The Massachusetts Department of Public Health (MDPH) is requesting cumulative antibiotic susceptibility test results (antibiograms) for the 2019 calendar year. The MDPH electronic web-based submission link allows antibiogram data submission directly into the Massachusetts Department of Public Health surveillance system called the Massachusetts Virtual Epidemiologic Network (MAVEN). The online submission allows for a consistent and standardized format following the Clinical Laboratory Standards Institute (CLSI) recommendations.

On December 18, 2013, revisions to 105 CMR 300.000: Reportable Diseases, Surveillance, and Isolation and Quarantine Requirements became effective. In accordance with 105 CMR 300.171: Reporting of Antimicrobial Resistant Organisms and Cumulative Antibiotic Susceptibility Test Results (Antibiograms), all hospitals must report antibiogram data in a format prescribed by the Department.

Submitting your antibiogram data using the web-based survey form will allow MDPH to report statewide aggregated means and trends back to you quickly. You will receive an email with a PDF version of the report with the data that you filled out shortly after submission.

As a reminder, CLSI has published guidelines for clinical laboratories to enhance the use of cumulative data and assist in empiric therapy decisions. The M39-A4 CLSI standards and guidelines are available at www.clsi.org.

After reading the instructions included in this email, please submit your 2019 antibiogram data using the attached submission instructions. If you have any questions, please email us at: dph-antibiogram@state.ma.us.

Sincerely,

Catherine M. Brown, DVM, MSc, MPH
State Epidemiologist and State Public Health Veterinarian
Beginning in February 2020, we are moving the antibiogram data capture to a new format using our online surveillance system – the Massachusetts Virtual Epidemiologic Network (MAVEN). The invite to participate in the 2019 antibiogram report will be sent via an email to one contact person at each facility.

When complete, the data can be submitted safely to our secure database. Only one person can receive the email for the antibiogram data capture process, but the email can be forwarded and accessed by others at your facility.

1. Once you receive the email from isishelp@state.ma.us, please click the link to open the 2019 antibiogram online introduction page. Then click on the green Begin the Survey button.

2. The message will read: “Dear Test Hospital, Please complete this Antibiogram survey. To begin, follow this link: http://www.mavenantibiogramlink this link will expire at the end of XX/XX /2020 11:59 PM. Sincerely, MDPH”.

3. Once the webpage opens, complete the following questions at the top of the page: Start Date, End Date, Reporting Year (2019), Were duplicates excluded, and Patient Population (drop down).
   - The name of the hospital and email contact information will be prepopulated.
   - Choose “Start Date” and “End Date” (a calendar will pop up when you click on the fields). Make sure you choose the correct calendar year for your data.
   - The reporting year will be prepopulated with “2019”.
   - Answer “yes” or “no” to the question about whether duplicate isolates were excluded from your data
   - Choose the patient population from the drop-down list. We have added a number of additional patient types here. If analysis is performed on a population not included in the drop-down list, choose “other” population, and describe the population type in the “specify” section. We have created the number of antibiograms for you that you specified in the antibiogram collection survey, conducted in January 2020. If you would like to submit additional patient populations, feel free to request an additional antibiogram survey link by contacting Joe Gerth or Scott Troppy at dph-antibiogram@state.ma.us.
4. In the next two sections you will see the Gram Negative & Gram Positive Organisms with drug (%) susceptibility options.

If your total number of isolates (which we call “N”) varies for any bug-drug combination, please click the small arrow to the right of the “Variable N” field. Choose “Yes” as you click on the arrow. An “N” column will appear for each bug/drug combination. Enter the “N” for each antibiotic listed.

- If you choose yes, the N column will appear allowing you to enter the number of isolates per bug/drug combinations.
- If you choose no, the form will only display the (%) columns.
- The form will not allow you to enter a percent without a corresponding number of isolates for a given bug/drug combination. It will also not allow you to enter the number of isolates without a corresponding percent susceptibility.
- No individual number of isolates can be greater than the row total number of isolates tested (which we call N*). Please enter an N* for each row which should correspond to the total number of that drug tested using antibiotic susceptibility testing.

5. Fill in the percent susceptible in each bug-drug cell.
6. If you did not test an antibiotic for an organism listed, leave the cell blank.
7. Please note that you cannot enter less than 0 or greater than 100 for any percent susceptible cell.
8. For MRSA, percent susceptible to oxacillin should be 0. A warning message at the top of the screen will appear if any other value is entered in that cell.
9. For MSSA, oxacillin percent susceptible should be 100. A warning message at the top of the screen will appear if any other value is entered in that cell.
10. For MRSA, MSSA, and all S. aureus, vancomycin percent susceptible should be 100. If you have verified your results and this is less than 100%, please call the Epidemiology Program at 617-983-6800.
11. For *S. pneumoniae*, CLSI recommends calculating the %Susceptible separately at the different breakpoints indicated on the form for Cefotaxime, Ceftriaxone, and Penicillin.

12. If there are other bug/drug combinations that you think we are missing, please let us know and we will add them to a future antibiogram submission form.

13. If you need to step away from your computer before you have completed your data entry, save the Antibiogram by clicking on the **Save and Exit** button near the top right or lower left hand corners.

14. Once you have completed entering all your data, please click on the **Next** button to review what you have entered for each bug/drug combination.

15. Once the report is ready, click the **Submit** button.

16. You should see the following message appear on your screen letting you know it was submitted.

17. If you try to access your submitted antibiogram, you will receive a message letting you know that it was already submitted.

18. You will receive an email with a PDF version of the report with the data that you filled out shortly after submission. If you need to reach us, use the email: dph-antibiogram@state.ma.us.
If you have any questions about this form, please email the antibiogram help address at dph-antibiogram@state.ma.us and include your contact phone number. Someone will get back to you as soon as possible.