Illinois Motorcycle

2020 Operator Manual

JESSE WHITE

SECRETARY OF STATE

Currently, there are more than 300,000 licensed motorcycles on Illinois roads, and this number is increasing every year. Due to a motorcycle's size and vulnerability in a crash, motorcyclists need to take special precautions when operating the vehicle. Learning and then practicing proper cycling skills can significantly reduce the risk of an accident.

This *Illinois Motorcycle Operator Manual* provides information that will help you learn how to operate your motorcycle safely and skillfully. Information needed for the Illinois Secretary of State motorcycle license exams also is included. I hope you will use this resource not only as a study aid, but as a tool to develop your motorcycling skills.

In addition to studying this manual when preparing for your motorcycle exams, please review the *Illinois Rules of the Road* booklet. The booklet provides an overview of important traffic safety laws. Motorcycle riders have the same rights and responsibilities as other motorists. By obeying traffic laws and practicing good motorcycling skills, you will ensure not only your safety but the safety of others who share the road with you.

Jesse White

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Secretary of State

TABLE OF CONTENTS

Overview
Motorcycle Classification 2
Instruction Permits 2
License Plates 3
Motorcycle Traffic Laws 3

Preparing to Ride
Helmet Use/Selection 4
Eye and Face Protection 5
Clothing 5

Know Your Motorcycle and Your Responsibilities
Borrowing and Lending 6
Get Familiar with the Controls 6
Check Your Motorcycle 7
Your Responsibilities 8

Motorcycle Control and Operation
Body Position 9
Shifting Gears 9
Braking 10
Turning 10
Keeping Your Distance 11
Lane Positions 11
Following Another Vehicle 12
Being Followed 13
Passing and Being Passed 13
Lane Sharing 14
Merging Vehicles 14
Vehicles Alongside 14
SIPDE 15
Intersections 16
Passing Parked Cars 18
Parking at the Roadside and Curbs 18

Being Seen
Clothing 19
Headlight 19
Signals 19
Brake Light 20
Using Your Mirrors 20
Head Checks 21
Horn 21
Riding at Night 21

Crash Avoidance
Quick Stops 22
Swerving or Turning Quickly 23
Cornering 23

Dangerous Surfaces
Uneven Surfaces and Obstacles 25
Slippery Surfaces 25
Tracks and Pavement Seams 27
Grooves and Gratings 27

Mechanical Problems
Tire Failure 27
Stuck Throttle 28
Wobble 28
Chain Problems 29
Engine Seizure 29

Obstacles
Animals 29
Flying Objects 30
Getting off the Road 30

Carrying Passengers and Cargo
Equipment 30
Instructing Passengers 31
Riding with Passengers 31
Carrying Loads 32

Protect Yourself and Others
Group Riding 32
Alcohol and Other Drugs 34
Fatigue 37

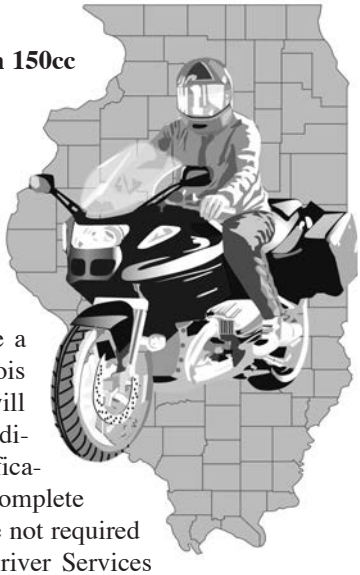
Earning Your Motorcycle License
Rider Skill Test 37
Two-Wheel, and Three-Wheel Motorcycles 39
Required Equipment 44
Knowledge Test — Sample Questions/Answers 45
Motorcycle Rider Safety Training Program Regional Centers 46

Classification Criteria
Motorcycles, Mopeds 47

OVERVIEW

Motorcycle Classification

Illinois driver's licenses are classified according to the type and weight of the vehicles to be driven. There are two classifications for motorcycle licenses:



Class L: Any motor-driven cycle with less than 150cc displacement.

Class M: Any motorcycle or motor-driven cycle.

To obtain a motorcycle classification on your driver's license, you must pass a separate motorcycle examination (see pages 37-42). Drivers ages 16 and 17 also must successfully complete a motorcycle training course approved by the Illinois Department of Transportation (IDOT). They will have a J09 restriction on their license, which indicates that they are allowed to have the "M" classification. Persons age 18 and older who successfully complete an IDOT Motorcycle Rider Education Course are not required to pass a written or driving examination at a Driver Services facility. The IDOT course completion card is valid for one year.

Instruction Permits

Motor-Driven Cycle — Persons ages 16 and 17 who have successfully completed driver education and passed the motorcycle written test may apply for a 24-month instruction permit to operate a motor-driven cycle (under 150cc). The permit allows driving only during daylight hours, under the direct supervision of a licensed motor-driven cycle operator age 21 or older with at least one year of driving experience.

Motorcycle — Persons age 18 or older may apply for a 12-month instruction permit to operate a motorcycle other than a motor-driven cycle. The permit allows driving only during daylight hours, under the direct supervision of a licensed motorcycle operator age 21 or older with at least one year of driving experience. A 24-month instruction permit for a Class M license may be issued to an applicant under age 18 only after successful completion of an approved driver education course and successful completion of an IDOT Motorcycle Rider Education Course.

Rental/Out-of-State Drivers — A person must have a valid driver's license with the appropriate motorcycle classification to rent a motorcycle or motor-driven cycle. Out-of-state drivers may drive for the period during which they are

in Illinois, provided they have a valid driver's license for motorcycle operation from their home state or country.

Moped Operators — Mopeds are low-speed, two-wheeled vehicles. They can be pedaled like a bicycle or driven like a motorcycle. Mopeds are intended for limited use on public roadways. Moped drivers must carry a valid driver's license and obey all signs, signals and traffic laws. If the moped meets all four criteria listed on page 46, the moped operator is not required to obtain a motor-driven cycle classification.

License Plates

All motorcycles and motor-driven cycles must have a license plate when operated on streets or highways. Different license plate series are assigned to motorcycles and motor-driven cycles; therefore, the correct piston displacement must appear on your license plate registration application. If trading from one classification to another (less than 150cc or 150cc and over), the license plate must be sent to the Secretary of State, along with applications for transfer, title and the appropriate fee.

Motorcycle Traffic Laws

Motorcycle drivers must obey all traffic laws, signs and signals in the same way as other drivers. Motorcycle drivers are prohibited from passing between two other vehicles going in the same direction unless there is an unobstructed traffic lane available to permit such passing safely. They also are prohibited from passing on the right unless there is unobstructed pavement at least 8 feet wide to the right of the vehicle being passed. A person who operates a motorcycle on one wheel is guilty of reckless driving or aggravated operating of a motorcycle on one wheel. Motorcycles may proceed through a red light that fails to change to a green light within a reasonable period of time not less than 120 seconds.

PREPARING TO RIDE

Before taking off on any trip, a safe rider makes a point to:

- Wear the right gear.
- Become familiar with the motorcycle.
- Check the motorcycle equipment.
- Be a responsible rider.

You have a far better chance of avoiding serious injury in a crash if you wear:

- A helmet (A helmet is not required under Illinois law; however, a rider who wears a properly fitted helmet greatly reduces the chance of a fatal head injury in an accident),
- Face or eye protection, and
- Protective clothing.

Helmet Use/Selection

Motorcycle crashes are common, particularly among beginning riders. One out of every five motorcycle crashes results in head or neck injuries. Crash analyses show that head and neck injuries account for a majority of serious and fatal injuries to motorcyclists. Research also shows that, with few exceptions, head and neck injuries are reduced by properly wearing an approved helmet.

Some riders do not wear helmets because they think helmets will limit their view to the sides. Others wear helmets only on long trips or when riding at high speeds. Following are some facts to consider:

- An approved helmet lets you see as far to the sides as necessary. A study of more than 900 motorcycle crashes, where 40 percent of the riders wore helmets, did not find one case in which a helmet kept a rider from spotting danger.
- Most crashes happen on short trips (less than 5 miles long), just a few minutes after starting out.
- Most riders are riding slower than 30 mph when a crash occurs. At these speeds, helmets can cut both the number and the severity of head injuries by half.

No matter what the speed, helmeted riders are three times more likely to survive head injuries than those not wearing helmets at the time of the crash.

There are two primary types of helmets, providing two levels of coverage: three-quarter and full face. Whichever style you choose, you get the most protection by making sure that the helmet:

- Meets U.S. Department of Transportation and state standards.
- Fits snugly, all the way around.
- Has no obvious defects, such as cracks, loose padding or frayed straps.

Helmets

Whatever helmet you wear, keep it securely fastened when you ride. Otherwise, if you are involved in a crash, it is likely to fly off your head.

Eye and Face Protection

A plastic, shatter-resistant face shield can help protect your whole face in a crash. It also protects you from wind, dust, dirt, rain, insects and pebbles thrown from cars ahead. These problems are distracting and can be painful, and if you have to deal with them, you cannot devote your full attention to the road.

Although goggles protect your eyes, they will not protect the rest of your face like a face shield does. A windshield is not a substitute for a face shield or goggles. Most windshields will not protect your eyes from the wind. Neither will eyeglasses or sunglasses. Glasses will not keep your eyes from watering, and they might blow off when you turn your head while riding.

To be effective, eye or face shield protection must:

- Be free of scratches.
- Be resistant to penetration.
- Give a clear view to either side.
- Fasten securely so it does not blow off.
- Permit air to pass through to reduce fogging.
- Permit enough room for eyeglasses or sunglasses, if needed.

Tinted eye protection should not be worn at night or any other time when little light is available.

Clothing

The right clothing protects you in a crash. It also provides comfort as well as protection from heat, cold, debris, and hot and moving parts of the motorcycle.

- **Jacket and pants** should cover arms and legs completely. They should fit snugly enough to keep from flapping in the wind, yet loosely enough to move freely. Leather offers the most protection. Sturdy synthetic material also provides good protection. Wear a jacket even in warm weather to prevent dehydration. Many are designed to protect without getting you overheated, even on summer days.
- **Boots or shoes** should be high and sturdy enough to cover your ankles and give them support. Soles should be made of hard, durable, slip-resistant material. Keep heels short so they do not catch on rough surfaces. Tuck in laces so they will not catch on your motorcycle.

Test Yourself

1 **A plastic, shatter-resistant face shield:**

a. Is not necessary if you have a windshield.
b. Only protects your eyes.
c. Helps protect your whole face.
d. Does not protect your face as well as goggles.

Answer — page 45

- **Gloves** allow a better grip and help protect your hands in a crash. Your gloves should be made of leather or similar durable material.

In cold or wet weather, your clothes should keep you warm and dry, as well as protect you from injury. Riding for long periods in cold weather can cause severe chill and fatigue. A winter jacket should resist wind and fit snugly at the neck, wrists and waist. Good-quality rain suits designed for motorcycle riding resist tearing apart or ballooning up at high speeds.

KNOW YOUR MOTORCYCLE AND YOUR RESPONSIBILITIES

Many things on the highway can cause you trouble. Your motorcycle should not be one of them. To make sure your motorcycle will not let you down:

- Start with the right motorcycle for you. Your motorcycle should fit you. Your feet should reach the ground while you are seated on the motorcycle.
- Read the owner's manual.
- Be familiar with the motorcycle controls.
- Check the motorcycle before every ride.
- Keep it in safe riding condition between rides.
- Avoid add-ons and modifications that make your motorcycle harder to handle.

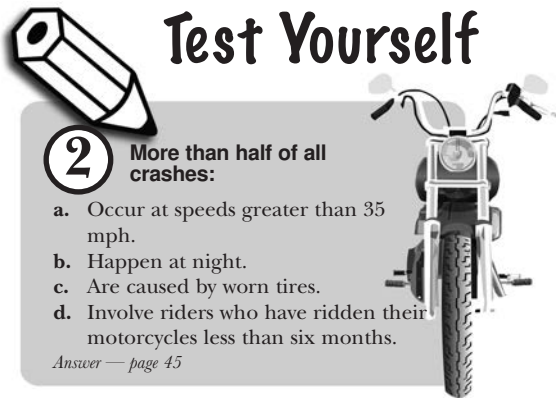
Borrowing and Lending

Borrowers and lenders of motorcycles beware. Crashes are fairly common among beginning riders, especially in the first months of riding. Riding an unfamiliar motorcycle adds to the problem. If you borrow a motorcycle, get familiar with it in a controlled area. If you lend your motorcycle out, make sure the driver is licensed and knows how to ride.

No matter how experienced you may be, ride extra carefully on any motorcycle that is new or unfamiliar to you. More than half of all crashes occur by motorcycle riders with less than six months of experience.

Get Familiar with the Controls

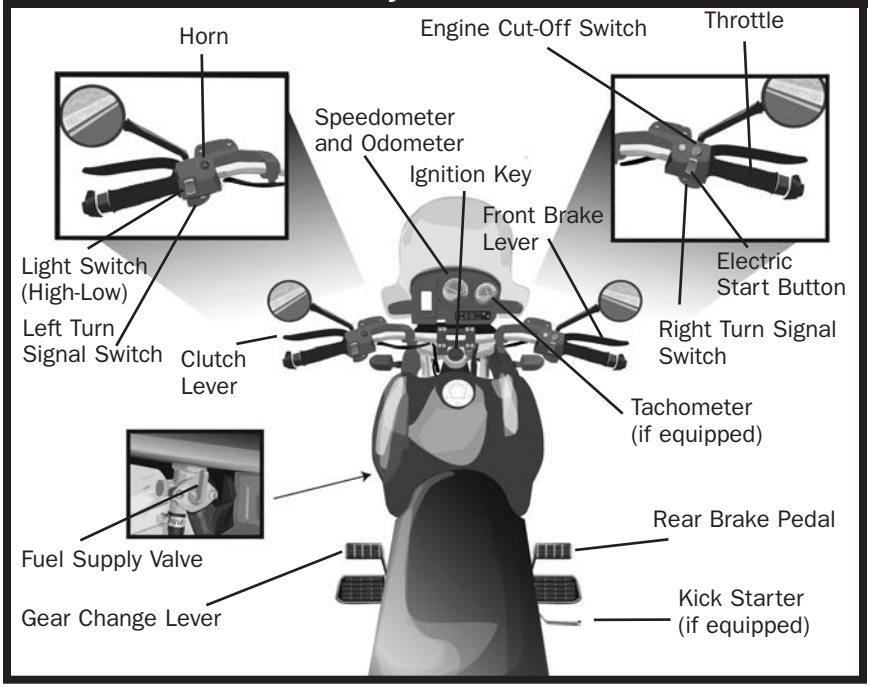
Familiarize yourself completely with the motorcycle and review the owner's manual before you take the motorcycle out on the street (see diagram on page 7). This is particularly important if you are riding a borrowed motorcycle.



If you are going to use an unfamiliar motorcycle:

- Make all the checks you would on your own motorcycle.
- Find out where everything is, particularly the turn signals, horn, headlight switch, fuel-control valve and engine cut-off switch.
- Know the gear pattern. Work the throttle, clutch and brakes a few times before you start riding. All controls react a little differently.
- Ride very cautiously and be aware of your surroundings.
- Accelerate gently, take turns more slowly and leave extra room for stopping.

Motorcycle Controls



Check Your Motorcycle

A motorcycle needs more frequent attention than a car. If something is wrong with the motorcycle, you will want to find out about it before you get in traffic. Make a complete check of your motorcycle before every ride. Before mounting the motorcycle, make the following checks:

- **Tires** — Check air pressure, general wear and tread.
- **Fluids** — Check oil and fluid levels. At a minimum, check hydraulic fluids and coolants weekly. Look under the motorcycle for signs of an oil or gas leak.
- **Headlight and Taillight** — Test your switch to make sure both high and low beams are working.

- **Turn Signals** — Turn on both turn signals. Make sure all lights are working properly.
- **Brake Light** — Try both brake controls. Make sure each one turns on the brake light.

Once you have mounted the motorcycle, complete the following checks before starting out:

- **Clutch and Throttle** — Make sure they work smoothly. The throttle should snap back when you let go. The clutch should feel tight and smooth.
- **Mirrors** — Clean and adjust both mirrors before starting. It is difficult to ride with one hand while you try to adjust a mirror. Adjust each mirror so you can see the lane behind you and as much as possible of the lane next to you. When properly adjusted, a mirror may show the edge of your arm or shoulder, but it is the road behind and to the side that is most important.
- **Brakes** — Try the front and rear brake levers one at a time. Make sure each one feels firm and holds the motorcycle when the brake is fully applied.
- **Horn** — Try the horn to make sure it works.

In addition to the checks you should make before every trip, check the following items at least once a week: wheels, cables, fasteners and fluids. Follow your owner's manual for recommendations.

Your Responsibilities

As a motorcycle rider, you cannot be sure that other motorists will see you or yield the right of way. To lessen your risk of a crash:

- **Be visible** — wear proper clothing, use your headlight and ride in the best lane position to see and be seen.
- **Communicate your intentions** — use the proper signals, brake light and lane position.
- **Maintain an adequate space cushion** — following, being followed, lane sharing, passing and being passed.
- **Scan your path of travel 12 seconds ahead**.
- **Identify and separate multiple hazards**.
- **Be prepared to act** — remain alert and know how to carry out proper crash-avoidance skills.

The ability to ride aware, make critical decisions and carry them out separates responsible riders from all the rest. Remember, it is up to you to keep from being the cause of, or an unprepared participant, in any crash.

MOTORCYCLE CONTROL AND OPERATION

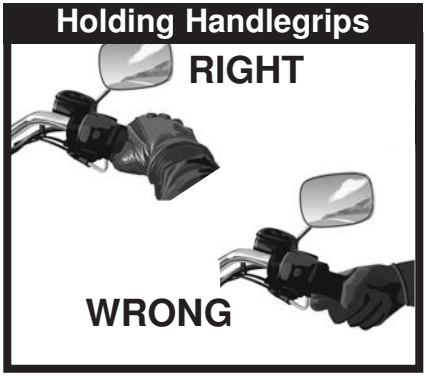
This manual cannot teach you how to control direction, speed or balance. Those are things you can learn only through practice. Control begins with knowing your

abilities and riding within them as well as knowing and obeying the rules of the road.

Body Position

To control a motorcycle well, follow these guidelines:

- **Posture** — Sit so you can use your arms to steer the motorcycle rather than to hold yourself up.
- **Seat** — Sit far enough forward so your arms are slightly bent when you hold the handlegrips. Bending your arms permits you to press on the handlebars without having to stretch.
- **Hands** — Hold the handlegrips firmly to keep your grip over rough surfaces. Start with your right wrist flat. This will help you keep from accidentally using too much throttle. Also, adjust the handlebars so your hands are even with or below your elbows in order to use the proper muscles for precision steering.
- **Knees** — Keep your knees against the gas tank to help you keep your balance as the motorcycle turns.



- **Feet** — Keep your feet firmly on the footrests to maintain balance. Do not drag your feet. If your foot catches on something, you could be injured and it could affect your control of the motorcycle. Keep your feet near the controls so you can get to them fast if needed. Also, do not let your toes point downward — they may get caught between the road and the footrests.

Shifting Gears

There is more to shifting gears than simply getting the motorcycle to pick up speed smoothly. Learning to use the gears when downshifting, turning or starting on hills is important for safe motorcycle operation.

- Shift down through the gears with the clutch as you slow or stop. Remain in first gear while you are stopped so you can move out quickly, if needed.
- Make certain you are riding slowly enough when you shift into a lower gear. If not, the motorcycle will lurch and the rear wheel may skid.
- Use the brakes to slow enough before downshifting when riding downhill or shifting into first gear. Work toward a smooth, even clutch release, especially when downshifting.
- It is best to change gears before entering a turn. However, sometimes shifting while in the turn is necessary. If so, remember to do so smoothly. A sudden change in power to the rear wheel may cause a skid.

Braking

Your motorcycle has two brakes: one for the front wheel and one for the rear wheel. Use both of them at the same time. The front brake is more powerful and can provide at least three-quarters of your total stopping power. The front brake is safe to use if used properly.

- Use both brakes every time you slow or stop. Using both brakes for even normal stops will permit you to develop the proper habit or skill of using both brakes properly in an emergency. Squeeze the front brake and press down on the rear. Grabbing at the front brake or jamming down on the rear can cause the brakes to lock, resulting in control problems.
- If you know the technique, using both brakes in a turn is possible, although it should be done very carefully. When leaning the motorcycle some of the traction is used for cornering; less traction is available for stopping. A skid can occur if you apply too much brake. Also, using the front brake incorrectly on a slippery surface may be hazardous. Use caution and squeeze the brake lever — never grab.
- Some motorcycles have integrated braking systems that link the front and rear brakes together by applying the rear brake pedal. Consult the owner's manual for a detailed explanation on the operation and effective use of these systems.

Turning

Approach turns and curves with caution. Riders often try to take curves or turns too fast. When they can't hold the turn, they end up crossing into another lane of traffic or going off the road. Or, they overreact and brake too hard, causing a skid and loss of control. Use the following four steps for better control:

1. **SLOW** — Reduce speed before the turn by closing the throttle and, if necessary, applying both brakes.

Normal Turns

In normal turns, the rider and the motorcycle should lean together at the same angle.

In slow, tight turns, counterbalance by leaning the motorcycle only and keeping your body straight.

Slow Turning

2. **LOOK** — Look through the turn to where you want to go. Turn just your head, not your shoulders, and keep your eyes level with the horizon.
3. **LEAN** — To turn the motorcycle must lean. To lean the motorcycle, press on the handlegrip in the direction of the turn. Press left, lean left, go left. Press right, lean right, go right. Higher speeds and/or tighter turns require the motorcycle to lean more.
4. **ROLL** — Roll on the throttle through the turn to stabilize suspension. Maintain steady speed or accelerate gradually through the turn. This will help keep the motorcycle stable.

Keeping Your Distance

The best protection you can have on the road is distance — a cushion of space — all around your motorcycle. If someone else makes a mistake, distance permits you time to react and space to maneuver.

Lane Positions

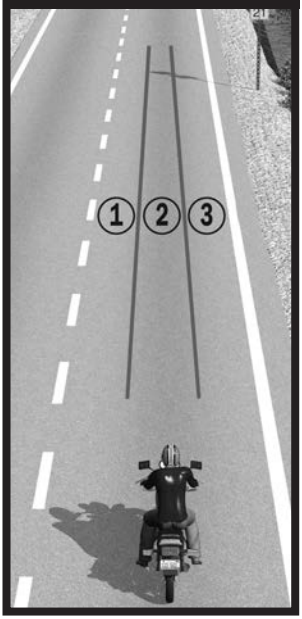
In some ways the size of the motorcycle can work to your advantage. Each traffic lane gives a motorcycle three paths of travel. Your lane position should:

- Increase your ability to see and be seen.
- Avoid others' blind spots.
- Avoid surface hazards.
- Protect your lane from other drivers.
- Communicate your intentions.
- Avoid wind blast from other vehicles.
- Provide an escape route.

Select the appropriate path to maximize your space cushion and make yourself more easily seen by others on the road.

In general, there is no single best lane position for riders to be seen and to maintain a space cushion around the motorcycle. No portion of the lane need be avoided, including the center.

Lane Positions



Position yourself in the portion of the lane where you are most likely to be seen and you can maintain a space cushion around you. Change position as traffic situations change. Ride in path 2 or 3 if vehicles and other potential problems are on your left only. Remain in path 1 or 2 if hazards are on your right only. If vehicles are being operated on both sides of you, the center of the lane, path 2, is usually your best option (see illustration above).

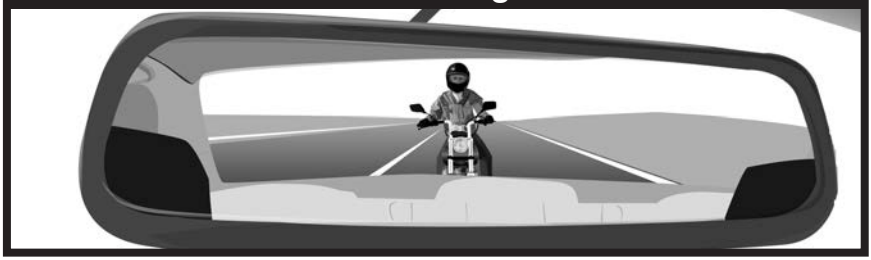
The oily strip in the center portion that collects drippings from cars is usually no more than 2 feet wide. Unless the road is wet, the average center strip permits adequate traction to ride on safely. You can operate to the left or right of the grease strip and still be within the center portion of the traffic lane. Avoid riding on big build-ups of oil and grease usually found at busy intersections or toll booths.

Following Another Vehicle

Following too closely could be a factor in crashes involving motorcyclists. In traffic, motorcycles need as much distance to stop as cars. Normally, a minimum three-second following distance should be maintained behind the vehicle ahead. To gauge your following distance:

- Pick out a marker, such as a pavement marking or lamp post, on or near the road ahead.
- When the rear bumper of the vehicle ahead passes the marker, count off the seconds: one-thousand-one, one-thousand-two.
- If you reach the marker before you reach a count of three, you are following too closely.

Following



A three-second following distance leaves a minimum amount of space to stop or swerve if the driver ahead stops suddenly. It also permits a better view of potholes and other hazards in the road.

A larger cushion of space is needed if your motorcycle will take longer than normal to stop. If the pavement is slippery, if you cannot see through the vehicle ahead, or if traffic is heavy and someone may squeeze in front of you, increase your following distance.

Test Yourself

3 **When riding you should:**

a. Turn your head and shoulders.
b. Keep your arms straight.
c. Keep your knees away from the gas tank.
d. Turn just your head and eyes to look where you are going.

Answer — page 45

Keep well behind the vehicle ahead even when you are stopped. This will make it easier to get out of the way if someone bears down on you from behind. It will also give you a cushion of space if the vehicle ahead starts to back up for some reason.

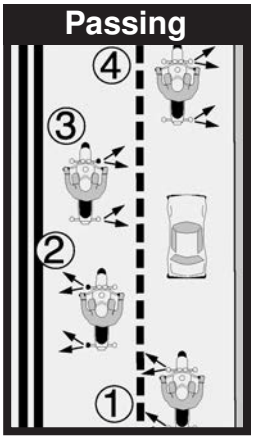
When behind a vehicle, ride where the driver can see you in the rearview mirror. Riding in the center portion of the lane should put your image in the middle of the rearview mirror, where a driver is most likely to see you (see illustration on page 12).

Riding at the far side of a lane may permit a driver to see you in a sideview mirror; however, most drivers do not look at the sideview mirrors as often as they check the rearview mirror. If the traffic situation allows, the center portion of the lane is usually the best place for you to be seen by the drivers ahead and to prevent lane sharing by others.

Being Followed

Speeding up to lose someone following too closely only ends up with someone tailgating you at a higher speed. A better way to handle tailgaters is to get them in front of you. When someone is following too closely, change lanes and let them pass. If you cannot do this, slow down and open up extra space ahead of you to allow room for both you and the tailgater to stop. This will also encourage them to pass. If they do not pass, you will have given yourself and the tailgater more time and space to react in case an emergency does develop ahead.

Passing and Being Passed

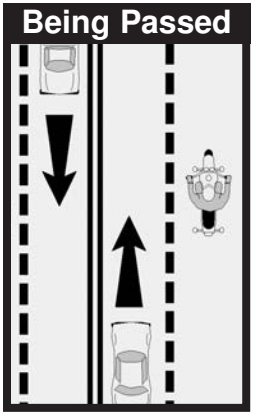


Be sure other drivers see you and that you see potential hazards when passing and being passed.

Passing — When passing, follow these steps:

1. Ride in the left portion of the lane at a safe following distance to increase your line of sight and make you more visible. Signal and check for oncoming traffic. Use your mirrors and turn your head to look for traffic behind.
2. When safe, move into the left lane and accelerate. Select a lane position that does not crowd the car you are passing and provides space to avoid hazards in your lane.
3. Ride through the blind spot as quickly as possible.
4. Signal again and complete mirror and head checks before returning to your original lane and then cancel the signal. Remember, passes must be completed within posted speed limits and only where permitted. Know your signs and road markings.

Being Passed — When you are being passed, stay in the center portion of your lane. Riding any closer to the passing vehicle could put you in a hazardous situation. Avoid being hit by:



- **The other vehicle** — A slight mistake by you or the passing driver could cause a sideswipe.
- **Extended mirrors** — Some drivers forget that their mirrors hang out farther than their fenders.
- **Objects thrown from windows** — Even if the driver knows you are there, a passenger may not see you and might toss something on you or the road ahead of you.
- **Blasts of wind from larger vehicles** — They can affect your control. You have more room for error if you are in the middle portion when hit by this blast than if you are on either side of the lane.

Do not move into the portion of the lane farthest from the passing vehicle. It may invite the other driver to cut back into your lane too early.

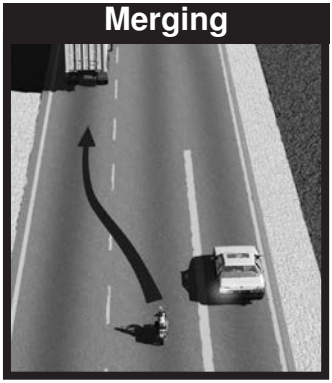
Lane Sharing

Automobiles and motorcycles need a full lane to operate safely. Lane sharing is usually prohibited. Riding between rows of stopped or moving cars in the same lane can leave you vulnerable to the unexpected. A hand could come out of a window; a door could open; a car could turn suddenly. Discourage lane sharing by others. Keep a center-portion position whenever drivers might be tempted to squeeze by you. Drivers are most tempted to do this:

- In heavy, bumper-to-bumper traffic.
- When they want to pass you.
- When you are preparing to turn at an intersection.
- When you are getting in an exit lane or leaving a highway.

Merging Vehicles

Drivers on an entrance ramp may not see you on the highway. Give them plenty of room. Change to another lane if one is open. If there is no room for a lane change, adjust speed to open up space for the merging driver.



Vehicles Alongside

Do not ride next to vehicles in other lanes if you do not have to. You might be in the blind spot of a vehicle in the next lane, which could switch into your

lane without warning. Vehicles in the next lane also block your escape if you come upon danger in your own lane. Speed up or drop back to find a place clear of traffic on both sides.

Blind Spots

Scan, Identify, Predict, Decide, Execute (SIPDE)

Good experienced riders remain aware of what is going on around them. They improve their riding strategy by using SIPDE, a five-step process used to make appropriate judgements, and apply them correctly in different traffic situations.

Scan — Search aggressively ahead, to the sides and behind to avoid potential hazards even before they arise. How assertively you search and how much time and space you have can eliminate or reduce harm. Focus even more on finding potential escape routes in or around intersections, shopping areas, school zones and construction zones.

Be especially alert in areas with limited visibility. Visually busy surroundings could hide you and your motorcycle from others.

Scan for:
- Oncoming traffic that may turn left in front of you.
- Traffic coming from the left and right.
- Traffic approaching from behind.
- Hazardous road conditions.

Identify — Locate hazards and potential conflicts.
- Vehicles and other motorcycles may move into your path and increase the likelihood of a crash.
- Pedestrians and animals may be unpredictable and make short, quick moves.
- Stationary objects such as potholes, guard rails, bridges, roadway signs, hedges or trees will not move into your path but may influence your riding strategy.

Predict — Consider speed, distance and direction of hazards to anticipate how they may affect you.

Test Yourself

4 **Usually, a good way to handle tailgaters is to:**

a. Change lanes and let them pass.
b. Use your horn and make obscene gestures.
c. Speed up to put distance between you and the tailgater.
d. Ignore them.

Answer — page 45

Cars moving into your path are more critical than those moving away or remaining stationary. Predict where a collision may occur. Completing this "what if...?" phrase to estimate results of contacting or attempting to avoid a hazard depends on your knowledge and experience.

Decide — Determine what you need to do based on your prediction. The mental process of determining your course of action depends on how aggressively you searched. The result is your action and knowing which strategy is best for the situation. You want to eliminate or reduce the potential hazard. You must decide when, where and how to take action. Your constant decision-making tasks must stay sharp to cope with constantly changing traffic situations.

The decisions you make can be grouped by types of hazards you encounter:
- One hazard.
- Two hazards.
- Multiple hazards.

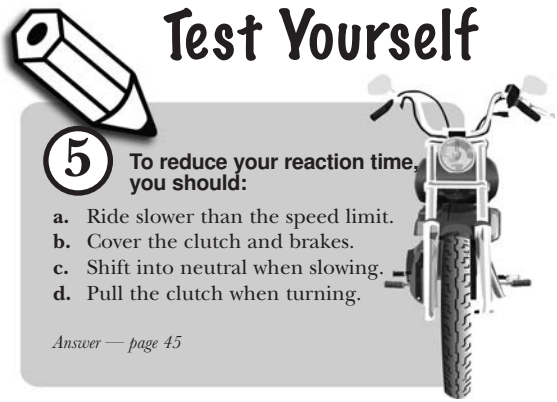
Execute — Carry out your decision. To create more space and minimize harm from any hazard:
- Communicate your presence with lights and/or horn.
- Adjust your speed by accelerating, stopping or slowing.
- Adjust your position and/or direction.

Apply the old adage, "one step at a time," to handle two or more hazards. Adjust speed to permit two hazards to separate. Then deal with them one at a time as single hazards. Decision-making becomes more complex with three or more hazards. Weigh the consequences of each and give equal distance to hazards.

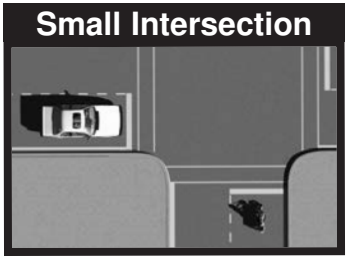
In potential high-risk areas, school zones and construction zones, cover the clutch and both brakes to reduce the time you need to react.

Intersections

The greatest potential for conflict between you and other traffic is at intersections. An intersection can be in the middle of an urban area or at a driveway on a residential street — anywhere traffic may cross your path of travel. Over one-half of motorcycle/automobile crashes are caused by drivers entering a rider's right of way. Vehicles that turn left in front of you,

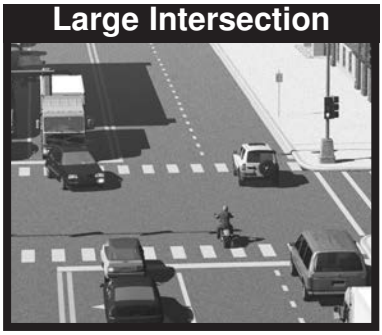


including those turning left from the lane to your right, and those on side streets that pull into your lane, are the biggest dangers. Using SIPDE (see pages 15-16) at intersections is critical.



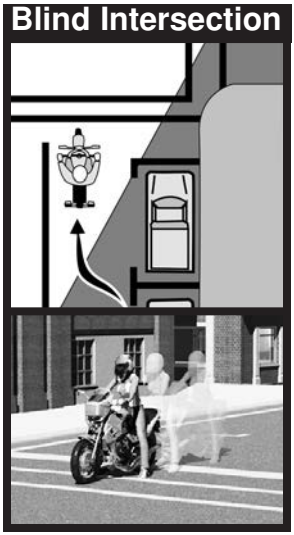
There are no guarantees that others see you. Never count on eye contact as a sign that a driver will yield. Too often, drivers look right at motorcyclists and still fail to see them. The only eyes that you can count on are your own. If a car can enter your path, assume that it will. Good riders are always looking for trouble not to get into it, but to stay out of it.

Increase your chances of being seen at intersections. Ride with your headlight on in a lane position that provides the best view of oncoming traffic. Provide a space cushion around the motorcycle that permits you to take evasive action.



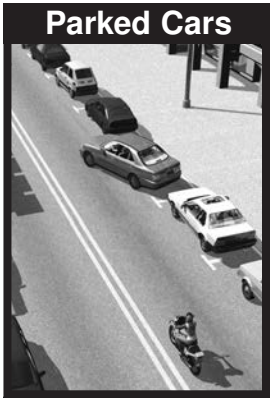
Large Intersections — As you approach the intersection, select a lane position to increase your visibility to the driver. Cover the clutch and both brakes to reduce reaction time. Reduce your speed as you approach an intersection. After entering the intersection, move away from vehicles preparing to turn. Do not change speed or position radically. The driver might think you are preparing to turn.

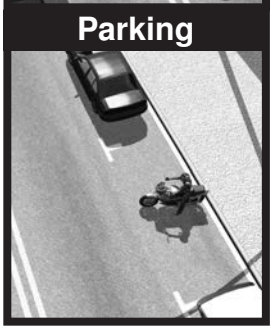
Blind Intersections — If you approach a blind intersection, move to the portion of the lane that will bring you into another driver's field of vision at the earliest possible moment. In the illustration at right, the rider has moved to the left portion of the lane, away from the parked car, so the driver on the cross street can see him/her as soon as possible. Remember, the key is to see as much as possible and remain visible to others while protecting your space.



If you have a stop sign or stop line, stop there first. Then edge forward and stop again, just short of where the cross-traffic lane meets your lane (see illustration). From that position, lean your body forward and look around buildings, parked cars or

bushes to see if anything is coming. Make sure your front wheel stays out of the cross lane of travel while you are looking.





Passing Parked Cars

When passing parked cars, stay toward the left of your lane. You can avoid problems caused by doors opening, drivers getting out of cars or people stepping from between cars. If oncoming traffic is present, it is usually best to remain in the center-lane position to maximize your space cushion.

A bigger problem can occur if the driver pulls away from the curb without checking for traffic behind. Even if drivers do look, they may fail to see you.

In either event, the driver might cut into your path. Slow down or change lanes to make room for someone cutting in.

Vehicles making a sudden U-turn are the most dangerous. They may cut you off entirely, blocking the entire roadway and leaving you with no place to go. Because you cannot tell what a driver will do, slow down and get the driver's attention. Sound your horn and continue with caution.

Parking at the Roadside and Curbs

Park at a 90-degree angle to the curb with the rear wheel touching the curb.

BEING SEEN

In crashes with motorcyclists, drivers often say they never saw the motorcycle. From ahead or behind, a motorcycle's outline is much smaller than that of another vehicle. Also, it is difficult to see something you are not looking for, and most drivers are not looking for motorcycles. More likely, they are looking through the skinny, two-wheeled silhouette in search of cars that may pose a problem to them. Even if a driver does see you coming, you are not necessarily safe. Smaller vehicles appear farther away and seem to be traveling slower than they actually are. It is common for drivers to pull out in front of motorcyclists, thinking they have plenty of time. Too often, they are wrong.

You can do many things to make it easier for others to recognize you and your motorcycle:

Clothing

Most crashes occur in broad daylight. Wear bright-colored clothing and/or reflective to increase your chances of being seen. Remember, your body is half of the visible surface area of the rider/motorcycle unit.

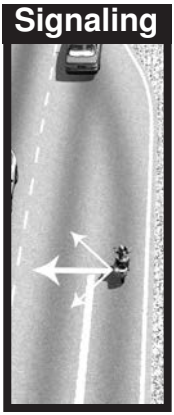
Bright orange, red, yellow or green jackets or vests are your best options for being seen. Your helmet can do more than protect you in a crash. Brightly colored helmets also may help others see you. Any bright color is better than drab or dark colors.

Reflective, bright-colored clothing (helmet and jacket or vest) is best. Reflective material on a vest and on the sides of the helmet will help drivers coming from the side to spot you. Reflective material also can be a big help for drivers coming toward you or from behind.

Headlight

The best way to help others see your motorcycle is to keep the headlight on at all times (although motorcycles sold in the U.S. since 1978 automatically have the headlights on when running). **Illinois law requires that the headlight be on when operating on streets and highways.**

Use of the high beam during the day increases the likelihood that oncoming drivers will see you. Use the low beam at night and in cloudy weather.



Signals

The signals on a motorcycle are similar to those on a car. They tell others what you plan to do. Due to a rider's added vulnerability, however, signals are even more important. Use them anytime you plan to change lanes or turn. Use them even when you think no one else is around. It is the car you do not see that is going to give you the most trouble. Your signal lights also make you easier to spot. That is why it is a good idea to use your turn signals even when what you plan to do is obvious.

When you enter a freeway, drivers approaching from behind are more likely to see your signal blinking and make room for you.

Turning on your signal light before each turn reduces confusion and frustration for traffic around you. Once you turn, make sure your signal is off, or a driver may pull directly into your path thinking you plan to turn again. Use your signals at every turn so drivers can react accordingly. Do not make them guess what you intend to do.

Brake Light

A motorcycle's brake light is usually not as noticeable as the brake lights on a car, particularly when the taillight is on. (It goes on with the headlight.) If the situation permits, help others notice you by flashing your brake light before you slow down. It is especially important to flash your brake light before you:

- Slow more quickly than others might expect (turning off a high-speed highway).
- Slow where others may not expect it (in the middle of a block or at an alley).

If you are being followed closely, it is a good idea to flash your brake light before you slow. The tailgater may be watching you and not see something ahead that will make you slow down. This will hopefully discourage them from tailgating and warn them of hazards ahead they may not see.

Using Your Mirrors

While it is most important to scan what is happening ahead, you cannot afford to ignore situations behind. Traffic conditions change quickly. Knowing what is going on behind is essential for you to make a safe decision about how to handle trouble ahead.

Frequent mirror checks should be part of your normal scanning routine. Make a point of using your mirrors:

- **When stopped at an intersection.** Watch cars coming up from behind. If drivers are not paying attention, they could be on top of you before they see you.
- **Before changing lanes.** Make sure no one is about to pass you.
- **Before slowing down.** The driver behind may not expect you to slow, or may be unsure about where you will slow. For example, you signal a turn and the driver thinks you plan to turn at a distant intersection, rather than at a nearer driveway.

Some motorcycles have rounded (convex) mirrors. These provide a wider view of the road behind than flat mirrors. They also make vehicles seem farther away than they really are. If you are not used to convex mirrors, get familiar with them. (While you are stopped, pick out a parked car in your mirror. Form a mental image of how far away it is. Then, turn around and look at it

Test Yourself

6 **Making eye contact with other drivers:**

a. Is a good sign they see you.
b. Is not worth the effort it takes.
c. Does not mean the other driver will yield.
d. Guarantees that the other driver will yield to you.

Answer — page 45

to see how close you came.) Practice with your mirrors until you become a good judge of distance. Even then, allow extra distance before you change lanes.

Head Checks

Checking your mirrors is not enough. Motorcycles have "blind spots" like other vehicles. Before changing lanes, turn your head and look to the side for other vehicles.

On a road with several lanes, check the far lane and the one next to you. A driver in the distant lane may head for the same space you plan to take.

Frequent head checks also should be your normal scanning routine. Only by knowing what is happening all around you are you fully prepared to deal with it.

Horn

Be ready to use your horn to get someone's attention quickly. It is a good idea to give a quick beep before passing anyone who may move into your lane. Following are some situations:

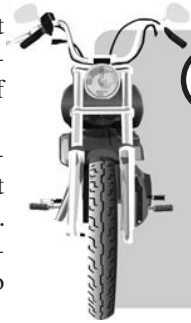
- A driver in the lane next to you is driving too closely to the vehicle ahead and may want to pass.
- A parked car has someone in the driver's seat.
- Someone is in the street riding a bicycle or walking.

In an emergency, press the horn button loud and long. Be ready to stop or swerve away from the danger. Keep in mind that a motorcycle's horn is not as loud as a car's; therefore, use it, but do not rely on it. Other strategies may be appropriate along with the horn.

Riding at Night

At night it is harder for you to see and be seen. Picking your headlight or taillight out of the car lights around you is not easy for other drivers. To compensate:

- **Reduce Your Speed** — Ride even slower than you would during the day, particularly on roads you do not know well. This will increase your chances of avoiding a hazard.
- **Increase Distance** — Distances are harder to judge at night than during the day. Your eyes rely upon shadows and light contrasts to



Test Yourself

7 **Reflective clothing should:**

a. Be worn at night.
b. Be worn during the day.
c. Not be worn.
d. Be worn day and night.

Answer — page 45

determine how far away an object is and how fast it is coming. These contrasts are missing or distorted under artificial lights at night. Open up your following distance and allow more distance to pass and be passed.

- **Use the Car Ahead** — The headlights of the car ahead can give you a better view of the road than even your high beam can. Taillights bouncing up and down can alert you to rough pavement.
- **Use Your High Beam** — Get all the light you can. Use your high beam whenever you are not following or meeting a car.
- **Be Flexible About Lane Position** — Change to whatever portion of the lane is best to help you see, be seen and keep an adequate space cushion.
- **Be Visible** — Wear reflective materials when riding at night.

CRASH AVOIDANCE

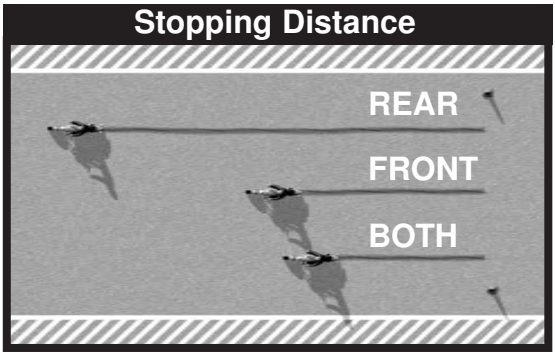
No matter how careful you are, there will be times when you find yourself in a tight spot. Your chances of getting out safely depend on your ability to react quickly and properly. Crashes often occur because a rider is not prepared for crash-avoidance maneuvers.

Knowing when and how to stop or swerve are two skills critical in avoiding a crash. It is not always desirable or possible to stop quickly to avoid an obstacle. Riders also must be able to swerve around an obstacle. Determining the skills necessary for the situation is important as well. Studies show most crash-involved riders:

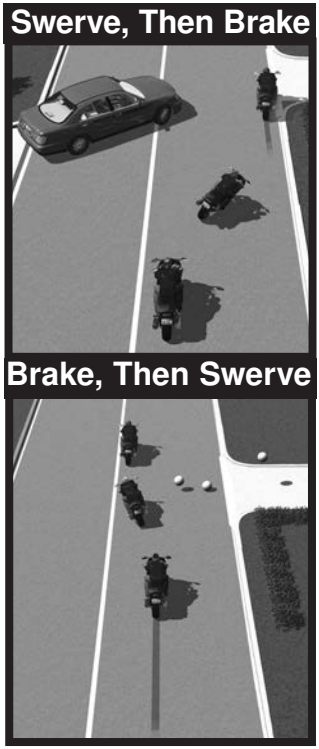
- Under brake the front tire and over brake the rear.
- Did not separate braking from swerving or did not choose swerving when it was appropriate.

Quick Stops

To stop quickly, apply both brakes at the same time. Do not be shy about using the front brake, but do not grab it either. Squeeze the brake lever firmly and progressively. If the front wheel locks, release the front brake immediately then reapply it firmly. At the same time, press down on the rear brake. If you accidentally lock the rear brake on a good traction surface, keep it locked until you have completely stopped. Even with a locked rear wheel, you can control the motorcycle on a straight away if it is upright and going in a straight line.



Always use both brakes at the same time to stop. The front brake can provide 70 percent or more of the potential stopping power. If you must stop quickly while turning or riding a curve, the best technique is to straighten the bike upright first and then brake. However, it may not always be possible to straighten the motorcycle and then stop. If you must brake while leaning, apply light brakes and reduce the throttle. As you slow, you can reduce your lean angle and apply more brake pressure until the motorcycle is straight and maximum brake pressure is possible. You should straighten the handlebars in the last few feet of stopping. The motorcycle should then be straight up and in balance.



Swerving or Turning Quickly

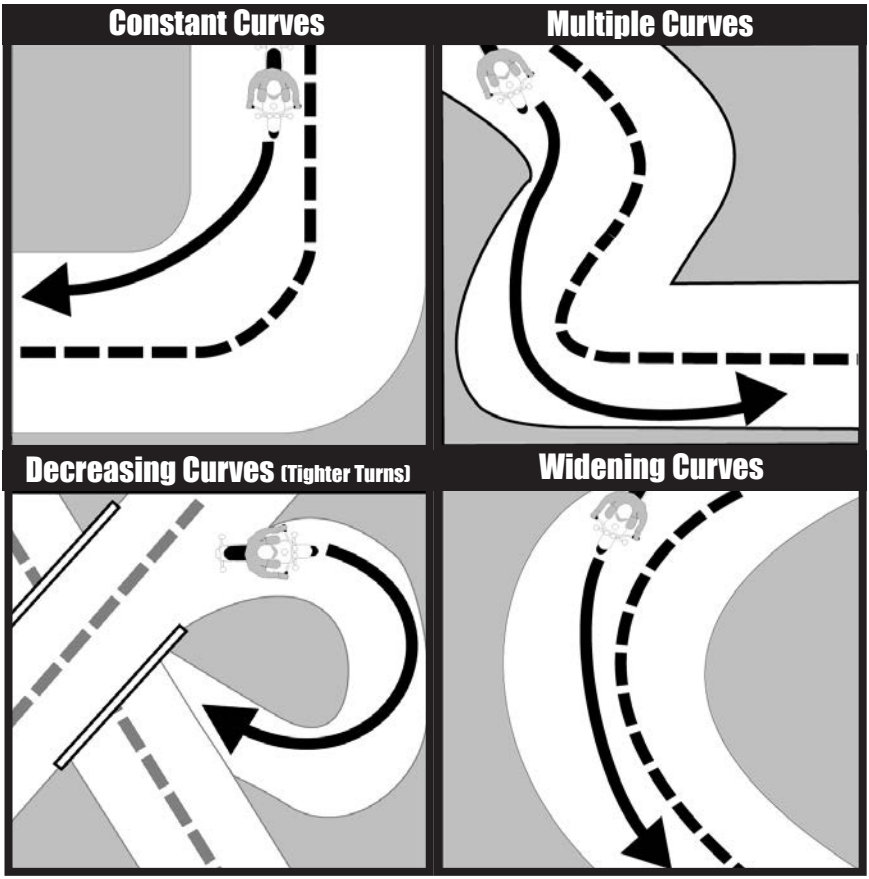
Sometimes you may not have enough room to stop, even if you use both brakes properly. An object might appear suddenly in your path or the car ahead might squeal to a stop. The only way to avoid a crash may be to turn quickly or swerve around it.

A swerve is any sudden change in direction. It can be two quick turns or a rapid shift to the side. Apply a small amount of hand pressure to the handlegrip located on the side of your intended direction of escape. This will cause the motorcycle to lean quickly. The sharper the turn(s), the more the motorcycle must lean. Keep your body upright and allow the motorcycle to lean in the direction of the turn while keeping your knees against the tank and your feet solidly on the pegs. Let the motorcycle move underneath you.

Make your escape route the target of your vision. Press on the opposite handlegrip once you clear the obstacle to return to your original direction of travel. To swerve to the left, press the left handlegrip, then press the right to recover. To swerve to the right, press right, then left. **If braking is required, separate it from swerving. Brake before or after, never while swerving.**

Cornering

A primary cause of single-vehicle crashes is motorcyclists running wide in a curve or turn and colliding with the roadway or a fixed object. Every curve is different. Be alert to whether a curve remains constant, gradually widens, gets tighter or involves multiple turns. Ride within your skill level and posted speed limits. Your best path may not always follow the curve of the road.



Change lane position depending on traffic, road conditions and curve of the road. If no traffic is present, start at the outside of a curve to increase your line of sight and the effective radius of the turn. As you turn, move toward the inside of the curve, and as you pass the center, move to the outside to exit.

Test Yourself

8 **The best way to stop quickly is to:**

a. Use the front brake only.
b. Use the rear brake first.
c. Throttle down and use the front brake.
d. Use both brakes simultaneously.

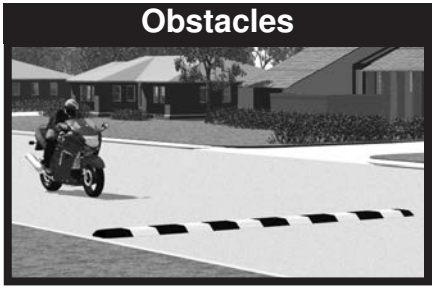
Answer — page 45

Another alternative is to move to the center of your lane before entering a curve and stay there until you exit. This permits you to spot approaching traffic as soon as possible. You can also adjust for traffic crowding the center line or debris blocking part of your lane.

DANGEROUS SURFACES

Your chance of falling or being involved in a crash increases whenever you ride across uneven surfaces or obstacles, slippery surfaces, railroad tracks, and grooves and gratings.

Uneven Surfaces and Obstacles



Watch for uneven surfaces such as bumps, broken pavement, potholes or small pieces of highway trash. Try to avoid obstacles by slowing or going around them. If you must go over the obstacle, first determine if it is possible. Approach it at as close to a 90-degree angle as possible. Look where you want to go to control your path of travel. If you have to ride over the obstacle, you should:

- Slow down as much as possible before contact.
- Make sure the motorcycle is straight.
- Rise slightly off the seat with your weight on the footrests to absorb the shock with your knees and elbows and avoid being thrown off the motorcycle.
- Just before contact, roll on the throttle slightly to lighten the front end.

If you ride over an object on the street, pull off the road and check your tires and rims for damage before riding any farther.

Slippery Surfaces

Motorcycles handle better when ridden on surfaces that permit good traction. Surfaces that provide poor traction include:

- Wet pavement, particularly just after it starts to rain and before surface oil washes to the side of the road.
- Gravel roads, or where sand and gravel collect.
- Mud, snow and ice.
- Lane markings, steel plates and manhole covers, especially when wet.

To ride safely on slippery surfaces:

- **Reduce your speed** — Slow down before you get to a slippery surface to lessen your chances of skidding. Your motorcycle needs more distance to stop. It is

particularly important to reduce speed before entering wet curves.

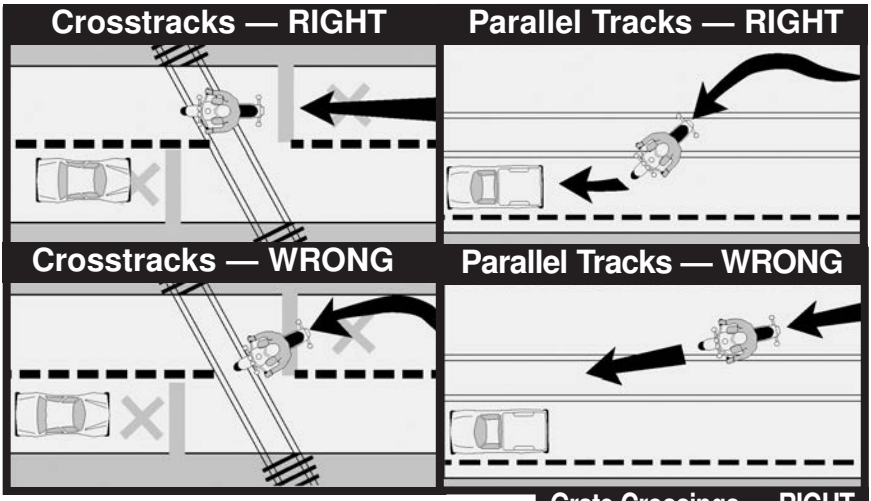
- **Avoid sudden moves** — Any sudden change in speed or direction can cause a skid. Be as smooth as possible when you speed up, shift gears, turn or brake.
- **Use both brakes** — The front brake is still effective, even on a slippery surface. Squeeze the brake lever gradually to avoid locking the front wheel. Remember, use gentle pressure on the rear brake.
- **Avoid the center of a lane** — When it starts to rain, ride in the tire tracks left by cars. Often, the left tire track will be the best position, depending on traffic and other road conditions as well.
- **Watch for oil spots** — Be careful when you put your foot down to stop or park. You may slip and fall.
- **Watch for dirt and gravel** — Dirt and gravel collect along the sides of the road, especially on curves and ramps leading to and from highways. Be aware of what is on the edge of the road, particularly when making sharp turns and getting on or off freeways at high speeds.
- **Watch for ice patches** — Ice develops more quickly on some sections of a road than on others. Patches of ice tend to form in low or shaded areas and on bridges and overpasses. Wet surfaces or wet leaves are just as slippery. Ride on the least slippery portion of the lane and reduce speed.

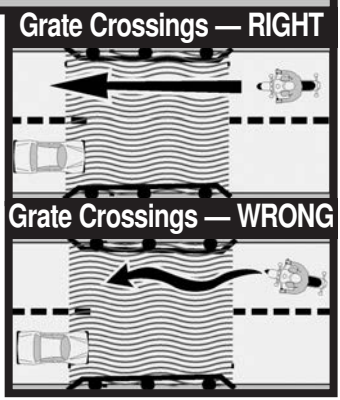
Cautious riders steer clear of roads covered with ice or snow. If you cannot avoid a slippery surface, keep your motorcycle straight up and proceed as slowly as possible. If you encounter a large surface so slippery you must coast or travel at a walking pace, consider letting your feet skim along the surface. If the motorcycle starts to fall, you can catch yourself. Be sure to keep off the brakes. If possible, squeeze the clutch and coast. Attempting this maneuver at anything other than the slowest of speeds could prove hazardous.

Beware of Slippery Roads

Tracks and Pavement Seams

It is usually safer to ride straight within your lane to cross tracks. Turning to take tracks head on (at a 90-degree angle) can be more dangerous and may carry you into another lane of traffic. For track and road seams that run parallel to your course, move far enough away from tracks, ruts or pavement seams to cross at an angle of at least 45 degrees. Then, make a quick, sharp turn. Edging across could catch your tires and throw you off balance.





Grooves and Gratings

Riding over rain grooves or bridge gratings may cause a motorcycle to weave. The uneasy, wandering feeling is generally not hazardous. Relax, maintain a steady speed and ride straight across. Crossing at an angle forces riders to zigzag to stay in the lane. The zigzag is far more hazardous than the wandering feeling.

MECHANICAL PROBLEMS

You can find yourself in an emergency the moment something goes wrong with your motorcycle. In dealing with any mechanical problem, take into account the road and traffic conditions you face. Following are some guidelines that can help you handle mechanical problems safely.

Tire Failure

You will seldom hear a tire go flat. If the motorcycle starts handling differently,

it may be a tire failure. This can be dangerous. You should be able to tell from the way the motorcycle reacts. If one of your tires suddenly loses air, react quickly to keep your balance. Pull off and check the tires.

If the front tire goes flat, the steering will feel heavy. A front-wheel flat is particularly hazardous because it affects your steering. You have to steer well to keep your balance.

If the rear tire goes flat, the back of the motorcycle may jerk or sway from side to side.

If either tire goes flat while riding:
- Hold handlegrips firmly, ease off the throttle and keep a straight course.
- If braking is required, however, gradually apply the brake of the tire that is not flat, if you are sure which one it is.
- When the motorcycle slows, edge to the side of the road, squeeze the clutch and stop.

Stuck Throttle

Twist the throttle back and forth several times. If the throttle cable is stuck, this may free it. If the throttle stays stuck, immediately operate the engine cut-off switch and pull in the clutch at the same time. This will remove power from the rear wheel, although engine noise may not immediately decline. Once the motorcycle is under control, pull off and stop. After you have stopped, check the throttle cable carefully to find the source of the trouble. Make certain the throttle works freely before you start to ride again.

Wobble

A wobble occurs when the front wheel and handlebars suddenly start to shake from side to side at any speed. Most wobbles can be traced to improper loading, unsuitable accessories or incorrect tire pressure. If you are carrying a heavy load, lighten it. If you cannot, shift it. Center the weight lower and farther forward on the motorcycle. Make sure tire pressure, spring pre-load, air shocks and dampers are at the settings recommended for that much weight. Make sure windshields and fairings are mounted properly. Check for poorly adjusted

steering; worn steering parts; a front wheel that is bent, misaligned or out of balance; loose wheel bearings or spokes; and swing arm bearings.

If none of these are determined to be the cause, have the motorcycle checked out thoroughly by a qualified professional. Trying to accelerate out of a wobble will only make the motorcycle more unstable. You should instead:

- Grip the handlebars firmly, but do not fight the wobble.
- Close the throttle gradually to slow down. Do not apply the brakes; braking could make the wobble worse.
- Move your weight as far forward and down as possible.
- Pull off the road as soon as you can to fix the problem.

Chain Problems

A chain that slips or breaks while you are riding could lock the rear wheel and cause your motorcycle to skid. Chain slippage or breakage can be avoided by proper maintenance.

- **Slippage** — If the chain slips when you try to speed up quickly or ride uphill, pull off the road. Check the chain and sprockets. Tightening the chain may help. If the problem is a worn or stretched chain or worn or bent sprockets, replace the chain, the sprockets or both before riding again.
- **Breakage** — You will notice an instant loss of power to the rear wheel. Close the throttle and brake to a stop.

Engine Seizure

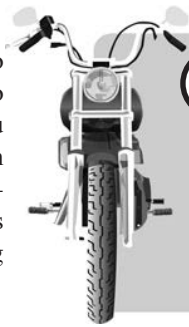
When the engine locks or freezes, it is usually low on oil. The engine's moving parts cannot move smoothly against each other and the engine overheats. The first sign may be a loss of engine power or a change in the engine's sound. Squeeze the clutch lever to disengage the engine from the rear wheel. Pull off the road and stop. Check the oil. If needed, oil should be added as soon as possible or the engine will seize. When this happens, the effect is the same as a locked rear wheel. Let the engine cool before restarting.

OBSTACLES

Animals

Naturally, you should do everything you safely can to avoid hitting an animal. If you are in traffic, however, remain in your lane. Hitting something small is less dangerous to you than hitting something big, like a car.

Test Yourself



10 **If your motorcycle starts to wobble you should:**

a. Accelerate out of the wobble.
b. Use the brakes gradually.
c. Grip the handlebars firmly and close the throttle gradually.
d. Downshift.

Answer — page 45

Motorcycles seem to attract dogs. If you are chased, downshift and approach the animal slowly. As you approach it, accelerate away and leave the animal behind. Do not kick at an animal. Keep control of your motorcycle and look to where you want to go. For larger animals (deer, cattle, etc.), brake and prepare to stop; they are unpredictable.

Flying Objects

Occasionally, riders are struck by insects, cigarettes thrown from cars or pebbles kicked up by the tires of the vehicle ahead. If you are wearing face protection, it might get smeared or cracked, making it difficult to see. Without face protection, an object could hit you in the eye, face or mouth. Whatever happens, keep your eyes on the road and your hands on the handlebars. When safe, pull off the road and repair the damage.

Getting off the Road

If you need to leave the road to check the motorcycle (or need to rest):

- **Check the roadside** — Make sure the surface of the roadside is firm enough to ride on. If it is soft grass, loose sand or you are just not sure about it, slow down before you turn onto it.
- **Signal** — Drivers behind might not expect you to slow down. Give a clear signal that you will be slowing down and changing direction. Check your mirror and make a head check before you take any action.
- **Pull off the road** — Get as far off the road as you can. It can be very hard to spot a motorcycle by the side of the road. You do not want someone else pulling off at the same place you are.
- **Park carefully** — Loose and sloped shoulders can make setting the side or center stand difficult.

CARRYING PASSENGERS AND CARGO

Only experienced riders should carry passengers or large loads. The extra weight changes the way the motorcycle handles, balances, speeds up and slows down. Before taking a passenger or a heavy load on the street, practice away from traffic.

Equipment

To carry passengers safely:

- Equip and adjust your motorcycle to carry passengers.
- Instruct the passenger before you start.
- Adjust your riding technique for the added weight.

Equipment should include:

- **Proper seat** — large enough to hold both of you without crowding. You should not sit any farther forward than you usually do.

- **Footrests for passenger** — firm footing prevents your passenger from falling off and pulling you off too.
- **Protective equipment** — the same as recommended for motorcycle operators.

Adjust the suspension to handle the additional weight. You will probably need to add a few pounds of pressure to the tires if you carry a passenger. (Check your owner's manual for appropriate settings.) While your passenger sits on the seat with you, adjust the mirror and headlight according to the change in the motorcycle's angle.

Instructing Passengers

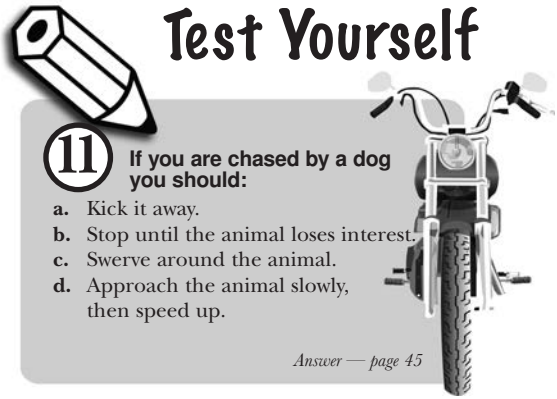
Even if your passenger is a motorcycle rider, provide complete instructions before you start.

Tell your passenger to:
- Get on the motorcycle only after you have started the engine.
- Sit as far forward as possible without crowding you.
- Hold on firmly to your waist, hips or belt.
- Keep both feet on the footrests, even when stopped.
- Keep legs away from the muffler(s), chains or moving parts.
- Stay directly behind you, leaning as you lean.
- Avoid unnecessary talk or motion.

Also, tell your passenger to tighten his/her hold when you:
- Approach surface problems.
- Are about to start from a stop.
- Warn that you will make a sudden move.

Riding with Passengers

Your motorcycle will respond more slowly with a passenger on board. The heavier your passenger, the longer it will take to slow down and speed up, especially on a light motorcycle.
- Ride slower, especially when taking curves, corners or bumps.
- Start slowing earlier as you approach a stop.
- Open up a larger cushion of space ahead and to the sides.
- Wait for larger gaps to cross, enter or merge in traffic.



Carrying Loads

Most motorcycles are not designed to carry much cargo. Small loads can be carried safely if positioned and fastened properly.

- **Keep the load low** — Fasten loads securely or put them in saddlebags. Piling loads against a sissy bar or frame on the back of the seat raises the motorcycle's center of gravity and disturbs its balance.
- **Keep the load forward** — Place the load over, or in front of, the rear axle. Tank bags keep loads forward, but use caution when loading hard or sharp objects. Make sure the tank bag does not interfere with handlebars or controls. Mounting loads behind the rear axle can affect how the motorcycle turns and brakes. It can also cause a wobble.
- **Distribute the load evenly** — Load saddlebags with about the same weight. An uneven load can cause the motorcycle to drift to one side.
- **Secure the load** — Fasten the load securely with bungee cords or nets. Elastic cords with more than one attachment point per side are more secure. A tight load will not catch in the wheel or chain, causing it to lock up and skid. Rope tends to stretch and knots come loose, permitting the load to shift or fall.
- **Check the load** — Stop and check the load every so often to make sure it has not worked loose.

PROTECT YOURSELF AND OTHERS

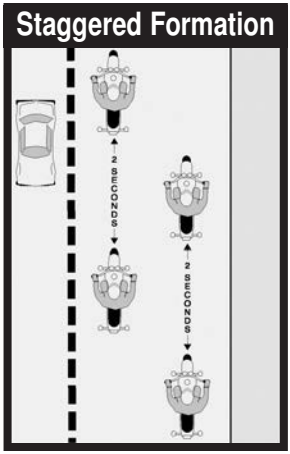
Group Riding

If you ride with others, do it in a way that promotes safety and does not interfere with the flow of traffic. Small groups make it easier and safer for car drivers who need to get around them. A small number is not separated as easily by traffic or red lights. Riders will not always be hurrying to catch up. If your group is larger than four or five riders, divide it into two or more smaller groups.

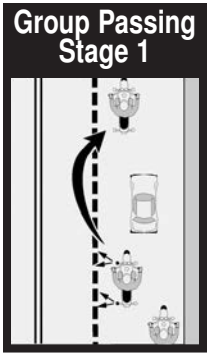
- **Plan ahead** — The leader should look ahead for changes and signal early. Start lane changes early to permit others to follow.
- **Put beginners up front** — Place inexperienced riders just behind the leader where more experienced riders can watch them from the back.
- **Follow those behind** — Let the tailender set the pace. Use your mirrors to keep an eye on the person behind. If a rider falls behind, everyone should slow to stay with the tailender.
- **Know the route** — Make sure everyone knows the route so if someone is separated they will not have to hurry to keep from getting lost or taking a wrong turn. Plan frequent stops on long rides.

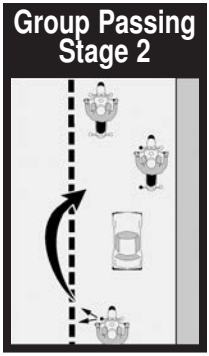
Maintain close ranks but at the same time keep a safe distance to allow each rider in the group time and space to react to hazards. A close group takes up less space on the highway, is easier to see and is less likely to be separated. However, it must be done properly.

- **Do not pair up** — Never operate directly alongside another rider. There is no place to go if you have to avoid a car or something on the road. To talk, wait until you are both stopped.
- **Staggered formation** — This is the best way to keep ranks close yet maintain an adequate space cushion. The leader rides in the left side of the lane, while the second rider stays one second behind in the right side of the lane. A third rider maintains in the left position, two seconds behind the first rider. The fourth rider would keep a two-second distance behind the second rider. This formation keeps the group close and permits each rider a safe distance from others ahead, behind and to the sides.



- **Passing in formation** — Riders in a staggered formation should pass one at a time. First, the lead rider should pull out and pass when it is safe. After passing, the leader should return to the left position and continue riding at passing speed to open room for the next rider. After the first rider passes safely, the second rider should move up to the left position and watch for a safe chance to pass. After passing, this rider should return to the right position and open up room for the next rider.





Some people suggest that the leader should move to the right side after passing a vehicle. This is not a good idea. It encourages the second rider to pass and cut back in before there is a large enough space cushion in front of the passed vehicle. It is simpler and safer to wait until there is enough room ahead of the passed vehicle to allow each rider to move into the same position held before the pass. **It is best to move into a single-file formation when riding curves, turning, or entering or leaving a highway.**

Test Yourself

12 **Passengers should:**

a. Lean as you lean.
b. Hold on to the motorcycle seat.
c. Sit as far back as possible.
d. Never hold on to you.

Answer — page 45

Alcohol and Other Drugs

Your ability to perform and respond to changing road and traffic conditions is influenced by how fit and alert you are. Alcohol and other drugs, more than any other factor, decrease your ability to think clearly and ride safely. As little as one drink can have a significant effect on your performance. Studies show that nearly half of all riders killed in motorcycle crashes have been drinking. Only one-third of those riders have a blood-alcohol concentration (BAC) above the illegal limit (.08). The rest have only a few drinks in their systems, enough to impair riding skills.

In addition to alcohol and cannabis, many prescription and nonprescription drugs may impair safe driving. These drugs include but are not limited to: antihistamines, cold remedies, pain relievers, mood-changing drugs, hashish, LSD, heroin, cocaine, morphine, amphetamines (pep pills) and methamphetamines. Mixing even small amounts of alcohol with other drugs is very dangerous. It is illegal to operate a motor vehicle on Illinois highways with any trace of a controlled drug, substance or intoxicating compounds in your blood.

Injuries occur in 90 percent of motorcycle crashes and 33 percent of automobile crashes that involve drinking or drugs. Annually, more than 2,000 motorcyclists are killed and about 50,000 seriously injured in alcohol-related crashes. Alcohol and drugs make you less able to think clearly and perform physical tasks skillfully. Judgment and the decision-making processes needed for vehicle operation are affected long before the illegal BAC limit is reached. Many over-the-counter prescription drugs and illegal drugs have side effects that increase the risk of a crash while riding. The combined effects of alcohol and other drugs are more dangerous than either is alone.

Alcohol enters the bloodstream quickly. Unlike most foods and beverages, it does not need to be digested. Within minutes after being consumed, it reaches the brain and begins to affect the drinker. Alcohol slows down and impairs bodily functions — both mental and physical.

BAC — Blood-alcohol concentration is the amount of alcohol in relation to blood in the body. Generally, alcohol can be eliminated in the body at the rate of about one drink per hour. But a variety of other factors also may influence the level of alcohol retained. The more alcohol in your blood, the greater the degree of impairment.

Test Yourself

13 **When riding in a group, inexperienced riders should position themselves:**

a. Just behind the leader.
b. In front of the group.
c. At the tail end of the group.
d. Beside the leader.

Answer — page 45

Three factors play a major part in determining BAC:

- Amount of alcohol consumed.
- How fast you drink.
- Body weight.

Other factors also contribute to the way alcohol affects your system. Your gender, physical condition and food intake also may cause your BAC level to be even higher. **Alcohol may still accumulate in your body even if you are drinking at a rate of one drink per hour. Abilities and judgment can be affected by that one drink.**

A 12-ounce can of beer, a mixed drink with a 1.5-ounce shot of hard liquor and a 5-ounce glass of wine all contain the same amount of alcohol.

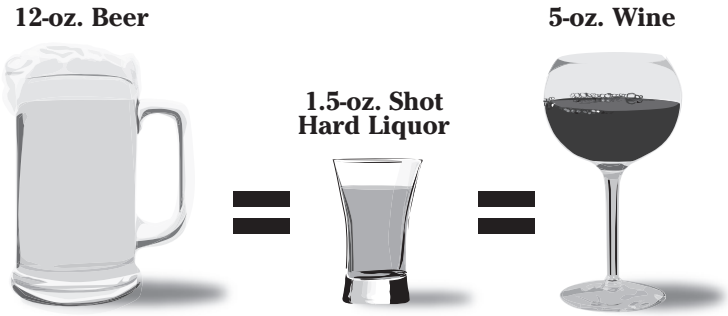
The faster you drink, the more alcohol accumulates in your body. If you drink two drinks in one hour, at the end of that hour, at least one drink remains in your bloodstream. Without taking into account any of the other factors, the formula below illustrates the LEAST amount of drinks remaining in the bloodstream:

A person drinking:

- eight drinks in four hours would have at least four drinks remaining in his/her system.
- seven drinks in three hours would have at least four drinks remaining in his/her system.

Total Drinks Consumed	LESS	Number of Hours Since Last Drink	EQUALS	Drinks Left in the Body
	-		=	

Alcohol Concentration



There are times when a larger person may not accumulate a high concentration of alcohol for each drink consumed because they have more blood and other bodily fluids. Because of individual differences it is better not to risk that your abilities have not been affected. Whether or not you are legally intoxicated is not the real issue. Impairment of judgment begins well below the illegal BAC limit.

DUI — In Illinois, a person with a BAC of .08 is considered intoxicated. It is illegal to drive if your BAC is .08 or greater. However, you can be convicted of DUI if your BAC is less than .08 percent and your driving ability is impaired.

Drunk drivers face stiff, mandatory penalties. If you are convicted of driving under the influence of alcohol or drugs, you may receive any of the following:

- **Driver's license suspension** — Mandatory suspension/revocation for conviction, arrest or refusal to submit to a breath test.
- **BAIID** — Breath-alcohol device required to start your vehicle.
- **Fines** — Severe fines, usually levied with a driver's license suspension/revocation.
- **Community service** — Performing tasks such as picking up litter along the highway, washing cars in the motor-vehicle pool or working at an emergency ward.

In addition, you face attorney's fees, lost work time spent in court or in alcohol-education programs, public transportation costs (while your driver's license is suspended/revoked) and the psychological costs of being tagged a drunk driver.

Do Not Drink or Do Not Ride — If you have not controlled your drinking, you must control your riding. Leave the motorcycle so you will not be tempted to ride. Arrange another way to get home. Once you start, your resistance becomes weaker. Setting a limit or pacing yourself are poor alternatives. Your ability to exercise good judgment is one of the first things affected by alcohol. Even if you try to drink in moderation, you may not realize to what extent your skills have suffered from alcohol's effects.

People who have had too much to drink are unable to make a responsible decision. It is up to others to step in and keep them from taking too great a risk. There are several ways to keep friends from hurting themselves:

- **Arrange a safe ride** — Provide alternative ways for them to get home.

Test Yourself

14 **If you wait an hour for each drink before riding:**

a. You cannot be arrested for drinking and driving.
b. Your riding skills will not be affected.
c. Effects from drinking may still remain.
d. You will be okay as long as you ride slowly.

Answer — page 45

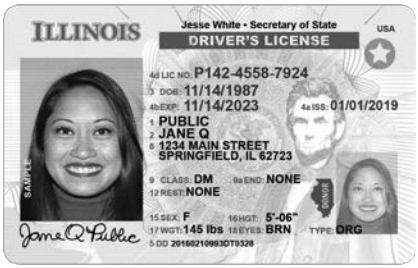
- **Slow the pace of drinking** — Involve them in other activities.
- **Keep them there** — Use any excuse to keep them from getting on their motorcycle. Serve them food and coffee to pass the time. Explain your concerns for their risks of getting arrested or hurt or hurting someone else.
- **Get friends involved** — Use peer pressure from a group of friends to intervene.

Fatigue

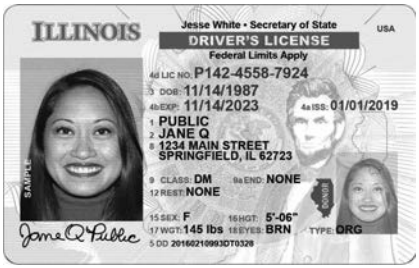
Riding a motorcycle is more tiring than driving a car. On a long trip, you will tire sooner than you would in a car. Avoid riding when tired. Fatigue can affect your control of the motorcycle.

- **Protect yourself from the elements** — Wind, cold and rain make you tire quickly. Dress warmly. A windshield is worth its cost if you plan to ride long distances.
- **Limit your distance** — Experienced riders seldom try to ride more than six hours a day.
- **Take frequent rest breaks** — Stop and get off the motorcycle at least every two hours.
- **Do not drink or use drugs** — Artificial stimulants often result in extreme fatigue or depression when they start to wear off. Riders are unable to concentrate on the task at hand.

REAL ID Driver's License or ID



Standard Driver's License or ID



EARNING YOUR MOTORCYCLE LICENSE

Safe riding requires knowledge and skill. To earn your license, you must pass both the knowledge test and skills test covering information in this manual. To pass you must study this manual thoroughly and practice the skills and techniques discussed.

Rider Skill Test

The Secretary of State's office administers the Rider Skill Test. Applicants for a Class L or Class M license are required to pass this examination.

Exception: Persons age 18 and older who hold a valid Illinois driver's license and have successfully completed a motorcycle training course approved by IDOT are not required to pass this test at a Driver Services facility. Those persons

already will have passed a skills test at the end of the training course and must show an IDOT Motorcycle Rider Education Course completion card dated after Jan. 1, 1993, in addition to proper identification. IDOT Motorcycle Rider Education Course completion cards are valid for one year after the issue date. For information about a Motorcycle Rider Education Course in your area, please call one of the toll-free numbers on page 46 of this manual.

The Rider Skill Test is designed to measure vehicle handling skills in an off-street paved area approximately 30 feet by 75 feet. Lines are painted within this area to delineate the following four exercises. An equipment check is conducted prior to the examination.

To receive a motorcycle license with full privileges, Illinois law requires the maneuvers be performed as designed.

If you test on a three-wheeled vehicle, a J-11 restriction (three-wheeled motorcycle only) will be added until completion of a two-wheeled test. If you test on a four-wheel vehicle, a J-17 restriction (four-wheeled motorcycle only) will be added.

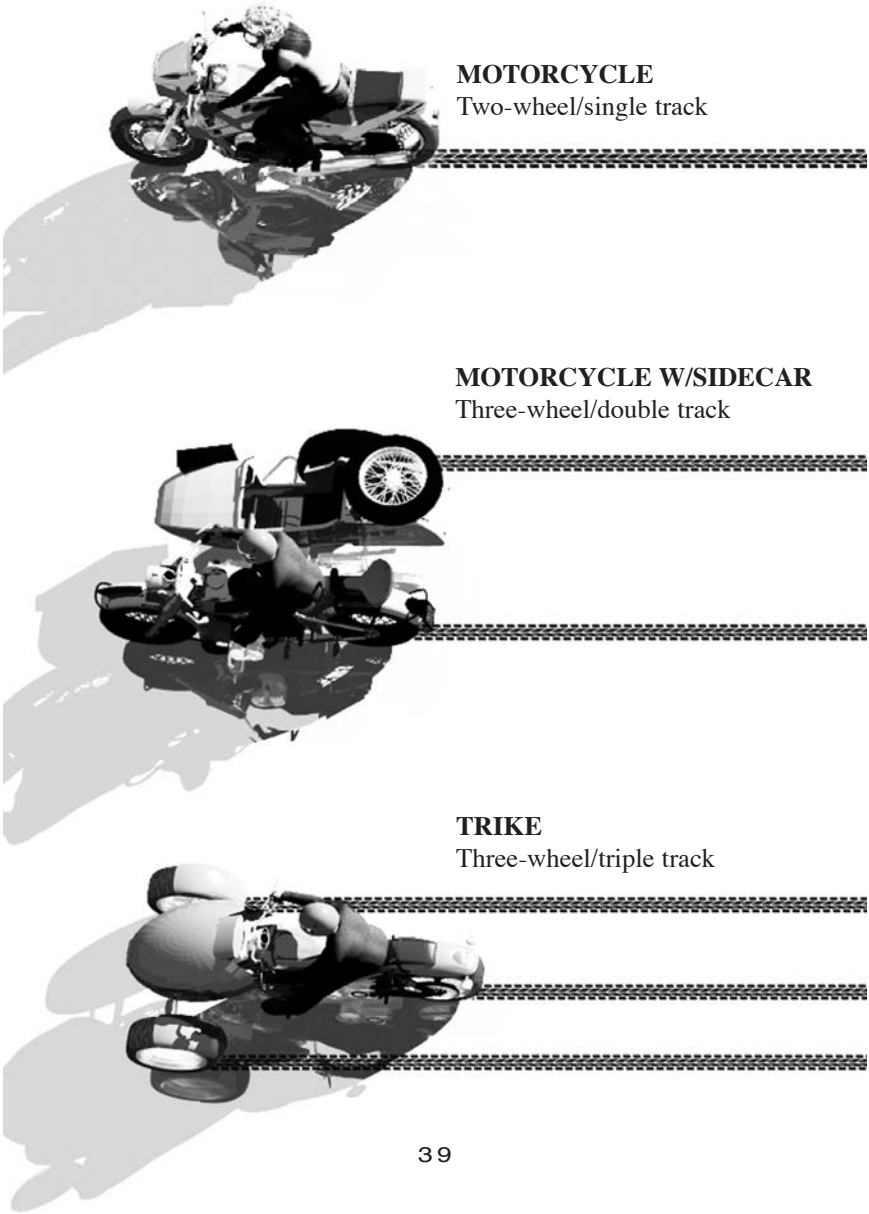
You also may be tested on your ability to:
- Know your motorcycle and your riding limits.
- Accelerate, brake and turn safely.
- See, be seen and communicate with others.
- Adjust speed and position to the traffic situation.
- Stop, turn and swerve quickly.
- Make critical decisions and carry them out.

Examiners may score on factors related to safety such as:
- Selecting safe speeds to perform maneuvers.
- Choosing the correct path and staying within boundaries.
- Completing normal and quick stops.
- Completing normal and quick turns or swerves.

The test will be terminated if the driver:
- Falls or drops the motorcycle at any time.
- Commits an unsafe act (i.e., loses control, raises the front wheel off the ground, uses excessively high speed, etc.).
- Obtains enough points (11 or more) to constitute a failure.
- Testing time exceeds a reasonable time limit.

Two-Wheel and Three-Wheel Motorcycles

Many variations of vehicles are commercially available and have driven the need for different tests. Understanding the differences among these vehicles is important when selecting or administering a Rider Skill Test. A common term is "track" and refers to the number of separate wheel impressions on a soft surface if the vehicle was driven in a straight line through it.



Two-Wheel Rider Skill Test

Engine Stalling

- Points are assessed if you stall your engine at any time during any exercise.
- Stalling the engine four times during this test is an automatic failure.

Exercise 1 — Cone weave, normal stop

- When signaled, ride to the right of the first cone, to the left of the second, and so on. Weave past all five cones without touching or skipping a cone.
- Turn left and ride toward this side of the course. Make a smooth non-skidding stop with your front tire inside the box.
- When stopped, your front tire must not touch the painted lines. Remain stopped.

Exercise 2 — Turn from a stop, U-turn

- When signaled, make a right turn between the boundary lines. Do not touch either line.
- Diagonally, cross to the opposite side of the range and make a left U-turn inside the painted box at the far end of the range.
- Do not touch the solid line (motorcycles 600cc or more) or the dashed line (motorcycles less than 600cc) or put a foot down.
- Stop with your front tire inside the box and wait for further instructions.

Exercise 3 — Quick stop

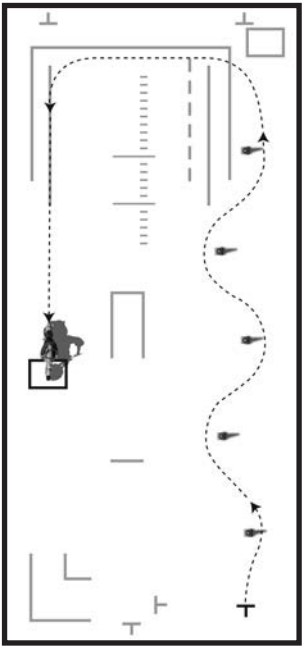
- Position your motorcycle on the Start T.
- When signaled, accelerate straight up this path. Stabilize your speed between 12 and 18 mph by the time you reach the first line.
- Maintain a steady speed.
- When your front tire crosses the second line, stop as fast as you safely can. You will not lose points if you skid.
- Once stopped, do not allow your motorcycle to roll in either direction.

Exercise 4 — Obstacle swerve

- Start at the same Start T.
- When signaled, accelerate straight up this path. Stabilize your speed between 12 and 18 mph by the time you reach the first line.
- Maintain a steady speed.
- When your front tire passes the second line, swerve to the right/left.
- Avoid the obstacle line and stay inside the sideline. Do not touch either line.
- Stop smoothly and wait for further instructions.

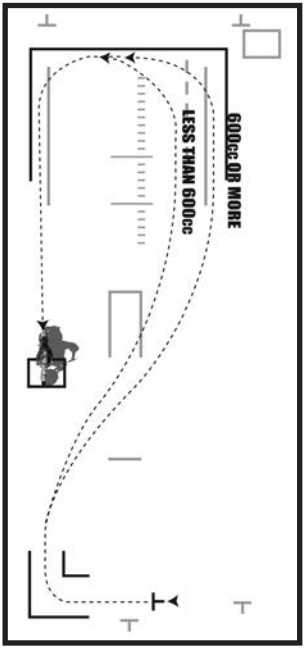
Two-Wheel Rider Skill Test

1



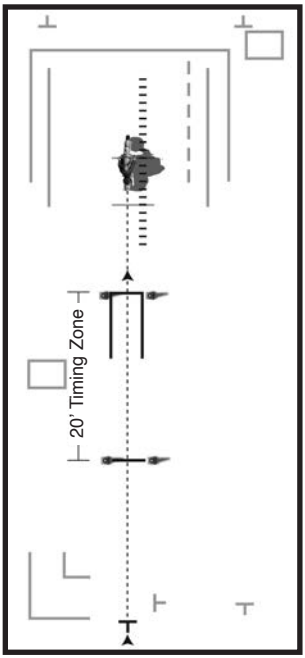
Cone Weave, Normal Stop

2



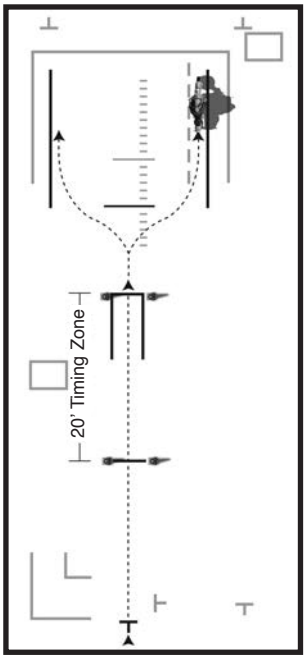
Turn From a Stop, U-turn

3



Quick Stop

4



Obstacle Swerve

Three-Wheel/Four-Wheel Rider Skill Test

Engine Stalling

- Points are assessed if you stall your engine at any time during any exercise.
- Stalling the engine four times during this test is an automatic failure.

Exercise 1 — Left turn, normal stop

- Accelerate straight ahead and make a sharp left turn between the outside boundary lines and the cone marker. Do not touch lines or the cone.
- Ride toward the end of the course. Make a smooth, non-skidding stop with your front tire inside the box (left front tire on vehicles with two front tires).
- When stopped, your front tire must not touch the painted lines. Remain stopped.

Exercise 2 — Cone weave, turn from a stop

- When signaled, ride to the left of the first cone, to the right of the second and to the left of the third. Weave past all three without touching or skipping any of the cones.
- Turn right at the end of the course and stop at the Start T facing the other side of the course.
- When signaled, make a right turn between the boundary lines and the cone. Do not touch the outside boundary lines or the cone.
- Make a smooth, non-skidding stop with your front tire inside the box and wait for further instructions.

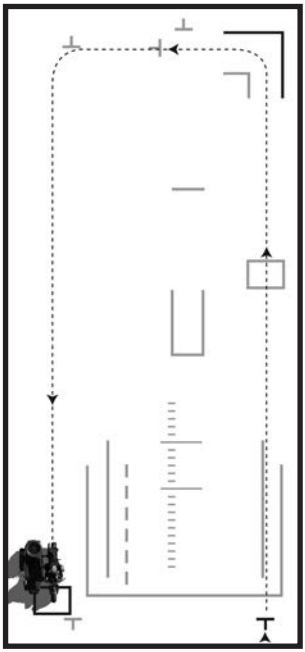
Exercise 3 — Quick stop

- Position your motorcycle on the Start T.
- When signaled, accelerate straight up this path. Stabilize your speed between 12 and 18 mph by the time you reach the first line.
- Maintain a steady speed.
- When your front tire/overhang crosses the second line, stop as fast as you safely can. You will not lose points if you skid.
- Once stopped, do not allow your vehicle to roll in either direction.

Exercise 4 — Obstacle swerve

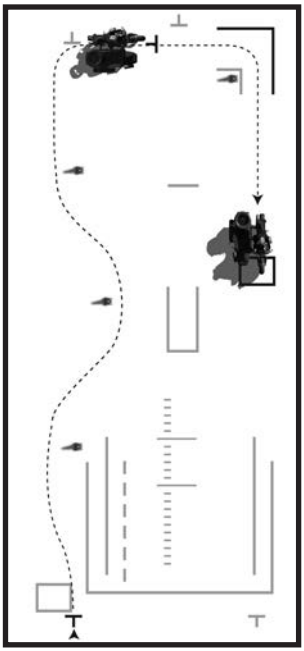
- Start at the same Start T.
- When signaled, accelerate straight up this path. Stabilize your speed between 12 and 18 mph by the time you reach the first line.
- Maintain a steady speed.
- When your front tire/overhang passes the second line, swerve to the right/left.
- Avoid the obstacle line and stay to the inside of the sideline. Do not touch either line.
- Stop smoothly and wait for further instructions.

Three-Wheel/Four-Wheel Rider Skill Test



1

Left Turn, Normal Stop



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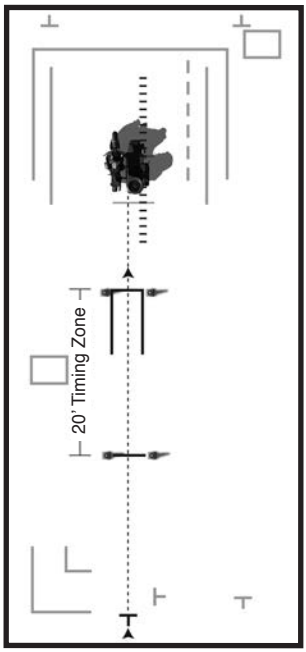
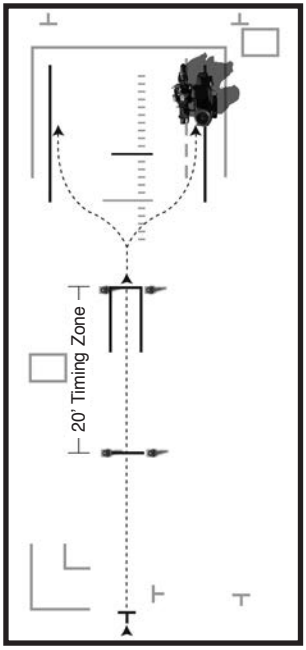
Cone Weave, Turn From a Stop



3

Quick Stop



4

Obstacle Swerve

REQUIRED EQUIPMENT

No motorcycle or motor-driven cycle may be legally operated on a street or highway without the following required equipment:

Brakes — Motorcycles must have brakes on both wheels, with a separate means of application for each wheel or two separate means of application on the rear wheel. Motor-driven cycles must have either a hand-operated or foot-operated brake on at least one wheel, preferably the rear wheel.

Eye protection — Both driver and passenger must be protected by glasses, goggles or a transparent windshield.

Footrests — No passengers may be carried except in a sidecar or enclosed cab, unless the vehicle is equipped for passengers with footrests adjusted to fit the passenger.

Handlebars — Handlebars should not be higher than the height of the head of the operator when seated in the normal driving position astride that portion of the seat or saddle occupied by the operator. The operator must keep at least one hand on the handlebar grip at all times the motorcycle is in motion.

Headlights — At least one white light, visible for 500 feet, must be lighted whenever the motorcycle is being operated on streets or highways. A device to modulate the high beam of the head lamp may be used except when lighted lamps are required for all vehicles.

Horn — Must be heard for 200 feet.

License plate light — One white license plate light must be lighted whenever the headlight is on and must make the license plate visible at least 50 feet away.

Muffler — Must be in constant operation and properly maintained to prevent any excessive or unusual noise. Modification of an exhaust system for the purpose of increasing the noise level is prohibited by law.

Rearview mirror — Must reflect a view of at least 200 feet.

Seat — Drivers are prohibited from carrying passengers unless the vehicle has been designed to carry two people. Everyone riding a motorcycle must sit astride the seat, face forward, with one leg on each side of the motorcycle.

Stoplight — One red light, actuated by the brake and visible for 500 feet.

Taillight — One red light, visible for 500 feet.

Note: Although a helmet is not required equipment under Illinois law, a rider who wears a properly fitted helmet greatly reduces the chance of receiving a fatal head injury in an accident, regardless of the vehicle's traveling speed.

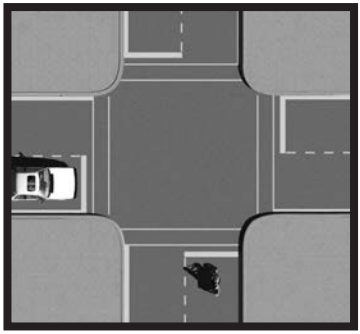
KNOWLEDGE TEST — SAMPLE QUESTIONS

1. It is MOST important to flash your brake light when:
a. Someone is following too closely.
b. You will be slowing suddenly.
c. There is a stop sign ahead.
d. Your signals are not working.

2. The FRONT brake supplies how much of the potential stopping power?
a. About one-quarter.
b. About one-half.
c. About three-quarters.
d. All the stopping power.

3. To swerve correctly:
a. Shift your weight quickly.
b. Turn the handlebars quickly.
c. Press the handlegrip in the direction of the turn.
d. Press the handlegrip in the opposite direction of the turn.

4. In the illustration at right, the car at left is waiting to enter the intersection. It is best to:
a. Make eye contact with the driver.
b. Reduce speed and be ready to react.
c. Maintain speed and position.
d. Maintain speed and move right.



Answers to above Knowledge Test:

1-b	2-c	3-c	4-b

Answers to Test Yourself (previous pages):

1-c	2-d	3-d	4-a	5-b	6-c	7-d
8-d	9-c	10-c	11-d	12-a	13-a	14-c

Cycle Rider Safety Training Program
REGIONAL CENTERS

A
Harper College Motorcycle Safety Program
650 E. Higgins Road, Suite 17-S
Schaumburg, IL 60173-4741
847-925-6803

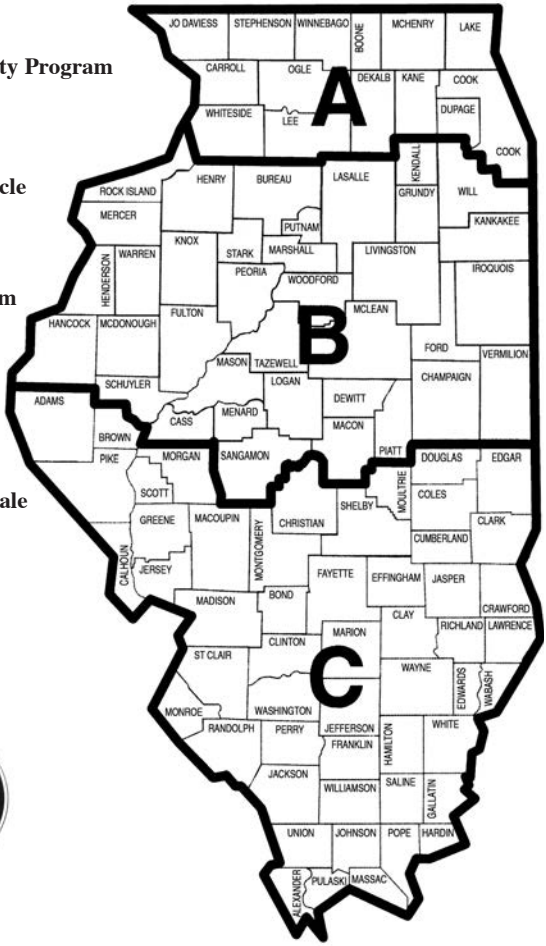
www.harpercollege.edu/motorcycle

B
Illinois Central College
Motorcycle Rider Safety Program
5407 N. University
Peoria, IL 61635-0001
800-252-3348

www.icc.edu/motorcycle

C
Southern Illinois Univ. Carbondale
Motorcycle Rider Program
1435 Douglas Drive
Carbondale, Illinois 62901
800-642-9589 • 618-453-2877
Fax: 618-453-2879

www.mrp.siu.edu



State of Illinois
Illinois Department of Transportation

Illinois Department of Transportation

For course dates, times and locations, please contact your Regional Center.

Diagrams and drawings used in this manual are for reference only and are not to correct scale for size of vehicles and distances.

Illinois Secretary of State Jesse White thanks the Motorcycle Safety Foundation for its assistance with this manual.

Information contained in this manual was correct at date of print.

CLASSIFICATION CRITERIA

Motorcycle: 150cc and over
(two-, three- or four-wheel)

CLASS M

Motor-Driven Cycle: 1cc-149cc
(two-, three- or four-wheel)

CLASS L

MOPED

- A moped is a motor-driven cycle with speeds attainable in one mile of between 20 mph and 30 mph.
- Equipped with a motor that produces 2 brake horsepower or less.
- If an internal combustion engine is used, the displacement shall not exceed 50cc.
- Power drive system does not require the operator to shift gears.

All four criteria must be met, otherwise it is a motor-driven cycle and a Class L is required.

A moped may be operated with any current, valid driver's license of any classification.

REAL ID

goes into effect **May 3, 2023.**

Your current Illinois driver's license or ID card (DL/ID) will be accepted at airports until May 3, 2023. We are providing you with the choice either to obtain a REAL ID card or to keep a standard card. Take time to know your options.

You **DO NOT NEED** a REAL ID if:

- You have a valid U.S. passport or passport card; or
- You do **not** use airplanes as a mode of domestic transportation; or
- You do **not** visit military bases; or
- You do **not** visit secure federal facilities.

You **NEED** a REAL ID if:

- You do **not** have a valid U.S. passport or passport card; AND
- You use airplanes as a mode of domestic transportation; or
- You visit military bases; or
- You visit secure federal facilities.

Action	Standard DL/ID	REAL ID DL/ID
Driving (DL only)	YES	YES
Using for general identification purposes	YES	YES
Boarding a domestic flight (U.S.) after May 3, 2023	NO	YES
Entering a military base or secure federal facility	NO	YES

For additional information:

833-503-4074

or visit:

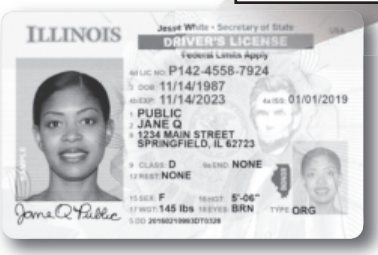
REAL**ID**.ilsos.gov

Know your options.

Make the choice that is right for you.

Standard Card Designation

Federal Limits Apply



REAL ID
Gold Star
Designation

Application Process for Standard Driver's License or ID

If your DL/ID is currently valid and not expiring soon, you do not need to do anything.

STEP 1: If your DL/ID is expiring soon, visit a Secretary of State Driver Services facility and take your photo and the required exams.

STEP 2: Receive a temporary, secure paper DL/ID at the facility.

STEP 3: After review and verification of documents have been conducted, your new permanent standard DL/ID will be mailed to you within 15 business days.

Fees for a Real ID and a standard DL/ID are the same.

For domestic travel, a U.S. passport or a REAL ID card is acceptable. For international travel, a U.S. passport is necessary.

For additional information about passports: npic@state.gov or 877-487-2778

For additional information:

833-503-4074

Application Process for REAL ID Driver's License or ID

STEP 1: Visit a Secretary of State Driver Services facility and take your photo and the required exams.

STEP 2: All applicants must provide proof of identity. (Examples are: a U.S. birth certificate, a U.S. passport, an employment authorization document, a permanent resident card or a foreign passport with an approved I-94 form.) **Please note that name change documents, such as a marriage certificate, will be required if the applicant presents a birth certificate with a name different from his/her current name.*

STEP 3: All applicants must provide proof of full Social Security number (SSN). (Examples are: an SSN card, a W-2 or a pay stub with full SSN.)

STEP 4: All applicants must provide two current residency documents with the applicant's name. (Examples are: a utility bill, rental agreement, deed/title or bank statement.)

STEP 5: All applicants must provide proof of signature. (Examples are: a credit/debit card, canceled check or current Illinois DL/ID.)

STEP 6: Receive a temporary, secure paper DL/ID at the facility. **Please note that the TSA and federal agents will not accept the paper document.*

STEP 7: After review and verification of documents have been conducted, your new permanent REAL ID card will be mailed to you within 15 business days.

***For a complete list of acceptable documents for steps 2-5, please visit:**

REAL**ID**.ilsos.gov

For more information about motorcycle licensing or examination, visit your local Secretary of State Driver Services facility or call:

800-252-8980

@ILSecOfState

@JesseWhiteSOS

@ilsecofstate

WWW.CYBERDRIVEILLINOIS.COM

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