## STATEMENT OF

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AND

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BEFORE THE

COMMITTEE ON ENERGY AND COMMERCE U. S. HOUSE OF REPRESENTATIVES

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Mr. Chairman, I am C. Everett Koop, a medical doctor and Surgeon General of the U.S. Public Health Service. I appear before this Committee to discuss the use of condoms in reducing the spread of Acquired Immune Deficiency Syndrome.

Scientific evidence indicates that abstinence is the only completely safe way to avoid acquiring AIDS sexually. Except for mutually faithful monogamous relationships with uninfected partners, the use of a condom is the best method of reducing or preventing HIV infection known at this time for those who for one reason or another will not practice abstinence or monogamy. Since January 1985, the Public Health Service has been recommending the use of condoms as an effective means of preventing or reducing the transmission of AIDS in sexually active individuals. It is recognized that condoms sometimes fail; for example, it has been shown that condoms may have a failure rate of 10 per cent when used as contraceptives, that most studie Sum a better field.

A condom must be properly used if it is to help prevent transmission of the AIDS virus. That is why I stressed in the Surgeon General's Report on AIDS that a condom must be worn <u>from</u> <u>start to finish.</u>

In my report on AIDS, released in October 1986, I state that "if your [blood] test [for antibody to the AIDS virus] is positive or if you engage in high risk activities and choose not to have a test, you should tell your sexual partner. If you jointly decide to have sex, you must protect your partner by always using a rubber (condom) during (start to finish) sexual intercourse (vagina or rectum)."

Also, "if your partner has a positive blood test showing that he/she has been infected with the AIDS virus or you suspect that he/she has been exposed by previous heterosexual or homosexual behavior or use of intravenous drugs with shared needles and syringes, a rubber (condom) should always be used during (start to finish) sexual intercourse (vagina or rectum)."

Condoms are manufactured from latex or natural membranes, and when used properly prevent both semen deposition and contact with urethral discharge or mucous membranes. Human immunodeficiency virus (HIV), hepatitis B virus, cytomegalovirus, <u>Neisseria</u> <u>gonorrhea</u>, <u>Chlamydia trachomatis</u>, <u>Mycoplasma hominis</u>, and trichomonal organisms are all transmitted in semen or vaginal secretions and condom use can reduce the rate of infection.

 Electron microscopic studies have shown that properly manufactured latex condoms are a continous layer with no holes. Quality control procedures performed by condom manufacturers are stringent, and <u>every</u> condom is tested for holes.

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- O Condoms made from natural animal membranes contain tiny pores which have been shown to allow passage of extremely small particles; (two hundredthousandths of a millimeter); however, all known infectious sexually transmitted agents are at least twice this size.
  - Under conditions simulating the mechanical friction of Vector
    Sexual intercourse, latex and natural membrane (skin)
    condoms have been shown to be effective barriers to HIV,
    and other infectious agents, but caution should be used
    in extrapolating these limited laboratory studies to
    actual use.

Some clinical studies support the laboratory studies just mentioned.

A cohort study which followed condom users
 over time showed they were less likely than
 nonusers to acquire gonorrhea.

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- A recent cohort study in the United States
  which followed heterosexual spouses of
  persons with AIDS for one to three years
  found that seroconversion (to HIV antibody positive) was associated with lack of regular
  condom use.
- Prostitutes in Zaire whose clients
  consistently used condoms had significantly
  lower rates of HIV infection than prostitutes
  whose clients didn't use condoms.

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→ In summary, condoms have been shown to obstruct the passage of the AIDS virus under specific laboratory conditions. The clinical studies I have cited lend support to these findings in actual practice. The use of condoms has limitations, but they are an integral part of our overall strategy to reduce the spread of the AIDS virus.

That concludes my testimony, Mr. Chairman. My colleague, Dr. Noble, and I will be pleased to answer your questions.

SEVERME STUDIES ARE NOW UNDERWAY TO DETERMINE THE DECREE TO WHICH CONDOMS AND OTHER BARNER METHODS OF CONTRACEPTION ARE EFFECTIVE IN REDUCING THE RIJK OF HIV TRANSMISSION

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