



Condoms: advising on the options

Condoms are the only form of contraception that protects against both sexually transmitted infections (STIs) and unplanned pregnancy. There is a selection of funded condoms available in New Zealand and some patients may require guidance to ensure correct and consistent use.

KEY PRACTICE POINTS:

- If external (male) condoms are used correctly on every occasion of sexual intercourse over a year the rate of pregnancy is approximately 2%; however, typical use results in a yearly rate of pregnancy of 18%
- If used correctly, all types of condoms are effective at preventing transmission of most STIs, including HIV, gonorrhoea, chlamydia and hepatitis B
- Condoms should be routinely and widely offered in primary care to ensure equitable access
- A variety of external latex condoms are fully funded in New Zealand
- Latex-free condoms are available, but not funded; however, these products should only be necessary in a small number of people with latex allergy (approximately 4% of the general population)
- Internal (female) condoms are available, but not funded; there is an approximately 5% rate of pregnancy with correct use on every occasion of sexual intercourse over a year, however, typical usage results in a yearly pregnancy rate of 21%

This is a revision of a previously published article.
What's new for this update:

- Includes recommendations from New Zealand Aotearoa's guidance on contraception, Ministry of Health (Dec, 2020), available from: https://www.health.govt.nz/system/files/documents/publications/final_aotearoa_contraception_guidance.pdf
- The failure rate of external (male) condoms with typical use is now estimated to be 18% (previously 13%)
- Table of funded external condoms updated
- The maximum number of 53 mm, 56 mm and 60 mm width condoms that can be prescribed all-at-once or available via PSO has decreased from 144 to 60

The benefits of regular condom use

The first external (male) condoms were developed in the 16th century to slow the spread of syphilis.¹ Originally these were bespoke and made from linen or animal gut,¹ but in the twentieth century mass production resulted in a variety of condom sizes, shapes, colours, flavours and thicknesses. The majority of external condoms are constructed from latex, although they may be made from other materials including polyurethane, polyisoprene and nitrile.²

Recommend condoms widely to prevent the spread of STIs

Condoms are the only method of contraception that protects against sexually transmitted infections (STIs). They are often used in combination with another contraceptive to prevent STI transmission and to further reduce the risk of an unintended pregnancy.

The advantages and disadvantages of external condoms:²

Advantages	Disadvantages
<ul style="list-style-type: none">Protect effectively against many STIsDo not affect fertilityDo not cause hormonal-related adverse effectsMay result in sex lasting longer, due to decreased sensitivityProvide fetal protection against STIs, if used during pregnancy	<ul style="list-style-type: none">Need to be stored in an easily accessible locationBreakage or slippage may occur requiring emergency contraceptionIncorrect use may result in pregnancyMay be uncomfortable if an inappropriate size is usedThe sensation of sex may be dulledLatex-free condoms (not funded) are required if either partner has a latex allergy

The effectiveness of external condoms

Pregnancy occurs in approximately 2% of females when external condoms are used correctly as the sole form of contraception during every occasion of sexual intercourse over one year.³ However, condoms are often not used consistently or correctly, therefore typical usage results in 18% of females becoming pregnant each year that condoms are used.³

Condoms substantially reduce the risk of STI transmission occurring through discharge to or from the penile urethra during vaginal or anal sex, e.g. HIV, gonorrhoea, chlamydia and hepatitis B.² Dermal and oral transmission of STIs, e.g. herpes and human papillomavirus (HPV), is reduced, but not eliminated through the regular use of condoms as they may not cover all infectious areas.²

Recommending the most appropriate condom

Ensuring consistent and correct use are the most important considerations when providing patients with condoms. All funded condoms available in New Zealand are made from latex and are pre-lubricated. There are differences in the width, thickness and length of funded condoms and some patients may require guidance on these issues (Table 1). Condoms made from isoprene (for people with latex allergy – see below) and textured condoms are available over-the-counter from a variety of retail outlets and online stores but are not funded.

Advising patients on the size and type of condom

The 56 mm condoms are the most commonly prescribed size in New Zealand.⁶ However, due to variations in penile size,⁷ this width of condom may not be appropriate for all. The length and thickness of some brands of condom does vary slightly, however, this is unlikely to be a significant issue for fit or protection in most cases.

Offer patients a selection to try first

All fully funded condoms in New Zealand are also available on Practitioner's Supply Order (PSO). It is recommended that a selection of condoms be available in the practice and offered the first time a prescription for condoms is provided. The prescription can be written with a default option but with instructions for another width or brand of condom to be dispensed if the patient wishes, following discussion with a pharmacist, e.g. "as specified or directed by patient preference". Filling the prescription can be delayed until the preferred condom size has been determined. If a previous prescription for condoms has been provided, ask if the fit was appropriate.

N.B. From 1 March, 2020, the maximum number of 53 mm, 56 mm and 60 mm width condoms that can be prescribed all-at-once or available via PSO was decreased from 144 to 60 to reduce wastage.⁵ The maximum number of 49 mm condoms that can be prescribed all-at-once or available via PSO is 144.⁴

Additional lubrication is not routinely required with condom use

All funded condoms in New Zealand are pre-lubricated; there are no separate lubricant products for use with condoms that are funded. There is insufficient evidence to recommend the routine use of extra lubrication for vaginal intercourse.⁸ However, additional lubrication may be helpful where there is a history of condom breakage or irritation.⁸ There is some evidence to suggest that extra lubrication may help to reduce the risk of condom breakage during anal intercourse.⁸ Inform patients that adding lubricant inside the condom or to the penis before using the condom increases the risk of slippage.³

Table 1: Selection guide for fully funded condoms in New Zealand, as of February, 2024.^{4,5}

Condom width	Brand	Thickness	Length	Additional features
49 mm	Moments	0.07 mm	160 mm minimum	–
53 mm	Moments	0.05 mm	160 mm minimum	–
		0.07 mm	160 mm minimum	Unflavoured (no colour) or with strawberry flavoured lubricant (red coloured condom) or chocolate flavoured lubricant (brown coloured condom)
56 mm	Moments	0.06 mm	160 mm minimum	–
		0.08 mm	160 mm minimum	No colour or coloured red
	Gold Knight	0.05 mm	<i>Information not available</i>	–
		0.07 mm	180 mm	Strawberry or chocolate flavoured lubricant
60 mm	Gold Knight XL	0.07 mm	<i>Information not available</i>	–

Water-based, e.g. K-Y Jelly, or silicone-based, e.g. Durex Perfect Glide, lubricants should be used if additional lubrication of latex condoms is required.⁸ Oil-based lubricants, e.g. petroleum gel (Vaseline), should not be used with latex condoms as they increase the risk that the condom will break.⁸ Lubricating substances such as cooking or coconut oil or body moisturisers should not be used with condoms.²

The frequent use of spermicidal condoms is not recommended

There is no evidence that condoms with added spermicide provide any additional protection against pregnancy or STIs than non-spermicidal condoms.³ Nonoxynol-9, a surfactant that disrupts cell membranes, is the most common spermicide.⁸ The use of condoms lubricated with nonoxynol-9 is not recommended as excessive use, i.e. several times per day, increases the risk of urinary tract infections (UTIs) and vaginal or anal irritation which may increase the risk of HIV infection and other STIs.³ However, using condoms with nonoxynol-9 is preferable to not using condoms at all.

Thicker condoms are unlikely to provide better protection against STIs

Limited evidence suggests that using a thicker condom does not reduce the risk of a condom breaking. A study involving 283 male couples in England found that the failure rate for condoms 0.074 mm thick was 2.5%, compared to a failure rate of 2.3% for condoms 0.112 mm thick.⁹ The majority of the funded condoms in New Zealand are 0.07 mm thick, however,

the Moments brand has a 0.08 mm thickness option and can be prescribed if there is a history of condom breakage.

Latex allergy is uncommon and non-latex condoms are generally not indicated

Condoms users may report dermal adverse reactions involving irritation of the penis or vagina or redness, rash and/or swelling of the groin or thighs.² Mild symptoms may be avoided by using a water or silicone-based lubricant to reduce friction and irritation, or by trialling another brand of condom.² When discussing potential adverse reactions to condoms, consider if the symptoms may be caused by a STI and whether a sexual health check is appropriate.

Most people with latex allergy will already be aware of an allergy through previous reactions, e.g. when using latex gloves or dressings or inflating a balloon.² Severe latex allergy, e.g. systemic urticaria, dizziness, difficulty breathing or loss of consciousness, is extremely rare; the worldwide prevalence of latex allergy of any severity is estimated to be 4% in the general population, with higher rates in groups who are regularly exposed, e.g. health workers who wear latex gloves.^{3, 10} Latex allergy can be managed by using non-latex external condoms or internal condoms (see below); neither of these options are funded.

Non-latex condoms are indicated while using vaginal creams for fungal infections

Latex condoms should not be used at the same time as vaginal creams for fungal infections, e.g. clotrimazole, miconazole and

nystatin, as the condom may be degraded by ingredients in the base of the cream.¹⁰⁻¹² Abstinence from sex or the use of non-latex condoms can be recommended while using these creams.

Correct use is essential for condoms to be effective

Key points to cover when discussing the correct use of condoms include:

- Checking the expiry date
- Inspecting the packet for tears and opening it carefully
- Applying the condom correctly, e.g. checking it is the right way up before applying

 Detailed instructions on the correct use of condoms are provided with product packaging and Family Planning has instructions available from: www.familyplanning.org.nz/advice/contraception/condoms

N.B. Condoms should not be flushed down the toilet. Latex condoms degrade naturally in landfill.

Provide advice on what to do if a condom fails

Emergency contraception can be administered up to five days after experiencing condom failure. Treatment options that are fully funded include:³

- A copper intrauterine device, which is the most effective method and can be used up to five days after unprotected sex
- The oral emergency contraceptive pill (levonorgestrel) is the most convenient method, however, this is only effective within three days of unprotected sex and may be less effective in patients weighing over 70 kg or with a body mass index greater than 26 kg/m²

A sexual health check should be undertaken following condom failure if there is a possibility of STI exposure.⁸

 Further information on emergency contraception is available from: "Contraception: which option for which patient", bpac.org.nz/2021/contraception/options.aspx

Internal condoms

Internal condoms, also referred to as female condoms, are thin pouches that are inserted into the vagina prior to sexual intercourse. The condom is held loosely in the vagina by a closed flexible ring at one end while an open ring at the other end allows for penile insertion. Internal condoms are "one size fits all" and the products available in New Zealand are generally made from a nitrile polymer and are latex-free.¹³ Their use has been promoted among sex workers in some countries with high rates of HIV infection as a female-controlled, alternative form of barrier contraception.

Internal condoms are currently not funded in New Zealand and are less accessible than external condoms. They can be purchased from the Family Planning website or a limited number of retail outlets and online stores.

The advantages and disadvantages of internal condoms:²

Advantages	Disadvantages
<ul style="list-style-type: none"> ■ The female partner controls the use of the condom ■ They can be inserted up to eight hours prior to sex ■ They have a soft, moist texture that feels more "natural" than latex and does not dull the sensation of sex ■ Water, silicone or oil-based lubricants can be safely used with latex-free condoms ■ They do not need to be removed immediately after ejaculation ■ The outer ring may provide additional stimulation 	<ul style="list-style-type: none"> ■ Not funded in New Zealand ■ Less effective at preventing pregnancy than external condoms ■ More often used incorrectly than external condoms ■ Slippage may occur requiring emergency contraception ■ Insertion may need to be practiced ■ May be uncomfortable for some people

Internal condoms are less effective at preventing pregnancy than external condoms

Pregnancy occurs in approximately 5% of females when internal condoms are used correctly as the sole form of contraception during every occasion of sexual intercourse over a year, compared to 2% with external condoms.³ However, internal condoms may not be used consistently or correctly, therefore typical usage results in 21% of females becoming pregnant each year that internal condoms are used, compared to 18% for external condoms.³

Data on STI prevention is limited

Internal condoms reduce the risk of contracting STIs, including HIV.² However, due to a lack of studies it is not possible to directly compare the effectiveness of internal condoms and external condoms for STI prevention.

Using internal condoms correctly

Internal condoms are relatively easy to use, although it is recommended that patients practice the technique before they are used for the first time.² External condoms should not be used at the same time as internal condoms.⁸

Problems encountered with the use of internal condoms may include discomfort following insertion, which may be resolved by tucking the inner ring behind the pubic bone, and noise from friction during use which can be resolved with lubrication.²

 Detailed instructions of the use of internal condoms are available on page 264 of the World Health Organization family planning handbook, available from: www.fphandbook.org/sites/default/files/global-handbook-2018-full-web_0.pdf

 Information is also available from Family Planning New Zealand: www.familyplanning.org.nz/advice/contraception/internal-condoms

Acknowledgement: This article is a revision of an original article published by bpac^{nz} in 2019. The original article was reviewed by **Dr Beth Messenger**, National Medical Advisor, Family Planning New Zealand.

Article supported by PHARMAC

N.B. Expert reviewers do not write the articles and are not responsible for the final content. bpac^{nz} retains editorial oversight of all content.

References

1. Cecil M, Nelson AL, Trussell J, et al. If the condom doesn't fit, you must resize it. *Contraception* 2010;82:489–90. doi:10.1016/j.contraception.2010.06.007
2. World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), Knowledge for Health Project. Family

planning: a global handbook for providers (2018 update). 2018. Available from: <http://apps.who.int/iris/bitstream/handle/10665/260156/9780999203705-eng.pdf?sequence=1> (Accessed Jul, 2021).

3. Ministry of Health. New Zealand Aotearoa's guidance on contraception. 2020. Available from: <https://www.health.govt.nz/publication/new-zealand-aotearoa-guidance-contraception> (Accessed Jul, 2021).
4. New Zealand Formulary (NZF). Available from: <https://www.nzf.org.nz/> (Accessed Feb, 2024)
5. PHARMAC. Decision to change funded male latex condoms. 2019. Available from: <https://pharmac.govt.nz/news-and-resources/consultations-and-decisions/decision-to-change-funded-male-latex-condoms/> (Accessed Feb, 2024).
6. Ministry of Health. Pharmaceutical Claims Collection. 2021.
7. Herbenick D, Reece M, Schick V, et al. Erect penile length and circumference dimensions of 1,661 sexually active men in the United States. *The Journal of Sexual Medicine* 2014;11:93–101. doi:10.1111/jsm.12244
8. Faculty of Sexual and Reproductive Healthcare. FSRH clinical guideline: barrier methods for contraception and STI prevention (August 2012, amended October 2015). 2012. Available from: <https://www.fsrh.org/standards-and-guidance/documents/ceuguidancebarriermethodscontraceptionsdi/> (Accessed Jul, 2021).
9. Golombok S, Harding R, Sheldon J. An evaluation of a thicker versus a standard condom with gay men. *AIDS* 2001;15:245–50. doi:10.1097/00002030-200101260-00015
10. Wu M, McIntosh J, Liu J. Current prevalence rate of latex allergy: Why it remains a problem? *J Occup Health* 2016;58:138–44. doi:10.1539/joh.15-0275-RA
11. Mylan New Zealand Ltd. New Zealand data sheet: MICREME. 2017. Available from: www.medsafe.govt.nz/profs/datasheet/m/Micremevagcrm.pdf (Accessed Jul, 2021)
12. Multichem NZ Ltd. New Zealand data sheet. 2018. Available from: www.medsafe.govt.nz/profs/datasheet/c/Clomazolcvmvagr.pdf (Accessed Jul, 2021)
13. Family Planning New Zealand. Internal condoms. Available from: <https://www.familyplanning.org.nz/advice/contraception/internal-condoms> (Accessed Jul, 2021).



This article is available online at:
www.bpac.org.nz/2021/contraception/condoms.aspx