

# Cervical Sampling Methods

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Wooden spatula and cervical brush.

Cervex-Brush. From CooperSurgical, form #80092, rev. 9/97, Shelton, Conn. **Cervical sampling methods**

Various sampling methods are used to obtain cells for Pap staining, each with its advantages and disadvantages. Aspiration from the vaginal pool is the easiest of these, but also the least effective ([Goroll](#)). The more widely used collection methods require visualization of the cervix and cervical os using a vaginal speculum. Endocervical swabbing with a saline-moistened cotton swab is somewhat better than aspiration. Refer to the section on [how to do it](#). Cervical scraping with the combination of a wooden (or plastic) spatula and cylindrical-type brush (cytobrush) approaches 100% sensitivity and 99% specificity for invasive cancer and carcinoma in situ. Sampling using the combination of the cytobrush and spatula is recommended to obtain cells from both the exocervix and endocervical canal, specifically from the squamocolumnar junction or transformation zone ([Goroll](#), [Boon](#)). However, the additional time taken when sampling with two instruments may delay fixation, sometimes causing air-drying artifact. A paintbrush-type collection device or plastic broom, can be used to collect both ectocervical and endocervical cells at the same time. This Cervex-Brush is expensive and does not transfer cells as well as the cytobrush and spatula ([Sanfilippo](#)). Another available method of Pap smear preparation may decrease false-negative test results by decreasing the number of smears that are unsatisfactory for interpretation. One such system on the market is Cytec's ThinPrep System Sample Collection Technique. After being collected with special cytobrush and plastic spatula, the sample is transferred to a solution vial. A processor and filter system collects and transfers a thin layer of cells onto a slide. The slide is automatically placed in fixative for later interpretation. The system breaks up blood, mucus, and debris, eliminating the factors that interfere with adequate visualization of cells, such as obscuring inflammation. The advantages of the system depend somewhat on the frequency of unsatisfactory smears in the physician's population.