



A BIKE DAY

GUIDE TO ORGANIZING A BIKE TOUR
WITH YOUNG PEOPLE





This document was prepared by the Direction des communications and the Direction du développement en sécurité routière of the Société de l'assurance automobile du Québec, in partnership with the Vélo Québec Association.

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This guide is based on the *Guide d'encadrement sécuritaire d'activités de plein air – Vélo – Normes, exigences et procédure*, prepared in partnership with Vélo Québec under the coordination of the Conseil québécois du loisir. This guide is available at the following Web site: www.loisirquebec.com.

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INTRODUCTION

THE INTEREST YOUNG PEOPLE HAVE FOR BIKING IS STILL THRIVING TODAY. THEY OFTEN VIEW IT AS A MEANS OF TRANSPORTATION THAT PROVIDES THEM WITH A SENSE OF INDEPENDENCE AND FREEDOM THEY DID NOT NECESSARILY HAVE BEFORE. FOR YOUNG PEOPLE, BIKING IS A MEANS OF EXPANDING THEIR ACTIVITIES WITHIN THE COMMUNITY OR BEYOND TO NEIGHBOURING MUNICIPALITIES. BIKING IS ALSO AN OPPORTUNITY FOR THEM TO DEVELOP SKILLS THEY WILL FIND USEFUL LATER IN LIFE WHEN TRAVELLING.

CYCLISTS UNDER AGE 15 REPRESENT 5.7 VICTIMS PER 100,000 INHABITANTS AND ARE AT THE HIGHEST RISK FOR SERIOUS OR FATAL INJURY. THIS AGE GROUP ACCOUNTS FOR THE HIGHEST NUMBER OF CYCLISTS INVOLVED IN ROAD ACCIDENTS. HENCE THE IMPORTANCE OF PROPER PREPARATION AND A KNOWLEDGE OF SAFETY RULES. A BIKE TOUR THAT IS WELL ORGANIZED AND SUPERVISED IS AN OPPORTUNITY TO COMBINE A PRACTICAL MEANS OF TRAVEL WITH ENJOYMENT AND THE CHANCE TO PRACTISE SAFETY RULES.

A BIKE TOUR IS ALSO AN OPPORTUNITY TO INSTIL THE IMPORTANCE OF A HEALTHY LIFESTYLE: EXERCISE AND A PROPER DIET. THIS IS SOMETHING YOU CAN EXPLORE WHEN PREPARING A BIKE TOUR.

THE SOCIÉTÉ DE L'ASSURANCE AUTOMOBILE DU QUÉBEC (SAAQ) HAS PUBLISHED THIS GUIDE TO HELP SPORTS ACTIVITIES DIRECTORS ORGANIZE BIKE TOURS FOR YOUNG PEOPLE, PRIMARILY AGES 10 TO 14. IT CONTAINS PRACTICAL TIPS ON PLANNING A BIKE TOUR, PROVIDING FOOD FOR PARTICIPANTS, OBEYING SAFETY RULES, AND EVERYTHING ELSE YOU NEED TO KNOW ABOUT ORGANIZING THIS TYPE OF OUTING.

SAFE BIKING!

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INDIVIDUALS WILL
FIND THIS GUIDE
HELPFUL

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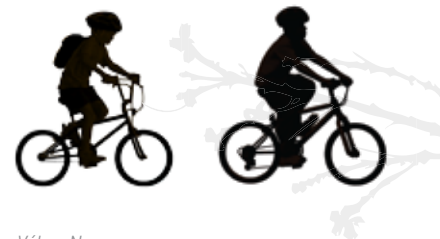
THE FOLLOWING INDIVIDUALS WILL FIND THIS GUIDE HELPFUL:

- INDIVIDUALS WHO WOULD LIKE TO ORGANIZE A SHORT BIKE TOUR WITH A GROUP OF YOUNG PEOPLE AGES 10 TO 14.
- TEACHERS:
 - in cycle three elementary school;
 - in cycle one secondary school.
- ELEMENTARY AND SECONDARY SCHOOL PHYSICAL EDUCATION TEACHERS.
- SPORTS ACTIVITIES DIRECTORS
 - in day camps;
 - in vacation camps;
 - in youth centres;
 - involved in student athletics;
 - who would like to organize a short bike tour.¹

OBJECTIVE OF THE GUIDE

This guide compiles information on safe biking practices, as well as tips from specialists on organizing a short bike tour (one day or less). It is designed to provide a checklist for organizers of a bike tour for young people. Although not exhaustive, it lists the principal steps in planning a day of biking: preparing equipment, performing roadside repairs, providing food for participants and obeying safety rules.

The emphasis is on sharing responsibilities between young people and adults. A bike tour project can be an opportunity to build group cohesion, which will make the outing a rich and rewarding experience for all. The **Participant's Notebook** available in the Appendix was designed with this in mind.



1. To organize a longer bike tour, consult the *Guide de pratique et d'encadrement sécuritaire d'activités de plein air – Vélo – Normes, exigences et procédures*, prepared by the Conseil québécois du loisir and published by the Vélo Québec Association.

PLANNING A BIKE TOUR

CONDITIONS NECESSARY FOR A BIKE TOUR

Before choosing a biking route, it is important to ensure that the individuals participating are mature enough to bike independently and can maintain their balance. They must be able to perform basic maneuvers: moderating speed as appropriate to the situation, avoiding obstacles, stopping and dismounting.

It is important to ensure that each participant has a signed and completed **parental consent form** and **personal health record**. You can use the models provided in the Appendix to make as many copies as you need and you can adapt them to suit your own requirements. If necessary, list the responsibilities of each person—parents, organizers and young people—on the forms.

CHOOSING THE TYPE OF BIKE TOUR

Determine the type of tour based on the participants' abilities (novice cyclists and physical condition of participants):

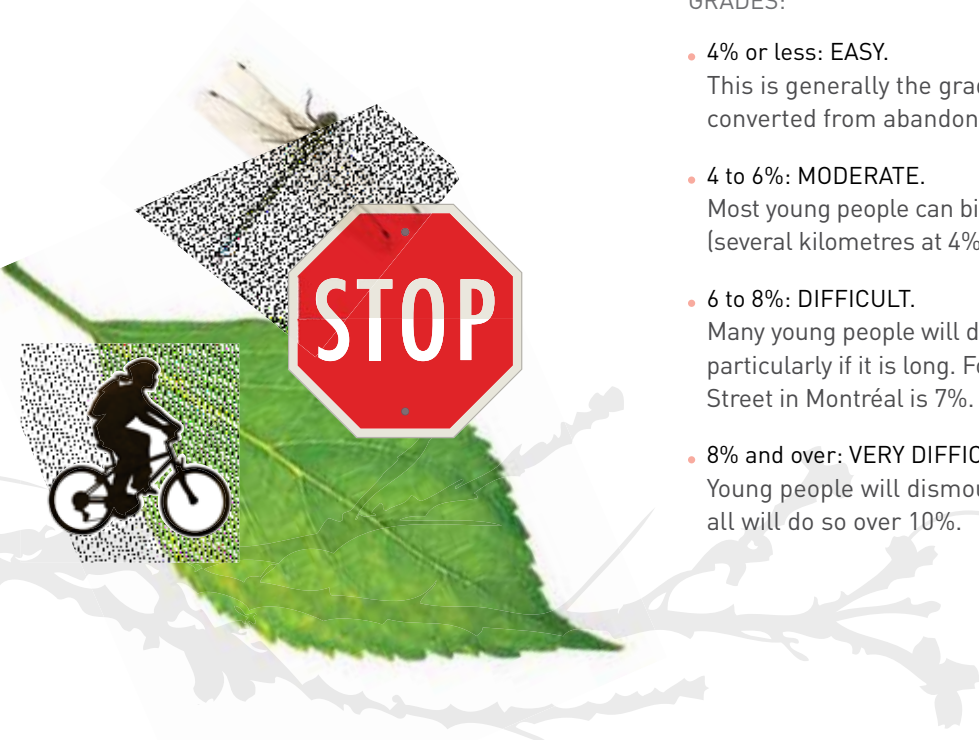
- LONG TOUR: tour lasting several days.
- SHORT TOUR: brief outing lasting an hour or several hours including lunch.

Factors to consider when determining the length of a tour

- TOPOGRAPHY: the grade of a slope determines how difficult a route is to travel.

GRADES:

- 4% or less: EASY.
This is generally the grade found on trails that were converted from abandoned railway lines.
- 4 to 6%: MODERATE.
Most young people can bike up this grade, unless it is long (several kilometres at 4%, several hundred metres at 6%).
- 6 to 8%: DIFFICULT.
Many young people will dismount on this type of grade, particularly if it is long. For example, the grade on Berry Street in Montréal is 7%.
- 8% and over: VERY DIFFICULT.
Young people will dismount on this type of grade; almost all will do so over 10%.



- **SPEED:** the average biking speed for young people is 10 to 15 km/h, including 10 minute breaks each hour, depending on age and physical ability. For example, the Tour des enfants bike tour (designed for children ages 6 to 12), is 20 km long and can be completed in 2 hours on average.
- **WIND:** if wind speed is 10 km/h or over, it will interfere with forward momentum. Wind can cause some degree of fatigue if it is blowing head on or from the side, but it does propel you forward when it is blowing from behind. Gusts of wind can make it hard for inexperienced young riders to control their bicycles. This is a factor to consider on the day of a bike tour.

SETTING UP AN ORGANIZING COMMITTEE AND ASSIGNING RESPONSIBILITIES

Once you have determined the type of bike tour you would like to organize, select members of an organizing committee, who will be responsible for the success of the activity.

The committee should draft a list of tasks to be carried out, determine the type of supervision necessary and assign responsibilities according to the preferences and talents of each individual.

CHOOSING AN ITINERARY

- Preferably choose a route that follows bicycle paths, roads with a bikeway (designated roadway, bicycle lane or paved shoulder) and roads where the posted speed limit is 50 km/h or less. The information resources listed in the Appendix can be used to plan an itinerary.
- Identify landmarks and rest stops along the route. Plan for stops based on the length of the tour.
- Travel the length of the route sometime before the day of the activity to determine if there are any challenges (hills, busy intersections, level crossings, bridges with a roadway of wood or of metal grating, sharp curves at the bottom of a hill, etc.) and finalize the itinerary accordingly.
- Give each participant a copy of the itinerary.
- Before you set out, provide a brief introduction to bike touring, including basic rules of conduct and tips to ensure a safe outing (see “The Bike Tour” section).

SUPERVISION

Supervision is essential to ensure that an outing with young people goes as planned.² The individual in charge of supervising cyclists must have a comprehensive knowledge of road safety rules, as well as the skills and know-how necessary to supervise individuals on the road for a variety of outings: club trips, bicycle touring excursions, group tours or special events.

Adult-youth ratio

Determine the number of supervisors and escorts you will need, based on the age of the participants and the size of the group (regardless of the length of the tour):

2. Vélo Québec offers a cyclist supervision training course that lasts one and a half days. (http://www.velo.qc.ca/velo_quebec/formations.php).

- **With children under age 12:** one supervisor and one adult escort per group of 10 children is recommended.
- **With teenagers age 12 or over:** the dynamics are more “interactive” in this situation, because teenagers are better able to assume responsibility. The ratio should therefore be one supervisor to every 14 participants. One participant can be appointed as leader or person in charge of breaks, for example. In addition to making the tour more proactive, assigning responsibilities to participants instills a sense of pride and greater safety awareness. Teenagers trust a supervisor who trusts them. The presence of an adult escort is therefore not essential.

Roles and responsibilities of supervisors, escorts, leaders and rearguards

Role and responsibilities of a supervisor:

- Assume the role of person in charge of the group.
- Communicate with participants in an appropriate manner.
- Clearly explain the role of a supervisor to the group.
- Know the itinerary.
- Spot potential dangers.
- Apply road safety rules that apply to cyclists.
- Apply emergency procedures in the event of an accident.
- Familiarize yourself with the code of conduct for bike tour supervisors.

Role and responsibilities of an escort:

- Lead the group.
- Give orders.
- Supervise young people who are more familiar with cycling.
- Stop at the locations selected by the supervisor.

Role and responsibilities of a leader:

- Lead the group on the correct route. To do so, it is important to know how to read a map and be able to find one’s bearings.
- Travel at a rate of speed that allows members of the group to stay together; in other words, travel at the rate of speed of the slowest cyclist.
- Determine which maneuvers are necessary and how to perform them.

Responsibility of the rearguard:

- Remain at the rear and ensure that no one lags behind the group.

BEFORE LEAVING

- Carry a list of the addresses and telephone numbers of participants and numbers where parents can be reached in the event of an emergency, along with emergency telephone numbers (police station, hospital).
- Provide parents with the following information: the itinerary, time of departure and time of return, cell phone number of an adult escort.
- Ask participants to bring along the following items:
 - health insurance card;
 - some spending money;
 - parental consent form to participate in the bike tour (see Appendix).
- If one of the following situations occurs, the supervisor or escort must weigh the options and determine if the activity should be cancelled or postponed or if a bike tour in progress should be terminated.

Unfavourable weather conditions

- Extreme heat: over 30° C
- Thick fog
- Storm or downpour

Inadequate equipment

- Individuals or group lacking safety equipment
- Loss or serious breakdown of essential equipment

Poorly prepared group

- Lack of motivation
- Poor attitude
- Misbehaviour

Severe accident or injury

- Accident involving a group member
- Route closed, with no bypass route available

TECHNICAL PREPARATION

Choosing the right size of bicycle

To ride safely, a bike should be chosen appropriate to the size of the rider. A bike that is too big or too small for a rider is hard to control and causes the rider to tire faster.

The bike's configuration has to be adjusted to the rider's size and body frame, particularly the shape and height of the handlebars and the seat adjustment. A seat that is too low can cause back and knee pain; a seat that is too high can cause hip swing, joint pain and fatigue.

To check whether the height of the bicycle frame is suited to the rider, straddle the bike above the crossbar and place both feet flat on the ground. There should be a space of at least 2 cm between the rider's crotch and the crossbar. The seat should be parallel to the ground. If the rider's leg can be fully extended when the heel is resting on the pedal, the seat is at the proper height. When the foot is in a pedalling position, the leg will therefore be slightly flexed. The handlebars should be adjusted to the same height as the seat or slightly lower.

If the bicycle frame is too big, the rider will be unstable. This causes numerous accidents, especially for young cyclists.



MANDATORY BICYCLE EQUIPMENT

Ensure that each participant is using a bicycle that meets regulations and has the following safety equipment:

- one white reflector at the front;
- one red reflector at the rear;
- one amber reflector on the front wheel spokes;
- one red reflector on the rear wheel spokes;
- amber reflectors on the pedals;
- a safe braking system.

For riding at night:

- a white front headlight;
- a red rear light.

For a long bike tour, the following items are recommended:

- a horn;
- a warning flag;
- a carrying rack or satchels;
- a rear-view mirror.

INSPECTION AND MAINTENANCE RECORD

Before setting out, inspect the following items. An inspection can be carried out by the group supervisor or the escort. If there is the slightest doubt about one or more defective parts, make the necessary repairs. A bicycle must be in perfect condition before setting out.

Items to check

- Handlebar and seat adjustment.
- Secure attachment of personal belongings, accessories, bike trailer or trailer bike (if necessary).
- Brakes:
 - brake levers operate correctly;
 - brake pads in good condition.
- Wheels:
 - tire pressure;
 - tire condition;
 - no warping.
- Derailleur operates correctly.
- No loose nuts or bolts.

KIT PREPARATION

Maintenance kit

For a short bike tour, you will need a maintenance kit consisting of the following:

- hex keys (Allen wrenches), 4, 5 and 6 mm (most common for bikes);
- a small flat-head screwdriver;
- a small adjustable wrench;
- a tire repair kit (including a fresh tube of glue);
- tire irons;
- a spare inner tube;
- a valve adapter;
- a pump.

First aid kit

The first aid kit listed in the Appendix is a kit for a bike tour lasting several days. The kit should be adapted to the number of participants and length of the bike tour.

Note: Organizers can plan to have a support vehicle follow the group to carry extra equipment that cannot be carried on bikes. This vehicle can also serve as a shuttle for cyclists who are tired or unable to continue. A support vehicle should have a bicycle rack or a trailer to carry bicycles.

PREPARATION FOR THE CYCLIST

BIKE HELMET

For a number of years now, research has shown the importance of wearing a helmet to prevent serious injury. Head injury is the cause of death in 60% of fatal cycling accidents. In a fall, the head is exposed to the highest risk of severe injury. In a crash, the helmet absorbs the force of an impact and spreads it over the surface of the helmet rather than on the head. Hence the importance of wearing a quality helmet.

- **Choosing the right helmet:**

When you buy a bike helmet, make sure that it meets one of the following performance standards: CSA, CPSC or ASTM, EN or Snell. These labels, affixed on the inside of the helmet, are a guarantee that it meets manufacturing standards.

For effective protection, it is important to adjust the helmet correctly using pads and adjustment straps. The front and back straps should meet below the ear and the chin strap should not fit too tightly. The helmet should not shift or slide down the forehead or the back of the head (see Appendix).

- The Highway Safety Code does not require use of a bike helmet. Although wearing protective headgear is recommended, it is also important to obey safety rules.
- If participants question the benefits of wearing a helmet, you can find arguments to help convince them in the “For-Against” table in the Appendix.

WHAT YOU SHOULD BRING ON A BIKE TOUR

Clothing

To ensure an enjoyable outing and to be prepared for any type of condition, wear comfortable clothing that is suited to the day’s weather. Wearing light or brightly coloured clothing will ensure that motorists can see you from a greater distance in daylight. To be sure motorists can see you at night, wear clothing with reflective strips.

For a bike tour with young people, regular clothing (Bermuda shorts, tee-shirt and windbreaker) will do. However, specialized cycling clothing (cycling shorts, cycling jersey, clip shoes, etc.) are recommended for longer and more challenging outings.

To avoid problems or injuries, here are a few factors to consider when choosing clothing or equipment.

Shoes

- Wear shoes that have a rigid sole and firmly support the foot.
- Children should not use toe clips or wear clip shoes.

Clothing

- Prevent thighs from rubbing together: wear clothing made of soft material that covers your thighs. Bermuda shorts are a good option. Cycling shorts are a specialized type of garment that protects thighs from chafing.
- Avoid wearing loose-fitting clothing that can get caught in the chain or wheel spokes.

Cycling gloves

- Wear gloves. They prevent your hands from becoming numb and developing blisters. They provide a better grip on handlebars and protect the palm of the hand from scrapes if you fall. (Gloves are better suited for long bike tours.)

Rain protection

- Avoid a poncho-type raincoat. A two-piece rainsuit is better.

Protection against wind and cold

- Choose a windbreaker or clothing that retains body heat: preferably brightly coloured for better visibility.
- Wear warm socks; avoid cotton.
- Wear a hat and gloves.

Sun protection

- Choose clothing that has long sleeves and long legs, and that will help you stay cool.
- Apply sun screen.

Food

During a bike outing, it is important to drink and eat regularly throughout the day.

For a short bike tour, a snack and water are all you need.

For a long bike tour, the rule is “eat light, eat often.” Fruit, nuts, energy bars, cereal bars, crackers and cheese are good options that keep well and are easy to carry and eat.

When cycling with young people, participants should not drink or eat while riding. (For example, you can take a break every hour to eat and drink.) The supervisor and the escort should remind participants to eat and drink regularly. Water is the best liquid to drink on any type of bike tour.

THE BIKE TOUR

RULES OF THE HIGHWAY SAFETY CODE

Under the Highway Safety Code, a bicycle is considered a vehicle. Cyclists are therefore required to follow the same rules as motorists.

It is important to make sure that participants have a thorough understanding of bicycle safety rules. Check their knowledge of Highway Safety Code rules that apply to bicycles and discuss the reasons for some of these rules.

Participants should also be reminded of what is required and what is prohibited under the rules. Make sure also that they are familiar with hand signals.

Required under the rules:

- Signal in advance whenever you are preparing to turn or brake (see Appendix). This rule must be obeyed strictly when traveling in a group, so as to ensure you are not struck by the cyclist behind you.
- Travel on the far right side of the roadway, with the direction of traffic.
- Obey mandatory stop signs, red lights, road signs and traffic signals, as well as the rules for a right turn at a red light.
- Travel in single file (maximum 15 people), not side by side.
- Hold the handlebars while biking.
- Use a bicycle lane if one is available.
- Yield to traffic that has the right of way.
- Turn on the white headlight and red rear light when biking at night.



Prohibited under the rules:

- Biking on expressways (“autoroutes”) and their on- and off-ramps.
- Biking on the sidewalk.
- Biking while listening to headphones.
- Carrying a passenger, unless the bicycle has a seat specifically for that purpose.
- Biking between two lanes of vehicles that are stopped in traffic or are moving.
- Drinking alcoholic beverages while biking.
- Biking with a defective brake system.
- Biking through private property to avoid road signs or traffic signals.
- **For children under age 12**, biking on roads where the posted speed limit is over 50 km/h, unless they are traveling in a bicycle lane or are accompanied by an adult.

Right turn at a red light

When making a right turn at a red light, motorists and cyclists are required to come to a full stop behind the pedestrian crosswalk or the stop line. Cyclists must carefully check all directions because they are required to yield the right of way to pedestrians, cyclists and vehicles that have already entered the intersection. It’s a matter of safety and courtesy.

Cyclists should also avoid stopping alongside a truck or bus, outside of the driver’s field of vision. It is also important to make sure that a motorist preparing to make a right turn at a red light is able to see you.



Other safety rules

- Maintain a distance of one bicycle length between each cyclist. This distance should be increased to several bicycle lengths when going down a hill. Remind participants that they should always look ahead and not stare at the rear wheel of the bike in front of them.
- At a level crossing, if the railroad tracks are not at a right angle to the road the cyclists are travelling on, instruct them to dismount and walk their bikes across the tracks.
- Adults escorting the group should supervise movement through intersections. The group leader crosses at the green light, followed by the group. If the entire group does not have enough time to cross the intersection, the rearguard must take charge and tell the remaining cyclists to wait for the next green light.
- Watch for
 - car doors that could open unexpectedly;
 - vehicles exiting from a private driveway;
 - buses; never overtake a bus on the right side;
 - spaces between parked vehicles (don't ride your bike between parked vehicles).

Note: For more information, consult the *Safe Cycling Guide*, available from the SAAQ or go to the SAAQ Web site at www.saaq.gouv.qc.ca.

- For a long bike tour, also make sure that participants have mastered the following:
 - emergency braking;
 - riding up and down a hill;
 - changing gears.

IF AN ACCIDENT OCCURS

- Make plans ahead of time for emergency procedures if injuries or mechanical failures occur. Group supervisors and escorts must be notified if a cyclist is injured or if a mechanical failure is detected. Cyclists should then signal that they are going to stop and pull over to the side (onto the shoulder or grass). If necessary, a group escort should divert automobile traffic to allow emergency assistance to reach the scene.
- If an accident causes only a mechanical failure, assess the problem in a safe location, and then make the repair if possible. If the group supervisor or escort cannot repair the bicycle on site, take the necessary steps to ensure the participant is accompanied back home.
- If an accident causes bodily injury, select a safe location to administer emergency medical procedures.

EVALUATION OF THE BIKE TOUR

Discussion topics for evaluating the bike tour experience:

- Did the itinerary pose certain problems?
- What did inspection of the equipment reveal?
- What are possible solutions to improve the situation?
- Were inspection and maintenance records useful?
- Were emergency kits used and did they contain everything needed?
- Did wearing a bicycle helmet create problems for some participants?
- What were the participants' attitudes toward the rules of the Highway Safety Code?
- Did participants enjoy the experience?
- Did the bike tour pique their interest in biking?

COMMENTS OF ORGANIZERS

DID YOU KNOW?

During a break, take the opportunity to share some information and surprising facts about the world of biking.

A BIT OF HISTORY ...

Some 5,500 years ago in Sumer in ancient Mesopotamia (present-day Iraq), a circular object was devised to help carry loads over long distances. The wheel had been invented. Practical uses for the wheel, such as wheelbarrows and carts, were developed during the Middle Ages. Later the bicycle was invented.

Some claim that drawings of technical objects made in Italy in 1493 by the renowned visionary Leonardo da Vinci in fact depict bicycle components.

It was a German baron by the name of Karl Drais von Sauerbronn who designed two-wheelers in 1818. His invention was known as the “draisine” or “dandy horse.” It is described as “two cartwheels fastened together by a wooden beam.” Since the “pedal” had not yet been invented, the vehicle was propelled by the rider sitting on the wooden beam and pushing it along the ground with his feet.

In 1860, two Frenchmen, Ernest and Pierre Michaud, invented pedalling by adding a footrest to the wheel spindle, which was later transformed into pedal cranks. The chain was introduced in 1865 and tires in 1889. In the 1920s and 1930s, development of the derailleur made it more functional. In 1947, with the arrival of the dual disc, the bicycle became a very efficient personal vehicle.

The first bicycles appeared Québec City and Montreal in 1868. The cyclist was regarded as an odd and eccentric individual by onlookers! The bicycle travelled through the streets alongside carriages, carts and pedestrians, but not without causing a certain amount of annoyance. Municipalities were forced to adjust to this new vehicle and find a way to integrate it into daily life. The first municipality in Québec to create a bicycle path was Saint-Hyacinthe in 1898.

FOOD: A SOURCE OF ENERGY ...

The banana is a natural fuel packed with carbohydrates. A single banana with 25 calories supplies enough energy for a cyclist to travel five kilometres by bike. Peanut butter and banana on whole wheat bread is a high-energy food combination.

If you are starting out on a long bike tour, **don't eat too much**. It takes a lot of effort for the human body to digest its food. Instead, **eat often** because your internal engine requires a continuous supply of food. **Eat the right foods**. Foods rich in carbohydrates, such as pasta, cereals and fruit, are particularly well suited for cycling because the body stores carbohydrates in the form of glycogen, which supplies the energy necessary for sustained effort.

A LITTLE PHYSICAL SCIENCE PERHAPS ...

The force that enables a bicycle to move forward is the **ground**. The ground pushes against the wheels when the cyclist exerts force by pedalling. Newton's action-reaction law applies in this instance.

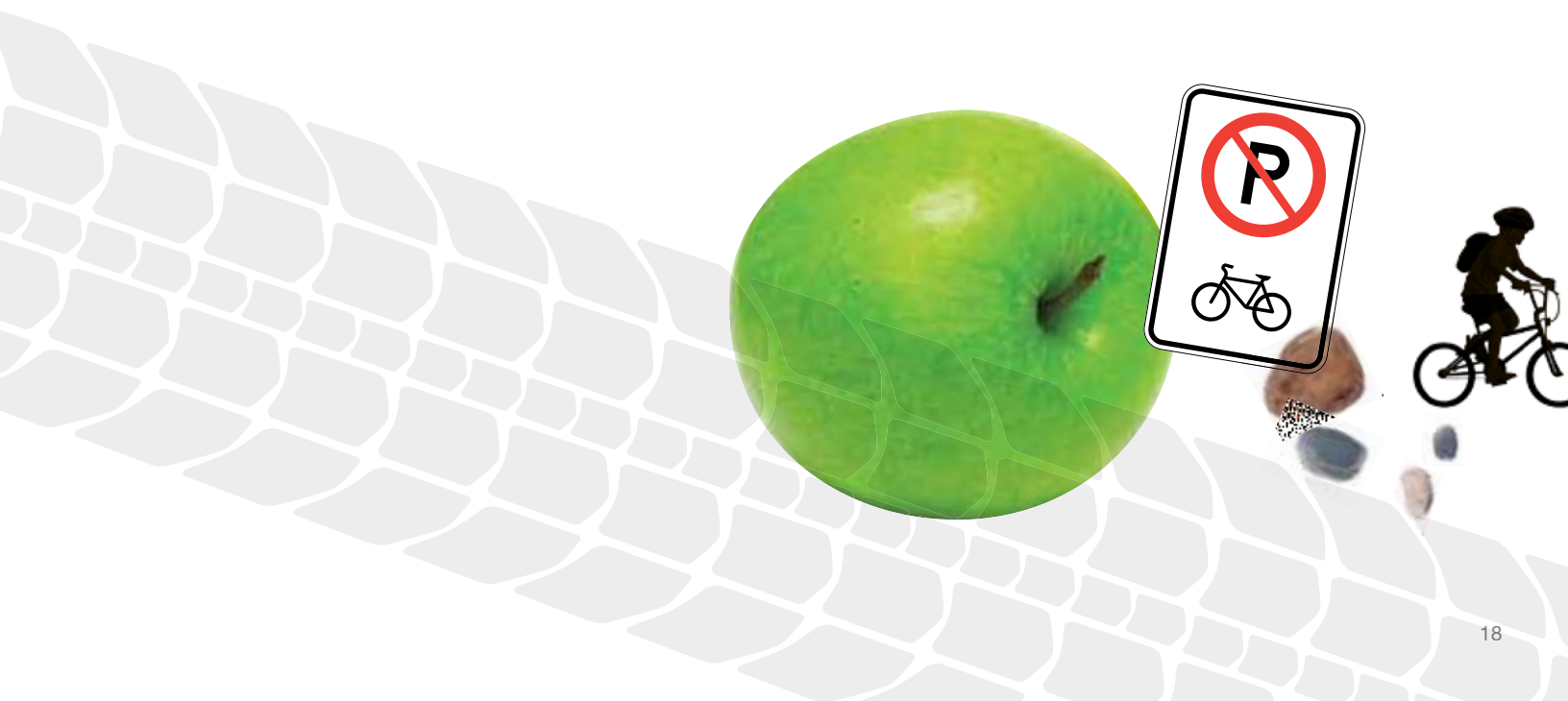
Wheel **diameter** significantly affects a cyclist's comfort level. The larger the wheel, the better it compensates for irregularities in the road surfaces (holes and bumps). It has also been noted that bicycles are safer if both wheels are the same size.

All-terrain bicycle tires consume large amounts of energy due to their size. They lose energy because their shape changes as they turn. This shortcoming, however, is largely compensated for by better traction, a smoother ride on gravel, and improved support on soft surfaces.

The different types of brake systems are not affected by rain. Wet pavement is what causes skidding when the brakes are applied.

During wet conditions, reduced friction means that cyclists should slow down, and they should also anticipate obstacles and events that may require them to brake suddenly.

Sources: « L'ADN du Vélo », in *Québec Science. Jeux de vélos*, Éditions MultiMondes.



RÉFÉRENCES

« L'ADN du vélo », *Québec Science*, Summer 1997.

BEAUDIN, Patrick, et al. *Jeux de vélos*, Montréal, Éditions MultiMondes, 1998.

CONSEIL QUÉBÉCOIS DU LOISIR. *Guide de pratique et d'encadrement sécuritaire d'activités de plein air – Vélo – Normes, exigences et procédures*, Montréal, Conseil québécois du loisir and Vélo Québec Association.

FORMATIONS REMUE-MÉNINGES. *Cadre de référence pour la sécurité dans les sorties des camps de jour*, Montréal, City of Montréal, 2005.

Guide de sécurité de certaines activités sportives et parascolaires, Montréal, Comité de gestion de la taxe scolaire de l'île de Montréal, 1995.

LABRECQUE, Michel, et Jean-François PRONOVOST. *Vélo Mode d'emploi*, Montréal, Vélo Québec, 1991, 198 p.

Le vélo à Montréal. Folder published for the exhibition presented during the 20th anniversary of the Tour de l'île de Montréal by the Musée du Château Ramezay, 2004.

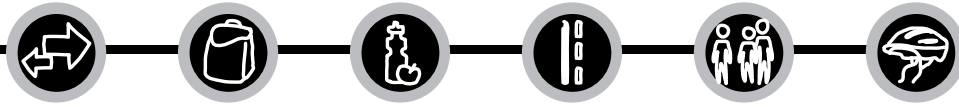
QUÉBEC . *Highway Safety Code*, R.S.Q., c. C-24.2, [Québec], Éditeur officiel du Québec.

SOCIÉTÉ DE L'ASSURANCE AUTOMOBILE DU QUÉBEC. *Safe Cycling Guide*, Québec, La Société, 2007.

VÉLO QUÉBEC. *Formation en encadrement cycliste – Carnet de cours*, Montréal, Vélo Québec, 2004, 130 p.

VIAU, Jean-Michel. *Techniques de base en peloton*, VéloPassion, 2004. Accessible through their Web site at www.velopassion.ca.





PARTICIPANT'S NOTEBOOK

Each of the young people participating in the bike tour should be involved in organizing it. By becoming involved, the individual will value the activity and will find the information acquired useful for future biking.

The approach we recommend is simple, but essential for learning new skills. The information in this guide is not exhaustive and is designed to provide guidelines for preparing a simple activity. We urge organizers to expand on the information provided, based on the needs of the group. This activity can be carried out in phases or as an end-of-year project.

OBJECTIVES OF THE NOTEBOOK

- General objective
 - Involving the young participant in the various phases of organizing a group bike tour.
- Intermediate objectives
 - 1** Learning to prepare an itinerary.
 - 2** Choosing which items to bring (clothing, personal belongings).
 - 3** Choosing the right kinds of food to bring.
 - 4** Learning bike safety rules.
 - 5** Adjusting and wearing a bicycle helmet properly.
 - 6** Familiarizing yourself with the rules for travelling in a group.

If you prefer to spend less time on this activity, we recommend beginning with the steps highlighted in bold print.

1 ITINERARY



OBJECTIVE: LEARNING TO PREPARE AN ITINERARY.

THINGS YOU WILL NEED: A MAP OF THE AREA WHERE THE TOUR WILL TAKE PLACE, AND A LIST INDICATING THE LOCATIONS YOU WILL BE VISITING, THE STARTING POINT AND THE ARRIVAL POINT.

- 1) Study the route proposed by the organizing committee.
- 2) Locate the starting point and the arrival point on the map.
- 3) Use a marker to highlight the route on the map you will be taking with you on the tour.
- 4) Assess the degree of difficulty of the route using the contour lines.
- 5) Identify the stops planned along the route.
- 6) Identify the bicycle paths you will be using, if any.
- 7) Find service areas (convenience store, picnic table, garage).
- 8) Using the scale of the map, determine the number of kilometres you will be travelling.

2 EQUIPMENT TO BRING WITH YOU



OBJECTIVE: CHOOSING WHICH ITEMS TO BRING (CLOTHING, PERSONAL BELONGINGS).

THINGS YOU WILL NEED: THE CLOTHING LIST PROVIDED IN THE APPENDIX.

- 1) **Make a list of clothing to bring along** based on information you should take into account for the bike tour (season, route, weather, etc.).
- 2) Check the characteristics of the clothing you will be wearing and determine whether your choices correspond to the needs you identified.
- 3) **Use the information sheet distributed by the organizer to list personal items you would like to bring along and determine if they are needed for the bike tour.**

3 FOOD



OBJECTIVE: CHOOSING THE RIGHT KINDS OF FOOD TO BRING.

THINGS YOU WILL NEED: THE “FOOD AND PHYSICAL ACTIVITY” SHEET.

- 1) Read the “Food and Physical Activity” sheet distributed by organizers.
- 2) **Use this list to choose foods you would like to bring along for the bike tour.**
- 3) Ask your parents if you have these food items at home. If you don’t, explain to your parents why you would like to take these foods with you on the tour (high-energy food, healthy choice, etc.) and discuss how you can obtain them.
- 4) Consider using the energy drink recipe provided.
- 5) Prepare your own energy drink using 100% pure fresh fruit juice. Find out which fruit juice is best for a bike tour.

4 SAFETY RULES



OBJECTIVE: LEARNING BIKE SAFETY RULES.

THINGS YOU WILL NEED: *THE SAFE CYCLING GUIDE*. YOU CAN OBTAIN A COPY OF THIS GUIDE FREE OF CHARGE FROM THE SAAQ OR DOWNLOAD IT FROM THE SAAQ WEB SITE (WWW.SAAQ.GOUV.QC.CA) UNDER “DOCUMENTS AND PUBLICATIONS.”

- 1) Make a list of the safety rules you know.
- 2) Compare these rules with the rules listed in the *Safe Cycling Guide*.
- 3) Using the *Safe Cycling Guide* and the list of items to check for indicated in this guide, make sure that you have performed all the necessary inspections before setting out on a bike tour (if necessary, check with an adult for the more complicated mechanical parts).
- 4) Memorize the hand signals you should use to warn other road users when you are preparing to turn or brake. Practise them.
- 5) Practise recognizing the road signs that appear along bicycle paths and make sure you know what they mean.
- 6) Find out which traffic violations cyclists are most likely to commit and the penalties for them.
- 7) Go over the rules listed in the *Safe Cycling Guide* and try to find out the reason for each rule. Then discuss this as a group. Examples: Why do cyclists have to travel with the direction of traffic? Why do they have to ride at the far right side of the road?
- 8) **Determine what is required and what is prohibited by the rules (the do’s and don’t’s of cycling).**

5 BICYCLE HELMET



OBJECTIVE: ADJUSTING AND WEARING A BICYCLE HELMET PROPERLY.

THINGS YOU WILL NEED: THE SECTION IN THE APPENDIX ON HOW TO ADJUST A BICYCLE HELMET AND THE *SAFE CYCLING GUIDE*.

- 1) Inspect the condition of your bicycle helmet (to see if it is clean, cracked, scratched, etc.). If it has ever been in a crash, it should be replaced.
- 2) **Properly adjust your bicycle helmet** using the illustration provided in the Appendix and the instructions provided in the *Safe Cycling Guide*, then check with the bike tour organizer to determine if it is properly adjusted.

6 TRAVELLING IN A GROUP



OBJECTIVE: FAMILIARIZING YOURSELF WITH THE RULES FOR TRAVELLING IN A GROUP.

THINGS YOU WILL NEED: THE *SAFE CYCLING GUIDE*.

- 1) Determine the rules you must obey when travelling in a group on a bike tour.
- 2) With the organizer, review the rules you have learned.
- 3) With the group, determine the consequences of violating these rules.
- 4) Discuss with the organizer how to handle the situation if anyone violates the rules.
- 5) Check to make sure the whole group understands the rules. If necessary, **review the rules and signals you need to know for safe cycling.**

PARENTAL AUTHORITY CONSENT FORM

Activity : Group bike tour

Date : _____

Name of participant: _____

Sex: M F

Health insurance number : _____

Name of person to contact in an emergency: _____

Mother _____

Father: _____

Address: _____

Telephone (home): _____

Telephone (office): _____

Telephone (emergency): _____

Does the participant suffer from an illness or health condition? If so, please specify.

EMERGENCY

In the event of an emergency where the participant must be taken to hospital or to a doctor, we confirm that we will contact the parents as soon as possible. If we are unable to do so, the undersigned authorizes us to allow emergency medical care to be administered to the participant, if a doctor prescribes that the participant needs such care. Any ambulance fees that apply shall be assumed by the parents.

I authorize (name) _____ to take part in the bike tour activity.

Signature of the person having parental authority: _____

Name in block letters: _____

Date: _____

PERSONAL HEALTH RECORD

GENERAL INFORMATION ABOUT THE PARTICIPANT

Last name: _____ First name: _____ Sex: M F

Health insurance number: _____ Expiry date: _____

Name of parents or guardians:

1) Tel. Home: (_____) Tel. Work: (_____)

2) Tel. Home: (_____) Tel. Work: (_____)

Contact information of two other persons to contact in an emergency:

Name: _____ Name: _____

Address: _____ Address: _____

City: _____ City: _____

Tel. : (_____) Tel. : (_____)

Relationship with family: _____ Relationship with family: _____

MEDICAL HISTORY

Has your child ever undergone surgery? Yes No

If yes, specify the date and type of surgery: _____

Does he or she have a chronic or recurring illness? Yes No

Description: _____

Does he or she have any of
the following illnesses?

Asthma Yes No

Hernia Yes No

Epilepsy Yes No

Diabetes Yes No

Other _____

Does he or she have any of
the following allergies?

Food Yes No

Pollen Yes No

Poison ivy Yes No

Insect bites Yes No

Animals Yes No

Penicillin Yes No

Other medication Yes No

Other allergies _____

Does your child have a dose of adrenaline at his or her disposal (EpiPen, Ana-Kit)? Yes No

Additional information you would like to provide regarding your child's health:

Société de l'assurance
automobile

Québec 

LIST OF CLOTHING

	WARM SEASON		COOL SEASON	
	ONE DAY TOUR		ONE DAY TOUR	
	wear	carry	wear	carry
Cotton sweater				
Wool sweater				
Anorak				
Rain coat				
Cotton socks				
Wool socks				
Cycling shorts or pants that cover mid-thigh				
Gloves and tuque				
Cycling gloves				
Sweat suit				
Cycling shoes or sneakers				
Cap or hat				
Long pants				

FIRST AID KIT

(To be adjusted based on the number of participants and the length of the bike tour)

- 24 assorted adhesive bandages
- 6 triangular bandages
- 50 mm gauze bandage rolls
- 100 mm gauze bandage rolls
- 12 gauze pads or compresses 75 mm X 75 mm
- surgical pads for compression bandages wrapped in separate packages
- 1 adhesive bandage roll 12 mm in width
- 1 adhesive bandage roll 50 mm in width
- 150 ml of antiseptic used in hospitals or disinfecting pads (benzalconium chloride)
- splints in assorted sizes
- round tip scissors
- safety pins
- 3 finger or joint bandages
- 3 pairs of latex gloves (to wear when treating individual)
- 1 emergency blanket

ARGUMENTS FOR AND AGAINST WEARING A BICYCLE HELMET

AGAINST	FOR
<ul style="list-style-type: none"> • “It’s hot.” 	<ul style="list-style-type: none"> • There are more than enough air holes.
<ul style="list-style-type: none"> • “It messes up my hair.” 	<ul style="list-style-type: none"> • Helmets are essential - they greatly reduce the risk of fatal head injuries. Be sure to adjust the pads so that the helmet fits properly.
<ul style="list-style-type: none"> • “It’s ugly.” 	<ul style="list-style-type: none"> • They come in lots of colour and shapes.
<ul style="list-style-type: none"> • “People will laugh at me.” 	<ul style="list-style-type: none"> • All serious athletes wear one.
<ul style="list-style-type: none"> • “I’m not going very far.” 	<ul style="list-style-type: none"> • A high number of accidents occur close to home.

Note : When accidents occur—sometimes resulting in a serious injury—the arguments against wearing a bicycle helmet carry little weight and suddenly seem very trivial.

HELMET ADJUSTMENT

It is important to try your helmet on to make sure that the weight, the pads and the adjustment straps are right for you.

- There should be a space two fingers wide between your eyebrows and the helmet rim.
- The straps should fit snugly against your skin.
- The side straps should meet below your ear and form a V shape under your ear lobe.
- The chin strap must fit snugly, but you should be able to insert a finger between your chin and the strap.
- Use the pads to help make for an even better fit.
- Check to make sure the helmet is properly adjusted. It should not shift to either side or slide down your forehead or the back of your neck.



HAND SIGNALS

In Québec, the Highway Safety Code requires cyclists to use hand signals when preparing to turn or brake. You must make your signal far enough in advance so that motorists can see it.



FOOD AND PHYSICAL ACTIVITY

Food is an important requirement for you to be able to participate to the fullest in any physical activity. The information below will help you understand why you need a well-balanced diet.

To exert an effort, muscles require sugar (carbohydrates) and fat (lipids).

Sugar provides quick energy, but only for a short period.

Fat provides energy over a longer period, but its effects are not immediate. That is why it's a good idea to eat fatty foods on the day before a bike tour or at breakfast on the day of the outing.

Good nutrition also includes proteins, minerals, vitamins and water.

A balanced diet should consist of

- 50% lipids: cheese, yogurt, figs, dates, nuts, eggs. These foods will help you supply energy to your muscles over a long period of exercise;
- 25% carbohydrates: honey, brown sugar, fruit, molasses, jam. These foods will help you supply energy to your muscles quickly;
- 25% proteins: meat and fish aid in growth and cell regeneration;
- vitamins: these help the body process carbohydrates, lipids and proteins. Dairy products, fruit and vegetables are a good source;
- water: this is crucial when exercising, because water is the medium in which biochemical reactions occur. Water can be replaced by fresh fruit juice, which has the added advantage of containing elements essential to nutrition. Insufficient intake of liquids can result in dehydration, particularly in hot weather.

SIGNS OF DEHYDRATION

- | | | |
|----------------|----------------|-------------------------|
| • Dry mouth | • Headache | • Fatigue |
| • Thirst | • Darker urine | • A drop in performance |
| • Constipation | | |

HOMEMADE ENERGY DRINK RECIPE (SIMILAR TO GATORADE)

- | | |
|-------------------------------------|------------------------|
| • 250 ml (1 cup) fresh orange juice | • 15 ml (1 Tbsp) sugar |
| • 350 ml (1 1/3 cup) water | • 1 pinch of salt |

SNACK SUGGESTIONS

- Vegetable juice with Ficello cheese
- Fruit and yogurt
- Cheese cubes and Ryvita crackers
- Whole grain cereal with milk
- High-fibre bread with peanut butter
- Banana bread with vanilla yogurt
- Oatmeal cakes with soymilk
- Rice cakes with fruit
- Dried apricots with yogurt
- Almonds with fruit compote
- Cereal bars with 100% pure fruit juice

FOODS YOU SHOULD CHOOSE

- | | |
|--------------------|---------------------|
| • 100% pure juice | • yogurt |
| • fruit | • bread |
| • vegetables | • Ryvita crackers |
| • homemade muffins | • sugar-free cereal |
| • rice cakes | • cereal bars |
| • bagels | |

FOODS YOU SHOULD AVOID

- | | |
|--------------------------------|------------------------------|
| • soft drinks | • bacon, sausage, butter |
| • candy, chocolate | • mayonnaise, salad dressing |
| • cakes, doughnuts, croissants | • spicy foods |
| • fruit-flavoured drinks | • fried rice, cream, etc. |
| • fatty foods | |

FINAL TIPS

Your morning meal on the day of the bike tour or your evening meal on the day before is important for storing the fat that will supply long-term energy. It is therefore important to eat a lot.

Chew your food well.

Eat and drink often, but only a little at a time during the bike tour.

Use reusable containers to carry your food, it's eco... logical!

CHECKLIST

GROUP SUPERVISOR'S CHECKLIST

On a bike tour, the group supervisor should carry the items listed below at all times. The quantity of each item may vary according to the number of participants. These items should be carried in a backpack identified by the supervisor's name, so that he or she can respond quickly to any situation that arises.

- Bike tour information sheet: containing all the information about the bike tour
- First aid kit
- Participants' medication, if necessary
- Attendance list with important information
- Personal health records of all participants
- Communication system (cell phone, walkie-talkie, etc.)
- Water bottle, sun screen and insect repellent
- Watch
- Notepad and pencils
- Cash
- Parental consent forms
- Safe Cycling Guide (extra copies)
- List of food and clothing (extra copies)
- Map of route for escorts (extra copies)

INFORMATION TOOLS FOR DETERMINING AN ITINERARY

A conventional map: This type of map contains no information about topography or the detailed information cyclists like to have, but it can be useful in calculating approximate distances.

Relief maps produced by the government of Canada, drawn to a scale of 1:50 000, contain information about topography, road surfaces (whether paved or not), the location of villages and railway lines. Since these maps are sometimes not up to date and the road system may have changed, it is a good idea to travel the route in advance of the date for which the bike tour is scheduled.

Regional or private maps, drawn to various scales, cover more area than maps drawn to a scale of 1:50 000 and show roads that do not appear on Québec road maps. However, they often contain errors and omissions, so you should travel the route beforehand. For example, a map may show only one name for a road that in fact has several different names along its route.

Specialized guides such as *Les voies cyclables au Québec* or *La Route verte du Québec* (Vélo Québec Éditions) are useful for planning an outing. They provide information about existing bicycle routes and services available to cyclists, indicate suggested itineraries, and highlight tourist attractions.

