



Department of biology



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Microbiology Lab

((Bacterial Smear Preparation))

Lab/3

2 stage

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Microbial smear :

It is a very small amount of microbial growth (broth or solid) spreaded on a clean slide and drying by air .

How to make a Bacterial Smear

1. Label a clean glass slide using a red wax marker. Note that it is important to recognize the side of the glass slide that you put your bacterial sample on.
2. Add a small drop of saline to the slide (you will usually put two bacteria on one microscope slide- Follow your instructor's specific instructions). This can be done by placing a drop of saline onto your inoculation loop and then transferring it to the slide. If you use the saline dropper directly on the slide, do not release a full drop.
3. With an inoculation loop or needle, pick up a small amount of bacteria. Mix it well with the saline and spread the mixture over a wider area of the slide.
4. Air dry the bacterial specimen on the slide .
5. When slides are completely air-dry, heat fix the bacterial specimen by passing the slide slowly over the flame twice .

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Fixation : The process of passing the smear after drying several times over benzene burner to fix the microbes on slide and prepare it for staining .

- Heat fixing kills cells, and adheres them to the slide.
- Cells will be rinsed off the slides if they are not heat fixed properly.
- Be careful not to overheat the slides in this procedure

After heat-fixing is complete, you are ready to simple or gram stain your slide.

