

Electric bikes (e-bikes) have become very popular over the last few years. They can be fun to ride and a great form of transportation. Employers are also seeing the benefit of using e-bikes in the workplace as a convenient and cost-effective mode of transportation.

Is your District considering the use of e-bikes? If so, it's important to first consider the risks. Once an e-bike is used in the workplace, it becomes a piece of equipment that falls under Cal/OSHA's requirement to protect employees by conducting a risk assessment and implementing effective control measures.

### CALIFORNIA E-BIKE LAWS

First, let's discuss what an e-bike is and is not. An e-bike is a bicycle with a motor and rechargeable battery that helps riders pedal faster and farther. The motor is powered by the battery and assists the rider when they pedal, or in some cases, by using a throttle. It's important to note the Department of Motor Vehicles (DMV) treats an e-bike as a bicycle and does not consider it a motorized scooter under the California Vehicle Code (CVC). There are three types of e-bikes.

- **Type 1:** Bikes with a top assisted speed of 20 mph that must be pedaled to operate.
- **Type 2:** Bikes with a top assisted speed of 20 mph that can be operated without pedaling by using a handlebar-mounted throttle.
- **Type 3:** Bikes with a top assisted speed of 28 mph that must be pedaled to operate.

The laws also outline the requirements on how and where to legally ride e-bikes. E-bike riders are subject to the same rules and legal requirements that apply to traditional bicycle riders, such as proper passing, following all traffic laws, and obeying posted speed limits, to name a few. [California's E-Bike Guidance](#) provides additional information on the different types of e-bikes, the rules of the road, the four classes of bikeways, and other important information.

### WHAT ARE THE RISKS?

When conducting a risk assessment, consider the potential for employee injuries, property damage, and liability exposures. The District should first consider where and how the e-bikes will be used. For example, will they be used only on District property, public roadways, or specific types of bikeways? Will they be used only during daylight hours and in good weather? Will employees need to carry any supplies, tools, etc. while riding the e-bikes? This will assist in determining employee risks.

Potential employee exposures include being struck by vehicles, bicycles, or scooters, and hitting stationary objects. Since e-bikes can weigh up to 60 lbs., there is also potential for strain injuries while handling and lifting the e-bike.

## WHAT ARE THE RISKS?

Potential property and liability exposures can come from the lithium-ion batteries, which are usually the power source for e-bikes. If the e-bikes and batteries are not properly maintained, stored, or inspected regularly, the batteries can catch on fire or explode, causing damage to property and possibly injuring employees and the public. In addition, an unskilled rider can increase the liability risks by colliding with pedestrians, vehicles, and property.



## DEVELOPING CONTROL MEASURES

Once you've identified the risks, it's time to identify the types of control measures the District should put in place.

### *Safe Operating Procedures (SOPs)*

Develop procedures on safe operating requirements, personal protective equipment requirements, proper maintenance and storage, emergency response procedures, authorized user approval process, etc.

Your primary source will come from the Manufacturer's instructions. The National Fire Protection Association's [E-Bike and E-Scooter Safety](#) publication provides fire prevention guidance and safety tips.

While current laws only require helmets for riders 17 and under, we strongly recommend that properly selected helmets be required when employees are riding e-bikes while working on behalf of the District. In addition to wearing clothing that covers the legs, arms, and feet, we also recommend reflective vests and elbow/knee pads.

### *Employee Training*

Cal/OSHA requires employee training on the safe operation of any equipment the employee operates, this includes e-bikes. Training should include a review of the SOPs, how to safely operate the e-bike, how to safely handle and lift the e-bike, and actual practice and observation at a safe location. A free on-line course is available through the California Highway Patrol [CHP Electric Bike Safety Training](#).

## INSURING E-BIKES

If your District is considering using e-bikes in the workplace, we recommend contacting your property/liability provider to determine coverage options and specific requirements that may apply. If you participate in SDRMA's Property/Liability program, please give us a call or email us at [memberplus@sdrma.org](mailto:memberplus@sdrma.org).

If your District allows employees to operate their personal e-bike while working on behalf of the District, please note that there are no requirements for the employee to carry insurance, which may increase the District's liability.

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