

# Spermicide-Coated Condoms: Too Much of a Good Thing?

The use of condoms coated with spermicides markedly increases the risk of contracting a urinary tract infection (UTI). Women who suffer recurrent UTIs while using coated condoms should switch to another form of birth control.

These conclusions are drawn from a case-controlled study by Fihn et al,<sup>1</sup> who interviewed 96 women with UTIs caused by *Staphylococcus saprophyticus* and more than 600 controls. *S saprophyticus* is responsible for up to a quarter of all UTIs in young, sexually active women; it is second only to *Escherichia coli* as a cause of UTIs in this population.

A variety of factors were found to increase the risk of UTI:

- ◆ Young age.
- ◆ Increased frequency of sexual activity.
- ◆ Increased number of sexual partners.
- ◆ History of UTIs.
- ◆ Use of spermicide-coated condoms.

By far the strongest risk was presented by the last factor. There was no increase in the risk of UTI associated with the use of non-coated condoms, and

only a slight increase associated with the use of lubricated condoms. However, even when the authors controlled their analysis for other risk factors, the likelihood of UTI was more than three times higher in women who used spermicide-coated condoms. Furthermore, there was a direct link between the risk of UTI and the extent of exposure to spermicide-coated condoms (Table 1). There was no increased risk of UTI associated with the use of diaphragms.

Because spermicide-coated condoms have also been shown to increase the risk of *E coli* infection, Fihn et al<sup>1</sup> suggest that these products damage the normal vaginal flora, allowing overgrowth of organisms such as *S saprophyticus* and *E coli*. Both these microbes possess adhesins that permit their attachment to the uroepithelium.

**Table 1. Odds ratios for urinary tract infection**

Variable	Odds ratio	Confidence interval
<b>Exposure to uncoated condoms</b>		
< 1 time/week	0.75	0.25 – 2.27
1 – 2 times/week	1.08	0.22 – 5.28
≥ 2 times/week	1.47	0.16 – 13.42
<b>Exposure to spermicide-coated condoms</b>		
< 1 time/week	1.75	0.57 – 5.37
1 – 2 times/week	6.52	2.41 – 24.50
≥ 2 times/week	10.43	2.05 – 52.97

## REFERENCE

1. Fihn SD, Boyko EJ, Chen C-L, et al. Use of spermicide-coated condoms and other risk factors for urinary tract infection caused by *Staphylococcus saprophyticus*. *Arch Intern Med*. 1998;158:281-287.

