

# Routine Microscopy

## Wet Mount

In this training video, you will learn the proper technique to perform a wet mount. For this procedure, you will need the following materials and equipment: personal protective equipment, a sharps container, a biological waste container and bag, sterile microscope slides, sterile pipettes, glass coverslips, and a pencil or slide marker. We will be using a vaginal sample in this video to perform a wet mount, detect motility and identify trichomoniasis vaginalis.

A vaginal sample should be taken to the laboratory for examination within 15 minutes. To begin the procedure, use a sterile pipette to remove one drop or ten microliters of the specimen from the collection tube. Place the drop on a sterile label microscope slide. Carefully, place a cover slip over the drop of the specimen on the slide.

Place the microscope slide on the stage of a bright-field microscope. Focus the microscope using low light and the 10X low power objective. Scan the entire microscope slide, reading at least ten fields using an S-shaped viewing pattern. As you look at the specimen under the 10X objective, you may notice some movement. Switch to the 40X objective to identify if what you are seeing is trichomoniasis.

Trichomoniasis will appear as motile pear-shaped protozoans, approximately 10 to 20 micrometers in size. In fresh specimens, trichomoniasis move by whipping their flagella and/or undulating membrane. Another structure, called the axostyle, helps the organism attach to the vaginal wall. As you move around, you can see some trichomoniasis start to round up and begin to die.

This is why it is important to view the slide within a 15-minute time frame. It's important to also report other objects seen in a wet mount, such as squamous epithelial cells, clue cells, white blood cells, red blood cells, and yeast. These findings are important to the physician to rule out infection.