Your Choices Matter:

How Your Health Today Impacts Your Health Tomorrow

Facilitator's Guide

saskatchewan
preventioninstitute
our goal is healthy children

The information for this manual is based on Saskatchewan Prevention Institute's (2009) report ***Infant Mortality in Saskatchewan: Evidence to Inform Public Health Practices.*** For more information on infant mortality in Saskatchewan or any of the following modifiable risk factors, please visit: http://www.skprevention.ca/?s=infant+mortality+in+saskatchewan&submit. The report also contains a reference list for further reading.

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Saskatchewan Prevention Institute

The Saskatchewan Prevention Institute is a non-profit organization, founded in 1980. Our mandate is to reduce the occurrence of disabling conditions in children. We raise awareness by using primary prevention methods. We provide training, information, and resources, all of which are based on current best-evidence. We believe that children of all abilities have the right to the best physical, social, and emotional health possible.

The Saskatchewan Prevention Institute has long-term committed support from:

- Community-at-Large
- Government of Saskatchewan
- Kinsmen Telemiracle Foundation
- Saskatchewan Abilities Council
- University of Saskatchewan

The Saskatchewan Prevention Institute is guided by a Board of Directors, an Executive Committee, a Medical Advisory Committee, and a Program Advisory Committee.

What is primary prevention?

Primary prevention efforts aim to prevent disabling conditions from occurring by eliminating or changing risk factors that can occur before or during pregnancy or after birth. In this series of lessons, it refers to modifying risk factors that can occur before pregnancy.

Primary prevention is the responsibility of both society and individuals. Examples of primary prevention include:

- Testing for and treating sexually transmitted infections (STIs) before and during pregnancy helps to prevent transmission of STIs to the fetus.
- Immunizing to prevent diseases like polio, measles, and whooping cough.
- Avoiding alcohol during pregnancy prevents Fetal Alcohol Spectrum Disorder.

What is the *Your Choices Matter* video and Facilitator's Guide?

Your Choices Matter is a tool for primary prevention. This video is focused on raising awareness about the impacts of youths' early life choices on the health of their future children. This includes decisions about drug and alcohol use, diet and exercise, relationships, vaccinations and regular health care, and sexual activity. To access the video, please follow http://www.skprevention.ca/infant-mortality/#Your%20Choices%20Matter%20Video.

Saskatchewan youth were involved in the creation of this video through the Saskatchewan Prevention Institute's Infant Mortality Youth Advisory Committee. The goal is to improve the preconception health of young people and decrease the incidence of infant mortality in Saskatchewan.

This video and facilitator's guide can be used to engage youth and communities to have conversations about the choices they can make today to ensure the best health outcomes for themselves and their future children. The guide provides background information and several lesson plans, which can be used in a classroom or group, to address the various topics introduced in the video. The video itself is meant to introduce the topic and begin discussions; the lesson plans are a way to take this a step further.

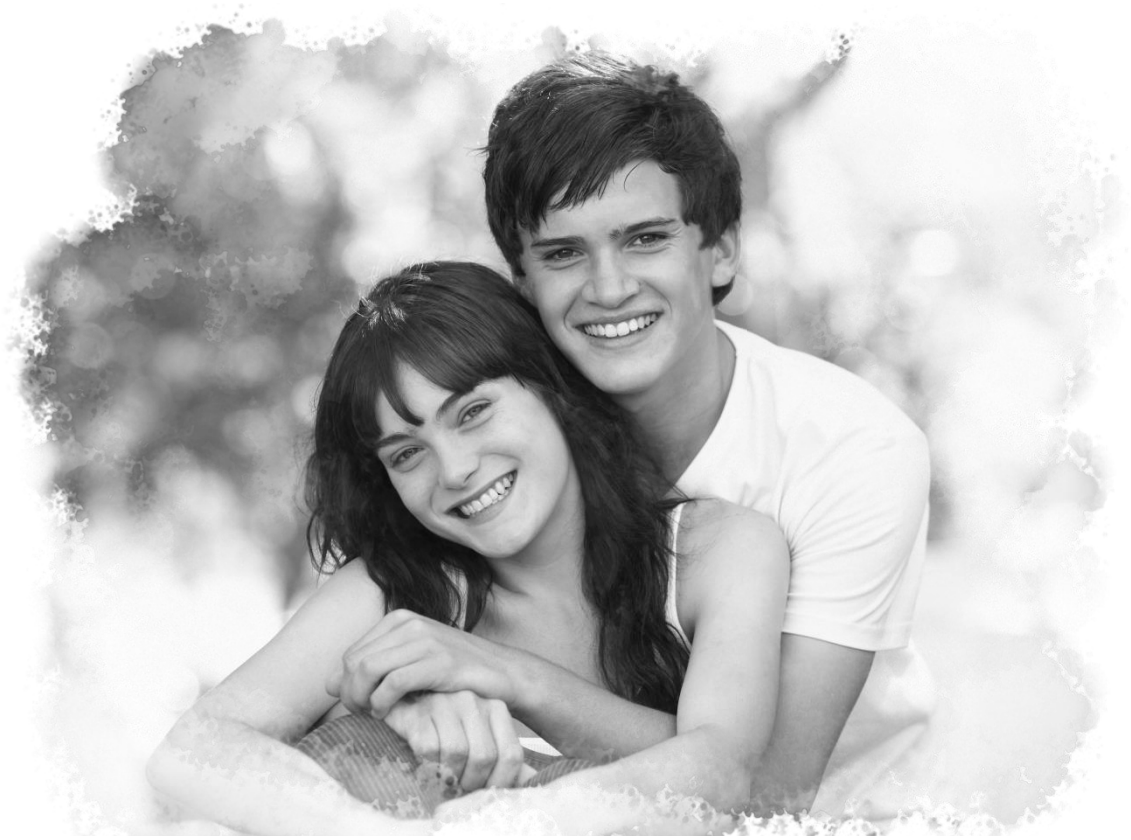
What is preconception health?

Preconception health refers to the physical, mental, and emotional well-being of both men and women of childbearing age (ages 14-44) prior to becoming pregnant. This includes planned or unplanned pregnancy.

Since only women can become pregnant, why is preconception health important for males?

Typically, when discussing preconception health, the focus is centered on the female. She carries the baby and her actions directly impact the health of the baby. Of course, in order to become pregnant a male is also involved.

The effects of a male's health on the health of an unborn child are not as profound as the effects of the female's health. However, they are still important. There are several ways that a male partner's health can impact the outcome for the infant. For example, untreated Sexually Transmitted Infections (STIs), smoking, and violence can impact the baby's health and the health of the mother.



Why should youth care about preconception health?

There are several reasons why young people should care about preconception health.

1. Being healthy today leads to being healthy tomorrow.
2. There are several ways that behaviours and decisions of youth today can impact their future health. Examples are being involved in unhealthy relationships or smoking.
3. Small steps can be taken today by young people to increase their health.
4. The health of future children is impacted by the behaviours of their parent(s) years before the pregnancy occurs. This includes improving the chances of a baby living past her first year of life.
5. Half (50%) of pregnancies in North America are unplanned. Most adolescent pregnancies are unplanned, which makes it even more important for young people to be healthy.

What is infant mortality?

Infant mortality refers to the death of an infant within the first year of life. Infant mortality is measured as the infant mortality rate (IMR), which is the number of deaths for infants less than one year of age per 1000 live births in a given population.

Infant mortality rates are used internationally to determine the overall health of given populations; therefore, infant mortality is referred to as a universal health indicator. Although not all cases of infant deaths are preventable, e.g., severe congenital abnormalities, examining infant mortality rates in a given population can help to determine if there are behavioural or social factors that are affecting the health of a population. Interventions can then be tailored to the specific needs of a community.

Why is it important to know about infant mortality?

Saskatchewan has one of the highest infant mortality rates in Canada.

Some risk factors for infant mortality, such as housing conditions and education, cannot always be changed by individuals. Instead, addressing these issues will take collaborative, community strategies and also advocacy and collaboration with local, provincial, and federal governments.

On the other hand, behavioural risk factors, for the most part, can be changed. Unplanned pregnancy, for example, is a major risk factor for infant mortality that is highly modifiable by the couple. Prevention of a pregnancy can be achieved by choosing to abstain from sex, using highly effective methods of birth control, or planning the pregnancy with the advice of a primary healthcare provider.

By making positive, healthy choices before pregnancy, future complications and adverse health outcomes may be avoided.

What are the modifiable risk factors for infant mortality?

The following pages outline modifiable risk factors for infant mortality. The information is from Saskatchewan Prevention Institute's (2009) report ***Infant Mortality in Saskatchewan: Evidence to Inform Public Health Practices.*** For more information about infant mortality in Saskatchewan or any of the following modifiable risk factors, please go to http://www.skprevention.ca/?s=infant+mortality+in+saskatchewan&submit. The report also contains a reference list for further reading.

Adolescent Pregnancy: Teen mothers are more likely to deliver low birth weight babies, have preterm births, and have lower rates of prenatal care than mothers in older age groups. These factors increase the risk of adverse health outcomes, including infant death and poorer health throughout childhood.

Alcohol Use: Alcohol is the most frequently used drug in Saskatchewan. It is a widely used teratogen among women of childbearing years and is the leading cause of neurological damage in children. Alcohol interferes with the normal development of the baby's growing cells. Alcohol use at any time during pregnancy can cause a lifelong disability with mental, physical, learning, and behaviour problems (Fetal Alcohol Spectrum Disorder). Alcohol can cause more damage to a developing baby than other legal and illegal drugs.

Chronic Health Conditions: Diabetes, circulatory diseases, and respiratory diseases are three conditions that can impact infant mortality. Having a planned pregnancy, access to reliable birth control, and having chronic diseases closely monitored and controlled can decrease the risk to the pregnancy and infant.

Environmental Pollutants: Tobacco smoke, pesticides, and other environmental toxins have been shown to increase the risk of low birth weight and preterm births.

High Levels of Stress: Chronic stress may be an important determinant of preterm birth as it leads to reduced immune functioning and increases susceptibility to infections. Stress can have both direct and indirect effects on birth outcomes by impacting a mother's emotional and physical health.

Illicit Drug Use: Babies born to mothers who abuse substances are at risk of being born addicted to the same drugs. The babies will need intensive acute care support early in the postnatal period to wean them off the effects of these drugs.

Insufficient Vitamin and Mineral Intake: Taking 0.4 mg of folic acid supplement before and during pregnancy can decrease the risk of having a baby with a neural tube defect, e.g., Spina Bifada, by 50% in most women. It is important that all women of childbearing age take folic acid supplements, even if they are not planning a pregnancy, as neural tube defects can occur before a woman even knows that she is pregnant. In addition, adequate intake of vitamins and nutrients is critical to personal health and the health of an unborn child.

Lack of Adequate Health Care and Testing: Regular checkups by a physician will help ensure that both parents are healthy and the baby will be provided with the best conditions in which to grow.

Lack of Social Support: Babies born to mothers with lack of social support in the early part of pregnancy weighed an average of 200g less than babies born to mothers with social support. The physical and emotional impacts of low social support have been reported to increase maternal stress, anxiety, and depression. Infant mortality rates for unmarried mothers have been shown to be 1.8 times higher than for married mothers.

Lack of Vaccinations: Many diseases that can be prevented by vaccination can cause damage to the fetus and/or can be passed on to the baby at birth. For example, if a mother has Rubella (German Measles) during pregnancy, this can be passed on to the baby at birth and is associated with miscarriage within the first three months of pregnancy.

Poor Mental Health: The mental health of the mother has been found to impact the health of her baby. Depression and other psychological issues have been associated with delivering a preterm or low birth weight infant. These are predisposing factors to infant mortality.

Poor Oral Health: There is evidence for a link between maternal periodontal (oral) disease and risk of preterm birth and low birth weight. While the evidence is mixed, it generally points to an association between oral health and risks related to infant mortality.

Smoking/Tobacco Use: Maternal smoking is the principle cause of low birth weight and has been associated with preterm births, sudden infant death syndrome, and respiratory distress syndrome. Smoking and exposure to second-hand smoke can impact the growing fetus. Following birth, second-hand and third-hand smoke can cause the baby to be sicker than if he had lived in a smoke-free home.

STIs: Sexually transmitted infections, including HIV, are recognized as increasing the risk of preterm delivery.

Unhealthy Weights: Research has shown a link between maternal obesity and stillbirth (i.e., the birth of a dead fetus), very low birth weight babies, as well as early neonatal death (i.e., death of a live-born baby within the first seven days of life). The percentage of babies admitted to the intensive care department is 3.5 times higher in the case of maternal obesity. As well, being severely underweight can impact fertility.

Unhealthy Relationships and Violence: The risk of domestic violence starting or intensifying during pregnancy is 4 times greater than when a woman is not pregnant. Violence during pregnancy can lead to maternal suicide, postpartum depression, poor nutrition, and the use of alcohol, tobacco and other drugs as coping mechanisms. It can also result in injury to mother and fetus as well as infant death.

Unplanned Pregnancy: Unplanned pregnancies are at higher risk of resulting in preterm or low birth weight newborns.

How can you begin health conversations with youth?

It can be difficult to encourage young people to think about their current health, let alone their health in the future and the health of their potential children. However, all of the risk factors listed on the previous pages have an impact on the personal health of youth today as well as their health tomorrow. Young people may exhibit one or more of the modifiable risk factors (e.g., alcohol use, unprotected sex, STIs, unhealthy eating, and unhealthy relationships).

This manual has been arranged so that you can use the suggested questions to begin discussion. Additional questions may include:

- What are some of the risk factors that were shown in this clip?
- Have you experienced or seen any of these risk factors among your peers?
- What are some of your dreams for the future? How might decisions you make today impact these dreams?
- What are some steps that you can take to help improve your health today?
- How can you convince your peers about the importance of caring for their health today?
- Who can you share this video clip with? Why would you want to do this?

How can you approach the risk factors discussed in this guide in the classroom?

The suggested lessons in this manual address common risk factors and can help guide discussion about the impact of these risk factors for youth today and in the future, and for their future children. There are several activities for each suggested lesson. Curriculum links are provided for each activity.

Connections to the Saskatchewan Education Curriculum

Lessons	1	2	3	4	5	6	7
Grade 8: Health Education							
USC8.1 Analyze and establish effective strategies of support for the purpose of helping others increase health enhancing behaviours.			★				
USC8.2 Investigate and analyze the impact of in/formal supports and services (including testing and diagnostic services) available to individuals, families, and communities infected with/affected by non-curable infections (including HIV and Hepatitis C).	★						
USC8.4 Demonstrate an understanding of the impact of violence (including but not limited to emotional abuse, physical abuse, sexual abuse, spiritual abuse, and neglect) on the well-being of, and support needs for self, family, and community.							★
USC8.7 Assess the social, cultural, and environmental influences on and support for sexual health knowledge, attitudes, behaviours, and decisions.	★	★					
DM8.8 Appraise the role of support in making healthy decisions related to family roles and responsibility, non-curable infections/diseases, violence/abuse, body image, sustainability, and sexual health.	★	★	★	★			★
AP8.10 Design, implement, and evaluate three seven-day action plans that establish supports for responsible health actions related to family roles and responsibilities, non-curable infections/diseases, violence/abuse, body image, sustainability, and sexual health.			★	★			
Grade 8: English Language Arts							
CC8.6 Use English language to interact purposefully, confidently and respectfully in a variety of situations, including one-to-one, small groups, and big group discussions (expressing feelings and viewpoints and contributing to group harmony).	★	★					
Grade 9: Health Education							
USC9.4 Analyze the norms and cultural expectations (e.g., community and cultural) associated with romantic relationships as a means to effectively plan for related health promotion.	★						★
USC9.6 Analyze the health, economic, and social supports and challenges of addictions (e.g., tobacco, shopping, alcohol, gambling, Internet, drugs) on self, family, community, and the environment.		★					
USC9.9 Develop and demonstrate personal insight, motivation and skills necessary to enhance and promote sexual health and avoid compromising sexual attitudes and behaviours.	★						
DM9.11 Analyze the health opportunities and challenges, and establish personal health promotion goal statements related to comprehensive approaches to safety, non-curable infections/diseases, romantic relationships, addictions, tragic death and suicide, chronic illness, and sexual health.						★	
Grade 9: English Language Arts							
CR9.7 Read independently and demonstrate comprehension of a variety of information texts, including expository essays, historical accounts, news articles, and scientific writing.				★	★		
CC9.5 Create and present a variety of visual and multimedia presentations to best represent a message for an intended audience and purpose.			★	★	★		

Lessons	1	2	3	4	5	6	7
Grade 9: English Language Arts							
CC9.6 Use oral language to interact purposefully, confidently, and appropriately in a variety of situations, including participating in one-to-one, small group, and large group discussions (e.g., prompting and supporting others, solving problems, resolving conflicts, building consensus, articulation and explaining personal viewpoints, discussing preferences, speaking to extend current knowledge, and celebrating special events and accomplishments).	★	★			★		
Grade 9: Science							
RE9.4 Analyze the process of human reproduction, including the influence of reproductive and contraceptive technologies.	★						
Level 10: Wellness							
W7 Promote sustainable well-being by planning for and engaging in movement activities, alone or with others, that enhance the health related (i.e., cardiovascular endurance, muscular strength, and body composition) and skill related (i.e., power, agility, speed, reaction, time, balance, and co-ordination) components of fitness.				★			
W8 Assess how relationships with others (e.g., self, peers, family, teachers, opponents, coaches, and employers) influence all dimensions of wellness.		★	★		★		★
W11 Make informed decisions regarding personal healthy eating practices based in connections to wellness.				★		★	
Level 10: English							
CCB10.2B Create and present a visual or multimedia presentation supporting a prepared talk on a research issue, using either digital or other presentation tools.		★			★		
Level 10: Psychology							
To understand how the thoughts, feelings, and behaviours of people are influenced by the actual, imagined, or implied presence of others.	★	★			★		
Level 20: Health Sciences							
HS20-HC2 Examine how physical and societal beliefs impact ethical decisions regarding health care.					★		
HS20-HB1 Analyze the anatomy and biology of human health.			★		★		
HS20-NU2 Analyze dietary choices based on personal and cultural beliefs and a scientific understanding of nutrition.				★			
Level 20: Communication Studies							
Recognize the importance of effective communication in a variety of situations. Recognize that communication involves problem solving and decision making.	★	★					
Level 20: Media Studies							
Recognize the way in which various mass media shape their messages, and construct a sense of what the world is or how it works.		★					★
Level 20: Environmental Science							
ES20-A31 Assess the impact of air quality on human and environmental health and the need for regulations and mitigating technology.		★					

LESSON 1:
Healthy Sexual Decision Making, Adolescent Pregnancy, and Sexually Transmitted Diseases

Rationale

Over half of all pregnancies in North America are unplanned. Saskatchewan has one of the highest rates of adolescent pregnancy in the country and some of the highest rates of STIs, including HIV. During adolescence, youth become more aware of their bodies, sexual feelings, and desire to be involved in romantic relationships. However, youth need adequate information or support to make informed decisions. Even with this information, youth may not be able to make healthy decisions at all times; therefore, continued support is needed.

Key Understandings

- Students are able to discuss different options that they have in a variety of sexual situations.
- Students are aware of the risks of unprotected sexual contact, including STIs and unplanned pregnancy.
- Students understand different forms of birth control, including how and where to access them.

Essential Questions

- Why is it important to understand the risks of unprotected sexual activity?
- What are STIs and how can they impact your life now and in the future?
- How would your life change if you or your partner became pregnant?
- Where can you go to access testing for STIs and pregnancy?
- Where do you go to access birth control?

LESSON 2:
Alcohol, Drugs, and Tobacco Use

Rationale

During adolescence, youth often experiment with alcohol, drugs, and tobacco. Even though there are large public campaigns about the dangers of tobacco and drugs, alcohol is used widely in our society. It is important to have conversations about the impact that alcohol, drugs, and tobacco have on our communities, our families, and ourselves. Substance use is closely connected with impulsive behaviours, unprotected sexual activity, unplanned pregnancies, and sexual assault.

Key Understandings

- Students are able to discuss the impact of substance use in their communities.
- Students are aware of the risks of substance use and its connections with sexual behaviour.

Essential Questions

- Why is it important to understand the risks of substance use?
- How is substance use connected with risky sexual behaviour?
- How has substance use impacted you, your family, and your communities?
- How can you make healthier choices about substance use?

LESSON 3:
Coping with Stress

Rationale

Stress refers to an individual's emotional and physical response to situations that are new, dangerous, or a threat to oneself. Stress is an everyday occurrence. Learning to cope with stress is important and ongoing. Experiencing stress activates the flight, fight, or freeze response. Coping with stress positively leads to better overall health.

Key Understandings

- Students are able to discuss stressful daily events.
- Students learn ways to cope with stress from one another.
- Students are aware of support services available to them to help them cope with stress.
- Students will begin to develop a support system.

Essential Questions

- How do individuals experience stress on a daily basis?
- Why is it important to learn how to cope with stress?
- What are some ways that people cope with stress?
- Why is it important to develop support systems?

LESSON 4:
Nutrition and Exercise

Rationale

In today's world, the emphasis on nutrition and exercise focuses on Body Mass Index (BMI) and obesity. While BMI and obesity are important health measures, they can an obsession with body size that impacts self-image, and decreases motivation to be healthier. Increasing youths' awareness of the purpose and value of nutrients is important. It is equally important to challenge misconceptions regarding exercise so that students who are not involved in sports can understand that there are a variety of healthy exercise options available to them.

Key Understandings

- Students will understand the concept of energy in – energy out.
- Students will explore the role of micronutrients to health.
- Students will expand their understanding of exercise.

Essential Questions

- Why is it important to balance the energy that you are taking in from food with the energy you are using daily for different activities?
- What are some ways, through diet, to increase micronutrients to meet daily recommended levels?
- What are some of the ways to increase exercise levels through daily activities?

LESSON 5:
Adequate Health Care

Rationale

The reality is that many young people in Saskatchewan do not have a family doctor, and even if they do, they do not see the doctor regularly. In some communities, doctors are not available at all. Regular, yearly physicals are important not only to ensure physical health, but also to give students an opportunity to meet with their health care professional. This allows students to form a relationship in which they feel comfortable asking any questions that they may have. It also gives an opportunity to ensure that vaccinations are up-to-date and for follow-up with students who may have chronic illnesses.

Key Understandings

- To understand the importance of and the role of vaccinations in population health.
- To explore the role that regular health care can play in personal health plans.
- To develop an understanding of the importance of monitoring and controlling chronic diseases, and supporting peers who may be experiencing these diseases.

Essential Questions

- Why do they call vaccination “herd protection”? Why is there a debate about whether it is good?
- How does health care today impact not just immediate personal health but also personal health in the future?
- What are the challenges of living with a chronic illness and maintaining health?

LESSON 6:
Oral Health

Rationale

Despite the fact that oral health education receives very little attention, it can positively or negatively impact an individual's overall health. Oral health is one of the most common preventable and transmittable chronic health concerns for young people. For the most part, both dental caries (tooth decay) and periodontal disease (gum disease) are preventable.

Key Understandings

- Students will develop an understanding of the cause of both dental caries and periodontal disease.
- Students will become aware of the risks of transmitting dental caries.
- Students will explore the impact of nutrition on oral health.
- Students will discuss the link between oral health care and chronic diseases.

Essential Questions

- Why is oral health care important?
- What are dental caries and how can they be spread?
- How does nutrition impact oral health?

LESSON 7:
Healthy Relationships

Rationale

In order for students to develop a support system and healthy romantic relationships, they first have to examine the characteristics of healthy and unhealthy relationships. For all ages, this can begin by looking at their relationships with friends and supportive adults. Students can also apply this to their romantic relationships.

Key Understandings

- Students can identify healthy and unhealthy relationship behaviours.
- Students have an understanding of the importance of a healthy support system.
- Students have an understanding of the importance of healthy relationships.
- Students can identify places in their community where they can get support regarding unhealthy relationships.
- Students understand the link between unhealthy relationships and sexual violence as well as the increased risk of violence during pregnancy.

Essential Questions

- Why is it important to understand the difference between healthy and unhealthy relationships?
- What are the signs of an unhealthy relationship, either with a friend or a romantic partner?
- How can being in an unhealthy relationship affect your health now and in the future?
- Where can you go for help if you are in an unhealthy relationship?