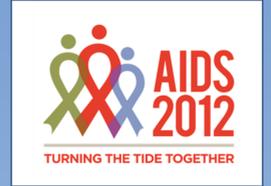


One Size Does Not Fit All: Examination of the initial sales of an expanded range of condom sizes beyond ISO and ASTM standards



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Introduction

Surveys in multiple countries indicate that nearly 50% of men report that their condoms do not fit. The low rates of condom use reported worldwide may result in part from lack of appropriately sized condoms.

Condoms are regulated medical devices and their sizes are mandated by international standards. For example, the ASTM (American Society for Testing Materials) current dimensional requirements for condoms are lengths of 170 mm – 210 mm (± 10 mm) and widths of 47 mm – 57 mm (± 2 mm).

Most condoms are the same size: 180 mm length (7 in) and 52 mm width (2 in).

The objective of this descriptive study was to determine what percentage of consumers of an expanded range of condom sizes purchased sizes within the approved ISO (International Organization for Standardization) and ASTM ranges.



Figure 1. Examples of some typical prophylactics

Materials and methods

TheyFit manufactures 95 condom sizes with combinations of 14 lengths (80 – 240 mm) and 12 widths (41 – 69 mm). Men select their condom sizes using a Fit Kit, a penile measuring device.



Figure 2. FitKit, a penile measuring device using non-sequential letters and numbers rather than incremental measuring units such as inches or centimeters to select a condom size and safeguard men's privacy

During the 2011-2012 winter launch, the initial 250 condom 6-pack units sold were analyzed for the range of sizes.

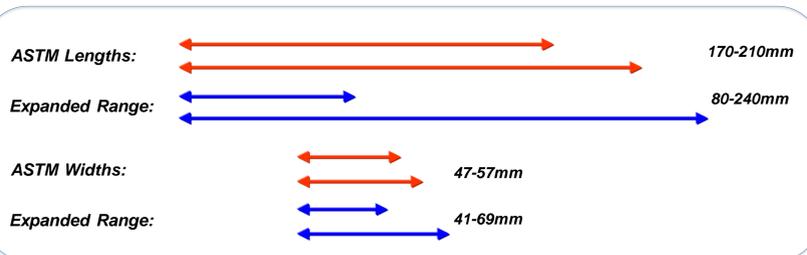
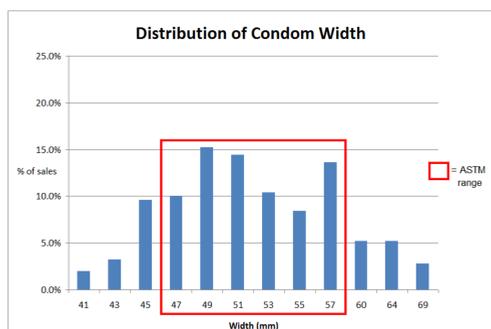


Figure 3. The extended range of condom sizes recently made available for purchase in Europe in comparison to current ASTM guidelines

Results

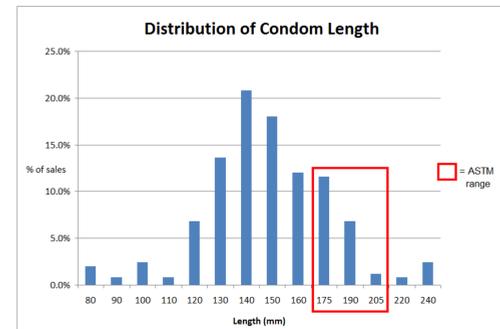
- 174 individuals from 11 countries purchased the first 250 units.
- Each of the 12 widths and 14 lengths were sold.
- Overall 61 (64%) of the 95 unique sizes were purchased.
- Only 12.4% of sales were within the ASTM allowable range of sizes.

The ASTM condom width range is too narrow



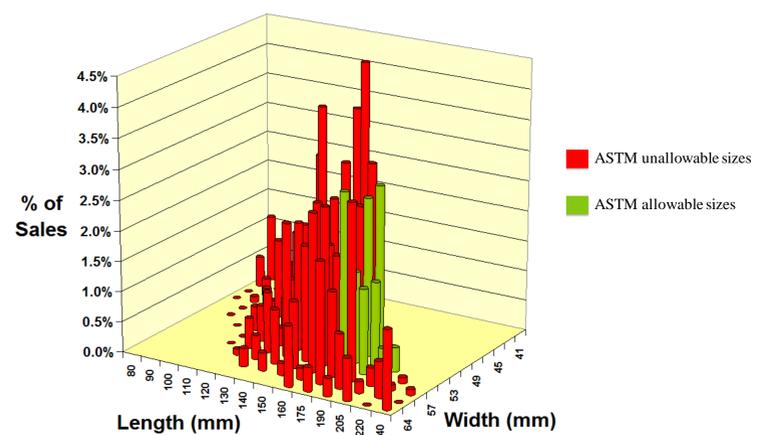
Graph 1. Sales of an expanded range of sizes showed 28.0% were for widths outside of the current ASTM range.

Most ASTM condoms are too long



Graph 2. Sales of an expanded range of sizes showed 80.4% were for lengths outside of the current ASTM range.

Few men select ASTM condom sizes



Graph 3. Sales of an expanded range of sizes show only 1 in 8 were within the ASTM range for allowable sizes.

Discussion

Men and their partners who used poorly fitting condoms experienced increased slippage, breakage, and early removal of condoms which contribute to sexual health problems.

Condom sizes in retail stores are quite limited, even more so than ASTM allowable sizes.

High risk populations for contracting HIV, such as African American MSM, report a high prevalence of problems with condom fit.

A large clinical trial involving 820 men in the U.S. comparing generic to fitted condoms found that fitted condoms from an expanded range of sizes had similar condom failure rates and greater acceptance.

Conclusions

Current condom sizes are mandated by international standards and are too restrictive.

The initial sales data strongly support the need for additional condom sizes.

International standard organizations and medical regulators should allow an expanded range of condom sizes.

Literature Cited

- Crosby RA, Yarber WL, Graham CA, Sanders SA. Does it fit okay? Problems with condom use as a function of self-reported poor fit. *Sex Transm Infect* 2010;86:36-8.
- Reece M, Herbenick D, Sanders SA, Monahan P, Temkit M, Yarber WL. Breakage, slippage and acceptability outcomes of a condom fitted to penile dimensions. *Sex Transm Infect* 2008;84:143-9.
- Reece M, Dodge B, Herbenick D, Fisher C, Alexander A, Sonya S. Experiences of condom fit and feel among African-American men who have sex with men. *Sex Transm Infect* 2007;83:454-457.
- Warner L, Gallo M, and Macaluso M. Condom use around the globe: how can we fulfill the prevention potential of male condoms? *Sex Health*. 2012 Mar;9(1):4-9.
- Warner L, Steiner MJ. Male condoms. In: Hatcher RA, Trussell J, Nelson AL, et al, editors. *Contraceptive technology, nineteenth revised edition*. New York: Ardent Media, Inc.; 2007. p. 297-316.

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