



Health Officer Order for Reporting of Carbapenem-Resistant Enterobacteriaceae (CRE) and Antimicrobial Resistance (AR) of Bacterial Pathogens

Frequently Asked Questions (FAQs) about Reporting Antibigrams

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

*Updated instructions and FAQs for antibiogram reporting can be found at:
<http://publichealth.lacounty.gov/acd/antibiogram.htm>*

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If you have other questions about reporting, please contact the Acute Communicable Disease Program at 213-240-7941 or hai@ph.lacounty.gov.

GENERAL INFORMATION

Why were antibiograms made reportable?

CRE is only one of many types of antimicrobial resistant (AR) organisms that are circulating in healthcare facilities. Antibiograms provide a comprehensive summary about AR organisms within healthcare facilities. Tracking the rise and spread of AR organisms will allow LACDPH to better understand the problem of AR, and better target interventions and prevention activities.

What does LACDPH plan to do with antibiogram information?

By tracking resistance rates across LA County, LACDPH will be able to rapidly and efficiently identify areas needing public health intervention in order to prevent the further spread of AR organisms. LACDPH will also use these data to compile an annual LA County antibiogram that will be made available to healthcare facilities so they can compare their resistance trends to the county overall.

What is required to be reported?

All ACHs and some SNFs prepare a facility-level antibiogram on at least an annual basis. The annual antibiogram encompassing one calendar year (January – December) is what LACDPH is requiring to be reported. LACDPH also requires that healthcare facilities follow the most current Clinical & Laboratory Standards Institute (CLSI) guidelines to prepare their antibiogram.

PREPARING AN ANTIBIOGRAM

Where can I find the most current Clinical & Laboratory Standards Institute (CLSI) guidelines to meet the antibiogram preparation requirements?

The CLSI M39-A4 outlines the analysis and presentation of cumulative antibiograms, and can be found at <http://shop.clsi.org/microbiology-documents/M39.html>.

The CLSI M100-S27 outlines standards for antimicrobial susceptibility testing, and can be accessed online for free at <http://clsi.org/m100/>.

You may also visit our Antibiogram page for resources at <http://ph.lacounty.gov/acd/antibiogram.htm>.

Which organisms should be included?

Follow the most current CLSI guidelines. Currently, the M39-A4 guidelines state facilities should only include species with \geq (greater than or equal to) 30 diagnostic (not surveillance) isolates per year. However, LACDPH is requesting all species be included (regardless of total number of isolates), and to include the number of isolates tested per organism.

The organisms of interest to LACDPH include:

- **Enterobacteriaceae group:** *Escherichia coli*, *Enterobacter* spp. (specify if combined or report as species, e.g. *E. aerogenes* and *E. cloacae*), *Klebsiella* spp. (specify if combined or report as species, e.g. *K. pneumonia* and *K. Oxytoca*), *Proteus mirabilis*
- **Non-Enterobacteriaceae:** *Pseudomonas aeruginosa*, *Acinetobacter baumannii*, *Stenotrophomonas maltophilia*.
- **Gram positive pathogens:** methicillin-resistant *Staphylococcus aureus*, Methicillin-sensitive *Staphylococcus aureus*, *Streptococcus pneumoniae*, *Streptococcus pyogenes* (Group A *Streptococcus*), *Streptococcus agalactiae* (Group B *Streptococcus*), and *Enterococcus* spp. (specify if combined or report as species, e.g. *E. faecalis* and *E. faecium*).

Which antimicrobials should be included?

Follow the most current CLSI guidelines. Currently, the M39-A4 guidelines state facilities should only include drugs that are routinely tested by your microbiology lab. Please work with your microbiologist to understand what drugs are routinely tested and reported for providers in your facility.

The antimicrobials of interest to LACDPH include:

- **Antimicrobial susceptibility for gram-negative pathogens:** piperacillin-tazobactam, ceftriaxone, ceftazidime, cefepime, meropenem, ertapenem, imipenem, gentamicin, tobramycin, amikacin, ciprofloxacin, levofloxacin, nitrofurantoin, trimethoprim-sulfamethoxazole, and colistin.
- **Antibiotic susceptibility for gram-positive pathogens:** penicillin (*S. pneumoniae*), ampicillin (*Enterococcus spp.*), ceftriaxone (*S. pneumoniae*), ceftaroline, doxycycline, levofloxacin (*S. pneumoniae*), ciprofloxacin (*S. pneumoniae*), linezolid (*S. aureus*, *Enterococcus spp.*), trimethoprim-sulfamethoxazole (*S. aureus*, *S. pneumoniae*), clindamycin, vancomycin, daptomycin, nitrofurantoin (*Enterococcus spp.*), erythromycin.

What type of results do I include?

Follow the most current CLSI guidelines. Currently, the M39-A4 guidelines state facilities should only include final, verified results for the first isolate per patient per year (regardless of body site, location and of overall antimicrobial susceptibility profile).

What if a hospital breaks the data down by inpatient vs. ICU? Are we expected to recalculate these?

If inpatient is a separate ward than ICU, then LACDPH asks that you recalculate an overall facility-wide inpatient antibiogram. If this is not possible, please submit both antibiograms to us (preferably in Excel).

SUBMITTING YOUR ANTI BIOGRAM

When are antibiograms due?

As most facilities complete their annual antibiogram within the first few months of the following year, LACDPH requires healthcare facilities to submit their annual antibiogram by June 1st of the following year. For example, the due date for 2016 antibiograms is June 1, 2017.

What if the laboratory I am working with is not aware of or trained to complete the required reporting?

Please direct your laboratory to our ACDC Antibiogram webpage <http://ph.lacounty.gov/acd/antibiogram.htm> to learn more about how they can meet the requirements.

Which staff member within a healthcare facility is most suited to prepare and submit the facility antibiogram?

The laboratory microbiology staff are generally the most familiar with preparing and analyzing an antibiogram; however, this is not always the case. LACDPH recommends each healthcare facility to assign responsibility of submitting antibiograms annually, and to work with reference/clinical labs and information technology (IT) staff as needed.

What if I need to report for more than one facility?

Please ask your laboratory to separate antibiogram information for each reporting facility. You may submit separate reports each facility in one email, if needed.

Are we required to use the Excel template provided?

No, the Excel template shared by LACDPH is only to be used as an example for formatting your antibiogram.

What if my facility does not currently create an annual antibiogram?

LACDPH recommends that you ask your clinical laboratory if they might be able to generate (or help you generate) a facility-level annual antibiogram for you. SNFs that currently do not have an antibiogram generated by their reference labs are exempt from this requirement. However as reference laboratories begin to acquire the capability to create facility-specific antibiograms, particularly for antimicrobial stewardship efforts, the most current antibiogram is to be submitted to LACDPH.

What if my facility can only generate antibiograms for less than one year (ie. 6 months)?

If it is not possible to generate an antibiogram containing data for one calendar year, then submitting separate antibiograms for smaller periods of time is acceptable.