

DEPARTMENT OF HEALTH SERVICES, IMMUNIZATION BRANCH
QUICK GUIDE

Naso-Pharyngeal Swab for Culture

PERTUSSIS

Purpose: To obtain a sufficient number of ciliated columnar epithelial cells for culture of Pertussis.

Equipment: Dacron or Rayon swab.

Transport media: <24 hrs. – Ames transport media with charcoal, or
>24 hrs. – Regan-Lowe transport media

Direct culture media: Regan-Lowe agar plates or Bordet-Gengou agar plates. Available from commercial vendors or in emergencies from state lab.

Instructions:

1. Assemble equipment, prepare patient in a comfortable (sitting) position next to wall, have patient blow nose and tilt head against wall.
2. Place your finger on the tip of the nose, depressing slightly (see illustration). The procedure is uncomfortable but should be completed quickly. Small children and uncooperative adults may need to be restrained.
3. Insert the flexible nasopharyngeal swab with a slow steady motion along the floor of the nose and continue several centimeters until the nasopharynx has been reached (you will meet with resistance). The swab is small and should pass into the pharynx relatively easily. When you encounter the resistance, rotate swab several times for 5-15 seconds to loosen the epithelial cells. Withdraw the swab; place swab in appropriate transport medium or inoculate the culture media. The swab can be snipped with a scissors to fit more easily into the small transport medium containers.
4. Incubate media at 35 C or transport the media at room temperature by overnight courier to your reference laboratory.