TERMINATIONS OF PREGNANCY

Introduction

In New Zealand, approximately one quarter of all pregnancies end in a termination, with one in four women undergoing a termination in their lifetimes [240]. Terminations are part of core, publicly funded health services, with pregnancies that present a serious danger to the life of a woman, or to her physical or mental health, that result from incest, or have a fetal abnormality being amongst those which can be legally terminated. Women usually go first to a referring doctor (e.g. a GP or Family Planning doctor) to have the pregnancy confirmed, to undergo diagnostic tests and to be referred to an abortion clinic. Two certifying consultants must then individually review the woman and agree that the case fulfils the legal grounds for a termination [240].

When considering the factors contributing to terminations, the Dunedin Multidisciplinary Health and Development Study [241] found that amongst their birth cohort of 477 women aged 26 years in 1998/99, 36% had been pregnant before 25 years, and that in 60% of cases the pregnancy had been unwanted. In this cohort, 48% of unwanted pregnancies ended in termination, as compared to 2% of wanted pregnancies. Factors associated with unwanted pregnancy included shorter relationship duration and first or only pregnancies. Unwanted pregnancies were more likely to result from contraception not being used (55%) than it failing (40%), with reasons for non-use of contraception including "not thinking about it" (40%), the use of alcohol (25%), partners not wanting to use a condom (11%), and not being able to afford contraception (6%) [241].

Similarly, a 2002 study of women attending a New Zealand clinic for assessment prior to a termination found that 69.5% had either used no contraception or natural family planning prior to conception, as compared to 48.0% of clinic attendees in 1999 and 44.5% in 1995. The authors noted that while European women were the highest users of the contraceptive pill prior to conception (31% of European attendees in 2002 vs. 28% in 1999), the largest numerical increases in clinic attendance had been for Asian women, who as a group, also had much lower rates of contraception use (in 2002, 80% had used no contraception prior to conception, with a further 17% using condoms only). The authors concluded that accurate information on contraceptive methods, accompanied by access to reliable contraception could reduce the need for termination of unwanted pregnancies and that in particular, young Asian women required immediate access to such advice [242].

The following section reviews terminations of pregnancy using information from the Abortion Supervisory Committee (via Statistics New Zealand). Policy documents and evidence-based reviews which consider how the issue of unintended pregnancies might be addressed at the population level are considered at the end of this section.

Data Sources and Methods

Indicator

1. Legally Induced Terminations of Pregnancy

Numerator: Legally Induced Terminations of Pregnancy Registered in New Zealand by the Abortion Supervisory Committee

Denominator: Statistics New Zealand Estimated Resident Population

Notes on Interpretation

Note 1: In New Zealand, information on the domicile of women presenting for a termination of pregnancy has only been recorded by the Abortion Supervisory Committee since 2004, with an agreement existing between the Committee and Statistics NZ that the only geographical breakdown of termination data will be at regional council level. Thus information on terminations of pregnancy by DHB or NZDep Index decile is unavailable.

Note 2: In its reporting of terminations, Statistics NZ uses total response ethnicity, and thus women will appear in each ethnic group with which they identified (in both the numerator and denominator).

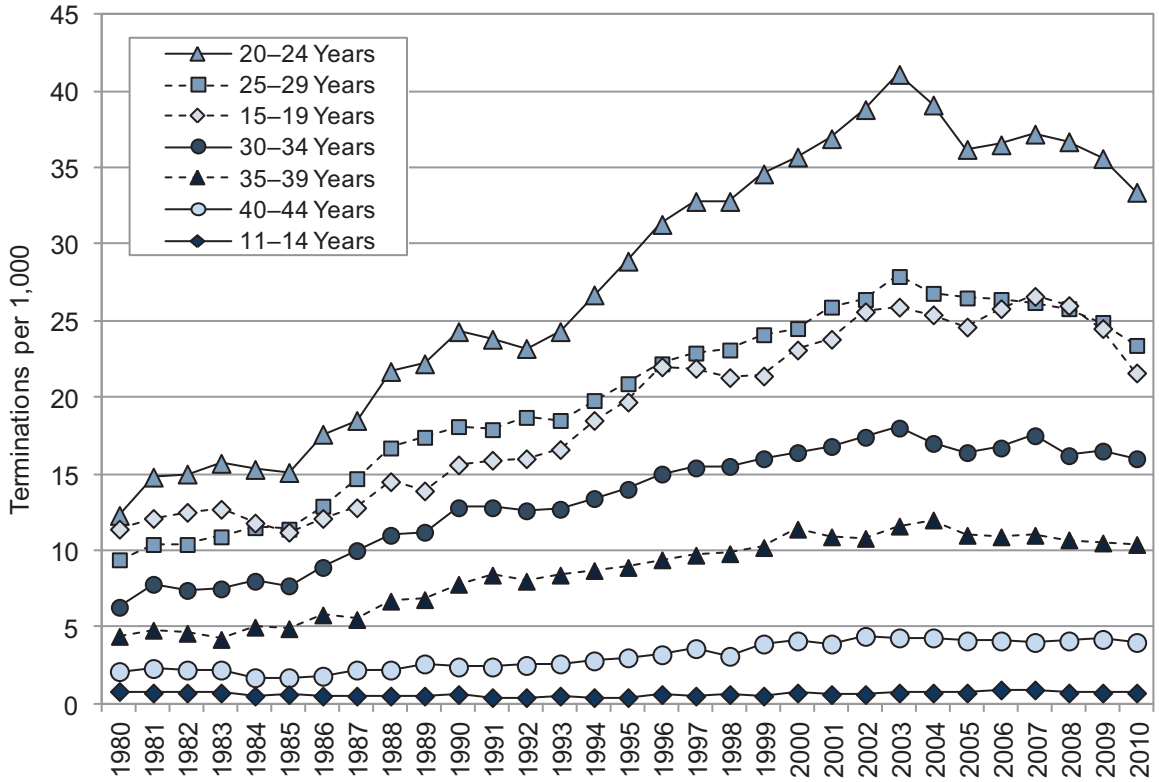
Note 3: Tests of statistical significance have not been applied to data in this section, and thus (unless the terms *significant* or non-*significant* are specifically used) the associations described do not imply statistical significance or non-significance (see **Appendix 2** for further discussion of this issue).

New Zealand Distribution and Trends

New Zealand Trends

In New Zealand during 1980–2010, terminations of pregnancy were highest in women aged 20–24 years, followed by those 25–29 years and 15–19 years of age. Termination rates increased during the 1980s and 1990s, with rates reaching a peak for most age groups in the early 2000s and then beginning to gradually decline (**Figure 145**).

Figure 145. Terminations of Pregnancy by Age, New Zealand 1980−2010



Source: Abortion Supervisory Committee via Statistics New Zealand

New Zealand Distribution by Age and Ethnicity

In New Zealand during 2010, terminations of pregnancy were highest in women aged 20–24 years, followed by those aged 25–29 years and those aged 15–19 years (**Figure 146**). While similar patterns were seen for women from each of New Zealand's largest ethnic groups, amongst younger women (<35 years) termination rates were higher for Pacific and Māori women than for European women. While terminations for European teens were higher than for Asian teens, Asian women had higher termination rates than European women from 25 years of age onwards (**Figure 147**).

In New Zealand during 2006–2010, terminations of pregnancy were higher for Pacific and Māori > European > Asian teenagers, while amongst those 20–24 years, terminations of pregnancy were higher for Pacific > Māori > Asian and European women (**Figure 148**).

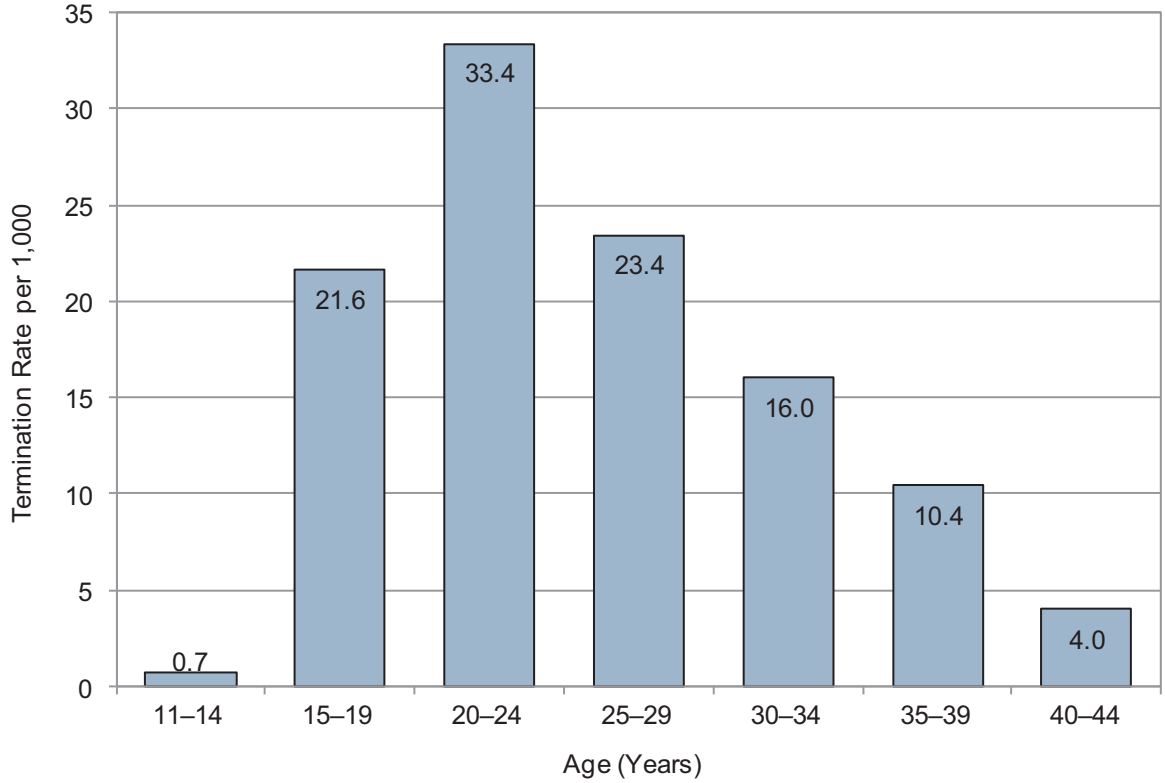
New Zealand Distribution by Age and Gestation

In New Zealand during 2009, the majority of terminations of pregnancy occurred between 8 and 12 weeks gestation, in all age groups. The next most frequent gestations were <8 weeks, followed by 13–16 weeks, with women aged 45+ years having a higher proportion of terminations > 12 weeks than those from other age groups (**Figure 149**).

New Zealand Distribution by Age and Previous Terminations

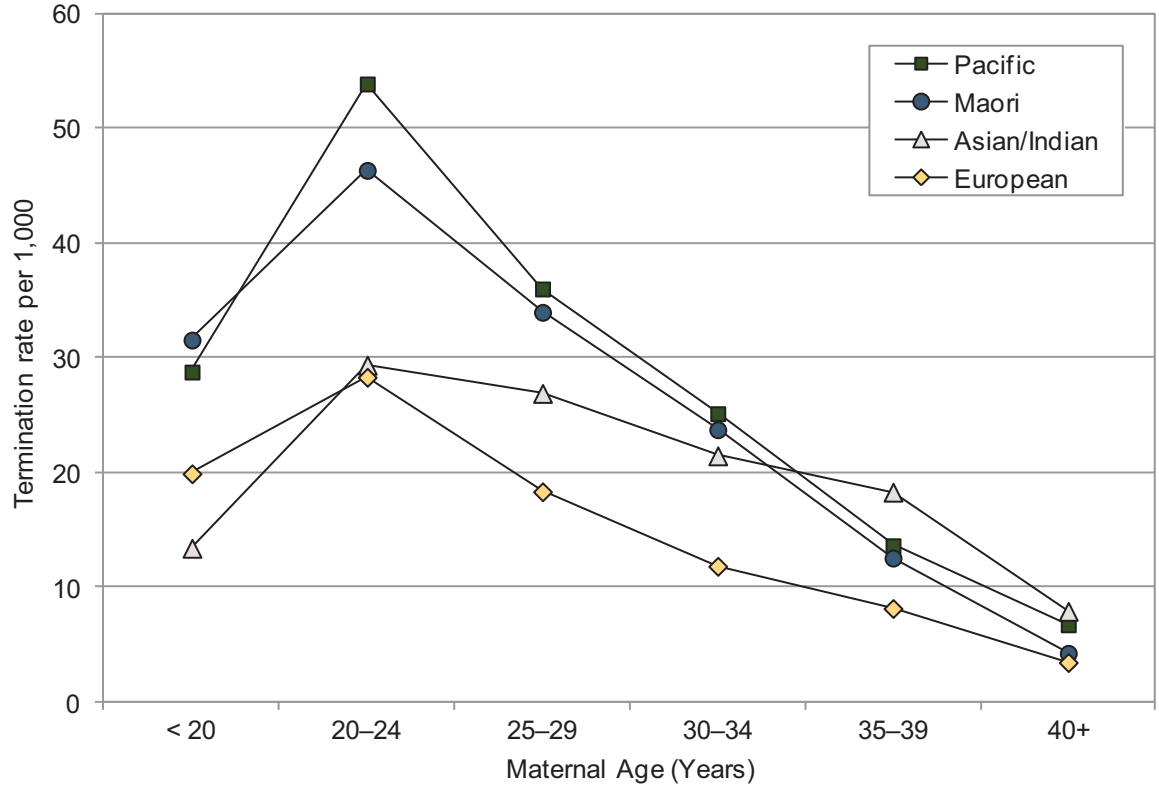
In New Zealand during 2009, the proportion of women who had not had a previous termination decreased with increasing age, with the highest number of previous terminations being amongst women in their late twenties to early forties (**Figure 150**).

Figure 146. Terminations of Pregnancy by Age, New Zealand 2010



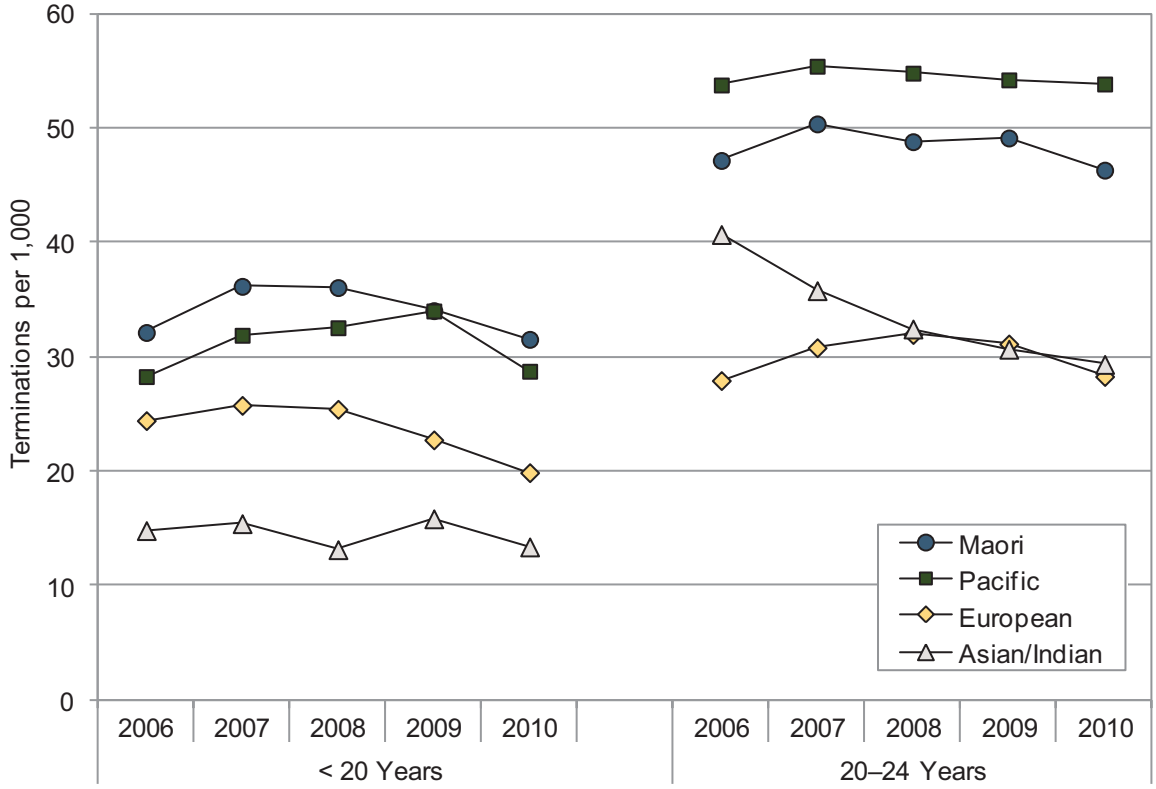
Source: Abortion Supervisory Committee via Statistics New Zealand

Figure 147. Terminations of Pregnancy by Age and Ethnicity, New Zealand 2010



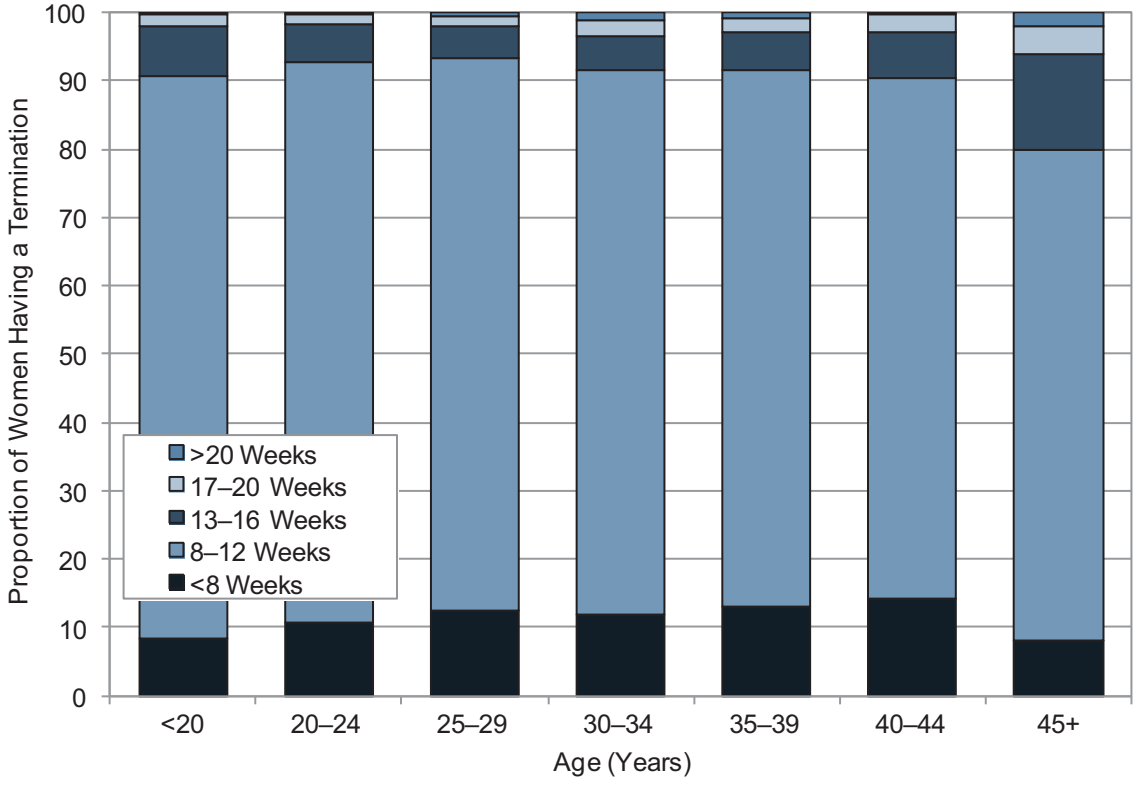
Source: Abortion Supervisory Committee via Statistics New Zealand. Note: Ethnicity is Total Response

Figure 148. Terminations of Pregnancy by Ethnicity in Young Women <25 Years, New Zealand 2006−2010



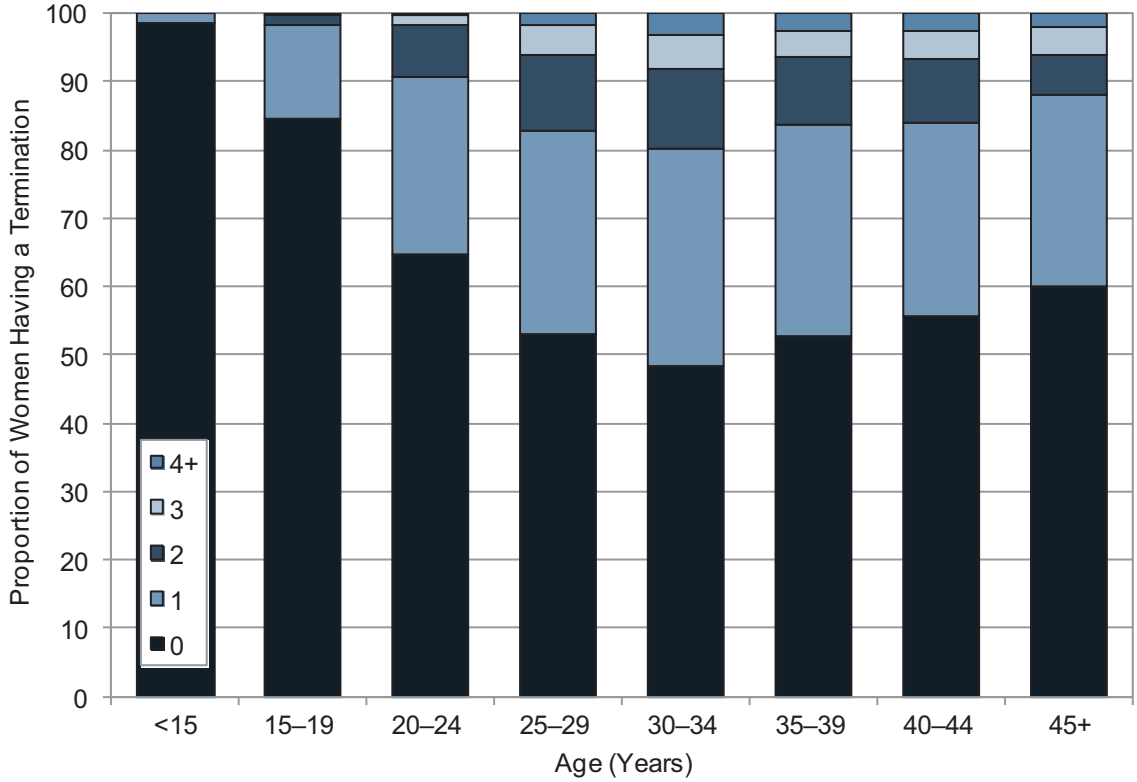
Source: Abortion Supervisory Committee via Statistics New Zealand. Note: Ethnicity is Total Response

Figure 149. Proportion of Women Who Had a Termination by Age and Gestation at Termination, New Zealand 2009



Source: Abortion Supervisory Committee [243]

Figure 150. Proportion of Women Who Had a Termination by Age and Number of Previous Terminations, New Zealand 2009



Source: Abortion Supervisory Committee [243]

Distribution by Health Facility and Region

Table 169. Terminations of Pregnancy by Regional Council of Residence, New Zealand 2004−2009

Regional Council	Number of Terminations					
	2004	2005	2006	2007	2008	2009
Northland	506	484	494	574	531	469
Auckland	7,238	7,181	7,225	7,299	7,146	6,981
Waikato	1,383	1,286	1,472	1,468	1,487	1,445
Bay of Plenty	819	756	905	951	800	905
Gisborne	136	142	121	158	134	122
Hawke's Bay	518	561	560	616	558	555
Taranaki	340	317	381	390	350	350
Manawatu-Whanganui	809	801	836	828	854	777
Wellington	2,199	2,160	2,193	2,318	2,185	2,189
Tasman	129	158	142	133	136	135
Nelson	196	191	215	216	206	190
Marlborough	109	133	138	164	143	131
West Coast	93	98	81	100	98	96
Canterbury	2,135	2,013	2,106	1,992	2,076	2,067
Otago	752	687	698	751	764	671
Southland	284	238	290	277	289	260

Source: Abortion Supervisory Committee Annual Reports via Statistics NZ

Distribution by Regional Council of Residence

During 2009, a total of 3,550 terminations of pregnancy were recorded as occurring amongst women living in the South Island's Regional Council catchments (**Table 169**).

Distribution by Health Facility

In New Zealand during 2003–2009, a large number of terminations were performed at different facilitates around the country, with 3,568 terminations being performed at hospitals located in the South Island during 2009 (**Table 170**).

Table 170. Terminations of Pregnancy by Healthcare Facility, New Zealand 2003−2009

Institution	Number of Terminations						
	2003	2004	2005	2006	2007	2008	2009
Whangarei Area Hospital	454	474	461	461	533	495	460
National Women's Health		18	105	116	128	188	192
Clinical Centre Short Stay	549	537	469	500	474	461	487
Epsom Day Unit	5,908	5,735	5,543	5,524	5,594	5,500	5,380
Auckland Medical-Aid Trust	1,813	1,647	1,462	1,511	1,592	1,476	1,321
North Shore	10	12	20	26	23	26	31
Middlemore	19	38	21	28	20	20	25
Thames	505	538	511	535	526	494	487
Tokoroa	517	553	542	548	549	562	551
Waikato	1,007	938	967	1,055	1,097	1,061	1,071
Hawke's Bay Hospital	579	539	559	557	613	568	563
Taranaki Base	263	310	294	358	368	352	350
Masterton / Wairarapa	81	96	131	111	164	197	211
Wellington	3,126	3,004	2,882	2,962	3,075	2,867	2,774
Nelson	318	332	344	359	348	333	320
Wairau	127	123	139	126	160	140	141
Ashburton Public	15	12		16	11	12	26
Christchurch Women's	365	339	202	108	105	129	158
Lyndhurst	2,210	2,290	2,242	2,380	2,330	2,398	2,305
Dunedin	607	653	601	626	646	644	618
Other Hospitals	38	23	36	27	26	17	79

Source: Abortion Supervisory Committee Annual Reports via Statistics NZ

Summary

In New Zealand during 1980–2010, terminations of pregnancy were highest in women aged 20–24 years, followed by those 25–29 years and 15–19 years. Termination rates increased during the 1980s and 1990s, with rates reaching a peak for most age groups in the early 2000s and then beginning to gradually decline. During 2006–2010, terminations were higher for Pacific and Māori > European > Asian teenagers, while amongst those 20–24 years, terminations were higher for Pacific > Māori > Asian and European women.

During 2009, a total of 3,550 terminations of pregnancy were recorded as occurring amongst women living in the South Island's Regional Council catchments.

Local Policy Documents and Evidence-Based Reviews Relevant to the Prevention of Unintentional Pregnancies

In New Zealand, while no policy documents focus solely on unintentional pregnancies, a number of documents consider sexual and reproductive health issues more generally, and these are considered in **Table 171**, along with a range of reviews and other publications which consider these issues in the overseas context. In addition, **Table 168** in the *Teenage Pregnancy* section considers publications relevant to the support of teenage parents.

Table 171. Local Policy Documents and Evidence-Based Reviews Relevant to Unintentional Pregnancies in Adolescents

Ministry of Health Policy Documents
Ministry of Health. 2003. **Sexual and Reproductive Health: A resource book for New Zealand health care organisations**. Wellington: Ministry of Health. http://www.moh.govt.nz/moh.nsf/82f4780aa066f8d7cc2570bb006b5d4d/cffe42ce625d5a37cc256dec000dc097/$FILE/sexualReproHealthResource.pdf This publication supports the Sexual and Reproductive Health Strategy and is designed to help DHBs and PHOs find ways of improving the uptake of effective contraception and safe sex practices in their populations. It notes that compared to some other developed countries, New Zealand has high rates of both abortions and teenage births. There is information on designing services, strategies for action, strategies for Māori, strategies for Pacific peoples, unintended and unwanted pregnancies, sexually transmitted infections, HIV and AIDS.
Minister of Health. 2001. **Sexual and Reproductive Health strategy Phase One**. Wellington: Ministry of Health. http://www.moh.govt.nz/moh.nsf/0/E4F15D3A93CF5A48CC256AE90016EF56/$File/sexualreproductivehealthstrategyphase1.pdf This document outlines the Government's overall direction in 2001, to improve sexual and reproductive health outcomes. Key priority areas are sexually transmitted infections, unwanted/unintended pregnancy, youth, and Māori and Pacific peoples. The strategy recognises that different population groups have different needs and that sexual and reproductive issues are intertwined with issues of self-esteem, sexual identity, diversity and youth suicide. Four strategic directions provide a framework for the strategy: Societal attitudes, values and behaviour, Personal knowledge, skills and behaviour, Services and Information.
Systematic and Other Reviews from the International Literature
Halpern Vera, Lopez L M, A GD, et al. 2011. **Strategies to improve adherence and acceptability of hormonal methods of contraception**. Cochrane Database of Systematic Reviews, 2011(4), Art. No.: CD004317. DOI: 10.1002/14651858.CD004317.pub3. Despite theoretical effectiveness of hormonal contraceptives, effectiveness in typical use is lower because women have difficulty remembering to take their pills, or they stop taking them and women using injectable contraceptives do not keep appointments for repeat injections. This review considered the effectiveness of interventions to improve adherence to, and acceptability of, hormonal contraceptive methods. The review included eight RCTs comparing a variety of interventions vs. standard family planning advice. The interventions included group motivation, counselling, and reminder systems for dosing or appointments. The measured outcomes were discontinuation, reasons for discontinuation, number of missed pills, number of on-time injections, and pregnancy. Of the eight RCTs, only one showed a significant benefit from an intervention. In that trial, women who had received structured pre-treatment counselling involving audio-visual messages on the risks, benefits and overall characteristics of the injectable contraceptive depo-medroxyprogesterone acetate (DMPA) were less likely to have discontinued using it after 12 months compared to women who had received routine counselling (OR 0.27; 95% CI 0.16 to 0.44). Another study found that women in the intervention group were less likely to discontinue use because of dissatisfaction with the contraceptive method (OR 0.27; 95% CI 0.16 to 0.44) but were equally likely to discontinue overall. The authors concluded that, so far, most studies have not shown a benefit from strategies to improve adherence and continuation however they noted that the trials had a number of limitations. Three had small sample sizes, four had high losses to follow up and there was considerable variation in the types and intensities of the interventions. They stated that more high quality research is needed given the importance of adherence and continuation for successful contraception.
Ralph LJ, Brindis CD. 2010. **Access to reproductive healthcare for adolescents: establishing healthy behaviors at a critical juncture in the lifecourse**. Current Opinion in Obstetrics & Gynecology, 22(5), 369-74. http://www.nmtpc.org/docs/contraceptive%20use%20among%20adolescents.pdf This U.S. review provides an overview of recent research on adolescents' access to reproductive healthcare. It states that recent research has confirmed the need for diverse points of access to the healthcare system. Adolescents need high quality, confidential, and comprehensive reproductive health care which includes a wide range of counselling, clinical and preventive care. Removing barriers to care (e.g. concerns about confidentiality and cost) is important.

Owen J, Carroll C, Cooke J, et al. 2010. **School-linked sexual health services for young people (SSHYP): a survey and systematic review concerning current models, effectiveness, cost-effectiveness and research opportunities**. Health Technology Assessment, 14(30). http://www.hta.ac.uk/fullmono/mon1430.pdf

This report contains both the results of a survey of sexual health services linked to schools in the U.K. and a systematic review of the international literature. The aim of the project was to synthesise evidence about the effectiveness, acceptability and cost-effectiveness of these types of services and to identify areas where further research would be useful. Three broad types of sexual health provision were found: 1) School-based sexual health services (SBSHS) staffed by school nurses offering "minimal" or basic" services; 2) SBSHSs and school-linked sexual health services (SLHSs) staffed by a multi-disciplinary team not including a doctor offering "basic" or "intermediate" levels of service; 3) SBHSs and SLSHSs staffed by a multi-professional team including doctors which offered "intermediate" or "comprehensive" services. The literature review indicated that the provision of SBHSs was not associated with higher rates of sexual activity or earlier age of first intercourse among young people. There was evidence, primarily from U.S. studies, that the provision of such services was associated with fewer births to teenage mothers and lower rates of chlamydial infection in young men. The evidence suggested that broad-based, holistic service models, not restricted to sexual health, were best for maximising service uptake, protecting young people's privacy and confidentiality, countering perceived stigmatisation and offering the most comprehensive range of products and services. The U.K. survey indicated that both professionals and students preferred broad-based services provided by a multi-professional team including doctors. These types of services fit with the Every Child Matters framework and other similar policy initiatives in the U.K. but they have not been rigorously evaluated so there was no data which could be used for cost-effectiveness modelling.

Halpern V, Raymond E G, Lopez L M. 2010. **Repeated use of pre- and postcoital hormonal contraception for prevention of pregnancy**. Cochrane Database of Systematic Reviews, 2010(1), Art. No.: CD007595. DOI: 10.1002/14651858.CD007595.pub2.

It is not recommended that post-coital hormonal contraception (the "morning after" pill) be used repeatedly due to its higher risk of side effects and lower effectiveness compared to other modern contraceptive methods, however this form of contraception may appeal to women who have infrequent sex and it is convenient and private. This review considered the safety and effectiveness of pericoital hormonal contraception. The authors identified 21 trials (12,332 women) that evaluated pericoital use of levonorgestrel (LNG) and other hormonal drugs on a regular basis for the prevention of pregnancy. The use of LNG in this way was found to be reasonably efficacious and safe. For the 0.75 mg dose of LNG the pooled Pearl Index (number of pregnancies per 100 woman-years of use) was 5.1 (95% CI 3.8 to 6.7) and for all doses of LNG it was 4.9 (95% CI 4.3 to 5.5). The most common side effect was irregular menstrual bleeding. Most women reported satisfaction with the use of LNG. Other hormonal drugs appeared promising but most had not been studied extensively. The authors noted that the quality of the studies was not particularly high but that given the large number of study participants, the low rates of pregnancy and the consistency of the results the overall grade of evidence was moderate. They concluded that pericoital use of LNG was an effective, safe and acceptable method of contraception but that, in the absence of more rigorous research, it would be prudent to adhere to the WHO recommendation that post-coital use of LNG is unsuitable for regular contraception.

Lohan M, Cruise S, O'Halloran P, et al. 2010. **Adolescent men's attitudes in relation to pregnancy and pregnancy outcomes: a systematic review of the literature from 1980-2009**. Journal of Adolescent Health, 47(4), 327-45.

The authors of this review argue that a greater understanding of adolescent men's views on pregnancy and pregnancy outcomes would lead to adolescent pregnancy being regarded as an issue for adolescent men as well as adolescent women and that this would lead to more effective and gender-inclusive pregnancy prevention and counselling programmes. The authors summarise the results of fifty studies pertaining to adolescent men and pregnancy and pregnancy outcomes, from various countries including the U.S., the U.K., Ireland, Canada, Sweden, Australia and New Zealand. In general, adolescent men viewed an unintended teenage pregnancy negatively because of the adverse effect that having a baby would have on their future aspirations and life goals as well as on their current freedoms. Overall adolescent men endorsed a woman's right to have an abortion but there were differences between countries in trends over time: Australian males seem to becoming more conservative on this issue while those in Ireland are becoming more liberal. Regarding men's involvement in their partner's decision on pregnancy outcome the research was inconsistent but the female partner was recognised as controlling the degree to which the potential father is involved. Adolescent men expressed the need to be involved and kept informed and, when they had been given the opportunity to be involved in decision making, they reported the experience to have been positive. Male attitudes to adolescent pregnancy are influenced by social class (female partners of higher class men are more likely to have an abortion), ethnicity, religion, and attitudes to masculinity (some males from poorer backgrounds may view getting a girl pregnant as a means of validating their masculine identity). The authors suggest that an explicit focus on men's' "procreative consciousness" and "procreative responsibility" could make sex education programmes more effective.

Rowlands S. 2010. **Social predictors of repeat adolescent pregnancy and focussed strategies**. Best Practice & Research in Clinical Obstetrics & Gynaecology, 24(5), 605-16.

An adolescent who has had one pregnancy has a high probability of having another, either intentionally or not. Teenage mothers who manage to avoid having another baby within two years are more likely to avoid many of the negative consequences of early childbearing that often lead to chronic poverty and welfare dependence. This review focused on the social factors predicting repeat pregnancy including: a planned first pregnancy, not using long-acting reversible contraception, lack of family support, dropping out of school prior to first pregnancy, not returning to school and low socio-economic status. It notes that secondary prevention programmes have often been ineffective but that they are more likely to be effective if they include individual counselling, home visits, a multidisciplinary youth-oriented approach, teaching about contraception and easy access to services.

Harden A, Brunton G, Fletcher A, et al. 2009. **Teenage pregnancy and social disadvantage: systematic review integrating controlled trials and qualitative studies**. BMJ, 339, b4254.

The aim of this review was to determine the impact of interventions to address the social disadvantage associated with early parenthood on reducing rates of unintended teenage pregnancy. The review included ten controlled trials and five qualitative studies. Six of the controlled trials, all from the U.S., were judged to be methodologically sound and these evaluated two types of interventions: early childhood interventions aimed at young children and their parents (3 trials) and youth development programmes which aimed to promote self-esteem, aspirations and a sense of purpose (3 trials).The review authors calculated an overall pooled effect size showing that teenage pregnancy rates were 39% lower in those receiving an intervention than in those receiving standard practice or no intervention (relative risk 0.61, 95% CI 0.48 to 0.77). Some common themes were evident in the qualitative studies: early parenthood was associated with dislike of school, poor material circumstances, unhappy childhood and low expectations. The authors concluded that there was a small but reliable evidence base to support the effectiveness of early childhood interventions and youth development programmes for reducing unintended teenage pregnancy.

Oringanje C, Meremikwu M, Eko H, et al. 2009. **Interventions for preventing unintended pregnancies among adolescents**. Cochrane Database of Systematic Reviews, 2009(4), Art. No.: CD005215. DOI:10.1002/14651858.CD005215.pub2.

This review included 41 RCTs involving 95,662 adolescents in many different countries and a wide variety of interventions. There were both individual and cluster-randomised trials. The results indicated that combination interventions involving both education and contraceptive provision were effective in lowering rates of adolescent pregnancy. The evidence on the effect of interventions on secondary outcomes (age at first intercourse, use of birth control methods, abortion rates, childbirth rates and sexually transmitted diseases) was inconclusive. The variability in study populations, types of interventions, and outcomes measured and also the paucity of trials comparing different interventions made it impossible to draw a conclusion about which type of intervention is most effective.

Deans E, Grimes D. 2009. **Intrauterine devices for adolescents: a systematic review**. Contraception, 79(6), 418-23.

There is some debate about the appropriateness of IUDs for use in adolescents. The American College of Obstetricians and Gynaecologists and the WHO support the use of IUDs as first choice for nulliparous adolescents but the American Academy of Pediatrics considers that IUDs should be a second-line choice for use in adolescents who have already had an unplanned pregnancy using another contraceptive method and who are protecting themselves from sexually transmitted infections. The authors of this review considered six cohort studies and seven case-series reports on the use of IUDs in adolescents. (They could not find any RCTs.) None of the IUDs in the studies were ones in current use in the U.S. Overall cumulative pregnancy rates were low ranging from 2% at six months to 11% at 48 months, and continuation rates were high. Compared to oral contraceptives, IUDs were similarly effective and had similar or better continuation rates. There may be increased expulsion rates at younger ages. The authors concluded that published reports were generally reassuring but the literature on IUD use in adolescents was scanty and obsolete. They state that RCTs comparing contemporary IUDs with other method in adolescents are urgently needed.

Cheng L, Gülmezoglu A M, Piaggio G P, et al. 2008. **Interventions for emergency contraception**. Cochrane Database of Systematic Reviews, 2008(2), Art. No.: CD001324. DOI: 10.1002/14651858.CD001324.pub3.

Emergency contraception is the use of drugs or a copper intra-uterine device (Cu-IUD) after unprotected intercourse in order to prevent pregnancy. This review included 81 trials (45,842 women), comparing either different drugs or different doses of the same drug as “morning after” pills. Seventy-one of the trials were conducted in China. Mifepristone middle dose (25-50 mg) was found to be superior to other hormonal regimens. Mifepristone low dose (<25 mg) could be more effective than levonorgestrel 0.75 mg (two doses) but this was not conclusive. Levonorgestrel proved more effective than the Yuzpe regimen. The copper IUD is another effective emergency contraceptive that can provide on-going contraception but its comparative effectiveness has not been thoroughly investigated (only one small RCT). The review authors concluded that emergency contraception should be offered to all women who request it and that mifepristone should be the first choice for hormonal emergency contraception. Women should be warned that it may lead to a few days’ delay in the start of menstruation. Women who present too late for the emergency contraceptive pill and who are not at risk of sexually transmitted diseases, and would prefer long term contraception, can be offered Cu-IUD insertion.

Kirby D. 2007. **Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases.** Washington, DC: National Campaign to Prevent Teen and Unplanned Pregnancy. http://www.thenationalcampaign.org/resources/pdf/pubs/EA2007_FINAL.pdf

This comprehensive review reports on studies of pregnancy and/or STD/HIV primary prevention programmes focussing on teens and conducted or published in the U.S. between 1990 and 2007. It summarises research on sexual behaviour and its consequences, it describes programmes and approaches that have reduced teen sexual risk taking and pregnancy or STDs, the characteristics of effective education programmes and promising strategies for organisations and communities wanting to select, adapt, design or implement pregnancy prevention programmes for their own teens. It does not assess the efficacy of various forms of contraception or consider same-sex aspects of STD and HIV prevention.

The American College of Obstetricians and Gynaecologists. 2007. **Strategies for Adolescent Pregnancy Prevention**. Washington, DC: The American College of Obstetricians and Gynaecologists. http://www.acog.org/departments/adolescentHealthCare/StrategiesForAdolescentPregnancyPrevention.pdf

This publication was designed for use by American doctors training in Obstetrics and Gynaecology. It summarises U.S. data related to adolescent pregnancy, it discusses various strategies for preventing adolescent pregnancy and models for effective programmes, and it provides a list of references, a categorised bibliography, and a list of useful websites.

Polis C B, Grimes D A, Schaffer K, et al. 2007. **Advance provision of emergency contraception for pregnancy prevention**. Cochrane Database of Systematic Reviews, 2007(2), Art. No.: CD005497. DOI: 10.1002/14651858.CD005497.pub2.

Since some women find it difficult to access emergency contraception (the "morning after pill") within the required timeframe it could be useful for them to be provided with a supply of pills for use if necessary after unprotected sex. This review considered RCTs comparing advance provision of emergency contraception with standard access. Eight trials (6389 women in the U.S., China and India) were included. Advance provision did not decrease pregnancy rates in studies with twelve months of follow up (OR 1.0, 95% CI 0.78 to 1.29, six months follow up (OR 0.91, 95% CI: 0.69 to 1.19) or three months follow up (OR 0.49, 95% CI 0.09 to 2.74) despite being associated with increased use: single use: OR 2.52; 95% CI 1.72 to 3.70; multiple use: OR 4.13; 95% CI 1.77 to 9.63) and faster use (weighted mean difference -14.6 hours; 95% CI -16.77 to -12.4 hours). Advance provision did not lead to increased rates of sexually transmitted infections, increased frequency of unprotected sex or changes in contraceptive methods. Women given emergency contraception in advance were just as likely to use condoms as other women. The authors concluded that women should have easy access to emergency contraception however advance provision of emergency contraception does not reduce pregnancy rates although it has no adverse effects on sexual and reproductive behaviour or outcomes.

Klerman L V. 2004. **Another Chance: Preventing Additional Births to Teen Mothers**. Washington DC: The National Campaign to Prevent Teen Pregnancy.
http://www.thenationalcampaign.org/resources/pdf/pubs/AnotherChance_FINAL.pdf

In 2002 in the U.S. 21% of all teen births were to teens who were already mothers. The aim of this review was to determine what types of programmes are most effective in preventing additional pregnancies and births to teen mothers. Nineteen studies of experimental or quasi-experimental design conducted in the U.S. since 1980 were included in the review. It appears that the most important factor in preventing subsequent pregnancies may be the relationship between the teenage mother and the person working with her so continuity of care from the first pregnancy is important as is home visiting. Little is known about the attitudes of teen mothers, their partners, peers, families and neighbours to second births but it may be that some communities do not share the belief of policy makers that closely-spaced pregnancies in teens are detrimental. It has been suggested that early childbearing is an adaptation made by poor urban African-Americans to structural constraints and reduced life-expectancy. The review concludes with a list of things that an effective and comprehensive pregnancy prevention programme should do.

Swann C, Bowe K, McCormick G, et al. 2003. **Teenage pregnancy and parenthood: a review of reviews Evidence briefing**. London: Health Development Agency.
http://www.nice.org.uk/niceMedia/documents/teenpreg_evidence_briefing.pdf

This evidence briefing is a review of 21 reviews (systematic reviews, meta-analyses and narrative reviews) published since 1996 that are either about interventions to prevent teenage pregnancy or about the effectiveness of interventions to improve outcomes for teenage parents. Twenty reviews were relevant to the issue of preventing teenage pregnancy and these were classified as category 1, 2, or 3 according to the level of evidence they provided. In each evidence category the individual reviews are summarised under a series of headings, usually data pool, findings and conclusions. There were only three reviews relating to interventions to support teen parents so these are summarised by review. There follows a discussion section summarising the strength of evidence for the various interventions and practices to prevent unwanted teenage pregnancies and to improve outcomes or teenage parents.

DiCenso A, Guyatt G, Willan A, et al. 2002. **Interventions to reduce unintended pregnancies among adolescents: systematic review of randomised controlled trials**. BMJ, 324(7351), 1426.

This systematic review included 26 RCTs, both published and unpublished, assessing the effectiveness of primary prevention strategies in delaying sexual intercourse, improving use of birth control and reducing unintended pregnancies in adolescents. Interventions did not delay first intercourse in either young women (pooled odds ratio (POR) 1.12, 95% CI 0.96 to 1.30), or young men (0.99, 0.84 to 1.16); did not increase use of birth control by young women at every intercourse (0.95, 0.69 to 1.30) or at last intercourse (1.05, 0.50 to 2.19), or by young men at every intercourse (0.90, 0.70 to 1.16) or at last intercourse (1.25, 0.99 to 1.59); and did not reduce pregnancy rates in young women (1.04, 0.78 to 1.40). Four abstinence programmes and one school-based sex education programme were associated with an increase in number of pregnancies among partners of young male participants (1.54, 1.03 to 2.29). One study found that there were significantly fewer pregnancies in young women who received a multifaceted programme (0.41, 0.20 to 0.83), but baseline differences between the control group and the intervention group in this study favoured the intervention. The authors concluded that primary prevention strategies that have been evaluated to date are not effective at delaying first intercourse, improving use of birth control or preventing pregnancy.

Useful Websites and Other Publications

Guide to Community Preventive Services. 2010. **Prevention of HIV/AIDS, other STIs and Pregnancy: group-based comprehensive risk reduction interventions for adolescents**. Atlanta, GA: Centers for Disease Control and Prevention. www.thecommunityguide.org/hiv/riskreduction.html

This CDC website reports briefly on systematic reviews evaluating comprehensive risk reduction interventions (those that promote behaviours which reduce the risk of pregnancy, HIV and other sexually transmitted infections) delivered to groups of adolescents in school or community settings. The Task Force on Community Preventive Services recommends these interventions based on the findings and meta-analysis results from the systematic reviews (which included 62 studies with 83 study arms). The website also reports the results of an economic review of ten studies.

Davis AJ. 2011. **Intrauterine devices in adolescents**. Current Opinion in Pediatrics, 23(5), 557-65.

This is an accessible article on IUDs and their use in adolescents. It explains that current data indicate that modern IUDs are highly effective and safe and do not affect long term fertility or increase sexually transmitted diseases.

Department for Children Schools and Families, Department of Health (U.K.). **Teenage pregnancy Strategy: Beyond 2010**. London: Department for Children, Schools and Families, Department of Health (U.K). https://www.education.gov.uk/publications/eOrderingDownload/00224-2010DOM-EN.pdf

This British strategy document is an update of the previous 1998 Teenage Pregnancy Strategy and it sets out ways to ensure that all young people:

- receive the information, advice and support they need – from parents, teachers and other professionals – to deal with pressure to have sex; enjoy positive and caring relationships; and experience good sexual health; and
- can access and know how to use contraception effectively when they do reach the stage that they become sexually active, so they can avoid unplanned pregnancies and sexually transmitted infections (STIs).

Appendix Two contains a series of case studies from various places in the U.K.

Meyrick Jane. 2002. **An evaluation resource to support the Teen Pregnancy Strategy**. London: Health Development Agency. http://www.nice.org.uk/niceMedia/documents/eval_teenpregnancy.pdf

The purpose of this publication is to provide guidance on project or programme evaluation for the following groups: Those directly involved in project planning and evaluation, those commissioning evaluations, and teenage pregnancy coordinators and others who have roles supporting or assisting project and strategy evaluation.

Health Development Agency. 2001. **Teenage pregnancy: an update on key characteristics of effective interventions**. London: Health Development Agency. http://www.nice.org.uk/niceMedia/documents/teenpreg.pdf

This concise bulletin draws on the research evidence to summarise what is known about the key characteristics of successful interventions and programmes for young people that aim to reduce the rate of teenage pregnancy. After a brief introduction on the target audience there is a discussion about ”what works” under the headings of community interventions, educational interventions, and health service interventions, followed by information on interventions that appear promising but have not, as yet, been fully evaluated.