VOTE FOR YOUR PREFERRED HIV PREVENTION METHOD/S NOW!
https://www.surveymonkey.com/r/NWZMLGP

**hiv prevention menu**

**behavioural methods**
- abstinence, partner reduction, clean needles

**barrier methods**
- condoms – male, female

**testing**
- voluntary counselling and testing

**circumcision**
- male medical circumcision

**antiretroviral drugs**
- for infected patients: HAART (TasP), PMTCT
- for uninfected patients: PEP, PreP

**under study**
- vaccines, rings, microbicides

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**Condoms, past present and future**

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MatCH Research Unit
The past-male condoms

- Although condoms in some form have been used for centuries, the Syphilis outbreak in late 1400’s among French troops prompted action and the earliest description of condom use by Gabriele Falloppio was published in 1564. He claimed to have invented a linen sheath covering the glans.
- Syphilis continued to be a problem in WW1 and many countries provided condoms to soldiers.
Rubber male condoms

- The first rubber condom was produced in 1855 and although skin (intestine or bladder) or linen condoms were more popular and cheaper than “rubber” condoms eventually mass production lowered price and improved quality of rubber condoms.

- Early rubber male condom deigns were reusable, often made to measure, and frequently fell off.

- At the end of the 19th century the condom was the Western world's most popular contraceptive method. Two surveys conducted in New York in 1890 and 1900 found that 45% of the women surveyed were using condoms to prevent pregnancy.
Transition from rubber to latex condoms

- Latex, rubber suspended in water, was invented in 1920. Latex condoms required less labor to produce than cement-dipped rubber condoms, which had to be smoothed by rubbing and trimming.
- Rubber condoms were discontinued and latex condoms became mass produced, widely available and cheaper.
- However condom sales were banned in some countries like Ireland till late 1970s.
Male condoms available now

• Currently available condoms, if packaged and stored correctly, will maintain their quality for five years or more.

• Condoms now on the market are manufactured more consistently, have better formulations of latex, have incorporated a wide range of design modifications to improve both acceptability and functionality, and are subjected to pre-marketing quality assurance.

• If used consistently and correctly they rarely fail. Estimated pregnancy rates for “perfect use is 2-3%.

Non-latex condoms available now

- The perceived advantages of non-latex condoms (polyurethane or synthetic elastomers) include compatibility with oil-based lubricants, better storage life, less noticeable odour, less constricting fit and greater body heat conductivity.
- Analysis data of 11 comparative studies found that more users preferred synthetic non-latex condoms.
- Despite greater breakage and slippage rates, their efficacy is comparable to latex condoms in preventing pregnancy.

The future: male condom developments

- Newer forms of male condoms include: Synthetic non-latex condoms – materials include: silicone polyurethane, styrene ethylene butylene styrene (SEBS), synthetic resin, polyisoprene.
  - some have a longer shelf life and can be used with oil-based lubricants.
  - Alternate for men sensitive or allergic to latex
  - Variety in colour, flavour, shape and size
  - Some polyurethane condoms have been made thinner

Condom with active substance that helps to keep an erection.

Availability in developing countries is limited as the cost of non-traditional condoms are too costly for public sector programmes.
The past-female condoms

The FC has been around longer than you think! FC from 1937

Several patents filed for FC products pre 80s but few commercially developed or viable.

First FC design that went onto development was FC1, and was invented by a Hessel, a Danish doctor.
TIMELINE FC DEVELOPMENT MILESTONES:
1980’s - 2000’s

- FC invented by Dutch doctor
- FDA approval of FC1
- FC1 acceptability studies conducted globally
- PATH start to develop Woman’s Condom
- FC re-use research conducted with FC1
- WHO/UNFPA approves FC2
- FHC begins to develop FC2 - same as the FC1 but made synthetic of latex
TIMELINE FC DEVELOPMENT MILESTONES: 2009 -2018

2009
FDA Approve FC2, and FC1 production ceases

2012
WHO/UNFPA Approves the Cupid FC

2016
WHO/UNFPA Approves the PATH Woman’s Condoms & the HLL Velvet FC

2018
FDA down classes the FC2 from a class III device to a class II, allowing for more access

Several other new FCs in development
Female Condoms Approved by WHO / UNFDA

FC2

Velvet

Cupid

Women’s Condom
Female condoms in development or not yet approved by WHO / UNFDA

Pleasuremore

Phoenurse

Air Condom

Wondaleaf

Panty Condom

MRU
Who is funding male and female condom development?

- Bill and Melinda Gates Foundation: - 2013 Grand Challenges funding opportunities to develop “a next-generation condom that significantly preserves or enhances pleasure in order to improve uptake and regular use.”
- Sadly few of the new designs awarded will be able to move forward due to the complex testing and regulatory requirements if the designs that are significantly different to pre-existing condoms — e.g. non-latex
- Other funders have included manufacturers of condoms, Universal Access to Female Condoms (UAFC), PATH, NIH
WHO USES CONDOMS AND WHEN?
Condom use at first sex

- The condom is the contraceptive method most commonly used at first intercourse in US. In 2006–2010, 68% of females and 80% of males aged 15–19 reported having used a condom the first time they had sex.

Condom use at first sex in South Africa

• In SA additional analysis from the 2008 HSRC survey reported that in 15-24 yr olds, 62.2% females and 41.3% males used a condom at first sex. Among males, condom use at first sex was significantly associated with current condom use at last sex (p=0.0007), not significant for females.

• Cape Area Panel Study (Wave 1) 2002 age 14-22yrs-81%

• In the 1999 survey “Transition to adulthood in the context of AIDS in South Africa” 61.8% of girls said the used a condom at first sex of which most used for dual protection.


Ever use of condoms

• Although data is most commonly collected on condom use at last sex, “ever used” a condom in sexually active adults is high in many countries, including some African countries where “ever” use is often over 60%
  – South Africa 70% +
  – Ethiopia 66%

Condom use for Contraception

Percentage of unmarried sexually active adolescent girls using modern contraception, by region, latest data, 2005-2014

Condom use for contraception in SA

- The 2016 South African Demographic and Health Survey key indicators report shows that overall, 64.2% of sexually active women nationally are using a method of contraception.

- In sexually active unmarried women, the most popular contraceptive method is male condoms (23.8%), followed by the injectables - DMPA (17.0%), NET-EN (9.1%), pills (4.9%), and implants (4.7%).

- In KZN province condom use for contraception is the highest nationally at 27.9%.
SA Condom Programme

- South Africa (SA) now has one of the largest and best established, public sector male and female condom programmes worldwide, with all public sector facilities now expected to distribute both MC and FC.
- In 2014 two new FC products were introduced and social marketing commenced in 2015 (although discontinued).
- The NDoH has finalized FC in-country branding “MAXIMA” for public sector FCs to complement MAX introduced in 2016.
MC/FC DISTRIBUTION DATA
2014-2018

Female Condom
• Distribution increased yearly to 27 M in 15/16 but fell back to 21.4M in 17/18
• Largest increase reported between 2013/14 and 2014/15 - many provinces doubled distribution.
• Plans to increase distribution to 40M per yr for next 3 yrs

Male Condom
• Distribution increased each year, with 917 M, distributed in 2016/17 and % change between 2014/15 and 2016 was 17.9%.
• Largest increase reported between 2013/14 and 2014/15 - by 200M with some provinces doubling distribution.
The South African National Female Condom Evaluation Study

• This was a comprehensive mixed-method evaluation of the SA FC programme but included a considerable amount of information on the MC programme.
• The Evaluation included a national survey in public and non-public sites, on site assessments, key informant interviews, interviews with providers and clients, a cohort of new FC users and programme costing.

Ever Heard and Use of Female Condoms by Province

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<th>Ever Use</th>
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Client Perceptions of FC Availability on Site

Percentage

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Funding for male and female condoms is a smart investment

An additional investment of $27.5 billion in male condoms in 81 high-burden countries by 2030 would meet all unmet demands for family planning as part of a package of contraceptives.

It would also meet:

- 90% of the condom needs for HIV and STI prevention among high-risk groups.

And it could prevent:

- 700 million STIs
- 17 million HIV infections
- 420 million unintended pregnancies

Vote for Condoms