiella pneumoniae carbapenemase
☐ (NDM) New Delhi metallo-ß-lactamase
☐ (IMP) Imipenemase
☐ (VIM) Verona integron-encoded metallo-ß-lactamase
☐ (OXA-48 like) Oxacillinase-48 like
☐ (NS-Carba) Nonspecific carbapenemase activity (e.g., MHT or Carba NP)
☐ (NS-MBL) Nonspecific metallo-ß-lactamase activity (e.g., MBL E-test or MBL screen)
☐ OTHCDT - Other (please specify)
☐ UNKCDT - Unknown

Outpatient *****:	N - No ⌄
Specimen Body Site/Source *****:	CARD - Cardiovascular/ Circulatory/ Lymphatics ⌄
Specimen Source *****:	BLDSPC - Blood specimen ⌄
Date Admitted to Facility *****:	01/08/2017
Location *****:	235 - ICU ⌄
Date Admitted to Location *****:	01/11/2017

Last physical overnight location of patient immediately prior to arriving into facility (applies to specimen(s) collected in outpatient setting or <4 days after inpatient admission): NURS - Nursing Home/Skilled Nursing Facility

Has patient been discharged from your facility in the past 4 weeks?: Y - Yes

Date of last discharge from your facility *: 12/28/2016

Has the patient been discharged from another facility in the past 4 weeks?: Y - Yes

If yes, from where (Check all that apply): ☑ Nursing Home/Skilled Nursing Facility
☐ Other Inpatient Healthcare Setting (i.e., acute care hospital, IRF, LTAC, etc.)

Documented evidence of previous infection or colonization with this specific organism type from a previously reported LabID Event in **any prior month**?: N - No

Custom Fields

ADMIT_FACILITY: LAC SNF   DATE_LAST_CRE: 01/19/2017

DIED: NO   DISCHARGED_TO: LAC SNF

DATE_DEATH.D/C: 01/20/2017

2.6   Summary Data Entry

Entry of monthly denominator data is required in order to complete reporting in NHSN. Please enter the number of patient days and admissions for your facility for the indicated month. If your facility did not identify any CRE during the month you are submitting denominator data, please ensure you check the "Report No Events" box next to the individual CRE organism for which you are reporting no events.

MDRO & CDI Infection						
Specific Organism Type	CRE-Ecoli	Report No Events	CRE-Enterobacter	Report No Events	CRE-Klebsiella	Report No Events
Infection Surveillance	☐	☐	☐	☐	☐	☐
LabID Event (All specimens)	* ☑	☐	* ☑	☐	* ☑	☐
LabID Event (Blood specimens only)	☐	☐	☐	☐	☐	☐

3 Submitting Data to Morbidity Unit – Skilled Nursing Facilities Only

3.1 Completing CRE Epi Form

For SNFs not enrolled in NHSN, compliance with the CRE reporting mandate will be met through completion of the CRE Epi form available at http://ph.lacounty.gov/acd/EpiForms.htm. This completed form will be faxed to the LACDPH Morbidity Unit at (888) 397-3778 along with the laboratory report indicating the specimen's susceptibility testing results.

SNFs are to utilize the CRE definition at the beginning of this document for their residents. We understand that reference labs may submit laboratory results to LACDPH, however the completion of the CRE epi form is still required to be submitted in order to consider the case report complete and in compliance with the reporting mandate.

3.2 Patient and Facility Information

This form requires completion of patient information (name, date of birth, age and sex) in addition to reporting facility information. Please indicate the name and address of the SNF that is reporting the case, as well as the name of the person that is reporting and their contact information.

COUNTY OF LOS ANGELES Public Health

Acute Communicable Disease Control
313 N. Figueroa St., Rm. 212, Los Angeles, CA 90012
213-240-7941 (phone), 213-482-4856 (facsimile)
www.lapublichealth.org/acd

CARBAPENEM-RESISTANT ENTEROBACTERIACEAE EPIDEMIOLOGY REPORT FORM
Klebsiella spp., Escherichia coli, and Enterobacter spp.
Only for use by Skilled Nursing Facilities

PATIENT INFORMATION

Patient Name-Last	First	Middle Initial	Date of Birth	Age	Sex

Race *(check one)*
☐ African-American/Black ☐ Asian/Pacific Islander ☐ Native American ☐ White ☐ Other:_____

Ethnicity *(check one)*
☐ Hispanic/Latino ☐ Non-Hispanic/Non-Latino

REPORTING FACILITY INFORMATION

Reporting Facility Name	Name of Person Reporting	Reporting Facility Phone Number
Reporting Facility Address- Number, Street	City	State	ZIP Code

3.3 Diagnostic Information

In this section indicate the organism identified, date the specimen was collected and the specimen source. If known, indicate if the patient was colonized or infected with the organism identified; if you are not sure if the patient had an infection select 'Unsure/unknown.' Indicate if your laboratory tests for the presence of a carbapenemase (Yes, No, Unk); if Yes, select the type of test your laboratory performs to detect the presence of a carbapenemase. If the laboratory identified a carbapenemase, please check the box next to the type that was identified. If you answer is 'Other' please specify the type detected. If you detect a carbapenemase that is not listed on this form, please contact Acute Communicable Disease Control Program at (213) 240-7941 immediately to report.

DIAGNOSTIC TESTS

Organism identified: ☐ *Klebsiella spp.* ☐ *E. coli* ☐ *Enterobacter spp*	Date of collection: _____

Specimen source: ☐ Blood ☐ Sputum ☐ Wound- sterile site ☐ Wound- non-sterile site ☐ Urine ☐ Rectal swab ☐ Other: _____

Patient status at time specimen was collected:	Was the bacterial isolate tested for the presence of a carbapenemase?	If Yes, which tests were done *(check all performed)*:
		☐ Broth MIC ☐ PCR ☐ ETest ☐ CarbaNP
☐ Colonization ☐ Infection ☐ Unsure/unknown	☐ Yes ☐ No ☐ Unk	☐ MHT ☐ Unk ☐ Other *(specify)*:_____

If Yes, what carbapenemase was detected *(check all that apply)*:

☐ Klebsiella pneumoniae carbapenemase (KPC) ☐ New Delhi metallo-β-lactamase (NDM) ☐ Imipenemase (IMP) ☐ OXA-48-like

☐ Verona integron-encoded metallo-β-lactamase (VIM) ☐ Negative/none detected ☐ Other specify:_____

3.4 Healthcare Presentation

Information for this section should be taken from the resident's current admission. Please indicate the date of admission, and note if this resident has been in your facility for more than three months. If the resident was admitted from a different healthcare facility in the four weeks prior to their current positive test, please indicate that on the form along with the type of facility they were admitted from as well as the name of the facility. At the time you are reporting the case, indicate the status of the resident in the 'Disposition' as either currently in your facility, discharged to a different facility, or died.

HEALTHCARE PRESENTATION

Date of admission:	Has the patient been a resident of your facility for more than 3 months?	Was the resident admitted from a healthcare facility in the four weeks prior to their current positive test?
	☐ Yes ☐ No ☐ Unk	☐ Yes ☐ No ☐ Unk
If Yes, what type of facility?	Disposition:	
☐ Hospital ☐ LTAC ☐ Other SNF	☐ Current resident ☐ Discharged to hospital ☐ Discharged to LTAC ☐ Discharged to another SNF	
Facility name: _____	☐ Discharged home ☐ Date of discharge:_____ ☐ Died - Date of Death: _____	

Additional notes:

If you have additional questions, please contact the Acute Communicable Disease Program at **(213)240-7941** or **hai@ph.lacounty.gov**.