

**Health Need:** Despite long-standing global public-health efforts to control sexually transmitted diseases (STDs), *Neisseria gonorrhoeae* (gonorrhea) infections still occur in epidemic proportions in the developing world and in specific regions of the United States. For effective control of gonorrhea, STD-control programs must offer early and accurate diagnosis of symptomatic infection and identification of invasive, complicated, or asymptomatic infections. Control of STDs is also considered to be an essential component in control of HIV/AIDS transmission. However, in some regions of the world, diagnosis of gonococcal infection is currently inadequate because available tests are relatively expensive and/or complex, culture diagnosis is unavailable, and syndromic diagnostic protocols for women are largely inadequate.

**Technology:** The immunochromatographic (IC) strip test for gonorrhea utilizes relatively inexpensive, off-the-shelf components, and is formatted to identify specific gonococcal antigens obtained directly from clinical specimens. The test can be completed in 15 to 20 minutes and can be performed by technicians with minimal training. The strips are stable for months at ambient temperatures, if packaged appropriately.

**Specific Applications:** The simple, rapid IC strip test for gonorrhea will allow testing to be performed on direct clinical specimens from patients in rural or smaller clinics or hospitals in the developing world or other resource-limited settings. Accurate results can be returned within the same hour or day, thereby allowing effective patient follow-up, additional counseling, and prescription of therapeutic drugs, if needed. The tests may also be used by epidemiological surveillance teams in the field to gather baseline data, or to assess the effect of public-health interventions. A secondary application would be for case-finding and identification of persons with asymptomatic infections; this would be valuable, for example, for use in maternal and child health/family practice clinics, in addition to STD clinics.

**Current Status:** This test is not yet commercially available. In a prospective field evaluation in South Africa, the sensitivity and specificity was 61.4% and 95.9% using vaginal swab samples for women and 91.6% and 95.9% using urine samples from men when compared to the Ligase Chain Reaction (reference standard).

Prospective field trials of the test are planned for sites in South America, Africa, and Asia in the next year. Funding for development has been provided by USAID under the HealthTech project, as well as by UNFPA.



## IC Strip Test for Gonorrhea

**A rapid, easy-to-read, low-cost test for gonococcal infection**

### About the Test:

For more information on the development status of the gonorrhea IC strip test, contact Program for Appropriate Technology in Health (PATH), Seattle, WA, USA (Matthew Steele, telephone 206-285-3500, fax 206-285-6619, e-mail [msteele@path.org](mailto:msteele@path.org)).

### About HealthTech:

Technologies to meet the health care needs of women and children in developing countries are developed, adapted, or assisted by PATH with support from the United States Agency for International Development (USAID) under the Technologies for Health (HealthTech) Project.

### About PATH:

PATH is a nonprofit, nongovernmental, international organization. PATH's mission is to improve health, especially of women and children in developing countries. To achieve these goals, PATH works with public-sector agencies and with private companies. For more information on PATH and its programs, as well as links to other development agencies and private voluntary organizations, visit the World Wide Web at: <http://www.path.org>