

HERPES SIMPLEX VIRUS (HSV) or VARICELLA ZOSTER VIRUS (VZV)
COLLECTION INSTRUCTIONS for DIRECT IMMUNOFLUORESCENCE
ANTIGEN DETECTION (DFA) and HSV Culture

Specimens: Proper specimen collection and handling is critical to the success of Direct Immunofluorescence Antigen Detection (DFA); adequate numbers of cells from the infected site must be collected. Specimens obtained from vesicular lesions within the first three days after their appearance are the specimens of choice. Ideally, more than one lesion should be sampled. Once crusting and healing have begun, the recovery rate of HSV/VZV drops sharply. A **satisfactory specimen includes 20 basal and/or parabasal cells**. Samples of poor quality may be unsatisfactory for analysis or result in false-negative results.

The use of alcohol or iodophors to cleanse the lesions may inactivate the virus and should therefore be avoided.

Collection materials:

3 mL Universal Transport Media (UTM) with a flocked nylon swab

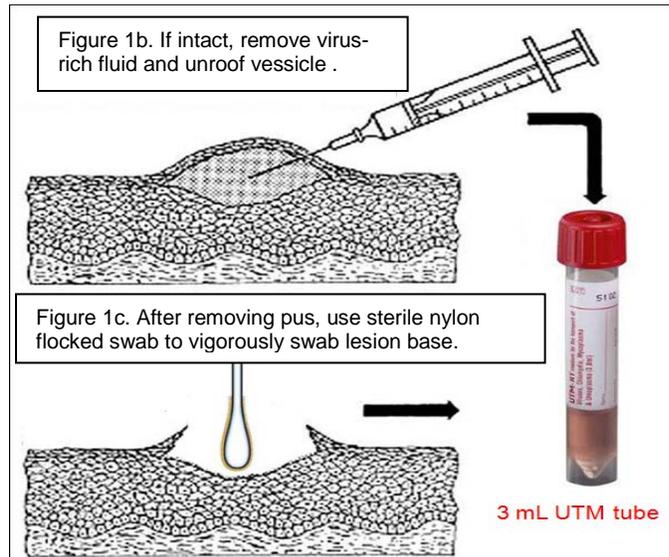
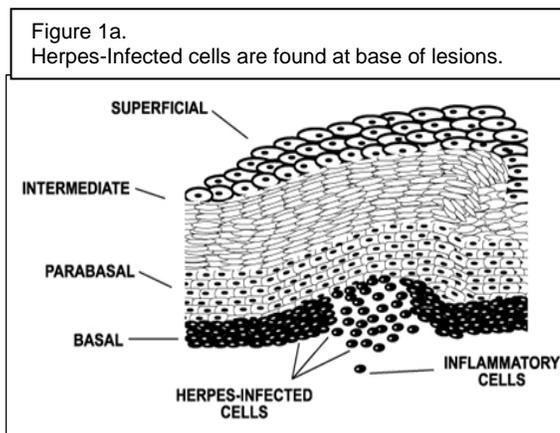
Available in the main Microbiology laboratory (Gray 5 GRB 532, 24/7, 617-726-3613)

Collection Instructions:

1. For intact or non-intact vesicles:
 - If vesicle is intact, use a sterile needle and syringe to remove the virus-rich fluid and unroof the vesicle. Transfer the virus-rich fluid into the red top 3 mL UTM tube.
 - If vesicle is not intact, expose the base of the lesion and use a regular sterile swab to remove any pus from the ulcerated lesion. Do not disturb the base of the lesion. Crusted lesions should have the crust removed and discarded before collection of cells from the lesion base.
 2. Collect the virus infected cells using the sterile nylon flocked swab from the kit with the 3 mL UTM tube by vigorously swabbing the base of the lesion. Place the nylon flocked swab into the red top 3 mL UTM tube. Break off the swab at the scored line.
- NOTE:** *It is no longer necessary for the physician to prepare the slides at the patient's bedside.*
3. Label the specimen and immediately transport the 3 mL UTM tube to Gray 5 Microbiology lab. If specimen transport to the lab will be delayed more than 2 hours from collection transport to the lab on wet ice.
 4. Please fill in requisition completely including the specimen collection site and specific virus (eg. HSV, VZV or both) requested.

Figure 1: Representation of Small Herpetic Lesion

Adapted from original illustration by Syva Company



Turn Around Time: Samples for HSV or VZV DFA testing that are received in the microbiology lab by 2:30pm Monday to Friday and by 12pm on Saturday will be resultd the same day.

The direct antigen method (DFA) is more sensitive than culture for Varicella Zoster Virus (VZV) detection. Viral culture for VZV is not performed.

If both HSV culture and HSV DFA are ordered and the HSV DFA is positive, the virology lab will cancel the culture unless instructed to do otherwise by the care unit and/or physician.