

# Bacterial Streak Plating

The purpose of a streak plate is to isolate individual bacterial colonies. It is important that scientists be able to isolate individual bacteria out of a mixture to characterize and identify the bacteria present. Some infections are mixtures of bacteria and only one of the many bacteria present is harmful. This technique is used in most bacteriology labs, food processing plants, and genetic research labs.

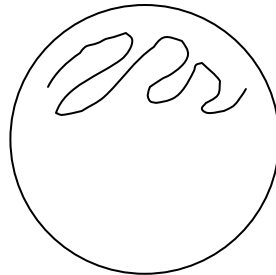
## Procedure:

1. Get an inoculating loop and Bunsen burner. Light the burner and then pass the loop through the burner until it is red-hot. **BE VERY CAREFUL. THIS CAN BURN YOU VERY SEVERELY.**
2. Wait about one minute until the loop cools before placing it into the bacterial source

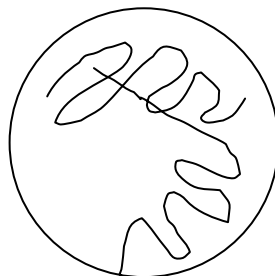
## Liquid to Agar Streak Plate

1. Open the culture tube with the hand not used to hold the inoculating loop. Pass the mouth of the culture tube through the flame while rotating it between the fingers.
2. Place the inoculating loop into the liquid culture and withdraw the loop.
3. Pass the mouth of the culture tube through the flame while rotating it between the fingers.
4. Put the cap back on the culture tube.
5. Obtain a petri plate with agar and lift the lid slightly (enough to put loop into the plate). Streak the plate in a back and forth manner. See Figure 1

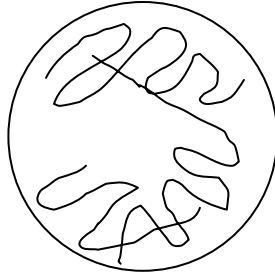
Figure 1



6. Pass the inoculating loop through the flame until it is red-hot. Let cool about a minute.
7. Touch the agar and check to see if it is too hot. Pass the loop through the previous pass and continue with the same motion as before. See Figure 2.



8. Flame and repeat as before. See Figure 3.



9. After the third and final pass the inoculating loop through the flame.

### Agar to Agar Streak Plate

1. After flaming the inoculating loop, lift the lid slightly on the petri plate and just swipe across one individual colony of bacteria. It should be semetrical and uniform.
2. Follow the same steps, being sure to flame between each streak.

### Sterile Transfer

1. To sterilely transfer bacteria from one liquid container to another, begin by flaming the loop before beginning.
2. Remove the top from the source tube and flame the mouth of the tube.
3. Retrieve a sample with the inoculating loop.
4. Flame the source again and replace top.
5. Open the receiving tube and flame the mouth.
6. Place the inoculating loop into the new tube.
7. Flame the mouth of tube and replace cap.
8. Flame the loop.