



Tips and Tools for Transitioning to Two Wheels: A biking guide for KidsAbility families

Do you feel like your child is ready to try two wheels? Have you struggled unsuccessfully to help them with the transition? Here are some tips and strategies that may help your struggling rider:

Selecting a bike for success

- A bike for a beginner rider should be easy to get on and off, allow the rider to sit upright (not leaning forward), and allow for both feet to comfortably reach the ground. BMX and mountain bike frames are often a poor fit for a beginner rider. Select the largest bike size that will allow your child to get their feet comfortably on the ground while straddling the seat. The handlebars should be noticeably higher than the seat.
- Avoid gears unless you are confident that your rider will want to use them and be able to manage them.
- Hand brakes are preferable to coaster brakes (back pedalling). If you select a bike for a young child that does not have a coaster brake, make sure that your child has the reach and hand strength to use the hand brake. If the bike has both types of brakes, encourage the use of the hand brake. “Feet are for going, hands are for stopping.”
- A lightweight bike with quality components and good geometry is going to be easier and more enjoyable to ride. Visit a local bike shop to learn about options within your price range. Consider purchasing a higher quality gently-used bike.
- See our handout on “*Choosing a Two-Wheel Bike for a Beginner Rider*” and/or watch the video on “Selecting a Suitable Bike for Learning” here: <https://icanshine.org/parents/ican-bike-parents/>

Accessories and modifications to help you and your child:

- A training handle can attach to a seat post or the bike frame to give the parent a secure place to hold on to assist a beginner rider
- If your child’s feet slip off the pedals, consider wrapping the pedals in duct tape (sticky side out). This will give some ‘stick’ while still allowing them to get their feet to the ground quickly. If this is still an issue when they are a more confident rider, other options can be explored such as toe clips, mountain bike (platform) pedals, or weighted pedals.





- A larger seat may help your rider to feel more secure on the bike, allowing them to relax more and focus on their balance and pedalling.
- Handlebars can be raised or adjusted for optimal positioning. Consider using a “stem riser” to raise the handlebars, or replacing the handlebars with BMX style bars with a 3” – 6” rise to promote a comfortable, upright riding position.
- Training wheels can often form bad habits. See below for strategies to teach a child to ride without training wheels. If your child has been riding with training wheels for a while, they may need some additional steps to help ‘unlearn’ their training wheel habits.

How do I know if my child is ready to learn to ride a two wheel bike?

- **Balance** – Your child can walk confidently without an assistive device.
- **Reflexes** – Your child can sidestep swiftly to both sides. Try this exercise: Stand about 2m away from your child with a soft ball or stuffed animal for them to catch. Throw the ball to either side of them. If they are able to react and move towards the object and attempt the catch, then that is a good sign they are ready! (Remember we are testing their reflexes, not their catching ability, so it doesn’t matter if they actually catch it!)
- **Strength** – It doesn’t take much leg strength to propel a two wheel bike – in fact biking on two wheels is the most efficient form of human transportation! (You can go five times faster than walking and three times as far on the same amount of caloric energy.) Biking is a great way to build strength and endurance because it is so fun. If you are concerned about your child’s strength or endurance, just take it slow and stop your practice sessions if your child is getting tired. They will be less successful when fatigued, and it’s important to keep your practice times motivating and fun. Select a bike with lower gearing (or “low gain ratio”) that will result in a bike that is easier to pedal.
- **Safety Awareness** – Does your child have the safety awareness to recognize the dangers of cars? Do they have the attention to stop safety at the end of a sidewalk or stop sign, or to share a pathway with pedestrians and other cyclists?

Steps for the transition to two wheels:

Identify a large, flat, paved practice space that is free of cars and obstacles. Empty parking lots or school tarmacs are great options.





Step 1: Remove the pedals and adjust the seat

If your child is too tall for a balance bike, you can easily convert their own bike to work like one. Simply remove the pedals! You will need a narrow 15mm or adjustable wrench. (If the distance between the crank and pedal platform is too narrow for your wrench, you may need to visit a bike shop for assistance or purchase a pedal wrench to complete the job.) The right-side pedal loosens counter-clockwise (“lefty-loosey”) but the left-side pedal loosens clockwise on most bikes. Here is a video that will show you how: <https://youtu.be/CQWSSUyvw6g>. Next, lower the seat so that the child can comfortably straddle the seat with their feet flat on the ground.

Step 2: Explore moving with the pedal-less bike

Encourage them to sit on the seat and walk with the bike to get a feel for its weight and movement. Next, encourage them to push off with both feet at the same time and glide forward. Then encourage them to begin to go faster, until they are able to run and glide. Sometimes a very gentle slope down can help. Continue with this until the child is very comfortable running, gliding, turning and stopping. You may choose to stay with this step for several days or even several weeks. (Here is a video of these strategies: <https://www.youtube.com/watch?v=qjxN82kifr0>). **See KidsAbility’s “Balance Bike Basics” handout for a detailed description of the stages of learning to ride a balance bike as well as tips for practicing for each stage of learning.**

Step 3: Put the pedals back on and install a training handle

Use the training handle to stabilize the bike for your rider while they get their feet on the pedals. Help your rider get a feel for pedaling forward vs. backward. If the bike has a coaster brake (back pedal to stop) they will likely accidentally engage it as they are learning to ride. You can help prepare them for what this will feel like so that it is not a surprise. If the bike has a free wheel (no pedal brake) help them to recognize the difference in feeling when they are pedaling forward (muscles working to push the bike forward) vs backward (no resistance felt.)

Step 4: The Launch

Now it’s time to launch. Your rider’s job right now is to combine pedaling and balancing. Don’t worry about steering. **Learning to balance requires turning the handlebars into the lean to rebalance the bike**, so the rider should have a safe space to weave about without worrying about steering or hitting anything.





Use the training handle to help your rider gain some momentum and begin pedaling, then **let go**. Use the handle to catch them if they begin to fall, but otherwise try to allow them to weave about as necessary. All that weaving and wobbling is an important part of the learning process!

Practice, practice, practice.

Step 5: Stopping

Once they can comfortably bike around a large open parking lot without falling, the next skill to introduce is braking. Engage the hand brake and put both feet out for the stop.

Step 6: Starting

The next skill is starting. A **very** gentle downward slope will help make this step easier.

There are two methods to try:

1. Position the pedal for their dominant foot at about two o'clock. Give it a really big push to get enough momentum to get both feet on the pedals and begin pedalling
2. Frog hops: use both feet to push along the ground a few times to get the bike rolling. When there is enough momentum, get those feet up and start pedalling! Encourage using three pushes ("one, two, three, pedal!")

Step 7: Practice, practice, practice

Try to get out for a short ride every day. Introduce gentle hills, sidewalks, bumpy surfaces, small patches of grass, etc. (Look out for sandy patches, as turning on sand or loose gravel can cause the bike to slip!) Finally, equip your new rider with the knowledge and tools they need to bike safely in their community. Teach them about car safety (every driveway is an intersection!), road signs, and anything else they need to safely navigate their community.

Happy riding!





More about training wheels:

Training wheels prevent a bike from leaning, which means that the child does not learn to lean into their turns. Controlling a two-wheel bike requires a rider to use both leaning and steering to manage turns and maintain balance. Therefore, a rider who is transitioning to two wheels after riding with training wheels will need to learn balancing skills as well as re-learn new steering skills (and “unlearn” their old steering habits!) If your rider is having difficulty leaning into their turns (or is leaning out) here are some strategies you can try to help your child correct this habit:

- When you are practicing with a balance bike or bike with pedals removed, have the child do lots and lots of circles and ‘figure 8’s’. They should be able to use primarily their inside leg to push and glide through the turn. Make sure they are confident with turns in both directions.
- When you have the pedals back on the bike, use the training handle to gently lean the bike to one side, and have the child respond by turning the handlebars in that direction. Practice both sides several times, and then begin mixing up which way you will lean the bike. Practice until the child consistently responds by turning the handlebars into the turn. These exercises should only be necessary if the child continues to struggle, or if they prefer a more cognitive approach to learning rather than kinesthetic. (If more information helps them to feel confident, these exercises are great, but if this will just leave them feeling confused or anxious, skip the exercises and just practice with the balance bike.)

Other tips:

- Keep it safe! Always wear a CSA or CPSC approved bike helmet with properly fitted straps. (See our handout on *“Choosing a Helmet”*.) Skateboard style helmets are not always CSA approved for cycling, and often offer less adjustability and less ventilation than more traditional style bike helmets. Long pants and long sleeves may help to prevent scrapes as well.
- Keep it fun! Only practice as long as it is motivating. If your rider is getting tired or frustrated, find a positive moment to end the practice session and try again another time.
- Bring them along for the ride – There are several trail-a-bikes, passenger options, or tow systems that allow a child to hitch a ride with an adult, and experience the speed, freedom, and thrill of riding on two wheels. See our handout on *“Trail-a-bikes, Trailers, Tandems, and Tow-arms”* for a summary of options available for family bike rides.





Additional supports available from KidsAbility:

1. **TR Bike Clinic** - Recreation Therapists run a clinic to support children with special needs in riding a “regular” bicycle or tricycle, or to explore options for enjoying biking together as a family.

At this clinic, the Recreation Therapist can work with you to:

- Identify teaching strategies to learn how to ride a two wheel bike
- Trial bike accessories or modifications that could help your child to ride
- Identify an appropriate bike to best suit your child
- Problem solve specific challenges impacting your child’s bike riding experience
- Identify options available for you to enjoy biking together as a family (trailers, tandems, trail-a-bikes, tow arms, etc.)
- Access equipment in the KidsAbility bike loan program

To access this clinic, contact Intake 519-886-8886 or 1-888-372-2259 ext. 1214 and request the TR Bike Clinic or speak to your KidsAbility Therapist. This clinic is available free of charge to all families eligible for KidsAbility’s universal services. www.kidsability.ca/tr-bike-clinic

2. **Adapted Bike Day** - Join KidsAbility’s physiotherapists and adapted bike vendors to explore the variety of specialized bikes and trikes designed specifically for children with special needs. Trial one of KidsAbility’s adapted bikes through our bike loan program, or work with a vendor to purchase the right bike for your child. To access this service, speak with your KidsAbility physiotherapist.

