The bell rings for the beginning of the second period. A small group of Secondary III girls are chatting on their way to class. “I could easily skip this course... Preventing pregnancy... More talk about contraception. Let me tell you, no way is it going to be me who goes in front of the class this year to unroll the condom on the banana.” Another girl adds: “It’s true, this course is useless. We already know everything about methods of contraception.”

Do you, like the students, feel that we have already discussed everything there is to be discussed with adolescents about preventing pregnancies? That they seem well informed about contraceptive methods? And that up to a certain point you feel you are not teaching them anything?

Nonetheless, teenage pregnancy is still a current social problem. According to data compiled by the government of Québec (2001), the rate of pregnancy amongst adolescents remains high and the number of voluntary terminations of pregnancy is still increasing.
How is the pregnancy rate calculated? It is done by adding births, spontaneous and induced abortions, and stillbirths. The rate is always expressed per 1,000 persons (Direction de santé publique de Montréal, 2003). For example, in Canada in 1997 it is estimated that the rate of pregnancy among adolescents between 15 and 19 years old was 42.7 per 1,000 (Statistics Canada, 2000).

SUGGESTION: mathematics teachers could use these data to explain how rates are calculated or to pose various problems dealing with this social phenomenon. For example: What region of Québec has the highest rate of teenage pregnancy? What criteria are used to determine that a statistical incidence has become worrisome and requires specific actions?

TEENAGE PREGNANCY: THE NUMBERS
In Québec about 1 in every 12 teenage girls becomes pregnant before reaching the age of 18, while about 1 in every 4 becomes pregnant before reaching the age of 20 (Rochon, 1997 in Massé and Léonard, 2003). In fact, according to the record of live births maintained in Québec’s registry of demographic events, a little more than 3,000 infants are born every year to mothers aged less than 20 years. Moreover, the rate of increase in pregnancies amongst the youngest adolescents is even more troubling: 1 in every 1,000 adolescent girls now becomes pregnant at the age of 15 years, a rate 5% higher than it was 10 years ago (Rochon, 1997a in Tremblay, 2001).

As for the teen abortion rate, it is steadily increasing. The rate in Québec increases by 4% every year. In Montreal it is 70%, the highest level in the province (Rochon, 1995 in Loignon, 1996). In Québec, the average rate is around 0.8 per 1,000 for 10-14 year olds, and 21.9 per 1,000 for 15-19 year olds (Gouvernement du Québec, 2001).

CONSEQUENCES OF TEENAGE PREGNANCY
A large fraction of the adolescents who continue their pregnancies come from disadvantaged or dysfunctional socioeconomic milieus. They are getting younger and, in many cases, they are themselves the daughters of adolescent mothers (Charbonneau et al., 1989 in Cardinal Remete, 1999; Morazin, 1991). They usually work at jobs that are low in pay and prestige (Charbonneau et al., 1989 in Cardinal Remete, 1999; Morazin, 1991). Nonetheless, the arrival of an infant entitles them to employment-assistance benefits (Coudé-Lord, 1997 in Cardinal Remete, 1999).

Teenage pregnancy is the principle reason for dropping out of school in Québec for 50% to 67% of girls, that is to say for about 1,000 teenage girls (Forget, Bilodeau and Tétrault, 1992 in Tremblay, 2001).

According to Loignon (1996), adolescent mothers frequently face the following consequences: social isolation, inadequate life skills, under-schooling, ill treatment, stress, and depression. Similarly, studies carried out in Canada and the United States have shown that young mothers run more risks of giving up school or reaching a lower level of education and, in consequence, of running up against a professional ceiling, or of missing out on employment opportunities. All of these factors combine to lead them into dependence on employment-assistance benefits (Tipper, 1997).

Though some adolescents may benefit from the support of their family and friends, the picture is not particularly encouraging.

1. The teen abortion rate is the number of induced abortions per 1,000 women aged 15 to 19 (Statistics Canada, 2000).
THE ROLE OF THE YOUNG MAN

Unfortunately, the scant literature that exists on adolescent paternity paints a less-than-rosy picture of young fathers. Among others, Des Rosiers-Lampe and Frappier (1981) stress that the adolescent male puts little effort into his new role as father, which seems too onerous to him (Cardinal Remete, 1999). The young man often leaves the infant’s mother during the pregnancy or within two years of the birth (Loignon, 1996). However, in certain cases, lack of “triangulation” on the part of the young girl may be a factor. The term “triangulation” refers to the cohesion of the family triangle (father, mother, and child). Some adolescent mothers decide to keep their children so as to supply the love they lack, and do not want to have the father around. In other cases, the young man has to face the hostility of the young girl’s family, even if he wants to invest in the child (Loignon, 1996). On the other hand, some young men do not want to make an effort and acknowledge their roles as fathers (Loignon, 1996). Though data and studies on paternity are scarce, it nevertheless seems plausible that certain adolescents take their role as fathers very seriously and fully assume their new responsibilities.

We have to think about ways to prevent teenage pregnancy. What will be stressed, among other things, is resistance to contraception, one of the main causes of adolescent pregnancy. Suggestions will be made so that teachers and interveners can, by taking a new approach when raising the subject of preventing pregnancy, foster the acquisition and maintenance of contraceptive behaviour. It is not enough for young people to know how to put on a condom; they also have to know how to negotiate condom use with their partners. Thus, beyond the technical aspects of contraception, certain behavioural aspects have to be addressed. Green and Kreutzer (1991) specify that the following factors influence the adoption of a behaviour:

**FACTORS THAT FACILITATE ACTION**
- Skills
- Absence of barriers or other external sources of resistance

**FACTORS THAT PREDISPOSE TO ACTION**
- Sociodemographic variables
- Knowledge
- Perceptions: severity, vulnerability, control
- Beliefs
- Attitudes
- Standards

**FACTORS THAT REINFORCE ACTION**
- Immediate environment
- Friends
- Models
- Parents

Furthermore, the researchers noted factors specifically relevant to the use of a means of contraception.

**RESISTANCE TO CONTRACEPTION**
Most authors agree that one of the factors explaining teenage pregnancy is resistance to contraception (Loignon, 1996; Dufort, Guilbert, and St-Laurent, 2000; Cromer et al., 1997). Resistance affects contraceptive behaviour in two ways: either no contraceptive is used, or the method used is inadequate.

Inadequate use usually comes down to three problems with use of a contraceptive method:
1. Delay between the beginning of sexual relations and the use of a contraceptive method (Bataille, 1991 in Dufort, Guilbert, and St-Laurent, 2000).
2. Irregular use of a contraceptive method (Baldassarre, Forget, and Tétreault, 1994; Brindis et al., 1994 in Dufort, Guilbert, and St-Laurent, 2000)
3. Prematurely stopping a contraceptive method (Oakley et al., 1991 in Dufort, Guilbert et St-Laurent, 2000). For example, taking a contraceptive pill irregularly or inadequately (missing doses, taking doses out of sequence, or faulty synchronization in taking a new packet) amounts to non-compliance with the established prescription and thus constitutes premature stopping (Rosenberg et al., 1995).

Since adolescents find it difficult to follow with rigour a contraceptive method, we have to focus our educational efforts on reinforcing their motivation.
DIFFICULTIES WITH CONTRACEPTION

Loignon (1996) lists 21 difficulties adolescents have with contraception. To clarify this account, we present here only the principle difficulties, which are also more suited to learning activities and group discussion.

Fear of self-assertion and of rejection

According to Loignon (1996), low self-esteem and self-confidence facilitate agreeing to a non-protected sexual relationship. Thus it is not uncommon that a young girl fears that her partner will reject her if she refuses to have sex, or if she insists that he use a condom (Loignon 1996). This fear of rejection on the part of girls is a major aspect of the problem must be tackled.

Inversely, do teenage girls leave their partners if their boyfriends propose using condoms or adopting a contraceptive method? Would they not see such partners as safe and responsible lovers? And why, moreover, do people believe right away that the majority of boys leave their girlfriends when the latter propose a protected sexual relationship?

One must not forget that in certain cases it may be the boy who is too timid to bring up the subject of contraception with his partner. Since it is often thought that it is the boy who most resists condom use, it would be interesting to question boys and girls on this issue: What would be the most convincing arguments, tips (choices between different techniques), and formulas or key phrases that would persuade your partner to use a contraceptive method?

Sexual precociousness

Sexual maturity is often reached before psychosocial maturity. Thus some adolescents have an active sexual life before they have reached psychosocial maturity (Tremblay, 2001). In fact, the average age at which the first sexual relationship occurs today is 15, some 3 or 4 years younger than for the previous generation (Bourque, 2002). Adolescents who are initiated earlier to sexuality are not necessarily equipped with adequate cognitive, emotional, and social tools for dealing with the difficulties and risks associated with sexuality (Nakkab, 1997 in Tremblay, 2001; Turcotte, 1994 in Tremblay, 2001; Peterson et al., 1995 in Tremblay, 2001). These risks include, of course, unplanned pregnancy and sexually transmitted infections (STI). It seems appropriate, then, when offering sex education to adolescents, to raise the aspect of postponing sexual risks include, of course, unplanned pregnancy and sexually transmitted infections (STI). It seems appropriate, then, when offering sex education to adolescents, to raise the aspect of postponing sexual relationships. Postponement involves two linked concepts: abstinence and continence. As Jocelyne Robert (2002) explains, continence is synonymous with chastity, which suggests refusal of all sexual pleasure, while abstinence consists in abstaining from certain sexual activities. In other words, sharing certain erotic practices, but without penetration (Robert, 2002). It is not a question of advocating abstinence, but rather of letting adolescents know that they are not obliged to have an active sex life, and that they have every right to want wait before having their first sexual relationship. Refusal to engage in risky sexual behaviour does not at all prevent tenderness, caresses, gentle words, and moments of great closeness in which one learns to feel good with another person. This intervention will also reassure adolescents who have not yet had their first sexual relationship.

The inability to prevent or anticipate a sexual relationship/encounter

Since adolescents live in the ‘here and now’, which does not leave them time to think about contraception and get organized (Loignon, 1996), it is important to encourage the adoption of contraceptive behaviour as a preventive measure. In the absence of a prior agreement about condom use, rather than rely on one’s partner, it is better to obtain a condom yourself. Young people can get into the habit of carrying condoms with them. Furthermore, if they are in a couple, even if they have not yet had sex, they can discuss the possibility of using birth control pills. A teenage girl can take contraceptive pills without her partner’s knowledge so as to avoid having a discussion for which she does not yet feel ready. Finally, there is nothing stopping boys and girls from thinking about contraception even though they are not in a couple. They can thus be in a position to protect themselves even though they had not anticipated having sexual relations. It is true, however, that there are prejudices not only about girls who have condoms with them—she is “easy”, a slut—but also about boys with condoms—he’s a womanizer, he was already planning to have sex. These myths discourage the adoption of contraceptive behaviour; adolescents discourage the adoption of contraceptive behaviour in their fellow adolescents who dare not assume their contraceptive responsibilities for fear of being accused of having specific sexual intentions. However, since the condom is the only method that offers protection against STIs, it is important to let students know that the ideal would be to combine condoms and pills, or to use both condoms and Depo Provera. Similarly, it would be very appropriate to inform them about the emergency birth control pill so that they can react if they forget to use contraception or if what they use fails. (You will find more information in Le petit bulletin de formation personnelle et sociale, Winter 2004, available at http://www.msss.gouv.qc.ca/itss).

In other respects, it could be interesting to discuss sharing the costs of buying condoms and birth control pills. Should the boy buy the condoms and the girl buy the pills? Are there other ways to share the costs?

Absence of motivation

According to Loignon (1996), the pill every day requires great discipline, especially when sexual relations are very sporadic. Although taking the pill is easy, adolescents often forget to do so. Indeed, they forget to take three pills a month, on average (Balassone, 1989 in Dufort, Guilbert, and St-Laurent, 2000). Moreover, compliance depends on how motivated the person is to adopt this contraceptive method. Motivation is weakened by fear of side effects and health repercussions that stem from personal anxiety or from environmental factors, notably the opinion of others (Dejen et al., 1997).

As for condoms, the same story recurs: at the beginning of a relationship the partners often use condoms, but as soon as they consider that their relationship is stable, they stop doing so. Interventions with adolescents should take account of this reality (De Visser and Smith, 2001). Thus, interventions with adolescents who have occasional partners should provide them with the tools they need to negotiate the use of condoms. As for adolescents who have sex with stable partners, the intervention should recommend condom use appropriate to the couple’s behaviour (De Visser and Smith, 2001). For example, let us take a stable couple that decides to use the pill as their only method of contraception. In this case, the partners should get tested before stopping condom use to be sure they do not have STIs. At the same time, it would be appropriate to find out how the adolescents feel about sexual exclusivity within the couple.

Finally, the fact the adolescents are more worried about the risks of pregnancy than about the risks of STIs could explain why condoms are unpopular, especially when they already use another method of contraception (De Visser and Smith, 2001).
## MYTHS ABOUT PREGNANCY AND CONTRACEPTION

Myths serve to maintain ignorance about the risks of pregnancy (Leignon, 1996). Here is a table of various myths that could be subjects of discussion with students.

<table>
<thead>
<tr>
<th>MYTH</th>
<th>REALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The girl cannot become pregnant during her first sexual encounter.</td>
<td>A single sexual encounter is enough to become pregnant or to contract an STI.</td>
</tr>
<tr>
<td>The girl cannot become pregnant if she has not yet begun to menstruate.</td>
<td>Ovulation occurs 14 days before the onset of menstruation. Since she cannot know when she will begin to menstruate for the first time, the girl is at risk of becoming pregnant if she has unprotected sex about 14 days before her first period.</td>
</tr>
<tr>
<td>It is impossible to become pregnant while menstruating.</td>
<td>The fertile period can begin during menstruation, especially if the woman has a short menstrual cycle.</td>
</tr>
<tr>
<td>If the boy pulls out before ejaculating, there is no risk of getting the girl pregnant.</td>
<td>Even if the boy pulls out before ejaculating, there are sperm in the pre-ejaculatory fluid, and thus a risk of pregnancy.</td>
</tr>
<tr>
<td>A woman cannot become pregnant if she does not have an orgasm.</td>
<td>Pregnancy occurs when the sperm fertilizes the woman’s egg, and this can happen whether the woman has an orgasm or not.</td>
</tr>
<tr>
<td>Pregnancy cannot occur if the sexual encounter occurs standing up, or with the woman on top.</td>
<td>The positions taken during a sexual encounter have nothing to do with whether fertilization occurs or not. When sperm are released in the woman’s vagina, biological processes guide them towards the cervix of the woman’s uterus, no matter what position she assumes while having sex.</td>
</tr>
<tr>
<td>A woman cannot become pregnant if she has a vaginal douche after having sex.</td>
<td>A vaginal douche is not effective in preventing pregnancy. After a sexual encounter, sperm penetrate through the cervix and are therefore out of reach of the liquid solution of the vaginal douche. Moreover, according to Germain and Langlis (1990), it can take sperm from one to several hours to reach the Fallopian tubes. Moreover, after sperm have reached these tubes they may remain fertile for several days (generally, for 3 days.)</td>
</tr>
<tr>
<td>Birth control pills make you put on weight.</td>
<td>The low-dose oral contraceptives used these days have no serious side effects, and do not cause weight change in most women.</td>
</tr>
<tr>
<td>Birth control pills cause cancer.</td>
<td>When all things are considered, birth control pills reduce the risks of cancer. Though the pill slightly increases the incidence of breast cancer in women aged over 35, this risk remains minimal. More importantly, the pill reduces by more than 50% the risk of ovarian and uterine cancer.</td>
</tr>
<tr>
<td>Birth control pills protect against STIs.</td>
<td>The condom is the only contraceptive method offering such protection.</td>
</tr>
<tr>
<td>Birth control pills should be taken for a limited time only.</td>
<td>Most healthy women can take the pill from puberty until menopause. The effectiveness of the pill does not decrease as the woman ages.</td>
</tr>
<tr>
<td>Birth control pills begin to be effective at the first dose.</td>
<td>Depending on the day on which a woman begins to take the pill, she may have to wait for a full menstrual cycle before she can count on it to prevent pregnancy.</td>
</tr>
</tbody>
</table>

Based on the website [http://www.sexualityandu.ca/eng/teens/CN/mythsrealities.cfm](http://www.sexualityandu.ca/eng/teens/CN/mythsrealities.cfm)
HOW TO INTERVENE
The Québec Education Program recommends raising the subject of teenage pregnancy within the general educational theme Health and Well Being). The recommended educational goal is to “lead the student to take a thoughtful approach in developing healthy life habits in the context of health, welfare, sexuality, and safety” (Ministère de l’Éducation du Québec, 2004). Moreover, the educational theme Science and Technology also includes elements dealing with the prevention of pregnancy.

However, according to a study by Dufort, Guilbert, and Saint-Laurent (2000), the ideas generally raised in sex education courses are the advantages and disadvantages of contraceptive methods, their modes of use, and their rates of effectiveness. Adolescents stay away from sex education classes that are based on anatomy or technical aspects of sexuality (Cloutier, 1994 in Tremblay, 2001). Moreover, they say they are bored by the repetition of content from year to year in courses on preventing pregnancy (Dufort, Guilbert, and Saint-Laurent, 2000). Teachers spend too much time on the theory of contraception, the adolescents say, rather than concentrating on the importance of adopting appropriate contraceptive behaviour. “It is as if knowledge of prevention methods remains abstract, without ever really being integrated into young people’s daily experiences” (Dufort, Guilbert, and Saint-Laurent, 2000).

Thus the importance of highlighting the consequences of a pregnancy during adolescence, self-assertion, the capacity to negotiate, the difficulties with adopting and sticking to adequate contraceptive behaviour, and the role of boys in contraception. This is much more than just unrolling a condom on a banana or a dildo in class.

Educational activities on the theme of pregnancy prevention should include boys, who are often largely overlooked, and show them that they too have an important role to play in the process of contraception. They have to be encouraged to question themselves about pregnancy. Often the decision to either terminate a pregnancy or continue it to term is taken exclusively by the teenage girl. Boys are rarely involved in making this decision. The only real power they have is to use a contraceptive method adequately. In summary, they have the choice of using protection or not, but they rarely have the choice of keeping the baby or not. Finally, you can inform the young people about the relevant resources available in your school and neighbourhood, and invite key interveners to speak.

Conclusion
Even if we sometimes feel that our educational efforts to prevent pregnancy are met with adolescent indifference, these efforts are necessary. It is up to us to innovate, to make lively, original presentations and to intervene with information that goes beyond the technical so that what we say has more bearing on adolescents’ reality. It is important to create a thoughtful environment and to foster dialogue so that adolescents become fully aware of the real stakes involved in getting pregnant at this age. Managing sexuality is not what adolescents are good at; at this period of life it is truly difficult to balance the desire to please and the hope of a seductive glance, with prevention of the risks of an active sex life.
TWO 65-MINUTE SESSIONS

SCENARIO 1: Caroline has the unfortunate habit of forgetting to take the pill when she falls in love. Subjects to discuss: In your opinion, why does Caroline forget to take the pill? Does the fact that she is in love affect her contraceptive behaviour? What would you say to her to encourage her to take her pill properly? What tips would you give her? How could her boyfriend get involved?

Duration: 10 minutes

SCENARIO 2: Because Martin’s girlfriend fears that he will leave her, she has decided to stop taking the pill (without telling him) and so become pregnant and be sure of keeping him. Questions to discuss: What do you think of this situation? What can boys do to make sure that such a situation does not occur?

Duration: 10 minutes

LEARNING OBJECTIVES
To identify the myths going around about pregnancy and contraception.
To discuss the perspective roles of girls and boys in contraceptive behaviour.
To identify elements that are likely to reinforce motivation to use contraceptives.

The students stay in their places. The session leader starts a discussion about the activity just completed. Students who have taken notes may share their ideas.

• How did the students who took part in the debate feel?
• What are the roles of the boy and of the girl in contraception?
• Would switching the roles have changed the debate?

Duration: 20 minutes

All students return to their places. The session leader presents the projected scenarios on overheads. He or she reads the scenarios to the group and proposes discussion subjects. Subjects must raise their hands to answer questions.

CONCLUSION
Review the objectives of the activity just held in class. Question the young people about what they learned from the two sessions. A final word: thinking about contraception (boys or girls) and taking responsibility for these choices shows considerable maturity. And while it is not easy to be perfect, it is important to take one’s sexual health seriously. “Accidents” can sometimes happen and be corrected later, but other cases require very important and delicate decisions. This is why preventing teenage pregnancy is much more than just knowing about the existence of contraceptive methods.

Duration: 5 minutes
**BIBLIOGRAPHY**


SITE INTERNET