

Obstacle in your path

As motorcyclists, we should expect the unexpected. Situations develop quickly when you're riding. You must constantly be alert and play "what if" relative to your surroundings. By actively scanning and practicing SEE (covered in the April newsletter), you can minimize the possibility of getting into a tight situation in the first place. But things happen that you don't count on – crest a hill or round a corner and you are faced with an obstacle in the road, a vehicle suddenly turns into your lane, an animal runs across the road, something falls off a truck in front of you, the wind blows something into your path, the driver in front of you slams on his brakes, the list goes on.

If a hazard does appear and you are unable to totally change direction, your best course of action is to stop or swerve around it. Can you stop before hitting the object? Can you safely swerve around it? This means, not only avoiding the object, but also re-establishing your original direction of travel or taking a different path. If you cannot swerve around an obstacle, can you go over it and maintain control? In reality, there will be little time to decide on the best course of action so your best bet is to practice different scenarios.

Stopping

To stop quickly, you need to apply both brakes at the same time and use taper braking. It is especially important in hard braking situations, but if you practice taper braking for all stops, you'll be able to use it in an emergency.

The sequence for taper braking is:

- Apply both brakes gradually and with almost equal force for the first phase of your braking. The weight will transfer forwards as the front suspension compresses, and your arms bend. There's now more weight on the front.
- Now let off most - or all - of the rear brake and increase pressure on the front, which now has most or all of the grip. This middle phase of braking can be 100%:0% - if it is less than 85% front, you probably aren't braking near your bike's limits. The bike slows and the forces you are exerting through the brakes and tires diminish. The front begins to rise back up on its suspension.
- Taper off on the front brake - to prevent a slow speed lock up - and increase the rear brake pressure once more. Even stopping from 100mph, the last 5mph is slow riding, and you should only use the rear brake for slow riding. So you do the final phase of stopping 0% front and 100% rear.

That's a lot to do in a very short time, but if done properly, you will stop in the shortest possible distance. If the front wheel locks, release the front brake then reapply firmly. If you accidentally lock the rear brake, keep it locked until you have completely stopped. Even with a locked rear wheel, you can control the bike if it is upright and going in a straight line.

If you must stop quickly *while turning or riding a curve*, it may not always be possible to straighten the motorcycle and then stop. If you must brake while leaning, apply the

brakes and reduce the throttle. As you slow, you can reduce your lean angle and apply more brake pressure until the motorcycle is straight and maximum brake pressure is possible. If you "straighten" the handlebar in the last few feet of stopping, the motorcycle should be straight up and in balance.

Swerving

It is not always possible or desirable to stop quickly to avoid an obstacle. Sometimes you may not have enough room to stop and the only way to avoid a collision may be to turn quickly, swerve, or ride over the obstacle.

A swerve is any sudden change in direction. It can be two quick turns, or a one rapid shift to the side. Apply a small amount of hand pressure to the hand grip in your intended direction of escape. This will get the motorcycle to lean quickly. The sharper the turn, the more the bike must lean. Keep your knees against the tank and your feet solidly on the pegs. Let the bike move underneath you. Make your escape route the target of your vision. Press on the opposite hand grip, once you clear the obstacle to return to your original direction of travel. To swerve to the left, push left then right to recover. To swerve to the right, push right then left. Try to stay in your own lane. Change lanes only if you have enough time to make sure there are no vehicles in the other lane. You should be able to squeeze by most obstacles without leaving your lane.

The intensity of this maneuver means that a large percentage of the tires' traction will be used for turning. Do not combine braking and swerving or you risk crashing. Remember, chopping the throttle is the same as applying the rear brake. So maintain speed while swerving. If you must slow down, do so either before or after the swerve. **IF BRAKING IS REQUIRED, SEPARATE IT FROM SWERVING.** Brake before or after --never while swerving.

Riding Over It

Swerving around road hazard is not always an available option. In some events you may want to consider riding over the obstruction. The most important decision you must make when faced with an object you must surmount is to decide if going over the hazard is physically possible--you're simply not going to get over a tree lying across the road--but 2x4s or bricks or potholes are usually doable. You should slow down as much as possible prior to contacting the obstacle. Next, approach the object as close to 90 degrees as possible to prevent the front tire from glancing off of it. Keep your eyes up looking well ahead. Remember, the best way to get to where you want to go is to simply look there. Next, wrap all of your fingers around your grips - do not 'cover' any levers, and raise your butt up off the seat with your legs while maintaining a relaxed upper body and a neutral throttle. Cruisers with forward-mounted footrests pose a special problem in this situation. Since you won't be able to support your body with your legs alone, you will need to use your upper body. Be careful not to give any accidental steering inputs while pulling yourself up with the handlebar. Just before contacting the obstacle, shift your weight rearward and roll on the throttle to lighten your front wheel. Keep your body relaxed and let the bike move underneath you. By staying loose you will be able to straighten the bike

more quickly if it gets knocked off line. Roll-off your throttle right after the front tire surmounts the obstacle (shifts weight to front and lengthens the rear shocks). If you encounter an obstacle in a turn, stand the bike up as much as possible and follow the same steps you would for riding in a straight line. After you clear the obstacle, you may want to pull off the road and check your tires and rims for damage before riding any farther.

Laying It Down

I've heard it said that "I laid it down to avoid a crash." Well, laying it down is a crash. Why would anyone intentionally crash their motorcycle? Staying with the bike, IN CONTROL is the correct way to handle any situation. The fastest deceleration is through maximum braking. A motorcycle and/or a body sliding across the pavement will decelerate slower, and will surely go further, than a motorcycle under maximum braking. You can swerve a bike faster and safer than "laying it down". If you cannot avoid an obstacle in your path, and cannot stop short of hitting it, your best bet is to use maximum braking to scrub off as much speed as possible before the collision occurs.

There you have it; how to use emergency braking or swerving to avoid a crash. Of course, the best defense is to avoid an emergency situation all together by staying alert and scanning well ahead. Never-the-less, there may come a time when you will need these skills. You need to practice them so that you can use them in an emergency. That is why you should plan to attend our Parking Lot Practice on October 15th. If you are not comfortable practicing these maneuvers in a controlled environment, you certainly won't use them in an emergency.

Portions of this article were taken from *Motorcycle Tips and Techniques* by James Davis, *MotorcycleCruiser.com*. *Steer Clear of Trouble* by Evans Brasfield, and the *Minnesota Motorcycle and Motorized Bicycle Manual*