

FE 305 Experiment 1

Presentation of Laboratory
equipments and primary training

Contents

- Microbiology lab rules
- Safety rules
- Equipments used in Lab
- General information about lab
Schedule

Microbiology Lab Rules

- General Rules

General information and rules about usage of microbiology laboratory and authorized personnel responsibilities

- Safety Rules

Rules that should be applied for safety of students, lab personnel and laboratory equipments.

General Rules



Obtain Food Microbiology Laboratory Book

Get a new, proper Lab coat

Get a glass pen or marker

Follow lab Schedule and Experiments

Bring food samples at Lab day

Do not bring food and drink to laboratory

Ask to your instructor if you are not sure about something

Safety Rules



Wash your hands with disinfectant

no food, drinks, chewing gum, or smoking is allowed

Purchase a lab coat, a marker pen and safety glasses

Disinfect work areas before and after use

Label everything clearly

Do not open Petri dishes in the lab

Turn off Bunsen burners when not in use

Equipments used in LAB

- Refrigerator: 0-4 C
- Freezer: Keeping materials at < -15 C



Oven and Incubators

- Dry air sterilization Oven 180 C



- Incubator
- 25, 37 and 45 C



Autoclave

- For sterilization of materials and media
- 121 C for sterilization of media
- 134 C for sterilization of waste and dish



pH meters

- Measuring pH of solutions



Preperation Materials

- Balance
- Spatules and spoons



Water bath and Microwave oven



Pipette and Petri Dishes



Dehydrated media



Stomacher mixer



Microscope



Biological safety cabinet



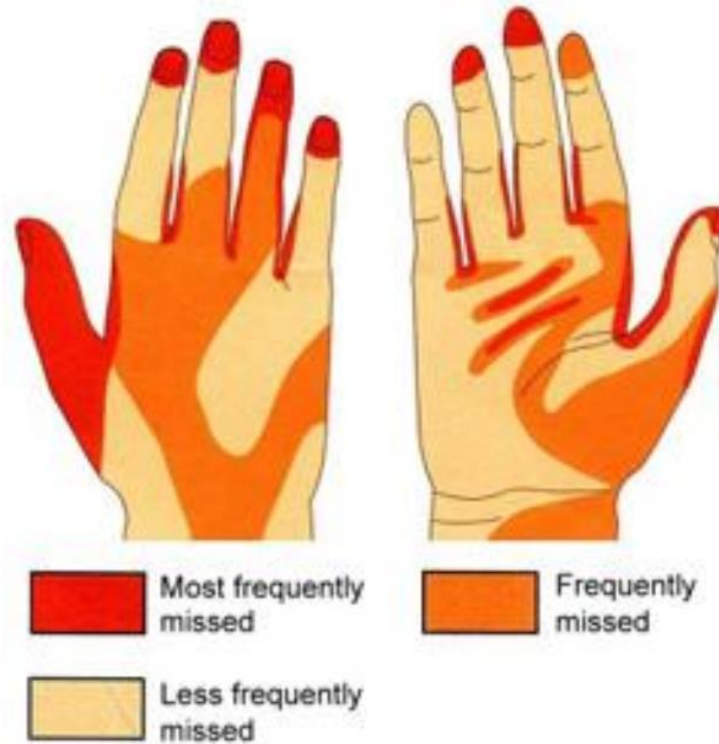
Bunsen burner usage

If using a Bunsen burner:

- **tie back long hair**
- **do not lean over the countertop**
- **always be aware of the flame**
- **keep flammable items away from the flame**
- **turn off the burner when not in use**
- **let burner cool down before touching them**



Hand washing and rubbing



Areas missed during handwashing.



Duration of the handwash (steps 2-7): 15-20 seconds



Duration of the entire procedure: 40-60 seconds

0



Wet hands with water;

1



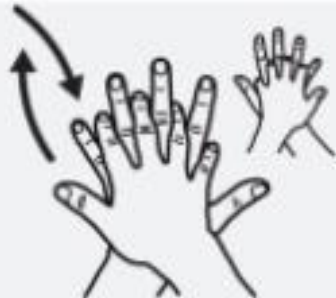
Apply enough soap to cover all hand surfaces;

2



Rub hands palm to palm;

3



Right palm over left dorsum with interlaced fingers and vice versa;

4



Palm to palm with fingers interlaced;

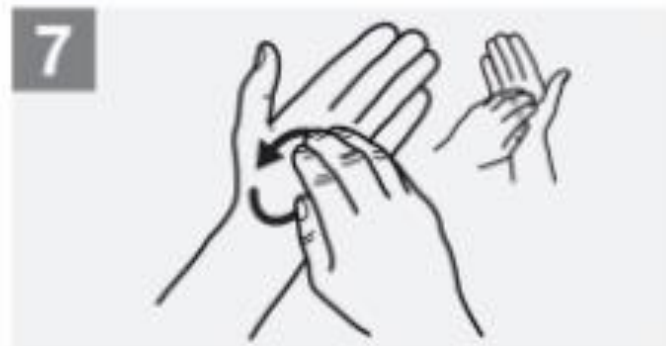
5



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



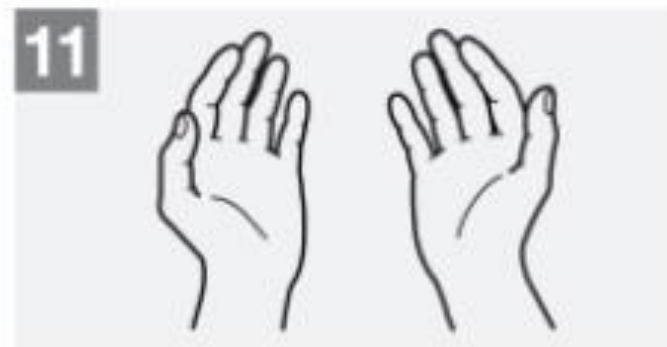
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED



Duration of the entire procedure: 20-30 seconds

1a



1b



2



Apply a palmful of the product in a cupped hand, covering all surfaces;

Rub hands palm to palm;



3 Right palm over left dorsum with interlaced fingers and vice versa;



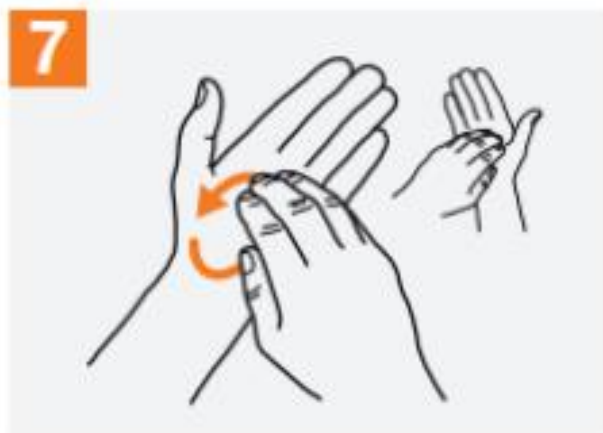
4 Palm to palm with fingers interlaced;



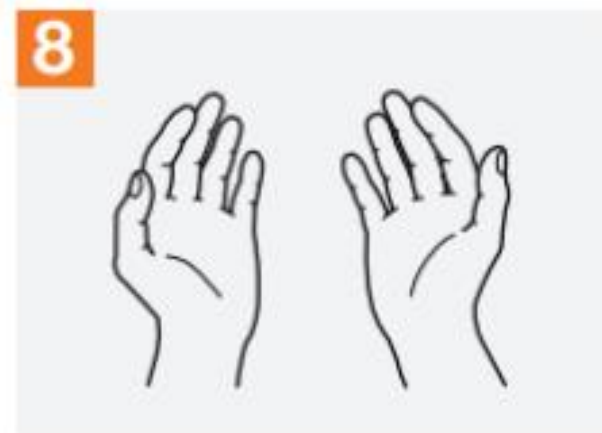
5 Backs of fingers to opposing palms with fingers interlocked;



6 Rotational rubbing of left thumb clasped in right palm and vice versa;



7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



8 Once dry, your hands are safe.