

News from the NHSN Help Desk

Positive Blood Culture FAQs Part 3: Reporting Antimicrobial Susceptibility

Knowing the antimicrobial susceptibility result of organisms from a positive blood culture is essential for tracking antibiotic resistance patterns and providing the proper IV antimicrobial to treat infection. When reporting a positive blood culture to NHSN, there are different requirements for reporting antimicrobial susceptibility results, depending on the organism. Learn how to report susceptibility information completely and accurately.

How is antimicrobial drug information reported?

When selecting an organism name from a pathogen drop-down menu, one or more antimicrobials with corresponding drug susceptibility codes will populate below the selected pathogen. Available drug susceptibility options vary based on the antimicrobial drug. For some antimicrobial drugs, you may see "S-DD = Susceptible – Dose Dependent" instead of "I = Intermediate" and "NS = Not susceptible" instead of "R = Resistant."

Pathogen 1:

> ☐ VANC ☐ S ☐ R ☐ I ☐ N

Antimicrobial drug name (abbreviated).
"VANC" = Vancomycin

Drug susceptibility options:
"S" = Sensitive
"R" = Resistant
"I" = Intermediate
"N" = Not tested

Where can I find a list of the antimicrobial drug codes and susceptibility result codes used in NHSN?

The Dialysis Event form includes a list of frequent organisms with their antimicrobial drug codes and susceptibility result codes. Go to the Dialysis Event Surveillance homepage <http://www.cdc.gov/nhsn/dialysis/event/index.html>, select "Data Collection Forms and Instructions" then "57.502 Dialysis Event (updated January 2016)" to find the most current version.

How do I know which susceptibility result is required?

Once an organism is selected, any required or optional antimicrobial susceptibility drug codes will display. Required susceptibility results will be marked with an * for events being reported in-plan (when the 'DE' box is checked on the Monthly Reporting Plan).

When susceptibility results are required, they must be entered for at least one drug per box. In the example below, susceptibility results are required for at least one drug in each of the 13 boxes.

Pathogen 1: 13 drugs required

* CIPRO ☐ S ☐ R ☐ I ☐ N	LEVO ☐ S ☐ R ☐ I ☐ N	MOXI ☐ S ☐ R ☐ I ☐ N	* DOXY ☐ S ☐ R ☐ I ☐ N	MINO ☐ S ☐ R ☐ I ☐ N	* CEFOX ☐ S ☐ R ☐ I ☐ N	METH ☐ S ☐ R ☐ I ☐ N	OX ☐ S ☐ R ☐ I ☐ N
* CLIND ☐ S ☐ R ☐ I ☐ N	* DAPTO ☐ S ☐ NS ☐ N	* ERYTH ☐ S ☐ R ☐ I ☐ N	* GENT ☐ S ☐ R ☐ I ☐ N	* LNZ ☐ S ☐ R ☐ N	* RIF ☐ S ☐ R ☐ I ☐ N	* TETRA ☐ S ☐ R ☐ I ☐ N	* TIG ☐ S ☐ NS ☐ N
* TMZ ☐ S ☐ R ☐ I ☐ N	* VANC ☐ S ☐ R ☐ I ☐ N						

The * indicates susceptibility results for at least 1 drug in the box is required

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Pathogens **HELP**

Pathogen 1: Bacteroides fragilis - BF Search **Drugs optional**

CEFOX ☐ S ☐ R ☐ I ☐ N

☐ S ☐ R ☐ I ☐ N

Add Drug

Some pathogens have no requirements for antimicrobial drug susceptibility reporting. Boxes for antimicrobial drug results that are optional will not be marked with any symbol and a message that indicates “Drugs are optional” will appear next to the selected organism.

Pathogens **HELP**

Pathogen 1: Aspergillus spp. - ASU

No drugs required.

A user may provide additional susceptibility results by clicking ‘Add Drug’ and then selecting a different antimicrobial drug code from the menu. When the “No drugs required” message appears, the user will not be allowed to add any antimicrobial susceptibility information.

What if the “1 drug required” message appears but no antimicrobial drug code populates below it?

If no drug code appears with the message “1 drug required” and an * in the box, then select a drug from the drop-down menu and indicate the organism’s susceptibility to that drug. If no susceptibility results are provided in the final lab report, then select any drug from the drop-down menu and click “N” for “Not tested.”

Pathogens **HELP**

Pathogen 1: Pseudomonas betle - STEMA Search **1 drug required**

* ☐ S ☐ R ☐ I ☐ N

Add Drug

The lab tested an organism’s susceptibility twice against the same antimicrobial drug. The two tests yielded different results. What susceptibility result(s) should be reported?

In such cases, only the highest resistance susceptibility result should be entered for that organism.

Order of Susceptibility from Lowest Resistance to Highest Resistance

S - Susceptible < **I** - Intermediate or **S-DD** - Susceptible Dose-Dependent < **R** - Resistant or **NS** - Not Susceptible

For example, if an organism is tested twice against doxycycline (DOXY) and yields an “I – intermediate” susceptibility result as well as a “R – resistant” susceptibility result, only report “R – resistant” susceptibility of that organism to doxycycline.



Questions? Email the NHSN helpdesk at nhsn@cdc.gov with “Dialysis” in the subject line and we will respond to your inquiry within 5 business days.