

Cycling (Normal Risk)

Low Risk

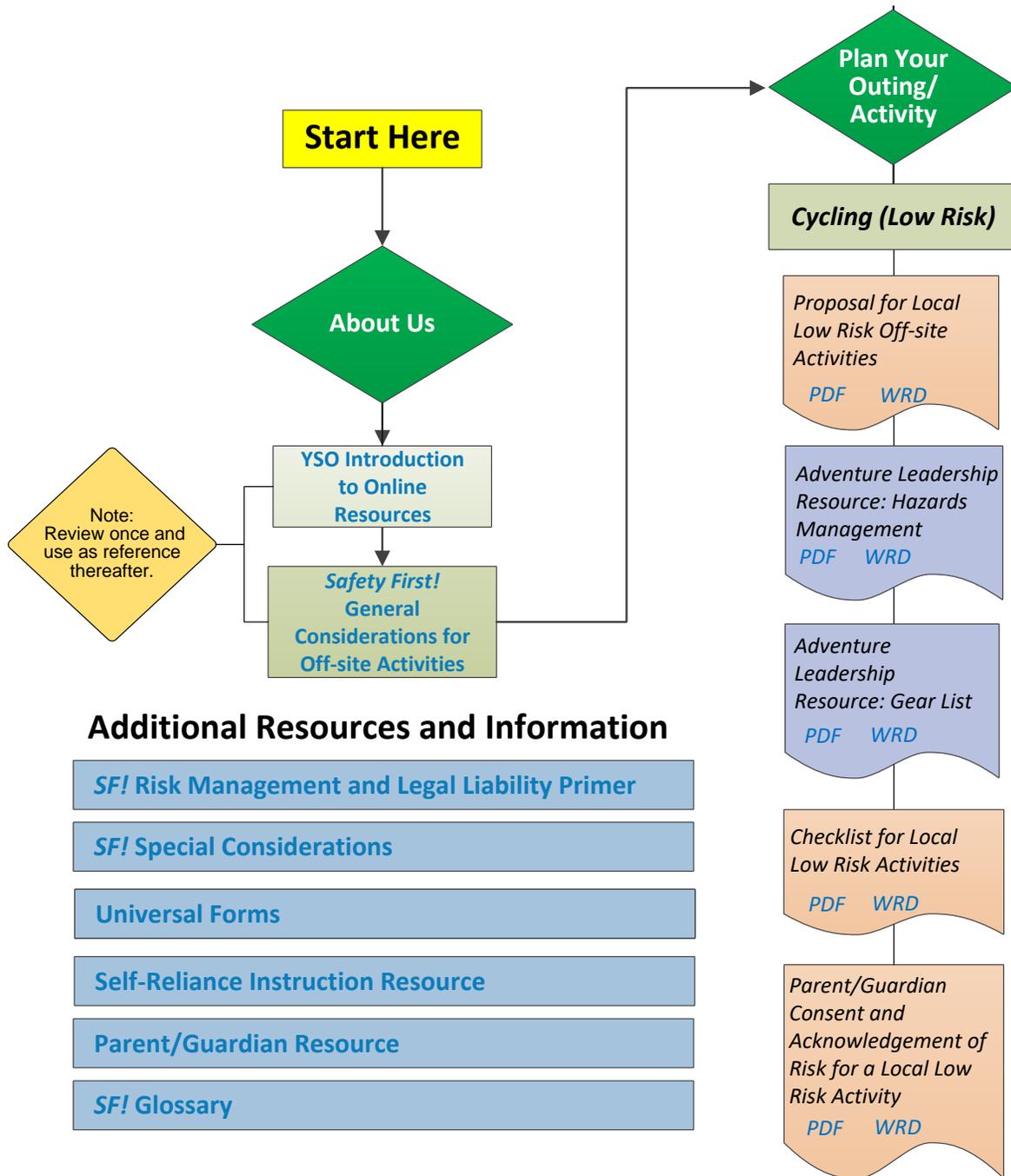
Criteria:

- Simple terrain: few junctions, gentle slopes, smooth surface;
- Local: in the community (e.g., urban park, local multi-purpose path)
- Low inherent risk in the activity; minimal skill and/or speed involved
- Clear boundaries for activity: hard to be lost for more than an hour;
- Short duration: typically (but not always) less than a half-a-day in duration;
- Near support services: e.g., buildings or vehicles accessible;
- Close to emergency services: less than 20 minutes from EMS arrival on-site;
- No specific teacher/leader qualification or certification required: an educated adult could implement the guidelines;
- Minimal preparation time of students: an hour or less student prep needed.

Cycling (Normal Risk)

Flow Chart, Steps to Success, and Safety Guidelines

Activity Instruction Grade 1+
Day Tripping (Local Low Risk) Grade 5+



Safety Guidelines

Cycling (Normal Risk)

Other than walking, cycling is the most common activity done by children and youth. It also accounts for the highest proportion of hospital visits. While this may suggest cycling should not be done as a school activity, in fact, the injuries very rarely occur during a supervised cycling activity and the injury rate speaks to how valuable some formal instruction in this lifetime activity can be. It will likely benefit the student in helping them learn to ride safely, and may, in helping prevent accidents that result in medical and other costs, be of significant value to the community.

Cycling in this context refers to bike riding on hard surface bike trails, quiet neighbourhood streets and/or soft surface packed dirt trails, but only where these are wide, gentle in grade and require minimal, if any, coping with fast-moving traffic or maneuvering through and around obstacles (e.g., narrowly spaced trees, rocks, roots, mud, streams).

Known Potential Risks

- Injuries related to motor vehicle incidents en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it;
- Injuries related to falling off the bike;
- Injuries related to colliding with a moving object (e.g., another cyclist) or with a fixed object (e.g., a tree);
- Injuries related to ill-fitting equipment, equipment malfunction, or failure to use the equipment properly;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions;
- Hypothermia due to insufficient clothing;
- Loss of manual dexterity in hands during cold and wet weather;
- Hyperthermia (e.g., heat exhaustion, heat stroke) due to insufficient hydration, overdressing, and/or overexertion in a hot environment;
- Allergic reactions to natural substances in the environment (e.g., bee or wasp stings);
- Injuries related to interactions with animals and plants in the environment;
- Psychological injury due to anxiety or embarrassment (e.g., re: body size or shape, lack of fitness and/or skill);
- Illness related to poor hygiene, and
- Other risks normally associated with the activity and environment.

Common Risk Mitigation Strategies

Cycling Activity Instruction

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the cycling activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The larger the area and/or longer the cycling activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- The teachers/leaders must be aware of and respect cycling related legislation in the province, as it relates to the cycling activity and environment.
- All teachers/leaders and accompanying supervisors on bikes should be comfortable on the type of bike and in the environment selected.
- The teachers/leaders should be very cognizant of their own riding habits and consciously work to be good role models (e.g., wear helmets, use signals consistently, walk where students are expected to walk).
- Training may be secured through Cycling Canada, Sprockids or other appropriate sources.
- If more than .5 km from the school, at least one supervisor should have first aid training, the level dependent upon the time/distance from EMS (refer to *First Aid in General Considerations for Higher Care Activities*).

Location

- Select on-site instruction stations carefully in terms of natural boundaries (or set out pylons or other indicators). Consider ground surface and pedestrian or other traffic.
- Cycling with students under grade 5 should be on-site or on another well-controlled site or route; avoiding roads shared with motor vehicle traffic as much as practicable.
- Prior to initial use of an unfamiliar route, leader or designate should do a pre-ride to assess safety and suitability.
- Avoid riding on sidewalks as much as possible; yield to pedestrians.
- If going off-site, choose routes carefully in terms of the length, grade, road surfaces (paved, gravel, dirt), and consider the presence/frequency of traffic, complex intersections, and/or other hazards.

Equipment

- If personal equipment, parents/guardians can be tasked with checking or having a bike technician check the bike over and fit it to the student prior to student using it in the activity. Bicycle inspection should include, but not limited to:
 - working brakes,
 - inflated tires with adequate tread,
 - functioning gears (if relevant), and

- secure headsets.
- bicycle fit, including correct seat height and position, pedal position, and handlebar position.
- Parents/guardians are responsible for outfitting their child/ward with correctly fitting single use approved bicycle helmets for cycling activities (see *Protective Equipment for Physical Activities in Special Considerations*), unless the school has assumed this responsibility. Cycling helmets reduce head injuries by 85-88%, are inexpensive, accessible and required by law for all minors in most provinces. Teachers/leaders must **REQUIRE** or at least **STRONGLY ENCOURAGE** their use in all cycling activities and require them for any riding on highways in BC.
- Teachers/leaders should check that students' helmet straps are properly adjusted and buckled and require students to keep them on at all times while riding.

Proper Bike "Fit" for a Child or Beginner

- Sitting on the seat with hands on the handlebar, the rider should be able to place the balls of both feet on the ground.
 - Straddling the centre bar, the rider should be able to stand with both feet flat on the ground with anywhere from a 2.5 – 5 cm (1-2") clearance between the crotch and the bar for road bikes; 7.5—12.5 cm (3-5") clearance for mountain bikes and 5 – 10 cm (2-4") clearance for commuter, touring and kids bikes depending on how aggressive the rider is.
 - The rider should be able to comfortably grasp the brakes and apply sufficient pressure to stop the bike.
- Recommend that a functioning bell or noisemaker be attached to each bike.
 - Use closed-toe, stable shoes for cycling (e.g., runners, approach shoes, cycling shoes).
 - Toe-clips or clipless pedals aid in cycling efficiency and in keeping the feet on the pedals, but riders who use them must know how to use them effectively and, more importantly, how to extricate themselves quickly if need be (especially on hills). Alternatively, if inadequate time and opportunity to learn to use these pedals safely, swap in flat pedals for the cycling activity.
 - Clothing worn should be comfortable and appropriate for the weather. Light coloured or reflective clothing and helmets are more visible.
 - Secure pant legs, as necessary (e.g., clips, elastics), to avoid snagging under chain.
 - Tie shoelaces and secure loose clothing and long hair.
 - No earphones or cell phones while riding.

Instruction

- Instruction may include, if/as relevant to the cycling activity, group and time available:
 - clothing and footwear for riding,
 - bike checks,

- correct positioning on bicycle,
 - reading and obeying traffic signs and/or bike trail signs,
 - staying alert (inattention causes accidents),
 - how to signal and carry out turns safely,
 - how to maneuver the bike (e.g., riding up and down hills, cornering)
 - when to ride and when to walk (e.g., busy intersections),
 - anticipating and responding to rough patches in the road/trail including standing water, depressions, loose gravel, rocks, ruts etc.,
 - riding single file, leaving enough space to be able to dodge obstacles without endangering others,
 - calling out obstacles and traffic for those behind,
 - riding in the same direction as the traffic (ride on the right),
 - passing others safely; call out and pass on the left,
 - stopping and looking both ways before entering the street,
 - riding in a predictable manner; looking around before swerving, turning or changing lanes and signaling where appropriate,
 - safe riding procedures for if in traffic, near parked vehicles and especially around buses and trucks,
 - staying alert and focused on the road and traffic including moving and non-moving obstacles, road conditions and weather conditions,
 - handling equipment failure like flat tires or breaking chains,
 - efficient cycling technique and gear use,
 - handling gusting headwinds and crosswinds,
 - dealing with wet riding surfaces (which can be slippery and can reduce brake function),
 - being aware of snow or ice which can be a seasonal hazard on trails,
 - basic bike maintenance (e.g., cleaning) and repair (e.g., changing a tire), and
 - how to fall/put the bike down safely.
- The relevant rules of the *Motor Vehicle Act* must be adhered to if going on roadways, including group riding protocol.
 - Students should be instructed to make eye contact with drivers and assume that they have not been seen until acknowledged.
 - Rules of the trail for off-road cycling must be reviewed, if trail riding.
 - With young or inexperienced riders, an initial riding pretest (safety emphasized) may be given before leaving the start area (e.g., starts, stops, turns, signals, communications).
 - Racing should generally not be done, except where students have been trained how to race and demonstrated they can race safely and an appropriate site is used.

Supervision

Ensure students are appropriately supervised (considering age, maturity and context). In addition to the guidelines in *Supervision* in the *General Considerations*, apply the following as appropriate:

- In the area supervision. On-site supervision when teaching new skills or if working with students under Grade 4.
- Students under grade four should be restricted to cycling on the schoolyard or adjacent park or well-defined learning environment.
- Larger groups of students (based on context; e.g., location, traffic, public) should be kept between a lead (supervisor at front) who sets the route and signals the turns and sweep (supervisor at rear) who helps ensure no one gets left behind.
- The lead and sweep should be in audible (and ideally, visual) range of each other.
- If the group gets too spread out, adjust the pace or urge dawdlers on.

The suggested minimum supervisor to student ratios for off-site cycling are:

Student Grade	Number of Supervisors to Students
1 – 3	1:8 / 2:16
4 – 7	1:12 / 2:24
8 – 12	1:15 / 2:30

Where a 2:30 ratio is provided, the intent is to suggest that two supervisors can likely handle a full class of students. It is accepted that, in some cases, this might mean a few more than 30 students; class sizes vary. Adjust supervision ratio if/as necessary due to the presence of any special considerations.

Cycling Day Trip: all of Activity Instruction above, plus:

Teacher/Leader Readiness

- If going off-site more than .5 km from the school, at least one supervisor should have some skill in basic bicycle repair and maintenance.
- If going more than .5 km from the school, at least one supervisor should have first aid training, the level dependent upon the time/distance from EMS (refer to *First Aid* in *General Considerations*).

Location

- An appropriate trail must be selected for the grade/age and ability of the students.
- Plan trip distances conservatively, in the event of a mechanical breakdown or other problem. Cycling trips usually cover substantially more distance than walking/hiking outings, so it is easy to be quite far from home base.

- Pre-travel the route or seek other reliable information to secure an estimate of the time needed, road or trail conditions, hazards present, and appropriateness for the group.
- Avoid riding on busy roads, especially if there is no cycle lane or paved shoulder. Quiet roads are generally safer, as well as more scenic and interesting.
- Headwinds can greatly affect pace. Consider direction of tour in relation to forecast and season and plan distances accordingly.

Equipment

- If road riding, at least the lead and sweep riders should be wearing clothing or safety vests that are brightly coloured or that have reflective tape to enhance visibility of the group to motorists. All riders should be encouraged to wear brightly coloured and/or reflective clothing.

Instruction

- Students should be competent at selecting and shifting gears effectively in response to changes in incline before venturing onto hilly trails.
- Instruct students to get themselves and all of their gear well off the road or trail when resting, having lunch, or stopping for any other reason.
- If sharing the trail with other recreational users (e.g., walkers/joggers, hikers, horse riders), ensure that cyclists are familiar with protocols for safety and courtesy (e.g., ride under control and at reasonable speed; make verbal/bell contact, especially if coming up behind someone; dismount, move off to side and stand still while horse groups pass).
- Because of convection effects, cyclists may dehydrate more quickly than hikers or others working at the same intensity. Students should be encouraged to carry water (on their bikes or persons), and to drink often (e.g., give reminders at break stops and model by drinking frequently).

Supervision

- As above under *Cycling Activity Instruction*.
- Lead and sweep supervisors should carry communication equipment (e.g., cell phones, FRS, walkie-talkies) to facilitate communication between them, or create a relay system to pass messages up and back.

Notes

1. If, when reviewing the guidelines above, terms and concepts presented are unfamiliar, this is a strong indicator that additional personal leadership preparation (e.g., a training course, reading) or contracting a qualified service provider is advisable.
2. This document is not intended as an instructional guide. The teacher will need to use other references to learn how to teach students the skills (e.g., how to brake when inline skating, how to do a diagonal stride when cross-country skiing).

