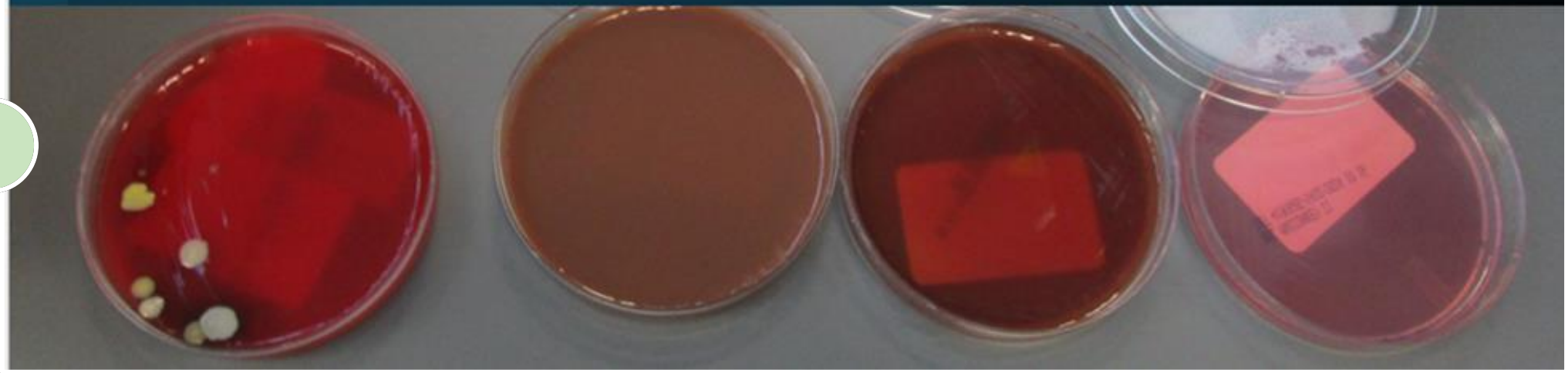
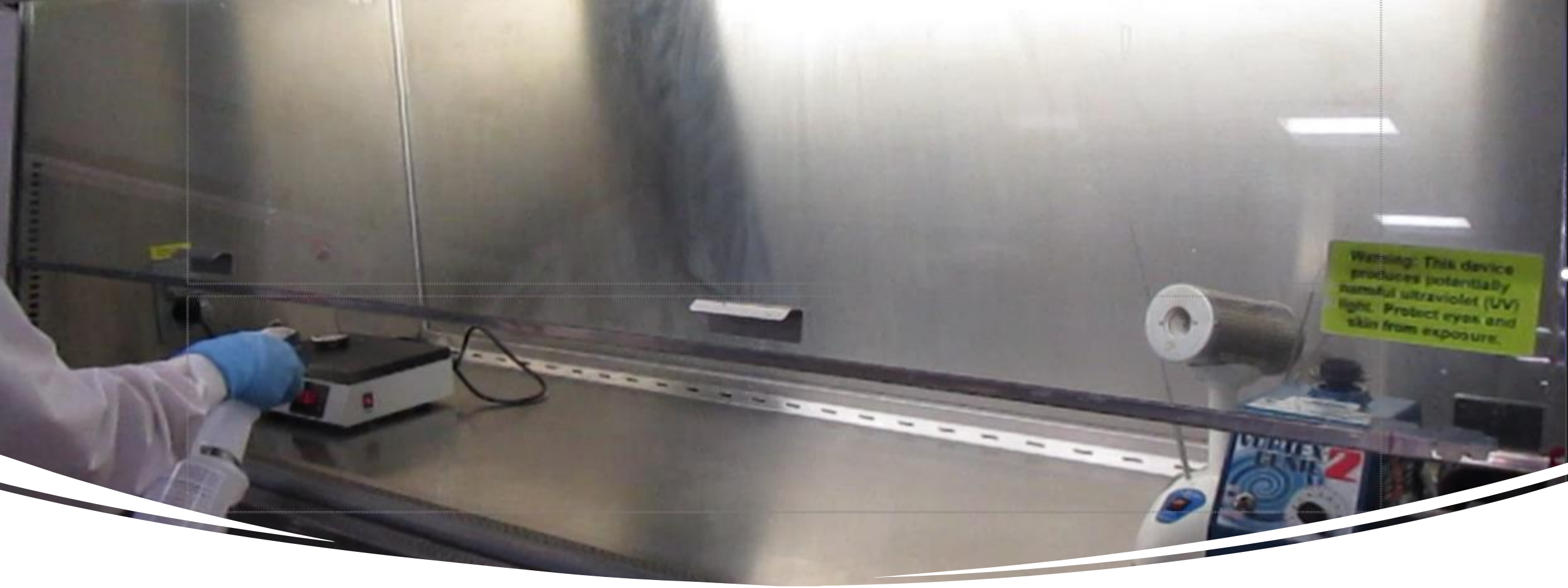
Improving Lab Techniques to Reduce Contamination during Processing Microbiology Specimens.





Clean the BSC before processing.

Cleaning a Biological Safety Cabinet (BSC) before processing is crucial to maintain a sterile environment and prevent contamination.

Bring the media to room temperature before use

Take the media out of the refrigerator and allow it to come to room temperature.

If the media is too cold, condensation can form on the lid of the culture dish, which can drip onto the media and cause contamination or uneven growth.

Print the label from the manual streaking station.

Print the required number of labels.

Gather the supplies needed for processing inside the BSC

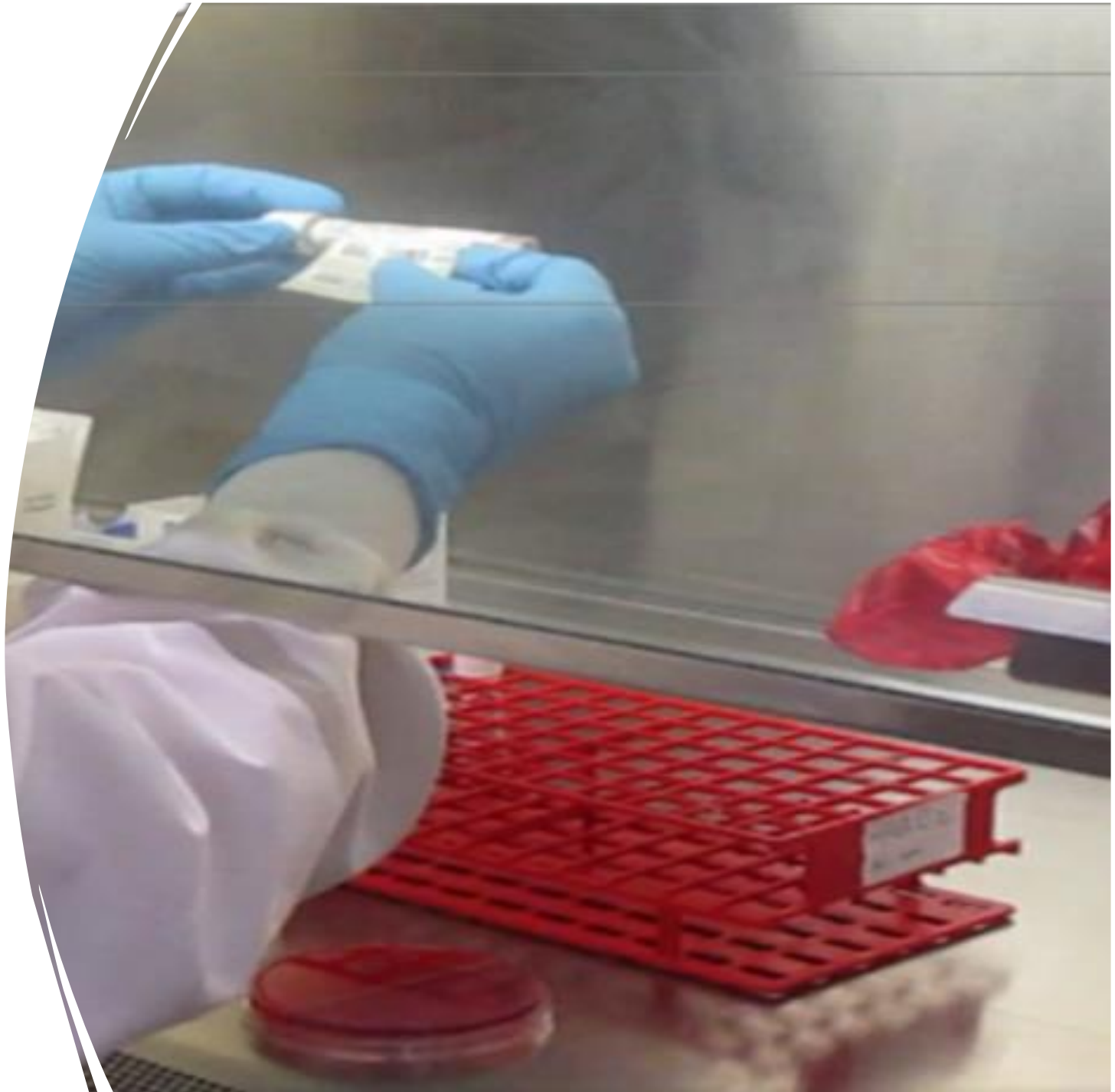
- Place all necessary supplies inside BSC.
- Place all E-swabs, tubes, plates, and labels in the hood.
- Arrange the supplies in an order that matches your workflow. Place frequently used items within easy reach to minimize movement and reduce the risk of contamination.
- Avoid Overcrowding. Overcrowding can disrupt airflow and increase the risk of contamination. Make sure that the placement of supplies does not block the airflow grilles. Proper airflow is crucial for maintaining a sterile environment.

Change gloves before starting the processing.

Changing gloves ensures, reducing the risk of contamination.

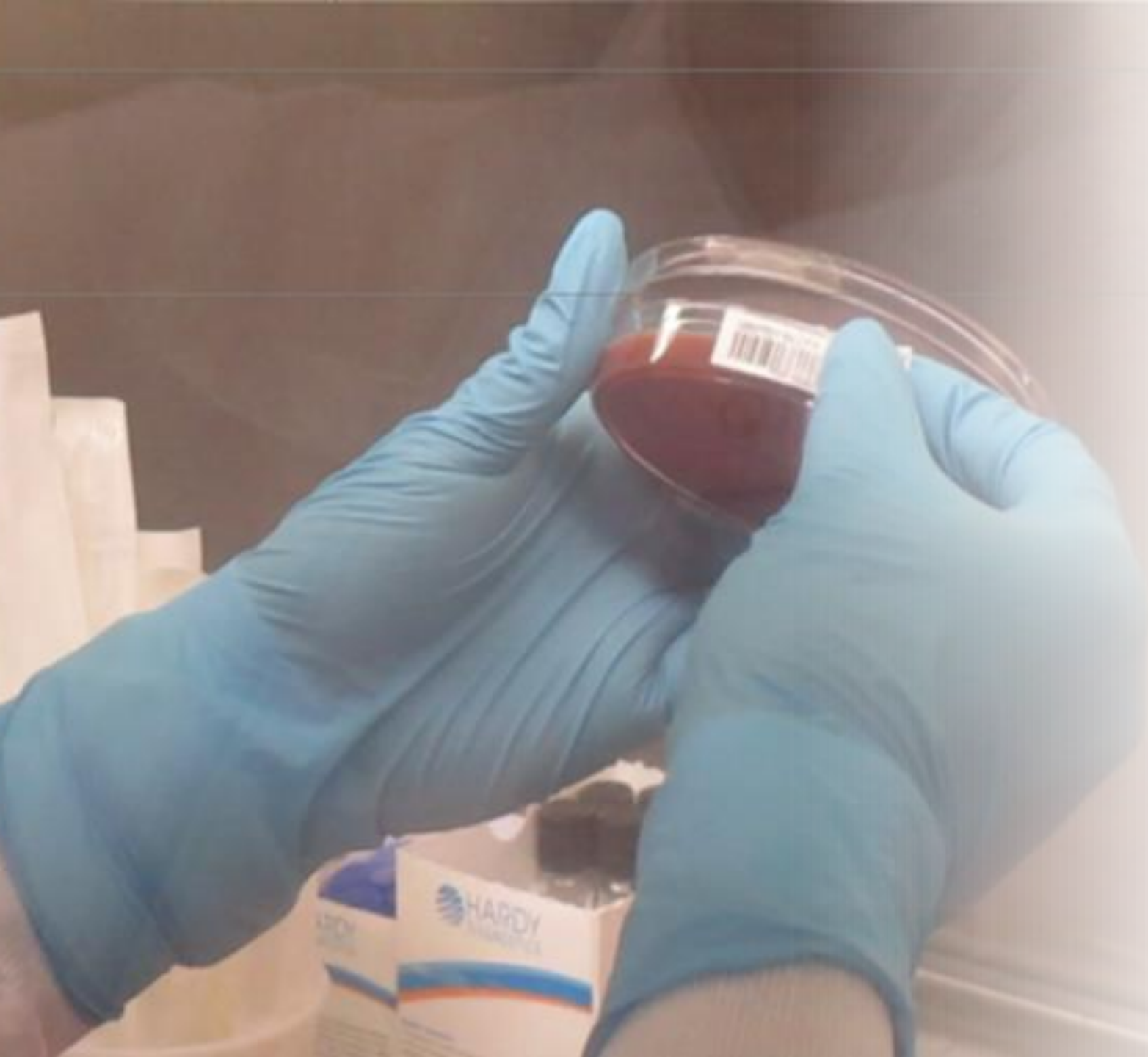
Check the label before inoculating the specimen.

The label is small, so be careful



Perform labeling of media and processing of the specimens inside the hood.

Performing labeling and processing of the specimens inside the BSC maintains a sterile environment, protecting both the specimens and the user from contamination.

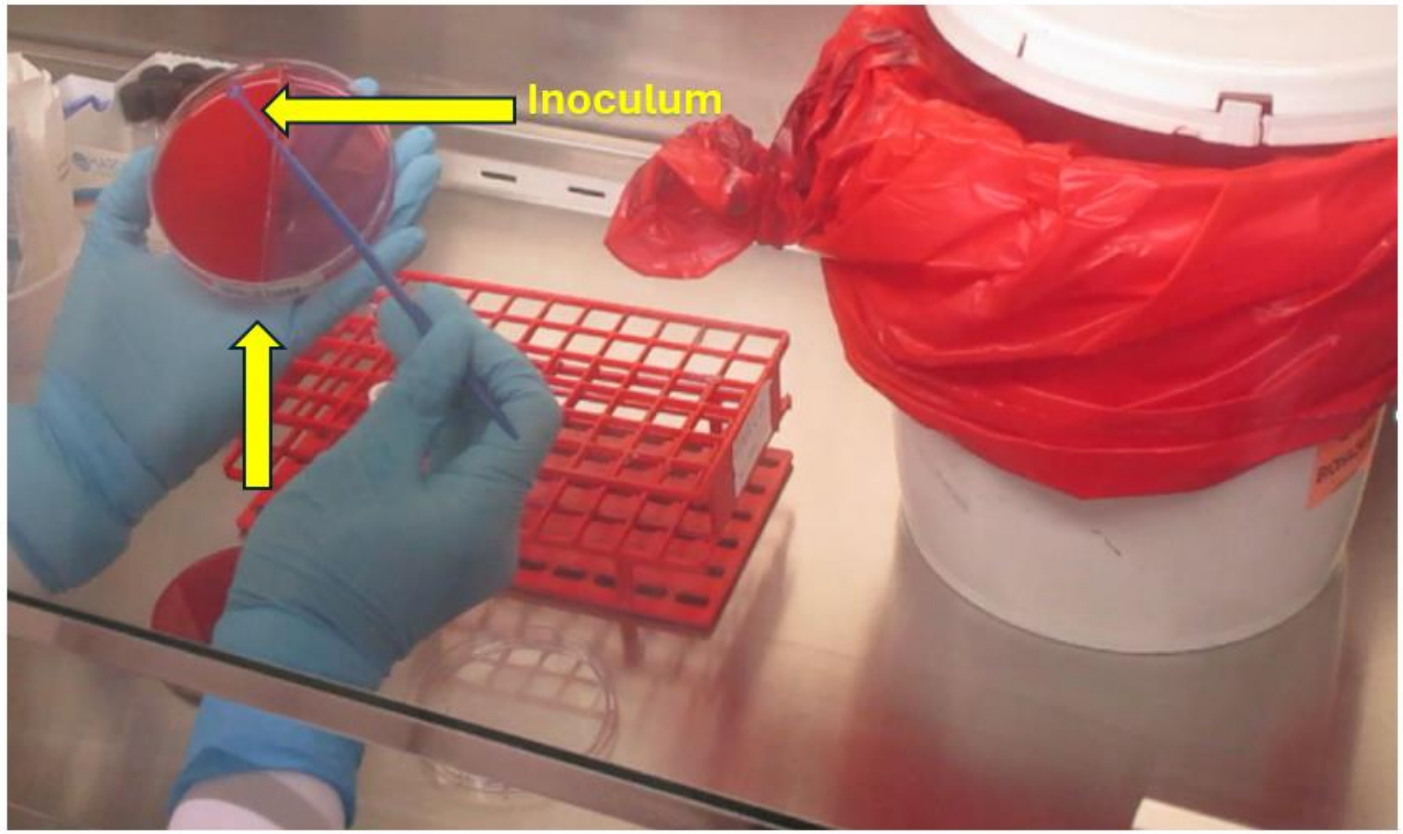


Label all your plates using the Copan label (Cerner label optional) inside the BSC.

- Identifying and tracking the samples accurately is important.
- Use clean gloves.
- Open the plate slightly on one side: Carefully lift the lid of the plate just a little bit on one side. This minimizes exposure to the environment, reducing the risk of contamination.
- Place a label: While the plate is slightly open, place a label on the side of

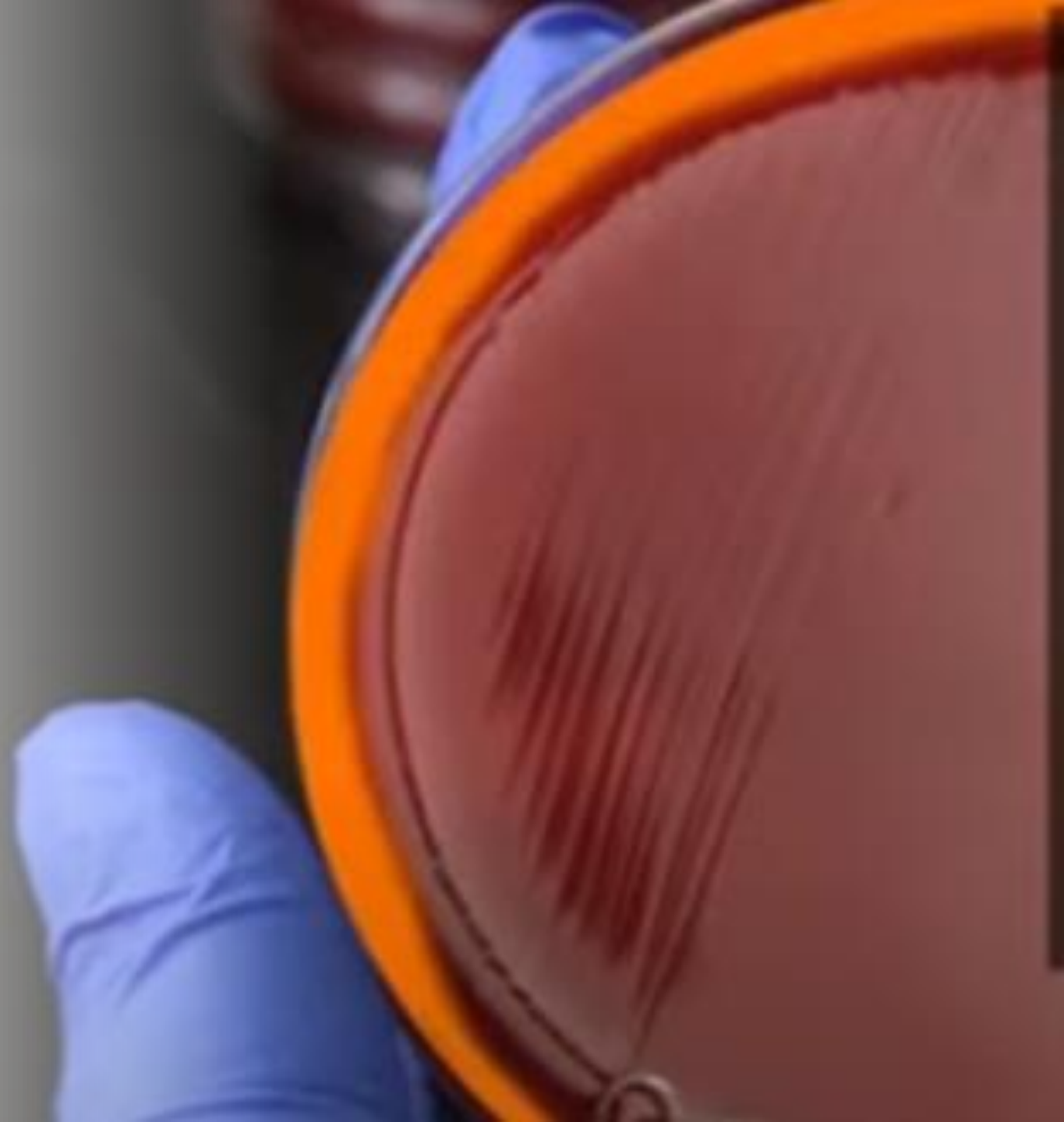
Inoculate the specimen on the opposite side of the label to prevent spreading contaminants introduced during labeling.

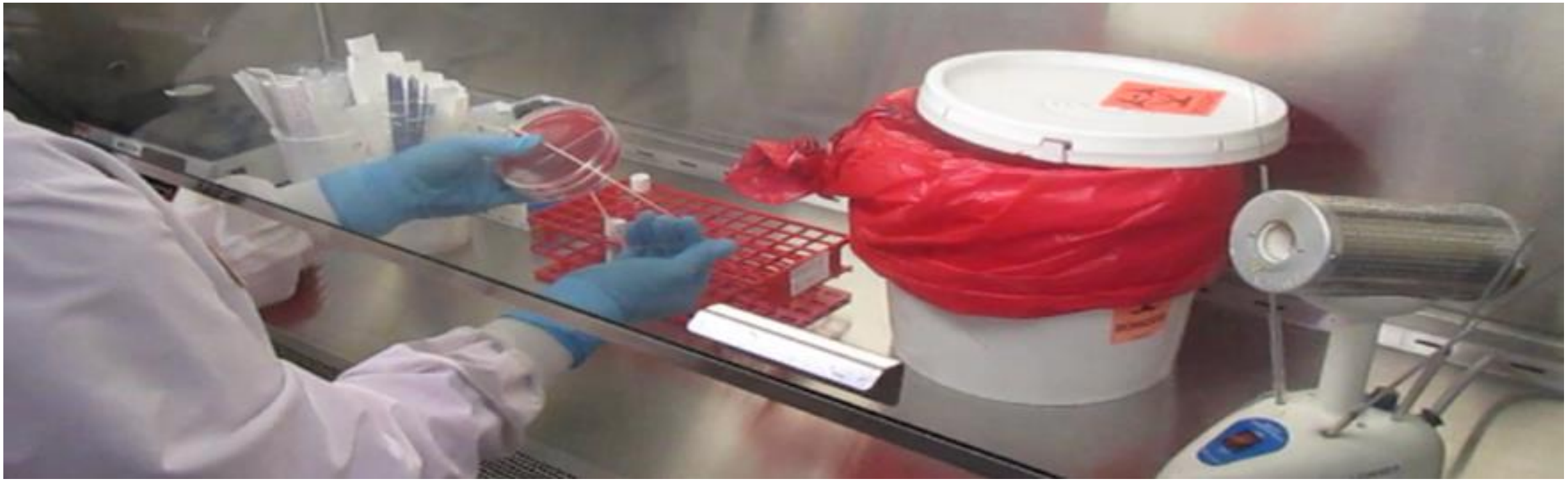
- Open the plate in a way so your arm does not go over the lid. This will minimize the risk of contaminating the plate with airborne particles or microbes from your hand.
- When opening the plate, hold the media at an angle and lift it just enough to access the agar surface. Keep your hand and arm away from the open part of the plate to avoid contamination.



To prevent accidental contamination, avoid streaking too close to the edge of the agar.

- The outer edge, highlighted by the orange color, is where airborne contaminants might be present. These contaminants can give the false impression of a pathogen if they appear on the streak line.
- Streak three or four quadrants as per the protocol.





Once processing the specimens is complete, rubber band the specimens inside the hood before bringing them outside.

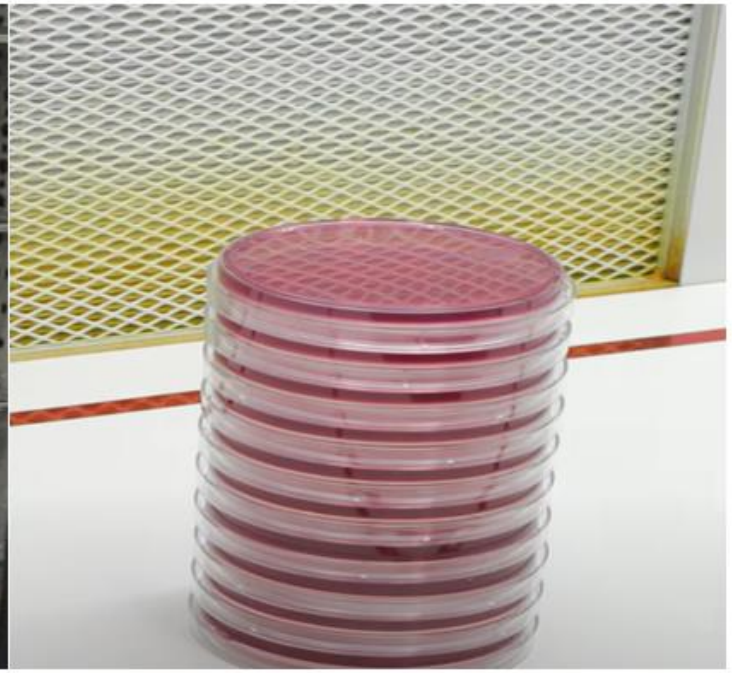
Rubber banding the plates together helps keep them secure and prevents them from opening or shifting during transport, which could lead to contamination.

Performing this step inside the BSC ensures that the plates remain in a sterile environment until they are securely bundled, reducing the risk of contamination from the external environment.

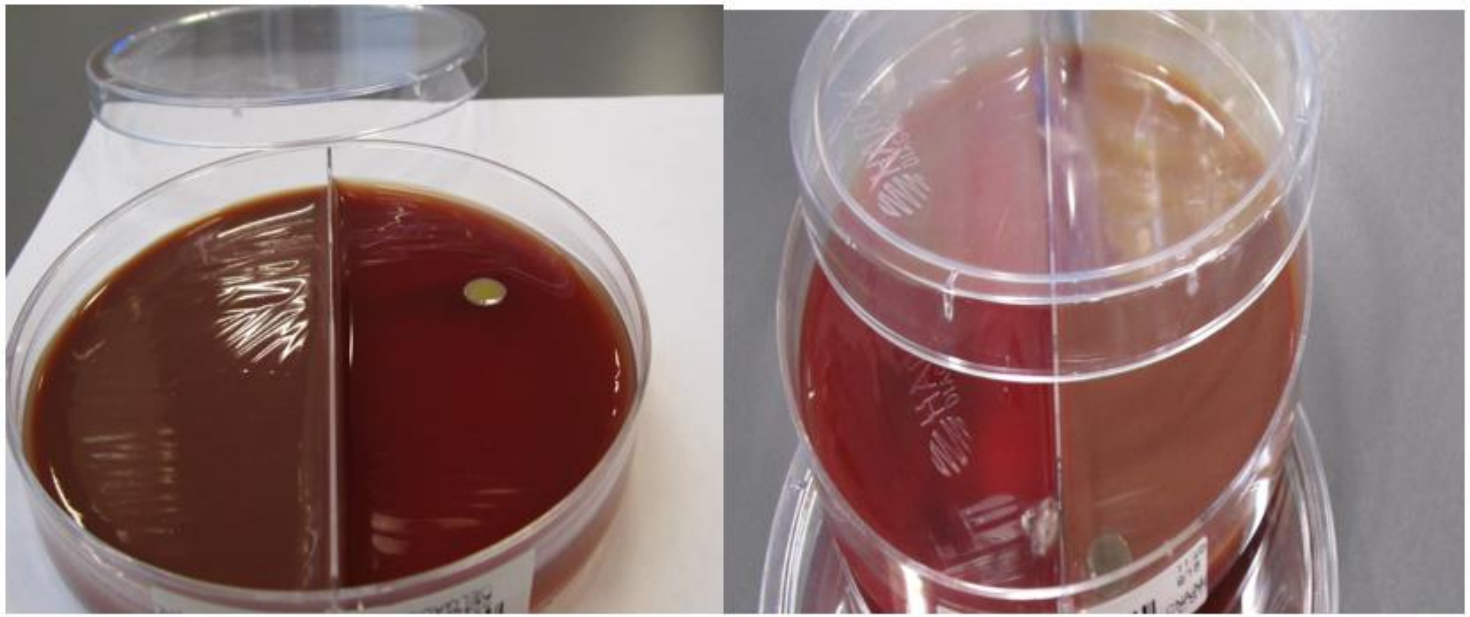
Keep the plates in the incubator with the media side up.

When plates are incubated with the media side up, any condensation that forms on the lid will not drip onto the agar surface.

This helps prevent the spread of colonies and contamination.



While contamination cannot be avoided, it can be minimized with good aseptic techniques.



Sterile and CSF Cultures Issues

INCORRECT

The Copan label from the manual streaking station is upside down, the WASP lab scanner cannot read it. It needs to be peeled off, reprinted, and replaced with a new one.

CORRECT

The label should be right-side up so it can be read.

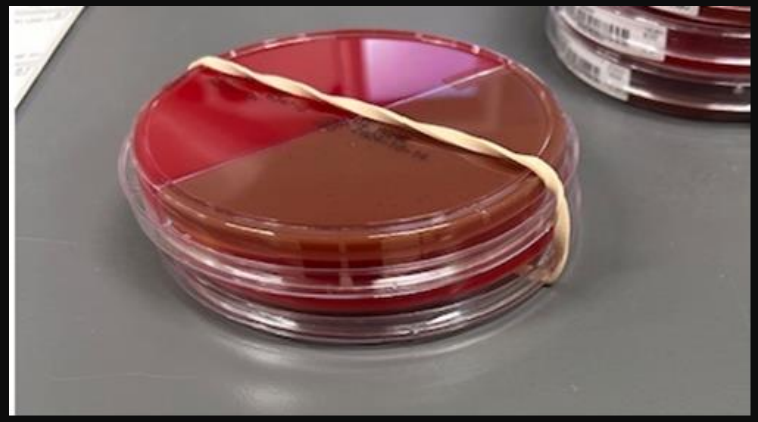
Sterile and CSF Cultures Issues

INCORRECT

Please do not use any kind of tape for stacking or pairing plates, especially clear Scotch tape. Clear tape is very hard to remove before loading into the WASP.

CORRECT

If needed, you can use a rubber band.



Sterile and CSF Cultures Issues

INCORRECT

If using a Cerner label, do not place it on the edge, as this causes error in the WASP.

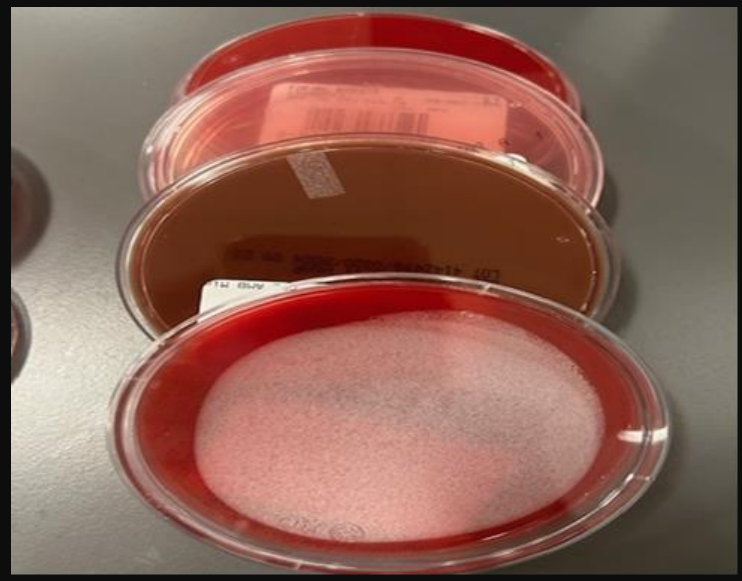
CORRECT

Place the Cerner label in the center of the plate

Sterile and CSF Cultures Issues

INCORRECT

Please do not use the four mono plates (BAP, CA, MAC, and CNA) for sterile and CSF cultures. They cannot be loaded into the WASP



CORRECT

Use bi-plates (BA/CA and CAN/MAC).