The total breakage rate, based on the total number of condoms opened for use (1,036 polyurethane and 1,023 latex), was also 7.2% for the polyurethane condom, although it includes one additional break that occurred during donning. The comparable rate for the latex condom, on the other hand, includes three that broke during donning, yielding a total of 1.4%. Thus, when nonclinical condom breaks are considered, the polyurethane condom was 5.3 times more likely to break than the latex condom.

**Slippage.** Both types of study condom slipped completely off the penis during intercourse less often than they broke. The polyurethane condom’s slippage rate during intercourse (1.4%) plus that during withdrawal (2.2%) produced a complete slippage rate of 3.6%. The comparable rate for slippage during intercourse for the latex condom was 0.4%, while the rate for slippage during withdrawal was 0.2%, yielding a complete slippage rate of 0.6%. Thus, total slippage rates were far higher for the polyurethane condom than for the latex condom (risk ratio of 6.4). (Slip-offs during withdrawal with either condom are considered preventable, since the instructions specified the need to hold on to the condom while withdrawing the penis.)

**All failures.** The total clinical failure rate, which combines all incidents of breakage and slippage, was 10.8% for the polyurethane condom and 1.7% for the latex condom, which yields a risk ratio of 6.4. None of the clinical failures resulted in a pregnancy. The overall total failure rate, which covers both clinical and nonclinical failures, was 7.2% for the polyurethane and 1.7% for the latex condom (risk ratio of 4.3).

Variables Associated with Breakage

A univariate analysis identified a number of characteristics at enrollment and condom preference and use variables that appeared significantly associated with clinical breakage of the polyurethane condom; these included the male partner being 25 or younger or a current smoker, a history of condom breakage with the study partner, a penis circumference of greater than 140 mm, condom slippage during intercourse, penile constriction caused by condom bunching and use of the rear-entry position for intercourse.

Some other variables that were less strongly related to the risk of a polyurethane condom breakage (<.15) were the female partner being age 25 or having a high school education or less, having an annual household income of less than $20,000, having been in the current relationship for less than six months, having ever been pregnant or responsible for a pregnancy, having a history of abortion, having intercourse at least three times weekly, having a penis length of more than 180 mm and reporting insufficient lubrication during intercourse.

Couples who were using a backup method along with the polyurethane condom did not have significantly higher breakage rates than those relying on a condom alone (p=.21). Although such a significance level did not meet the criterion for inclusion in the multivariate model, we forced the entry of this variable into the analysis because study enrollment was stratified along these lines. The only variable that reduced the risk of breakage was the condom stretching during intercourse (p=.09).

We used stepwise logistic regression to assess the relative importance of these risk factors in clinical breakage of the polyurethane condom (Table 5). (We could not carry out a comparable stepwise logistic regression for the latex condom because there were too few clinical breaks.) The participant characteristics that significantly increased the likelihood of breakage, in order of declining significance, were history of condom breakage with study partner (odds ratio of 3.8), having been with the study partner for less than six months (odds ratio of 2.4), hav-