

Safer, Smoother, Stronger...

101 tips from Mr. Safety

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There is no "miracle pill" -- no single trick that will guarantee everyone years of happy, accident-free motor cycling. In fact, back in 1973, when the Motorcycle Safety Foundation commissioned a team of researchers to assess the skills required to ride a motorcycle safely, they came back with a catalog of 2,500 separate activities! Each of us has a riding style that is a composite of the experience, habits and advice -- both good and bad -- we've assimilated over time. After 16 years of teaching people to ride motorcycles, these are the ones which I find myself sharing most frequently.

TRAFFIC STRATEGIES

It's almost always necessary to share the road with other users, but sharing has its limits. To keep the wind in your face and everything else out, here are some useful tips:

1. **Time Things**-- A good pass on a two-lane road takes no more than six seconds. How long does it take to cross an intersection? To accelerate to freeway speed?
2. **Estimate Times**-- How far away is that oncoming car or that blind crest? Knowing could save your butt.
3. **Don't Tailgate**-- When the preceding vehicle passes a fixed object count off: "one thousand one... one thousand two..." If you get there before "two" you're following too closely.
4. **Project Each Car's Path of Travel**-- See a car poking out of a driveway? Put your bike where it can't reach you.
5. **Don't Ride Staggered In Twisties**-- . . .or anywhere maneuvering within your lane is likely to become necessary.
6. **Late Apex**-- By starting on the out side of a curve and delaying your turn, you'll not only see farther ahead, you'll increase your space cushion in left hand turns.

7. **Watch for Cars "Stacking Up"**-- On two-lane roads, there's always the danger of a car abandoning the pack to pass. Maintain a constant vigil for phantom vehicles and, when you think you've spotted one, move to the right. This creates space as well as conspicuity.
8. **Don't Follow Behind Obstructive Vehicles**-- Trucks, vans -- anything that's hard to see around also makes you invisible to oncoming cars. Stay way back, or better still, let some passenger cars fill the gap.
9. **Avoid Rush Hour**-- Pilots have to train for each airport. Don't try to tackle a strange metropolis when everyone else is pressed for time.
10. **Head Checks**-- Don't rely on mirrors or peripheral vision. Do one before each lane change.
11. **Signal Your Intentions**-- Two full seconds before lane changes; four seconds for turns.
12. **Keep Right Unless Passing**--
13. **Give Way to Faster Traffic**-- It's the civilized thing to do.
14. **Don't Speed Through Town**-- Speed is only a factor if you hit some thing... and in town there are all sorts of things to hit.
15. **Avoid Bad Drivers**-- Give wide berth to anyone who is excessively fast or slow, wanders in their lane or changes lanes without signals.
16. **Avoid Other Drivers' Blind Spots**-- Keep back; accelerate when necessary.
17. **Look Farther Up the Road**-- Maintain a 12-second visual lead; search for the exit of each turn.
18. **Cover the Front Brake Lever**-- in high-risk areas.
19. **...But Don't Cover With One Finger**--...or even two fingers unless that's how you practice emergency stops. Once you've started the brake application, you'll need to release in order to add fingers.
20. **Check Your Mirrors When You Slow Down**-- Look for an escape route, too; the guy behind you might not be so alert.
21. **The Left Wheel Track**-- of four-wheeled vehicles is your principal lane position... but continually adjust to changing conditions.
22. **Beware of Cars Turning Left Across Your Path**-- Slow down -- see what the driver's going to do. Check your right mirror, then move as far to the right as is practical. If the car turns early -- brake. If the car turns late -- accelerate.

EQUIPMENT TIPS

All you really need is a tank of gas and the open road... if you don't mind freezing your kazoonzies off with a broken-down bike in the middle of nowhere. But since getting there is half the fun, here's some advice to help you and your bike accomplish it:

23. **Protective Armor**-- Many types are available, and the jury's still out on which is best. Armor should conform to anatomy and not slide around. Vulnerable areas are knees, elbows, shoulders and hips.
24. **"Retroreflective" Material**-- The stuff with the little glass beads. Helmet, sleeves, pant legs, but especially across your back.
25. **Eye Protection**-- Replace scratched shields. Carry a spritzer and soft cloth, and consider a quality defogging device like Fog City's.



26. **Electric Vest**-- Electric clothing is the only way to replace lost body heat while you're riding.
27. **Owner's Manual**-- Don't leave home without it.
28. **Handlebars** are not a fashion statement; they're the primary interface of man and machine. Choose bars that enable you to relax, yet remain in control.
29. **The Right Seat**-- What's comfortable in your living room isn't what works best on the highway. You want back support and freedom of movement.
30. **Adjust All Controls**-- Sit on your bike and close your eyes: Can you reach out and rest your fingers on the clutch and brake levers? How's the free play in clutch and throttle? Is your front brake firm?
31. **Lube Cables**-- Sticky, notchy cables equal clumsy riding.
32. **Tire Inspection**-- Dry rot? Cuts? Foreign objects? How's your air pressure?
33. **Tire Replacement**-- Forget tread depth; cupped fronts, squared-off rears, uneven wear -- all equal yucky handling. Don't buy tires because racers like them or because they yield the highest mileage; choose the best all around skins for the riding you do.
34. **Suspension Tuning**-- Learn what the various adjustments are for. Make changes one at a time. Change fork oil yearly.
35. **Roadside Tire Repairs**-- Tubes. Patches. Plugs. Tire irons. CO2 cartridges. What does your bike require? Never underestimate the dangers of being stranded.
36. **Downsize**-- Keep the big bike; get a small one for kicks and skill development.
37. **Road-Race Gloves**-- So-called "summer" or "touring" gloves will turn to confetti in a good tumble.
38. **A Good Helmet**-- '90s helmets have protective liners made of expanded polystyrene nearly 1-1/2 inches thick. Partial coverage helmets should at least protect the brain stem in back and not slide around on your head. Full-face helmets should have EPS throughout, including the chinbar.

FITNESS

Even if you drank, smoked, doped and womanized your youth away, there's still time to whip your body into shape and enjoy years of healthy riding. At least that's what Editor Tuttle says.

39. **Don't Slouch**--You'll injure the ligaments in your back and eventually the disks themselves. When that happens, you won't ride motorcycles anymore.
40. **Preserve Your Hearing**-- Highway cruising will damage your ears unless you have a full fairing or ride with a full-face helmet and earplugs. Consider accessories which seal off turbulence entering the bottom of your helmet.
41. **Do an "Arm Check"**-- Tension makes your arms stiffen and rise, degrading your steering and throttle control. Keep wrists down and let elbows fall naturally to your sides.
42. **Avoid Fatty Foods**-- Fat molecules attach themselves to your red blood cells and deprive your brain of oxygen.
43. **Avoid Caffeine**-- When you're tired, try exercising to stimulate blood circulation. If that doesn't work, you need rest.
44. **Pack a First-Aid Kit**--
45. **Take a First-Aid Course**-- Phone your local Red Cross chapter.
46. **Stretch Frequently**-- Get a good book on yoga. Consider buying an inversion bar.
47. **Push Your Bike**-- If you catch a chill, this is a great way to elevate your body temperature. But don't allow your self to become sweaty in cold weather.

48. **Listen to Your Body**-- Not only can fatigue cause accidents, but riding with pain can cause permanent damage, such as back injuries and carpal tunnel syndrome. Shivering is the first stage of hypothermia.
49. **Windproof Yourself**-- Buy a good quality riding suit, but in a pinch you can throw on your rainsuit and even duct tape any gaps which allow heat to escape.

USEFUL ADVICE AND INFORMATION

There's a deep pool of knowledge where common sense and experience converge. Some of the wise words passed along to me:



56: Pack Lightly. It's hard to be smooth on an overloaded bike.

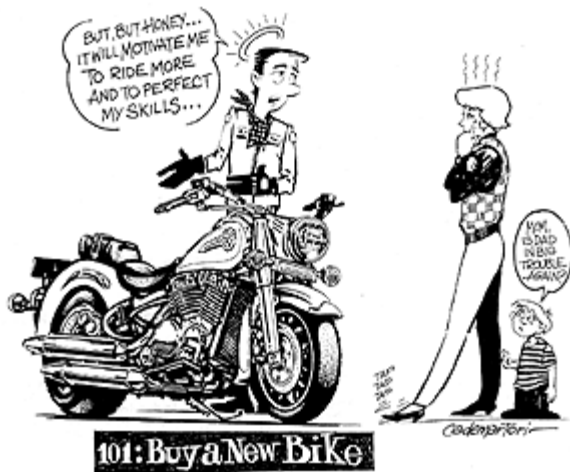
50. **Motorcycle Rider Course (MRC-RSS)**-- The way to improve complex skills is to perfect basic ones. Call the Motorcycle Safety Foundation at (800) 447-4700 for the course nearest you.
51. **Experienced Rider Course (ERC)**-- Find out where the best instructors teach and make sure you get the supplemental course hand-outs.
52. **CLASS**-- Reg Pridmore's academy is run on racetracks throughout the country. What better way to explore your limits and those of your bike? (805) 933-9936.
53. **"You've Got to Go Slow to Go Fast"**-- I think it was Reg Pridmore who said that. Never ride in a hurry.
54. **Buy a Dirt Bike**-- This is the very best way to unlock the mysteries of traction control. If you've never ridden off road, consider an organized dual sport tour and take one of the Specialty Vehicle Institute's off-road courses.
55. **Warm Your Bike's Engine**-- A stalled engine in the wrong place can be a disaster.
56. **Pack Lightly**-- It's hard to be smooth on an overloaded bike. Stay warm. Stay dry. Compromise on everything else.
57. **Limit Group Size to Four Riders**-- Fewer delays, fewer bad habits and less chance of a serious accident.
58. **Develop Simple Rules and Signals for Group Riding**--
59. **Find a Good Passenger**-- Passengers are the most perfectly balanced form of cargo. They also force you to shift smoothly, remind you to ride sensibly, keep you from making wrong turns and may reward you with a soothing massage after a nice ride.
60. **Imagine Yourself "Down In" Rather Than "Atop" Your Bike**-- Total relaxation can actually lower your center of gravity, and that makes your bike handle better.
61. **Organize Emergency Information**-- Phone numbers, insurance, medical information, etc.
62. **Respect Unfamiliar Bikes**-- No matter how experienced you are, your risk is greater when you switch bikes. Give yourself more time and space to compensate for unfamiliar equipment.
63. **Avoid the Causes of Speed Wobbles**-- Worn tires, loose bearings, accessories -- especially handlebar mounted fairings and windshields. These and other things can cause your bike to go out of control at high speeds. Got that? High speeds.
64. **Be a Voracious Reader**-- For a catalog of motorcycle books, call Whitehorse Press; (800) 531-1133.

65. **Question What You Read**-- Motojournalists get theirs for free. Owners club news editors think there's only one brand of bike. Academics have to publish or perish. Safety instructors are, you know....
66. **Read Road Surfaces**-- Look for composition, texture, camber, contaminates.
67. **Go Sport Touring**-- Lots of great athletes train in the mountains, and these days there are numerous possibilities for organized tours and rentals.
68. **Devise a Test Course**-- Take a loop you travel regularly and evaluate your braking, shifting, turning... especially tricky situations which require combination maneuvers.
69. **Limit Night Riding**-- Bouncing, tilting motorcycle headlights can't equal the uniform illumination that car lights provide. Ride your challenging roads by daylight.
70. **Choose Good Riding Partners**-- Avoid whiners, drunks and people who don't read motorcycle magazines.
71. **Know Your Insurance Coverage**-- Health, life and motorcycle; don't wait until you've had an accident.
72. **Learn From Good Riders**-- Observe their actions and ask questions.
73. **But Ride Your Own Ride**-- No matter how much you respect another rider, devise your own strategies and allow time to execute at your rate.
74. **And Let Your Buddy Ride His or Hers**-- Be patient and don't wave him or her through anything he can't see for him- or herself.

SKILLS YOU SHOULD PRACTICE

There was a boy named Clem whose parents sent him to French boarding school and later to Harvard. But he never learned a useful skill and wound up a broken-down motojournalist. Education cannot help you if you don't hone practical skills. Here are some to work on:

75. **Stopping on a Line**-- You should be able, with one smooth brake application, to stop the bike where you want -- hard or gently -- at low speeds or high.
76. **Emergency Stops**-- Don't call them "panic" stops. Learn to calmly stop in the shortest possible distance. Research shows that 30 mph is the most common pre-crash speed.
77. **Countersteering**-- Push left/Go left. Push right/Go right. It sounds counterintuitive, but you can handle it. And you don't push down; it's forward.
78. **Counterbalancing**-- Lean your body out as you lean your bike in. This useful skill will add stability to low speed turns. Offset weaves are a good practice drill.
79. **Swerving**-- Vigorous countersteering combined with a loose riding position that enables the bike to work independently of your body.
80. **Weaving**-- A good way to relieve boredom on empty stretches of road. Use your hips as well as countersteering.
81. **U-Turns**-- Exaggerate your head turns and try to turn in one quick motion.
82. **140-Degree Curbside Pull Outs**-- Back your bike to the curb at a 40-degree angle. Lean and turn handlebars as far as you're comfortable. Plant your inside foot and place your outside foot on the peg. Look back over your shoulder and pull away with out dabbing or hesitating.
83. **"Swooping"**-- Pick a curvy, hilly stretch of road and set your entry speed using only your throttle, not your brakes.
84. **Riding Slowly**-- "Balance" actually comes from deft manipulation of clutch, throttle, brakes and steering... skills that will serve you well at all speeds.
85. **Throttle Steering**-- Use throttle roll-on to straighten your bike and guide it to the proper exit position on the outside of the turn.



86. **Rear Brake to Control Chassis In Turns--** Instead of snapping the throttle shut for tight turns, try holding it open partially and applying a little rear brake.
87. **Mid-turn Connections--** If you're in too hot, turn your head more, push harder on the handlebar, and apply No. 86, but don't close the throttle.
88. **"Feathering" the Clutch--** The dirt rider's trick for controlling power surges and driveline lash. The key is "pressure," not "motion."
89. **Brake/Throttle Transitions--** To keep your chassis stable, smoothly begin one as you're trailing off the other. Grip the throttle lightly and glide your fingers around the brake lever "cam-like" instead of squeezing directly.
90. **Upshifting--** Don't squeeze your clutch lever so far. You only need to squeeze it to the friction point. In fact, smooth, quick up-shifts don't require clutching at all on most bikes. Try it.
91. **Downshifting--** By "blipping" the throttle (quickly raising the RPMs to the correct engine speed for the lower gear) you eliminate the need for a slow burn on the clutch.
92. **Brake and Downshift Simultaneously--** This one is tricky -- requires combining Nos. 89 and 91 (and maybe 52).
93. **Accelerate--** Changing speed and direction are your only physical defenses. Can you up-shift without "bobbing" the fork during max acceleration?
94. **Stop on a Curve--** You must straighten quickly to stop quickly... but you cannot fully straighten before braking (you'd be off the road). Trick is to smoothly increase brake pressure as you decrease lean angle.
95. **Impending Skid--** Learn the signs: faint chirping or squirminess of the front tire. It's possible to ease off slightly... but if it actually locks, you'll have to release (you can keep the rear brake locked). Try various surfaces and remember: hard braking on the front lightens the rear.
96. **ABS Stops--** Slam them on; it feels weird, so you'd better get used to it. Try it on all types of surfaces... but -- uh -- first make sure you actually have antilock brakes, and you're not cornering.
97. **Slide Down a Hill--** You can learn to control a locked rear brake by slowly sliding down a wet, grassy hill or other slippery surface. Of course you can also learn a more valuable lesson... how not to lock it.
98. **Integrated Braking--** Yamaha Venture, 1983 and later Honda Gold Wing and most Moto Guzzi riders -- use both the hand lever and foot pedal every time you brake. Otherwise you won't have the necessary skills when you need to stop quickly.
99. **Practice Switching the Fuel Petcock to Reserve--** So there I was in lane four of the San Diego Freeway on this weird Ducati, traffic on my right doing about 80 mph and traffic on the left doing 90 when....
100. **Throttle Baby--** If the rear wheel slides in a turn (from gravel, oil, over acceleration, etc.), don't snap the throttle shut! Stay on it until you regain traction. See No. 55.
101. **Buy a New Bike--** Well, it's not technically a "skill," but it will motivate you to ride more and to perfect your skills. It will help your dealer pay his rent and keep food on a motojournalist's table. Short of world peace, what more could you ask for?