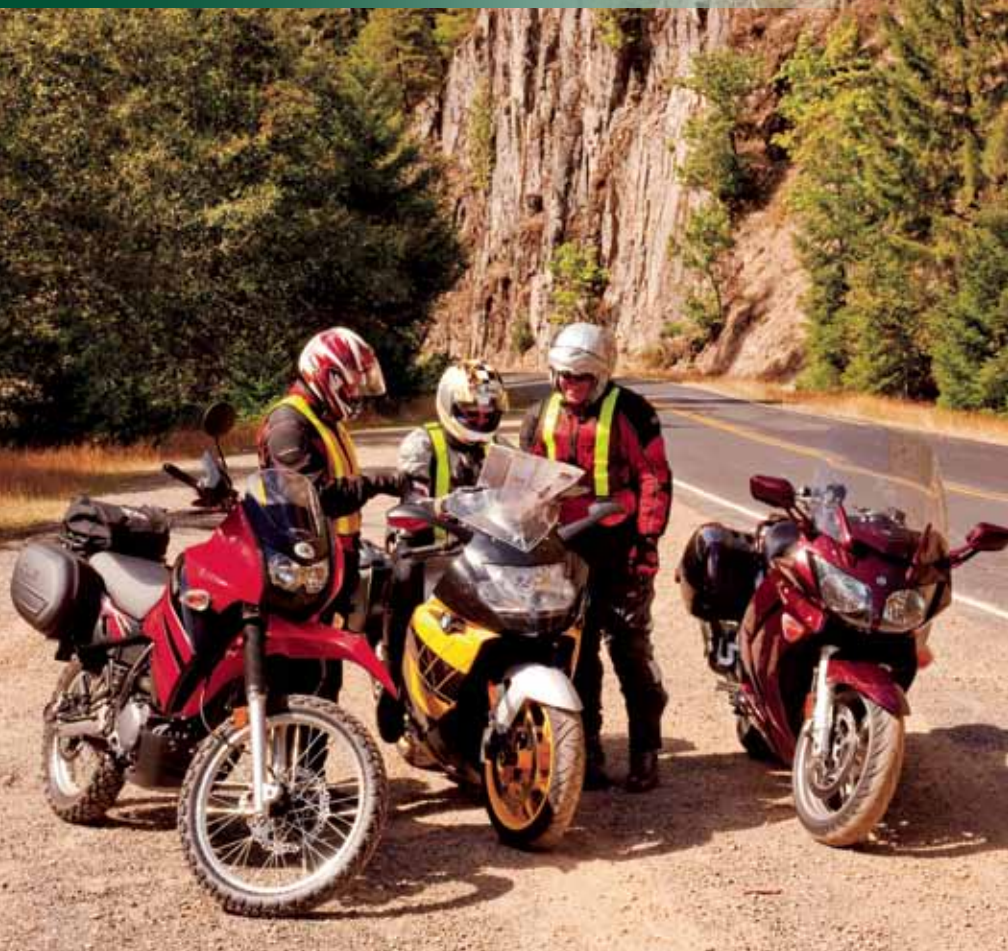


2012 – 2013

OREGON MOTORCYCLE & MOPED MANUAL

DRIVER AND MOTOR VEHICLE SERVICES



TEAM OREGON MOTORCYCLE SAFETY TRAINING PROGRAM

A black and white close-up photograph of a person's foot wearing a motorcycle boot, resting on a clutch lever. The sole of the boot is visible, featuring the text "KICK IT UP A NOTCH" in a large, bold, sans-serif font.

KICK IT UP
A NOTCH

Rev up your cycle skills with the training you need to protect yourself. Take a course from TEAM OREGON and take your ride to the next level.

Visit team-oregon.org to find a class near you, or call 1-800-545-9944.

Ride Safely. The Way to Go.

Transportation Safety – ODOT



Visit us at our web site

www.OregonDMV.com

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Section 1

Riding in Oregon

1.1 Motorcycles and Mopeds

Motorcycles and mopeds are defined as vehicles designed to travel with not more than three wheels in contact with the ground and with a seat or saddle for use of the rider.

A moped must have an independent power source that is a power drive system that functions directly or automatically and does not require clutching or shifting by the operator after the system is engaged. A moped cannot be capable of speeds of more than 30 mph on level ground **AND**, if the moped's power source is a combustion engine, it cannot be larger than 50 cc. Mopeds also include cycles designed as bicycles, if they are equipped with a power source meeting the legal definition.

Mandatory Rider Education

If you apply for a motorcycle endorsement and you do not have a valid motorcycle endorsement from another state, you may be required to complete an approved motorcycle rider education course—depending on your age.

If you apply for a motorcycle endorsement on or after:	You must take a TEAM OREGON course if you are:
January 1, 2012	Under 41
January 1, 2013	Under 51
January 1, 2014	Under 61
January 1, 2015	All ages

TEAM OREGON is the only approved motorcycle rider education provider. You can find course information at www.team-oregon.org.

- Their Basic Rider Training (BRT) course is approved for riders of any age and is **required for applicants under 21**. A TEAM OREGON BRT course completion card waives both the motorcycle knowledge and skills tests.
- Their Intermediate Rider Training (IRT) course is approved for riders 21 and older. A TEAM OREGON IRT course completion card waives only the motorcycle skills test. You must take the motorcycle knowledge test at DMV.

If you are not required to take a TEAM OREGON course, you can still choose to take a course for waiver of DMV tests as noted above. If you are not required to and you do not take an approved rider education course, you must pass the motorcycle knowledge and skills tests at DMV.

If you apply for a 3-wheel restricted motorcycle endorsement, you are not required to take a rider education course. You must take the motorcycle knowledge and skills tests at DMV. TEAM OREGON does not offer training for 3-wheel motorcycles.

Riders who complete an approved motorcycle rider education course may qualify for a discount on the insurance premium for their motorcycle.

Riding Unendorsed

Riding a motorcycle without a motorcycle endorsement is a Class A traffic violation.

Mandatory Insurance

Oregon's insurance law requires every driver to insure their vehicle, including a motorcycle or moped, if it is operated on any highway or on premises open to the public. The minimum amount of liability insurance required is:

- Bodily injury and property damage liability—\$25,000 per person; \$50,000 per accident for bodily injury to others; and \$20,000 per accident for damage to property of others.
- Uninsured motorist coverage—\$25,000 per person, \$50,000 per accident for bodily injury.

Instruction Permits

Moped—there is no instruction permit available for a moped.

Motorcycle—you must be at least 16 years of age, have a valid Oregon driver license, pass the motorcycle knowledge test and a vision test, and pay the \$23.50 permit fee. You must carry both your driver license and instruction permit when operating a motorcycle. A motorcycle instruction permit is valid for one year. The permit allows you to learn how to safely operate a motorcycle on public streets and highways. You should learn balance and control of the motorcycle off the street.

Restrictions on a motorcycle instruction permit:

- Must be accompanied by, and under the supervision and visual observation of, a rider on a separate motorcycle who is at least 21 years of age and who has a valid driver license with a motorcycle endorsement;
- Operation only during daylight hours;
- No passengers; and
- Must wear an approved helmet.

Endorsements

Moped—no endorsement needed. You may operate a moped with any class of driver license or a moped-restricted Class C license.

If you are riding a bike that has an independent power source and can go over 30 mph on level ground, unassisted, you must have a motorcycle endorsement.

Motorcycle—you must have a motorcycle endorsement on your driver license. Depending on your age, you may be required to complete a TEAM OREGON motorcycle rider course, which allows DMV to waive the required endorsement test(s).

If you have a valid motorcycle endorsement from another state, you may retain the endorsement by passing Oregon’s motorcycle knowledge test. Please let our staff know that you want to keep your endorsement. If your license is issued without the endorsement and you wish to get it in the future, you will be required to take all tests or courses required for an original endorsement. You can verify that the motorcycle endorsement is on your license by looking for an M on the front of your license under Endorsements.

Safety Instruction

If you are new to or returning to motorcycling, it is a good idea to take a motorcycle safety course. Motorcycle rider training courses are available in many communities around the state through the TEAM OREGON Motorcycle Safety Program. Riders of all ages are encouraged to complete rider training. DMV will waive the motorcycle knowledge and skills tests for applicants who present a TEAM OREGON Basic Rider Training course completion card dated within two years. DMV will waive the on-cycle skills test for applicants who present a TEAM OREGON Intermediate Rider Training course completion card dated within two years.

For information about the TEAM OREGON Motorcycle Safety Program or their schedule and fees, visit their website at www.team-oregon.org, or call 1-800-545-9944.

Motorcycle Endorsement Tests

There are no fees for motorcycle tests.

These are the basic testing requirements for a motorcycle endorsement if you are not required to take a motorcycle rider education course:

- Pass a vision screening.
- Pass a motorcycle operator knowledge test based on the information in this manual. Questions are multiple choice.
- Be able to identify the major equipment on your motorcycle, such as rear brake and clutch controls.
- Show your ability to perform basic maneuvers during an off-street skills test. The test is explained in the back of this manual.
- Pay an \$87 fee to add the motorcycle endorsement to your driver license.

If you pass the on-cycle skills test on a three-wheel motorcycle or a motorcycle with a sidecar, your endorsement will include a restriction for the operation of only three-wheel motorcycles.

On-cycle skills tests are conducted by appointment only. To schedule an appointment or for information:

Outside Portland Area	(503) 945-5000
Portland Area.....	(503) 299-9999
DMV Web Site	www.OregonDMV.com
TDD (for hearing and speech impaired).....	(503) 945-5001

Moped Tests

To get a moped-restricted Class C license, you must be 16 years of age, pass a series of tests similar to the motorcycle tests and pay a \$60 fee. The tests consist of a vision test, a knowledge test with multiple choice questions based on information in this manual and the *Oregon Driver Manual*, an equipment knowledge and identification test, and an off-street skills test in which you show basic riding skills such as starting, turning and stopping. The fee for the moped knowledge test is \$5.00 and the fee for the moped skills test is \$9.00.

NOTE: All retest fees are the same as the original test fees.

Riding mopeds

Moped operators in Oregon generally obey the same rules of the road as motorcycle operators.

Motorcycles and mopeds, while a little alike in appearance, differ in the way they operate. Motorcycles are heavier and more powerful. Mopeds may have a top speed, unassisted, of no more than 30 miles per hour while on a level surface.

Since they are not built the same, mopeds and motorcycles should not be used for some of the same purposes. Mopeds are designed for leisure travel. They are not designed to compete with heavier vehicles or to travel long distances on the highway with high speed vehicles. Oregon law allows a moped to use bicycle lanes or paths if the moped is being pedaled. When under its own power, a moped must use regular traffic lanes.

Mopeds are designed for one rider only—the driver. It is unlawful to carry a passenger on a moped in Oregon. Carrying more than one person or heavy items is unsafe and can damage a moped.

Mini-Motorcycles, Pocket Bikes, ATVs and Off-Road Motorcycles

A mini-motorcycle, pocket bike, go-kart or all-terrain vehicle (ATV) is not legal for use on public roads in Oregon. To be legal on public roads, motorized vehicles, including motorcycles, need to meet the U.S. Department of Transportation’s vehicle design safety and equipment requirements and U.S. Environmental Protection Agency (EPA) emission standards.

Motorcycles originally manufactured for off-road use generally do not meet the emission standards for on-road use and cannot be registered for highway use in Oregon. For information about converting an off-road motorcycle to street use, visit the Transportation Safety Division’s website at: www.oregon.gov/ODOT/TS/Veh_Equipment.shtml#motorcycles.

1.2 How To Apply

- Complete an application
- Present proof of legal presence, full legal name, identity and date of birth
- Provide your Social Security Number on the application
- Present proof of your current residence address
- Successfully complete required knowledge and skills tests or a TEAM OREGON course, and a vision test
- Pay applicable fees; and
- If you are under 18 years old, comply with provisional licensing requirements.

The Application Process

You must complete a Driver License / ID Card Application. This form is available at all DMV offices or at www.OregonDMV.com.

If you are under 18 years old, you must have a parent or legal guardian's signature on all applications, unless you are emancipated or married. If you are emancipated or married, bring the legal document proving your emancipation or your marriage.

As part of the application process, DMV will check your driver record through a national computer system. If your privileges are suspended, revoked, or canceled in Oregon or any other state, you will need to take care of the problem before Oregon DMV can issue you a driving privilege.

If you are convicted of giving a false statement on your application, using a false or fictitious name or document, or giving a false address or age, you may be fined, sentenced to jail, or both. DMV will suspend your driving privileges for one year due to a conviction or if DMV determines you did any of the above.

Proof of School Attendance, Completion, or Exemption

If you are under 18 years old and applying for a first-time Oregon driving privilege, you are required to show proof of school attendance, completion, or exemption.

Your school provides you with a completed Statement of Enrollment form as proof of attendance. If you expect to apply for an endorsement when school is out, you need to think ahead and get a completed Statement of Enrollment form from your school while it is open. A student body card is not acceptable proof of school enrollment.

Acceptable proof of completion includes a high school diploma or General Education Development (GED) certificate.

Proof of Legal Presence, Full Legal Name, Identity and Date of Birth

You are required to present acceptable proof of legal presence, full legal name, identity and date of birth any time you conduct business at DMV related to your driving privilege or ID card. Documents presented as proof must be original or certified copies from the issuing agency.

Acceptable proof of **legal presence, full legal name, identity and date of birth** includes:

- U.S. or U.S. Territorial government-issued birth certificate (hospital issued birth certificates and baptismal records are not acceptable);
- U.S. passport or passport card, valid or expired no more than 5 years;
- U.S. territorial passport, valid or expired no more than 5 years;
- Tribal ID card from a federally recognized tribe located in Oregon or a federally recognized tribe with an Oregon affiliation, approved by DMV;
- Certificate of Naturalization
- Certificate of Citizenship
- An Arrival/Departure Record (I-94, CBP I-94A or I-797A) with the appropriate entry endorsement by the Department of Homeland Security (USCIS) or Customs and Border Protection (CBP) accompanied by a valid, unexpired foreign passport;
- U.S. Department of Homeland Security (USCIS) issued documents, not expired, (I-551, I-688, I-766);
- Re-entry Permit form (I-327);
- Refugee Travel Document form (I-571)

For a current list of acceptable documents visit www.OregonDMV.com.

Proof of Current Full Legal Name

You are required to present proof of your full legal name. Your full legal name is the name recorded on the proof of legal presence document. If your current full legal name is different than the name shown on your proof of legal presence, you will be required to provide additional proof of identity or legal name change documents.

Examples of acceptable identity documents that can be used to prove your current full legal name include: current driver license, instruction permit or identification card; military identification or common access card; out of state driver license, instruction permit or identification card. For a complete list of acceptable identity documents visit www.OregonDMV.com.

Acceptable proof of legal name change includes: an official government-issued marriage certificate/license, certificate of registered domestic partnership issued by vital statistics, U.S. court issued divorce decree, judgment of dissolution or annulment of marriage or domestic partnership, adoption decree or court order name change. All documents must be signed by a government official of the issuing agency and include a stamp or seal signifying that the document has been filed with the state and/or county.

Social Security Number

You are required to provide your Social Security Number (SSN) issued by the U.S. Social Security Administration on the application. The SSN you provide will be verified with the Social Security Administration.

If you are not eligible for a SSN, you are required to provide proof of ineligibility and sign a Statement of Not Eligible for Social Security Number form. If you sign a Statement of Not Eligible for Social Security Number form you are certifying that you are not eligible for a SSN and to the best of your knowledge you are legally present in the United States. If you knowingly supply a false statement you may be fined, imprisoned, or both and DMV will suspend your driver license, permit or identification card.

The SSN on an application is confidential information. It will not be printed on your driver license, permit or identification card and will not be released on DMV records. Access to your SSN is allowed only to qualified government agencies.

Proof of Address

Along with proof of legal presence, full legal name, identity, date of birth and SSN, you must also present one document to prove your current residence address. Oregon law allows you to use a **mailing** address, such as a post office box or business address, **in addition to a residence address**, but never in place of one.

Acceptable proof of **residence** address includes:

- A person who resides at the same address as you, such as your parent, legal guardian, spouse, domestic partner, or roommate, may certify your residence address. The individual must appear in person with you and show acceptable proof of their residence address;
- Any mail from a business or government agency containing your first and last name. Personal mail, such as mail from family, friends, yourself or neighbors is not acceptable. Mail from DMV cannot include a mailing address that is different from your residence address. Mail forwarded by the U.S. Postal Service, such as a yellow forwarding sticker, computer printed address change, or stamped address change is not acceptable;
- Utility hookup order or statement of account, dated within 60 days of application;
- An Oregon vehicle title or registration card on which you are listed as the first registered owner and that contains your current residence address only. It is not acceptable if it contains a mailing address;
- A document from the acceptable proof of legal presence, identity and date of birth list that contains your current residence address;
- A mortgage document, such as property tax, payment statement, or closing document, dated within the last year;
- A payment booklet, dated within the last year;
- Oregon Voter Notification card, Selective Service card, medical, or health card;
- An educational institution transcript, for the current year;
- An unexpired professional license issued by a government agency in the U.S.;

All documents serving as proof of legal presence, full legal name, identity, date of birth and residence address must be original or certified copies. DMV has discretion to require additional proof.

These requirements can change. Be certain you possess documents that are acceptable before you come to DMV. Please check DMV's website at www.OregonDMV.com or contact us at (503) 945-5000.

Photographs

When you go to a DMV office to apply for a license, permit, or identification card, be prepared to have your photo taken. Standards are in place to ensure that a quality photo is taken of each applicant for the purpose of identification and photo comparison.

Hats and glasses, including prescription glasses, are not allowed. You may not wear face paint, stickers, or other temporary substances or materials that cover or distort all or part of the face or contact lenses that significantly change the appearance of the eye. If you are unhappy with your photo and would like it re-taken, you must pay the fee for a replacement card.

Interim Card

If you meet all the requirements to obtain an Oregon driver license, permit or identification card, you will be issued an interim card at the DMV office. Your permanent license, permit or ID card will be produced in a central location and will be mailed to the address you provide at the time of application. Because you will receive your license, permit or ID card in the mail and it will not be forwarded to a different address, it is important that your address is correct. You should receive your permanent card within 5 to 10 business days.

Renewals

You must renew in person at a local office. You must provide your SSN on the application and present documentation proving legal presence, full legal name, identity, date of birth and current residence address in addition to paying the renewal fee.

If you are 50 years old or older, you will be required to take and pass a vision screening test at the time of renewal.

Replacement Licenses, Permits and Identification Cards

DMV will issue a replacement driver license, permit, or identification card if:

- Your license, permit, or identification card is lost, stolen, or destroyed;
- Your residence address changes and you choose to get a new card;
- You have a name change;
- You are exchanging a valid-without-photo license for a license or identification card with a photograph;
- You are replacing a license or identification card with an error;
- You are obtaining a license or identification card after reinstatement of a suspension;
- You are replacing a license or identification card confiscated by law enforcement or the courts and you once again have become eligible for driving privileges.

You must provide documentation proving legal presence, full legal name, identity, date of birth, social security number and current residence address in addition to paying the replacement fee prior to issuance.

Name and Address Changes

If your name or address changes, **you must notify DMV within 30 days of the change.**

To change the name on your license, permit, or identification card, you must bring proof of your current full legal name and the replacement fee to a DMV office and apply for a replacement license, permit, or identification card.

To change your address, notify DMV by mail, on the web at www.OregonDMV.com, or at a DMV office. DMV will mail you an address change sticker to affix to your license, permit, or identification card. There is no charge for an address change sticker.

To receive a replacement license, permit, or identification card with your new address on it, you must bring proof of the address change ([see page 7](#)) and pay the replacement fee at your local DMV office.

Organ, Eye and Tissue Donation

Anyone at least 15 years old, regardless of health or age, can sign up on the organ, eye, and tissue donor registry. DMV will add a “D” restriction code to your license, permit or identification card. The ability to be a donor is not determined until time of death and the criteria for donation change due to medical research. Everyone who registers should inform their family of the decision to be a donor. You may also register online or obtain more information about organ, eye, and tissue donation for transplant at www.donatelifenw.org or calling (800) 452-1369.

Voter Registration

If you are 17 years of age or older, you may register or re-register to vote when you are issued a driver license, instruction permit, or identification card. DMV will forward your voter registration application to the registrar in your county of residence.

Veteran Designation

If you are a veteran you may request that DMV add a veteran designation on your license, permit, or identification card. You must present a Certification of Release or Discharge from Active Duty, form DD214, or a Correction to DD214, form DD215, as proof that you are a veteran. If you were discharged before 1950, a separation document issued by a branch or department of the US Armed Services is acceptable. You may add the veteran designation for no additional cost anytime you apply for an original, renewal or replacement license, permit, or identification card.

You wouldn't jump without training.



Why ride without it?

You finally got the bike you've always wanted. Now get the training to protect your investment and yourself. Call **TEAM OREGON** at 1-800-545-9944 for a class. And save yourself from rough landings.

Ride Safely. The Way to Go.

Transportation Safety — ODOT



Section 2

Preparing to Ride

What you do before you start a trip goes a long way toward determining whether or not you'll get where you want to go safely. 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.

2.1 Wear the Right Gear

When you ride, your gear is “right” if it protects you. You have a far better chance of avoiding serious injury in a crash if you wear:

- A DOT approved helmet.
- Face and eye protection.
- Protective clothing.

Helmet Use

Oregon law requires you to wear an approved motorcycle helmet whenever you ride a motorcycle or moped, as either a driver or passenger. Helmets must have a label on them saying they meet U.S. Department of Transportation (DOT) standards.

Crashes can occur—particularly among untrained, beginning riders. And one out of every five motorcycle crashes result in head or neck injuries. Head injuries are just as severe as neck injuries—and far more common. 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.

Here 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% of the riders wore helmets, did not find even one case in which a helmet kept a rider from spotting danger.
- Most crashes happen on short trips (less than five 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.

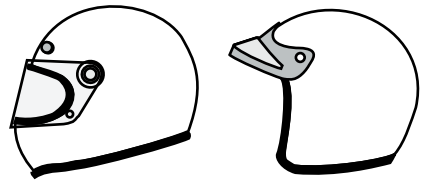
Helmet Selection

There are two primary types of helmets, providing two different levels of coverage: three-quarter and full-face. Full-face helmets provide the most protection.

Whichever style you choose, make sure that the helmet:

- Is designed to meet U.S. Department of Transportation (DOT) standards.
- Fits snugly, all the way around.
- Has no obvious defects such as cracks, loose padding or frayed straps.

Securely fasten your helmet on your head every time you ride. Otherwise, if you are involved in a crash, it's likely to fly off your head before it gets a chance to protect you.



Full-Face

Three-Quarter

Helmets

Eye and Face Protection

A shatter-resistant faceshield can help protect your whole face from wind, dust, dirt, rain, insects, and pebbles thrown up from vehicles ahead of you. These problems are distracting and can be painful. If you have to deal with them, you can't devote your full attention to the road.

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

To be effective, eye and/or face protection must:

- Be free of scratches.
- Be shatter resistant.
- 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 there are low-light conditions.

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. The right clothing can also make you more visible to others. Choose riding gear that is brightly colored and with retro-reflective material to keep you visible to other traffic, both day and night.

- *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 and sturdy synthetic materials offer the best protection. Wear a jacket to prevent dehydration, even in warm weather. 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 foot pegs or rough surfaces. Tuck laces in so they won't catch on your motorcycle.
- *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. You cannot control a motorcycle well if you are numb. 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 that are designed for motorcycle riding resist tearing apart or ballooning up at high speeds.

TEST YOUR KNOWLEDGE

1. A full-face helmet with a 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 56

2.2 Know Your Motorcycle

There are plenty of things on the highway that can cause you trouble and create hazards. Your motorcycle should not be one of them. To make sure that your motorcycle won't let you down:

- Read the owner's manual first.
- Start with the right motorcycle for you.
- 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 more difficult to handle.

The Right Motorcycle for You

Make sure your motorcycle is right for you. It should “fit” you. Your feet should reach the ground flat-footed while you are seated on the motorcycle.

Required Motorcycle Equipment

All motorcycles and mopeds must have:

- At least one but not more than three, white headlights. Modulating headlights are allowed during daylight hours. Oregon law requires that the headlight be on at all times.
- At least one red taillight.
- One white license plate light.
- At least one red brake light.
- Amber turn signal lights if the motorcycle was built after 1972.
- A red reflector on the rear.
- At least one rear view mirror.
- One horn.
- Fenders on all wheels.
- At least one brake operated by hand or foot.
- An exhaust system in good working order and in constant operation (or, in the case of mopeds, when the engine is running), which prevents the vehicle from discharging any visible emissions and keeps exhaust noise levels at or below standards set by the Department of Environmental Quality.
- All lighting must be DOT compliant.

Motorcycles designed for “Off-Road Use Only” may not be able to be made street legal, even by purchasing a “street kit” from a motorcycle dealership or parts house. Off-road use only motorcycle engines may not meet federal Department of Environmental Quality standards for street use. Check with the motorcycle manufacturer for this information.

Borrowing and Lending

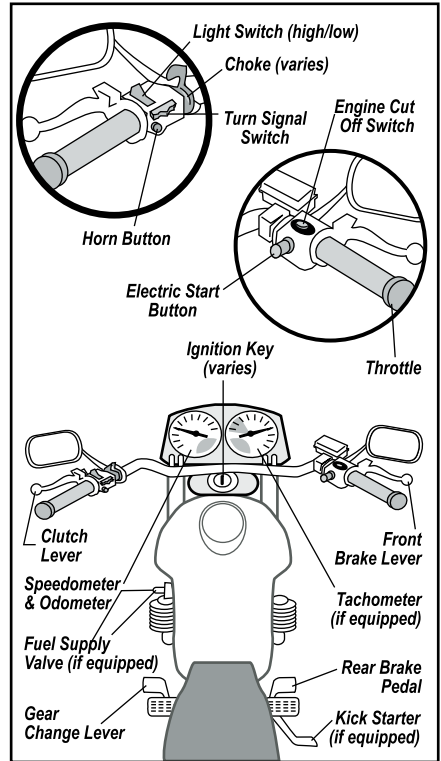
Borrowers and lenders of motorcycles, beware. Crashes are fairly common among beginning riders—especially in the first months of riding. More than half of all crashes involve riders with less than five months of experience on their motorcycle. Riding an unfamiliar motorcycle adds to the problem. If you borrow a motorcycle, get familiar with it in a controlled area. And if you lend your motorcycle to friends, make sure they are licensed and know how to ride before allowing them out into traffic.

No matter how experienced you may be, ride extra carefully on any motorcycle that’s new or unfamiliar to you. It takes time to adjust, so give yourself a cushion of space to allow more time to react and more space to maneuver.

Get Familiar With The Motorcycle Controls

Make sure you are completely familiar with the motorcycle before you take it out on the street. Be sure to review the owner's manual. This is particularly important if you are riding a borrowed motorcycle.

- Know where everything is, particularly the turn signals, horn, headlight switch, fuel-control valve and engine cut-off switch. Find and operate these items without having to look for them.
- 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.
- Make all the checks you would on your own motorcycle if you borrow a bike.



Motorcycle Controls

Check Your Motorcycle

A motorcycle needs more frequent attention than a car. A minor technical failure in a car seldom leads to anything more than an inconvenience for the driver.

If something is wrong with the motorcycle, you'll want to find out about it before you get in traffic. Make a complete check of your motorcycle before every ride.

Before getting on the motorcycle make the following checks:

- **Tires**—Check the air pressure, general wear and tread. The tires may look okay even when they are badly under-inflated. Use a tire gauge to check the pressure often. Proper inflation is very important for stability, control and safety.
- **Fluids**—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**—Check them both. Test your switch to make sure both high and low beams are working.
- **Turn signals**—Turn on both right and left turn signals. Make sure all lights are working properly.
- **Brake light**—Try both brake controls and make sure each one turns on the brake light.

After you get on 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. This is one of the most important controls. Twist the throttle toward you to speed up and away from you to slow down. The clutch should feel tight and smooth.
- **Mirrors**—Clean and adjust both mirrors before starting. It's difficult to ride with one hand while you try to adjust a mirror. Adjust each mirror so you can see the lane behind 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's the road behind and to the side that's most important.
- **Brakes**—Try the front and rear brake controls one at a time. Make sure each one feels firm and holds the motorcycle when the brake is fully applied.
- **Horn**—Try the horn. 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 recommendations.

2.3 Special Equipment for Mopeds

Although mopeds and motorcycles have some of the same equipment, there are major differences. Here are the moped controls you should be familiar with:

- **Fuel valve**—This control regulates the flow of fuel from the gas tank to the carburetor.
- **Engine cut-off switch**—This control is intended for emergency use when you have to switch the engine off quickly. The location of this switch may vary.
- **Spokes**—Loose spokes also affect stability and control. Be sure the spokes on your moped are tight. When tapped with a screwdriver, a tight spoke will ring and a loose one will thud. Have loose spokes tightened by a qualified mechanic.

TEST YOUR KNOWLEDGE

2. If you borrow a motorcycle:
 - A. Don't worry about checking the tire pressure.
 - B. It will always handle the same as your own bike.
 - C. The person you borrow it from will make sure the brakes work.
 - D. Give yourself an extra cushion of space to allow more time to react.

Answer—page 56

2.4 Know Your Responsibilities

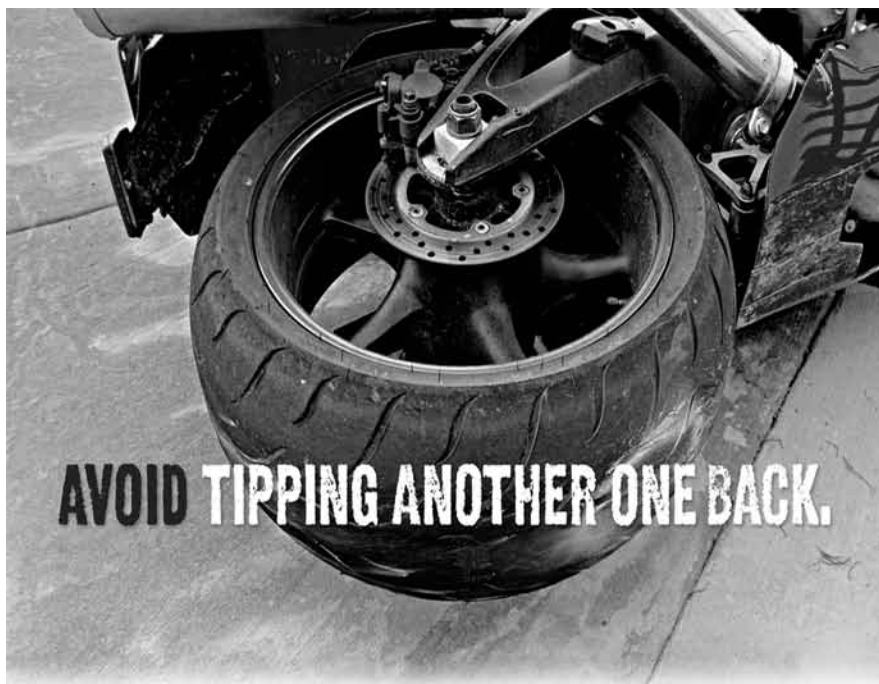
“Accident” implies an unforeseen event that occurs without anyone’s fault or negligence. Most often, in traffic, that is not the case. In fact, most people involved in a crash can usually claim some responsibility for what takes place.

Consider a situation where someone decides to try to squeeze through an intersection on a yellow light turning red. Your light turns green. You pull into the intersection without checking for possible latecomers. That is all it takes for the two of you to tangle. It was the driver’s responsibility to stop. And it was your responsibility to look before pulling out. Neither of you held up your end of the deal. Just because someone else starts the chain of events leading to a crash, doesn’t leave any of us free of responsibility.

As a rider you can’t be sure that other operators will see you or yield the right of way. To lessen your chances of a crash occurring:

- **Be visible**—wear bright-colored clothing, use your headlight, 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 ([review pages 23 and 24](#)).
- **Scan your path of travel 12 seconds ahead.**
- **Be prepared to act**—remain alert and know how to carry out proper crash-avoidance skills.

Blame doesn’t matter when someone is injured in a crash. There is rarely a single cause of any crash. 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.



AVOID TIPPING ANOTHER ONE BACK.

Sharing the road on a motorcycle takes a sharp mind, quick reflexes and manual dexterity – all of which you lose when you drink alcohol. So here's a tip: if you plan to head out on two wheels, plan to stay sober.

RIDE SOBER.

Share the Road. The Way to Go.

Transportation Safety – ODOT

Section 3

Ride Within Your Abilities

This manual cannot teach you how to control direction, speed, or balance. That's something you can learn only through training and practice. Control begins with knowing your abilities and riding within them, along with knowing and obeying the rules of the road.

3.1 Basic Vehicle Control

Body Position

To control a motorcycle well:

Posture—Sit so you can use your hands and arms to control the motorcycle rather than to hold yourself up.

Seat—Sit far enough forward so that your arms are slightly bent and relaxed when you hold the handgrips.

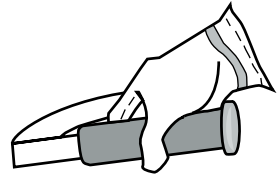
Hands—Hold the handgrips firmly to keep your grip over rough surfaces. Keep your right wrist flat. This will help you keep from accidentally using too much throttle. Also, adjust the handlebars so your hands are even with or below your elbows. This permits you to use the proper muscles for precision steering.

Knees—Keep your knees against the gas tank to help you keep your balance.

Feet—Keep your feet firmly on the foot pegs to maintain balance. Don't drag your feet. If your foot catches on something, you can 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, don't let your toes point downward—they may get caught between the road and the foot pegs.



Right



Wrong

Holding Handgrips

Shifting Gears

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

Shift down through the gears as you slow or stop. Remain in first gear while you are stopped so that you can move out quickly if you need to.

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. When riding downhill or shifting into first gear you may need to use the brakes to slow enough

before downshifting safely. 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 can cause a skid.

Braking

Your motorcycle has two brakes: one each for the front and 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. It is important to use the front brake properly. Remember:

- Use both brakes *every time* you slow or stop. Using both brakes for even “normal” stops will permit you to develop the habit and skill of using both brakes properly in an emergency. Squeeze the front brake lever and press down on the rear brake control. Grabbing the front brake or jamming down on the rear brake can cause the brakes to lock. If the brakes lock, you could lose control and crash.
- 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, leaving less traction available for braking. A skid can occur if you apply too much brake or apply the brake with abrupt force. Also, using the brakes incorrectly on a slippery surface may be hazardous if the brakes are applied with abrupt force. Use caution and *squeeze* the front brake lever and use light pressure on the rear brake control.
- Some motorcycles have integrated braking systems that link the front and rear brakes together by applying a single brake control. (Consult the owner’s manual for information on the use of these systems.)

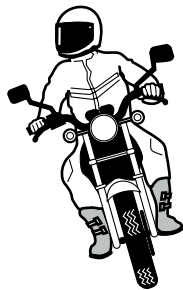
Turning

Riders often try to enter 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 crash. Approach turns and curves with caution.

Use four steps for better control:

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

LOOK—Turn your head to look through the turn. Look as far as possible to where the turn leads. Keep your eyes level with the horizon.



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

Normal Turning



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

Slow Turning

ROLL—Roll on the throttle through the turn to stabilize the suspension. Maintain steady speed or accelerate gradually through the turn.

PRESS—To turn, the motorcycle must lean. To lean the motorcycle, press on the handgrip in the direction of the turn. Press left—lean left—go left. Press right—lean right—go right.

TEST YOUR KNOWLEDGE

3. When riding, you should:
- A. Turn your whole body when you look through turns.
 - 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 56

3.2 Keeping Your Distance

The best protection you can have is distance—a “cushion of space”—all around your motorcycle. If someone else makes a mistake, distance permits you:

- Time to react.
- Space to maneuver.

Lane Positions

Oregon law gives you the right to full use of a traffic lane when you ride a motorcycle or moped. An automobile or other motor vehicle may not legally pass you using the same lane in which you are riding. In slow-moving, congested traffic, stay in one lane and move at the speed of other traffic. Each traffic lane gives a motorcycle three paths of travel, as indicated in the illustration on the next page.

Your lane position should:

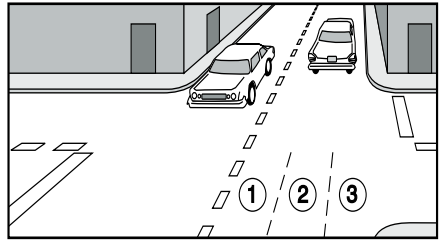
- Increase your ability to see and be seen.
- Avoid other’s blind spots.
- Avoid surface hazards.
- Protect your lane from other drivers.
- Communicate your intentions.
- Avoid wind blast from other vehicles.
- Provide an escape route.

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

In general, there is no single best 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.

Position yourself in the portion of the lane where you are most likely to see and be seen and where you can maintain a space cushion around you.

Change position as traffic situations change. The oily strip in the center portion of the lane that collects drippings from cars is usually no more than two feet wide and is worse at intersections. Unless the road is wet, the center lane position usually provides adequate traction to ride on safely. Avoid riding on big buildups of oil and grease usually found at busy intersections or toll booths.



Lane Positions

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 of two seconds** distance should be maintained behind the vehicle ahead.

To gauge your following distance:

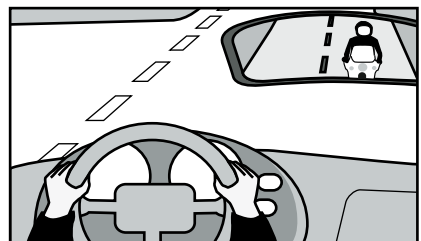
- Pick out a marker, such as a pavement marking or lamppost, on or near the road ahead.
- When the rear bumper of the vehicle ahead passes the marker, count off the seconds: “one thousand-one, one thousand-two, etc.”
- If you reach the marker before you reach “two,” you are following too closely.

A two-second following distance leaves a *minimum amount* of space to avoid a crash at low speeds. It also leaves room for you to see potholes and other hazards in the road. Two seconds may not give you enough time to stop.

When conditions are not ideal or you travel at higher speeds, increase your following distance to give yourself a greater margin of safety.

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, open up a three second or more following distance.

Remember that most drivers don’t look at their side view mirrors nearly as often as they check their rear view mirror. If the traffic situation allows, the center portion of the lane is the best place for you to be seen by the drivers ahead and to prevent lane sharing by others.



Following

Being Followed

Speeding up to lose someone that is following you 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 can't 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 don't pass, you will have given yourself and the tailgater more time and space to react in case an emergency does develop.

3.3 Passing and Being Passed

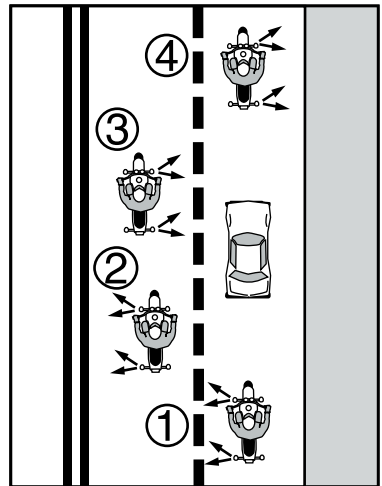
Passing and being passed by another vehicle is not much different than with a car. However, visibility is more critical. Be sure other drivers see you, and that you see potential hazards.

Motorcycle and moped riders must follow the same rules in passing as drivers of automobiles. Although passing on the right is permitted in some situations, it is illegal to pass on the right if you must drive off the paved part of the road to go around. It also is against the law for motorcycles or mopeds to pass by riding between two moving vehicles on a multi-lane highway or a one-way street. This space can vanish in an instant if both drivers turn their steering wheels slightly. Oregon law allows one motorcycle or moped rider to pass another using the same lane.

No passing zones mean just that—NO PASSING.

Passing

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 doesn't crowd the car you are passing and provides space to avoid hazards in your lane.
3. Ride through the vehicle's blind spot as quickly as possible.
4. Signal again, and complete mirror and head checks before returning to your original lane and then cancel signal.



Passing

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 from behind or by an oncoming vehicle, stay in the center portion of your lane. Riding any closer to them 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.
- **Blasts of wind from larger vehicles**—

They can affect your control. You have more room to maneuver, 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 might invite the other driver to cut back into your lane too early.

Lane Sharing

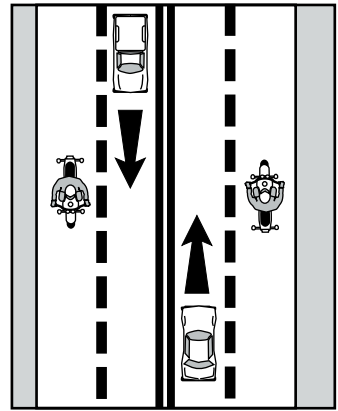
Cars and motorcycles need a full lane to operate safely. Oregon law allows motorcycles to ride two abreast in a single lane, but this is not a recommended safety practice. Sharing a lane with a car while passing them is commonly known as “lane splitting” and is not legal in Oregon. Lane splitting can leave you vulnerable to the unexpected and reduces your space cushion.

Discourage lane sharing by others by keeping a center-portion position whenever drivers might be tempted to squeeze by you. Drivers are most tempted to do this:

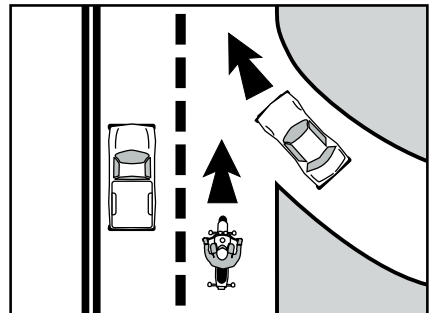
- In heavy, bumper-to-bumper traffic.
- When they want to pass you.
- When you are preparing to turn at an intersection.
- When you are getting in an exit lane, or leaving a highway.

Merging Cars

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.



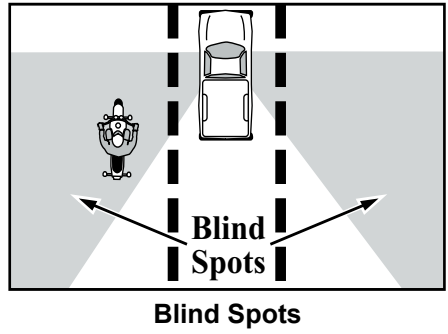
Being Passed



Merging

Cars Alongside

Do not ride next to cars or trucks in other lanes if you do not have to. You might be in the blind spot of a car in the next lane, which could switch into your lane without warning. Cars 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.



TEST YOUR KNOWLEDGE

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 56

3.4 SIPDE

Good experienced riders remain aware of what is going on around them. They improve their riding strategy by using SIPDE, a 5-step process used to make appropriate judgments, and applying it correctly in different traffic situations:

- Scan
- Identify
- Predict
- Decide
- Execute

Let's examine each of these steps.

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 allow, can eliminate or reduce harm. Focus on finding potential escape routes.

Identify

An assertive scan allows you to locate hazards and potential conflicts before you reach them.

- Vehicles and other motorcycles—may move into your path and increase the likelihood of a crash.
- Pedestrians and animals—are unpredictable, and make short, quick moves.
- Stationary objects—potholes, guard rails, bridges, roadway signs, hedges, or trees may influence your riding strategy.

Predict

Predict where a crash may occur. Completing this type of “what if . . .?” phrase helps predict the worst-case scenario and gives you time to prepare. “What if . . .?”—that car turns left—that’s oil, not water, etc.

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. 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 conditions.

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 your speed to permit hazards to separate. Then deal with them one at a time as single hazards. Decision making becomes more complex with three or more hazards.

In potentially high-risk areas, such as intersections, shopping areas and school or construction zones, cover the clutch and both brakes to reduce the amount of time it takes you to react.

TEST YOUR KNOWLEDGE

5. To reduce the amount of time it takes you to react, you should:
- A. Ride slower than the speed limit.
 - B. Cover the clutch and the brakes.
 - C. Shift into neutral when slowing.
 - D. Pull in the clutch when turning.

Answer—page 56

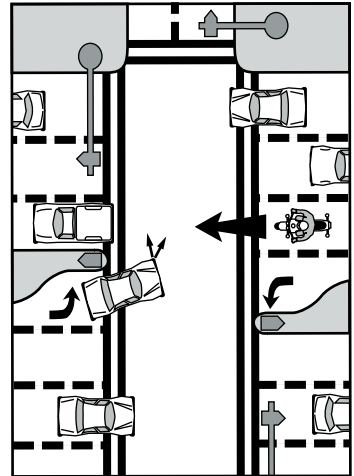
3.5 Intersections

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. Many motorcycle/car crashes are caused by drivers entering a rider's right-of-way. Cars that turn left in front of you, including cars turning left from the lane to your right, and cars on side streets that pull into your lane, are the biggest dangers. Your use of SIPDE [p. 25] at intersections is critical.

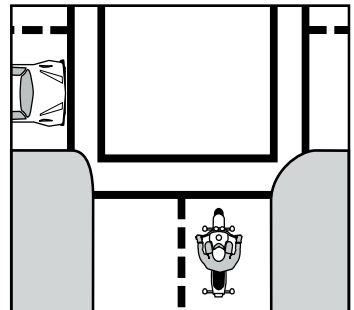
There are no guarantees that others see you. Never count on "eye contact" as a sign that a driver will yield. Too often, a driver looks right at a motorcyclist and still fails to "see" him. The only eyes that you can count on are your own. If a car can enter your path, predict that it will. Good riders 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 and in a lane position that provides the best view of oncoming traffic. Provide a space cushion around your motorcycle that permits you to take evasive action. Wear bright clothing with retro-reflective material.

As you approach the intersection, select a lane position to increase your visibility to surrounding drivers. Cover the clutch lever and both brakes to reduce reaction time.



Large Intersections



Small Intersections

Reduce your speed as you approach an intersection. After entering the intersection, move away from oncoming vehicles that are preparing to turn. Do not change speed or position radically. The driver might think that 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 this picture, 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 as soon as possible.

Remember, the key is to see as much as possible and remain visible to others while protecting your space.

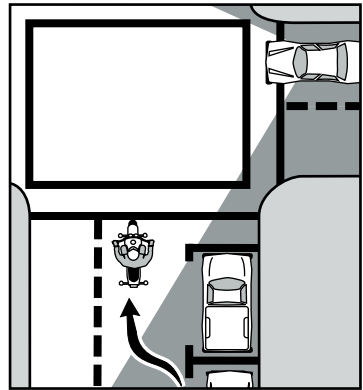
If you have a stop sign or stop line, stop there first. Then edge forward and stop again, just short of where the cross-traffic lane meets your lane. From that position, lean your body forward and look around buildings, parked cars, or bushes to see if anything is coming. Just make sure your front wheel stays out of the cross lane of travel while you’re looking.

Passing Parked Cars

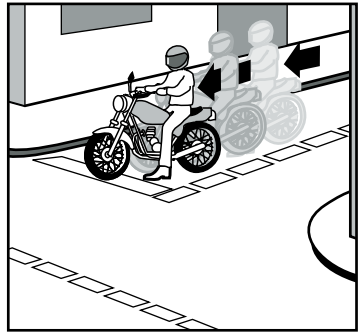
When passing parked cars, stay toward the left of your lane. You can avoid problems caused by doors opening, drivers getting out of cars, or people stepping from between cars. If oncoming traffic is present, it is usually best to remain in the center-lane position to maximize your space cushion.

A bigger problem can occur if the driver pulls away from the curb without checking for traffic behind. Even if he does look, he 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.

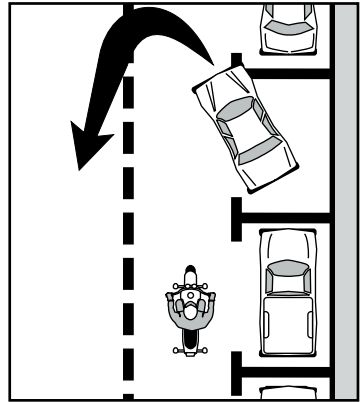
Cars making a sudden U-turn are the most dangerous. They may cut you off entirely, blocking the whole roadway and leaving you with no place to go. Since you can’t tell what a driver will do, slow down and get the driver’s attention. Sound your horn and continue with caution.



Blind Intersections



Stop Signs



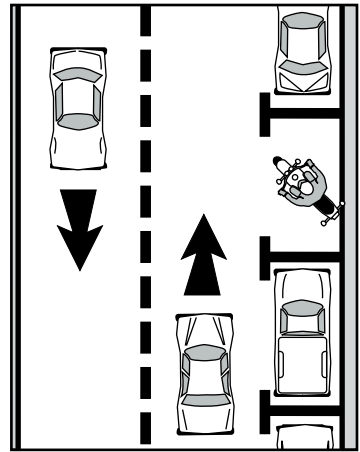
Parked Cars

Parking at the Roadside

Angle your motorcycle to see in both directions without straining or having the cycle in the lane of travel. Back the cycle into the parking spot so you can ride it out into traffic.

Traffic Sensors

Many intersections have an electric sensor, called a “loop,” which is a wire imbedded in the road surface to trigger a traffic light. Sometimes these sensors have trouble detecting motorcycles. Oregon usually uses two loop designs; round and diamond. The sensor is most likely to detect a motorcycle if the largest portion of the motorcycle, such as the lowest part of the frame, is directly over the outline of the loop. Do not stop in the middle of the loop as there is a “dead zone” in the middle. If the loop is not visible in the pavement, position your bike one-third of the lane width away from the lane line with the front wheel stopped just before the stop line.



Parking at Curbs

TEST YOUR KNOWLEDGE

6. Making eye contact with other drivers:
- A. Is a good sign they see you.
 - B. Is not worth the effort it takes.
 - C. Doesn't mean that the driver will yield.
 - D. Guarantees that the other driver will yield to you.

Answer—page 56

3.6 See and Be Seen

In crashes with motorcyclists, drivers often say that they never saw the motorcycle. From ahead or behind, a motorcycle's outline is much smaller than a car's. Also, it's hard 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 aren't 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.

However, 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 clothing with retro-reflective material to increase your chances of being seen both day and night. 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 bets for being seen. Your helmet can do more than protect you in a crash. Brightly colored helmets can also help others see you.

Any bright color is better than drab or dark colors. Retro-reflective or bright colored clothing (helmet and jacket or vest) is best.

Retro-reflective material on a vest and on the sides of the helmet will help drivers coming from the side spot you. Reflective material can also be a big help for drivers coming toward you or from behind.

Headlight

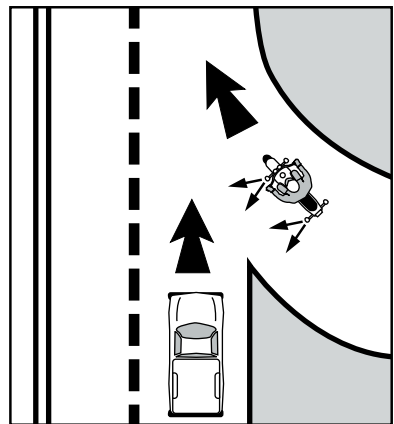
The best way to help others see your motorcycle is to keep the headlight on—**at all times**. Studies show that, during the day, a motorcycle with its light on is twice as likely to be noticed.

Oregon law requires that you have your headlight on at all times. This includes during the day. A light (no more than two) other than a headlight may be lighted on a motorcycle provided that the intensity of the light does not exceed the intensity of the low beam of the headlight. You may use a modulating headlight during the day to help make you and your motorcycle more visible to other drivers.

Signals

Oregon law requires the use of signals, either hand-and-arm or electrical, before making a turn, changing lanes or stopping.

Motorcyclists may use either hand-and-arm signals or turn signal lights during the day and when people and other vehicles can be seen 1,000 feet ahead. *At night, turn signals are required for motorcycles.* Using hand signals takes practice, since you must take one hand off the handlebars. Remember, a signal is not a guarantee of clear passage. Always check the traffic around you to be sure you can make the turn or lane change safely. One more thing about motorcycle turn signals—most are not self-canceling, so when you have made your turn, **be sure to turn the signal off.** A confusing or incorrect signal can be worse



Signaling

than no signal at all. Use signals at every turn so drivers can react accordingly. Don't make them guess what you intend to do.

Brake Light

Your motorcycle's brake light is usually not as noticeable as the brake lights on a car—particularly when your taillight is on. You can increase your visibility to following traffic by flashing your brake light when you are slowing or stopping, if traffic conditions allow. It is especially important to flash your brake light before:

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

If you are being followed closely, it's 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.

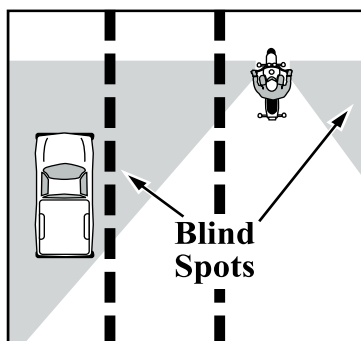
Using Your Mirrors

While it's most important to keep track of what's happening ahead, you can't afford to ignore situations behind. Traffic conditions change quickly. Knowing what's 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 special point of using your mirrors:

- When you are stopped at an intersection. Watch cars coming up from behind. If the driver isn't paying attention, he could be on top of you before he sees you.
- Before you change lanes. Make sure no one is about to pass you.
- Before you slow 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 do flat mirrors. They also make cars 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 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.



Using Mirrors

Head Checks

Checking your mirrors is not enough. Motorcycles have “blind spots” like cars. Before you change 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 should be a part of your normal scanning routine, also. 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 that may move into your lane.

Here are some of those situations:

- A driver in the lane next to you is driving too close to the vehicle ahead and may want to pass.
- A parked car has someone in the driver’s seat.
- Someone is walking in the street.

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 isn’t as loud as a car’s, therefore, use it, but don’t rely on it. Other strategies, like having time and space to maneuver, are appropriate along with the horn.

Riding at Night

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

Reduce your speed—Ride even slower than you would during the day, especially on roads you don’t know well. This will increase your chances of avoiding a hazard.

Increase distance—Distances are harder to judge at night than during the day. Leave a three-second following distance or more 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. Their taillights bouncing up and down can alert you to bumps or rough pavement.

Use your high beam—Get all the light you can. Use your high beam whenever you are not following or meeting a vehicle. Make sure to dim your headlight and any auxiliary lights you may have when your motorcycle is within 500 feet of an approaching vehicle or 350 feet behind a vehicle. Be visible. Wear reflective materials when riding at night.

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.

TEST YOUR KNOWLEDGE

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 56

3.7 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. Often, a crash occurs because a rider is not prepared for or skilled in crash-avoidance maneuvers.

Know when and how to stop or swerve, two skills critical to avoiding a crash. It is not always desirable or possible to stop quickly to avoid an obstacle. Riders must also be able to swerve around an obstacle. Determining the skill necessary for the situation is important as well.

Studies show that most riders involved in a crash:

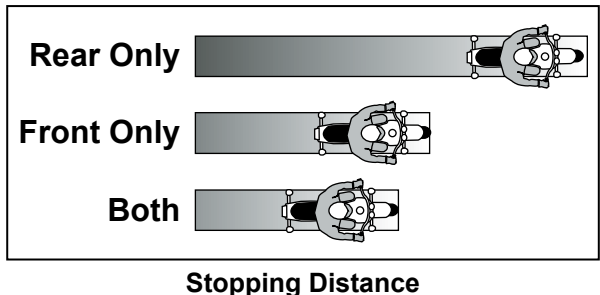
- Under brake the front tire and over brake the rear.
- Did not separate braking from swerving or did not choose swerving when it was appropriate.

The following information shows the skills you need to have.

Quick Stops

To stop quickly, apply both brakes at the same time. Don't be shy about using the front brake, but don't "grab" it, either. Squeeze the brake lever firmly and progressively. At the same time, press down on the rear brake control. If the front or rear wheel locks, release the brake control immediately, then reapply it firmly. Locking either wheel may result in loss of control and a crash.

Always use both brakes at the same time to stop. The front brake can provide 70% 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 motorcycle 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 the brakes gently. 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. If you “straighten” the handlebars in the last few feet of stopping, the motorcycle should be straight up and in balance.

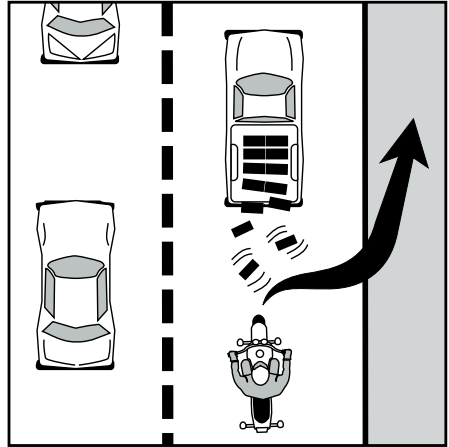
Swerving or Turning Quickly

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 swerve quickly.

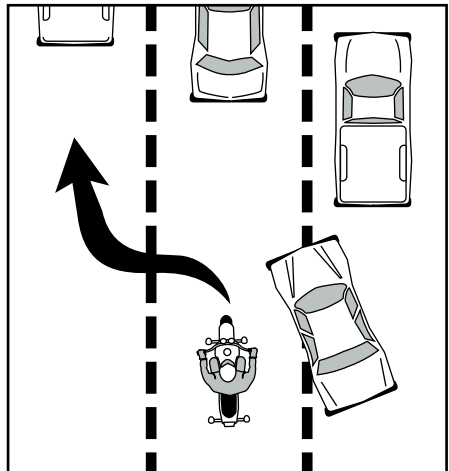
A swerve is any sudden change in direction. Apply forward hand pressure to the handgrip located on the side of your intended direction of escape. This will cause the motorcycle to lean and move in that direction.

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. Once you clear the obstacle, press on the opposite handgrip, to return to your original direction of travel. To swerve to the left, press the left handgrip, and 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.



Brake, Then Swerve



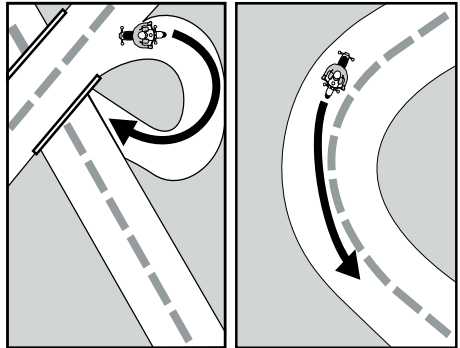
Swerve, Then Brake

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.

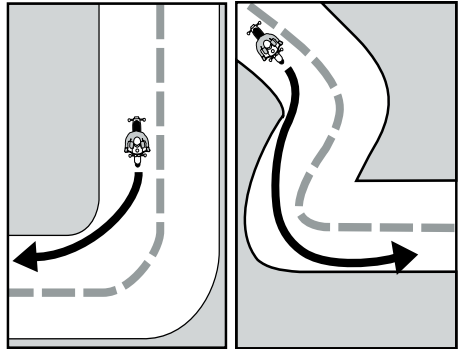
Your best path may not always follow the curve of the road. Change lane position depending on traffic, road conditions and curve of the road. If no traffic is present, start at the outside of a curve to increase your line of sight and the effective radius of the turn. As you turn, move toward the inside of the curve, and as you pass the center, move to the outside to exit.

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. Ride within your skill level and posted speed limits.



Decreasing Curves

Widening Curves



Constant Curves

Multiple Curves

Roadway Curves

TEST YOUR KNOWLEDGE

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 at the same time.

Answer—page 56

3.8 Handling Dangerous Surfaces

Your chance of falling or being involved in a crash increase whenever you ride across:

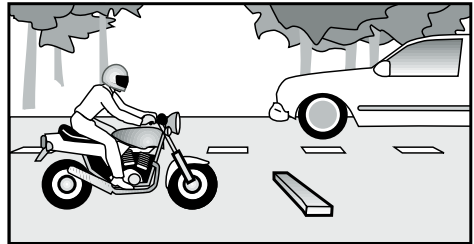
- Uneven surfaces or obstacles.
- Slippery surfaces.
- Railroad tracks.
- Grooves and gratings.

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 foot pegs to absorb the shock with your knees and elbows. This will help you from being thrown off the motorcycle.
- Just before contact, roll on the throttle slightly to lighten the front end.



Obstacles

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, ice and wet leaves.
- Lane markings, crack sealant, steel plates and manhole covers, especially when wet.

To ride safely on slippery surfaces:

Reduce 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.

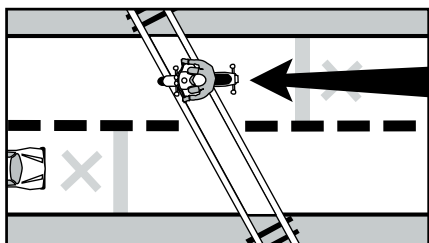
Use both brakes—The front brake is still effective, even on a slippery surface. Squeeze the brake lever gradually to avoid locking the front wheel. Remember to use gentle pressure on the rear brake.

- The center of a lane can be hazardous when wet. 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.
- Watch for oil spots when you put your foot down to stop or park. You may slip and fall.
- Dirt and gravel collect along the sides of the road—especially on curves and ramps leading to and from highways. Be aware of what’s on the edge of the road, particularly when making sharp turns and getting on or off freeways at high speeds.
- Rain dries and snow melts faster on some sections of a road than on others. Patches of ice tend to crop up 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.

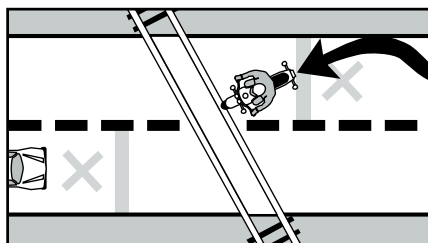
Cautious riders steer clear of roads covered with ice or snow. If you can’t avoid a slippery surface, keep your motorcycle straight up and proceed as *slowly* as possible. If you encounter a large surface so slippery that you must coast, or travel at a walking pace, consider letting your feet skim along 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.

Railroad Tracks, Trolley Tracks and Pavement Seams

Usually it is 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—your path may carry you into another lane of traffic.



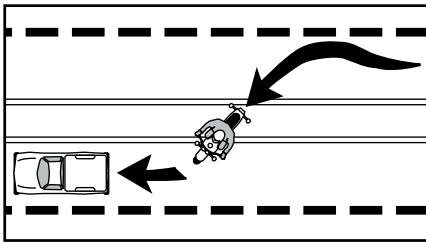
Right



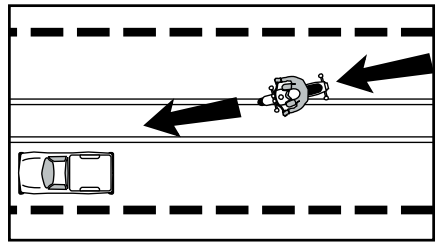
Wrong

Crossing Tracks

For tracks and road seams that run parallel to your course, move far enough away from the tracks, ruts, or pavement seams to cross at an angle of at least 45 degrees. Then make a deliberate turn. Edging across could catch your tires and result in a crash.



Right

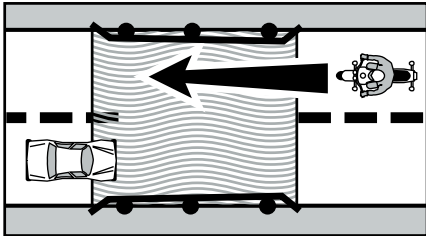


Wrong

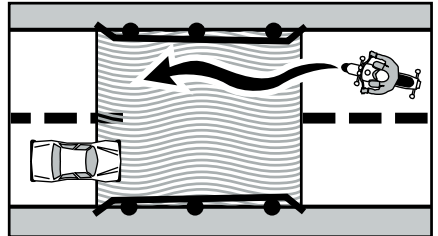
Crossing Parallel Tracks

Grooves and Gratings

Riding over rain grooves or bridge gratings will cause a motorcycle to weave. The uneasy, wandering feeling is generally not hazardous. Relax, maintain 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.



Right



Wrong

Grate Crossings

TEST YOUR KNOWLEDGE

9. When it starts to rain it is usually best to:
- A. Ride in the center of the lane.
 - B. Pull off to the side until the rain stops.
 - C. Ride in the tire tracks left by cars.
 - D. Increase your speed.

Answer—page 56

3.9 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. Here 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 must 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 the road 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 from side to side.

If either tire goes flat while riding:

- Hold the handgrips firmly, ease off the throttle, and keep a straight course.
- If braking is required, gradually apply the brake of the tire that isn't 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, though engine noise may not immediately decline. Once the motorcycle is “under control,” pull off the road 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 can't, shift it. Center the weight lower and farther forward on the motorcycle. Make sure tire pressure, spring pre-load, air shocks, and dampeners are at the settings recommended for that much weight. Make sure windshields and fairings are mounted properly.

Trying to accelerate out of a wobble will only make the motorcycle more unstable. Instead:

- Grip the handlebars firmly, but don't 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.

Have the motorcycle checked out thoroughly by a qualified professional.

Drive Train Problems

The drive train for a motorcycle uses either a chain, belt or drive shaft to transfer power from the engine to the rear wheel. Routine inspection, adjustment and maintenance make failure a rare occurrence. A chain or belt that slips or breaks while you're riding could lock the rear wheel and cause your motorcycle to skid and possibly crash.

If the chain or belt breaks, you'll notice an instant loss of power to the rear wheel. Close the throttle and brake to a stop in a safe area.

On models with a drive shaft, loss of oil in the rear differential can cause the rear wheel to lock, and you may not be able to prevent a skid.

TEST YOUR KNOWLEDGE

10. If your motorcycle starts to wobble:

- 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 56](#)

3.10 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.

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. Don't kick at an animal. Keep control of your motorcycle and look where you want to go.

For larger animals (deer, elk, cattle) brake and prepare to stop; they are unpredictable. Deer, elk and cattle are herd animals, so always be prepared for more than one animal.

3.11 Flying Objects

From time to time 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.

3.12 Getting Off the Road

If you need to leave the road to check the motorcycle (or just to rest for a while), be sure you:

- **Check the roadside**—Make sure the surface of the roadside is firm enough to ride on. If it is soft grass, loose sand, or if you're just not sure about it, slow way 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 don't 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.

TEST YOUR KNOWLEDGE

11. If you are chased by an animal:

- A. Kick it away.
- B. Stop until the animal loses interest.
- C. Swerve around the animal.
- D. Approach the animal slowly, and then speed up.

Answer—page 56

3.13 Carrying Passengers and Cargo

Oregon law requires a motorcycle passenger to sit on a permanent and regular seat. A passenger must straddle the motorcycle and use foot pegs, unless riding in a sidecar. You cannot carry a passenger on a moped.

It is against the law to carry a passenger or unsecured load on the gas tank or in such a way that it interferes with the safe operation of the motorcycle.

Only experienced riders should carry passengers or large loads. The extra weight changes the way the motorcycle handles, balances, turns, speeds up, and slows down. Before taking a passenger or 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:

- **A proper seat**—large enough to hold both of you without crowding. You should not sit any farther forward than you usually do.
- **Footrests**—for the passenger. Firm footing prevents your passenger from falling off and pulling you off too.
- **Protective equipment**—the same protective gear recommended for 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 mirrors 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 firmly to your waist or hips.
- 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 or 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 may respond more slowly with a passenger on board. The heavier your passenger, the longer it will take to slow down, speed up, or turn—especially on a light motorcycle.

- Ride a little 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.

Warn your passenger of special conditions—when you will pull out, stop quickly, turn sharply, or ride over a bump. Turn your head slightly to make yourself understood, but keep your eyes on the road ahead.

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 saddle bags. Piling loads against aissy 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 tank bags do 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 elastic cords (bungee cords or nets). Elastic cords with two or more attachment points per side are more secure. A tight load won't 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 or moved.

TEST YOUR KNOWLEDGE

12. Passengers should:

- A. Lean as you lean.
- B. Hang on to the motorcycle seat.
- C. Sit as far back as possible.
- D. Never hold onto you.

Answer—page 56

3.14 Group Riding

If you ride with others, do it in a way that promotes safety and doesn't interfere with the flow of traffic.

Keep the Group Small

Small groups make it easier and safer for car drivers who need to get around them. A small group isn't separated as easily by traffic or red lights. Riders won't always be hurrying to catch up. If your group is larger than four or five riders, divide it up into two or more smaller groups.

Keep the Group Together

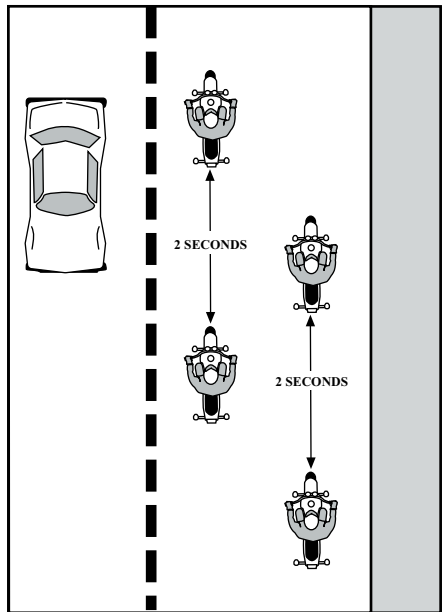
- **Plan**—The leader should look ahead for changes and signal early so “the word gets back” in plenty of time. Start lane changes early to permit everyone to complete the change.
- **Put beginners up front**—Place inexperienced riders just behind the leader. That way the more experienced riders can watch them from the back.
- **Know the route**—Make sure everyone knows the route. Then, if someone is separated they won't have to hurry to keep from getting lost or taking a wrong turn. Frequent stops should be planned on long rides.
- **Keep track of those behind you**—Check to make sure that riders following are still with you. If not, slow down and wait. If everyone does this, it will help keep the group together.

Keep Your Distance

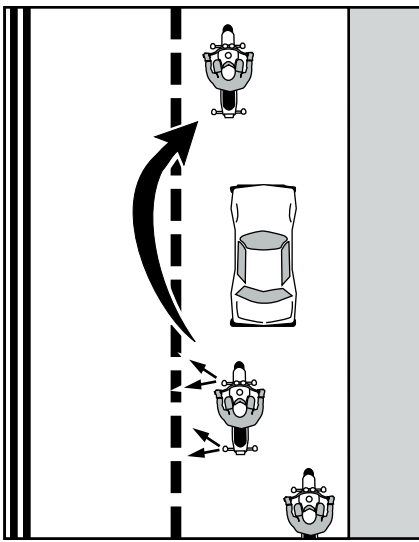
Maintain close ranks but at the same time keep a safe distance to allow each rider in the group time and space to react to hazards. A close group takes up less space on the highway, is easier to see and is less likely to be separated. However, it must be done properly.

Don't 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. Oregon law prohibits grabbing on to another vehicle while your motorcycle or moped is moving.

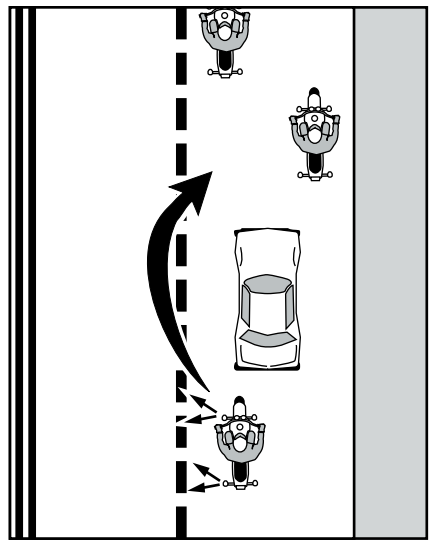
Staggered formation—This is the best way to keep ranks close yet maintain an adequate space cushion.



Staggered Formation



Stage 1



Stage 2

Group Passing

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

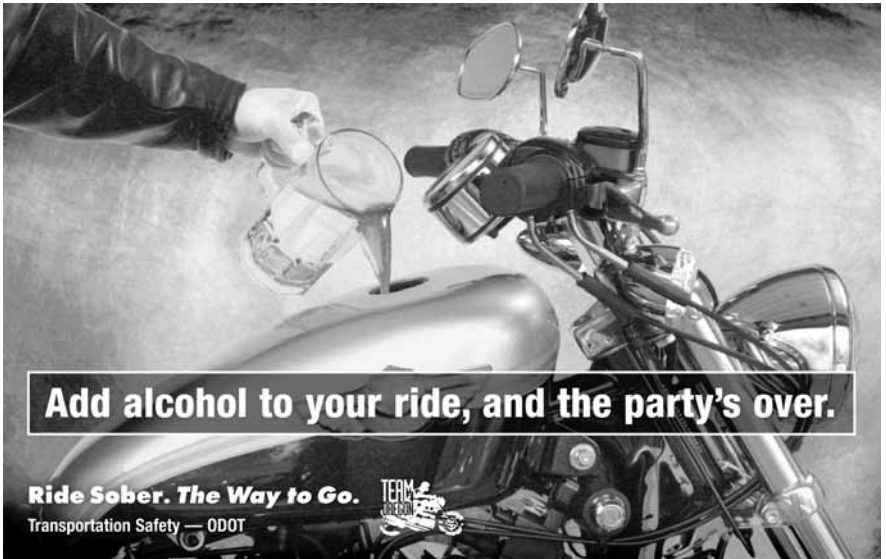
Some people suggest that the leader should move to the right side after passing a vehicle. This is not a good idea. It encourages the second rider to pass and cut back in before there is a large enough space cushion in front of the passed vehicle. It's simpler and safer to wait until there is enough room ahead of the passed vehicle to allow each rider to move into the same position held before the pass.

Single-file formation—It is best to move into a single-file formation when cornering, turning, entering or leaving a highway.

TEST YOUR KNOWLEDGE

13. When riding in a group, inexperienced riders should position themselves:
- A. Just behind the leader.
 - B. In front of the group.
 - C. In the tail end of the group.
 - D. Beside the leader.

Answer—page 56



Section 4

Being in Shape to Ride ---

Riding a motorcycle is a demanding and complex task. Skilled riders pay attention to the riding environment and to operating the motorcycle, identifying potential hazards, making good judgments, and executing decisions quickly and skillfully. Your ability to perform and respond to changing conditions is influenced by how fit and alert you are. Alcohol and other drugs, more than any other factor, degrade your ability to think clearly and to ride safely. As little as one drink can have a significant effect on your performance.

No one is immune to the effects of alcohol or drugs. Friends may brag about their ability to hold their liquor or perform better on drugs, but alcohol or drugs make them less able to think clearly and perform physical tasks skillfully. Judgment and the decision-making processes needed for vehicle operation are affected long before legal limits are reached.

Many over-the-counter, prescription, and illegal drugs have side effects that increase the risk of riding. It is difficult to accurately measure the involvement of particular drugs in motorcycle crashes. But we know what effects various drugs have on the process involved in riding a motorcycle. We also know the combined effects of alcohol and other drugs are more dangerous than either is alone.

4.1 Why This Information Is Important ---

Alcohol is a major contributor to motorcycle crashes, particularly fatal crashes. In Oregon about 40% of all riders killed in motorcycle crashes had been drinking. Only one-third of those riders had a blood alcohol concentration above .08 percent. The rest had only a few drinks in their systems—enough to impair riding skills. Riding “under the influence” of either alcohol or drugs poses physical and legal hazards for every rider.

Drinking and drug use is as big a problem among motorcyclists as it is among automobile drivers. Motorcyclists, however, are more likely to be killed or severely injured in a crash. Injuries occur in 90% of motorcycle crashes and 33% of automobile crashes that involve abuse of substances. Nationally, on a yearly basis, 1,500 motorcyclists are killed and almost 10,000 seriously injured in alcohol-related crashes. These statistics are too overwhelming to ignore.

By becoming knowledgeable about the effects of alcohol and other drugs, you will see that riding and substance abuse don’t mix. Take positive steps to protect yourself and prevent others from injuring themselves.

4.2 Alcohol in the Body

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. The major effect alcohol has is to slow down and impair bodily functions—both mental and physical. Whatever you do, you don't do as well after consuming alcohol.

Blood Alcohol Concentration

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

Three factors play a major part in determining BAC:

- The amount of alcohol you consume.
- How fast you drink.
- Your body weight.

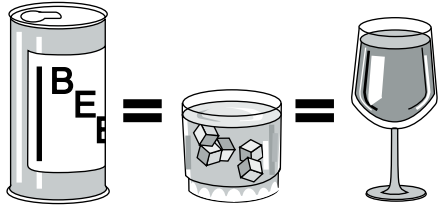
Other factors also contribute to the way alcohol affects your system. Your gender, physical condition and food intake are just a few that may cause your BAC level to be even higher. But the full effects of these are not completely known. **Alcohol may still accumulate in your body even if you are drinking 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 one shot of 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 an hour, at the end of that hour, at least one drink will remain in your bloodstream.

Without taking into account any other factors, the formula below illustrates the LEAST amount of drinks remaining in the bloodstream:

Total drinks consumed	<i>LESS</i>	# hours since last drink	<i>EQUALS</i>	drinks left in body
_____	-	_____	=	_____



Alcohol Equivalents

A person drinking:

- 8 drinks in 4 hours would have at least 4 drinks remaining in their system.
- 7 drinks in 3 hours would have at least 4 drinks remaining in their system.

There are times when a larger person may not accumulate as high a concentration of alcohol for each drink consumed. They have more blood and other body fluids. But because of individual differences it is better not to take the chance that abilities and judgment have not been affected. Whether or not you are legally intoxicated is not the real issue. The first effect of alcohol is on your ability to make judgments. Impairment of judgment and skills begins with the first drink and well below the legal limit.

4.3 Alcohol and the Law

In Oregon, a person with a BAC of .08 percent or above is considered intoxicated. Any amount of alcohol in operators under 21 years of age constitutes being under the influence. It doesn't matter how sober you may look or act. Officers conduct standardized field sobriety tests to determine impairment. The breath or blood test is what confirms whether you are riding legally or illegally.

If you are arrested and take a breath test, a blood alcohol reading of less than .08 percent is indirect evidence that may be used, with other evidence, to decide if you were under the influence of intoxicants. A reading of .08 percent or more is enough to establish that you were under the influence of intoxicating liquor. If a chemical test is not taken, you still may be convicted if the police have enough evidence to convince the judge or jury that you were intoxicated.

Your chances of being stopped for riding under the influence of alcohol are increasing. Law enforcement is being stepped up across the county in response to the senseless deaths and injuries caused by drinking drivers and riders.

You may be charged with most traffic violations only if they take place on a public highway. However, you may be charged with any major traffic offense, including driving while under the influence of intoxicants, if you commit the offense in any place open to the general public for use of motor vehicles. This includes both public and privately owned areas, such as shopping center parking lots, even if a fee is charged for use of the areas.

Consequences of Conviction

Years ago, first offenders had a good chance of getting off with a small fine and participation in alcohol-abuse classes. Today the laws of most states impose stiff penalties on drinking operators. And those penalties are mandatory, meaning that judges must impose them.

If you are convicted of riding under the influence of alcohol or drugs, you may receive any of the following penalties:

- **Licence Suspension**—Mandatory suspension for conviction, arrest, or refusal to submit to a breath test.
- **Fines**—Severe fines are another aspect of a conviction usually levied with a license suspension.

- **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.
- **Costs**—Additional lawyer’s fees to pay; lost work time spent in court or alcohol-education programs; public transportation costs (while your license is suspended); and the added psychological costs of being tagged a “drunk driver.”

4.4 Minimize the Risks ---

Your ability to judge how well you are riding is affected first. Although you may be performing more and more poorly, you think you are doing better and better. The result is that you ride confidently, taking greater and greater risks.

Make an Intelligent Decision

DON’T DRINK—Once you start, your resistance becomes weaker.

Setting a limit or pacing yourself are poor alternatives at best. Your ability to exercise good judgment is one of the first things affected by alcohol. Even if you have tried to drink in moderation, you may not realize to what extent your skills have suffered from alcohol’s fatiguing effects.

OR, DON’T RIDE —If you haven’t controlled your drinking, you must control your riding.

- **Leave the Motorcycle home**—so you won’t be tempted to ride. Arrange another way to get home.
- **Wait**—If you exceed your limit, wait until your system eliminates the alcohol and its fatiguing effects.

4.5 Step in to Protect Friends ---

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. No one wants to do this—it’s uncomfortable, embarrassing and thankless. You are rarely thanked for your efforts at the time. But the alternatives are often worse.

There are several ways to keep friends from hurting themselves:

- **Arrange a safe ride**—Provide alternative ways for them to get home.
- **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.
- **Keep the motorcycle there**—If you can’t control the rider, control the motorcycle. Take the keys or temporarily disable the motorcycle (e.g., loosen or switch the plug leads enough so they won’t fire).
- **Get friends involved**—Use peer pressure from a group of friends to intervene.

It helps to enlist support from others when you decide to step in. The more people on your side, the easier it is to be firm and the harder it is for the rider to

resist. While you may not be thanked at the time, you will never have to say, “If only I had...”

TEST YOUR KNOWLEDGE

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

- A. You cannot be arrested for drinking and riding.
- B. Your riding skills will not be affected.
- C. Side effects from the drinking may still remain.
- D. You will be okay as long as you ride slowly.

Answer—page 56

4.6 Fatigue

Riding a motorcycle is more tiring than driving a car. On a long trip, you'll 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 about six hours a day.
- **Take frequent rest breaks**—Stop, and get off the motorcycle at least every two hours.
- **Don't 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.

TEST YOUR KNOWLEDGE

15. To avoid fatigue, you should ride no more than:

- A. 2 hours a day.
- B. 4 hours a day.
- C. 6 hours a day.
- D. 10 hours a day.

Answer—page 56



DRINKING AND RIDING CROSSES THE LINE.

Ride Sober. The Way To Go.
Transportation Safety — ODOT



Section 5

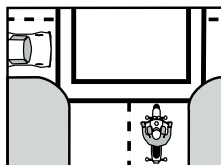
Earning Your Endorsement_____

To earn your motorcycle endorsement, you must pass a knowledge test and an on-cycle skills test or present a TEAM OREGON Basic Rider Training course completion card. Knowledge test questions are based on information, practices, and ideas from this manual. They require that you know and understand road rules and safe riding practices. An on-cycle skills test will be conducted in a controlled, off-street area. If you present a TEAM OREGON Intermediate Rider Training course completion card, only the on-cycle skills test will be waived.

5.1 Knowledge Test—Sample Questions_____

Answers are printed at the bottom of the page.

1. It is MOST important to flash your brake light when:
 - A. Someone is following too closely.
 - B. You know 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 of the stopping power.
3. To swerve correctly:
 - A. Shift your weight quickly.
 - B. Turn the handlebars quickly.
 - C. Press the handgrip in the direction of the turn.
 - D. Press the handgrip in the opposite direction of the turn.
4. If a tire goes flat while riding, it is usually best to:
 - A. Relax on the handle grips.
 - B. Shift your weight toward the good tire.
 - C. Brake on the good tire and steer to the side of the road.
 - D. Use both brakes and stop quickly.
5. The car 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-C; 5-B

5.2 On-Cycle Skills Test

Basic vehicle control and crash-avoidance skills are included in on-cycle tests to determine your ability to handle normal and hazardous traffic situations. You may be tested for your ability to:

- Know your motorcycle and your riding limits.
- Accelerate, brake, and turn safely.
- 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.

If you take the skills test on a three-wheel motorcycle or a motorcycle with a sidecar, your endorsement will be restricted to riding a three-wheel motorcycle until you successfully complete a skills test on a two-wheel motorcycle or present a course completion card from an approved motorcycle rider education course and are issued an endorsement that is not restricted. [See page 1](#) for mandatory rider education information.

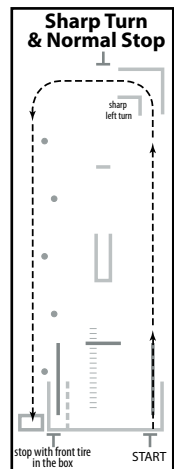
Here are diagrams of the on-cycle course and the maneuvers you will have to perform:

Sharp Turn & Normal Stop

Accelerate straight ahead, then make a sharp left turn without touching the boundary lines painted on the pavement and without putting your foot down. After the turn, continue toward the end of the course, making a smooth, non-skidding, stop with your front tire completely inside the box painted on the pavement.

Scoring deductions are made for:

- Foot touching the ground.
- Either tire crossing the boundary lines.
- Motorcycle skidding.
- Not stopping inside the box.



Cone Weave & U-Turn

Beginning to the left, weave back and forth around all five cones without hitting any or putting your foot down. Once you are beyond the last cone, continue around to the far side of the course and ride toward the box. Make a U-turn within the box without touching the boundaries or putting your foot down. After completing the turn, stop near the line.

Scoring deductions are made for:

- Foot touching the ground.
- Skipping or hitting a cone.
- Either tire touching the boundary line during the U-turn.

Quick Stop

Go straight down the course between the cones at a speed of 12-20 miles per hour. Maintain a steady speed of at least 12 miles per hour before you reach the first line. When your front tire passes the second line, begin braking. Bring your motorcycle to a complete stop as quickly and as safely as possible. No points are deducted if you skid.

Scoring deductions are made for:

- Not stopping within the maximum distance allowed.
- Not reaching the correct speed range.

Obstacle Swerve

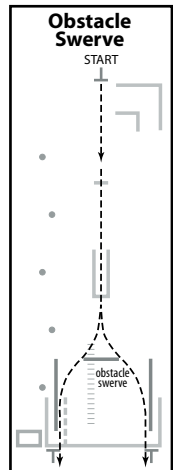
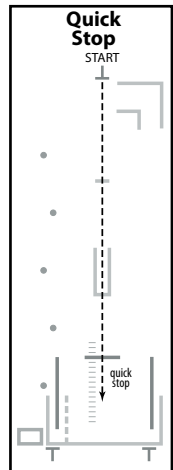
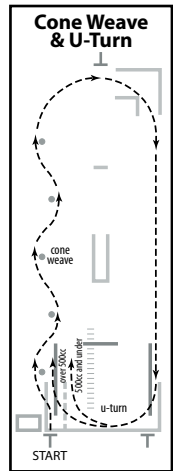
Follow the same path used in the quick stop test at about the same speed. This time, when your front tire passes the second line, swerve to the right or left to avoid hitting the obstacle line. Then swerve back to avoid hitting the sideline.

Scoring deductions are made for:

- Either tire touching the obstacle line or sideline.
- Not reaching the correct speed range.

You will be graded on your ability to control the cycle, maneuver, turn, stop quickly and ride in a straight line. Points will be deducted if you stall your engine while attempting the test. The examiner also will watch your posture and overall operation and attention.

You may stop the test at any time you desire. You should not attempt a test you do not feel you can do. If a test is too hard, or you cannot safely follow instructions, tell the examiner. You can make an appointment for another day, after you've had more time to practice.



MOTORCYCLES MAKE SENSE— SO DOES PROFESSIONAL TRAINING

Motorcycles are fun to ride and easy to park. Unfortunately, many riders never learn the critical skills needed to ride safely.

Professional training for beginning and experienced riders helps prepare them for real-world traffic situations. Motorcycle training teaches and improves skills such as:

- effective turning
- obstacle avoidance
- braking maneuvers
- traffic strategies
- protective apparel selection
- maintenance



**FOR THE BEGINNING, INTERMEDIATE OR EXPERIENCED
TRAINING COURSE NEAREST YOU, VISIT:**

team-oregon.org

or

800-545-9944

MOTORCYCLE SAFETY FOUNDATION

2 Jenner Street, Suite 150

Irvine, Ca 92718-3812

In promoting improved licensing programs, the Motorcycle Safety Foundation works closely with state licensing agencies. The Foundation has helped more than half the states in the nation adopt the Motorcycle Operator Manual (MOM) for use in their licensing systems. Oregon is included in this. The majority of the content of this manual is directly from the Motorcycle Safety Foundation MOM, with inserts that are particular to Oregon law.

References to motorcycles include mopeds. Those items that are specific to mopeds are identified as being specific to mopeds.

The Oregon Motorcycle & Moped Operator's Manual should help you become a safer rider. You also will need to study the Oregon Driver Manual before you test for a Class C restricted license.

Answers to Test Your Knowledge (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; 15-C



move over

It's the law!



OTD **Transportation Safety**
Oregon Department of Transportation



Slow Down. The Way to Go.

Notes

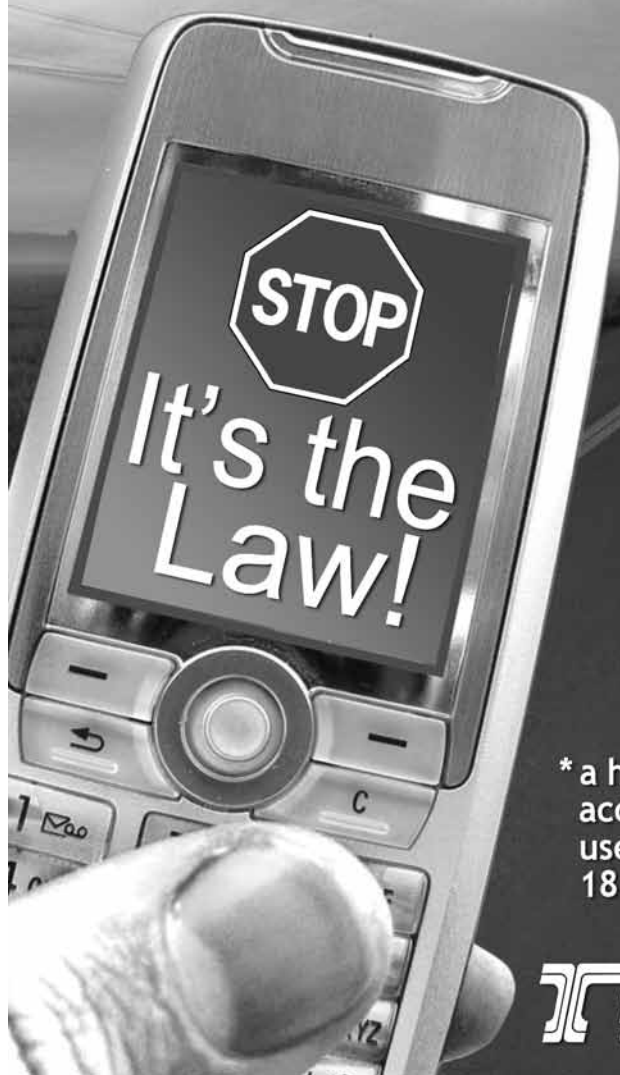
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ODOT does not discriminate on the basis of disability in admission or access to our programs, services, activities, hiring, and employment practices.

Questions: 1-877-336-6368 (EEO-ODOT).

This information can be made available in an alternative format by contacting a local DMV field office.

You may not use a mobile communication device to talk or text while operating a motor vehicle.



* a hands-free accessory may be used by drivers 18 and over

 Oregon
Department
of Transportation

DRIVE SAFELY AND COURTEOUSLY



IT COULD SAVE A LIFE!

THIS MESSAGE IS BROUGHT TO YOU BY YOUR LOCAL DMV OFFICE