

## **E-Bike Safety Checklist: Everything Needed to Stay Safe**



Electric bikes' popularity continues to grow every day. With so many new riders joining the phenomenon, it is crucial to talk about safety. Whether you haven't ridden in a few years or consider yourself an intermediate rider, getting a new electric bike is a great time to assess your riding skills. Electric bike riders should also know how to perform a proper bike inspection every time they ride.

Electric bikes can be a safe, reliable form of transportation or sport. You must be aware of ways to reduce danger every time you get on your e-bike. Anyone riding one of these bikes must adhere to general safety tips and any laws that apply in the area. Before you mount your bike again, ensure you understand the regulations and guidelines that will keep you safe on your electric bicycle.

### **General Electric Bike Road Safety Tips**

Staying safe while on an e-bike does not differ too much from riding a standard bicycle. You need to think about defensive ways you can avoid accidents. Follow these general safety tips wherever you ride to keep yourself and others safe.

# E-Bike Safety Tips

Staying safe on an e-bike is much like staying safe on a standard bicycle. Here are the most important safety tips for riding your e-bike:



## Wear a Helmet

Helmets reduce the risk of head injury by 70%.



## Keep Others Aware of Your Presence

Always ride with a front and rear light, wear brightly colored clothing, and use reflective tape while riding.



## Check Your Feet

Select shoes that fully cover your feet and don't slip off easily.



## Use Caution Mounting and Dismounting

E-bikes weigh a lot more than non-electric bicycles and require more effort to mount and dismount.



## Use Mirrors

Just like your car, minimize the amount of time you move your head from looking straight ahead.



## Watch Your Speed and Braking

You will need to train yourself to brake earlier than you would on a traditional bike.



## Maintain Your Bike

Keep the tires properly inflated, check the treads, and replace them regularly.



## Keep Your Battery Charged

Only use a charger rated for your battery to avoid overheating and causing damage or a fire.



## Know the Laws

Know if they are considered motorized vehicles, as that changes where you are legally allowed to ride.



## Remember to Ride Like a Vehicle

Follow the rules of the road to keep yourself safe and legal when riding in traffic.

Elevate your ride with an e-bike from Juiced Bikes.

Our performance-inspired innovation will keep you safe and having fun.



## 1. Wear a Helmet

A helmet is the most critical safety feature you can use. For cyclists, wearing a helmet can [reduce the risk of head injuries by 70%](#). The likelihood of a fatality from a head injury also reduces by 65% if you don a helmet.

The faster speeds you can attain with an e-bike make protecting your head even more critical to walking away from an accident without severe head injuries. While wearing a helmet won't prevent an accident from happening, it can save your life if one does occur.

## 2. Be Visible and Audible

With electric bikes, you must be able to see and be visible to others. Regardless of where you ride, visibility could prevent accidents. On the road, you can avoid collisions with cars. If you ride off-road, greater visibility will make it easier for other trail users to avoid you. To ensure your visibility, always ride with a front and rear light. At a minimum, use one light in the front and one in the back. You have options for additional lighting for the spokes of your wheels, handlebars, and helmet. The more illumination you use, the safer you will be, especially when riding in low visibility or dim conditions.

Whether you are riding your bike during the day or night, wear brightly colored clothing. Reflective tape on your clothes is an ideal solution. But you can also wear white or other bright hues.

In addition to ensuring others can see you, have a noisemaking device on your bike to audibly alert others of your presence. A bell or horn will give you a louder means than your voice of warning pedestrians ahead of you.

## 3. Check Your Feet

When riding an e-bike, make sure you have secure footwear. Don't wear flip-flops or other shoes that could readily fall off. Also, tightly tie your shoelaces to keep them out of the spokes or the chain. Never ride an electric bicycle without proper footwear.

Footwear becomes an even more critical decision for e-bikes because the bicycles weigh much more than regular lightweight bikes. You have the option of [pedals that require clip-in shoes or have a flat surface](#) you can use with any footwear.

If you select clip-in pedals, you will need shoes to attach to the clips. These shoes help your feet stay connected to the pedals through rough terrain and at higher speeds. For regular mountain biking on your electric bicycle, you may find clip-in shoes more comfortable and secure. Additionally, e-bikes with clips on the pedals allow you to generate more torque by pulling up on the pedals in addition to pushing down.

Flat pedals give you the ability to hop off your bike in street shoes or tennis shoes when you arrive at your destination. If you need to dismount your bike in an accident or when encountering tough terrain, flat pedals make it possible.

The type of footwear you choose needs to fully cover your feet and not slip off easily. Whether you select clip or flat pedals and their corresponding shoes depends on how you ride your e-bike. Because your feet help you control your bike, the choice of shoes can make your electric bicycle safer to ride.

#### **4. Use Caution Mounting and Dismounting**

E-bikes weigh a lot more than non-electric bicycles, which can make [mounting and dismounting dangerous](#) for those not ready for the extra heft. Children and those who are not strong enough to lift the bike themselves may risk harm from not using caution when getting on and off their bikes.

Moving an e-bike onto a bike rack or carrying it downstairs can also be dangerous. If you cannot carry a weightier electric bike, consider getting help or finding a lower-weight model. You could even seek out alternatives to where you store your bike, so you minimize the amount of lifting you must do. Lifting a heavy bike incorrectly could cause pulled muscles or strains.

#### **5. Use Mirrors**

Mirrors help you see behind you without turning your head. With mirrors, you can minimize the amount of time you move your head from looking straight ahead.

Whether you ride in city traffic or on trails, you need visibility on all sides of your bike. A small investment in a mirror could prevent you from getting rear-ended, reducing the accidents you experience and keeping you and others safer when you ride your bike.

## 6. Watch Your Speed and Braking

E-bikes can [reach speeds of 28 mph with assistance](#). You can still go faster in places that do not regulate the top speed or by pedaling alone. You need to watch your speed when riding to keep from going too fast. A severe problem you may encounter with [malfunctioning controls is the throttle sticking](#). This situation causes the bike to accelerate uncontrollably to its maximum speed. Install an emergency cut-off if your bike does not already have one, or upgrade your brakes to stop even at high speed.

Braking differs on e-bikes because the bike has added weight and goes faster. You will need to train yourself to brake earlier than you would on a traditional bike before you hit the road or trails. Knowing when to brake will help you stay safer.

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### Pre-Ride Checklist

Accidents can happen if you don't properly maintain your bike. Review this maintenance checklist before riding.

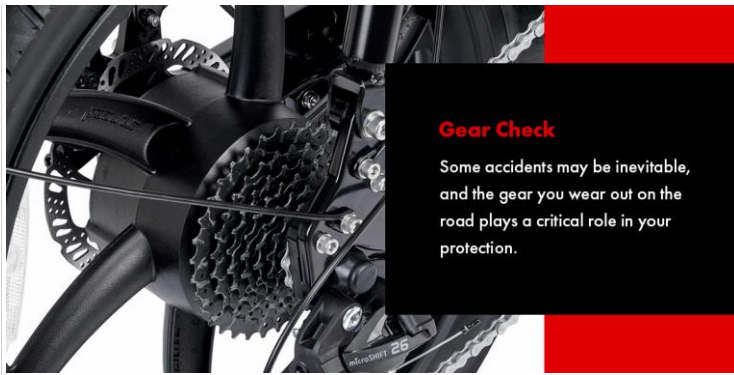
#### Wheel Check

Check that the front wheel has safe installation. Whether your model came with a quick-release front wheel or a bolt-on axle, you need to ensure the [wheel is correctly seated](#) and that the hardware holding the axle in place is tight enough before riding.

Road vibrations can loosen a quick-release bolt, so make sure to check this regularly. A loose wheel can be deceiving and will stay in place with pressure on it, but if you jump off a curb or hit a bump in the road, you could be heading for disaster. Check your wheels regularly and [review your e-bike manual](#) for maintenance and assembly.

Riders should also check the PSI of their electric bikes' tires to ensure that they ride with ease. You can check their PSI with a tire gauge before going for a ride.

Remember to also check for broken spokes and tighten up loose spokes with a [spoke wrench](#).



### **Gear Check**

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Some accidents may be inevitable, and the gear you wear out on the road plays a critical role in your protection. The right safety gear can determine whether you walk away from an accident with a minor scrape or more severe injuries. Most bike riders already wear a helmet, but with top e-bike speeds reaching higher limits, you must consider wearing more safety gear.

Lined garments or fuller-coverage clothing can help you avoid scrapes. Also, chamois and bike shorts are not exclusive to road cyclists — they are excellent garment options for riding an electric bike.

Riders should carry repair kits on their long rides in case they need to perform maintenance. [Having the right tools](#) and gear with you is beneficial in many situations, like flat tires. A frame pump will keep your tires at the perfect PSI to avoid blowouts or drag while traveling. Since rear-hub motors can create challenges when changing your rear tire, [check out this video](#) to help guide you. Look for debris ahead in the road and avoid the flat if possible, but be ready to get your tools out and change a flat tire if one occurs.

## **Tech Check**

You want to make sure the battery is securely in place. You could experience intermittent power during your ride or risk the battery falling out if it isn't secure. Lightly pull on the battery to check whether it's stable. If your battery becomes unseated while locked, faulty installation might be to blame, or there may be an issue with the battery lock interfacing. [Contact customer support](#) for assistance if this occurs.

Make sure to check your voltage percentage on your LCD screen. Use this [chart to compare the voltage](#) reading on your screen to a percentage. For optimal performance and battery life, you will want

to stay within 80% and 20% voltage. Low voltage can affect your model's top speeds.

## Off-Road E-Bike Safety Tips

Riding off-road on an e-bike will require you to do some research before hitting the trails. Staying safe will take some effort to ensure you get the ultimate fun on your next ride.

### 1. Know the Laws

Many places classify electric bikes as motorized vehicles and prohibit them from traditional bike trails. If in doubt and you see a sign that indicates the path does not allow motor vehicles, keep your e-bike off.

On the federal level, the Forest Service, Bureau of Land Management and National Park Service all forbid riding e-bikes on natural surface trails that do not allow motorized vehicles.

State regulations vary and change regularly as local legislatures reevaluate the use of electric mountain bikes on multi-purpose trails and off-road trails. Many places have not encountered electric mountain bikes often enough to warrant creating laws specifically for them. For instance, [25% of state legislatures](#) had never seen a necessity to address electric mountain bike use.

Only a handful of states mention using e-bikes on non-motorized trails. Out of 22 states that responded to the International Mountain Bicycling Association's survey on their e-bike laws for natural surface trails, only four allowed e-bikes on non-motorized trails. An additional six permitted e-bikes on such trails under exceptional circumstances as power-driven mobility devices.

Learn the rules for riding electric bikes in your specific area and look into the laws and regulations before purchasing a model. Doing this will save you time and keep you safe on the road.

### 2. Watch for Other Riders

If you ride in an area that allows off-road use of e-bikes, watch out for other trail users. Be ready to alert walkers or other bike riders via a horn, bell or verbal means if you approach them from behind. They may not hear you or your bike. Signaling others of your presence on the trail also means you need to be aware of anyone coming behind you. Leave the headphones and earbuds at home. You will need to

keep your ears open if another rider or jogger needs to pass you on the trail.

### 3. Know Your Limits

When riding off-road, you may rely too heavily on the bike's motor to get you home if you tire. However, the distance the motor will take you depends on the motor's wattage, the battery's power and how much you use the bike's throttle. Relying on the motor at full power will wear it out quickly, and it could leave you tired and stranded in a far-flung place without a means of getting back.

To avoid this situation, don't go farther out on your electric mountain bike than you could return from under your power.

### 4. Install Torque Arms for Front Motor Bikes

If you have a motor on the front wheel hub of your bike, you risk having the front fork fail, especially when landing from a jump. There are several ways to prevent the potentially dangerous failure of your fork.

Do not ride an electric bike with a front-hub motor that also has front suspension forks. Also, do not install a high-powered motor on your front wheel. If you want a high-performance e-bike, stay safer by opting for a model that puts the engine in the middle of the bike's frame and has a professional design. If you do have a front-hub motor, install torque arms to keep the front fork in place.

## Electric Bike On-Road Safety Tips

When riding on the road, your electric bicycle has more options than off-road. Most states allow e-bikes to share bike lanes with other bicycles. To stay safe, know about your state's laws and how they affect your e-bike options and riding choices.

### 1. Know Your E-Bike Class

As of 2019, [22 states use a three-class system](#) for defining e-bikes. These three classes depend on the propulsion method and the maximum speed.

- **Class 1 bikes** go no faster than [20 mph with help from the motor](#). Riders can pedal faster than this, but the motor must cut out at 20 mph or if the rider stops pedaling.



- **Class 2 bikes** can use a throttle to drive the bike without help from the rider pedaling. These bikes can reach up to 20 mph with motor assistance.
- **Class 3 bikes** can reach the fastest speeds. As with class 1 bikes, the motor only assists when the rider pedals the bike. The motor does not cut out until the rider reaches 28 mph, though.

Because they reach the fastest speeds, class 3 bikes have the strictest limitations. Some states, such as California and Utah, [prohibit those under 16 from riding class 3 bikes](#), while Utah bans anyone under 14 from riding any classification of electric bike anywhere with the motor engaged. Seventeen states require you to license your electric bike as you would any other motor vehicle.

As with off-road riding, check your local and state laws before setting out on the road.

## 2. Ride in the Lane Correctly

When riding in towns, stick to the designated bike lanes. If you don't have available bike lanes, feel free to [ride in the middle of the far lane](#), provided you can keep up with traffic. Maintaining the same speed as the cars around you should not be challenging in dense urban centers where stop-and-go traffic typically peaks at 20 to 30 mph.

Ride at an appropriate speed for the area you're riding. If you are not using the electric bike's top speeds, stay in the bike lane. If you are using race mode or our Hyper model's top speeds, share traffic with cars and other vehicles traveling at similar speeds.

## 3. Remember to Ride Like a Vehicle

As long as you ride your electric bike as if it's a car, you must conduct yourself as you would if you drove a vehicle in traffic. Signal when turning, and make deliberate eye contact with pedestrians and drivers if you will cross in front of them.

Despite being a bicycle, the motor means these bikes fall under the same regulations regarding motorized vehicles in many cities and states. Follow the rules of the road to keep yourself safe and legal when riding in traffic.

## Start Your Road to Safe Riding

So, are electric bikes safe? The answer depends on how you ride the bicycle. If you follow safety guidelines, protect yourself with a helmet and follow all rules of the road in your state, riding an e-bike can be just as safe as other forms of transportation.

If you already have an e-bike, what's stopping you from getting out and enjoying it? If you prefer to upgrade to a premium ride, go faster and farther on one of our fully loaded [e-bikes from us here at Juiced Bikes](#). Each of our bikes is ready to ride as soon as it arrives, so you can spend more time on the road or trails enjoying your ultimate thrill ride.

