

## Condomania

Governments, schools, and media have been united for three decades in a frenzied effort to protect us all from sexual diseases by telling us there is safety in latex. The condom will save us. Pleasure can be snatched from the jaws of disease, or perhaps death. Even Toronto's *Globe and Mail* has on occasion deigned to lecture us about "safe-sex fatigue," boldly advising that "condoms are effective against sexually transmitted infection, including HIV."

This week we learned that the condom is useless against Human Papillomavirus. But what about HIV, the virus thought to be the cause of AIDS? It would seem utterly sensible to ask whether or not the latex condom will in fact do what we are told, and why it is that information so readily available is so late entering the public mind?

A few years ago I interviewed the then editor of *Rubber Chemistry and Technology*, Dr. C. Michael Roland of the U.S. Naval Research Laboratory in Washington D.C., about his research on "intrinsic flaws" in latex rubber condoms and surgical gloves. What he told me was alarming, to say the least, and gives at least a partial answer to the question the *Globe* raised in its Sex-ed editorial: "Why, in spite of so much effort, does AIDS keep spreading?" Roland said that what I am about to relate is "common knowledge among good scientists who have no political agenda."

Electron microscopy reveals the HIV virus to be about 0.1 microns in size (a micron is a millionth of a metre). It is 60 times smaller than a syphilis bacterium, and 450 times smaller than a single human sperm.

The standard U.S. government leakage test (ASTM) will detect water leakage through holes only as small as 10 to 12 microns (most condoms sold in Canada are made in the U.S.A., but I'll mention the Canadian test below). Roland says in good tests based on these standards, 33% of all condoms tested allowed HIV-sized particles through, and that "spermicidal agents such as nonoxonol-9 may actually ease the passage."

Roland's first paper on this alarming subject (in *Rubber World*, 1993) shows electron microscopy photos of natural latex. You can see the natural holes, or intrinsic flaws, "inherent defects in natural rubber [ranging] between 5 and 70 microns."

And it's not as if governments don't know. A study by Dr. R.F. Carey of the U.S. Centers for Disease Control reported in the same period that "leakage of HIV-sized particles through latex condoms [is] detectable for as many as 29 of 89 condoms tested." These were brand new, pre-approved condoms. But Roland says a closer reading of Carey's data actually yields a 78% HIV-leakage rate, and concludes: "That the CDC would promote condoms based on [this] study...suggests its agenda is concerned with something other than public health and welfare." The federal government's standard tests, he adds, "cannot detect flaws even 70 times larger than the AIDS virus." Such tests are "blind to leakage volumes less than one microliter - yet this

quantity of fluid from an AIDS-infected individual has been found to contain as many as 100,000 HIV particles."

Condoms are not the solution to the tragedy of AIDS, he warns. "It is ludicrous to believe they allow one to safely engage in sexual relations with HIV carriers. Their promotion for that purpose is dangerous and irresponsible." As one U.S. surgeon memorably put it, "The HIV virus can go through a condom like a bullet through a tennis net."

It's the same story with latex gloves. Gloves from four different manufacturers revealed "pits as large as 15 microns wide and 30 microns deep." More relevant to HIV transmission, "5 micron-wide channels, penetrating the entire thickness were found in all the gloves." He said the presence of such defects in latex "is well established."

Perhaps that is why a review of major studies shows that while condom use may reduce "rates" of infection, nevertheless the acknowledged HIV infection rate for couples using condoms is very high, ranging from 13 to 27%. Handing a student a condom to protect against AIDS is like giving him an overcoat to walk across a battlefield. Meanwhile, strict avoidance of sex with infected partners gives a 5,000-fold increase in protection.

For Canada, the story is the same. I investigated this in 1995 and have a letter on file from Health and Welfare Canada explaining that a standard test of condoms manufactured between 1987 and 1990, based on stringent tests of pressure, leakage, and volume (as in the U.S., there is no effort to examine micron-level leakage), revealed that an astonishing 40% of the condoms tested failed at least one of the tests. Tests in 1991 showed an "improved" 28% rate. Why didn't this hit the front page?

On June 17, 1987, Dr. Maria Crenshaw, past president of the American Association of Sex Educators stood up before 800 sex-educators at the World Congress of Sexology, in Heidelberg, and asked a revealing question: "If you had available the partner of your dreams, and knew this person carried the HIV virus - would you rely on a condom for protection?" Not a single person raised a hand. So she accused them of giving irresponsible advice to the young.

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