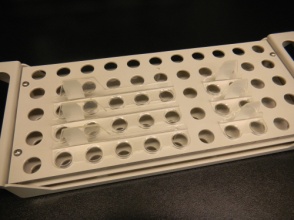
**Laboratory - Completing the DST worksheet and labeling for MGIT DSTs**

DST Worksheet

1. Write the date the DST batch will be inoculated in the top right corner of the worksheet
2. Skip the reagent lot number section for now, this can be completed immediately before inoculation
3. Begin filling out the table starting at the far left and work toward the right
4. **Specimen ID column**: List the specimen ID numbers of each isolate that will tested in numerical order in the Specimen ID # column
   1. Additional information can be added to the next column, Specimen ID Number (optional)
5. **Media column**: List the media type that each isolate is currently growing on, MGIT, LJ, or 7H10
6. **Drug Panel columns**: Indicate which tests will be inoculated by placing an X in the SIRE or PZA column for each isolate
7. **AGE of MGIT column**: Obtain the age of each MGIT culture from the unloaded positives report, the day it is considered positive by the MGIT is Day 0, count out the age of each isolate and record it in the” age of initial MGIT in days column”
8. **1:5 Dilution column**: The answer to the age of the MGIT will determine if a 1:5 dilution is necessary for DST inoculum.
   1. 1-2 days old = No dilution is necessary
   2. 3-5 days old = 1:5 dilutions is needed
   3. Place a Y for yes or N for no in this column
9. **PZA 1:10 Dilution**: If the PZA test is selected then a dilution will need to be prepared for inoculating the PZA growth control (1:10)

Labeling MGIT DST SIRE and PZA sets

1. Place a transport rack on the work surface and place carriers on top the rack as shown below
   1. Use a 5 tube carrier for each SIRE set
   2. Use a 2 tube carrier for each PZA set
2. Place tubes in the transport rack in carriers as shown below

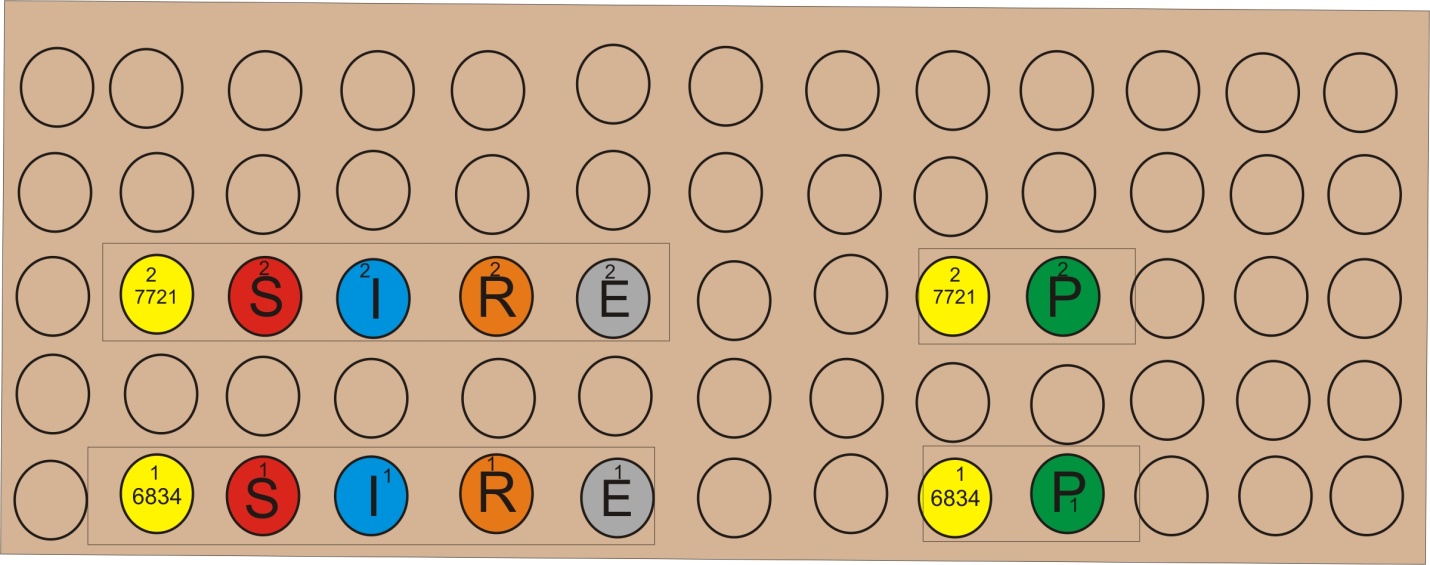
 

Two types of labels are used for labeling DST sets

1. Barcode labels- placed only on the growth control (GC) tube for each DST set
   1. Barcode should be placed vertically on the tube ensuring that a space or “window” is left so that the liquid level can be observed in each tube

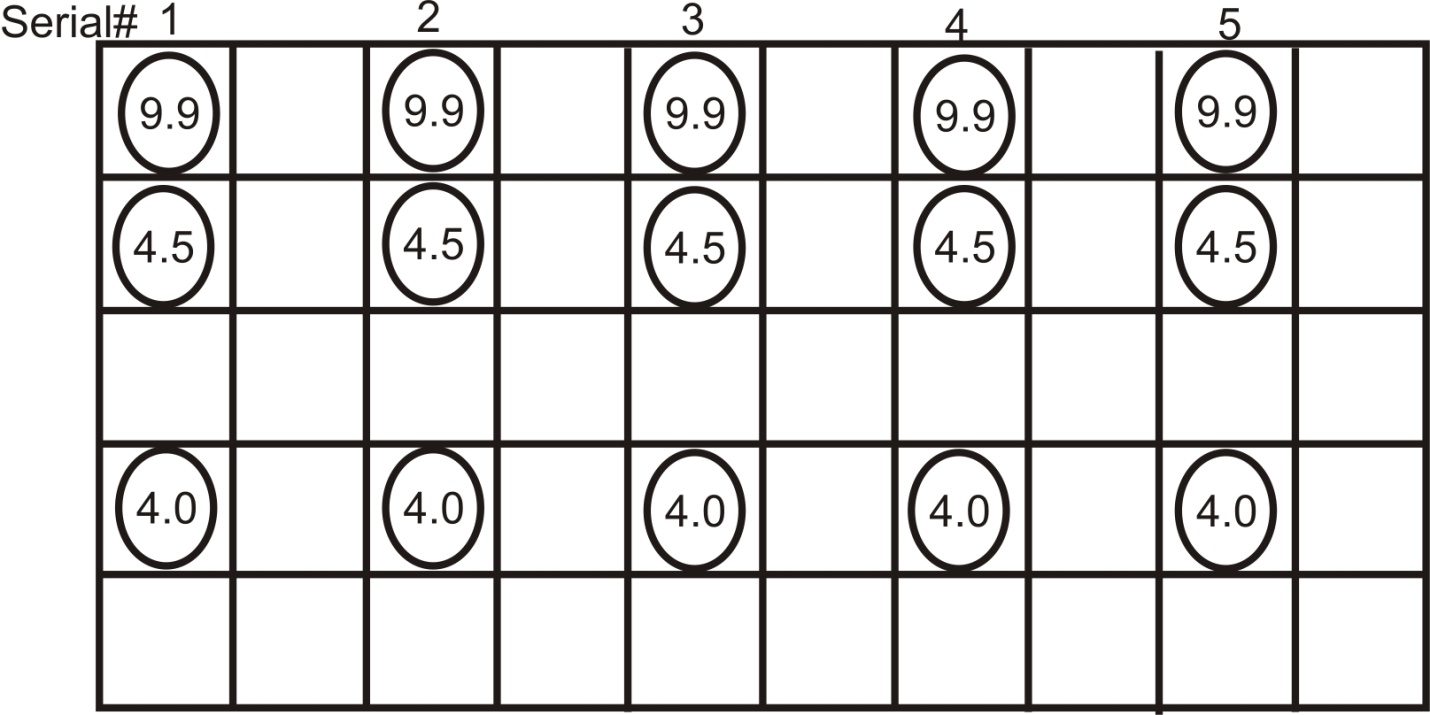


1. Dot labels- used to color code the GC or drug tubes; each tube in the set is labeled with a dot label. Please see the dot decoder for information color code
2. Before dots are applied to the tops of MGIT tubes write the specimen ID # on the yellow dots which will be applied to each growth control tube (both SIRE and PZA GC tubes are denoted with yellow dots)
3. Write the first letter of each drug other dots
   1. S = red dot
   2. I = blue dot
   3. R = orange dot
   4. E = grey dot
   5. P = green dot
4. Write the serial number of the DST set on all dots, this can be use to ensure DST set stay in the correct order
5. Apply the labeled dots to the tops of the tubes.
6. The end result should look like the diagram below with serial numbers



Dilution tubes

1. Refer to the DST worksheet to determine what dilutions will need to be prepared.
2. Use the saline blanks to create the following dilutions
   1. 4.0 ml saline and 1.0 ml MGIT seed =1:5
   2. 4.5 ml saline and 0.5 ml MGIT seed = 1:10
   3. 9.9 ml saline and 0.1 ml MGIT seed or 1:5 dilution if age of MGIT is day 3 – day 5 = 1:100
3. Labeling 4.0 ml, 4.5 ml, and 9.9 ml Saline blanks
   1. If a 1:5 dilution is needed (MGIT seed is 3-5 days old) label a 4.0 ml saline blank with the specimen ID # and 1:5
   2. If PZA will be inoculated ,label a 4.5 ml saline blank with the specimen ID # and 1:10
   3. If SIRE will be inoculated label a 9.9 ml saline blank with the specimen ID # and 1:100
4. Place all dilutions tubes for one specimen ID number in a row as shown in the diagram.



1. If a 1:5 dilution is not needed leave the space empty.